Agenda

PLANNING COMMISSION REGULAR DOCKET
TUESDAY, November 14, 2023 at 5:30 P.M.
Hybrid Meeting

I. Commission Pre-Meeting (Agenda discussion(s))

Beginning: 5:00 p.m.
Location: (NDS Conference Room, 610 East Market Street, Charlottesville, VA 22902)

II. Commission Regular Meeting

Beginning: 5:30 p.m.
Location: (Council Chambers, 605 E. Main Street, Charlottesville, VA 22902 and Electronic/Virtual)

A. COMMISSIONERS' REPORTS
B. UNIVERSITY REPORT
C. CHAIR'S REPORT
D. DEPARTMENT OF NDS
E. MATTERS TO BE PRESENTED BY THE PUBLIC NOT ON THE FORMAL AGENDA
F. CONSENT AGENDA

(Items removed from the consent agenda will be considered at the end of the regular agenda)

1. Minutes – September 14, 2023 – Special Meeting
2. Minutes – July 11, 2023 – Regular Meeting
3. Resolution – Verve Charlottesville PUD "findings" with written reasons in accordance with Code of Virginia, § 15.2-2232(B)
4. Subdivision – Belmont Condominium
5. Site Plan – Belmont Condominium

G. Entrance Corridor – 1709 Jefferson Park Avenue

III. JOINT MEETING OF COMMISSION/ COUNCIL

Beginning: 6:00 p.m.
Continuing: until all public hearings are completed
Format: (i) Staff Report, (ii) Applicant, (iii) Hearing

1.ZM23-00004 – VERVE Charlottesville PUD – Subtext Acquisitions, LLC ("Applicant"), on behalf of Woodrow Apartments, LLC; Woodrow Too, LLC; and 1709 JPA LLC, ("Owner") is requesting a Zoning Map Amendment pursuant to Sections 34-41 of the Code of the City of Charlottesville ("Code") for properties ("Subject Property"): Parcel Number: 160008000, 1705 Jefferson Park Avenue, Charlottesville, VA 22903, Parcel Number: 160005000, 106-114 Stadium Road, Charlottesville, VA 22903, Parcel Number: 160004000, 100 Stadium Road, Charlottesville, VA 22903, Parcel Number: 160003000, 102 Stadium Road, Charlottesville, VA 22903, Parcel Number: 160002000, 104 Stadium Road, Charlottesville, VA 22093, Parcel Number: 160001000, 409 Stadium Road, Charlottesville, VA 22903; The applicant is proposing to rezone the Subject Property from Multifamily Residential ("R-3") to Planned Unit Development ("PUD") with a Development Plan and a Proffer Statement. The application and development plan includes parking requirements; a use matrix including a maximum dwelling units per acre ("DUA"); yard and height regulations; open space; and landscaping. The Proffer Statement indicates the applicant will provide a cash contribution to the City's affordable housing fund in the amount equal to double that which is required under Section 34-12(d)(2). The applicant is proposing to redevelop the Subject Property and replace the existing (62) residential units (spread

between nine different buildings) with one building containing between (524) to (550) residential units. The proposed building will have a height range of (75) feet to (135) feet and stories that range from (5) to (12). In addition, the proposed PUD includes improved pedestrian and bicycle circulation along Stadium Road, Emmet Street, and Jefferson Park Avenue and road improvements to Montebello Circle.
The Subject Property is approximately 3.3 acres with road frontage on Jefferson Park Avenue, Stadium Road, Emmet Street, and Montebello Circle. The Comprehensive Land Use Map designates this area in the Urban Mixed Use Corridor. The Subject Property is zoned Residential Multifamily (R-3) (104 Stadium Road is zoned R-3H and is an IPP) with an Entrance Corridor Overlay. This application may be viewed online at http://www.charlottesville.org/departments-and-services/departments-h-z/neighborhood-development-services or a copy is on file in the Department of Neighborhood Development Services, 2nd Floor of City Hall, 610 East Main Street. Persons interested in this SUP request may contact NDS Planner Matt Alfele by e-mail (alfelem@charlottesville.gov) or by telephone (434-970-3636).

2.ZM23-0002, SP23-00003 and P23-0046 - 108 Lankford Avenue – On November 14, 2023, the Planning Commission and City Council will conduct a Joint Public Hearing for a Rezoning application and a Special Use Permit Application ("SUP") for property located at 108, 110, 112 Lankford Avenue and identified in the City's land records as Tax Map and Parcel ("TMP") No. 260012000 (the "Subject Property"). Following the Joint Public Hearing, it is the intention of the Planning Commission to vote on whether to recommend approval of the Rezoning, SUP and Critical Slope Waiver. The owner, Green Retro Salvage II Holdings, LLC, has submitted a Rezoning application pursuant to Charlottesville City Code Section 34-41 to change the existing zoning of the Subject Property from Single-Family Residential Small Lot ("R-1(S)") to the R-3 Multifamily Residential ("R-3") with proffers. The proffers include provisions for 12.5% of residential units to be affordable to households at 60% of the area median income. The full proffer statement may be viewed in the application materials or by contacting the project Planner. The owner has also submitted a SUP application to increase the by-right density from 21 dwelling units per acre ("DUA") to 51 DUA along with modifications to the setbacks and screening requirements pursuant to Charlottesville City Code Sections 34-420, 34-158, and 34-162. The setback and screening modifications include the following:

Lankford Avenue front yard setback (City Code Section 34-353A): Modified from 25-foot minimum to 10-feet.
Setback requirement adjacent to low-density residential districts (City Code Section 34-353(b)(4)): Modified from 75-foot minimum to 10-foot side setback and 25-foot rear setback.
Setback screening requirement adjacent to low-density residential districts (City Code Section 34-872(a)(1)(a)): Modified from 20-foot minimum S-2 screen landscape buffer to 6-foot opaque screening fence.

In order for the applicant to implement the development plan as presented, the applicant will also need approval from City Council on Critical Slope Waiver Application P23-0046 per City Code Section 34-1120(b).
The applicant is proposing a multifamily residential development with up to 48 units through new construction. The Subject Property is approximately 0.95 acres with road frontage on Lankford Avenue. The Comprehensive Land Use Map designates the Subject Property area as General Residential.
Additional information pertaining to these applications (ZM23-0002, SP23-00003, and P23-0046) may be viewed online at www.charlottesville.gov/agenda. Persons interested in these applications may also contact NDS Planner Carrie Rainey by email at (raineyc@charlottesville.gov) or by telephone (434-970-3453).

3.ZM23-00003 – 2117 Ivy Road PUD – Williams Mullen ("Applicant"), on behalf of RMD Properties LLC, ("Owner") is requesting a Zoning Map Amendment pursuant to Sections 34-41 and 34-490 through 34-519 of the Code of the City of Charlottesville for property located at 2117 Ivy Road and identified in the City's land records as Tax Map and Parcel ("TMP") No. 070001200 (the "Subject Property"). Following the Joint Public Hearing, it is the intention of the Planning Commission to vote on whether to recommend

approval of the Rezoning request. The applicant is proposing to rezone the Subject Property from Urban Corridor ("URB") to Planned Unit Development ("PUD") with a development plan and proffers. The proffers indicate the applicant shall choose one of the following options: either provide 10% of residential units as affordable dwellings to households at 60% of area median income, or provide a cash contribution to the City's affordable housing fund in the amount equal to double that which is required under Section 34-12(d)(2). The full proffer statement may be viewed in the application materials or by contacting the project Planner. The development plan includes a commitment to affordable housing; a transportation demand management plan; a use matrix; yard and height regulations; parking requirements; open space; and landscaping. The applicant is proposing to redevelop the Subject Property and replace the existing commercial structure with one building containing (287) residential units. The proposed building will have a height of (130) feet and include (10) stories plus rooftop amenity space. In addition, the proposed PUD includes improved pedestrian and bicycle road markings at the intersection of Ivy Road, Copeley Road and Alderman Road.
The Subject Property is approximately 1.027 acres with road frontage on Ivy Road and Copeley Road. The Comprehensive Land Use Map designates this area as Urban Mixed-Use Corridor. The Subject Property is zoned Urban Corridor (URB) with an Entrance Corridor Overlay.
Additional information pertaining to this application (ZM23-00003) may be viewed online at www.charlottesville.gov/agenda. Persons interested in this application may also contact NDS Planner Dannan O'Connell by email at (oconnelld@charlottesville.gov) or by telephone (434-970-3991).

IV. COMMISSION'S ACTION ITEMS

Continuing: until all action items are concluded.

V. FUTURE MEETING SCHEDULE/ADJOURN

Tuesday November 28, 2023 – 5:00 PM	Work Session	Capital Improvement Program
Tuesday December 12, 2023 – 5:00 PM	Pre-Meeting	
Tuesday December 12, 2023 – 5:30 PM	Regular Meeting	Minutes Capital Improvement Program

Anticipated Items on Future Agendas

Rezoning and SUP – 0 Carlton Road,
Site Plan –Flint Hill PUD, 240 Stribling Ave, 1613 Grove Street Extended, MACAA – Park Street
Preliminary Discussion – Dairy Central Phase 3
Future Entrance Corridor

- 1801 Hydraulic Road – revised Comp Sign Plan, (*Hillsdale Place*, Riverbend)
- Review of 2117 Ivy Road for compatibility with Entrance Corridor prior to Rezoning request.

PLEASE NOTE: THIS AGENDA IS SUBJECT TO CHANGE PRIOR TO THE MEETING.

PLEASE NOTE: We are including suggested time frames on Agenda items. These times are subject to change at any time during the meeting.

Individuals with disabilities who require assistance or special arrangements to participate in the public meeting may call the ADA Coordinator at (434) 970-3182 or submit a request via email to

ada@charlottesville.gov. The City of Charlottesville requests that you provide a 48 hour notice so that proper arrangements may be made.

Planning Commission premeeting and regular meetings are held in person and by Zoom webinar. The webinar is broadcast on Comcast Channel 10 and on all the City's streaming platforms including: Facebook, Twitter, and www.charlottesville.gov/streaming. Public hearings and other matters from the public will be heard via the Zoom webinar which requires advanced registration here: www.charlottesville.gov/zoom . You may also participate via telephone and a number is provided with the Zoom registration or by contacting staff at 434-970-3182 to ask for the dial in number for each meeting.

LIST OF SITE PLANS AND SUBDIVISIONS APPROVED ADMINISTRATIVELY
10/1/2023 TO 10/31/2023

1. **Preliminary Site Plans**
2. **Final Site Plans**
3. **Site Plan Amendments**
    a. Friendship Court Phase 1- SPA#3 – September 15, 2023
4. **Subdivision**

September 14, 2023 and July 11, 2023 Planning Commission Minutes are included as the last documents in this packet.

CITY OF CHARLOTTESVILLE

DEPARTMENT OF NEIGHBORHOOD DEVELOPMENT SERVICES

STAFF REPORT

PLANNING COMMISSION RESOLUTION

COMPREHENSIVE PLAN (CODE OF VIRGINIA, § 15.2-2232) COMPLIANCE REVIEW

APPLICATION NUMBER: CP23-00000: Woodrow Street

DATE OF THE MEETING: November 14, 2023

Project Planner: Matt Alfele, AICP

Date of Staff Report: October 12, 2023

Summary

On October 10, 2023, the Planning Commission held a public hearing and reviewed the public facilities associated with amending the November 4, 1996, ordinance vacating Woodrow Street Right of Way (ROW) pursuant to Virginia Code Section 15.2-2232 and City Code Section 34-28 to determine if amending the adopted ordinance to remove the following conditions;

1. The adjoining property owners, excluding the City of Charlottesville, shall provide for storm water connections to Jefferson Park Avenue from the east side of Woodrow Street as part of the Jefferson Park Avenue sidewalk construction.
2. All adjoining property owners, excluding the City, shall enter into a joint access and maintenance agreement with respect to the vacated area. Such agreement shall preclude the building of additional units on the vacated area.

would be substantially in accord with the City's adopted Comprehensive Plan or part thereof. Following the public hearing, the Planning Commission took a vote on this matter. Code of Virginia, 15.2-2232(B) requires that the Commission communicate its findings to City Council indicating its approval or disapproval with written reasons for its decision.

The Planning Commission determined amending the November 4, 1996, ordinance vacating Woodrow Street ROW is **substantially in accord** with the City's adopted Comprehensive Plan and amendments:

The attached resolution is provided for the Planning Commission's consideration.

Attachments

A. Resolution

RESOLUTION
OF THE CHARLOTTESVILLE PLANNING COMMISSION
COMMUNICATING ITS WOODROW STREET (CP23-00002) COMPREHENSIVE PLAN REVIEW FINDINGS TO THE CHARLOTTESVILLE CITY COUNCIL IN ACCORDANCE WITH CODE OF VIRGINIA 15.2-2232

WHEREAS, this Planning Commission held a public hearing on October 10, 2023, to conduct a Code of Virginia 15.2-2232 review of the applicant's request to amended the November 4, 1996 ordinance vacating Woodrow Street Right of Way (ROW) to remove all conditions, which was requested as part of a Zoning Map Amendment (ZMA) and Zoning Text Amendment (ZTA) applications (ZM23-00004 and ZT23-09-02), which were submitted to the Planning Commission for this specific 2232 review on September 26, 2023, proper notice of this 2232 review was published as required by law, including, but not limited to, Code of Virginia 15.2-2204.

NOW THEREFORE,

AND BE IT FURTHER RESOLVED that this Planning Commission confirms that amending the November 4, 1996 ordinance vacating Woodrow Street ROW to permit the proposed Planned Unit Development (PUD) as described in ZMA application ZM23-00004 and ZTA application ZT23-09-02 **is substantially in accord** with the City's Comprehensive Plan or parts thereof, as amended:

1. Amending the November 4, 1996 ordinance vacating Woodrow Street to allow residential units within the vacated area serves the Comprehensive Plan Land Use, Urban Form, and Historic & Cultural Preservation Objectives for Residential Areas by increasing opportunities to develop diverse housing options near schools, parks, shopping districts, and employment centers. Amending the 1996 ordinance will open up a portion of the Subject Property for development that is currently prohibited. This development would contribute to Chapter 5 (Housing), Goal 2 (Diverse Housing Throughout the City) of the City's Comprehensive Plan.

NOW, THEREFORE,

Upon adoption of this Resolution, the Planning Commission's findings with written reasons therefore on November 14, 2023, in accordance with Code of Virginia 15.2-2232(B), are hereby communicated to the Charlottesville City Council on November 14, 2023. The Secretary of this Planning Commission shall transmit this Resolution to the Charlottesville City Council.

Adopted by this Planning Commission, this 14th day of November 2023.

Attest: _____
Secretary, Charlottesville Planning Commission

CITY OF CHARLOTTESVILLE

DEPARTMENT OF NEIGHBORHOOD DEVELOPMENT SERVICES

STAFF REPORT

PLANNING COMMISSION MEETING

APPLICATION FOR APPROVAL OF A SUBDIVISION

APPLICATION NUMBER: P22-0038

DATE OF MEETING:

Project Planner: Benjamin Koby
Date of Staff Report: October 25, 2023

Applicant: Collins Engineering
Applicant's Representative(s): Scott Collins of Collins Engineering,
Current Property Owner: Belmont & Carlton Holdings, LLC
Property Street Address: 1003 - 1005 Carlton Ave., 0 Walnut St., 730 - 732 Walnut St., 735 Walnut St., and 0 Cherry St. ("Subject Property")
Tax Map & Parcel: 570020000, 570002100, 570004000, 570006000, 570007100, 570007300, 570007500, 570007700, 570007900, 570002000, 570003000, 57005000, 570007000, 570007200, 570007400, 570007600, 570007800, and 570010000
Current Zoning Classification: NCC (Neighborhood Commercial Corridor)
Overlay District: None
Reason for Planning Commission Review: Final site plan reflects the proposed development of a property that is the subject of an approved Critical Slope Waiver - Sections 34-820(d) and 34-822.

Vicinity Map



Standard of Review

Subdivisions are reviewed for compliance with City codes and standards, in accordance with procedures prescribed by Virginia Code 15.2-2259 and standards and design requirements specified within the City's subdivision, zoning, and water protection ordinances and the City's Standards and Design Manual. The Planning Commission is the "subdivision agent" for the purpose of reviewing and approving a proposed final subdivision plat for a major subdivision.

As "subdivision agent" the Planning Commission is performing an administrative function, and there are only two possible actions: (1) *Approval*--if the proposed subdivision meets all

applicable requirements, the Planning Commission must approve it, or (2) if the Planning Commission determines that the proposed subdivision does not meet all applicable requirements, then the Planning Commission must disapprove the plat, and must articulate specific reasons why the subdivision does not meet the requirements—with reference to specific laws, ordinances and regulations.

Summary

Scott Collins of Collins Engineering, on behalf of Belmont & Carlton Holdings, LLC, is seeking major subdivision approval that will establish a new public Right of Way and a new public utility easement to serve the proposed 130 unit residential mixed use unit development. A Final Site Plan corresponding to this subdivision has been submitted and is still subject to approval by the planning. The stie plan is on the same agenda as this project. A Critical Slope waiver was approved for this property on November 7th, 2022 (P22-0039). The City's Zoning Ordinance requires for site plans associated with approved critical slope waiver be subject to approval by the Planning Commission. The mixed-use development is permitted by right in the NCC (Neighborhood Commercial Corridor) zoning district.

The land within the proposed major subdivision is identified on City Real Estate Tax Map 57, Parcels: 2, 3, 4, 5, 6, 7, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 20, 21. All parcels are to be combined into Tax Map 57 Parcel 20. The proposed Parcel shares frontage with the existing Carlton Ave and Spruce Street. This subdivision would expand the existing Holly Street dedication and is fully establishing Conifer Drive. The site is proposed to be 6.353 Acres. The applicant has submitted two (2) prior versions of the proposed plat; with each submission, staff has made a good faith effort to identify all deficiencies (if any) so that the applicant could be in a position to submit an approvable final plat to you for consideration and approval.

Subdivision Requirements

A. Section 29-140 requires all subdivision plats and supporting materials to be in accordance with:

1. Applicable provisions of the Virginia Code
2. The Water Protection Ordinance, Chapter 10 City Code
3. The Fire Prevention Code, Chapter 12 City Code
4. Utilities Ordinance, Chapter 31 City Code
5. Zoning Ordinance, Chapter 34 City Code
6. Charlottesville's Standards and Design Manual
7. Subdivision Ordinance, Chapter 29 City Code, and other applicable City ordinances

B. **Compliance with design standards and improvements (per Sections 29-160 - 29-163)**

1. Blocks: The proposed subdivision is in compliance with design standards.
2. Lots: The applicant is proposing to combine the existing lots into one single parcel. No new lots will be created.
3. Parks, Schools, and other Public Land: No new parks or schools will be created with this subdivision.
4. Preservation of natural features and amenities: Critical slopes as defined by Section 34-1120(b)(2) are located on the site. They have been approved to disturb the critical slopes on site.
5. Items Listed in Section 29-111(b): The applicant has submitted a proposed final site plan for approval by the planning commission. The site plan will be processed at the same meeting as the subdivision plat.
6. Monuments: The subdivision plat demonstrates that the following requirements of Section 29-160 have been satisfied:
    a. All boundaries (exterior and interior) of the original survey for the subdivision have monuments in accordance with the Standards & Design Manual (see Sheet 5).
    b. The applicant has verified that these monuments will be set prior to recordation of the subdivision plat, or prior to conveyance of lots with reference to this plat.

C. Compliance with the Street Standards for Subdivisions (Section 29-180 – 29-183)

The proposed subdivision includes two new public streets (Holly Street and Conifer Drive). Right-of-way for these streets is dedicated to public use through this subdivision plat. Design specifications for the new public streets are contained within the associated site plan and were reviewed by the Public Works/Engineering Department. It is anticipated that the roads will be constructed and accepted by the City following Final Site Plan approval.

D. Compliance with Utility Standards for Subdivisions (Sections 29-200 – 29-204)

The specific utility configurations and design details are under review by the Utilities Department as a part of the site plan review process and will be approved administratively by staff as part of final site plan approval. The utility easements as shown on this final subdivision plat have been approved by the Utilities Department. Public easements are required to be shown on a final subdivision plat; once the approved final plat is recorded in the land records, the plat will establish as a matter of record the physical boundaries of the easement areas.

E. Compliance with applicable zoning district regulations (Sections 34-350 – 34-420)

The dimensions (area, frontage, building site, etc.) of the three reconfigured lots will, in staff's assessment, comply with the requirements of the Highway Corridor zoning district. See Section 29-161.

F. **Compliance with the Water Protection Ordinance (City Code Chapter 10).** Per Section 29-202 every development must be designed to achieve state and local requirements for post-development stormwater management, including measures addressing both the quantity and quality of stormwater, as set forth within Chapter 10 of the City Code (Water Protection).
   1. Stormwater Management Plan: a stormwater management concept has been submitted in the final site plan along with the final plat materials, as required by Section 29-111(a)(2). The applicant has also submitted a proposed final Stormwater Management Plan for consideration by the City's VESMP Agent. Such improvements, facilities and treatments are identified within the final site plan, which is currently under administrative review by staff.
   2. Erosion & Sediment Control: the applicant will submit an erosion and sediment control plan as part of the construction plans that are part of the site plan that is concurrently under review. This is permitted by Section 29-111(b).

Suggested Motions

Motion to Approve: I move to approve of the final subdivision plat dated September 27th 2023 for Tax Map 57 Parcel 20.

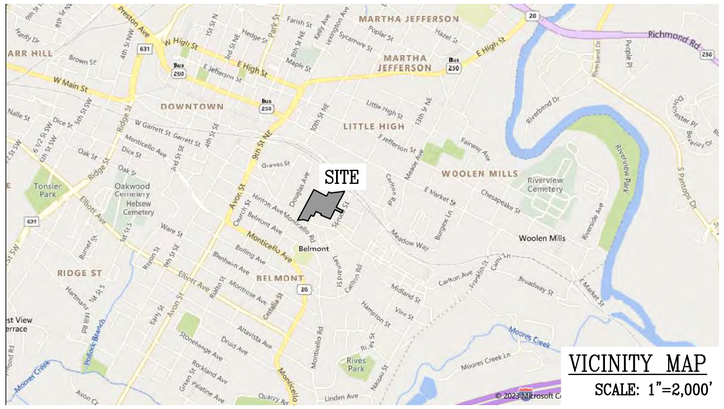
Motion to Deny Approval: I move to deny approval of the final subdivision plat dated September 27th 2023 for Tax Map 57 Parcel 20 for the following reasons:

Attachments

A. Final Subdivision Plat dated September 27th, 2023
B. Private Easement Plat dated September 27th, 2023
C. Final Site Plan dated August 18th, 2023

BLA, RIGHT OF WAY DEDICATION, & EASEMENT PLAT
BELMONT CONDOMINIUMS
TAX MAP 57 PARCELS 2,3,4,5,6,7,7.1, 7.2,7.3,7.4,7.5,7.6,7.7,7.8,7.9,10,20,&21
CITY OF CHARLOTTESVILLE, VIRGINIA

COVER SHEET



VICINITY MAP
SCALE: 1"=2,000'

BOUNDARY LINE TABLE		
Line	Direction	Length
L1	N 28°02'28" E	9.75'
L2	S 60°29'38" E	10.91'
L3	N 61°57'32" W	30.00'
L4	S 88°30'30" W	7.38'
L5	N 61°36'19" E	9.78'
L6	S 02°57'03" E	8.66'
L7	N 57°02'57" E	8.66'
L8	N 27°02'57" E	2.85'
L9	S 27°02'57" W	6.43'
L10	N 02°57'03" W	9.24'
L11	N 74°03'53" W	29.67'

BOUNDARY CURVE TABLE						
Curve	Length	Radius	Delta	Tangent	Chord	Chord Bearing
C1	45.61'	136.00'	19°12'48"	23.02'	45.39'	N 81°53'16" W
C2	13.96'	20.00'	39°59'18"	7.28'	13.68'	N 71°29'52" W
C3	9.10'	8.50'	61°20'04"	5.04'	8.67'	N 20°50'11" W
C4	52.57'	183.06'	16°27'16"	26.47'	52.39'	N 18°26'24" E
C5	100.95'	554.80'	10°25'30"	50.61'	100.81'	N 32°15'35" E
C6	26.70'	17.00'	90°00'00"	17.00'	24.04'	N 72°02'57" E
C7	32.95'	780.00'	2°25'13"	16.48'	32.95'	S 61°44'27" E
C8	32.95'	820.00'	2°18'07"	16.48'	32.94'	N 61°48'00" W
C9	44.23'	228.00'	11°06'50"	22.18'	44.16'	N 68°30'28" W

ZONING: NCC
CURRENT ZONING REQUIREMENTS:

SEC. 34-697. - HEIGHT REGULATIONS.

THE FOLLOWING HEIGHT REGULATIONS SHALL APPLY TO BUILDINGS AND STRUCTURES WITHIN THE NEIGHBORHOOD COMMERCIAL CORRIDOR DISTRICT, EXCEPT AS PROVIDED WITHIN SECTION 34-718(A) (STEPBACK REQUIREMENT):

(1) MINIMUM: NONE.

(2) MAXIMUM HEIGHT: FORTY-FIVE (45) FEET; HOWEVER, UP TO SIXTY (60) FEET MAY BE ALLOWED BY SPECIAL PERMIT, SUBJECT TO STREETWALL REGULATIONS.

SEC. 34-698. - STREETWALL REGULATIONS.

(A) STEPBACK REQUIREMENTS. THE MAXIMUM HEIGHT OF THE STREET WALL OF ANY BUILDING OR STRUCTURE SHALL BE FORTY-FIVE (45) FEET. AFTER FORTY-FIVE (45) FEET, THERE SHALL BE A MINIMUM STEPBACK OF TEN (10) FEET ALONG AT LEAST FIFTY (50) PERCENT OF THE LENGTH OF THE STREETWALL.

(B) SETBACKS:
(1) PRIMARY STREET FRONTAGE: NO MINIMUM REQUIRED; TEN (10) FEET, MAXIMUM.
(2) LINKING STREET FRONTAGE: NONE REQUIRED.
(3) SIDE AND REAR, ADJACENT TO LOW DENSITY RESIDENTIAL DISTRICT: TEN (10) FEET, MINIMUM.
(4) SIDE AND REAR, ADJACENT TO ANY OTHER ZONING DISTRICTS: NONE REQUIRED.

SEC. 34-699. - BUFFER REGULATIONS.

ADJACENT TO ANY LOW DENSITY RESIDENTIAL DISTRICT, SIDE AND REAR BUFFERS (S-1 TYPE) SHALL BE REQUIRED, TEN (10) FEET, MINIMUM (REFER TO SECTION 34-871).

SEC. 34-700. - DENSITY.

OTHER RESIDENTIAL DEVELOPMENT. RESIDENTIAL DENSITY SHALL NOT EXCEED TWENTY-ONE (21) DUA; HOWEVER, UP TO FORTY-THREE (43) DUA MAY BE ALLOWED BY SPECIAL USE PERMIT.

APPROVED FOR RECORDATION:

SIGNATURE: _____
CITY SUBDIVISION AGENT DATE

SIGNATURE: _____
CHAIR, CITY PLANNING COMMISSION DATE

NOTES:

1. THIS PLAT HAS BEEN PREPARED WITH THE BENEFIT OF A TITLE REPORT BY CHICAGO TITLE INSURANCE COMPANY WITH A COMMITMENT NUMBER OF SHOC-032 AND A COMMITMENT DATE OF JUNE 26, 2023.
2. THE AREA SHOWN HEREON IS LOCATED IN ZONE "X" AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN AS SHOWN ON FEMA MAP NO 51003C0288D, EFFECTIVE DATE FEBRUARY 4, 2005. THIS DETERMINATION HAS BEEN MADE BY GRAPHIC METHODS, NO ELEVATION STUDY HAS BEEN PERFORMED AS A PORTION OF THIS PROJECT.
3. BOUNDARY DATA SHOWN IS TAKEN FROM A BOUNDARY SURVEY PREPARED BY ROUDABUSH, GALE AND ASSOCIATES DATED DECEMBER 3, 2018.
4. EASEMENTS MAY EXIST OTHER THAN THOSE SHOWN HEREON.
5. REVISED TAX MAP 57 PARCEL 20 WILL BECOME A MULTI-ZONED PARCEL AS SHOWN ON SHEET V2 & V3.
6. ALL PROPERTY CORNERS WILL BE MONUMENTED WITH IRON PINS UNLESS NOTED OTHERWISE.
7. PUBLIC UTILITY EASEMENTS AND SIGHT DISTANCE EASEMENTS ARE PUBLIC AND DEDICATED TO THE CITY OF CHARLOTTESVILLE.
8. THE PORTIONS OF HOLLY STREET & CONIFER DRIVE SHOWN AS PROPOSED ON SHEET V3 ARE PUBLIC RIGHTS OF WAY AND SHALL BE DEDICATED TO PUBLIC USE.
9. EACH PARCEL CREATED BY THIS SUBDIVISION PLAT CONTAINS A BUILDING SITE THAT COMPLIES WITH THE REQUIREMENTS OF THE CITY OF CHARLOTTESVILLE'S ZONING, WATER PROTECTION AND SUBDIVISION ORDINANCES.
10. NO PLACES OF HUMAN BURIAL HAVE BEEN OBSERVED DURING THE PROCESS OF THIS SURVEY.
11. REVISED TAX MAP 57 PARCEL 20 IS ZONED NCC.
12. PLAT HAS BEEN PREPARED BY TYLER JAMISON

COMMONWEALTH OF VIRGINIA
BRIAN D. JAMISON
No. 3334
09-27-2023
LAND SURVEYOR
DRAFT

DATE:	07-10-2023
REV:	09-27-2023
REV:	
SCALE:	N/A
JOB:	19.0212
FILE:	TMPROJ

SHEET: V1 OF V5

SHEET INDEX

V1 COVER SHEET
V2 BOUNDARY LINE ADJUSTMENT
V3 RIGHT-OF-WAY DEDICATION
V4 PUBLIC UTILITY EASEMENTS
V5 SIGHT DISTANCE EASEMENTS

ROUDABUSH, GALE & ASSOCIATES, INC.
ENGINEERS, SURVEYORS AND LAND PLANNERS
A PROFESSIONAL CORPORATION
SERVING VIRGINIA SINCE 1956
999 SECOND ST. SE, CHARLOTTESVILLE, VIRGINIA 22902
PHONE 434-977-0205 - FAX 434-296-5220 - EMAIL INFO@ROUDABUSH.COM

LEGEND:

BNF BRICK NAIL FOUND
IF IRON FOUND
PF PIPE FOUND
RR RAILROAD MONUMENT FOUND
R/W RIGHT OF WAY
V/W VARIABLE WIDTH

STATEMENT OF CONSENT

THE PLATTING OR DEDICATION OF THE FOLLOWING DESCRIBED LAND, TAX MAP 57 PARCELS 2, 3, 4, 5, 6, 7, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 20, AND 21 IS WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRE OF THE UNDERSIGNED OWNERS, PROPRIETORS AND TRUSTEES, IF ANY.

_____
AUTHORIZED AGENT
BELMONT & CARLTON HOLDINGS, LLC.
PO BOX 1467
CHARLOTTESVILLE, VA 22902

COMMONWEALTH OF VIRGINIA -
CITY/COUNTY OF: _____
TO WIT: THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS _____ DAY OF _____ 20___.

_____
SIGNATURE OF NOTARY PUBLIC

REG. NO.: _____

MY COMMISSION EXPIRES: _____

STATEMENT OF CONSENT

THE PLATTING OR DEDICATION OF THE FOLLOWING DESCRIBED LAND, TAX MAP 57 PARCEL 10 IS WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRE OF THE UNDERSIGNED OWNERS, PROPRIETORS AND TRUSTEES, IF ANY.

_____
AUTHORIZED AGENT
SPRUCE STREET INVESTMENTS, LLC.
P O BOX 1467
CHARLOTTESVILLE, VA 22902

COMMONWEALTH OF VIRGINIA -
CITY/COUNTY OF: _____
TO WIT: THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS _____ DAY OF _____ 20___.

_____
SIGNATURE OF NOTARY PUBLIC

REG. NO.: _____

MY COMMISSION EXPIRES: _____

BLA, RIGHT OF WAY DEDICATION, & EASEMENT PLAT
BELMONT CONDOMINIUMS

TAX MAP 57 PARCELS 2,3,4,5,6,7,7.1, 7.2,7.3,7.4,7.5,7.6,7.7,7.8,7.9,10,20,&21

CITY OF CHARLOTTESVILLE, VIRGINIA

BOUNDARY LINE ADJUSTMENT

40' 0 40' 80' 120'

SCALE: 1" = 40'

TMP 58-349
N/F SPARTINA, LLC
INST#2013: 4712

TMP 58-349.1
N/F HATCHER, JANET TRUSTEE
DB: 1113 PG: 35

TMP 58-350
N/F BRAVERMAN, STANTON, TRUSTEE
INST#2020: 883
INST#2019: 4411
INST#2017: 104

TMP 58-351
N/F SYLVESTER, PHYLLIS & LEO J ARICO
DB: 687 PG: 718

TMP 58-352
N/F MAJORS, CHARLES H.
INST#2018: 3017

TMP 58-353.1
N/F BAXTER, JOHN W & ROBIN A
DB: 1033 PG: 943

TMP 58-353
N/F VAN DER LINDE, WILLIAM F
INST#2013: 4005

TMP 58-354
N/F SCHETTINI, EUGENIO & CHRISTINE PALAZZOLO
DB: 1038 PG: 361

TMP 58-354.1
N/F GRAY, JOHN ERNEST CATHERINE
INST#2018: 2714
INST#2014: 2421

EX. HOLLY STREET
30' & V/W R/W
(UNIMPROVED)

N: 3896555.19
E: 11490270.93

N28°05'05"E 645.19'(T)

N: 3897124.41
E: 11490574.67

STREAM

203.02'

442.17'

S85°36'36"W 82.97'

17.03'

S88°14'47"W 25.38'(T)

8.35'

N80°00'32"W 19.65'

BOUNDARY LINES HEREBY VACATED (TYP)

TMP 57 - 21
BELMONT AND CARLTON HOLDINGS, LLC
ZONE: NCC
D.B. 1133 p. 905
D.B. 351 p. 526(plat)
14930 Sq. Ft. (0.343 Acres)

TMP 57 - 20
BELMONT & CARLTON HOLDINGS, LLC
ZONE: NCC
Instr.# 201200701
D.B. 1070 p. 445
D.B. 400 p. 96(plat)
D.B. 456 p. 635(plat)
118252 Sq. Ft. (2.715 Acres)

TOTAL COMBINED PARCEL
REVISED TAX MAP 57 PARCEL 20
276,714 SQ FT (6.353 AC)

N72°27'18"W 67.71'

EX. CARLTON AVE
40' & V/W R/W

S73°32'56"E 49.80'

S28°02'28"W 125.00'

TMP 57-19
N/F BROWN, PHILIP E SR & BARBARA J
DB: 456 PG: 31
DB: 398 PG: 480

N62°56'09"W 49.17'

S28°03'38"W 116.70'

S28°02'28"W 102.79'

EX. GARDEN STREET
50' PUBLIC R/W
DB: 48 PG: 110
INST#2012: 701

N28°48'49"E 160.32'

TMP 57-18
N/F PHILIP E. BROWN, SR.
DB: 372 PG: 517
DB: 367 PG: 239

S68°15'48"E 64.07'

EX. WALNUT STREET
50' PUBLIC R/W
DB: 48 PG: 110
INST#2012: 701

N67°35'19"W 80.05'

N22°24'41"E 25.12'

N22°24'41"E 25.12'

N67°55'34"W 70.42'

N27°07'17"E 2.30'

N69°08'40"W 118.31'

TMP 57-18.1
N/F PEACOCK AUTO SERVICE, LLC
INST#2019: 3827
INST#2019: 2642
INST#2012: 701
DB: 341 PG: 212

TMP 57-17
N/F PEACOCK AUTO SERVICE, LLC
INST#2019: 3827
INST#2019: 2642
DB: 341 PG: 212

EX. 20' PUBLIC WATERLINE ESMT
INST#2012: 701
~TO BE VACATED BY SEPARATE DOCUMENT~

EX. 20' PUBLIC GASLINE ESMT
INST#2012: 701
~TO BE VACATED BY SEPARATE DOCUMENT~

STREAM

(N28°08'16"E 343.54')

EX. SOUTH CHERRY STREET
30' R/W (UNIMPROVED)

S62°33'13"E 256.00'(T)

30.00'

L1 N27°42'31"E 80.92'(T)

L2

15.46' 5.22' 10.24' 50.00'

S62°51'00"E 42.56'

N83°06'10"E 256.72'

TMP 57-1
N/F MILLER, TRUST
INST#2018: 2714
INST#2015: 2597

TMP 57-1.1
N/F MILLER, JOHN C, TRUSTEE JOHN C MILLER TRUST–2004 & JACKSON, DEBORAH, TRUSTEE DEBORAH JACKSON TRUST–2004
INST#2018: 2714
INST#2015: 2597

TMP 57 - 2
BELMONT & CARLTON HOLDINGS, LLC
ZONE: NCC
D.B. 1098 p. 731
D.B. 48 p. 110(plat)
RESOLUTIONS CLOSING STREETS BOOK 2 pg. 20
40689 Sq. Ft. (0.934 Acres)

TMP 57-145.C
N/F CITY OF CHARLOTTESVILLE
DB: 953 PG: 717(PLAT)

BOUNDARY LINES HEREBY VACATED (TYP)

NAD83
VA SOUTH ZONE

TMP 57 - 5
BELMONT & CARLTON HOLDINGS LLC.
ZONE: NCC
D.B. 1098 p. 731
Instr#201200701
D.B. 48 p. 110(plat)
8220 Sq. Ft. (0.189 Acres)

TMP 57 - 7.2
BELMONT & CARLTON HOLDINGS LLC.
ZONE: NCC
D.B. 1098 p. 731
Instr#201200701
D.B. 48 p.110(plat)
6479 Sq. Ft. (0.149 Acres

TMP 57 - 7.3
BELMONT & CARLTON HOLDINGS LLC.
ZONE: NCC
D.B. 1098 p. 731
Instr#201200701
D.B. 48 p.110(plat)
6446 Sq. Ft. (0.148 Acres)

TMP 57 - 4
BELMONT & CARLTON HOLDINGS LLC.
ZONE: NCC
D.B. 1098 p. 731
Instr#201200701
D.B. 48 p.110(plat)
6413 Sq. Ft. (0.147 Acres)

TMP 57 - 3
BELMONT & CARLTON HOLDINGS LLC.
ZONE: NCC
D.B. 1098 p. 731
Instr#201200701
D.B. 48 p.110(plat)
6380 Sq. Ft. (0.146 Acres)

TMP 57 - 7.4
BELMONT & CARLTON HOLDINGS LLC.
ZONE: NCC
D.B. 1098 p. 731
Instr#201200701
D.B. 48 p.110(plat)
6347 Sq. Ft. (0.146 Acres)

TMP 57 - 7.5
BELMONT & CARLTON HOLDINGS LLC.
ZONE: NCC
D.B. 1098 p. 731
Instr#201200701
D.B. 48 p.110(plat)
6315 Sq. Ft. (0.145 Acres)

TMP 57 - 7.6
BELMONT & CARLTON HOLDINGS LLC.
ZONE: NCC
D.B. 1098 p. 731
Instr#201200701
D.B. 48 p.110(plat)
Resolutions Closing Streets Book 2 pg. 20
8006 Sq. Ft. (0.184 Acres)

TMP 57 - 7
BELMONT & CARLTON HOLDINGS LLC.
ZONE: NCC
D.B. 1098 p. 731
Instr#201200701
D.B. 48 p.110(plat)
6816 Sq. Ft. (0.156 Acres)

TMP 57 - 7.1
BELMONT & CARLTON HOLDINGS LLC.
ZONE: NCC
D.B. 1098 p. 731
Instr#201200701
D.B. 48 p.110(plat)
5698 Sq. Ft. (0.131 Acres)

TMP 57 - 6
BELMONT & CARLTON HOLDINGS LLC.
ZONE: NCC
D.B. 1098 p. 731
Instr#201200701
D.B. 48 p.110(plat)
11370 Sq. Ft. (0.261 Acres)

TMP 57 - 7.9
BELMONT & CARLTON HOLDINGS LLC.
ZONE: NCC
D.B. 1098 p. 731
Instr#201200701
D.B. 48 p.110(plat)
5995 Sq. Ft. (0.138 Acres)

TMP 57 - 7.8
BELMONT & CARLTON HOLDINGS LLC.
ZONE: NCC
D.B. 1098 p. 731
Instr#201200701
D.B. 48 p.110(plat)
5689 Sq. Ft. (0.131 Acres)

TMP 57 - 7.7
BELMONT & CARLTON HOLDINGS LLC.
ZONE: NCC
D.B. 1098 p. 731
Instr#201200701
D.B. 48 p.110(plat)
5687 Sq. Ft. (0.131 Acres)

MATCHLINE SEE INSET THIS SHEET

'BOUNDARY LINE HEREBY VACATED

NCC ZONING
R-2 ZONING

N: 3896578.70
E: 11490879.49

IF @ 6.04'

S27°02'57"W 194.70'(T)

S27°02'57"W 100.13'

S26°51'08"W 50.05'

S29°45'10"W 74.56'

S27°19'31"W 109.77'

N: 3897092.70
E: 11491146.28

TMP 57-15
N/F GLASGOW, DIANA
DB: 952 PG: 797

TMP 57-14
N/F WELCH, SARA JANE
INST#2016: 419

TMP 57-13
N/F SPRUCE MANOR HOUSING, INC
DB: 987 PG: 359

TMP 57-12
N/F HAMILTON, TODD ESKEL & ELLEN
DB: 956 PG: 254

TMP 57-11
N/F VAN HORN, KAI E AXELBAUM, MIRIAM Z
INST#2022: 2222

N63°14'54"W 139.71'

TMP 57 – 10
SPRUCE STREET INVESTMENTS LLC
ZONE: R-2
Instr#2021: 4933
6982 Sq. Ft (0.160 Acres)

S63°14'50"E 139.73'

TMP 57-9
N/F LACKMAN, PAUL M
INST#2021: 5497

TMP 57-9.001
N/F PARROTT, CHARLES W & CHRISTINE D
INST#2021: 5789

TMP 57-9.1
N/F JENSEN, MARY E & KEITH F CHEELY
DB: 1012 PG: 866

TMP 57-8
N/F THEISEN, KEVIN JIUNN
INST#2022: 1478
INST#2019: 2620
DB: 509 PG: 745

TMP 57-145.B1
N/F FOGEL, JEFFREY E
DB: 1126 PG: 234

TMP 57-145.B
N/F DOREY, BRUCE R
INST#2020: 0792

TMP 57-145.A
N/F WILL, JOHN T & SANDRA R, TRUSTEES
INST#2020: 4720
INST#2019: 0120
INST#2013: 3433

INSET
SCALE: 1"=40'

BELMONT 5995 BELMONT 568 BELMONT

BOUNDARY LINE HEREBY VACATED

NCC ZONING
R-2 ZONING

IF S27°02'57 IF S27°02'57

TMP 57-11
N/F VAN HORN, KAI E AXELBAUM, MIRIAM Z
INST#2022: 2222

TMP 57 – 10
SPRUCE STREET INVESTMENTS LLC
ZONE: R-2
Instr#2021: 4933
6982 Sq. Ft (0.160 Acres)

TMP 57-9
N/F LACKMAN, PAUL M
INST#2021: 5497

N63°14'54"W 139.71'

S63°14'50"E 139.73'

IF S27°03'50"W 49.97' IF

EX. SPRUCE STREET
50' PUBLIC R/W
DB: 95 PG: 330(ALB)

COMMONWEALTH OF VIRGINIA
BRIAN D JAMISON
LIC. 3334
09-27-2023
LAND SURVEYOR
DRAFT

DATE:	07-10-2023
REV:	09-27-2023
REV:	
SCALE:	1"=40'
JOB:	19.0212
FILE:	TMPROJ
SHEET:	V2 OF V5

SEE SHEET V1 FOR LINE AND CURVE CALLS

ROUDABUSH, GALE & ASSOCIATES, INC.
ENGINEERS, SURVEYORS AND LAND PLANNERS
A PROFESSIONAL CORPORATION
SERVING VIRGINIA SINCE 1956
999 SECOND ST. SE, CHARLOTTESVILLE, VIRGINIA 22902
PHONE 434-977-0205 - FAX 434-296-5220 - EMAIL INFO@ROUDABUSH.COM

BLA, RIGHT OF WAY DEDICATION, & EASEMENT PLAT
BELMONT CONDOMINIUMS
TAX MAP 57 PARCELS 2,3,4,5,6,7,7.1, 7.2,7.3,7.4,7.5,7.6,7.7,7.8,7.9,10,20,&21
CITY OF CHARLOTTESVILLE, VIRGINIA
RIGHT-OF-WAY DEDICATION

40' 0 40' 80' 120'
SCALE: 1" = 40'

TMP 58-349
N/F SPARTINA, LLC
INST#2013: 4712

TMP 58-349.1
N/F HATCHER, JANET TRUSTEE
DB: 1113 PG: 35

TMP 58-350
N/F BRAVERMAN, STANTON, TRUSTEE
INST#2020: 883
INST#2019: 4411
INST#2017: 104

TMP 58-351
N/F SYLVESTER, PHYLLIS & LEO J ARICO
DB: 687 PG: 718

TMP 58-352
N/F MAJORS, CHARLES H.
INST#2018: 3017

TMP 58-353.1
N/F BAXTER, JOHN W & ROBIN A
DB: 1033 PG: 943

TMP 58-353
N/F VAN DER LINDE, WILLIAM F
INST#2013: 4005

TMP 58-354
N/F SCHETTINI, EUGENIO & CHRISTINE PALAZZOLO
DB: 1038 PG: 361

TMP 58-354.1
N/F GRAY, JOHN ERNEST CATHERINE
INST#2018: 2714
INST#2014: 2421

EX. HOLLY STREET
30' & V/W R/W
(UNIMPROVED)

HOLLY STREET
PROPOSED V/W PUBLIC R/W

PUBLIC STREET DEDICATION
1.276 AC.
55,587 SF

N28°05'05"E 110.51'
PF
L11
60
N27°02'57"E 117.60'
C3
C4
C2
L4
C1
L5 24.10'
N35°36'56"E
C5
N27°02'57"E 127.14'
C6
10' MAX SETBACK

REVISED TAX MAP 57 PARCEL 20
221,126 SQ FT (5.077 AC) SOUTHERN & NORTHERN PORTIONS

EX. SOUTH CHERRY STREET
30' R/W (UNIMPROVED)
S62°33'13"E 256.00'
226.00'

TMP 57-1
N/F MILLER, TRUST
INST#2018: 2714
INST#2015: 2597

TMP 57-1.1
N/F MILLER, JOHN C, TRUSTEE JOHN C MILLER TRUST-2004 & JACKSON, DEBORAH, TRUSTEE DEBORAH JACKSON TRUST-2004
INST#2018: 2714
INST#2015: 2597

EX. CARLTON AVE
40' & V/W R/W

BNF
S28°02'28"W 123.01'
125.00'
S72°29'49"E 49.97'
S72°32'56"E 49.80'
N72°16'53"W 56.72'
N62°56'09"W 49.17'

TMP 57-19
N/F BROWN, PHILIP E SR & BARBARA J
DB: 456 PG: 31
DB: 398 PG: 480

S28°03'38"W 116.70'
IF
S28°02'28"W 102.79'

EX. GARDEN STREET
50' PUBLIC R/W
DB: 48 PG: 110
INST#2012: 701

L3
IF
N28°48'49"E 160.32'

GARDEN STREET
FORMERLY WALNUT STREET
50' PUBLIC R/W
DB: 48 PG: 110
INST#2012: 701
N67°35'19"W 80.05'
S68°15'48"E 64.07'
10' MAX SETBACK

TMP 57-18
N/F PHILIP E. BROWN, SR.
DB: 372 PG: 517
DB: 367 PG: 239

N22°24'41"E 25.12'
N22°24'41"E
25.12'
N67°55'34"W 70.42'
N27°07'17"E
2.30'
IF
N69°08'40"W 118.31'

TMP 57-18.1
N/F PEACOCK AUTO SERVICE, LLC
INST#2019: 3827
INST#2019: 2642
INST#2012: 701
DB: 341 PG: 212

TMP 57-17
N/F PEACOCK AUTO SERVICE, LLC
INST#2019: 3827
INST#2019: 2642
DB: 341 PG: 212

AREA COMPUTATIONS:

REVISED PARCEL
6.353 AC COMBINED TOTAL FROM SHEET 2
– 1.276 AC PUBLIC STREET DEDICATION
5.077 AC REVISED TAX MAP 57 PARCEL 20

+ 2.974 AC SOUTHERN PORTION
+ 2.103 AC NORTHERN PORTION
5.077 AC REVISED TAX MAP 57 PARCEL 20

SOUTHERN PORTION
OF TAX MAP 57 PARCEL 20
2.974 AC.
129,507 SF

NORTHERN PORTION
OF TAX MAP 57 PARCEL 20
2.103 AC.
91,619 SF

CONIFER DRIVE
PROPOSED V/W PUBLIC R/W

10' MAX SETBACK
S62°57'03"E 90.97'
L1
S62°57'03"E 143.51'
L6
S62°57'03"E 174.49'
L7
L10
10' MAX SETBACK
N62°57'03"W 237.11'
N62°57'03"W 173.91'
C7
C8
NCC/R-2
ZONING LINE
S27°02'57"W 100.13'
S26°51'08"W 50.05'
S29°45'10"W 74.56'
S27°19'31"W 109.77'
IF
L8
L9
RR

30.00'
L1
L2
IF
N27°42'31"E 80.92'(T)
IF 15.46' 5.22' 10.24' 50.00' IF
S62°51'00"E 42.56'

NAD83
VA SOUTH ZONE

TMP 57-145.C
N/F CITY OF CHARLOTTESVILLE
DB: 953 PG: 717(PLAT)
N83°06'10"E 256.72'

MATCHLINE SEE INSET THIS SHEET

S27°02'57"W 194.70'(T)
IF
© 6.04'

TMP 57-15
N/F GLASGOW, DIANA
DB: 952 PG: 797

TMP 57-14
N/F WELCH, SARA JANE
INST#2016: 419

TMP 57-13
N/F SPRUCE MANOR HOUSING, INC
DB: 987 PG: 359

TMP 57-12
N/F HAMILTON, TODD ESKEL & ELLEN
DB: 956 PG: 254

TMP 57-11
N/F VAN HORN, KAI E AXELBAUM, MIRIAM Z
INST#2022: 2222

N63°14'54"W 13

R DRIVE
/W PUBLIC R/W

TMP 57-9
N/F LACKMAN, PAUL M
INST#2021: 5497

S63°14'5

TMP 57-9.001
N/F PARROTT, CHARLES W & CHRISTINE D
INST#2021: 5789

TMP 57-9.1
N/F JENSEN, MARY E & KEITH F CHEELY
DB: 1012 PG: 866

TMP 57-8
N/F THEISEN, KEVIN JIUNN
INST#2022: 1478
INST#2019: 2620
DB: 509 PG: 745

TMP 57-145.B1
N/F FOGEL, JEFFREY E
DB: 1126 PG: 234

TMP 57-145.B
N/F DOREY, BRUCE R
INST#2020: 0792

TMP 57-145.A
N/F WILL, JOHN T & SANDRA R, TRUSTEES
INST#2020: 4720
INST#2019: 0120
INST#2013: 3433

INSET
SCALE: 1"=40'

TMP 57-11
N/F VAN HORN, KAI E AXELBAUM, MIRIAM Z
INST#2022: 2222

TMP 57-9
N/F LACKMAN, PAUL M
INST#2021: 5497

SOUTHERN PORTION
NORTHERN PORTION
NCC/R-2 ZONING LINE
S27°02
C7
C8
IF
L8
L9
N63°14'54"W 139.71'139.71'(T)
CONIFER DRIVE
PROPOSED V/W PUBLIC R/W
S63°14'50"E 139.73'

EX. SPRUCE STREET
50' PUBLIC R/W
DB: 95 PG: 330(ALB)

COMMONWEALTH OF VIRGINIA
BRIAN D JAMISON
LIC. 13334
09-27-2023
LAND SURVEYOR
DRAFT

DATE:	07-10-2023
REV:	09-27-2023
REV:	
SCALE:	1"=40'
JOB:	19.0212
FILE:	TMPROJ

SHEET: V3 OF V5

SEE SHEET V1 FOR LINE AND CURVE CALLS

ROUDABUSH, GALE & ASSOCIATES, INC.
ENGINEERS, SURVEYORS AND LAND PLANNERS
A PROFESSIONAL CORPORATION SERVING VIRGINIA SINCE 1956
999 SECOND ST. SE, CHARLOTTESVILLE, VIRGINIA 22902
PHONE 434-977-0205 - FAX 434-296-5220 - EMAIL INFO@ROUDABUSH.COM

BLA, RIGHT OF WAY DEDICATION, & EASEMENT PLAT
BELMONT CONDOMINIUMS

TAX MAP 57 PARCELS 2,3,4,5,6,7,7.1, 7.2,7.3,7.4,7.5,7.6,7.7,7.8,7.9,10,20,&21

CITY OF CHARLOTTESVILLE, VIRGINIA

PUBLIC UTILITY EASEMENTS

40' 0 40' 80' 120'

SCALE: 1" = 40'

TMP 58-349
N/F SPARTINA, LLC
INST#2013: 4712

TMP 58-349.1
N/F HATCHER, JANET TRUSTEE
DB: 1113 PG: 35

TMP 58-350
N/F BRAVERMAN, STANTON, TRUSTEE
INST#2020: 883
INST#2019: 4411
INST#2017: 104

TMP 58-351
N/F SYLVESTER, PHYLLIS & LEO J ARICO
DB: 687 PG: 718

TMP 58-352
N/F MAJORS, CHARLES H.
INST#2018: 3017

TMP 58-353.1
N/F BAXTER, JOHN W & ROBIN A
DB: 1033 PG: 943

TMP 58-353
N/F VAN DER LINDE, WILLIAM F
INST#2013: 4005

TMP 58-354
N/F SCHETTINI, EUGENIO & CHRISTINE PALAZZOLO
DB: 1038 PG: 361

TMP 58-354.1
N/F GRAY, JOHN ERNEST CATHERINE
INST#2018: 2714
INST#2014: 2421

HOLLY STREET
PROPOSED V/W PUBLIC R/W

V/W PUBLIC UTILITY EASEMENT
L=5.10'
L=35.36'
47.68'
N27°02'57"E 117.60'
S62°00'51"E 4.99'
S62°57'03"E 13.80'
S27°02'57"W 11.01'
V/W PUBLIC UTILITY EASEMENT
L5 24.10' N35°36'56"E
L=29.11'
L15 L14 L13 C5
N27°02'57"E 127.14'
S27°30'46"W 160.51'
L=10.04'
L=10.71'
L12 C6 L16
V/W PUBLIC UTILITY EASEMENTS
L17 38.77'
L18 17.30'
N28°21'51"E 211.62'
N61°38'09"W 20.00'
20' PUBLIC UTILITY EASEMENT
20.01'
S28°21'51"W 212.08'
*20' PUBLIC UTILITY EASEMENT
S27°02'57"W 1.85'
S62°57'03"E 143.51'
23.60'
28.99'
S27°02'57"W 2.50'
*21' PUBLIC UTILITY EASEMENT
14.84'
L20 L19 L6
N27°02'57"E 186.47'
V/W PUBLIC UTILITY EASEMENT
20.00'
60.09'
S27°02'57"W 189.34'
4.04'
S88°47'55"W 8.32'
N72°40'16"W 58.35'
62.51'
N17°19'44"E 8.93'
*20' PUBLIC UTILITY EASEMENT
S27°02'57"W 11.70'
90.97'
28.83'
S62°57'03"E 33.05'
L7 L9 L8
S63°24'52"E 66.13'
V/W PUBLIC UTILITY EASEMENT
L28 L27 L26 L25 L24 L23 L22
S62°57'03"E 174.49'
S63°36'54"E 92.13'
L21 C7
S27°02'57"W 194.70'(T)
IF @ 6.04'
L8
N63°14'54"W 13

EX. CARLTON AVE
40' & V/W R/W

BNF
S28°02'28"W 123.01'
125.00'
S08°44'41"W 91.77'(TIE)
N72°16'53"W 56.72'
S62°56'09"W 49.17'

TMP 57-19
N/F BROWN, PHILIP E SR & BARBARA J
DB: 456 PG: 31
DB: 398 PG: 480

IF
S28°02'28"W 102.79'

EX. GARDEN STREET
50' PUBLIC R/W
DB: 48 PG: 110
INST#2012: 701

GARDEN STREET
FORMERLY WALNUT STREET
50' PUBLIC R/W
DB: 48 PG: 110
INST#2012: 701

N67°35'19"W 80.05'

TMP 57-18
N/F PHILIP E. BROWN, SR.
DB: 372 PG: 517
DB: 367 PG: 239

REVISED TAX MAP
57 PARCEL 20
5.108 AC.
222,517 SQ. FT.

N22°24'41"E 25.12'

TMP 57-18.1
N/F PEACOCK AUTO SERVICE, LLC
INST#2019: 3827
INST#2019: 2642
INST#2012: 701
DB: 341 PG: 212

N67°55'34"W 70.42'
N27°07'17"E 2.30'
IF
N69°08'40"W 118.31'

TMP 57-17
N/F PEACOCK AUTO SERVICE, LLC
INST#2019: 3827
INST#2019: 2642
DB: 341 PG: 212

*CALLS TO CENTERLINE OF EASEMENT
SEE SHEET V1 FOR BOUNDARY LINE AND CURVE CALLS

COMMONWEALTH OF VIRGINIA
BRIAN D JAMISON
LIC. 3334
09-27-2023
LAND SURVEYOR
DRAFT

DATE:	07-10-2023
REV:	09-27-2023
REV:	
SCALE:	1"=40'
JOB:	19.0212
FILE:	TMPROJ

SHEET: V4 OF V5

ROUDABUSH, GALE & ASSOCIATES, INC.
ENGINEERS, SURVEYORS AND LAND PLANNERS
A PROFESSIONAL CORPORATION SERVING VIRGINIA SINCE 1956
999 SECOND ST. SE, CHARLOTTESVILLE, VIRGINIA 22902
PHONE 434-977-0205 - FAX 434-296-5220 - EMAIL INFO@ROUDABUSH.COM

TMP 57-15
N/F GLASGOW, DIANA
DB: 952 PG: 797

TMP 57-14
N/F WELCH, SARA JANE
INST#2016: 419

TMP 57-13
N/F SPRUCE MANOR HOUSING, INC
DB: 987 PG: 359

TMP 57-12
N/F HAMILTON, TODD ESKEL & ELLEN
DB: 956 PG: 254

TMP 57-11
N/F VAN HORN, KAI E AXELBAUM, MIRIAM Z
INST#2022: 2222

CONIFER DRIVE
PROPOSED V/W PUBLIC R/W

N28°05'05"E 110.51'
PF
L11 C9
N27°02'57"E 1.83'
7.95'
N62°57'03"W 237.11'
S62°59'31"E 154.90'
V/W PUBLIC UTILITY EASEMENTS
S27°02'57"W 1.94'
*20' PUBLIC UTILITY EASEMENT
40.78'
N27°01'57"E 7.15'
33.48'
L10
50.31'
S27°02'57"W 2.57'
*10' PUBLIC UTILITY EASEMENT
173.91'
N62°57'03"W 175.26'
*20' PUBLIC UTILITY EASEMENTS
S27°02'57"W 2.55'
51.96'
C8
L9
IF
S27°02'57"W 100.13'
S26°51'08"W 50.05'
S29°45'10"W 74.56'
S27°19'31"W 109.77'
RR
S63°14'5

EX. SOUTH CHERRY STREET
30' R/W (UNIMPROVED)

226.00'
S62°33'13"E 256.00'
IF
30.00'
L1
L2
N27°42'31"E 80.92'(T)
IF 15.46' 5.22' 10.24' 50.00' IF
S62°51'00"E 42.56'
IF

REVISED TAX MAP
57 PARCEL 20
5.108 AC.
222,517 SQ. FT.

NAD83
VA SOUTH ZONE

N83°06'10"E 256.72'

EASEMENT LINE TABLE			*EASEMENT LINE TABLE*		
Line	Direction	Length	Line	Direction	Length
L12	S 31°03'34" W	14.99'	L20	N 26°00'21" E	5.12'
L13	S 33°09'30" W	22.90'	L21	N 27°02'57" E	2.85'
L14	S 31°25'50" W	10.27'	L22	N 27°02'57" E	4.79'
L15	N 56°12'28" W	1.97'	L23	S 62°57'03" E	10.00'
L16	S 65°39'35" E	19.28'	L25	S 62°57'03" E	31.28'
L17	S 62°57'03" E	29.52'	L26	N 27°02'57" E	4.80'
L18	N 27°02'57" E	2.35'	L27	S 62°57'03" E	10.00'
L19	N 62°57'03" W	10.50'	L28	S 27°02'57" W	4.67'

TMP 57-1
N/F MILLER, TRUST
INST#2018: 2714
INST#2015: 2597

TMP 57-1.1
N/F MILLER, JOHN C, TRUSTEE JOHN C MILLER TRUST–2004 & JACKSON, DEBORAH, TRUSTEE DEBORAH JACKSON TRUST–2004
INST#2018: 2714
INST#2015: 2597

TMP 57-145.C
N/F CITY OF CHARLOTTESVILLE
DB: 953 PG: 717(PLAT)

TMP 57-9
N/F LACKMAN, PAUL M
INST#2021: 5497

TMP 57-9.001
N/F PARROTT, CHARLES W & CHRISTINE D
INST#2021: 5789

TMP 57-9.1
N/F JENSEN, MARY E & KEITH F CHEELY
DB: 1012 PG: 866

TMP 57-8
N/F THEISEN, KEVIN JIUNN
INST#2022: 1478
INST#2019: 2620
DB: 509 PG: 745

TMP 57-145.B1
N/F FOGEL, JEFFREY E
DB: 1126 PG: 234

TMP 57-145.B
N/F DOREY, BRUCE R
INST#2020: 0792

TMP 57-145.A
N/F WILL, JOHN T & SANDRA R, TRUSTEES
INST#2020: 4720
INST#2019: 0120
INST#2013: 3433

Q:\RGA\TMPROJ\19.0212_BELMONT_CONDOS\SURVEY\2023_platting\DWG\19.0212 Belmont Condos Boundary Plat 1.dwg

BLA, RIGHT OF WAY DEDICATION, & EASEMENT PLAT
BELMONT CONDOMINIUMS
TAX MAP 57 PARCELS 2,3,4,5,6,7,7.1, 7.2,7.3,7.4,7.5,7.6,7.7,7.8,7.9,10,20,&21
CITY OF CHARLOTTESVILLE, VIRGINIA
SIGHT DISTANCE EASEMENTS

40' 0 40' 80' 120'
SCALE: 1" = 40'

TMP 58-349
N/F SPARTINA, LLC
INST#2013: 4712

TMP 58-349.1
N/F HATCHER, JANET TRUSTEE
DB: 1113 PG: 35

TMP 58-350
N/F BRAVERMAN, STANTON, TRUSTEE
INST#2020: 883
INST#2019: 4411
INST#2017: 104

TMP 58-351
N/F SYLVESTER, PHYLLIS & LEO J ARICO
DB: 687 PG: 718

TMP 58-352
N/F MAJORS, CHARLES H.
INST#2018: 3017

TMP 58-353.1
N/F BAXTER, JOHN W & ROBIN A
DB: 1033 PG: 943

TMP 58-353
N/F VAN DER LINDE, WILLIAM F
INST#2013: 4005

TMP 58-354
N/F SCHETTINI, EUGENIO & CHRISTINE PALAZZOLO
DB: 1038 PG: 361

TMP 58-354.1
N/F GRAY, JOHN ERNEST CATHERINE
INST#2018: 2714
INST#2014: 2421

HOLLY STREET
PROPOSED V/W PUBLIC R/W

N27°02'57"E 117.60'
C4
C3
C2
L4
C1
L5 24.10' N35°36'56"E
C5
N27°02'57"E 127.14'
C6
42.18'
27.65'
S51°27'22"E
S68°59'55"E 52.30'
143.51'
S62°57'03"E
21.11'
L6
V/W PUBLIC SIGHT DISTANCE EASEMENT

N28°05'05"E 110.51'
PF
L11
C9
N62°57'03"W 237.11'
226.00'
S62°33'13"E 256.00'

EX. SOUTH CHERRY STREET
30' R/W (UNIMPROVED)

TMP 57-1
N/F MILLER, TRUST
INST#2018: 2714
INST#2015: 2597

TMP 57-1.1
N/F MILLER, JOHN C, TRUSTEE JOHN C MILLER TRUST-2004 & JACKSON, DEBORAH, TRUSTEE DEBORAH JACKSON TRUST-2004
INST#2018: 2714
INST#2015: 2597

NAD83
VA SOUTH ZONE

EX. CARLTON AVE
40' & V/W R/W

N72°16'53"W 56.72'
BNF
S28°02'28"W 123.01'
125.00'
S72°29'49"E 49.97'
S72°32'56"E 49.80'
N62°56'09"W 49.17'

TMP 57-19
N/F BROWN, PHILIP E SR & BARBARA J
DB: 456 PG: 31
DB: 398 PG: 480

S28°03'38"W 116.70'
IF
S28°02'28"W 102.79'

EX. GARDEN STREET
50' PUBLIC R/W
DB: 48 PG: 110
INST#2012: 701

L3
IF
N28°48'49"E 160.32'

TMP 57-18
N/F PHILIP E. BROWN, SR.
DB: 372 PG: 517
DB: 367 PG: 239

S68°15'48"E 64.07'

FORMERLY WALNUT STREET
50' PUBLIC R/W
DB: 48 PG: 110
INST#2012: 701

N67°35'19"W 80.05'
N22°24'41"E 25.12'
N22°24'41"E 25.12'
N67°55'34"W 70.42'
N27°07'17"E 2.30'
IF

TMP 57-18.1
N/F PEACOCK AUTO SERVICE, LLC
INST#2019: 3827
INST#2019: 2642
INST#2012: 701
DB: 341 PG: 212

N69°08'40"W 118.31'

TMP 57-17
N/F PEACOCK AUTO SERVICE, LLC
INST#2019: 3827
INST#2019: 2642
DB: 341 PG: 212

REVISED TAX MAP
57 PARCEL 20
5.108 AC.
222,517 SQ. FT.

CONIFER DRIVE
PROPOSED V/W PUBLIC R/W

L1
IF
30.00'
L2
IF IF IF
IF 15.46' 5.22' 10.24' 50.00' IF
N27°42'31"E 80.92'(T)

REVISED TAX MAP
57 PARCEL 20
5.108 AC.
222,517 SQ. FT.

S62°51'00"E 42.96'
IF
N83°06'10"E 256.72'

TMP 57-145.C
N/F CITY OF CHARLOTTESVILLE
DB: 953 PG: 717(PLAT)

L10
33.11'
S68°59'55"E 52.24'
S58°57'27"E 79.03'
163.17' N62°57'03"W
N62°57'03"W 174.49'
S62°57'03"E
14.83'
S58°57'27"E 79.03'
S68°59'55"E 52.24'
28.87'
10.02'
L7
L8
L9
IF
NCC/R-2 ZONING LINE
S27°02'57"W 100.13'
S26°51'08"W 50.05'
S29°45'10"W 74.56'
S27°19'31"W 109.77'
RR
RR

V/W PUBLIC SIGHT DISTANCE EASEMENT
V/W PUBLIC SIGHT DISTANCE EASEMENT

IF @ 6.04'
S27°02'57"W 194.70'(T)
IF
L8
N63°14'54"W 13
S63°14'5

TMP 57-15
N/F GLASGOW, DIANA
DB: 952 PG: 797

TMP 57-14
N/F WELCH, SARA JANE
INST#2016: 419

TMP 57-13
N/F SPRUCE MANOR HOUSING, INC
DB: 987 PG: 359

TMP 57-12
N/F HAMILTON, TODD ESKEL & ELLEN
DB: 956 PG: 254

TMP 57-11
N/F VAN HORN, KAI E AXELBAUM, MIRIAM Z
INST#2022: 2222

R DRIVE
/W PUBLIC R/W

TMP 57-9
N/F LACKMAN, PAUL M
INST#2021: 5497

TMP 57-9.001
N/F PARROTT, CHARLES W & CHRISTINE D
INST#2021: 5789

TMP 57-9.1
N/F JENSEN, MARY E & KEITH F CHEELY
DB: 1012 PG: 866

TMP 57-8
N/F THEISEN, KEVIN JIUNN
INST#2022: 1478
INST#2019: 2620
DB: 509 PG: 745

TMP 57-145.B1
N/F FOGEL, JEFFREY E
DB: 1126 PG: 234

TMP 57-145.B
N/F DOREY, BRUCE R
INST#2020: 0792

TMP 57-145.A
N/F WILL, JOHN T & SANDRA R, TRUSTEES
INST#2020: 4720
INST#2019: 0120
INST#2013: 3433

COMMONWEALTH OF VIRGINIA
DRAFT
BRIAN D JAMISON
NO. 13334
09-27-2023
LAND SURVEYOR

DATE:	07-10-2023
REV:	09-27-2023
REV:	
SCALE:	1"=40'
JOB:	19.0212
FILE:	TMPROJ

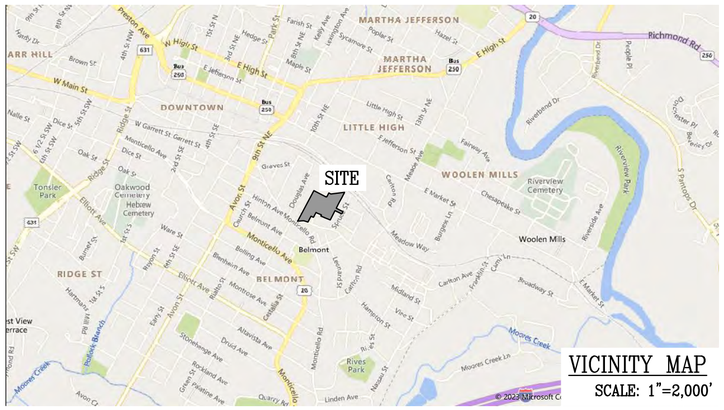
SHEET: V5 OF V5

SEE SHEET V1 FOR BOUNDARY LINE AND CURVE CALLS

ROUDABUSH, GALE & ASSOCIATES, INC.
ENGINEERS, SURVEYORS AND LAND PLANNERS
A PROFESSIONAL CORPORATION SERVING VIRGINIA SINCE 1956
999 SECOND ST. SE, CHARLOTTESVILLE, VIRGINIA 22902
PHONE 434-977-0205 - FAX 434-296-5220 - EMAIL INFO@ROUDABUSH.COM

PRIVATE EASEMENT PLAT
BELMONT CONDOMINIUMS
TAX MAP 57 PARCEL 20
CITY OF CHARLOTTESVILLE, VIRGINIA

COVER SHEET


SITE
MARTHA JEFFERSON
DOWNTOWN
LITTLE HIGH
WOOLEN MILLS
BELMONT
RIDGE ST
Woolen Mills
Riverview Cemetery
Oakwood Cemetery
Hebrew Cemetery
Tonsler Park
Rives Park
Moores Creek
Richmond Rd
E High St
W Main St
Monticello Ave
Belmont Ave
Preston Ave
Ridge St
Avon St
Chesapeake St
Riverview Park
Riverside Ave
Broadway St
Carlton Ave
Midland St
Meade Ave
Maplewood Dr
Linden Ave
Quarry Rd
Rockland Ave
Palatine Ave
Stonehenge Ave
Druid Ave
Altavista Ave
Belmont Bridge
Hazel St
Maple St
Poplar St
Sycamore St
Park St
Farish St
Kelly Ave
Lexington Ave
Hedge St
Nalle St
Oak St
Dice St
Graves St
Garrett St
Elliott Ave
Ware St
Wertland St
Bruce St
Burnett St
Hartmans Mill Rd
Preston Place
Meade Ave
Cream Pl
Locust Ave
Carlton Rd
Hamilton St
View St
Nassau St
Riverbend Dr
Purple Pl
Fairway Ave
Rugby Rd
Rugby Ter
Chancellor St
Lyon Ln
Madison Ln
Madison Hall
Madison Way
Burgess Ln
E Market St
Jefferson St
Little High St
13th St NE
10th St NE
9th St NE
4th St NW
5th St NW
6th St NW
7th St NW
Rugby Ave
Gilmer Dr
Riverbend Dr

PRIVATE EASEMENT PLAT
BELMONT CONDOMINIUMS
TAX MAP 57 PARCEL 20
CITY OF CHARLOTTESVILLE, VIRGINIA
EXISTING CONDITIONS

40' 0 40' 80' 120'

SCALE: 1" = 40'

TMP 58-349
N/F SPARTINA, LLC
INST#2013: 4712

TMP 58-349.1
N/F HATCHER, JANET TRUSTEE
DB: 1113 PG: 35

TMP 58-350
N/F BRAVERMAN, STANTON, TRUSTEE
INST#2020: 883
INST#2019: 4411
INST#2017: 104

TMP 58-351
N/F SYLVESTER, PHYLLIS & LEO J ARICO
DB: 687 PG: 718

TMP 58-352
N/F MAJORS, CHARLES H.
INST#2018: 3017

TMP 58-353.1
N/F BAXTER, JOHN W & ROBIN A
DB: 1033 PG: 943

TMP 58-353
N/F VAN DER LINDE, WILLIAM F
INST#2013: 4005

TMP 58-354
N/F SCHETTINI, EUGENIO & CHRISTINE PALAZZOLO
DB: 1038 PG: 361

TMP 58-354.1
N/F GRAY, JOHN ERNEST CATHERINE
INST#2018: 2714
INST#2014: 2421

EX. HOLLY STREET
30' & V/W R/W
(UNIMPROVED)

HOLLY STREET
V/W PUBLIC R/W
INST#XXXX: XXXX

TAX MAP 57 PARCEL 20
5.108 AC.
222,517 SQ. FT.

EX. CARLTON AVE
40' & V/W R/W

EX. SOUTH CHERRY STREET
30' R/W (UNIMPROVED)

EX. GARDEN STREET
50' PUBLIC R/W
DB: 48 PG: 110
INST#2012: 701

GARDEN STREET
FORMERLY WALNUT STREET
50' PUBLIC R/W
DB: 48 PG: 110
INST#2012: 701

CONIFER DRIVE
V/W PUBLIC R/W
INST#XXXX: XXXX

STREAM

N27°02'57"E 117.60'
C1 N72°16'53"W 56.72'
S28°02'28"W 123.01'
N62°56'09"W 49.17'
S28°02'28"W 102.79'
N67°35'19"W 80.05'
N67°55'34"W 70.42'
N27°07'17"E 2.30'
S69°08'40"E 118.31'
N27°02'57"E 198.21'
L5 24.10' N35°36'56"E
C5 N27°02'57"E 127.14'
S62°57'03"E 143.51'
S62°57'03"E 90.97'
S62°57'03"E 174.49'
N62°57'03"W 237.11'
N62°57'03"W 173.91'
N28°05'05"E 110.51'
S62°33'13"E 256.00'
226.00'
30.00'
N27°42'31"E 80.92'(T)
15.46' 5.22' 10.24' 50.00'
S62°51'00"E 42.56'
N83°06'10"E 256.72'
S27°02'57"W 106.56'
S26°51'08"W 50.05'
S29°45'10"W 74.56'
S27°19'31"W 109.77'

TMP 57-1
N/F MILLER, TRUST
INST#2018: 2714
INST#2015: 2597

TMP 57-1.1
N/F MILLER, JOHN C, TRUSTEE JOHN C MILLER TRUST-2004 & JACKSON, DEBORAH, TRUSTEE DEBORAH JACKSON TRUST-2004
INST#2018: 2714
INST#2015: 2597

TMP 57-18
N/F PHILIP E. BROWN, SR.
DB: 372 PG: 517
DB: 367 PG: 239

TMP 57-19
N/F BROWN, PHILIP E SR & BARBARA J
DB: 456 PG: 31
DB: 398 PG: 480

TMP 57-18.1
N/F PEACOCK AUTO SERVICE, LLC
INST#2019: 3827
INST#2019: 2642
INST#2012: 701
DB: 341 PG: 212

TMP 57-17
N/F PEACOCK AUTO SERVICE, LLC
INST#2019: 3827
INST#2019: 2642
DB: 341 PG: 212

TMP 57-145.C
N/F CITY OF CHARLOTTESVILLE
DB: 953 PG: 717(PLAT)

NAD83
VA SOUTH ZONE

EXISTING EASEMENTS:

Ⓐ V/W PUBLIC UTILITY EASEMENT
INST#XXXX: XXXX

Ⓑ 20' PUBLIC UTILITY EASEMENT
INST#XXXX: XXXX

Ⓒ 21' PUBLIC UTILITY EASEMENT
INST#XXXX: XXXX

Ⓓ 10' PUBLIC UTILITY EASEMENT
INST#XXXX: XXXX

Ⓔ V/W PUBLIC SIGHT DISTANCE EASEMENT
INST#XXXX: XXXX

Ⓕ 20' PUBLIC GASLINE EASEMENT
INST#2012: 701
~TO BE VACATED BY SEPARATE DOCUMENT~

Ⓖ 20' PUBLIC WATERLINE EASEMENT
INST#2012: 701
~TO BE VACATED BY SEPARATE DOCUMENT~

COMMONWEALTH OF VIRGINIA
BRIAN D JAMISON
LIC. 3334
09-27-2023
LAND SURVEYOR
DRAFT

DATE:	07-10-2023
REV:	09-27-2023
REV:	
SCALE:	1"=40'
JOB:	19.0212
FILE:	TMPROJ

SHEET: V2 OF V4

SEE SHEET V1 FOR LINE AND CURVE CALLS

ROUDABUSH, GALE & ASSOCIATES, INC.
ENGINEERS, SURVEYORS AND LAND PLANNERS
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TMP 57-15
N/F GLASGOW, DIANA
DB: 952 PG: 797

TMP 57-14
N/F WELCH, SARA JANE
INST#2016: 419

TMP 57-13
N/F SPRUCE MANOR HOUSING, INC
DB: 987 PG: 359

TMP 57-12
N/F HAMILTON, TODD ESKEL & ELLEN
DB: 956 PG: 254

TMP 57-11
N/F VAN HORN, KAI E AXELBAUM, MIRIAM Z
INST#2022: 2222

TMP 57-9
N/F LACKMAN, PAUL M
INST#2021: 5497

TMP 57-9.001
N/F PARROTT, CHARLES W & CHRISTINE D
INST#2021: 5789

TMP 57-9.1
N/F JENSEN, MARY E & KEITH F CHEELY
DB: 1012 PG: 866

TMP 57-8
N/F THEISEN, KEVIN JIUNN
INST#2022: 1478
INST#2019: 2620
DB: 509 PG: 745

TMP 57-145.B1
N/F FOGEL, JEFFREY E
DB: 1126 PG: 234

TMP 57-145.B
N/F DOREY, BRUCE R
INST#2020: 0792

TMP 57-145.A
N/F WILL, JOHN T & SANDRA R, TRUSTEES
INST#2020: 4720
INST#2019: 0120
INST#2013: 3433

PRIVATE EASEMENT PLAT
BELMONT CONDOMINIUMS
TAX MAP 57 PARCEL 20
CITY OF CHARLOTTESVILLE, VIRGINIA
PRIVATE ACCESS EASEMENTS

40' 0 40' 80' 120'

SCALE: 1" = 40'

TMP 58-349
N/F SPARTINA, LLC
INST#2013: 4712

TMP 58-349.1
N/F HATCHER, JANET TRUSTEE
DB: 1113 PG: 35

TMP 58-350
N/F BRAVERMAN, STANTON, TRUSTEE
INST#2020: 883
INST#2019: 4411
INST#2017: 104

TMP 58-351
N/F SYLVESTER, PHYLLIS & LEO J ARICO
DB: 687 PG: 718

TMP 58-352
N/F MAJORS, CHARLES H.
INST#2018: 3017

TMP 58-353.1
N/F BAXTER, JOHN W & ROBIN A
DB: 1033 PG: 943

TMP 58-353
N/F VAN DER LINDE, WILLIAM F
INST#2013: 4005

TMP 58-354
N/F SCHETTINI, EUGENIO & CHRISTINE PALAZZOLO
DB: 1038 PG: 361

TMP 58-354.1
N/F GRAY, JOHN ERNEST CATHERINE
INST#2018: 2714
INST#2014: 2421

HOLLY STREET
V/W PUBLIC R/W
INST#XXXX: XXXX

N27°02'57"E 117.60' | 31.15' | L5 24.10' N35°36'56"E | C5 N27°02'57"E 127.14' | C6

N62°57'03"W 77.19' | 66.44'

C10 L10 C11 — 26' PRIVATE ACCESS EASEMENT — S27°02'57"W 268.03'

S62°57'03"E 143.51'

EX. CARLTON AVE
40' & V/W R/W

N72°16'53"W 56.72'

S28°02'28"W 123.01'

TMP 57-19
N/F BROWN, PHILIP E SR & BARBARA J
DB: 456 PG: 31
DB: 398 PG: 480

N62°56'09"W 49.17'

S28°02'28"W 102.79'

EX. GARDEN STREET
50' PUBLIC R/W
DB: 48 PG: 110
INST#2012: 701

TMP 57-18
N/F PHILIP E. BROWN, SR.
DB: 372 PG: 517
DB: 367 PG: 239

N67°35'19"W 80.05'

GARDEN STREET
FORMERLY WALNUT STREET
50' PUBLIC R/W
DB: 48 PG: 110
INST#2012: 701

TMP 57-18.1
N/F PEACOCK AUTO SERVICE, LLC
INST#2019: 3827
INST#2019: 2642
INST#2012: 701
DB: 341 PG: 212

L16 24.50' S67°55'34"E 43.61'

N67°55'34"W 70.42' | 55.02' | 24.5' | 26.0' | C12

N27°07'17"E 2.30' | C13

N27°02'57"E 170.34'
V/W PRIVATE ACCESS EASEMENT
S27°02'57"W 170.34'

S62°57'03"E 90.97' | 76.65' | 26.00' | S62°57'03"E 174.49'

CONIFER DRIVE
V/W PUBLIC R/W
INST#XXXX: XXXX

S69°08'40"E 118.31'

N27°02'57"E 198.21'

TAX MAP 57 PARCEL 20
5.108 AC.
222,517 SQ. FT.

N28°05'05"E 110.51'

L9 5.55' | C16 N27°02'57"E 62.55' | 31.95' N08°29'25"W (TIE)

26' PRIVATE ACCESS EASEMENT

C9

N62°57'03"W 237.11'

226.00' | S62°33'13"E 256.00'

EX. SOUTH CHERRY STREET
30' R/W (UNIMPROVED)

TMP 57-1.1
N/F MILLER, JOHN C, TRUSTEE JOHN C MILLER TRUST-2004 & JACKSON, DEBORAH, TRUSTEE DEBORAH JACKSON TRUST-2004
INST#2018: 2714
INST#2015: 2597

30.00' | L1 | L2 | N27°42'31"E 80.92'(T)

15.46' 5.22' 10.24' 50.00' | S62°51'00"E 42.56'

NAD83
VA SOUTH ZONE

L8 | 76.07' | 173.91'

L11 N83°06'10"E 57.80' | S83°06'10"W 50.18'

TMP 57-145.C
N/F CITY OF CHARLOTTESVILLE
DB: 953 PG: 717(PLAT)

N27°02'57"E 209.78'
26' PRIVATE ACCESS EASEMENT
S27°02'57"W 223.54'

N62°57'03"W 26.00' | 26.0' | C15 N83°06'10"E 256.72'

C14 26.0' | 43.13' | N62°57'03"W | L12 | S62°57'03"E 43.13'

47.47' N34°21'12"W (TIE)

C8

S27°02'57"W 106.56' | S26°51'08"W 50.05' | S29°45'10"W 74.56' | S27°19'31"W 109.77'

TMP 57-17
N/F PEACOCK AUTO SERVICE, LLC
INST#2019: 3827
INST#2019: 2642
DB: 341 PG: 212

TMP 57-15
N/F GLASGOW, DIANA
DB: 952 PG: 797

TMP 57-14
N/F WELCH, SARA JANE
INST#2016: 419

TMP 57-13
N/F SPRUCE MANOR HOUSING, INC
DB: 987 PG: 359

TMP 57-12
N/F HAMILTON, TODD ESKEL & ELLEN
DB: 956 PG: 254

TMP 57-11
N/F VAN HORN, KAI E AXELBAUM, MIRIAM Z
INST#2022: 2222

TMP 57-9
N/F LACKMAN, PAUL M
INST#2021: 5497

TMP 57-9.001
N/F PARROTT, CHARLES W & CHRISTINE D
INST#2021: 5789

TMP 57-9.1
N/F JENSEN, MARY E & KEITH F CHEELY
DB: 1012 PG: 866

TMP 57-8
N/F THEISEN, KEVIN JIUNN
INST#2022: 1478
INST#2019: 2620
DB: 509 PG: 745

TMP 57-145.B1
N/F FOGEL, JEFFREY E
DB: 1126 PG: 234

TMP 57-145.B
N/F DOREY, BRUCE R
INST#2020: 0792

TMP 57-145.A
N/F WILL, JOHN T & SANDRA R, TRUSTEES
INST#2020: 4720
INST#2019: 0120
INST#2013: 3433

COMMONWEALTH OF VIRGINIA
BRIAN D. JAMISON
LIC. 03334
09-27-2023
LAND SURVEYOR
DRAFT

ACCESS EASEMENT CURVE TABLE

Curve	Length	Radius	Delta	Tangent	Chord	Chord Bearing
C10	24.43'	20.00'	70°00'00"	14.00'	22.94'	S 82°02'57" W
C11	20.94'	60.00'	20°00'00"	10.58'	20.84'	S 37°02'57" W
C12	25.23'	17.00'	85°01'30"	15.58'	22.98'	N 69°33'41" E
C13	52.42'	43.00'	69°50'48"	30.02'	49.23'	S 61°58'21" W
C14	23.69'	77.00'	17°37'36"	11.94'	23.60'	N 71°45'52" W
C15	61.02'	103.00'	33°56'46"	31.44'	60.14'	S 79°55'27" E
C16	17.66'	50.00'	20°14'23"	8.92'	17.57'	N 16°55'45" E

ACCESS EASEMENT LINE TABLE

Line	Direction	Length
L10	S 47°02'57" W	6.23'
L11	N 06°53'50" W	26.00'
L12	S 27°02'57" W	26.00'

DATE:	07-10-2023
REV:	09-27-2023
REV:	
SCALE:	1"=40'
JOB:	19.0212
FILE:	TMPROJ

SHEET: V3 OF V4

ROUDABUSH, GALE & ASSOCIATES, INC.
ENGINEERS, SURVEYORS AND LAND PLANNERS
A PROFESSIONAL CORPORATION SERVING VIRGINIA SINCE 1956
999 SECOND ST. SE, CHARLOTTESVILLE, VIRGINIA 22902
PHONE 434-977-0205 - FAX 434-296-5220 - EMAIL INFO@ROUDABUSH.COM

PRIVATE EASEMENT PLAT
BELMONT CONDOMINIUMS
TAX MAP 57 PARCEL 20
CITY OF CHARLOTTESVILLE, VIRGINIA
PRIVATE SWM & DRAINAGE EASEMENTS

40' 0 40' 80' 120'

SCALE: 1" = 40'

TMP 58-349
N/F SPARTINA, LLC
INST#2013: 4712

TMP 58-349.1
N/F HATCHER, JANET TRUSTEE
DB: 1113 PG: 35

TMP 58-350
N/F BRAVERMAN, STANTON, TRUSTEE
INST#2020: 883
INST#2019: 4411
INST#2017: 104

TMP 58-351
N/F SYLVESTER, PHYLLIS & LEO J ARICO
DB: 687 PG: 718

TMP 58-352
N/F MAJORS, CHARLES H.
INST#2018: 3017

TMP 58-353.1
N/F BAXTER, JOHN W & ROBIN A
DB: 1033 PG: 943

TMP 58-353
N/F VAN DER LINDE, WILLIAM F
INST#2013: 4005

TMP 58-354
N/F SCHETTINI, EUGENIO & CHRISTINE PALAZZOLO
DB: 1038 PG: 361

TMP 58-354.1
N/F GRAY, JOHN ERNEST CATHERINE
INST#2018: 2714
INST#2014: 2421

HOLLY STREET
V/W PUBLIC R/W
INST#XXXX: XXXX

C4 L=47.67 N27°02'57"E 117.60' 38.18' L5 24.10' N35°36'56"E

C3 C2 36.56' N62°00'51"W L4 L=35.82 C1 S27°56'11"W 63.44' L13 L14 S62°00'51"E 75.73' N71°19'53"W 56.72'

V/W PRIVATE DRAINAGE EASEMENT

S12°33'16"W 8.58'

N78°34'30"W 117.71' S78°35'12"E 118.84' V/W PRIVATE DRAINAGE EASEMENT N71°28'40"E 71.48' S71°28'40"W 74.98'

S28°02'28"W 123.01' N62°56'09"W 49.17'

N82°01'27"E 26.18' S82°01'27"W 9.80' 24.73' 20.11'

S28°02'28"W 102.79'

C5 N27°02'57"E 127.14' C6

S62°57'03"E 143.51'

TMP 57-19
N/F BROWN, PHILIP E
SR & BARBARA J
DB: 456 PG: 31
DB: 398 PG: 480

EX. CARLTON AVE
40' & V/W R/W

EX. GARDEN STREET
50' PUBLIC R/W
DB: 48 PG: 110
INST#2012: 701

TAX MAP 57 PARCEL 20
5.108 AC.
222,517 SQ. FT.

N23°00'49"E 16.17' 5.08'

N17°21'09"W 39.80' N27°02'57"E 113.11' 41.63' 66.00' N62°57'03"W 90.97' S62°57'03"E

V/W SWM/BMP PRIVATE MAINTENANCE EASEMENT ~HATCHED AREA~

S27°02'57"W 155.84' 2.95'

L3 N67°35'19"W 80.05' 41.31' 20.02' L18 L19 L17 L15 L16 L16

FORMERLY WALNUT STREET
50' PUBLIC R/W
DB: 48 PG: 110
INST#2012: 701

20' PRIVATE DRAINAGE EASEMENT

TMP 57-18
N/F PHILIP E. BROWN, SR.
DB: 372 PG: 517
DB: 367 PG: 239

TMP 57-18.1
N/F PEACOCK AUTO SERVICE, LLC
INST#2019: 3827
INST#2019: 2642
INST#2012: 701
DB: 341 PG: 212

N67°55'34"W 70.42' N27°07'17"E 2.30'

TMP 57-17
N/F PEACOCK AUTO SERVICE, LLC
INST#2019: 3827
INST#2019: 2642
DB: 341 PG: 212

S69°08'40"E 118.31'

N27°02'57"E 198.21'

C7

CONIFER DRIVE
V/W PUBLIC R/W
INST#XXXX: XXXX

N28°05'05"E 110.51' L9 C9

N62°57'03"W 237.11' 226.00' S62°33'13"E 256.00'

EX. SOUTH CHERRY STREET
30' R/W (UNIMPROVED)

N27°02'57"E 98.96' 33.92' 30.00'

V/W SWM/BMP PRIVATE MAINTENANCE EASEMENT ~HATCHED AREA~

82.78' L1 N27°42'31"E 80.92'(T) L2 15.46' 5.22' 10.24' 50.00' 42.56' S62°51'00"E

S27°02'57"W 149.74' L8 3.31' C17 22.01' L21 L20

N62°57'03"W 173.91' C8

N83°06'10"E 256.72'

TMP 57-1
N/F MILLER, TRUST
INST#2018: 2714
INST#2015: 2597

TMP 57-1.1
N/F MILLER, JOHN C, TRUSTEE JOHN C MILLER TRUST-2004 & JACKSON, DEBORAH, TRUSTEE DEBORAH JACKSON TRUST-2004
INST#2018: 2714
INST#2015: 2597

TMP 57-145.C
N/F CITY OF CHARLOTTESVILLE
DB: 953 PG: 717(PLAT)

NAD83 VA SOUTH ZONE

EASEMENT CURVE TABLE

Curve	Length	Radius	Delta	Tangent	Chord	Chord Bearing
C17	46.14'	29.00'	91°10'06"	29.60'	41.43'	S 72°38'00" W

EASEMENT LINE TABLE

Line	Direction	Length
L13	N 27°02'57" E	79.41'
L14	S 42°00'10" W	26.44'
L15	N 24°56'07" E	15.61'
L16	N 10°11'26" E	16.28'
L17	N 62°57'03" W	20.90'
L18	S 10°11'26" W	19.75'
L19	S 24°56'07" W	13.90'
L20	S 06°53'50" E	27.23'
L21	N 61°46'57" W	9.57'

COMMONWEALTH OF VIRGINIA
BRIAN D JAMISON
LIC. 03334
09-27-2023
LAND SURVEYOR
DRAFT

DATE:	07-10-2023
REV:	09-27-2023
REV:	
SCALE:	1"=40'
JOB:	19.0212
FILE:	TMPROJ

SHEET: V4 OF V4

TMP 57-15
N/F GLASGOW, DIANA
DB: 952 PG: 797

TMP 57-14
N/F WELCH, SARA JANE
INST#2016: 419

TMP 57-13
N/F SPRUCE MANOR HOUSING, INC
DB: 987 PG: 359

TMP 57-12
N/F HAMILTON, TODD ESKEL & ELLEN
DB: 956 PG: 254

TMP 57-11
N/F VAN HORN, KAI E AXELBAUM, MIRIAM Z
INST#2022: 2222

S27°02'57"W 106.56' S26°51'08"W 50.05' S29°45'10"W 74.56' S27°19'31"W 109.77'

TMP 57-9
N/F LACKMAN, PAUL M
INST#2021: 5497

TMP 57-9.001
N/F PARROTT, CHARLES W & CHRISTINE D
INST#2021: 5789

TMP 57-9.1
N/F JENSEN, MARY E & KEITH F CHEELY
DB: 1012 PG: 866

TMP 57-8
N/F THEISEN, KEVIN JIUNN
INST#2022: 1478
INST#2019: 2620
DB: 509 PG: 745

TMP 57-145.B1
N/F FOGEL, JEFFREY E
DB: 1126 PG: 234

TMP 57-145.B
N/F DOREY, BRUCE R
INST#2020: 0792

TMP 57-145.A
N/F WILL, JOHN T & SANDRA R, TRUSTEES
INST#2020: 4720
INST#2019: 0120
INST#2013: 3433

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CITY OF CHARLOTTESVILLE

DEPARTMENT OF NEIGHBORHOOD DEVELOPMENT SERVICES

STAFF REPORT

PLANNING COMMISSION MEETING

APPLICATION FOR APPROVAL OF A FINAL SITE PLAN

APPLICATION NUMBER: P22-0038

DATE OF MEETING: November 14, 2023

Project Planner: Matt Alfele, AICP
Date of Staff Report: November 2, 2023

Applicant: Collins Engineering
Applicant's Representative(s): Scott Collins of Collins Engineering,
Current Property Owner: Belmont & Carlton Holdings, LLC
Property Street Address: 1003 - 1005 Carlton Ave., 0 Walnut St., 730 - 732 Walnut St., 735 Walnut St., and 0 Cherry St. ("Subject Property")
Tax Map & Parcel: 570020000, 570002100, 570004000, 570006000, 570007100, 570007300, 570007500, 570007700, 570007900, 570002000, 570003000, 57005000, 570007000, 570007200, 570007400, 570007600, 570007800, and 570010000
Current Zoning Classification: NCC (Neighborhood Commercial Corridor)
Overlay District: None
Reason for Planning Commission Review: Final site plan reflects the proposed development of a property that is the subject of an approved Critical Slope Waiver Sections 34-820(d) and 34-822.

Vicinity Map



Standard of Review

Site plan approval is a ministerial function of Planning Commission in which no discretion is involved. If this final site plan contains all required information, then it must be granted approval. If Planning Commission disapproves this plan, it shall set forth in writing the specific reasons therefor. As per Section 34-823(c), the reasons for disapproval shall identify deficiencies in this plan which cause the disapproval, by reference to specific ordinances, laws, or regulations. If this plan is disapproved, Planning Commission must also generally identify modifications or corrections that will permit approval of this plan.

Applicant's Request (Summary)

Mr. Scott Collins, with Collins Engineering, on behalf of Belmont & Carlton Holdings, LLC, is seeking Planning Commission approval for the Belmont Condominiums Final Site Plan. This final site plan proposes a by-right mixed use development that include 130 residential units split between 20 apartments and 110 condominiums, 6,230 square feet of non-residential general retail space, new private street, reconfiguration of Holly Street, new City streets, a connection to Spruce Street, and open space. It is also indicated on the Final Site Plan that 5% of the residential units will be affordable. This calculates out to seven (7) units. On November 7, 2022, City Council approved a Critical Slope Waiver (P22-0039) authorizing disturbance of critical slope to build the mixed use development as presented. As per the City's Zoning Ordinance, Planning Commission shall review this final site plan because it reflects the proposed development of property that is subject to a Critical Slope Waiver.

Site Plan Requirements

A. Compliance with the City's Erosion and Sediment Control ordinance (Chapter 10)
Staff has determined that this final site plan complies with the City's Erosion and Sediment Control ordinance. Erosion and Sediment Control plans are included as site plan Sheets 33 through 40, and Stormwater Management Plans are included as site plan Sheets 41 through 47.

B. Compliance with applicable NCC Mixed Use District zoning regulations (Sections 34-696 through 34-702)
The property is zoned NCC (Neighborhood Commercial Corridor). The project complies with all requirements of the NCC Mixed Use District.

C. Compliance with general standards for site plans (Sections 34-827 - 34-828)
Staff has determined that this site plan contains the following information as required:

1. General site plan information, including but not limited to project, property, zoning, site, and traffic information: **Found on Sheets 1 and 2.**
2. Existing condition and adjacent property information: **Found on Sheet 4.**
3. Phasing plan: **The project will be constructed in one phase per Sheets 1 and 2.**
4. Topography and grading: **Found on Sheets 13 and 14.**
5. Existing landscape and trees: **Found on Sheet 4.**
6. The name and location of all water features: **Found on Sheet 4.**
7. One hundred-year flood plain limits: **N/A.**
8. Existing and proposed streets and associated traffic information: **Found on Sheets 3, 3A, 9, 10, 21, and 22.**

9. Location and size of existing water and sewer infrastructure: **Found on Sheets 11, 12, 17, 18,21, and 22.**
10. Proposed layout for water and sanitary sewer facilities and storm drain facilities: **Found of Sheets 9, 10, 11, 12, 13, 14, 16, 17, 18, 21, 22, 23, 24, 25, 26, and 27.**
11. Location of other existing and proposed utilities and utility easements: **Found of Sheets 9, 10, 11, 12, 13, 14, 16, 17, 18, 21, 22, 23, 24, 25, 26, and 27.**
12. Location of existing and proposed ingress to and egress from the property, showing the distance to the centerline of the nearest existing street intersection: **Found on Sheets 9 and 10.**
13. Location and dimensions of all existing and proposed improvements: **Found on Sheets 9, 10, 29, 30, 30A, and 31.**
14. All areas intended to be dedicated or reserved for public use: **Found on Sheets 3, 3A, 9, and 10.**
15. Landscape plan: **Found on Sheets 29, 30, and 30A.**

D. Additional information to be shown on the site plan as deemed necessary by the director or Commission in order to provide sufficient information for the director or Commission to adequately review the site plan.

The Critical Slope Waiver granted by City Council on November 7, 2022 includes the following conditions.

(1) Erosion and sediment control (ESC) plans for the Project shall include, at a minimum, four (4) stages/phases of ESC controls. The first phase shall include “Initial/Preliminary Controls”. Outfalls from any proposed sediment traps shall be established with rigorous independent ESC controls, early in the sequence, prior to the establishment of a sediment trap and associated conveyances.

(2) Any channels/diversions that convey ‘clear’ water shall be stabilized with sod on the ‘clear water’ side immediately after installation.

(3) A “Super Silt Fence” (chain linked backing) shall be installed where perimeter silt fence is specified.

(4) Any disturbance occurring outside of conveyances to a sediment trap, in either sequence or space, planned or unforeseen, shall be immediately stabilized with sod (for pervious areas, utilities should have other “same day stabilization”).

(5) At no time shall concentrated water be directed toward the areas of critical slopes, without adequate conveyance down and beyond the slopes to an acceptable outfall.

(6) To document the landowner's representations within the Application Materials regarding intended onsite water quality measures, the Stormwater Management Plan for the Project shall include either (a) a design for onsite water quality provided by a

facility, or (b) facilities that are either i) designed in accordance with the BMP Clearinghouse "2013 Draft Design Specifications for Practices 1-15", or ii) proprietary Manufactured Treatment Device(s) approved by the Virginia Department of Environmental Quality ("DEQ") as of the date the stormwater management plan for the Project is submitted for the City's review. The facility or facilities should provide 125 percent of the onsite Phosphorus removal required by the Virginia Water Quality requirements for the development Project. Compliance with the 125 percent will be demonstrated by accurate project data set forth within a completed Virginia Runoff Reduction Method ("VRRM") spreadsheet for the project.

E. Compliance with Additional Standards for Specific Uses (Sections 34-930 - 34-937)
No improvements regulated by these sections are proposed.

Recommendation

Staff recommends approval of the final site plan.

Attachments

1. Final Site Plan dated 8/18/23.
2. Critical Slope Waiver dated November 7, 2022.

BELMONT CONDOMINIUMS

FINAL SITE PLAN

CITY OF CHARLOTTESVILLE, VIRGINIA

PROJECT SITE INFO:

TMP: 570020000 (2.594 AC) 570002000 (0.914 AC)
570021000 (0.354 AC) 570003000 (0.118 AC)
570004000 (0.118 AC) 570005000 (0.123 AC)
570006000 (0.213 AC) 570007000 (0.121 AC)
570007100 (0.116 AC) 570007200 (0.119 AC)
570007300 (0.119 AC) 570007400 (0.117 AC)
570007500 (0.116 AC) 570007600 (0.153 AC)
570007700 (0.116 AC) 570007800 (0.116 AC)
570007900 (0.121 AC) 570010000 (0.160 AC)
UNIMPROVED (NON-CITY DEDICATED RIGHT OF WAY) - 0.556 AC
NOTE: TMP 570010000 IS INCLUDED WITH THE FINAL SITE PLAN APPLICATION FOR THE PROPOSED OFFSITE GRADING AND IMPROVEMENTS ON THE ADJACENT PROPERTY ASSOCIATED WITH THIS FINAL SITE PLAN.

ADDRESS: GARDEN STREET
CHARLOTTESVILLE, VA 22902

ZONING: NCC (NEIGHBORHOOD COMMERCIAL CORRIDOR) AND R-2 (RESIDENTIAL)

ACREAGE: 6.193 AC TOTAL (PROJECT AREA AND ACREAGE DOES NOT INCLUDE ANY CITY DEDICATED RIGHT OF WAY OR TMP 570010000 - SEE PLAT ON SHEET 3)

D.B./PG.: 1070/445

EXISTING USE: COMMERCIAL USES

PROPOSED USE: MIXED USE DEVELOPMENT (8,330 SF OF NON-RESIDENTIAL GENERAL RETAIL SPACE & 130 MULTI-FAMILY RESIDENTIAL UNITS)

OWNERS: BELMONT & CARLTON HOLDINGS, LLC
PO BOX 1467
CHARLOTTESVILLE, VA 22902
SPRUCE STREET INVESTMENTS, LLC
600 E WATER ST
CHARLOTTESVILLE, VA 22902

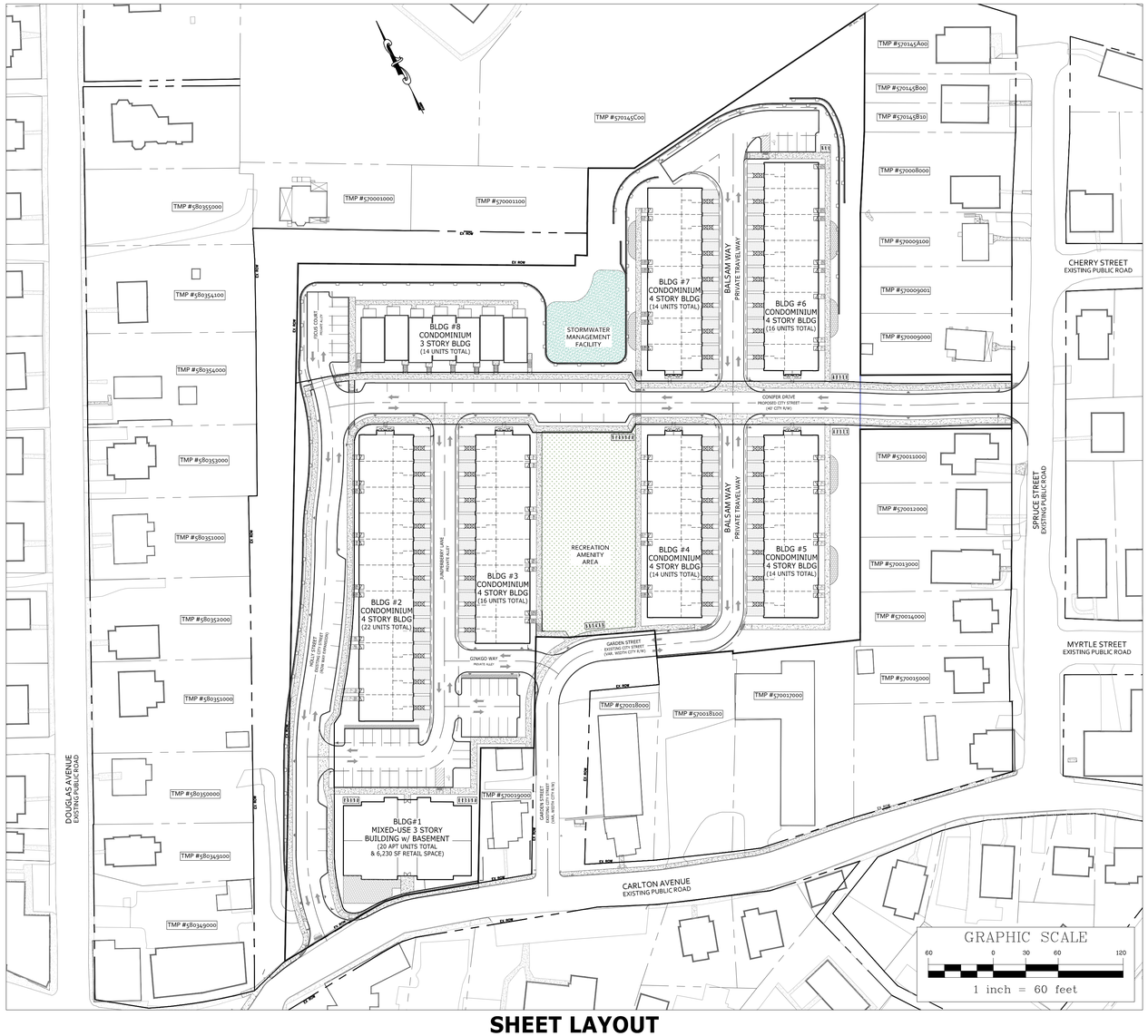
DEVELOPER: RIVERBEND DEVELOPMENT, INC
455 2ND STREET SE, SUITE 201
CHARLOTTESVILLE, VA 22902
(434) 245-4970

ENGINEER: COLLINS ENGINEERING, INC
200 GARRETT STREET, SUITE K
CHARLOTTESVILLE, VA 22902
(434) 293-3719

AFFORDABLE HOUSING:
5% OF THE TOTAL NUMBER OF DWELLING UNITS SHALL BE DEDICATED TO AFFORDABLE HOUSING, MEETING THE CITY AFFORDABLE HOUSING REQUIREMENTS.
130 TOTAL RESIDENTIAL UNITS * 5% = 7 UNITS
7 RESIDENTIAL UNITS ARE PROPOSED TO BE DEDICATED AS AFFORDABLE HOUSING UNITS.
NOTE: NO AFFORDABLE HOUSING IS REQUIRED FOR THIS PROJECT.

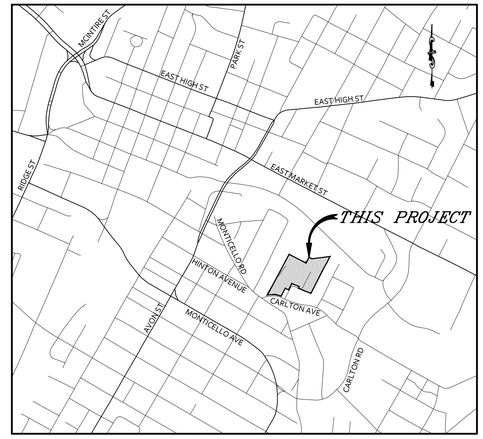
Detail List Table

Sheet Number	Detail Title	Sheet Number	Detail Title
SITE & ROAD DETAILS		UTILITY DETAILS	
16	CG-12 DETECTABLE WARNING SURFACE	17	CONCRETE THRUST BLOCKS
16	CG-12 - TYPE B	17	CONCRETE THRUST BLOCK DIMENSIONS
16	CG-12 - TYPE C	17	FIRE HYDRANT - TYPICAL
16	STANDARD CURBING	17	GATE VALVE - TYPICAL
16	ROLLTOP CURB & GUTTER	17	SERVICE LATERAL - TYPICAL
16	STEP CONNECTIONS	17	METER BOX - ¾" AND 1" METERS
16	ENTRANCE WALK ADJUSTMENTS	17	METER VAULTS
16	STANDARD SIDEWALK WITHOUT CURB	17	METER VAULT - 1.5" AND 2" METERS
16	STANDARD SIDEWALK WITH CURB	17	WATER MAIN ABANDONMENT
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SHEET LAYOUT

SCALE: 1" = 60'



VICINITY MAP

SCALE: 1" = 1000'

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CITY OF CHARLOTTESVILLE-OUTFALL TABULATION CHART

9VAC25-870-66:				EXISTING									PROPOSED								
Outfall Designation	LOA Designation	Receiving Channel	Compliance Method	DA (Acres)	Offsite Contribution (Acres)	CN	Tc ~~(min)~~	Q_1 (cfs)	Q_2 (cfs)	Q_{10} (cfs)	Q_{100} (cfs)	Runoff Volume (V, / RV)	Runoff Volume Units	DA (Acres)	Offsite Contribution (Acres)	CN	Tc ~~(min)~~	Q_1 (cfs)	Q_2 (cfs)	Q_{10} (cfs)	Q_{100} (cfs)	Runoff Volume (V, / RV)	Runoff Volume Units
1 (DA 1A)	POA 'A'	Natural	B.3.a & C.2.b	4.82		75	0.22 hrs.	5.11	8.53	17.42	-	0.97	in.										
4 (DA 1B)	POA 'A'	Manmade	B.3.a & C.2.b	1.44		85	0.11 hrs.	3.63	4.88	8.76	-	1.60	in.	7.93		88	0.19 hrs.	4.83	7.37	18.38	-	0.72	in.
3 (DA 1C)	POA 'A'	Manmade	B.3.a & C.2.b	0.28		97	0.10 hrs.	1.19	1.47	2.30	-	2.70	in.										
5 (DA 1E)	POA 'B'	Natural	B.3.a & C.2.b	0.60		68	0.13 hrs.	0.59	0.92	2.12	-	0.62	in.	0.77		62	0.10 hrs.	0.48	0.82	2.10	-	0.39	in.
6 (DA 2)	POA 'C'	Natural	B.3.a & C.2.b	4.97		74	0.18 hrs.	5.09	8.54	17.60	-	0.94	in.	3.41		69	0.18 hrs.	2.54	3.92	10.07	-	0.68	in.
TOTAL				12.11										12.11									

City of Charlottesville Department of Public Works-Engineering Division Version 1.0 -10-21-2020

NOTE: Options for column "Receiving Channel Type" include: "Manmade", "Natural", "Restored", "Sheet", or "Other"
The column for "Compliance Method" requires specific code references, options include: "B.1.a", "B.2.a", "B.3.a (EB)", "D"

CITY OF CHARLOTTESVILLE-LAND DISTURBANCE MS4 REPORTING CHART

BMP TYPE	PRACTICE (1-15)	LEVEL (1 or 2)	LATITUDE	LONGITUDE	TOTAL DA (AC)	IMP. DA (AC)	PERV. DA (AC)	P REMOVED (LBS)	12 DIG. HUC.	*SWM MAINT. AGR. INST. #
Bioretention Basin	Spec. #9	2	38.025841	-78.472399	2.02	1.62	0.40	3.38	020802040401	
Underground Detention System	N/A	N/A	38.025314	-78.473075	7.93	5.82	2.11	0	020802040401	
TOTAL LOD (AC)			6.66							
TOTAL P REMOVED BY BMP'S (LBS)			3.38							
TOTAL P CREDITS PURCHASED (LBS)			0.00							
TOTAL P CREDITED TO PROJECT (LBS)			3.38							
TOTAL P REQUIRED (LBS)			2.69							
***LAND DISTURBING #**										
***SWM BOND RELEASE DATE**										

* TO BE ENTERED BY CITY OF CHARLOTTESVILLE STAFF

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
8/18/23
PROFESSIONAL ENGINEER

REVISIONS

DATE	REVISION DESCRIPTION
3/15/22	INITIAL PLAN SUBMITTAL
1/03/23	2ND PLAN SUBMITTAL
5/19/23	3RD PLAN SUBMITTAL
8/18/23	4TH PLAN SUBMITTAL

COLLINS ENGINEERING
200 GARRETT STREET, SUITE K.-CHARLOTTESVILLE, VA 22902 -434.293.3719

PROJECT: BELMONT CONDOMINIUMS - FINAL SITE PLAN

SHEET: COVER

JOB NO. 202201

SCALE AS SHOWN

SHEET NO. 1

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Attachment A

PROJECT DATA:

- OWNERS:
  BELMONT & CARLTON HOLDINGS, LLC
  PO BOX 1467
  CHARLOTTESVILLE, VA 22902
  TELEPHONE NUMBER: (434)245-4970
  SPRUCE STREET INVESTMENTS, LLC (TMP570010000)
  600 E WATER STREET
  CHARLOTTESVILLE, VA 22902
  TELEPHONE NUMBER: NOT AVAILABLE TO THE PUBLIC
- THESE PLANS HAVE BEEN PREPARED BY:
  COLLINS ENGINEERING, INC
  200 GARRETT STREET, SUITE K
  CHARLOTTESVILLE, VA 22902
  TELEPHONE: (434) 293-3719
  EMAIL: scott@collins-engineering.com
  DEVELOPER:
  RIVERBEND DEVELOPMENT, INC
  455 2ND STREET SE, SUITE 201
  CHARLOTTESVILLE, VA 22902
  TELEPHONE: (434) 245-4970
  EMAIL: ALAN@RIVERBENDDEV.COM
- SURVEY:
  TOPOGRAPHY AND BOUNDARY OF THE SITE WERE PROVIDED BY ROUDABUSH, GALE, AND ASSOCIATES IN 2010. SURVEY AND TOPOGRAPHY WAS UPDATED IN SEPTEMBER, 2018 AND JANUARY, 2019. TOPO IS FIELD SURVEYED, TOPOGRAPHY SHOWN AT 2' INTERVALS. THE MISS UTILITY NUMBER IS #A82360289-00A.
- EXISTING ZONING: NCC (NEIGHBORHOOD COMMERCIAL CORRIDOR) AND R-2 (RESIDENTIAL) FOR PROPERTY ALONG SPRUCE ST.-TMP 570010000
- MAXIMUM ALLOWED BUILDING HEIGHT: 45' (BY-RIGHT MAXIMUM BUILDING HEIGHT)
- MINIMUM REQUIRED SETBACKS:
  PRIMARY STREET FRONTAGE - NO MINIMUM REQUIRED; 10' MAXIMUM
  LINKING STREET FRONTAGE - NONE REQUIRED
  SIDE AND REAR - 10' MINIMUM (ADJACENT TO LOW DENSITY RESIDENTIAL DISTRICT)
  SIDE AND REAR - NONE REQUIRED (ADJACENT TO ANY OTHER ZONING DISTRICT)
- TAX MAP PARCEL NUMBERS:
  TMP 570020000 - 2.594 AC | TMP 570002000 - 0.914 AC | TMP 570003000 - 0.118 AC
  TMP 570004000 - 0.118 AC | TMP 570005000 - 0.123 AC | TMP 570006000 - 0.213 AC
  TMP 570007000 - 0.121 AC | TMP 570007100 - 0.116 AC | TMP 570007200 - 0.119 AC
  TMP 570007300 - 0.119 AC | TMP 570007400 - 0.117 AC | TMP 570007500 - 0.116 AC
  TMP 570007600 - 0.153 AC | TMP 570007700 - 0.116 AC | TMP 570007800 - 0.116 AC
  TMP 570007900 - 0.121 AC | TMP 570021000 - 0.354 AC | TMP 570010000 - 0.160 AC
  UNIMPROVED (NON-CITY DEDICATED RIGHT OF WAY) - 0.556 AC
  NOTE: TMP 570010000 IS INCLUDED WITH THE SITE PLAN APPLICATION FOR THE PROPOSED ROW, UTILITY & GRADING IMPROVEMENTS ON THE PROPERTY ASSOCIATED WITH THIS FINAL SITE PLAN. THIS PROPERTY IS NOT INCLUDED IN THE OVERALL DENSITY CALCULATIONS.
  TOTAL - 6.193 AC (PROJECT AREA & ACREAGE DOES NOT INCLUDE ANY CITY DEDICATED ROW OR TMP 570010000) - SEE SHEETS 3&4
- USGS DATUM: NAD 83 (1994)
- LOCATION/ADDRESS OF PROJECT: GARDEN STREET, CHARLOTTESVILLE, VA 22902
- BUILDING HEIGHT PROPOSED: MAXIMUM HEIGHT OF 45'
- PROPOSED USE: MIXED USE DEVELOPMENT - 6,230 SF OF NON-RESIDENTIAL GENERAL RETAIL SPACE & 130 MULTI-FAMILY RESIDENTIAL UNITS (20 APARTMENT UNITS & 110 CONDOMINIUM UNITS)
- DENSITY: 130 UNITS / 6.193 ACRES = 21 DUA (INCLUDING 0.54 ACRES OF R/W TO BE DEDICATED TO THE CITY)
- TOTAL ACREAGE OF SITE: 6.193 ACRES TOTAL (INTERIOR LOT LINES TO BE VACATED)
- TOTAL AREAGE OF LAND DISTURBANCE: 6.66 ACRES (INCLUDING AREA WITHIN CITY RIGHT OF WAY)
- DEVELOPMENT PHASING: PROJECT CURRENTLY PROPOSED TO BE DEVELOPMENT IN ONE PHASE
- CRITICAL SLOPES: SEE SHEETS 5 & 6 FOR A FULL CRITICAL SLOPE ANALYSIS
  TOTAL ON-SITE CRITICAL SLOPE AREA = 43,042 SF (0.988 AC)
  TOTAL ON-SITE PROPOSED CRITICAL SLOPE IMPACT AREA = 37,589 SF (0.862 AC) - 87.2% OF CRITICAL SLOPES ON-SITE IMPACTED
  NOTE: OF THE ON-SITE PROPOSED CRITICAL SLOPE IMPACT AREA, 34.7% (0.299 AC) ARE EXEMPT FOR DRIVEWAYS & ROADWAY CONNECTIONS.
- VEHICLE PARKING:
  REQUIRED PARKING FOR GENERAL RETAIL: 3.5 SPACES PER 1,000 SF OF GFA
  6,230 SF / 1,000 SF = 6.23 * 3.5 = 22 SPACES REQUIRED
  REQUIRED PARKING FOR MULTI-FAMILY UNITS: 1 SPACE PER UNIT (w/ 1&2 BEDROOMS) & 2 SPACES PER UNIT (w/ 3&4 BEDROOMS)
  82 (1&2 BEDROOM UNITS) X 1 SP/UNIT + 48 (3&4 BEDROOM UNITS) X 2 SP/UNIT = 178 SPACES REQUIRED
  TOTAL REQUIRED PARKING SPACES = 200 SPACES
  PROPOSED PARKING: 192 SPACES (1 GARAGE + 1 DRIVEWAY SPACE PER 4 STORY CONDO UNIT) + 47 PRIVATE SURFACE SPACES = 239 SPACES
  NOTE: AN ADDITIONAL 26 PARKING SPACES WITHIN CITY ROW ARE BEING PROVIDED, WHICH ARE NOT INCLUDED IN THE PARKING CALCS.
- BICYCLE PARKING:
  REQUIRED PARKING: 74 BICYCLE PARKING SPACES TOTAL
  1 STORAGE BICYCLE PARKING SPACE FOR EVERY (2) MULTIFAMILY DWELLING UNITS = 130 PROPOSED DWELLING UNITS / 2 = 65 BICYCLE STORAGE SPACES REQUIRED
  1 STORAGE BICYCLE PARKING SPACE FOR EVERY 1,000 SF OF PUBLIC SPACE = 6,230 SF / 1,000 = 7 BICYCLE STORAGE SPACES
  PROPOSED PARKING: 74 BICYCLE PARKING SPACES
  NOTE: IN ADDITION, GARAGES PROVIDE BIKE PARKING SPACES FOR THE RESIDENTIAL UNITS.
- RECREATION AREA: 16,000 SF (0.37 AC) DEDICATED RECREATION SPACE
- STORMWATER MANAGEMENT AND STORM DRAINAGE:
  THE EXISTING SITE IS PRIMARILY IMPERVIOUS. THE PROPOSED DEVELOPMENT WILL INCREASE THIS IMPERVIOUS AREA AND WILL MITIGATE THE INCREASES IN RUNOFF VIA TWO UNDERGROUND DETENTION SYSTEMS (STORMWATER QUANTITY) AND ONCE BIORETENTION BASIN (STORMWATER QUALITY).
- STREAM BUFFER: THE DEVELOPMENT OF THIS PROPERTY DOES NOT IMPACT A STREAM BUFFER.
- FLOODPLAIN: THERE ARE NO FLOODPLAIN LIMITS WITHIN THE SUBJECT PROPERTY PER FEMA MAP #51003C0288D, PANEL #0288D DATED FEBRUARY 4, 2005.
- AREAS DEDICATED TO PUBLIC USE: CURRENTLY, THERE IS NO LAND ON THIS PROPERTY THAT IS PROPOSED TO BE DEDICATED TO PUBLIC USE, EXCEPT FOR THE PROPOSED RIGHT-OF-WAY.
- IMPERVIOUS AREA SUMMARY (BOUNDARY DEFINED BY THE PROPOSED LIMITS OF DISTURBANCE):

Pre-Development		Post-Development	
Road, Parking, Driveways & Sidewalk	128,250 sf	Roads, Alleys and Parking	65,925 sf
Buildings	22,400 sf	Sidewalk, Walkways & Concrete	18,925 sf
Compacted Gravel or Riprap	1,150 sf	Driveways	18,825 sf
	151,800 sf	Buildings	80,325 sf
		Factor of Safety Impervious Areas	250 sf
		Compacted Gravel or Riprap	1,200 sf
			185,450 sf

- PUBLIC UTILITIES: THE SITE WILL BE SERVED BY EXISTING CITY PUBLIC WATER AND SEWER
- A MISS UTILITY TICKET DESIGN NUMBER WAS GENERATED WITH THESE PLANS. THE TICKET NUMBER IS A207400944.
- SIGNAGE: SITE SIGNAGE WILL BE PROPOSED IN A SEPARATE APPLICATION.
- INGRESS & EGRESS: ACCESS TO THIS PROPERTY SHALL BE PROVIDED BY TWO ENTRANCES OFF CARLTON AVENUE AND ONE ENTRANCE OFF SPRUCE STREET AS SHOWN ON THE SITE PLAN SHEET. AN ADDITIONAL PEDESTRIAN ACCESS IS PROPOSED TO CONNECT TO THE ADJACENT NEIGHBORHOOD.
- LIGHTING PLAN:
  A LIGHTING PLAN IS PROVIDED WITH THE FINAL SITE PLAN. ALL PROPOSED LIGHTING SHALL COMPLY WITH CITY OF CHARLOTTESVILLE CODE OF ORDINANCES SECTION 34-978 AND ALL FIXTURES SHALL BE FULL CUT-OFF LIGHT FIXTURES WITH NO SPILLOVER AT THE PROPERTY LINES.
- LANDSCAPING PLAN:
  A LANDSCAPING PLAN IS PROVIDED WITH THE FINAL SITE PLAN. ALL PROPOSED LANDSCAPING SHALL COMPLY WITH CITY OF CHARLOTTESVILLE CODE OF ORDINANCES SECTION 34-850.
- SITE TRIP GENERATION (ITE TRIP GENERATION, 10TH EDITION):

	MULTIFAMILY HOUSING (130 UNITS)	GENERAL RETAIL (6,230 SF)	TOTAL
AVERAGE DAILY TRIPS -	952 VPD (476 ENTER / 476 EXIT)	62 VPD (31 ENTER / 31 EXIT)	1,014 VPD (507 ENTER / 507 EXIT)
AM PEAK HOURS -	60 VPH (14 ENTER / 46 EXIT)	8 VPH (7 ENTER / 1 EXIT)	68 VPH (21 ENTER / 47 EXIT)
PM PEAK HOURS -	73 VPH (46 ENTER / 27 EXIT)	8 VPH (1 ENTER / 7 EXIT)	81 VPH (47 ENTER / 34 EXIT)

  EXISTING TRIPS PER DAY (ITE, 10TH EDITION - CODE GENERAL LIGHT INDUSTRIAL FOR 6.21 ACRES) = 341 ADT
  PROPOSED PROJECT CREATES 697 ADDITIONAL VEHICLES PER DAY
  IN ADDITION, DUE TO THE WALKABILITY OF THIS PROJECT TO THE DOWNTOWN AREA, A 20%-30% REDUCTION IN VPD CAN BE EXPECTED FOR THIS PROJECT. THIS WOULD REDUCE THE TOTAL TRIPS TO 710 TO 812 VPD, RESULTING IN A NET INCREASE IN TRAFFIC OF 369 TO 471 VPD.
- EXISTING VEGETATION: MINIMAL EXISTING TREE COVERAGE, SITE IS PRIMARILY PAVED
  NOTE: THE SITE CONTAINS EXISTING STREAM AND WETLANDS; HOWEVER, THERE ARE NO STREAM BUFFERS OR FLOODPLAINS ON THE PROPERTY. THIS PROJECT DOES INCLUDE SOME STREAM AND WETLAND IMPACTS AS SHOWN ON SHEET 5.
- STREAM BUFFER MITIGATION PLAN - NOT APPLICABLE
- CONSERVATION PLAN - NOT APPLICABLE
- PAVED PARKING AND CIRCULATION: 67,080 SF (1.54 AC)
- LOT COVERAGE: 4.63 ACRES IMPERVIOUS (74.8% OF SITE) AND 1.56 ACRES OF OPEN SPACE (25.2% OF SITE)
- FIRE FLOW:
- FOUR FIRE HYDRANTS ARE PROPOSED. THERE IS ONE EXISTING FIRE HYDRANT APPROXIMATELY 300' TO THE WEST OF THE PROPOSED ENTRANCE (LOCATED NEAR THE INTERSECTION OF CARLTON AVENUE AND MONTICELLO RD). THERE IS A SECOND FIRE HYDRANT 450' TO THE EAST OF THE PROPOSED PROJECT ENTRANCE (LOCATED AT THE INTERSECTION OF CARLTON AVENUE AND SPRUCE STREET). ADDITIONAL FIRE HYDRANTS AND A WATERLINE LOOP SYSTEM IS PROPOSED WITH THIS DEVELOPMENT. BASED ON THE VSFPC B105.2, B105.1 AND TABLE 105.1, THE REQUIRED FIRE FLOW FOR THE DEVELOPMENT IS 1500 GPM . THE AVAILABLE FIRE FLOW IS 1,776 GPM WITH A STATIC PRESSURE OF 85PSI AND RESIDUAL PRESSURE OF 65 PSI.
- WATER FLOW CALCULATIONS: SEE SHEET 18 FOR WATER FLOW AND WATER METER CALCULATION WORKSHEETS
  TOTAL WATER FLOW DEMANDS PROPOSED = 475 GPM DEMAND
- SEWER FLOW CALCULATIONS:
  (82) 2-BEDROOMS x 300 GPD + (38) 3-BEDROOMS x 400 GPD + (10) 4-BEDROOMS x 400 GPD + 6,230 (NON-RESIDENTIAL) x 300 GPD/1000 SF= 45,669 GPD TOTAL

NOTE: COLLINS ENGINEERING SHALL NOT HAVE AUTHORITY OVER CONTRACTOR'S WORK, SAFETY PRECAUTIONS, SCHEDULES, OR COMPLIANCE WITH LAWS AND REGULATIONS. WE SHALL NOT ASSUME RESPONSIBILITY FOR ANY CONSTRUCTION BEGUN PRIOR TO PLAN APPROVAL.

DEMOLITION NOTES

1. PRIOR TO DEMOLITION AND CONSTRUCTION, A FIRE PREVENTION PLAN MEETING MUST OCCUR AND A FIRE PREVENTION PLAN MUST BE SUBMITTED TO AND APPROVED BY THE FIRE MARSHAL.
2. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR ALL UNDERGROUND UTILITIES NOT SHOWN ON THIS PLAN SHEET AND SHALL DEMOLISH ALL DISCOVERED UTILITIES AS REQUIRED.
3. THE CONTRACTOR SHALL VIDEO AND INSPECT ALL SANITARY SEWER PIPES AND MANHOLES SLATED TO REMAIN TO DETERMINE ADEQUATE STRUCTURAL INTEGRITY. IF EXISTING SANITARY SEWER IS DAMAGED, THE CONTRACTOR SHALL CONTACT THE ENGINEER.
4. THE CONTRACTOR SHALL EXAMINE THE STRUCTURAL INTEGRITY OF EXISTING STORM SEWER STRUCTURES TO REMAIN AND REPLACE TOPS AS NECESSARY; THIS SHALL BE REFLECTED IN THE CONTRACTOR BID.
5. ALL EXISTING WATER, SANITARY, AND STORM SEWER SLATED FOR DEMOLITION SHALL BE REMOVED FROM THE BUILDING TO THE PROPERTY LINE, UNLESS MARKED AS TO REMAIN.
6. UTILITIES THAT ARE DISCONNECTED SHALL BE PROPERLY ABANDONED AT THE MAIN LINE. FOR WATER SERVICE LINES, THE CORP STOP MUST BE TURNED OFF AT THE MAIN LINE AND THE SERVICE DISCONNECTED FROM THE MAIN. FOR SEWER LATERALS, THE LATERAL TAP MUST BE SEALED AT THE MAIN LINE SO THAT IT IS WATER TIGHT AND THE LATERAL REMOVED FROM THE MAIN LINE. FOR SANITARY MANHOLES TO BE ABANDONED THE TOP 3' OF THE MANHOLE STRUCTURE SHALL BE REMOVED, ALL LINES DISCONNECTED, AND THE MANHOLE SHOULD BE FILLED WITH STONE AND COVERED, ALL TAPS MUST BE LOCATED AND DISCONNECTED PER PROCEDURE ABOVE.
7. EXISTING ROOF DRAINS SLATED TO BE DEMOLISHED SHALL BE DISCONNECTED AND REMOVED; ROOFDRAINS TO BE REROUTED AS SHOWN ON THE ARCHITECTURAL PLANS.
8. EXISTING DOMINION OVERHEAD/UNDERGROUND ELECTRIC LINES AND OVERHEAD UTILITIES TO THE EXISTING BUILDING SHALL BE DISCONNECTED AND REROUTED AS PROPOSED ON THE UTILITY PLAN SHEET.
9. ANY EXISTING UNDERGROUND STORAGE TANKS SHALL BE DRAINED BY THE OWNER, AND THE CONTRACTOR SHALL REMOVE TANKS SHALL REMAIN.
10. BUILDINGS BEING DEMOLISHED. WHERE A BUILDING IS BEING DEMOLISHED AND A STANDPIPE IS EXISTING WITHIN SUCH A BUILDING, SUCH STANDPIPE SHALL BE MAINTAINED IN AN OPERABLE CONDITION SO AS TO BE AVAILABLE FOR USE BY THE FIRE DEPARTMENT. SUCH STANDPIPE SHALL BE DEMOLISHED WHEN THE BUILDING BUT SHALL NOT BE DEMOLISHED MORE THAN ONE FLOOR BELOW THE FLOOR BEING DEMOLISHED.

FIRE DEPARTMENT NOTES

1. THE PROPOSED BUILDINGS WILL BE BUILT TO THE STANDARDS OUTLINED IN THE 2019 VIRGINIA CONSTRUCTION CODE.
2. FIRE PREVENTION: 2018 SFPC (2018 IFC), TYPE V-B CONSTRUCTION, RESIDENTIAL OCCUPANCY CLASSIFICATION.
3. VSFPC 505.1 - THE BUILDING STREET NUMBER TO BE PLAINLY VISIBLE FROM THE STREET FOR EMERGENCY RESPONDERS.
4. VSFPC 506.1 - AN APPROVED KEY BOX SHALL BE MOUNTED TO THE SIDE OF THE FRONT OR MAIN ENTRANCE. THE CHARLOTTESVILLE FIRE DEPARTMENT CARRIES THE KNOX BOX MASTER KEY. A KNOX BOX KEY BOX CAN BE ORDERED BY GOING ONLINE TO WWW.KNOXBOX.COM. THE KNOX BOX ALLOWS ENTRY TO THE BUILDING WITHOUT DAMAGING THE LOCK AND DOOR SYSTEM.
5. VSFPC B105.2, B105.1 AND TABLE 105.1 - CALCULATION OF THE FIRE FLOW REQUIRED FOR THE SITE SHALL BE SHOWN ON THE SITE PLAN. ALSO, VERIFICATION THAT THE NEEDED FIRE FLOW (NFF) IS AVAILABLE ON SITE. THE MINIMUM REQUIRED FIRE FLOW FOR ALL BUILDINGS, WITH THE EXCEPT OF ONE AND TWO-FAMILY DWELLINGS WHICH IS 1,000 GALLONS PER MINUTE, IS 1,500 GALLONS PER MINUTE (SPRINKLER PROTECTED OR NON-SPRINKLER PROTECTED).
6. VSFPC 912.4 AND 912.3 - FIRE DEPARTMENT CONNECTIONS OR FIRE SUPPRESSION SYSTEM CONTROL VALVES SHALL REMAIN CLEAR AND UNOBSTRUCTED BY LANDSCAPING, PARKING, OR OTHER OBJECTS OR BARRIERS.
7. SFPC 507.5.1.1 - HYDRANT FOR STANDPIPE SYSTEM - BUILDINGS EQUIPPED WITH A STANDPIPE SYSTEM INSTALLED IN ACCORDANCE WITH SECTION 905.3.1 SHALL HAVE A FIRE HYDRANT WITHIN 100 FEET OF THE FIRE DEPARTMENT CONNECTIONS. THE DISTANCE SHALL BE PERMITTED TO EXCEED 100 FEET WHERE APPROVED BY THE FIRE CODE OFFICIAL.
8. VSFPC 503.2.1 - OVERHEAD WIRING OR OTHER OBSTRUCTIONS SHALL BE HIGHER THAN 13 FEET, 6 INCHES.
9. VSFPC 3312.1 - AN APPROVED WATER SUPPLY FOR FIRE PROTECTION SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL ARRIVES ON THE SITE.
10. VSFPC 3311.1 - WHERE A BUILDING HAS BEEN CONSTRUCTED TO A HEIGHT GREATER THAN 50 FEET OR FOUR (4) STORIES, AT LEAST ONE TEMPORARY STANDPIPE SYSTEM SHALL BE PROVIDED UNLESS ONE OR MORE OF THE PERMANENT STAIRWAYS ARE ERECTED AS THE CONSTRUCTION PROGRESSES.
11. VSFPC 503.2.5 - IF APPLICABLE, DEAD-END EMERGENCY FIRE APPARATUS ACCESS ROADWAYS AND FIRE LANES IN EXCESS OF 150 FEET SHALL BE PROVIDED WITH AN APPROVED TURN-AROUND.
12. VSFPC 503.3 - MARKING FIRE LANES: THE FIRE CODE OFFICIAL IS AUTHORIZING FIRE LANES SHALL BE CLEARLY INDICATED ON THE SUBMITTED SITE PLAN. FIRE LANES SHALL BE A MINIMUM OF 20 FEET IN WIDTH. SIGNS AND MARKINGS TO DELINEATE FIRE LANES AS DESIGNATED BY THE FIRE OFFICIAL SHALL BE PROVIDED AND INSTALLED BY THE OWNER OR HIS/HER AGENT OF THE PROPERTY INVOLVED. FIRE APPARATUS ROADS 20 TO 26 FEET IN WIDTH SHALL BE POSTED WITH SIGNS ON BOTH SIDES NO PARKING - FIRE LANE" AS REQUIRED, PUBLIC AND PRIVATE, SHALL BE POSTED EXCEPT THOSE PORTIONS OF A STREET DESIGNATED FOR ON-STREET PARKING.
13. VSFPC 3313.1 - WHERE REQUIRED - BUILDINGS FOUR OR MORE STORIES IN HEIGHT SHALL BE PROVIDED WITH NOT LESS THAN ONE STANDPIPE FOR USE DURING CONSTRUCTION. SUCH STANDPIPES SHALL BE INSTALLED WHEN THE PROGRESS OF CONSTRUCTION IS NOT MORE THAN 40 FEET IN HEIGHT ABOVE THE LOWEST LEVEL OF FIRE DEPARTMENT ACCESS. SUCH STANDPIPE SHALL BE PROVIDED WITH FIRE DEPARTMENT HOSE CONNECTIONS AT ACCESSIBLE LOCATIONS ADJACENT TO USABLE STAIRS. SUCH STANDPIPES SHALL BE EXTENDED AS CONSTRUCTION PROGRESSES TO WITHIN ONE FLOOR OF THE HIGHEST POINT OF CONSTRUCTION HAVING SECURED DECKING OR FLOORING.
14. VSFPC 310.3 AND 310.5 - SMOKING TO BE ALLOWED IN ONLY DESIGNATED SPACES WITH PROPER RECEPTACLES. "NO SMOKING" SIGNS SHALL BE POSTED AT EACH BUILDING SITE AND WITHIN EACH BUILDING DURING CONSTRUCTION. NO SMOKING OR VAPING WITHIN THE CONSTRUCTION SAFETY FENCE. NO SMOKING POSTING SHALL BE POSTED THROUGHOUT EACH BUILDING UNDER CONSTRUCTION AS WELL AS OUTSIDE THE BUILDING. SHOULD ANYONE FROM THE FIRE MARSHAL'S OFFICE WITNESS SMOKING/VAPING WITHIN THE CONSTRUCTION SITE, HE OR SHE MAP REQUEST A FOR AWORK STOP WORK ORDER FROM THE CITY BUILDING OFFICIAL.
15. VSFPC 3304.1 - PROPER DISPOSAL OF COMBUSTIBLE DEBRIS SHALL BE REMOVED FROM THE BUILDING AT THE END OF EACH WORKDAY.
16. VSFPC 3304.6 - CUTTING AND WELDING - OPERATIONS INVOLVING THE USE OF CUTTING AND WELDING SHALL BE DONE IN ACCORDANCE WITH CHAPTER 35, OF THE VIRGINIA STATEWIDE FIRE PREVENTION CODE, ADDRESSING WELDING AND HOT WORK OPERATIONS.
17. VSFPC 3315.1 - FIRE EXTINGUISHERS SHALL BE PROVIDED WITH NOT LESS THAN ONE APPROVED PORTABLE FIRE EXTINGUISHER AT EACH STAIRWAY ON ALL FLOOR LEVELS WHERE COMBUSTIBLE MATERIALS HAVE ACCUMULATED.
18. VSFPC 3310.1 - REQUIRED VEHICLE ACCESS FOR FIREFIGHTING SHALL BE PROVIDED TO ALL CONSTRUCTION OR DEMOLITION SITES. VEHICLE ACCESS SHALL BE PROVIDED TO WITHIN 100 FEET OF TEMPORARY OR PERMANENT FIRE DEPARTMENT CONNECTIONS. VEHICLE ACCESS SHALL BE PROVIDED BY EITHER TEMPORARY OR PERMANENT ROADS, CAPABLE OF SUPPORTING VEHICLE LOADING UNDER ALL WEATHER CONDITIONS. VEHICLE ACCESS SHALL BE MAINTAINED UNTIL PERMANENT FIRE APPARATUS ACCESS ROADS ARE AVAILABLE.
19. VSFP 1408.1 PROGRAM SUPERINTENDENT. THE OWNER SHALL DESIGNATE A PERSON TO BE THE FIRE PREVENTION PROGRAM SUPERINTENDENT WHO SHALL BE RESPONSIBLE FOR THE FIRE PREVENTION PROGRAM AND ENSURE THAT IT IS CARRIED OUT THROUGH COMPLETION OF THE PROJECT. THE FIRE PREVENTION PROGRAM SUPERINTENDENT SHALL HAVE THE AUTHORITY TO ENFORCE THE PROVISIONS OF THIS CHAPTER AND OTHER PROVISIONS AS NECESSARY TO SECURE THE INTENT OF THIS CHAPTER. WHERE GUARD SERVICE IS PROVIDED, THE SUPERINTENDENT SHALL BE RESPONSIBLE FOR THE GUARD SERVICE.
20. VSFP 1408.2 PREFIRE PLANS. THE FIRE PREVENTION PROGRAM SUPERINTENDENT SHALL DEVELOP AND MAINTAIN AN APPROVED PREFIRE PLAN IN COOPERATION WITH THE FIRE CHIEF. THE FIRE CHIEF AND THE FIRE CODE OFFICIAL SHALL BE NOTIFIED OF CHANGES AFFECTING THE UTILIZATION OF INFORMATION CONTAINED IN SUCH PREFIRE PLANS.
21. A SITE SPECIFIC FIRE PREVENTION PLAN SHALL BE SUBMITTED TO THE FIRE MARSHAL'S OFFICE PRIOR TO COMMENCEMENT OF ANY DEMOLITION/CONSTRUCTION.
22. THE FIRE MARSHAL'S OFFICE NO LONGER ALLOWS ANY TYPE OF LANDSCAPING TO BE PLACED IN FRONT OF AND WITHIN A 5 FOOT RADIUS OF FIRE HYDRANTS, FIRE PUMP TEST HEADERS, FIRE DEPARTMENT CONNECTIONS OR FIRE SUPPRESSION SYSTEM CONTROL VALVES.
23. ALL PAVEMENT SHALL BE CAPABLE OF SUPPORTING FIRE APPARATUS WEIGHTING 85,000 LBS.
24. ALL SIGNS SHALL BE IN ACCORDANCE WITH ARTICLE IX, SECTION 34-1020 CITY CODE. ALL SIGNAGE AND PAVEMENT MARKINGS SHALL BE CONSISTENT WITH THE MUTCD.
25. NO VEHICLES/MACHINERY OF ANY TYPE, CONSTRUCTION MATERIALS OR CONSTRUCTION DEBRIS ARE TO BE PARKED, PLACED, OR STORED EITHER IN FRONT OF OR WITHIN 15 FEET OF A FIRE HYDRANT.

SITE NOTES

1. CONTRACTOR SHALL OBTAIN A TEMPORARY STREET CLOSURE PERMIT FOR CLOSURE OF SIDEWALKS, PARKING SPACES & ROADWAYS SUBJECT TO APPROVAL BY THE CITY TRAFFIC ENGINEER PRIOR TO CONSTRUCTION IN THESE EXISTING AREAS.
2. PROPOSED MECHANICAL EQUIPMENT WILL BE LOCATED ON THE ROOF BEHIND THE PARAPET OF THE PROPOSED BUILDINGS. MECHANICAL EQUIPMENT LOCATED ON THE ROOF OF A BUILDING OR STRUCTURE SHALL BE HIDDEN BEHIND A WALL OR OTHER SOLID ENCLOSURE, EXTENDING NO MORE THAN TWELVE (12) INCHES ABOVE THE HEIGHT OR SUCH EQUIPMENT, SUCH WALL TO BE CONSTRUCTED OF A MATERIAL HARMONIOUS WITH THE FACADE OF THE BUILDING OR STRUCTURE. MECHANICAL EQUIPMENT LOCATED ON THE GROUND SHALL BE SCREENED FROM VIEW FROM ALL PUBLIC RIGHTS-OF-WAY AND FROM ADJACENT RESIDENTIAL DISTRICTS, AN S-3 SCREEN SHALL BE PROVIDED, EXTENDING NO MORE THAN TWELVE (12) INCHES ABOVE THE HEIGHT OF SUCH EQUIPMENT. THE SCREENING MATERIALS SHALL BE LOCATED IN SUCH A MANNER TO MOST EFFECTIVELY REFLECT NOISE AWAY FROM ADJACENT RESIDENTIAL DISTRICTS.
3. EXISTING AND PROPOSED DUMPSTERS ON SITE SHALL COMPLY WITH APPLICABLE CODE SECTIONS, INCLUDING BUT NOT LIMITED TO SEC. 34-870 (b)(1) AND SEC. 34-934. DUMPSTERS SHALL NOT BE VISIBLE FROM RIGHT-OF-WAY.
4. ALL SIDEWALK WITHIN THE LIMITS OF THE DEVELOPMENT SHALL BE PRIVATE SIDEWALKS AND SHALL BE PRIVATELY MAINTAINED.
5. ALL SIDEWALKS AND WALKWAYS SHALL HAVE A MINIMUM CLEAR WIDTH OF 5'.
6. ALL WALKWAY CROSSINGS SHALL MEET MINIMUM ADA ACCESSIBILITY STANDARDS AND SHALL HAVE A CROSS SLOPES OF 2% OR LESS.
7. ALL SIGNING AND PAVEMENT MARKINGS SHALL BE INSTALLED CONSISTENT WITH MUTCD STANDARDS.
8. ACCESSIBLE PARKING SPACES SHALL BE LOCATED ON THE SHORTEST ACCESSIBLE ROUTE FROM PARKING TO AN ACCESSIBLE ENTRANCE.
9. ALL SIGNS IDENTIFYING ACCESSIBLE PARKING SPACES SHALL BE AT LEAST 60 INCHES ABOVE THE GROUND/SURFACE (FROM BOTTOM OF SIGN) AND INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY. ACCESSIBLE VAN PARKING SPACES SHALL CONTAIN THE DESIGNATION "VAN ACCESSIBLE".
10. RAMPS OVER 30" IN ELEVATION CHANGE REQUIRE HANDRAILS.
11. ALL SITE AND BUILDING CONSTRUCTION SHALL MEET 2006 IBC SECTION 3409 REQUIREMENTS FOR ACCESSIBILITY AND VA USBC 103.3 FOR CHANGE OF OCCUPANCY.
12. PRIOR TO BUILDING PERMIT APPROVAL, THE BUILDING PLANS MUST MEET THE REQUIREMENTS OF BOTH THE 2012 VA CONSTRUCTION CODE (VCC) AND 2015 VCC 1009.3 BOTH REQUIRE TWO ACCESSIBLE MEANS OF EGRESS FOR EACH BUILDING.
13. BUILDING FOUNDATIONS SHALL MEET THE REQUIREMENTS OF THE 2012 OR 2015 VA CONSTRUCTION CODE 1808.7.2 "FOUNDATION SETBACK FROM DESCENDING SLOPES".
14. PER 502.6 OF THE 2010 ADA DESIGN STANDARDS ACCESSIBLE PARKING SPACE IDENTIFICATION SIGNS SHALL INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY COMPLYING WITH 703.7.2.1, AND SIGNS IDENTIFYING VAN PARKING SPACES SHALL CONTAIN THE DESIGNATION "VAN ACCESSIBLE".
15. PER ADA 502.4 PARKING SPACES AND ACCESS AISLES SHALL COMPLY WITH 302, SLOPES NOT STEEPER THAN 2% SHALL BE PERMITTED. PER ADA 403.3 THE RUNNING SLOPE OF AN ACCESSIBLE ROUTE SHALL BE 5% OR LESS. SLOPES OVER 5% WILL REQUIRE A RAMP.
16. PER ADA 206.2.2 AT LEAST ONE ACCESSIBLE ROUTE SHALL CONNECT ACCESSIBLE BUILDINGS, FACILITIES, ELEMENTS AND SPACES ON THE SAME SITE.
17. ALL PARKING SPACES SHALL BE 8.5'x18', EXCEPT AS NOTED.
18. HANDICAP PARKING SPACES SHALL BE 9'x18' (UNIVERSAL PARKING SPACES), EXCEPT AS NOTED.
19. ALL HANDICAP PARKING SPACES SHALL BE INDICATED WITH A SIGN.
20. ALL PROPOSED DRIVE AISLES SHALL HAVE A 5" 21A SUB-BASE, A 3" BM-25 BASE ASPHALT, AND A 2" SM-9.A ASPHALT TOPCOAT.
21. ALL PROPOSED PARKING SPACES SHALL HAVE AN 8" 21A BASE, AND A 2" SM-9.5 ASPHALT TOPCOAT.

UTILITY NOTES

1. ANY DAMAGE TO EXISTING UTILITIES CAUSED BY CONTRACTOR OR ITS SUBCONTRACTORS SHALL BE CONTRACTOR'S SOLE RESPONSIBILITY AND REPAIRED AT CONTRACTOR'S EXPENSE.
2. THE CONTRACT DOCUMENTS DO NOT GUARANTEE THE EXISTENCE, NON-EXISTENCE OR LOCATION OF UTILITIES. CONTRACTOR SHALL VERIFY THE EXISTENCE AND LOCATION OR THE NON-EXISTENCE OF UTILITIES. AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION OR CONSTRUCTION, CONTRACTOR SHALL NOTIFY MISS UTILITY (1-800-552-7001) AND/OR THE RESPECTIVE UTILITY COMPANIES FOR GAS, WATER, SEWER, POWER, PHONE, AND CABLE. CONTRACTOR SHALL TIMELY ARRANGE TO HAVE THE VARIOUS UTILITIES LOCATED, AND TO HAVE THEM REMOVED OR RELOCATED IN A MANNER SATISFACTORY TO THE RESPECTIVE OWNER, IF UTILITIES IN ACCORDANCE WITH THE RESPECTIVE UTILITY'S RULES AND REGULATIONS.
3. NO BUILDING OR WALL FOUNDATION SHALL BE CONSTRUCTED WITHIN 10 FEET OF ANY STORM, SANITARY, WATER, OR GAS LINE. ANY COST INCLUDED FOR REMOVING, RELOCATIONS, OR PROTECTING UTILITIES SHALL BE BORNE BY CONTRACTOR UNLESS INDICATED OTHERWISE.
4. CONTRACTOR SHALL EXCAVATE TO LOCATE BURIED UTILITIES FAR ENOUGH IN ADVANCE OF ITS WORK TO ALLOW FOR HORIZONTAL AND/OR VERTICAL ADJUSTMENTS TO ITS WORK AND/OR THE UTILITIES. NO ADJUSTMENT IN COMPENSATION OR SCHEDULE WILL BE ALLOWED FOR DAYS RESULTING FROM CONTRACTOR'S FAILURE TO CONTACT AND COORDINATE WITH UTILITIES.
5. WHEN THE WORK CROSSES EXISTING UTILITIES, THE EXISTING UTILITIES SHALL BE ADEQUATELY SUPPORTED AND PROTECTED FROM DAMAGE DUE TO THE WORK. ALL METHODS FOR SUPPORTING AND MAINTAINING THE EXISTING UTILITIES SHALL BE APPROVED BY THE RESPECTIVE UTILITY COMPANY AND/OR THE ENGINEER.
6. CONTRACTOR SHALL EXERCISE CARE IN EST

Attachment A

NOTE:
SHEET 3 (BOUNDARY LINE ADJUSTMENT, RIGHT OF WAY DEDICATION, EASEMENT PLAT & PUBLIC GAS EASEMENT VACATION) AND SHEET 3A (PRIVATE EASEMENT PLAT & PUBLIC WATER EASEMENT VACATION) ARE SHOWN WITHIN THIS SET FOR INFORMATIONAL PURPOSES ONLY. THESE DOCUMENTS HAVE BEEN SUBMITTED TO THE CITY SEPARATELY FOR REVIEW AND APPROVAL.



VICINITY MAP
SCALE 1"=2,000'

APPROVED FOR RECORDATION:

SIGNATURE: _____ DATE: _____
CITY SUBDIVISION AGENT

SIGNATURE: _____ DATE: _____
CHAIR, CITY PLANNING COMMISSION

NOTES:

1. THIS PLAT HAS BEEN PREPARED WITH THE BENEFIT OF A TITLE REPORT BY CHICAGO TITLE INSURANCE COMPANY WITH A COMMITMENT NUMBER OF SVOC-432 AND A COMMITMENT DATE OF JUNE 26, 2023.
2. THE AREA SHOWN HEREON IS LOCATED IN ZONE "X" AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN PER FLOOD INSURANCE RATE MAP NUMBER 51003C0293D, EFFECTIVE FEBRUARY 4, 2005. THIS DETERMINATION HAS BEEN MADE BY GRAPHIC METHODS, NO ELEVATION STUDY HAS BEEN PERFORMED AS A PORTION OF THIS PROJECT.
3. THE BOUNDARY SHOWN HEREON IS BASED ON A BOUNDARY SURVEY PREPARED BY ROUDABUSH, GALE AND ASSOCIATES DATED DECEMBER 5, 2018.
4. EASEMENTS MAY EXIST OTHER THAN THOSE SHOWN HEREON.
5. REVISED TAX MAP 57 PARCEL 20 WILL BECOME A MULTI-ZONED PARCEL AS SHOWN ON SHEET V2 HEREIN.
6. ALL PROPERTY CORNERS WILL BE MONUMENTED WITH IRON PINS UNLESS NOTED OTHERWISE.
7. PUBLIC UTILITY EASEMENTS AND SIGHT DISTANCE EASEMENTS ARE PUBLIC AND DEDICATED TO THE CITY OF CHARLOTTESVILLE.
8. ALL PUBLIC UTILITY EASEMENT & CONVEYOR DRIVE SHOWN AS PROPOSED ON SHEET V3 ARE PUBLIC RIGHTS OF WAY AND SHALL BE DEDICATED TO PUBLIC USE.
9. EACH PARCEL CREATED BY THIS SUBDIVISION PLAT CONTAINS A BUILDING SITE THAT COMPLIES WITH THE REQUIREMENTS OF THE CITY OF CHARLOTTESVILLE'S ZONING, WATER PROTECTION AND SUBDIVISION ORDINANCES.
10. NO SIGNS OF CEMETERIES OR BURIAL HAVE BEEN OBSERVED DURING THE PROCESS OF THIS SURVEY.
11. REVISED TAX MAP 57 PARCEL 20 WILL BECOME A MULTI-ZONED PARCEL AS A RESULT OF THIS PLAT. EXISTING TAX MAP 57 PARCEL 10 IS PRESENTLY ZONED R-2 WHILE THE REMAINDER OF THE SUBJECT AREA IS ZONED NCC.
12.PLAT HAS BEEN PREPARED BY TYLER JAMISON

BOUNDARY LINE TABLE			
Line	Direction	Length	Curve
L1	N 29°25'28" E	9.70'	C1
L2	S 60°29'36" E	15.91'	C2
L3	N 81°57'26" E	30.00'	C3
L4	S 88°30'56" W	7.28'	C4
L5	N 8°39'34" E	9.78'	C5
L6	S 82°57'26" E	6.95'	C6
L7	N 57°25'21" E	8.66'	C7
L8	S 76°51'17" E	3.15'	C8
L9	S 85°37'26" E	11.67'	C9
L10	S 62°57'52" E	12.63'	C10
L11	N 62°57'52" W	12.64'	C11
L12	N 85°37'26" W	11.67'	C12
L13	N 76°51'17" W	3.15'	C13
L14	N 62°57'52" W	9.74'	
L15	N 74°52'52" W	29.63'	

BOUNDARY CURVE TABLE					
Length	Radius	Delta	Tangent	Chord	Chord Bearing
45.67'	136.00'	19°14'42"	23.02'	45.29'	N 81°52'47" W
20.60'	39°59'4"	7.28'	13.44'	N 73°35'52" W
8.92'	81°35'6"	5.04'	8.47'	N 29°50'17" E
53.57'	163.00'	18°49'54"	26.47'	53.33'	N 19°35'24" E
104.92'	372.00'	16°09'36"	52.81'	104.60'	N 21°13'32" E
21.70'	17.00'	73°08'51"	12.60'	20.24'	N 72°03'17" E
8.66'	786.00'	0°37'47"	20.80'	41.68'	S 81°53'16" E
43.70'	635.00'	3°57'10"	30.44'	66.66'	S 82°47'34" E
11.67'	635.00'	1°03'21"	20.84'	43.70'	S 84°51'48" E
44.33'	228.00'	11°08'30"	22.28'	44.26'	N 88°30'38" W

ZONING: NCC
CURRENT ZONING REQUIREMENTS:

SEC. 34-487 – HEIGHT REGULATIONS.

THE FOLLOWING HEIGHT REGULATIONS SHALL APPLY TO BUILDINGS AND STRUCTURES WITHIN THE NEIGHBORHOOD COMMERCIAL CORRIDOR DISTRICT, EXCEPT AS PROVIDED WITHIN SECTION 34-796(A) (STEPBACK REQUIREMENT):

(1) MINIMUM: NONE.

(2) MAXIMUM HEIGHT: FORTY-FIVE (45) FEET; HOWEVER, UP TO SIXTY (60) FEET MAY BE ALLOWED BY SPECIAL PERMIT, SUBJECT TO STREETWALL REGULATIONS.

SEC. 34-488. – STREETWALL REGULATIONS.

(A) STEPBACK REQUIREMENTS. THE MAXIMUM HEIGHT OF THE STREET WALL OF ANY BUILDING OR STRUCTURE SHALL BE FORTY-FIVE (45) FEET, AFTER FORTY-FIVE (45) FEET, THERE SHALL BE A MINIMUM STEPBACK OF TEN (10) FEET ALONG AT LEAST FIFTY (50) PERCENT OF THE LENGTH OF THE STREETWALL.

(B) SETBACKS.
(1) PRIMARY STREET FRONTAGE: NO MINIMUM REQUIRED; TEN (10) FEET, MAXIMUM.
(2) LINKING STREET FRONTAGE: NONE REQUIRED.
(3) SIDE AND REAR, ADJACENT TO LOW DENSITY RESIDENTIAL DISTRICT: TEN (10) FEET, MINIMUM.
(4) SIDE AND REAR, ADJACENT TO ANY OTHER ZONING DISTRICTS: NONE REQUIRED.

SEC. 34-489. – BUFFER REGULATIONS.

ADJACENT TO ANY LOW DENSITY RESIDENTIAL DISTRICT, SIDE AND REAR BUFFERS (S-1 TYPE) SHALL BE REQUIRED, TEN (10) FEET, MINIMUM (REFER TO SECTION 34-871).

SEC. 34-700. – DENSITY.

OTHER RESIDENTIAL DEVELOPMENT. RESIDENTIAL DENSITY SHALL NOT EXCEED TWENTY-ONE (21) DUA; HOWEVER, UP TO FORTY-THREE (43) DUA MAY BE ALLOWED BY SPECIAL USE PERMIT.

ZONING: R-2
CURRENT ZONING REQUIREMENTS:

SEC. 34-353. – DIMENSIONAL REQUIREMENTS.

HEIGHT RESTRICTIONS – 35 FT. MAX HEIGHT
REQUIRED FRONT YARD – 25 FT. MIN
REQUIRED SIDE YARD –
SINGLE FAMILY DETACHED – 5' MIN
SINGLE FAMILY ATTACHED – 10' MIN
TWO FAMILY DWELLING – 10' MIN
NONRESIDENTIAL – 10' MIN
CORNER, STREET SIDE – 20' MIN
REQUIRED REAR YARD –
RESIDENTIAL – 25' MIN
NONRESIDENTIAL – 10' MIN

STATEMENT OF CONSENT

THE PLATTING OR DEDICATION OF THE FOLLOWING DESCRIBED LAND, TAX MAP 57 PARCELS 2, 3, 4, 5, 6, 7, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 10, 20, AND 21 IS WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRE OF THE UNDERSIGNED OWNERS, PROPRIETORS AND TRUSTEES, IF ANY.

AUTHORIZED AGENT
BELMONT CARLTON HOLDINGS, LLC.
PO BOX 1447
CHARLOTTESVILLE, VA 22902

COMMONWEALTH OF VIRGINIA –
CITY/COUNTY OF _____,
TO WIT: THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS _____ DAY OF _____, 20__.

SIGNATURE OF NOTARY PUBLIC

REG. NO.: _____

MY COMMISSION EXPIRES: _____

STATEMENT OF CONSENT

THE PLATTING OR DEDICATION OF THE FOLLOWING DESCRIBED LAND, TAX MAP 57 PARCEL 10 IS WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRE OF THE UNDERSIGNED OWNERS, PROPRIETORS AND TRUSTEES, IF ANY.

AUTHORIZED AGENT
BELMONT CARLTON APARTMENTS, LLC
P O BOX 1447
CHARLOTTESVILLE, VA 22902

COMMONWEALTH OF VIRGINIA –
CITY/COUNTY OF _____,
TO WIT: THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS _____ DAY OF _____, 20__.

SIGNATURE OF NOTARY PUBLIC

REG. NO.: _____

MY COMMISSION EXPIRES: _____

SHEET INDEX

V1 COVER SHEET
V2 BOUNDARY LINE ADJUSTMENT
V3 ROW DEDICATION
V4 PUBLIC UTILITY EASEMENTS
V5 SIGHT DISTANCE EASEMENTS

LEGEND:

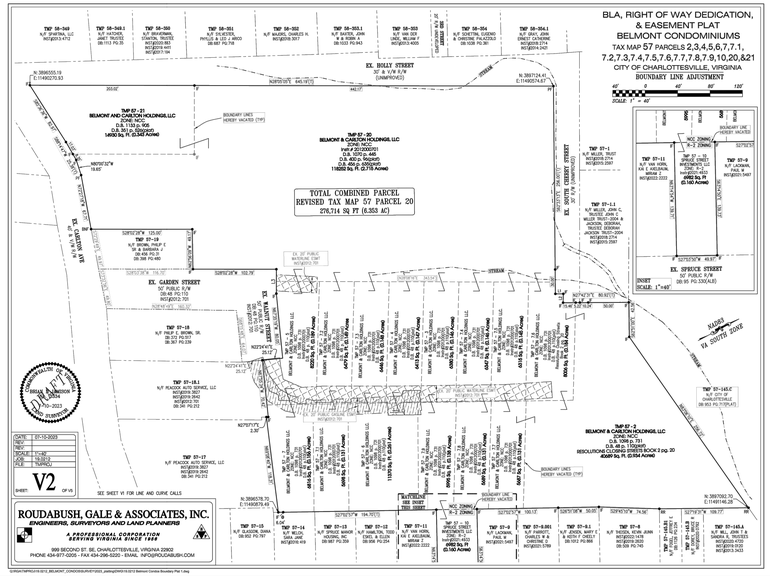
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IF IRON FOUND
PF PIPE FOUND
RBF REBAR W/ MONUMENT FOUND
R/W RIGHT OF WAY
V/W VARIABLE WIDTH

DATE: 07-10-2023
REV:
REV:
SCALE: 1=N/A
JOB: 18-0012
FILE: TMPRO1

SHEET: V1 OF V5

ROUDABUSH, GALE & ASSOCIATES, INC.
ENGINEERS, SURVEYORS AND LAND PLANNERS
A PROFESSIONAL CORPORATION
SERVING VIRGINIA SINCE 1958
999 SECOND ST. SE, CHARLOTTESVILLE, VIRGINIA 22902
PHONE 434-977-0205 - FAX 434-296-5220 - EMAIL INFO@ROUDABUSH.COM

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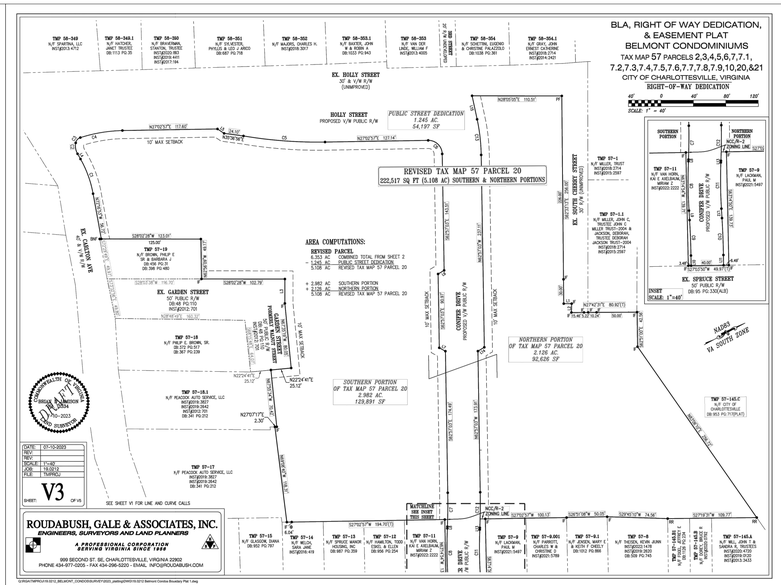


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REV:
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JOB: 18-0012
FILE: TMPRO2

SHEET: V2 OF V5

ROUDABUSH, GALE & ASSOCIATES, INC.
ENGINEERS, SURVEYORS AND LAND PLANNERS
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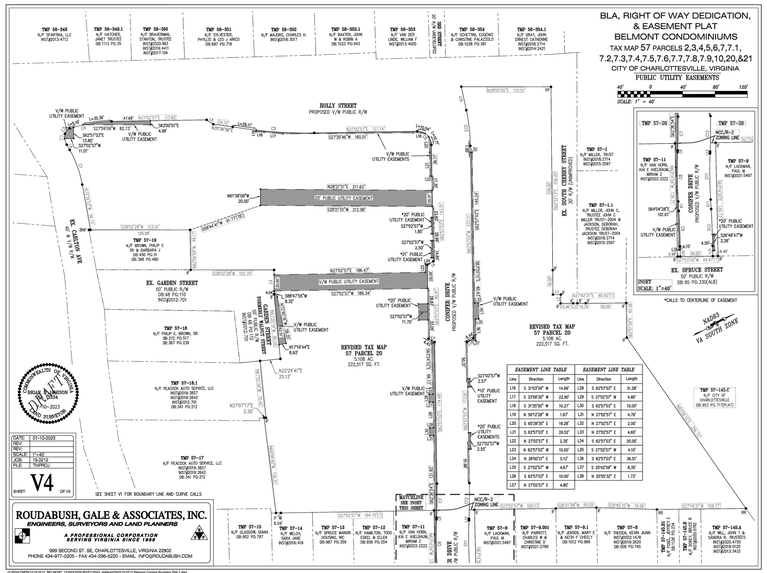


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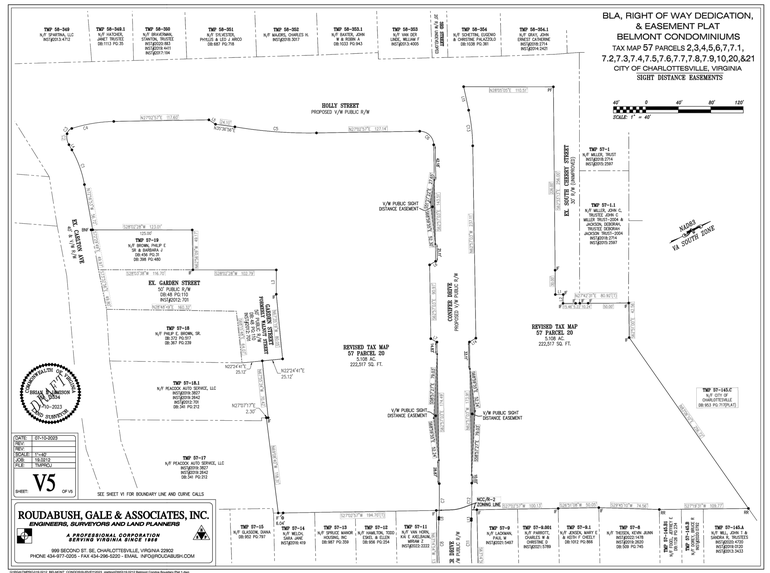
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EASEMENT LINE TABLE			EASEMENT LINE TABLE		
Line	Direction	Length	Line	Direction	Length
L16	S 31°25'34" W	14.96'	L28	S 43°57'57" E	31.28'
L17	S 33°08'36" W	23.90'	L29	S 31°57'57" W	4.90'
L18	S 31°57'57" W	10.07'	L30	S 43°57'57" E	10.00'
L19	N 58°02'36" W	1.87'	L31	N 31°57'57" E	4.74'
L20	S 46°36'36" E	16.28'	L32	N 31°57'57" E	3.00'
L21	S 43°57'57" E	26.52'	L33	N 31°57'57" E	4.60'
L22	N 31°57'57" E	3.30'	L34	S 43°57'57" E	20.00'
L23	N 43°57'57" E	10.50'	L35	S 31°57'57" W	4.10'
L24	N 36°00'24" E	5.12'	L36	S 43°57'57" E	26.57'
L25	S 27°02'57" W	4.47'	L37	S 25°42'36" W	8.35'
L26	S 43°57'57" E	10.50'	L38	N 25°42'36" E	1.72'
L27	N 31°57'57" E	4.80'			

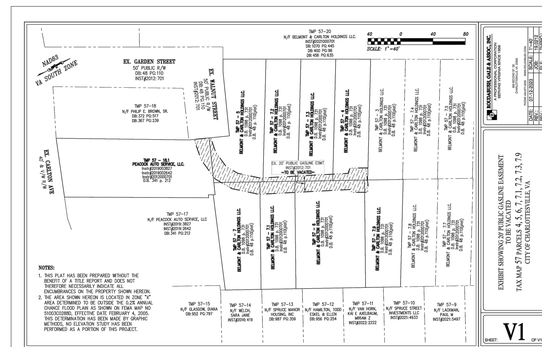


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999 SECOND ST. SE, CHARLOTTESVILLE, VIRGINIA 22902
PHONE 434-977-0205 - FAX 434-296-5220 - EMAIL INFO@ROUDABUSH.COM

G:\RGA\TMPRO\18-0012_BELMONT_CONDOS\SURVEY\0023_platting\DWG\18-0012 Belmont Condos Boundary Plat 1.dwg



SHEET: V1 OF V1

G:\RGA\TMPRO\18-0012_BELMONT_CONDOS\SURVEY\0023_platting\DWG\18-0012 Belmont Condos Gas Easement Vacation Ex004.dwg

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
PROFESSIONAL ENGINEER
8/18/23

REVISIONS

DATE	REVISION DESCRIPTION
3/15/22	INITIAL PLAN SUBMITTAL
1/03/23	2ND PLAN SUBMITTAL
5/19/23	3RD PLAN SUBMITTAL
8/18/23	4TH PLAN SUBMITTAL

COLLINS ENGINEERING
200 GARRETT STREET, SUITE K-CHARLOTTESVILLE, VA 22902 -434.293.3719

PROJECT: BELMONT CONDOMINIUMS - FINAL SITE PLAN
SHEET: PLATS

JOB NO. 202201
SCALE: NOT TO SCALE
SHEET NO. 3

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Attachment A

NOTE:
SHEET 3 (BOUNDARY LINE ADJUSTMENT, RIGHT OF WAY DEDICATION, EASEMENT PLAT & PUBLIC GAS EASEMENT VACATION) AND SHEET 3A (PRIVATE EASEMENT PLAT & PUBLIC WATER EASEMENT VACATION) ARE SHOWN WITHIN THIS SET FOR INFORMATIONAL PURPOSES ONLY. THESE DOCUMENTS HAVE BEEN SUBMITTED TO THE CITY SEPARATELY FOR REVIEW AND APPROVAL.

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
PROFESSIONAL ENGINEER
8/18/23

PRIVATE EASEMENT PLAT
BELMONT CONDOMINIUMS
TAX MAP 57 PARCEL 20
CITY OF CHARLOTTESVILLE, VIRGINIA
COVER SHEET



BOUNDARY LINE TABLE			
Line	Direction	Length	Curve
L1	N 28°25'28" E	9.70'	C1
L2	S 65°29'36" E	16.91'	C2
L4	S 89°30'36" E	1.28'	C3
L5	N 6°16'36" E	8.78'	C4
L6	S 02°57'32" E	8.66'	C5
L7	N 87°02'27" E	3.00'	C6
L8	S 09°57'27" E	11.67'	C7
L9	S 45°57'32" E	11.67'	C8
L10	S 42°57'32" E	13.62'	C9
L11	N 02°57'32" E	12.64'	C10
L12	N 65°30'36" W	11.67'	C11
L13	N 09°57'27" W	2.01'	C12
L14	N 02°57'32" W	9.24'	C13
L15	N 74°02'52" W	29.67'	
L16	N 22°24'40" E	25.12'	

BOUNDARY CURVE TABLE					
Curve	Length	Radius	Delta	Tangent	Chord	Chord Bearing
C1	45.61'	136.00'	19°12'40"	23.02'	45.39'	N 81°53'16" W
C2	13.84'	20.00'	39°38'42"	7.28'	13.56'	N 71°39'57" W
C3	6.92'	8.50'	81°33'51"	3.94'	6.67'	N 28°50'11" W
C4	52.57'	163.00'	18°29'04"	26.47'	52.34'	N 18°26'24" E
C5	150.95'	334.00'	10°23'26"	59.87'	150.61'	N 32°15'32" E
C6	31.55'	31.00'	58°19'01"	17.50'	30.20'	N 61°07'03" E
C7	41.75'	786.00'	3°02'47"	20.90'	41.68'	S 69°55'12" E
C8	63.82'	635.00'	5°45'31"	31.94'	63.80'	S 62°47'34" E
C9	43.75'	995.00'	2°31'06"	21.88'	43.75'	S 64°13'34" E
C10	45.54'	1035.00'	2°31'06"	22.77'	45.53'	N 64°13'46" W
C11	56.90'	585.00'	5°34'15"	28.47'	56.88'	N 62°47'34" W
C12	63.84'	655.00'	5°34'47"	31.92'	63.82'	N 61°51'16" W
C13	44.33'	228.00'	11°08'30"	22.18'	44.26'	N 68°35'38" W

NOTES:
1. THIS PLAT HAS BEEN PREPARED WITH THE BENEFIT OF A TITLE REPORT BY CHICAGO TITLE INSURANCE COMPANY WITH A COMMITMENT NUMBER OF 5400-632 AND A COMMITMENT DATE OF JUNE 26, 2023.
2. THE AREA SHOWN HEREON IS LOCATED IN ZONE "X" AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN AS SHOWN ON FEMA MAP NO 51003C0289D, EFFECTIVE DATE FEBRUARY 4, 2005. THIS DETERMINATION HAS BEEN MADE BY GRAPHIC METHODS. NO ELEVATION STUDY HAS BEEN PERFORMED AS A PORTION OF THIS PROJECT.
3. THE BOUNDARY SHOWN HEREON IS BASED ON A BOUNDARY SURVEY PREPARED BY ROUDABUSH, GALE AND ASSOCIATES DATED DECEMBER 3, 2018.
4. TAX MAP 57 PARCEL 20 IS A MULTI-ZONED PARCEL AS SHOWN HEREON.
5. STORM WATER MANAGEMENT EASEMENTS ARE PRIVATE AND SHALL BE MAINTAINED BY THE HOMEOWNER'S ASSOCIATION.
6. ALL KNOWN UTILITIES HAVE BEEN OBSERVED DURING THE PROCESS OF THIS SURVEY.
7. PLAT HAS BEEN PREPARED BY TYLER JAMISON

ZONING: NCC
CURRENT ZONING REQUIREMENTS:

SEC. 34-697. – HEIGHT REGULATIONS.

THE FOLLOWING HEIGHT REGULATIONS SHALL APPLY TO BUILDINGS AND STRUCTURES WITHIN THE NEIGHBORHOOD COMMERCIAL CORRIDOR DISTRICT, EXCEPT AS PROVIDED WITHIN SECTION 34-758(A) (STEPBACK REQUIREMENT):

(1) MINIMUM: NONE.

(2) MAXIMUM HEIGHT: FORTY-FIVE (45) FEET; HOWEVER, UP TO SIXTY (60) FEET MAY BE ALLOWED BY SPECIAL PERMIT, SUBJECT TO STREETWALL REGULATIONS.

SEC. 34-698. – STREETWALL REGULATIONS.

(A) STEPBACK REQUIREMENTS. THE MAXIMUM HEIGHT OF THE STREET WALL OF ANY BUILDING OR STRUCTURE SHALL BE FORTY-FIVE (45) FEET, AFTER FORTY-FIVE (45) FEET, THERE SHALL BE A MINIMUM STEPBACK OF TEN (10) FEET ALONG AT LEAST FIFTY (50) PERCENT OF THE LENGTH OF THE STREETWALL.

(B) SETBACKS.
(1) PRIMARY STREET FRONTAGE: NO MINIMUM REQUIRED; TEN (10) FEET, MAXIMUM.
(2) LINKING STREET FRONTAGE: NONE REQUIRED.
(3) SIDE AND REAR, ADJACENT TO LOW DENSITY RESIDENTIAL DISTRICT: TEN (10) FEET, MINIMUM.
(4) SIDE AND REAR, ADJACENT TO ANY OTHER ZONING DISTRICTS: NONE REQUIRED.

SEC. 34-699. – BUFFER REGULATIONS.

ADJACENT TO ANY LOW DENSITY RESIDENTIAL DISTRICT, SIDE AND REAR BUFFERS (S-1 TYPE) SHALL BE REQUIRED, TEN (10) FEET, MINIMUM (REFER TO SECTION 34-871).

SEC. 34-700. – DENSITY.

OTHER RESIDENTIAL DEVELOPMENT. RESIDENTIAL DENSITY SHALL NOT EXCEED TWENTY-ONE (21) DUA; HOWEVER, UP TO FORTY-THREE (43) DUA MAY BE ALLOWED BY SPECIAL USE PERMIT.

ZONING: B-2
CURRENT ZONING REQUIREMENTS:

SEC. 34-353. – DIMENSIONAL REQUIREMENTS.

HEIGHT RESTRICTIONS – 35 FT. MAX HEIGHT
REQUIRED FRONT YARD – 20 FT. MIN
REQUIRED SIDE YARD:
SINGLE FAMILY DETACHED – 5' MIN
SINGLE FAMILY ATTACHED – 10' MIN
TWO FAMILY DWELLING – 10' MIN
NONRESIDENTIAL – 10' MIN
CORNER, STREET SIDE – 20' MIN
REQUIRED REAR YARD:
RESIDENTIAL – 25' MIN
NONRESIDENTIAL – 10' MIN

DATE:	07-10-2023
REV:	
REV:	
SCALE:	N/A
JOB:	18-0012
FILE:	TMPRO1
SHEET:	V1 OF V4

SHEET INDEX
V1 COVER SHEET
V2 EXISTING CONDITIONS
V3 PRIVATE ACCESS EASEMENTS
V4 PRIVATE SWM & DRAINAGE EASEMENTS

LEGEND:
BNF BIRCH NAIL FOUND
IF IRON FOUND
PF PIPE FOUND
MF MONUMENT FOUND
R/W RIGHT OF WAY
V/W VARIABLE WIDTH

STATEMENT OF CONSENT

THE PLATTING OR DEDICATION OF THE FOLLOWING DESCRIBED LAND, TAX MAP 57 PARCEL 20 IS WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRE OF THE UNDERSIGNED OWNERS, PROPRIETORS AND TRUSTEES, IF ANY.

AUTHORIZED AGENT
BELMONT & CARLTON HOLDINGS, LLC
P.O. BOX 4
CHARLOTTESVILLE, VA 22902

COMMONWEALTH OF VIRGINIA –
CITY/COUNTY OF
TO WIT: THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS _____ DAY OF _____, 20__.

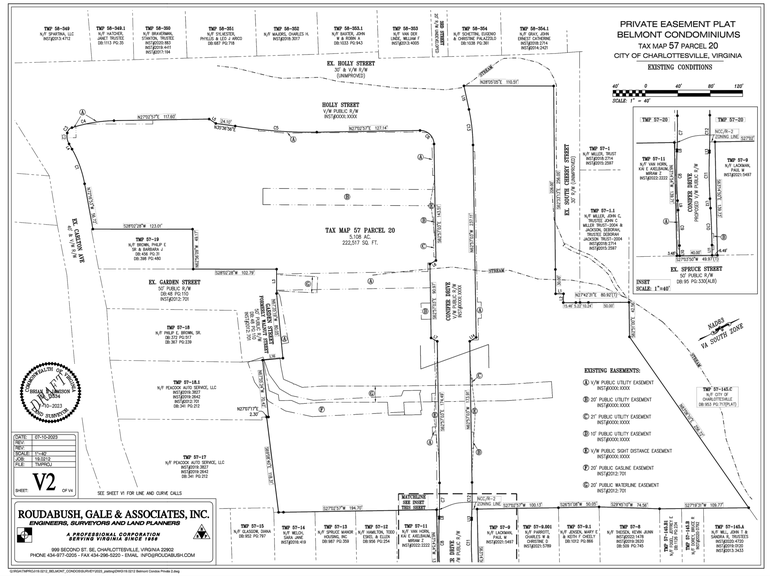
SIGNATURE OF NOTARY PUBLIC

REG. NO.: _____

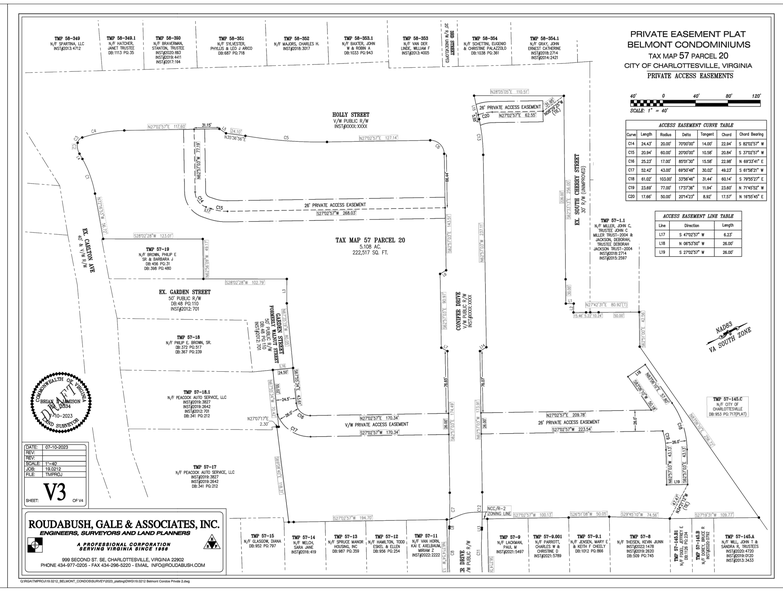
MY COMMISSION EXPIRES: _____

ROUDABUSH, GALE & ASSOCIATES, INC.
ENGINEERS, SURVEYORS AND LAND PLANNERS
A PROFESSIONAL CORPORATION
SERVING VIRGINIA SINCE 1958
999 SECOND ST. SE, CHARLOTTESVILLE, VIRGINIA 22902
PHONE 434-977-0205 - FAX 434-296-5220 - EMAIL: INFO@ROUDABUSH.COM

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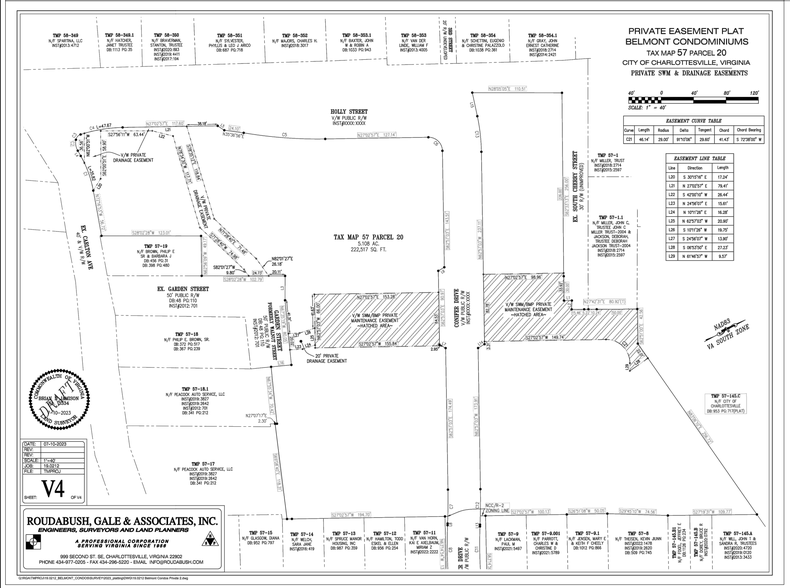
DATE:	07-10-2023
REV:	
REV:	
SCALE:	1"=60'
JOB:	18-0012
FILE:	TMPRO1
SHEET:	V2 OF V4



ACCESS EASEMENT CURVE TABLE						
Curve	Length	Radius	Delta	Tangent	Chord	Chord Bearing
C14	24.42'	20.00'	70°00'00"	14.00'	22.94'	S 82°57'57" W
C15	31.94'	60.00'	30°30'00"	16.38'	31.56'	S 37°42'57" W
C16	25.22'	17.00'	85°01'30"	15.58'	22.96'	N 68°34'47" E
C17	52.42'	43.00'	69°52'46"	30.02'	49.25'	S 69°56'34" E
C18	61.02'	103.00'	33°56'46"	31.44'	60.14'	S 79°55'13" E
C19	23.66'	71.00'	19°05'36"	11.94'	23.55'	N 71°41'52" E
C20	11.66'	56.00'	10°41'27"	5.84'	11.63'	N 76°56'46" E

ACCESS EASEMENT LINE TABLE		
Line	Direction	Length
L17	S 47°02'59" E	6.33'
L18	N 09°52'59" E	26.00'
L19	S 27°02'59" E	26.00'

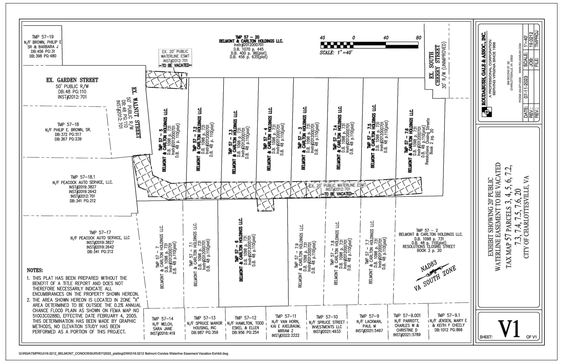
DATE:	07-10-2023
REV:	
REV:	
SCALE:	1"=60'
JOB:	18-0012
FILE:	TMPRO1
SHEET:	V3 OF V4



EASEMENT CURVE TABLE					
Curve	Length	Radius	Delta	Tangent	Chord	Chord Bearing
C21	46.14'	29.00'	91°10'56"	29.60'	41.42'	S 72°38'58" W

EASEMENT LINE TABLE		
Line	Direction	Length
L20	S 30°55'04" E	17.24'
L21	N 27°02'59" E	76.47'
L22	S 42°57'01" E	28.44'
L23	N 24°55'01" E	16.81'
L24	N 10°11'26" E	16.28'
L25	N 62°57'01" W	33.88'
L26	S 10°11'26" W	16.70'
L27	S 24°55'01" W	13.98'
L28	S 36°55'04" E	21.22'
L29	N 61°46'01" W	9.53'

DATE:	07-10-2023
REV:	
REV:	
SCALE:	1"=60'
JOB:	18-0012
FILE:	TMPRO1
SHEET:	V4 OF V4



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REVISIONS	
DATE	REVISION DESCRIPTION
3/15/22	INITIAL PLAN SUBMITTAL
1/03/23	2ND PLAN SUBMITTAL
5/19/23	3RD PLAN SUBMITTAL
8/18/23	4TH PLAN SUBMITTAL

COLLINS ENGINEERING
200 GARRETT STREET, SUITE K-CHARLOTTESVILLE, VA 22902 -434.293.3719

BELMONT CONDOMINIUMS - FINAL SITE PLAN

PLATS

JOB NO. 202201
SCALE NOT TO SCALE
SHEET NO. 3A

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Attachment A

GENERAL NOTES:

1. NO FLOODPLAIN EXISTS ON THE SUBJECT SITE PER FEMA FLOODPLAIN MAP # 51003C0288D DATED FEBRUARY 4, 2005.
2. NO STREAM BUFFER EXISTS ON THE SUBJECT PROPERTY.
3. BEFORE BEGINNING SITE WORK, THE CONTRACTOR SHALL INVESTIGATE AND VERIFY THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES, MECHANICAL AND ELECTRICAL SYSTEMS, AND OTHER CONSTRUCTION AFFECTING THE WORK. BEFORE CONSTRUCTION THE CONTRACTOR SHALL VERIFY THE LOCATION AND INVERT ELEVATIONS AT POINTS OF CONNECTION OF SANITARY SEWER, STORM SEWER, WATER-SERVICE PIPING, UNDERGROUND ELECTRICAL SERVICES AND OTHER UTILITIES. THE CONTRACTOR SHALL FURNISH LOCATION DATA FOR WORK RELATED TO PROJECT THAT MUST BE PERFORMED BY PUBLIC UTILITIES SERVING THE PROJECT SITE.
4. ALL WATER AND SANITARY SEWER LATERALS SHALL BE IDENTIFIED BY THE CONTRACTOR AND ABANDONED BACK TO THE MAIN WATER LINE AND SANITARY SEWER LINE. NEW SERVICES SHALL BE INSTALLED FOR THE PROPOSED BUILDINGS.
5. CONTRACTOR SHALL VERIFY SIZES, TYPES & LOCATIONS OF EXISTING WATER LINES.
6. THE MISS UTILITY DESIGN TICKET NUMBER IS # A207400944. THE MISS UTILITY TICKET WAS CREATED ON MARCH 15, 2022.

PARCEL #580355000 (0.250 AC)
0 DOUGLAS AVE
R-2 (VACANT)
MILLER, JOHN C TRUSTEE
210 DOUGLAS AVE
CHARLOTTESVILLE, VA 22902
DEED BOOK 2018, PAGE 2714

PARCEL #570001000 (0.206 AC)
210 DOUGLAS AVE
R-2 (EX RESIDENTIAL USE)
MILLER, JOHN C TRUSTEE
210 DOUGLAS AVE
CHARLOTTESVILLE, VA 22902
DEED BOOK 2018, PAGE 2714
DEED BOOK 752, PAGE 745 (PLAT)

PARCEL #570001100 (0.226 AC)
0 DOUGLAS AVE
R-2 (EX RESIDENTIAL USE)
MILLER, JOHN C TRUSTEE
210 DOUGLAS AVE
CHARLOTTESVILLE, VA 22902
DEED BOOK 2018, PAGE 2714
DEED BOOK 752, PAGE 745 (PLAT)

PARCEL #570145C00 (1.339 AC)
0 DOUGLAS AVE
R-2 (VACANT)
CITY OF CHARLOTTESVILLE
PO BOX 911
CHARLOTTESVILLE, VA 22902

EXISTING CRITICAL SLOPES

PARCEL #570002000 (0.916 AC)
0 CHERRY STREET
NCC (EX COMMERCIAL USE)
BELMONT AND CARLTON HOLDINGS, LLC
PO BOX 1467
CHARLOTTESVILLE, VA 22902
DEED BOOK 1098, PAGE 731
DEED BOOK 48, PAGE 110 (PLAT)
RESOLUTIONS CLOSING STREETS BOOK 2, PAGE 20

EXISTING PROPERTY LINE, TYP.

PARCEL #570145A00 (0.223 AC)
211 SPRUCE STREET
R-2 (EX RESIDENTIAL USE)
WILL, JOHN T. & SANDRA B., TRUSTEES
211 SPRUCE STREET
CHARLOTTESVILLE, VA 22902
DEED BOOK 2020, PAGE 4720

PARCEL #570145B00 (0.043 AC)
213 SPRUCE STREET
R-2 (EX RESIDENTIAL USE)
DOREY, BRUCE R
213 SPRUCE STREET
CHARLOTTESVILLE, VA 22902
DEED BOOK 2020, PAGE 0792

PARCEL #570145B10 (0.043 AC)
215 SPRUCE STREET
R-2 (EX RESIDENTIAL USE)
FOGEL, JEFFREY E
215 SPRUCE STREET
CHARLOTTESVILLE, VA 22902
DEED BOOK 1126, PAGE 234

PARCEL #570008000 (0.242 AC)
221 SPRUCE STREET
R-2 (EX RESIDENTIAL USE)
BARKER, JOHN & CASSANDRA
1515 E MARKET STREET
CHARLOTTESVILLE, VA 22902
DEED BOOK 2018, PAGE 2620

PARCEL #570009100 (0.169 AC)
223 SPRUCE STREET
R-2 (EX RESIDENTIAL USE)
JENSEN, ERIK P. & KEITH F CHEELY
6183 PLANK ROAD
AFTON, VA 22920
DEED BOOK 1012, PAGE 466

PARCEL #570009001 (0.161 AC)
227 SPRUCE STREET
R-2 (VACANT)
PARROTT, CHARLES W & CHRISTINE D
1105 DISTRICT AVE, #107
CHARLOTTESVILLE, VA 22901
DEED BOOK 2021, PAGE 5789

PARCEL #570009000 (0.161 AC)
301 SPRUCE STREET
R-2 (EX RESIDENTIAL USE)
THOMAS, JOHN C
301 SPRUCE STREET
CHARLOTTESVILLE, VA 22902
DEED BOOK 2021, PAGE 5497

PARCEL #570010000 (0.169 AC)
303-305 SPRUCE STREET
R-2 (VACANT)
SPRUCE STREET INVESTMENTS, LLC
600 E WATER STREET
CHARLOTTESVILLE, VA 22902
DEED BOOK 2021, PAGE 4933

PARCEL #570011000 (0.169 AC)
309 SPRUCE STREET
R-2 (EX RESIDENTIAL USE)
SPRUCE MANOR HOUSING, INC
1001 E MARKET STREET, SUITE 102
CHARLOTTESVILLE, VA 22902
DEED BOOK 2015, PAGE 4047

PARCEL #570012000 (0.202 AC)
307 SPRUCE STREET
R-2 (EX RESIDENTIAL USE)
HAMILTON, TODD ESKEL & ELLEN
100 CEDAR RIDGE ROAD
TROY, VA 22974
DEED BOOK 956, PAGE 254

PARCEL #570013000 (0.160 AC)
309 SPRUCE STREET
R-2 (EX RESIDENTIAL USE)
SPRUCE MANOR HOUSING, INC
1001 E MARKET STREET, SUITE 102
CHARLOTTESVILLE, VA 22902
DEED BOOK 987, PAGE 359

PARCEL #570014000 (0.223 AC)
311 SPRUCE STREET
R-2 (EX RESIDENTIAL USE)
WELCH, SARA JANE
419 FARMOUNTA AVE
JERSEY CITY, NJ 07306
DEED BOOK 2016, PAGE 419

PARCEL #570015000 (0.175 AC)
313 SPRUCE STREET
R-2 (EX RESIDENTIAL USE)
GLASGOW, DIANA
313 SPRUCE STREET
CHARLOTTESVILLE, VA 22902
DEED BOOK 952, PAGE 797

SPRUCE STREET (50' PUBLIC R/W)
CHERRY STREET (50' PUBLIC R/W)
MYRTLE STREET (50' PUBLIC R/W)

SOUTH CHERRY STREET (30' PUBLIC R/W)

EXISTING STREAM

PARCEL #580354100 (0.290 AC)
212 DOUGLAS AVE
R-2 (EX RESIDENTIAL USE)
GRAY, CHRISTOPHER & CATHERINE
2522 WILLARD DR
CHARLOTTESVILLE, VA 22903
DEED BOOK 2018, PAGE 2714

PARCEL #580354000 (0.307 AC)
214 DOUGLAS AVE
R-2 (EX RESIDENTIAL USE)
SCHETTINI, EUGENIO & CHRISTINE PALAZZOLO
214 DOUGLAS AVE
CHARLOTTESVILLE, VA 22902
DEED BOOK 1036, PAGE 361

PARCEL #570007600 (0.1527 AC)
PARCEL #570007500 (0.1158 AC)
PARCEL #570007400 (0.1165 AC)
PARCEL #570007300 (0.1186 AC)
PARCEL #570007200 (0.1192 AC)
PARCEL #570005000 (0.1257 AC)
PARCEL #570007100 (0.1160 AC)
PARCEL #570007000 (0.1209 AC)
PARCEL #570002000 (0.1558 AC)
PARCEL #570007700 (0.1157 AC)
PARCEL #570007800 (0.1158 AC)
PARCEL #570003000 (0.1172 AC)
PARCEL #570004000 (0.1179 AC)
PARCEL #570006000 (0.2134 AC)

APPROX. LOCATION OF DRAINFIELD

PARCEL #570020000 (2.5941 AC)
1005 CARLTON AVE.
NCC (EX COMMERCIAL USE)
BELMONT AND CARLTON HOLDINGS, LLC
PO BOX 1467
CHARLOTTESVILLE, VA 22902
DEED BOOK 1070, PAGE 445
DEED BOOK 400, PAGE 96 (PLAT)
DEED BOOK 456, PAGE 635 (PLAT)

EXISTING STREAM, TYP.

EXISTING ASPHALT PAVEMENT

PARCEL #580353000 (0.237 AC)
216 DOUGLAS AVE
R-2 (EX RESIDENTIAL USE)
VANDER LINDE, WILLIAM F
216 DOUGLAS AVE
CHARLOTTESVILLE, VA 22902
DEED BOOK 2013, PAGE 4005

PARCEL #580353100 (0.224 AC)
218 DOUGLAS AVE
R-2 (EX RESIDENTIAL USE)
BAXTER, JOHN W. JR. & JOHN A
2020 MORNINGSIDE DR. SW
ROANOKE, VA 24015
DEED BOOK 1033, PAGE 943

PARCEL #580352000 (0.258 AC)
220 DOUGLAS AVE
R-2 (EX RESIDENTIAL USE)
MAJORS, CHARLES H.
220 DOUGLAS AVE
CHARLOTTESVILLE, VA 22902
DEED BOOK 2018, PAGE 3017

PARCEL #580351000 (0.290 AC)
222 DOUGLAS AVE
R-2 (EX RESIDENTIAL USE)
SYLVESTER, PHYLLIS & LEO J ARCO
222 DOUGLAS AVE
CHARLOTTESVILLE, VA 22902
DEED BOOK 687, PAGE 718

PARCEL #580350000 (0.220 AC)
226 DOUGLAS AVE
NCC (EX RESIDENTIAL USE)
BRAVERMAN, STANTON, TRUSTEE
191 BIRCH GATE LN
SYRIA, VA 22743
DEED BOOK 2020, PAGE 0883

PARCEL #580349100 (0.181 AC)
228 DOUGLAS AVE
NCC (EX RESIDENTIAL USE)
HATCHER, JANET D., TRUSTEE
336 MINOR RIDGE RD
CHARLOTTESVILLE, VA 22901
DEED BOOK 0, PAGE 0

PARCEL #580349000 (0.370 AC)
421 MONTICELLO RD
NCC (EX COMMERCIAL USE)
BCM HOTEL, LLC
421 MONTICELLO RD
CHARLOTTESVILLE, VA 22902
DEED BOOK 2013, PAGE 4712

DOUGLAS AVE (50' PUBLIC R/W)
HOLLY STREET (50' PUBLIC R/W)

PARCEL #570021000 (0.354 AC)
1003 CARLTON AVE
NCC (EX COMMERCIAL USE)
BELMONT AND CARLTON HOLDINGS, LLC
PO BOX 1467
CHARLOTTESVILLE, VA 22902
DEED BOOK 1133, PAGE 905
DEED BOOK 351, PAGE 526 (PLAT)

PARCEL #570022000 (0.138 AC)
1009 CARLTON AVE
NCC (EX RESIDENTIAL USE)
BROWN, PHILIP E SR. & BARBARA J
1135 FREE STATE ROAD
CHARLOTTESVILLE, VA 22901
DEED BOOK 372, PAGE 517

EXISTING WETLAND AREA, TYP.

EXISTING ASPHALT PAVEMENT

EXISTING BUILDING

EX. 2" GALVANIZED WATERLINE

EXISTING BUILDING

EXISTING ASPHALT PARKING LOT

PARCEL #570018000 (0.236 AC)
1013 CARLTON AVE
NCC (EX COMMERCIAL USE)
BROWN, PHILIP E SR.
1135 FREE STATE ROAD
CHARLOTTESVILLE, VA 22901
DEED BOOK 372, PAGE 517

PARCEL #570018100 (0.268 AC)
0 CARLTON AVE
NCC (EX AUTO SHOP)
PEACOCK AUTO SERVICE, INC
1023 CARLTON AVE
CHARLOTTESVILLE, VA 22902
DEED BOOK 2019, PAGE 3827

PARCEL #570017000 (0.444 AC)
1023 CARLTON AVE
NCC (EX AUTO SHOP)
PEACOCK AUTO SERVICE, LLC
1023 CARLTON AVE
CHARLOTTESVILLE, VA 22902
DEED BOOK 2019, PAGE 3827

CARLTON AVE (50' PUBLIC R/W)

EXISTING 8" TERRA COTTA SANITARY SEWER

EXISTING 6" DIP W/L

EXISTING 6" DI W/L

23' E/P-E/P

EXISTING 8" TERRA COTTA SANITARY SEWER PIPE

PUBLIC R/W, TYP.

EXISTING 2" POLYETHYLENE

EXISTING 2" POLYETHYLENE
BENCHMARK
BRASS DISK ON TOP OF PARKING LOT STEPS
#914 MONTICELLO ROAD
OLD RIGA OFFICE BUILDING
ELEVATION = 462.20

PARCEL #57002200
904 MONTICELLO RD
0.112 ACRES
ZONING - NCC

PARCEL #57002300
906 MONTICELLO RD
0.152 ACRES
ZONING - NCC

PARCEL #57002400
914 MONTICELLO RD
0.547 ACRES
ZONING - NCC

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 ft.

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS II
No. 35791
PROFESSIONAL ENGINEER
8/18/23

REVISIONS

DATE	REVISION DESCRIPTION
3/15/22	INITIAL PLAN SUBMITTAL
1/03/23	2ND PLAN SUBMITTAL
5/19/23	3RD PLAN SUBMITTAL
8/18/23	4TH PLAN SUBMITTAL

COLLINS ENGINEERING
200 GARRETT STREET, SUITE K-CHARLOTTESVILLE, VA 22902-434.293.3719

PROJECT
BELMONT CONDOMINIUMS - FINAL SITE PLAN

SHEET
EXISTING CONDITIONS

JOB NO. 202201
SCALE 1"=40'
SHEET NO. 4

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Attachment A

MATCHLINE - SEE SHEET 6

PARCEL #580351000
218 DOUGLAS AVE
0.224 ACRES
ZONING - R-2

PARCEL #580352000
220 DOUGLAS AVE
0.258 ACRES
ZONING - R-2

PARCEL #580351000
222 DOUGLAS AVE
0.290 ACRES
ZONING - R-2

PARCEL #580350000
226 DOUGLAS AVE
0.220 ACRES
ZONING - NCC

PARCEL #580349100
228 DOUGLAS AVE
0.181 ACRES
ZONING - NCC

PARCEL #580349000
421 MONTICELLO RD
0.370 ACRES
ZONING - NCC

EX. ROW

EXISTING RIPRAP TO REMAIN

EXISTING PIPE TO REMAIN
INV.=434.25

EXISTING HOLLY STREET ASPHALT TO BE REMOVED BELOW ITS ACCESS TO THE TMP 580351000 DRIVEWAY

EXISTING HOLLY STREET ASPHALT TO BE REMOVED & IMPROVED BETWEEN CARLTON AVENUE & ITS ACCESS TO THE TMP 580351000 DRIVEWAY

HOLLY STREET
(30' PUBLIC R/W)

EXISTING CITY CONCRETE SIDEWALK TO REMAIN

EX. 5/8" WM BOX, METER HAS BEEN REMOVED

PARCEL #570021000 (0.354 AC)
1003 CARLTON AVE
NCC (EX COMMERCIAL USE)
BELMONT AND CARLTON HOLDINGS, LLC
PO BOX 1467
CHARLOTTESVILLE, VA 22902
DEED BOOK 1133, PAGE 905
DEED BOOK 351, PAGE 526 (PLAT)

EXISTING WETLANDS

12" SYCAMORE

36" MAPLE

36" TREE

8" MAPLE

15" ASH

15" WALNUT

24" ASH

15" MAPLE

WALNUT STREET
(50' PUBLIC R/W)
D.B. 48, PG 110 (INSTR# 2012000701)

WALNUT STREET
(50' PUBLIC R/W)

15" Grate
INV. = 436.54
INV. = 433.54

5" PVMNT @ 446

PROJECT LIMITS, TYP.

PARCEL #570012000
307 SPRUCE ST
0.202 ACRES
ZONING - R-2

PARCEL #570013000
309 SPRUCE ST
0.160 ACRES
ZONING - R-2

PARCEL #570014000
311 SPRUCE ST
0.223 ACRES
ZONING - R-2

PARCEL #570015000
313 SPRUCE ST
0.175 ACRES
ZONING - R-2

PARCEL #570017000
1023 CARLTON AVE
0.444 ACRES
ZONING - NCC

PARCEL #570018100
0 CARLTON AVE
0.268 ACRES
ZONING - NCC

PARCEL #570018000
1013 CARLTON AVE
0.236 ACRES
ZONING - NCC

PARCEL #570019000
1009 CARLTON AVE
0.138 ACRES
ZONE - NCC

EXISTING GARDEN STREET ASPHALT TO BE REMOVED & IMPROVED

EXISTING ASPHALT TO BE SAWCUT AS SHOWN ALONG THIS LINE FOR THE PROPOSED IMPROVEMENTS TO GARDEN STREET. ALL CONSTRUCTION WORK FOR THE GARDEN STREET IMPROVEMENTS SHALL BE LOCATED WITHIN EXISTING CITY ROW

EXISTING ASPHALT TO REMAIN

GARDEN STREET
(50' PUBLIC R/W)
D.B. 48, PG 110 (INSTR# 2012000701)

EX. 5/8" WM

EXISTING BUILDING, TYPICAL

SHED

PLANTER

EXISTING ROCK WALL

EXISTING 3-4" ± CONCRETE WALL TO REMAIN

EX. PORTION OF GARDEN STREET TO REMAIN

EX. POWER POLE

EX. 5/8" WM TO REMAIN

EXISTING 2" POLYETHYLENE

EXISTING 8" TERRA COTTA SANITARY SEWER

EXISTING 6" DIP WATERLINE

EXISTING CITY CONCRETE SIDEWALK TO REMAIN

EXISTING CITY CONCRETE SIDEWALK TO REMAIN

CARLTON AVE
(40' PUBLIC R/W)

Top=458.09

BENCHMARK
BRASS DISK ON TOP OF PARKING LOT STEPS
#914 MONTICELLO ROAD
OLD RGA OFFICE BUILDING
ELEVATION = 462.20

PARCEL #57002200
904 MONTICELLO RD
0.112 ACRES
ZONING - NCC

PARCEL #57002300
906 MONTICELLO RD
0.152 ACRES
ZONING - NCC

PARCEL #57002400
914 MONTICELLO RD
0.542 ACRES
ZONING - NCC

GRAPHIC SCALE
(IN FEET)
1 inch = 20 ft.

DEMOLITION NOTE LEGEND:

- A EXISTING BUILDING TO BE REMOVED
- B EXISTING CURB TO BE REMOVED
- C EXISTING SIDEWALK TO BE REMOVED
- D EXISTING ASPHALT TO BE REMOVED
- E EXISTING GRAVEL TO BE REMOVED
- F EXISTING WALL TO BE REMOVED
- G EXISTING FENCE TO BE REMOVED
- H EXISTING SIGN TO BE REMOVED
- I EX. 2" GALVANIZED WATERLINE TO BE REMOVED
- J EXISTING GASLINE TO BE REMOVED
- K EXISTING SANITARY SEWER SYSTEM TO BE REMOVED
- L EXISTING STORM SEWER SYSTEM TO BE REMOVED
- M EXISTING OVERHEAD ELECTRICAL TO BE REMOVED OR RELOCATED UNDERGROUND
- N EXISTING VEGETATION TO BE REMOVED
- O EXISTING CONCRETE TO BE REMOVED
- P EXISTING COARSE SAND & STONE
- Q EXISTING PROPERTY LINE TO BE VACATED
- R SAW CUT EXISTING ASPHALT AND REMOVE 2' WIDE STRIP OF EXISTING ASPHALT FOR CURB DEMOLITION AND NEW CURB AND STREET CONSTRUCTION
- S EXISTING HOLLY ROAD (ASPHALT AND STONE ROADWAY) TO BE REMOVED
- T EXISTING PORTION OF GARDEN STREET (ASPHALT AND STONE ROADWAY) TO BE REMOVED
- U EXISTING WATER METER TO BE REMOVED BACK TO THE MAIN WATERLINE AT THE CORP STOP. THE (2) WATER METERS ALONG GARDEN STREET SERVING THE ADJACENT PROPERTIES TO BE REPLACED
- V APPROXIMATE LOCATION OF EX. DRAINFIELD TO BE REMOVED (PER VDH DOCUMENTS)

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
8/18/23
PROFESSIONAL ENGINEER

REVISIONS

DATE	REVISION DESCRIPTION
3/15/22	INITIAL PLAN SUBMITTAL
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COLLINS ENGINEERING
200 GARRETT STREET, SUITE K-CHARLOTTESVILLE, VA 22902 -434.293.3719

BELMONT CONDOMINIUMS - FINAL SITE PLAN

DEMOLITION PLAN

PROJECT
JOB NO. 202201
SCALE 1"=20'
SHEET
SHEET NO. 5

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Attachment A

GRAPHIC SCALE
(IN FEET)
1 inch = 20 ft.

PARCEL #570009000
301 SPRUCE ST
0.161 ACRES
ZONING - R-2

EXISTING HOUSE

EXISTING SPRUCE STREET

EX. 8" TERRA COTTA SANITARY SEWER LINE

PORTION OF EXISTING WATERLINE TO BE REMOVED FOR A NEW CONNECTION

PORTION OF EXISTING SANITARY SEWER TO BE REMOVED FOR A DOGHOUSE MANHOLE INSTALLATION

EX. 2" WATER METER IN VAULT TO BE REMOVED

EX. 8" WATER METER TO REMAIN

MATCHLINE - SEE THIS SHEET

PARCEL #570011000
305 SPRUCE ST
0.169 ACRES
ZONING - R-2

EX.POWER POLE TO REMAIN

EXISTING HOUSE

EX. 8" WATER METER TO REMAIN

EX. 2" POLYETHYLENE GAS LINE

Iron fnd.

Pipe fnd.

EX. 6" W/L

344.75' of 8"Terra-cotta @ 0.525%

23' E/P-E/P

Water Vault

Drain Inlet

Curb Inlet

Top=440.95
(I)=438.30

DEMOLITION NOTE LEGEND:

- A EXISTING BUILDING TO BE REMOVED
- B EXISTING CURB TO BE REMOVED
- C EXISTING SIDEWALK TO BE REMOVED
- D EXISTING ASPHALT TO BE REMOVED
- E EXISTING GRAVEL TO BE REMOVED
- F EXISTING WALL TO BE REMOVED
- G EXISTING FENCE TO BE REMOVED
- H EXISTING SIGN TO BE REMOVED
- I EX. 2" GALVANIZED WATERLINE TO BE REMOVED
- J EXISTING GASLINE TO BE REMOVED
- K EXISTING SANITARY SEWER SYSTEM TO BE REMOVED
- L EXISTING STORM SEWER SYSTEM TO BE REMOVED
- M EXISTING OVERHEAD ELECTRICAL TO BE REMOVED OR RELOCATED UNDERGROUND
- N EXISTING VEGETATION TO BE REMOVED
- O EXISTING CONCRETE TO BE REMOVED
- P EXISTING COARSE SAND & STONE
- Q EXISTING PROPERTY LINE TO BE VACATED
- R SAW CUT EXISTING ASPHALT AND REMOVE 2' WIDE STRIP OF EXISTING ASPHALT FOR CURB DEMOLITION AND NEW CURB AND STREET CONSTRUCTION
- S EXISTING HOLLY ROAD (ASPHALT AND STONE ROADWAY) TO BE REMOVED
- T EXISTING PORTION OF GARDEN STREET (ASPHALT AND STONE ROADWAY) TO BE REMOVED
- U EXISTING WATER METER TO BE REMOVED BACK TO THE MAIN WATERLINE AT THE CORP STOP. THE (2) WATER METERS ALONG GARDEN STREET SERVING THE ADJACENT PROPERTIES TO BE REPLACED
- V APPROXIMATE LOCATION OF EX. DRAINFIELD TO BE REMOVED (PER VDH DOCUMENTS)

PARCEL #580355000
0 DOUGLAS AVE
0.25 ACRES
ZONING - R-2

Top=434.63
Inv=

EXISTING BUILDING, TYPICAL

PARCEL #570001000
210 DOUGLAS AVE
0.206 ACRES
ZONING - R-2

PARCEL #570001100
0 DOUGLAS AVE
0.226 ACRES
ZONING - R-2

EX ROW

SOUTH CHERRY STREET
(30' PUBLIC R/W)

EXISTING STREAM & RIPRAP TO REMAIN

PROJECT LIMITS, TYP.

EXISTING WETLANDS

PARCEL #580354100
212 DOUGLAS AVE
0.29 ACRES
ZONING - R-2

PARCEL #580354000
214 DOUGLAS AVE
0.307 ACRES
ZONING - R-2

EX. GRAVEL BERM TO BE REMOVED

PARCEL #570020000 (2.5941 AC)
1005 CARLTON AVE
NCC (EX COMMERCIAL USE)
BELMONT AND CARLTON HOLDINGS, LLC
PO BOX 1467
CHARLOTTESVILLE, VA 22902
DEED BOOK 1070, PAGE 445
DEED BOOK 400, PAGE 96 (PLAT)
DEED BOOK 456, PAGE 635 (PLAT)

HOLLY STREET
(30' PUBLIC R/W)

PARCEL #580353000
216 DOUGLAS AVE
0.237 ACRES
ZONING - R-2

GRAPHIC SCALE
(IN FEET)
1 inch = 20 ft.

MATCHLINE - SEE SHEET 5

Elec. Tv. Phone Pole

HEADWALL INV. 401.4

EX. 36" CULVERT PIPE & HEADWALL TO REMAIN

EX. STREAM

EX. WETLANDS TO REMAIN

RR Mon. fnd.

10.17' CPP
408.0 +/-

PARCEL #570145C00
0 DOUGLAS AVE
1.339 ACRES
ZONING - R-2

PARCEL #570002000 (0.916 AC)
0 CHERRY STREET
NCC (EX COMMERCIAL USE)
BELMONT AND CARLTON HOLDINGS, LLC
PO BOX 1467
CHARLOTTESVILLE, VA 22902
DEED BOOK 1098, PAGE 731
DEED BOOK 48, PAGE 110 (PLAT)
RESOLUTIONS CLOSING STREETS BOOK 2, PAGE 20

water spigot

Meter Pedestal

Sanitary Grinder Pump

2" x 2.5" Metal Cover Water Valve

6" PVC W/ Valve

36" Dbl.MULBRRY

40" Maple

18" ASH

36" MAPLE

PARCEL #570145A00
211 SPRUCE ST
0.223 ACRES
ZONING - R-2

PARCEL #570145B00
213 SPRUCE ST
0.043 ACRES
ZONING - R-2

PARCEL #570145B10
215 SPRUCE ST
0.043 ACRES
ZONING - R-2

PARCEL #570008000
221 SPRUCE ST
0.242 ACRES
ZONING - R-2

EXISTING STORM SEWER

15"HDPE
(I)=422.9

PARCEL #570009100
223 SPRUCE ST
0.169 ACRES
ZONING - R-2

PARCEL #570009001
227 SPRUCE ST
0.161 ACRES
ZONING - R-2

PARCEL #570009000
301 SPRUCE ST
0.161 ACRES
ZONING - R-2

PARCEL #570011000
305 SPRUCE ST
0.169 ACRES
ZONING - R-2

MATCHLINE - SEE THIS SHEET

Iron fnd.

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
PROFESSIONAL ENGINEER
8/18/23

REVISIONS

DATE	REVISION DESCRIPTION
3/15/22	INITIAL PLAN SUBMITTAL
1/03/23	2ND PLAN SUBMITTAL
5/19/23	3RD PLAN SUBMITTAL
8/18/23	4TH PLAN SUBMITTAL

COLLINS ENGINEERING
200 GARRETT STREET, SUITE K-CHARLOTTESVILLE, VA 22902 -434.293.3719

PROJECT: BELMONT CONDOMINIUMS - FINAL SITE PLAN

SHEET: DEMOLITION PLAN

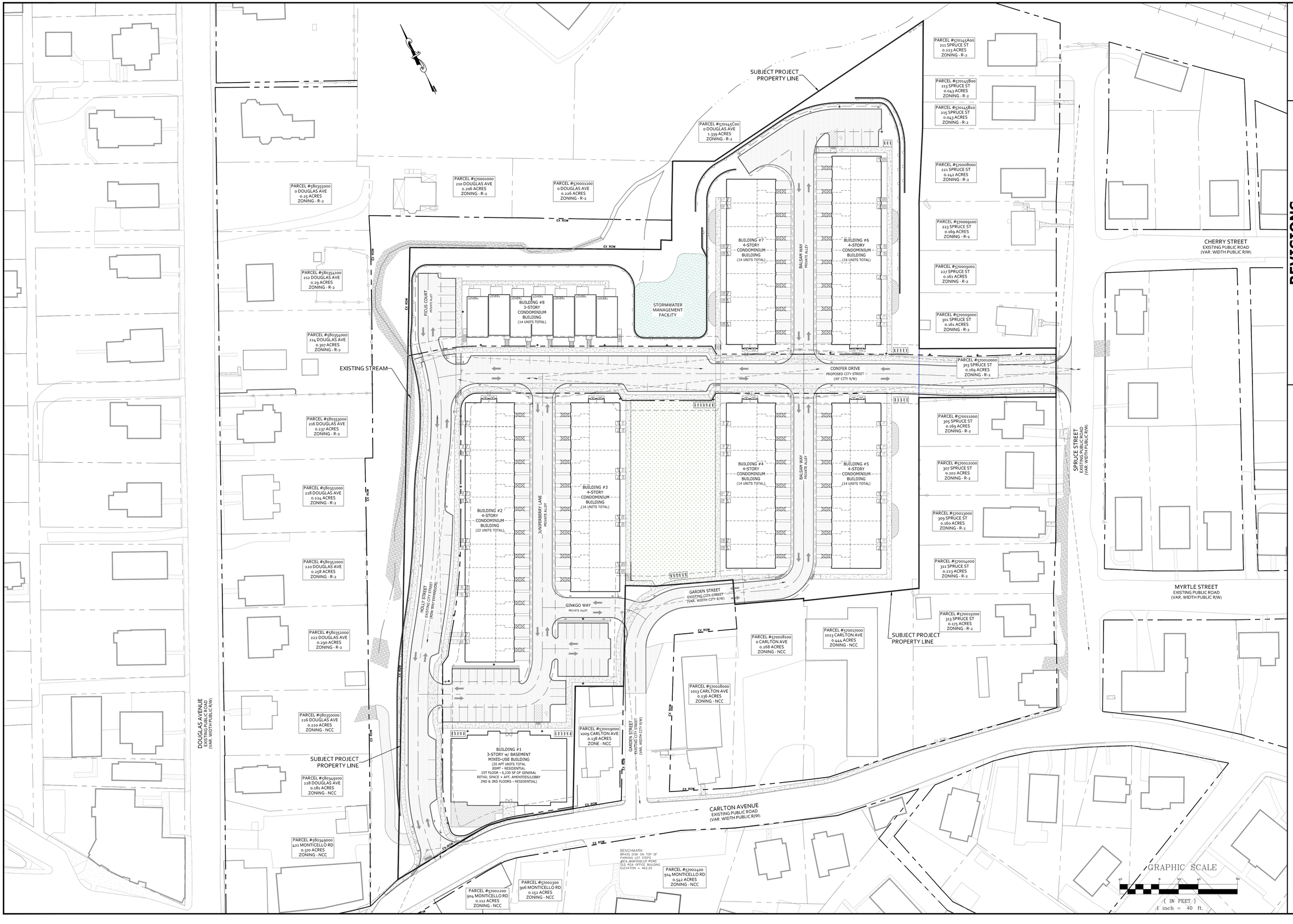
JOB NO. 202201

SCALE 1"=20'

SHEET NO. 6

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Attachment A



COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
PROFESSIONAL ENGINEER
8/18/23

REVISIONS

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3/15/22	INITIAL PLAN SUBMITTAL
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8/18/23	4TH PLAN SUBMITTAL

COLLINS ENGINEERING
200 GARRETT STREET, SUITE K-CHARLOTTESVILLE, VA 22902 -434.293.3719

PROJECT: BELMONT CONDOMINIUMS - FINAL SITE PLAN

SHEET: OVERALL DEVELOPMENT PLAN

JOB NO. 202201

SCALE 1"=40'

SHEET NO. 7

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CRITICAL SLOPES LEGEND:

EXISTING CRITICAL SLOPES (0.988 ACRES)

IMPACT AREAS TO CRITICAL SLOPES (0.563 ACRES)

EXEMPT IMPACT AREAS TO CRITICAL SLOPES FOR ROADWAY CONNECTIONS (0.299 ACRES)

CRITICAL SLOPES ANALYSIS:

TOTAL ON-SITE CRITICAL SLOPES AREA = 43,042 SF (0.988 AC)

TOTAL PROPOSED CRITICAL SLOPES IMPACT AREA = 37,589 SF (0.862 AC)

TOTAL CRITICAL SLOPE PERCENT IMPACTED = 87.2%

NOTE: OF THE PROPOSED ON-SITE CRITICAL SLOPES IMPACT AREA, 34.7% ARE EXEMPT FOR DRIVEWAYS & ROADWAY CONNECTIONS.

#R-22-148

RESOLUTION
Granting a critical slope waiver for a residential development referred to as "Belmont Condominiums"

WHEREAS Belmont & Carlton Holdings, LLC ("Landowner") is the owner of certain land identified within the City of Charlottesville Real Estate Assessor's records as Real Estate Parcel Identification Nos. 570020000, 570002100, 570004000, 570006000, 570007100, 570007300, 570007500, 570007700, 570007900, 570002000, 570003000, 57005000, 570007000, 570007200, 570007400, 570007600, 570007800, 570010000, said parcels having current street addresses of 1003-1005 Carlton Avenue, 0 Walnut Street, 730 – 732 Walnut Street, 735 Walnut Street, and 0 Cherry Street (collectively, the "Subject Property"); and

WHEREAS the Subject Property contains critical slopes, over and within an area of approximately 0.988 acre, which is approximately 16% of the combined area of the various parcels that constitute the Subject Property, and Landowner is requesting a waiver of the critical slopes requirements of City Code Sec. 34-1120(b)(6)(b), in connection with the Owner's plan to construct a mixed use development on the Subject Property (the "Project"); and

WHEREAS the Project is described in more specific detail within the application materials submitted in connection with waiver application no. P22-0039, as required by City Code §34-1120(b)(6) (collectively, the "Application Materials"); and

WHEREAS the Planning Commission considered and recommended approval of this application at their October 11, 2022 meeting, subject to conditions proposed within the Staff Report and modified as discussed in the meeting; now, therefore,

BE IT RESOLVED by the Council for the City of Charlottesville, Virginia, that a waiver is hereby granted of the critical slopes requirements for the Project, to allow for the development of the Project as described within the Application Materials, subject to the following conditions:

(1) Erosion and sediment control (ESC) plans for the Project shall include, at a minimum, four (4) stages/phases of ESC controls. The first phase shall include "Initial/Preliminary Controls". Outfalls from any proposed sediment traps shall be established with rigorous independent ESC controls, early in the sequence, prior to the establishment of a sediment trap and associated conveyances.

(2) Any channels/diversions that convey 'clear' water shall be stabilized with sod on the 'clear water' side immediately after installation.

(3) A "Super Silt Fence" (chain linked backing) shall be installed where perimeter silt fence is specified.

(4) Any disturbance occurring outside of conveyances to a sediment trap, in either sequence or space, planned or unforeseen, shall be immediately stabilized with sod (for pervious areas, utilities should have other "same day stabilization").

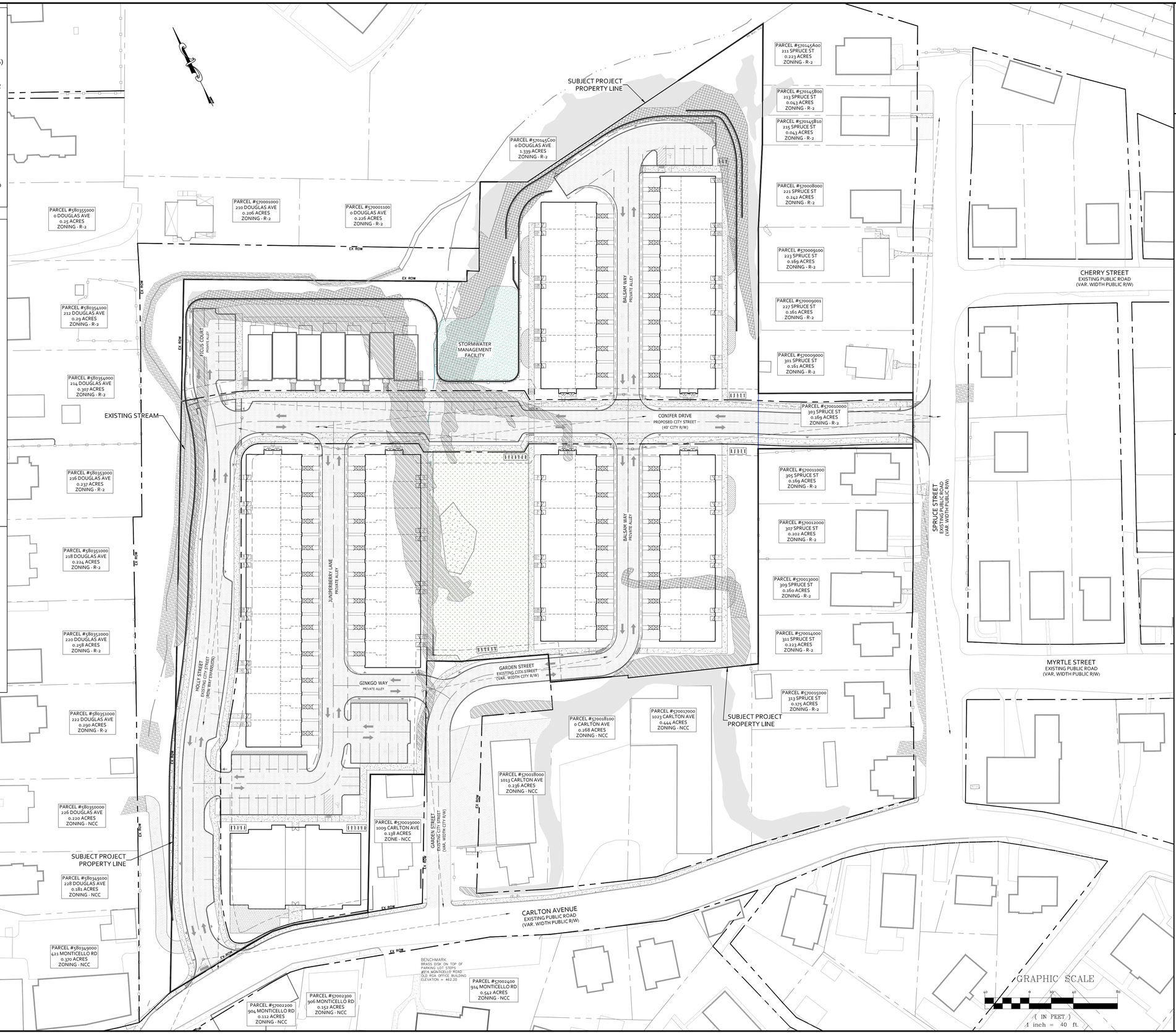
(5) At no time shall concentrated water be directed toward the areas of critical slopes, without adequate conveyance down and beyond the slopes to an acceptable outfall.

(6) To document the landowner's representations within the Application Materials regarding intended onsite water quality measures, the Stormwater Management Plan for the Project shall include either (a) a design for onsite water quality provided by a facility, or (b) facilities that are either i) designed in accordance with the BMP Clearinghouse "2013 Draft Design Specifications for Practices 1-15", or ii) proprietary Manufactured Treatment Device(s) approved by the Virginia Department of Environmental Quality ("DEQ") as of the date the stormwater management plan for the Project is submitted for the City's review. The facility or facilities should provide 125 percent of the onsite Phosphorus removal required by the Virginia Water Quality requirements for the development Project. Compliance with the 125 percent will be demonstrated by accurate project data set forth within a completed Virginia Runoff Reduction Method ("VRRM") spreadsheet for the project.

	Aye	No
Magill	X	
Payne		X
Pinkston	X	
Snook	X	
Wade	X	

Approved by Council
November 7, 2022

Kyna Thomas
Kyna Thomas, MMC
Clerk of Council



COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
PROFESSIONAL ENGINEER
8/18/23

REVISIONS

REVISION DESCRIPTION	DATE
INITIAL PLAN SUBMITTAL	3/15/22
2ND PLAN SUBMITTAL	1/03/23
3RD PLAN SUBMITTAL	5/19/23
4TH PLAN SUBMITTAL	8/18/23

COLLINS ENGINEERING
200 GARRETT STREET, SUITE K-CHARLOTTESVILLE, VA 22902 -434.293.3719

PROJECT: BELMONT CONDOMINIUMS - FINAL SITE PLAN

SHEET: PROPOSED LAYOUT & CRITICAL SLOPES IMPACTS PLAN

JOB NO. 202201

SCALE 1"=40'

SHEET NO. 8

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Attachment A

MATCHLINE - SEE SHEET 10

PARCEL #580351000
218 DOUGLAS AVE
0.224 ACRES
ZONING - R-2

PARCEL #580352000
220 DOUGLAS AVE
0.258 ACRES
ZONING - R-2

PARCEL #580351000
222 DOUGLAS AVE
0.290 ACRES
ZONING - R-2

PARCEL #580350000
226 DOUGLAS AVE
0.220 ACRES
ZONING - NCC

PARCEL #580349100
228 DOUGLAS AVE
0.181 ACRES
ZONING - NCC

PARCEL #580349000
421 MONTICELLO RD
0.370 ACRES
ZONING - NCC

EX ROW

HOLLY STREET
PROPOSED CITY STREET
(VAR. WIDTH CITY R/W)

(P) CITY ROW

SIGHT DISTANCE = 280'

SIGHT DISTANCE = 130'

SIGHT DISTANCE=405'

BUILDING #2
4-STORY
CONDOMINIUM
BUILDING
(22 UNITS TOTAL)

JUNIPERBERRY LANE
PRIVATE ALLEY

BUILDING #3
4-STORY
CONDOMINIUM
BUILDING
(16 UNITS TOTAL)

RECREATIONAL
AMENITY AREA
17,780 SF

BUILDING #4
4-STORY
CONDOMINIUM
BUILDING
(14 UNITS TOTAL)

BALSAM WAY
PRIVATE ALLEY

BUILDING #5
4-STORY
CONDOMINIUM
BUILDING
(14 UNITS TOTAL)

BUILDING #1
3-STORY w/ BASEMENT
MIXED-USE BUILDING
(20 APT UNITS TOTAL
BSMT - RESIDENTIAL
1ST FLOOR - 6,230 SF OF GENERAL
RETAIL SPACE + APT. AMENITIES/LOBBY
2ND & 3RD FLOORS - RESIDENTIAL)

(P) PATIO
1,060 SF

GINKGO WAY
PRIVATE ALLEY

GARDEN STREET
(VAR. WIDTH CITY R/W)

GARDEN STREET
EXISTING CITY STREET
(VAR. WIDTH CITY R/W)

END OF CITY RIGHT-OF-WAY

(10) BIKE RACK SPACES

(12) BIKE RACK SPACES

(12) BIKE RACK SPACES

3' GRASS STRIP

3' GRASS STRIP

PARCEL #570012000
307 SPRUCE ST
0.202 ACRES
ZONING - R-2

PARCEL #570013000
309 SPRUCE ST
0.160 ACRES
ZONING - R-2

PROPERTY LINE

PARCEL #570014000
311 SPRUCE ST
0.223 ACRES
ZONING - R-2

EXISTING
BUILDING

PARCEL #570015000
313 SPRUCE ST
0.175 ACRES
ZONING - R-2

PARCEL #570017000
1023 CARLTON AVE
0.444 ACRES
ZONING - NCC

EXISTING
BUILDING

PARCEL #570018100
0 CARLTON AVE
0.268 ACRES
ZONING - NCC

EX. ASPHALT
PARKING LOT

PARCEL #570018000
1013 CARLTON AVE
0.236 ACRES
ZONING - NCC

EXISTING
BUILDING

EXISTING GARDEN
STREET TO REMAIN

PARCEL #570019000
1009 CARLTON AVE
0.138 ACRES
ZONE - NCC

EXISTING
BUILDING

EX. WALL

EXISTING
BUILDING

EXISTING CONCRETE
SIDEWALK

EXISTING INTERSECTION
TO REMAIN

CARLTON AVENUE
EXISTING PUBLIC ROAD
(VAR. WIDTH PUBLIC R/W)

32' F/C-F/C

LIMITS OF MILL/OVERLAY
SEE SHEET 16 FOR DETAILS

EXISTING ASPHALT
PARKING SPACES (NOT
STRIPED)

PROPOSED VDOT STD.
CG-9B ENTRANCE

TIE PROPOSED CG-2 CURB
INTO EXISTING CURB
ALONG CARLTON AVE

TIE PROPOSED CG-2 CURB
INTO EXISTING CURB
ALONG CARLTON AVE

INSTALL NEW CONCRETE
CURB AND 5' SIDEWALK
WHERE EXISTING CONCRETE
ENTRANCE WAS REMOVED

LIMITS OF MILL/OVERLAY
SEE SHEET 16 FOR DETAILS

BENCHMARK
BRASS DISK ON TOP OF
PARKING LOT STEPS
#914 MONTICELLO ROAD
OLD RGA OFFICE BUILDING
ELEVATION = 462.20

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1 inch = 20 ft.

SITE PLAN NOTE LEGEND:

- A PROPOSED STOP SIGN
- B PROPOSED STREET SIGN
- C PROPOSED CG-2 CURB
- D PROPOSED ROLL-FACE CURB
- E PROPOSED CG-12 & DETECTABLE WARNING SURFACE
- F PROPOSED 5' CONCRETE SIDEWALK
- G PROPOSED 6' CONCRETE SIDEWALK
- H PROPOSED 3' GRASS PLANTING STRIP
- I PROPOSED BIKE RACKS
- J PROPOSED PRIMARY DWELLING UNIT ENTRANCE
- K PROPOSED GARAGE
- L PROPOSED NO PARKING SIGN
- M PROPOSED CG-9D ENTRANCE
- N PROPOSED HVAC UNIT
- O PROPOSED SEGMENTED RETAINING WALL W/ HANDRAIL
- P PROPOSED PORCH (9.6' WIDE & 6' DEEP)
- Q VARIABLE WIDTH SIGHT DISTANCE EASEMENT
- R PROPOSED 3' CONCRETE SIDEWALK
- S STAMPED OR DECORATIVE CONCRETE PAD
- T PROPOSED ASPHALT DRIVEWAY (9' x 16')

★★ ASTERISK INDICATES THE LOWER UNITS (BASEMENT UNITS) WITHIN THIS CONDOMINIUM FOOTPRINT SHALL BE AN AFFORDABLE UNIT. THE UPPER UNIT WITHIN THIS CONDOMINIUM FOOTPRINT SHALL BE MARKET RATE.

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
PROFESSIONAL ENGINEER
8/18/23

REVISIONS

DATE	REVISION DESCRIPTION
3/15/22	INITIAL PLAN SUBMITTAL
1/03/23	2ND PLAN SUBMITTAL
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8/18/23	4TH PLAN SUBMITTAL

COLLINS ENGINEERING
200 GARRETT STREET, SUITE K-CHARLOTTESVILLE, VA 22902 -434.293.3719

PROJECT
BELMONT CONDOMINIUMS - FINAL SITE PLAN

SHEET
SITE PLAN

JOB NO. 202201
SCALE 1"=20'
SHEET NO. 9

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Attachment A

SITE PLAN NOTE LEGEND:

- A PROPOSED STOP SIGN
- B PROPOSED STREET SIGN
- C PROPOSED CG-2 CURB
- D PROPOSED ROLL-FACE CURB
- E PROPOSED CG-12 & DETECTABLE WARNING SURFACE
- F PROPOSED 5' CONCRETE SIDEWALK
- G PROPOSED 6' CONCRETE SIDEWALK
- H PROPOSED 3' GRASS PLANTING STRIP
- I PROPOSED BIKE RACKS
- J PROPOSED PRIMARY DWELLING UNIT ENTRANCE
- K PROPOSED GARAGE
- L PROPOSED NO PARKING SIGN
- M PROPOSED CG-9D ENTRANCE
- N PROPOSED HVAC UNIT
- O PROPOSED SEGMENTED RETAINING WALL W/ HANDRAIL
- P PROPOSED PORCH (9.6' WIDE & 6' DEEP)
- Q VARIABLE WIDTH SIGHT DISTANCE EASEMENT
- R PROPOSED 3' CONCRETE SIDEWALK
- S STAMPED OR DECORATIVE CONCRETE PAD
- T PROPOSED ASPHALT DRIVEWAY (9' x 16')

★★ ASTERISK INDICATES THE LOWER UNITS (BASEMENT UNITS) WITHIN THIS CONDOMINIUM FOOTPRINT SHALL BE AN AFFORDABLE UNIT. THE UPPER UNIT WITHIN THIS CONDOMINIUM FOOTPRINT SHALL BE MARKET RATE.

PARCEL #570009000
301 SPRUCE ST
0.161 ACRES
ZONING - R-2

PARCEL #570011000
305 SPRUCE ST
0.169 ACRES
ZONING - R-2

PARCEL #570145C00
0 DOUGLAS AVE
1.339 ACRES
ZONING - R-2

PARCEL #570145A00
211 SPRUCE ST
0.223 ACRES
ZONING - R-2

PARCEL #570145B00
213 SPRUCE ST
0.043 ACRES
ZONING - R-2

PARCEL #570145B10
215 SPRUCE ST
0.043 ACRES
ZONING - R-2

PARCEL #570008000
221 SPRUCE ST
0.242 ACRES
ZONING - R-2

PARCEL #570009100
223 SPRUCE ST
0.169 ACRES
ZONING - R-2

PARCEL #570009001
227 SPRUCE ST
0.161 ACRES
ZONING - R-2

PARCEL #570001000
210 DOUGLAS AVE
0.206 ACRES
ZONING - R-2

PARCEL #570001100
0 DOUGLAS AVE
0.226 ACRES
ZONING - R-2

PARCEL #580355000
0 DOUGLAS AVE
0.25 ACRES
ZONING - R-2

PARCEL #580354100
212 DOUGLAS AVE
0.29 ACRES
ZONING - R-2

PARCEL #580354000
214 DOUGLAS AVE
0.307 ACRES
ZONING - R-2

PARCEL #580353000
216 DOUGLAS AVE
0.237 ACRES
ZONING - R-2

(10) BIKE RACK SPACES

(10) BIKE RACK SPACES

MATCHLINE - SEE THIS SHEET

LIMITS OF MILL & OVERLAY SEE SHEET 16 FOR DETAILS

LIMITS OF MILL & OVERLAY SEE SHEET 16 FOR DETAILS

(P) CITY ROW

(P) CITY ROW

SIGHT DISTANCE = 123'

DRIVE AISLE

600'R

800'R

EX ROW

PROPERTY LINE

BUILDING #7
4-STORY
CONDOMINIUM
BUILDING
(14 UNITS TOTAL)

BUILDING #6
4-STORY
CONDOMINIUM
BUILDING
(16 UNITS TOTAL)

BUILDING #8
3-STORY
CONDOMINIUM
BUILDING
(14 UNITS TOTAL)

STORMWATER MANAGEMENT FACILITY

BALSAM WAY
PRIVATE ALLEY

FICUS COURT
PRIVATE ALLEY

CONIFER DRIVE
(40' PUBLIC R/W)

(6) BIKE RACK SPACES

(14) BIKE RACK SPACES

(10) BIKE RACK SPACES

(10) BIKE RACK SPACES

PROPOSED VAR. WIDTH SIGHT DISTANCE EASEMENT

(6) CONC. STEPS

10' MAX SETBACK

SIGHT DISTANCE = 280'

SIGHT DISTANCE = 92'

SIGHT DISTANCE = 180'

SIGHT DISTANCE = 123'

MATCHLINE - SEE SHEET 9

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1 inch = 20 ft.

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
PROFESSIONAL ENGINEER
8/18/23

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COLLINS ENGINEERING
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BELMONT CONDOMINIUMS - FINAL SITE PLAN

SITE PLAN

PROJECT

SHEET

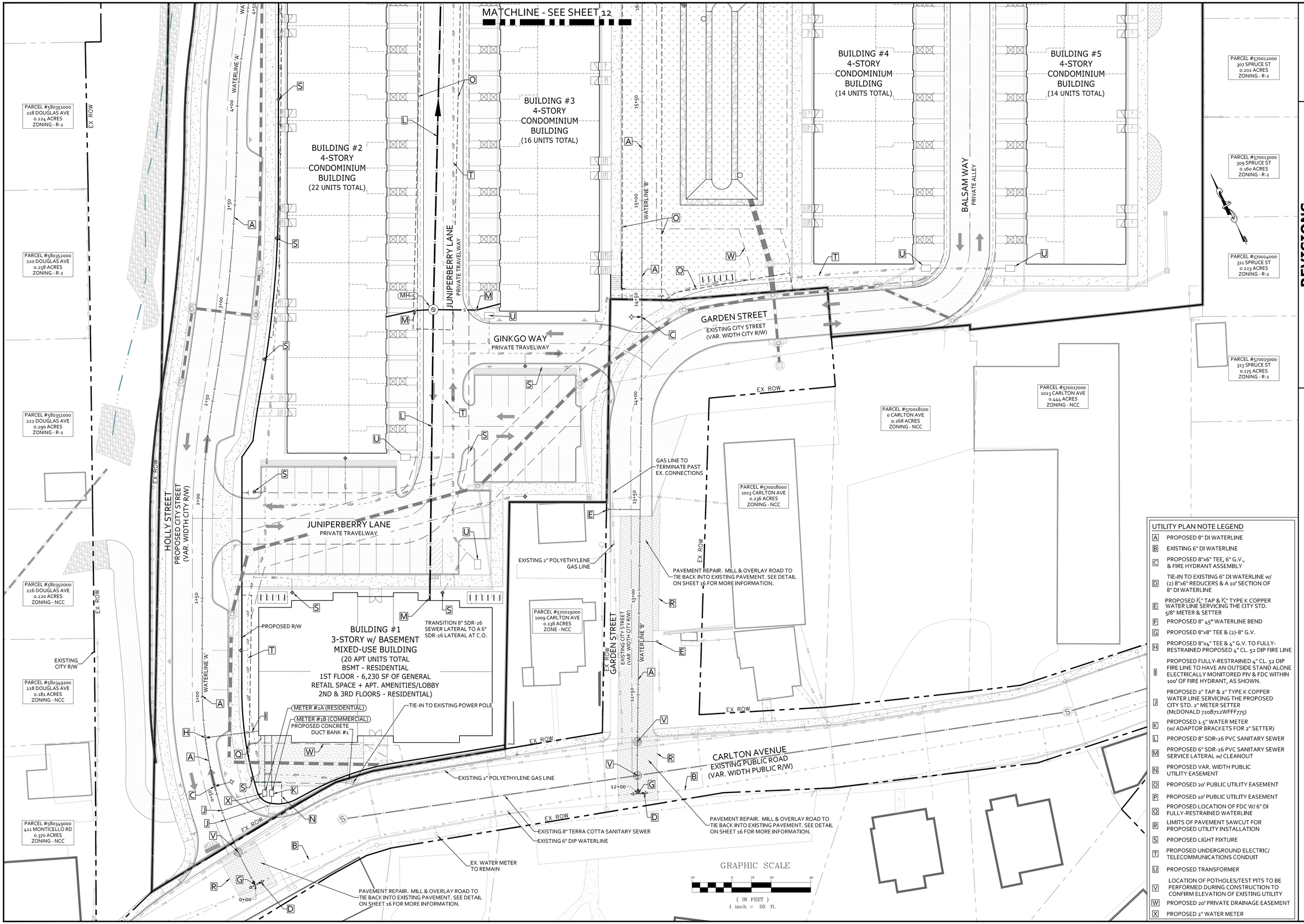
JOB NO. 202201

SCALE 1"=20'

SHEET NO. 10

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Attachment A



UTILITY PLAN NOTE LEGEND

- A — PROPOSED 8" DI WATERLINE
- B — EXISTING 6" DI WATERLINE
- C — PROPOSED 8"x6" TEE, 6" G.V., & FIRE HYDRANT ASSEMBLY
- D — TIE-IN TO EXISTING 6" DI WATERLINE w/ (2) 8"x6" REDUCERS & A 10' SECTION OF 8" DI WATERLINE
- E — PROPOSED ¾" TAP & ¾" TYPE K COPPER WATER LINE SERVICING THE CITY STD. 5/8" METER & SETTER
- F — PROPOSED 8" 45° WATERLINE BEND
- G — PROPOSED 8"x8" TEE & (2)-8" G.V.
- H — PROPOSED 8"x4" TEE & 4" G.V. TO FULLY-RESTRAINED PROPOSED 4" CL. 52 DIP FIRE LINE
- I — PROPOSED FULLY-RESTRAINED 4" CL. 52 DIP FIRE LINE TO HAVE AN OUTSIDE STAND ALONE ELECTRICALLY MONITORED PIV & FDC WITHIN 100' OF FIRE HYDRANT, AS SHOWN.
- J — PROPOSED 2" TAP & 2" TYPE K COPPER WATER LINE SERVICING THE PROPOSED CITY STD. 2" METER SETTER (McDONALD 720B712WFFF775)
- K — PROPOSED 2-5/8" WATER METER (w/ ADAPTOR BRACKETS FOR 2" SETTER)
- L — PROPOSED 8" SDR-26 PVC SANITARY SEWER
- M — PROPOSED 6" SDR-26 PVC SANITARY SEWER SERVICE LATERAL w/ CLEANOUT
- N — PROPOSED VAR. WIDTH PUBLIC UTILITY EASEMENT
- O — PROPOSED 20' PUBLIC UTILITY EASEMENT
- P — PROPOSED 10' PUBLIC UTILITY EASEMENT
- Q — PROPOSED LOCATION OF FDC W/ 6" DI FULLY-RESTRAINED WATERLINE
- R — LIMITS OF PAVEMENT SAWCUT FOR PROPOSED UTILITY INSTALLATION
- S — PROPOSED LIGHT FIXTURE
- T — PROPOSED UNDERGROUND ELECTRIC/ TELECOMMUNICATIONS CONDUIT
- U — PROPOSED TRANSFORMER
- V — LOCATION OF POTHOLES/TEST PITS TO BE PERFORMED DURING CONSTRUCTION TO CONFIRM ELEVATION OF EXISTING UTILITY
- W — PROPOSED 20' PRIVATE DRAINAGE EASEMENT
- X — PROPOSED 2" WATER METER

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
PROFESSIONAL ENGINEER
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COLLINS ENGINEERING
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PROJECT
BELMONT CONDOMINIUMS - FINAL SITE PLAN
SHEET
UTILITY PLAN

JOB NO. 202201
SCALE 1"=20'
SHEET NO. 11

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Attachment A

PARCEL #570009000
301 SPRUCE ST
0.161 ACRES
ZONING - R-2

PARCEL #570010000
303 SPRUCE ST
0.169 ACRES
ZONING - R-2

PROJECT BOUNDARY (TYP.)

SPRUCE STREET
EXISTING PUBLIC ROAD
(50' PUBLIC R/W)

WATERLINE 'A'

CONIFER DRIVE
(VAR. WIDTH PUBLIC R/W)

PAVEMENT REPAIR. MILL & OVERLAY ROAD TO TIE BACK INTO EXISTING PAVEMENT. SEE DETAIL ON SHEET 16 FOR MORE INFORMATION.

MH-1

TIE-IN TO EXISTING 8" TERRA-COTTA SANITARY SEWER PIPE WITH PROPOSED DOGHOUSE MANHOLE

EXISTING 8" TERRA-COTTA SANITARY SEWER

EXISTING 2" POLYETHYLENE GAS LINE

EXISTING 6" DI WATERLINE

MATCHLINE - SEE THIS SHEET

PARCEL #570011000
305 SPRUCE ST
0.169 ACRES
ZONING - R-2

PARCEL #570145C00
0 DOUGLAS AVE
1.339 ACRES
ZONING - R-2

PROPOSED SEGMENTED RETAINING WALLS

BUILDING #7
4-STORY
CONDOMINIUM
BUILDING
(14 UNITS TOTAL)

BUILDING #6
4-STORY
CONDOMINIUM
BUILDING
(16 UNITS TOTAL)

BALSAM WAY
(PRIVATE ALLEY)

METER #7 (RESIDENTIAL)

PROPOSED CONCRETE DUCT BANK #2

METER #6 (RESIDENTIAL)

METER #5 (RESIDENTIAL)

METER #4 (RESIDENTIAL)

PARCEL #570009100
223 SPRUCE ST
0.169 ACRES
ZONING - R-2

PROJECT BOUNDARY (TYP.)

PARCEL #570009001
227 SPRUCE ST
0.161 ACRES
ZONING - R-2

PARCEL #570009000
301 SPRUCE ST
0.161 ACRES
ZONING - R-2

PARCEL #570010000
303 SPRUCE ST
0.169 ACRES
ZONING - R-2

WATERLINE 'A'

MH-2

MH-3

CONIFER DRIVE
(VAR. WIDTH PUBLIC R/W)

PARCEL #570011000
305 SPRUCE ST
0.169 ACRES
ZONING - R-2

MATCHLINE - SEE THIS SHEET

PARCEL #580355000
0 DOUGLAS AVE
0.25 ACRES
ZONING - R-2

PARCEL #570001000
210 DOUGLAS AVE
0.206 ACRES
ZONING - R-2

PARCEL #570001100
0 DOUGLAS AVE
0.226 ACRES
ZONING - R-2

EX ROW

NOTE: ⊛ SYMBOL DENOTES GRAVITY SEWER NOT AVAILABLE TO BASEMENT OF THIS UNIT. BASEMENTS SEWER SERVICE WILL REQUIRE GRINDER PUMPS. EACH UNIT SHALL HAVE AN INTERNAL GRINDER PUMP THAT WILL PUMP TO A COMMON LATERAL FOR THE ENTIRE BUILDING.

PROJECT BOUNDARY (TYP.)

PROPOSED SEGMENTED RETAINING WALL

PARCEL #580354100
212 DOUGLAS AVE
0.29 ACRES
ZONING - R-2

PARCEL #580354000
214 DOUGLAS AVE
0.307 ACRES
ZONING - R-2

PARCEL #580353000
216 DOUGLAS AVE
0.237 ACRES
ZONING - R-2

EX ROW

FICUS COURT

2OVER1 BUILDING #8
3-STORY
CONDOMINIUM
BUILDING
(14 UNITS TOTAL)

PROPOSED SEGMENTED RETAINING WALL

STORMWATER MANAGEMENT FACILITY

METER #8 (RESIDENTIAL)

METER #3 (RESIDENTIAL)

PROPOSED CONCRETE DUCT BANK #3

METER #2 (RESIDENTIAL)

CONIFER DRIVE
(VAR. WIDTH PUBLIC R/W)

WATERLINE 'A'

MH-4

HOLLY STREET
(VAR. WIDTH PUBLIC R/W)

JUNIPERBERRY LANE
(PRIVATE ALLEY)

WATERLINE 'B'

MATCHLINE - SEE SHEET 11

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1 inch = 20 ft.

UTILITY PLAN NOTE LEGEND

- A PROPOSED 8" DI WATERLINE
- B EXISTING 6" DI WATERLINE
- C PROPOSED 8"x6" TEE, 6" G.V., & FIRE HYDRANT ASSEMBLY
- D TIE-IN TO EXISTING 6" DI WATERLINE w/ (2) 8"x6" REDUCERS & A 10' SECTION OF 8" DI WATERLINE
- E PROPOSED ¾" TAP & ¾" TYPE K COPPER WATER LINE SERVICING THE CITY STD. 5/8" METER & SETTER
- F PROPOSED 8" 45° WATERLINE BEND
- G PROPOSED 8"x8" TEE & (2)-8" G.V.
- H PROPOSED 8"x4" TEE & 4" G.V. TO FULLY-RESTRAINED PROPOSED 4" CL. 52 DIP FIRE LINE
- I PROPOSED FULLY-RESTRAINED 4" CL. 52 DIP FIRE LINE TO HAVE AN OUTSIDE STAND ALONE ELECTRICALLY MONITORED PIV & FDC WITHIN 100' OF FIRE HYDRANT, AS SHOWN.
- J PROPOSED 2" TAP & 2" TYPE K COPPER WATER LINE SERVICING THE PROPOSED CITY STD. 2" METER SETTER (McDONALD 720B712WFFF775)
- K PROPOSED 1.5" WATER METER (w/ ADAPTOR BRACKETS FOR 2" SETTER)
- L PROPOSED 8" SDR-26 PVC SANITARY SEWER
- M PROPOSED 6" SDR-26 PVC SANITARY SEWER SERVICE LATERAL w/ CLEANOUT
- N PROPOSED VAR. WIDTH PUBLIC UTILITY EASEMENT
- O PROPOSED 20' PUBLIC UTILITY EASEMENT
- P PROPOSED 10' PUBLIC UTILITY EASEMENT
- Q PROPOSED LOCATION OF FDC W/ 6" DI FULLY-RESTRAINED WATERLINE
- R LIMITS OF PAVEMENT SAWCUT FOR PROPOSED UTILITY INSTALLATION
- S PROPOSED LIGHT FIXTURE
- T PROPOSED UNDERGROUND ELECTRIC/ TELECOMMUNICATIONS CONDUIT
- U PROPOSED TRANSFORMER
- V LOCATION OF POTHOLES/TEST PITS TO BE PERFORMED DURING CONSTRUCTION TO CONFIRM ELEVATION OF EXISTING UTILITY
- W PROPOSED 20' PRIVATE DRAINAGE EASEMENT
- X PROPOSED 2" WATER METER

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
PROFESSIONAL ENGINEER
8/18/23

REVISIONS

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COLLINS ENGINEERING
200 GARRETT STREET, SUITE K-CHARLOTTESVILLE, VA 22902 434.293.3719

PROJECT: BELMONT CONDOMINIUMS - FINAL SITE PLAN
SHEET: UTILITY PLAN

JOB NO. 202201
SCALE 1"=20'
SHEET NO. 12

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Attachment A

MATCHLINE - SEE SHEET 14

PARCEL #580351000
218 DOUGLAS AVE
0.224 ACRES
ZONING - R-2

PARCEL #580352000
220 DOUGLAS AVE
0.258 ACRES
ZONING - R-2

PARCEL #580353000
222 DOUGLAS AVE
0.290 ACRES
ZONING - R-2

PARCEL #580350000
226 DOUGLAS AVE
0.220 ACRES
ZONING - NCC

PARCEL #580349100
228 DOUGLAS AVE
0.181 ACRES
ZONING - NCC

PARCEL #580349000
421 MONTICELLO RD
0.370 ACRES
ZONING - NCC

EX ROW

PROPOSED SEGMENTED RETAINING WALL (MAX. HT. = 8')

PROPOSED SLOPE IMPACTS (TYP.)

HOLLY STREET
CITY STREET
(VAR. WIDTH CITY R/W)

BUILDING #2
4-STORY
CONDOMINIUM
BUILDING
(22 UNITS TOTAL)

JUNIPERBERRY LANE
PRIVATE ALLEY

BUILDING #3
4-STORY
CONDOMINIUM
BUILDING
(16 UNITS TOTAL)

EXISTING CRITICAL SLOPES (TYP.)

GINKGO WAY
PRIVATE ALLEY

BUILDING #4
4-STORY
CONDOMINIUM
BUILDING
(14 UNITS TOTAL)

BALSAM WAY
PRIVATE ALLEY

BUILDING #5
4-STORY
CONDOMINIUM
BUILDING
(14 UNITS TOTAL)

PARCEL #570012000
307 SPRUCE ST
0.202 ACRES
ZONING - R-2

PARCEL #570013000
309 SPRUCE ST
0.160 ACRES
ZONING - R-2

PARCEL #570014000
311 SPRUCE ST
0.223 ACRES
ZONING - R-2

PROPOSED SLOPE IMPACTS (TYP.)

12+50
GARDEN STREET
EXISTING CITY STREET
(VAR. WIDTH CITY R/W)

PARCEL #570018100
0 CARLTON AVE
0.268 ACRES
ZONING - NCC

EXISTING CRITICAL SLOPES (TYP.)

PARCEL #570018000
1013 CARLTON AVE
0.236 ACRES
ZONING - NCC

GARDEN STREET
EXISTING CITY STREET
(VAR. WIDTH CITY R/W)

PARCEL #570019000
1009 CARLTON AVE
0.138 ACRES
ZONE - NCC

BUILDING #1
3-STORY w/ BASEMENT
MIXED-USE BUILDING
(20 APT UNITS TOTAL
BSMT - RESIDENTIAL
1ST FLOOR - 6,230 SF OF GENERAL
RETAIL SPACE + APT. AMENITIES/LOBBY
2ND & 3RD FLOORS - RESIDENTIAL)

448.67 BSMT
458.67 FFE

CARLTON AVENUE
EXISTING PUBLIC ROAD
(VAR. WIDTH PUBLIC R/W)

START WALL 'A' - STA. 0+00

WALL 'A'

BENCHMARK
BRASS DISK ON TOP OF
PARKING LOT STEPS
#914 MONTICELLO ROAD
OLD RGA OFFICE BUILDING
ELEVATION = 462.20

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1 inch = 20 ft.

GRADING & DRAINAGE PLAN NOTE LEGEND

- [A] PROPOSED ROAD DRAINAGE SYSTEM
- [B] PROPOSED 20' PRIVATE DRAINAGE EASEMENT
- [C] PROPOSED 20' PUBLIC UTILITY EASEMENT
- [D] PROPOSED ROLL-TOP CURB
- [E] PROPOSED DRY ROLL TOP CURB
- [F] TRANSITION FROM CG-2 TO ROLL-TOP CURB
- [G] TRANSITION FROM CG-2 TO DRY ROLL-TOP CURB
- [H] PROPOSED 8" NYLOPLAST ROOF/FOUNDATION DRAINAGE SYSTEM
- [I] PROPOSED VDOT STD. EW-1
- [J] PROPOSED VAR. WIDTH SWM FACILITY & MAINTENANCE EASEMENT
- [K] PROPOSED VDOT CL. AI COARSE AGGREGATE OUTLET PROTECTION WITH GEOTEXTILE FILTER FABRIC UNDERLAYMENT. RIPRAP TO EXTEND TO FOREBAY BOTTOM. (L=17', W=6', D=12" MIN.)
- [L] PROPOSED CG-12 ADA RAMP, SEE SHEET 15 FOR DETAILS ON THE DESIGN OF THE CG-12 RAMP

DRAINAGE DESCRIPTIONS

STR. NO.	PIPE INFORMATION DIA. (in.)	LENGTH* (ft.)	SLOPE (%)	INVERT IN	INVERT OUT	MATERIAL	INLET INFORMATION INLET TYPE	Curb Type	SLOT LENGTH	RIM ELEVATION	COMMENTS
20							DI-3B	CG-2	6	441.17	VDOT STD. IS-1 REQ'D
19	15	100.14	0.57%	436.42	435.85	RCP					
8							DI-3B	CG-2	6	445.67	VDOT STD. IS-1 REQ'D
7	15	31.53	0.73%	435.75	435.52	RCP					
10							MH	-	-	445.42	VDOT STD. IS-1 REQ'D
9	15	43.18	0.56%	435.42	435.18	RCP					
2B							DI-3C	CG-2	6	445.17	VDOT STD. IS-1 REQ'D
1	15	31.67	0.73%	435.08	434.85	RCP					
2							DI-3C	CG-2	6	445.00	VDOT STD. IS-1 REQ'D
2A	18	79.74	0.50%	434.75	434.35	RCP					
4							DI-3B	CG-2	6	445.67	VDOT STD. IS-1 REQ'D
3	24	55.56	0.55%	434.25	433.94	RCP					
6							DI-3B	CG-2	6	446.25	VDOT STD. IS-1 REQ'D
6A	24	39.68	0.61%	433.84	433.60	RCP					
6B							DI-3B	CG-2	6	446.25	VDOT STD. IS-1 REQ'D
45	24	15.05	0.66%	433.50	433.40	RCP					
44							Modified MH	-	-	446.40	VDOT STD. IS-1 REQ'D
5	24	46.89	3.00%	431.30	429.89	RCP					
4D							DI-3B	CG-2	8	445.50	VDOT STD. IS-1 REQ'D
4C	15	47.25	0.85%	437.50	437.10	RCP					
4B							DI-3B	CG-2	4	445.75	VDOT STD. IS-1 REQ'D
4A	15	31.68	1.33%	437.00	436.58	RCP					
16							DI-3C	CG-2	6	446.25	VDOT STD. IS-1 REQ'D
15	15	22.55	0.67%	438.58	438.43	RCP					
14							DI-3B	CG-2	6	446.33	VDOT STD. IS-1 REQ'D
13	15	160.33	0.56%	438.33	437.43	RCP					
12							DI-3B	CG-2	6	446.33	VDOT STD. IS-1 REQ'D
11	15	28.30	1.17%	437.33	437.00	RCP					
16D							DI-3B	CG-2	10	446.67	VDOT STD. IS-1 REQ'D
16C	15	37.92	1.11%	442.17	441.75	RCP					
16B							DI-3C	CG-2	4	446.33	VDOT STD. IS-1 REQ'D
16A	15	31.69	1.01%	439.00	438.68	RCP					
28B							DI-3B	CG-2	8	443.92	VDOT STD. IS-1 REQ'D
28A	15	23.75	0.97%	434.33	434.10	RCP					
28							DI-3C	CG-2	16	444.08	VDOT STD. IS-1 REQ'D
27	15	91.97	0.52%	434.00	433.52	RCP					
26							DI-3B	CG-2	6	445.00	VDOT STD. IS-1 REQ'D
25	15	142.74	0.53%	433.42	432.67	RCP					
24							MH	-	-	445.92	VDOT STD. IS-1 REQ'D
23	24	104.28	0.54%	432.00	431.43	RCP					
22B							MH	-	-	446.58	VDOT STD. IS-1 REQ'D
22A	24	52.05	0.55%	430.67	430.39	RCP					
22							MH	-	-	445.33	VDOT STD. IS-1 REQ'D
21	24	7.88	2.37%	430.29	430.10	RCP					
30B							DI-3C	CG-2	12	438.19	VDOT STD. IS-1 REQ'D
30A	15	81.57	0.60%	433.92	433.43	HDPE					
30							MH	-	-	441.50	VDOT STD. IS-1 REQ'D
29	18	239.30	0.51%	433.33	432.10	RCP					
30D							DI-3C	CG-2	12	440.50	VDOT STD. IS-1 REQ'D
30C	15	67.20	1.24%	435.83	435.00	HDPE					
34D							DI-1	-	-	437.00	VDOT STD. IS-1 REQ'D
34C	15	11.71	2.73%	432.25	431.93	RCP					
34B							DI-3C	CG-2	6	439.08	VDOT STD. IS-1 REQ'D
34A	15	23.67	2.87%	431.83	431.15	RCP					
34							DI-3C	CG-2	6	439.08	VDOT STD. IS-1 REQ'D
33	30	16.30	0.80%	430.15	430.02	RCP					
32							DI-1	-	-	438.00	VDOT STD. IS-1 REQ'D
31	30	34.09	0.73%	429.92	429.67	HDPE					
36B							DI-3B	CG-2	16	441.17	VDOT STD. IS-1 REQ'D
36A	15	41.19	2.18%	434.00	433.10	RCP					
36							DI-3B	CG-2	12	439.92	VDOT STD. IS-1 REQ'D
35	15	53.05	3.49%	433.00	431.25	RCP					
18D							MH	-	-	458.22	VDOT STD. IS-1 REQ'D
18C	18	78.18	0.86%	446.50	445.83	RCP					
18B							MH	-	-	456.79	VDOT STD. IS-1 REQ'D
18A	18	74.66	0.78%	443.33	442.75	RCP					
18							DI-3B	CG-2	12	450.58	VDOT STD. IS-1 REQ'D
17	18	33.31	1.65%	442.65	442.10	RCP					
42B							MH	-	-	448.00	VDOT STD. IS-1 REQ'D
42A	18	120.83	0.52%	438.60	437.97	RCP					
42							DI-3C	CG-2	10	446.50	VDOT STD. IS-1 REQ'D
41	18	72.66	2.94%	437.87	435.73	HDPE					
40							DI-3C	CG-2	8	443.50	VDOT STD. IS-1 REQ'D
39	18	64.67	1.25%	431.73	430.93	RCP					
38							DI-3B	CG-2	12	439.67	VDOT STD. IS-1 REQ'D
37	18	46.10	1.25%	430.83	430.25	RCP					
YD-2C							18" Yard Inlet	-	-	442.00	
	12	38.83	1.29%	438.00	437.50	HDPE					
YD-2B							24" Yard Inlet	-	-	441.50	
	12	22.21	1.13%	437.50	437.25	HDPE					
YD-2A							12" Cleanout	-	-	443.00	
	12	52.36	1.11%	437.25	436.67	HDPE					
YD-2							12" Cleanout	-	-	443.00	
	12	39.07	1.71%	436.67	436.00	HDPE					
YD-3							18" Yard Inlet	-	-	444.00	
	12	9.21	1.85%	441.00	440.83	HDPE					
YD-1							18" Yard Inlet	-	-	444.17	
	12	57.63	2.03%	440.17	439.00	HDPE					

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
8/18/23
PROFESSIONAL ENGINEER

REVISIONS

DATE	REVISION DESCRIPTION
3/15/22	INITIAL PLAN SUBMITTAL
1/03/23	2ND PLAN SUBMITTAL
5/19/23	3RD PLAN SUBMITTAL
8/18/23	4TH PLAN SUBMITTAL

COLLINS ENGINEERING
200 GARRETT STREET, SUITE K-CHARLOTTESVILLE, VA 22902 -434.293.3719

PROJECT: BELMONT CONDOMINIUMS - FINAL SITE PLAN

SHEET: GRADING & DRAINAGE PLAN

JOB NO. 202201
SCALE 1"=20'
SHEET NO. 13

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Attachment A

GRADING & DRAINAGE PLAN NOTE LEGEND

- A PROPOSED ROAD DRAINAGE SYSTEM
- B PROPOSED 20' PRIVATE DRAINAGE EASEMENT
- C PROPOSED 20' PUBLIC UTILITY EASEMENT
- D PROPOSED ROLL-TOP CURB
- E PROPOSED DRY ROLL TOP CURB
- F TRANSITION FROM CG-2 TO ROLL-TOP CURB
- G TRANSITION FROM CG-2 TO DRY ROLL-TOP CURB
- H PROPOSED 8" NYLOPLAST ROOF/FOUNDATION DRAINAGE SYSTEM
- J PROPOSED VDOT STD. EW-1
- J PROPOSED VAR. WIDTH SWM FACILITY & MAINTENANCE EASEMENT
- K PROPOSED VDOT CL. AI COARSE AGGREGATE OUTLET PROTECTION WITH GEOTEXTILE FILTER FABRIC UNDERLAYMENT. RIPRAP TO EXTEND TO FOREBAY BOTTOM. (L=17', W=6', D=12" MIN.)
- L PROPOSED CG-12 ADA RAMP, SEE SHEET 15 FOR DETAILS ON THE DESIGN OF THE CG-12 RAMP

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
PROFESSIONAL ENGINEER
8/18/23

REVISIONS

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8/18/23	4TH PLAN SUBMITTAL

COLLINS ENGINEERING
200 GARRETT STREET, SUITE K-CHARLOTTESVILLE, VA 22902-434.293.3719

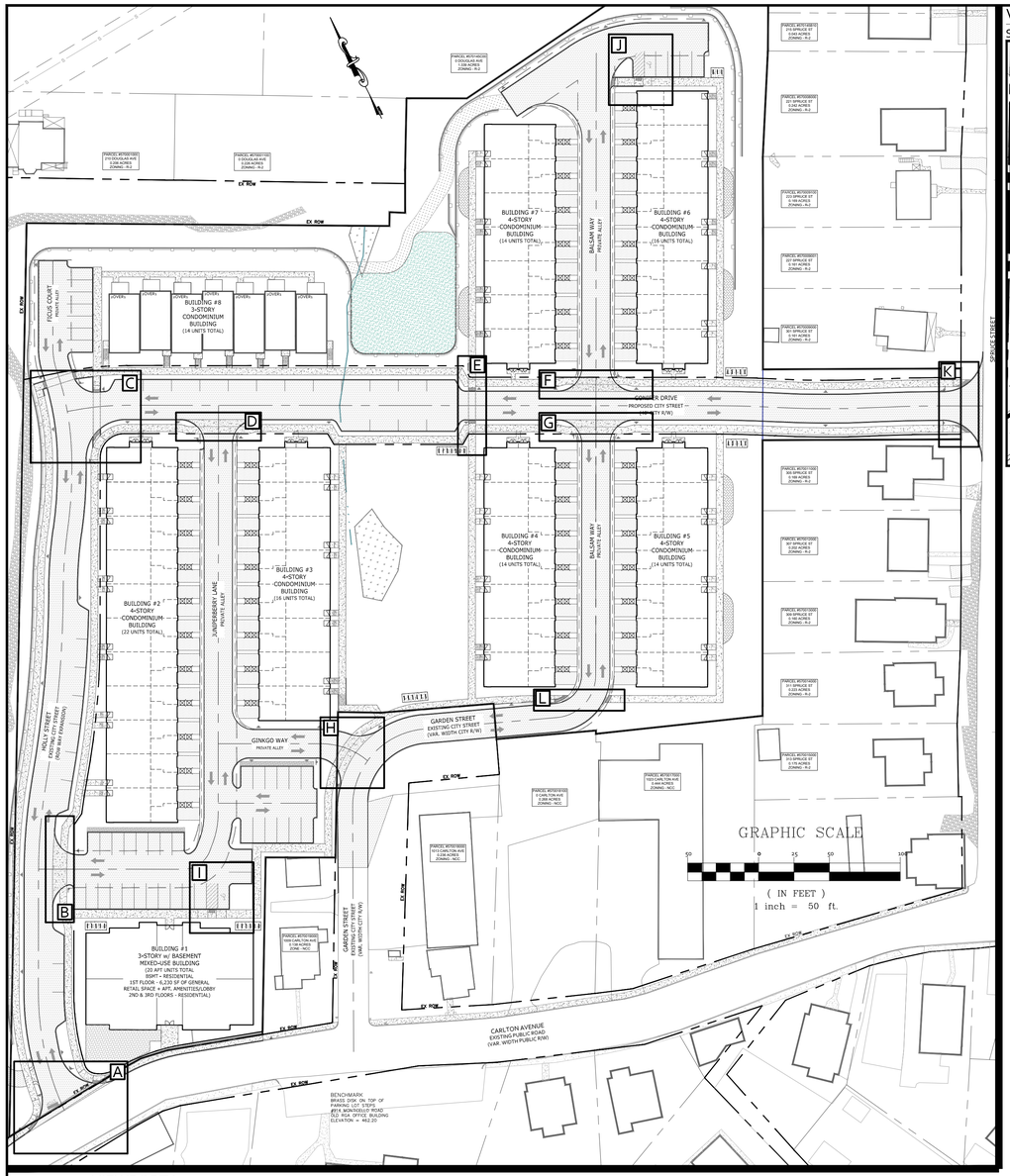
PROJECT: BELMONT CONDOMINIUMS - FINAL SITE PLAN
SHEET: GRADING & DRAINAGE PLAN

JOB NO. 202201
SCALE 1"=20'
SHEET NO. 14

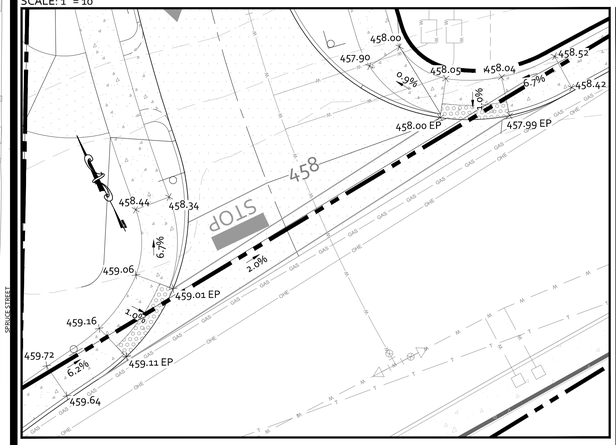
GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1 inch = 20 ft.

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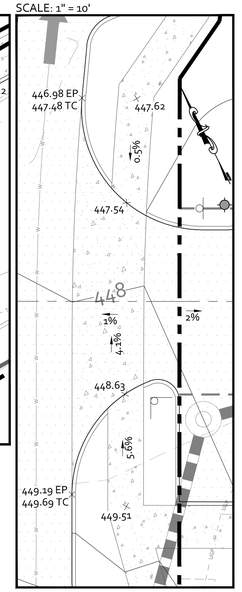
Attachment A



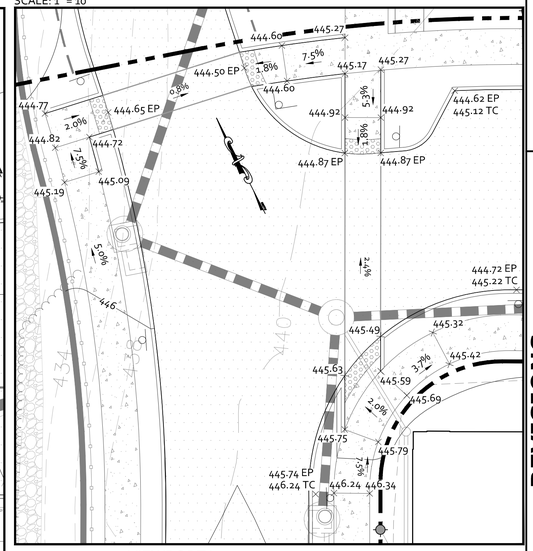
VIEWPORT A
SCALE: 1" = 10'



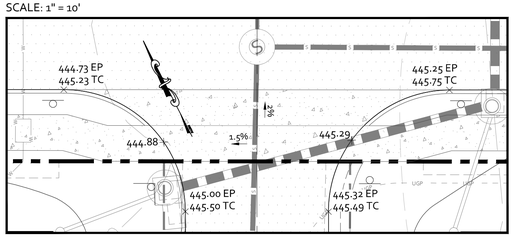
VIEWPORT B
SCALE: 1" = 10'



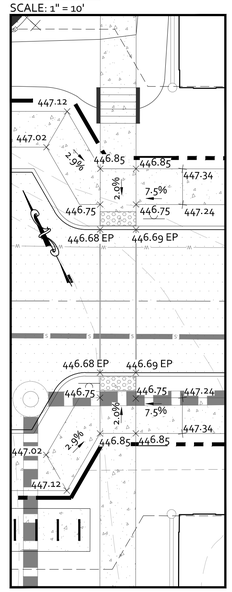
VIEWPORT C
SCALE: 1" = 10'



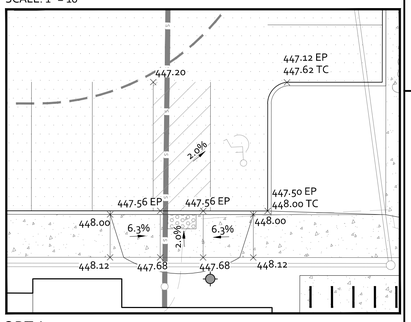
VIEWPORT D
SCALE: 1" = 10'



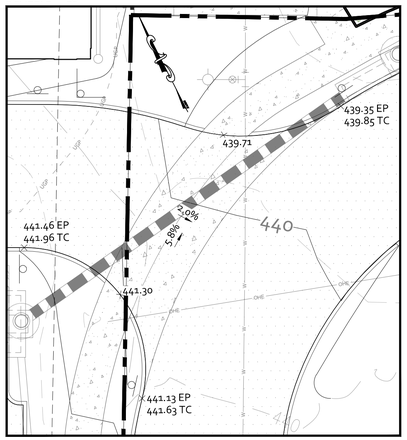
VIEWPORT E
SCALE: 1" = 10'



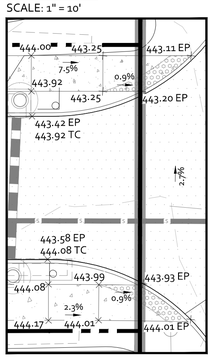
VIEWPORT I
SCALE: 1" = 10'



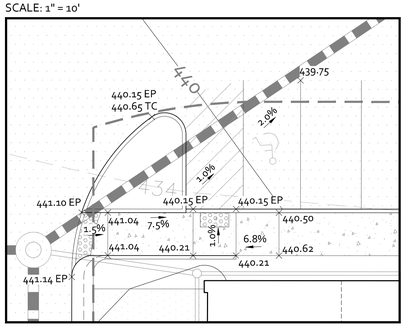
VIEWPORT H
SCALE: 1" = 10'



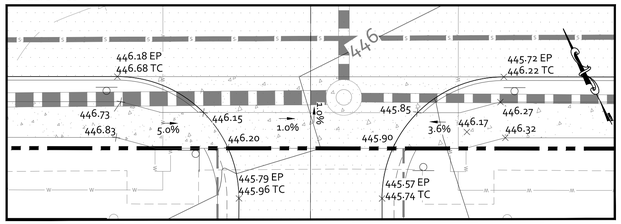
VIEWPORT K
SCALE: 1" = 10'



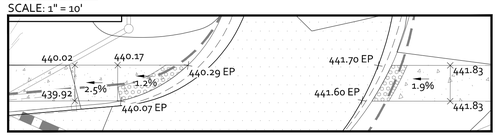
VIEWPORT J
SCALE: 1" = 10'



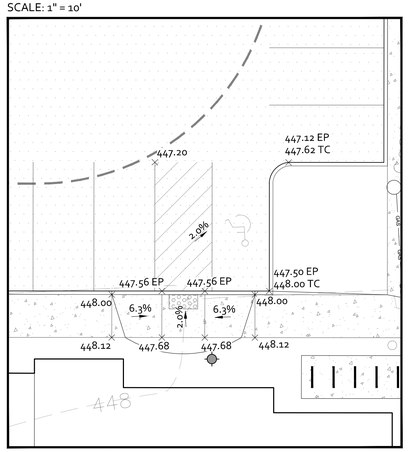
VIEWPORT G
SCALE: 1" = 10'



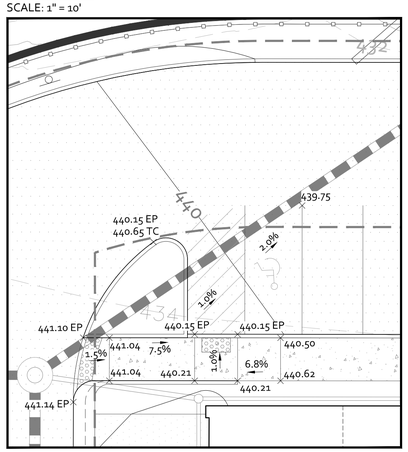
VIEWPORT L
SCALE: 1" = 10'



VIEWPORT I
SCALE: 1" = 10'

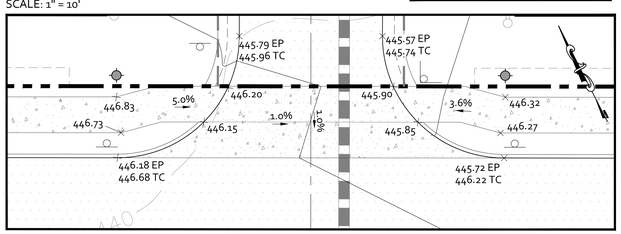


VIEWPORT J
SCALE: 1" = 10'



GRAPHIC SCALE
10 0 5 10 20
(IN FEET)
1 inch = 10 ft.

VIEWPORT F
SCALE: 1" = 10'



NOTES:
1. ALL CURBING SHOWN AT ADA RAMPS IS TRANSITION CURBING TO THE SIDEWALK INTO THE PROPOSED OR EXISTING GRADES AS REQUIRED. CURBING SHALL NOT BE INSTALLED IF SIDEWALK IS LEVEL OR ABOVE THE PROPOSED AND EXISTING GRADES.
2. ALL LANDINGS SHALL HAVE A MAXIMUM SLOPE AND CROSS-SLOPE OF 1%-1.5%. LANDINGS SHALL BE A MINIMUM OF 5'X5'.
3. MAXIMUM CROSS-SLOPE OF THE SIDEWALK SHALL BE 2% ALONG THE ADA RAMPS.

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
PROFESSIONAL ENGINEER
8/18/23

REVISIONS

REVISION DESCRIPTION	DATE
INITIAL PLAN SUBMITTAL	3/15/22
2ND PLAN SUBMITTAL	1/03/23
3RD PLAN SUBMITTAL	5/19/23
4TH PLAN SUBMITTAL	8/18/23

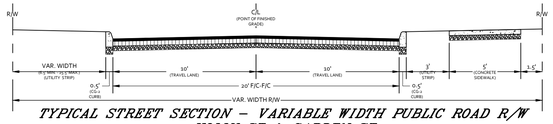
COLLINS ENGINEERING
200 GARRETT STREET, SUITE K-CHARLOTTESVILLE, VA 22902 -434.293.3719

PROJECT
BELMONT CONDOMINIUMS - FINAL SITE PLAN
SHEET
ADA GRADING DETAILS

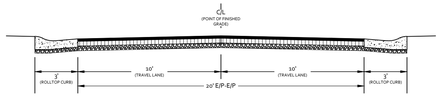
JOB NO. 202201
SCALE AS SHOWN
SHEET NO. 15

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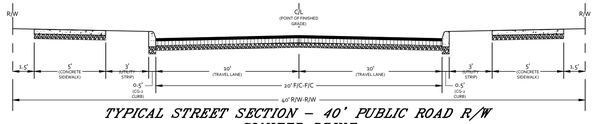
Attachment A



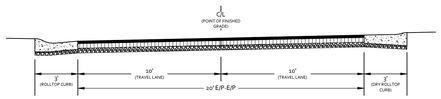
TYPICAL STREET SECTION – VARIABLE WIDTH PUBLIC ROAD R/W
HOLLY ST & GARDEN ST
25 MPH DESIGN SPEED
(SCALE: 1"=10')



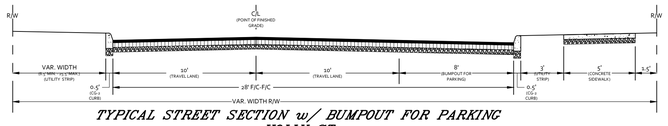
TYPICAL PRIVATE ALLEY SECTION
BALSAM WAY
25 MPH DESIGN SPEED
(SCALE: 1"=10')



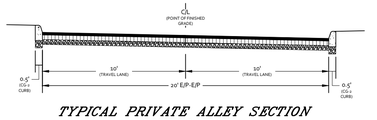
TYPICAL STREET SECTION – 40' PUBLIC ROAD R/W
CONIFER DRIVE
25 MPH DESIGN SPEED
(SCALE: 1"=10')



TYPICAL PRIVATE ALLEY SECTION
JUNIPERBERRY LANE
25 MPH DESIGN SPEED
(SCALE: 1"=10')

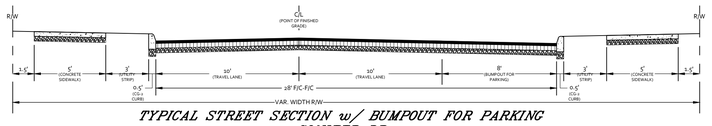


TYPICAL STREET SECTION w/ BUMPOUT FOR PARKING
HOLLY ST
25 MPH DESIGN SPEED
(SCALE: 1"=10')

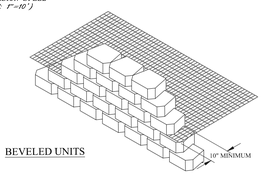


TYPICAL PRIVATE ALLEY SECTION
GINKGO WAY
25 MPH DESIGN SPEED
(SCALE: 1"=10')

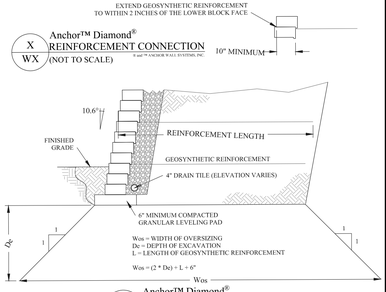
NOTE: ALL SIDEWALKS WITHIN CITY ROW SHALL BE 4,000 PSI MINIMUM CONCRETE



TYPICAL STREET SECTION w/ BUMPOUT FOR PARKING
CONIFER DR
25 MPH DESIGN SPEED
(SCALE: 1"=10')

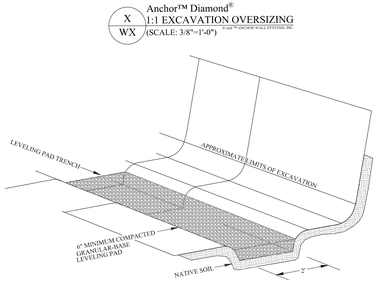


BEVELED UNITS



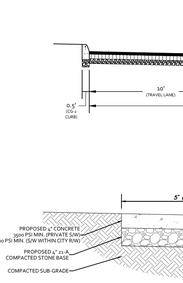
Anchor™ Diamond®
X / WX
1:1 EXCAVATION OVERSIZING
(SCALE: 3/8"=1'-0")

Anchor™ Diamond®
X / WX
REINFORCEMENT CONNECTION
(NOT TO SCALE)



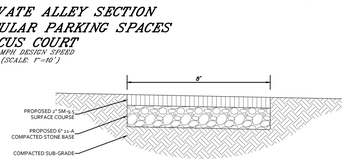
Anchor™ Diamond®
X / WX
TYPICAL BASE PREPARATION
(NOT TO SCALE)

SEGMENTED WALL DETAIL
DIAMOND PRO (TAN)
NOT TO SCALE



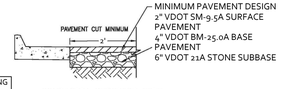
CONCRETE SIDEWALK
NO SCALE

NOTE: ALL PUBLIC SIDEWALK SHALL BE 4,000 PSI MINIMUM CONCRETE



PEDESTRIAN PATHWAY (CLASS A–TYPE 1)
NO SCALE

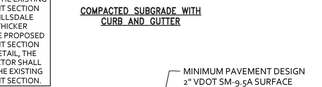
NOTE: DETAIL HAS BEEN MODIFIED FOR THIS PROJECT.



MINIMUM PAVEMENT DESIGN
2" VDOT SM-9.5A SURFACE PAVEMENT
4" VDOT BM-25.0A BASE PAVEMENT
6" VDOT 21A STONE SUBBASE

NOTE: IF THE EXISTING PAVEMENT SECTION ALONG HILLSDALE DRIVE IS THICKER THAN THE PROPOSED PAVEMENT SECTION IN THIS DETAIL, THE CONTRACTOR SHALL MATCH THE EXISTING PAVEMENT SECTION.

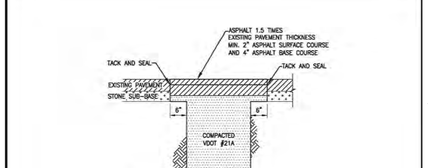
COMPACTED SUBGRADE WITH CURB AND GUTTER



MINIMUM PAVEMENT DESIGN
2" VDOT SM-9.5A SURFACE PAVEMENT
4" VDOT BM-25.0A BASE PAVEMENT
6" VDOT 21A STONE SUBBASE

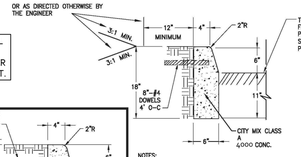
COMPACTED SUBGRADE WITH STANDARD SIDEWALK WITH CURB

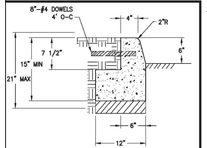
CITY OF CHARLOTTESVILLE
CITY STANDARDS
MINIMUM PAVEMENT PATCH
REVISION | DATE | SCALE: N.T.S. | STANDARD NUMBER: PP–1



CITY OF CHARLOTTESVILLE
CITY STANDARDS
PERMANENT PAVEMENT REPAIR
REVISION | DATE | SCALE: N.T.S. | STANDARD NUMBER: PR–1

NOTE: DETAIL HAS BEEN MODIFIED FOR THIS PROJECT.



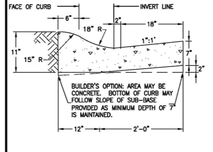


ACCEPTABLE ALTERNATE IF CURB IS EXTRUDED

NOTES:
1. THE DEPTH OF CURB MAY BE REDUCED OR INCREASED AS MUCH AS 6"(15"–21"DEPTH) SO THAT THE BOTTOM OF THE CURB WILL COINCIDE WITH THE TOP OF A COURSE OF THE PAVEMENT SUBSTRUCTURE . OTHERWISE THE DEPTH SHALL BE 18" AS SHOWN.
2. CURBING HAVING A RADIUS OF 300' OR LESS (ALONG FACE OF CURB) SHALL BE CONSIDERED RADIAL CURBING.
3. RULED JOINTS REQUIRED EVERY 10' ON CENTER, 1/2" PREMOLDED EXPANSION JOINT FILLER 30' MAX. ON CENTER.
4. CONCRETE TO BE CITY MIX CLASS A 4000

CITY OF CHARLOTTESVILLE
CITY STANDARDS
STANDARD CURBING
REVISION | DATE | SCALE: N.T.S. | STANDARD NUMBER: CG–2

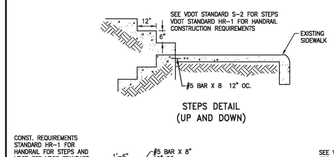
NOTE: DETAIL HAS BEEN MODIFIED FOR THIS PROJECT.



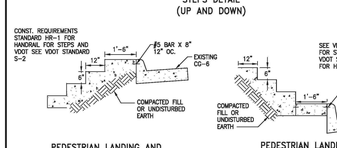
ROLL TOP CURB & GUTTER
NOT TO SCALE

NOTES:
1. CONCRETE TO BE BC CITY MIX CLASS A 4000
2. WHEN USED WITH STABILIZED, OPEN–GRADED DRAINAGE LAYERS, THE BOTTOM OF THE CURB AND GUTTER SHALL BE CONSTRUCTED PARALLEL TO THE SLOPE OF THE SUB–BASE COURSES AND TO THE DEPTH OF THE PAVEMENT BUT NOT LESS THAN THE THICKNESS SHOWN.
3. ROLL–TOP CURB & GUTTER MAY BE USED ALONG SUBDIVISION STREETS HAVING A DESIGN SPEED NOT GREATER THAN 30 MPH.

CITY OF CHARLOTTESVILLE
CITY STANDARDS
ROLL–TOP CURB & GUTTER OPTION
REVISION | DATE | SCALE: N.T.S. | STANDARD NUMBER: RT–1



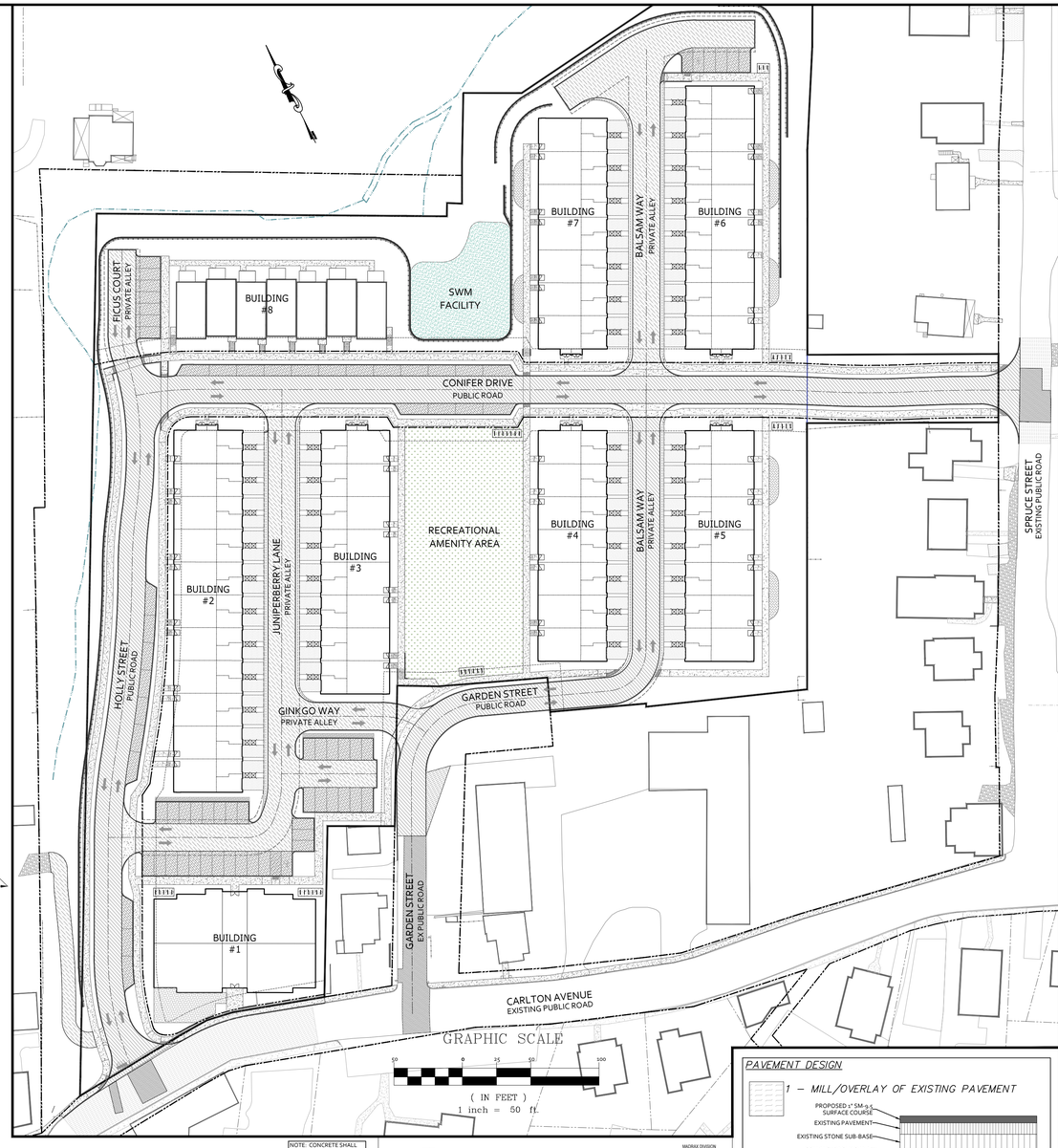
STEPS DETAIL
(UP AND DOWN)

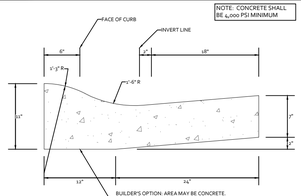


PEDESTRIAN LANDING AND STEPS DETAIL (DOWN)

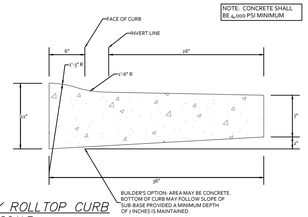
PEDESTRIAN LANDING AND STEPS DETAIL (UP)

CITY OF CHARLOTTESVILLE
CITY STANDARDS
STEP CONNECTIONS
REVISION | DATE | SCALE: N.T.S. | STANDARD NUMBER: SC–1

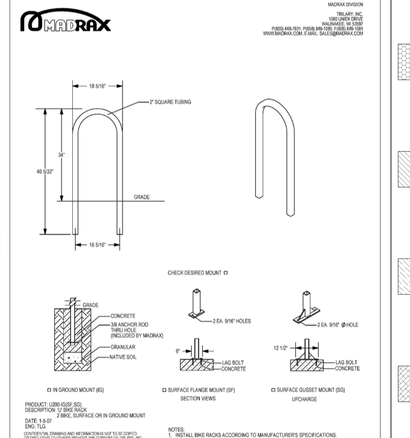




ROLLTOP CURB
NO SCALE



DRY ROLLTOP CURB
NO SCALE



PAVEMENT DESIGN

1 – MILL/OVERLAY OF EXISTING PAVEMENT
PROPOSED 1" SM-9.5 SURFACE COURSE
EXISTING PAVEMENT
EXISTING STONE SUB-BASE
COMPACTED SUBGRADE

2 – PERMANENT PAVEMENT REPAIR
PROPOSED 2" SM-9.5 SURFACE COURSE
PROPOSED 2" BM-25 INTERMEDIATE COURSE
PROPOSED 6" 21-A AGGREGATE BASE COURSE
COMPACTED SUBGRADE

3 – PROPOSED PUBLIC ROADS
PROPOSED 1.5" SM-9.5 SURFACE COURSE
PROPOSED 3" BM-25 INTERMEDIATE COURSE
PROPOSED 6" 21-A AGGREGATE BASE COURSE
COMPACTED SUBGRADE

4 – PROPOSED PRIVATE DRIVE AISLES
PROPOSED 1.5" SM-9.5 SURFACE COURSE
PROPOSED 3" BM-25 INTERMEDIATE COURSE
PROPOSED 6" 21-A AGGREGATE BASE COURSE
COMPACTED SUBGRADE

5 – PROPOSED PARKING SPACES
PROPOSED 2" SM-9.5 SURFACE COURSE
PROPOSED 6" 21-A AGGREGATE BASE COURSE
COMPACTED SUBGRADE

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
PROFESSIONAL ENGINEER
8/18/23

REVISIONS

DATE	REVISION DESCRIPTION
3/15/22	INITIAL PLAN SUBMITTAL
1/03/23	2ND PLAN SUBMITTAL
5/19/23	3RD PLAN SUBMITTAL
8/18/23	4TH PLAN SUBMITTAL

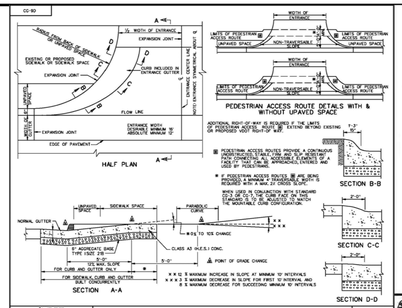
COLLINS ENGINEERING
200 GARRETT STREET, SUITE K-CHARLOTTESVILLE, VA 22902 434.293.3719

PROJECT
BELMONT CONDOMINIUMS - FINAL SITE PLAN

SHEET
SITE DETAILS

JOB NO. 202201
SCALE AS SHOWN
SHEET NO. 16

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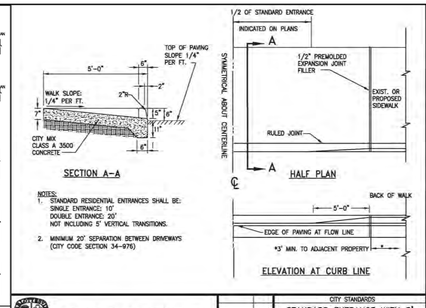


VDOT — ROAD AND BRIDGE STANDARDS — SHEET 1 OF 1 — REVISION DATE 2013.01

STANDARD ENTRANCE GUTTER

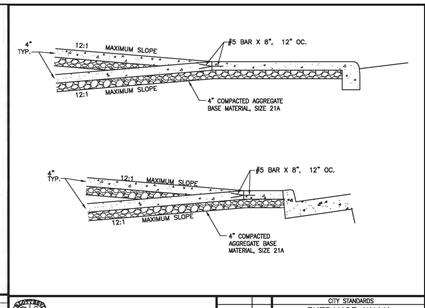
VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE 502



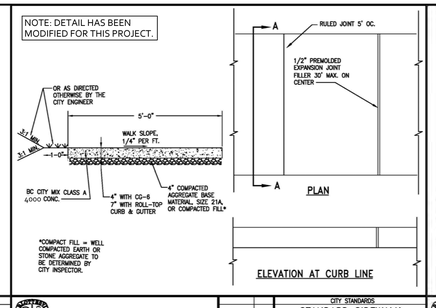
NOTES:
1. STANDARD RESIDENTIAL ENTRANCES SHALL BE: SINGLE ENTRANCE: 10' DOUBLE ENTRANCE: 20' NOT INCLUDING 5' VERTICAL TRANSITIONS.
2. MINIMUM 20' SEPARATION BETWEEN DRIVEWAYS (CITY CODE SECTION 34-976)

CITY OF CHARLOTTESVILLE — CITY STANDARDS — STANDARD ENTRANCE WITH 5' MONOLITHIC SIDEWALK AND CURB — REVISION DATE — SCALE: N.T.S. — STANDARD NUMBER: EC-1



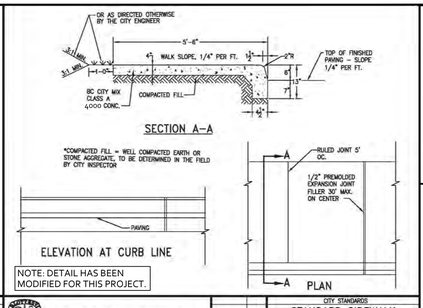
CITY OF CHARLOTTESVILLE — CITY STANDARDS — ENTRANCE WALK ADJUSTMENTS — REVISION DATE — SCALE: N.T.S. — STANDARD NUMBER: EWA-1

NOTE: DETAIL HAS BEEN MODIFIED FOR THIS PROJECT.



CITY OF CHARLOTTESVILLE — CITY STANDARDS — STANDARD SIDEWALK WITHOUT CURB — REVISION DATE — SCALE: N.T.S. — STANDARD NUMBER: SW-1

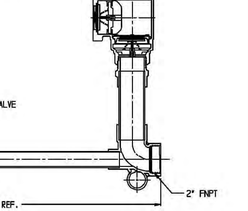
NOTE: DETAIL HAS BEEN MODIFIED FOR THIS PROJECT.

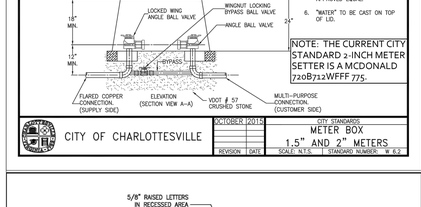


CITY OF CHARLOTTESVILLE — CITY STANDARDS — STANDARD SIDEWALK MONOLITHIC WITH CURB — REVISION DATE — SCALE: N.T.S. — STANDARD NUMBER: SW-2

GENERAL NOTES:

1. DETECTABLE WARNING TO BE PRE-FORMED PLASTIC INSERT WITH SLIP RESISTANT SURFACE COVERING THE FULL WIDTH OF THE RAMP FLOOR BY 2 FOOT IN LENGTH IN THE DIRECTION OF TRAVEL.
2. THE DETECTABLE WARNING SHALL BE PROVIDED BY TRUNCATED DOMES. TRUNCATED DOMES TO BE STAMPED IN TOP SURFACE. THE COLOR OF THE DETECTABLE WARNING SECTION SHALL BE YELLOW.
3. SLOPING SIDES OF CURB RAMP MAY BE POURED MONOLITHICALLY WITH RAMP FLOOR OR BY USING PERMISSIBLE CONSTRUCTION JOINT WITH REQUIRED BARS.
4. IF RAMP FLOOR IS PRECAST, HOLES MUST BE PROVIDED FOR DOWEL BARS SO THAT ADJOINING FLARED SIDES CAN BE CAST IN PLACE AFTER PLACEMENT OF PRECAST RAMP FLOOR. PRECAST CONCRETE SHALL BE CLASS A-4.
5. REQUIRED BARS ARE TO BE NO. 5 X 8' PLACED 1' CENTER TO CENTER ALONG BOTH SIDES OF THE RAMP FLOOR, MID-DEPTH OF RAMP FLOOR. MINIMUM CONCRETE COVER 1 1/2".
6. RAMPS MAY BE PLACED ON RADIAL OR TANGENTIAL SECTIONS PROVIDED THAT THE CURB OPENING IS PLACED WITHIN THE LIMITS OF THE CROSSWALK AND THAT THE SLOPE AT THE CONNECTION OF THE CURB OPENING IS PERPENDICULAR TO THE CURB.
7. TYPICAL CONCRETE SIDEWALK IS 4" THICK. WHEN THE RAMP IS PLACED IN THE CURB RETURN RADIUS IT SHALL BE 7" THICK.
8. WHEN CURB RAMPS ARE USED IN CONJUNCTION WITH A SHARED USE PATH, THE MINIMUM WIDTH SHALL BE THE WIDTH OF THE SHARED USE PATH.

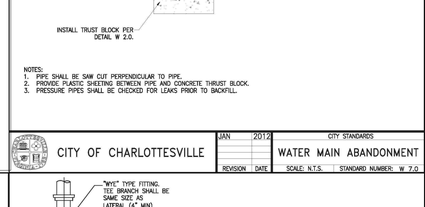




TYPE B PARALLEL APPLICATION

ROADWAY GRADE (%)	MIN. RAMP LENGTH (FT) 4" CURB	6" CURB
0	4	6
1	5	7
2	5	8
3	6	9
4	8	12
5	10	15
6	14	15

NOTE: THE REQUIRED LENGTH OF A PARALLEL RAMP IS LIMITED TO 15 FEET, REGARDLESS OF THE SLOPE.

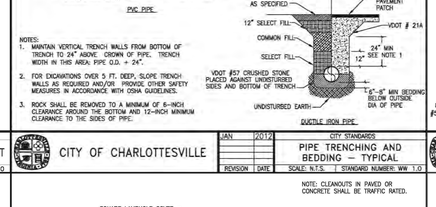


NOTE: FOR GENERAL NOTES ON THE DETECTABLE WARNING SURFACE, SEE SHEET 1 OF 3.

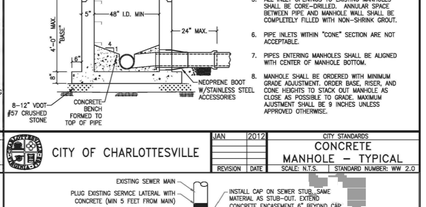
THIS COMBINED (PARALLEL & PERPENDICULAR) DESIGN FOR ALTERATIONS CAN BE USED WITH ADJOINING BUFFER STRIP. LANDING AT BOTTOM OF TWO SLOPING SIDES WITH 60"X60" MIN. DIMENSIONS. THE SHORT PERPENDICULAR RUN TO THE STREET CAN BE PROTECTED BY A LANDSCAPED SETBACK OR CONNECTED TO THE SIDEWALK WITH A WARPED SURFACE.

ROADWAY GRADE (%)	MIN. RAMP LENGTH (FT) 4" CURB	6" CURB
0	2	4
1	2	5
2	3	5
3	3	6
4	4	8
5	5	10
6	7	14
7	13	15
8	15	15

NOTE: THE REQUIRED LENGTH OF A PARALLEL RAMP IS LIMITED TO 15 FEET, REGARDLESS OF THE SLOPE.



NOTES:
1. MAXIMUM TEST PRESSURE: 225 PSI.
2. MINIMUM ALLOWABLE SOIL BEARING PRESSURE: 2000 PSF.
3. THRUST BLOCKS OR RESTRAINED JOINT FITTINGS ARE REQUIRED WHENEVER PIPELINE CHANGES DIRECTION, SIZE, OR DEAD-ENDS.
4. USE 3000 P.S.I. CONCRETE. NO CONCRETE SHALL BE POURED ON ANY PART OF THE JOINT.
5. SEE DRAWING W 2.1 FOR THRUST BLOCK DIMENSIONS.



PIPE SIZE	DEGREE OF BEND	BEND (FT) L	H	T	MIN. PIPE COVER (FT)	TEE AND PLUG (FT) L	H	T	MIN. PIPE COVER (FT)
4" & 6"	90	3.00	2.50	3.01	3	2.00	2.30	2.50	3
	45	2.00	2.30	2.60					
	22 1/2	1.50	2.00	2.50					
	11 1/4	1.50	2.00	2.50					
8" & 10"	90	4.50	3.50	3.20	3	3.20	3.00	3.00	3
	45	3.00	2.70	2.80					
	22 1/2	2.00	2.00	2.70					
	11 1/4	1.70	2.00	2.70					
12" & 14"	90	7.30	4.00	3.60	4	4.30	4.00	2.80	4
	45	4.50	3.60	3.00					
	22 1/2	3.30	2.80	2.90					
	11 1/4	1.80	2.30	2.80					
16" & 18"	90	10.90	4.50	4.50	5	6.30	4.60	3.80	5
	45	6.50	4.00	3.00					
	22 1/2	4.50	3.30	3.00					
	11 1/4	2.80	2.70	2.80					

REFERENCE DRAWING 2.0 FOR DIMENSION LOCATIONS

NOTES:
1. MAXIMUM TEST PRESSURE: 225 PSI.
2. MINIMUM ALLOWABLE SOIL BEARING PRESSURE: 2000 PSF.
3. USE MINIMUM 3000 P.S.I. CONCRETE.
4. THE DESIGN ENGINEER SHALL BE RESPONSIBLE FOR VERIFICATION OF ADEQUACY OF ALL THRUST BLOCKS.

CITY OF CHARLOTTESVILLE — CITY STANDARDS — CG-12 DETECTABLE WARNING SURFACE GENERAL NOTES (SHEET 1 OF 3) — REVISION DATE — SCALE: N.T.S. — STANDARD NUMBER: CG-12

CITY OF CHARLOTTESVILLE — CITY STANDARDS — CG-12 DETECTABLE WARNING SURFACE TYPE B (SHEET 2 OF 3) — REVISION DATE — SCALE: N.T.S. — STANDARD NUMBER: CG-12

CITY OF CHARLOTTESVILLE — CITY STANDARDS — CG-12 DETECTABLE WARNING SURFACE TYPE C (SHEET 3 OF 3) — REVISION DATE — SCALE: N.T.S. — STANDARD NUMBER: CG-12

CITY OF CHARLOTTESVILLE — JULY 2011 — CITY STANDARDS — CONCRETE THRUST BLOCKS — REVISION DATE — SCALE: N.T.S. — STANDARD NUMBER: W 2.0

CITY OF CHARLOTTESVILLE — JULY 2011 — CITY STANDARDS — CONCRETE THRUST BLOCK DIMENSIONS — REVISION DATE — SCALE: N.T.S. — STANDARD NUMBER: W 2.1

NOTES:
1. UNPAVED AREAS (PREFERRED LOCATION): PLASTIC BROOKS 2200 SERIES WITH 6" EXTENSION OR APPROVED EQUAL.
2. PAVED AREAS (ALTERNATE LOCATION): CAST IRON BINGHAM AND TAYLOR NO. 6015-B OR APPROVED EQUAL. USE 6" OF BRICK AND/OR BLOCK TO INCREASE DEPTH TO 24".
3. LID MUST BE CAST TO ACCEPT AN ITRON, INC. WATER ERT METER MODULE.

CITY OF CHARLOTTESVILLE — JULY 2011 — CITY STANDARDS — METER BOX – 5/8" AND 1" METERS — REVISION DATE — SCALE: N.T.S. — STANDARD NUMBER: W 6.0

NOTES:
1. SURROUND WEEP HOLES WITH GRAVEL AND KEEP FREE OF CONCRETE.
2. MAINTAIN A 3" MIN. COVER FROM THE MAIN TO THE FIRE HYDRANT (INCLUDING DITCHES).
3. FINISHED GRADE SHALL SLOPE AWAY FROM THE FIRE HYDRANT AND VALVE BOX.
4. GATE VALVE SHALL NOT BE PLACED WITHIN THE DITCH LINES.
5. IF GROUNDWATER IS PRESENT AT THE INSTALLATION SITE, COORDINATE THE RELOCATION OF THE HYDRANT WITH CITY.
6. EACH NEW FIRE HYDRANT SHALL BE FRESHLY PAINTED WITH "CLIO" GUARD #45 SAFETY RED, BY "CLIDDEN" OR APPROVED EQUAL.
7. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL FIRE HYDRANTS ARE PROVIDED WITH "CITY OF CHARLOTTESVILLE" THREADS.
8. ALL CHAINS SHALL BE REMOVED FOLLOWING INSTALLATION AND TESTING.

CITY OF CHARLOTTESVILLE — JAN 2012 — CITY STANDARDS — FIRE HYDRANT – TYPICAL — REVISION DATE — SCALE: N.T.S. — STANDARD NUMBER: W 3.0

NOTES:
1. QUANTITY AND PLACEMENT OF BOLLARDS TO BE DETERMINED BY PLANS OR FIELD INSPECTION BY UTILITIES DEPARTMENT OR FIRE MARSHALL.
2. CONCRETE TO BE CLASS A3.

CITY OF CHARLOTTESVILLE — JUN 2012 — CITY STANDARDS — FIRE HYDRANT BOLLARDS — REVISION DATE — SCALE: N.T.S. — STANDARD NUMBER: W 3.1

NOTES:
1. IN REMOTE AREAS, VALVE BOXES SHALL EXTEND SIX (6) INCHES ABOVE GRADE.
2. USE RESTRAINED JOINTS IN BOTH DIRECTIONS IN ACCORDANCE WITH DETAIL W2.4.

CITY OF CHARLOTTESVILLE — JULY 2011 — CITY STANDARDS — GATE VALVE – TYPICAL — REVISION DATE — SCALE: N.T.S. — STANDARD NUMBER: W 4.0

NOTES:
1. THE SERVICE LATERAL, 1/4 BEND COUPLING, AND CORPORATION STOP SHALL BE THE SAME SIZE AS THE COPPERSETTER, EXCEPT AS NOTED ABOVE.
2. METER TO BE INSTALLED BY THE CITY.
3. INSTALL WARNING TAPE WITH SERVICE LATERAL.
4. CORPORATION STOPS THREADED INTO IRON PIPES, FITTINGS, OR SPECIALS SHALL HAVE THEIR THREADS WRAPPED IN TEFLON TAPE PRIOR TO ASSEMBLY.
5. TAPS SHALL NOT BE MADE WITHIN TWO (2) FEET OF A BELL JOINT, FITTING, OR OTHER TAP.

CITY OF CHARLOTTESVILLE — JAN 2012 — CITY STANDARDS — SERVICE LATERAL – TYPICAL — REVISION DATE — SCALE: N.T.S. — STANDARD NUMBER: W 5.0

SUBMITTAL DATA SHEET

NL Large Size Meter Setter – 720B712WFFF 775

FNPT x FNPT

EST. 1856 McDonald

SUBMITTAL INFORMATION

- Manufactured in compliance with ANSI/AWWA C800 (latest revision)
- Brass components in contact with potable water conform to ASTM B584, UNS C89833 (latest revision) and identified with "NL"
- Certified to NSF/ANSI 372
- Brass components not in contact with potable water conform to ASTM B62 and ASTM B584, UNS C83600 -85-5-5-5 (latest revision)
- Copper tubing made in compliance with ASTM B88, UNS C12200 (latest revision)
- Lead free solder joints
- Designed to provide proper meter spacing for ease of installation
- Padlock wings standard on all valves

EST. 1856 McDonald

A.Y. McDonald Mfg. CO.
P.O. Box 508
Dubuque, IA 52004-508

Toll Free: 1-800-292-2737
Fax: 1-800-832-9296
Hours: 7:00 a.m. – 5:00 p.m., CST

sales@aymcdonald.com
www.aymcdonald.com

A.Y. McDonald considers the information on this assembly drawing correct when published. Item and option availability, including specifications, are subject to change without notice.

Submitted by: 10-14

CITY OF CHARLOTTESVILLE — OCTOBER 2015 — CITY STANDARDS — METER BOX 1.5" AND 2" METERS — REVISION DATE — SCALE: N.T.S. — STANDARD NUMBER: W 6.2

NOTES:
1. CONSULT WITH DEPARTMENT OF PUBLIC WORKS — WATER DIVISION FOR METER LAYING LENGTH.
2. INSTALL WARNING TAPE AND TRACER WIRE WITH SERVICE LATERAL. TERMINATE WIRE IN A LOOP WITHIN METER BOX.
3. BOX SHALL NOT REST ON SERVICE PIPING.
4. COPPERSETTER SHALL BE FORD METER BOX VBB72-12B-44-XX-NL OR APPROVED EQUAL.
5. BOX SHALL BE FRP TIER 15 RATED BY ARMORCAST OR APPROVED EQUAL.
6. "WATER" TO BE CAST ON TOP OF LID.

NOTE: THE CURRENT CITY STANDARD 2-INCH METER SETTER IS A MCDONALD 720B722WFFF 775.

NOTES:
1. PIPE SHALL BE SAW CUT PERPENDICULAR TO PIPE.
2. PROVIDE PLASTIC SHEETING BETWEEN PIPE AND CONCRETE THRUST BLOCK.
3. PRESSURE PIPES SHALL BE CHECKED FOR LEAKS PRIOR TO BACKFILL.

CITY OF CHARLOTTESVILLE — JAN 2012 — CITY STANDARDS — WATER MAIN ABANDONMENT — REVISION DATE — SCALE: N.T.S. — STANDARD NUMBER: W 7.0

NOTES:
1. MAINTAIN VERTICAL TRENCH WALLS FROM BOTTOM OF TRENCH TO 24" ABOVE CROWN OF PIPE. TRENCH WIDTH IN THIS AREA: PIPE O.D. + 24".
2. FOR EXCAVATIONS OVER 5 FT. DEEP, SLOPE TRENCH WALLS AS REQUIRED AND/OR PROVIDE OTHER SAFETY MEASURES IN ACCORDANCE WITH OSHA GUIDELINES.
3. ROCK SHALL BE REMOVED TO A MINIMUM OF 6-INCH CLEARANCE AROUND THE BOTTOM AND 12-INCH MINIMUM CLEARANCE TO THE SIDES OF PIPE.

CITY OF CHARLOTTESVILLE — JAN 2012 — CITY STANDARDS — PIPE TRENCHING AND BEDDING – TYPICAL — REVISION DATE — SCALE: N.T.S. — STANDARD NUMBER: WW 1.0

NOTES:
1. ALL JOINTS, LIFT HOLES, INLETS AND OUTLETS SHALL BE GROUTED AND SCALED INSIDE AND OUT.
2. CHANNELS AND MANHOLE "SHELF" TO BE CONSTRUCTED OF 3000 PSI CONCRETE, FILL FINISHED SMOOTH WITH STEEL TROWEL. FLOW CHANNELS SHALL BE FORMED TO ALLOW INSERTION OF A ROBOTIC CAMERA.
3. INSIDE OF MANHOLE SHALL BE FACTORY COATED WITH ONE COAT EPOXY COATING, COLOR GRAY. OUTSIDE SHALL RECEIVE ONE COAT COAL TAR EPOXY. MANUAL ON-SITE EPOXY COATING MAY BE REQUIRED IN SOME SITUATIONS.
4. FOR PRECAST INLETS AND OUTLETS, PIPE TO MANHOLE CONNECTIONS SHALL BE NEOPRENE BOOT WITH STAINLESS STEEL ACCESSORIES.
5. ALL INLET OPENINGS TO EXISTING MANHOLES SHALL BE CORE-DRILLED. ANNULAR SPACE BETWEEN PIPE AND MANHOLE WALL SHALL BE COMPLETELY FILLED WITH NON-SHRINK GROUT.
6. PIPE INLETS WITHIN "CONE" SECTION ARE NOT ACCEPTABLE.
7. PIPES ENTERING MANHOLES SHALL BE ALIGNED WITH CENTER OF MANHOLE BOTTOM.
8. MANHOLE SHALL BE ORDERED WITH MINIMUM GRADE ADJUSTMENT. ORDER BASE, RISER, AND CONE HEIGHTS TO STACK OUT MANHOLE AS CLOSE AS POSSIBLE TO GRADE. MAXIMUM ADJUSTMENT SHALL BE 9 INCHES UNLESS APPROVED OTHERWISE.

CITY OF CHARLOTTESVILLE — JAN 2012 — CITY STANDARDS — CONCRETE MANHOLE – TYPICAL — REVISION DATE — SCALE: N.T.S. — STANDARD NUMBER: WW 2.0

NOTES:
1. CAPITOL FOUNDRY OF VA. MODEL MH-3000 24" MANHOLE FRAME AND COVER WITH RAISED LETTERS MARKED "SANITARY SEWER" OR APPROVED EQUAL.
2. ALL MANHOLES WITHIN THE 100-YEAR FLOODPLAIN OR LOCATED IN AREAS SUBJECT TO LOCALIZED FLOODING ARE TO HAVE WATERTIGHT FRAME AND COVER (SEE DETAIL WW 2.5)

CITY OF CHARLOTTESVILLE — JULY 2011 — CITY STANDARDS — MANHOLE FRAME AND COVER — REVISION DATE — SCALE: N.T.S. — STANDARD NUMBER: WW 2.4

NOTES:
1. USE DUCTILE IRON PIPE FROM SEWER MAIN TO CLEANOUT IF LESS THAN 3.5 FT. COVER EXISTS.
2. SEWER LATERAL TAPPED INTO EXISTING SEWER MAIN SHALL BE CONNECTED USING A ROMAC PIPE SADDLE (STYLE SB) OR APPROVED EQUAL. ALL TAPS SHALL BE CORE-DRILLED.
3. LATERAL SHALL NOT PROTRUDE INTO SEWER MAIN.
4. WHERE THE DISTANCE "X" IS SUCH THAT MORE THAN ONE PIPE JOINT IS REQUIRED AND THE PIPE SLOPE EXCEEDS 20%, CONTRACTOR SHALL PROVIDE ANCHORAGE IN ACCORDANCE WITH DRAWING WW 6.0.
5. SEWER LATERAL CONNECTIONS INTO EXISTING MANHOLES SHALL BE IN ACCORDANCE WITH DETAIL DRAWINGS WW 2.0, WW 2.1, WW 2.2, OR WW 2.3 AS APPLICABLE.
6. IF MAIN LINE IS LINED, SEE DETAIL WW 5.2.

CITY OF CHARLOTTESVILLE — JAN 2011 — CITY STANDARDS — SEWER LATERAL CONNECTION – TYPICAL — REVISION DATE — SCALE: N.T.S. — STANDARD NUMBER: WW 5.0

NOTE: CLEANOUT TO BE SAME SIZE AND MATERIAL AS SEWER LINE.

CITY OF CHARLOTTESVILLE — JAN 2011 — CITY STANDARDS — CLEANOUT DETAIL — REVISION DATE — SCALE: N.T.S. — STANDARD NUMBER: WW 5.1

NOTES:
1. REFER TO THIS DETAIL WHEN ABANDONING EXISTING SERVICE LATERALS. SERVICE LATERALS SHALL BE ABANDONED WHEN A NEW LATERAL IS BEING INSTALLED TO SERVE A PROPERTY AND THE NEW LATERAL IS BEING CONNECTED TO THE THE MAIN SEWER AT A DIFFERENT LOCATION, A BUILDING IS BEING DEMOLISHED, OR AS DIRECTED BY UTILITIES ENGINEER. CONTACT PUBLIC UTILITIES (434-970-3800) A MINIMUM OF 48 HOURS IN ADVANCE FOR INSPECTION PRIOR TO BACKFILL.
2. TO ABANDON THE EXISTING SERVICE LATERAL AT THE MAIN SEWER, CAREFULLY REMOVE THE LATERAL FROM THE MAIN SEWER, CUT THE EXISTING LATERAL AT LEAST 5 FEET FROM THE MAIN SEWER, PLUG THE REMAINING PIPE END WITH CONCRETE, INSTALL A SADDLE PERMOTE 3 AND 4" TO 8" LONG STUB-OUT. INSTALL A CAP ON THE STUB-OUT AND ENCASE THE SADDLE, STUB-OUT AND CAP IN MIN. 3500 PSI CONCRETE – ENCASEMENT TO EXTEND TO 8" EACH SIDE OF THE LATERAL/SADDLE AND 6" BEYOND THE CAP. BACKFILL AS SPECIFIED.

IF THE EXISTING MAIN SEWER IS DAMAGED DURING THE REMOVAL OF THE EXISTING LATERAL AND THE SADDLE CONNECTION WILL NOT WORK AS DETERMINED BY CITY PERSONNEL, A POINT REPAIR SHALL BE PERFORMED ON THE MAIN SEWER PER DETAIL WW 8.1.

3. SUPPORT THE EXISTING SEWER DURING THIS WORK.

CITY OF CHARLOTTESVILLE — JAN 2012 — CITY STANDARDS — SEWER LATERAL ABANDONMENT AT MAIN — REVISION DATE — SCALE: N.T.S. — STANDARD NUMBER: WW 7.2

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
8/18/23
PROFESSIONAL ENGINEER

REVISIONS

DATE	REVISION DESCRIPTION
3/15/22	INITIAL PLAN SUBMITTAL
1/03/23	2ND PLAN SUBMITTAL
5/19/23	3RD PLAN SUBMITTAL
8/18/23	4TH PLAN SUBMITTAL

COLLINS ENGINEERING
200 GARRETT STREET, SUITE K-CHARLOTTESVILLE, VA 22902 -434.293.3719

PROJECT: BELMONT CONDOMINIUMS - FINAL SITE PLAN

SHEET: UTILITY DETAILS

JOB NO. 202201

SCALE N/A

SHEET NO. 17

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SIZING WATER SERVICE LINES AND METERS Rev. 2020.02.26

CITY OF CHARLOTTESVILLE
Water Customer Data Sheet

Customer _____ Address _____
Building Address Building #1 - Meter #1A (Residential) Zip Code _____
Subdivision _____ Lot No. _____ Blk. No. _____
Type of Occupancy _____

Fixture	Fixture Value 60 psi		No. of Fixtures		Fixture Value
Bathtub	8	x	20	=	160
Bedpan Washers	10	x		=	
Bidet	2	x		=	
Dental Unit	2	x		=	
Drinking Fountain - Public	2	x		=	
Kitchen Sink	2.2	x	20	=	44
Lavatory	1.5	x	40	=	60
Showerhead (Shower Only)	2.5	x	40	=	100
Service Sink	4	x		=	
Toilet – Flush Valve - Tank Type	4	x	40	=	160
Urinal – Pedestal Flush Valve - Wall Flush Valve	35 16	x x		= =	
Wash Sink (Each Set of Faucets)	4	x		=	
Dishwasher	2	x	20	=	40
Washing Machine	6	x	20	=	120
Hose (50 ft Wash Down) - 1/2 in. - 5/8 in. - 3/4 in.	5 9 12	x x x	1	= = =	5
Combined Fixture Value Total				=	689.0

Pressure Factor from Table 4-1 = 1.17

Customer Peak Demand From Fig. 4 –2 or 4 –3 x Press. Factor = 65.5 gpm

Add Irrigation - 0 Sections* x 1.16 or 0.40+ = 0.0 gpm
- 3 Hose Bibs x Fixture Value x 1.17 Press. Factor = 17.6 gpm

Added Fixed Load = 0.0 gpm

TOTAL FIXED DEMAND = 83.1 gpm

* 100 ft² area = 1 section
+ Spray Systems- Use 1.16; Rotary systems- Use 0.40

Figure 4-5 Water customer data sheet

Source: AWWA M22 Sizing Water Service Lines and Meters (Jan. 2004)
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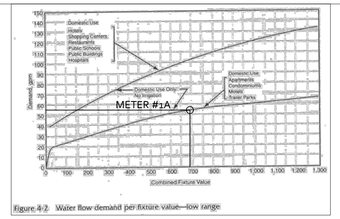


Figure 4-2 Water flow demand per fixture value—low range

SIZING WATER SERVICE LINES AND METERS Rev. 2020.02.26

CITY OF CHARLOTTESVILLE
Water Customer Data Sheet

Customer _____ Address _____
Building Address Building #1 - Meter #1B (Commercial) Zip Code _____
Subdivision _____ Lot No. _____ Blk. No. _____
Type of Occupancy _____

Fixture	Fixture Value 60 psi		No. of Fixtures		Fixture Value
Bathtub	8	x		=	
Bedpan Washers	10	x		=	
Bidet	2	x		=	
Dental Unit	2	x		=	
Drinking Fountain - Public	2	x	2	=	4
Kitchen Sink	2.2	x	1	=	2.2
Lavatory	1.5	x	4	=	6
Showerhead (Shower Only)	2.5	x		=	
Service Sink	4	x	1	=	4
Toilet – Flush Valve - Tank Type	35 4	x x	4	= =	16
Urinal – Pedestal Flush Valve - Wall Flush Valve	35 16	x x	2	= =	32
Wash Sink (Each Set of Faucets)	4	x	1	=	4
Dishwasher	2	x		=	
Washing Machine	6	x		=	
Hose (50 ft Wash Down) - 1/2 in. - 5/8 in. - 3/4 in.	5 9 12	x x x	1	= = =	5
Combined Fixture Value Total				=	73.2

Pressure Factor from Table 4-1 = 1.17

Customer Peak Demand From Fig. 4 –2 or 4 –3 x Press. Factor = 55.0 gpm

Add Irrigation - 0 Sections* x 1.16 or 0.40+ = 0.0 gpm
- 0 Hose Bibs x Fixture Value x 1.17 Press. Factor = 0 gpm

Added Fixed Load = 0.0 gpm

TOTAL FIXED DEMAND = 55.0 gpm

* 100 ft² area = 1 section
+ Spray Systems- Use 1.16; Rotary systems- Use 0.40

Figure 4-5 Water customer data sheet

Source: AWWA M22 Sizing Water Service Lines and Meters (Jan. 2004)
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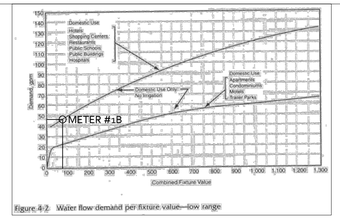


Figure 4-2 Water flow demand per fixture value—low range

SIZING WATER SERVICE LINES AND METERS Rev. 2020.02.26

CITY OF CHARLOTTESVILLE
Water Customer Data Sheet

Customer _____ Address _____
Building Address Building #2 - Meter #2 (Residential) Zip Code _____
Subdivision _____ Lot No. _____ Blk. No. _____
Type of Occupancy _____

Fixture	Fixture Value 60 psi		No. of Fixtures		Fixture Value
Bathtub	8	x	22	=	176
Bedpan Washers	10	x		=	
Bidet	2	x		=	
Dental Unit	2	x		=	
Drinking Fountain - Public	2	x		=	
Kitchen Sink	2.2	x	22	=	48.4
Lavatory	1.5	x	44	=	66
Showerhead (Shower Only)	2.5	x	44	=	110
Service Sink	4	x		=	
Toilet – Flush Valve - Tank Type	35 4	x x	44	= =	176
Urinal – Pedestal Flush Valve - Wall Flush Valve	35 16	x x		= =	
Wash Sink (Each Set of Faucets)	4	x		=	
Dishwasher	2	x	22	=	44
Washing Machine	6	x	22	=	132
Hose (50 ft Wash Down) - 1/2 in. - 5/8 in. - 3/4 in.	5 9 12	x x x	1	= = =	5
Combined Fixture Value Total				=	757.4

Pressure Factor from Table 4-1 = 1.17

Customer Peak Demand From Fig. 4 –2 or 4 –3 x Press. Factor = 67.9 gpm

Add Irrigation - 0 Sections* x 1.16 or 0.40+ = 0.0 gpm
- 3 Hose Bibs x Fixture Value x 1.17 Press. Factor = 17.6 gpm

Added Fixed Load = 0.0 gpm

TOTAL FIXED DEMAND = 85.5 gpm

* 100 ft² area = 1 section
+ Spray Systems- Use 1.16; Rotary systems- Use 0.40

Figure 4-5 Water customer data sheet

Source: AWWA M22 Sizing Water Service Lines and Meters (Jan. 2004)
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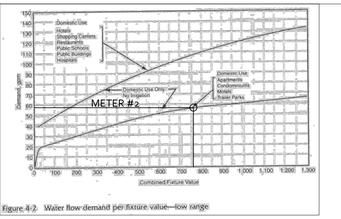


Figure 4-2 Water flow demand per fixture value—low range

SIZING WATER SERVICE LINES AND METERS Rev. 2020.02.26

CITY OF CHARLOTTESVILLE
Water Customer Data Sheet

Customer _____ Address _____
Building Address Building #3 - Meter #3 (Residential) Zip Code _____
Subdivision _____ Lot No. _____ Blk. No. _____
Type of Occupancy _____

Fixture	Fixture Value 60 psi		No. of Fixtures		Fixture Value
Bathtub	8	x	16	=	128
Bedpan Washers	10	x		=	
Bidet	2	x		=	
Dental Unit	2	x		=	
Drinking Fountain - Public	2	x		=	
Kitchen Sink	2.2	x	16	=	35.2
Lavatory	1.5	x	32	=	48
Showerhead (Shower Only)	2.5	x	32	=	80
Service Sink	4	x		=	
Toilet – Flush Valve - Tank Type	35 4	x x	32	= =	128
Urinal – Pedestal Flush Valve - Wall Flush Valve	35 16	x x		= =	
Wash Sink (Each Set of Faucets)	4	x		=	
Dishwasher	2	x	16	=	32
Washing Machine	6	x	16	=	96
Hose (50 ft Wash Down) - 1/2 in. - 5/8 in. - 3/4 in.	5 9 12	x x x	1	= = =	5
Combined Fixture Value Total				=	552.2

Pressure Factor from Table 4-1 = 1.17

Customer Peak Demand From Fig. 4 –2 or 4 –3 x Press. Factor = 59.7 gpm

Add Irrigation - 0 Sections* x 1.16 or 0.40+ = 0.0 gpm
- 3 Hose Bibs x Fixture Value x 1.17 Press. Factor = 17.6 gpm

Added Fixed Load = 0.0 gpm

TOTAL FIXED DEMAND = 77.3 gpm

* 100 ft² area = 1 section
+ Spray Systems- Use 1.16; Rotary systems- Use 0.40

Figure 4-5 Water customer data sheet

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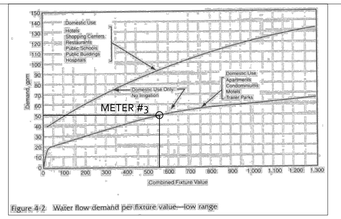


Figure 4-2 Water flow demand per fixture value—low range

SIZING WATER SERVICE LINES AND METERS Rev. 2020.02.26

CITY OF CHARLOTTESVILLE
Water Customer Data Sheet

Customer _____ Address _____
Building Address Building #4 - Meter #4 (Residential) Zip Code _____
Subdivision _____ Lot No. _____ Blk. No. _____
Type of Occupancy _____

Fixture	Fixture Value 60 psi		No. of Fixtures		Fixture Value
Bathtub	8	x	14	=	112
Bedpan Washers	10	x		=	
Bidet	2	x		=	
Dental Unit	2	x		=	
Drinking Fountain - Public	2	x		=	
Kitchen Sink	2.2	x	14	=	30.8
Lavatory	1.5	x	28	=	42
Showerhead (Shower Only)	2.5	x	28	=	70
Service Sink	4	x		=	
Toilet – Flush Valve - Tank Type	35 4	x x	28	= =	112
Urinal – Pedestal Flush Valve - Wall Flush Valve	35 16	x x		= =	
Wash Sink (Each Set of Faucets)	4	x		=	
Dishwasher	2	x	14	=	28
Washing Machine	6	x	14	=	84
Hose (50 ft Wash Down) - 1/2 in. - 5/8 in. - 3/4 in.	5 9 12	x x x	1	= = =	5
Combined Fixture Value Total				=	483.8

Pressure Factor from Table 4-1 = 1.17

Customer Peak Demand From Fig. 4 –2 or 4 –3 x Press. Factor = 55.0 gpm

Add Irrigation - 0 Sections* x 1.16 or 0.40+ = 0.0 gpm
- 3 Hose Bibs x Fixture Value x 1.17 Press. Factor = 17.6 gpm

Added Fixed Load = 0.0 gpm

TOTAL FIXED DEMAND = 72.6 gpm

* 100 ft² area = 1 section
+ Spray Systems- Use 1.16; Rotary systems- Use 0.40

Figure 4-5 Water customer data sheet

Source: AWWA M22 Sizing Water Service Lines and Meters (Jan. 2004)
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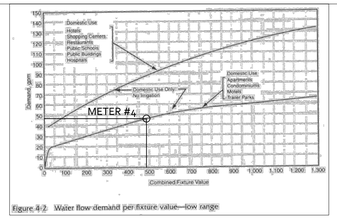


Figure 4-2 Water flow demand per fixture value—low range

SIZING WATER SERVICE LINES AND METERS Rev. 2020.02.26

CITY OF CHARLOTTESVILLE
Water Customer Data Sheet

Customer _____ Address _____
Building Address Building #5 - Meter #5 (Residential) Zip Code _____
Subdivision _____ Lot No. _____ Blk. No. _____
Type of Occupancy _____

Fixture	Fixture Value 60 psi		No. of Fixtures		Fixture Value
Bathtub	8	x	14	=	112
Bedpan Washers	10	x		=	
Bidet	2	x		=	
Dental Unit	2	x		=	
Drinking Fountain - Public	2	x		=	
Kitchen Sink	2.2	x	14	=	30.8
Lavatory	1.5	x	28	=	42
Showerhead (Shower Only)	2.5	x	28	=	70
Service Sink	4	x		=	
Toilet – Flush Valve - Tank Type	35 4	x x	28	= =	112
Urinal – Pedestal Flush Valve - Wall Flush Valve	35 16	x x		= =	
Wash Sink (Each Set of Faucets)	4	x		=	
Dishwasher	2	x	14	=	28
Washing Machine	6	x	14	=	84
Hose (50 ft Wash Down) - 1/2 in. - 5/8 in. - 3/4 in.	5 9 12	x x x	1	= = =	5
Combined Fixture Value Total				=	483.8

Pressure Factor from Table 4-1 = 1.17

Customer Peak Demand From Fig. 4 –2 or 4 –3 x Press. Factor = 55.0 gpm

Add Irrigation - 0 Sections* x 1.16 or 0.40+ = 0.0 gpm
- 3 Hose Bibs x Fixture Value x 1.17 Press. Factor = 17.6 gpm

Added Fixed Load = 0.0 gpm

TOTAL FIXED DEMAND = 72.6 gpm

* 100 ft² area = 1 section
+ Spray Systems- Use 1.16; Rotary systems- Use 0.40

Figure 4-5 Water customer data sheet

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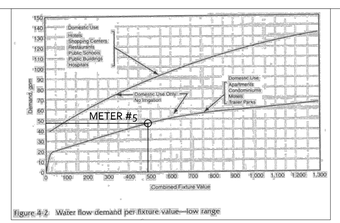


Figure 4-2 Water flow demand per fixture value—low range

SIZING WATER SERVICE LINES AND METERS Rev. 2020.02.26

CITY OF CHARLOTTESVILLE
Water Customer Data Sheet

Customer _____ Address _____
Building Address Building #6 - Meter #6 (Residential) Zip Code _____
Subdivision _____ Lot No. _____ Blk. No. _____
Type of Occupancy _____

Fixture	Fixture Value 60 psi		No. of Fixtures		Fixture Value
Bathtub	8	x	16	=	128
Bedpan Washers	10	x		=	
Bidet	2	x		=	
Dental Unit	2	x		=	
Drinking Fountain - Public	2	x		=	
Kitchen Sink	2.2	x	16	=	35.2
Lavatory	1.5	x	32	=	48
Showerhead (Shower Only)	2.5	x	32	=	80
Service Sink	4	x		=	
Toilet – Flush Valve - Tank Type	35 4	x x	32	= =	128
Urinal – Pedestal Flush Valve - Wall Flush Valve	35 16	x x		= =	
Wash Sink (Each Set of Faucets)	4	x		=	
Dishwasher	2	x	16	=	32
Washing Machine	6	x	16	=	96
Hose (50 ft Wash Down) - 1/2 in. - 5/8 in. - 3/4 in.	5 9 12	x x x	1	= = =	5
Combined Fixture Value Total				=	552.2

Pressure Factor from Table 4-1 = 1.17

Customer Peak Demand From Fig. 4 –2 or 4 –3 x Press. Factor = 59.7 gpm

Add Irrigation - 0 Sections* x 1.16 or 0.40+ = 0.0 gpm
- 3 Hose Bibs x Fixture Value x 1.17 Press. Factor = 17.6 gpm

Added Fixed Load = 0.0 gpm

TOTAL FIXED DEMAND = 77.3 gpm

* 100 ft² area = 1 section
+ Spray Systems- Use 1.16; Rotary systems- Use 0.40

Figure 4-5 Water customer data sheet

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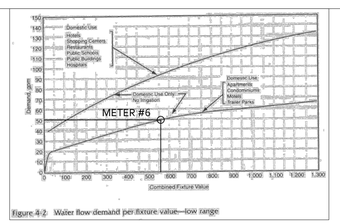


Figure 4-2 Water flow demand per fixture value—low range

SIZING WATER SERVICE LINES AND METERS Rev. 2020.02.26

CITY OF CHARLOTTESVILLE
Water Customer Data Sheet

Customer _____ Address _____
Building Address Building #7 - Meter #7 (Residential) Zip Code _____
Subdivision _____ Lot No. _____ Blk. No. _____
Type of Occupancy _____

Fixture	Fixture Value 60 psi		No. of Fixtures		Fixture Value
Bathtub	8	x	14	=	112
Bedpan Washers	10	x		=	
Bidet	2	x		=	
Dental Unit	2	x		=	
Drinking Fountain - Public	2	x		=	
Kitchen Sink	2.2	x	14	=	30.8
Lavatory	1.5	x	28	=	42
Showerhead (Shower Only)	2.5	x	28	=	70
Service Sink	4	x		=	
Toilet – Flush Valve - Tank Type	35 4	x x	28	= =	112
Urinal – Pedestal Flush Valve - Wall Flush Valve	35 16	x x		= =	
Wash Sink (Each Set of Faucets)	4	x		=	
Dishwasher	2	x	14	=	28
Washing Machine	6	x	14	=	84
Hose (50 ft Wash Down) - 1/2 in. - 5/8 in. - 3/4 in.	5 9 12	x x x	1	= = =	5
Combined Fixture Value Total				=	483.8

Pressure Factor from Table 4-1 = 1.17

Customer Peak Demand From Fig. 4 –2 or 4 –3 x Press. Factor = 55.0 gpm

Add Irrigation - 0 Sections* x 1.16 or 0.40+ = 0.0 gpm
- 3 Hose Bibs x Fixture Value x 1.17 Press. Factor = 17.6 gpm

Added Fixed Load = 0.0 gpm

TOTAL FIXED DEMAND = 72.6 gpm

* 100 ft² area = 1 section
+ Spray Systems- Use 1.16; Rotary systems- Use 0.40

Figure 4-5 Water customer data sheet

Source: AWWA M22 Sizing Water Service Lines and Meters (Jan. 2004)
Copyright 2004, American Water Works Association

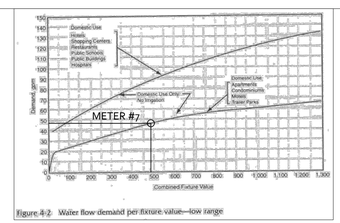


Figure 4-2 Water flow demand per fixture value—low range

SIZING WATER SERVICE LINES AND METERS Rev. 2020.02.26

CITY OF CHARLOTTESVILLE
Water Customer Data Sheet

Customer _____ Address _____
Building Address Building #8 - Meter #8 (Residential) Zip Code _____
Subdivision _____ Lot No. _____ Blk. No. _____
Type of Occupancy _____

Fixture	Fixture Value 60 psi		No. of Fixtures		Fixture Value
Bathtub	8	x	14	=	112
Bedpan Washers	10	x		=	
Bidet	2	x		=	
Dental Unit	2	x		=	
Drinking Fountain - Public	2	x		=	
Kitchen Sink	2.2	x	14	=	30.8
Lavatory	1.5	x	28	=	42
Showerhead (Shower Only)	2.5	x	28	=	70
Service Sink	4	x		=	
Toilet – Flush Valve - Tank Type	35 4	x x	28	= =	112
Urinal – Pedestal Flush Valve - Wall Flush Valve	35 16	x x		= =	
Wash Sink (Each Set of Faucets)	4	x		=	
Dishwasher	2	x	14	=	28
Washing Machine	6	x	14	=	84
Hose (50 ft Wash Down) - 1/2 in. - 5/8 in. - 3/4 in.	5 9 12	x x x	1	= = =	5
Combined Fixture Value Total				=	483.8

Pressure Factor from Table 4-1 = 1.17

Customer Peak Demand From Fig. 4 –2 or 4 –3 x Press. Factor = 55.0 gpm

Add Irrigation - 0 Sections* x 1.16 or 0.40+ = 0.0 gpm
- 3 Hose Bibs x Fixture Value x 1.17 Press. Factor = 17.6 gpm

Added Fixed Load = 0.0 gpm

TOTAL FIXED DEMAND = 72.6 gpm

* 100 ft² area = 1 section
+ Spray Systems- Use 1.16; Rotary systems- Use 0.40

Figure 4-5 Water customer data sheet

Source: AWWA M22 Sizing Water Service Lines and Meters (Jan. 2004)
Copyright 2004, American Water Works Association

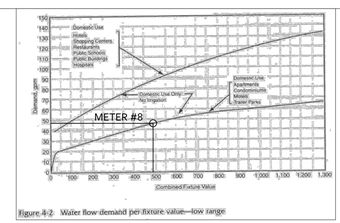


Figure 4-2 Water flow demand per fixture value—low range

WATER FLOWS - MAXIMUM AND PEAK HOUR DEMANDS				
MAXIMUM HOUR DEMAND MIN. = 2 GPM PER CONNECTION				
PEAK HOUR DEMAND FOR MIN. = 3 GPM PER CONNECTION				
TABLE 9-2 OF THE CHARLOTTESVILLE DESIGN STANDARDS MANUAL WAS USED TO ESTIMATE THE DESIGN FLOW. MAXIMUM HOUR DEMAND AND PEAK HOUR DEMAND PER CONNECTION SHALL NOT BE LESS THAN 2 GPM AND 3 GPM, RESPECTIVELY. WHERE THE NUMBER OF RESIDENTIAL UNITS IS LESS THAN 1,000, THE GREATER OF THE FOLLOWING EQUATION OR ABOVE SHALL BE USED: Q=11.4(N)^0.544 WHERE N=NUMBER OF CONNECTIONS.				
METER	NUMBER OF CONNECTIONS	FLOW CALCULATIONS	MAXIMUM HOUR DEMAND	PEAK HOUR DEMAND
1A	20	40 GPM	40 GPM	60 GPM
1B	1	12 GPM	12 GPM	18 GPM
2	22	44 GPM	44 GPM	66 GPM
3	16	32 GPM	32 GPM	48 GPM
4	14	28 GPM	28 GPM	42 GPM
5	14	28 GPM	28 GPM	42 GPM
6	16	32 GPM	32 GPM	48 GPM
7	14	28 GPM	28 GPM	42 GPM
8	14	28 GPM	28 GPM	42 GPM

Wastewater Flow Estimates

	Non-Residential flow	Total	With 4.0	Expected
Non-Residential	per 1,000 sf (gpd)	(gpd)	PF (gpd)	Completion
Proposed 6,230 sf of non-residential general retail space	300	1,869	7,476	12/31/2027

	Residential flow per	Total	With 4.0	Expected
Residential	bedroom (gpd)	(gpd)	PF (gpd)	Completion
Proposed (82) 2-bedroom units	300	24600	98,400	12/31/2027
Proposed (38) 3-bedroom units	400	15200	60,800	12/31/2027
Proposed (10) 4-bedroom units	400	4000	16,000	12/31/2027
	Total Proposed (gpd) Flows =	**45,669**	182,676 (With 4.0 PF)	

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
PROFESSIONAL ENGINEER
8/18/23

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1/03/23	2ND PLAN SUBMITTAL
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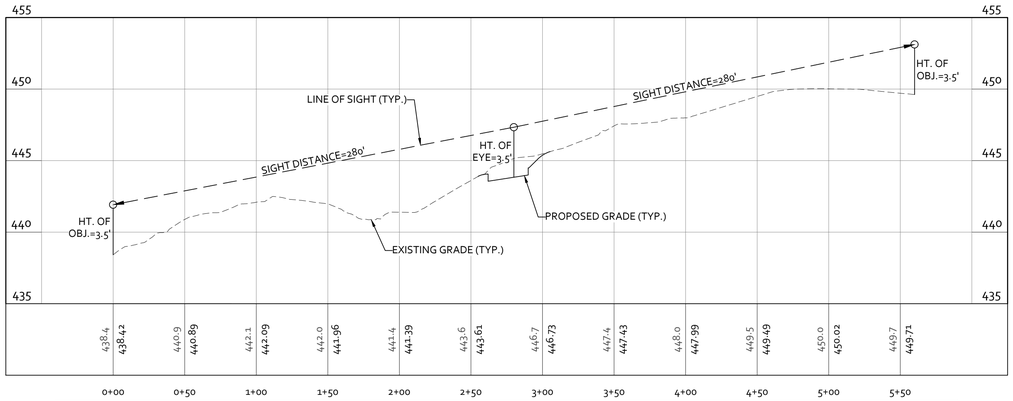
COLLINS ENGINEERING
200 GARRETT STREET, SUITE K-CHARLOTTESVILLE, VA 22902 -434.293.3719

PROJECT
BELMONT CONDOMINIUMS - FINAL SITE PLAN
SHEET
METER SIZING DATA SHEETS

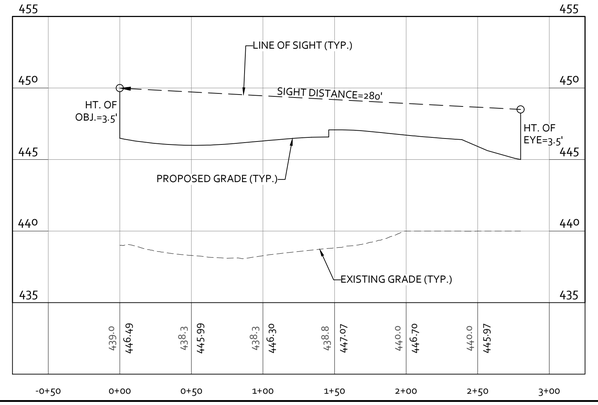
JOB NO. 202201
SCALE N/A
SHEET NO. 18

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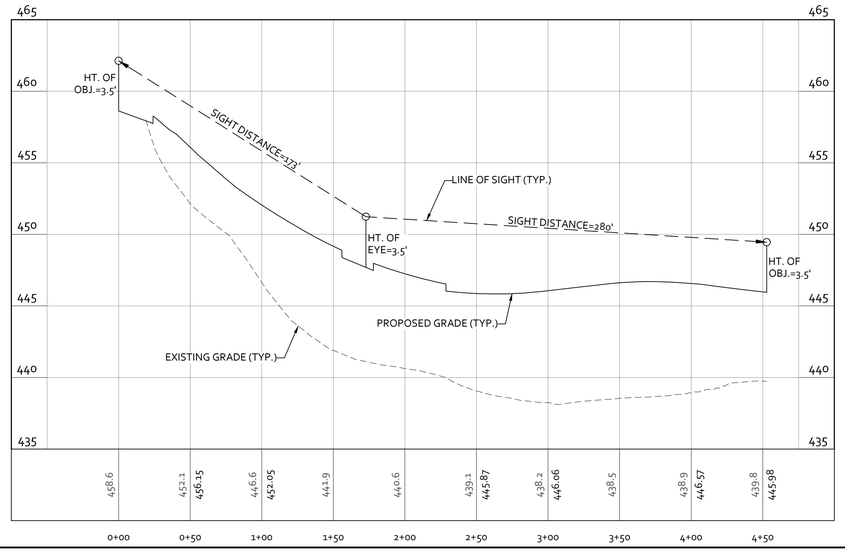
Attachment A



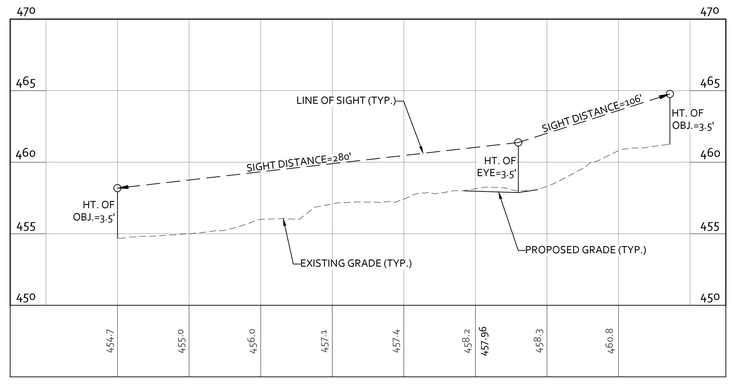
INTERSECTION OF CONIFER DRIVE & SPRUCE ST SIGHT DISTANCE PROFILE



INTERSECTION OF CONIFER DRIVE & HOLLY ST SIGHT DISTANCE PROFILE



INTERSECTION OF JUNIPERBERRY LANE & HOLLY ST SIGHT DISTANCE PROFILE



INTERSECTION OF HOLLY ST & CARLTON AVE SIGHT DISTANCE PROFILE

VERTICAL SCALE

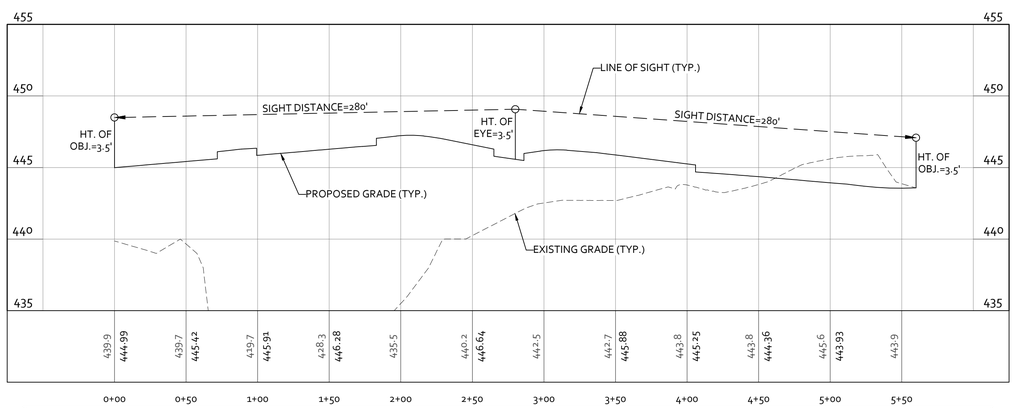
5 0 2.5 5 10 20

(IN FEET)
1 inch = 5 ft.

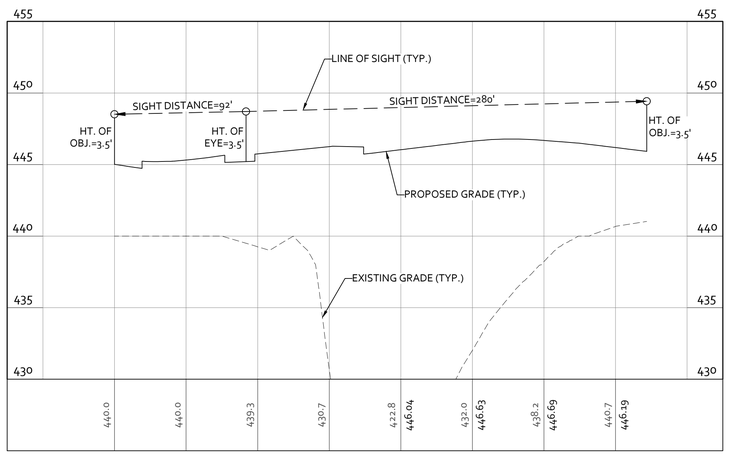
HORIZONTAL SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.



INTERSECTION OF GARDEN STREET & CONIFER DRIVE SIGHT DISTANCE PROFILE



INTERSECTION OF JUNIPERBERRY LANE & CONIFER DRIVE SIGHT DISTANCE PROFILE

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
PROFESSIONAL ENGINEER
8/18/23

REVISIONS

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PROJECT: BELMONT CONDOMINIUMS - FINAL SITE PLAN

SHEET: INTERSECTION SIGHT DISTANCE PROFILES

JOB NO. 202201

SCALE 1"=50'

SHEET NO. 19

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Attachment A

VERTICAL SCALE

5 0 2.5 5 10 20

(IN FEET)

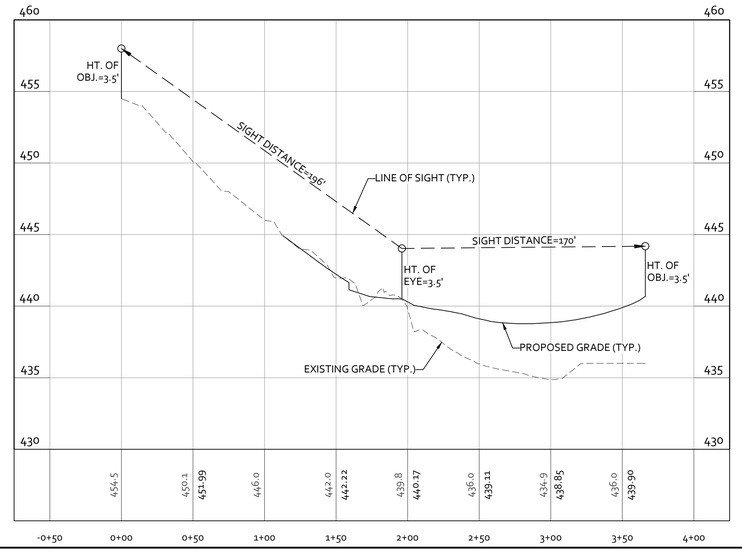
1 inch = 5 ft.

HORIZONTAL SCALE

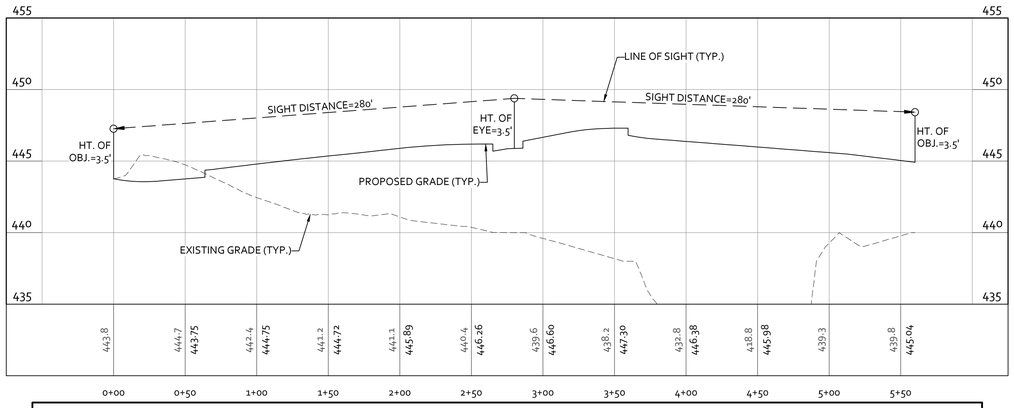
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(IN FEET)

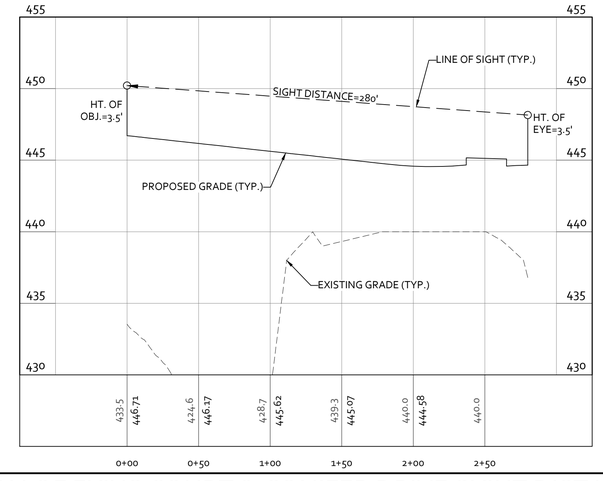
1 inch = 50 ft.



INTERSECTION OF GINKGO WAY & GARDEN ST SIGHT DISTANCE PROFILE



INTERSECTION OF BALSAM DRIVE & CONIFER DRIVE SIGHT DISTANCE PROFILE



INTERSECTION OF FICUS COURT & CONIFER DRIVE SIGHT DISTANCE PROFILE

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PROJECT: BELMONT CONDOMINIUMS - FINAL SITE PLAN

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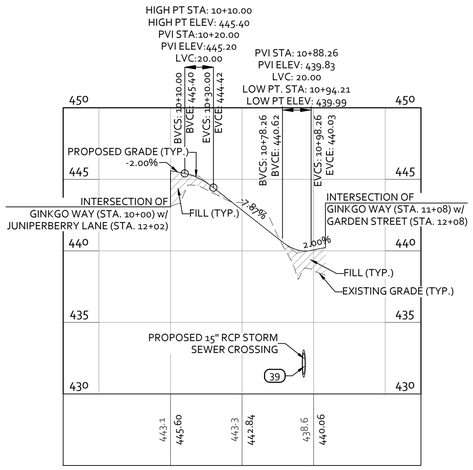
JOB NO. 202201

SCALE 1"=50'

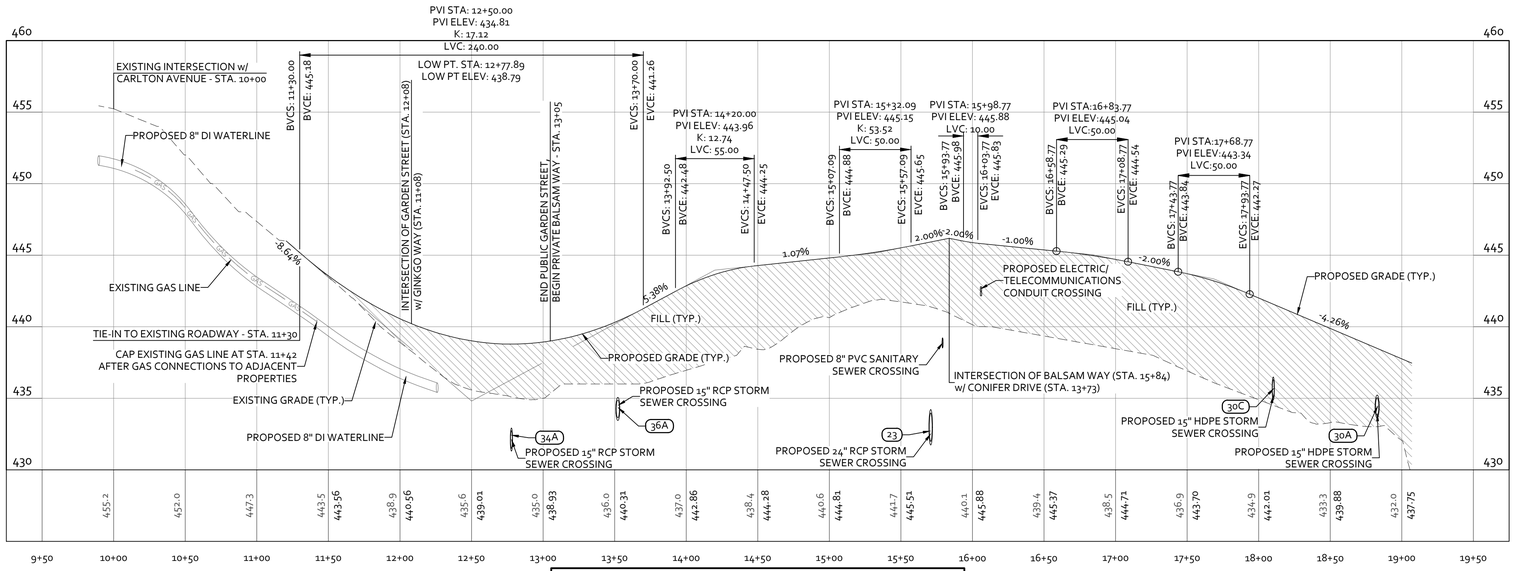
SHEET NO. 20

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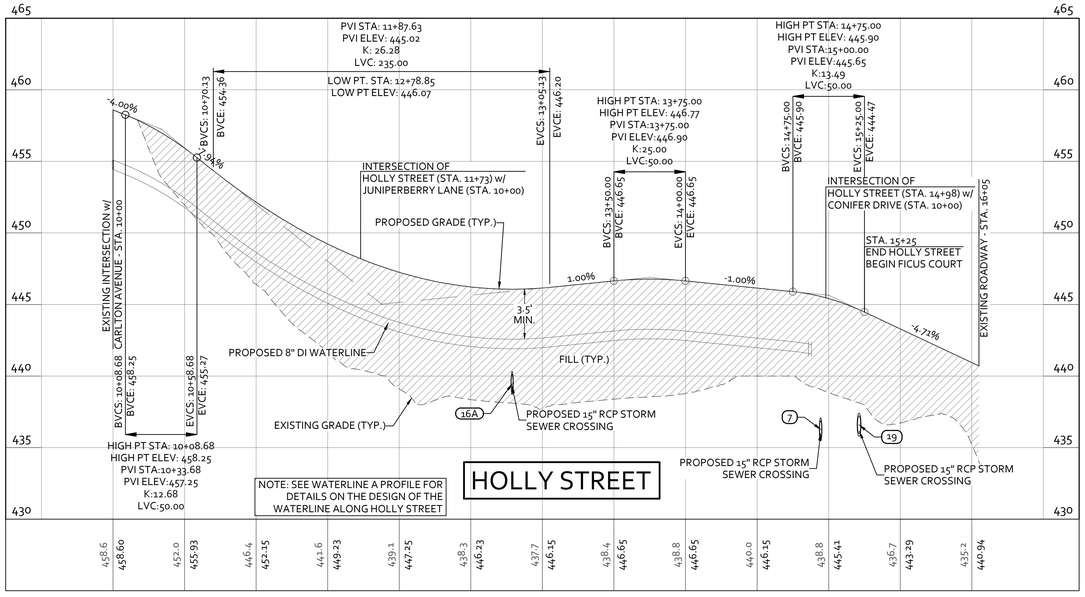
Attachment A



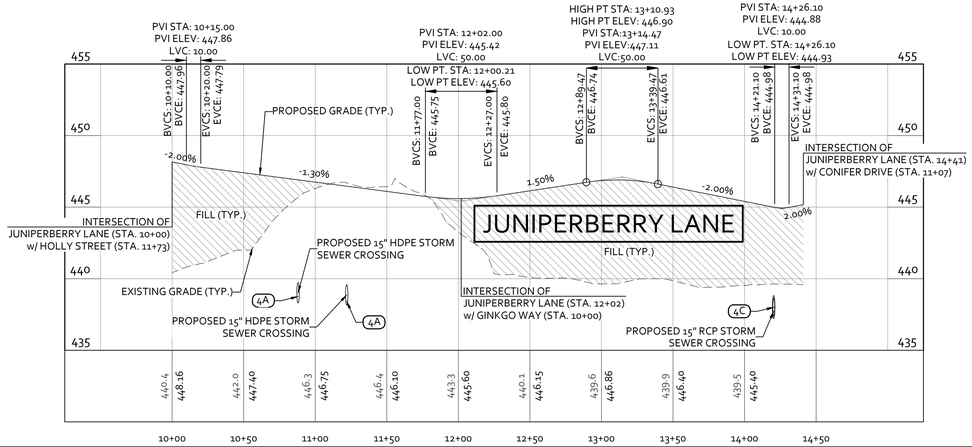
GINKGO WAY



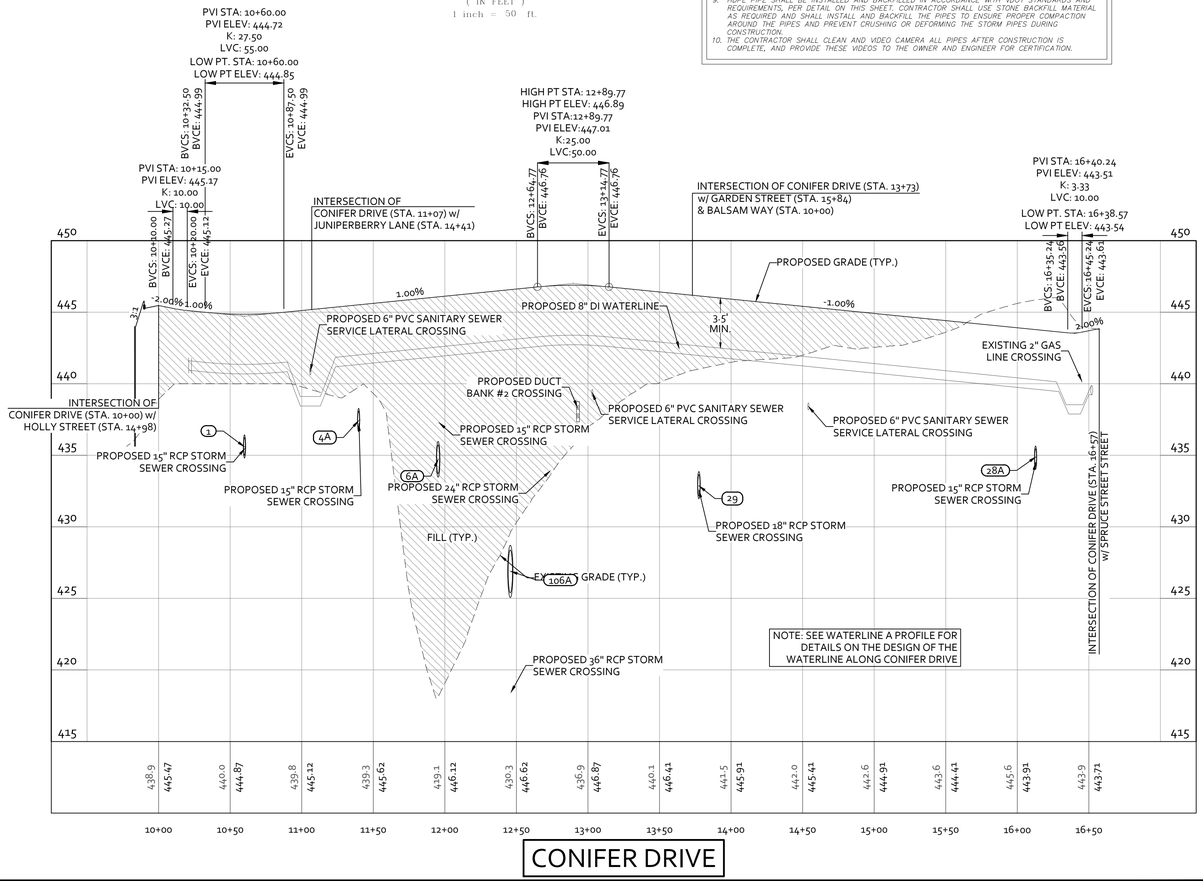
GARDEN STREET & BALSAM WAY



HOLLY STREET



JUNIPERBERRY LANE



CONIFER DRIVE

VERTICAL SCALE

5 0 2.5 5 10 20

(IN FEET)
1 inch = 5 ft.

HORIZONTAL SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

NOTES:
1. ALL ROADWAY EMBANKMENT MATERIAL SHALL CONSIST PREDOMINANTLY OF SOIL AND BE PLACED IN SUCCESSIVE UNIFORM LAYERS NOT MORE THAN 8 INCHES IN THICKNESS BEFORE COMPACTION OVER THE ENTIRE ROADBED AREA IN ACCORDANCE WITH VDOT 2016 ROAD AND BRIDGE SPECIFICATION 303.04.
2. ALL FILL MUST MEET 95% COMPACTION.
3. MINIMUM 3.5' OF COVER MUST BE MAINTAINED OVER SANITARY SEWER MAINS.
4. MINIMUM 3.5' OF COVER MUST BE MAINTAINED OVER W/L MAINS.
5. MINIMUM 1.5' OF VERTICAL SEPARATION FROM STORM SEWER & W/L AND 1.5' OF SEPARATION BETWEEN W/L & SANITARY SEWER MUST BE PROVIDED.
6. VDOT STD. IS-1 INLET SHAPING REQUIRED ON ALL STORM STRUCTURES.
7. VDOT STD SL-1 SAFETY SLAB REQUIRED WHERE DROP GREATER THAN 12' (NO SL-1 ON SANITARY MHS).
8. THE DUCTILE IRON WATERLINES SHALL BE WRAPPED IN POLYETHYLENE ENCASEMENT IF NEEDED BASED ON SOIL CONDITIONS, WHICH WILL BE TESTED AND INSPECTED DURING THE CONSTRUCTION PROCESS.
9. HDPE PIPE SHALL BE INSTALLED AND BACKFILLED IN ACCORDANCE WITH VDOT STANDARDS AND REQUIREMENTS, PER DETAIL ON THIS SHEET. CONTRACTOR SHALL USE STONE BACKFILL MATERIAL AS REQUIRED AND SHALL INSTALL AND BACKFILL THE PIPES TO ENSURE PROPER COMPACTION AROUND THE PIPES AND PREVENT CRUSHING OR DEFORMING THE STORM PIPES DURING CONSTRUCTION.
10. THE CONTRACTOR SHALL CLEAN AND VIDEO CAMERA ALL PIPES AFTER CONSTRUCTION IS COMPLETE, AND PROVIDE THESE VIDEOS TO THE OWNER AND ENGINEER FOR CERTIFICATION.

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
PROFESSIONAL ENGINEER
8/18/23

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PROJECT
BELMONT CONDOMINIUMS - FINAL SITE PLAN

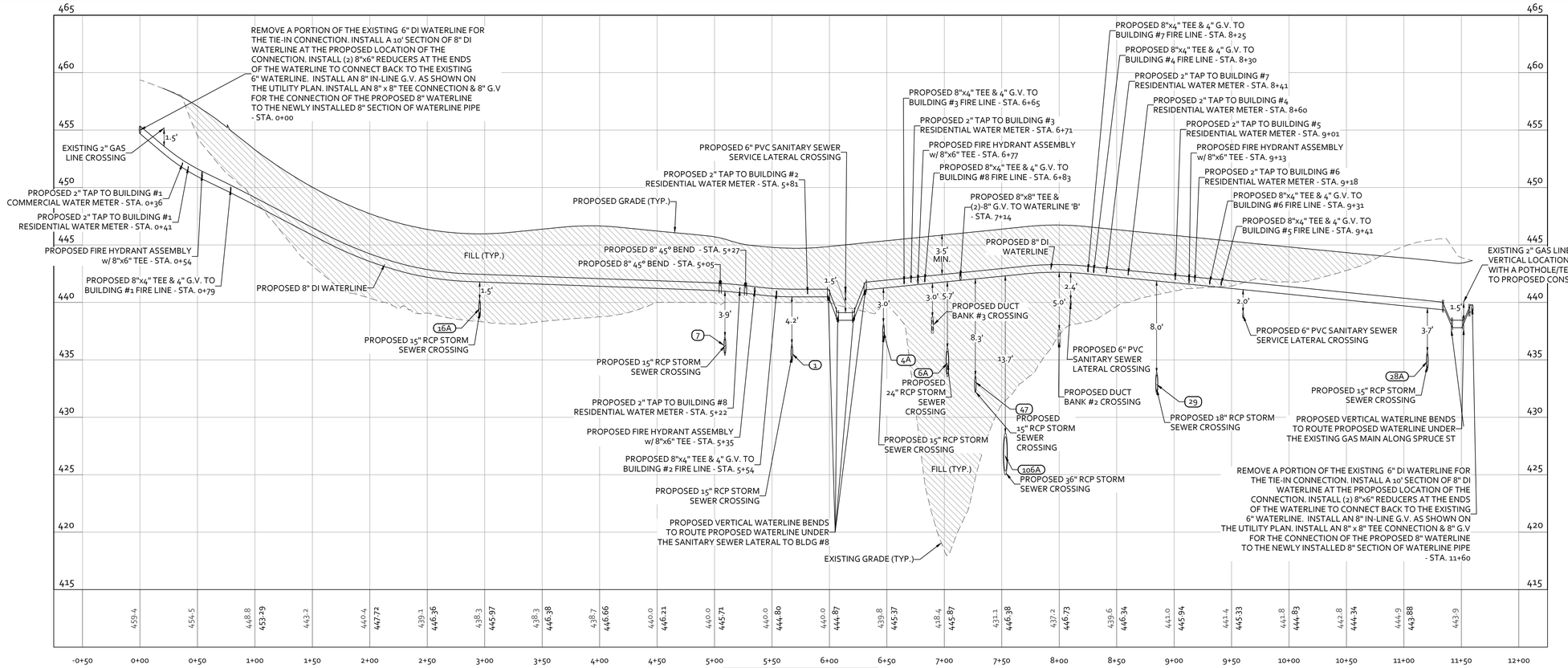
SHEET
ROAD & UTILITY PROFILES

JOB NO.
202201

SCALE
1"=50'

SHEET NO.
21

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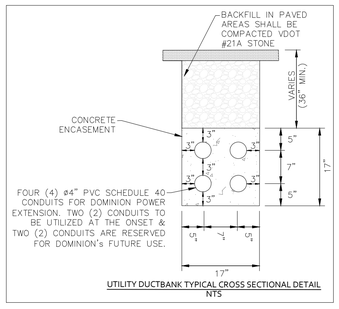


WATERLINE 'A'

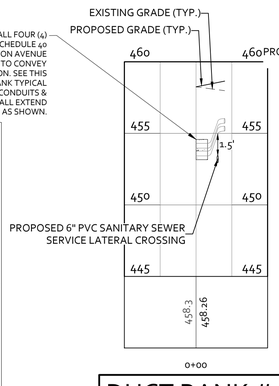
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10. THE CONTRACTOR SHALL CLEAN AND VIDEO CAMERA ALL PIPES AFTER CONSTRUCTION IS COMPLETE, AND PROVIDE THESE VIDEOS TO THE OWNER AND ENGINEER FOR CERTIFICATION.

VERTICAL SCALE
5 0 2.5 5 10 20
(IN FEET)
1 inch = 5 ft.

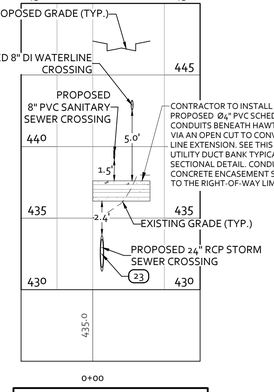
HORIZONTAL SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.



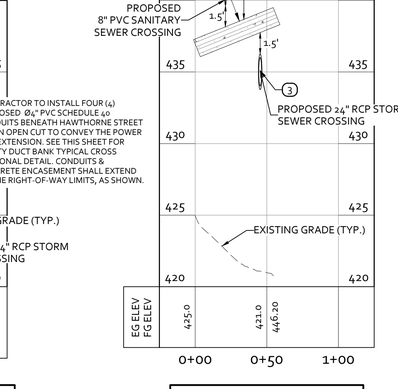
UTILITY DUCTBANK TYPICAL CROSS SECTIONAL DETAIL
NTS



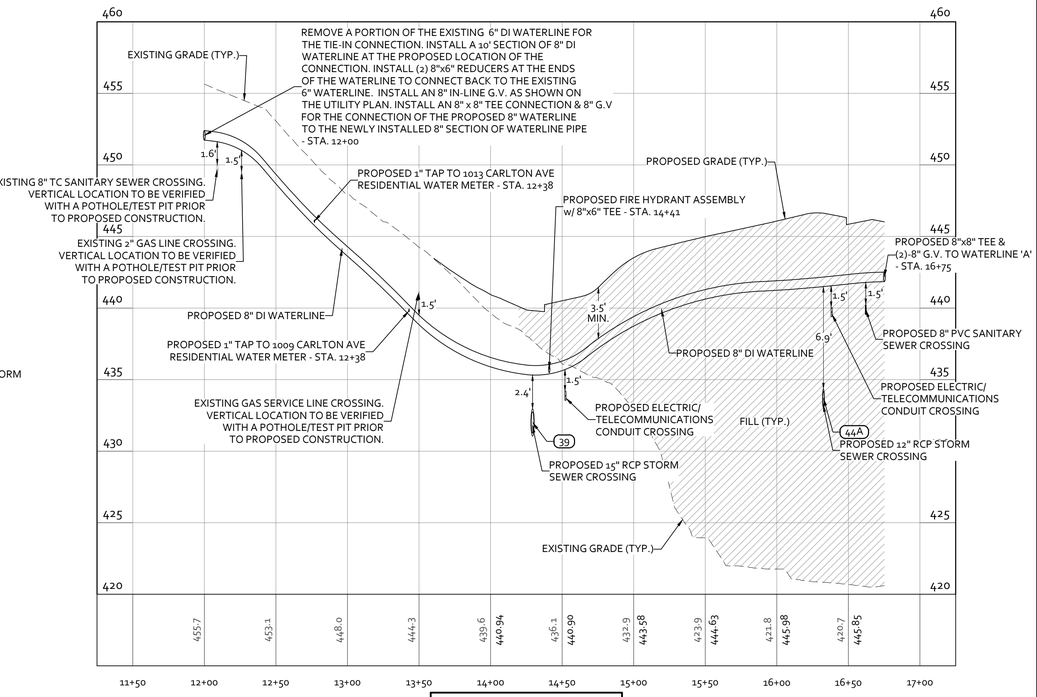
DUCT BANK #1



DUCT BANK #2



DUCT BANK #3



WATERLINE 'B'

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
PROFESSIONAL ENGINEER
8/18/23

REVISIONS

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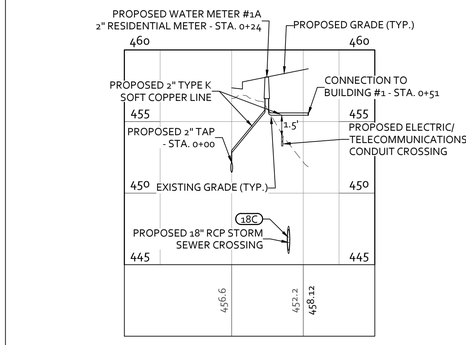
PROJECT: BELMONT CONDOMINIUMS - FINAL SITE PLAN
SHEET: ROAD & UTILITY PROFILES

JOB NO. 202201
SCALE 1"=50'
SHEET NO. 22

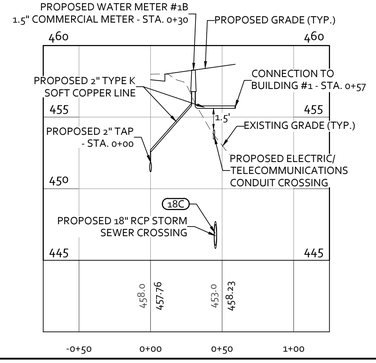
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Attachment A

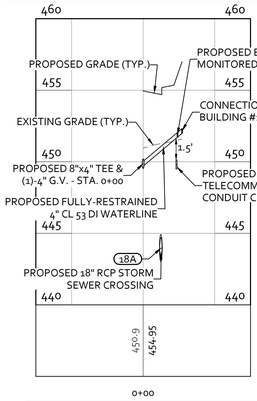
BUILDING #1 UTILITY SERVICE CONNECTIONS



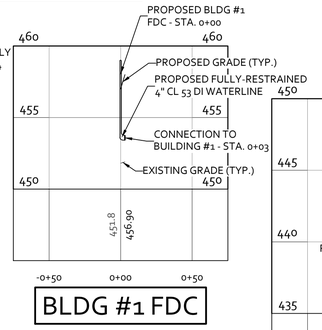
BLDG #1 RESIDENTIAL WATER METER



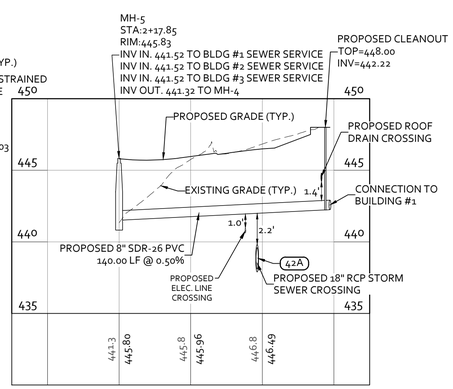
BLDG #1 COMMERCIAL WATER METER



BLDG #1 FIRE LINE

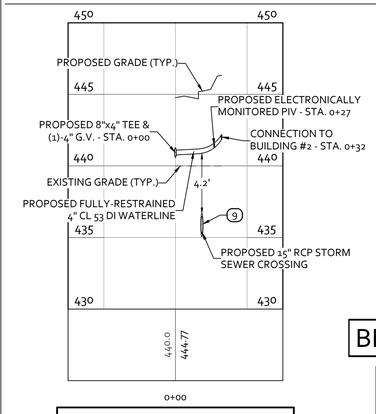


BLDG #1 FDC

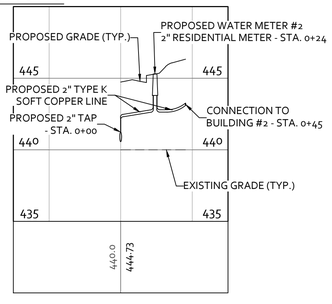


BLDG #1 SEWER SERVICE

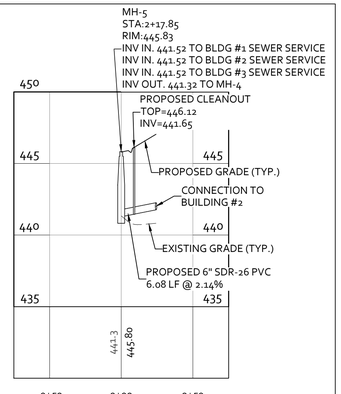
BUILDING #2 UTILITY SERVICE CONNECTIONS



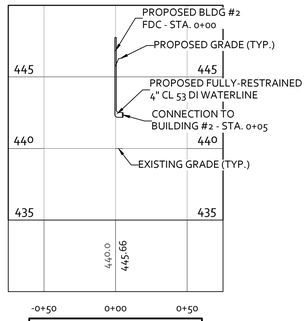
BLDG #2 FIRE LINE



BLDG #2 WATER METER



BLDG #2 SEWER SERVICE



BLDG #2 FDC

VERTICAL SCALE

5 0 2.5 5 10 20

(IN FEET)

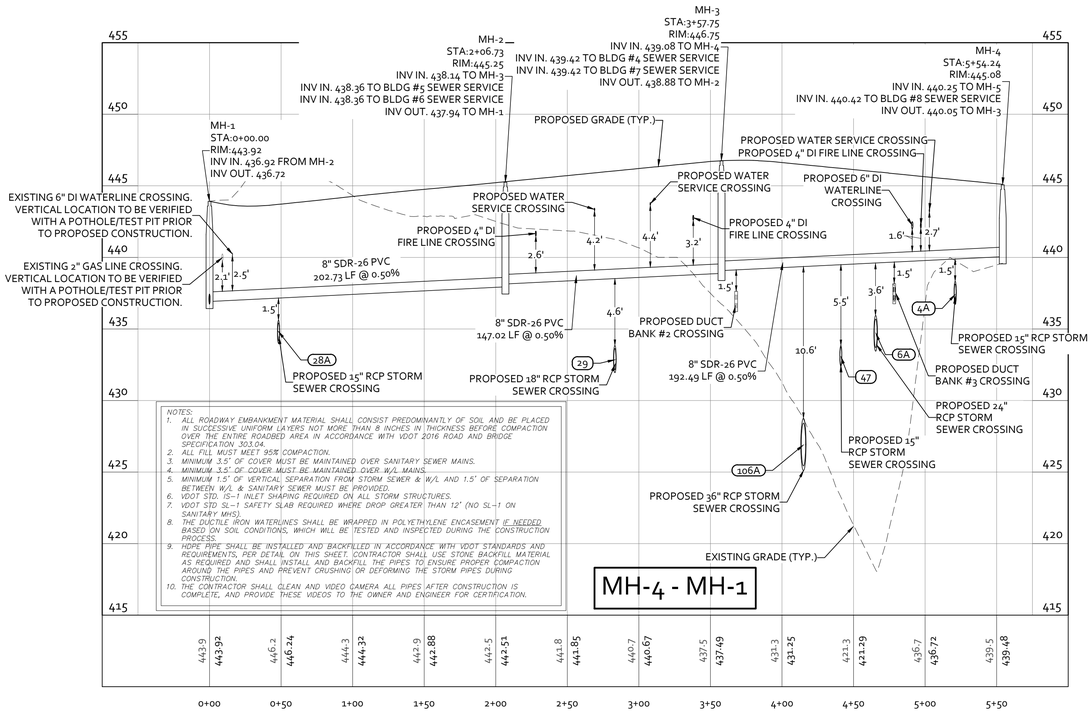
1 inch = 5 ft.

HORIZONTAL SCALE

50 0 25 50 100 200

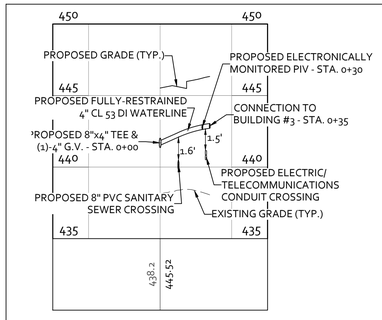
(IN FEET)

1 inch = 50 ft.

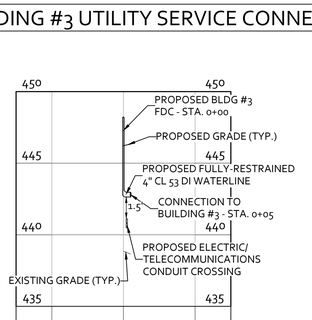


MH-4 - MH-1

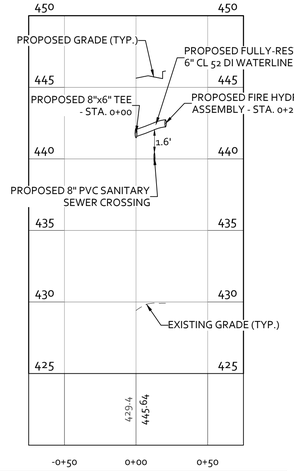
BUILDING #3 UTILITY SERVICE CONNECTIONS



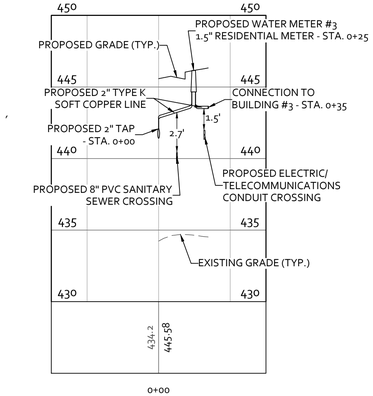
BLDG #3 FIRE LINE



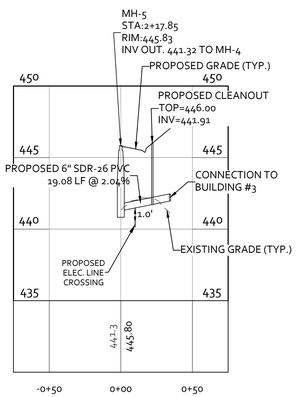
BLDG #3 FDC



BLDG #3 FIRE HYDRANT



BLDG #3 WATER METER



BLDG #3 SEWER SERVICE

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
PROFESSIONAL ENGINEER
8/18/23

REVISIONS

REVISION DESCRIPTION	DATE
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2ND PLAN SUBMITTAL	1/03/23
3RD PLAN SUBMITTAL	5/19/23
4TH PLAN SUBMITTAL	8/18/23

COLLINS ENGINEERING
200 GARRETT STREET, SUITE K-CHARLOTTESVILLE, VA 22902 -434.293.3719

BELMONT CONDOMINIUMS - FINAL SITE PLAN

UTILITY PROFILES

PROJECT

JOB NO. 202201

SCALE 1"=50'

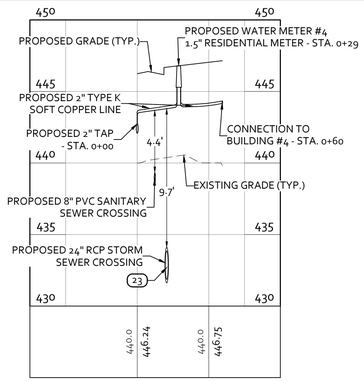
SHEET NO. 23

SHEET

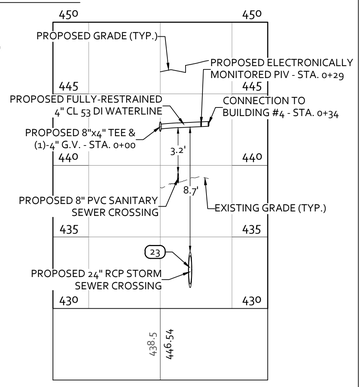
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Attachment A

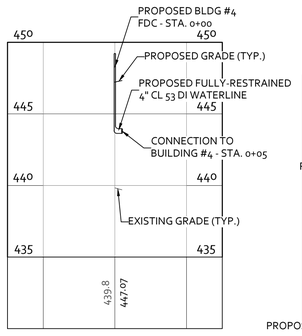
BUILDING #4 UTILITY SERVICE CONNECTIONS



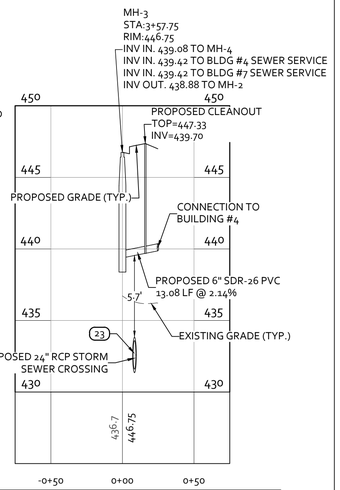
BLDG #4 WATER METER



BLDG #4 FIRE LINE

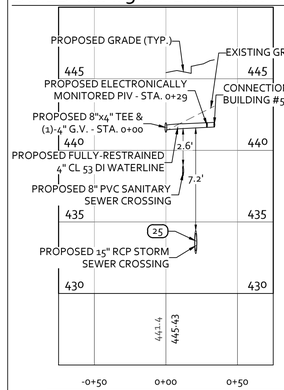


BLDG #4 FDC

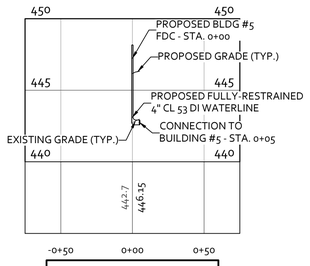


BLDG #4 SEWER SERVICE

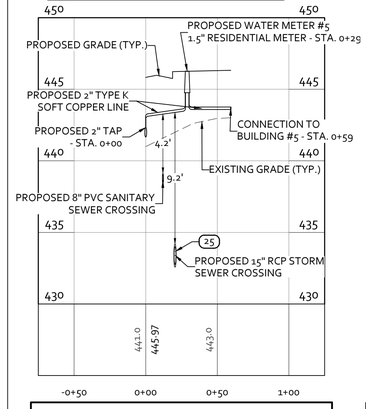
BUILDING #5 UTILITY SERVICE CONNECTIONS



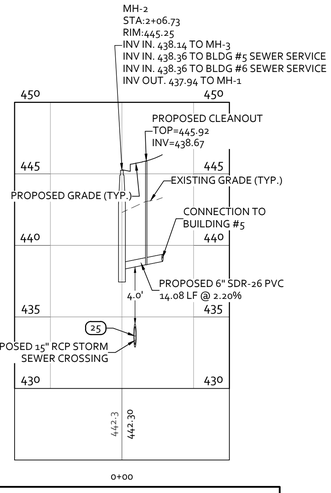
BLDG #5 FIRE LINE



BLDG #5 FDC

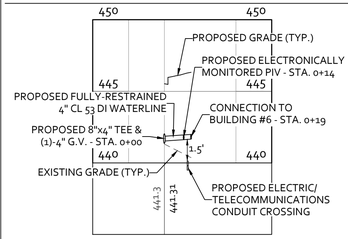


BLDG #5 WATER METER

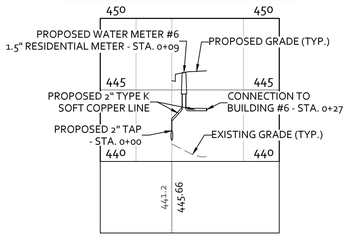


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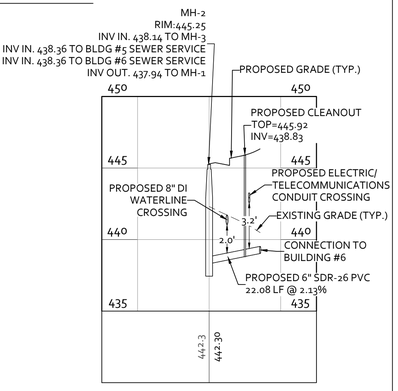
BUILDING #6 UTILITY SERVICE CONNECTIONS



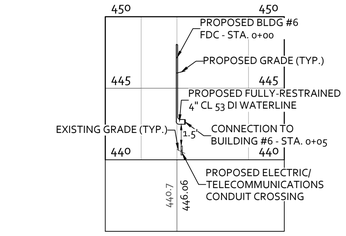
BLDG #6 FIRE LINE



BLDG #6 WATER METER

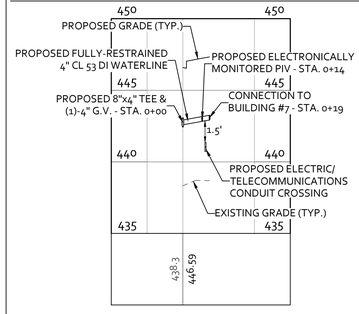


BLDG #6 SEWER SERVICE

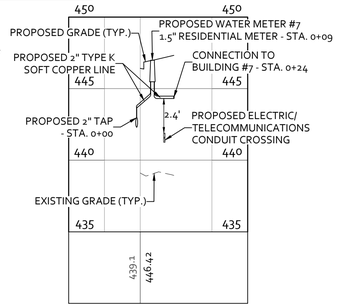


BLDG #6 FDC

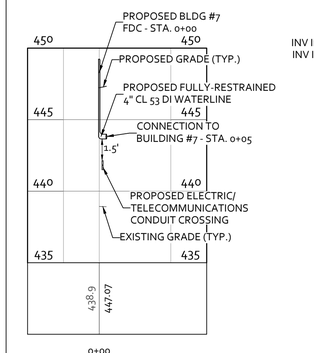
BUILDING #7 UTILITY SERVICE CONNECTIONS



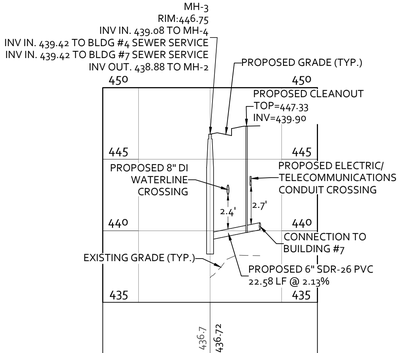
BLDG #7 FIRE LINE



BLDG #7 WATER METER

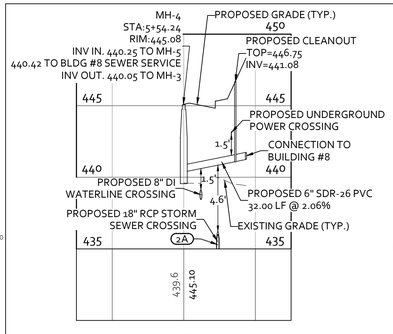


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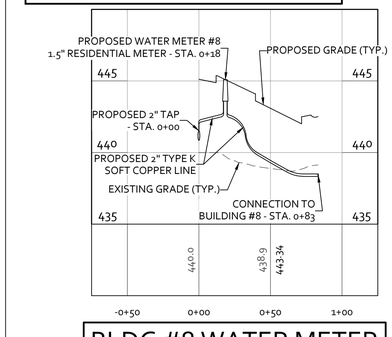


BLDG #7 SEWER SERVICE

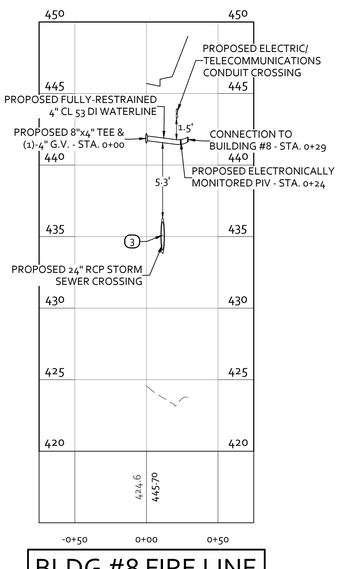
BUILDING #8 UTILITY SERVICE CONNECTIONS



BLDG #8 SEWER SERVICE



BLDG #8 WATER METER



BLDG #8 FIRE LINE

VERTICAL SCALE

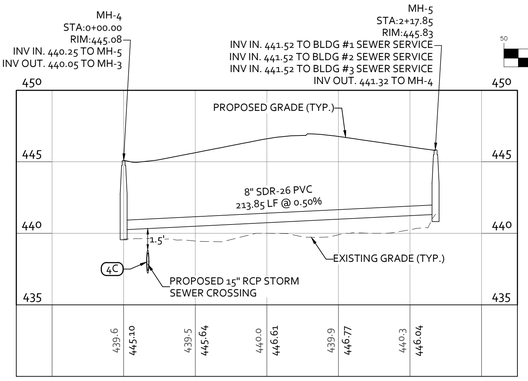
5 0 2.5 5 10 20

(IN FEET)
1 inch = 5 ft.

HORIZONTAL SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.



MH-5 - MH-4

NOTES:
1. ALL ROADWAY EMBANKMENT MATERIAL SHALL CONSIST PREDOMINANTLY OF SOIL AND BE PLACED IN SUCCESSIVE UNIFORM LAYERS NOT MORE THAN 8 INCHES IN THICKNESS BEFORE COMPACTION. OVER THE ENTIRE ROADBED AREA IN ACCORDANCE WITH VDOT 2016 ROAD AND BRIDGE SPECIFICATION 303.04.
2. ALL FILL MUST MEET 95% COMPACTION.
3. MINIMUM 3.5' OF COVER MUST BE MAINTAINED OVER SANITARY SEWER MAINS.
4. MINIMUM 3.5' OF COVER MUST BE MAINTAINED OVER W/L MAINS.
5. MINIMUM 1.5' OF VERTICAL SEPARATION FROM STORM SEWER & W/L AND 1.5' OF SEPARATION BETWEEN W/L & SANITARY SEWER MUST BE PROVIDED.
6. VDOT STD. IS--1 INLET SHAPING REQUIRED ON ALL STORM STRUCTURES.
7. VDOT STD SL--1 SAFETY SLAB REQUIRED WHERE DROP GREATER THAN 12' (NO SL--1 ON SANITARY MHS).
8. THE DUCTILE IRON WATERLINES SHALL BE WRAPPED IN POLYETHYLENE ENCASEMENT IF NEEDED BASED ON SOIL CONDITIONS, WHICH WILL BE TESTED AND INSPECTED DURING THE CONSTRUCTION PROCESS.
9. HDPE PIPE SHALL BE INSTALLED AND BACKFILLED IN ACCORDANCE WITH VDOT STANDARDS AND REQUIREMENTS, PER DETAIL ON THIS SHEET. CONTRACTOR SHALL USE STONE BACKFILL MATERIAL AS REQUIRED AND SHALL INSTALL AND BACKFILL THE PIPES TO ENSURE PROPER COMPACTION AROUND THE PIPES AND PREVENT CRUSHING OR DEFORMING THE STORM PIPES DURING CONSTRUCTION.
10. THE CONTRACTOR SHALL CLEAN AND VIDEO CAMERA ALL PIPES AFTER CONSTRUCTION IS COMPLETE, AND PROVIDE THESE VIDEOS TO THE OWNER AND ENGINEER FOR CERTIFICATION.

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
PROFESSIONAL ENGINEER
8/18/23

REVISIONS

DATE	REVISION DESCRIPTION
3/15/22	INITIAL PLAN SUBMITTAL
1/03/23	2ND PLAN SUBMITTAL
5/19/23	3RD PLAN SUBMITTAL
8/18/23	4TH PLAN SUBMITTAL

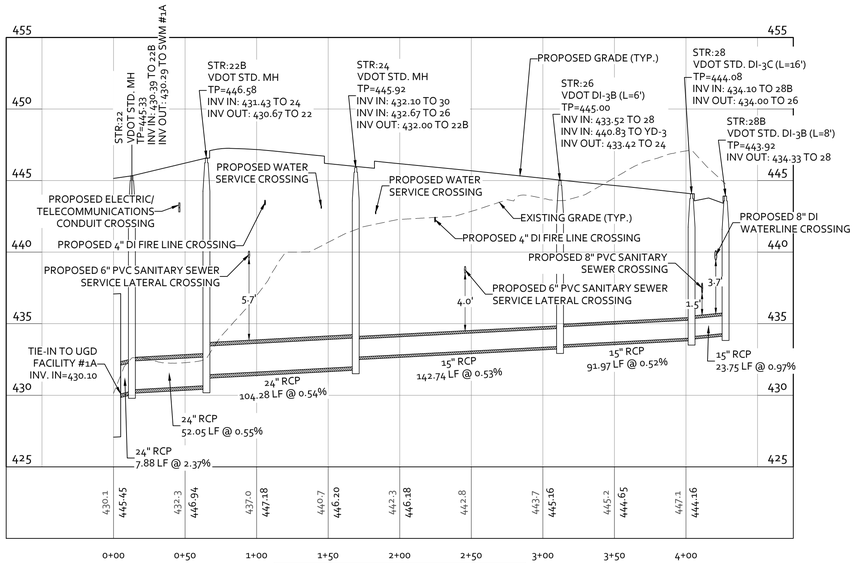
COLLINS ENGINEERING
200 GARRETT STREET, SUITE K-CHARLOTTESVILLE, VA 22902 -434.293.3719

PROJECT: BELMONT CONDOMINIUMS - FINAL SITE PLAN
SHEET: UTILITY PROFILES

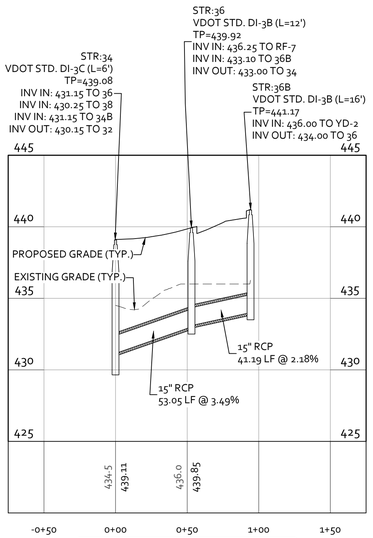
JOB NO. 202201
SCALE 1"=50'
SHEET NO. 24

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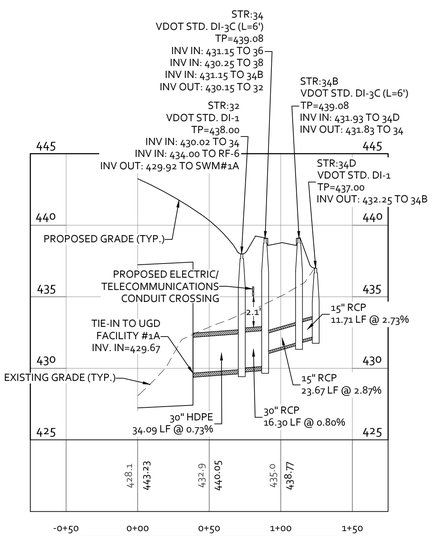
Attachment A



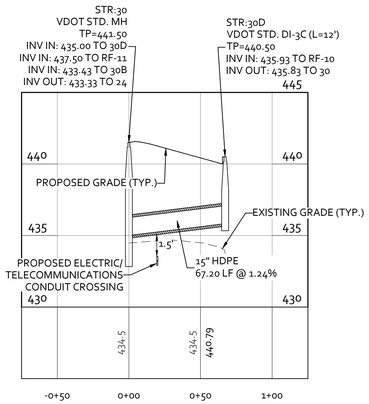
STR-28B - SWM #1A



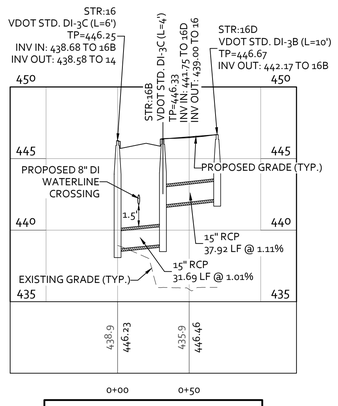
STR-36B - STR-34



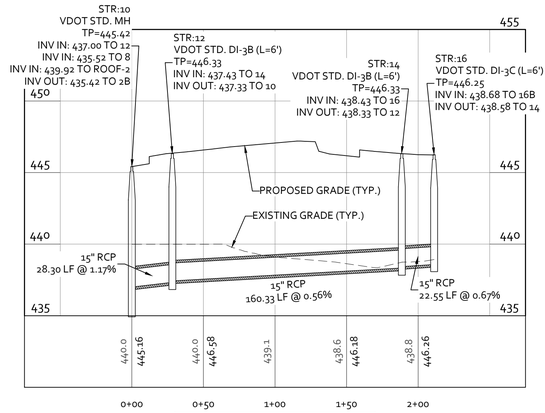
STR-34D - SWM #1A



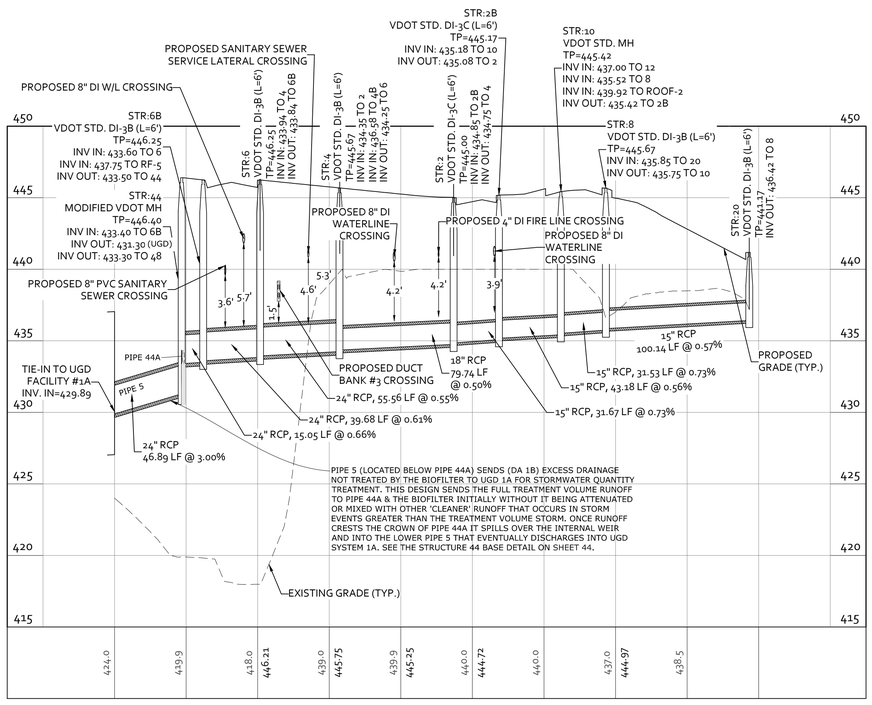
STR-30D - STR-30



STR-16D - STR-16



STR-16 - STR-10



STR-20 - UGD 1A

NOTES:
1. ALL ROADWAY EMBANKMENT MATERIAL SHALL CONSIST PREDOMINANTLY OF SOIL AND BE PLACED IN SUCCESSIVE UNIFORM LAYERS NOT MORE THAN 8 INCHES IN THICKNESS BEFORE COMPACTION OVER THE ENTIRE ROADBED AREA IN ACCORDANCE WITH VDOT 2016 ROAD AND BRIDGE SPECIFICATION 303.04.
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VERTICAL SCALE



(IN FEET)
1 inch = 5 ft.

HORIZONTAL SCALE



(IN FEET)
1 inch = 50 ft.

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
PROFESSIONAL ENGINEER
8/18/23

REVISIONS

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1/03/23	2ND PLAN SUBMITTAL
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COLLINS ENGINEERING
200 GARRETT STREET, SUITE K-CHARLOTTESVILLE, VA 22902 -434.293.3719

BELMONT CONDOMINIUMS - FINAL SITE PLAN

DRAINAGE PROFILES

PROJECT

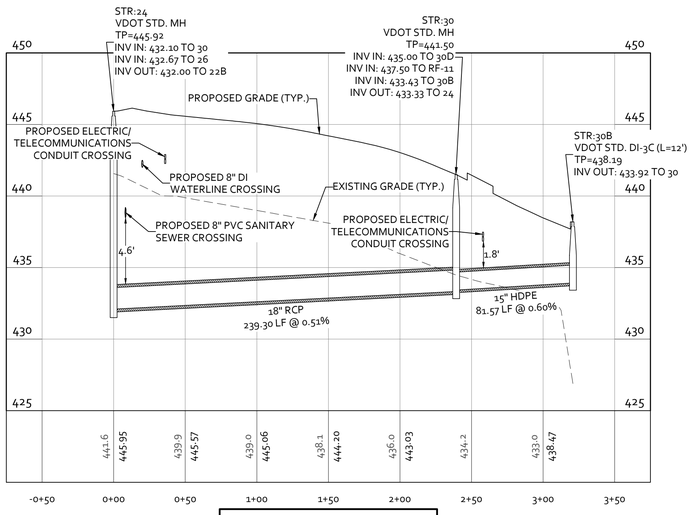
JOB NO. 202201

SCALE 1"=50'

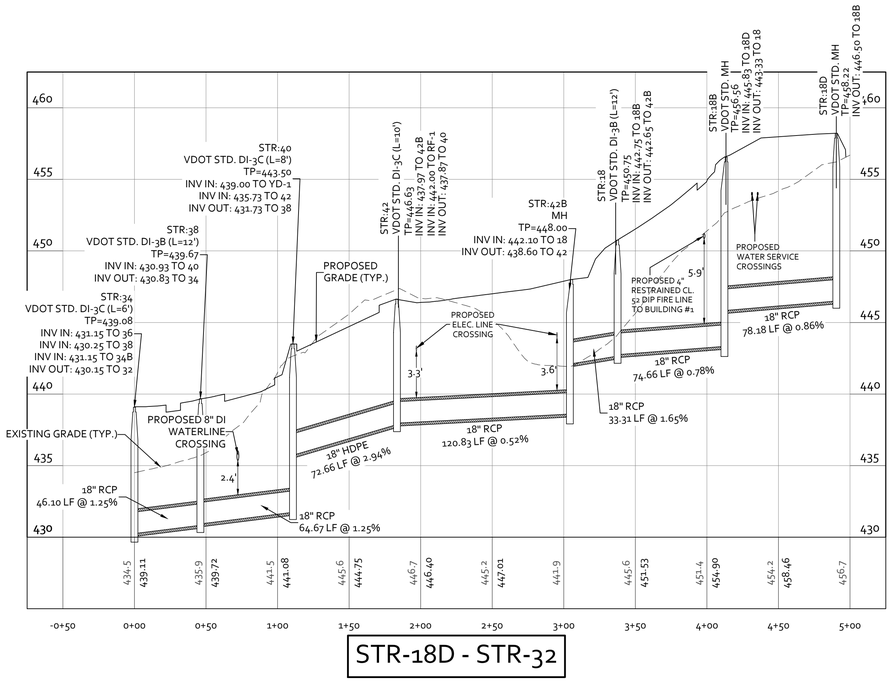
SHEET NO. 25

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Attachment A



STR-30B - STR-24



STR-18D - STR-32

NOTES:
1. ALL ROADWAY EMBANKMENT MATERIAL SHALL CONSIST PREDOMINANTLY OF SOIL AND BE PLACED IN SUCCESSIVE UNIFORM LAYERS NOT MORE THAN 8 INCHES IN THICKNESS BEFORE COMPACTION OVER THE ENTIRE ROADBED AREA IN ACCORDANCE WITH VDOT 2016 ROAD AND BRIDGE SPECIFICATION 303.04.
2. ALL FILL MUST MEET 95% COMPACTION.
3. MINIMUM 3.5' OF COVER MUST BE MAINTAINED OVER SANITARY SEWER MAINS.
4. MINIMUM 3.5' OF COVER MUST BE MAINTAINED OVER W/L MAINS.
5. MINIMUM 1.5' OF VERTICAL SEPARATION FROM STORM SEWER & W/L AND 1.5' OF SEPARATION BETWEEN W/L & SANITARY SEWER MUST BE PROVIDED.
6. VDOT STD. IS-1 INLET SHAPING REQUIRED ON ALL STORM STRUCTURES.
7. VDOT STD SL-1 SAFETY SLAB REQUIRED WHERE DROP GREATER THAN 12' (NO SL-1 ON SANITARY MHS).
8. THE DUCTILE IRON WATERLINES SHALL BE WRAPPED IN POLYETHYLENE ENCASEMENT IF NEEDED BASED ON SOIL CONDITIONS, WHICH WILL BE TESTED AND INSPECTED DURING THE CONSTRUCTION PROCESS.
9. HDPE PIPE SHALL BE INSTALLED AND BACKFILLED IN ACCORDANCE WITH VDOT STANDARDS AND REQUIREMENTS. PER DETAIL ON THIS SHEET, CONTRACTOR SHALL USE STONE BACKFILL MATERIAL AS REQUIRED AND SHALL INSTALL AND BACKFILL THE PIPES TO ENSURE PROPER COMPACTION AROUND THE PIPES AND PREVENT CRUSHING OR DEFORMING THE STORM PIPES DURING CONSTRUCTION.
10. THE CONTRACTOR SHALL CLEAN AND VIDEO CAMERA ALL PIPES AFTER CONSTRUCTION IS COMPLETE, AND PROVIDE THESE VIDEOS TO THE OWNER AND ENGINEER FOR CERTIFICATION.

VERTICAL SCALE

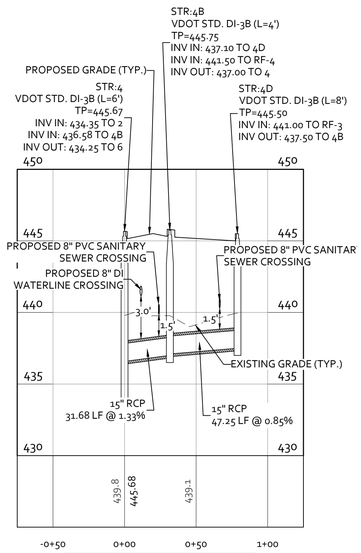


(IN FEET)
1 inch = 5 ft.

HORIZONTAL SCALE



(IN FEET)
1 inch = 50 ft.



STR-4B - STR-4

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
PROFESSIONAL ENGINEER
8/18/23

REVISIONS

DATE	REVISION DESCRIPTION
3/15/22	INITIAL PLAN SUBMITTAL
1/03/23	2ND PLAN SUBMITTAL
5/19/23	3RD PLAN SUBMITTAL
8/18/23	4TH PLAN SUBMITTAL

COLLINS ENGINEERING
200 GARRETT STREET, SUITE K-CHARLOTTESVILLE, VA 22902 -434.293.3719

PROJECT: BELMONT CONDOMINIUMS - FINAL SITE PLAN
SHEET: DRAINAGE PROFILES

JOB NO. 202201
SCALE 1"=50'
SHEET NO. 26

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Attachment A

INLETS IN SUMP, DESIGN (CURB SPREAD AND INLET SPREAD AND DEPTH)

Intensity 4.00 (Intensity = 4 in/hr for spread, and 6.5 in/hr for capacity and depth)
Mannings Coefficient, n is 0.013

Inlet			Hydrology						Curb and Gutter						Inlet			
Plan Label	VDOT DI type	L. throat length (ft)		A. Drainage area (acres)	C. rational coeff.	CA	Q. flow incr. (cfs)	Qb. carry-over (cfs)	Qt. total flow	Sl. gutter longitudinal slope (ft/ft)	Sx. lane cross slope (ft/ft)	W. gutter width (ft)	Sw. gutter cross-slope (ft/ft)	SwSx	T. spread at curb (ft)	d. flow depth (ft)	d h (height of opening, 3.5")	T. spread at inlet (ft)	Maximum allowable spread
			left	0.11	0.75	0.083	0.33	0.00	0.33	0.0010	0.0200	2.0	0.0200	1.0000	**6.75**				
			right	0.06	0.75	0.045	0.18	0.00	0.18	0.0010	0.0200	2.0	0.0200	1.0000	**5.40**				
2	3C	6.0					combined flow		0.5							0.08	0.177	4.06	Maximum allowable spread=10'
			left	0.04	0.70	0.028	0.11	0.00	0.11	0.0010	0.0200	2.0	0.0200	1.0000	**4.52**				
			right	0.05	0.70	0.035	0.14	0.00	0.14	0.0010	0.0200	2.0	0.0200	1.0000	**4.91**				
2B	3C	6.0					combined flow		0.3							0.05	0.111	2.53	Maximum allowable spread=5'
			left	0.09	0.70	0.063	0.25	0.00	0.25	0.0010	0.0200	2.0	0.0200	1.0000	**6.12**				
			right	0.02	0.70	0.014	0.06	0.00	0.06	0.0010	0.0200	2.0	0.0200	1.0000	**3.45**				
16	3C	6.0					combined flow		0.3							0.06	0.126	2.90	Maximum allowable spread=10'
			left	0.03	0.90	0.027	0.11	0.00	0.11	0.0010	0.0200	2.0	0.0200	1.0000	**4.46**				
			right	0.01	0.90	0.009	0.04	0.00	0.04	0.0010	0.0200	2.0	0.0200	1.0000	**2.55**				
16B	3C	4.0					combined flow		0.1							0.04	0.089	2.04	Maximum allowable spread=5'
			left	0.04	0.85	0.034	0.14	0.00	0.14	0.0010	0.0200	2.0	0.0200	1.0000	**4.89**				
			right	0.06	0.85	0.051	0.20	0.00	0.20	0.0010	0.0200	2.0	0.0200	1.0000	**5.86**				
20	3C	6.0					combined flow		0.3							0.06	0.135	3.09	Maximum allowable spread=10'
			left	0.09	0.60	0.054	0.22	0.00	0.22	0.0100	0.0200	2.0	0.0833	4.1650	**3.75**				
			right	0.27	0.60	0.162	0.65	0.00	0.65	0.0200	0.0200	2.0	0.0833	4.1650	**4.98**				
28	3C	10.0					combined flow		0.9							0.07	0.156	3.58	Maximum allowable spread=5'
			left	0.05	0.80	0.040	0.16	0.00	0.16	0.0252	0.0200	2.0	0.0833	4.1650	**2.82**				
			right	0.18	0.80	0.144	0.58	0.00	0.58	0.0350	0.0200	2.0	0.0833	4.1650	**4.29**				
30B	3C	12.0					combined flow		0.7							0.07	0.163	3.75	Maximum allowable spread=10'
			left	0.04	0.90	0.032	0.13	0.00	0.13	0.0150	0.0200	2.0	0.0833	4.1650	**2.95**				
			right	0.18	0.90	0.144	0.58	0.00	0.58	0.0150	0.0200	2.0	0.0833	4.1650	**5.03**				
30D	3C	12.0					combined flow		0.7							0.07	0.159	3.64	Maximum allowable spread=10'
			left	0.04	0.70	0.028	0.11	0.00	0.11	0.0010	0.0200	2.0	0.0833	4.1650	**4.52**				
			right	0.03	0.70	0.021	0.08	0.00	0.08	0.0010	0.0200	2.0	0.0833	4.1650	**4.05**				
34	3C	6.0					combined flow		0.2							0.04	0.094	2.14	Maximum allowable spread=5'
			left	0.03	0.90	0.027	0.11	0.00	0.11	0.0010	0.0200	2.0	0.0833	4.1650	**4.46**				
			right	0.02	0.90	0.018	0.07	0.00	0.07	0.0010	0.0200	2.0	0.0833	4.1650	**3.83**				
34B	3C	6.0					combined flow		0.2							0.04	0.088	2.03	Maximum allowable spread=5'
			left	0.08	0.65	0.052	0.21	0.00	0.21	0.0200	0.0200	2.0	0.0833	4.1650	**3.25**				
			right	0.10	0.65	0.065	0.26	0.00	0.26	0.0350	0.0200	2.0	0.0833	4.1650	**3.15**				
40	3C	8.0					combined flow		0.5							0.07	0.147	3.38	Maximum allowable spread=10'
			left	0.16	0.75	0.120	0.48	0.00	0.48	0.0300	0.0200	2.0	0.0833	4.1650	**4.12**				
			right	0.10	0.75	0.075	0.30	0.00	0.30	0.0150	0.0200	2.0	0.0833	4.1650	**4.04**				
42	3C	8.0					combined flow		0.8							0.09	0.207	4.75	Maximum allowable spread=10'

INLETS IN SUMP, DESIGN (CURB SPREAD AND INLET SPREAD AND DEPTH)

Intensity 6.50 (Intensity is 4 in/hr for spread, and 6.5 in/hr for capacity and depth)
Mannings Coefficient, n is 0.013

Inlet			Hydrology						Curb and Gutter						Inlet			
Plan Label	VDOT DI type	L. throat length (ft)		A. Drainage area (acres)	C. rational coeff.	CA	Q. flow incr. (cfs)	Qb. carry-over (cfs)	Qt. total flow	Sl. gutter longitudinal slope (ft/ft)	Sx. lane cross slope (ft/ft)	W. gutter width (ft)	Sw. gutter cross-slope (ft/ft)	SwSx	T. spread at curb (ft)	d. flow depth (ft)	d h (height of opening, 5.5")	T. spread at inlet (ft)	Remarks
			left	0.11	0.75	0.083	0.54	0.00	0.54	0.0010	0.0200	2.0	0.0200	1.0000	8.13				
			right	0.06	0.75	0.045	0.29	0.00	0.29	0.0010	0.0200	2.0	0.0200	1.0000	6.48				
2	3C	6.0					combined flow		0.8							0.11	0.245	**5.51**	
			left	0.04	0.70	0.028	0.18	0.00	0.18	0.0010	0.0200	2.0	0.0200	1.0000	5.43				
			right	0.05	0.70	0.035	0.23	0.00	0.23	0.0010	0.0200	2.0	0.0200	1.0000	5.88				
2B	3C	6.0					combined flow		0.4							0.07	0.153	**3.59**	
			left	0.09	0.70	0.063	0.41	0.00	0.41	0.0010	0.0200	2.0	0.0200	1.0000	7.35				
			right	0.02	0.70	0.014	0.09	0.00	0.09	0.0010	0.0200	2.0	0.0200	1.0000	4.16				
16	3C	6.0					combined flow		0.5							0.08	0.175	**4.09**	
			left	0.03	0.90	0.027	0.18	0.00	0.18	0.0010	0.0200	2.0	0.0200	1.0000	5.35				
			right	0.01	0.90	0.009	0.06	0.00	0.06	0.0010	0.0200	2.0	0.0200	1.0000	3.54				
16B	3C	4.0					combined flow		0.2							0.06	0.123	**2.82**	
			left	0.04	0.85	0.034	0.22	0.00	0.22	0.0010	0.0200	2.0	0.0200	1.0000	5.83				
			right	0.06	0.85	0.051	0.33	0.00	0.33	0.0010	0.0200	2.0	0.0200	1.0000	6.79				
20	3C	6.0					combined flow		0.6							0.09	0.187	**4.28**	
			left	0.09	0.60	0.054	0.35	0.00	0.35	0.0100	0.0200	2.0	0.0200	1.0000	4.50				
			right	0.27	0.60	0.162	1.05	0.00	1.05	0.0200	0.0200	2.0	0.0200	1.0000	5.97				
28	3C	10.0					combined flow		1.4							0.10	0.216	**4.55**	
			left	0.05	0.80	0.040	0.26	0.00	0.26	0.0252	0.0200	2.0	0.0200	1.0000	3.39				
			right	0.18	0.80	0.144	0.94	0.00	0.94	0.0350	0.0200	2.0	0.0200	1.0000	5.14				
30B	3C	12.0					combined flow		1.2							0.10	0.226	**5.18**	
			left	0.04	0.80	0.032	0.21	0.00	0.21	0.0150	0.0200	2.0	0.0200	1.0000	3.43				
			right	0.18	0.80	0.144	0.94	0.00	0.94	0.0150	0.0200	2.0	0.0200	1.0000	6.03				
30D	3C	12.0					combined flow		1.1							0.10	0.219	**5.03**	
			left	0.04	0.70	0.028	0.18	0.00	0.18	0.0010	0.0200	2.0	0.0833	4.1650	5.42				
			right	0.03	0.70	0.021	0.14	0.00	0.14	0.0010	0.0200	2.0	0.0833	4.1650	4.87				
34	3C	6.0					combined flow		0.3							0.06	0.129	**2.56**	
			left	0.03	0.90	0.027	0.18	0.00	0.18	0.0010	0.0200	2.0	0.0833	4.1650	5.35				
			right	0.02	0.90	0.018	0.12	0.00	0.12	0.0010	0.0200	2.0	0.0833	4.1650	4.59				
34B	3C	6.0					combined flow		0.3							0.06	0.122	**2.50**	
			left	0.08	0.65	0.052	0.34	0.00	0.34	0.0200	0.0200	2.0	0.0833	4.1650	3.90				
			right	0.10	0.65	0.065	0.42	0.00	0.42	0.0350	0.0200	2.0	0.0833	4.1650	3.82				
40	3C	8.0					combined flow		0.8							0.09	0.204	**4.67**	
			left	0.16	0.75	0.120	0.78	0.00	0.78	0.0300	0.0200	2.0	0.0833	4.1650	4.94				
			right	0.10	0.75	0.075	0.49	0.00	0.49	0.0150	0.0200	2.0	0.0833	4.1650	4.65				
42	3C	10.0					combined flow		1.3							0.12	0.257	**5.59**	

INLETS ON GRADE, DESIGN (CURB SPREAD AND INLET CAPTURE)

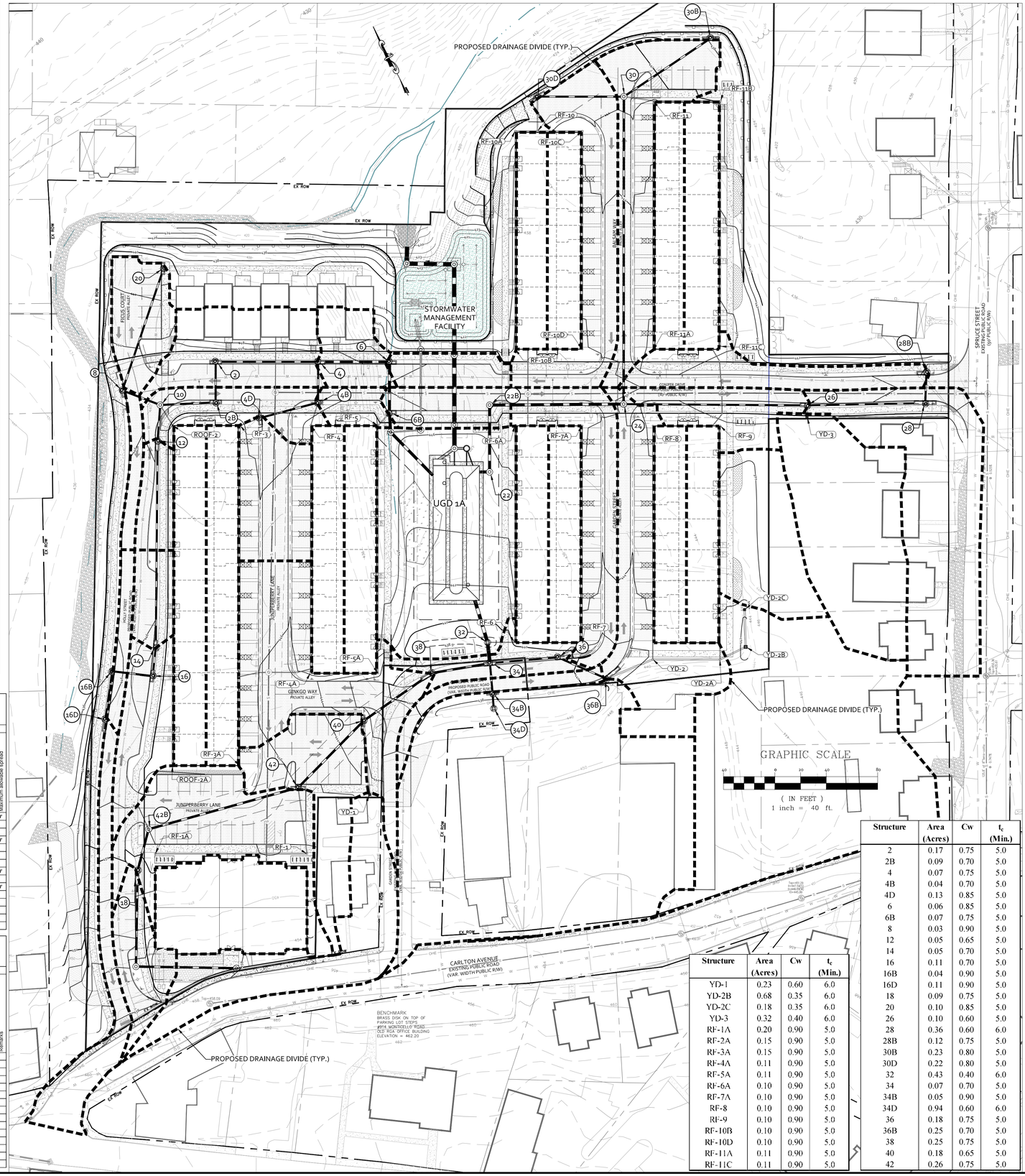
Intensity 4.00 (Intensity is 4 in/hr for spread, and 6.5 in/hr for capacity and depth)
Mannings Coefficient, n is 0.013

Inlet			Hydrology					Curb and Gutter							Inlet							
Plan Label	VDOT DI type	L. throat length (ft)	A. Drainage area (acres)	C. rational coeff.	CA	Q. flow incr. (cfs)	Qb. carry-over (cfs)	Qt. total flow	S. gutter longitudinal slope (ft/ft)	Sx. lane cross slope (ft/ft)	W. gutter width (ft)	Sw. gutter cross-slope (ft/ft)	SwSx	T. spread at curb (ft)	Es. frontal flow ratio in gutter W	a. 12W(Sw-Sx)+2*local depr. (in)	Sw = a/(12W)	Se = Sx+kSw(Ex)	Lt. require throat length (ft)	L / Lt	E. inlet efficiency	Qi. flow intercepted	Qb. carry-over	carry-over to inlet	Maximum allowable spread
4	3B	**8.0**	0.07	0.75	0.053	0.21	0.00	0.21	0.0100	0.0200	2.0	0.0200	1.0000	**3.71**	0.87	2.0000	0.0833	0.0925	4.13	1.94	1.00	0.21	0.00		Maximum allowable spread=10'
4B	3B	**4.0**	0.04	0.70	0.028	0.11	0.00	0.11	0.0100	0.0200	2.0	0.0200	1.0000	**2.93**	0.94	2.0000	0.0833	0.0983	3.05	1.31	1.00	0.11	0.00		Maximum allowable spread=5'
4D	3B	**8.0**	0.13	0.85	0.111	0.44	0.00	0.44	0.0100	0.0200	2.0	0.0200	1.0000	**4.91**	0.76	2.0000	0.0833	0.0833	6.00	1.33	1.00	0.44	0.00		Maximum allowable spread=5'
6	3B	**6.0**	0.06	0.85	0.051	0.20	0.00	0.20	0.0100	0.0200	2.0	0.0200	1.0000	**3.67**	0.86	2.0000	0.0833	0.0917	4.10	1.46	1.00	0.20	0.00		Maximum allowable spread=10'
6B	3B	**6.0**	0.07	0.75	0.053	0.21	0.00	0.21	0.0100	0.0200	2.0	0.0200	1.0000	**3.71**	0.86	2.0000	0.0833	0.0917	4.15	1.45	1.00	0.21	0.00		Maximum allowable spread=5'
8	3B	**6.0**	0.03	0.90	0.027	0.11	0.00	0.11	0.0300	0.0200	2.0	0.0200	1.0000	**2.36**	0.99	2.0000	0.0833	0.1025	4.08	1.47	1.00	0.11	0.00		Maximum allowable spread=5'
12	3B	**6.0**	0.05	0.65	0.033	0.13	0.00	0.13	0.0100	0.0200	2.0	0.0200	1.0000	**3.10**	0.93	2.0000	0.0833	0.0975	3.27	1.84	1.00	0.13	0.00		Maximum allowable spread=5'
14	3B	**6.0**	0.05	0.70	0.035	0.14	0.00	0.14	0.0100	0.0200	2.0	0.0200	1.0000	**3.19**	0.92	2.0000	0.0833	0.0967	3.39	1.77	1.00	0.14	0.00		Maximum allowable spread=10'
16D	3B	**10.0**	0.11	0.90	0.099	0.40	0.00	0.40	0.0150	0.0200	2.0	0.0200	1.0000	**4.37**	0.80	2.0000	0.0833	0.0867	6.32	1.58	1.00	0.40	0.00		Maximum allowable spread=5'
18	3B	**12.0**	0.09	0.75	0.068	0.27	0.00	0.27	0.0864	0.0200	2.0	0.0200	1.0000	**2.72**	0.96	2.0000	0.0833	0.1000	8.36	1.44	1.00	0.27	0.00		Maximum allowable spread=10'
26	3B	**6.0**	0.10	0.60	0.060	0.24	0.00	0.24	0.0100	0.0200	2.0	0.0200	1.0000	**3.91**	0.85	2.0000	0.0833	0.0998	4.41	1.36	1.00	0.24	0.00		Maximum allowable spread=5'
28B	3B	**8.0**	0.12	0.75	0.090	0.36	0.00	0.36	0.0100	0.0200	2.0	0.0200	1.0000	**4.55**	0.78	2.0000	0.0833	0.0850	5.44	1.47	1.00	0.36	0.00		Maximum allowable spread=5'
36	3B	**12.0**	0.18	0.75	0.135	0.54	0.00	0.54	0.0363	0.0200	2.0	0.0833	4.1650	**4.16**	0.83	3.5192	0.1466	0.1417	6.99	1.72	1.00	0.54	0.00		Maximum allowable spread=5'
36B	3B	**16.0**	0.25	0.70	0.175	0.70	0.00	0.70	0.0486	0.0200	2.0	0.0833	4.1650	**4.34**	0.80	3.5192	0.1466	0.1373	8.67	1.84	1.00	0.70	0.00		Maximum allowable spread=5'
38	3B	**12.0**	0.25	0.75	0.188	0.75	0.00	0.75	0.0275	0.0200	2.0	0.0833	4.1650	**4.95**	0.75	3.5192	0.1466	0.1300	7.78	1.54	1.00	0.75	0.00		Maximum allowable spread=5'

INLETS ON GRADE, DESIGN (CURB SPREAD AND INLET CAPTURE)

Intensity 6.50 (Intensity is 4 in/hr for spread, and 6.5 in/hr for capacity and depth)
Mannings Coefficient, n is 0.013

Inlet			Hydrology					Curb and Gutter							Inlet							
Plan Label	VDOT DI type	L. throat length (ft)	A. Drainage area (acres)	C. rational coeff.	CA	Q. flow incr. (cfs)	Qb. carry-over (cfs)	Qt. total flow	S. gutter longitudinal slope (ft/ft)	Sx. lane cross slope (ft/ft)	W. gutter width (ft)	Sw. gutter cross-slope (ft/ft)	SwSx	T. spread at curb (ft)	Es. frontal flow ratio in gutter W	a. 12W(Sw-Sx)+2*local depr. (in)	Sw = a/(12W)	Se = Sx+kSw(Ex)	Lt. require throat length (ft)	L / Lt	E. inlet efficiency	Qi. flow intercepted	Qb. carry-over	carry-over to inlet	Remarks
4	3B	**6.0**	0.07	0.75	0.053	0.34	0.00	0.34	0.0100	0.0200	2.0	0.0200	1.0000	4.46	0.79	2.0000	0.0833	0.0858	**5.29**	1.13	1.00	0.34	0.00		
4B	3B	**4.0**	0.04	0.70	0.028	0.18	0.00	0.18	0.0100	0.0200	2.0	0.0200	1.0000	3.52	0.88	2.0000	0.0833	0.0933	**3.86**	1.04	1.00	0.18	0.00		
4D	3B	**8.0**	0.13	0.85	0.111	0.72	0.00	0.72	0.0100	0.0200	2.0	0.0200	1.0000	5.89	0.67	2.0000	0.0833	0.0758	**7.79**	1.03	1.00	0.72	0.00		
6	3B	**6.0**	0.06	0.85	0.051	0.33	0.00	0.33	0.0100	0.0200	2.0	0.0200	1.0000	4.41	0.79	2.0000	0.0833	0.0858	**5.23**	1.15	1.00	0.33	0.00		
6B	3B	**6.0**	0.07	0.75	0.053	0.34	0.00	0.34	0.0100	0.0200	2.0	0.0200	1.0000	4.46	0.79	2.0000	0.0833	0.0858	**5.29**	1.13	1.00	0.34	0.00		
8	3B	**6.0**	0.03	0.90	0.027	0.18	0.00	0.18	0.0300	0.0200	2.0	0.0200	1.0000	2.83	0.95	2.0000	0.0833	0.0992	**5.10**	1.18	1.00	0.18	0.00		
12	3B	**6.0**	0.05	0.65	0.033	0.21	0.00	0.21	0.0100	0.0200	2.0	0.0200	1.0000	3.72	0.87	2.0000	0.0833	0.0925	**4.14**	1.45	1.00	0.21	0.00		
14	3B	**6.0**	0.05	0.70	0.035	0.23	0.00	0.23	0.0100	0.0200	2.0	0.0200	1.0000	3.83	0.85	2.0000	0.0833	0.0908	**4.31**	1.39	1.00	0.23	0.00		
16D	3B	**10.0**	0.11	0.90	0.099	0.64	0.00	0.64	0.0150	0.0200	2.0	0.0200	1.0000	5.24	0.72	2.0000	0.0833	0.0800	**8.14**	1.23	1.00	0.64	0.00		
18	3B	**12.0**	0.09	0.75	0.068	0.44	0.00	0.44	0.0864	0.0200	2.0	0.0200	1.0000	3.27	0.91	2.0000	0.0833	0.0958	**10.51**	1.14	1.00	0.44	0.00		
26	3B	**6.0**	0.10	0.60	0.060	0.39	0.00	0.39	0.0100	0.0200	2.0	0.0200	1.0000	4.68	0.77	2.0000	0.0833	0.0842	**5.66**	1.06	1.00	0.39	0.00		
28B	3B	**8.0**	0.12	0.75	0.090	0.59	0.00	0.59	0.0100	0.0200	2.0	0.0200	1.0000	5.45	0.71	2.0000	0.0833	0.0792	**6.96**	1.15	1.00	0.59	0.00		
36	3B	**12.0**	0.18	0.75	0.135	0.88	0.00	0.88	0.0363	0.0200	2.0	0.0200	1.0000	4.99	0.75	2.0000	0.0833	0.0825	**11.86**	1.01	1.00	0.88	0.00		
36B	3B	**16.0**	0.25	0.70	0.175	1.14	0.00	1.14	0.0486	0.0200	2.0	0.0200	1.0000	5.20	0.72	2.0000	0.0833	0.0800	**14.70**	1.09	1.00	1.14	0.00		
38	3B	**12.0**	0.25	0.75	0.188	1.22	0.00	1.22	0.0275	0.0200	2.0	0.0833	4.1650	5.94	0.67	3.5192	0.1466	0.1182	**10.09**	1.19	1.00	1.22	0.00		



Structure	Area (Acres)	Cw	t_c (Min.)
2	0.17	0.75	5.0
2B	0.09	0.70	5.0
4	0.07	0.75	5.0
4B	0.04	0.70	5.0
4D	0.13	0.85	5.0
6	0.06	0.85	5.0
6B	0.07	0.75	5.0
8	0.03	0.90	5.0
12	0.05	0.65	5.0
14	0.05	0.70	5.0
16	0.11	0.70	5.0
16B	0.04	0.90	5.0
16D	0.11	0.90	5.0
18	0.09	0.75	5.0
20	0.10	0.85	5.0
26	0.10	0.60	5.0
28	0.36	0.60	6.0
28B	0.12	0.75	5.0
30B	0.23	0.80	5.0
30D	0.22	0.80	5.0
32	0.43	0.40	6.0
34	0.07	0.70	5.0
34B	0.05	0.90	5.0
34D	0.94	0.60	6.0
36	0.18	0.75	5.0
36B	0.25	0.70	5.0
38	0.25	0.75	5.0
40	0.18	0.65	5.0
42	0.26	0.75	5.0

Structure	Area (Acres)	Cw	t_c (Min.)
YD-1	0.23	0.60	6.0
YD-2B	0.68	0.35	6.0
YD-2C	0.18	0.35	6.0
YD-3	0.32	0.40	6.0
RF-1A	0.20	0.90	5.0
RF-2A	0.15	0.90	5.0
RF-3A	0.15	0.90	5.0
RF-4A	0.11	0.90	5.0
RF-5A	0.11	0.90	5.0
RF-6A	0.10	0.90	5.0
RF-7A	0.10	0.90	5.0
RF-8	0.10	0.90	5.0
RF-9	0.10	0.90	5.0
RF-10B	0.10	0.90	5.0
RF-10D	0.10	0.90	5.0
RF-11A	0.11	0.90	5.0
RF-11C	0.11	0.90	5.0

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
PROFESSIONAL ENGINEER
8/18/23

REVISIONS

DATE	REVISION DESCRIPTION
3/15/22	INITIAL PLAN SUBMITTAL
1/03/23	2ND PLAN SUBMITTAL
5/19/23	3RD PLAN SUBMITTAL
8/18/23	4TH PLAN SUBMITTAL

COLLINS ENGINEERING
200 GARRETT STREET, SUITE K-CHARLOTTESVILLE, VA 22902 -434.293.3719

BELMONT CONDOMINIUMS - FINAL SITE PLAN
DRAINAGE MAP & CALCULATIONS

PROJECT / SHEET

JOB NO. 202201
SCALE 1"=40'
SHEET NO. 27

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Attachment A

Design Year: **100** Project: Belmont Apartments Job #: 202201 Prepared by: AML, PE

INLET STATION	OUTLET WATER / SURFACE ELEV	t_{co}	D_x	Q_x / ZW	S_{fo}	H_f	JUNCTION LOSS V_e	H_e	Q_{IN}	V_{IN}	$Q_{IN}*V_{IN}$	$V_e^2/2g$	H_i	ANGLE	H_x	H_t	1.3H_t	5H_t	FINAL H	INLET WATER SURFACE ELEV.	RIM ELEV
	436.43	46.10	18	13.18	0.016	0.73	7.5	0.2													
38									11.7	6.6	77.74	0.7	0.24	25	0.15	0.61	NA	0.30	1.03	**437.46**	**439.67**
	437.46	64.67	18	11.72	0.012	0.81	6.6	0.2													
40									9.7	5.5	53.77	0.5	0.17	10	0.00	0.34	NA	0.17	0.97	**438.43**	**443.50**
	438.43	72.66	18	9.75	0.007	0.53	5.5	0.1													
42									8.3	4.7	39.32	0.3	0.12	30	0.10	0.34	NA	0.17	0.70	**439.13**	**446.50**
	439.17	120.83	18	8.34	0.006	0.76	4.7	0.1													
42B									8.3	4.7	39.32	0.3	0.12	60	0.19	0.40	N/A	0.20	0.96	**440.13**	**448.00**
	443.30	33.31	18	8.34	0.006	0.21	4.7	0.1													
18									7.9	4.5	35.57	0.3	0.11	14	0.00	0.20	NA	0.10	0.31	**443.61**	**450.58**
	443.95	74.66	18	7.93	0.006	0.43	4.5	0.1													
18B									7.9	4.5	35.57	0.3	0.11	90	0.22	0.41	N/A	0.20	0.63	**444.58**	**456.79**
	447.03	78.18	18	7.93	0.006	0.45	4.5	0.1													
18D													0.00	105	0.00	0.08	N/A	0.04	0.48	**447.51**	**458.22**
	436.43	53.05	15	4.93	0.006	0.31	4.0	0.1													
36									3.9	3.1	12.15	0.2	0.05	29	0.03	0.15	NA	0.08	0.38	**436.82**	**439.92**
	436.82	41.19	15	3.86	0.004	0.15	3.1	0.0													
36B									2.5	6.4	15.82	0.6	0.22	0	0.00	0.26	NA	0.13	0.28	**437.09**	**441.17**
	435.91	34.09	30	25.21	0.003	0.11	5.1	0.1													
32									23.1	4.7	109.2	0.3	0.12	10	0.00	0.22	NA	0.11	0.28	**436.19**	**438.00**
	436.19	16.30	30	23.15	0.003	0.05	4.7	0.1													
34									13.2	7.5	98.25	0.9	0.30	2	0.00	0.39	NA	0.19	0.25	**436.43**	**439.08**
	436.43	23.67	15	5.06	0.006	0.15	4.1	0.1													
34B									4.7	3.8	17.92	0.2	0.08	0	0.00	0.15	NA	0.07	0.22	**436.65**	**439.08**
	436.65	11.71	15	4.69	0.005	0.06	3.8	0.1													
34D													0.00	0	0.00	0.06	NA	0.03	0.15	**436.80**	**437.00**
	436.56	67.20	15	1.54	0.000	0.03	1.3	0.0													
30D													0.00	0	0.00	0.01	NA	0.00	0.04	**436.59**	**440.50**
	436.19	239.30	18	3.10	0.001	0.21	1.8	0.0													
30									1.5	4.9	7.601	0.4	0.13	56	0.18	0.32	N/A	0.16	0.37	**436.56**	**441.50**
	436.56	81.57	15	1.61	0.001	0.04	1.3	0.0													
30B													0.00	0	0.00	0.01	NA	0.00	0.05	**436.61**	**438.19**
	435.91	7.88	24	6.79	0.001	0.01	2.2	0.0													
22									6.8	2.2	14.66	0.1	0.03	90	0.05	0.09	N/A	0.05	0.05	**435.96**	**445.33**
	435.96	52.05	24	6.79	0.001	0.05	2.2	0.0													
22B									6.8	2.2	14.66	0.1	0.03	90	0.05	0.09	N/A	0.05	0.09	**436.06**	**446.58**
	436.06	104.28	24	6.79	0.001	0.09	2.2	0.0													
24									4.0	3.3	13.24	0.2	0.06	1	0.00	0.08	N/A	0.04	0.13	**436.19**	**445.92**
	436.19	142.74	15	4.03	0.004	0.56	3.3	0.0													
26									1.1	5.2	5.521	0.4	0.15	1	0.00	0.19	NA	0.09	0.65	**436.84**	**445.00**
	436.84	91.97	15	2.54	0.002	0.14	2.1	0.0													
28									0.8	0.6	0.507	0.0	0.00	87	0.00	0.02	NA	0.01	0.15	**436.99**	**444.08**
	436.99	23.75	15	0.79	0.000	0.00	0.6	0.0													
28B													0.00	0	0.00	0.00	NA	0.00	0.00	**437.00**	**443.92**
	439.68	31.69	15	1.17	0.000	0.01	1.0	0.0													
16B									0.9	0.7	0.613	0.0	0.00	89	0.01	0.01	NA	0.01	0.02	**439.70**	**446.33**
	442.75	37.92	15	0.87	0.000	0.01	0.7	0.0													
16D													0.00	0	0.00	0.00	NA	0.00	0.01	**442.76**	**446.67**
	438.00	28.30	15	2.31	0.001	0.04	1.9	0.0													
12									2.1	1.7	3.655	0.0	0.02	1	0.00	0.03	NA	0.01	0.05	**438.05**	**446.33**
	438.43	160.33	15	2.12	0.001	0.17	1.7	0.0													
14									1.8	1.5	2.72	0.0	0.01	5	0.00	0.02	NA	0.01	0.18	**438.61**	**446.33**
	439.43	22.55	15	1.83	0.001	0.02	1.5	0.0													
16									1.2	4.0	4.635	0.2	0.08	90	0.17	0.26	NA	0.13	0.15	**439.58**	**446.25**
	437.58	31.68	15	3.23	0.003	0.08	2.6	0.0													
4B									2.2	1.8	3.771	0.0	0.02	75	0.03	0.07	NA	0.04	0.12	**437.70**	**445.75**
	438.10	47.25	15	2.15	0.001	0.05	1.8	0.0													
4D													0.00	0	0.00	0.01	NA	0.01	0.06	**438.16**	**445.50**
	435.91	46.89	24	8.75	0.001	0.07	2.8	0.0													
44									8.7	2.8	24.31	0.1	0.04	139	0.08	0.16	NA	0.08	0.15	**436.06**	**446.40**
	436.06	15.05	24	8.74	0.001	0.02	2.8	0.0													
6B									8.4	2.7	22.3	0.1	0.04	177	0.08	0.15	NA	0.07	0.10	**436.15**	**446.25**
	436.15	39.68	24	8.37	0.001	0.05	2.7	0.0													
6									8.0	2.6	20.54	0.1	0.04	90	0.07	0.13	NA	0.07	0.12	**436.28**	**446.25**
	436.28	55.56	24	8.03	0.001	0.07	2.6	0.0													
4									3.2	5.9	18.93	0.5	0.19	0	0.00	0.21	NA	0.11	0.18	**436.45**	**445.67**
	436.45	79.74	18	4.71	0.002	0.16	2.7	0.0													
2									3.7	3.0	11.14	0.1	0.05	90	0.10	0.18	NA	0.09	0.25	**436.70**	**445.00**
	436.70	31.67	15	3.70	0.003	0.10	3.0	0.0													
2B									3.2	2.6	8.405	0.1	0.04	87	0.07	0.14	NA	0.07	0.18	**436.87**	**445.17**
	436.87	43.18	15	3.21	0.002	0.11	2.6	0.0													
10									2.3	5.1	11.72	0.4	0.14	24	0.06	0.23	N/A	0.12	0.22	**437.10**	**445.42**
	437.10	31.53	15	0.95	0.000	0.01	0.8	0.0													
8									0.7	0.6	0.452	0.0	0.00	88	0.00	0.01	NA	0.00	0.01	**437.11**	**445.67**
	437.11	100.14	15	0.74	0.000	0.01	0.6	0.0													
20													0.00	0	0.00	0.00	NA	0.00	0.01	**437.12**	**441.17**

Design Year: **10** Project: Belmont Apartments Job #: 202201 Prepared by: AML, PE

INLET STATION	OUTLET WATER / SURFACE ELEV	t_{co}	D_x	Q_x / ZW	S_{fo}	H_f	JUNCTION LOSS V_e	H_e	Q_{IN}	V_{IN}	$Q_{IN}*V_{IN}$	$V_e^2/2g$	H_i	ANGLE	H_x	H_t	1.3H_t	5H_t	FINAL H	INLET WATER SURFACE ELEV.	RIM ELEV
	436.35	46.10	18	11.19	0.011	0.52	6.3	0.2													
38									10.1	5.7	57.6	0.5	0.18	25	0.11	0.44	NA	0.22	0.75	**437.10**	**439.67**
	437.10	64.67	18	10.09	0.009	0.60	5.7	0.1													
40									8.6	4.9	41.6	0.4	0.13	10	0.00	0.25	NA	0.13	0.72	**437.82**	**443.50**
	437.82	72.66	18	8.58	0.006	0.41	4.9	0.1													
42									6.3	3.6	22.8	0.2	0.07	30	0.06	0.22	NA	0.11	0.52	**438.34**	**446.50**
	439.17	120.83	18	6.34	0.004	0.44	3.6	0.1													
42B									6.3	3.6	22.8	0.2	0.07	60	0.11	0.23	N/A	0.12	0.56	**439.73**	**448.00**
	443.30	33.31	18	6.34	0.004	0.12	3.6	0.1													
18									6.0	3.4	20.6	0.2	0.06	14	0.00	0.11	NA	0.06	0.18	**443.48**	**450.58**
	443.95	74.66	18	6.03	0.003	0.25	3.4	0.0													
18B									6.0	3.4	20.6	0.2	0.06	90	0.13	0.24	N/A	0.12	0.36	**444.31**	**456.79**
	447.03	78.18	18	6.03	0.003	0.26	3.4	0.0													
18D													0.00	105	0.00	0.05	N/A	0.02	0.28	**447.31**	**458.22**
	436.35	53.05	15	5.44	0.007	0.38	4.4	0.1													
36									4.1	3.3	13.5	0.2	0.06	29	0.04	0.17	NA	0.09	0.46	**436.81**	**439.92**
	436.81	41.19	15	4.07	0.004	0.16	3.3	0.0													
36B									3.0	6.7	20	0.7	0.24	0	0.00	0.29	NA	0.14	0.31	**437.12**	**441.17**
	435.91	34.09	30	22.04	0.002	0.08	4.5	0.1													
32									20.5	4.2	85.4	0.3	0.09	10	0.00	0.17	NA	0.09	0.21	**436.12**	**438.00**
	436.12	16.30	30	20.47	0.002	0.04	4.2	0.1													
34									11.2	7.6	84.7	0.9	0.31	2	0.00	0.38	NA	0.19	0.23	**436.35**	**439.08**
	436.35	23.67	15	3.86	0.004	0.08	3.1	0.0													
34B									3.6	2.9	10.4	0.1	0.05	0	0.00	0.08	NA	0.04	0.13	**436.48**	**439.08**
	436.48	11.71	15	3.58	0.003	0.04	2.9	0.0													
34D													0.00	0	0.00	0.03	NA	0.02	0.09	**436.57**	**437.00**
	436.98	67.20	15	2.37	0.001	0.08	1.9	0.0													
30D													0.00	0	0.00	0.01	NA	0.01	0.08	**437.07**	**440.50**
	436.27	239.30	18	4.83	0.002	0.51	2.7	0.0													
30									2.4	5.5	13.1	0.5	0.16	56	0.22	0.42	N/A	0.21	0.71	**436.98**	**441.50**
	436.98	81.57	15	1.23	0.000	0.03	1.0	0.0													
30B													0.00	0	0.00	0.00	NA	0.00	0.03	**437.01**	**438.19**
	435.91	7.88	24	7.47	0.001	0.01	2.4	0.0													
22									7.5	2.4	17.8	0.1	0.03	90	0.06	0.11	N/A	0.06	0.07	**435.98**	**445.33**
	435.98	52.05	24	7.47	0.001	0.06	2.4	0.0													
22B									7.5	2.4	17.8	0.1	0.03	90	0.06	0.11	N/A	0.06	0.11	**436.09**	**446.58**
	436.09	104.28	24	7.47	0.001	0.11	2.4	0.0													
24									4.8	4.5	21.7	0.3	0.11	1	0.00	0.13	N/A	0.07	0.18	**436.27**	**445.92**
	436.27	142.74	15	3.08	0.002	0.32	2.5	0.0													
26									0.8	4.8	3.89	0.4	0.12	1	0.00	0.15	NA	0.07	0.40	**436.67**	**445.00**
	436.67	91.97	15	1.94	0.001	0.08	1.6	0.0													
28									0.6	0.5	0.29	0.0	0.00	87	0.00	0.01	NA	0.01	0.09	**436.76**	**444.08**
	436.76	23.75	15	0.60	0.000	0.00	0.5	0.0													
28B													0.00	0	0.00	0.00	NA	0.00	0.00	**436.76**	**443.92**
	439.68	31.69	15	0.89	0.000	0.01	0.7	0.0													
16B									0.7	0.5	0.35	0.0	0.00	89	0.00	0.01	NA	0.00	0.01	**439.69**	**446.33**
	442.75	37.92	15	0.66	0.000	0.00	0.5	0.0													
16D													0.00	0	0.00	0.00	NA	0.00	0.00	**442.75**	**446.67**
	438.00	28.30	15	1.76	0.001	0.02	1.4	0.0													
12									1.6	1.3	2.12	0.0	0.01	1	0.00	0.02	NA	0.01	0.03	**438.03**	**446.33**
	438.43	160.33	15	1.61	0.001	0.10	1.3	0.0													
14									1.4	1.1	1.58	0.0	0.01	5	0.00	0.01	NA	0.01	0.11	**438.54**	**446.33**
	439.43	22.55	15	1.39	0.000	0.01	1.1	0.0													
16									0.9	3.7	3.31	0.2	0.07	90	0.15	0.23	NA	0.11	0.12	**439.55**	**446.25**
	437.58	31.68	15	2.46	0.001	0.05	2.0	0.0													
4B									1.6	1.3	2.18	0.0	0.01	75	0.02	0.04	NA	0.02	0.07	**437.65**	**445.75**
	438.10	47.25	15	1.64	0.001	0.03	1.3	0.0													
4D													0.00	0	0.00	0.01	NA	0.00	0.03	**438.13**	**445.50**
	435.91	46.89	24	7.50	0.001	0.05	2.4	0.0													
44									7.5	2.4	17.9	0.1	0.03	139	0.06	0.12	NA	0.06	0.11	**436.02**	**446.40**
	436.02	15.05	24	7.50	0.001	0.02	2.4	0.0													
6B									7.2	2.3	16.6	0.1	0.03	177	0.06	0.11	NA	0.05	0.07	**436.09**	**446.25**
	436.09	39.68	24	7.22	0.001	0.04	2.3	0.0													
6									7.0	2.2	15.5	0.1	0.03	90	0.05	0.10	NA	0.05	0.09	**436.18**	**446.25**
	436.18	55.56	24	6.97	0.001	0.05	2.2	0.0													
4									2.5	5.4	13.3	0.5	0.16	0	0.00	0.18	NA	0.09	0.14	**436.32**	**445.67**
	436.32	79.74	18	4.44	0.002	0.14	2.5	0.0													
2									3.7	3.0	11	0.1	0.05	90	0.10	0.17	NA	0.09	0.23	**436.55**	**445.00**
	436.55	31.67	15	3.67	0.003	0.10	3.0	0.0													
2B									3.3	2.7	8.87	0.1	0.04	87	0.07	0.15	NA	0.07	0.18	**436.73**	**445.17**
	436.73	43.18	15	3.30	0.003	0.11	2.7	0.0													
10									1.8	4.7	8.32	0.3	0.12	24	0.0555	0.21	N/A	0.10	0.22	**436.94**	**445.42**
	436.94	31.53	15	0.72	0.000	0.00	0.6	0.0													
8									0.6	0.5	0.26	0.0	0.00	88	0.0022	0.00	NA	0.00	0.01	**436.95**	**445.67**
	436.95	100.14	15	0.57	0.000	0.01	0.5	0.0													
20													0.00	0	0	0.00	NA	0.00	0.01	**436.96**	**441.17**

STRUCTURE				DRAINAGE					
INLET	TYPE	AREA (FT^2)	PERIMETER (FT)	A (ACRES)	C	I (IN/HR)	Q (CFS)	D (IN)	FLOW TYPE
32	DI-1	2.33	10.00	0.43	0.40	4.00	0.69	1.0	WEIR FLOW
32	DI-1	2.33	10.00	0.43	0.40	6.50	1.12	1.3	WEIR FLOW
32	DI-1 - 50% clogged	1.17	5.00	0.43	0.40	4.00	0.69	1.5	WEIR FLOW
32	DI-1 - 50% clogged	1.17	5.00	0.43	0.40	6.50	1.12	2.1	WEIR FLOW
34D	DI-1	2.33	10.00	0.94	0.60	4.00	2.26	2.1	WEIR FLOW
34D	DI-1	2.33	10.00	0.94	0.60	6.50	3.67	3.0	WEIR FLOW
34D	DI-1 - 50% clogged	1.17	5.00	0.94	0.60	4.00	2.26	3.4	WEIR FLOW
34D	DI-1 - 50% clogged	1.17	5.00	0.94	0.60	6.50	3.67	4.1	ORIFICE FLOW

STRUCTURE				DRAINAGE					
INLET	TYPE	AREA (FT^2)	PERIMETER (FT)	A (ACRES)	C	I (IN/HR)	Q (CFS)	D (IN)	FLOW TYPE
YD-1	18" Nyloplast Yard Inlet	0.64	5.40	0.23	0.60	4.00	0.552	**1.26**	WEIR FLOW
YD-1	18" Nyloplast Yard Inlet	0.64	5.40	0.23	0.60	6.50	0.897	**1.74**	WEIR FLOW
YD-1	18" Nyloplast Yard Inlet - 50% clogged	0.32	2.70	0.23	0.60	4.00	0.552	**2.00**	WEIR FLOW
YD-1	18" Nyloplast Yard Inlet - 50% clogged	0.32	2.70	0.23	0.60	6.50	0.897	**3.26**	WEIR FLOW
YD-2B	24" Nyloplast Yard Inlet	1.11	6.51	0.68	0.35	4.00	0.952	**1.60**	WEIR FLOW
YD-2B	24" Nyloplast Yard Inlet	1.11	6.51	0.68	0.35	6.50	1.547	**2.21**	WEIR FLOW
YD-2B	24" Nyloplast Yard Inlet - 50% clogged	0.56	3.26	0.68	0.35	4.00	0.952	**2.54**	WEIR FLOW
YD-2B	24" Nyloplast Yard Inlet - 50% clogged	0.56	3.26	0.68	0.35	6.50	1.547	**3.51**	WEIR FLOW
YD-2C	18" Nyloplast Yard Inlet	0.64	5.40	0.18	0.35	4.00	0.252	**0.75**	WEIR FLOW
YD-2C	18" Nyloplast Yard Inlet	0.64	5.40	0.18	0.35	6.50	0.410	**1.03**	WEIR FLOW
YD-2C	18" Nyloplast Yard Inlet - 50% clogged	0.32	2.70	0.18	0.35	4.00	0.252	**1.19**	WEIR FLOW
YD-2C	18" Nyloplast Yard Inlet - 50% clogged	0.32	2.70	0.18	0.35	6.50	0.410	**1.64**	WEIR FLOW
YD-3	18" Nyloplast Yard Inlet	0.64	5.40	0.32	0.40	4.00	0.512	**1.20**	WEIR FLOW
YD-3	18" Nyloplast Yard Inlet	0.64	5.40	0.32	0.40	6.50	0.832	**1.66**	WEIR FLOW
YD-3	18" Nyloplast Yard Inlet - 50% clogged	0.32	2.70	0.32	0.40	4.00	0.512	**1.90**	WEIR FLOW
YD-3	18" Nyloplast Yard Inlet - 50% clogged	0.32	2.70	0.32	0.40	6.50	0.832	**2.81**	WEIR FLOW

Design Storm Year = 10

POINT	DOWNSTREAM STRUCTURE	DRAIN AREA ACRES	RUNOFF COEFF. C	CA INCR	CA ACCUM	INLET TIME MIN	RAIN FALL MIN	**RUNOFF Q C.F.S.**	INVERT ELEVATIONS UPPER	INVERT ELEVATIONS LOWER	LENGTH FEET	SLOPE FT./FT.	DIA INCHES	**CAPA-CITY C.F.S.**	VEL F.P.S.	FLOW TIME SEC
20		0.10	0.85	0.09	0.09	5.00	6.67	**0.6**								
	8								436.42	435.85	100.14	0.0057	15	**4.9**	2.7	37.7
8		0.03	0.90	0.03	0.11	5.63	6.47	**0.7**								
	10								435.75	435.52	31.53	0.0073	15	**5.5**	3.1	10.2
10		0.00	0.90	0.00	0.53	6.29	6.27	**3.3**								
	2B								435.42	435.18	43.18	0.0056	15	**4.8**	4.2	10.2
2B		0.09	0.70	0.06	0.59	6.46	6.22	**3.7**								
	2								435.08	434.85	31.67	0.0073	15	**5.5**	4.8	6.6
2		0.17	0.75	0.13	0.72	6.57	6.19	**4.4**								
	4								434.75	434.35	79.74	0.0050	18	**7.4**	4.4	18.3
4		0.07	0.75	0.05	1.14	6.87	6.10	**7.0**								
	6								434.25	433.94	55.56	0.0055	24	**16.8**	5.0	11.0
6		0.06	0.85	0.05	1.19	7.06	6.05	**7.2**								
	6B								433.84	433.60	39.68	0.0061	24	**17.7**	5.3	7.5
6B		0.07	0.75	0.05	1.25	7.18	6.02	**7.5**								
	44								433.50	433.40	15.05	0.0066	24	**18.4**	5.5	2.7
44		0.00	0.90	0.00	1.25	7.23	6.01	**7.5**								
	SWM #1A								431.30	429.89	46.89	0.0300	24	**39.2**	9.5	4.9
4D		0.13	0.85	0.11	0.25	5.00	6.67	**1.6**								
	4B								437.50	437.10	47.25	0.0085	15	**6.0**	4.1	11.5
4B		0.04	0.70	0.03	0.37	5.19	6.60	**2.5**								
	4								437.00	436.58	31.68	0.0133	15	**7.4**	5.4	5.9
16		0.11	0.70	0.08	0.21	5.32	6.56	**1.4**								
	14								438.58	438.43	22.55	0.0067	15	**5.3**	3.6	6.2
14		0.05	0.70	0.04	0.25	5.43	6.53	**1.6**								
	12								438.33	437.43	160.33	0.0056	15	**4.8**	3.5	45.

MATCHLINE - SEE SHEET 30

EX ROW

PROPOSED ROOT BARRIER

BUILDING #2
4-STORY
CONDOMINIUM
BUILDING
(22 UNITS TOTAL)

JUNIPERBERRY LANE
PRIVATE ALLEY

BUILDING #3
4-STORY
CONDOMINIUM
BUILDING
(16 UNITS TOTAL)

BUILDING #4
4-STORY
CONDOMINIUM
BUILDING
(14 UNITS TOTAL)

BALSAM WAY
PRIVATE ALLEY

BUILDING #5
4-STORY
CONDOMINIUM
BUILDING
(14 UNITS TOTAL)

HOLLY STREET
EXISTING CITY STREET
(ROW WAY EXPANSION)

GARDEN STREET
EXISTING CITY STREET
(VAR. WIDTH CITY R/W)

GINKGO WAY
PRIVATE ALLEY

EX ROW

* PROPOSED ROOT BARRIER SHALL BE A MINIMUM OF 5' FROM CLOSEST UTILITY.

NOTE: PROPOSED TREES LESS THAN 10' BUT AT LEAST 5' FROM STORM INFRASTRUCTURE SHALL INCLUDE A ROOT BARRIER WHEN PLANTED. THE ROOT BARRIER SHALLED BE INSTALLED BETWEEN THE PROPOSED TREE AND THE CLOSEST INFRASTRUCTURE, AS FAR AWAY FROM THE TREE AS SPACE ALLOWS. THE ROOT BARRIER PANELS SHALL BE A PRE-MANUFACTURED HEAVY-DUTY POLYPROPYLENE ROOT BARRIER BETWEEN FORTY AND SIXTY MIL THICK, 24" WIDE, AND 48" TALL AT THE TIME OF THE TREE'S PLANTING (TWO PANELS MAY BE CONNECTED TOGETHER TO CREATE A LONGER BARRIER). THE ROOT BARRIER SHALL PREVENT THE TREE'S ROOTS FROM GROWING THROUGH THE BARRIER AND DAMAGING INFRASTRUCTURE. THE POLYPROPYLENE WILL ALLOW WATER TO PASS THROUGH WITHOUT CAUSING DAMAGE TO SURROUNDING UTILITIES. SEE DETAILS ON SHEET 30A.

BUILDING #1
3-STORY w/ BASEMENT
MIXED-USE BUILDING
(20 APT UNITS TOTAL
BSMT - RESIDENTIAL
1ST FLOOR - 6,230 SF OF GENERAL
RETAIL SPACE + APT. AMENITIES/LOBBY
2ND & 3RD FLOORS - RESIDENTIAL)

PROPOSED ROOT BARRIER (*)

GARDEN STREET
EXISTING PUBLIC ROAD

CARLTON AVENUE
EXISTING PUBLIC ROAD

STOP

BENCHMARK
BRASS DISK ON TOP OF
PARKING LOT STEPS
#914 MONTICELLO ROAD
OLD RGA OFFICE BUILDING
ELEVATION = 462.20

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1 inch = 20 ft.

LANDSCAPING PLAN LEGEND:

BN	UA	LT
PA	QP	QC
LS	TA	NS
IO	JV	MG
PS	CC	CP
AA	FG	HV
IG	IV	MC
MP	PO	VD

EXISTING TREELINE PRE-DEVELOPMENT
PROPOSED TREELINE POST-DEVELOPMENT
TREE PROTECTION FENCING
AREA OF EXISTING VEGETATION TO REMAIN
LANDSCAPE BUFFER ALONG PROPERTY LINE
PROPOSED RECREATION AREA

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
PROFESSIONAL ENGINEER
8/18/23

REVISIONS

DATE	REVISION DESCRIPTION
3/15/22	INITIAL PLAN SUBMITTAL
1/03/23	2ND PLAN SUBMITTAL
5/19/23	3RD PLAN SUBMITTAL
8/18/23	4TH PLAN SUBMITTAL

COLLINS ENGINEERING
200 GARRETT STREET, SUITE K-CHARLOTTESVILLE, VA 22902 -434.293.3719

PROJECT
BELMONT CONDOMINIUMS - FINAL SITE PLAN

SHEET
LANDSCAPING PLAN

JOB NO. 202201
SCALE 1"=20'
SHEET NO. 29

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Attachment A

LANDSCAPING PLAN LEGEND:

BN UA LT
PA QP QC
LS TA NS
IO JV MG
PS CC CP
AA FG HV
IG IV MC
MP PO VD

EXISTING TREELINE PRE-DEVELOPMENT
PROPOSED TREELINE POST-DEVELOPMENT
TREE PROTECTION FENCING
AREA OF EXISTING VEGETATION TO REMAIN
LANDSCAPE BUFFER ALONG PROPERTY LINE
PROPOSED RECREATION AREA

NOTE: PROPOSED TREES LESS THAN 10' BUT AT LEAST 5' FROM STORM INFRASTRUCTURE SHALL INCLUDE A ROOT BARRIER WHEN PLANTED. THE ROOT BARRIER SHALLED BE INSTALLED BETWEEN THE PROPOSED TREE AND THE CLOSEST INFRASTRUCTURE, AS FAR AWAY FROM THE TREE AS SPACE ALLOWS. THE ROOT BARRIER PANELS SHALL BE A PRE-MANUFACTURED HEAVY-DUTY POLYPROPYLENE ROOT BARRIER BETWEEN FORTY AND SIXTY MIL THICK, 24" WIDE, AND 48" TALL AT THE TIME OF THE TREE'S PLANTING (TWO PANELS MAY BE CONNECTED TOGETHER TO CREATE A LONGER BARRIER). THE ROOT BARRIER SHALL PREVENT THE TREE'S ROOTS FROM GROWING THROUGH THE BARRIER AND DAMAGING INFRASTRUCTURE. THE POLYPROPYLENE WILL ALLOW WATER TO PASS THROUGH WITHOUT CAUSING DAMAGE TO SURROUNDING UTILITIES. SEE DETAILS ON SHEET 30A.

* PROPOSED ROOT BARRIER SHALL BE A MINIMUM OF 5' FROM CLOSEST UTILITY.

MATCHLINE - SEE THIS SHEET

PROPOSED ROOT BARRIER (*)

PROPOSED ROOT BARRIER

EXISTING TREE CANOPY TO REMAIN

PARCEL #570145A00
211 SPRUCE ST
0.223 ACRES
ZONING - R-2

PARCEL #570145B00
213 SPRUCE ST
0.043 ACRES
ZONING - R-2

PARCEL #570145B10
215 SPRUCE ST
0.043 ACRES
ZONING - R-2

PARCEL #570145C00
0 DOUGLAS AVE
1.339 ACRES
ZONING - R-2

PARCEL #570008000
221 SPRUCE ST
0.242 ACRES
ZONING - R-2

PARCEL #570009100
223 SPRUCE ST
0.169 ACRES
ZONING - R-2

PARCEL #570009001
227 SPRUCE ST
0.161 ACRES
ZONING - R-2

PARCEL #570009000
301 SPRUCE ST
0.161 ACRES
ZONING - R-2

PARCEL #570011000
305 SPRUCE ST
0.169 ACRES
ZONING - R-2

PARCEL #580355000
0 DOUGLAS AVE
0.25 ACRES
ZONING - R-2

PARCEL #570001000
210 DOUGLAS AVE
0.206 ACRES
ZONING - R-2

PARCEL #570001100
0 DOUGLAS AVE
0.226 ACRES
ZONING - R-2

PARCEL #580354100
212 DOUGLAS AVE
0.29 ACRES
ZONING - R-2

PARCEL #580354000
214 DOUGLAS AVE
0.307 ACRES
ZONING - R-2

PARCEL #580353000
216 DOUGLAS AVE
0.237 ACRES
ZONING - R-2

EX ROW

BUILDING #7
4-STORY
CONDOMINIUM
BUILDING
(14 UNITS TOTAL)

BUILDING #6
4-STORY
CONDOMINIUM
BUILDING
(16 UNITS TOTAL)

BUILDING #8
3-STORY
CONDOMINIUM
BUILDING
(14 UNITS TOTAL)

2OVER1

BALSAM WAY
PRIVATE ALLEY

FICUS COURT
PRIVATE ALLEY

CONIFER DRIVE
PROPOSED CITY STREET
(40' CITY R/W)

(1) BN
(225 SF) SC
(300 SF) PV
(3) IG
(3) MC
(2) LS
(1) AR
(150 SF) SC
(600 SF) PV

FACILITY SIDE SLOPES SHALL BE MULCHED WITH SWAMP MILKWEEK PLANTINGS, TYPICAL (1,650 SF)

MATCHLINE - SEE SHEET 29

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1 inch = 20 ft.

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
PROFESSIONAL ENGINEER
8/18/23

REVISIONS

REVISION DESCRIPTION	DATE
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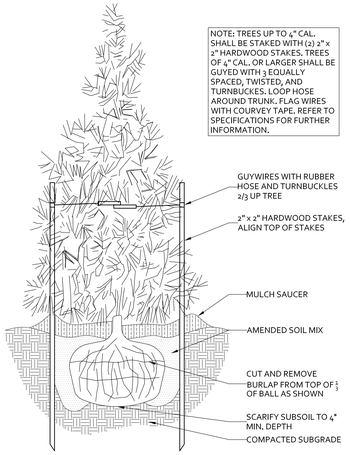
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PROJECT
BELMONT CONDOMINIUMS - FINAL SITE PLAN

SHEET
LANDSCAPING PLAN

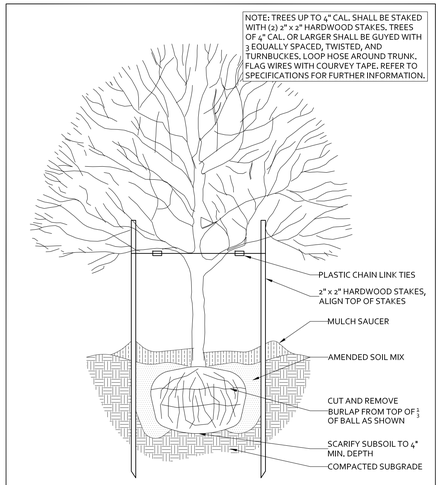
JOB NO. 202201
SCALE 1"=20'
SHEET NO. 30

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EVERGREEN TREE PLANTING DETAIL

NOT TO SCALE



TREE PLANTING & STAKING DETAIL

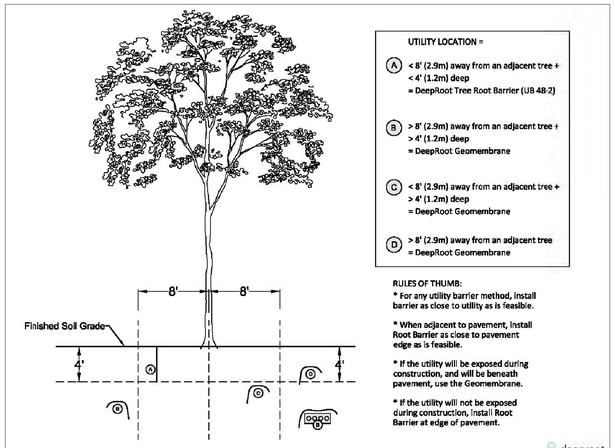
NOT TO SCALE

LANDSCAPING GENERAL NOTES:

1. CONTRACTOR TO USE EXTREME CARE AND CAUTION AS NOT TO DAMAGE ANY TREES SCHEDULED TO REMAIN OUTSIDE LIMITS OF CONSTRUCTION. PROPERTY LINE SERVES AS LIMITS OF CONSTRUCTION.
2. NO CONSTRUCTION EQUIPMENT OR STORAGE SHALL OCCUR WITHIN DRIPLINE OF EXISTING TREES. PRIOR TO MOBILIZATION CONTRACTOR SHALL CONTACT LANDSCAPE ARCHITECT (LA) TO DISCUSS TREE PROTECTION EFFORTS. ALL TREE PROTECTION MEASURES SHALL BE APPROVED BY LA AND/OR TREE ARBORIST BEFORE ANY CONSTRUCTION ACTIVITIES SHALL TAKE PLACE ON-SITE.
3. CONTRACTOR TO MONITOR TREES FOR STRESS AND/OR DAMAGE AND ADVISE LA AND TREE ARBORIST IF ANY OCCUR.
4. CONTRACTOR TO NOTIFY LANDSCAPE ARCHITECT AND/OR TREE ARBORIST 48-HOURS IN ADVANCEOF ANY CONSTRUCTION ACTIVITY NEEDED WITHIN ANY TREE PROTECTION MEASURE. ALL TREE PROTECTION MEASURES SHALL BE REPLACED IN ORIGINAL LOCATION ONCE WORK HAS BEEN COMPLETED. NO WORK SHALL BE DONE WITHIN DRIPLINE OF EXISTING TREES UNLESS APPROVED BY TREE ARBORIST OR LANDSCAPE ARCHITECT PRIOR TO WORK.
5. ALL WORK TO BE PERFORMED BY THE CONTRACTOR WITHIN THE DRIPLINE OF ANY EXISTING TREE OR TREE PROTECTION AREA SHALL BE DONE IN A MANNER SENSITIVE TO ENSURING NO DAMAGE WILL BE DONE TO THE EXISTING TREES. THE PREFERRED METHOD FOR GRADING SMALL AREAS WITHIN THE DRIPLINE SHALL BE DONE BY HAND. LARGER AREAS TO BE GRADED MAY BE DONE WITH A SMALL BOBCAT/TRACT-HOE. CONTRACTOR TO DISCUSS METHODS OF GRADING WORK WITH LANDSCAPE ARCHITECT AND TREE ARBORIST PRIOR TO COMMENCING ANY SUCH WORK WITHIN DESIGNATED TREE PROTECTION AREAS OR WITHIN EXISTING DRIPLINES.
6. ALL PLANTS HAVING A QUANTITY GREATER THAN ONE(1) SHALL BE MATCHED AND SUPPLIED FROM THE SAME SOURCE (PER SPECIES).
7. CONTACT LANDSCAPE ARCHITECT AT THE TIME OF PLANT MATERIAL DELIVERY, BEFORE ANY SUBSTITUTIONS OR CHANGES, IF SCHEDULED TYPES ARE UNAVAILABLE, AND FOLLOWING INSTALLATION. ALL PLANT SUBSTITUTIONS SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO PLACEMENT OF ORDERS.
8. LANDSCAPE ARCHITECT SHALL INSPECT AND APPROVE ALL PLANT MATERIAL AT TIME OF DELIVERY AS WELL AS AFTER INITIAL PLACEMENT PRIOR TO PLANTING. CONTRACTOR TO NOTIFY LANDSCAPE ARCHITECT 48-HOURS PRIOR TO DELIVERY.
9. PLANT LOCATIONS TO BE REEVALUATED AND REVISED, IF NECESSARY, AFTER FINISHED GRADING.
10. MULCH IN PLANTERS AND PLANTING BEDS TO BE CLEAN AND FREE FROM PEST AND DISEASES. MULCH SHALL BE APPLIED TO A 2-INCH DEPTH. MULCH RINGS 24-INCHES MIN. IN DIAMETER ARE TO BE PLACED AROUND ALL TREES NOT LOCATED IN PLANTING BEDS. MULCH TO BE DOUBLE-SHREDDED HARDWOOD.
11. CONTRACTOR TO VERIFY ALL QUANTITIES BETWEEN PLAN AND PLANT LIST AND REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT IMMEDIATELY PRIOR TO ORDERING.
12. ANY STREET TREE WITHIN THE PUBLIC RIGHT OF WAY SHALL BE MAINTAINED BY THE APARTMENT COMPLEX.
13. ALL DUMPSTERS SHALL BE SCREENED WITH AN ENCLOSURE AT A MINIMUM HEIGHT OF ONE (1) FOOT ABOVE THE HEIGHT OF THE DUMPSTER AND WITH A MINIMUM INSIDE CLEARANCE AT THE OPENING OF TWELVE (12) FEET.
14. ALL PLANTINGS SHALL HAVE A MINIMUM HEIGHT OF EIGHTEEN (18) INCHES WHEN PLANTED. PLANTINGS SHALL BE EVENLY SPACED IN A ROW, AT INTERVALS SUFFICIENT TO ALLOW FOR THEIR HEALTHY GROWTH AND DEVELOPMENT.
15. NO TREES TO BE MAINTAINED BY THE CITY OF CHARLOTTESVILLE.
16. LARGE STREET TREES SHALL BE PLANTED WITHIN A PLANTING STRIP WITH A MINIMUM OF 8' WIDE, AND SOIL VOLUME OF 900 CF PER TREE, WITH A SPACING OF 30' MIN.
17. FIRE HYDRANTS, FIRE PUMP TEST HEADERS, FIRE DEPARTMENT CONNECTIONS AND FIRE SUPPRESSION SYSTEM CONTROL VALVES SHALL REMAIN CLEAN & UNOBSTRUCTED BY LANDSCAPING, PARKING AND OTHER OBJECTS. LANDSCAPING IN THESE VICINITIES SHALL NOT ENCROACH WITHIN A FIVE (5) FOOT RADIUS OF MATURITY.

LANDSCAPING CALCULATIONS

SITE TREE COVERAGE		
REQUIREMENT: CANOPY COVER AT 10 YEARS EQUALS OR IS GREATER THAN 10% OF GROSS SITE AREA		
GROSS SITE AREA		269,746 SF
TOTAL TREE CANOPY REQUIRED		26,975 SF
EXISTING TREE CANOPY TO REMAIN		7,040 SF
PROPOSED TREE CANOPY WITH THIS PLAN		34,477 SF
TOTAL TREE CANOPY PROVIDED		41,517 SF
STREETSCAPE TREES		
REQUIREMENT: 1 LARGE TREE PER 40 FEET OF PUBLIC ROAD FRONTAGE OR 1 MEDIUM TREE PER 25 FEET OF PUBLIC ROAD FRONTAGE		
CARLTON AVENUE		124 LINEAR FEET
	LANDSCAPING REQUIRED	3 LARGE SHADE TREES
	LANDSCAPING PROPOSED	3 LARGE SHADE TREES
HOLLY STREET		932 LINEAR FEET
	LANDSCAPING REQUIRED	23 LARGE SHADE TREES
	LANDSCAPING PROPOSED	23 LARGE SHADE TREES
GARDEN STREET		182 LINEAR FEET
	LANDSCAPING REQUIRED	5 LARGE SHADE TREES
	LANDSCAPING PROPOSED	5 LARGE SHADE TREES
CONIFER DRIVE		1,159 LINEAR FEET
	LANDSCAPING REQUIRED	29 LARGE SHADE TREES
	LANDSCAPING PROPOSED	29 LARGE SHADE TREES
PARKING LOTS - INTERIOR LANDSCAPING		
REQUIREMENT: 5% OF THE GROSS AREA OF A PARKING LOT SHALL BE LANDSCAPED		
PARKING AREA NORTH OF BLDG #1		8,455 SF
	LANDSCAPING REQUIRED	423 SF
	LANDSCAPING PROPOSED	496 SF
PARKING AREA NORTH OF BLDG #6		1,890 SF
	LANDSCAPING REQUIRED	95 SF
	LANDSCAPING PROPOSED	124 SF
PARKING AREA WEST OF BLDG #8		2,260 SF
	LANDSCAPING REQUIRED	113 SF
	LANDSCAPING PROPOSED	191 SF
PROPERTY LINES - SCREENING		
REQUIREMENT: A CONTINUOUS LANDSCAPE BUFFER 10' IN WIDTH INCLUDING 1 LARGE TREE, 1 MEDIUM TREE, 2 EVERGREEN TREES, & 10 SHRUBS FOR EVERY 100' OF PROPERTY LINE		
NORTHERN PROPERTY LINE		417 LINEAR FEET
	LANDSCAPING REQUIRED	17 TREES & 42 SHRUBS
	LANDSCAPING PROPOSED	20 TREES & 42 SHRUBS
EASTERN PROPERTY LINE		522 LINEAR FEET
	LANDSCAPING REQUIRED	21 TREES & 52 SHRUBS
	LANDSCAPING PROPOSED	31 TREES & 63 SHRUBS
SOUTHERN PROPERTY LINE		113 LINEAR FEET
	LANDSCAPING REQUIRED	4 TREES & 10 SHRUBS
	LANDSCAPING PROPOSED	4 TREES & 10 SHRUBS
WESTERN PROPERTY LINE		110 LINEAR FEET
	LANDSCAPING REQUIRED	4 TREES & 10 SHRUBS
	LANDSCAPING PROPOSED	5 TREES & 12 SHRUBS



UTILITY LOCATION =

- (A) **< 8' (2.9m) away from an adjacent tree + < 4' (1.2m) deep = DeepRoot Tree Root Barrier (UB 48-2)**
- (B) **> 8' (2.9m) away from an adjacent tree + > 4' (1.2m) deep = DeepRoot Geomembrane**
- (C) **< 8' (2.9m) away from an adjacent tree + > 4' (1.2m) deep = DeepRoot Geomembrane**
- (D) **> 8' (2.9m) away from an adjacent tree = DeepRoot Geomembrane**

RULES OF THUMB:

*** For any utility barrier method, install barrier as close to utility as is feasible.**

*** When adjacent to pavement, install Root Barrier as close to pavement edge as is feasible.**

*** If the utility will be exposed during construction, and will be beneath pavement, use the Geomembrane.**

*** If the utility will not be exposed during construction, install Root Barrier at edge of pavement.**

deeproot

City of Charlottesville
Best Management Practices for Tree Preservation.....

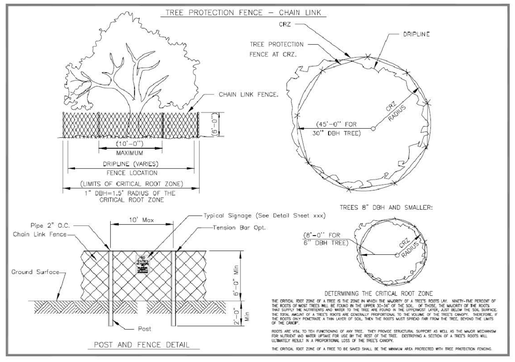
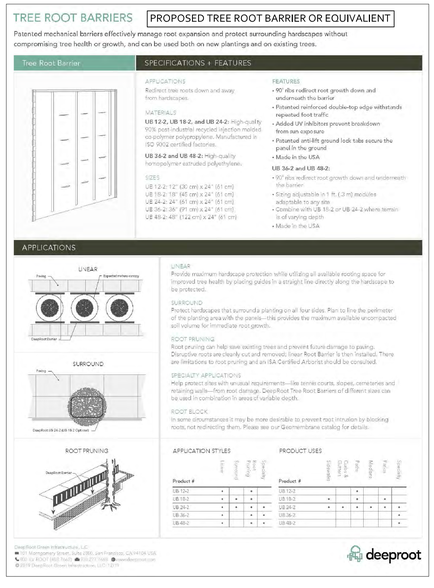
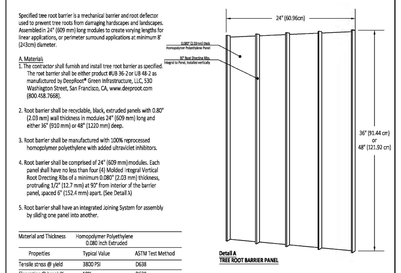


Figure 3.2: Tree Protection Fence



PROPOSED TREE ROOT BARRIER OR EQUIVALENT

UB 36-2/UB 48-2 Specifications
36" and 48" DeepRoot® Tree Root Barrier



Specified tree root barrier is a mechanical barrier and root deflector used to prevent tree roots from damaging hardscapes and landscapes. Assembled in 24" (609 mm) long modules to create varying lengths for linear applications, or perimeter surround applications at minimum 8' (2.43m) diameter.

A. Materials

1. The contractor shall furnish and install tree root barrier as specified. The root barrier shall be either product #UB 36-2 or UB 48-2 as manufactured by DeepRoot® Green Infrastructure, LLC, 530 Washington Street, San Francisco, CA, www.deeproot.com (800.458.7668).
2. Root barrier shall be recyclable, black, extruded panels with 0.80" (2.03 mm) wall thickness in modules 24" (609 mm) long and either 36" (910 mm) or 48" (1220 mm) deep.
3. Root barrier shall be manufactured with 100% reprocessed homopolymer polyethylene with added ultraviolet inhibitors.
4. Root barrier shall be comprised of 24" (609 mm) modules. Each panel shall have no less than four (4) Molded Integral Vertical Root Directing Ribs of a minimum 0.080" (2.03 mm) thickness, protruding 1/2" (12.7 mm) at 90° from interior of the barrier panel, spaced 6" (152.4 mm) apart. (See Detail A)
5. Root barrier shall have an integrated Joining System for assembly by sliding one panel into another.

Material and Thickness	Homopolymer Polyethylene 0.080 Inch Extruded	
Properties	Typical Value	ASTM Test Method
Tensile stress @ yield	3800 PSI	D638
Elongation @ break %	10%	D638
Tensile Modulus	155,000 PSI	D638
Notched Izod Impact	0.4 - 4.0	D256A
Flexual Modulus 73 F PSI	145,000	D790
Hardness Shore	P66	D2240

deeproot

PLANT SCHEDULE

SYM	BOTANICAL NAME	COMMON NAME	SIZE	CANOPY	QUANTITY	TOTAL COVERAGE
TREES						
BN	BETULA NIGRA 'HERITAGE'	RIVER BIRCH	2" CAL	397	10	3970
LS	LIQUIDAMBAR STYRACIFLUA 'ROTUNDILOBA'	ROTUNDILOBA SWEETGUM	2" CAL	206	4	824
LT	LIRIODENDRON TULIPIFERA	TULIP POPLAR	2" CAL	387	6	2322
NS	NYSSA SYLVATICA	BLACKGUM	2" CAL	123	10	1230
PA	PLANTANUS X ACERIFOLIA 'BLOODGOOD'	LONDON PLANETREE	2" CAL	368	6	2208
QC	QUERCUS BICOLOR	SWAMP WHITE OAK	2" CAL	299	11	3289
QP	QUERCUS PHELLOS	WILLOW OAK	2" CAL	370	18	6660
TA	TILIA AMERICANA	AMERICAN LINDEN	2" CAL	191	9	1719
UA	ULMUS AMERICANA	JEFFERSON AMERICAN ELM	2" CAL	397	21	8337
EVERGREEN TREES						
IO	ILEX OPACA	AMERICAN HOLLY	4-5' HT	56	11	616
JV	JUNIPERUS VIRGINIANA	EASTERN REDCEDAR	4-5' HT	16	19	304
MG	MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA	4-5' HT	54	13	702
PS	PINUS STROBUS	EASTERN WHITE PINE	4-5' HT	118	10	1180
ORNAMENTAL TREES						
CC	CERCIS CANADENSIS	EASTERN REDBUD	6' HT	124	4	496
CP	CORNUS FLORIDA 'CHEROKEE PRINCESS'	CHEROKEE PRINCESS DOGWOOD	6' HT	124	5	620
EVERGREEN AND DECIDUOUS SHRUBS						
AA	ARONIA ARBUTIFOLIA	CHOKECHERRY	24" HT		12	
FG	FOTHERGILLA GARDENII	DWARF FOTHERGILLA	24" HT		34	
HV	HAMAMELIS VIRGINIANA	AMERICAN WITCHHAZEL	24" HT		35	
IG	ILEX GLABRA 'SHAMROCK'	INKBERRY HOLLY	24" HT		73	
IV	ITEA VIRGINICA	HENRY'S GARNET SWEETSPIRE	24" HT		39	
MC	MYRICA CERIFERA	SOUTHERN WAXMYRTLE	24" HT		21	
MP	MYRICA PENSLYVANICA	NORTHERN BAYBERRY	24" HT		38	
PO	PHYSOCARPUS OPULIFOLIUS	NINEBARK	24" HT		12	
VD	VIBURNUM DENTATUM	ARROWWOOD VIBURNUM	24" HT		14	
					TOTAL:	34477

BIORETENTION BASIN LANDSCAPING SCHEDULE

SYM	BOTANICAL	COMMON NAME	SIZE	SWM FACILITY QUANTITY	SWM FACILITY COVERAGE (sf)
PERENNIALS/HERBACEOUS					
SC	SCIRPUS CYPERINUS	WOOLGRASS	-	-	375
AI	ASCLEPIAS INCARNATA	SWAMP MILKWEED	-	-	1,650
PV	PANICUM VIRGATUM	SWITCHGRASS	-	-	900
SHRUBS					
MC	MYRICA CERIFERA	WAX MYRTLE	2-1/2" CAL.	3	-
IG	ILEX GLABRA	INKBERRY	2-1/2" CAL.	3	-
TREES					
BN	BETULA NIGRA	RIVER BIRCH	2" CAL.	1	-
AR	ACER RUBRUM	RED MAPLE	2-1/2" CAL.	1	-
LS	LIQUIDAMBAR STYRACIFLUA	SWEETGUM	1-1/2" CAL.	2	-

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
PROFESSIONAL ENGINEER
8/18/23

REVISIONS

DATE	REVISION DESCRIPTION
3/15/22	INITIAL PLAN SUBMITTAL
1/03/23	2ND PLAN SUBMITTAL
5/19/23	3RD PLAN SUBMITTAL
8/18/23	4TH PLAN SUBMITTAL

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200 GARRETT STREET, SUITE K-CHARLOTTESVILLE, VA 22902 -434.293.3719

PROJECT: BELMONT CONDOMINIUMS - FINAL SITE PLAN

SHEET: LANDSCAPING NOTES & DETAILS

JOB NO. 202201

SCALE 1"=20'

SHEET NO. 30A

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Attachment A

HOLOPHANE
LEADERS IN LIGHTING SOLUTIONS

Catalog Number

Notes

Type

GSLF3

GlasWerks® Luminescent
LED Hallbrook®



General Description
The architectural luminaire consists of a flat LED optical assembly shielded by a decorative finned housing and a top mounted cast aluminum electrical assembly. The optical assembly is seamlessly integrated into the form factor for beautiful daytime appearance and exceptionally uniform lighting at night.

Optical Assembly
The optical assembly consists of an edgelit waveguide light engine for unmatched visual comfort. Light from the LED module is distributed by proprietary wave guide technology to maximize uniformity and minimize glare. Configurable with CCT options of 2700K, 3000K, and 4000K. CRI is 70 minimum. Available with asymmetric, symmetric, or pathway distributions.

Mounting Style
Optional mounting styles include Quick Lock Stem, NPT threads, and horizontal arm.
Quick Lock Stem Mounting style is compatible with the following leveling fitters:
- Boston Harbor Decorative Arm Fitter (BHDF)
- GlasWerks Decorative Arm Fitter (GWDF)
- Mont Liberty Decorative Arm Fitter (MLDF)
- Bell Style Decorative Fitter (BADF)

Electrical Assembly
The cast aluminum electrical housing has a smooth domed contour. A (1) station terminal block is provided to accept #14 through #2 size wire. The electrical housing is hinged with a tool-less latch to provide easy access to the gear assembly. The wiretized electrical assembly, containing the electronic driver and other components, plugs into the terminal block and mounts electrically independent from the luminaire's weldedd stem (Quick Lock Stem Mounting), which aides in installation speed. The arm mount version is provided with two U-bolts with washers and nuts and two leveling set screws that lock the housing to a 2 inch nominal (2-3/8" O.D.) horizontal arm and allow a ±5° degree adjustment from horizontal to the cover.

Electrical System
Programmable LED driver with 0-10V dimming. Optional DALI dimming. Driver life is rated to at least 100,000 hours. Luminaire surge protection rating of 20kV/10kA per ANSI/ IEEE C62.41.2.

Finish
The luminaire is finished with corrosion resistance super durable powder coat paint to ensure maximum durability. Finish is rated to 5,000 hours salt spray per ASTM B117.

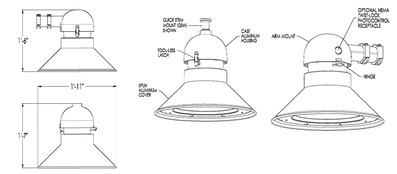
Listing
The luminaire is CSA certified to US and Canadian standards. IP55 rated electrical chamber, IP66 rated LED optic chamber. 20kV/10kA extreme surge protection per ANSI/IEEE C136.2. Suitable for operation in ambient temperatures from -40°C to 40°C
DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/ QPL to confirm which versions are qualified.

Buy American Act
This product is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT regulations. Please refer to www.acuitybrands.com/resources/buy-american for additional information.

Warranty
This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Limited warranty located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application.
All values are design or typical values, measured under laboratory conditions at 25 °C.
Specifications subject to change without notice.

DIMENSIONAL DATA



Maximum Weight: ~47 lbs
Maximum Effective Projected Area: ~0.8 ft²

AcuityBrands. | Holophane | One Lithonia Way, Conyers, GA 30012 | Phone: 866-HOLOPHANE | www.holophane.com | techsupportHP@acuitybrands.com | HOLOPHANE-ARCH-DISTRICT-HALLBROOK-GSLF3-P30-FOUR-DIST
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GSLF3

GlasWerks® Luminescent LED Hallbrook®

HOLOPHANE

ORDERING INFORMATION **Example:** GSLF3 P30 40K MVOLT ASY QSM BK

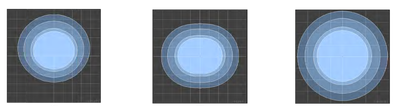
Cover Type	LED Lumen Package	Color Temperature	Voltage	Optics	Mounting Style	Finish Color
GSLF3 Hallbrook®	P10 P10 Performance Package	27K 2700K, 70 CRI	MVOLT 120-277V	ASY Asymmetric	ARM Horizontal Arm Mount	BK Black
	P20 P20 Performance Package	30K 3000K, 70 CRI	HVOLT 347-480V	SYM Symmetric	NPT 1.5" NPT Thread	BZ Bronze
	P30 P30 Performance Package	40K 4000K, 70 CRI		PTH Pathway	QSM Quick Stem Mount	GH Graphite
	P40 P40 Performance Package					GN Green
	P50 P50 Performance Package					GR Gray
	P60 P60 Performance Package					WH White
	P70 P70 Performance Package					
	P80 P80 Performance Package					

Options

Control Options		Pressure Lead Options	
PR1	3 pin NEMA photocontrol receptacle	L15	3ft. pressire leads
PR7	7 pin NEMA photocontrol receptacle	L10	10ft. pressire leads
PR3E	3 pin NEMA photocontrol external	L20	20ft. pressire leads
PR7E	7 pin NEMA photocontrol external	L25	25ft. pressire leads
PI4	Solid state long life photocontrol (347V)	L30	30ft. pressire leads
P48	Solid state long life photocontrol (480V)		
PCL	DLL photocontrol	NEMA Label Options	
SH	Shorting cap	NL1B1	3"x 1" NEMA label
A0	Adjustable Output Module	NL3B3	3"x 3" NEMA label
DALI	DALI dimming		
WG	Wire guard (ships separately)		
HSS	House side shield (ships separately)		

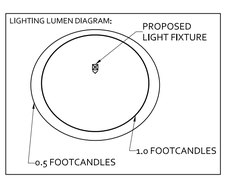
Accessories (Order as a separate catalog number)	
GBLF3HSS	House side shield
GBLF3WG	Wire guard

OPTICAL DISTRIBUTIONS



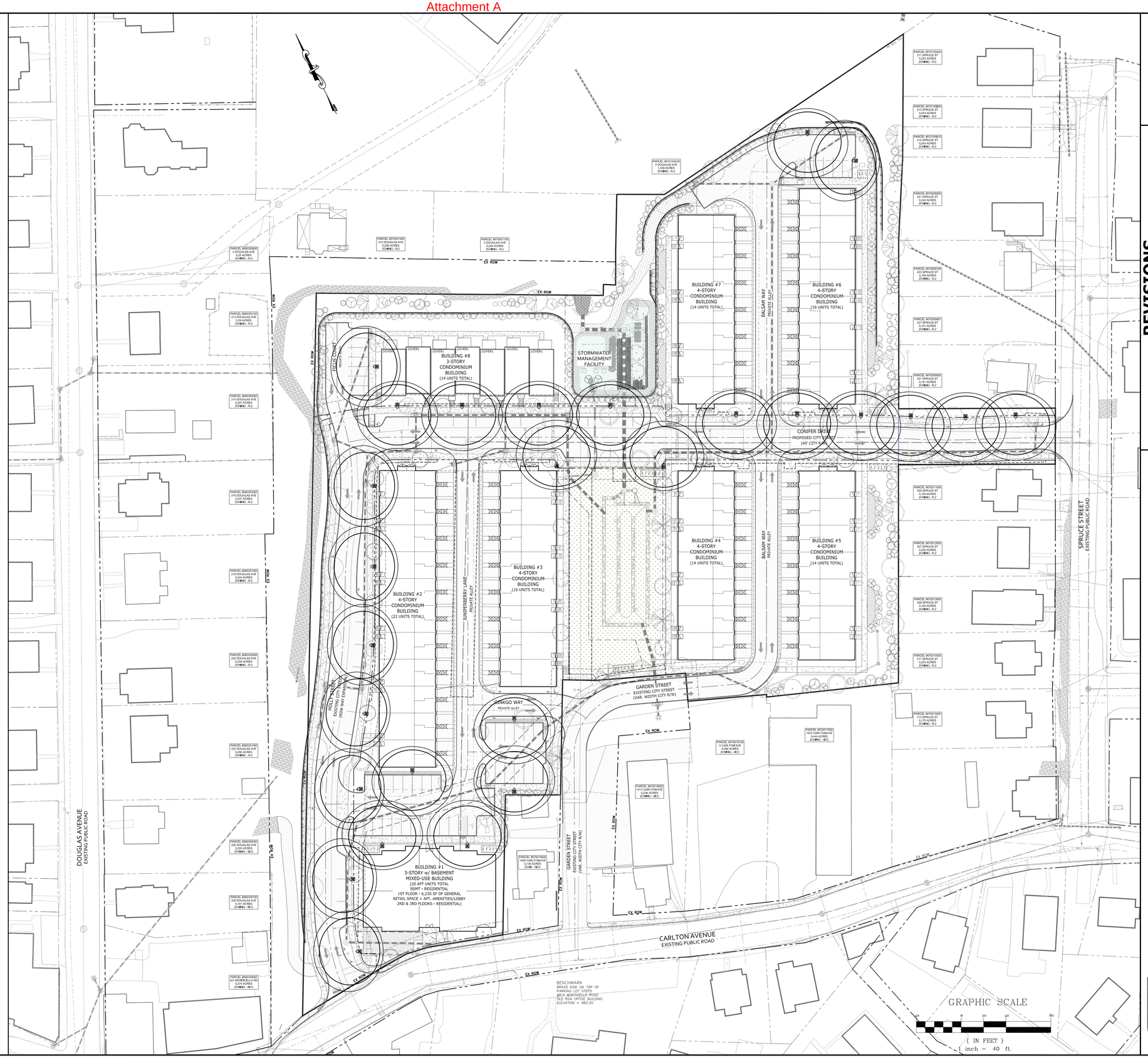
AcuityBrands. | Holophane | One Lithonia Way, Conyers, GA 30012 | Phone: 866-HOLOPHANE | www.holophane.com | techsupportHP@acuitybrands.com | HOLOPHANE-ARCH-OUTDOOR-HALLBROOK-GSLF3-P30-FOUR-DIST
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LIGHTING LUMEN DIAGRAM:



LIGHTING GENERAL NOTES:

1. EACH OUTDOOR LUMINAIRE SHALL BE A FULL CUTOFF LUMINAIRE.
2. EACH OUTDOOR LUMINAIRE SHALL BE EQUIPPED WITH A LAMP THAT EMITS LESS THAN 3,000 INTIAL LUMENS.
3. NO OUTDOOR LUMINAIRE SITUATED OUTSIDE OF A PUBLIC RIGHT-OF-WAY AND WITHIN OR IMMEDIATELY ADJACENT TO ANY LOW DENSITY RESIDENTIAL DISTRICT SHALL BE MOUNTED OR PLACED AT A LOCATION MORE THAN TWELVE (12) FEET IN HEIGHT.
4. NO OUTDOOR LUMINAIRE SHALL BE MOUNTED OR PLACED AT A LOCATION THAT IS MORE THAN TWELVE (12) FEET IN HEIGHT. ALL POLE LIGHTS SHALL BE 12' FROM THE GROUND TO THE PROPOSED LIGHT FIXTURE (INCLUDING THE BASE).
5. ALL OUTDOOR LUMINAIRE, REGARDLESS OF THE NUMBER OF LUMENS, SHALL BE ARRANGED OR SHIELDED TO REFLECT LIGHT AWAY FROM ADJOINING RESIDENTIAL DISTRICTS AND AWAY FROM ADJACENT ROADS. THE SPILLOVER OF LIGHTING FROM LUMINAIRES ONTO PUBLIC ROADS AND PROPERTY IN RESIDENTIAL OR RURAL ZONING DISTRICTS SHALL NOT EXCEED ONE-HALF FOOTCANDLE.
6. ALL LIGHT FIXTURES SHALL HAVE A LAMP TYPE OF WHITE LIGHT TO CREATE A UNIFIED COOL WHITE LIGHTING ACROSS THE SITE.
7. ALL LIGHT FIXTURES SHALL HAVE A FLAT LENSE.
8. ALL LIGHT FIXTURES SHALL BE BRONZE IN COLOR.
9. ALL LIGHTING SHALL COMPLY WITH THE DARK SKIES REQUIREMENTS FOUND IN THE CITY OF CHARLOTTESVILLE STANDARDS AND DESIGN MANUAL.



COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
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PROJECT
BELMONT CONDOMINIUMS - FINAL SITE PLAN

SHEET
LIGHTING PLAN

JOB NO. 202201
SCALE 1"=40'
SHEET NO. 31

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Attachment A

EROSION & SEDIMENT CONTROL MEASURES:

STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK. STRUCTURAL PRACTICES USED IN THIS SECTION CONSIST OF THE FOLLOWING:

3.01 SAFETY FENCE:
A PROTECTIVE BARRIER INSTALLED TO PREVENT ACCESS TO AN EROSION CONTROL MEASURE. TO PROHIBIT THE UNDESIRABLE USE OF AN EROSION CONTROL MEASURE BY THE PUBLIC. APPLICABLE TO ANY CONTROL MEASURE OR SERIES OF MEASURES WHICH CAN BE CONSIDERED UNSAFE BY VIRTUE OF POTENTIAL ACCESS BY THE PUBLIC.

3.02 CONSTRUCTION ENTRANCE:
A STABILIZED CONSTRUCTION ENTRANCE LOCATED AT POINTS OF VEHICULAR INGRESS AND EGRESS ON A CONSTRUCTION SITE. TO REDUCE THE AMOUNT OF MUD TRANSPORTED ONTO PAVED PUBLIC ROADS BY MOTOR VEHICLES OR RUNOFF. CONSTRUCTION ENTRANCES SHALL BE INSTALLED AS SHOWN ON THE PLANS TO REDUCE THE AMOUNT SEDIMENT TRANSPORTED ONTO PUBLIC ROADWAYS.

3.03 CONSTRUCTION ROAD STABILIZATION:
THE TEMPORARY STABILIZATION OF ACCESS ROADS, SUBDIVISION ROADS, PARKING AREAS, AND OTHER SITE VEHICLE TRANSPORTATION ROUTES WITH IMMEDIATELY AFTER GRADING. TO REDUCE EROSION OF TEMPORARY ROADBEDS BY CONSTRUCTION TRAFFIC DURING WET WEATHER AND TO REDUCE EROSION AND SUBSEQUENT REGARDING OF PERMANENT ROADBEDS BETWEEN THE TIME OF INITIAL GRADING AND FINAL STABILIZATION. USE WHEREVER STONE–BASE ROADS OR PARKING AREAS ARE CONSTRUCTED, WHETHER PERMANENT OR TEMPORARY, FOR USE BY CONSTRUCTION TRAFFIC.

3.05 SILT FENCE:
A TEMPORARY SEDIMENT BARRIER CONSISTING OF A SYNTHETIC FILTER FABRIC STRETCHED ACROSS AND ATTACHED TO SUPPORTING POSTS AND ENTRENCHED, TO INTERCEPT AND DETAIN SMALL AMOUNTS OF SEDIMENT FROM DISTURBED AREAS DURING CONSTRUCTION OPERATIONS IN ORDER TO PREVENT SEDIMENT FROM LEAVING THE SITE, AND TO DECREASE THE VELOCITY OF SHEET FLOWS AND LOW–TO–MODERATE LEVEL CHANNEL FLOWS. THE SILT FENCE BARRIERS SHALL BE INSTALLED DOWN SLOPE OF AREAS WITH MINIMAL GRADES TO FILTER SEDIMENT LADEN RUNOFF FROM SHEET FLOW AS INDICATED. THEY SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND MAINTAINED IN ACCORDANCE WITH THE VIRGINIA EROSION & SEDIMENT CONTROL HANDBOOK (VESCH).

3.07 STORM DRAIN INLET PROTECTION:
A SEDIMENT FILTER OR AN EXCAVATED IMPOUNDING AREA AROUND A STORM DRAIN DROP INLET OR CURB INLET. TO PREVENT SEDIMENT FROM ENTERING STORM DRAINAGE SYSTEMS PRIOR TO PERMANENT STABILIZATION OF THE DISTURBED AREA. INLET PROTECTION APPLIES WHERE STORM DRAIN INLETS ARE TO BE MADE OPERATIONAL BEFORE PERMANENT STABILIZATION OF THE CORRESPONDING DISTURBED DRAINAGE AREA.

3.09 TEMPORARY DIVERSION DIKE:
A TEMPORARY RIDGE OF COMPACTED SOIL CONSTRUCTED AT THE TOP OR BASE OF A SLOPING DISTURBED AREA. TO DIVERT STORM RUNOFF FROM UNPROTECTED DISTURBED AREAS AND SLOPES TO A STABILIZED OUTLET. TO DIVERT SEDIMENT–LADEN RUNOFF FROM A DISTURBED AREA TO A SEDIMENT–TRAPPING FACILITY SUCH AS A SEDIMENT TRAP OR SEDIMENT BASIN. USE WHEREVER STORMWATER RUNOFF MUST BE TEMPORARILY DIVERTED TO PROTECT DISTURBED AREAS AND SLOPES OR RETAIN SEDIMENT ON SITE DURING CONSTRUCTION. THESE STRUCTURES GENERALLY HAVE A LIFE EXPECTANCY OF 18 MONTHS OR LESS, WHICH CAN BE PROLONGED WITH PROPER MAINTENANCE.

3.11 TEMPORARY RIGHT–OF–WAY DIVERSION:
A RIDGE OF COMPACTED SOIL, OR LOOSE ROCK OR GRAVEL CONSTRUCTED ACROSS DISTURBED RIGHTS–OF–WAY AND SIMILAR SLOPING AREAS. TO SHORTEN THE FLOW LENGTH WITHIN A SLOPING RIGHT–OF–WAY, THEREBY REDUCING THE EROSION POTENTIAL BY DIVERTING STORM RUNOFF TO A STABILIZED OUTLET. GENERALLY, EARTHEN DIVERSIONS ARE APPLICABLE WHERE THERE WILL BE LITTLE OR NO CONSTRUCTION TRAFFIC WITHIN THE RIGHT–OF–WAY. GRAVEL STRUCTURES ARE MORE APPLICABLE TO ROADS AND OTHER RIGHTS–OF–WAY WHICH ACCOMMODATE VEHICULAR TRAFFIC.

3.13 / 3.14 TEMPORARY SEDIMENT TRAP / BASIN:
A TEMPORARY BARRIER OR DAM WITH A CONTROLLED STORMWATER RELEASE STRUCTURE FORMED BY CONSTRUCTING AN EMBANKMENT OF COMPACTED SOIL ACROSS A DRAINAGEWAY. TO DETAIN SEDIMENT–LADEN RUNOFF FROM DISTURBED AREAS IN "WET" AND "DRY" STORAGE LONG ENOUGH FOR THE MAJORITY OF THE SEDIMENT TO SETTLE OUT. APPLIES BELOW DISTURBED AREAS WHERE THE TOTAL CONTRIBUTING DRAINAGE AREA IS EQUAL TO OR GREATER THAN THREE ACRES FOR BASINS, OR LESS THAN 3 ACRES FOR TRAPS. THERE MUST BE SUFFICIENT SPACE AND APPROPRIATE TOPOGRAPHY FOR THE CONSTRUCTION OF A TEMPORARY IMPOUNDMENT.

3.17 STORMWATER CONVEYANCE CHANNEL:
A PERMANENT, DESIGNED WATERWAY, SHAPED, SIZED, AND LINED WITH APPROPRIATE VEGETATION OR STRUCTURAL MATERIAL USED TO SAFELY CONVEY STORMWATER RUNOFF WITHIN OR AWAY FROM A DEVELOPING AREA. TO PROVIDE FOR THE CONVEYANCE OF CONCENTRATED SURFACE RUNOFF WATER TO A RECEIVING CHANNEL OR SYSTEM WITHOUT DAMAGE FROM EROSION. GENERALLY APPLIES TO MANMADE CHANNELS, INCLUDING ROADSIDE DITCHES, THAT ARE CONSTRUCTED TO ACCOMMODATE FLOWS GENERATED BY LAND DEVELOPMENT.

3.18 OUTLET PROTECTION:
A RIPRAP LINED FLOW TRANSITION STRUCTURE OR APRON DESIGNED TO PREVENT SCOUR AT STORMWATER OUTLETS BY ABSORBING THE INITIAL IMPACT OF THE FLOW AND REDUCING THE FLOW VELOCITY TO A LEVEL WHICH WILL NOT ERODE THE RECEIVING CHANNEL OR AREA. THE APRON IS APPLIED TO THE IMMEDIATE AREA BELOW THE PIPE OR CHANNEL OUTLET, EXTENDING ACROSS THE OUTLET AND UP THE CHANNEL BANKS TO AN ELEVATION ONE FOOT ABOVE THE MAXIMUM TAILWATER DEPTH OR TO THE TOP OF THE BANK.

3.19 RIPRAP:
A PERMANENT, EROSION–RESISTANT GROUND COVER OF LARGE, LOOSE, ANGULAR STONE WITH FILTER FABRIC OR GRANULAR UNDERLINING. TO PROTECT THE SOIL FROM THE EROSIVE FORCES OF CONCENTRATED RUNOFF; SLOW THE VELOCITY OF CONCENTRATED RUNOFF WHILE ENHANCING THE POTENTIAL FOR INFILTRATION, AND TO STABILIZE SLOPES WITH SEEPAGE PROBLEMS, AND/OR NON–COHESIVE SOILS. USE WHEREVER SOIL AND WATER INTERFACE AND THE SOIL CONDITIONS, WATER TURBULENCE AND VELOCITY, EXPECTED VEGETATIVE COVER, ETC., ARE SUCH THAT THE SOIL MAY ERODE UNDER THE DESIGN FLOW CONDITIONS.

3.20 ROCK CHECK DAMS:
SMALL TEMPORARY STONE DAMS CONSTRUCTED ACROSS A SWALE OR DRAINAGE DITCH. TO REDUCE THE VELOCITY OF CONCENTRATED STORMWATER FLOWS, THEREBY REDUCING EROSION OF THE SWALE OR DITCH. THIS PRACTICE ALSO TRAPS SEDIMENT GENERATED FROM ADJACENT AREAS OR THE DITCH ITSELF, MAINLY BY PONDING OF THE STORMWATER RUNOFF. THIS PRACTICE, UTILIZING A COMBINATION OF STONE SIZES, IS LIMITED TO USE IN SMALL OPEN CHANNELS WHICH DRAIN 10 ACRES OR LESS.

3.31 TEMPORARY SEEDING:
THE ESTABLISHMENT OF A TEMPORARY VEGETATIVE COVER ON DISTURBED AREAS BY SEEDING WITH APPROPRIATE RAPIDLY GROWING ANNUAL PLANTS. TO REDUCE EROSION AND SEDIMENTATION BY STABILIZING DISTURBED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE FOR A PERIOD OF MORE THAN 14 DAYS. TO REDUCE DAMAGE FROM SEDIMENT AND RUNOFF TO DOWNSTREAM OR OFF–SITE AREAS, AND TO PROVIDE PROTECTION TO BARE SOILS EXPOSED DURING CONSTRUCTION UNTIL PERMANENT VEGETATION OR OTHER EROSION CONTROL MEASURES CAN BE ESTABLISHED.

3.32 PERMANENT STABILIZATION:
THE ESTABLISHMENT OF PERENNIAL VEGETATIVE COVER ON DISTURBED AREAS BY PLANTING SEED. TO REDUCE EROSION AND DECREASE SEDIMENT YIELD FROM DISTURBED AREAS. TO PERMANENTLY STABILIZE DISTURBED AREAS IN A MANNER THAT IS ECONOMICAL, ADAPTABLE TO SITE CONDITIONS AND ALLOWS SELECTION OF THE MOST APPROPRIATE PLANT MATERIALS. TO IMPROVE WILDLIFE HABITAT. TO ENHANCE NATURAL BEAUTY. UPON COMPLETION OF CONSTRUCTION ACTIVITIES, ALL AREAS WILL RECEIVE A PERMANENT VEGETATIVE COVER.

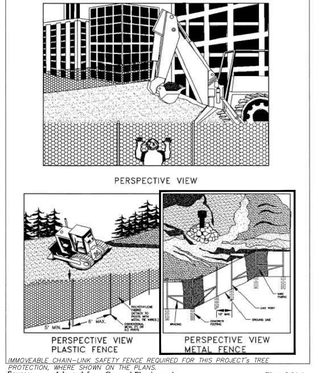
3.36 BLANKET MATTING:
INSTALLATION OF A PROTECTIVE COVERING OR A SOIL STABILIZATION MAT ON A PREPARED PLANTING AREA OF A STEEP SLOPE OR CHANNEL TO AID IN THE CONTROLLING EROSION ON CRITICAL AREAS.

3.38 TREE PRESERVATION AND PROTECTION:
PROTECTION OF DESIRABLE TREES FROM MECHANICAL OR OTHER INJURY DURING LAND DISTURBING AND CONSTRUCTION ACTIVITY. TO ENSURE THE SURVIVAL OF DESIRABLE TREES WHERE THEY WILL BE EFFECTIVE FOR EROSION AND SEDIMENT CONTROL, WATERSHED PROTECTION, LANDSCAPE BEAUTIFICATION, DUST AND POLLUTION CONTROL, NOISE REDUCTION, SHADE AND OTHER ENVIRONMENTAL BENEFITS WHILE THE LAND IS BEING CONVERTED FROM FOREST TO URBAN–TYPE USES. APPLIES IN TREE–INHABITED AREAS SUBJECT TO LAND DISTURBING ACTIVITIES.

3.39 DUST CONTROL:
REDUCING SURFACE AND AIR MOVEMENT OF DUST DURING LAND DISTURBING, DEMOLITION AND CONSTRUCTION ACTIVITIES. TO PREVENT SURFACE AND AIR MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES AND REDUCE THE PRESENCE OF AIRBORNE SUBSTANCES WHICH MAY PRESENT HEALTH HAZARDS, TRAFFIC SAFETY PROBLEMS OR HARM ANIMAL OR PLANT LIFE. DUST CONTROL MEASURES SHALL BE EMPLOYED TO PREVENT SURFACE AND AIR MOVEMENT OF DUST DURING CONSTRUCTION. MEASURES EMPLOYED SHALL BE IN ACCORDANCE WITH THE VESCH.

1992 3.01

SAFETY FENCE



IMMOVEABLE CHAIN–LINK SAFETY FENCE REQUIRED FOR THIS PROJECT'S TREE PROTECTION, WHERE SHOWN ON THE PLANS.

Source: Adapted from Conwed Plastics and VDOT Road and Bridge Standards

Plate 3.01-1

EROSION CONTROL NOTES (PART 1)

1. THE PLAN APPROVING AUTHORITY MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE–CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.
2. ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND VIRGINIA REGULATIONS 9VAC25–840 EROSION AND SEDIMENT CONTROL REGULATIONS.
3. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING.
4. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
5. PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO, OFF–SITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY.
6. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE PLAN APPROVING AUTHORITY.
7. ALL DISTURBED AREAS ARE TO BE PROVIDED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.
8. DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE.
9. THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF–PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.
10. ALL FILL MATERIAL TO BE TAKEN FROM AN APPROVED, DESIGNATED BORROW AREA.
11. ALL WASTE MATERIALS SHALL BE TAKEN TO AN APPROVED WASTE AREA. EARTH FILL SHALL BE INERT MATERIALS ONLY, FREE OF ROOTS, STUMPS, WOOD, RUBBISH, AND OTHER DEBRIS.
12. BORROW OR WASTE AREAS ARE TO BE RECLAIMED WITHIN 7 DAYS OF COMPLETION PER ZONING ORDINANCE SECTION 10.2.
13. ALL INERT MATERIALS SHALL BE TRANSPORTED IN COMPLIANCE WITH CITY CODE AND STATE REGULATIONS.
14. BORROW, FILL OR WASTE ACTIVITY INVOLVING INDUSTRIAL–TYPE POWER EQUIPMENT SHALL BE LIMITED TO THE HOURS OF 7:00 AM TO 9:00 PM.
15. BORROW, FILL OR WASTE ACTIVITY SHALL BE CONDUCTED IN A SAFE MANNER THAT MAINTAINS LATERAL SUPPORT, OR ORDER TO MINIMIZE ANY HAZARD TO PERSONS, PHYSICAL DAMAGE TO ADJACENT LAND AND IMPROVEMENTS, AND DAMAGE TO ANY PUBLIC STREET BECAUSE OF SLIDES, SINKING, OR COLLAPSE.
16. THE DEVELOPER SHALL RESERVE THE RIGHT TO INSTALL, MAINTAIN, REMOVE OR CONVERT TO PERMANENT STORMWATER MANAGEMENT FACILITIES WHERE APPLICABLE ALL EROSION CONTROL MEASURES REQUIRED BY THIS PLAN REGARDLESS OF THE SALE OF ANY LOT, UNIT, BUILDING OR OTHER PORTION OF THE PROPERTY.
17. TEMPORARY STABILIZATION SHALL BE TEMPORARY SEEDING AND MULCHING. SEEDING IS TO BE AT 75 LBS/ACRE, AND IN THE MONTHS OF SEPTEMBER TO FEBRUARY TO CONSIST A 50/50 MIX OF ANNUAL RYGRASS AND CEREAL WINTER RYE, OR IN MARCH AND APRIL TO CONSIST OF ANNUAL RYE, OR MAY THROUGH AUGUST TO CONSIST OF GERMAN MILLET. STRAW MULCH IS TO BE APPLIED AT 80LBS/1000SF. ALTERNATIVES ARE SUBJECT TO APPROVAL BY THE EROSION CONTROL INSPECTOR.
18. PERMANENT STABILIZATION SHALL BE LIME AND FERTILIZER, PERMANENT SEEDING, AND MULCH. AGRICULTURAL GRADE LIMESTONE SHALL BE APPLIED AT 90LBS/1000SF, INCORPORATED INTO THE TOP 4–6 INCHES OF SOIL. FERTILIZER SHALL BE APPLIED AT 100LBS/ACRE AND CONSIST OF A 10–20–10 NUTRIENT MIX. PERMANENT SEEDING SHALL BE APPLIED AT 180LBS/ACRE AND CONSIST OF 95% KENTUCKY 31 OR TALL FESCUE AND 0–5% PERENNIAL RYGRASS OR KENTUCKY BLUEGRASS. STRAW MULCH IS TO BE APPLIED AT 80LBS/1000F. ALTERNATIVES ARE SUBJECT TO APPROVAL BY THE EROSION CONTROL INSPECTOR.
19. MAINTENANCE: ALL MEASURES ARE TO BE INSPECTED WEEKLY AND AFTER EACH RAINFALL. ANY DAMAGE OR CLOGGING TO STRUCTURAL MEASURES IS TO BE REPAIRED IMMEDIATELY. SILT TRAPS ARE TO BE CLEANED WHEN 50% OF THE WET STORAGE VOLUME IS FILLED WITH SEDIMENT. ALL SEEDED AREAS ARE TO BE RESEEDED WHEN NECESSARY TO ACHIEVE A GOOD STAND OF GRASS. SILT FENCE AND DIVERSION DYKES WHICH ARE COLLECTING SEDIMENT TO HALF THEIR HEIGHT MUST BE CLEANED AND REPAIRED IMMEDIATELY.
20. ALL TEMPORARY EROSION AND SEDIMENT CONTROLS ARE TO BE REMOVED WITHIN 30 DAYS OF FINAL SITE STABILIZATION, WHEN MEASURES ARE NO LONGER NEEDED, SUBJECT TO APPROVAL BY THE EROSION CONTROL INSPECTOR.
21. THE E&S INSPECTOR HAS THE AUTHORITY TO ADD OR DELETE E&S CONTROLS AS NECESSARY IN THE FIELD AS SITE CONDITIONS CHANGE. IN ADDITION, NO SEDIMENT BASIN OR TRAP CAN BE REMOVED WITHOUT WRITTEN AUTHORIZATION.

EROSION CONTROL NOTES (PART 2)

ES–1: UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND VIRGINIA REGULATIONS 9VAC25–840 EROSION AND SEDIMENT CONTROL REGULATIONS.

ES–2: THE PLAN APPROVING AUTHORITY MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE–CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.

ES–3: ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING.

ES–4: A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.

ES–5: PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING BUT NOT LIMITED TO, OFF–SITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY.

ES–6: THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE PLAN APPROVING AUTHORITY.

ES–7: ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.

ES–8: DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED WATER FILTERING DEVICE.

ES–9: THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF–PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.

SOIL DESCRIPTION

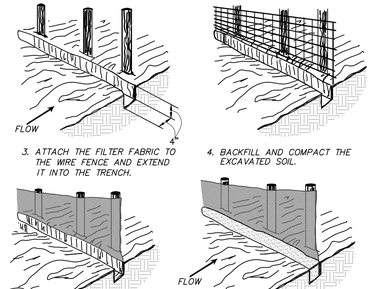
121C – CULPEPER– URBAN LAND COMPLEX– CULPEPER SOILS HAVE A TENDENCY TO HAVE STEEP SLOPES UPWARD OF APPROXIMATELY SOIL THE SOIL IS TYPICALLY WELL DRAINED, WITH MORE THAN 80 INCHES TO THE WATER TABLE IN MOST CASES. THE SOIL'S PARENT MATERIAL IS RESIDUUM WEATHERED FROM GRANITE & GNEISS. THIS SOIL HAS CONVEX DOWN–SLOPE AND CONVEX ACROSS–SLOPE SHAPE. THE SOIL HAS A MEDIUM RUNOFF CLASS WITHOUT A FREQUENCY OF PONDING OR FLOODING. THE K'sat VALUE RANGES FROM VERY LOW TO HIGH. URBAN LAND SOILS VARY AND ARE DEPENDENT UPON PRIOR CONSTRUCTION ACTIVITIES. THE NRCS PROVIDES LITTLE DATA ON THESE SOILS, BUT THEY ARE OFTEN DENSELY COMPACTED, MORE IMPERVIOUS AND POORLY DRAINED WITH LESS INFILTRATION.

REFERENCE: WEB SOIL SURVEY ONLINE DATABASE, FOUND AT http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

(OP) OUTLET PROTECTION SUMMARY

Outlet Protection	Length of Riprap	Width at Outlet	Bottom Width	Depth of Stone	Stone Size
Outlet Protection #1	17'	9'	16'	12"	VDOT Std. Class A1
Outlet Protection #3	9'	2'	5'	12"	VDOT Std. Class A1
Outlet Protection #4	10'	3'	7'	12"	VDOT Std. Class A1
Outlet Protection #5	8'	2'	5'	12"	VDOT Std. Class A1

1. SET POSTS AND EXCAVATE A 4"X4" TRENCH UPSLOPE ALONG THE LINE OF POSTS.
2. STAPLE WIRE FENCING TO THE POSTS.
3. ATTACH THE FILTER FABRIC TO THE WIRE FENCE AND EXTEND IT INTO THE TRENCH.
4. BACKFILL AND COMPACT THE EXCAVATED SOIL.

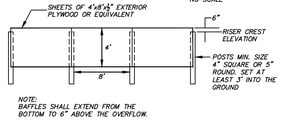


SSF SUPER SILT FENCE (WITH WIRE–BACK) 3.05–2

NO SCALE

SEDIMENT BASIN BAFFLE DETAIL

NO SCALE



NOTE: BAFFLES SHALL EXTEND FROM THE BOTTOM TO 6" ABOVE THE OVERFLOW.

(SCC) STORMWATER CONVEYANCE CHANNEL SUMMARY

Stormwater Conveyance Channel (SCC) Designs

Worse-Case Contributing DA, acres	Cw Value	Time of Conc. min.	Slope of Ditch, ft / ft	Depth of V-Notch Ditch (3:1 Side Slopes)	2-Yr. Flow, cfs	2-yr Velocity, ft / s	10-Yr. Flow, cfs	10-yr Depth, inches
SCC #1	1.36	0.45	5	0.5	12"	3.18	8.11	4.10	4.8
SSC #2	1.34	0.46	5	0.5	12"	3.21	8.13	4.13	4.8
SSC #3	0.28	0.80	5	0.38	12"	1.16	5.68	1.50	3.4
SSC #4	0.94	0.45	5	0.16	12"	2.20	4.82	2.83	5.1
SSC #5	0.89	0.45	5	0.36	12"	2.08	6.45	2.68	4.3
SSC #6	0.26	0.45	5	0.28	12"	0.61	4.32	0.78	2.9
SSC #7	0.09	0.45	5	0.44	12"	0.21	3.91	0.27	1.8
SSC #8	1.25	0.55	5	0.048	12"	3.58	4.30	4.61	6.9

Note: A roughness coefficient of 0.04 was used for riprap (SCC 1-7), and a coefficient of 0.03 was used for the stabilized grass (SCC #8).

UTILITY INSTALLATION NOTES.
1. SITE DRAINAGE FACILITIES SHALL BE SCHEDULED TO BE COMPLETED WITHIN 30 DAYS FOLLOWING COMPLETION OF THE ROUGH GRADING OPERATIONS FOR THAT PORTION OF THE PROJECT.
2. AREAS DESIGNATED FOR UNDERGROUND UTILITIES SHALL BE STABILIZED AS SOON AS PRACTICAL BUT NOT EXCEEDING 14 DAYS FOLLOWING THEIR INSTALLATION AND BACKFILLING. TRENCH LENGTH TO BE OPENED AT ANY ONE TIME NOT TO EXCEED 500 FEET IN LENGTH. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED AND PASSED THROUGH THE SEDIMENT BASIN TO NOT ADVERSELY AFFECT STREAMS OR OFF SITE PROPERTY.

DESCRIPTION OF EROSION & SEDIMENT CONTROL MEASURES:

EROSION AND SEDIMENT CONTROL MEASURES:
IT IS ANTICIPATED TO USE A CONSTRUCTION ENTRANCE, DIVERSIONS, SEDIMENT BASINS, A SEDIMENT TRAP, A CHECK DAM AND TRADITIONAL AND WIRE BACKED SILT FENCE TO CONTROL SURFACE DRAINAGE AND RUN–OFF DURING THE OVERALL CONSTRUCTION OPERATIONS ON THE PROPERTY. TEMPORARY SEEDING WILL BE USED IMMEDIATELY FOLLOWING ALL LAND DISTURBANCE ACTIVITIES. TEMPORARY STOCKPILE AREAS AND FILL STOCKPILE AREAS WILL BE NECESSARY WITH THE PROPOSED DESIGN. A POTENTIAL LOCATION HAS BEEN SHOWN ON THE EROSION & SEDIMENT CONTROL SHEETS FOR THE TOPSOIL STOCKPILE AREA. THE FILL DIRT WILL BE BROUGHT INTO THE SITE FROM ANOTHER SITE WITH AN APPROVED VSMP PERMIT AND PLACED IN THE FILL AREAS. ALL STOCKPILES WILL NEED TO BE MAINTAINED AND STORED FOR LATER SPREADING. STOCKPILE LOCATIONS SHALL BE ON SITE AND SHALL BE STABILIZED WITH A TEMPORARY VEGETATIVE COVER. PERMANENT SEEDING WILL BE PERFORMED ON ALL DISTURBED AREAS ON WHICH WILL NO LONGER BE EXCAVATED AND THE CONSTRUCTION ACTIVITIES HAVE CEASED. PERMANENT SEEDING SHALL ALSO BE PERFORMED FOR ALL DENUDED AREAS WHICH WILL BE LEFT DORMANT FOR A YEAR OR MORE. SELECTION OF SEED MIXTURE WILL DEPEND ON THE TIME OF YEAR APPLIED. TEMPORARY SEEDING WILL BE PERFORMED FOR ALL DENUDED AREAS WHICH ARE TO BE LEFT DORMANT FOR MORE THAN SEVEN DAYS. THESE AREAS SHALL BE SEEDED WITH FAST GERMINATING VEGETATION IMMEDIATELY FOLLOWING GRADING OF THOSE AREAS. SELECTION OF SEED MIXTURE WILL DEPEND ON THE TIME OF YEAR APPLIED. TEMPORARY STABILIZATION ALONG ANY DISTURBED SLOPES SHALL BE ACHIEVED WITH BLANKET MATTING. A TEMPORARY PIPE SHALL BE USED TO DIVERT THE RUNOFF SAFELY TO THE SEDIMENT BASIN, AS SHOWN IN ESC PHASE IV.

3.01 SAFETY FENCE– TO DISCOURAGE ACCESS TO A PARTICULAR AREA.

3.02 CONSTRUCTION ENTRANCE – TO REDUCE THE AMOUNT OF MUD TRANSPORTED ONTO PAVED PUBLIC ROADS BY MOTOR VEHICLES OR RUNOFF.

3.03 CONSTRUCTION ROAD STABILIZATION – TO REDUCE THE EROSION OF TEMPORARY ROADBEDS BY CONSTRUCTION TRAFFIC AND TO REDUCE THE EROSION AND SUBSEQUENT REGRADING OF PERMANENT ROADBEDS BETWEEN THE TIME OF INITIAL GRADING AND FINAL STABILIZATION. CONSTRUCTION ROAD STABILIZATION WILL BE APPLIED TO THE CONTRACTOR PARKING & STAGING AREAS AS SHOWN.

3.05 SILT FENCE & SILT FENCE WITH WIRE BACKING– SILT FENCE,/ SILT FENCE WITH WIRE BACKING IS PROPOSED, WHERE SHOWN ON THE PLANS.

3.07 STORM DRAIN INLET PROTECTION– INLET PROTECTION IS PROPOSED ON INLETS, WHERE SHOWN ON THE PLANS.

3.09 DIVERSION– PERIMETER DIVERSIONS ARE PROPOSED WHERE SHOWN ON THE PLANS TO DIRECT RUNOFF INTO SEDIMENT TRAPPING DEVICES.

3.13 SEDIMENT TRAP– A SEDIMENT TRAP IS PROPOSED, WHERE SHOWN ON THE PLANS. SEDIMENT TRAP #1 AND A SEDIMENT TRAP AT THE CONSTRUCTION ENTRANCE ARE PROPOSED FOR ADDITIONAL ESC MEASURES. THE CONSTRUCTION ENTRANCE SEDIMENT TRAP WILL CONTROL FLASH RUNOFF FROM VEHICULAR WASH OFFS.

3.14 SEDIMENT BASIN – SEDIMENT BASINS WITH BAFFLES ARE PROPOSED AS A PERIMETER MEASURE TO COLLECT THE SEDIMENT–LADEN RUN–OFF FROM THE SITE AND ALLOW THE SEDIMENT TO SETTLE OUT PRIOR TO RELEASING THE RUN–OFF.

3.17 STORMWATER CONVEYANCE CHANNEL– STORMWATER CONVEYANCE CHANNELS ARE PROPOSED TO DIRECT RUNOFF INTO SEDIMENT BASINS.

3.20 ROCK CHECK DAM– A SMALL TEMPORARY STONE DAM CONSTRUCTED ACROSS A SWALE, AS SHOWN, TO REDUCE VELOCITIES AND LIMIT THE RISK OF EROSION.

3.32 PERMANENT SEEDING–PERMANENT SEEDING IS REQUIRED AND PROPOSED WITH THIS PLAN.

3.38 TREE PRESERVATION AND PROTECTION– TREE PROTECTION IS PROPOSED WITH THIS PLAN. SEE THE ESC PLAN FOR THE REQUIRED LOCATIONS.

3.39 DUST CONTROL–DUST CONTROL IS REQUIRED AND PROPOSED WITH THIS PLAN.

NOTE: SEE THIS SHEET UNDER EROSION & SEDIMENT CONTROL MEASURES FOR ADDITIONAL DESCRIPTIONS OF ALL PROPOSED EROSION AND SEDIMENT CONTROL ITEMS.

MAINTENANCE:

IN GENERAL, DURING CONSTRUCTION THE RLD OR CONTRACTOR ON–SITE WILL CHECK ALL EROSION AND SEDIMENT CONTROL MEASURES DAILY AND AFTER EACH SIGNIFICANT RAINFALL. MONITORING REPORTS WILL BE REQUIRED FROM THE RLD IF NEEDED. SPECIFIC ATTENTION WILL BE PAID TO THE FOLLOWING ITEMS:

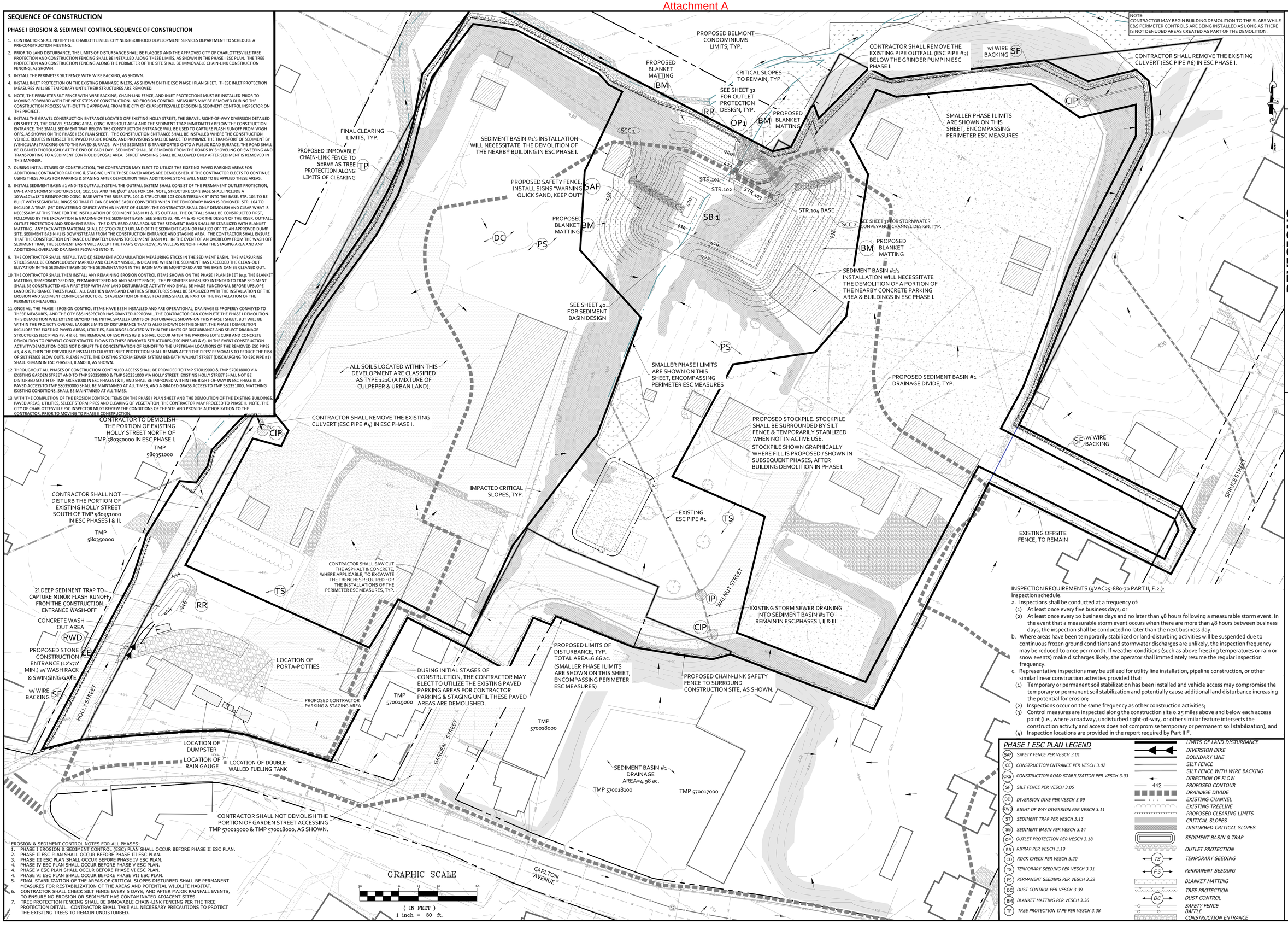
a. SEDIMENT TRAPS & BASINS WILL BE CLEANED AND MAINTAINED IN ACCORDANCE WITH THE VIRGINIA EROSION & SEDIMENT CONTROL HANDBOOK.
b. ALL GRAVEL OUTLETS WILL BE CHECKED REGULARLY FOR SEDIMENT BUILDUP THAT WILL PREVENT PROPER DRAINAGE. IF THE GRAVEL IS CLOGGED BY SEDIMENT, THE GRAVEL WILL BE REMOVED AND CLEANED, OR IT WILL BE REPLACED. SLOPE DRAIN SHALL BE CHECKED REGULARLY AS WELL FOR SEDIMENT BUILDUP OR CLOGGING THAT WILL PREVENT PROPER FUNCTIONING.
c. ALL SILT FENCE BARRIERS WILL BE CHECKED REGULARLY FOR UNDERMINING OR DETERIORATION OF THE FABRIC AND REPAIRED AS REQUIRED. SEDIMENT SHALL BE REMOVED WHEN THE LEVEL OF SEDIMENT DEPOSITION REACHED HALF WAY TO THE TOP OF THE BARRIER.
d. ALL DIVERSION DIKES SHALL BE CHECKED REGULARLY TO ENSURE POSITIVE FLOW THROUGH THE DIVERSIONS A

Attachment A

SEQUENCE OF CONSTRUCTION

PHASE I EROSION & SEDIMENT CONTROL SEQUENCE OF CONSTRUCTION

1. CONTRACTOR SHALL NOTIFY THE CHARLOTTESVILLE CITY NEIGHBORHOOD DEVELOPMENT SERVICES DEPARTMENT TO SCHEDULE A PRE-CONSTRUCTION MEETING.
2. PRIOR TO LAND DISTURBANCE, THE LIMITS OF DISTURBANCE SHALL BE FLAGGED AND THE APPROVED CITY OF CHARLOTTESVILLE TREE PROTECTION AND CONSTRUCTION FENCING SHALL BE INSTALLED ALONG THESE LIMITS, AS SHOWN IN THE PHASE I ESC PLAN. THE TREE PROTECTION AND CONSTRUCTION FENCING ALONG THE PERIMETER OF THE SITE SHALL BE IMMOVABLE CHAIN-LINK CONSTRUCTION FENCING, AS SHOWN.
3. INSTALL THE PERIMETER SILT FENCE WITH WIRE BACKING, AS SHOWN.
4. INSTALL INLET PROTECTION ON THE EXISTING DRAINAGE INLETS, AS SHOWN ON THE ESC PHASE I PLAN SHEET. THESE INLET PROTECTION MEASURES WILL BE TEMPORARY UNTIL THEIR STRUCTURES ARE REMOVED.
5. NOTE, THE PERIMETER SILT FENCE WITH WIRE BACKING, CHAIN-LINK FENCE, AND INLET PROTECTIONS MUST BE INSTALLED PRIOR TO MOVING FORWARD WITH THE NEXT STEPS OF CONSTRUCTION. NO EROSION CONTROL MEASURES MAY BE REMOVED DURING THE CONSTRUCTION PROCESS WITHOUT THE APPROVAL FROM THE CITY OF CHARLOTTESVILLE EROSION & SEDIMENT CONTROL INSPECTOR ON THE PROJECT.
6. INSTALL THE GRAVEL CONSTRUCTION ENTRANCE LOCATED OFF EXISTING HOLLY STREET, THE GRAVEL RIGHT-OF-WAY DIVERSION DETAILED ON SHEET 23, THE GRAVEL STAGING AREA, CONC. WASHOUT AREA AND THE SEDIMENT TRAP IMMEDIATELY BELOW THE CONSTRUCTION ENTRANCE. THE SMALL SEDIMENT TRAP BELOW THE CONSTRUCTION ENTRANCE WILL BE USED TO CAPTURE FLASH RUNOFF FROM WASH OFFS, AS SHOWN ON THE PHASE I ESC PLAN SHEET. THE CONSTRUCTION ENTRANCE SHALL BE INSTALLED WHERE THE CONSTRUCTION VEHICLE ROUTES INTERSECT THE PAVED PUBLIC ROADS, AND PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY (VEHICULAR) TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PUBLIC ROAD SURFACE, THE ROAD SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTING TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER.
7. DURING INITIAL STAGES OF CONSTRUCTION, THE CONTRACTOR MAY ELECT TO UTILIZE THE EXISTING PAVED PARKING AREAS FOR ADDITIONAL CONTRACTOR PARKING & STAGING UNTIL THESE PAVED AREAS ARE DEMOLISHED. IF THE CONTRACTOR ELECTS TO CONTINUE USING THESE AREAS FOR PARKING & STAGING AFTER DEMOLITION THEN ADDITIONAL STONE WILL NEED TO BE APPLIED THESE AREAS.
8. INSTALL SEDIMENT BASIN #1 AND ITS OUTFALL SYSTEM. THE OUTFALL SYSTEM SHALL CONSIST OF THE PERMANENT OUTLET PROTECTION, EW-1 AND STORM STRUCTURES 101, 102, 103 AND THE Ø60" BASE FOR 104. NOTE, STRUCTURE 104's BASE SHALL INCLUDE A 10'Wx10'Lx18"D REINFORCED CONC. BASE WITH THE RISER STR. 104 & STRUCTURE 103 COUNTERSUNK 6" INTO THE BASE. STR. 104 TO BE BUILT WITH SEGMENTAL RINGS SO THAT IT CAN BE MORE EASILY CONVERTED WHEN THE TEMPORARY BASIN IS REMOVED. STR. 104 TO INCLUDE A TEMP. Ø6" DEWATERING ORIFICE WITH AN INVERT OF 418.39'. THE CONTRACTOR SHALL ONLY DEMOLISH AND CLEAR WHAT IS NECESSARY AT THIS TIME FOR THE INSTALLATION OF SEDIMENT BASIN #1 & ITS OUTFALL. THE OUTFALL SHALL BE CONSTRUCTED FIRST, FOLLOWED BY THE EXCAVATION & GRADING OF THE SEDIMENT BASIN. SEE SHEETS 32, 40, 44 & 45 FOR THE DESIGN OF THE RISER, OUTFALL, OUTLET PROTECTION AND SEDIMENT BASIN. THE DISTURBED AREA AROUND THE SEDIMENT BASIN SHALL BE STABILIZED WITH BLANKET MATTING. ANY EXCAVATED MATERIAL SHALL BE STOCKPILED UPLAND OF THE SEDIMENT BASIN OR HAULED OFF TO AN APPROVED DUMP SITE. SEDIMENT BASIN #1 IS DOWNSTREAM FROM THE CONSTRUCTION ENTRANCE AND STAGING AREA. THE CONTRACTOR SHALL ENSURE THAT THE CONSTRUCTION ENTRANCE ULTIMATELY DRAINS TO SEDIMENT BASIN #1. IN THE EVENT OF AN OVERFLOW FROM THE WASH OFF SEDIMENT TRAP, THE SEDIMENT BASIN WILL ACCEPT THE TRAP'S OVERFLOW, AS WELL AS RUNOFF FROM THE STAGING AREA AND ANY ADDITIONAL OVERLAND DRAINAGE FLOWING INTO IT.
9. THE CONTRACTOR SHALL INSTALL TWO (2) SEDIMENT ACCUMULATION MEASURING STICKS IN THE SEDIMENT BASIN. THE MEASURING STICKS SHALL BE CONSPICUOUSLY MARKED AND CLEARLY VISIBLE, INDICATING WHEN THE SEDIMENT HAS EXCEEDED THE CLEAN-OUT ELEVATION IN THE SEDIMENT BASIN SO THE SEDIMENTATION IN THE BASIN MAY BE MONITORED AND THE BASIN CAN BE CLEANED OUT.
10. THE CONTRACTOR SHALL THEN INSTALL ANY REMAINING EROSION CONTROL ITEMS SHOWN ON THE PHASE I PLAN SHEET (e.g. THE BLANKET MATTING, TEMPORARY SEEDING, PERMANENT SEEDING AND SAFETY FENCE). THE PERIMETER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP WITH ANY LAND DISTURBANCE ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE. ALL EARTHEN DAMS AND EARTHEN STRUCTURES SHALL BE STABILIZED WITH THE INSTALLATION OF THE EROSION AND SEDIMENT CONTROL STRUCTURE. STABILIZATION OF THESE FEATURES SHALL BE PART OF THE INSTALLATION OF THE PERIMETER MEASURES.
11. ONCE ALL THE PHASE I EROSION CONTROL ITEMS HAVE BEEN INSTALLED AND ARE OPERATIONAL, DRAINAGE IS PROPERLY CONVEYED TO THESE MEASURES, AND THE CITY E&S INSPECTOR HAS GRANTED APPROVAL, THE CONTRACTOR CAN COMPLETE THE PHASE I DEMOLITION. THIS DEMOLITION WILL EXTEND BEYOND THE INITIAL SMALLER LIMITS OF DISTURBANCE SHOWN ON THIS PHASE I SHEET, BUT WILL BE WITHIN THE PROJECT'S OVERALL LARGER LIMITS OF DISTURBANCE THAT IS ALSO SHOWN ON THIS SHEET. THE PHASE I DEMOLITION INCLUDES THE EXISTING PAVED AREAS, UTILITIES, BUILDINGS LOCATED WITHIN THE LIMITS OF DISTURBANCE AND SELECT DRAINAGE STRUCTURES (ESC PIPES #3, 4 & 6). THE REMOVAL OF ESC PIPES #3 & 6 SHALL OCCUR AFTER THE PARKING LOT's CURB AND CONCRETE DEMOLITION TO PREVENT CONCENTRATED FLOWS TO THESE REMOVED STRUCTURES (ESC PIPES #3 & 6). IN THE EVENT CONSTRUCTION ACTIVITY/DEMOLITION DOES NOT DISRUPT THE CONCENTRATION OF RUNOFF TO THE UPSTREAM LOCATIONS OF THE REMOVED ESC PIPES #3, 4 & 6, THEN THE PREVIOUSLY INSTALLED CULVERT INLET PROTECTION SHALL REMAIN AFTER THE PIPES' REMOVALS TO REDUCE THE RISK OF SILT FENCE BLOW OUTS. PLEASE NOTE, THE EXISTING STORM SEWER SYSTEM BENEATH WALNUT STREET (DISCHARGING TO ESC PIPE #1) SHALL REMAIN IN ESC PHASES I, II AND III, AS SHOWN.
12. THROUGHOUT ALL PHASES OF CONSTRUCTION CONTINUED ACCESS SHALL BE PROVIDED TO TMP 570019000 & TMP 570018000 VIA EXISTING GARDEN STREET AND TO TMP 580350000 & TMP 580351000 VIA HOLLY STREET. EXISTING HOLLY STREET SHALL NOT BE DISTURBED SOUTH OF TMP 580351000 IN ESC PHASES I & II, AND SHALL BE IMPROVED WITHIN THE RIGHT-OF-WAY IN ESC PHASE III. A PAVED ACCESS TO TMP 580350000 SHALL BE MAINTAINED AT ALL TIMES, AND A GRADED GRASS ACCESS TO TMP 580351000, MATCHING EXISTING CONDITIONS, SHALL BE MAINTAINED AT ALL TIMES.
13. WITH THE COMPLETION OF THE EROSION CONTROL ITEMS ON THE PHASE I PLAN SHEET AND THE DEMOLITION OF THE EXISTING BUILDINGS, PAVED AREAS, UTILITIES, SELECT STORM PIPES AND CLEARING OF VEGETATION, THE CONTRACTOR MAY PROCEED TO PHASE II. NOTE, THE CITY OF CHARLOTTESVILLE ESC INSPECTOR MUST REVIEW THE CONDITIONS OF THE SITE AND PROVIDE AUTHORIZATION TO THE CONTRACTOR, PRIOR TO MOVING TO PHASE II CONSTRUCTION.



GRAPHIC SCALE
30 0 15 30 60
(IN FEET)
1 inch = 30 ft.

EROSION & SEDIMENT CONTROL NOTES FOR ALL PHASES:
1. PHASE I EROSION & SEDIMENT CONTROL (ESC) PLAN SHALL OCCUR BEFORE PHASE II ESC PLAN.
2. PHASE II ESC PLAN SHALL OCCUR BEFORE PHASE III ESC PLAN.
3. PHASE III ESC PLAN SHALL OCCUR BEFORE PHASE IV ESC PLAN.
4. PHASE IV ESC PLAN SHALL OCCUR BEFORE PHASE V ESC PLAN.
4. PHASE V ESC PLAN SHALL OCCUR BEFORE PHASE VI ESC PLAN.
4. PHASE VI ESC PLAN SHALL OCCUR BEFORE PHASE VII ESC PLAN.
5. FINAL STABILIZATION OF THE AREAS OF CRITICAL SLOPES DISTURBED SHALL BE PERMANENT MEASURES FOR RESTABILIZATION OF THE AREAS AND POTENTIAL WILDLIFE HABITAT.
6. CONTRACTOR SHALL CHECK SILT FENCE EVERY 5 DAYS, AND AFTER MAJOR RAINFALL EVENTS, TO ENSURE NO EROSION OR SEDIMENT HAS CONTAMINATED ADJACENT SITES.
7. TREE PROTECTION FENCING SHALL BE IMMOVABLE CHAIN-LINK FENCING PER THE TREE PROTECTION DETAIL. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING TREES TO REMAIN UNDISTURBED.

INSPECTION REQUIREMENTS (9VAC25-880-70 PART II, F.2.):
Inspection schedule.
a. Inspections shall be conducted at a frequency of:
(1) At least once every five business days; or
(2) At least once every 10 business days and no later than 48 hours following a measurable storm event. In the event that a measurable storm event occurs when there are more than 48 hours between business days, the inspection shall be conducted no later than the next business day.
b. Where areas have been temporarily stabilized or land-disturbing activities will be suspended due to continuous frozen ground conditions and stormwater discharges are unlikely, the inspection frequency may be reduced to once per month. If weather conditions (such as above freezing temperatures or rain or snow events) make discharges likely, the operator shall immediately resume the regular inspection frequency.
c. Representative inspections may be utilized for utility line installation, pipeline construction, or other similar linear construction activities provided that:
(1) Temporary or permanent soil stabilization has been installed and vehicle access may compromise the temporary or permanent soil stabilization and potentially cause additional land disturbance increasing the potential for erosion;
(2) Inspections occur on the same frequency as other construction activities;
(3) Control measures are inspected along the construction site 0.25 miles above and below each access point (i.e., where a roadway, undisturbed right-of-way, or other similar feature intersects the construction activity and access does not compromise temporary or permanent soil stabilization); and
(4) Inspection locations are provided in the report required by Part II F.

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
PROFESSIONAL ENGINEER
8/18/23

REVISIONS

DATE	REVISION DESCRIPTION
3/15/22	INITIAL PLAN SUBMITTAL
1/03/23	2ND PLAN SUBMITTAL
5/19/23	3RD PLAN SUBMITTAL
8/18/23	4TH PLAN SUBMITTAL

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BELMONT CONDOMINIUMS - FINAL SITE PLAN

EROSION & SEDIMENT CONTROL PLAN - PHASE I

PROJECT
SHEET
JOB NO. 202201
SCALE 1"=30'
SHEET NO. 33

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SEQUENCE OF CONSTRUCTION

PHASE II EROSION & SEDIMENT CONTROL SEQUENCE OF CONSTRUCTION

1. THE CONTRACTOR SHALL BEGIN PHASE II CONSTRUCTION BY INSTALLING DIVERSION BERMS #1, 2 & 3. THESE BERMS WILL DIRECT RUNOFF FROM THE SITE TO SEDIMENT BASIN #1, AS SHOWN. THE INSTALLATION OF DIVERSION BERMS #1 & 2 WILL INCLUDE TEMPORARY CULVERTS TO FACILITATE VEHICULAR CONSTRUCTION TRAFFIC ACROSS THE BERMS. THE BERMS SHALL BE STABILIZED IN ACCORDANCE WITH THE DESIGN DETAIL, AND STORMWATER CONVEYANCE CHANNELS SHALL BE INSTALLED BELOW BERMS #1 & 2, AS SHOWN.
2. AFTER THE DIVERSION BERMS ARE INSTALLED AND ARE DIRECTING THEIR RUNOFF INTO SEDIMENT BASIN #1, AS SHOWN, THE CONTRACTOR SHALL INSTALL ANY REMAINING EROSION CONTROL ITEMS SHOWN ON THE PHASE II PLAN SHEET. THE PERIMETER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP WITH ANY LAND DISTURBANCE ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE. ALL EARTHEN DAMS AND EARTHEN STRUCTURES SHALL BE STABILIZED WITH THE INSTALLATION OF THE EROSION AND SEDIMENT CONTROL STRUCTURE. STABILIZATION OF THESE FEATURES SHALL BE PART OF THE INSTALLATION OF THE PERIMETER MEASURES.
3. ONCE ALL THE PHASE II EROSION CONTROL ITEMS HAVE BEEN INSTALLED AND ARE OPERATIONAL, DRAINAGE IS PROPERLY CONVEYED TO THESE MEASURES, AND THE CITY ESC INSPECTOR HAS GRANTED APPROVAL, THE CONTRACTOR CAN PROCEED TO ESC PHASE III.

CONTRACTOR SHALL ENSURE POSITIVE SLOPE IS MAINTAINED, AN 18" BERM HEIGHT IS PROVIDED & THE BERM IS STABILIZED AS A FIRST STEP IN DISTURBANCE (TYP.) DD1

FINAL CLEARING LIMITS, TYP.

PROPOSED IMMOVABLE CHAIN-LINK FENCE TO SERVE AS TREE PROTECTION ALONG LIMITS OF CLEARING TP

PROPOSED BELMONT CONDOMINIUMS LIMITS, TYP.

PROPOSED BLANKET MATTING BM

CRITICAL SLOPES TO REMAIN, TYP.

SEE SHEET 32 FOR OUTLET PROTECTION DESIGN, TYP. RR OP1

PROPOSED BLANKET MATTING BM

w/ WIRE BACKING SF

CD

PROPOSED TEMPORARY 15" CMP CULVERT #2 (L=18', II=434.2, IO=433.90'). CULVERT TO ALLOW VEHICULAR CONSTRUCTION TRAFFIC TO CROSS THE DIVERSION.

SCC 1

432' C/L

CD 434' C/L

PROPOSED SAFETY FENCE. INSTALL SIGNS "WARNING QUICK SAND, KEEP OUT" SAF

PROPOSED BLANKET MATTING BM

SB 1

DC

PS

SCC 2 SEE SHEET 32 FOR STORMWATER CONVEYANCE CHANNEL DESIGN, TYP.

BM PROPOSED BLANKET MATTING

436' C/L

CD

SEE SHEET 40 FOR SEDIMENT BASIN DESIGN

PROPOSED SEDIMENT BASIN #1 DRAINAGE DIVIDE, TYP.

438' C/L

CD

DD2 CONTRACTOR SHALL ENSURE POSITIVE SLOPE IS MAINTAINED, AN 18" BERM HEIGHT IS PROVIDED & THE BERM IS STABILIZED AS A FIRST STEP IN DISTURBANCE (TYP.)

w/ WIRE BACKING SF

INSTALL SILT FENCE BREAK AT LOCATION OF REMOVED ESC PIPE #4. SEE THIS SHEET FOR DETAIL

PROPOSED TEMPORARY 15" CMP CULVERT #1 (L=18', II=438.27, IO=438.00'). CULVERT TO ALLOW VEHICULAR CONSTRUCTION TRAFFIC TO CROSS THE DIVERSION.

PROPOSED STOCKPILE. STOCKPILE SHALL BE SURROUNDED BY SILT FENCE & TEMPORARILY STABILIZED WHEN NOT IN ACTIVE USE.

TMP 580351000

CONTRACTOR SHALL NOT DISTURB THE PORTION OF EXISTING HOLLY STREET SOUTH OF TMP 580351000 IN ESC PHASES I & II.

TMP 580350000

IMPACTED CRITICAL SLOPES, TYP.

EXISTING ESC PIPE #1 TS

440' C/L

CD

442' C/L

DD3

TS

442' C/L

2' DEEP SEDIMENT TRAP TO CAPTURE MINOR FLASH RUNOFF FROM THE CONSTRUCTION ENTRANCE WASH-OFF

CONCRETE WASH OUT AREA RWD

PROPOSED STONE CONSTRUCTION ENTRANCE (12'x70' MIN.) w/ WASH RACK & SWINGING GATE CE

w/ WIRE BACKING SF

CRS

LOCATION OF PORTA-POTTIES

PROPOSED CONTRACTOR PARKING & STAGING AREA

LOCATION OF DUMPSTER

LOCATION OF RAIN GAUGE

LOCATION OF DOUBLE WALLED FUELING TANK

EXISTING STORM SEWER DRAINING INTO SEDIMENT BASIN #1 TO REMAIN IN ESC PHASES I, II & III

IP

CIP

PROPOSED LIMITS OF DISTURBANCE, TYP. TOTAL AREA=6.66 ac.

PROPOSED CHAIN-LINK SAFETY FENCE TO SURROUND CONSTRUCTION SITE, AS SHOWN.

TMP 570019000

TMP 570018000

TMP 570018100

TMP 570017000

SEDIMENT BASIN #1 DRAINAGE AREA= 7.22 ac.

CONTRACTOR SHALL NOT DEMOLISH THE PORTION OF GARDEN STREET ACCESSING TMP 570019000 & TMP 570018000, AS SHOWN.

HOLLY STREET

GARDEN STREET

CARLTON AVENUE

SPRUCE STREET

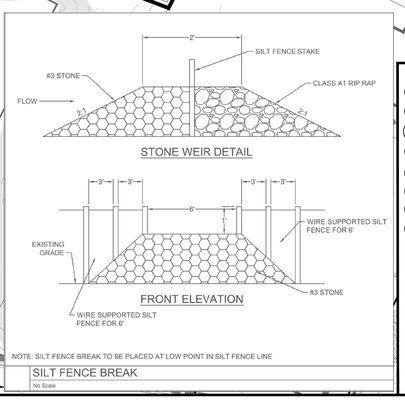
EX ROW

EROSION & SEDIMENT CONTROL NOTES FOR ALL PHASES:

1. PHASE I EROSION & SEDIMENT CONTROL (ESC) PLAN SHALL OCCUR BEFORE PHASE II ESC PLAN.
2. PHASE II ESC PLAN SHALL OCCUR BEFORE PHASE III ESC PLAN.
3. PHASE III ESC PLAN SHALL OCCUR BEFORE PHASE IV ESC PLAN.
4. PHASE IV ESC PLAN SHALL OCCUR BEFORE PHASE V ESC PLAN.
4. PHASE V ESC PLAN SHALL OCCUR BEFORE PHASE VI ESC PLAN.
4. PHASE VI ESC PLAN SHALL OCCUR BEFORE PHASE VII ESC PLAN.
5. FINAL STABILIZATION OF THE AREAS OF CRITICAL SLOPES DISTURBED SHALL BE PERMANENT MEASURES FOR RESTABILIZATION OF THE AREAS AND POTENTIAL WILDLIFE HABITAT.
6. CONTRACTOR SHALL CHECK SILT FENCE EVERY 5 DAYS, AND AFTER MAJOR RAINFALL EVENTS, TO ENSURE NO EROSION OR SEDIMENT HAS CONTAMINATED ADJACENT SITES.
7. TREE PROTECTION FENCING SHALL BE IMMOVABLE CHAIN-LINK FENCING PER THE TREE PROTECTION DETAIL. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING TREES TO REMAIN UNDISTURBED.

GRAPHIC SCALE

(IN FEET)
1 inch = 30 ft.



PHASE II ESC PLAN LEGEND

SAF	SAFETY FENCE PER VESCH 3.01
CE	CONSTRUCTION ENTRANCE PER VESCH 3.02
CRS	CONSTRUCTION ROAD STABILIZATION PER VESCH 3.03
SF	SILT FENCE PER VESCH 3.05
DD	DIVERSION DIKE PER VESCH 3.09
RWD	RIGHT OF WAY DIVERSION PER VESCH 3.11
ST	SEDIMENT TRAP PER VESCH 3.13
SB	SEDIMENT BASIN PER VESCH 3.14
OP	OUTLET PROTECTION PER VESCH 3.18
RR	RIPRAP PER VESCH 3.19
CD	ROCK CHECK PER VESCH 3.20
TS	TEMPORARY SEEDING PER VESCH 3.31
PS	PERMANENT SEEDING PER VESCH 3.32
DC	DUST CONTROL PER VESCH 3.39
BM	BLANKET MATTING PER VESCH 3.36
TP	TREE PROTECTION TAPE PER VESCH 3.38

LIMITS OF LAND DISTURBANCE
DIVERSION DIKE
BOUNDARY LINE
SILT FENCE
SILT FENCE WITH WIRE BACKING
DIRECTION OF FLOW
442 PROPOSED CONTOUR
DRAINAGE DIVIDE
EXISTING CHANNEL
EXISTING TREELINE
PROPOSED CLEARING LIMITS
CRITICAL SLOPES
DISTURBED CRITICAL SLOPES
SEDIMENT BASIN & TRAP
OUTLET PROTECTION
TS TEMPORARY SEEDING
PS PERMANENT SEEDING
BLANKET MATTING
DC DUST CONTROL
TREE PROTECTION
SAFETY FENCE
BAFFLE
CONSTRUCTION ENTRANCE

INSPECTION REQUIREMENTS (9VAC25-880-70 PART II, F.2.):
Inspection schedule.
a. Inspections shall be conducted at a frequency of:
(1) At least once every five business days; or
(2) At least once every 10 business days and no later than 48 hours following a measurable storm event. In the event that a measurable storm event occurs when there are more than 48 hours between business days, the inspection shall be conducted no later than the next business day.
b. Where areas have been temporarily stabilized or land-disturbing activities will be suspended due to continuous frozen ground conditions and stormwater discharges are unlikely, the inspection frequency may be reduced to once per month. If weather conditions (such as above freezing temperatures or rain or snow events) make discharges likely, the operator shall immediately resume the regular inspection frequency.
c. Representative inspections may be utilized for utility line installation, pipeline construction, or other similar linear construction activities provided that:
(1) Temporary or permanent soil stabilization has been installed and vehicle access may compromise the temporary or permanent soil stabilization and potentially cause additional land disturbance increasing the potential for erosion;
(2) Inspections occur on the same frequency as other construction activities;
(3) Control measures are inspected along the construction site 0.25 miles above and below each access point (i.e., where a roadway, undisturbed right-of-way, or other similar feature intersects the construction activity and access does not compromise temporary or permanent soil stabilization); and
(4) Inspection locations are provided in the report required by Part II F.

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
8/18/23
PROFESSIONAL ENGINEER

REVISIONS

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PROJECT
BELMONT CONDOMINIUMS - FINAL SITE PLAN
EROSION & SEDIMENT CONTROL PLAN - PHASE II

JOB NO. 202201
SCALE 1"=30'
SHEET NO. 34

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INSPECTION REQUIREMENTS (9VAC25-880-70 PART II, F.2.):
Inspection schedule.
a. Inspections shall be conducted at a frequency of:
(1) At least once every five business days; or
(2) At least once every 10 business days and no later than 48 hours following a measurable storm event. In the event that a measurable storm event occurs when there are more than 48 hours between business days, the inspection shall be conducted no later than the next business day.
b. Where areas have been temporarily stabilized or land-disturbing activities will be suspended due to continuous frozen ground conditions and stormwater discharges are unlikely, the inspection frequency may be reduced to once per month. If weather conditions (such as above freezing temperatures or rain or snow events) make discharges likely, the operator shall immediately resume the regular inspection frequency.
c. Representative inspections may be utilized for utility line installation, pipeline construction, or other similar linear construction activities provided that:
(1) Temporary or permanent soil stabilization has been installed and vehicle access may compromise the temporary or permanent soil stabilization and potentially cause additional land disturbance increasing the potential for erosion;
(2) Inspections occur on the same frequency as other construction activities;
(3) Control measures are inspected along the construction site 0.25 miles above and below each access point (i.e., where a roadway, undisturbed right-of-way, or other similar feature intersects the construction activity and access does not compromise temporary or permanent soil stabilization); and
(4) Inspection locations are provided in the report required by Part II F.

PHASE III ESC PLAN LEGEND

- (SAF) SAFETY FENCE PER VESCH 3.01
- (CE) CONSTRUCTION ENTRANCE PER VESCH 3.02
- (CRS) CONSTRUCTION ROAD STABILIZATION PER VESCH 3.03
- (SF) SILT FENCE PER VESCH 3.05
- (DD) DIVERSION DIKE PER VESCH 3.09
- (RWD) RIGHT OF WAY DIVERSION PER VESCH 3.11
- (ST) SEDIMENT TRAP PER VESCH 3.13
- (SB) SEDIMENT BASIN PER VESCH 3.14
- (OP) OUTLET PROTECTION PER VESCH 3.18
- (RR) RIPRAP PER VESCH 3.19
- (CD) ROCK CHECK PER VESCH 3.20
- (TS) TEMPORARY SEEDING PER VESCH 3.31
- (PS) PERMANENT SEEDING PER VESCH 3.32
- (DC) DUST CONTROL PER VESCH 3.39
- (BM) BLANKET MATTING PER VESCH 3.36
- (TP) TREE PROTECTION TAPE PER VESCH 3.38

- LIMITS OF LAND DISTURBANCE
- DIVERSION DIKE
- BOUNDARY LINE
- SILT FENCE
- SILT FENCE WITH WIRE BACKING
- DIRECTION OF FLOW
- 442 PROPOSED CONTOUR
- DRAINAGE DIVIDE
- EXISTING CHANNEL
- EXISTING TREELINE
- PROPOSED CLEARING LIMITS
- CRITICAL SLOPES
- DISTURBED CRITICAL SLOPES
- SEDIMENT BASIN & TRAP
- OUTLET PROTECTION
- (TS) TEMPORARY SEEDING
- (PS) PERMANENT SEEDING
- BLANKET MATTING
- TREE PROTECTION
- (DC) DUST CONTROL
- SAFETY FENCE BAFFLE
- CONSTRUCTION ENTRANCE

CONTRACTOR TO INSTALL A PORTION OF THE RETAINING WALL AT ITS FINAL ELEVATION, AS SHOWN. WALL TO TEMPORARILY TERMINATE UPSTREAM OF SB #1 IN ESC PHASE III.

PROPOSED BELMONT CONDOMINIUMS LIMITS, TYP.

CONTRACTOR SHALL ENSURE POSITIVE SLOPE IS MAINTAINED, AN 18" BERM HEIGHT IS PROVIDED & THE BERM IS STABILIZED AS A FIRST STEP IN DISTURBANCE (TYP.)

FINAL CLEARING LIMITS, TYP.

PROPOSED IMMOVABLE CHAIN-LINK FENCE TO SERVE AS TREE PROTECTION ALONG LIMITS OF CLEARING

PROPOSED BLANKET MATTING

CRITICAL SLOPES TO REMAIN, TYP.

SEE SHEET 32 FOR OUTLET PROTECTION DESIGN, TYP.

PROPOSED SAFETY FENCE, INSTALL SIGNS "WARNING QUICK SAND, KEEP OUT"

TEMPORARY 148' OF Ø15" HDPE TO OUTFALL STR. 10 (II=433.85, IO=424.00). STR. 10 TO BE MODIFIED TO ACCEPT THE TEMP. PIPE.

SEE SHEET 40 FOR SEDIMENT BASIN DESIGN

SEE SHEET 32 FOR STORMWATER CONVEYANCE CHANNEL DESIGN, TYP.

PROPOSED BLANKET MATTING

PROPOSED SEDIMENT BASIN #1 DRAINAGE DIVIDE, TYP.

CONTRACTOR TO INSTALL THE RETAINING WALLS AT THEIR FINAL ELEVATIONS, AS SHOWN, IN ESC PHASE III

CONTRACTOR SHALL ENSURE POSITIVE SLOPE IS MAINTAINED, AN 18" BERM HEIGHT IS PROVIDED & THE BERM IS STABILIZED AS A FIRST STEP IN DISTURBANCE (TYP.)

SEDIMENT BASIN #1 DRAINAGE AREA=7.71 ac.

PROPOSED STOCKPILE. STOCKPILE SHALL BE SURROUNDED BY SILT FENCE & TEMPORARILY STABILIZED WHEN NOT IN ACTIVE USE.

PROPOSED TEMPORARY 15" CMP CULVERT #1 (L=18', II=438.27, IO=438.00'). CULVERT TO ALLOW VEHICULAR CONSTRUCTION TRAFFIC TO CROSS THE DIVERSION.

IMPACTED CRITICAL SLOPES, TYP.

EXISTING ESC PIPE #1

EXISTING STORM SEWER DRAINING INTO SEDIMENT BASIN #1 TO REMAIN IN ESC PHASES I, II & III

CONTRACTOR SHALL RECONSTRUCT THE EXISTING DRIVEWAY, AS SHOWN, WITHIN PUBLIC R/W IN ESC PHASE III.
TMP 580350000

2' DEEP SEDIMENT TRAP TO CAPTURE MINOR FLASH RUNOFF FROM THE CONSTRUCTION ENTRANCE WASH-OFF

CONCRETE WASH OUT AREA

PROPOSED STONE CONSTRUCTION ENTRANCE (12'x70' MIN.) w/ WASH RACK

LOCATION OF PORTA-POTTIES

PROPOSED CONTRACTOR PARKING & STAGING AREA

LOCATION OF DUMPSTER

LOCATION OF RAIN GAUGE

LOCATION OF DOUBLE WALLED FUELING TANK

SWINGING GATE

PROPOSED LIMITS OF DISTURBANCE, TYP. TOTAL AREA=6.66 ac.

PROPOSED CHAIN-LINK SAFETY FENCE TO SURROUND CONSTRUCTION SITE, AS SHOWN.

CONTRACTOR SHALL NOT DEMOLISH THE PORTION OF GARDEN STREET ACCESSING TMP 570019000 & TMP 570018000, AS SHOWN.

TMP 580351000
TMP 570019000
TMP 570018000
TMP 570018100
TMP 570017000

GARDEN STREET
CARLTON AVENUE
SPRUCE STREET

GRAPHIC SCALE
30 0 15 30 60
(IN FEET)
1 inch = 30 ft.

EROSION & SEDIMENT CONTROL NOTES FOR ALL PHASES:
1. PHASE I EROSION & SEDIMENT CONTROL (ESC) PLAN SHALL OCCUR BEFORE PHASE II ESC PLAN.
2. PHASE II ESC PLAN SHALL OCCUR BEFORE PHASE III ESC PLAN.
3. PHASE III ESC PLAN SHALL OCCUR BEFORE PHASE IV ESC PLAN.
4. PHASE IV ESC PLAN SHALL OCCUR BEFORE PHASE V ESC PLAN.
4. PHASE V ESC PLAN SHALL OCCUR BEFORE PHASE VI ESC PLAN.
4. PHASE VI ESC PLAN SHALL OCCUR BEFORE PHASE VII ESC PLAN.
5. FINAL STABILIZATION OF THE AREAS OF CRITICAL SLOPES DISTURBED SHALL BE PERMANENT MEASURES FOR RESTABILIZATION OF THE AREAS AND POTENTIAL WILDLIFE HABITAT.
6. CONTRACTOR SHALL CHECK SILT FENCE EVERY 5 DAYS, AND AFTER MAJOR RAINFALL EVENTS, TO ENSURE NO EROSION OR SEDIMENT HAS CONTAMINATED ADJACENT SITES.
7. TREE PROTECTION FENCING SHALL BE IMMOVABLE CHAIN-LINK FENCING PER THE TREE PROTECTION DETAIL. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING TREES TO REMAIN UNDISTURBED.

SEQUENCE OF CONSTRUCTION

PHASE III EROSION & SEDIMENT CONTROL SEQUENCE OF CONSTRUCTION

1. PHASE III CONSTRUCTION SHALL BEGIN WITH THE INSTALLATION OF A NEW CONSTRUCTION ENTRANCE AND ITS STONE ACCESS OFF CARLTON AVENUE. THE NEW CONSTRUCTION ENTRANCE WILL NECESSITATE THE ROUGH GRADING OF THE INITIAL 75' OF PROPOSED HOLLY STREET. THIS NEW CONSTRUCTION ENTRANCE AND STONE ACCESS OFF CARLTON AVENUE WILL REMAIN THROUGH PHASE VI. THE REMOVAL OF THE PHASES I & II CONSTRUCTION ENTRANCE SHALL NOT OCCUR UNTIL AFTER THE INSTALLATION OF THIS NEW CONSTRUCTION ENTRANCE AND APPROVAL FROM THE CITY ESC INSPECTOR. THE CONTRACTOR SHALL CLEAN THE SEDIMENT OUT OF THE SEDIMENT TRAP BELOW THE PHASES I & II CONSTRUCTION ENTRANCE AT THE TIME OF TRAP'S REMOVAL. THE TRAP SHALL BE PROPERLY DEWATERED WITH A PUMP AND A FILTER ON THE SUCTION END AND A SEDIMENT FILTER BAG ON THE OUTLET SIDE. DEWATERING OF THE TRAP SHALL OCCUR NO SOONER THAN 48 HOURS AFTER THE LAST RAINFALL EVENT TO ENSURE PROPER SETTLING TIME IN THE TRAP. MUD AND SEDIMENT FROM THE BOTTOM OF THE SEDIMENT TRAP SHALL NOT BE PUMPED. THE CONTRACTOR SHALL DISPOSE OF THE SEDIMENT IN ACCORDANCE WITH THE VIRGINIA EROSION & SEDIMENT CONTROL HANDBOOK. ONE METHOD OF SEDIMENT DISPOSAL IS SPREADING IT ONSITE, UPLAND OF SEDIMENT BASIN #1, FOR DRYING. ALTERNATIVELY, THE CONTRACTOR MAY ELECT TO HAUL THE SEDIMENT OFFSITE TO AN ACTIVE/APPROVED DEQ PERMITTED SITE.
2. THE NEW CONSTRUCTION ENTRANCE INSTALLATION WILL INCLUDE A SWINGING GATE, WASH RACK, CONC. WASH OUT AREA AND A SMALL SEDIMENT TRAP BELOW THE CONSTRUCTION ENTRANCE, AS SHOWN ON THE PHASE III ESC PLAN. THE SMALL SEDIMENT TRAP BELOW THE CONSTRUCTION ENTRANCE WILL BE USED TO CAPTURE FLASH RUNOFF FROM WASH OFFS. THE CONSTRUCTION ENTRANCE SHALL BE INSTALLED WHERE THE CONSTRUCTION VEHICLE ROUTES INTERSECT THE PAVED PUBLIC ROADS, AND PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY (VEHICULAR) TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PUBLIC ROAD SURFACE, THE ROAD SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTING TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER.
3. AFTER THE NEW CONSTRUCTION ENTRANCE AND DOWNSTREAM SEDIMENT TRAP ARE OPERATIONAL, THE CONTRACTOR SHALL INSTALL ADDITIONAL WIRE-BACKED SILT FENCE EAST OF THE EXISTING HOLLY STREET AND A NEW GRAVEL STAGING AREA.
4. AS THIS IS HAPPENING THE CONTRACTOR SHALL RECONSTRUCT THE EXISTING HOLLY STREET ACCESSING TMP 580350000 & TMP 580351000. SEE THE 'ASPHALT PAVING - PUBLIC ROADS' DETAIL ON SHEET 16 FOR DESIGN SPECIFICATIONS.
5. FOLLOWING THE RECONSTRUCTION OF THE EXISTING HOLLY STREET, WHICH IS USED AS A DRIVEWAY ACCESS, THE CONTRACTOR CAN REMOVE THE SILT FENCE WITH WIRE BACKING AND CHAIN-LINK CONSTRUCTION FENCING IMMEDIATELY WEST OF HOLLY STREET. THESE ITEMS SHALL NOT BE REMOVED UNTIL APPROVAL HAS BEEN GRANTED BY THE ESC INSPECTOR AND THE DISTURBED AREAS IMMEDIATELY SURROUNDING THE AREA ARE STABILIZED. THE SILT FENCE WITH WIRE BACKING IMMEDIATELY TO THE EAST OF HOLLY STREET SHALL REMAIN.
6. THE CONTRACTOR SHALL THEN BEGIN ROUGH GRADING THE REMAINDER OF THE PROPOSED HOLLY STREET AS SHOWN ON THE ESC PHASE III PLAN. AS ROUGH GRADES ARE ACHIEVED THE CONTRACTOR SHALL INSTALL THE STONE SUBBASE, CONCRETE CURB IN PLACES, STORM SEWER AND THE PORTION OF THE RETAINING WALLS SHOWN IN PHASE III ASSOCIATED WITH PROPOSED HOLLY STREET. THIS IS INCLUSIVE OF STRUCTURES 10-16, 16A, 16B, 16C, 16D & THE TEMPORARY PIPE OUTFALLING STR. 10. PLEASE NOTE, AT THIS TIME THE RETAINING WALLS ASSOCIATED WITH THE PROPOSED HOLLY STREET WILL TEMPORARILY TERMINATE AT SEDIMENT BASIN #1 IN ESC PHASES III, IV & V. WHEN THE STORM SEWER INSTALLATION OUTFALLING INTO SEDIMENT BASIN #1 HAS BEEN COMPLETED, WHICH INCLUDES THE AFOREMENTIONED TEMPORARY PIPE & MODIFIED STRUCTURE 10 AS SHOWN ON THIS SHEET, OUTLET PROTECTION SHALL BE INSTALLED BELOW THE OUTFALL. WHILE THE ROUGH GRADING IS UNDERWAY, THE CONTRACTOR SHALL MODIFY DIVERSION BERM #1, AS SHOWN, TO ENSURE THE SITE'S RUNOFF CONTINUES TO FLOW INTO SEDIMENT BASIN #1. BLANKET MATTING SHALL BE APPLIED TO THE AREA BELOW PROPOSED HOLLY STREET TO THE WEST, WHERE SILT FENCE WITH WIRE BACKING WILL REMAIN AT THE TOE OF THE SLOPE FOR ADDITIONAL PROTECTION. AS THE STORM PIPES AND INLETS ARE INSTALLED, THE CONTRACTOR SHALL INSTALL INLET PROTECTION ON THE INLETS, AS SHOWN ON THE ESC PHASE III PLAN. INLET PROTECTION SHALL BE INSPECTED AFTER EACH RAINFALL EVENT AND REPAIRS SHALL BE MADE AS NECESSARY. IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE STONE MUST BE PULLED AWAY AND CLEANED AND/OR REPLACED.
7. WHILE ROUGH GRADES ARE BEING ACHIEVED FOR THE PROPOSED HOLLY STREET, THE CONTRACTOR CAN BEGIN CONSTRUCTION OF THE RETAINING WALLS LOCATED IN THE NORTHEAST, AS SHOWN ON THE PHASE III PLAN. WHEN THE RETAINING WALLS REACH THEIR FINAL TOP ELEVATIONS, A 6' WIDE MIN. LEVEL BENCH SHALL BE INSTALLED PARALLEL WITH THE TOP OF THE WALL, WITH 3:1 TIE BACK GRADES TO THE LOWER EXISTING GROUND. DIVERSION BERM #2 SHALL THEN BE MODIFIED TO BE LOCATED AT THE TOE OF THE 3:1 TIE-BACK GRADES.
8. MAINTAINING DIVERSION BERMS #1 & 2 WILL HELP ENSURE THE OVERWHELMING MAJORITY OF THE SITE'S RUNOFF WILL CONTINUE TO SURFACE FLOW TO THE SEDIMENT BASIN.
9. CONSTRUCTION ROAD STABILIZATION MEASURES SHALL BE APPLIED, AS NEEDED, THROUGHOUT ALL PHASES OF CONSTRUCTION.
10. DUST CONTROL SHALL BE UTILIZED AS NECESSARY TO CONTROL THE DUST LEAVING THE SITE DURING THE CONSTRUCTION, TYPICAL.
11. TEMPORARY SEEDING SHALL BE INSTALLED TO THE DENUDED AREAS OF THE SITE WITHIN 7 DAYS AFTER LAND DISTURBING ACTIVITIES ON THAT PORTION OF THE SITE.
12. THE CONTRACTOR SHALL CONTINUE TO MONITOR THE PERIMETER EROSION CONTROL MEASURES, SEDIMENT BASIN, STORMWATER CONVEY CHANNELS AND OUTLET PROTECTIONS. WEEKLY MAINTENANCE AND INSPECTIONS SHALL BE PERFORMED ON THESE ITEMS, AS OUTLINED ON THE PLAN SHEETS.
13. THE CONTRACTOR SHALL INSTALL ANY REMAINING EROSION CONTROL ITEMS SHOWN ON THE PHASE III PLAN SHEET.
14. ONCE ALL THE PHASE III EROSION CONTROL ITEMS HAVE BEEN INSTALLED AND ARE OPERATIONAL, DRAINAGE IS PROPERLY CONVEYED TO THESE MEASURES, AND THE CITY ESC INSPECTOR HAS GRANTED APPROVAL, THE CONTRACTOR CAN PROCEED TO ESC PHASE IV.

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
8/18/23
PROFESSIONAL ENGINEER

REVISIONS

DATE	REVISION DESCRIPTION
3/15/22	INITIAL PLAN SUBMITTAL
1/03/23	2ND PLAN SUBMITTAL
5/19/23	3RD PLAN SUBMITTAL
8/18/23	4TH PLAN SUBMITTAL

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BELMONT CONDOMINIUMS - FINAL SITE PLAN

EROSION & SEDIMENT CONTROL PLAN - PHASE III

PROJECT
JOB NO. 202201
SCALE 1"=30'
SHEET
SHEET NO. 35

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SEQUENCE OF CONSTRUCTION

PHASE IV EROSION & SEDIMENT CONTROL SEQUENCE OF CONSTRUCTION

1. WITH THE INSTALLATION OF THE RETAINING WALLS IN THE NORTHEASTERN PORTION OF THE SITE IN PHASE III, THE CONTRACTOR CAN BEGIN PHASE IV BY FILLING THIS AREA AND INSTALLING SEDIMENT TRAP #1 & ITS OUTFALL SYSTEM. SEDIMENT TRAP #1 PROPOSES A TEMPORARY 48" CMP RISER IN LIEU OF A TRADITIONAL STONE WEIR OUTFALL TO AVOID RELEASING RUNOFF OVER EXISTING STEEP SLOPES. THE 48" RISER OPENING AREA IS GREATER THAN THIS TRAP'S REQUIRED WEIR OPENING AREA CALCULATED. ALSO, THE PERMANENT STORM SEWER STRUCTURES 23, 24 & 29 SHALL BE INSTALLED AND WILL OUTFALL THE TRAP. FIELD ADJUSTMENTS MAY BE REQUIRED TO THE PERMANENT STRUCTURES FOR THE RIM/INTERIM ELEVATIONS. PHASING THE STORM SEWER INSTALLATION IN THIS MANNER WILL ALLOW FOR TEMPORARY SEDIMENT TRAP #1 TO OUTFALL INTO TEMPORARY SEDIMENT BASIN #1. THIS DESIGN WILL PROVIDE SECONDARY TREATMENT UPLAND OF SEDIMENT BASIN #1. PLEASE NOTE, SEDIMENT BASIN #1 WAS SIZED FOR ALL PHASES OF CONSTRUCTION AND IT WAS SIZED TO INCLUDE THE AREA FEEDING SEDIMENT TRAP #1. A STORMWATER CONVEYANCE CHANNEL SHALL BE INSTALLED BELOW THE STRUCTURE 23's TEMPORARY OUTFALL, AS SHOWN AND LABELED ON THE ESC PHASE IV PLAN AND SHEET 32.
2. WHILE THIS IS OCCURRING, THE CONTRACTOR SHALL REMOVE THE EXISTING STORM SEWER BENEATH THE DEMOLISHED WALNUT STREET (ESC PIPE #1 AND ITS CONNECTED STORM SEWER SYSTEM), ALLOWING THE OFFSITE RUNOFF TO FLOW NATURALLY TO THE DOWNGRADE SEDIMENT BASIN #1.
3. AS THE STORM PIPES AND INLETS ARE INSTALLED, THE CONTRACTOR SHALL INSTALL INLET PROTECTION ON THE INLETS. INLET PROTECTION SHALL BE INSPECTED AFTER EACH RAINFALL EVENT AND REPAIRS SHALL BE MADE AS NECESSARY. IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE STONE MUST BE PULLED AWAY AND CLEANED AND/OR REPLACED.
4. AFTER SEDIMENT TRAP #1 HAS BEEN INSTALLED THE CONTRACTOR SHALL MODIFY DIVERSION BERM #2 SO THAT IT OUTFALLS INTO SEDIMENT TRAP #1. AT THE SAME TIME THE CONTRACTOR SHALL ALSO INSTALL DIVERSION BERM #4, WHICH WILL OUTFALL INTO SEDIMENT TRAP #1, AS SHOWN IN THE PHASE IV PLAN. THE BERMS SHALL BE STABILIZED IN ACCORDANCE WITH THE DESIGN DETAIL AND STORMWATER CONVEYANCE CHANNELS SHALL BE INSTALLED BELOW BERMS #2 & 4, AS SHOWN ON THIS SHEET & SHEET 32.
5. AS ROUGH GRADES ARE ACHIEVED IN THE NORTHEAST PORTION OF THE SITE, THE CONTRACTOR CAN MOVE FORWARD WITH THE INSTALLATION OF A PORTION OF THE UTILITIES, AS SHOWN IN THE PHASE IV PLAN. THE UTILITY INSTALLATION INCLUDES INSTALLING SOME OF THE SANITARY SEWER AND WATER MAIN EXTENSIONS. WHEN UTILITY INSTALLATIONS OCCUR WITHIN SPRUCE STREET, PAVEMENT REPAIRS SHALL BE MADE IN ACCORDANCE WITH THE DETAIL SHOWN ON SHEET 16.
6. AS GRADING CONTINUES, THE RUNOFF SHALL CONTINUE TO SURFACE FLOW TO SEDIMENT TRAP #1 AND SEDIMENT BASIN #1. ANY DIVERSION BERMS IMPACTED BY THE UTILITY INSTALLATIONS SHALL BE REPAIRED AND RE-INSTALLED AFTER THE UTILITY WORK IN THAT AREA IS COMPLETE. THE CONTRACTOR SHALL MONITOR THE WEATHER FORECAST AND INSTALL THE UTILITIES IN THE SENSITIVE AREAS THAT REQUIRE MODIFICATIONS TO THE E&S MEASURES WHEN NO RAIN IS FORECASTED FOR A PERIOD OF 48 HOURS.
7. AS PORTIONS OF THE SITE ARE GRADED TO THE FINAL DESIGN GRADES THE CONTRACTOR SHALL STABILIZE THE AREAS. TEMPORARY STABILIZATION SHALL CONSIST OF TEMPORARY SEEDING AND STRAW MATTING, AND PERMANENT STABILIZATION SHALL BE IN ACCORDANCE WITH DETAIL SHOWN ON THE E&S NOTES AND DETAILS SHEET ONCE CONSTRUCTION IS COMPLETE.
8. DUST CONTROL SHALL CONTINUE TO BE UTILIZED AS NECESSARY TO CONTROL DUST LEAVING THE SITE DURING THE CONSTRUCTION.
9. TEMPORARY SEEDING SHALL CONTINUE TO BE APPLIED TO THE DENUDED AREAS OF THE SITE WITHIN 7 DAYS AFTER LAND DISTURBING ACTIVITIES ON THAT PORTION OF THE SITE, TYPICAL.
10. ONCE ALL THE PHASE IV EROSION CONTROL ITEMS HAVE BEEN INSTALLED AND ARE OPERATIONAL, DRAINAGE IS PROPERLY CONVEYED TO THESE MEASURES, AND THE CITY ESC INSPECTOR HAS GRANTED APPROVAL, THE CONTRACTOR CAN PROCEED TO ESC PHASE V.

PROPOSED BELMONT CONDOMINIUMS LIMITS, TYP.

PROPOSED BLANKET MATTING (BM)

CRITICAL SLOPES TO REMAIN, TYP.

SEE SHEET 32 FOR OUTLET PROTECTION DESIGN, TYP.

CONTRACTOR SHALL ENSURE POSITIVE SLOPE IS MAINTAINED, AN 18" BERM HEIGHT IS PROVIDED & THE BERM IS STABILIZED AS A FIRST STEP IN DISTURBANCE (TYP.) (DD1)

FINAL CLEARING LIMITS, TYP.

PROPOSED IMMOVABLE CHAIN-LINK FENCE TO SERVE AS TREE PROTECTION ALONG LIMITS OF CLEARING (TP)

PROPOSED SAFETY FENCE, INSTALL SIGNS "WARNING QUICK SAND, KEEP OUT" (SAF)

TEMPORARY 148' OF Ø15" HDPE TO OUTFALL STR. 10 (II=433.85, IO=424.00). STR. 10 TO BE MODIFIED TO ACCEPT THE TEMP. PIPE. (DC)

SEE SHEET 40 FOR SEDIMENT BASIN DESIGN

CONTRACTOR TO INSTALL PERMANENT STR. 23 TO OUTFALL ST #1 INTO THE DOWNSTREAM SB #1 IN ESC PHASE IV (PS)

SEDIMENT BASIN #1 DRAINAGE AREA: TOTAL=7.23 ac. (6.29 ac. + 0.94 ac. FROM ST #1)

PROPOSED TEMPORARY 15" CMP CULVERT #1 (L=18', II=438.27, IO=438.00'). CULVERT TO ALLOW VEHICULAR CONSTRUCTION TRAFFIC TO CROSS THE DIVERSION.

IMPACTED CRITICAL SLOPES, TYP.

PROPOSED STOCKPILE. STOCKPILE SHALL BE SURROUNDED BY SILT FENCE & TEMPORARILY STABILIZED WHEN NOT IN ACTIVE USE.

PROPOSED SEDIMENT BASIN #1 DRAINAGE DIVIDE, TYP.

PROPOSED LIMITS OF DISTURBANCE, TYP. TOTAL AREA=6.66 ac.

PROPOSED CHAIN-LINK SAFETY FENCE TO SURROUND CONSTRUCTION SITE, AS SHOWN.

PROPOSED SAFETY FENCE, INSTALL SIGNS "WARNING QUICK SAND, KEEP OUT" (SAF)

SEE SHEET 40 FOR SEDIMENT TRAP #1 DESIGN

TEMPORARY Ø48" CMP RISER (RIM ELEV.=438.0') TO BE INSTALLED INSTEAD OF THE PERMANENT STR. 30. TEMPORARY RISER TO OUTFALL SEDIMENT TRAP #1 INTO PERMANENT STR. 29 (INVERT AT RISER=433.33). RISER TO INCLUDE A 6" DEWATERING ORIFICE WITH AN INVERT ELEVATION SET AT THE WET STORAGE ELEVATION (INV.=436.00).

PROPOSED SEDIMENT TRAP #1 DRAINAGE DIVIDE, TYP.

SEDIMENT TRAP #1 DRAINAGE AREA=0.94ac.

CONTRACTOR SHALL ENSURE POSITIVE SLOPE IS MAINTAINED, AN 18" BERM HEIGHT IS PROVIDED & THE BERM IS STABILIZED AS A FIRST STEP IN DISTURBANCE (TYP.) (DD2)

TMP 580351000

TMP 580350000

TMP 570019000

TMP 570018000

TMP 570018100

TMP 570017000

2' DEEP SEDIMENT TRAP TO CAPTURE MINOR FLASH RUNOFF FROM THE CONSTRUCTION ENTRANCE WASH-OFF

CONCRETE WASH OUT AREA (CRS)

PROPOSED STONE CONSTRUCTION ENTRANCE (12'x70' MIN.) w/ WASH RACK (CE)

LOCATION OF PORTA-POTTIES (RR)

PROPOSED CONTRACTOR PARKING & STAGING AREA

LOCATION OF DUMPSTER

SWINGING GATE

LOCATION OF RAIN GAUGE

LOCATION OF DOUBLE WALLED FUELING TANK

CONTRACTOR SHALL NOT DEMOLISH THE PORTION OF GARDEN STREET ACCESSING TMP 570019000 & TMP 570018000, AS SHOWN.

GARDEN STREET

CARLTON AVENUE

SPRUCE STREET

EX ROW

INSPECTION REQUIREMENTS (9VAC25-880-70 PART II, F.2.):

Inspection schedule.

a. Inspections shall be conducted at a frequency of:
   (1) At least once every five business days; or
   (2) At least once every 10 business days and no later than 48 hours following a measurable storm event. In the event that a measurable storm event occurs when there are more than 48 hours between business days, the inspection shall be conducted no later than the next business day.
b. Where areas have been temporarily stabilized or land-disturbing activities will be suspended due to continuous frozen ground conditions and stormwater discharges are unlikely, the inspection frequency may be reduced to once per month. If weather conditions (such as above freezing temperatures or rain or snow events) make discharges likely, the operator shall immediately resume the regular inspection frequency.
c. Representative inspections may be utilized for utility line installation, pipeline construction, or other similar linear construction activities provided that:
   (1) Temporary or permanent soil stabilization has been installed and vehicle access may compromise the temporary or permanent soil stabilization and potentially cause additional land disturbance increasing the potential for erosion;
   (2) Inspections occur on the same frequency as other construction activities;
   (3) Control measures are inspected along the construction site 0.25 miles above and below each access point (i.e., where a roadway, undisturbed right-of-way, or other similar feature intersects the construction activity and access does not compromise temporary or permanent soil stabilization); and
   (4) Inspection locations are provided in the report required by Part II F.

EROSION & SEDIMENT CONTROL NOTES FOR ALL PHASES:

1. PHASE I EROSION & SEDIMENT CONTROL (ESC) PLAN SHALL OCCUR BEFORE PHASE II ESC PLAN.
2. PHASE II ESC PLAN SHALL OCCUR BEFORE PHASE III ESC PLAN.
3. PHASE III ESC PLAN SHALL OCCUR BEFORE PHASE IV ESC PLAN.
4. PHASE IV ESC PLAN SHALL OCCUR BEFORE PHASE V ESC PLAN.
4. PHASE V ESC PLAN SHALL OCCUR BEFORE PHASE VI ESC PLAN.
4. PHASE VI ESC PLAN SHALL OCCUR BEFORE PHASE VII ESC PLAN.
5. FINAL STABILIZATION OF THE AREAS OF CRITICAL SLOPES DISTURBED SHALL BE PERMANENT MEASURES FOR RESTABILIZATION OF THE AREAS AND POTENTIAL WILDLIFE HABITAT.
6. CONTRACTOR SHALL CHECK SILT FENCE EVERY 5 DAYS, AND AFTER MAJOR RAINFALL EVENTS, TO ENSURE NO EROSION OR SEDIMENT HAS CONTAMINATED ADJACENT SITES.
7. TREE PROTECTION FENCING SHALL BE IMMOVABLE CHAIN-LINK FENCING PER THE TREE PROTECTION DETAIL. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING TREES TO REMAIN UNDISTURBED.

GRAPHIC SCALE

30 0 15 30 60

(IN FEET)
1 inch = 30 ft.

PHASE IV ESC PLAN LEGEND

- SAF — SAFETY FENCE PER VESCH 3.01
- CE — CONSTRUCTION ENTRANCE PER VESCH 3.02
- CRS — CONSTRUCTION ROAD STABILIZATION PER VESCH 3.03
- SF — SILT FENCE PER VESCH 3.05
- DD — DIVERSION DIKE PER VESCH 3.09
- RWD — RIGHT OF WAY DIVERSION PER VESCH 3.11
- ST — SEDIMENT TRAP PER VESCH 3.13
- SB — SEDIMENT BASIN PER VESCH 3.14
- OP — OUTLET PROTECTION PER VESCH 3.18
- RR — RIPRAP PER VESCH 3.19
- CD — ROCK CHECK PER VESCH 3.20
- TS — TEMPORARY SEEDING PER VESCH 3.31
- PS — PERMANENT SEEDING PER VESCH 3.32
- DC — DUST CONTROL PER VESCH 3.39
- BM — BLANKET MATTING PER VESCH 3.36
- TP — TREE PROTECTION TAPE PER VESCH 3.38

- LIMITS OF LAND DISTURBANCE
- DIVERSION DIKE
- BOUNDARY LINE
- SILT FENCE
- SILT FENCE WITH WIRE BACKING
- DIRECTION OF FLOW
- 442 — PROPOSED CONTOUR
- DRAINAGE DIVIDE
- EXISTING CHANNEL
- EXISTING TREELINE
- PROPOSED CLEARING LIMITS
- CRITICAL SLOPES
- DISTURBED CRITICAL SLOPES
- SEDIMENT BASIN & TRAP
- OUTLET PROTECTION
- TS — TEMPORARY SEEDING
- PS — PERMANENT SEEDING
- BLANKET MATTING
- TREE PROTECTION
- DC — DUST CONTROL
- SAFETY FENCE
- BAFFLE
- CONSTRUCTION ENTRANCE

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
PROFESSIONAL ENGINEER
8/18/23

REVISIONS

DATE	REVISION DESCRIPTION
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PROJECT: BELMONT CONDOMINIUMS - FINAL SITE PLAN
SHEET: EROSION & SEDIMENT CONTROL PLAN - PHASE IV

JOB NO. 202201
SCALE 1"=30'
SHEET NO. 36

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Attachment A

SEQUENCE OF CONSTRUCTION

PHASE V EROSION & SEDIMENT CONTROL SEQUENCE OF CONSTRUCTION

1. PHASE V CONSTRUCTION WILL INITIALLY BE FOCUSED ON FILLING THE REMAINDER OF THE SITE. AS THE SITE IS BEING RAISED RUNOFF WILL INITIALLY SURFACE FLOW TO SEDIMENT BASIN #1 AS SHOWN IN THE PREVIOUS PHASE IV PLAN. WITH THE RAISING OF THE SITE DIVERSION BERM #2 SHALL BE EXTENDED PARALLELING THE PROPERTY LINE AND OUTFALLING INTO SEDIMENT TRAP #1, AS SHOWN.
2. AS THE FILL OPERATIONS CONTINUE, 2:1 TIE-IN GRADES SHALL BE INSTALLED IMMEDIATELY UPLAND OF SEDIMENT BASIN #1. THIS WILL ALLOW SEDIMENT BASIN #1 TO CONTINUE TO TREAT THE SITE AS IT IS BEING FILLED. AS THIS OCCURS SEDIMENT BASIN #2 SHALL BE CONSTRUCTED AND DIVERSION BERM #1 SHALL BE REROUTED TO SEDIMENT BASIN #2. NOTE, SEDIMENT BASIN #2 IS LOCATED IN THE VICINITY OF UNDERGROUND DETENTION SYSTEM #1A AND STRUCTURES 105, 106, 106A & 106B WILL BE BUILT WITH SEDIMENT BASIN #2. THESE STRUCTURES WILL BE USED AS AN OUTFALL TO DISCHARGE CLEAN WATER FROM SEDIMENT BASIN #2. THIS SEQUENCING WILL REDUCE THE RUNOFF ENTERING SEDIMENT BASIN #1, WHICH WILL ALLOW FOR THE REDUCTION IN SEDIMENT BASIN #1's VOLUME IN PHASE VI. WITH THE CONSTRUCTION OF SEDIMENT BASIN #2, THE CONTRACTOR SHALL INSTALL STORM SEWER DOWNSTREAM OF STRUCTURE 24, AS SHOWN ON THE PHASE V PLAN, INCLUSIVE OF A TEMPORARY 24" PIPE BELOW STRUCTURE 22. THE TEMPORARY PIPE WILL INCLUDE OUTLET PROTECTION AND THE STORM SEWER SYSTEM WILL DIRECT SEDIMENT TRAP #1's RUNOFF INTO SEDIMENT BASIN #2, ALLOWING FOR THE REMOVAL OF SEDIMENT TRAP #1 IN ESC PHASE VI.
3. AS THE SITE BEGINS TO REACH ROUGH GRADES THE CONTRACTOR SHALL CONTINUE INSTALLING THE STORM SEWER, AS SHOWN ON THE PHASE V PLANS. THIS INSTALLATION INCLUDES STRUCTURES 18D, 36B, 34D AND THESE STRUCTURES' DOWNSTREAM SYSTEMS DEPICTED ON THIS PHASE V PLAN. THIS STORM SEWER SYSTEM WILL CONVEY UPLAND RUNOFF TO THE NEWLY CONSTRUCTED SEDIMENT BASIN #2 VIA THE TEMPORARY PIPE RUNNING ALONG STRUCTURE 31's ALIGNMENT.
4. WHILE ROUGH GRADES CONTINUE TO BE ACHIEVED, THE CONTRACTOR SHALL INSTALL THE ADDITIONAL STORM SEWER STRUCTURES, SANITARY SEWER AND WATER LINES SHOWN ON THE PHASE V PLAN. DROP INLETS SHALL BE INSTALLED WITH INLET PROTECTION AT EACH STRUCTURE. ANY DIVERSION BERMS IMPACTED BY THE UTILITY INSTALLATIONS SHALL BE REPAIRED AND RE-INSTALLED AFTER THE UTILITY WORK IN THAT AREA IS COMPLETE.
5. ALL AREAS OF DISTURBANCE SHALL BE TEMPORARILY OR PERMANENTLY STABILIZED WITH SEED AND STRAW.
6. DUST CONTROL SHALL CONTINUE TO BE UTILIZED AS NECESSARY TO CONTROL DUST LEAVING THE SITE DURING THE CONSTRUCTION.
7. TEMPORARY SEEDING SHALL CONTINUE TO BE APPLIED TO THE DENUDED AREAS OF THE SITE WITHIN 7 DAYS AFTER LAND DISTURBING ACTIVITIES ON THAT PORTION OF THE SITE.
8. THE CONTRACTOR SHALL CONTINUE TO MONITOR THE PERIMETER EROSION CONTROL MEASURES, SEDIMENT TRAP, SEDIMENT BASINS, STORMWATER CONVEYANCE CHANNELS AND OUTLET PROTECTIONS. WEEKLY MAINTENANCE AND INSPECTIONS SHALL BE PERFORMED ON THESE ITEMS, AS OUTLINED ON THE PLAN SHEETS.
9. ONCE ALL THE PHASE V EROSION CONTROL ITEMS HAVE BEEN INSTALLED AND ARE OPERATIONAL, DRAINAGE IS PROPERLY CONVEYED TO THESE MEASURES, AND THE CITY ESC INSPECTOR HAS GRANTED APPROVAL, THE CONTRACTOR CAN PROCEED TO ESC PHASE VI.

PROPOSED BELMONT CONDOMINIUMS LIMITS, TYP.
PROPOSED BLANKET MATTING
CRITICAL SLOPES TO REMAIN, TYP.
SEE SHEET 32 FOR OUTLET PROTECTION DESIGN, TYP.
PROPOSED SAFETY FENCE, INSTALL SIGNS "WARNING QUICK SAND, KEEP OUT"
SEE SHEET 40 FOR SEDIMENT TRAP #1 DESIGN
FINAL CLEARING LIMITS, TYP.
PROPOSED IMMOVABLE CHAIN-LINK FENCE TO SERVE AS TREE PROTECTION ALONG LIMITS OF CLEARING
SEDIMENT BASIN #1 DRAINAGE AREA=1.21 ac.
TEMPORARY 148' OF Ø15" HDPE TO OUTFALL STR. 10 (II=433.85, IO=424.00). STR. 10 TO BE MODIFIED TO ACCEPT THE TEMP. PIPE.
SEE SHEET 40 FOR SEDIMENT BASIN DESIGN
TEMPORARY Ø48" CMP RISER (RIM ELEV.=438.0') TO BE INSTALLED INSTEAD OF THE PERMANENT STR. 30. TEMPORARY RISER TO OUTFALL SEDIMENT TRAP #1 INTO PERMANENT STR. 29 (INVERT AT RISER=433.33). RISER TO INCLUDE A 6" DEWATERING ORIFICE WITH AN INVERT ELEVATION SET AT THE WET STORAGE ELEVATION (INV.=436.00).
PROPOSED SEDIMENT TRAP #1 DRAINAGE DIVIDE, TYP.
SEDIMENT TRAP #1 DRAINAGE AREA=0.93 ac.
CONTRACTOR SHALL ENSURE POSITIVE SLOPE IS MAINTAINED, AN 18" BERM HEIGHT IS PROVIDED & THE BERM IS STABILIZED AS A FIRST STEP IN DISTURBANCE (TYP.)
SEDIMENT BASIN #2 DRAINAGE AREA: TOTAL=5.92 ac. (4.99 ac. + 0.93 ac. FROM ST #1)
TEMPORARY 25' OF Ø24" HDPE TO OUTFALL STR. 22 INTO SEDIMENT BASIN #2 (II=430.29, IO=430.0). STR. 22 TO BE MODIFIED TO ACCEPT THE TEMP. PIPE AS NEEDED.
IMPACTED CRITICAL SLOPES, TYP.
TEMP. PIPE ALONG STR. 31's ALIGNMENT
PROPOSED SEDIMENT BASIN #2 DRAINAGE DIVIDE, TYP.
2' DEEP SEDIMENT TRAP TO CAPTURE MINOR FLASH RUNOFF FROM THE CONSTRUCTION ENTRANCE WASH-OFF
CONCRETE WASH OUT AREA
PROPOSED STONE CONSTRUCTION ENTRANCE (12'x70' MIN.) w/ WASH RACK
LOCATION OF PORTA-POTTIES
PROPOSED LIMITS OF DISTURBANCE, TYP. TOTAL AREA=6.66 ac.
PROPOSED CHAIN-LINK SAFETY FENCE TO SURROUND CONSTRUCTION SITE, AS SHOWN.
TMP 570019000
TMP 570018000
TMP 570018100
TMP 570017000
SWINGING GATE
LOCATION OF DUMPSTER
LOCATION OF RAIN GAUGE
LOCATION OF DOUBLE WALLED FUELING TANK
CARLTON AVENUE
SPRUCE STREET
HIGH POINT

STR.10, STR.105, STR.106, STR.106A, STR.106B, STR.29, STR.30, STR.22, STR.24, STR.42A, STR.34D, STR.36B, STR.18D

SB 1, SB 2, DD1, DD2, DD4, OP1, OP3, OP5, PS, DC, TS, RR, CRS, CE, SF, SAF, BM, IP, SCC 3, SCC 5, SCC 6, SCC 7, SCC 8, ST 1

EX ROW

442' C/L, 444' C/L, 444.25' C/L, 440' C/L, 446' C/L, 448' C/L

EROSION & SEDIMENT CONTROL NOTES FOR ALL PHASES:

1. PHASE I EROSION & SEDIMENT CONTROL (ESC) PLAN SHALL OCCUR BEFORE PHASE II ESC PLAN.
2. PHASE II ESC PLAN SHALL OCCUR BEFORE PHASE III ESC PLAN.
3. PHASE III ESC PLAN SHALL OCCUR BEFORE PHASE IV ESC PLAN.
4. PHASE IV ESC PLAN SHALL OCCUR BEFORE PHASE V ESC PLAN.
4. PHASE V ESC PLAN SHALL OCCUR BEFORE PHASE VI ESC PLAN.
4. PHASE VI ESC PLAN SHALL OCCUR BEFORE PHASE VII ESC PLAN.
5. FINAL STABILIZATION OF THE AREAS OF CRITICAL SLOPES DISTURBED SHALL BE PERMANENT MEASURES FOR RESTABILIZATION OF THE AREAS AND POTENTIAL WILDLIFE HABITAT.
6. CONTRACTOR SHALL CHECK SILT FENCE EVERY 5 DAYS, AND AFTER MAJOR RAINFALL EVENTS, TO ENSURE NO EROSION OR SEDIMENT HAS CONTAMINATED ADJACENT SITES.
7. TREE PROTECTION FENCING SHALL BE IMMOVABLE CHAIN-LINK FENCING PER THE TREE PROTECTION DETAIL. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING TREES TO REMAIN UNDISTURBED.

GRAPHIC SCALE
30 0 15 30 60
(IN FEET)
1 inch = 30 ft.

INSPECTION REQUIREMENTS (9VAC25-880-70 PART II, F.2.):
Inspection schedule.
a. Inspections shall be conducted at a frequency of:
(1) At least once every five business days; or
(2) At least once every 10 business days and no later than 48 hours following a measurable storm event. In the event that a measurable storm event occurs when there are more than 48 hours between business days, the inspection shall be conducted no later than the next business day.
b. Where areas have been temporarily stabilized or land-disturbing activities will be suspended due to continuous frozen ground conditions and stormwater discharges are unlikely, the inspection frequency may be reduced to once per month. If weather conditions (such as above freezing temperatures or rain or snow events) make discharges likely, the operator shall immediately resume the regular inspection frequency.
c. Representative inspections may be utilized for utility line installation, pipeline construction, or other similar linear construction activities provided that:
(1) Temporary or permanent soil stabilization has been installed and vehicle access may compromise the temporary or permanent soil stabilization and potentially cause additional land disturbance increasing the potential for erosion;
(2) Inspections occur on the same frequency as other construction activities;
(3) Control measures are inspected along the construction site 0.25 miles above and below each access point (i.e., where a roadway, undisturbed right-of-way, or other similar feature intersects the construction activity and access does not compromise temporary or permanent soil stabilization); and
(4) Inspection locations are provided in the report required by Part II F.

PHASE V ESC PLAN LEGEND

SAF SAFETY FENCE PER VESCH 3.01	LIMITS OF LAND DISTURBANCE
CE CONSTRUCTION ENTRANCE PER VESCH 3.02	DIVERSION DIKE
CRS CONSTRUCTION ROAD STABILIZATION PER VESCH 3.03	BOUNDARY LINE
SF SILT FENCE PER VESCH 3.05	SILT FENCE
DD DIVERSION DIKE PER VESCH 3.09	SILT FENCE WITH WIRE BACKING
RWD RIGHT OF WAY DIVERSION PER VESCH 3.11	DIRECTION OF FLOW
ST SEDIMENT TRAP PER VESCH 3.13	PROPOSED CONTOUR
SB SEDIMENT BASIN PER VESCH 3.14	DRAINAGE DIVIDE
OP OUTLET PROTECTION PER VESCH 3.18	EXISTING CHANNEL
RR RIPRAP PER VESCH 3.19	EXISTING TREELINE
CD ROCK CHECK PER VESCH 3.20	PROPOSED CLEARING LIMITS
TS TEMPORARY SEEDING PER VESCH 3.31	CRITICAL SLOPES
PS PERMANENT SEEDING PER VESCH 3.32	DISTURBED CRITICAL SLOPES
DC DUST CONTROL PER VESCH 3.39	SEDIMENT BASIN & TRAP
BM BLANKET MATTING PER VESCH 3.36	OUTLET PROTECTION
TP TREE PROTECTION TAPE PER VESCH 3.38	TEMPORARY SEEDING
	PERMANENT SEEDING
	BLANKET MATTING
	TREE PROTECTION
	DUST CONTROL
	SAFETY FENCE
	BAFFLE
	CONSTRUCTION ENTRANCE

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
PROFESSIONAL ENGINEER
8/18/23

REVISIONS

DATE	REVISION DESCRIPTION
3/15/22	INITIAL PLAN SUBMITTAL
1/03/23	2ND PLAN SUBMITTAL
5/19/23	3RD PLAN SUBMITTAL
8/18/23	4TH PLAN SUBMITTAL

COLLINS ENGINEERING
200 GARRETT STREET, SUITE K-CHARLOTTESVILLE, VA 22902 -434.293.3719

PROJECT: BELMONT CONDOMINIUMS - FINAL SITE PLAN
SHEET: EROSION & SEDIMENT CONTROL PLAN - PHASE V

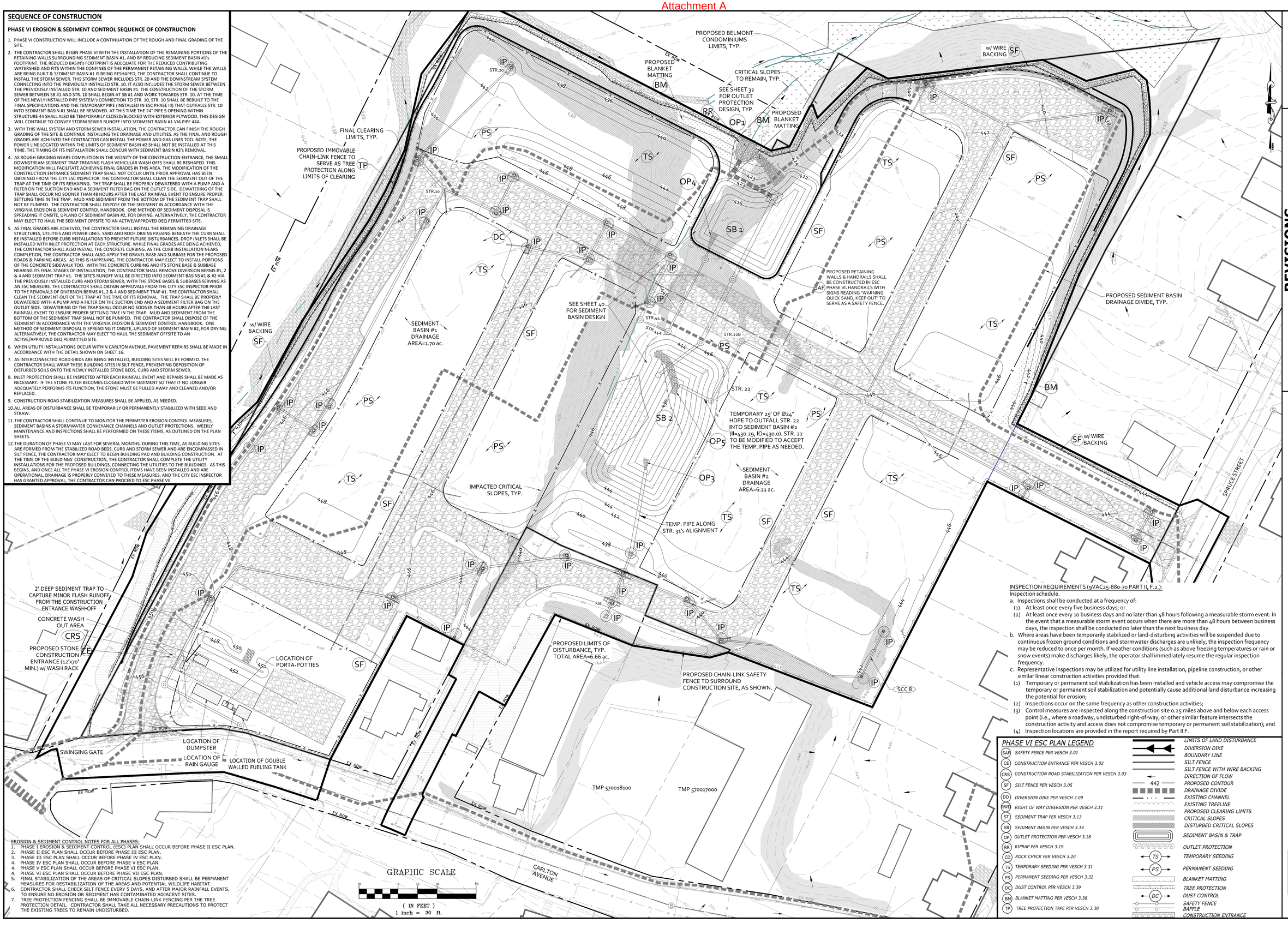
JOB NO. 202201
SCALE 1"=30'
SHEET NO. 37

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SEQUENCE OF CONSTRUCTION

PHASE VI EROSION & SEDIMENT CONTROL SEQUENCE OF CONSTRUCTION

1. PHASE VI CONSTRUCTION WILL INCLUDE A CONTINUATION OF THE ROUGH AND FINAL GRADING OF THE SITE.
2. THE CONTRACTOR SHALL BEGIN PHASE VI WITH THE INSTALLATION OF THE REMAINING PORTIONS OF THE RETAINING WALLS SURROUNDING SEDIMENT BASIN #1, AND BY REDUCING SEDIMENT BASIN #1'S FOOTPRINT. THE REDUCED BASIN'S FOOTPRINT IS ADEQUATE FOR THE REDUCED CONTRIBUTING WATERSHED AND FITS WITHIN THE CONFINES OF THE PERMANENT RETAINING WALLS. WHILE THE WALLS ARE BEING BUILT & SEDIMENT BASIN #1 IS BEING RESHAPED, THE CONTRACTOR SHALL CONTINUE TO INSTALL THE STORM SEWER. THIS STORM SEWER INCLUDES STR. 20 AND THE DOWNSTREAM SYSTEM CONNECTING INTO THE PREVIOUSLY INSTALLED STR. 10. IT ALSO INCLUDES THE STORM SEWER BETWEEN THE PREVIOUSLY INSTALLED STR. 10 AND SEDIMENT BASIN #1. THE CONSTRUCTION OF THE STORM SEWER BETWEEN SB #1 AND STR. 10 SHALL BEGIN AT SB #1 AND WORK TOWARDS STR. 10. AT THE TIME OF THIS NEWLY INSTALLED PIPE SYSTEM'S CONNECTION TO STR. 10, STR. 10 SHALL BE REBUILT TO THE FINAL SPECIFICATIONS AND THE TEMPORARY PIPE (INSTALLED IN ESC PHASE III) THAT OUTFALLS STR. 10 INTO SEDIMENT BASIN #1 SHALL BE REMOVED. AT THIS TIME THE 24" PIPE S OPENING WITHIN STRUCTURE 44 SHALL ALSO BE TEMPORARILY CLOSED/BLOCKED WITH EXTERIOR PLYWOOD. THIS DESIGN WILL CONTINUE TO CONVEY STORM SEWER RUNOFF INTO SEDIMENT BASIN #1 VIA PIPE 44A.
3. WITH THIS WALL SYSTEM AND STORM SEWER INSTALLATION, THE CONTRACTOR CAN FINISH THE ROUGH GRADING OF THE SITE & CONTINUE INSTALLING THE DRAINAGE AND UTILITIES. AS THE FINAL AND ROUGH GRADES ARE ACHIEVED THE CONTRACTOR CAN INSTALL THE POWER AND GAS LINES TOO. NOTE, THE POWER LINE LOCATED WITHIN THE LIMITS OF SEDIMENT BASIN #2 SHALL NOT BE INSTALLED AT THIS TIME. THE TIMING OF ITS INSTALLATION SHALL CONCUR WITH SEDIMENT BASIN #2'S REMOVAL.
4. AS ROUGH GRADING NEARS COMPLETION IN THE VICINITY OF THE CONSTRUCTION ENTRANCE, THE SMALL DOWNSTREAM SEDIMENT TRAP TREATING FLASH VEHICULAR WASH-OFFS SHALL BE RESHAPED. THIS MODIFICATION WILL FACILITATE ACHIEVING FINAL GRADES IN THIS AREA. THE MODIFICATION OF THE CONSTRUCTION ENTRANCE SEDIMENT TRAP SHALL NOT OCCUR UNTIL PRIOR APPROVAL HAS BEEN OBTAINED FROM THE CITY ESC INSPECTOR. THE CONTRACTOR SHALL CLEAN THE SEDIMENT OUT OF THE TRAP AT THE TIME OF ITS RESHAPING. THE TRAP SHALL BE PROPERLY DEWATERED WITH A PUMP AND A FILTER ON THE SUCTION END AND A SEDIMENT FILTER BAG ON THE OUTLET SIDE. DEWATERING OF THE TRAP SHALL OCCUR NO SOONER THAN 48 HOUES AFTER THE LAST RAINFALL EVENT TO ENSURE PROPER SETTLING TIME IN THE TRAP. MUD AND SEDIMENT FROM THE BOTTOM OF THE SEDIMENT TRAP SHALL NOT BE PUMPED. THE CONTRACTOR SHALL DISPOSE OF THE SEDIMENT IN ACCORDANCE WITH THE VIRGINIA EROSION & SEDIMENT CONTROL HANDBOOK. ONE METHOD OF SEDIMENT DISPOSAL IS SPREADING IT ONSITE, UPLAND OF SEDIMENT BASIN #2, FOR DRYING. ALTERNATIVELY, THE CONTRACTOR MAY ELECT TO HAUL THE SEDIMENT OFFSITE TO AN ACTIVE/APPROVED DEQ PERMITTED SITE.
5. AS FINAL GRADES ARE ACHIEVED, THE CONTRACTOR SHALL INSTALL THE REMAINING DRAINAGE STRUCTURES, UTILITIES AND POWER LINES. YARD AND ROOF DRAINS PASSING BENEATH THE CURB SHALL BE INSTALLED BEFORE CURB INSTALLATIONS TO PREVENT FUTURE DISTURBANCES. DROP INLETS SHALL BE INSTALLED WITH INLET PROTECTION AT EACH STRUCTURE. WHILE FINAL GRADES ARE BEING ACHIEVED, THE CONTRACTOR SHALL ALSO INSTALL THE CONCRETE CURBING. AS THE CURB INSTALLATION NEARS COMPLETION, THE CONTRACTOR SHALL ALSO APPLY THE GRAVEL BASE AND SUBBASE FOR THE PROPOSED ROADS & PARKING AREAS. AS THIS IS HAPPENING, THE CONTRACTOR MAY ELECT TO INSTALL PORTIONS OF THE CONCRETE SIDEWALK TOO. WITH THE CONCRETE CURBING AND ITS STONE BASE & SUBBASE NEARING ITS FINAL STAGES OF INSTALLATION, THE CONTRACTOR SHALL REMOVE DIVERSION BERMS #1, 2 & 4 AND SEDIMENT TRAP #1. THE SITE'S RUNOFF WILL BE DIRECTED INTO SEDIMENT BASINS #1 & #2 VIA THE PREVIOUSLY INSTALLED CURB AND STORM SEWER, WITH THE STONE BASES & SUBBASES SERVING AS AN ESC MEASURE. THE CONTRACTOR SHALL OBTAIN APPROVALS FROM THE CITY ESC INSPECTOR PRIOR TO THE REMOVALS OF DIVERSION BERMS #1, 2 & 4 AND SEDIMENT TRAP #1. THE CONTRACTOR SHALL CLEAN THE SEDIMENT OUT OF THE TRAP AT THE TIME OF ITS REMOVAL. THE TRAP SHALL BE PROPERLY DEWATERED WITH A PUMP AND A FILTER ON THE SUCTION END AND A SEDIMENT FILTER BAG ON THE OUTLET SIDE. DEWATERING OF THE TRAP SHALL OCCUR NO SOONER THAN 48 HOURS AFTER THE LAST RAINFALL EVENT TO ENSURE PROPER SETTLING TIME IN THE TRAP. MUD AND SEDIMENT FROM THE BOTTOM OF THE SEDIMENT TRAP SHALL NOT BE PUMPED. THE CONTRACTOR SHALL DISPOSE OF THE SEDIMENT IN ACCORDANCE WITH THE VIRGINIA EROSION & SEDIMENT CONTROL HANDBOOK. ONE METHOD OF SEDIMENT DISPOSAL IS SPREADING IT ONSITE, UPLAND OF SEDIMENT BASIN #2, FOR DRYING. ALTERNATIVELY, THE CONTRACTOR MAY ELECT TO HAUL THE SEDIMENT OFFSITE TO AN ACTIVE/APPROVED DEQ PERMITTED SITE.
6. WHEN UTILITY INSTALLATIONS OCCUR WITHIN CARLTON AVENUE, PAVEMENT REPAIRS SHALL BE MADE IN ACCORDANCE WITH THE DETAIL SHOWN ON SHEET 16.
7. AS INTERCONNECTED ROAD GRIDS ARE BEING INSTALLED, BUILDING SITES WILL BE FORMED. THE CONTRACTOR SHALL WRAP THESE BUILDING SITES IN SILT FENCE, PREVENTING DEPOSITION OF DISTURBED SOILS ONTO THE NEWLY INSTALLED STONE BEDS, CURB AND STORM SEWER.
8. INLET PROTECTION SHALL BE INSPECTED AFTER EACH RAINFALL EVENT AND REPAIRS SHALL BE MADE AS NECESSARY. IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE STONE MUST BE PULLED AWAY AND CLEANED AND/OR REPLACED.
9. CONSTRUCTION ROAD STABILIZATION MEASURES SHALL BE APPLIED, AS NEEDED.
10. ALL AREAS OF DISTURBANCE SHALL BE TEMPORARILY OR PERMANENTLY STABILIZED WITH SEED AND STRAW.
11. THE CONTRACTOR SHALL CONTINUE TO MONITOR THE PERIMETER EROSION CONTROL MEASURES, SEDIMENT BASINS A STORMWATER CONVEYANCE CHANNELS AND OUTLET PROTECTIONS. WEEKLY MAINTENANCE AND INSPECTIONS SHALL BE PERFORMED ON THESE ITEMS, AS OUTLINED ON THE PLAN SHEETS.
12. THE DURATION OF PHASE VI MAY LAST FOR SEVERAL MONTHS. DURING THIS TIME, AS BUILDING SITES ARE FORMED FROM THE STABILIZED ROAD BEDS, CURB AND STORM SEWER AND ARE ENCOMPASSED IN SILT FENCE, THE CONTRACTOR MAY ELECT TO BEGIN BUILDING PAD AND BUILDING CONSTRUCTION. AT THE TIME OF THE BUILDINGS' CONSTRUCTION, THE CONTRACTOR SHALL COMPLETE THE UTILITY INSTALLATIONS FOR THE PROPOSED BUILDINGS, CONNECTING THE UTILITIES TO THE BUILDINGS. AS THIS BEGINS, AND ONCE ALL THE PHASE VI EROSION CONTROL ITEMS HAVE BEEN INSTALLED AND ARE OPERATIONAL, DRAINAGE IS PROPERLY CONVEYED TO THESE MEASURES, AND THE CITY ESC INSPECTOR HAS GRANTED APPROVAL THE CONTRACTOR CAN PROCEED TO ESC PHASE VII.



EROSION & SEDIMENT CONTROL NOTES FOR ALL PHASES:
1. PHASE I EROSION & SEDIMENT CONTROL (ESC) PLAN SHALL OCCUR BEFORE PHASE II ESC PLAN.
2. PHASE II ESC PLAN SHALL OCCUR BEFORE PHASE III ESC PLAN.
3. PHASE III ESC PLAN SHALL OCCUR BEFORE PHASE IV ESC PLAN.
4. PHASE IV ESC PLAN SHALL OCCUR BEFORE PHASE V ESC PLAN.
4. PHASE V ESC PLAN SHALL OCCUR BEFORE PHASE VI ESC PLAN.
4. PHASE VI ESC PLAN SHALL OCCUR BEFORE PHASE VII ESC PLAN.
5. FINAL STABILIZATION OF THE AREAS OF CRITICAL SLOPES DISTURBED SHALL BE PERMANENT MEASURES FOR RESTABILIZATION OF THE AREAS AND POTENTIAL WILDLIFE HABITAT.
6. CONTRACTOR SHALL CHECK SILT FENCE EVERY 5 DAYS, AND AFTER MAJOR RAINFALL EVENTS, TO ENSURE NO EROSION OR SEDIMENT HAS COMMINATED ADJACENT SITES.
7. TREE PROTECTION FENCING SHALL BE IMMOVABLE CHAIN-LINK FENCING PER THE TREE PROTECTION DETAIL. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING TREES TO REMAIN UNDISTURBED.

GRAPHIC SCALE
(IN FEET)
1 inch = 30 ft.

INSPECTION REQUIREMENTS (9VAC25-880-70 PART II, F.2.):
Inspection schedule.
a. Inspections shall be conducted at a frequency of:
(1) At least once every five business days; or
(2) At least once every 10 business days and no later than 48 hours following a measurable storm event. In the event that a measurable storm event occurs when there are more than 48 hours between business days, the inspection shall be conducted no later than the next business day.
b. Where areas have been temporarily stabilized or land-disturbing activities will be suspended due to continuous frozen ground conditions and stormwater discharges are unlikely, the inspection frequency may be reduced to once per month. If weather conditions (such as above freezing temperatures or rain or snow events) make discharges likely, the operator shall immediately resume the regular inspection frequency.
c. Representative inspections may be utilized for utility line installation, pipeline construction, or other similar linear construction activities provided that:
(1) Temporary or permanent soil stabilization has been installed and vehicle access may compromise the temporary or permanent soil stabilization and potentially cause additional land disturbance increasing the potential for erosion;
(2) Inspections occur on the same frequency as other construction activities;
(3) Control measures are inspected along the construction site 0.25 miles above and below each access point (i.e., where a roadway, undisturbed right-of-way, or other similar feature intersects the construction activity and access does not compromise temporary or permanent soil stabilization); and
(4) Inspection locations are provided in the report required by Part II F.

PHASE VI ESC PLAN LEGEND

SAF	SAFETY FENCE PER VESCH 3.01
CE	CONSTRUCTION ENTRANCE PER VESCH 3.02
CRS	CONSTRUCTION ROAD STABILIZATION PER VESCH 3.03
SF	SILT FENCE PER VESCH 3.05
DD	DIVERSION DIKE PER VESCH 3.09
RWD	RIGHT OF WAY DIVERSION PER VESCH 3.11
ST	SEDIMENT TRAP PER VESCH 3.13
SB	SEDIMENT BASIN PER VESCH 3.14
OP	OUTLET PROTECTION PER VESCH 3.18
RR	RIPRAP PER VESCH 3.19
CD	ROCK CHECK PER VESCH 3.20
TS	TEMPORARY SEEDING PER VESCH 3.31
PS	PERMANENT SEEDING PER VESCH 3.32
DC	DUST CONTROL PER VESCH 3.39
BM	BLANKET MATTING PER VESCH 3.36
TP	TREE PROTECTION TAPE PER VESCH 3.38

LIMITS OF LAND DISTURBANCE
DIVERSION DIKE
BOUNDARY LINE
SILT FENCE
SILT FENCE WITH WIRE BACKING
DIRECTION OF FLOW
442 PROPOSED CONTOUR
DRAINAGE DIVIDE
EXISTING CHANNEL
EXISTING TREELINE
PROPOSED CLEARING LIMITS
CRITICAL SLOPES
DISTURBED CRITICAL SLOPES
SEDIMENT BASIN & TRAP
OUTLET PROTECTION
TS TEMPORARY SEEDING
PS PERMANENT SEEDING
BLANKET MATTING
TREE PROTECTION
DC DUST CONTROL
SAFETY FENCE
BAFFLE
CONSTRUCTION ENTRANCE

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
PROFESSIONAL ENGINEER
8/18/23

REVISIONS

DATE	REVISION DESCRIPTION
3/15/22	INITIAL PLAN SUBMITTAL
1/03/23	2ND PLAN SUBMITTAL
5/19/23	3RD PLAN SUBMITTAL
8/18/23	4TH PLAN SUBMITTAL

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200 GARRETT STREET, SUITE K-CHARLOTTESVILLE, VA 22902 -434.293.3719

BELMONT CONDOMINIUMS - FINAL SITE PLAN

EROSION & SEDIMENT CONTROL PLAN - PHASE VI

PROJECT

JOB NO. 202201
SCALE 1"=30'
SHEET NO. 38
SHEET

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Attachment A

INSPECTION REQUIREMENTS (9VAC25-880-70 PART II, F.2.):
Inspection schedule.
a. Inspections shall be conducted at a frequency of:
(1) At least once every five business days; or
(2) At least once every 10 business days and no later than 48 hours following a measurable storm event. In the event that a measurable storm event occurs when there are more than 48 hours between business days, the inspection shall be conducted no later than the next business day.
b. Where areas have been temporarily stabilized or land-disturbing activities will be suspended due to continuous frozen ground conditions and stormwater discharges are unlikely, the inspection frequency may be reduced to once per month. If weather conditions (such as above freezing temperatures or rain or snow events) make discharges likely, the operator shall immediately resume the regular inspection frequency.
c. Representative inspections may be utilized for utility line installation, pipeline construction, or other similar linear construction activities provided that:
(1) Temporary or permanent soil stabilization has been installed and vehicle access may compromise the temporary or permanent soil stabilization and potentially cause additional land disturbance increasing the potential for erosion;
(2) Inspections occur on the same frequency as other construction activities;
(3) Control measures are inspected along the construction site 0.25 miles above and below each access point (i.e., where a roadway, undisturbed right-of-way, or other similar feature intersects the construction activity and access does not compromise temporary or permanent soil stabilization); and
(4) Inspection locations are provided in the report required by Part II F.

PHASE VII ESC PLAN LEGEND

- (SAF) *SAFETY FENCE PER VESCH 3.01*
- (CE) *CONSTRUCTION ENTRANCE PER VESCH 3.02*
- (CRS) *CONSTRUCTION ROAD STABILIZATION PER VESCH 3.03*
- (SF) *SILT FENCE PER VESCH 3.05*
- (DD) *DIVERSION DIKE PER VESCH 3.09*
- (RWD) *RIGHT OF WAY DIVERSION PER VESCH 3.11*
- (ST) *SEDIMENT TRAP PER VESCH 3.13*
- (SB) *SEDIMENT BASIN PER VESCH 3.14*
- (OP) *OUTLET PROTECTION PER VESCH 3.18*
- (RR) *RIPRAP PER VESCH 3.19*
- (CD) *ROCK CHECK PER VESCH 3.20*
- (TS) *TEMPORARY SEEDING PER VESCH 3.31*
- (PS) *PERMANENT SEEDING PER VESCH 3.32*
- (DC) *DUST CONTROL PER VESCH 3.39*
- (BM) *BLANKET MATTING PER VESCH 3.36*
- (TP) *TREE PROTECTION TAPE PER VESCH 3.38*

- *LIMITS OF LAND DISTURBANCE*
- *DIVERSION DIKE*
- *BOUNDARY LINE*
- *SILT FENCE*
- *SILT FENCE WITH WIRE BACKING*
- *DIRECTION OF FLOW*
- 442 *PROPOSED CONTOUR*
- *DRAINAGE DIVIDE*
- *EXISTING CHANNEL*
- *EXISTING TREELINE*
- *PROPOSED CLEARING LIMITS*
- *CRITICAL SLOPES*
- *DISTURBED CRITICAL SLOPES*
- *SEDIMENT BASIN & TRAP*
- *OUTLET PROTECTION*
- (TS) *TEMPORARY SEEDING*
- (PS) *PERMANENT SEEDING*
- *BLANKET MATTING*
- *TREE PROTECTION*
- (DC) *DUST CONTROL*
- *SAFETY FENCE*
- *BAFFLE*
- *CONSTRUCTION ENTRANCE*

PROPOSED BELMONT CONDOMINIUMS LIMITS, TYP.
PROPOSED BLANKET MATTING
CRITICAL SLOPES TO REMAIN, TYP.
SEE SHEET 32 FOR OUTLET PROTECTION DESIGN, TYP.
FINAL CLEARING LIMITS, TYP.
PROPOSED IMMOVABLE CHAIN-LINK FENCE TO SERVE AS TREE PROTECTION ALONG LIMITS OF CLEARING
w/ WIRE BACKING
PROPOSED RETAINING WALLS & HANDRAILS SHALL BE CONSTRUCTED IN ESC PHASE VI. HANDRAILS WITH SIGNS READING "WARNING QUICK SAND, KEEP OUT" TO SERVE AS A SAFETY FENCE.
STR.44
STR.44A
STR.5
STR. 22
UGD SYSTEM #1A
IMPACTED CRITICAL SLOPES, TYP.
STR. 32
SWINGING GATE
CONCRETE WASH OUT AREA
PROPOSED STONE CONSTRUCTION ENTRANCE (12'x70' MIN.) w/ WASH RACK
LOCATION OF PORTA-POTTIES
LOCATION OF RAIN GAUGE
LOCATION OF DUMPSTER
LOCATION OF DOUBLE WALLED FUELING TANK
TOWARDS THE END OF CONSTRUCTION, CONTRACTOR TO REMOVE CONSTRUCTION ENTRANCE, FENCING & GATE LOCATED ACROSS THE ROAD AT THE TIME OF THE ROAD's ASPHALT APPLICATION.
AFTER THE CONSTRUCTION FENCING IS REMOVED & ASPHALT IS APPLIED TO THE ROAD, THE CONTRACTOR SHALL INSTALL A MOVEABLE BARRICADE ACROSS THE ROAD TO PROHIBIT THE PUBLIC FROM ENTERING THE CONSTRUCTION SITE DURING ESC PHASE VII. TEMPORARY MOVEABLE BARRICADE TO REMAIN UNTIL ITS REMOVAL IS APPROVED BY THE CITY E&S INSPECTOR.
PROPOSED LIMITS OF DISTURBANCE, TYP. TOTAL AREA=6.66 ac.
CONTRACTOR TO REMOVE CONSTRUCTION FENCING & GATE LOCATED ACROSS THE ROAD AT THE TIME OF THE ROAD's ASPHALT APPLICATION.
PROPOSED CHAIN-LINK SAFETY FENCE TO SURROUND CONSTRUCTION SITE, AS SHOWN.
SPRUCE STREET
CARLTON AVENUE
SCC 8

EROSION & SEDIMENT CONTROL NOTES FOR ALL PHASES:
1. PHASE I EROSION & SEDIMENT CONTROL (ESC) PLAN SHALL OCCUR BEFORE PHASE II ESC PLAN.
2. PHASE II ESC PLAN SHALL OCCUR BEFORE PHASE III ESC PLAN.
3. PHASE III ESC PLAN SHALL OCCUR BEFORE PHASE IV ESC PLAN.
4. PHASE IV ESC PLAN SHALL OCCUR BEFORE PHASE V ESC PLAN.
4. PHASE V ESC PLAN SHALL OCCUR BEFORE PHASE VI ESC PLAN.
4. PHASE VI ESC PLAN SHALL OCCUR BEFORE PHASE VII ESC PLAN.
5. FINAL STABILIZATION OF THE AREAS OF CRITICAL SLOPES DISTURBED SHALL BE PERMANENT MEASURES FOR RESTABILIZATION OF THE AREAS AND POTENTIAL WILDLIFE HABITAT.
6. CONTRACTOR SHALL CHECK SILT FENCE EVERY 5 DAYS, AND AFTER MAJOR RAINFALL EVENTS, TO ENSURE NO EROSION OR SEDIMENT HAS CONTAMINATED ADJACENT SITES.
7. TREE PROTECTION FENCING SHALL BE IMMOVABLE CHAIN-LINK FENCING PER THE TREE PROTECTION DETAIL. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING TREES TO REMAIN UNDISTURBED.

GRAPHIC SCALE
30 0 15 30 60
(IN FEET)
1 inch = 30 ft.

SEQUENCE OF CONSTRUCTION

PHASE VII EROSION & SEDIMENT CONTROL SEQUENCE OF CONSTRUCTION

1. WITH THE SITE OVERWHELMINGLY STABILIZED WITH THE PHASE VI INSTALLATION OF THE ROAD & STONE BASES & SUBBASES, AND WITH ADDITIONAL STABILIZATION EFFORTS UNDERWAY FROM BLANKET MATTING, SILT FENCE, TEMPORARY AND PERMANENT SEEDING AND SEDIMENT BASINS #1 & 2, THE CONTRACTOR CAN BEGIN BUILDING CONSTRUCTION ON THE REMAINING BUILDINGS IF THIS HAS NOT ALREADY BEGUN. THE BUILDING SITES' SHALL BE SURROUNDED IN SILT FENCE, AS SHOWN ON THE PHASES VI & VII PLANS, WITH SMALL BREAKS TO ALLOW FOR PEDESTRIAN AND CONSTRUCTION TRAFFIC. AT THE TIME OF THE BUILDINGS' CONSTRUCTION, THE CONTRACTOR SHALL COMPLETE THE UTILITY INSTALLATIONS FOR THE PROPOSED BUILDINGS, CONNECTING THE UTILITIES TO THE BUILDINGS. THE REMAINING ROOF DRAINS AND YARD DRAINS SHALL ALSO BE INSTALLED AND CONNECTED TO THE DRAINAGE SYSTEM ONCE BUILDING CONSTRUCTION HAS PROGRESSED TO A POINT WHERE RISK OF DAMAGE TO THE YARD AND ROOF DRAINS IS MINIMAL FROM CONSTRUCTION TRAFFIC.
2. AS THIS IS HAPPENING, A NEW GRAVEL CONSTRUCTION ENTRANCE SHALL BE INSTALLED WITHIN THE LIMITS OF THE PROPOSED HOLLY STREET. THE NEW CONSTRUCTION ENTRANCE WILL HAVE A WASH RACK THAT WILL RELEASE ITS FLASH WASH OFFS UPLAND OF A NEARBY INLET PROTECTION THAT WAS PREVIOUSLY INSTALLED. THIS RUNOFF WILL ULTIMATELY DRAIN TO SEDIMENT BASIN #1 VIA STORM SEWER. THE REMOVAL OF THE PREVIOUS PHASES' CONSTRUCTION ENTRANCE SHALL NOT OCCUR UNTIL AFTER THE NEW CONSTRUCTION ENTRANCE HAS BEEN INSTALLED AND APPROVAL HAS BEEN OBTAINED BY THE ESC INSPECTOR. THE CONTRACTOR SHALL ALSO RELOCATE THE CONC. WASH OUT AREA, DUMPSTER, FUELING TANK, RAIN GAUGE AND PORTA-POTTIES WITH THE RELOCATED CONSTRUCTION ENTRANCE, AS SHOWN.
3. AS PHASE VII CONSTRUCTION CONTINUES, THE CONTRACTOR CAN FINISH INSTALLING ANY REMAINING SIDEWALK AND CONCRETE CURBING. AT THIS TIME STR. 22 WILL CONTINUE TO FLOW INTO SEDIMENT BASIN #2 & STR. 44 WILL CONTINUE TO FLOW INTO SEDIMENT BASIN #1 VIA PIPE 44A WITH THE TEMPORARY BLOCKED PIPE 5 OPENING INSTALLED IN ESC PHASE VI.
4. AT THIS POINT THE CONSTRUCTION OF THE PROPOSED ROADS' AND PARKING LOTS' STONE BASES HAVE BEEN COMPLETED, AND THE SURROUNDING INFRASTRUCTURE HAVE BEEN INSTALLED, OR IN THE FINAL STAGES OF INSTALLATION, AND THE SITE IS NEARING COMPLETE STABILIZATION. WHILE THIS IS OCCURRING THE CONSTRUCTION OF THE BUILDINGS WILL CONTINUE TO PROGRESS WHILE BEING SURROUNDED WITH SILT FENCE.
5. THE CONTRACTOR SHALL ENSURE ALL PHASE VII EROSION CONTROL ITEMS HAVE BEEN INSTALLED AND ARE OPERATIONAL, AND DRAINAGE IS PROPERLY CONVEYED TO THESE MEASURES.
6. AFTER THE BUILDINGS' CONSTRUCTION, AND ALL OF THE CURB, SIDEWALK, STORM SEWER, UTILITIES, ROAD & PARKING STONE BASES & SUBBASES HAVE BEEN INSTALLED, THE CONTRACTOR CAN PLACE THE ASPHALT PAVEMENT. AT THE TIME OF THE ASPHALT APPLICATION, THE CONTRACTOR SHALL REMOVE THE CONSTRUCTION FENCING LOCATED ACROSS THE CARLTON AVENUE, GARDEN STREET AND SPRUCE STREET ENTRANCES. WITH THE REMOVAL OF THE CONSTRUCTION FENCING, THE CONTRACTOR SHALL ALSO REMOVE THE PHASE VII CONSTRUCTION ENTRANCE, ITS WASH RACK AND OUTFALL PIPE. THE TIMING OF THESE MEASURES' REMOVALS SHALL BE APPROVED BY THE CITY ESC INSPECTOR AND IS PARTIALLY DEPENDENT UPON THE STATE OF THE PROPOSED BUILDINGS' CONSTRUCTION.
7. ONCE THE ENTRANCES HAVE BEEN PAVED, AND AFTER THE PAVING CONTRACTOR PROVIDES PERMISSION ALLOWING FOR DRYING TIME, THE CONTRACTOR SHALL INSTALL TEMPORARY MOVEABLE BARRICADES ACROSS THE THREE ENTRANCES TO PROHIBIT THE PUBLIC FROM ENTERING THE CONSTRUCTION SITE DURING ESC PHASE VII, AS SHOWN. THE TEMPORARY MOVEABLE BARRICADES SHALL REMAIN UNTIL ITS REMOVAL IS APPROVED BY THE CITY ESC INSPECTOR.
8. AS CONSTRUCTION IS NEARING COMPLETION, THE CONTRACTOR SHALL CHECK/VERIFY THE STRUCTURAL INTEGRITY OF ALL DRAINAGE STRUCTURES AND UTILITIES PRIOR TO THE PROJECT'S COMPLETION AND CLEAN/REPAIR THEM AS NEEDED. ANY PERMANENT STRUCTURE INSTALLED THAT WAS USED FOR THE CONVEYANCE OF TEMPORARY ESC MEASURES SHALL BE FLUSHED ONCE UPSTREAM STABILIZATION HAS BEEN ACHIEVED.
9. FOLLOWING THE FLUSHING OF THE PERTINENT STORM SEWER STRUCTURES, THE CONTRACTOR CAN REMOVE SEDIMENT BASIN #2, ITS TEMPORARY RISER & BARREL & THE TWO TEMPORARY PIPES FEEDING THE BASIN FROM STRUCTURES 22 & 32. WITH THE REMOVAL OF SEDIMENT BASIN #2 THE CONTRACTOR CAN INSTALL UGD SYSTEM #1A, ITS PERMANENT INFLOW AND OUTFLOW PIPES & FINISH THE ELECTRICAL LINE INSTALLATIONS. SB #1 WILL REMAIN FUNCTIONAL DURING THE REMOVAL OF SB #2 AND THE INSTALLATION OF UGD SYSTEM #1A. PIPE 5's OPENING WITHIN STR. 44 SHALL REMAIN BLOCKED AT THIS TIME TO CONTINUE DIRECTING RUNOFF INTO SB #1. THE REMOVAL OF SEDIMENT BASIN #2 SHALL NOT OCCUR UNTIL AFTER APPROVAL HAS BEEN GIVEN BY THE CITY ESC INSPECTOR. THE CONTRACTOR SHALL CLEAN THE SEDIMENT OUT OF THE SEDIMENT BASIN AT THE TIME OF THE BASIN'S REMOVAL. THE BASIN SHALL BE PROPERLY DEWATERED WITH A PUMP AND A FILTER ON THE SUCTION END AND A SEDIMENT FILTER BAG ON THE OUTLET SIDE. DEWATERING OF THE BASIN SHALL OCCUR NO SOONER THAN 48 HOURS AFTER THE LAST RAINFALL EVENT TO ENSURE PROPER SETTLING TIME IN THE BASIN. MUD AND SEDIMENT FROM THE BOTTOM OF THE SEDIMENT BASIN SHALL NOT BE PUMPED. THE CONTRACTOR SHALL DISPOSE OF THE SEDIMENT IN ACCORDANCE WITH THE VIRGINIA EROSION & SEDIMENT CONTROL HANDBOOK. ONE METHOD OF SEDIMENT DISPOSAL IS SPREADING IT ONSITE, UPLAND OF SILT FENCE, FOR DRYING. ALTERNATIVELY, THE CONTRACTOR MAY ELECT TO HAUL THE SEDIMENT OFFSITE TO AN ACTIVE/APPROVED DEQ PERMITTED SITE.
10. THROUGHOUT ALL PHASES OF CONSTRUCTION, THE CONTRACTOR SHALL CONTINUE TO MONITOR THE PERIMETER EROSION CONTROL MEASURES. WEEKLY MAINTENANCE AND INSPECTIONS SHALL BE PERFORMED ON THESE ITEMS, AS OUTLINED ON THE PLAN SHEETS.
11. AFTER THE REMOVAL OF SEDIMENT BASIN #2, THE CONTRACTOR CAN THEN CONVERT SEDIMENT BASIN #1 IN PHASE VII TO A PERMANENT SWM FACILITY. THE CITY OF CHARLOTTESVILLE SHALL INSPECT THE SITE FOR UPLAND STABILIZATION PRIOR TO THE BASIN'S CONVERSION. AUTHORIZATION FROM THE CITY ESC INSPECTOR IS REQUIRED PRIOR TO THE CONVERSION OF THE BASIN AND THE REMOVAL OF ANY ESC MEASURE.
12. AT THE TIME OF SEDIMENT BASIN #1's CONVERSION, THE CONTRACTOR SHALL REMOVE THE TEMPORARY PIPE 5 BLOCKED OPENING IN STR. 44 TO ALLOW RUNOFF TO FLOW INTO THE NEWLY INSTALLED UGD SYSTEM. AT THIS SAME TIME, THE CONTRACTOR SHALL TEMPORARILY BLOCK THE 12" PIPE 44A OPENING IN STR. 44, PREVENTING RUNOFF FROM ENTERING SEDIMENT BASIN #1 DURING ITS CONVERSION. THE CONTRACTOR SHALL CLEAN THE SEDIMENT OUT OF THE SEDIMENT BASIN NEXT. THE BASIN SHALL BE PROPERLY DEWATERED WITH A PUMP AND A FILTER ON THE SUCTION END AND A SEDIMENT FILTER BAG ON THE OUTLET SIDE. DEWATERING OF THE BASIN SHALL OCCUR NO SOONER THAN 48 HOURS AFTER THE LAST RAINFALL EVENT TO ENSURE PROPER SETTLING TIME IN THE BASIN. MUD AND SEDIMENT FROM THE BOTTOM OF THE SEDIMENT BASIN SHALL NOT BE PUMPED. THE CONTRACTOR SHALL DISPOSE OF THE SEDIMENT IN ACCORDANCE WITH THE VIRGINIA EROSION & SEDIMENT CONTROL HANDBOOK. ONE METHOD OF SEDIMENT DISPOSAL IS SPREADING IT ONSITE, UPLAND OF SILT FENCE, FOR DRYING. ALTERNATIVELY, THE CONTRACTOR MAY ELECT TO HAUL THE SEDIMENT OFFSITE TO AN ACTIVE/APPROVED DEQ PERMITTED SITE.
13. AFTER THE SEDIMENT BASIN HAS BEEN CLEANED IT CAN BE REGRADED. THIS AREA SHALL BE PREPPED AND GRADED FOR THE PERMANENT SWM FACILITY. WHILE THIS IS HAPPENING, THE CONTRACTOR CAN COMPLETE THE INSTALLATION OF THE SWM FACILITY'S RISER. SEE SHEETS 44 & 45 FOR THE DESIGN OF THE PERMANENT SWM FACILITY AND ITS STRUCTURES. NOTE, THE ENGINEER OF RECORD SHALL BE NOTIFIED DURING THE CONVERSION OF THE BASIN SO THAT COLLINS ENGINEERING OR A DESIGNATED PARTY CAN MONITOR THE CONVERSION TO A PERMANENT FACILITY. THE DOWNGRADE SILT FENCE WITH WIRE BACKING SHALL REMAIN IN PLACE FOR SEDIMENT CONTROL DURING THIS CONVERSION. SIMILARLY, UPLAND INLET PROTECTION, BLANKET MATTING AND TEMPORARY & PERMANENT STABILIZATION MEASURES WILL REMAIN IN EFFECT.
14. ONCE TEMPORARY SEDIMENT BASIN #1 HAS BEEN CONVERTED TO A PERMANENT SWM FACILITY, AND THE FACILITY'S INTERIOR GRADES AND UPLAND WATERSHED ARE STABILIZED, THE CONTRACTOR CAN REMOVE THE TEMPORARY PIPE 44A BLOCKED OPENING IN STR. 44, INLET PROTECTIONS AND CHAIN-LINK CONSTRUCTION FENCING SURROUNDING THE SITE. THE REMOVAL OF THESE ITEMS SHALL FIRST BE APPROVED BY THE CITY ESC INSPECTOR, AND THE STORM INLETS' UPLAND SUBAREAS MUST FIRST BE COMPLETELY STABILIZED. NOTE, AN AS-BUILT CERTIFICATION OF THE PERMANENT SWM FACILITIES IS REQUIRED TO BE SUBMITTED TO THE CITY FOR APPROVAL.
15. AFTER THE SITE IS PERMANENTLY STABILIZED, THE CONTRACTOR CAN BEGIN REMOVAL OF ANY REMAINING EROSION & SEDIMENT CONTROL MEASURES. NO ITEMS SHALL BE REMOVED UNLESS THE UPSTREAM AREAS ARE STABILIZED AND THE INSPECTOR GIVES PERMISSION, TYPICAL. THE CONTRACTOR SHALL STABILIZE REMAINING AREAS OF THE SITE IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL REQUIREMENTS.
16. ALL AREAS OF DISTURBANCE SHALL BE PERMANENTLY STABILIZED WITH SEED AND STRAW.
17. THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES AS SPECIFIED IN THE VIRGINIA EROSION & SEDIMENT CONTROL HANDBOOK, REMOVING ONLY WHEN APPROVED BY THE LOCAL PROGRAM ADMINISTRATOR IN ACCORDANCE WITH THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.
18. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE AUTHORIZED BY THE LOCAL PROGRAM ADMINISTRATOR. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF THE TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
PROFESSIONAL ENGINEER
8/18/23

REVISIONS

DATE	REVISION DESCRIPTION
3/15/22	INITIAL PLAN SUBMITTAL
1/03/23	2ND PLAN SUBMITTAL
5/19/23	3RD PLAN SUBMITTAL
8/18/23	4TH PLAN SUBMITTAL

CE COLLINS ENGINEERING
200 GARRETT STREET, SUITE K-CHARLOTTESVILLE, VA 22902 -434.293.3719

PROJECT: BELMONT CONDOMINIUMS - FINAL SITE PLAN
SHEET: EROSION & SEDIMENT CONTROL PLAN - PHASE VII

JOB NO. 202201
SCALE 1"=30'
SHEET NO. 39

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Attachment A

Erosion & Sediment Control Drainage Area Summary

	Sediment Basin #1, ac.	Sediment Basin #2, ac.	* Sediment Trap #1, ac.
Phase I	4.98	-	-
Phase II	7.22	-	-
Phase III	7.71	-	-
Phase IV	7.23	-	0.94
Phase V	1.21	5.92	0.93
Phase VI	1.70	6.21	-
Phase VII	-	-	-

* Sediment trap #1 is proposed to provide additional / extra treatment upland of the primary ESC measure, sediment basin #1. Sediment trap #1 provides additional sediment removal, beyond minimum requirements. Sediment basin #1 is sized to handle sediment

SEDIMENT TRAP #1 CALCULATION NOTES:

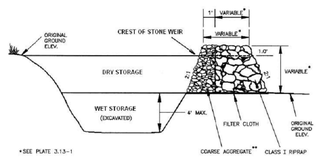
THE FOLLOWING SEDIMENT TRAP #1 CALCULATIONS WERE SIZED FOR THE LARGER PHASE IV SUBAREA. THIS TRAP AVOIDS RELEASING RUNOFF ONTO STEEP SLOPES BY INSTALLING A RISER AND BARREL OUTFALL SYSTEM IN LIEU OF A TRADITIONAL STONE WEIR OUTFALL. THE PROPOSED Ø48" RISER HAS AN OPENING AREA GREATER THAN THE MINIMUM REQUIRED WEIR OUTFALL CALCULATED. ALSO, THE TRAP's DESIGN PROVIDES 2' OF VERTICAL SEPARATION BETWEEN THE RISER's RIM ELEVATION AND THE TOP OF DAM, AS OPPOSED TO THE TRADITIONAL TRAP's 1' OF VERTICAL SEPARATION BETWEEN THE WEIR's CREST AND THE TOP OF DAM.

Sediment Trap #1 Design

drainage area (acres) (<3) 0.94

trap volumes:

elevation (ft)	area (sf)	volume(cf)	volume(cy)
434	431	0	0.0
436	1454	1784	66.1
438	2308	5514	204.2
439	2780	8054	298.3
440	3279	11080	410.4



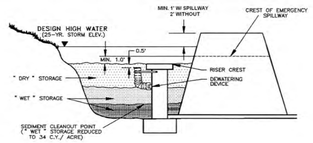
wet storage:

wet storage required (cy) (67*DA)	63.0	weir length (ft) (6xDA)	5.6
bottom of stone weir (ft)	436.0	1' deep weir opening area (ft²)	5.6
equivalent invert of a 6" dewatering orifice	436.0	48" riser diameter area opening (ft²)	12.6
wet storage provided at this elevation (cy)	66.1	bottom of trap elevation (ft)	434
slope of wet storage sides	2:1	bottom trap dimensions:	48'x9'
		top of dam elevation (ft)	440
dry storage:		top width of dam (ft)	11'+
dry storage required (cy) (67*DA)	63.0	top trap dimensions	100'x33'
crest of stone weir	438.0		
equivalent rim elev. of a 48" riser	438.0		
dry storage provided at this elevation (cy)	138		
slope of dry storage sides	2:1		

SEDIMENT BASIN #1 CALCULATION NOTE #1:

THE FOLLOWING SEDIMENT BASIN #1 CALCULATIONS REFLECT THE CONDITIONS DURING ESC PHASES I-V, WHEN THE PROPOSED BASIN IS AT ITS LARGEST VOLUME. THE BASIN WAS SIZED DURING THESE ESC PHASES FOR ITS LARGEST CONTRIBUTING DRAINAGE AREA IN PHASE III. NOTE, SEDIMENT BASIN #1 IS ADEQUATELY SIZED TO HANDLE ITS CORRESPONDING CONTRIBUTING DRAINAGE AREA THROUGHOUT ALL PHASES OF CONSTRUCTION.

Sediment Basin #1 Design
(During Phases I-V)



drainage area (acres) 7.71

basin volumes: (using 2' contour intervals)

elevation (ft)	contour area (sf)	volume(cy)
410	80	0
412	311	14
414	670	49
416	3074	177
418	4233	446
420	5541	807
422	6940	1,269
423	7691	1539

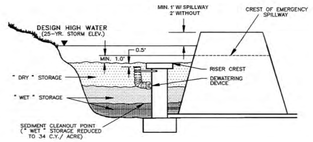
wet storage:

wet storage required (cy) (67*DA)	517	design high water	422.00
dewatering orifice elevation (ft)	418.39	top of dam (ft)	423.00
wet storage provided at this elevation (cy)	517	top width of dam (ft)	8.0
available volume before cleanout (cy) (34*DA)	262	bottom of basin (ft)	410.0
cleanout elevation (ft)	416.60	approx. bottom dimensions:	5'x15'
distance from cleanout to orifice (ft) (> 1')	1.8	upstream face slope:	2:1
		downstream face slope:	3:1
dry storage:			
dry storage required (cy) (67*DA)	517	baffles:	YES
principle spillway crest (ft)	421.00	length of flow, L (ft)	30
dry storage provided at this elevation (cy)	521	effective width, We (ft)	208
diameter of dewatering orifice (in)	6.0	L / We (baffles required if < 2)	0.1
diameter of flexible tubing (in) (orifice+2")	8.0		
		collars:	YES
runoff:		depth of water at spillway crest (ft)	11
C (use 0.45 for bare earth)	0.5	slope of upstream face (Z:1)	2
tc (min)	12	slope of barrel (Sb)	11.8%
I 2yr 3.0 Q 2yr	11.6	length of barrel in saturated zone (Ls)	12.91
I 25yr 4.5 Q 25yr	19.1	number collars required	3
		dimension of permanent collars	7'x7'
principle spillway:			
available head (ft)	1.00	emergency spillway:	YES
diameter riser (in)	60	required capacity (Q25-Qp) (cfs)	0.0
spillway capacity, Qp (cfs)	19.1	bottom width (ft)	10
diameter trash rack (in)	90	slope of exist channel (ft/ft)	33%
barrel length (ft)	12.92	minimun length of exit channel (ft)	19
head on barrel through embankment (ft)	8.0	crest of spillway (ft)	422
diameter of barrel (in)	36		

SEDIMENT BASIN #1 CALCULATION NOTE #2:

THE FOLLOWING SEDIMENT BASIN #1 CALCULATIONS REFLECT THE CONDITIONS DURING ESC PHASE VI, WHEN THE PROPOSED BASIN IS RESHAPED TO ITS SMALLER FOOTPRINT. THE BASIN WAS SIZED FOR ITS CORRESPONDING PHASE VI SMALLER CONTRIBUTING DRAINAGE AREA. NOTE, SEDIMENT BASIN #1 IS ADEQUATELY SIZED TO HANDLE ITS CORRESPONDING CONTRIBUTING DRAINAGE AREA THROUGHOUT ALL PHASES OF CONSTRUCTION.

Sediment Basin #1 Design
(During Phase VI)



drainage area (acres) 1.70

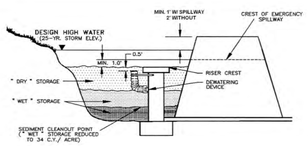
basin volumes: (using 2' contour intervals)

elevation (ft)	contour area (sf)	volume(cy)
416	1,669	0
418	2507	154
420	3464	374
421	3982	512
422	4525	669
423	5094	847

wet storage:

wet storage required (cy) (67*DA)	114	design high water	422.00
dewatering orifice elevation (ft)	418.39	top of dam (ft)	423.00
wet storage provided at this elevation (cy)	197	top width of dam (ft)	8.0
available volume before cleanout (cy) (34*DA)	58	bottom of basin (ft)	416.0
cleanout elevation (ft)	416.74	approx. bottom dimensions:	40'x45'
distance from cleanout to orifice (ft) (> 1')	1.6	upstream face slope:	2:1
		downstream face slope:	3:1
dry storage:			
dry storage required (cy) (67*DA)	114	baffles:	YES
principle spillway crest (ft)	421.00	length of flow, L (ft)	45
dry storage provided at this elevation (cy)	315	effective width, We (ft)	88
diameter of dewatering orifice (in)	6.0	L / We (baffles required if < 2)	0.5
diameter of flexible tubing (in) (orifice+2")	8.0		
		collars:	YES
runoff:		depth of water at spillway crest (ft)	11
C (use 0.45 for bare earth)	0.56	slope of upstream face (Z:1)	2
tc (min)	5	slope of barrel (Sb)	11.8%
I 2yr 5.2 Q 2yr	5.0	length of barrel in saturated zone (Ls)	12.91
I 25yr 7.5 Q 25yr	7.9	number collars required	3
		dimension of permanent collars	7'x7'
principle spillway:			
available head (ft)	1.00	emergency spillway:	YES
diameter riser (in)	60	required capacity (Q25-Qp) (cfs)	0.0
spillway capacity, Qp (cfs)	7.9	bottom width (ft)	10
diameter trash rack (in)	90	slope of exist channel (ft/ft)	33%
barrel length (ft)	12.92	minimun length of exit channel (ft)	19
head on barrel through embankment (ft)	8.0	crest of spillway (ft)	422
diameter of barrel (in)	36		

Sediment Basin #2 Design



drainage area (acres) 6.21

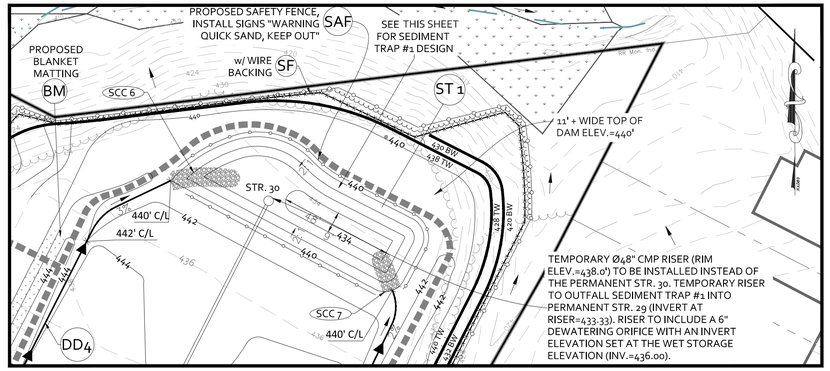
basin volumes: (using 2' contour intervals)

elevation (ft)	contour area (sf)	volume(cy)
430	596	0
432	1257	67
434	2044	188
436	2955	372
438	4005	629
440	5160	968
442	6417	1,396
444	7778	1921

wet storage:

wet storage required (cy) (67*DA)	416	design high water	440.25
dewatering orifice elevation (ft)	436.34	top of dam (ft)	444.00
wet storage provided at this elevation (cy)	416	top width of dam (ft)	8.0
available volume before cleanout (cy) (34*DA)	211	bottom of basin (ft)	430.0
cleanout elevation (ft)	434.22	approx. bottom dimensions:	68'x10'
distance from cleanout to orifice (ft) (> 1')	2.1	upstream face slope:	2:1
		downstream face slope:	3:1
dry storage:			
dry storage required (cy) (67*DA)	416	baffles:	YES
principle spillway crest (ft)	439.25	length of flow, L (ft)	24
dry storage provided at this elevation (cy)	425	effective width, We (ft)	173
diameter of dewatering orifice (in)	6.0	L / We (baffles required if < 2)	0.1
diameter of flexible tubing (in) (orifice+2")	8.0		
		collars:	YES
runoff:		depth of water at spillway crest (ft)	9.25
C (use 0.45 for bare earth)	0.57	slope of upstream face (Z:1)	2
tc (min)	12	slope of barrel (Sb)	1.3%
I 2yr 3.0 Q 2yr	10.6	length of barrel in saturated zone (Ls)	37.25
I 25yr 4.5 Q 25yr	17.5	number collars required	2
		dimension of collars on temp. barrel	4.9'x4.9'
principle spillway:			
available head (ft)	1.00	emergency spillway:	NO
diameter riser (in)	48	required capacity (Q25-Qp) (cfs)	0.0
spillway capacity, Qp (cfs)	17.5	bottom width (ft)	-
diameter trash rack (in)	72	slope of exist channel (ft/ft)	-
barrel length (ft)	34.3	minimun length of exit channel (ft)	-
head on barrel through embankment (ft)	11.8	crest of spillway (ft)	-
diameter of barrel (in)	24		

SEDIMENT TRAP #1 DETAIL- SCALE 1"=30'



GRAPHIC SCALE

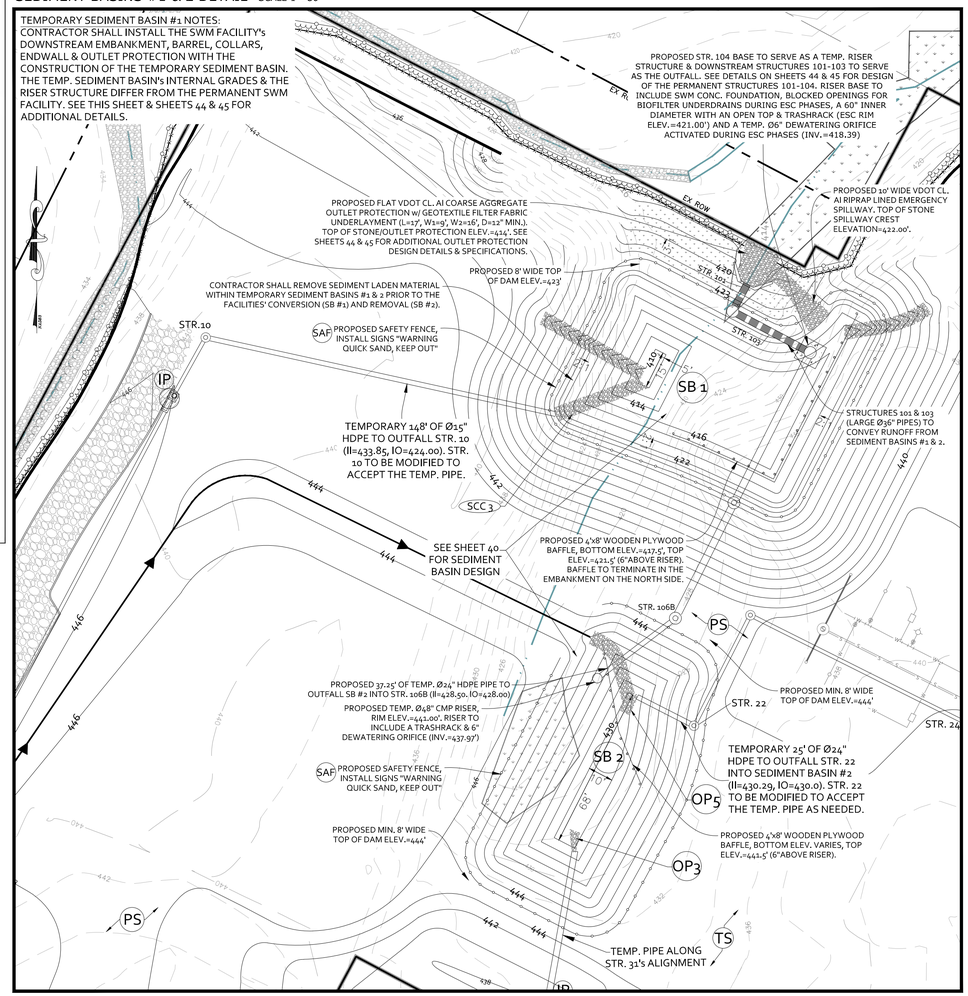
30 0 15 30 60

(IN FEET)

1 inch = 30 ft.

SEDIMENT BASINS #1 & 2 DETAIL- SCALE 1"=30'

TEMPORARY SEDIMENT BASIN #1 NOTES: CONTRACTOR SHALL INSTALL THE SWM FACILITY's DOWNSTREAM EMBANKMENT, BARREL, COLLARS, ENDWALL & OUTLET PROTECTION WITH THE CONSTRUCTION OF THE TEMPORARY SEDIMENT BASIN. THE TEMP. SEDIMENT BASIN's INTERNAL GRADES & THE RISER STRUCTURE DIFFER FROM THE PERMANENT SWM FACILITY. SEE THIS SHEET & SHEETS 44 & 45 FOR ADDITIONAL DETAILS.



GRAPHIC SCALE

30 0 15 30 60

(IN FEET)

1 inch = 30 ft.

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
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3/15/22	INITIAL PLAN SUBMITTAL
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5/19/23	3RD PLAN SUBMITTAL
8/18/23	4TH PLAN SUBMITTAL

COLLINS ENGINEERING
200 GARRETT STREET, SUITE K-CHARLOTTESVILLE, VA 22902 -434.293.3719

BELMONT CONDOMINIUMS - FINAL SITE PLAN

EROSION & SEDIMENT CONTROL - NOTES & DETAILS

PROJECT

SHEET

JOB NO. 202201

SCALE 1"=30'

SHEET NO. 40

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Attachment A

Impervious Area Summary-

Pre-Development DA 1A

Onsite Road, Parking, Driveways & Sidewalk	26,675 sf
Onsite Buildings	8,425 sf
Onsite Compacted Gravel or Riprap	4,400 sf
Offsite Roads, Parking, Driveways & Sidewalk	26,375 sf
Offsite Buildings	16375 sf
	82,250 sf

Pre-Development DA 1B

Road, Parking, Driveways & Sidewalk	35,000 sf
Buildings	4,725 sf
Compacted Gravel or Riprap	875 sf
	40,600 sf

Pre-Development DA 1C

Road, Parking, Driveways & Sidewalk	10,925 sf
Buildings	975 sf
	11,900 sf

Pre-Development DA 1E

Onsite Road, Parking, Driveways & Sidewalk	2,425 sf
Offsite Road, Parking, Driveways & Sidewalk	1,500 sf
Buildings	700 sf
	4,625 sf

Pre-Development DA 2

Ex.Roads & Parking	20,825 sf
Ex.Sidewalk, Walkways & Concrete	875 sf
Ex. Buildings	18,700 sf
Road, Parking, Driveways & Sidewalk	34,925 sf
Buildings	2,175 sf
	77,500 sf

DA 1E REPRESENTS AREAS THAT ARE DISTURBED IN THE POST-DEVELOPMENT STATE & ARE RELEASED IN A NON-CONCENTRATED FASHION (DEFINED AS SITE OUTFALL #5). DA 1E HAS BEEN ACCOUNTED FOR IN THE STORMWATER QUANTITY (9VAC25-870-66) ANALYSIS.

THE LIMITS OF ANALYSIS IS THE DOWNSTREAM CHANNEL, WHERE ALL THREE POINTS OF ANALYSES DRAIN.

POA 'C'

SITE OUTFALL #6 (EXISTING CHANNEL) DRAINS DA 2

SITE OUTFALL #3 (EXISTING PIPE OUTFALL BELOW SANITARY GRINDER) DRAINS DA 1C

POA 'A'
SITE OUTFALL #1 (EXISTING CHANNEL)

POA 'B'

PROJECT LIMITS, TYP.

DA 1C

DA 1A

DA 1E

DA 2

DA 1B

SPRUCE STREET

DOUGLAS AVENUE

CARLTON AVENUE

100' OF OVERLAND FLOW w/ Δ ELEV.=7', 30' OF CONC. FLOW w/ Δ ELEV.=16'

100' OF OVERLAND FLOW w/ Δ ELEV.=2', 50' OF CONC. FLOW w/ Δ ELEV.=19' & 260' OF CHANNEL FLOW (Tc=0.22 hrs.)

100' OF OVERLAND FLOW w/ Δ ELEV.=2' & 140' OF CONC. FLOW w/ Δ ELEV.=2'

100' OF OVERLAND FLOW w/ Δ ELEV.=12' 20' OF CONC. FLOW w/ Δ ELEV.=2' 230' OF CHANNEL FLOW (Tc=0.11 hrs.)

100' OF OVERLAND FLOW w/ Δ ELEV.=5' & 240' OF CONC. FLOW w/ Δ ELEV.=12' & 360' OF CHANNEL FLOW

100' OF OVERLAND FLOW w/ Δ ELEV.=7', 250' OF CONC. FLOW w/ Δ ELEV.=6' & 425' OF CHANNEL FLOW (Tc=0.16 hrs.)

100' OF OVERLAND FLOW w/ Δ ELEV.=14' 90' OF CONC. FLOW w/ Δ ELEV.=5' 50' OF CHANNEL FLOW

DA 1A CURRENTLY DRAINS TO THE DOWNSTREAM SITE OUTFALL #3 VIA VARIOUS PIPES & SWALES

SITE OUTFALL #4 (EXISTING CULVERT) DRAINS DA 1B

EX ROW

GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

General Construction notes for Stormwater Management Plans
1. All dams and constructed fill to be within 95% of maximum dry density and 2% of optimum moisture content. All fill material to be approved by a geotechnical engineer. A geotechnical engineer is to be present during construction of dams.
2. Pipe and riser joints are to be watertight within stormwater management facilities.
3. For temporary sediment traps or basins which are to be converted to permanent stormwater management facilities; conversion is not to take place until the site is stabilized, and permission has been obtained from the City erosion control inspector.

STORMWATER MANAGEMENT PLAN LEGEND
- OVERALL WATERSHEDS, WHICH WERE ANALYZED FOR CHANNEL & FLOOD PROTECTION
- SUBAREAS
- TIME OF CONCENTRATION PATH
- DENOTES CHANGE IN FLOW TYPE (PER SCS TR-55 MANUAL)
- PROPERTY LIMITS OF SUBJECT DEVELOPMENT
- PROPERTY LIMITS OF ADJACENT LOTS
- EXISTING CONCRETE
- EXISTING BUILDING

WATERSHED SUMMARY- For Point of Analysis 'A'

Pre-Development

	CN	Tc, hrs.	Area, ac.	1-year Flow, cfs	2-year Flow, cfs	10-year Flow, cfs
DA 1A (Pre-Dev.)	75	0.22	4.82	5.11	8.53	17.42
DA 1B (Pre-Dev.)	85	0.11	1.44	3.63	4.88	8.76
DA 1C (Pre-Dev.)	97	0.10	0.28	1.19	1.47	2.30
	78		6.54	9.93	14.88	28.49

WATERSHED SUMMARY- For Point of Analysis 'B'

Pre-Development

	CN	Tc, hrs.	Area, ac.	1-year Flow, cfs	2-year Flow, cfs	10-year Flow, cfs
DA 1E (Pre-Dev.)	68	0.13	0.60	0.59	0.92	2.12

WATERSHED SUMMARY- For Point of Analysis 'C'

Pre-Development

	CN	Tc, hrs.	Area, ac.	1-year Flow, cfs	2-year Flow, cfs	10-year Flow, cfs
DA 2 (Pre-Dev.)	74	0.18	4.97	5.09	8.54	17.60

OVERALL WATERSHED SUMMARY- Total Areas

Pre-Development Subarea	Area, ac.
DA 1A (Pre-Dev.)	4.82
DA 1B (Pre-Dev.)	1.44
DA 1C (Pre-Dev.)	0.28
DA 1E (Pre-Dev.)	0.60
DA 2 (Pre-Dev.)	4.97
Total =	12.11

Post-Development Subarea	Area, ac.
DA 1A (Post-Dev.)	6.21
DA 1B (Post-Dev.)	1.72
DA 1E (Post-Dev.)	0.77
DA 2 (Post-Dev.)	3.41
Total =	12.11

SITE OUTFALL SUMMARY

Point of Analyis 'A'

Pre-Development Subrea	Site Outfall
DA 1A (Pre-Dev.)	1
DA 1B (Pre-Dev.)	4
DA 1C (Pre-Dev.)	3

Post-Development Subrea	Site Outfall
DA 1A (Post-Dev.)	1
DA 1B (Post-Dev.)	

Point of Analyis 'B'

Pre-Development Subrea	Site Outfall
DA 1E (Post-Dev.)	5

Post-Development Subrea	Site Outfall
DA 1E (Post-Dev.)	5

Point of Analyis 'C'

Pre-Development Subrea	Site Outfall
DA 2 (Pre-Dev.)	6

Post-Development Subrea	Site Outfall
DA 2 (Post-Dev.)	6

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
PROFESSIONAL ENGINEER
8/18/23

REVISIONS

DATE	REVISION DESCRIPTION
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PROJECT: BELMONT CONDOMINIUMS - FINAL SITE PLAN
SHEET: PRE-DEVELOPMENT STORMWATER MANAGEMENT PLAN

JOB NO. 202201
SCALE 1"=40'
SHEET NO. 41

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Attachment A

STORMWATER MANAGEMENT NARRATIVE:

OVERVIEW:
THE PROPOSED BELMONT CONDOMINIUMS' STORMWATER MANAGEMENT PLAN COMPLIES WITH PART IIB MINIMUM REQUIREMENTS AND THE STORMWATER RUNOFF RATES, VOLUMES, AND VELOCITIES RESULTING FROM THIS DEVELOPMENT WILL BE IMPROVED PRIOR TO EXITING THE SITE.

THE PROPOSED BELMONT CONDOMINIUMS GENERATES AN INCREASE IN IMPERVIOUS AREA. THIS INCREASE PROMPTS THE NEED FOR NEW STORMWATER QUANTITY AND QUALITY TREATMENT, WHICH IS PROVIDED FOR WITH THE INSTALLATION OF AN UNDERGROUND DETENTION SYSTEM (QUANTITY) AND A BIORETENTION BASIN (QUALITY).

PLEASE SEE THE ATTACHED 'STORMWATER MANAGEMENT CALCULATIONS PACKET' FOR EVIDENCE OF THE PROJECT's COMPLIANCE. SUMMARIES OF THIS COMPLIANCE CAN BE VIEWED ON SHEETS 41-47 AS WELL.

STORMWATER QUALITY:
WITH THE AFOREMENTIONED INCREASE IN IMPERVIOUS AREA, A TOTAL PHOSPHORUS REMOVAL RATE OF 2.69 lbs/yr IS REQUIRED. THIS WAS DETERMINED BY USING THE DEQ VIRGINIA RUNOFF REDUCTION METHOD (VRRM) SPREADSHEET FOR ReDEVELOPMENTS. THE EROSION AND SEDIMENT CONTROL's LIMITS OF DISTURBANCE BOUNDARY WAS USED FOR THE VRRM's WATER QUALITY BOUNDARY, AS SHOWN ON SHEET 43.

THE STORMWATER QUALITY REQUIREMENTS ARE MET FOR THE PROPOSED DEVELOPMENT THROUGH A NEW BIORETENTION BASIN THAT PROVIDES 3.38 lbs/yr REMOVAL OF PHOSPHORUS. A BIORETENTION BASIN WAS SELECTED TO HELP MITIGATE THE PROPOSED REMOVAL OF WETLANDS AND TO MINIMIZE THE IMPACT TO WILDLIFE HABITAT. THE BIORETENTION BASIN IS 'OFFLINE' FROM THE UNDERGROUND DETENTION (UGD) SYSTEM #1A. IN ACCORDANCE WITH THE VA DEQ SPECIFICATION No. 9 FOR BIORETENTION BASINS, UNDER SECTION 6.5 ON PAGE 24, "OFF-LINE DESIGNS ARE PREFERRED." ALSO IN ACCORDANCE WITH THIS VA DEQ SECTION, A "FLOW SPLITTER AT THE INLET TO ALLOW ONLY THE TREATMENT VOLUME TO ENTER THE FACILITY" IS UTILIZED. THIS IS PROPOSED WITH THE CONSTRUCTION OF STRUCTURE 44, AS ANNOTATED ON THIS SHEET & SHEET 44.

STORMWATER QUANTITY:
THE BELMONT CONDOMINIUMS DEVELOPMENT DRAINS TO THREE POINTS OF ANALYSES (POA), AS SHOWN ON THIS SHEET, SHEET 41 AND DESCRIBED BELOW.

POINT OF ANALYSIS 'A':
PRE-DEVELOPMENT SUBAREAS 1A & 1C DRAIN TO POA 'A' VIA SITE OUTFALLS #1 AND 3. THESE TWO SUBAREAS WILL BE COMBINED IN THE POST-DEVELOPMENT STATE WITH THE REMOVAL OF SITE OUTFALL #3, AN EXISTING PIPE OUTFALL BELOW A SANITARY GRINDER. THESE TWO SUBAREAS WILL ALSO BE COMBINED IN THE CHANNEL & FLOOD PROTECTION ANALYSIS AT POA 'A' WITH PRE-DEVELOPMENT DA 1B. THIS IS DONE BECAUSE IN THE POST-DEVELOPMENT STATE DA 1B's SITE OUTFALL#4 IS REMOVED AND ITS RUNOFF IS REDIRECTED TO SITE OUTFALL #1 & POA 'A'. IN TOTAL, PRE-DEVELOPMENT SUBAREAS 1A, 1B & 1C WILL BE COMPARED TO POST-DEVELOPMENT SUBAREAS 1A & 1B. IN THE POST-DEVELOPMENT STATE SUBAREAS 1A & 1B WILL BE ATTENUATED IN UGD SYSTEM #1A BEFORE BEING RELEASED TO POA 'A'. NOTE, SINCE IN THE POST-DEVELOPMENT STATE PRE-DEV. DA 1B's AREA IS REDIRECTED TO POA 'A', A CROSS SECTION 'A' HAS BEEN PROVIDED TO ENSURE ADEQUACIES. CROSS SECTION 'A' IS STRATEGICALLY LOCATED BELOW POA 'A', AND UPLAND OF WHERE SITE OUTFALLS #1 (POA A) & #5 (POA B) CONVERGE. PLEASE SEE THE ATTACHED STORMWATER MANAGEMENT CALCULATIONS PACKET FOR THIS INFORMATION. A SECOND CROSS SECTION IN THE EXISTING CHANNEL BELOW SITE OUTFALL #5 (POA B) IS NOT REQUIRED SINCE THE PRE-DEV. DA 1B AREA IS REMOVED FROM THIS WATERSHED AND CHANNEL AND FLOOD PROTECTION REQUIREMENTS ARE MET FOR THIS AREA (SEE BELOW IN THIS NARRATIVE). REGARDING SITE OUTFALL #3, IF DURING CONSTRUCTION AN EXISTING BURIED SEPTIC FIELD OR OTHER INFRASTRUCTURE ASSOCIATED WITH THE SANITARY GRINDER ARE LOCATED, THEN THESE ITEMS WILL ALSO BE REMOVED IN A MANNER MEETING MINIMUM VDH REQUIREMENTS.

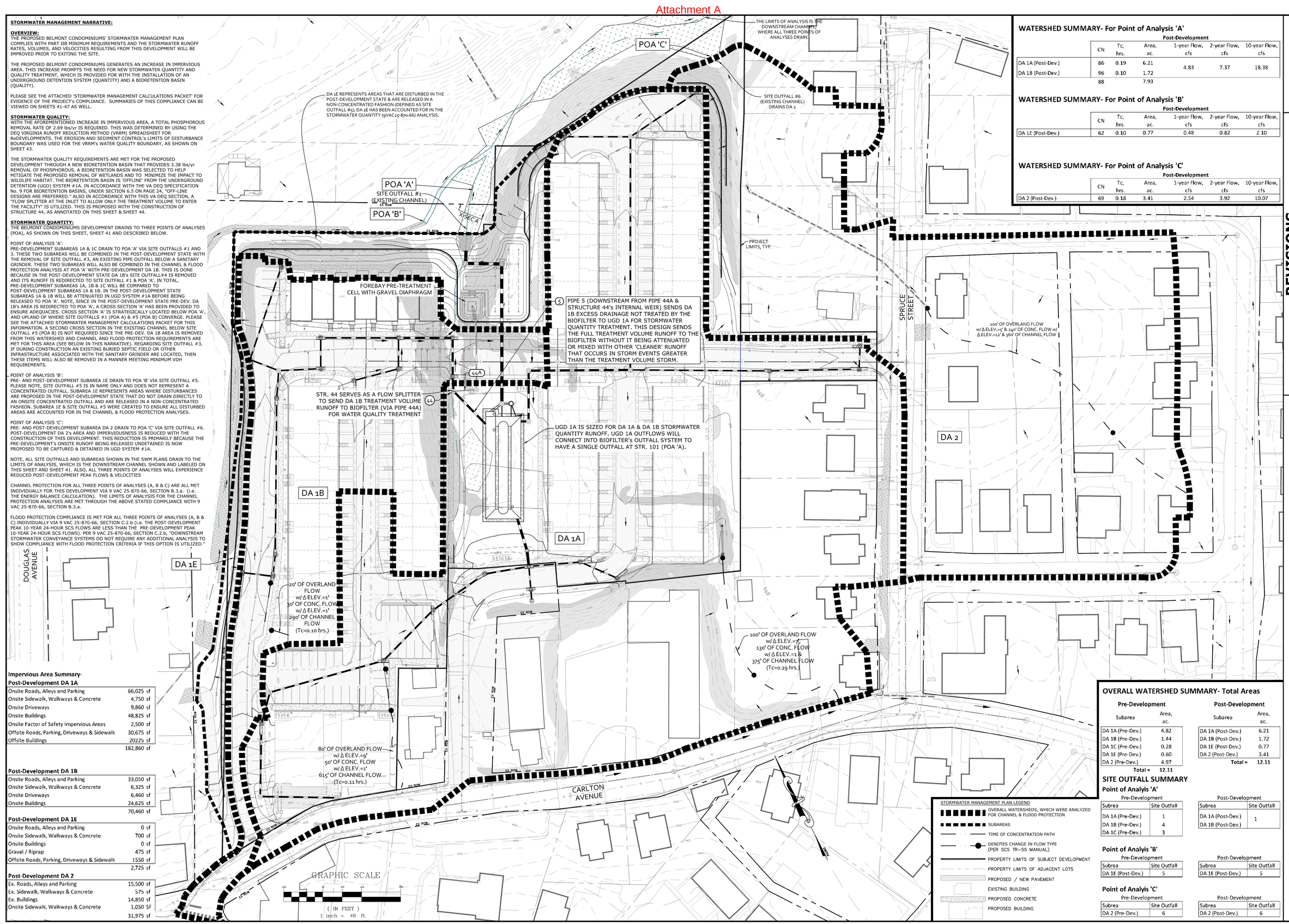
POINT OF ANALYSIS 'B':
PRE- AND POST-DEVELOPMENT SUBAREA 1E DRAIN TO POA 'B' VIA SITE OUTFALL #5. PLEASE NOTE, SITE OUTFALL #5 IS IN NAME ONLY AND DOES NOT REPRESENT A CONCENTRATED OUTFALL. SUBAREA 1E REPRESENTS AREAS WHERE DISTURBANCES ARE PROPOSED IN THE POST-DEVELOPMENT STATE THAT DO NOT DRAIN DIRECTLY TO AN ONSITE CONCENTRATED OUTFALL AND ARE RELEASED IN A NON-CONCENTRATED FASHION. SUBAREA 1E & SITE OUTFALL #5 WERE CREATED TO ENSURE ALL DISTURBED AREAS ARE ACCOUNTED FOR IN THE CHANNEL & FLOOD PROTECTION ANALYSES.

POINT OF ANALYSIS 'C':
PRE- AND POST-DEVELOPMENT SUBAREA DA 2 DRAIN TO POA 'C' VIA SITE OUTFALL #6. POST-DEVELOPMENT DA 2's AREA AND IMPERVIOUSNESS IS REDUCED WITH THE CONSTRUCTION OF THIS DEVELOPMENT. THIS REDUCTION IS PRIMARILY BECAUSE THE PRE-DEVELOPMENT's ONSITE RUNOFF BEING RELEASED UNDETAINED IS NOW PROPOSED TO BE CAPTURED & DETAINED IN UGD SYSTEM #1A.

NOTE, ALL SITE OUTFALLS AND SUBAREAS SHOWN IN THE SWM PLANS DRAIN TO THE LIMITS OF ANALYSIS, WHICH IS THE DOWNSTREAM CHANNEL SHOWN AND LABELED ON THIS SHEET AND SHEET 41. ALSO, ALL THREE POINTS OF ANALYSES WILL EXPERIENCE REDUCED POST-DEVELOPMENT PEAK FLOWS & VELOCITIES

CHANNEL PROTECTION FOR ALL THREE POINTS OF ANALYSES (A, B & C) ARE ALL MET INDIVIDUALLY FOR THIS DEVELOPMENT VIA 9 VAC 25-870-66, SECTION B.3.a. (i.e. THE ENERGY BALANCE CALCULATION). THE LIMITS OF ANALYSIS FOR THE CHANNEL PROTECTION ANALYSES ARE MET THROUGH THE ABOVE STATED COMPLIANCE WITH 9 VAC 25-870-66, SECTION B.3.a.

FLOOD PROTECTION COMPLIANCE IS MET FOR ALL THREE POINTS OF ANALYSES (A, B & C) INDIVIDUALLY VIA 9 VAC 25-870-66, SECTION C.2.b (i.e. THE POST-DEVELOPMENT PEAK 10-YEAR 24-HOUR SCS FLOWS ARE LESS THAN THE PRE-DEVELOPMENT PEAK 10-YEAR 24-HOUR SCS FLOWS). PER 9 VAC 25-870-66, SECTION C.2.b, "DOWNSTREAM STORMWATER CONVEYANCE SYSTEMS DO NOT REQUIRE ANY ADDITIONAL ANALYSIS TO SHOW COMPLIANCE WITH FLOOD PROTECTION CRITERIA IF THIS OPTION IS UTILIZED."



WATERSHED SUMMARY- For Point of Analysis 'A'

	Post-Development					
	CN	Tc, hrs.	Area, ac.	1-year Flow, cfs	2-year Flow, cfs	10-year Flow, cfs
DA 1A (Post-Dev.)	86	0.19	6.21	4.83	7.37	18.38
DA 1B (Post-Dev.)	96	0.10	1.72			
	88		7.93			

WATERSHED SUMMARY- For Point of Analysis 'B'

	Post-Development					
	CN	Tc, hrs.	Area, ac.	1-year Flow, cfs	2-year Flow, cfs	10-year Flow, cfs
DA 1E (Post-Dev.)	62	0.10	0.77	0.48	0.82	2.10

WATERSHED SUMMARY- For Point of Analysis 'C'

	Post-Development					
	CN	Tc, hrs.	Area, ac.	1-year Flow, cfs	2-year Flow, cfs	10-year Flow, cfs
DA 2 (Post-Dev.)	69	0.18	3.41	2.54	3.92	10.07

Impervious Area Summary-

Post-Development DA 1A

Onsite Roads, Alleys and Parking	66,025 sf
Onsite Sidewalk, Walkways & Concrete	4,750 sf
Onsite Driveways	9,860 sf
Onsite Buildings	48,825 sf
Onsite Factor of Safety Impervious Areas	2,500 sf
Offsite Roads, Parking, Driveways & Sidewalk	30,675 sf
Offsite Buildings	20225 sf
	182,860 sf

Post-Development DA 1B

Onsite Roads, Alleys and Parking	33,050 sf
Onsite Sidewalk, Walkways & Concrete	6,325 sf
Onsite Driveways	6,460 sf
Onsite Buildings	24,625 sf
	70,460 sf

Post-Development DA 1E

Onsite Roads, Alleys and Parking	0 sf
Onsite Sidewalk, Walkways & Concrete	700 sf
Onsite Buildings	0 sf
Gravel / Riprap	475 sf
Offsite Roads, Parking, Driveways & Sidewalk	1550 sf
	2,725 sf

Post-Development DA 2

Ex. Roads, Alleys and Parking	15,500 sf
Ex. Sidewalk, Walkways & Concrete	575 sf
Ex. Buildings	14,850 sf
Onsite Sidewalk, Walkways & Concrete	1,050 SF
	31,975 sf

OVERALL WATERSHED SUMMARY- Total Areas

Pre-Development Subarea	Area, ac.
DA 1A (Pre-Dev.)	4.82
DA 1B (Pre-Dev.)	1.44
DA 1C (Pre-Dev.)	0.28
DA 1E (Pre-Dev.)	0.60
DA 2 (Pre-Dev.)	4.97
Total =	12.11

Post-Development Subarea	Area, ac.
DA 1A (Post-Dev.)	6.21
DA 1B (Post-Dev.)	1.72
DA 1E (Post-Dev.)	0.77
DA 2 (Post-Dev.)	3.41
Total =	12.11

SITE OUTFALL SUMMARY

Point of Analysis 'A'

Pre-Development Subrea	Site Outfall
DA 1A (Pre-Dev.)	1
DA 1B (Pre-Dev.)	4
DA 1C (Pre-Dev.)	3

Post-Development Subrea	Site Outfall
DA 1A (Post-Dev.)	1
DA 1B (Post-Dev.)	

Point of Analysis 'B'

Pre-Development Subrea	Site Outfall
DA 1E (Post-Dev.)	5

Post-Development Subrea	Site Outfall
DA 1E (Post-Dev.)	5

Point of Analysis 'C'

Pre-Development Subrea	Site Outfall
DA 2 (Pre-Dev.)	6

Post-Development Subrea	Site Outfall
DA 2 (Post-Dev.)	6

STORMWATER MANAGEMENT PLAN LEGEND
- OVERALL WATERSHEDS, WHICH WERE ANALYZED FOR CHANNEL & FLOOD PROTECTION
- SUBAREAS
- TIME OF CONCENTRATION PATH
- DENOTES CHANGE IN FLOW TYPE (PER SCS TR-55 MANUAL)
- PROPERTY LIMITS OF SUBJECT DEVELOPMENT
- PROPERTY LIMITS OF ADJACENT LOTS
- PROPOSED / NEW PAVEMENT
- EXISTING BUILDING
- PROPOSED CONCRETE
- PROPOSED BUILDING

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
PROFESSIONAL ENGINEER
8/18/23

REVISIONS

DATE	REVISION DESCRIPTION
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200 GARRETT STREET, SUITE K-CHARLOTTESVILLE, VA 22902 -434.293.3719

PROJECT: BELMONT CONDOMINIUMS - FINAL SITE PLAN

SHEET: POST-DEVELOPMENT STORMWATER MANAGEMENT PLAN

JOB NO. 202201
SCALE 1"=40'
SHEET NO. 42

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Attachment A

PRE-DEVELOPMENT STORMWATER QUALITY PLAN

POST-DEVELOPMENT STORMWATER QUALITY PLAN

STORMWATER MANAGEMENT PLAN LEGEND

- PROPOSED VRRM WATER QUALITY BOUNDARY. THIS BOUNDARY REPRESENTS PROPOSED SUBGRADE DISTURBANCES.
- PROPERTY LIMITS OF SUBJECT DEVELOPMENT
- PROPERTY LIMITS OF ADJACENT LOTS
- PROPOSED / NEW PAVEMENT
- EXISTING CONCRETE
- EXISTING BUILDING
- PROPOSED CONCRETE
- PROPOSED BUILDING

PROPOSED BOUNDARY FOR THE ESC LIMITS OF DISTURBANCE IS USED FOR THE VRRM WATER QUALITY BOUNDARY.

PROPOSED BOUNDARY FOR THE ESC LIMITS OF DISTURBANCE IS USED FOR THE VRRM WATER QUALITY BOUNDARY.

PORTION OF PROPOSED DEVELOPMENT BEING TREATED BY A LEVEL II BIOFILTER

SOUTH CHERRY STREET (30' PUBLIC R/W)

HOLLY STREET (30' PUBLIC R/W)

WALNUT STREET (50' PUBLIC R/W)

SPRUCE STREET (50' PUBLIC R/W)

CARLTON AVE (50' PUBLIC R/W)

CARLTON AVENUE

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

Pre-Development Land Cover
(Defined by Limits of Disturbance)

Managed Turf	3.25 ac.
Impervous Areas	3.41 ac.
	6.66 ac.

Biofilter '1B' Water Quality Watershed

Managed Turf	0.40 ac.
Impervious Area	1.62 ac.
	2.02 ac.

Post-Development Land Cover
(Defined by Limits of Disturbance)

Managed Turf	2.70 ac.
* Impervous Areas	3.96 ac.
	6.66 ac.

* Includes a 2,500 sf Factor of Safety Impervious Area

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PROJECT: BELMONT CONDOMINIUMS - FINAL SITE PLAN
SHEET: STORMWATER QUALITY PLAN

JOB NO. 202201
SCALE 1"=50'
SHEET NO. 43

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Attachment A

LEVEL II BIORETENTION BASIN 'A' DESIGN & REQUIREMENTS:

Treatment Volume (Per VRRM Calculations)	5,986 cf
Minimum Treatment Volume Required	7,483 cf
Minimum Forebay Volume Required (15% of Tv)	1,122 cf
Forebay Volume Provided	1,252 cf
* Minimum Surface Area Required (Tv/Storage Depth)	2,771 sf
Surface Area Provided	2,786 sf
Length of Shortest Flow Path	65 ft
Overall Length	74 ft
Shortest Flow Path / Overall Length Ratio (≥ 0.8)	0.9

* Porosity Ratios based on DEQ Spec. #9, Section 6.1.1.

BIORETENTION BASIN PROFILE NOTES:
1. PROPOSED BIOFILTER TOP SURFACE ELEVATION =421.00'.
2. CONTRACTOR SHALL EXCAVATE VERTICALLY BENEATH THE BIOFILTER FLOOR TOP ELEVATION TO A DEPTH OF 6', OR ELEVATION 415.00'.
3. CONTRACTOR SHALL BACKFILL THIS AREA STARTING AT THE BOTTOM WITH 18" OF VDOT #57 STONE. THE PERFORATED UNDERDRAINS SHALL BE PLACED INSIDE THE #57 STONE LAYER, HAVE A 12' #57 STONE SUMP LOCATED BELOW THE INVERT OF THE UNDERDRAINS AND TIE INTO THE TWO Ø30" CLEANOUTS CONTAINING WEIR WALLS. THE WEIR WALLS TOP ELEVATION SHALL EQUAL THE TOP ELEV. OF CHOCKER STONE LAYER, OR ELEV. 416.75'.
4. PIPES CONNECTING THE TWO Ø30" CLEANOUTS TO STR. 104 SHALL BE SOLID SCHEDULE 40 PVC PIPES. STR. 104 SHALL DAYLIGHT THE BIOFILTER'S UNDERDRAINS.
5. PROPOSED CLEANOUTS SHALL BE INSTALLED AT CRITICAL POINTS ALONG THE UNDERDRAIN SYSTEM & AT CHANGES IN DIRECTION OF THE PIPES.
6. THE CONTRACTOR SHALL INSTALL INSTALL A 3" DEEP LAYER OF PEA GRAVEL CHOCKER STONE OVER THE #57 STONE BED, WITH A 4' WIDE FILTER FABRIC CENTERED ON THE UNDERDRAINS. CHOCKER STONE TOP LAYER ELEV.=416.75'
7. A 4' DEEP STATE-APPROVED BIOFILTER MIX SHALL THEN BE PLACED ON TOP OF THE PEA GRAVEL. TOP LAYER OF BIOFILTER MIX ELEV.=420.75'.
8. THE CONTRACTOR SHALL THEN INSTALL A 3" DEEP LAYER OF SHREDDED HARDWOOD MULCH. TOP OF MULCH LAYER ELEV.=421.00'.

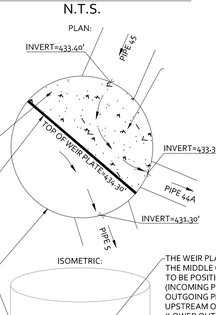
STORMWATER MANAGEMENT FACILITY GRADING

Elevation (ft)	Forebay Cell Contours (sf)	Volume (cf)
415	-	-
416	1	-
417	26	-
418	82	0
419	171	124
420	290	352
421	453	720
422	614	1,252
423	-	-

Elevation (ft)	Bioretention Cell Contours (sf)	Volume (cf)
415	2,786	0
416	2,786	2,786
417	2,786	5,572
418	2,786	8,358
419	2,786	11,144
420	2,786	13,930
421	2,786	16,716
422	3,577	19,889
423	5,094	24,202

Elevation (ft)	Total Contours (sf)	Volume (cf)
415	2,786	0
416	2,787	2,786
417	2,812	5,586
418	2,868	8,426
419	2,957	11,338
420	3,076	14,355
421	3,239	17,512
422	4,191	21,217
423	5,094	25,852

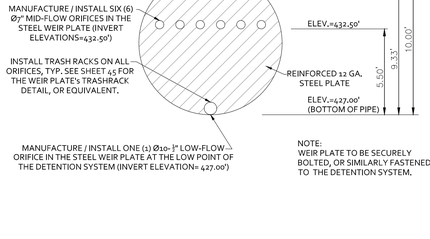
STRUCTURE 44 BASE DETAIL
N.T.S.



THE UPSTREAM SIDE OF THE WEIR PLATE SHALL BE FILLED WITH CONCRETE TO PREVENT PONDING. CONCRETE TO BE PLACED FROM THE BOTTOM OF THE STRUCTURE TO THE INVERTS, WITH INLET SHAPING CONVEYING THE RUNOFF FROM STR. 45 TO 44A.

WEIR PLATE, DIVIDING ELEVATED/ UPSTREAM CONCRETE FILLED SECTION OF MH BASE (TO BIOFILTER) FROM LOWER/ DOWNSTREAM SECTION OF MH BASE (TO UGD SYSTEM 1A)

Ø120" WEIR PLATE DETAIL
(UNDERGROUND DETENTION SYSTEM #1A)
SCALE:1"=5'



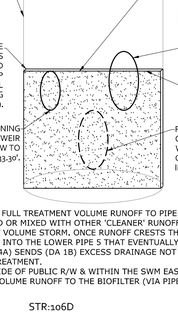
NOTE:
WEIR PLATE TO BE SECURELY BOLTED, OR SIMILARLY FASTENED, TO THE DETENTION SYSTEM.

STRUCTURE 44 TO BE A Ø48" I.D. VDOT MH-1 WITH A B-1 BASE. MANHOLE TO INCLUDE IS-1 INLET SHAPING ON UPSTREAM SIDE OF WEIR PLATE FROM PIPE 4S TO PIPE 44A, AND IS-1 INLET SHAPING ON DOWNSTREAM SIDE OF WEIR PLATE TO PIPE 5. MANHOLE TO INCLUDE ST-1 STEPS ABOVE WEIR.

CONTRACTOR SHALL GROUT THE WEIR PLATE INTO THE INNER WALLS OF STR. 44, OR SIMILARLY FASTENED IT IN A SECURE MANNER. THE TOP OF THE GROUT & WEIR PLATE SHALL EQUAL THE TOP OF THE OPENING FOR STR. 44A (ELEV.=434.30').

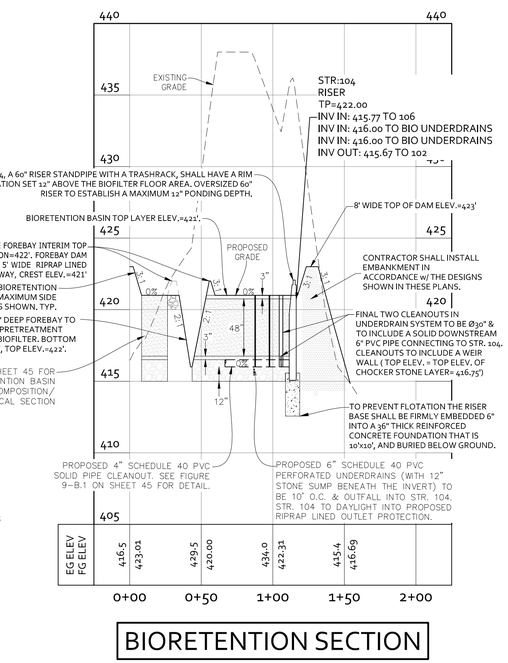
PIPE 44A, ELEVATED Ø12"OPENING ON UPSTREAM SIDE OF WEIR PLATE (FOR INITIAL OUTFLOW TO BIOFILTER). INVERT=433.30'.

ISOMETRIC:



THE WEIR PLATE SHALL BE POSITIONED IN THE MIDDLE OF THE MANHOLE. WEIR PLATE TO BE POSITIONED SUCH THAT STR. 45 (INCOMING PIPE) AND STR. 44A (ELEVATED OUTGOING PIPE TO BIOFILTER) ARE UPSTREAM OF THE WEIR PLATE AND STR. 5 (LOWER OUTGOING PIPE TO UGD SYSTEM) IS DOWNSTREAM FROM THE WEIR PLATE.

STRUCTURE 44 NOTES:
1. THE DESIGN ABOVE SENDS THE FULL TREATMENT VOLUME RUNOFF TO PIPE 44A & THE BIOFILTER INITIALLY WITHOUT IT BEING ATTENUATED OR MIXED WITH OTHER 'CLEANER' RUNOFF THAT OCCURS IN STORM EVENTS GREATER THAN THE TREATMENT VOLUME STORM, ONCE RUNOFF CRESTS THE CROWN OF PIPE 44A IT SPILLS OVER THE INTERNAL WEIR PLATE AND INTO THE LOWER PIPE 5 THAT EVENTUALLY DISCHARGES INTO UGD SYSTEM 1A. PIPE 5 (LOCATED BELOW PIPE 44A) SENDS (DA 1B) EXCESS DRAINAGE NOT TREATED BY THE BIOFILTER TO UGD 1A FOR STORMWATER QUANTITY TREATMENT.
2. STRUCTURE 44, LOCATED OUTSIDE OF PUBLIC R/W & WITHIN THE SWM EASEMENT, SERVES AS A FLOW SPLITTER TO SEND (DA 1B) TREATMENT VOLUME RUNOFF TO THE BIOFILTER (VIA PIPE 44A) FOR WATER QUALITY TREATMENT.



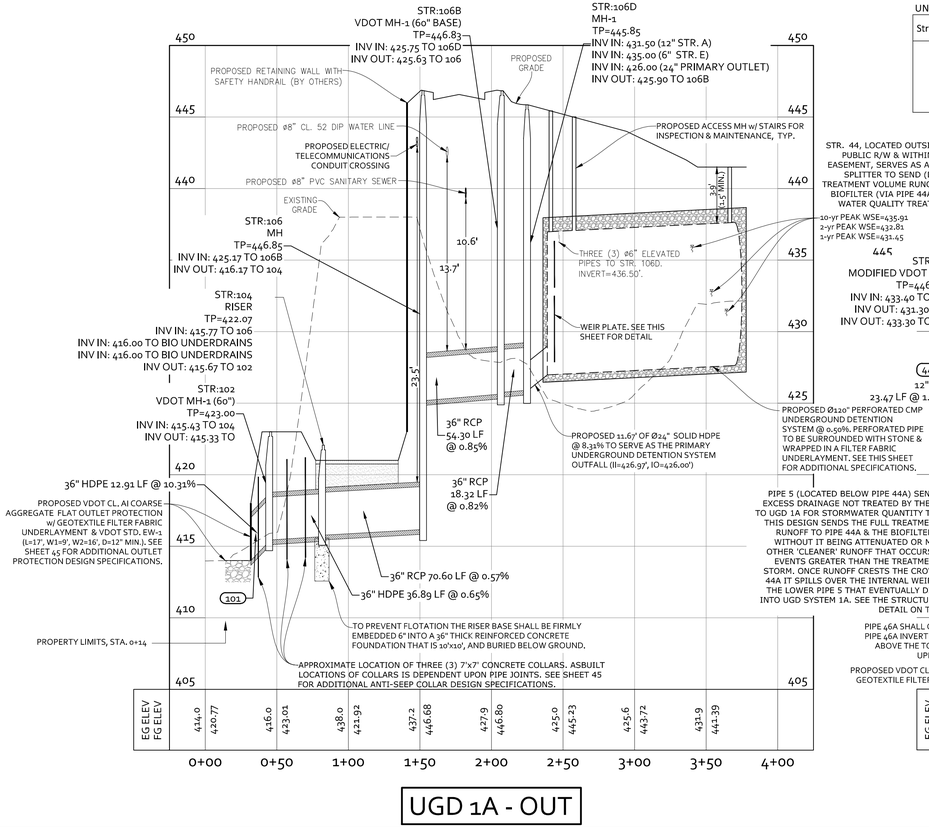
BIORETENTION SECTION

PROFILE VERTICAL GRAPHIC SCALE
5 0 2.5 5 10
(IN FEET)
1 inch = 5 ft.

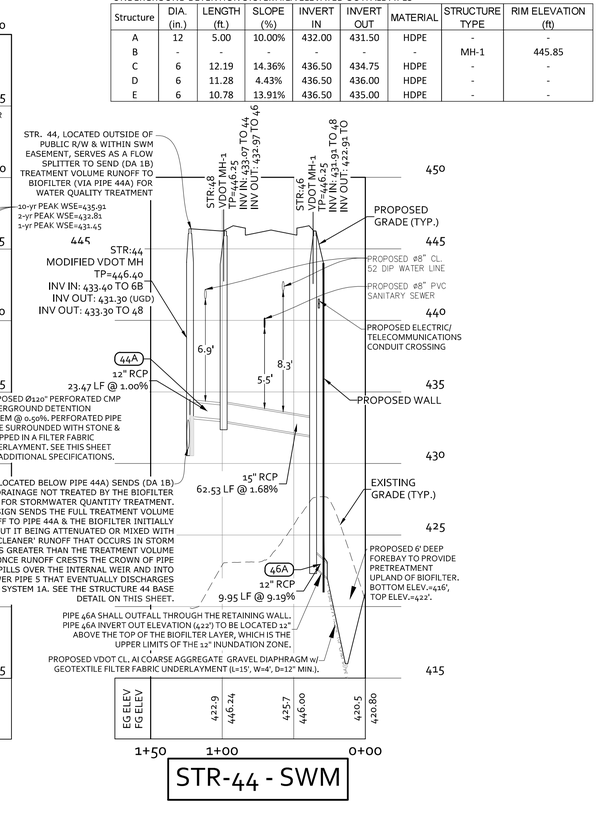
PROFILE HORIZONTAL GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
1 inch = 50 ft.

UNDERGROUND DETENTION SYSTEM #1A ELEVATED OUTFALL PIPES

Structure	DIA. (in.)	LENGTH (ft.)	SLOPE (%)	INVERT IN	INVERT OUT	MATERIAL	STRUCTURE TYPE	RIM ELEVATION (ft)
A	12	5.00	10.00%	432.00	431.50	HDPE	-	-
B	-	-	-	-	-	-	MH-1	445.85
C	6	12.19	14.36%	436.50	434.75	HDPE	-	-
D	6	11.28	4.43%	436.50	436.00	HDPE	-	-
E	6	10.78	13.91%	436.50	435.00	HDPE	-	-

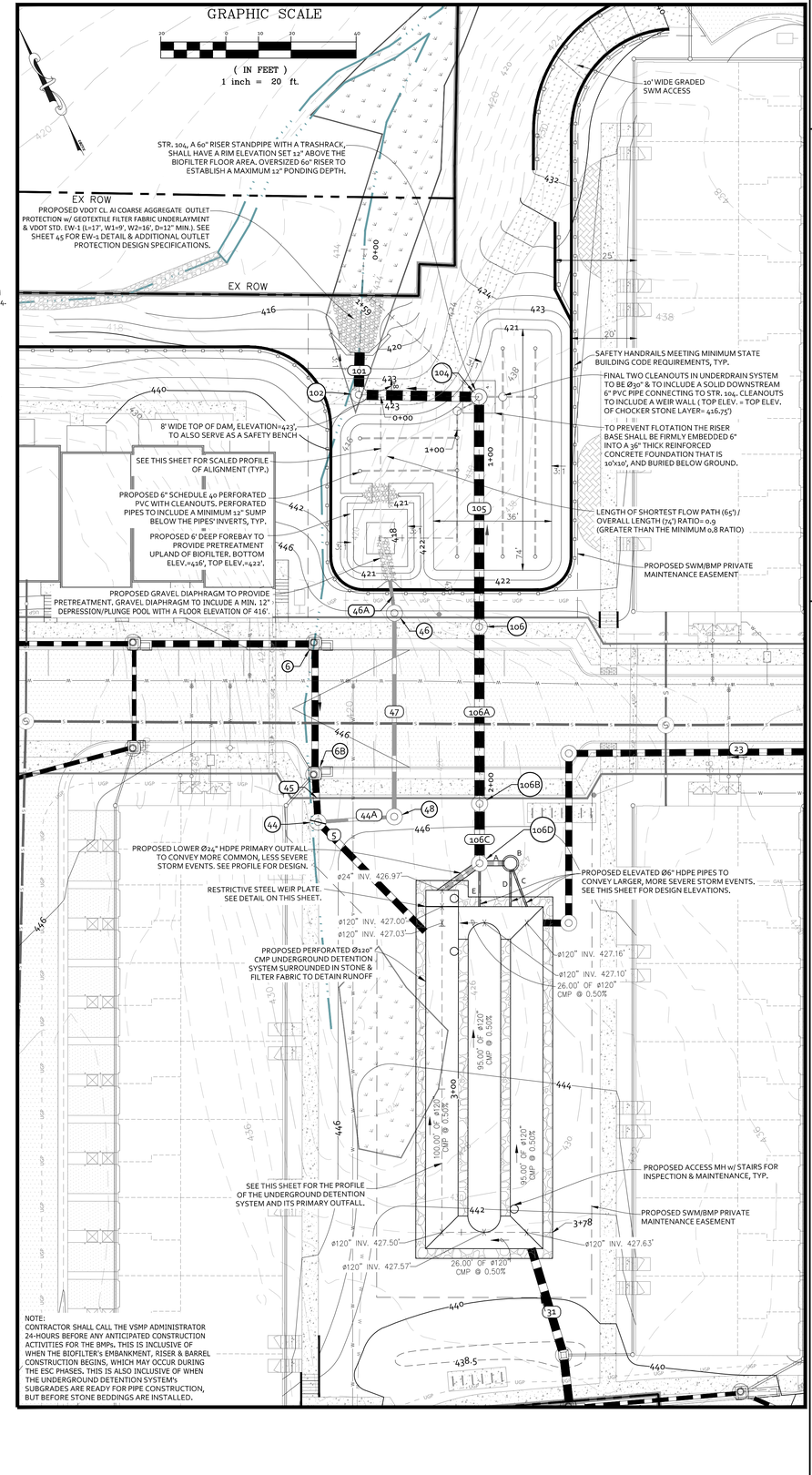


UGD 1A - OUT



STR-44 - SWM

UNDERGROUND DETENTION SYSTEM #1A AND LEVEL II BIORETENTION BASIN DETAIL- SCALE 1"=20'



COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
PROFESSIONAL ENGINEER
8/18/23

REVISIONS

DATE	REVISION DESCRIPTION
3/15/22	INITIAL PLAN SUBMITTAL
1/03/23	2ND PLAN SUBMITTAL
5/19/23	3RD PLAN SUBMITTAL
8/18/23	4TH PLAN SUBMITTAL

COLLINS ENGINEERING
200 GARRETT STREET, SUITE K-CHARLOTTESVILLE, VA 22902 -434.293.3719

PROJECT: BELMONT CONDOMINIUMS - FINAL SITE PLAN

SHEET: STORMWATER MANAGEMENT PLAN - NOTES & DETAILS

JOB NO. 202201
SCALE AS SHOWN
SHEET NO. 44

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Attachment A

UNDERGROUND DETENTION (UGD) SYSTEM REQUIREMENTS

CONTRACTOR REQUIREMENTS:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LAYOUT OF ALL WORK COVERED UNDER THESE PLANS.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD AND NOTIFY THE DESIGNER OF ANY VARIANCE FROM THE PLAN.
3. REFER TO THE APPROVED FINAL SITE PLAN FOR ANY DETAILED SITE INFORMATION.
4. ALL WORK SHALL BE COORDINATED WITH OTHER PARTIES.
5. MINOR FIELD ADJUSTMENTS MAY BE NECESSARY DUE TO SITE CONDITIONS. MAJOR ADJUSTMENTS MUST BE APPROVED BY THE DESIGNER.

GENERAL CONSTRUCTION SEQUENCE NARRATIVE

1. THE CONTRACTOR SHALL ASSEMBLE CONSTRUCTION MATERIALS ON-SITE, MAKING SURE THEY MEET DESIGN SPECIFICATIONS AND ARE PREPARED AT STAGING AREAS WHEN POSSIBLE.
2. THE CONTRACTOR SHALL CLEAR AND STRIP THE PROJECT AREA IF REQUIRED TO THE DESIRED SUB-GRADE.
3. CONTRACTOR SHALL EXCAVATE THE TRENCH.
4. THE TRENCH FOR THE UGD SYSTEM SHALL EXTEND 3' BEYOND THE PIPES' SPRINGLINES.
5. CONTRACTOR SHALL WRAP THE EXCAVATED TRENCH WITH A 6 OUNCE FILTER FABRIC CLOTH. IN ACCORDANCE WITH AASHTO SPECIFICATION)6 5 3, A FOUNDATION BENEATH THE TRENCH's FILTER CLOTH, PIPE AND SIDE BACKFILL SHALL BE CAPABLE OF SUPPORTING THE LOADS ACTING UPON IT.
6. TRENCH TO INCLUDE A 6" #57 STONE BED AT 95% COMPACTION BENEATH THE STORM PIPES.
7. CONTRACTOR SHALL INSTALL THE UGD DETENTION SYSTEM, INCLUSIVE OF THE OUTFALLS AND ALL OF THE ASSOCIATED STRUCTURES.
8. TRENCH SHALL BE BACKFILLED WITH #57 STONE IN 8" LIFTS AND SHALL EXTEND 12" VERTICALLY ABOVE THE CROWN OF THE PIPES.
9. THE TOP OF THE #57 STONE SHALL BE COVERED WITH A 6 OUNCE FILTER FABRIC CLOTH, OVERLAPPING THE PREVIOUSLY INSTALLED CLOTH THAT SURROUNDS THE BOTTOM AND SIDES OF THE TRENCH.
10. SUITABLE FILL REACHING THE FINISHED GRADE SHALL BE APPLIED ABOVE THE TOP LAYER's FILTER CLOTH, MEETING MINIMUM PIPE MANUFACTURER's REQUIREMENTS TO PREVENT FLOATATION AND ENSURING PIPE INTEGRITY IS MAINTAINED.
11. A MINIMUM COVER OF 18" IS REQUIRED ABOVE THE CROWN OF THE DETENTION SYSTEM's PIPES. THE MINIMUM 12" OF #57 STONE ABOVE THE CROWN OF THE PIPES CAN BE PART OF THE MINIMUM 18" OF COVER.
12. SEE THE MANUFACTURER's SPECIFICATIONS FOR ADDITIONAL UNDERGROUND DETENTION SYSTEM REQUIREMENTS.

INSPECTIONS DURING CONSTRUCTION:

CONSTRUCTION INSPECTIONS ARE CRITICAL TO ENSURE THE UNDERGROUND DETENTION SYSTEM IS PROPERLY BUILT. BECAUSE THE TIMING OF THE INSTALLATION IS DICTATED BY THE CONTRACTOR, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE ENGINEER, CITY INSPECTOR AND CONTECH REPRESENTATIVE PRIOR TO INSTALLATION. CONTECH, OR AN EQUIVALENT PIPE MANUFACTURER, SHALL BE CONTACTED WELL AHEAD OF THE CONSTRUCTION START DATE TO ENSURE ADEQUATE LEAD TIME FOR MATERIALS AND DELIVERY. MULTIPLE SITE VISITS AND INSPECTIONS ARE REQUIRED TO BE SCHEDULED BY THE CONTRACTOR, WITH THE ENGINEER, CITY INSPECTOR & PIPE MANUFACTURER, DURING THE FOLLOWING STAGES OF THE UNDERGROUND DETENTION SYSTEM CONSTRUCTION PROCESS:

1. PRE-CONSTRUCTION MEETING
2. INITIAL SITE PREPARATION (INCLUDING INSTALLATION OF PROJECT E&S CONTROLS)
3. EXCAVATION/GRADING (E.G., INTERIM/FINAL ELEVATIONS).
4. WHEN THE DETENTION PIPE SUBGRADE IS READY FOR PIPE CONSTRUCTION, BUT BEFORE STONE BEDDING IS INSTALLED.
5. AFTER STONE BEDDING IS PLACED AND COMPACTED, BUT PRIOR TO PIPE INSTALLATION.
6. AT THE TIME OF THE PIPE INSTALLATION.
7. AFTER PIPE INSTALLATION, BUT PRIOR TO PLACING BACKFILL & FILL OVER THE SYSTEM.
8. FINAL INSPECTION AFTER BACKFILL AND FILTER CLOTH WRAPPING IS COMPLETE, BUT PRIOR TO PLACEMENT OF FILL DIRT ABOVE THE SYSTEM. CONTRACTOR TO DEVELOP A PUNCH LIST WITH THE CITY INSPECTOR FOR FACILITY ACCEPTANCE AT THIS TIME.

PLEASE ALSO SEE BELOW, UNDER FACILITY MAINTENANCE, FOR REQUIRED INSPECTIONS AFTER INSTALLATION IS COMPLETE.

INSPECTIONS & MAINTENANCE AFTER CONSTRUCTION:

THE FOLLOWING MAINTENANCE TASKS SHALL BE PERFORMED BY THE CONTRACTOR IN THE FIRST YEAR FOLLOWING THE INSTALLATION OF THE UNDERGROUND DETENTION SYSTEM.

1. DURING THE FIRST YEAR FOLLOWING CONSTRUCTION, THE SITE SHALL BE INSPECTED BY THE CONTRACTOR QUARTERLY AND AFTER STORM EVENTS THAT EXCEED 1/2 INCH OF RAINFALL.
2. THE CONTRACTOR SHALL LOOK FOR BARE OR ERODING AREAS IN THE CONTRIBUTING DRAINAGE AREA AND AROUND THE UNDERGROUND DETENTION SYSTEM AND MAKE SURE THEY ARE IMMEDIATELY STABILIZED. CONTRACTOR SHALL SPOT RESEED AS NECESSARY AND ENSURE ADEQUATE SITE COVERAGE IS PROVIDED WITHIN THE FIRST YEAR. AT THE QUARTERLY INSPECTIONS, AND AFTER EACH RAINFALL EVENT IN EXCESS OF 1", THE CONTRACTOR SHALL PERFORM THE ANNUAL MAINTENANCE TASKS DESCRIBED BELOW IN #3.

AFTER THE FIRST YEAR THE OWNER SHALL PERFORM FOLLOW-UP INSPECTIONS ANNUALLY, AND AFTER EACH SIGNIFICANT RAINFALL EVENT.

3. A SPRING MAINTENANCE INSPECTION AND CLEANUP SHALL BE CONDUCTED ANNUALLY. THE MAINTENANCE PROGRAM FOR THE UNDERGROUND DETENTION SYSTEM SHALL INCLUDE CLEANING IT ANNUALLY OF TRASH, DEBRIS & SEDIMENT AND ENSURING THE INTEGRITY OF THE TRASH RACKS AND OUTFALLS & INFLOW PIPES. THE OWNER SHALL ENSURE THE SYSTEM IS OPERATING AS INTENDED AND IS NOT CLOGGED OR DAMAGED. THE OWNER SHALL IMMEDIATELY CLEAN & REPAIR THE FACILITY AS NECESSARY AND SHALL PAY SPECIAL ATTENTION TO THE INLET AND OUTLET LOCATIONS. THE ACCESS MANHOLES SHALL BE USED FOR INSPECTION AND MAINTENANCE.

GENERAL SWM NOTES:

1. STATE APPROVED TRASH RACKS SHALL BE INSTALLED ON ALL ORIFICE OPENINGS. SEE DETAILS ON THIS SHEET, OR EQUIVALENT, FOR INSTALLATION.
2. A CONCRETE FOUNDATION SHALL BE INSTALLED ON THE RISER STRUCTURE MEETING MINIMUM VESCH 3.14 SPECIFICATIONS.
3. CONTRACTOR SHALL HIRE A THIRD PARTY GEOTECHNICAL ENGINEER TO ENSURE THE EMBANKMENT IS STRUCTURALLY SOUND. THE EMBANKMENT SHALL HAVE A COMPACTED CLAY CORE WITH A CUTOFF TRENCH & BE IN ACCORDANCE WITH THE DETAILS SHOWN IN THIS PLAN. ALL EXISTING AND PROPOSED FILL MATERIAL AND PROPOSED CONSTRUCTION SHALL BE APPROVED BY AN ONSITE GEOTECHNICAL ENGINEER PRESENT DURING THE CONSTRUCTION OF THE EMBANKMENTS AND FILL AREAS, AND PRESENT DURING THE CORE SAMPLING.
4. THE DOWNSTREAM EMBANKMENT SIDE SLOPES OF ALL PERMANENT FACILITIES SHALL HAVE A MAXIMUM 3:1 SLOPE.
5. IF THE PERMANENT SWM FACILITY IS USED AS A TEMPORARY SEDIMENT TRAPPING DEVICE DURING CONSTRUCTION, THE CONSTRUCTION OF THE PERMANENT SWM RISER, BARREL, SPILLWAY & EMBANKMENT SHALL BE COMPLETED WITH THE CONSTRUCTION OF THE TEMPORARY SEDIMENT TRAPPING FACILITY. THE CONTRACTOR SHALL NOT CONVERT THE TEMPORARY ESC FACILITY TO A PERMANENT SWM FACILITY UNTIL THE ESC INSPECTOR APPROVES THE CONVERSION. AT THE TIME OF THE ESC FACILITY's CONVERSION, THE CONTRACTOR SHALL REMOVE SEDIMENT LADEN MATERIAL AND SHALL ENSURE THE GRADES AND MINIMUM VOLUME SHOWN ON THIS PLAN ARE ACHIEVED. THE CONTRACTOR SHALL REASONABLY MINIMIZE SOIL COMPACTION DURING THE CONVERSION.

RIPRAP LINED OUTLET PROTECTION DESIGN REQUIREMENTS:

1. RIPRAP LINED OUTLET PROTECTION SHALL BE INSTALLED IN CUT WITH CLASS II FILTER FABRIC UNDERLAYMENT LOCATED IMMEDIATELY UPLAND OF THE CHANNEL.
2. FLAT OUTLET PROTECTION BELOW UGD SYSTEM #1A AND THE BIOFILTER SHALL HAVE THE FOLLOWING DIMENSIONS: L=17', W1=9' & W2=16'.
3. CONTRACTOR SHALL INSTALL A CLASS II FILTER FABRIC UNDERLAYMENT MEETING MINIMUM REQUIREMENTS SET FORTH IN TABLE 3.19-D OF THE VESCH STANDARD & SPECIFICATION 3.19, AS SHOWN ON THIS SHEET. FILTER FABRIC SHALL BE KEYED INTO THE EXISTING GROUND A MINIMUM OF 9" AT ITS ENDS & ALONG THE ENTIRE PERIMETER.
4. PLACEMENT OF FILTER FABRIC SHALL BE DONE IMMEDIATELY AFTER OUTLET PROTECTION PREPARATION. EDGES OF THE FILTER SHEETS SHALL OVERLAP AT LEAST 9".
5. A 12" LAYER OF VDOT CL. A1 STONE SHALL BE PLACED OVER THE FILTER FABRIC. STONE PLACEMENT SHALL FOLLOW IMMEDIATELY AFTER PLACEMENT OF THE FILTER FABRIC. RIPRAP SHALL BE PLACED SO THAT IT PRODUCES A DENSE WELL-GRADED MASS OF STONE WITH MINIMAL VOIDS. THE FINISHED SLOPE SHALL BE FREE OF POCKETS OF SMALL STONE OR CLUSTERS OF LARGE STONES. THE TOTAL STONE DEPTH SHALL BE 12'.
6. OUTLET PROTECTION SHALL TIE INTO THE EXISTING GROUND ON THE SIDES IN CUT AT A MAXIMUM SLOPE OF 2:1.
7. CONTRACTOR SHALL SCHEDULE A MEETING WITH AN ENGINEERING DEPARTMENT INSPECTOR AT LEAST 24 HOURS IN ADVANCE OF THE OUTLET PROTECTION CONSTRUCTION. TICKETS FROM THE QUARRY WILL BE REVIEWED BEFORE STONE PLACEMENT TO ENSURE CORRECT STONE SIZES. SEE NOTES ON THIS PLAN, AND CURRENT VDOT ROAD AND BRIDGE SPECIFICATIONS, FOR PROPER STONE GRADATIONS & MINIMUM REQUIREMENTS.

BIORETENTION BASIN CONSTRUCTION NOTES:

FACILITY PLANTING SPECIFICATIONS:

1. ROOT STOCK OF THE PLANT MATERIAL SHALL BE KEPT MOIST DURING TRANSPORT FROM THE SOURCE TO THE JOB SITE AND UNTIL PLANTED.
2. WALLS OF PLANTING PIT SHALL BE DUG SO THAT THEY ARE VERTICAL.
3. THE DIAMETER OF THE PLANTING PIT MUST BE A MINIMUM OF SIX INCHES (6") LARGER THAN THE DIAMETER OF THE BALL OF THE TREE.
4. THE PLANTING PIT SHALL BE DEEP ENOUGH TO ALLOW 1/8 OF THE OVERALL DIMENSION OF THE ROOT BALL TO BE ABOVE GRADE. LOOSE SOIL AT THE BOTTOM OF THE PIT SHALL BE TAMPED BY HAND.
5. THE APPROPRIATE AMOUNT OF FERTILIZER IS TO BE PLACED AT THE BOTTOM OF THE PIT (SEE BELOW FOR FERTILIZATION RATES).
6. THE PLANT SHALL BE REMOVED FROM THE CONTAINER AND PLACED IN THE PLANTING PIT BY LIFTING AND CARRYING THE PLANT BY ITS BALL (NEVER LIFT BY BRANCHES OR TRUNK).
7. SET THE PLANT STRAIGHT AND IN THE CENTER OF THE PIT SO THAT APPROXIMATELY 1/8 OF THE DIAMETER OF THE ROOT BALL IS ABOVE THE FINAL GRADE.
8. BACKFILL PLANTING PIT WITH EXISTING SOIL.
9. MAKE SURE PLANT REMAINS STRAIGHT DURING BACKFILLING PROCEDURE.
10. NEVER COVER THE TOP OF THE BALL WITH SOIL. MOUNT SOIL AROUND THE EXPOSED BALL.
11. TREES SHALL BE BRACED BY USING 2' BY 2' WHITE OAK STAKES, STAKES SHALL BE PLACED PARALLEL TO WALKWAYS AND BUILDINGS. STAKES ARE TO BE EQUALLY SPACED ON THE OUTSIDE OF THE TREE BALL. UTILIZING HOSE AND WIRE, THE TREE IS TO BE BRACED BY THE STAKES.
12. BECAUSE OF THE HIGH LEVELS OF NUTRIENTS IN STORMWATER RUNOFF TO BE TREATED, BIORETENTION BASIN PLANTS SHOULD NOT REQUIRE CHEMICAL FERTILIZATION.
13. NOTE: WOODY VEGETATION ON THE EMBANKMENT IS RESTRICTED.

CONTRACTOR REQUIREMENTS: *(SEE SHEET 30 FOR BIOFILTER LANDSCAPING PLAN)*

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LAYOUT OF ALL WORK COVERED UNDER THESE PLANS.
2. LANDSCAPE CONTRACTOR SHALL REFER TO THE STANDARDIZED LANDSCAPE SPECIFICATIONS FOR THE STATE OF VIRGINIA FOR ADDITIONAL INFORMATION. THE CONTRACTOR SHALL ABIDE BY ITS CONTENTS; HOWEVER ANY NOTES OR SPECIFICATIONS ON THE PLANS SHALL SUPERSEDE THOSE OUTLINED IN THE SPECIFICATIONS MANUAL (COPIES ARE AVAILABLE FOR A FEE FROM THE VIRGINIA CHAPTER OF THE AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS, VIRGINIA NURSERYMEN'S ASSOCIATION, INC. AND THE VIRGINIA SOCIETY OF LANDSCAPE DESIGNERS).
3. ALL PLANT MATERIAL SHALL MEET THE MINIMUM SPECIFICATIONS AND STANDARDS DESCRIBED IN THE CURRENT ISSUE OF THE AMERICAN STANDARD FOR NURSERY STOCK, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, 1250 STREET, NW, SUITE 500, WASHINGTON, DC 20005.
4. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD AND NOTIFY THE DESIGNER OF ANY VARIANCE FROM THE PLAN.
5. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION OF ANY ONSITE UTILITIES (CALL MISS UTILITY 1-800-552-7001 BEFORE ANY EXCAVATION).
6. REFER TO THE APPROVED FINAL SITE PLANS FOR ANY DETAILED SITE INFORMATION.
7. ALL WORK SHALL BE COORDINATED WITH OTHER PARTIES.
8. PLANTS WILL BE PREPARED FOR SHIPMENT IN A MANNER THAT WILL NOT CAUSE DAMAGE TO THE BARK, BUDS, BRANCHES, STEMS, OR OVERALL SHAPE OF THE STOCK. CONTAINER GROWN PLANTS WILL BE TRANSPORTED IN THE CONTAINERS IN WHICH THEY HAVE BEEN GROWN.
9. ALL PLANT MATERIAL, UNLESS OTHERWISE SPECIFIED, SHALL BE UNIFORMLY BRANCHED AND HAVE A VIGOROUS ROOT SYSTEM. PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS, AND FREE FROM DEFECTS, DECAY, DISEASES, INSECT PEST EGGS, AND ALL FORMS OF INFESTATION. ALL PLANT MATERIAL SHALL BE FRESH, FREE FROM TRANSPLANT SHOCK OR VISIBLE WILT. PLANTS DEEMED UNHEALTHY WILL BE REJECTED.
10. ALL CONTAINER STOCK SHALL HAVE BEEN PROPAGATED IN A CONTAINER LONG ENOUGH FOR THE ROOT SYSTEM TO HAVE DEVELOPED SUFFICIENTLY TO HOLD ITS SOIL. CONTAINER STOCK WITH POORLY DEVELOPED ROOT SYSTEMS WILL NOT BE ACCEPTED.
11. PLANTS NOT INSTALLED ON THE DAY OF ARRIVAL ON SITE SHALL BE STORED AND PROTECTED BY THE CONTAINER. OUTSIDE STORAGE AREAS WILL BE SHADED AND PROTECTED FROM THE WIND AND SUN. PLANTS STORED ON SITE SHALL BE PROTECTED FROM ANY DRYING AT ALL TIMES BY COVERING THE BALLS OR ROOTS WITH MOIST SAWDUST, WET BURLAP, WOOD CHIPS, SHREDDED BARK, PEAT MOSS, OR OTHER SIMILAR MULCHING MATERIAL.
12. THE OWNER RESERVES THE RIGHT TO SUBSTITUTE PLANT MATERIAL TYPE, SIZE AND/OR QUANTITY. ANY SUBSTITUTIONS MUST BE APPROVED BY THE DESIGNER & CITY ENGINEER PRIOR TO INSTALLATION.
13. MINOR FIELD ADJUSTMENTS MAY BE NECESSARY DUE TO SITE CONDITIONS (EX: ROOTBALL AND UTILITY CONFLICT). MAJOR ADJUSTMENTS MUST BE APPROVED BY THE DESIGNER AND CITY ENGINEER PRIOR TO INSTALLATION.
14. NO PLANTING SHALL OCCUR WHEN THE SOIL IS FROZEN.
15. PLANT MATERIAL SHALL BE PLACED IN EXISTING SOIL WITH EACH PLANTING PIT EXCAVATED TO A SIZE SUFFICIENT TO CONTAIN THE ENTIRE ROOT BALL OR ROOT MASS, WITHOUT CRAMPING ROOT STOCK.
16. THE CONTRACTOR SHALL MAINTAIN A ONE (1) CALENDAR YEAR 90% CARE AND REPLACEMENT WARRANTY FOR ALL PLANTINGS. THE PERIOD OF CARE AND REPLACEMENT SHALL BEGIN AFTER INSPECTION AND APPROVAL OF THE COMPLETE INSTALLATION OF ALL PLANTS AND CONTINUE FOR ONE CALENDAR YEAR.
17. THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND DISPOSAL OF TRASH AND DEBRIS WITHIN THE LIMITS OF THE PLANTING ON A DAILY BASIS.
18. THE CONTRACTOR WILL NOT BE RESPONSIBLE FOR PLANT MATERIAL THAT HAS BEEN DAMAGED BY VANDALISM, FIRE, OR OTHER ACTIVITIES BEYOND THE CONTRACTOR'S CONTROL.
19. THE CONTRACTOR SHALL CONTACT THE CITY INSPECTOR AND COLLINS ENGINEERING 24 HOURS PRIOR TO BACKFILLING THE BIOFILTERS AND REQUEST AN INSPECTION AND APPROVAL OF THE UNDERDRAINS INSTALLATION AND THE SOIL MIX.
20. THE BIOFILTER PLANTING AREAS SHALL BE COVERED WITH HEAVY STRAW MULCH TO A DEPTH OF 3" IMMEDIATELY AFTER PLANTING.

FACILITY CONSTRUCTION

1. BIORETENTION AREAS SHALL BE FULLY PROTECTED BY SILT FENCE OR CONSTRUCTION FENCING, PARTICULARLY IF THEY WILL RELY ON INFILTRATION. IDEALLY, BIORETENTION SHALL REMAIN OUTSIDE THE LIMIT OF DISTURBANCE DURING CONSTRUCTION TO PREVENT SOIL COMPACTION BY HEAVY EQUIPMENT. BIORETENTION BASIN LOCATIONS MAY BE USED AS SEDIMENT TRAPS OR BASINS DURING CONSTRUCTION THOUGH. IF THE FACILITY IS USED AS A SEDIMENT TRAP OR BASIN, THE BIORETENTION BASIN MUST CONTAIN AN UNDERDRAIN AND THE ENGINEER OF RECORD SHALL BE NOTIFIED AHEAD OF CONSTRUCTION OF THE OUTLET STRUCTURE, EMBANKMENT AND ANTI-SEEP COLLARS FOR MONITORING AND AS-BUILT DRAWING CERTIFICATIONS. THE ESC FACILITY MUST ALSO BE CLEANED FREE OF DEBRIS, STABILIZED AND ANY STRUCTURES PROPOSED TO REMAIN, REMOVED OR CONVERTED MUST BE DONE SO AS EARLY IN THE CONSTRUCTION PROCESS AS POSSIBLE. ANY PERMANENT STORM SEWER PIPES CONVEYING RUNOFF FROM CONSTRUCTION ACTIVITY INTO THE SEDIMENT BASIN WILL NEED TO BE FLUSHED AFTER STABILIZATION IS ACHIEVED, PRIOR TO THE CONVERSATION OF THE BASIN TO A PERMANENT BIORETENTION BASIN.
2. CONSTRUCTION OF THE BIORETENTION AREA MAY ONLY BEGIN AFTER THE ENTIRE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED WITH VEGETATION. IT MAY BE NECESSARY TO BLOCK CERTAIN CURB OR OTHER INLETS WHILE THE BIORETENTION AREA IS BEING CONSTRUCTED. THE PROPOSED SITE SHALL BE CHECKED FOR EXISTING UTILITIES PRIOR TO ANY EXCAVATION.
3. THE DESIGNER AND THE INSTALLER SHALL HAVE A PRE-CONSTRUCTION MEETING, CHECKING THE BOUNDARIES OF THE CONTRIBUTING DRAINAGE AREA AND THE ACTUAL INLET ELEVATIONS TO ENSURE THEY CONFORM TO THE ORIGINAL DESIGN. BECAUSE THE TIMING OF THE INSTALLATION IS DICTATED BY THE CONTRACTOR, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE ENGINEER. SINCE OTHER CONTRACTORS MAY BE RESPONSIBLE FOR CONSTRUCTING PORTIONS OF THE SITE, IT IS QUITE COMMON TO FIND SUBTLE DIFFERENCES IN SITE GRADING, DRAINAGE AND PAVING ELEVATIONS THAT CAN PRODUCE HYDRAULICALLY IMPORTANT DIFFERENCES FOR THE PROPOSED BIORETENTION. THE GENERAL CONTRACTOR SHALL CLEARLY COMMUNICATE, IN WRITING, ANY PROJECT CHANGES DETERMINED DURING THE PRE-CONSTRUCTION MEETING TO THE INSTALLER AND THE PLAN REVIEW/INSPECTION AUTHORITY.
4. TEMPORARY E&S CONTROLS ARE NEEDED DURING CONSTRUCTION OF THE BIORETENTION AREA TO DIVERT STORMWATER AWAY FROM THE BIORETENTION AREA UNTIL IT IS COMPLETED. SPECIAL PROTECTION MEASURES SUCH AS EROSION CONTROL FABRICS MAY BE NEEDED TO PROTECT VULNERABLE SIDE SLOPES FROM EROSION DURING THE CONSTRUCTION PROCESS.
5. ANY PRE-TREATMENT CELLS SHALL BE EXCAVATED FIRST AND THEN SEALED TO TRAP SEDIMENTS.
6. EXCAVATORS OR BACKHOES SHALL WORK FROM THE SIDES TO EXCAVATE THE BIORETENTION AREA TO ITS APPROPRIATE DESIGN DEPTH AND DIMENSIONS. EXCAVATING EQUIPMENT SHALL HAVE SCOOPS WITH ADEQUATE REACH SO THEY DO NOT HAVE TO SIT INSIDE THE FOOTPRINT OF THE BIORETENTION AREA. CONTRACTORS SHALL USE A CELL CONSTRUCTION APPROACH IN LARGER BIORETENTION BASINS, WHEREBY THE BASIN IS SPLIT INTO 500 TO 1,000 SQ. FT. TEMPORARY CELLS WITH A 10-15 FOOT EARTH BRIDGE IN BETWEEN, SO THAT CELLS CAN BE EXCAVATED FROM THE SIDE.
7. IT MAY BE NECESSARY TO RIP THE BOTTOM SOILS TO A DEPTH OF 6 TO 12 INCHES TO PROMOTE GREATER INFILTRATION. THIS REQUIREMENT WILL BE DICTATED BY THE INSPECTOR, PRIOR TO INSTALLATION OF THE REMAINDER OF THE FACILITY.
8. PLACE GEOTEXTILE FABRIC ON THE SIDES OF THE BIORETENTION AREA WITH A 6-INCH OVERLAP ON THE BOTTOM. IF A STONE STORAGE LAYER WILL BE USED, PLACE THE APPROPRIATE DEPTH OF #57 STONE ON THE BOTTOM, INSTALL THE PERFORATED UNDERDRAIN PIPE, PACK #57 STONE TO 3 INCHES ABOVE THE UNDERDRAIN PIPE, AND ADD APPROXIMATELY 2 INCHES OF CHOKER STONE/PEA GRAVEL AS A FILTER BETWEEN THE UNDERDRAIN AND THE SOIL MEDIA LAYER. IF NO STONE STORAGE LAYER IS USED, START WITH 6 INCHES OF #57 STONE ON THE BOTTOM, AND PROCEED WITH THE LAYERING AS DESCRIBED ABOVE.
9. DELIVER THE SOIL MEDIA FROM AN APPROVED VENDOR, AND STORE IT ON AN ADJACENT IMPERVIOUS AREA OR PLASTIC SHEETING. APPLY THE MEDIA IN 12-INCH LIFTS UNTIL THE DESIRED TOP ELEVATION OF THE BIORETENTION AREA IS ACHIEVED. WAIT A FEW DAYS TO CHECK FOR SETTLEMENT, AND ADD ADDITIONAL MEDIA, AS NEEDED, TO ACHIEVE THE DESIGN ELEVATION.
10. PREPARE PLANTING HOLES FOR ANY TREES AND SHRUBS, INSTALL THE VEGETATION, AND WATER ACCORDINGLY.
11. PLACE THE SURFACE COVER IN BOTH CELLS (MULCH, RIVER STONE OR TURF), DEPENDING ON THE DESIGN. IF COIR OR JUTE MATTING WILL BE USED IN LIEU OF MULCH, THE MATTING WILL NEED TO BE INSTALLED PRIOR TO PLANTING (STEP 9), AND HOLES OR SLITS WILL HAVE TO BE CUT IN THE MATTING TO INSTALL THE PLANTS.
12. INSTALL THE PLANT MATERIALS AS SHOWN IN THE LANDSCAPING PLAN, AND WATER THEM DURING WEEKS OF NO RAIN FOR THE FIRST TWO MONTHS.
13. CONDUCT THE FINAL CONSTRUCTION INSPECTION. THEN LOG THE GPS COORDINATES FOR EACH BIORETENTION FACILITY AND SUBMIT THEM FOR ENTRY INTO THE LOCAL MAINTENANCE TRACKING DATABASE.

FACILITY MAINTENANCE & OPERATIONS:

THE FOLLOWING TASKS SHALL BE PERFORMED BY THE CONTRACTOR IN THE FIRST YEAR FOLLOWING INSTALLATION. THIS WILL BE A PRIVATE AGREEMENT BETWEEN THE CONTRACTOR AND OWNER, WHICH WILL NOT INCLUDE THE CITY.

1. FOR THE FIRST 6 MONTHS FOLLOWING CONSTRUCTION, THE SITE SHALL BE INSPECTED BY THE CONTRACTOR AT LEAST TWICE AFTER STORM EVENTS THAT EXCEED 1/2 INCH OF RAINFALL.
2. THE CONTRACTOR SHALL LOOK FOR BARE OR ERODING AREAS IN THE CONTRIBUTING DRAINAGE AREA OR AROUND THE BIORETENTION AREA, AND MAKE SURE THEY ARE IMMEDIATELY STABILIZED WITH GRASS COVER. CONTRACTOR SHALL SPOT RESEED AS NECESSARY.
3. ONE-TIME, SPOT FERTILIZATION MAY BE NEEDED FOR INITIAL PLANTINGS.
4. WATERING IS NEEDED ONCE A WEEK DURING THE FIRST 2 MONTHS, AND THEN AS NEEDED DURING THE FIRST GROWING SEASON (APRIL-OCTOBER), DEPENDING ON RAINFALL.
5. REMOVE AND REPLACE DEAD PLANTS. SINCE UP TO 10% OF THE PLANT STOCK MAY DIE OFF IN THE FIRST YEAR, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CARE AND REPLACEMENT WARRANTY TO ENSURE THAT VEGETATION IS PROPERLY ESTABLISHED AND SURVIVES DURING THE FIRST GROWING SEASON FOLLOWING CONSTRUCTION. THE TYPICAL THRESHOLDS BELOW WHICH REPLACEMENT IS REQUIRED ARE 90% SURVIVAL OF PLANT MATERIAL AND 100% SURVIVAL OF TREES.
6. A SPRING MAINTENANCE INSPECTION AND CLEANUP SHALL BE CONDUCTED AT EACH BIORETENTION AREA. THE FOLLOWING IS A LIST OF SOME OF THE KEY MAINTENANCE PROBLEMS TO LOOK FOR.
   A. CHECK TO SEE IF 75% TO 90% COVER (MULCH PLUS VEGETATIVE COVER) HAS BEEN ACHIEVED IN THE BED, AND MEASURE THE DEPTH OF THE REMAINING MULCH. CONFIRM WOODY VEGETATION HAS NOT GROWN ON THE EMBANKMENT.
   B. CHECK FOR SEDIMENT BUILDUP AT CURB CUTS, GRAVEL DIAPHRAGMS OR PAVEMENT EDGES THAT PREVENTS FLOW FROM GETTING INTO THE BED, AND CHECK FOR OTHER SIGNS OF BYPASSING.
   C. CHECK FOR ANY WINTER- OR SALT-KILLED VEGETATION, AND REPLACE IT WITH HARDIER SPECIES.
   D. NOTE PRESENCE OF ACCUMULATED SAND, SEDIMENT AND TRASH IN THE PRE-TREATMENT CELL OR FILTER BEDS, AND REMOVE IT.
   E. INSPECT BIORETENTION SIDE SLOPES AND GRASS FILTER STRIPS FOR EVIDENCE OF ANY RILL OR GULLY EROSION, AND REPAIR IT.
   F. CHECK THE BIORETENTION BED FOR EVIDENCE OF MULCH FLOTATION, EXCESSIVE PONDING, DEAD PLANTS OR CONCENTRATED FLOWS, AND TAKE APPROPRIATE REMEDIAL ACTION.
   G. CHECK INFLOW POINTS FOR CLOGGING, AND REMOVE ANY SEDIMENT.
   H. LOOK FOR ANY BARE SOIL OR SEDIMENT SOURCES IN THE CONTRIBUTING DRAINAGE AREA, AND STABILIZE THEM IMMEDIATELY.
   I. CHECK FOR CLOGGED OR SLOW-DRAINING SOIL MEDIA, A CRUST FORMED ON THE TOP LAYER, INAPPROPRIATE SOIL MEDIA, OR OTHER CAUSES OF INSUFFICIENT FILTERING TIME, AND RESTORE PROPER FILTRATION CHARACTERISTICS.
7. FOR A LIST OF THE OWNER'S ANNUAL LONG-TERM MAINTENANCE ACTIVITIES AFTER THE CONTRACTOR's RESPONSIBILITIES HAVE BEEN COMPLETED, PLEASE SEE BELOW.

Annual Maintenance Activities for Bioretention

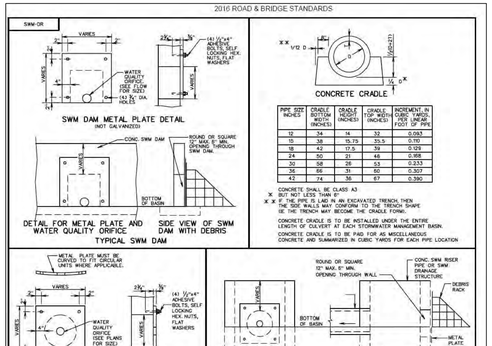
Maintenance Tasks	Frequency
• Mowing of grass filter strips and bioretention turf cover	At least 4 times a year
• Spot weeding, erosion repair, trash removal, and mulch raking	Twice during growing season
• Add reinforcement planting to maintain desired the vegetation density • Remove invasive plants using recommended control methods • Stabilize the contributing drainage area to prevent erosion	As needed
• Spring inspection and cleanup • Supplement mulch to maintain a 3 inch layer	Annually
• Prune trees and shrubs	
• Remove sediment in pre-treatment cells and inflow points	Once every 2 to 3 years
• Replace the mulch layer	Every 3 years

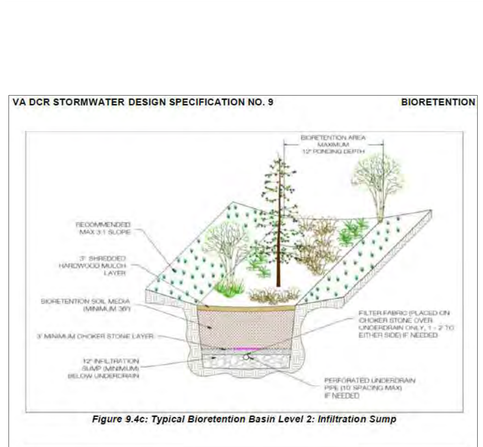
FACILITY INSPECTION:

CONSTRUCTION INSPECTIONS ARE CRITICAL TO ENSURE THE BIORETENTION BASINS ARE PROPERLY CONSTRUCTED AND ESTABLISHED. BECAUSE THE TIMING OF THE INSTALLATION IS DICTATED BY THE CONTRACTOR, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE ENGINEER AND INSPECTOR PRIOR TO INSTALLATION. MULTIPLE SITE VISITS AND INSPECTIONS ARE REQUIRED TO BE SCHEDULED BY THE CONTRACTOR, WITH THE ENGINEER AND INSPECTOR, DURING THE FOLLOWING STAGES OF THE BIOFILTER CONSTRUCTION PROCESS:

1. PRE-CONSTRUCTION MEETING
2. INITIAL SITE PREPARATION (INCLUDING INSTALLATION OF PROJECT E&S CONTROLS)
3. EXCAVATION/GRADING (E.G., INTERIM/FINAL ELEVATIONS)
4. BIOFILTER INSTALLATION (E.G., MICROTOPOGRAPHY, SOIL AMENDMENTS, STONE BEDDING, UNDERDRAINS AND STAKING OF PLANTING ZONES)
5. PLANTING PHASE (WITH AN EXPERIENCED LANDSCAPE ARCHITECT PRESENT)
6. FINAL INSPECTION (DEVELOP A PUNCH LIST FOR FACILITY ACCEPTANCE)

PLEASE ALSO SEE ABOVE, UNDER FACILITY MAINTENANCE #6, FOR REQUIRED INSPECTIONS.

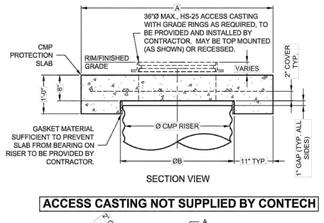



VA DCR STORMWATER DESIGN S

Attachment A

UNDERGROUND DETENTION SYSTEM #1A STORAGE TABLE

(A) Facility Elevations (ft)	(B) Area of 120" Perforated CMP (sf)	(C) UGD System Footprint (sf)	(D) Void Space of Stone (%)	(E) C - B Area of Stone (sf)	(F) D x E Storage Area in Stone (cf)	(G) B + F Total UGD System Storage Area (sf)
426.50	0	4,742	40%	4,742	1,897	1,897
427.00	0	4,742	40%	4,742	1,897	1,897
428.00	2,052	4,742	40%	2,690	1,076	3,128
429.00	2,736	4,742	40%	2,006	802	3,538
430.00	3,134	4,742	40%	1,608	643	3,777
431.00	3,351	4,742	40%	1,391	556	3,907
432.00	3,420	4,742	40%	1,322	529	3,949
433.00	3,351	4,742	40%	1,391	556	3,907
434.00	3,134	4,742	40%	1,608	643	3,777
435.00	2,736	4,742	40%	2,006	802	3,538
436.00	2,052	4,742	40%	2,690	1,076	3,128
437.00	0	4,742	40%	4,742	1,897	1,897
438.00	0	4,742	40%	4,742	1,897	1,897

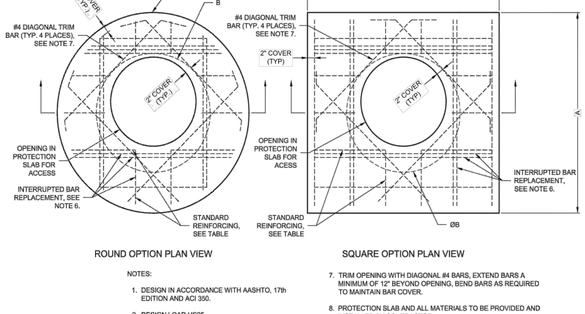


SECTION VIEW

REINFORCING TABLE				
Ø CMP RISER	A	B Ø	REINFORCING	**BEARING PRESSURE (PSF)
24"	4'Ø 4'x4'	26"	#5 @ 10" OCEW #5 @ 10" OCEW	2,540 1,900
30"	4'-6"Ø 4'-6" x 4'-6"	32"	#5 @ 10" OCEW #5 @ 9" OCEW	2,260 1,670
36"	5'Ø 5' x 5'	38"	#5 @ 9" OCEW #5 @ 8" OCEW	2,060 1,500
42"	5'-6"Ø 5'-6" x 5'-6"	44"	#5 @ 8" OCEW #5 @ 8" OCEW	1,490 1,370
48"	6'Ø 6' x 6'	50"	#5 @ 7" OCEW #5 @ 7" OCEW	1,210 1,270

** ASSUMED SOIL BEARING CAPACITY

ACCESS CASTING NOT SUPPLIED BY CONTECH



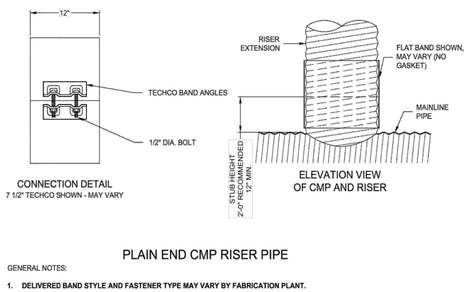
ROUND OPTION PLAN VIEW

SQUARE OPTION PLAN VIEW

NOTES:

1. DESIGN IN ACCORDANCE WITH AASHTO, 17th EDITION AND ACI 350.
2. DESIGN LOAD HS25.
3. EARTH COVER = 1' MAX.
4. CONCRETE STRENGTH = 4,000 psi
5. REINFORCING STEEL = ASTM A615, GRADE 60.
6. PROVIDE ADDITIONAL REINFORCING AROUND OPENINGS EQUAL TO THE BARS INTERRUPTED, HALF EACH SIDE. ADDITIONAL BARS TO BE IN THE SAME PLANE.
7. TRIM OPENING WITH DIAGONAL #4 BARS, EXTEND BARS A MINIMUM OF 12" BEYOND OPENING, BEND BARS AS REQUIRED TO MAINTAIN BAR COVER.
8. PROTECTION SLAB AND ALL MATERIALS TO BE PROVIDED AND INSTALLED BY CONTRACTOR.
9. DETAIL DESIGN BY DELTA ENGINEERS, ARCHITECTS AND LAND SURVEYORS, ENDWELL, NY.

MANHOLE CAP DETAIL
NOT TO SCALE



CONNECTION DETAIL
7 1/2" TECHCO SHOWN - MAY VARY

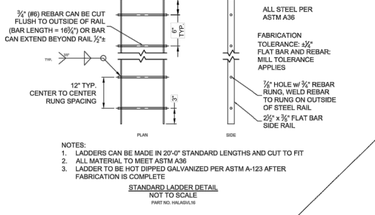
ELEVATION VIEW OF CMP AND RISER

PLAIN END CMP RISER PIPE

GENERAL NOTES:

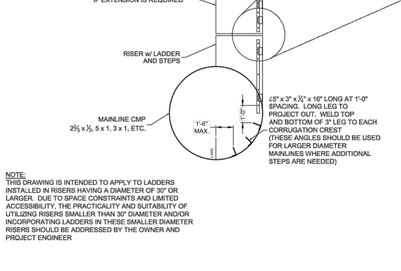
1. **DELIVERED BAND STYLE AND FASTENER TYPE MAY VARY BY FABRICATION PLANT.**
2. JOINT IS TO BE ASSEMBLED PER AASHTO BRIDGE CONSTRUCTION SPECIFICATION SEC 26.4.2.4.
3. BAND MATERIAL AND GAGE TO BE SAME AS RISER MATERIAL.
4. IF RISER HAS A HEIGHT OF COVER OF 10' OR MORE, USE A SLIP JOINT.
5. BANDS ARE NORMALLY FURNISHED AS FOLLOWS:
   - 12" THRU 48" 1-PIECE
   - 54" 2-PIECES
6. ALL RISER JOINT COMPONENTS WILL BE FIELD ASSEMBLED.
7. MANHOLE RISERS IN APPLICATIONS WHERE TRAFFIC LOADS ARE IMPOSED REQUIRE SPECIAL DESIGN CONSIDERATIONS.
8. DIMENSIONS SUBJECT TO MANUFACTURING TOLERANCES.

12" RISER BAND DETAIL
NOT TO SCALE



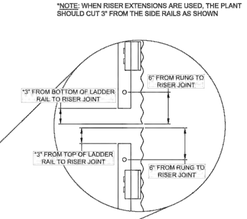
NOTES:
1. LADDERS CAN BE MADE IN 20'-0" STANDARD LENGTHS AND CUT TO FIT
2. ALL MATERIAL TO MEET ASTM A36
3. LADDER TO BE HOT DIPPED GALVANIZED PER ASTM A-123 AFTER FABRICATION IS COMPLETE

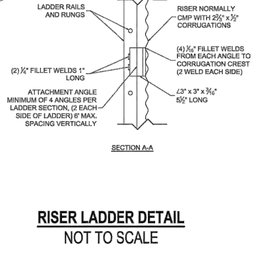
STANDARD LADDER DETAIL
NOT TO SCALE
PART NO. HVLADDL16



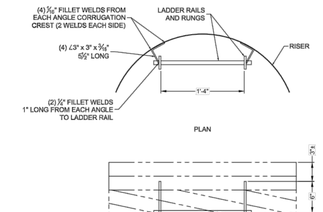
NOTE:
THIS DRAWING IS INTENDED TO APPLY TO LADDERS INSTALLED IN RISERS HAVING A DIAMETER OF 30" OR LARGER. DUE TO SPACE CONSTRAINTS AND LIMITED ACCESSIBILITY, THE PRACTICALITY AND SUITABILITY OF UTILIZING RISERS SMALLER THAN 30" DIAMETER AND/OR INCORPORATING LADDERS IN THESE SMALLER DIAMETER RISERS SHOULD BE ADDRESSED BY THE OWNER AND PROJECT ENGINEER

*NOTE: WHEN RISER EXTENSIONS ARE USED, THE PLANT SHOULD CUT 3" FROM THE SIDE RAILS AS SHOWN

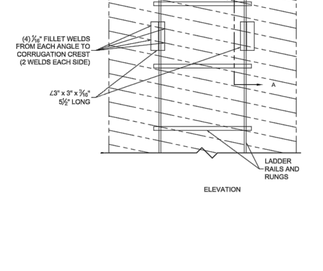




SECTION A-A

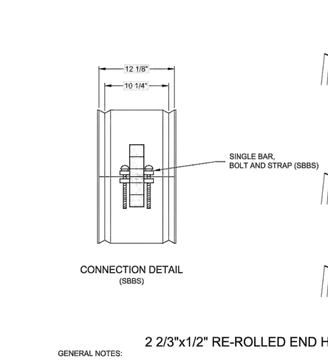


PLAN

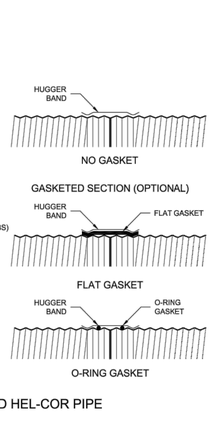


ELEVATION

RISER LADDER DETAIL
NOT TO SCALE



CONNECTION DETAIL
(SBBS)

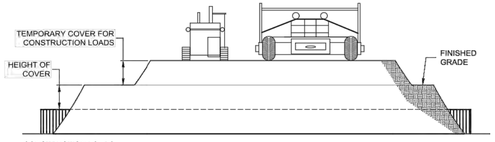


2 2/3"x1/2" RE-ROLLED END HEL-COR PIPE

GENERAL NOTES:

1. JOINT IS TO BE ASSEMBLED PER AASHTO BRIDGE CONSTRUCTION SPECIFICATION SEC 26.4.2.4.
2. BAND MATERIALS AND/OR COATING CAN VARY BY LOCATION. CONTACT YOUR CONTECH REPRESENTATIVE FOR AVAILABILITY.
3. BANDS ARE SHAPED TO MATCH THE PIPE-ARCH WHEN APPLICABLE.
4. BANDS ARE NORMALLY FURNISHED AS FOLLOWS:
   - 12" THRU 48" 1-PIECE
   - 54" THRU 96" 2-PIECES
   - 102" THRU 144" 3-PIECES
5. BAND FASTENERS ARE ATTACHED WITH SPOT WELDS, RIVETS OR HAND WELDS.
6. ALL CMP IS REROLLED TO HAVE ANNULAR END CORRUGATIONS OF 2 2/3"x1/2"
7. DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
8. ORDER SHALL DESIGNATE GASKET OPTION, IF REQUIRED (SEE DETAILS ABOVE).

H-12 HUGGER BAND DETAIL
NOT TO SCALE



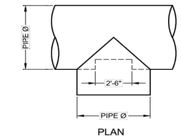
CONSTRUCTION LOADS

FOR TEMPORARY CONSTRUCTION VEHICLE LOADS, AN EXTRA AMOUNT OF COMPACTED COVER MAY BE REQUIRED OVER THE TOP OF THE PIPE. THE HEIGHT-OF-COVER SHALL MEET THE MINIMUM REQUIREMENTS SHOWN IN THE TABLE BELOW. THE USE OF HEAVY CONSTRUCTION EQUIPMENT NECESSITATES GREATER PROTECTION FOR THE PIPE THAN FINISHED GRADE COVER MINIMUMS FOR NORMAL HIGHWAY TRAFFIC.

PIPE SPAN, INCHES	AXLE LOADS (kips)			
	18-50	50-75	75-110	110-150
	MINIMUM COVER (FT)			
12-42	2.0	2.5	3.0	3.0
48-72	3.0	3.0	3.5	4.0
78-120	3.0	3.5	4.0	4.0
126-144	3.5	4.0	4.5	4.5

*MINIMUM COVER MAY VARY, DEPENDING ON LOCAL CONDITIONS. THE CONTRACTOR MUST PROVIDE THE ADDITIONAL COVER REQUIRED TO AVOID DAMAGE TO THE PIPE. MINIMUM COVER IS MEASURED FROM THE TOP OF THE PIPE TO THE TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE.

CONSTRUCTION LOADING DIAGRAM
NOT TO SCALE



48"Ø to 90"Ø FITTING REINFORCEMENT MAY BE REQUIRED BASED ON HEIGHT OF COVER AND LIVE LOAD CONDITION

TYPICAL MANWAY DETAIL
NOT TO SCALE



TYPICAL SECTION VIEW
NOT TO SCALE

NOTE: IF SALTING AGENTS FOR SNOW AND ICE REMOVAL ARE USED ON OR NEAR THE PROJECT, A GEOMEMBRANE BARRIER IS RECOMMENDED WITH THE SYSTEM. THE GEOMEMBRANE LINER IS INTENDED TO HELP PROTECT THE SYSTEM FROM THE POTENTIAL ADVERSE EFFECTS THAT MAY RESULT FROM A CHANGE IN THE SURROUNDING ENVIRONMENT OVER A PERIOD OF TIME. PLEASE REFER TO THE CORRUGATED METAL PIPE DETENTION DESIGN GUIDE FOR ADDITIONAL INFORMATION.

SPECIFICATION FOR CORRUGATED STEEL PIPE-ALUMINIZED TYPE 2 STEEL

SCOPE

THIS SPECIFICATION COVERS THE MANUFACTURE AND INSTALLATION OF THE CORRUGATED STEEL PIPE (CSP) DETAILED IN THE PROJECT PLANS.

MATERIAL

THE ALUMINIZED TYPE 2 STEEL COILS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M274 OR ASTM A929.

PIPE

THE CSP SHALL BE MANUFACTURED IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF AASHTO M36 OR ASTM A760. THE PIPE SIZES, GAGES AND CORRUGATIONS SHALL BE AS SHOWN ON THE PROJECT PLANS.

ALL FABRICATION OF THE PRODUCT SHALL OCCUR WITHIN THE UNITED STATES.

HANDLING AND ASSEMBLY

SHALL BE IN ACCORDANCE WITH RECOMMENDATIONS OF THE NATIONAL CORRUGATED STEEL PIPE ASSOCIATION (NCSPA)

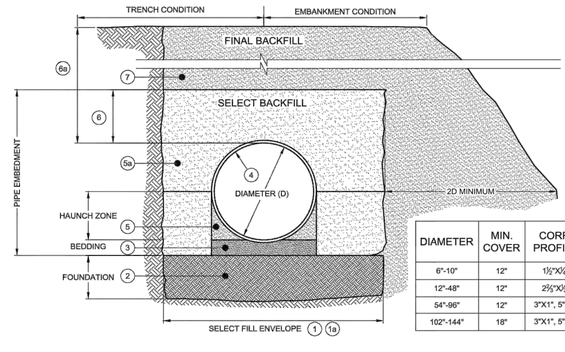
INSTALLATION

SHALL BE IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SECTION 26, DIVISION II OR ASTM A798 AND IN CONFORMANCE WITH THE PROJECT PLANS AND SPECIFICATIONS. IF THERE ARE ANY INCONSISTENCIES OR CONFLICTS THE CONTRACTOR SHOULD DISCUSS AND RESOLVE WITH THE SITE ENGINEER.

IT IS ALWAYS THE RESPONSIBILITY OF THE CONTRACTOR TO FOLLOW OSHA GUIDELINES FOR SAFE PRACTICES.

ANTI-FLOTATION PROVISIONS DUE TO HIGH GROUNDWATER OR OTHER FLOTATION CONCERNS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.

MATERIAL SPECIFICATION
NOT TO SCALE



DIAMETER	MIN. COVER	CORR. PROFILE
6"-10"	12"	1½"X½"
12"-48"	12"	2½"X½"
54"-96"	12"	3"X1", 5"X1"
102"-144"	18"	3"X1", 5"X1"

- **BACKFILL REQUIREMENTS FOLLOW THE GUIDELINES OF ASTM A 798.**

(1) MINIMUM TRENCH WIDTH MUST ALLOW ROOM FOR PROPER COMPACTION OF HAUNCH MATERIALS UNDER THE PIPE. THE TRENCH WIDTH IS THE MINIMUM AMOUNT REQUIRED FOR PROPER INSTALLATION (5.1) AND TO SUPPORT HORIZONTAL PRESSURE FROM THE PIPE (TABLE #1). THE MANUFACTURER'S SUGGESTED MINIMUM VALUE IS: 1.5D + 12".

(1a) MINIMUM CRITICAL FILL WIDTH MIN. 2'-0" FROM SPRINGLINE TO SIDE OF SELECT FILL ENVELOPE.

(2) THE FOUNDATION UNDER THE PIPE AND SIDE BACKFILL SHALL BE ADEQUATE TO SUPPORT THE LOADS ACTING UPON IT (6.1).

(3) BEDDING MATERIAL SHALL BE A RELATIVELY LOOSE MATERIAL THAT IS ROUGHLY SHAPED TO FIT THE BOTTOM OF THE PIPE, AND A DEPTH OF ½" PER FOOT OF FILL HEIGHT (6a), 24" MAX (FIG. #3). THE MAXIMUM PARTICLE SIZE IS NOT TO EXCEED 3" IN DIAMETER (7.1).

(4) CORRUGATED STEEL PIPE (CSP) [HEL-COR].

(5) HAUNCH ZONE MATERIAL SHALL BE HAND SHOVELED OR SHOVEL SLICED INTO PLACE TO ALLOW FOR PROPER COMPACTION (10.1).

(5a) INITIAL BACKFILL FOR PIPE EMBEDMENT TO MEET GW, GP, GM, GC, SW OR SP UNIFIED SOIL CLASSIFICATION SYSTEM PER ASTM D2487, OR APPROVED EQUAL, AND COMPACTED TO 90% STANDARD PROCTOR PER ASTM D698. MAXIMUM PARTICLE SIZE NOT TO EXCEED 3" (9.2). ALL LIFTS SHALL BE PLACED IN A CONTROLLED MANNER, 6" TO 12" IN DEPTH AND COMPACTED BEFORE ADDING THE NEXT LIFT, AND NO MORE THAN ONE LIFT SIDE-TO-SIDE DIFFERENCE SHALL BE PERMITTED (10.1 & 10.2).

(6) INITIAL BACKFILL ABOVE PIPE MAY INCLUDE ROAD BASE MATERIAL (AND RIGID PAVEMENT IF APPLICABLE). SEE TABLE ABOVE.

(6a) TOTAL HEIGHT OF COMPACTED COVER FOR CONVENTIONAL HIGHWAY LOADS IS MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TOP OF RIGID PAVEMENT (ASTM A796, 11.1).

(7) FINAL BACKFILL MATERIAL SELECTION AND COMPACTION REQUIREMENTS SHALL FOLLOW THE PROJECT PLANS AND SPECIFICATIONS PER THE ENGINEER OF RECORD (11.1, 11.2).

NOTES:
- GEOTEXTILE SHOULD BE CONSIDERED FOR USE TO PREVENT SOIL MIGRATION INTO VARYING SOIL TYPES (PROJECT ENGINEER).
- FOR MULTIPLE BARREL INSTALLATIONS THE RECOMMENDED MINIMUM STANDARD SPACING BETWEEN PARALLEL PIPE RUNS SHALL BE NO LESS THAN 24" FOR DIAMETERS UP TO 48". FOR DIAMETERS > 48", THE MINIMUM SPACING IS DIAMETER/2 OR 36", WHICHEVER IS LESS (ASTM A796,19.1)
- CONTACT YOUR CONTECH REPRESENTATIVE FOR NONSTANDARD SPACING.

CSP-SLOPED BACKFILL-ROUND-ASTM

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
PROFESSIONAL ENGINEER
9/1/22

REVISIONS

DATE	REVISION DESCRIPTION
3/15/22	INITIAL PLAN SUBMITTAL
9/1/22	REVISED PER LAYOUT CHANGES

COLLINS ENGINEERING
200 GARRETT STREET, SUITE K-CHARLOTTESVILLE, VA 22902 -434.293.3719

PROJECT: BELMONT CONDOMINIUMS - CRITICAL SLOPES WAIVER REQUEST

SHEET: STORMWATER MANAGEMENT NOTES & DETAILS

JOB NO. 202201
SCALE N/A
SHEET NO. 46

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CHANNEL PROTECTION ANALYSIS AT POINT OF ANALYSIS 'A':
COMPLIANCE IS MET VIA VAC 25-870-66, VIA SUBSECTION B.3.a

9 VAC 25-870-66 (Point of Analysis 'A')

Section B: Channel Protection
"Concentrated stormwater flow shall be released into a stormwater conveyance system and shall meet the criteria in subdivision 1, 2 or 3 of this subsection..."

Section B.1: Manmade stormwater conveyance systems

"When stormwater from a development is discharged to a manmade stormwater conveyance system, following the land-disturbing activity, either..." a. or b. shall be met:

Section B.3
"... the maximum peak flow rate from the one-year 24-hour storm following the land-disturbing activity shall be calculated either.." a. or b."

Section B.3.a.
In accordance with the following methodology:
$Q_{Developed} \leq I.F. * (Q_{Pre\text{-}Developed} * RV_{Pre\text{-}Developed}) / RV_{Developed}$
$Q_{Allowed}$ ≤ **4.93** cfs

Where:	$Q_{Pre\text{-}Developed}$ =	9.93	cfs	(From Worksheet 4 Watershed Summary)
	$CN_{Pre\text{-}Developed}$ =	78		(From Worksheet 4 Watershed Summary)
	$S_{Pre\text{-}Developed}$ =	2.82		(From SCS TR-55 eq. 2-4)
	$RV_{Pre\text{-}Developed}$ =	1.15	in.	(From SCS TR-55 eq. 2-3)
	$CN_{Post\text{-}Developed}$ =	88		(From Worksheet 4 Watershed Summary)
	$S_{Post\text{-}Developed}$ =	1.35		(From SCS TR-55 eq. 2-4)
	$RV_{Post\text{-}Developed}$ =	1.86	in.	(From SCS TR-55 eq. 2-3)
	I.F. =	0.80		(Factor of Safety)

$Q_{Developed}$ = **4.83** cfs

Section B.4 Limits of Analysis

The analysis terminates at the subareas since subsection B.3.a is met.

FLOOD PROTECTION ANALYSIS AT POINT OF ANALYSIS 'A':
COMPLIANCE IS MET VIA VAC 25-870-66, VIA SUBSECTION C.2.b

9 VAC 25-870-66 (Point of Analysis 'A')

Section C: Flood Protection
"Concentrated stormwater flow shall be released into a stormwater conveyance system and shall meet one of the following criteria as demonstrated by use of acceptable hydrologic and hydraulic methodologies:"

Section C.2.b.:

The point of discharge "releases a postdevelopment peak flow rate for the 10-year 24-hour storm event that is less than the predevelopment peak flow rate from the 10-year 24-hour storm event. Downstream stormwater conveyance systems do not require any additional analysis to show compliance with flood protection criteria if this option is utilized."

Pre-Development 10-year 24-hour Peak Flow Rate = 28.49 cfs
Post-Development 10-year 24-hour Peak Flow Rate = 18.38 cfs

Section C.3 Limits of Analysis
The analysis terminates at the subareas' limits since subsection C.2.b is met.

CHANNEL PROTECTION ANALYSIS AT POINT OF ANALYSIS 'B':
COMPLIANCE IS MET VIA VAC 25-870-66, VIA SUBSECTION B.3.a

9 VAC 25-870-66 (Point of Analysis 'B')

Section B: Channel Protection
"Concentrated stormwater flow shall be released into a stormwater conveyance system and shall meet the criteria in subdivision 1, 2 or 3 of this subsection..."

Section B.1: Manmade stormwater conveyance systems

"When stormwater from a development is discharged to a manmade stormwater conveyance system, following the land-disturbing activity, either..." a. or b. shall be met:

Section B.3
"... the maximum peak flow rate from the one-year 24-hour storm following the land-disturbing activity shall be calculated either.." a. or b."

Section B.3.a.
In accordance with the following methodology:
$Q_{Developed} \leq I.F. * (Q_{Pre\text{-}Developed} * RV_{Pre\text{-}Developed}) / RV_{Developed}$
$Q_{Allowed}$ ≤ 0.75 cfs (Per Energy Balance Calculation)

"Under no condition shall $Q_{Developed}$ be greater than $Q_{Pre\text{-}Developed}$.
Therefore, Maximum Q Allowed is as follows:
$Q_{Allowed}$ ≤ **0.59** cfs (Pre-Development Flow)

Where:	$Q_{Pre\text{-}Developed}$ =	0.59	cfs	(From Worksheet 4 Watershed Summary)
	$CN_{Pre\text{-}Developed}$ =	68		(From Worksheet 4 Watershed Summary)
	$S_{Pre\text{-}Developed}$ =	4.80		(From SCS TR-55 eq. 2-4)
	$RV_{Pre\text{-}Developed}$ =	0.62	in.	(From SCS TR-55 eq. 2-3)
	$CN_{Post\text{-}Developed}$ =	62		(From Worksheet 4 Watershed Summary)
	$S_{Post\text{-}Developed}$ =	6.26		(From SCS TR-55 eq. 2-4)
	$RV_{Post\text{-}Developed}$ =	0.39	in.	(From SCS TR-55 eq. 2-3)
	I.F. =	0.80		(Factor of Safety)

$Q_{Developed}$ = **0.48** cfs

Section B.4 Limits of Analysis

The analysis terminates at the subareas since subsection B.3.a is met.

FLOOD PROTECTION ANALYSIS AT POINT OF ANALYSIS 'B':
COMPLIANCE IS MET VIA VAC 25-870-66, VIA SUBSECTION C.2.b

9 VAC 25-870-66 (Point of Analysis 'B')

Section C: Flood Protection
"Concentrated stormwater flow shall be released into a stormwater conveyance system and shall meet one of the following criteria as demonstrated by use of acceptable hydrologic and hydraulic methodologies:"

Section C.2.b.:

The point of discharge "releases a postdevelopment peak flow rate for the 10-year 24-hour storm event that is less than the predevelopment peak flow rate from the 10-year 24-hour storm event. Downstream stormwater conveyance systems do not require any additional analysis to show compliance with flood protection criteria if this option is utilized."

Pre-Development 10-year 24-hour Peak Flow Rate = 2.12 cfs
Post-Development 10-year 24-hour Peak Flow Rate = 2.10 cfs

Section C.3 Limits of Analysis
The analysis terminates at the subareas' limits since subsection C.2.b is met.

WATERSHED SUMMARY- For Point of Analysis 'A'

Pre-Development

	CN	Tc, hrs.	Area, ac.	1-year Flow, cfs	2-year Flow, cfs	10-year Flow, cfs
DA 1A (Pre-Dev.)	75	0.22	4.82	5.11	8.53	17.42
DA 1B (Pre-Dev.)	85	0.11	1.44	3.63	4.88	8.76
DA 1C (Pre-Dev.)	97	0.10	0.28	1.19	1.47	2.30
	78		6.54	9.93	14.88	28.49

Post-Development

	CN	Tc, hrs.	Area, ac.	1-year Flow, cfs	2-year Flow, cfs	10-year Flow, cfs
DA 1A (Post-Dev.)	86	0.19	6.21	4.83	7.37	18.38
DA 1B (Post-Dev.)	96	0.10	1.72			
	88		7.93			

WATERSHED SUMMARY- For Point of Analysis 'B'

Pre-Development

	CN	Tc, hrs.	Area, ac.	1-year Flow, cfs	2-year Flow, cfs	10-year Flow, cfs
DA 1E (Pre-Dev.)	68	0.13	0.60	0.59	0.92	2.12

Post-Development

	CN	Tc, hrs.	Area, ac.	1-year Flow, cfs	2-year Flow, cfs	10-year Flow, cfs
DA 1E (Post-Dev.)	62	0.10	0.77	0.48	0.82	2.10

WATERSHED SUMMARY- For Point of Analysis 'C'

Pre-Development

	CN	Tc, hrs.	Area, ac.	1-year Flow, cfs	2-year Flow, cfs	10-year Flow, cfs
DA 2 (Pre-Dev.)	74	0.18	4.97	5.09	8.54	17.60

Post-Development

	CN	Tc, hrs.	Area, ac.	1-year Flow, cfs	2-year Flow, cfs	10-year Flow, cfs
DA 2 (Post-Dev.)	69	0.18	3.41	2.54	3.92	10.07

CHANNEL PROTECTION ANALYSIS AT POINT OF ANALYSIS 'C':
COMPLIANCE IS MET VIA VAC 25-870-66, VIA SUBSECTION B.3.a

9 VAC 25-870-66 (Point of Analysis 'C')

Section B: Channel Protection
"Concentrated stormwater flow shall be released into a stormwater conveyance system and shall meet the criteria in subdivision 1, 2 or 3 of this subsection..."

Section B.1: Manmade stormwater conveyance systems

"When stormwater from a development is discharged to a manmade stormwater conveyance system, following the land-disturbing activity, either..." a. or b. shall be met:

Section B.3
"... the maximum peak flow rate from the one-year 24-hour storm following the land-disturbing activity shall be calculated either.." a. or b."

Section B.3.a.
In accordance with the following methodology:
$Q_{Developed} \leq I.F. * (Q_{Pre\text{-}Developed} * RV_{Pre\text{-}Developed}) / RV_{Developed}$
$Q_{Allowed}$ ≤ **5.59** cfs

Where:	$Q_{Pre\text{-}Developed}$ =	5.09	cfs	(From Worksheet 4 Watershed Summary)
	$CN_{Pre\text{-}Developed}$ =	74		(From Worksheet 4 Watershed Summary)
	$S_{Pre\text{-}Developed}$ =	3.47		(From SCS TR-55 eq. 2-4)
	$RV_{Pre\text{-}Developed}$ =	0.94	in.	(From SCS TR-55 eq. 2-3)
	$CN_{Post\text{-}Developed}$ =	69		(From Worksheet 4 Watershed Summary)
	$S_{Post\text{-}Developed}$ =	4.50		(From SCS TR-55 eq. 2-4)
	$RV_{Post\text{-}Developed}$ =	0.68	in.	(From SCS TR-55 eq. 2-3)
	I.F. =	0.80		(Factor of Safety)

$Q_{Developed}$ = **2.54** cfs

Section B.4 Limits of Analysis

The analysis terminates at the subareas since subsection B.3.a is met.

FLOOD PROTECTION ANALYSIS AT POINT OF ANALYSIS 'C':
COMPLIANCE IS MET VIA VAC 25-870-66, VIA SUBSECTION C.2.b

9 VAC 25-870-66 (Point of Analysis 'C')

Section C: Flood Protection
"Concentrated stormwater flow shall be released into a stormwater conveyance system and shall meet one of the following criteria as demonstrated by use of acceptable hydrologic and hydraulic methodologies:"

Section C.2.b.:

The point of discharge "releases a postdevelopment peak flow rate for the 10-year 24-hour storm event that is less than the predevelopment peak flow rate from the 10-year 24-hour storm event. Downstream stormwater conveyance systems do not require any additional analysis to show compliance with flood protection criteria if this option is utilized."

Pre-Development 10-year 24-hour Peak Flow Rate = 17.60 cfs
Post-Development 10-year 24-hour Peak Flow Rate = 10.07 cfs

Section C.3 Limits of Analysis
The analysis terminates at the subareas' limits since subsection C.2.b is met.

NOTE:
SEE SHEET 42 FOR THIS PROJECT's STORMWATER MANAGEMENT NARRATIVE, WHICH PROVIDES ADDITIONAL DETAILED INFORMATION.

BMP DATA FOR THIS PROJECT:

BMP OWNERSHIP INFORMATION:	BELMONT & CARLTON HOLDINGS, LLC PO BOX 1467 CHARLOTTESVILLE, VA 22902
TYPE OF BMP INSTALLED:	LEVEL II BIORETENTION BASIN AND TWO UGD SYSTEMS
GEOGRAPHIC LOCATION (HYDROLOGIC UNIT CODE)	LOCATED OFF GARDEN STREET (PREDOMINANT HYDROLOGIC SOIL GROUP TYPE 121C (CULPEPER-URBAN LAND). HUC UNIT CODE: 020802040401, LAT: 38.025841, LONG: -78.472399
WATERBODY THE BMP IS ULTIMATELY DISCHARGING INTO:	RIVANNA RIVER
No. OF ACRES TREATED BY BMPs:	THE BIORETENTION BASIN TREATS 2.02 ac. OF THE 6.66 ac. OF LAND DISTURBANCE. THE BIORETENTION BASIN REMOVES 3.38 lbs/yr OF PHOSPHORUS AND EXCEEDS THE PROJECT's REQUIRED 2.69 lbs/yr. OF PHOSPHOROUS. UGD SYSTEM #1A TREATS 7.93 ac.
DESCRIPTION OF REQUIRED MAINTENANCE:	THE MAINTENANCE PROGRAMS FOR THE BIORETENTION BASIN AND UNDERGROUND DETENTION SYSTEMS ARE DETAILED ON SHEET 45.

CITY OF CHARLOTTESVILLE-LAND DISTURBANCE MS4 REPORTING CHART

BMP TYPE	PRACTICE (1-15)	LEVEL (1 or 2)	LATITUDE	LONGITUDE	TOTAL DA (AC)	IMP. DA (AC)	PERV. DA (AC)	P REMOVED (LBS)	12 DIG. HUC.	*SWM MAINT. AGR. INST. #
Bioretention Basin	Spec. #9	2	38.025841	-78.472399	2.02	1.62	0.40	3.38	020802040401	
Underground Detention System	N/A	N/A	38.025314	-78.473075	7.93	5.82	2.11	0	020802040401	
TOTAL LOD (AC)			6.66							
TOTAL P REMOVED BY BMP'S (LBS)			3.38							
TOTAL P CREDITS PURCHASED (LBS)			0.00							
TOTAL P CREDITED TO PROJECT (LBS)			3.38							
TOTAL P REQUIRED (LBS)			2.69							
***LAND DISTURBING #**										
***SWM BOND RELEASE DATE**										

* TO BE ENTERED BY CITY OF CHARLOTTESVILLE STAFF

CITY OF CHARLOTTESVILLE-OUTFALL TABULATION CHART

9VAC25-870-66:				EXISTING									PROPOSED									
Outfall Designation	LOA Designation	Receiving Channel	Compliance Method	DA (Acres)	Offsite Contribution (Acres)	CN	Tc ~~(min)~~	Q_1 (cfs)	Q_2 (cfs)	Q_{10} (cfs)	Q_{100} (cfs)	Runoff Volume (V, / RV)	Runoff Volume Units	DA (Acres)	Offsite Contribution (Acres)	CN	Tc ~~(min)~~	Q_1 (cfs)	Q_2 (cfs)	Q_{10} (cfs)	Q_{100} (cfs)	Runoff Volume (V, / RV)	Runoff Volume Units
1 (DA 1A)	POA 'A'	Natural	B.3.a & C.2.b	4.82		75	0.22 hrs.	5.11	8.53	17.42	-	0.97	in.										
4 (DA 1B)	POA 'A'	Manmade	B.3.a & C.2.b	1.44		85	0.11 hrs.	3.63	4.88	8.76	-	1.60	in.	7.93		88	0.19 hrs.	4.83	7.37	18.38	-	0.72	in.
3 (DA 1C)	POA 'A'	Manmade	B.3.a & C.2.b	0.28		97	0.10 hrs.	1.19	1.47	2.30	-	2.70	in.										
5 (DA 1E)	POA 'B'	Natural	B.3.a & C.2.b	0.60		68	0.13 hrs.	0.59	0.92	2.12	-	0.62	in.	0.77		62	0.10 hrs.	0.48	0.82	2.10	-	0.39	in.
6 (DA 2)	POA 'C'	Natural	B.3.a & C.2.b	4.97		74	0.18 hrs.	5.09	8.54	17.60	-	0.94	in.	3.41		69	0.18 hrs.	2.54	3.92	10.07	-	0.68	in.
TOTAL				12.11										12.11									

City of Charlottesville Department of Public Works-Engineering Division Version 1.0 -10-21-2020

NOTE: Options for column "Receiving Channel Type" include: "Manmade", "Natural", "Restored", "Sheet", or "Other"
The column for "Compliance Method" requires specific code references, options include: "B.1.a", "B.2.a", "B.3.a (EB)", "D"

Public Works
City of Charlottesville

City of Charlottesville

Department of Public Works -Engineering Division
Engineering Completeness Review Checklist
610 E Market Street, Charlottesville, VA 22902
Telephone 434-970-3182; Fax 434-970-3359

Created On: 1/30/2020
Created By: J. Dawson
Last Modified On: 10/21/2020
Last Modified By: J. Dawson

This checklist is a required submittal item for the applicant. It is used by City PWE staff to evaluate the completeness of a submitted Site Plan for adequacy of review. It is applicable to all projects proposing to disturb 6,000 SF or more, or otherwise subject to VSMP compliance, submitted as a Final Plan. If a submitted plan does not meet all applicable standards contained herien, this completed checklist will be returned to the applicant to serve as both a written justification of the reasons the plans were not accepted for review, as well as guidance on how to improve the submittal to a standard in which it will be deemed acceptable. If you have recieved this checklist as a result of having plans deemed incomplete and have questions, please contact PWE staff for clarification. Applicant shall complete comlumn #1 with the location (plan sheet/detail etc) or "N/A". City staff will complete column #2.

		Code/Manual Reference	#1-Location or N/A	#2-Y/N/NA
GENERAL				
1	**Required Applications**			
1a	E&S and SWM Plan Application (or Amendment Application)	SADM 2.3	SUBMITTED WITH THE PLANS	
1b	Site Plan Application	SADM 2.3/Sec. 34-828	SUBMITTED WITH THE PLANS	
1c	State Permit Registration Application **(Sites> 1 Acre Only)**	SADM 2.3	SUBMITTED WITH THE PLANS	
2	**Required Checklists**			
2a	E&S and SWM Plan Submittal Requirements Checklist	SADM 2.3	SUBMITTED WITH THE PLANS	
2b	E&S Checklist	SADM 2.3	SUBMITTED WITH THE PLANS	
2c	Engineering Checklist	SADM 2.3	SUBMITTED WITH THE PLANS	
3	**Required Fees**			
3a	E&S Fee	SADM 2.3	SUBMITTED WITH THE PLANS	
3b	SWM Fee	SADM 2.3	SUBMITTED WITH THE PLANS	
VSMP Package Generally				
1	Tax reference number and parcel number for all parcels within LOD or otherwise affected by project (encumbered by access easements etc.).	9VAC25-870-55 B-1	SHEET 1	
2	Name, address, telephone #, and email address for each owner of all properties required by the above.	9VAC25-870-55 B-2	SEE APPLICATION	
3	A SWM narrative that addresses, minimally; number of and specific flow regimes for all S.O.'s in both existing and proposed conditions, descriptions of all drainage areas in existing and proposed conditions, general description of all proposed SWM facilities and in which DA they will be operated, how many receiving waters (or Limits of Analysis, storm drain networks etc.) will be affected and if DA will be shifted from one receiving channel/SD network/LOA to another in proposed. Narrative must include whether or not the applicant intends to meet compliance through off-site options (nutrient credit purchases or others).	9VAC25-870-55 B-3,4,5,9	SHEET 42	
4	Information on the proposed stormwater management facilities, including (i) the type of facilities; (ii) location, including geographic coordinates; (iii) acres treated; and (iv) the surface waters or karst features into which the facility will discharge	9VAC25-870-55 B-5	THIS SHEET & SHEETS 41-47	
5	A SWM Computation Booklet and report including all relevant hydrologic and hydraulic computations, VRRM spreadsheets, etc, necessary to demonstrate compliance with all VSMP regulations	9VAC25-870-55 B-6,7	SWM REPORT PROVIDED	
6	Letter of Availability from off-site provider if offsite nutrient credits are to be purchased.	9VAC25-870-55 B-9	N/A	
7	All SWM plans, specifications, and calculations included in the stormwater management plans and computation booklet shall be signed and sealed by a PE licensed in the Commonwealth of Virginia	9VAC25-870-55 C	THIS INFORMATION IS SEALED	
SWM Plans or Drainage Area Maps shall include:				
8	Existing and proposed contours (minimum 2' intervals)	9VAC25-870-55 B-8	2' PR. & EX. INTERVALS PROVIDED	
9	Identification of all Site Outfalls (1)	9VAC25-870-55 B-1	SHEETS 41 & 42	
10	Delineation of drainage areas to each S.O. in both pre and post developed conditions	9VAC25-870-55 B-1	SHEETS 41 & 42	
11	Delineation of the drainage areas to each SWM BMP	9VAC25-870-55 B-8(a)	SHEETS 42 & 43	
12	Delineation of the Limits of Disturbance	9VAC25-870-55 B-8(f)	SHEETS 33-39 & 43	
13	Depictions of all streams, ponds, culverts, ditches, wetlands, floodplains, wetlands or other waterbodies	9VAC25-870-55 B-8 (c)	SHEETS 4-14 & 41-43	
14	Locations of all existing structures, roads, utilities, SWM facilities and easements	9VAC25-870-55 B-8(d)	SHEETS 4-6	
15	Locations of all proposed buildings, roads, parking areas, utilities, and SWM facilities	9VAC25-870-55 B-8(g)	SHEETS 7-14 & 44	
16	Sufficient information on adjoining properties to assess impacts of stormwater on or from those properties. Minimally this means showing all topography and drainage or conveyance structures within 100' of subject parcel boundaries or within 100' of any delineated DA divides when these occur offsite.	9VAC25-870-55 B-8(e)	SHEETS 41-43, THIS SHEET & SWM REPORT	
17	Maintenance schedules, notes, and requirements for all BMP's included on plans, and Forest/Open Space designated areas.	9VAC25-870-55 B-4	SHEETS 44 & 47	

Date Application was received:

ACCEPTED **OR** **REJECTED**

By:

Date :

COMMONWEALTH OF VIRGINIA
SCOTT R. COLLINS
No. 35791
PROFESSIONAL ENGINEER
8/18/23

REVISIONS

DATE	REVISION DESCRIPTION
3/15/22	INITIAL PLAN SUBMITTAL
1/03/23	2ND PLAN SUBMITTAL
5/19/23	3RD PLAN SUBMITTAL
8/18/23	4TH PLAN SUBMITTAL

COLLINS ENGINEERING
200 GARRETT STREET, SUITE K-CHARLOTTESVILLE, VA 22902 -434.293.3719

PROJECT
BELMONT CONDOMINIUMS - FINAL SITE PLAN

SHEET
STORMWATER MANAGEMENT PLAN - COMPLIANCE SUMMARIES

JOB NO. 202201
SCALE NONE
SHEET NO. 47

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Attachment B

#R-22-148

RESOLUTION
Granting a critical slope waiver for a residential development referred to as "Belmont Condominiums"

WHEREAS Belmont & Carlton Holdings, LLC ("Landowner") is the owner of certain land identified within the City of Charlottesville Real Estate Assessor's records as Real Estate Parcel Identification Nos. 570020000, 570002100, 570004000, 570006000, 570007100, 570007300, 570007500, 570007700, 570007900, 570002000, 570003000, 57005000, 570007000, 570007200, 570007400, 570007600, 570007800, 570010000, said parcels having current street addresses of 1003-1005 Carlton Avenue, 0 Walnut Street, 730 – 732 Walnut Street, 735 Walnut Street, and 0 Cherry Street (collectively, the "Subject Property"); and

WHEREAS the Subject Property contains critical slopes, over and within an area of approximately 0.988 acre, which is approximately 16% of the combined area of the various parcels that constitute the Subject Property, and Landowner is requesting a waiver of the critical slopes requirements of City Code Sec. 34-1120(b)(6)(b), in connection with the Owner's plan to construct a mixed use development on the Subject Property (the "Project"); and

WHEREAS the Project is described in more specific detail within the application materials submitted in connection with waiver application no. P22-0039, as required by City Code §34-1120(b)(6) (collectively, the "Application Materials"); and

WHEREAS the Planning Commission considered and recommended approval of this application at their October 11, 2022 meeting, subject to conditions proposed within the Staff Report and modified as discussed in the meeting; now, therefore,

BE IT RESOLVED by the Council for the City of Charlottesville, Virginia, that a waiver is hereby granted of the critical slopes requirements for the Project, to allow for the development of the Project as described within the Application Materials, subject to the following conditions:

(1) Erosion and sediment control (ESC) plans for the Project shall include, at a minimum, four (4) stages/phases of ESC controls. The first phase shall include "Initial/Preliminary Controls". Outfalls from any proposed sediment traps shall be established with rigorous independent ESC controls, early in the sequence, prior to the establishment of a sediment trap and associated conveyances.

(2) Any channels/diversions that convey 'clear' water shall be stabilized with sod on the 'clear water' side immediately after installation.

(3) A "Super Silt Fence" (chain linked backing) shall be installed where perimeter silt fence is specified.

(4) Any disturbance occurring outside of conveyances to a sediment trap, in either sequence or space, planned or unforeseen, shall be immediately stabilized with sod (for pervious areas, utilities should have other "same day stabilization").

(5) At no time shall concentrated water be directed toward the areas of critical slopes, without adequate conveyance down and beyond the slopes to an acceptable outfall.

(6) To document the landowner's representations within the Application Materials regarding intended onsite water quality measures, the Stormwater Management Plan for the Project shall include either (a) a design for onsite water quality provided by a facility, or (b) facilities that are either i) designed in accordance with the BMP Clearinghouse "2013 Draft Design Specifications for Practices 1-15", or ii) proprietary Manufactured Treatment Device(s) approved by the Virginia Department of Environmental Quality ("DEQ") as of the date the stormwater management plan for the Project is submitted for the City's review. The facility or facilities should provide 125 percent of the onsite Phosphorus removal required by the Virginia Water Quality requirements for the development Project. Compliance with the 125 percent will be demonstrated by accurate project data set forth within a completed Virginia Runoff Reduction Method ("VRRM") spreadsheet for the project.

	Aye	**No**
Magill	_x__	____
Payne	____	_x__
Pinkston	_x__	____
Snook	_x__	____
Wade	_x__	____

Approved by Council
November 7, 2022

Kyna Thomas

Kyna Thomas, MMC
Clerk of Council

City of Charlottesville
Department of Neighborhood Development Services
Staff Report

Entrance Corridor Review Board
Review of Certificate of Appropriateness for 1709 Jefferson Park Avenue

Planning Commission Regular Meeting
Date Of Planning Commission Meeting: November 14, 2023

Project Planner: Matt Alfele
Date of Hearing: November 14, 2023
Application Number: P23-0066
Zoning: R-3 Residential with Entrance Corridor Overlay (Fontaine Ave/JPA; Sub-area C.)
FLUM designation: Urban Mixed-Use Corridor
Tax Map Parcel: 16-101
Site Acreage: 0.3080 acres (13,416 sq ft)
ERB Staff report prepared by: Jeff Werner, AICP, Preservation and Design Planner
Submittal: Mitchell/Matthews Architects & Planners drawings, *1709 Jefferson Park Avenue Entrance Corridor Review Application*, October 17, 2023. (Cover sheet, pages 2 through 64.)

Relevant Code Section

The Planning Commission serves as the Entrance Corridor Review Board (*ERB*), responsible for administering the design review process in entrance corridor overlay districts (*EC*). This development project requires a site plan, and therefore also requires a Certificate of Appropriateness (*CoA*), pursuant to the provisions of Section 34-309(a)(3) of the City's Zoning Ordinance. ERB shall act on an application within 60 days of the submittal date, and shall either approve, approve with conditions, or deny the application. Appeal would be to City Council.

Background

1709 Jefferson Park Avenue (JPA) is a 0.31-acre parcel within Sub-area C (Maury Avenue to Emmet Street) of the Fontaine Avenue/Jefferson Park Avenue Entrance Corridor (City Code Sec. Sec. 34-307(5)). The parcel fronts on JPA to the east and Montebello Circle to the west. Currently on the site is a four-story, brick apartment building, constructed in 1972 and of an unadorned, modernist design. The building is set back approximately 66-ft from JPA, above a brick retaining wall that faces a concrete, surface parking lot. (The existing structures will be razed for the proposed development.)

Available records indicate no buildings on this site prior to existing apartments and there is no historic designation—local, state, or federal—of the building or parcel. [Note: In the early 1800s, this was part of several-hundred acres owned by John Perry. In 1817, Perry sold a

portion of his land, 196-acres, to the trustees of Central College, later renamed the University of Virginia. As part to the transaction, Perry was the contractor for several of the original academic buildings. In 1819, he built his residence, *Montebello*, which lies west of 1709 JPA, across Montebello Circle. Now owned by the University, the house and 1.4-acre parcel are listed on the Virginia Landmarks Register and the National Register of Historic Places.]

On October 2, 2023, City Council approved a SUP request for increased residential density on this parcel, which included the following: (Reference sheet 3 of applicant's submittal.)

- Maximum building height increased to 70-ft.
- JPA front yard setback reduced to 18-ft.
- Montebello Cir. front yard setback reduced to 25-ft.
- Side yard setbacks reduced to 5-ft.
- Off-street parking requirements reduced to 19, with a condition of no on-site parking on yard facing Montebello Cir.
- Minimum distance to low-density zoning reduced to 58-ft., at Montebello Cir.
- Landscape buffer (type S-1) width at Montebello Cir. reduced to 18 ft.
- Tree canopy cover not less than 2,400 sq ft.
- Provide continuous raised sidewalk along JPA.
- Provide short term bicycle and/or micromobility within yard at Montebello Cir.

Public Comments Received

No public comments regarding this CoA request have been received to-date.

Standards for considering certificates of appropriateness.

Per Section 34-310, in reviewing a CoA application the ERB must consider certain features and factors in determining the appropriateness of proposed construction, alteration, etc. of buildings or structures located within an EC. The five primary criteria in Section 34-310 are:

1) Overall architectural design, form, and style of the subject building or structure, including, but not limited to: the height, mass and scale;
2) Exterior architectural details and features of the subject building or structure;
3) Texture, materials and color of materials proposed for use on the subject building or structure;
4) Design and arrangement of buildings and structures on the subject site; and
5) The extent to which the features and characteristics described within paragraphs (1)-(4), above, are architecturally compatible (or incompatible) with similar features and characteristics of other buildings and structures having frontage on the same EC street(s) as the subject property.

Links to EC Design Guidelines

EC Design Guidelines Chapter I - Introduction
EC Design Guidelines Chapter II - Streetscape

EC Design Guidelines Chapter III - Site
EC Design Guidelines Chapter IV - Buildings
EC Design Guidelines Chapter V - Corridors

Summary and Discussion

CoA request for a proposed development of a 0.31-acre parcel (existing structure to be razed) to construct an eight-story (max height 70-ft) apartment building with a footprint of approximately 70-ft (wide) x 100-ft (deep). The brick and metal-panel building features a six-story tower atop a two-story podium. The primary façade, oriented to JPA, steps back at the third-story and eighth-story, and, at street-level, incorporated into the podium is the primary pedestrian entrance and the vehicular entrance to the enclosed garage.

Building materials:

- Foundation/Podium: Red brick with glazed, metal storefront.
- Upper floors: Red brick walls with painted metal panels.
- Balconies and rooftop: Painted metal railings, panels, and canopies.
- Apartment doors (balcony) and windows: Vinyl-clad metal with insulated glass. (Endurance Series or equivalent.) Color: Silver. (See sheet 39)
- Podium windows and entry: Commercial, metal-framed storefront with clear glass. [Staff note: Recommend condition that the glass will be clear at the first and second floors, primarily at the JPA elevation. Re: *clear* glass, refer to the attached August 2018 memo.]
- Canopy at podium entry: Metal, painted, to match storefront frames.
- Roof: Flat roof behind parapet. Possible *green roof*. (See sheet 16)

Landscaping:

- Plantings: (all on City tree list)
    - Kentucky Coffeetree (within beds of Appalachian Sedge)
    - Alleghany Serviceberry
    - Common Sassafras
    - Washington Hawthorn
    - Blackgum
- Landscape/terrace walls: Concrete, buff color. (Note: Existing low walls at the JPA sidewalk-- stone and stacked block-- to remain.)
- Side yard retaining walls: Concrete, buff color. If required, railings will be painted metal, sim to balcony railings. [Staff note: See comments below re: visibility of the retaining walls.]
- Paving: Concrete block pavers.
- Possible linear bio-filter areas at side yards. (See sheet 16)

Site Lighting:

- Exterior lighting is not indicated. Staff recommends a condition that the lamping for exterior lighting be dimmable, have a Color Temperature not exceeding 3,000K, and a Color Rendering Index not less than 80, preferably not less than 90. Also, to prevent bright light

and glare emanating from the garage entrance, lamping for the garage [interior] lights will comply with the above. Additionally, should there be concerns expressed later related to glare, the owner will work with NDS to find a reasonable solution. (Note: Compliance with the lamping requirements will be determined during review of the site plan and review of the building permit application.)

Design:
The design is generally consistent with the guidelines relative to architectural design, form, and style, relative to building placement, materiality, and color palette, and relative to streetscape, landscape, and site design.

The height [established by SUP] is consistent with the trend of recently constructed/approved buildings on JPA to be taller than older structures (four to seven stories versus two; 1709 JPA will be eight stories), to have larger footprints (covering approx. 70% of a lot vs 35%; 1709 JPA footprint will be 75%), and to have reduced front setbacks (26-ft versus 44-ft; 1709 JPA will be 18-ft). Side yard setbacks and spacing between buildings along this section of JPA vary widely (14-ft to 58-ft), so there is no typical dimension, nor an emerging trend from recent construction. [Note: The above from a general comparison of 23 nearby buildings on JPA. 16 constructed between 1940 and 1999; seven built or approved since 2001]

The design features variation in materiality and color palette (brick, metal panels, canopies and railings, doors and windows), an articulated façade (projecting balconies, stepbacks at the third and eighth floors), and street-level landscaping and hardscaping that mitigate the perception and visual impact of the building's height, mass, and scale.

From back to front (Montebello Circle to JPA) the grade is steep, dropping over 50-ft within the parcel's 100-ft depth. As a result, the side yards feature tall, concrete retaining walls. From street-level they are obscured by landscaping and limited sightlines; from elsewhere on JPA they are generally obscured by the trees, the building, and the topography. However, if the ERB feels further visual mitigation is necessary, specifically of the rear wall segments--the *back* walls, not the *sides*--some or all of the following might be considered:

- At-grade, above the rear wall segments plant a cascading plant suitable for that location, with a condition the plants are maintained and do not encroach onto the building walls.
- Construct the walls with textured and/or tinted concrete.
- At the side terraces, closer to JPA, plant hedges or install lattice screening.

Note: Because the retaining walls at the sides follow the parcel boundary, at-grade plantings are not practicable. Additionally, to meet code requirements, the retaining walls will either be poured to the necessary height above grade or capped with railings of the necessary height. (See note on sheet 40 of the submittal.)

The on-site parking will be concealed within the building, a solution consistent with the design guidelines. While the entrance to the parking garage is a prominent element of the primary façade, this is the only viable location.

Public Comments Received

No public comments regarding this CoA request have been received to-date.

Staff Recommendation

Staff finds the proposed improvements are appropriate and recommends approval of the CoA.

Staff concurs with the applicant's comments:

- *Exterior material selections are predominantly brick and metal. This is consistent with other buildings along the JPA corridor. The color palette falls in a compatible range. Building massing is varied, not monolithic. The scale evident in fenestration, entrances, site steps, balconies and railings is appropriate for this district*
- *The building height is similar to multiple nearby structures along the corridor. [1725 JPA, 1815 JPA, and 1800 JPA are five to nine stories tall.] Mass and form of the proposed building is varied. Multiple walks and plazas provide usable spaces, traversable by visitors and passers-by. Street trees will provide screening, shade and beauty. The dimensions and arrangements of windows, openings and entries are consistent with neighboring apartment buildings.*
- *The proposed pedestrian experience along JPA represents a significant improvement over streetscapes found elsewhere on the corridor. The existing sidewalk will be refurbished, maintaining its current width. An elevated crosswalk at the underbuilding parking entry will keep the sidewalk relatively level for the full width of the parcel. On site, an easily accessible plaza adjacent to the sidewalk will give pedestrians a kind of wayside where they can relax and socialize in the shade and beauty of new plantings.*

Attached is a comprehensive review of the design guidelines, reflecting both the applicant's and staff's comments. Also, link below to the design staff's comments from the SUP request. Those comments address issues related to height, massing, and scale.

Suggested Motion

Approval: Having considered the standards set forth within the City's Entrance Corridor Design Guidelines, I move to find that the proposed design for 1709 Jefferson Park Avenue is consistent with the Guidelines and compatible with the goals of this Entrance Corridor, and that the ERB approves the Certificate of Appropriateness application as submitted, with the following conditions of approval:

- Glass at the first and second floor doors/windows will be clear, a VLT not less than 70%.
- New railings, if required at site walls, will match the metal rail at the balconies.
- All exterior lighting and all interior garage lighting visible at the garage entrance will have lamping that is dimmable, has a Color Temperature not exceeding 3,000K, and has a Color Rendering Index not less than 80, preferably not less than 90. Additionally, the

owner will address any reasonable public complaints about light glare by either dimming the lamp or replacing the lamps/fixtures.
- Dumpsters and trash and/or recycling bins to be located within the designated storage area and pulled to the curb only on collection days. The walls of the designated enclosure shall be a minimum 5-ft in height.
- Any ground-level mechanical equipment and/or utility boxes will be appropriately screened. That screening will be subject to approval by design staff and must be memorialized as an amendment to the site plan.
- Meters and panel boxes for utility, communications, and cable connections will be located preferably within the garage; if not, then in non-prominent locations on the side elevations only and appropriately screened. That screening will be subject to approval by design staff and must be memorialized as an amendment to the site plan.

Alternate Motions

Deferral: I move to defer [or, *to accept the applicant's request to defer*] the Entrance Corridor Certificate of Appropriateness application for 1709 Jefferson Park Avenue.

Denial: Having considered the standards set forth within the City's Entrance Corridor Design Guidelines, I move to find that the proposed design for 1709 Jefferson Park Avenue is not consistent with the Guidelines and is not compatible with the goals of this Entrance Corridor, and that for the following reason(s) the ERB denies the Certificate of Appropriateness application as submitted: [...]

Attachments

1. Mitchell/Matthews Architects & Planners drawings for 1709 Jefferson Park Avenue Entrance Corridor Review Application, dated October 17, 2023.
2. EC design guidelines re: 1709 Jefferson Park Avenue request. Applicant and staff comments.
3. August 2018 memo re: clear glass.

Links

Sept 12, 2023 ERB Review of Special Use Permit Request for 1709 JPA. (See *agenda packet*.)
https://charlottesvilleva.portal.civicclerk.com/event/1744/files

Oct 2, 2023 City Council staff report for Special Use Permit for 1709 JPA
CC memo – October 2 2023 SUP for 1709 JPA

Oct 2, 2023 approved SUP/Council Resolution. (See pages 3 – 5.)
https://weblink.charlottesville.org/public/0/edoc/806253/20231002Oct02_cert.pdf

Appendix: Recently constructed buildings near 1709 JPA. (* Not within the EC; however, they reflect the emerging architectural form and scale along JPA.)



1718 JPA* (built 2000)



1815 JPA (built 2001)



1707 JPA (built 2007)



1620 JPA* (built 2007)



1600 JPA* (built 2015)



1725 JPA (built 2020)

1709 JPA

ENTRANCE REVIEW BOARD APPLICATION

MITCHELL MATTHEWS ARCHITECTS

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#R-23-132

RESOLUTION
Granting a Special Use Permit (SUP) for Property Located at 1709 Jefferson Park Avenue

WHEREAS Neighborhood Investments, LLC ("Landowner") is the owner of certain land identified within City real estate assessment records by Parcel Identification number 160010100 respectively, currently addressed as "1709 Jefferson Park Avenue" (collectively referred to as the "Property"), and the Landowner, through its authorized representative, proposes to redevelop the Property to accommodate a 27-unit multifamily building with underground parking, and to facilitate this redevelopment the Landowner seeks this Special Use Permit to increase density to 87 DUA, increase height from a by-right 45 feet to 70 feet per Section 34-53(b)(3); modify front yard requirements from the average calculations under Section 34-353(b)(1) to a set 18 feet along Jefferson Park Avenue and 25 feet along Montebello Circle per Section 34-162; modify the side yard requirements of 17.5 feet under Section 34-353(a) to 5 feet per Section 34-162; reduce the minimum distance between the facade of the multifamily building and the boundary of any low-density residential district from 75 feet to 58 feet under Section 34-353(b)(4) per Section 34-162; modify the yard screening requirement from 25 feet width of S-3 screening along Montebello Circle to 17 feet S-1 screening for 50% of the frontage along Montebello Circle under Section 34-353(b)(4) per Section 34-162; and reduction of on-site parking from 38 spaces under 34-986 to 19 spaces per Section 34-162.

WHEREAS the Applicant seeks a Special Use Permit under City Code Secs. 34-420, 34-353(3), and 34-162(a) which allow the requested increased residential density, additional height, and modifications to parking and setbacks for the Project; and

WHEREAS the Property is located within the R-3 zoning district, a district in which, according to the Use Matrix set forth within City Code §34-420, the Project as proposed may be authorized by City Council by means of a special use permit; and

WHEREAS the Project is described in more detail within the Landowner's application materials submitted in connection with SP23-00005, as required by City Code §34-158 (collectively, the "Application Materials"); and

WHEREAS, the Planning Commission and City Council conducted a joint public hearing, after notice and advertisement as required by law, on September 12, 2023; and

WHEREAS the Planning Commission considered and recommended approval of this application at their September 12, 2023 meeting; and

WHEREAS upon consideration of the Planning Commission's recommendation, the City Staff Report, comments received at the public hearing, as well as the factors set forth within Sec. 34-157 of the City's Zoning Ordinance, this Council finds and determines that granting the proposed Special Use subject to suitable regulations and safeguards would serve the public necessity, convenience, general welfare or good zoning practice; now, therefore,

BE IT RESOLVED by the Council for the City of Charlottesville, Virginia, **THAT** a Special Use Permit is hereby granted to allow the Project to be established on the Property, subject to the following conditions:

1) Per Section 34-420: Permitted Residential density up to 87 Dwelling Units per Acre (DUA) on the Subject Property.
2) Per Section 34-353(b)(3): Allow building height of seventy (70) feet on the Subject Property.
3) Per Section 34-162: Alter the Jefferson Park Avenue yard setback requirement to eighteen (18) feet.
4) Per Section 34-162: Alter the Montebello Circle yard setback requirement to twenty-five (25) feet.
5) Per Section 34-162: Alter the side yard setbacks to five (5) feet.
6) Per Section 34-162: Alter the landscape buffer within the Montebello Circle yard to eighteen (18) feet wide along fifty (50) percent of the liner frontage. Landscape buffer shall be S-1 as defined in Zoning Section 34-871.
7) Per Section 34-162: Reduce the minimum distance between the facade of the multifamily building and the boundary of any low-density residential district to fifty-eight (58) feet.
8) Per Section 34-162: Alter the on-site minimum parking requirement to nineteen (19) vehicular parking spaces. In addition, the applicant will work with the City's Traffic Engineer to develop a Master Parking Plan for the site. This plan will be kept on file with the City and may be updated or altered from time to time with authorization of the City's Traffic Engineer. The plan shall indicate how the developer will distribute available parking spots on site, how potential residents are informed of their parking opportunities, and any possible offsite parking arrangements for residents, etc.…
9) Per 34-157(b): On-site vehicular parking shall not be permitted within the Montebello Circle yard(s) or right-of-way. Nothing within this condition shall prevent loading and unloading within the Montebello Circle yard or designating a space for such activities so long as condition #6 is met.
10) Per 34-157(b): The applicant shall provide a minimum of 2,400 square feet of Tree Canopy as illustrated in the application materials (sheet 14).
11) Per 34-157(b): The applicant shall implement measures on the City's Low Impact Development (LID) worksheet to achieve a minimum of 10 points. The applicant's checklist (page 8 of the application and sheet 36 of the application materials) notes a combination of shared parking, bioretention, and/or green rooftop; however, other measures from the checklist may be substituted with approval from City Engineering if the measures indicated become impractical as the project develops.
12) 34-157(b): The applicant shall construct a continuous raised sidewalk along the frontage of Jefferson Park Avenue to ensure pedestrian safety crossing the vehicular entrance to the site. Nothing within this condition relieves the applicant from adhering to standards found within the City Standard and Design Manual (SADM).
13) 34-157(b): The applicant shall provide short term bicycle and/or micromobility parking within the Montebello Circle yard. These elements must be located on private property and not within the City right-of-way.

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14) 34-157(b): The applicant shall provide stepbacks that are substantially consistent with the application materials. Specifically, sheet 18 of the Mitchell Matthews drawings, *1709 JPA Progress Draft*, dated July 18, 2023.

	Aye	**No**
Payne	____	_x__
Pinkston	_x__	____
Puryear	____	_x__
Snook	_x__	____
Wade	_x__	____

Approved by Council
October 2, 2023

Kyna Thomas

Kyna Thomas, MMC
Clerk of Council

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Exterior materials are brick and metal, both durable. Red brick is consistent with other buildings in the city and along the corridor. Building massing is varied, not monolithic. The scale-- evident in fenestration, entrances, site steps, balconies and railings-- is appropriate for this district.



Design for a Corridor Vision

A new entry plaza along JPA has the potential to enhance the public realm. Several large street trees and native plantings will bring color, shade and comfort to both the plaza and the adjacent sidewalk. This is a marked improvement over existing conditions.



Create an Inviting Public Realm

In its current state, the site has a rough, uninviting presence. Deteriorating pavement prevails, slopes are daunting, walks are meager and trees are all but absent. The existing building withdraws from JPA, and passersby have little to identify as a street wall or street edge. The proposed architecture and landscape will engage the streets and sidewalks with legible entries and much improved access.



Create a Sense of Place

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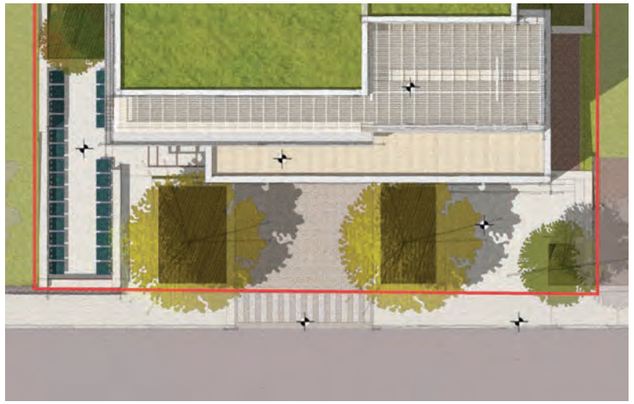
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Street Trees + Native Species

A varied selection of flora-- trees large and small in beds of understory plantings-- will enhance the building's edges and bring color, comfort and shelter. Plant selections prioritize native species, almost all recommended by Charlottesville's Tree Packet.



Avoid Excessive Curb Cuts



The proposed project substantially reduces the curb cuts on JPA. A single garage entry will replace two curb cuts that currently total almost 60' wide. At the new entry the pavement will be elevated to create a crossing surface for pedestrians level with the sidewalk.



Orient Building Facades to Front on the Corridor



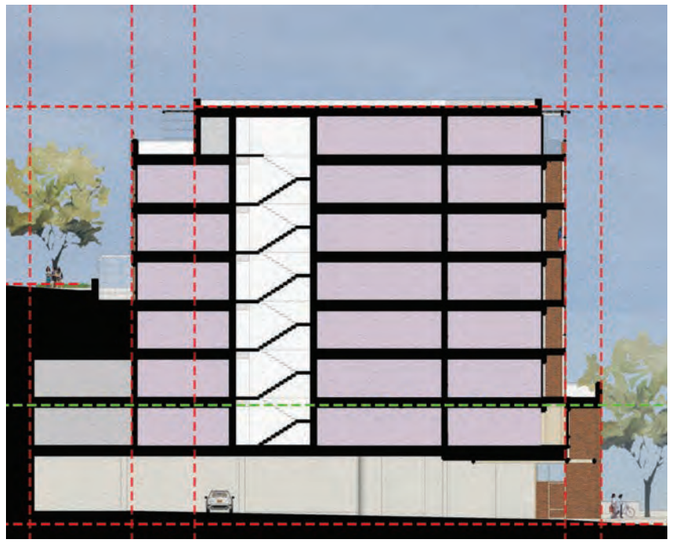
A prominent entry portal and adjacent plaza open onto Jefferson Park Avenue.

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ARCHITECTS & PLANNERS
434.979.7550

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Use Step Backs at Upper Stories



Step backs are used at both streets to help the upper story recede from view. The stepback is more significant at Montebello Circle, where nearby properties are not as tall as they are on JPA.

Use Varied Wall Surfaces
Avoid Large Expanses of Blank Walls



Wall surfaces do not extend for long stretches in the same plane. Balconies help subdivide masonry facades. Opaque, undifferentiated facades do not prevail.

Use Massing Reduction Techniques



A variety of massing reduction techniques are employed, among them step backs, variations in color and changes of materials.

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Openings with Traditional Vertical Proportions Preferred



Windows and doors are typically vertically proportioned.

Use Storefronts or Large Display Windows at Street Level



At the plaza along JPA storefront is used at the lobby level and in a student lounge directly above.

Use Material Changes to Improve Massing



Material and color changes are used on all building facades to improve massing.

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1709 JPA
Charlottesville VA
10 . 17 . 2023

AERIAL VIEW

All grades, counts and quantities are approximate and will change as design proceeds.

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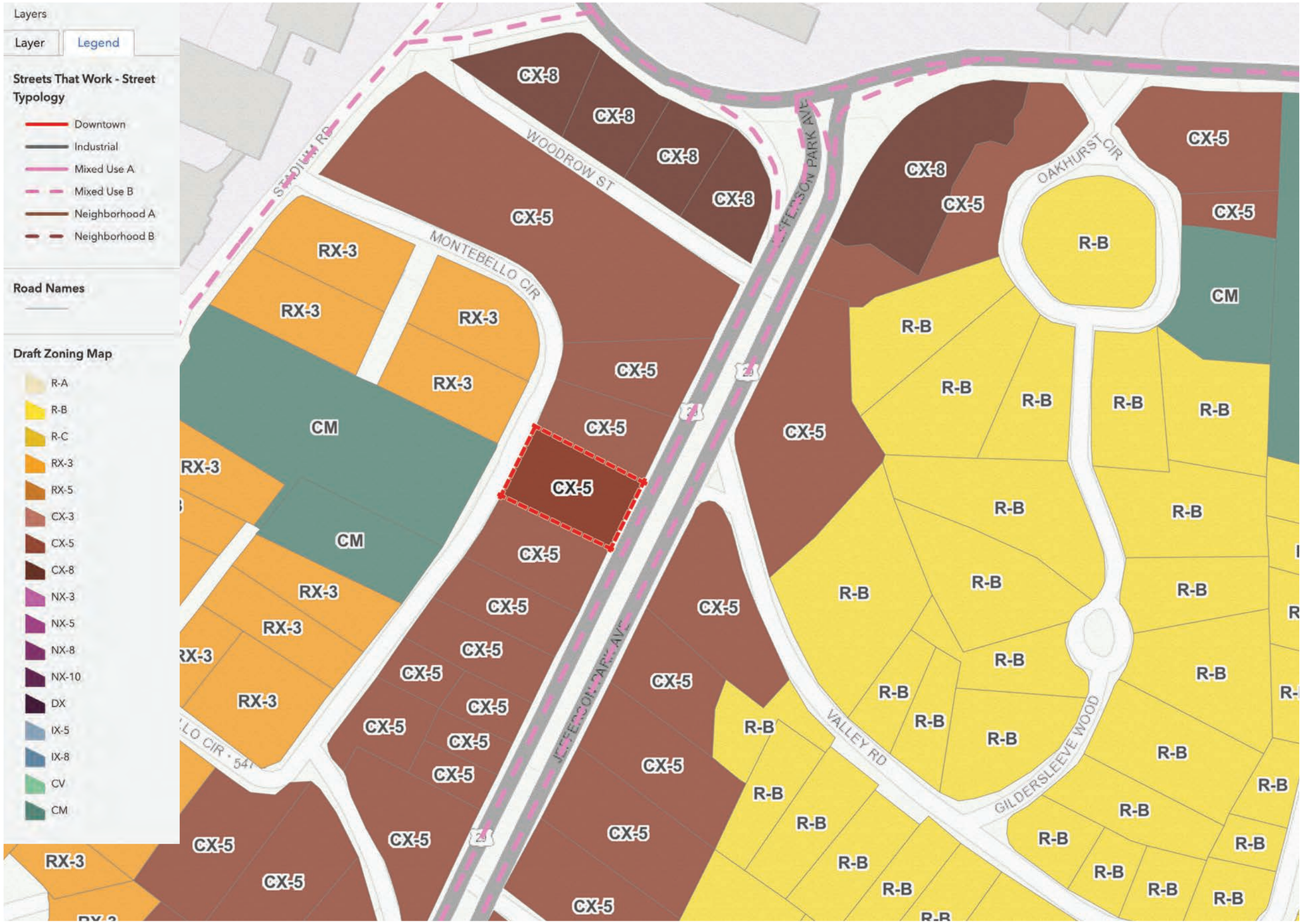


Location	**1709 Jefferson Park Ave**
Area	**0.311 acres** (13,547 SF)
Zone	**R-3**
Residential Use	**21 DUA** *(by right)* **22 - 87 DUA** *(by SUP)*
Parking	**1 space** *(two bedroom apartment or smaller)* **2 spaces** *(three or four bedroom apartment)*
Height	**45 feet** *(by right)* **80 feet** *(at 22-43 DUA by SUP)* **101 feet** *(at 44-87 DUA by SUP)*
Min. Yard (Front)	*average of existing front yards within 500 feet on either side of parcel*
Min. Yard (Side)	*1/4 of building height*
Overlays	**Entrance Corridor**

R-3
R-2
R-1
University Property

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Location	**1709 Jefferson Park Ave**
Area	**0.311 acres** (13,547 SF)
Zone	**CX-5**
Residential Use	**unlimited DUA**
Parking	**1 space** *(two bedroom apartment or smaller)* **2 spaces** *(three or four bedroom apartment)*
Height	**72 feet / 5 stories** *(by right)* **100 feet / 7 stories** *(bonus level)*
Min/Max Yard (Front)	**0’ / 10’**
Min. Yard (Side)	**0’**
Outdoor Amenity Space	**10%**
Overlays	**Entrance Corridor**

* *Requirements and classifications on this page **do not** reflect the zoning ordinance currently in effect. They are included to summarize forthcoming conditions outlined in the future zoning draft (module 1). While the draft may undergo further revisions before being adopted, we believe it reflects aspirations that align well with the city’s Comprehensive Plan.*

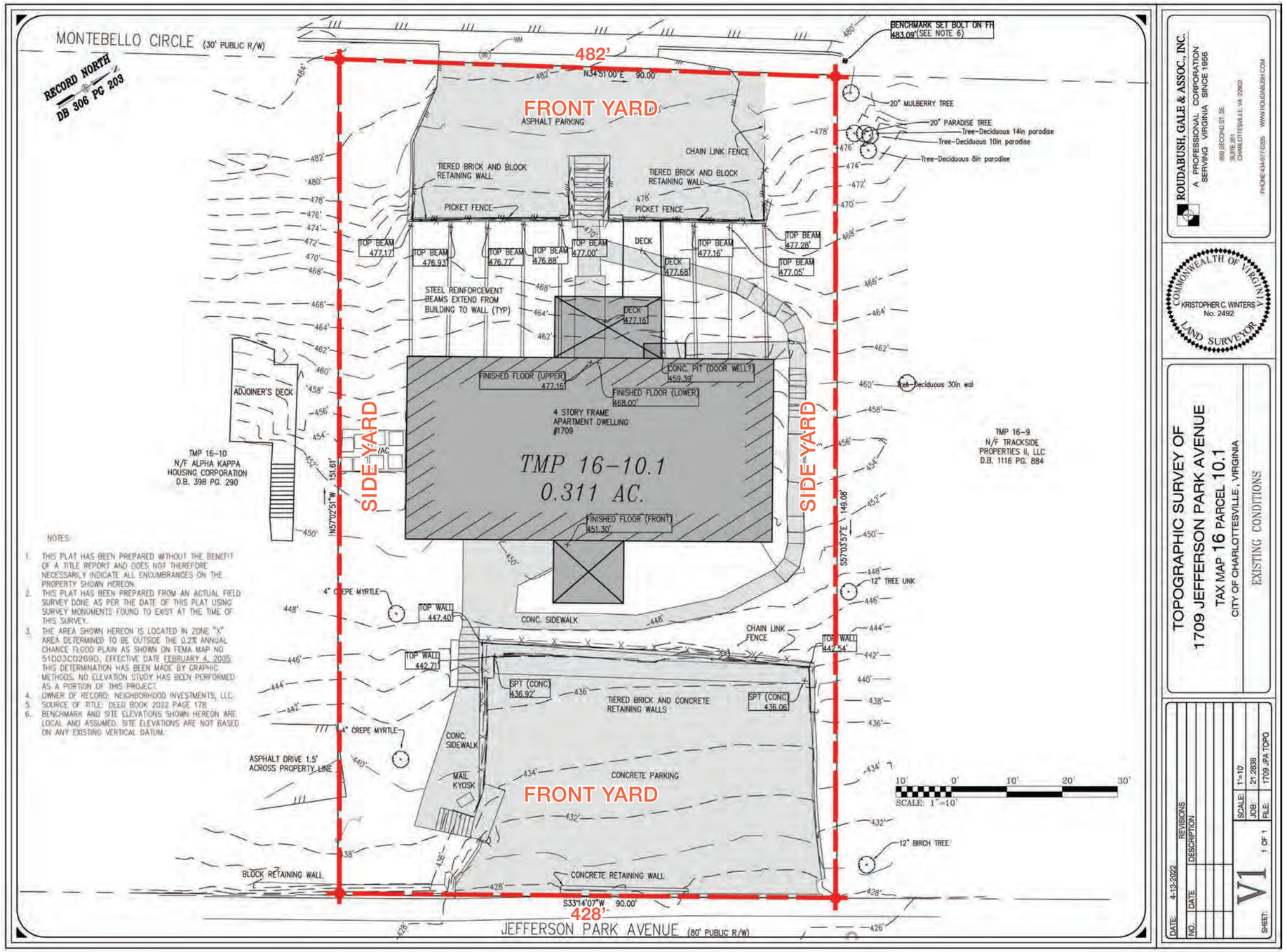
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DRAFT ZONING MAP (current proposal) *

All grades, counts and quantities are approximate and will change as design proceeds.

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The yard at Montebello is considerably higher than the yard at JPA. Along a distance of 150 feet the grade descends **54 feet**.

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1725 JPA



1723 JPA

1721 JPA

1719 JPA



1717 JPA



1715 JPA



1713 JPA



1707 JPA



1705 JPA



106 Stadium Road

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1620 JPA



1700 JPA



1708 JPA



1712 JPA



1714 JPA



1718 JPA

PROGRESS DRAFT

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1707 JPA



1713 JPA



210 Montebello



208 Montebello



206 Montebello



204 Montebello



1725 JPA



300 Montebello



205 Montebello



1700 Stadium Road



221 Montebello



225 Montebello

PRO
DRA



a *Gymnocladus Dioicus espresso (seedless Kentucky Coffeetree) - in bed of Appalachian Sedge*

b *Amelenchier Laevis (Allegheny Serviceberry) - in bed of creeping phlox*

c *Sassafras Albidum (Common Sassafras)*

d *Crataegus phaenopyrum (Washington Hawthorn)*

e *Nyssa Sylvatica (Blackgum) - in bed of Appalachian Sedge*

f *Green Roof (potential option to address stormwater quality/quantity)*

g *Linear Biofilter Area (potential option to address stormwater quality/quantity)*

1,347 sf minimum required tree canopy *(site area = 13,547 sf x 10%)*

2,400+ sf estimated proposed tree canopy at 10 years

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Gymnocladus Dioicus espresso (seedless Kentucky Coffeetree)



Nyssa Sylvatica (Blackgum)



Amelenchier Laevis (Allegheny Serviceberry)



Creeping Phlox



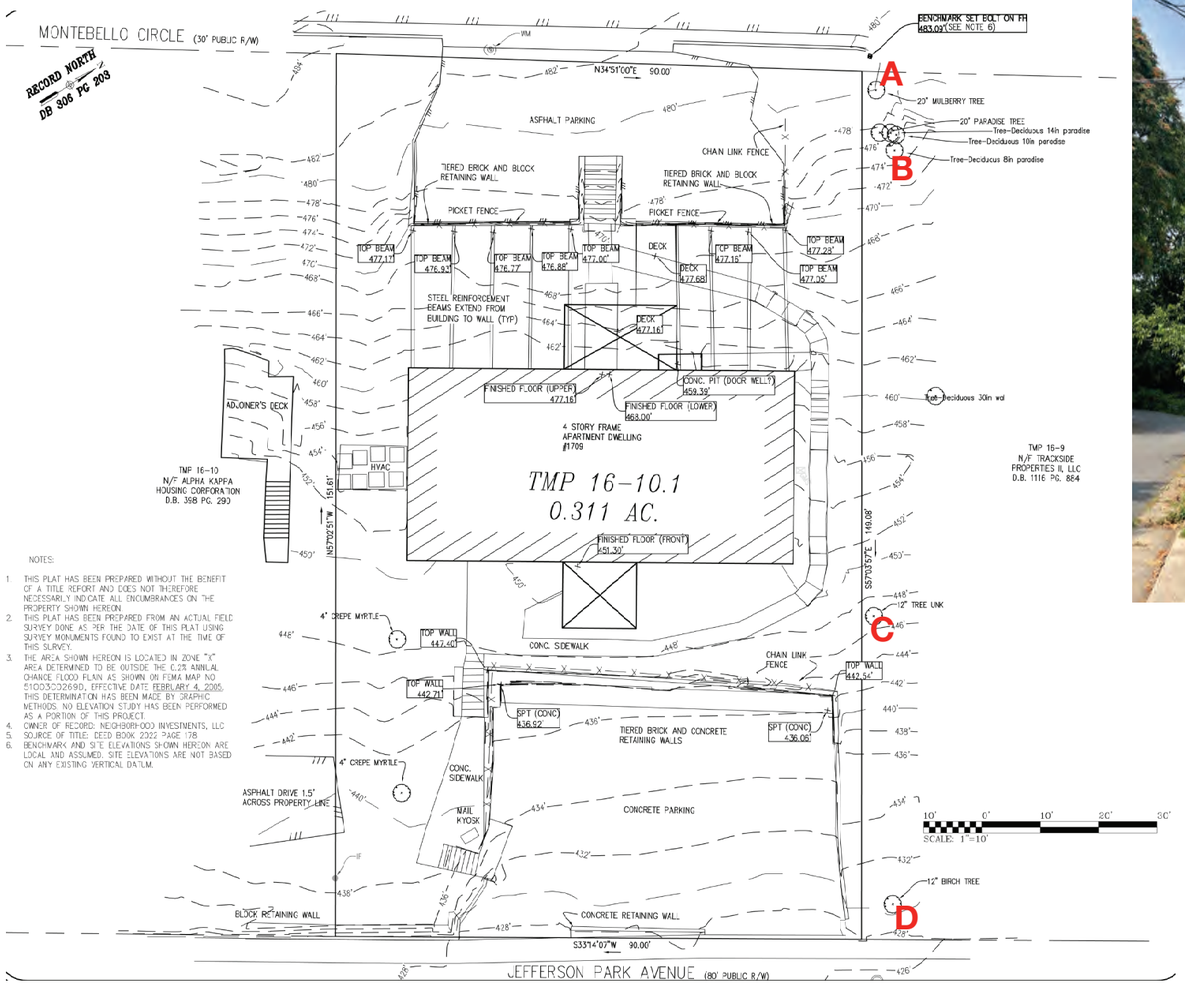
Appalachian Sedge



Sassafras Albidum (Common Sassafras)

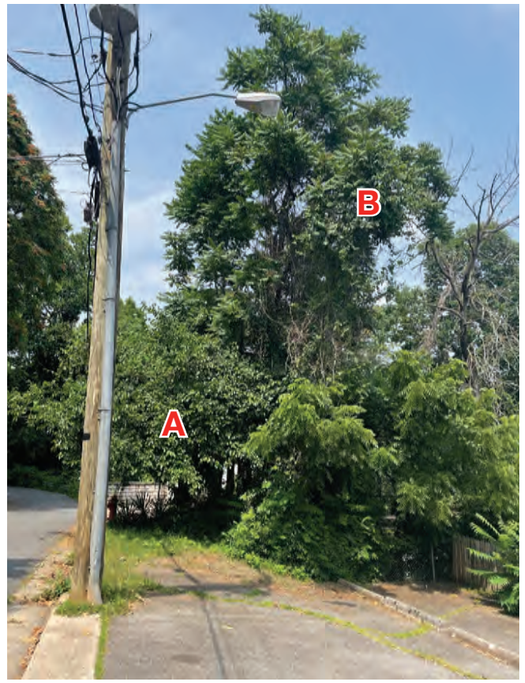
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NOTES:

1. THIS PLAT HAS BEEN PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND DOES NOT THEREFORE NECESSARILY INDICATE ALL ENCUMBRANCES ON THE PROPERTY SHOWN HEREON.
2. THIS PLAT HAS BEEN PREPARED FROM AN ACTUAL FIELD SURVEY DONE AS PER THE DATE OF THIS PLAT USING SURVEY MONUMENTS FOUND TO EXIST AT THE TIME OF THIS SURVEY.
3. THE AREA SHOWN HEREON IS LOCATED IN ZONE "X" AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN AS SHOWN ON FEMA MAP NO. 51003C0226D, EFFECTIVE DATE FEBRUARY 4, 2005. THIS DETERMINATION HAS BEEN MADE BY GRAPHIC METHODS. NO ELEVATION STUDY HAS BEEN PERFORMED AS A PORTION OF THIS PROJECT.
4. OWNER OF RECORD: NEIGHBORHOOD INVESTMENTS, LLC
5. SOURCE OF TITLE: DEED BOOK 2022 PAGE 178
6. BENCHMARK AND SITE ELEVATIONS SHOWN HEREON ARE LOCAL AND ASSUMED. SITE ELEVATIONS ARE NOT BASED ON ANY EXISTING VERTICAL DATUM.



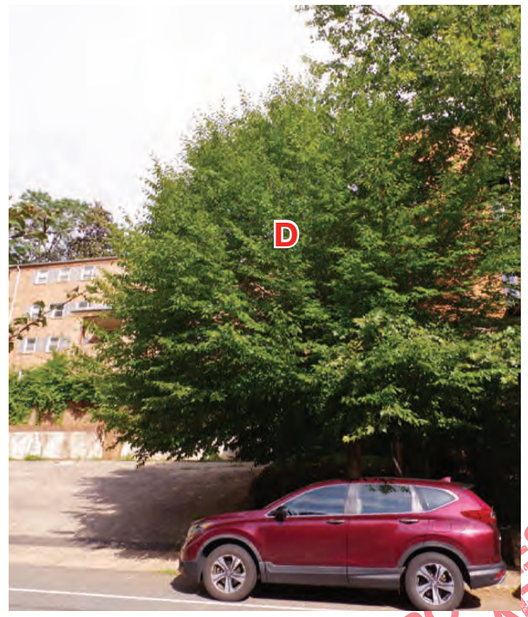
Mulberry tree + cluster of Paradise trees



Unidentified dead tree covered in vines

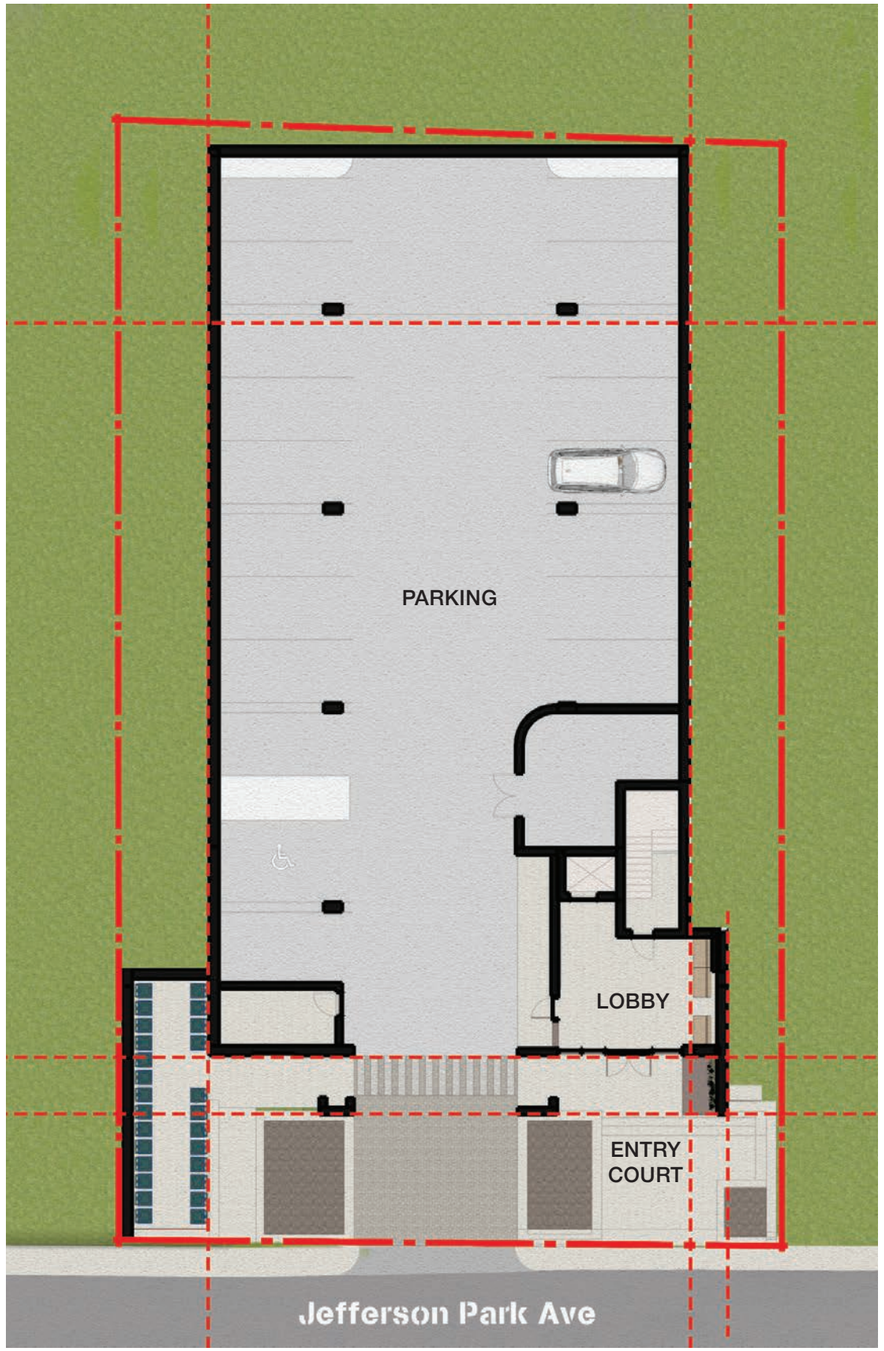
None of the trees depicted here is on the project property, but each is close to the boundary. The owner will take precautions to minimize disturbance to the birch tree near JPA. While we do not anticipate construction work will endanger other nearby trees, these are either already dead or are not regarded as valued specimens. Mulberry trees and paradise trees are not on the city's recommended trees list. Paradise trees are considered invasive and detrimental.

On the project property, only a handful of small, relatively young ornamental trees will be removed to allow construction. None are street trees.

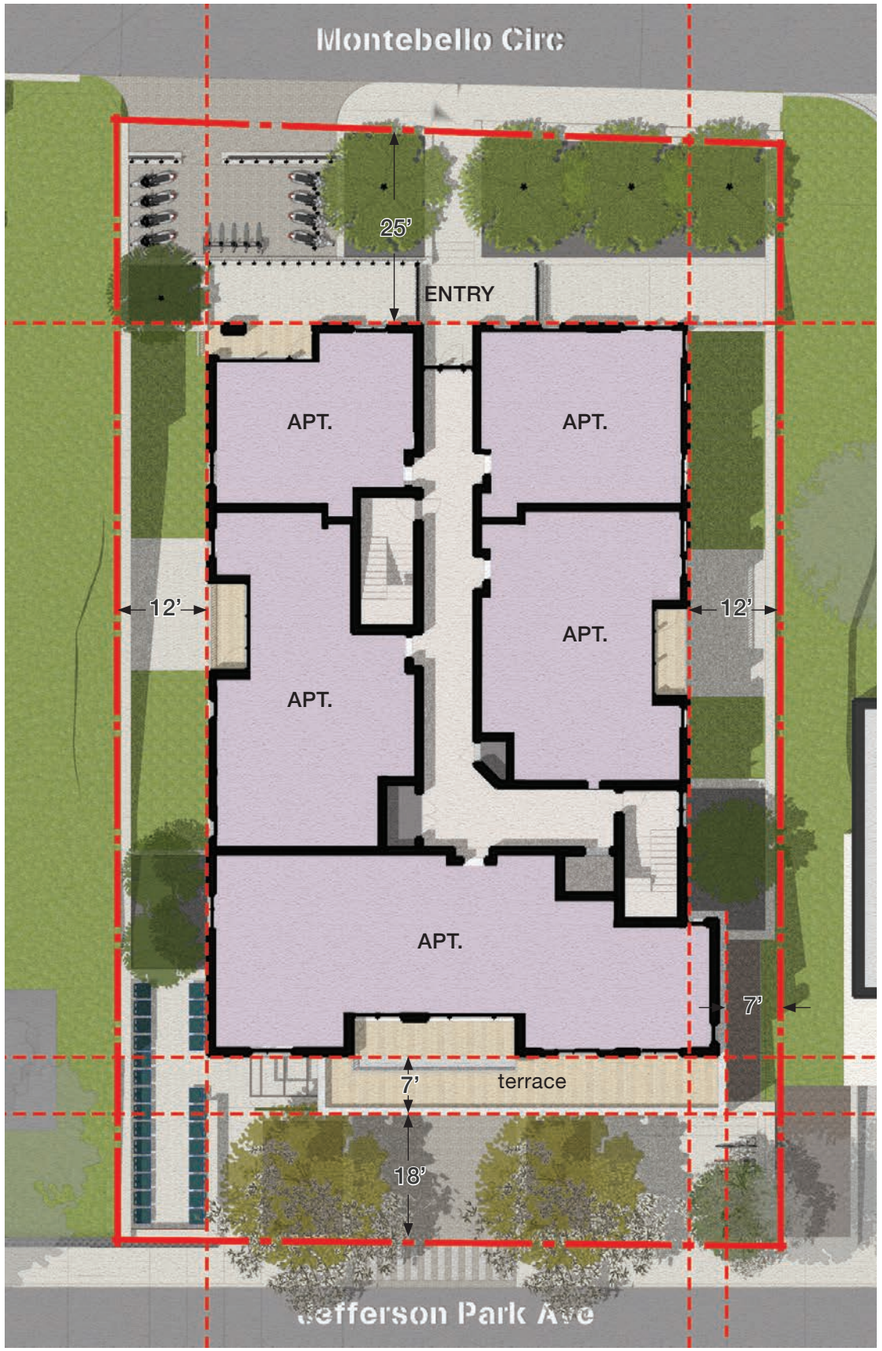


Birch tree

PROCESS DRAFT



STREET LEVEL at **JPA**

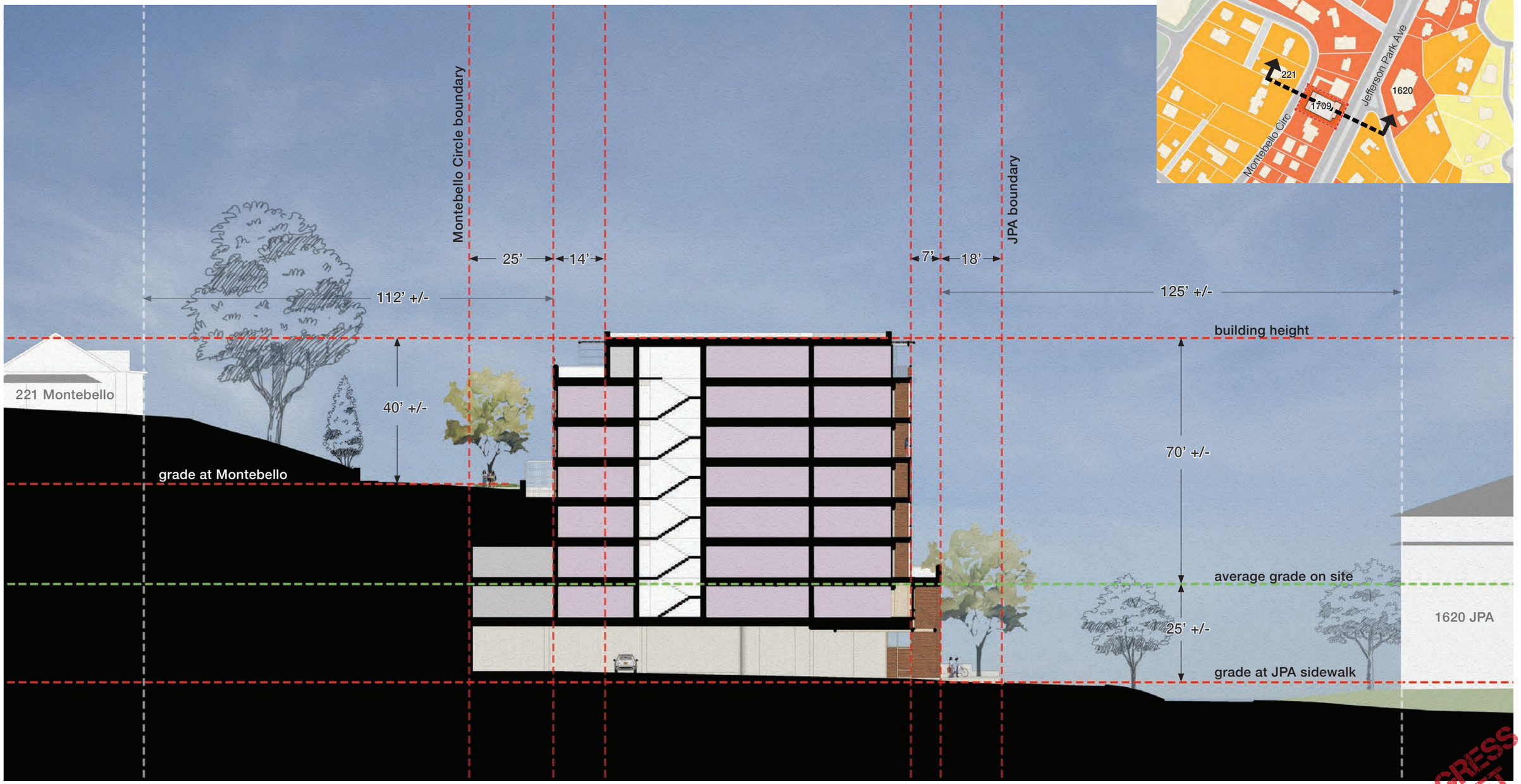


STREET LEVEL at **Montebello**

Location	**1709 Jefferson Park Ave**
Area	**0.311 acres** (13,547 SF)
Zone	**R-3**
Residential Use	**26 - 27 apartments** *(84 - 87 DUA)*
Parking	**22 spaces on site** *(less than 50% reduction of the 38 spaces required by ordinance)*
Height	**70 feet**
Front Yard at JPA	**18 feet**
Front Yard at Montebello	**25 feet**
Side Yard	**5 feet** *(The great majority of the building will be 12'+ from the side boundaries. Only the east corner mass at JPA will be closer.)*
Stepbacks/ transitions at uppermost story	**at JPA, 7 feet** **at Montebello, 14 feet**
Overlays	**Entrance Corridor**

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1709 JPA
Charlottesville VA
10 . 17 . 2023

BUILDING SECTION

All grades, counts and quantities are approximate and will change as design proceeds.

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ARCHITECTS & PLANNERS
434.979.7550
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BUILDING ELEVATION - JPA frontage

All grades, counts and quantities are approximate and will change as design proceeds.

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1709 JPA
Charlottesville VA
10 . 17 . 2023

BUILDING ELEVATION - NE side

All grades, counts and quantities are approximate and will change as design proceeds.

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BUILDING ELEVATION - Montebello frontage

All grades, counts and quantities are approximate and will change as design proceeds.

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BUILDING ELEVATION - SW side

All grades, counts and quantities are approximate and will change as design proceeds.

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on JPA looking SW

All grades, counts and quantities are approximate and will change as design proceeds.

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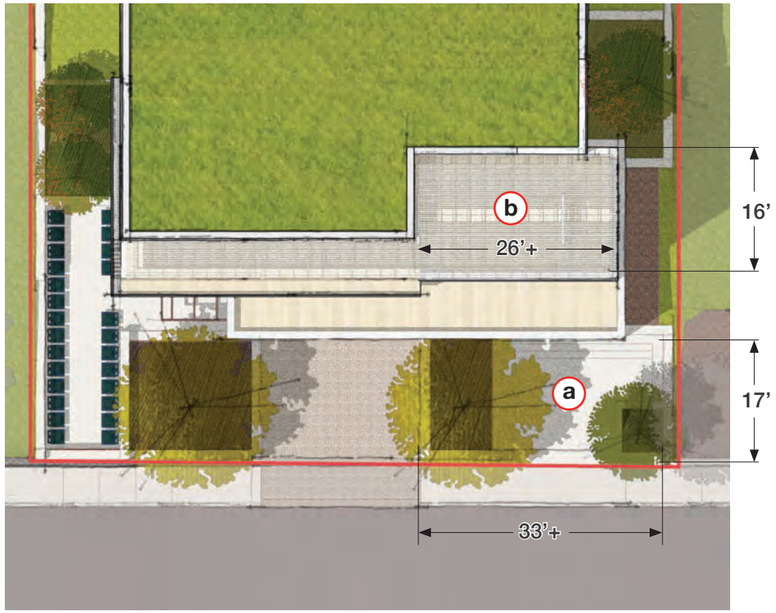


PROGRESS DRAFT

on JPA looking SW

All grades, counts and quantities are approximate and will change as design proceeds.

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a JPA Entry Plaza
pedestrian outdoor amenity space
(561 sf x 2 = ***1,122 sf*** *toward required outdoor amenity space)*

b Roof Deck
common outdoor amenity space
*(****416 sf*** *toward required outdoor amenity space)*

1,347 sf *minimum required outdoor amentity space (site area = 13,547 sf x 10%)*

1,538 sf *outdoor amenity space proposed (JPA front yard only)*

DRAFT RULES FOR ZONING DISTRICT

ii. The required outdoor amenity space must meet the standards of either *Sec. XX Common Outdoor Amenity Space* or *Sec. XX Pedestrian Outdoor Amenity Space*.



iii. Outdoor amenity space may not be surrounded by walls for more than 2/3 of its perimeter.

iv. Each outdoor amenity space must have a minimum area of 400 square feet, and no horizontal dimension of less than 15 feet, measured perpendicular to any boundary of the space.

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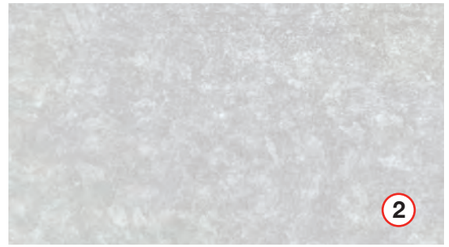


Triangle Cape Cod (or similar)

OR



Meridian Brick - mix of Red Wire-cut Flashed & Flat Set (or similar)



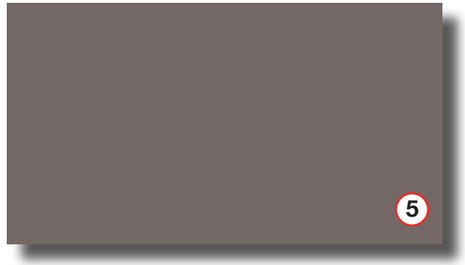
Metal Finish at Wall Panels & Balconies
(anodized aluminum or textured gray or similar)



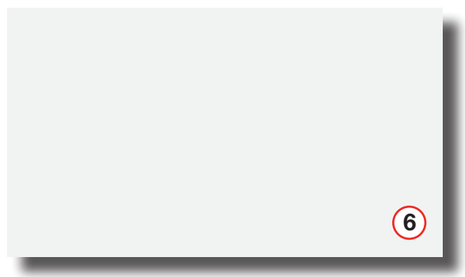
Wood Soffits
(white oak, black locust or similar)



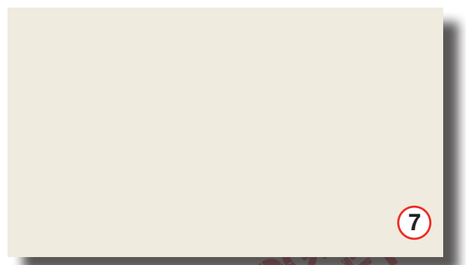
Gray Window Color



Metal Color at JPA Storefront/Canopy
(Pantone 410C or similar)



Metal Color at Roof Canopies
(HEX color FCFBFC or similar)

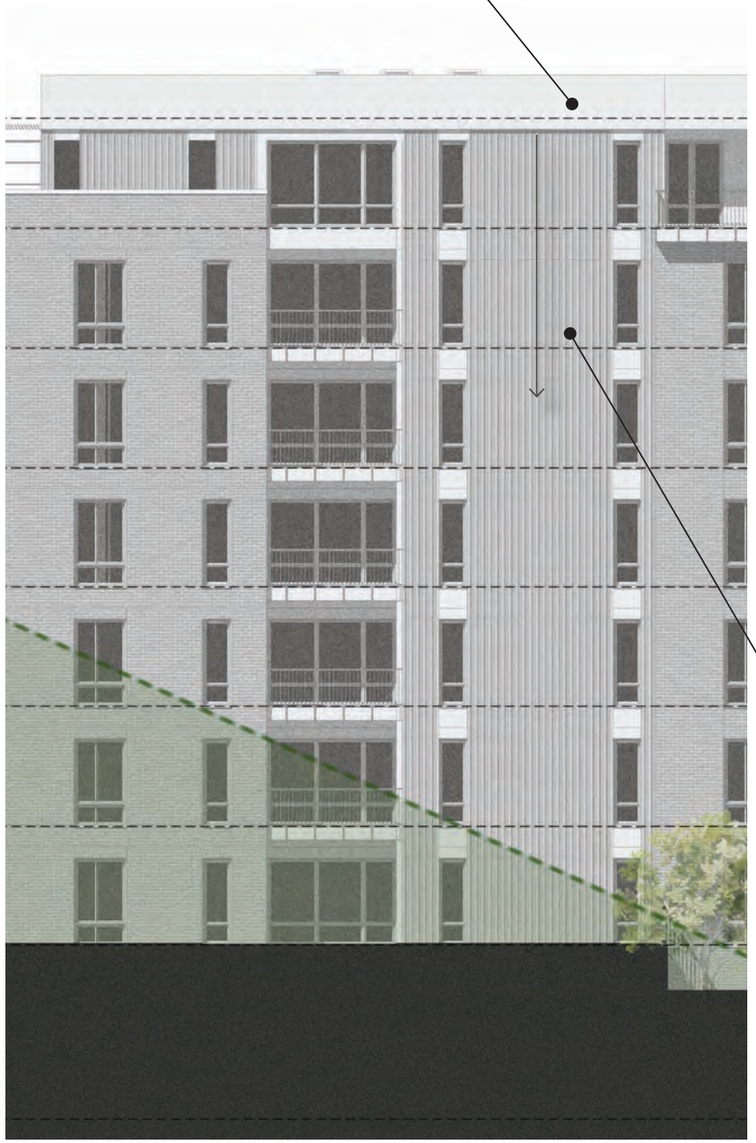


Concrete Walk & Site Wall Color
(HEX color F3EFEO or similar)

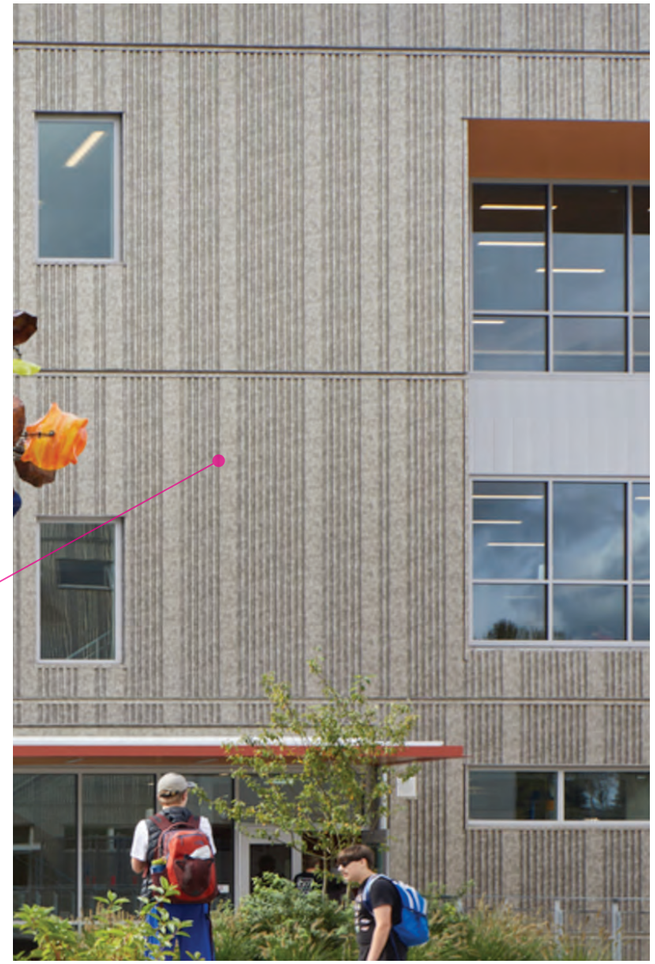
PROGRESS PRINT

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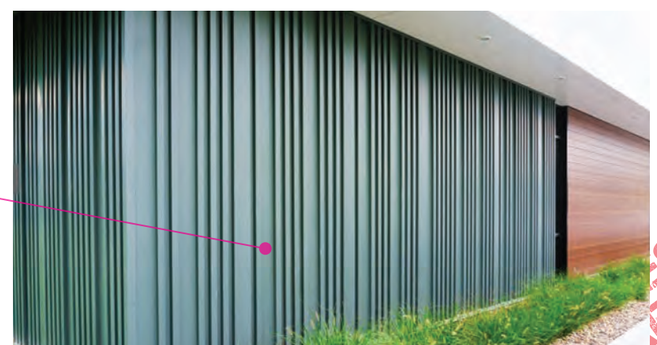
Metal paneling at the parapet above the window heads will be flat and smooth with minimal joints







Typical metal paneling below the parapet will have a profile similar to the precedent images here-- vertically oriented ribs with semi-irregular spacing. The metal color will be close to the image on the upper right.



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Concrete Paving
(Charlestone paver by Belgard or stained and scored concrete or similar)





Scooter / Escooter Docks
(something like those pictured for orderly scooter parking)

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ENDURANCE SERIES



Endurance Window

Commercial Mid-Rise Windows

Strength & Performance

- Superior product performance developed and tested in the lab, proven in the field
- Commercial grade metal reinforcements interconnected throughout window assembly
- Vinyl frames deliver consistent thermal performance and minimize condensation
- Windows are assembled with continuous frames to avoid risky mulls

Water Resistance

- Panel level design minimizes water intrusion and air infiltration/ex-filtration
- Fusion welded corners provide environmental comfort and protect against leaks
- Integral nailfin options for ease of installation and water barrier

Design & Security

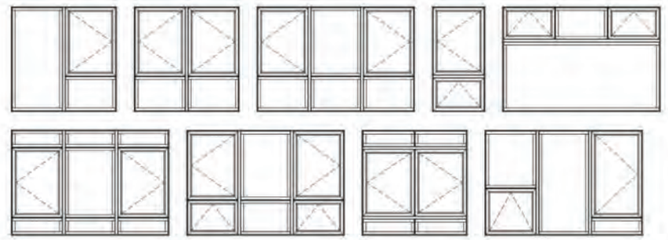
- Durable, co-extruded acrylic exterior finishes allow for color diversity
- Available multiple locking points ensure security and compress the triple weather seal for superior air and water resistance
- Easy to operate hardware for egress and fair housing requirements
- Heavily reinforced intersecting "T-Bar" system allows for design freedom with superior structural, air, water, and thermal performance



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Common Configurations:



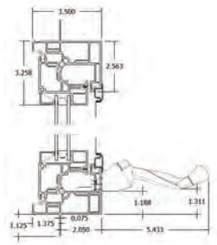
Options:

- Casement
- Awning
- Fixed
- Single Hung
- Horizontal Slider

Sill Details:

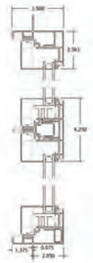
Casement/Awning
3 1/2" Frame Depth

- Up to CW PG-70
- U values as low as .18
- Sound Rating as high as STC 44/OITC 33



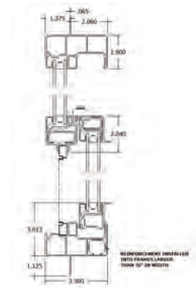
Fixed Window
3 1/2" Frame Depth

- Up to CW PG-40
- U values as low as .16
- Sound Rating as high as STC 44/OITC 33



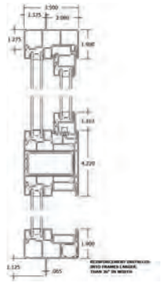
Single Hung
3 1/2" Frame Depth

- Up to LC-PG55
- U values as low as .22
- Sound Rating as high as STC 36/OITC 29



Horizontal Slider
3 1/2" Frame Depth

- Up to LC-PG50
- U values as low as .22
- Sound Rating as high as STC 36/OITC 29



Colors:

Base | *SuperCapSR**



SuperCapSR
Heat-Reflective Color Technology

*Printing limitations prevent exact color duplication. Contact your VPI representative for color samples.

ENDURANCE SERIES

Vinyl-clad windows with metal reinforcing and acrylic exterior finish

(these or a similar window to be used)

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Concrete site wall at side boundary (7)
(similar to what's illustrated here; typical of both sides)

Top of walls to be a combination of stepped and sloped. Where the top of wall is not 42" above adjacent grade, metal railings like those at balconies will be used to meet code.

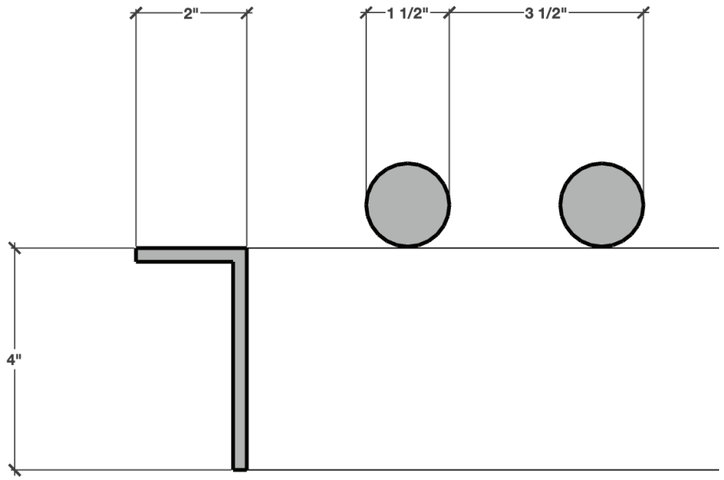


7

Concrete Walk & Site Wall Color
(HEX color F3EFEO or similar)

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Metal Canopies in powder coated finish

The same structures are to be used as screens around the moped & scooter corral.

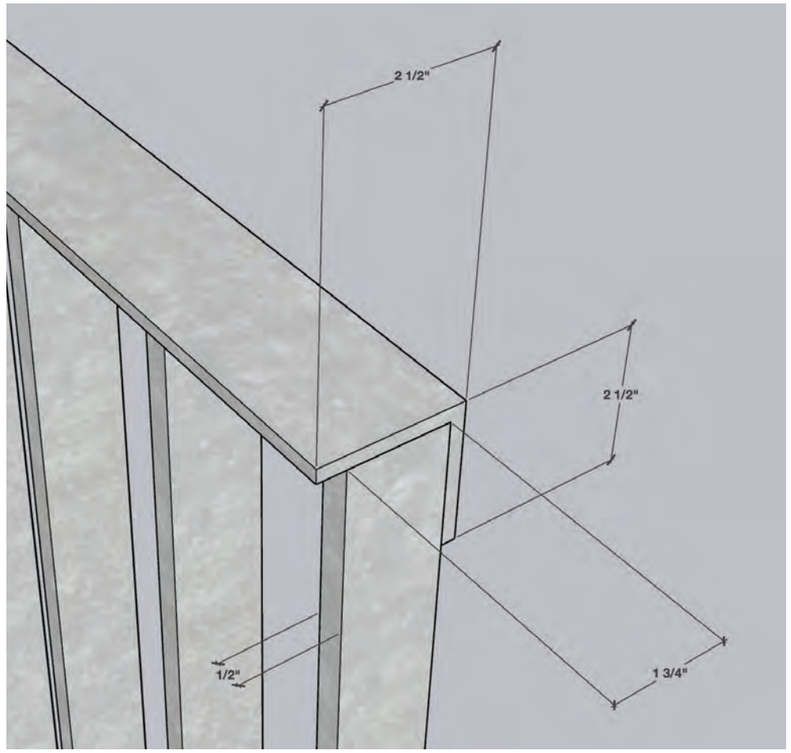


6

Metal Color at Roof Canopies
(HEX color FCFBFC or similar)

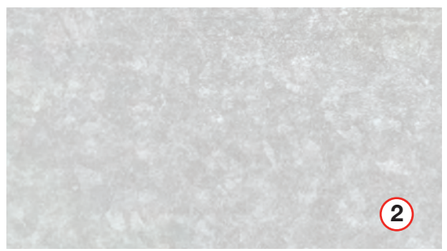
PROGRESS DRAFT

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Metal Railings in Anodized Aluminum Finish (or similar)

These railings are to be used at all balconies and at site retaining walls where necessary (except at scooter corral)





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APPENDIX

ERB GUIDELINES (DETAILED)

Full response to all guidelines

***Design for a Corridor Vision**: New building design should be compatible-- in massing, scale, materials and colors-- with neighboring structures that contribute to the overall quality of the corridor. Site designs should contain some common elements to provide continuity along the corridor. New development should compliment the city's character and respect those qualities that distinguish the city's built environment.*

Exterior material selections are predominantly brick and metal. This is consistent with other buildings along the JPA corridor. The color palette falls in a compatible range. Building massing is varied, not monolithic. The scale evident in fenestration, entrances, site steps, balconies and railings is appropriate for this district. The landscape design along JPA and Montebello Circle-- consisting of new walks, small plazas and plantings-- has the potential to enhance the corridor's character, creating opportunities for pedestrian comfort and interaction in a shaded environment that is a marked improvement over other student housing that fronts this district.

***Preserve History**: Preserve historic buildings and distinctive architecture from earlier periods. Encourage contemporary design that is respectful of historic building design.*

There are no historically designated buildings on this site. The property is in an Entrance Corridor, but it does not fall within any of the city's Historic Districts.

***Facilitate Pedestrian Access**: Encourage compact, walkable developments. Design pedestrian connections from sidewalk and car to buildings, between buildings and between corridor properties and adjacent residential areas.*

The proposed pedestrian experience along JPA represents a significant improvement over streetscapes found elsewhere on the corridor. The existing sidewalk will be refurbished, maintaining its current width. An elevated crosswalk at the underbuilding parking entry will keep the sidewalk relatively level for the full width of the parcel. On site, an easily accessible plaza adjacent to the sidewalk will give pedestrians a kind of wayside where they can relax and socialize in the shade and beauty of new plantings. In the Montebello front yard 18' deep planting beds will allow space for 4 medium heigh street trees and a new paved walk will give tenants and their guests access to the building.

***Maintain Human Scale in Buildings and Spaces**: Consider the impact of building design-- especially height, mass, complexity of form, architectural details and exterior spaces-- on the people who will pass by, live, work or shop here. The size, placement of doors, windows, portals and openings define human scale.*

The building height is similar to multiple nearby structures along the corridor. Buildings at 1725 JPA, 1815 JPA and 1800 JPA are five to nine stories tall. Mass and form of the proposed building is varied. Multiple walks and plazas provide usable spaces, traversable by visitors and passers-by. Street trees will provide screening, shade and beauty. The dimensions and arrangements of windows, openings and entries are consistent with neighboring apartment buildings.

***Preserve and Enhance Natural Character**: Encourage plantings of diverse native species.*

Proposed plantings are all about enhancement. Currently the site has almost no natural character to preserve. The landscape plan proposes a variety of native plantings in a variety of sizes-- from smaller sedges to large trees.

***Create a Sense of Place**: In corridors with substantial pedestrian activity, one goal is to create a sense of place. Building arrangements, uses, natural features and landscaping should contribute, where feasible, to create exterior space where people can interact.*

In its current state the site makes little contribution to the street wall. It lacks architectural presence on the corridor and contributes little to a sense of place. The proposed development will engage the street, providing shaded walks and courts from which tenants can easily see and communicate with other students and city residents as they move to and fro.

***Create an Inviting Public Realm**: Design inviting streetscapes and public spaces. Redevelopment of properties should enhance the existing streetscapes and create an engaging public realm.*

A generous array walks, seat walls and planting beds will create a comfortable, shaded environment along the public realm. The JPA entry plaza will create a kind of expanded sidewalk with places to sit, rest, eat and talk.

***Mask the Utilitarian**: Provide screening from adjacent properties and public view of: parking lots, outdoor storage and loading areas, refuse areas, mechanical and communication equipment and other uses that have adverse impacts. Relegate parking behind buildings.*

All on-site parking is concealed under the building. Storage areas, refuse areas and mechanical equipment will all be concealed behind site walls, within the building or on rooftops behind parapets.

***Respect and Enhance Charlottesville's Character**: Architectural transplants from other locales or shallow imitations of Jeffersonian architecture are examples of building designs that are not appropriate.*

By and large, traditional materials are proposed, but the building's architecture does not rely on historic references deployed superficially or romantically. It does not indulge vernacular details associated with places outside Charlottesville.

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II. Streetscape Guidelines — Plantings & Open Space

Use street trees *to provide shade, a sense of enclosure and to define edges.*

Six street trees are proposed: two large trees on Jefferson Park Avenue and four medium-to-large trees on Montebello Circle. Currently the site has no street trees at all.

Include appropriately scaled trees, shrubs and other plantings *to provide beauty as well as shade within a pedestrian gathering place and as screening for parking, utilities and service areas.*

The combination of plantings, appropriately sized, will enhance a sense of scale around the building, emphasizing the edges of and enclosing outdoor space.

Use hardy native species *that require minimal maintenance. Avoid over-used species.*

Almost all planting selections come from the Charlottesville Tree Packet of recommended species. Over-used species-- Bradford Pear and Crepe Myrtle, for example-- are not proposed.

Use larger species *where appropriate to space and function.*

Certain species-- the Kentucky Coffeetree, for example-- will attain significant height when mature. They are proposed along JPA, where in time they will provide abundant shade and an ever-changing screen of the upper stories of the new building.

Expand use of ***seasonal color*** *in plantings.*

Multiple species-- blackgum and sassafras among them-- will provide potentially great colors in fall and spring.

Use plantings to promote ***visual order*** *and help integrate buildings into the corridor.*

In time, the varied scale of plantings will create a layered environment from which the building emerges, avoiding abrupt or stark transitions.

Refer to the ***Tree Planting and Preservation BMP Manual*** *in the Charlottesville Standards and Design Manual.*

Yes.

II. Streetscape Guidelines — Pedestrian Routes

Where feasible, ***provide unbroken pedestrian routes*** *between developments. Place paths in a logical pattern where people will want to walk. Separate sidewalks from the curb by a five feet wide landscape buffer if possible.*

The continuity of sidewalks will be significantly improved by this project. Currently the JPA sidewalk is interrupted by two large curb cuts that serve very few vehicles. After this project is complete, the sidewalk will be renovated to run continously at grade from one side of the parcel to the other. There will be one vehicular entry, but at its threshold, the paving will be elevated for the width of the sidewalk, so there is no sudden dipping or abrupt ramping. This will result in much easier travel for people who use wheelchairs or who have reduced mobility. Walks into the building at both entrances will be along very gentle slopes with a minimum of steps.

Within developments, ***identify a complete pedestrian pathway system*** *linking all buildings, parking and green spaces. Ensure this network connects to public pedestrian pathways.*

All building entries and plazas are connected to public pathways.

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Pedestrian Routes, cont.

Add designated pedestrian pathways through larger parking lots.	No visible surface parking lots are proposed in this project.
Provide crosswalks at intersections, between major pedestrian destinations and in front of building entrances that link to parking.	A crosswalk level with the sidewalk is proposed at the entry to the parking level.
***Design crosswalks to highlight their visibility** by slightly raising them, making them wider, constructing them of materials other than asphalt and using bulb-out corners than reduce their length.*	At the entrance to the under-building parking, the crosswalk will not be paved in asphalt, and it will be aligned with and level with the sidewalk.
***Provide breaks in large building masses** to allow pedestrians to pass through, particularly through shopping centers.*	The site is not big enough to allow large building masses.
***Avoid excessive curb cuts for vehicular access** across pedestrian ways. Where curb cuts are necessary, mark them with a change in materials, color, texture or grade.*	On JPA the project requires only a single curb cut, marked with a change in material, at the entry to the under-building parking. This is a significant reduction to existing curb cut conditions.
***Design sidewalks appropriately for the site** and the expected amount of foot travel.*	The rebuilt JPA sidewalk will maintain the current width of neighboring properties to maintain continuity.
***Use brick or patterned concrete** or a combination of these materials that relates to the existing architectural vocabulary of the corridor.*	Currently, there is little precedent in this corridor for brick or patterned concrete walks.
Avoid concrete curbing poured in continuous strips.	We will.
Avoid excessive variation in sidewalk and curb material.	We will.

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II. Streetscape Guidelines — Bicycle Routes

Provide for bicycle traffic along major corridors *and between major destinations, with particular emphasis on connecting residential areas to schools, recreation areas and commercial centers.*	Currently there is a dedicated bike lane along JPA adjacent to the site. This will remain.
Provide new bike paths to connect to planned or existing municipal paths or paths of adjoing developments.	NA
Provide facilities to store or lock bicycles *at appropriate sites.*	Required indoor, secure storage for bicycles will be provided on site.
Develop an easily identifiable graphic system of signs and road markings to designate bicycle routes and crossings.	NA

II. Streetscape Guidelines — Lighting

Use full cutoff luminaires *in accordance with city lighting requirements to provide better lighting and prevent unwanted glare.*	Full cutoff luminaries will be used.
Where appropriate, ***replace modern cobra-head type lamps and poles*** *with painted metal, traditionally designed fixtures that have a base, shaft and luminaire.*	NA
Consider using a different but compatible style of fixture for each of the corridors.	NA
Light pedestrian areas with appropriately scaled poles.	NA
Provide pedestrian lighting at transit stops and along paths to parking lots and other destinations.	NA
Provide lighting of intersections in high traffic areas.	NA
Include any lighting upgrades as a part of an overall streetscape plan for each corridor.	NA

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II. Streetscape Guidelines — Street Furniture

Develop and use a common palette of colors, materials and design.	Furniture materials, colors and design will be coherent.
Coordinate street furniture along corridors*. While they need not match, they should be compatible and not clash.*	There is little presence or continuity of street furniture along JPA now. We do not anticipate furniture choices for this project to clash.
Place benches at key locations *such as transit stops. Use traditional designs constructed of wood and/or painted metal.*	No transit stops are currently located along the site's JPA boundary, but site walls around planting beds and adjacent to the entry court will be seat-height.
Avoid placing too many elements on narrow sidewalks.	NA

II. Streetscape Guidelines — Public Signs

Develop a system of public way finding *and informational signs to reflect the character of Charlottesville to be used on all corridors.*	NA
Coordinate the colors and design of signs *within a corridor.*	The color scheme and design of signs will be consistent and coherent.
Keep signs to the minimum number and size *necessary for the use.*	The number of signs will not be excessive.
Scale and place signs *for both automobile traffic and pedestrians.*	NA
Avoid placing signposts in locations where they can interfere with the opening of vehicle doors.	NA
Consider using decorative color banners within a specific corridor.	NA

II. Streetscape Guidelines — Public Art & Monuments

No public art or sculpture is being replaced by or proposed within this development, so none of the criteria in this section is applicable.

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II. Streetscape Guidelines

Utilities & Comm. Equip.

Locate and screen utilities to limit their visibility *from the street and from nearby development.*

Power and communication cables will remain above ground and suspended from utility poles.

Place existing and proposed utilities underground.

Utilities will not be buried, as is typical of most other buildings along this corridor.

Consider integrating cellular communication towers *into building design so as to appear visually unobtrusive.*

NA

III. Site Guidelines

Connectivity Between Entrance Corridor area & neighborhoods

Maintain or provide a strong sense of community *by providing pedestrian and vehicular links from a corridor site to nearby neighborhoods, parks, schools and other public destinations.*

Pedestrian connections along the corridor are enhanced by improved continuous sidewalks that are minimally interrupted by vehicular crossings.

Use common streetscape elements*, materials and designs to visually link the corridor areas and neighborhoods.*

Materials typical of the surrounding neighborhoods-- brick and concrete-- will be used in walks and site walls.

Provide continuous pedestrian routes *along corridors where feasible.*

Pedestrians routes along the corridor will be enhanced and expanded.

Site grading should promote connectivity *with adjacent sites.*

Site grading will not affect adjacent sites.

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Connectivity Between & Within Sites

Create a complete pedestrian pathway system *within a site and between adjacent sites, linking all buildings, parking areas and green spaces. Ensure that this network connects to any nearby public pedestrian pathway.*

All building entries and entry courts are clearly and legibly connected to public pathways.

Design pedestrian and vehicular circulation to maximize the quality and safety of the pedestrian experience through:

"shared space" approaches that slow vehicle speeds and enhance pedestrian experience;

designated, separate sidewalks with planted areas through large parking lots;

crosswalks at points of vehicular access routes and in front of building entrances;

crosswalk designs that highlight their visibility by slightly raising them, making them wider, by constructing them of materials other than asphalt and by using bulb-out corners that reduce their length.

Where the sidewalk crosses the JPA driveway, the paving will be striped for visibility and elevated to match sidewalk height. This will make crossing the driveway not only easier for pedestrians and wheelchair users, but safer-- elevated above the drive surface it will create a speed bump that helps slow cars entering or exiting the property.

Ensure the new paving materials are compatible with area character. *Scored concrete with broom finishes, colored, exposed aggregate concrete and brick or unit pavers are examples of appropriate applications. Avoid large expanses of bright white or gray concrete surfaces.*

At the JPA entry court and the Montebello entry walk, paving materials will be scored concrete in a buff stain.

Provide passageways within large building masses *to allow pedestrians to pass through, particularly through shopping centers.*

NA

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Building Placement

Orient the facade of new buildings to front on the corridor.	The main building entry and entry court front Jefferson Park Avenue.
Limit setbacks of new buildings *according to the zoning of the particular corridor.*	The front yard is 18’ deep. This leaves ample room for street trees and a modest plaza for gathering without placing the building too far away from the street.
Limit setbacks at major intersections *so that the architecture can help define the area.*	NA
Use compact building arrangements *to reduce the feeling of seas of parking, encourage pedestrian activity and define space.*	No exposed, surface parking is proposed.
Strive for contiguous building arrangement along the street face *and avoid large breaks between buildings in identified development sites.*	We do.
Ensure that larger developments orient their design *to any adjoining neighborhoods and side streets.*	The Montebello Circle facade rises roughly 3 1/2 stories above street grade, acknowledging a neighborhood environment where existing buildings are not as tall as those on JPA.
Orient service areas to limit their impact *on the development and any neighboring areas.*	Trash bins will be stored out of sight in a walled pen south of the entry drive on JPA. A modest loading/delivery pull-off will be located at Montebello Circle, but vehicle parking will not be permitted here.
Each side of a corner building *that faces a street should be considered a facade for design purposes.*	NA

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Parking

Reduce the scale of parking lots...

NA (This project does not include surface parking lots.)

Reduce the visibility of residential garages by:

Not allowing a garage to become the primary architectural feature when a development is viewed from the street;

Placing garages behind the building setback, preferably facing to the side or rear of attached housing;

Placing garages and parking in the rear with alley access.

Although the entry drive is centered on the parcel, the drive will be as narrow as feasible. Within 10 years, it's likely the Coffeetrees will help screen the entry opening. The tall lobby and student lounge above, with maximum transparency afforded by storefront facades will help draw attention away from the entry opening, especially during evening hours.

Accommodate pedestrian needs within parking areas by:

Providing clear pedestrian paths and crossings from parking spaces to main entrances and to the street;

Ways from parking spaces to building entrances will be clearly marked.

Planning parking so that it least interferes with appropriate pedestrian access and connections to adjoining developments;

Primary building entrances are connected directly to public sidewalks, away from subterranean parking.

Construct parking lots that reinforce the existing street wall *of buildings and the grid system of rectangular blocks.*

NA

The number and width of curb cuts should be the minimum necessary *for effective on- and off-site traffic circulation.*

Only one curb cut for vehicular access on Jefferson Park Avenue is proposed.

Design any detached parking structure to be architecturally compatible with its setting...

NA (No detached parking structure is proposed.)

Bicycle parking facilities should be provided within areas where significant bicycle traffic is anticipated. They should be located in designated areas close to buildings and pedestrian paths.

Most bike storage will be located securely inside the building. There will be room at the north side of the JPA entry court for some exterior bike racks. In the Montebello Circle yard a small, screened enclosure is proposed for the parking of mopeds, scooters and escooters.

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Plantings & Open Spaces

Provide landscaping within parking areas by...	NA (This project does not include parking lots outside of the building under open sky.)
The majority of open space should be located at the perimeter of the site *where it is visible, and it should be of sufficient width and depth to provide adequate contrast to any adjoining site parking. Planting zones should be consolidated into areas large enough to give natural character to a site rather than randomly distributed in small and narrow open spaces that do not match the context and scale of the project.*	Most open space is located along the streets. Planting zones are spacious and concentrated on the two streets. Planting zones are designed deliberately to help define and shade public sidewalks.
Planted areas should be located along the site boundaries, *within parking areas, along drainage or stormwater management areas, around buildings and at building entries.*	Plantings are proposed in all of these locations (with the exception of parking areas, because all parking is under the building).
The existing topography should be preserved intact as much as possible *to minimize disruptions in drainage.*	Critical slopes requirements for this project have been waived by Council, acknowledging the impossibility of building anything here otherwise.
Different scales of plantings *(trees, shrubs, flowers) should be incorporated into site design to the extent possible and such features as mature woods and riparian areas should be retained.*	A variety of plantings of different sizes and colors are proposed.
Use species appropriate for site conditions *including available sunlight, water and root and canopy space.*	Selected species are appropriate for site conditions.
Use trees, shrubs and other landscaping features to provide screens for service areas, parking and utilities.	Climbing plants are proposed to help screening of the moped/scooter corral in the Montebello Circle yard.
Use large specimen street trees along pedestrian routes *to provide shade and to define edges.*	Medium-to-large and large trees, selected from Charlottesville's Tree Packet of recommended species, are proposed along all sidewalks.
In the core of larger commercial and office centers, street trees and more formal urban plantings organized around public open spaces are recommended.	NA
Consider using ***landscaping areas that also provide storm water treatment*** *such as rain gardens.*	Bioretention may be used in some combination in side yards or on the roof to help treat storm water.

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III. Site Guidelines — Plantings & Open Spaces, cont.

*Refer to the **Tree Planting and Preservation BMP Manual** in the Charlottesville Standards and Design Manual*	We have.
*Encourage **day lighting of streams** where appropriate.*	NA

III. Site Guidelines — Lighting

***Use cutoff luminaries in accordance with city lighting requirements** to provide better lighting and prevent unwanted glare. Lighting should at all times be designed to prevent light pollution in the form of light transmission laterally beyond site boundaries or upward to the sky.*	All relevant lighting will follow the city's cutoff luminary requirements.
***Coordinate the lighting plan with the landscape plan** to ensure pedestrian areas are well-lit and that any conflict between trees and light fixtures is avoided.*	Lighting is being coordinated with the landscape design.
***Lighting should provide for appropriate and desirable nighttime illumination** for all uses on and related to the site to promote a safe environment.*	LED lighting at levels and temperatures recommended by BAR guidelines will be specified. Most exterior lighting will be motion-activated.
***Light pedestrian areas with appropriately scaled poles and luminaries.** Their heights are typically ten to fourteen feet.*	We do not plan to propose lighting of pedestrian areas that are mounted on poles.
***Avoid using building accent lighting that is too bright and draws too much attention to the building.** Reasonable levels of accent lighting to accentuate architectural character may be appropriate in individual instances when it is shielded and is not aimed towards neighboring properties, sidewalks, pathways, driveways or public right-of-ways in such a manner as to distract travel.*	No accent lighting is proposed.
Gasoline station/convenience store aprons and canopies should utilize full shielded lighting fixtures...	NA

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Walls and Fences

Choose high quality materials *and designs using materials such as brick, stone, metal and wood. Avoid untreated wood, vinyl, chain-link fences, wire fences or concrete block walls. Consider materials used elsewhere on the property or structures within the site.*	Site walls will be built out of quality, durable materials.
Use a scale and level of ornateness of the design of any new walls and fences that relate to the scale and ornateness of the building within the site. *Use simpler designs on smaller lots.*	In detailing and scale, the site walls will be compatible with the building.
Avoid exceeding the average height of other fences and walls *of surrounding properties.*	Site walls easily seen along JPA will typically be low-- in many cases, seat wall height.
Fences should be set back form the street right-of-way *to allow a clear area for utilities and landscaping.*	NA -- no fences proposed
When walls or fences stretch longer than 50 feet, use designs with texture and modulation *to provide a regular rhythm without being monotonous.*	NA
Use paint or opaque stains on pressure treated or unpainted wood fences.	NA
Fence stringers (the structural framing of the fence) should be located facing the interior *of the subject lot, with the finished side facing out away from the subject property.*	NA
Fence at intersections or driveways should comply with city requirements for site distance *(see Article IX, Division 7 of the Zoning Ordinance for detailed site triangle requirements.)*	NA

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Signs

Place signs so that they do not obstruct architectural elements and details *that define the design of the building.*	Signs will not obscure architecture. They will be well integrated.
Respect the design and visibility of signs for adjacent businesses.	Signs on the subject property will not obscure or clash with signs on properties elsewhere.
Use colors and appropriate materials that complement the materials and color scheme of the building*, including accent and trim colors.*	Sign materials and design will enhance building materials and design.
Use a minimal number of colors per sign where possible. *Avoid jarring or overly bright color schemes.*	Signs will not have a busy color palette.
Exterior illumination of signs shall comply with the city's outdoor lighting requirements. *Exterior neon is discouraged.*	Sign lighting will adopt the city's BAR's recommendations for exterior lighting.
Illumination of any sign shall not be directed toward any residential area or adjacent street.	Sign lighting will be discreet and indirect, not shining outward toward the property edges.
Consider using a comprehensive signage plan *for larger developments.*	Signs will be compatible with one another.
Encourage the use of monument signs *with accent landscaping at the base along corridors.*	No monument sign is proposed.
Internally lit signs should use an opaque background *so only letters are lit.*	If sign lighting is employed it will be indirect, illuminating only the text/numbers.
Flashing lights are prohibited.	None proposed.

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Utilities, Comm. Equip. & Service Areas

Locate utilities to minimize their visual impact *from the street and adjoining developments.*	Utilities will be away from or screened from the JPA Corridor.
Screen and landscape dumpsters *with wood board or solid barrier wall when multiple sides of the a building are highly visible.*	NA. (Trash dumpsters/bins will be stored in an enclosure, out of sight.)
Place utilities underground *if possible or located behind buildings.*	NA
Screen service areas and loading docks *that are visible from streets or adjoining development with berms, landscaping, structures or fences.*	NA
Site noise generating features away from neighboring properties, *especially residences.*	Exterior mechanical equipment is planned to be located on the middle of the roof. We anticipate no noise issues will arise.
Screen rooftop communications and mechanical equipment.	Rooftop equipment will typically be screened behind parapet walls.

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Architectural Compatibility

Charlottesville seeks new construction that reflects its unique character, history and cultural diversity. *Architectural transplants from other locales or shallow imitations of historic architectural styles, for example, are neither appropriate nor desirable.*	The building's architecture does not rely on historic references deployed superficially or romantically. It does not indulge vernacular details associated with places outside Charlottesville.
A distinctive identity for each corridor should be created *through a combination of materials, forms and features that create a coordinated and inviting mix of buildings and spaces.*	Exterior material selections are predominantly brick and metal, consistent with other buildings along the JPA corridor. The color palette falls in a compatible range. Building massing is varied, not monolithic. The scale evident in fenestration, entrances, site stairs, canopies and balconies is appropriate for this district. The landscape design along Jefferson Park Avenue and Montebello Circle has the potential to enhance the corridor's character, creating opportunities for pedestrian comfort and interaction in a shaded environment that is a marked improvement over other housing that fronts this corridor.
Encourage a diversity of architectural materials, *forms and styles that respect the traditions of architecture in the Charlottesville area, including gable or hipped roof forms, standing seam metal roofing, brick and wood siding.*	Exterior material selections are predominantly brick, consistent with area traditions. The flat roof with parapets is common among the city's larger apartment buildings, including older ones (see 300 Fourth St SE, the Altamont Circle Apts, 39 University Circle, the Preston Court Apts, etc...)
New developments should strive to implement the intended vision *rather than repeat existing inappropriate development patterns.*	Currently there are multiple examples of buildings along JPA that do not present engaging facades along the corridor (1909, 1905, 1801, 1721, 1719, 1715, 1713, 1709 and 1712 JPA, among them). On these properties, surface parking is prominent and visible in the front yards. Pedestrian walks are negligible and typically connect front doors not to public sidewalks but to asphalt parking. Street trees are uncommon, in many cases nonexistent. Trash cans are visible throughout the week. These properties do little to contribute to a sense of street edge. They are ill-defined. Architectural character is lacking. In contrast, the proposed project will not perpetuate *any* of these patterns. It represents a design that aspires to a better vision for this Corridor.
New development should respect existing historic buildings *and excellent examples from the recent past.*	No buildings on the property are historically designated.
Existing development should be upgraded as opportunities arise.	NA

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Building Mass, Scale & Height

Break up the front of a large building *by dividing it into individual bays, 25 - 40 feet wide.*	The building width is not significant enough to merit subdivision.
Use variation in materials, textures, patterns, colors and details *to break down mass and scale of the building.*	Material, textures and colors are varied. Brick veneer is used in much of the building body, but gives way along the wider side elevations and at the topmost story to invite some modulation of the perceived mass.
Avoid an unmodulated mass.	Perspective views reveal modulated massing.
Use stepped-back height.	Stepbacks occur frequently at upper stories.
Use varied wall surfaces.	Wall surfaces do not extend for long stretches in the same plane. Facades are distinguished by balcony recesses at regular intervals.
Use varied heights with regular width.	Parapet walls are taller over some locations, creating both variation in wall heights and places to screen mechanical equipment.
Use building mass appropriate to the site. *Place buildings of greatest footprint, massing and height in the core of commercial or office developments where the impact on adjacent uses is the least. Follow setback requirements for upper story according to zoning classification of the corridor.*	NA (This is not an office or commercial development.)
When making transitions to lower density areas, modulate the mass of the building to relate to smaller buildings. *Heights can be greater if the mass is modulated and other scale techniques are adopted. Reduce height near lower density areas.*	Because the grade rises from JPA to Montebello, the lower four levels of the building are submerged. This results in fewer stories above grade at the Montebello yard, where the proposed building is closer to the smaller scale houses along the circle.
Use massing reduction techniques of articulated base, watertables, string courses, material changes, patterns and fenestration to reduce the apparent height of the building. *Floor-to-floor heights of a building can have an impact on the mass of a building. For instance... when actual or implied floor-to-floor heights exceed 15-20 feet on the exterior, a building may begin to read as more massive than human-scaled.*	Multiple massing reduction techniques are employed. Floor-to-floor heights are typically 11', appropriate for a multi-family building.
Create human-scaled spaces *defined by either buildings or landscape features that provide more friendly, inviting spaces.*	Spaces along the streets, those pedestrians are most likely to encounter, benefit from plantings, site walls and courts that support human-scaled environments. On the building, windows, doors and canopies will further enhance this sense of scale.

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Facade Organization & Storefronts

Orient primary entrances on a building facade to the street or corridor.	The primary entrance faces on the corridor.
Use a hierarchy of entry design *on any complex, if the building has more than one orientation and focus on the main entry on the street/corner facade.*	The inclusion of an entry plaza leading to the main entrance creates a visible arrival sequence, complimented by beautiful native plantings.
Secondary entrances *may be created to allow convenient access from adjacent buildings, sidewalks, parking, bicycle paths and transit stops..*	Another entrance is located on Montebello Circle. It provides a convenient location for residents who prefer to come and go at the northwest side of the parcel.
Orient at least part of public elevations of shopping complexes to any adjoining neighborhoods.	NA
Provide attractive facade treatments *on any elevation that is visible from streets/corridors or from any primary elevations of adjoining developments and avoid use of unadorned blank walls.*	Primary elevation facades utilize materials, fenestration and masonry detailing that create an appropriate level of relief.
Consider using the traditional three-part facade *of a cornice, a pattern of upper story windows and a storefront with articulated base when designing a new building or renovating an existing structure.*	The proposed building does not present a three-part hierarchy in the most obvious, traditional form. This building does not prioritize the historical horizontal subdivisions that were more common in previous eras. Instead, we intend the use of material and facade transitions to create a richer juxtaposition, emphasizing both vertical and horizontal proportions, often overlapping the two.
Use a regular pattern of solids and voids *for openings that relate to more traditional building design in the corridor.*	NA
Use a proportion of openings *(vertical or horizontal) that is generally consistent with the context of the building. Traditional design openings are typically vertically proportioned.*	The windows, doors and storefront typically adopt vertical proportions in keeping with traditional buildings.
Strive for designs and materials *that reflect the architectural traditions of the region.*	Typically, material choices are appropriate for the region.
Storefronts or large display windows *should be used at street level.*	Storefront facades are used at the JPA entry lobby, offering visibility into common space.

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Materials and Textures

Use material changes *to help reduce mass and provide visual interest.*	Materials changes are used deliberately to reduce the impression of massiveness.
Choose materials that offer texture *and avoid monotonous surfaces. For example, use wood or brick or stone or new synthetic materials that approximate the look and dimension of these materials.*	The proposed brick and metal cladding will provide a range of textures and avoid monotony.
Use quality materials *consistently on all visible sides of commercial, office and multi-family residential buildings.*	Materials will be durable.
In Charlottesville ***common building materials are brick, wood or stucco walls and standing-seam metal roofs.*** *Stone is more commonly used for site walls than building walls.*	Building walls will be faced in part in brick.
Avoid the use of building materials with long-term maintenance problems *such as EIFS (Exterior Insulation and Finish System) or vinyl siding****.*** *Sustainable, utilitarian building materials such as concrete block, metal siding or cementitious panels may be appropriate in contemporary designs.*	NA

Colors

A coordinated palette of colors *should be created for each development. This palette should be compatible with adjacent developments.*	The colors will be complimentary. Red brick is common along the Corridor. Metal paneling will have a gray or silver patina, which may tend to darken subtly as it weathers. We believe the metal material, while more common on roofs, will pair well with the brick on the building walls.
Set the color theme *by choosing the color for the material with the most area. If there is more roof than wall area, roof color will be the most important color choice and will set the tone for the rest of the colors.*	The brick facades cover the most exterior area. The metal finish will be coordinated to look good with the brick.
Limit the number of color choices. *Generally there is a wall color, trim color, accent color and roof color.*	Number of color choices are appropriate.

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IV. Building Guidelines — Colors

Use natural tints of materials such as reds, browns, tans, grays and greens as primary colors. *Save bright accent colors for awnings and signs on commercial buildings.*	We will.
Use color variation *to break up the mass of the building and provide visual interest.*	See perspective drawings.
Do not use strong color *that has the effect of turning the entire building into a sign.*	We do not.

IV. Building Guidelines — Details

Use articulated elements *such as cornices, belt courses, water tables, bay divisions, variations in wall plane and roof features to create designs of interest.*	A building base at JPA, variations in wall plane created by recessed balconies, and a stepped back top story clad in a different material are among the elements used to create architectural articulation.
Include human-scaled elements *such as columns, pilasters and cornice, in particular at street level and on facades with a pedestrian focus.*	Site steps, lobby doors, balcony railings and fenestration contribute to human scale.
Avoid large expanses of blank walls *that are visible from the public right of way or neighboring developments.*	Typically vertical planes, materials and colors vary often enough that large blank expanses do not result.
Avoid oversized decorative elements.	No big decorative elements are proposed.
Avoid decorative elements that do not relate to the architecture *but serve to turn the whole building into a sign.*	No such elements are proposed

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Roof Forms & Materials

Use roof forms that complement the building design *and contribute to human scale. Avoid tall roof areas that overwhelm the height of the building's wall. Common Charlottesville roof forms include hipped, gable, flat and gambrel.*	Roofs and their materials are not visible from the ground. They are flat roofs, common for and appropriate to multi-family buildings in Charlottesville.
If a shed roof or flat roof design is used, add a parapet wall to screen the roof.	Some roofs have parapets.
Avoid a visible monolithic expanse of roof on large-scale buildings. *Break the roof mass with elements such as gables, dormers or parapets. Scale these features to the scale of the building.*	Roof surfaces are not visible from the Corridor.
Consider using a special roof feature on buildings located at a gateway, *a prominent corner, or highlight entry bays on larger structures.*	Metal canopies extending above the lobby storefront help signal the primary entry place.
Steeper forms are associated with more traditional design *and can be appropriate when the development adjoins nearby neighborhoods.*	NA
On roofs that visible such as gable, hipped or shed design, *use quality materials such as metal or textured asphalt shingles*	NA
Any equipment located on a roof should be screened from public view.	It will be.

Awnings

Encourage the use of awnings at the storefront level *to shield displays and entry and to add visual interest.*	Canopies are proposed for these purposes.
Coordinate the choice of colors *as a part of the overall color scheme. Solid colors, wide stripes and narrow stripes should be considered as appropriate.*	Canopy colors are coordinated with associated storefronts.
Awning forms may be angled or curved.	NA

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IV. Building Guidelines — Awnings

Use of a canopy as an illuminated sign is not appropriate	NA
Awning materials should be appropriate to the overall design of the building. *Traditional cloth fabric, standing seam metal or newer rigid materials may be considered.*	Canopies would be painted or powder coated metal.

IV. Building Guidelines — Appurtenances

Building service, loading and utility areas should not be visible from public streets, *adjacent developments or from access drives within large developments. Such service areas should be located behind the main structure in the least visible location possible.*	Because the building does not have access to side streets or alleys, loading and deliveries must happen along one of the streets. The Montebello yard has room for a modest delivery pull-off.
Mechanical equipment on roofs or sides of buildings should not be visible from the street.	Rooftop equipment will be screened by parapet walls.
When mechanical equipment vents, meters, satellite dishes and similar equipment is ground mounted, *screening should include either an opaque fence or wall made of the same material as the building or an evergreen hedge that screens objectionable views.*	NA
Items such as roof ladders, railings, roll-up doors and service doors, *should be located on building elevations that are the least visible from public streets/corridors, adjacent developments or from access drives within large developments. Their colors should be coordinated among all of these elements and with the rest of the building.*	None of these are located in visible locations.
In some cases appurtenances may be integrated into the building design *if such integration enhances the compatibility of the overall design with the corridor vision.*	NA

IV. Building Guidelines — Additions & Corridor Conversions

NA

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IV. Building Guidelines	**Franchise Designs**	NA
IV. Building Guidelines	**Gas Station Canopies**	NA
IV. Building Guidelines	**Civic & Institutional Buildings**	NA
IV. Building Guidelines	**Multi-Family Buildings**	
Follow other guidelines in this chapter *as applicable to the overall design of such buildings in such issues as massing and building footprint, scale, complexity of form, height and width, materials, textures and colors, roof forms and materials, etc...*		Other applicable chapter guidelines are addressed in previous pages.
Give consideration to placing the first floor retail storefronts in multi-family buildings *if they face along a commercial corridor or face a pedestrian-oriented street within the downtown.*		NA
Avoid creating street front facades that are dominated by garage doors.		No garage doors are proposed on the front facade.
Ensure that the designs of such buildings are consistent with any adjoining neighborhoods and the zoning ordinance.		They are consistent.

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1709 JPA - ERB Review - Entrance Corridor Design Guidelines

Chapter I: Design Principles	Applicant's Comment	Staff Comment
Design for a Corridor Vision: New building design should be compatible (in massing, scale, materials, colors) with other neighboring structures that contribute to the overall quality of the corridor. Existing developments should be encouraged to make upgrades consistent with the corridor vision. Site designs should contain some common elements to provide continuity along the corridor. New development, including franchise development, should complement the City's character and respect those qualities that distinguish the City's built environment.	Exterior material selections are predominantly brick and metal. This is consistent with other buildings along the JPA corridor. The color palette falls in a compatible range. Building massing is varied, not monolithic. The scale evident in fenestration, entrances, site steps, balconies and railings is appropriate for this district. The landscape design along JPA and Montebello Circle-- consisting of new walks, small plazas and plantings-- has the potential to enhance the corridor's character, creating opportunities for pedestrian comfort and interaction in a shaded environment that is a marked improvement over other student housing that fronts this district.	Concur
Preserve History: Preserve historic buildings and distinctive architecture from earlier periods. Encourage new contemporary design that is respectful of historic building design.	There are no historically designated buildings on this site. The property is in an Entrance Corridor, but it does not fall within any of the city's Historic Districts.	Concur
Facilitate Pedestrian Access: Encourage compact, walkable developments. Design pedestrian connections from sidewalk and car to buildings, between buildings, and between corridor properties and adjacent residential areas.	The proposed pedestrian experience along JPA represents a significant improvement over streetscapes found elsewhere on the corridor. The existing sidewalk will be refurbished, maintaining its current width. An elevated crosswalk at the underbuilding parking entry will keep the sidewalk relatively level for the full width of the parcel. On site, an easily accessible plaza adjacent to the sidewalk will give pedestrians a kind of wayside where they can relax and socialize in the shade and beauty of new plantings. In the Montebello front yard 18' deep planting beds will allow space for 4 medium heigh street trees and a new paved walk will give tenants and their guests access to the building.	Contributes positively to ongoing change within the corridor.
Maintain Human Scale in Buildings and Spaces: Consider the impact of building design, especially height, mass, complexity of form, and architectural details, and the impact of spaces created, on the people who will pass by, live, work, or shop there. The size, placement and number of doors, windows, portals and openings define human scale.	The building height is similar to multiple nearby structures along the corridor. Buildings at 1725 JPA, 1815 JPA and 1800 JPA are five to nine stories tall. Mass and form of the proposed building is varied. Multiple walks and plazas provide usable spaces, traversable by visitors and passers-by. Street trees will provide screening, shade and beauty. The dimensions and arrangements of windows, openings and entries are consistent with neighboring apartment buildings.	Concur
Preserve and Enhance Natural Character: Daylight streams, and retain mature trees and natural buffers. Work with topography to minimize grading and limit the introduction of impervious surfaces. Encourage plantings of diverse native species.	Proposed plantings are all about enhancement. Currently the site has almost no natural character to preserve. The landscape plan proposes a variety of native plantings in a variety of sizes-- from smaller sedges to large trees.	Concur
Create a Sense of Place: In corridors where substantial pedestrian activity occurs or is encouraged, or where mixed use and multi-building projects are proposed, one goal will be creating a sense of place. Building arrangements, uses, natural features, and landscaping should contribute, where feasible, to create exterior space where people can interact.	In its current state the site makes little contribution to the street wall. It lacks architectural presence on the corridor and contributes little to a sense of place. The proposed development will engage the street, providing shaded walks and courts from which tenants can easily see and communicate with other students and city residents as they move to and fro.	Concur
Create an Inviting Public Realm: Design inviting streetscapes and public spaces. Redevelopment of properties should enhance the existing streetscapes and create an engaging public realm.	A generous array walks, seat walls and planting beds will create a comfortable, shaded environment along the public realm. The JPA entry plaza will create a kind of expanded sidewalk with places to sit, rest, eat and talk.	Concur
Create Restrained Communications: Private signage and advertising should be harmonious and in scale with building elements and landscaping features.		n/a
Mask the Utilitarian: Provide screening from adjacent properties and public view of: parking lots, outdoor storage and loading areas, refuse areas, mechanical and communication equipment, and other uses that have adverse impacts. Where feasible, relegate parking behind buildings.	All on-site parking is concealed under the building. Storage areas, refuse areas and mechanical equipment will all be concealed behind site walls, within the building or on rooftops behind parapets.	Concur
Respect and Enhance Charlottesville's Character: Architectural transplants from other locales, and shallow or artificial imitations of the Jeffersonian architectural style are examples of building designs that are neither appropriate nor desirable. Objectionable or incompatible aspects of franchise design or corporate signature buildings must be modified or customized to fit the character of this community.	By and large, traditional materials are proposed, but the building's architecture does not rely on historic references deployed superficially or romantically. It does not indulge vernacular details associated with places outside Charlottesville.	Concur, Materials are typical of this area. The design reflect the emerging trends along JPA and in proximity to UVa.

Chapter II: Guidelines for Streetscapes, B. Plantings & Open Space	Applicant's Comment	Staff Comment
1. Use street trees to provide shade, a sense of enclosure and to define edges.	Six street trees are proposed: two large trees on Jefferson Park Avenue and four medium-to-large trees on Montebello Circle. Currently the site has no street trees at all.	Concur
2. Include appropriately scaled trees, shrubs and other plantings to provide beauty as well as shade, within a pedestrian gathering place, and as screening for parking, utilities, and service areas.	The combination of plantings, appropriately sized, will enhance a sense of scale around the building, emphasizing the edges of and enclosing outdoor space.	Concur
3. Maintain existing plantings in all public areas.		n/a
4. Use hardy native species that require minimal maintenance.	Almost all planting selections come from the Charlottesville Tree Packet of recommended species. Over-used species-- Bradford Pear and Crepe Myrtle, for example-- are not proposed.	All specified trees are on the City's Tree List
5. Replace damaged or missing street trees with appropriate species.		n/a
6. Avoid over-used species such as Bradford pear.		n/a
7. Use larger tree species where appropriate to space and function.	Certain species-- the Kentucky Coffeetree, for example-- will attain significant height when mature. They are proposed along JPA, where in time they will provide abundant shade and an ever-changing screen of the upper stories of the new building.	Concur

8. Expand use of seasonal color in plantings.	Multiple species-- blackgum and sassafras among them-- will provide potentially great colors in fall and spring.	Concur
9. Use landscaping to create an identity within a particular corridor or sub-area by selecting specific species, sizes, colors or shape of plants and trees.		
10. Use plantings to promote visual order and help integrate buildings into the corridor.		
11. Refer to the Tree Planting and Preservation BMP Manual in the Charlottesville Standards and Design Manual.	Confirmed	
12. Encourage day lighting of streams where appropriate.		n/a

Chapter II: Guidelines for Streetscapes, C. Pedestrian Routes	**Applicant's Comment**	**Staff Comment**
1. Provide, where feasible, unbroken pedestrian routes between developments. Place paths in a logical pattern where people will want to walk. Place sidewalks on both sides of streets where feasible and separate them from the curb by a minimum five (5) feet wide landscape zone if possible.	The continuity of sidewalks will be significantly improved by this project. Currently the JPA sidewalk is interrupted by two large curb cuts that serve very few vehicles. After this project is complete, the sidewalk will be renovated to run continuously at grade from one side of the parcel to the other. There will be one vehicular entry, but at its threshold, the paving will be elevated for the width of the sidewalk, so there is no sudden dipping or abrupt ramping. This will result in much easier travel for people who use wheelchairs or who have reduced mobility. Walks into the building at both entrances will be along very gentle slopes with a minimum of steps.	Concur
2. Within developments, identify a complete internal pedestrian pathway system linking all buildings, parking and green spaces. Ensure that this network connects to public pedestrian pathways that link schools, recreation areas, and other major destinations.	All building entries and plazas are connected to public pathways.	Concur
3. Add designated pedestrian pathways through larger parking lots.	No visible surface parking lots are proposed in this project.	Concur
4. Provide crosswalks at intersections, between major pedestrian destinations and in front of building entrances that link to parking.	A crosswalk level with the sidewalk is proposed at the entry to the parking level.	Concur
5. Design crosswalks to highlight their visibility by slightly raising them, by making them wider, by constructing them of materials other than asphalt and by using bulb-out corners that reduce their length.	At the entrance to the under-building parking, the crosswalk will not be paved in asphalt, and it will be aligned with and level with the sidewalk.	Concur
6. Provide breaks in large building masses to allow pedestrians to pass through, particularly through shopping centers.	The site is not big enough to allow large building masses.	Concur
7. Place sidewalks throughout residential areas.		n/a
8. Avoid excessive curb cuts for vehicular access across pedestrian ways. Where curb cuts are necessary, mark them with a change in materials, color, texture or grade.	On JPA the project requires only a single curb cut, marked with a change in material, at the entry to the under-building parking. This is a significant reduction to existing curb cut conditions.	Concur
9. Design sidewalks appropriately for the site and the expected amount of foot traffic. In commercial areas where foot traffic is expected, sidewalks should be a minimum of (10) ten feet. Sidewalks in residential areas can be five (5) feet, depending on the type of street and size of road.	The rebuilt JPA sidewalk will maintain the current width of neighboring properties to maintain continuity.	Concur
10. Use brick or patterned concrete, or a combination of these materials, that relates to the existing architectural vocabulary of the corridor or sub-area.	Currently, there is little precedent in this corridor for brick or patterned concrete walks.	Concur
11. Avoid concrete curbing poured in continuous strips.	We will	Site plan review
12. Avoid excessive variation in sidewalk and curb materials.	We will	Site plan review

Chapter II: Guidelines for Streetscapes, D. Bicycle Routes	**Applicant's Comment**	**Staff Comment**
1. Provide for bicycle traffic along major corridors and between major destinations, with particular emphasis on connecting residential areas to schools, recreation areas, and commercial centers.	Currently there is a dedicated bike lane along JPA adjacent to the site. This will remain.	n/a
2. Provide new bike paths to connect to planned or existing municipal paths or paths of adjoining developments.	n/a	n/a
3. Provide facilities to store or lock bicycles at appropriate sites, including schools, major recreation areas, office parks, public institutions, and large commercial centers.	Required indoor, secure storage for bicycles will be provided on site.	Concur
4. Develop an easily identifiable graphic system of signs and road markings to designate bicycle routes and crossings.	n/a	n/a

Chapter II: Guidelines for Streetscapes, E. Lighting	**Applicant's Comment**	**Staff Comment**
1. Use full cutoff luminaires in accordance with City lighting requirements to provide better lighting and prevent unwanted glare.	Full cutoff luminaries will be used.	See staff report for proposed condition
2. Where appropriate, replace modern cobra-head type lamps and poles with painted metal, traditionally designed fixtures that have a base, shaft and luminaire.	n/a	n/a
3. Consider using a different but compatible style of fixture for each of the corridors.	n/a	n/a
4. Light pedestrian areas with appropriately scaled poles.	n/a	n/a
5. Provide pedestrian lighting at transit stops and along paths to parking lots and other destinations.	n/a	n/a
6. Provide lighting of intersections in high traffic areas.	n/a	n/a
7. Include any lighting upgrades as a part of an overall streetscape plan for each corridor.	n/a	n/a

Chapter II: Guidelines for Streetscapes, F. Street Furniture	**Applicant's Comment**	**Staff Comment**
1. Develop and use a common palette of colors, materials and design.	Furniture materials, colors and design will be coherent.	n/a

2. Coordinate furniture along corridors. While they need not match, they should be compatible and not clash.	There is little presence or continuity of street furniture along JPA now. We do not anticipate furniture choices for this project to clash.	n/a
3. Place benches at key locations such as transit stops. Use traditional designs constructed of wood and/or painted metal.	No transit stops are currently located along the site's JPA boundary, but site walls around planting beds and adjacent to the entry court will be seat height.	n/a
4. Avoid placing too many elements on narrow sidewalks.	n/a	n/a

Chapter II: Guidelines for Streetscapes, G. Public Signs	**Applicant's Comment**	**Staff Comment**
1. Develop a system of public wayfinding and informational signs to reflect the character of Charlottesville to be used on all corridors.	n/a	n/a
2. Coordinate the colors and design of signs within a corridor.	The color scheme and design of signs will be consistent and coherent.	
3. Keep signs to the minimum number and size necessary for the use.	The number of signs will not be excessive.	
4. Scale and place signs for both automobile traffic and pedestrians.	n/a	
5. Avoid placing signposts in locations where they can interfere with the opening of vehicle doors.	n/a	
6. Consider using decorative color banners within a specific corridor	n/a	

Chapter II: Guidelines for Streetscapes, H. Public Art & Monuments	No public art or sculpture is being replaced by or proposed within this development, so none of the criteria in this section is applicable	n/a

Chapter II: Guidelines for Streetscapes, I. Utilities & Communication Equipment	**Applicant's Comment**	**Staff Comment**
1. Locate and screen utilities to limit their visibility from the street and from nearby development.	Power and communication cables will remain above ground and suspended from utility poles.	See staff report for proposed condition
2. Place existing and proposed utilities underground.	Utilities will not be buried, as is typical of most other buildings along this corridor.	Overhead utilities are within the median of JPA.
3. Consider integrating cellular communication towers into building design so as to appear visually unobtrusive	n/a	n/a

Chapter III: Guidelines for Sites, B. Connectivity Between Entrance Corridor Areas & Neighborhoods	**Applicant's Comment**	**Staff Comment**
1. Maintain or provide a strong sense of community, by providing pedestrian and vehicular links from a corridor site to nearby neighborhoods, parks, schools and other public destinations.	Pedestrian connections along the corridor are enhanced by improved continuous sidewalks that are minimally interrupted by vehicular crossings.	Concur
2. Use common streetscape elements, materials and designs to visually link the corridor areas and neighborhoods.	Materials typical of the surrounding neighborhoods-- brick and concrete-- will be used in walks and site walls.	Project includes street trees and a continuous sidewalk along JPA.
3. Provide continuous pedestrian routes along corridors where feasible.	Pedestrians routes along the corridor will be enhanced and expanded	Concur
4. Site grading should promote connectivity with adjacent sites.	Site grading will not affect adjacent sites.	Concur

Chapter III: Guidelines for Sites, C. Connectivity Between & Within Sites	**Applicant's Comment**	**Staff Comment**
1. Create a complete pedestrian pathway system within a site and between adjacent sites, linking all buildings, parking areas and green spaces. Ensure that this network connects to any nearby public pedestrian pathway.	All building entries and entry courts are clearly and legibly connected to public pathways.	Concur.
2. Design pedestrian and vehicular circulation to maximize the quality and safety of pedestrian experience through:	Where the sidewalk crosses the JPA driveway, the paving will be striped for visibility and elevated to match sidewalk height. This will make crossing the driveway not only easier for pedestrians and wheelchair users, but safer-- elevated above the drive surface it will create a speed bump that helps slow cars entering or exiting the property.	Concur
a. Design approaches such as "shared space" that slow vehicle speeds and enhance pedestrian experience.		
b. Designated, separate sidewalks with planted areas through large parking lots.		
c. Crosswalks at points of vehicular access routes and in front of building entrances.		
d. Crosswalks designs that highlight their visibility by slightly raising them, by making them wider, by constructing them of materials other than asphalt and by using bulb-out corners that reduce their length.		
3. Ensure that new paving materials are compatible with the character of the area. Scored concrete with broom finishes, colored, exposed aggregate concrete, and brick or unit pavers are examples of appropriate applications. Avoid large expanses of bright white or gray concrete surfaces.	At the JPA entry court and the Montebello entry walk, paving materials will be scored concrete in a buff stain.	Concur.
4. Provide passageways within large building masses to allow pedestrians to pass through, particularly through shopping centers	n/a	n/a

Chapter III: Guidelines for Sites, D. Building Placement	**Applicant's Comment**	**Staff Comment**
1. Orient the facade of new buildings to front on the corridor.	The main building entry and entry court front Jefferson Park Avenue.	Concur.
2. Limit setback of new buildings according to the zoning of the particular corridor.	The front yard is 18' deep. This leaves ample room for street trees and a modest plaza for gathering without placing the building too far away from the street.	Setback established by SUP.
3. Limit setbacks at major intersections so that the architecture can help define the area.	n/a	n/a
4. Use compact building arrangements to reduce the feeling of seas of parking, encourage pedestrian activity and define space.	No exposed, surface parking is proposed [at JPA].	Concur.

5. Strive for contiguous building arrangement along the street face, and avoid large breaks between buildings in identified development sites.	Will do	Design meets criteria
6. Ensure that larger developments orient their design to any adjoining neighborhoods and to side streets.	The Montebello Circle facade rises roughly 3 1/2 stories above street grade, acknowledging a neighborhood environment where existing buildings are not as tall as those on JPA	Concur.
7. Provide breaks in large developments and building masses to allow pedestrian connections between developments.		n/a
8. Orient service areas to limit their impact on the development and any neighboring areas.	Trash bins will be stored out of sight in a walled pen south of the entry drive on JPA. A modest loading/delivery pull-off will be located at Montebello Circle, but vehicle parking will not be permitted here.	See note on sheet 16. Also, City Code Sec. 26-30 requires that emptied receptacles be removed from the sidewalk or roadway and taken behind the building setback line no later than 12:00 pm (noon) the day of collection.
9. Each side of a corner building that faces a street should be considered a facade of the building for design purposes.	n/a	n/a

Chapter III: Guidelines for Sites, E. Parking	**Applicant's Comment**	**Staff Comment**
1. Reduce the scale of parking lots by:	NA (This project does not include surface parking lots.)	n/a
2. Where existing parking lots are located on the street, screen such lots from the street and from adjoining development, using low fences or walls, or year-round plantings.		n/a
3. Reduce the visibility of residential garages by:		
a. Not allowing a garage to become the primary architectural feature when a development is viewed from the street, especially for attached housing.	Although the entry drive is centered on the parcel, the drive will be as narrow as feasible. Within 10 years, it's likely the Coffeetrees will help screen the entry opening. The tall lobby and student lounge above, with maximum transparency afforded by storefront facades will help draw attention away from the entry opening, especially during evening hours.	Concur. No viable alternative for locution of garage entrance.
b. Placing garages behind the building setback, preferably facing to the side or rear of attached housing.		
c. Placing garages and parking in the rear with alley access		
4. Accommodate pedestrian needs within parking areas by:		
a. Providing clear pedestrian paths and crossings from parking spaces to main entrances and to the street.	Ways from parking spaces to building entrances will be clearly marked.	n/a
b. Planning parking so that it least interferes with appropriate pedestrian access and connections to adjoining developments.	Primary building entrances are connected directly to public sidewalks, away from subterranean parking.	n/a
5. Construct parking lots that reinforce the existing street wall of buildings and the grid system of rectangular blocks.	n/a	n/a
6. The number and width of curb cuts should be the minimum necessary for effective on- and off-site traffic circulation. Whenever possible, curb cuts shall be combined with adjacent entrances.	Only one curb cut for vehicular access on Jefferson Park Avenue is proposed.	Concur.
7. Design any detached parking structures to be architecturally compatible with its setting or to be screened by other buildings or by landscaping. If it fronts on a street or pedestrian path, design the street level facade with storefronts, display windows, bay divisions, and other pedestrian oriented features.	NA (No detached parking structure is proposed.)	n/a
8. Bicycle parking facilities should be provided within areas where significant bicycle traffic is anticipated. They should be located in designated areas close to buildings and pedestrian paths. The design, materials, and color of the bicycle racks should coordinate with other site elements and should be well-lit for night time uses.	Most bike storage will be located securely inside the building. There will be room at the north side of the JPA entry court for some exterior bike racks. In the Montebello Circle yard a small, screened enclosure is proposed for the parking of mopeds, scooters and escooters.	Concur.

Chapter III: Guidelines for Sites, F. Plantings & Open Spaces	**Applicant's Comment**	**Staff Comment**
1. Provide landscaping within parking areas by:	NA (This project does not include parking lots outside of the building under open sky.)	n/a
a. Separating parking aisles with medians planted with shade trees along the length of the islands.		
b. Including pedestrian walkways with planted medians to reinforce connectivity and separate pedestrians from vehicular traffic.		
c. Avoiding isolated islands of single trees and instead providing landscaped tree aisles between every other row of cars.		
d. Using shade trees of sufficient number and size at maturity to shade a substantial portion of the lot. Consider orientations that would provide the greatest shade during summer months. Smaller, more decorative trees can be used closest to buildings.		
2. The majority of the open space should be located at the perimeter of the site where it is visible and it should be of sufficient width and depth to provide adequate contrast to any adjoining site parking. Planting zones should be consolidated into areas large enough to give a natural character to a site rather than randomly distributed in small and narrow open spaces that do not match the context and scale of the project.	Most open space is located along the streets. Planting zones are spacious and concentrated on the two streets. Planting zones are designed deliberately to help define and shade public sidewalks.	Concur.
3. Planted areas should also be located along the public boundaries of the site, within parking areas, along drainage or stormwater management areas, around buildings, and at building entries.	Plantings are proposed in all of these locations (with the exception of parking areas, because all parking is under the building).	Concur
4. The existing topography should be preserved intact as much as possible to minimize disruptions in drainage.	Critical slopes requirements for this project have been waived by Council, acknowledging the impossibility of building anything here otherwise.	Concur
5. Different scales of plantings (trees, shrubs, flowers) should be incorporated into site design to the extent possible and such features as mature woods and riparian areas should be retained.	A variety of plantings of different sizes and colors are proposed.	Concur
6. Use species appropriate for site conditions including available sunlight, water and root and canopy space.	Selected species are appropriate for site conditions.	Maintenance of approved landscaping condition of CoA

7. Use trees, shrubs and other landscaping features to provide screens for service areas, parking and utilities.	Climbing plants are proposed to help screening of the moped/scooter corral in the Montebello Circle yard.	Not visible from EC
8. Use large specimen street trees along pedestrian routes to provide shade and to define edges.	Medium-to-large and large trees, selected from Charlottesville's Tree Packet of recommended species, are proposed along all sidewalks	Concur
9. In the core of larger commercial and office centers, street trees and more formal urban plantings organized around public open spaces are recommended.	n/a	n/a
10. Consider using landscaping areas that also provide storm water treatment, such as rain gardens.	Bioretention may be used in some combination in side yards or on the roof to help treat storm water.	See sheet 16
11. Refer to the Tree Planting and Preservation BMP Manual in the Charlottesville Standards and Design Manual	We have.	Site plan
12. Encourage day lighting of streams where appropriate.	n/a	n/a

Chapter III: Guidelines for Sites, G. Lighting	**Applicant's Comment**	**Staff Comment**
1. Use full cutoff luminaires in accordance with City lighting requirements to provide better lighting and prevent unwanted glare. Lighting should at all times be designed to prevent light pollution in the form of light transmission laterally beyond site boundaries or upward to the sky.	All relevant lighting will follow the city's cutoff luminary requirements	See proposed condition
2. Coordinate the lighting plan with the landscape plan to ensure pedestrian areas are well-lit and that any conflict between trees and light fixtures is avoided.	Lighting is being coordinated with the landscape design.	
3. Lighting should provide for appropriate and desirable nighttime illumination for all uses on and related to the site to promote a safe environment.	LED lighting at levels and temperatures recommended by BAR guidelines will be specified. Most exterior lighting will be motion-activated.	
4. Light pedestrian areas with appropriately scaled poles and luminaires. Their heights are typically ten to fourteen feet.	We do not plan to propose lighting of pedestrian areas that are mounted on poles.	
5. Avoid using building accent lighting that is too bright and draws too much attention to the building. Reasonable levels of accent lighting to accentuate architectural character may be appropriate in individual instances when it is shielded and is not aimed towards neighboring properties, sidewalks, pathways, driveways, or public right-of-ways in such a manner as to distract travel.	No accent lighting is proposed.	
6. Gasoline station/convenience store aprons and canopies should utilize fully shielded lighting fixtures. 7. Provide pedestrian lighting at transit stops and along paths to parking lots and other destinations.	n/a	n/a

Chapter III: Guidelines for Sites, H. Walls & Fences	**Applicant's Comment**	**Staff Comment**
1. Choose high-quality materials and designs using materials such as brick, stone, metal, and wood. Avoid untreated wood, vinyl, chain-link, or wire fences or concrete block walls. Consider selecting materials used elsewhere on the property or the structures within the site.	Site walls will be built out of quality, durable materials.	Concrete walls are proposed. See staff report re: side yard retaining walls.
2. Use a scale and level of ornateness of the design of any new walls and fences that relate to the scale and ornateness of the building within the site. Use simpler designs on small lots.	In detailing and scale, the site walls will be compatible with the building.	
3. Avoid exceeding the average height of other fences and walls of surrounding properties.	Site walls easily seen along JPA will typically be low-- in many cases, seat wall height	
4. Fences should be set back from the street right-of-way to allow a clear area for utilities and landscaping.	NA -- no fences proposed	n/a
5. When walls or fences stretch longer than 50 feet, use designs with texture and modulation to provide a regular rhythm without being monotonous. For example, use vertical piers (generally spaced no more than 25 feet apart) of a different material or width or height. Plantings and street trees should be used in conjunction with a wall or fence to break up a long expanse.	n/a	See staff report re: side yard retaining walls.
6. Use paint or opaque stains on pressure treated or unpainted wooden fences.	n/a	n/a
7. Fence stringers (the structural framing of the fence) should be located facing the interior of the subject lot, with the finished side facing out away from the subject property.	n/a	n/a
8. Fences at intersections and driveways should comply with City requirements for site distance. (See Article IX, Division 7 of the Zoning Ordinance for detailed site triangle requirements.)	n/a	n/a
9. Transitional screening should consist of a densely planted buffer strip to provide an adequate visual screen. The screen should be of appropriate plant materials to form an effective buffer for all seasons. Mature vegetation should be retained in such areas and supplemented as necessary by new vegetation to screen sight lines.		n/a

Chapter III: Guidelines for Sites, I. Signs	**Applicant's Comment**	**Staff Comment**
1. Place signs so that they do not obstruct architectural elements and details that define the design of the building.	Signs will not obscure architecture. They will be well integrated.	All commercial signs require separate sign permit(s), which are reviewed in accordance with the signs regs and EC design guidelines. [Note: The referenced *BAR's recommendation* s are represented in the lamping conditions recommended by staff.]
2. Respect the design and visibility of signs for adjacent businesses.	Signs on the subject property will not obscure or clash with signs on properties elsewhere.	
3. Use colors and appropriate materials that complement the materials and color scheme of the building, including accent and trim colors.	Sign materials and design will enhance building materials and design.	
4. Use a minimal number of colors per sign where possible. Avoid jarring overly bright color schemes.	Signs will not have a busy color palette.	
5. Exterior illumination of signs shall comply with the City's outdoor lighting requirements. Exterior neon is discouraged.	Sign lighting will adopt the city's BAR's recommendations for exterior lighting.	
6. Illumination of any sign shall not be directed toward any residential area or adjacent street.	Sign lighting will be discreet and indirect, not shining outward toward the property edges.	
7. Consider using a comprehensive signage plan for larger developments.	Signs will be compatible with one another.	
8. Encourage the use of monument signs with accent landscaping at the base along corridors.	No monument sign is proposed.	

9. Internally lit signs should use an opaque background so only letters are lit.	If sign lighting is employed it will be indirect, illuminating only the text/numbers.	
10. Flashing lights are prohibited.	None proposed.	

Chapter III: Guidelines for Sites, J. Utilities, Communication Equipment & Service Areas	**Applicant's Comment**	**Staff Comment**
1. Locate utilities to minimize their visual impact from the street and adjoining developments.	Utilities will be away from or screened from the JPA Corridor.	See comments/recommended condition in staff report
2. Screen and landscape dumpsters with wood board or solid barrier wall when multiple sides of a building are highly visible.	NA. (Trash dumpsters/bins will be stored in an enclosure, out of sight.	See comments/recommended condition in staff report
3. Place utilities underground if at all possible or locate behind buildings.	n/a	n/a
4. Screen service areas and loading docks that are visible from streets or adjoining development with berms, landscaping, structures or fences.	n/a	n/a
5. Site noise-generating features away from neighboring properties especially residences, or use noise barriers or other means of reducing the impact.	Exterior mechanical equipment is planned to be located on the middle of the roof. We anticipate no noise issues will arise.	See comments/recommended condition in staff report
6. Screen roof-top communications and mechanical equipment.	Rooftop equipment will typically be screened behind parapet walls.	

Chapter IV: Guidelines for Buildings, B. Architectural Compatibility	**Applicant's Comment**	**Staff Comment**
1. Charlottesville seeks new construction that reflects the unique character, history, and cultural diversity of this place. Architectural transplants from other locales or shallow imitations of historic architectural styles, for example, are neither appropriate nor desirable.	The building's architecture does not rely on historic references deployed superficially or romantically. It does not indulge vernacular details associated with places outside Charlottesville.	Concur
2. A distinctive identity for each corridor should be created through a combination of materials, forms and features that create a coordinated and inviting mix of buildings and spaces.	Exterior material selections are predominantly brick and metal, consistent with other buildings along the JPA corridor. The color palette falls in a compatible range. Building massing is varied, not monolithic. The scale evident in fenestration, entrances, site stairs, canopies and balconies is appropriate for this district. The landscape design along Jefferson Park Avenue and Montebello Circle has the potential to enhance the corridor's character, creating opportunities for pedestrian comfort and interaction in a shaded environment that is a marked improvement over other housing that fronts this corridor.	
3. Encourage a diversity of architectural materials, forms and styles that respect the traditions of architecture in the Charlottesville area including gable or hipped roof forms, standing seam metal roofing, brick, and wood siding.	Exterior material selections are predominantly brick, consistent with area traditions. The flat roof with parapets is common among the city's larger apartment buildings, including older ones (see 300 Fourth St SE, the Altamont Circle Apts, 39 University Circle, the Preston Court Apts, etc...)	
4. **New development should strive to implement the intended visio**n rather than repeat existing inappropriate development patterns.	Currently there are multiple examples of buildings along JPA that do not present engaging facades along the corridor (1909, 1905, 1801, 1721, 1719, 1715, 1713, 1709 and 1712 JPA, among them). On these properties, surface parking is prominent and visible in the front yards. Pedestrian walks are negligible and typically connect front doors not to public sidewalks but to asphalt parking. Street trees are uncommon, in many cases nonexistent. Trash cans are visible throughout the week. These properties do little to contribute to a sense of street edge. They are ill-defined. Architectural character is lacking. In contrast, the proposed project will not perpetuate any of these patterns. It represents a design that aspires to a better vision for this Corridor.	
5. New development should respect existing historic buildings and excellent examples from the recent past.	No buildings on the property are historically designated.	
6. Existing development should be upgraded as opportunities arise.	n/a	n/a

Chapter IV: Guidelines for Buildings, C. Building Mass, Scale & Height	**Applicant's Comment**	**Staff Comment**
1. Break up the front of a large building by dividing it into individual bays of 25 to 40 feet wide.	The building width is not significant enough to merit subdivision	Concur
2. Use variation in materials, textures, patterns, colors and details to break down the mass and scale of the building.	Material, textures and colors are varied. Brick veneer is used in much of the building body, but gives way along the wider side elevations and at the topmost story to invite some modulation of the perceived mass.	
Avoid an unmodulated mass	Perspective views reveal modulated massing.	
Use stepped-back height	Stepbacks occur frequently at upper stories.	
Use varied wall surfaces	Wall surfaces do not extend for long stretches in the same plane. Facades are distinguished by balcony recesses at regular intervals.	
Use varied heights with regular width	Parapet walls are taller over some locations, creating both variation in wall heights and places to screen mechanical equipment.	
3. Use building mass appropriate to the site. Place buildings of the greatest footprint, massing, and height in the core of commercial or office developments where the impact on adjacent uses is the least. Follow setback requirements for upper story according to zoning classification of the corridor.	NA (This is not an office or commercial development.)	
4. When making transitions to lower density areas, modulate the mass of the building to relate to smaller buildings. Heights can be greater if the mass is modulated and other scale techniques are adopted. Reduce height near lower density uses.	Because the grade rises from JPA to Montebello, the lower four levels of the building are submerged. This results in fewer stories above grade at the Montebello yard, where the proposed building is closer to the smaller scale houses along the circle.	

5. Use massing reduction techniques of articulated base, watertables, string courses, cornices, material changes and patterns, and fenestration to reduce the apparent height of a large building. Fake windows and similar details are not appropriate articulation. Floor-to-floor heights of a building can have an impact on the mass of a building. For instance, typical ceiling heights in a residence are 8-9 feet. First floors of office buildings or retail shops can range from 10-15 feet. Upper floors that include residential or office are generally 8-12 feet in height. When actual or implied floor-to-floor heights exceed 15-20 feet on the exterior, then a building may begin to read as more massive than human-scaled. When articulating large buildings, keep these dimensions in mind.	Multiple massing reduction techniques are employed. Floor-to-floor heights are typically 11', appropriate for a multi-family building.	
Space: Creating human-scaled spaces that are defined by either buildings or landscape features provide more friendly, inviting places.	Spaces along the streets, those pedestrians are most likely to encounter, benefit from plantings, site walls and courts that support human-scaled environments. On the building, windows, doors and canopies will further enhance this sense of scale	

Chapter IV: Guidelines for Buildings, E. Facade Organization & Storefronts	**Applicant's Comment**	**Staff Comment**
1. Orient primary entrances on a building facade to the street or corridor.	The primary entrance faces on the corridor.	Concur
2. Use a hierarchy of entry design on any complex, if the building has more than one orientation, and focus main entry on street/corridor facade.	The inclusion of an entry plaza leading to the main entrance creates a visible arrival sequence, complimented by beautiful native plantings.	
3. Secondary entries may be created to allow convenient access from adjacent buildings, sidewalks, parking, bicycle paths and transit stops.	Another entrance is located on Montebello Circle. It provides a convenient location for residents who prefer to come and go at the northwest side of the parcel.	
4. Orient at least part of public elevations of shopping complexes to any adjoining neighborhoods.	n/a	
5. Provide attractive facade treatments on any elevation that is visible from streets/corridors or from any primary elevations of adjoining developments and avoid use of unadorned blank walls.	Primary elevation facades utilize materials, fenestration and masonry detailing that create an appropriate level of relief.	
6. Consider using the traditional three-part facade of **cornice**, pattern of **upper story window**s and a **storefront with articulated bas**e when designing a new building or when renovating an existing structure.	The proposed building does not present a three-part hierarchy in the most obvious, traditional form. This building does not prioritize the historical horizontal subdivisions that were more common in previous eras. Instead, we intend the use of material and facade transitions to create a richer juxtaposition, emphasizing both vertical and horizontal proportions, often overlapping the two.	
7. Use a regular pattern of solids and voids for openings that relate to more traditional building design in the corridor.	n/a	
8. Use a proportion of openings (vertical or horizontal) that generally is consistent with the context of the building. More traditional designed openings are typically vertically proportioned.	The windows, doors and storefront typically adopt vertical proportions in keeping with traditional buildings.	
9. Strive for designs and materials that reflect the architectural traditions of the region.	Typically, material choices are appropriate for the region.	
10. Storefronts or large display windows should be used at the street level.	Storefront facades are used at the JPA entry lobby, offering visibility into common space.	

Chapter IV: Guidelines for Buildings, F. Materials & Textures	**Applicant's Comment**	**Staff Comment**
1. Use material changes to help reduce mass and provide visual interest.	Materials changes are used deliberately to reduce the impression of massiveness.	Concur
2. Choose materials that offer texture and avoid monotonous surfaces. For example, use wood or brick or stone, or new synthetic materials that approximate the look and dimension of these materials.	The proposed brick and metal cladding will provide a range of textures and avoid monotony.	
3. Use quality materials consistently on all visible sides of commercial, office and multi-family residential buildings.	Materials will be durable.	
4. In Charlottesville, common building materials are brick, wood or stucco siding, and standing-seam metal roofs. Stone is more commonly used for site walls than building walls.	n/a	
5. Avoid the use of building materials with long-term maintenance problems, such as EIFS (exterior insulation and finishing systems), or vinyl siding. Sustainable, utilitarian building materials such as concrete block, metal siding or cementitious panels may be appropriately used for a contemporary design.		n/a
6. Clear glass windows are preferred.		See comments/recommended condition in staff report

Chapter IV: Guidelines for Buildings, G. Color	**Applicant's Comment**	**Staff Comment**
1. A coordinated palette of colors should be created for each development. This palette should be compatible with adjacent developments.	The colors will be complimentary. Red brick is common along the Corridor. Metal paneling will have a gray or silver patina, which may tend to darken subtly as it weathers. We believe the metal material, while more common on roofs, will pair well with the brick on the building walls.	Concur
2. Set the color theme by choosing the color for the material with the most area. If there is more roof than wall area in a development, roof color will be the most important color choice and will set the tone for the rest of the colors.	The brick facades cover the most exterior area. The metal finish will be coordinated to look good with the brick.	
3. Limit the number of color choices. Generally there is a wall color, trim color, accent color, and roof color.	Number of color choices are appropriate.	
4. Use natural tints of materials such as reds, browns, tans, grays, and greens as primary colors. Save bright accent colors for awnings and signs on commercial buildings.	We will.	
5. Use color variation to break up the mass of a building and provide visual interest.	See perspective drawings.	
6. Do not use strong color that has the effect of turning the entire building into a sign.	We do not.	

Chapter IV: Guidelines for Buildings, H. Details		
1. Use articulated elements such as cornices, belt courses, water tables, bay divisions, variations in wall plane and roof features to create designs of interest.	A building base at JPA, variations in wall plane created by recessed balconies, and a stepped back top story clad in a different material are among the elements used to create architectural articulation.	

2. Include human-scaled elements such as columns, pilasters and cornices, particularly at street level and on facades with a pedestrian focus.	Site steps, lobby doors, balcony railings and fenestration contribute to human scale.	Concur
3. Avoid large expanses of blank walls that are visible from the public right of way or neighboring developments.	Typically vertical planes, materials and colors vary often enough that large blank expanses do not result.	
4. Avoid oversized decorative elements.	No big decorative elements are proposed.	
5. Avoid decorative elements that do not relate to the architecture but serve to turn the whole building into a sign.	No such elements are proposed	

Chapter IV: Guidelines for Buildings, I. Roof Form & Materials	**Applicant's Comment**	**Staff Comment**
1. Use roof forms that complement the building design and contribute to a human scale. Avoid tall roof areas that overwhelm the height of the building's wall. Common Charlottesville roof forms include hipped, gable, flat and gambrel.	Roofs and their materials are not visible from the ground. They are flat roofs, common for and appropriate to multi-family buildings in Charlottesville.	Concur
2. If a shed roof or flat roof design is used, add a parapet wall to screen the roof.	Some roofs have parapets.	
3. Avoid a visible monolithic expanse of roof on large-scale buildings. Break the roof mass with elements such as gables, dormers, or parapets. Scale these features to the scale of the building.	Roof surfaces are not visible from the Corridor.	
4. Consider using a special roof feature on buildings located at a gateway, a prominent corner or highlight entry bays on larger structures.	Metal canopies extending above the lobby storefront help signal the primary entry place.	
5. Steeper forms are associated with more traditional design and can be appropriate when the development adjoins nearby neighborhoods.	n/a	
6. On roofs that are visible such as gable, hipped or shed designs, use quality materials such as metal or textured asphalt shingles.	n/a	
7. Any equipment located on a roof should be screened from public view.	It will be.	

Chapter IV: Guidelines for Buildings, J. Awnings.	**Applicant's Comment**	**Staff Comment**
1. Encourage the use of awnings at the storefront level to shield displays and entry and to add visual interest.	Canopies are proposed for these purposes.	Concur
2. Coordinate the choice of colors, as part of an overall color scheme. Solid colors, wide stripes and narrow stripes should be considered as appropriate.	Canopy colors are coordinated with associated storefronts.	
3. Awning forms may be angled or curved.	n/a	
4. Use of a canopy as an illuminated sign is not appropriate.	n/a	
5. Awning materials should be appropriate to the overall design of the building. Traditional cloth fabric, as well as standing-seam metal or newer rigid materials may be considered.	Canopies would be painted or powder coated metal.	

Chapter IV: Guidelines for Buildings, I. Appurtenances	**Applicant's Comment**	**Staff Comment**
1. Building service, loading, and utility areas should not be visible from public streets, adjacent developments or from access drives within large developments. Such service areas should be located behind the main structure in the least visible location possible.	Because the building does not have access to side streets or alleys, loading and deliveries must happen along one of the streets. The Montebello yard has room for a modest delivery pull-off.	See comments/recommended condition in staff report
2. Mechanical equipment on roofs or sides of buildings should not be visible from streets.	n/a	
3. When the mechanical equipment vents, meters, satellite dishes and similar equipment is ground mounted, screening should include either an opaque fence or wall made of the same material as the building or an evergreen hedge that screens objectionable views.	None of these are located in visible locations.	
4. Items such as roof ladders, railings, roll-up doors and service doors should be located on building elevations that are the least visible from public streets/corridors, adjacent developments or from access drives within large developments. Their colors should be coordinated among all these elements and with the rest of the building.	n/a	
5. In some cases, appurtenances may be integrated into the building design if such integration enhances the compatibility of the overall design with the corridor vision.		

Chapter IV: Guidelines for Buildings, J. Additions & Corridor Conversions		n/a
Chapter IV: Guidelines for Buildings, K. Franchise Design		n/a
Chapter IV: Guidelines for Buildings, L. Gas Station Canopies		n/a
Chapter IV: Guidelines for Buildings, M. Civic & Institutional Buildings		n/a

Chapter IV: Guidelines for Buildings, N. Multi-Family Buildings	**Applicant's Comment**	**Staff Comment**
1. Follow the other guidelines within this chapter as applicable for the overall design of such buildings in such issues as massing and building footprint, scale, complexity of form, height and width, materials, textures and colors, roof forms and materials, etc.	Other applicable chapter guidelines are addressed in previous pages.	See germane comments above.
2. Give consideration to placing first floor retail storefronts in multi-family buildings if they face along a commercial corridor or face a pedestrian-oriented street within the downtown.	n/a	
3. Avoid creating street front facades that are dominated by garage doors.	No garage doors are proposed on the front facade.	
4. Ensure that the designs of such buildings are consistent with any adjoining neighborhoods and the zoning ordinance.	They are consistent.	

CITY OF CHARLOTTESVILLE
BOARD OF ARCHITECTURAL REVIEW
Summary of BAR Discussion on July 17, 2018 re: *Clear Glass*

On July 17, 2018, at the request of the ERB, the BAR regarding the definition of clear glass and the corresponding 70 VLT that has become the city's standard.

Background:
While one of several factors used in specifying glass, Visual Light Transmittance (VLT) is generally accepted as the measure of the clearness and reflectivity of glass. High VLT indicates the glass is clearer and less reflective; low VLT indicate less clear, more reflective glass.

The city's Design Guidelines for Architectural Design Control Districts and Entrance Corridors (EC projects are reviewed by the Entrance Corridor Review Board, or ERB) both recommend "clear glass." However neither guidelines refers to a specific VLT—see citations below. Several years ago, after evaluating the criteria used to specify glass, the BAR (and the ERB) began using 70 VLT as the threshold for clear glass; tacitly establishing it as *the standard*.

Summary of BAR Discussion:
BAR concluded that VLT 70 should remain the preference relative to *clear glass*. However, they acknowledged the case-by-case flexibility offered in the Design Guidelines; specifically, though not exclusively, that this allows for the consideration of alternatives—e.g. VLTs below 70--and that subsequent BAR decisions regarding glass should be guided by the project's location (e.g. on the Downtown Mall versus a side street), the type of windows and location on the building (e.g. a street level storefront versus the upper floors of an office building), the fenestration design (e.g. continuous glass walls versus punched windows), energy conservation goals, the intent of the architectural design, matching historical glass, and so on.

Additionally, the BAR recommends that the ERB consider a similar approach in its evaluation of the glass proposed for EC projects.

References to Glass in Resign Guidelines
ADC Design Guidelines
Chapter 3. New construction; I. Windows & Doors
(5) Darkly tinted mirrored glass is not an appropriate material for windows in new buildings within the historic districts.
(9) Glass shall be clear. Opaque spandrel glass or translucent glass may be approved by the BAR for specific applications.

Chapter 4. Rehabilitations; C. Windows
(15) Do not use tinted or mirrored glass on major facades of the building. Translucent or low (e) glass may be strategies to keep heat gain down.

Entrance Corridor Design Guidelines
IV. Guidelines for Buildings; E. Materials and Textures
(6) Clear glass windows are preferred.

Note: The Historic Conservation District guidelines state: *Clear glass windows (VLT of 70% or more) are preferred.* These were adopted after the 70 VLT became the tacit standard for ADC and EC projects.

CITY OF CHARLOTTESVILLE

DEPARTMENT OF NEIGHBORHOOD DEVELOPMENT SERVICES

STAFF REPORT

JOINT CITY COUNCIL AND PLANNING COMMISSION PUBLIC HEARING

APPLICATION FOR A REZONING OF PROPERTY

APPLICATION NUMBER: ZM23-00004

DATE OF HEARING: November 14, 2023

Project Planner: Matt Alfele, AICP
Date of Staff Report: October 31, 2023

Applicant: Subtext Acquisitions, LLC (Contract Purchaser)
Applicants Representative: Dylan Lambur (Subtext Acquisitions, LLC)
Current Property Owners: Woodrow Apartments, LLC; Woodrow Too, LLC; and 1709 JPA LLC (collectively the "Owners")

Application Information

Property Street Address: 106 – 114 Stadium Road, 409 Stadium Road, 104 Stadium Road, 102 Stadium Road, 1705 Jefferson Park Avenue, and 100 Stadium Road (the "Subject Properties")
Tax Map & Parcel/Tax Status: Parcel Number: 160008000, 160005000, 160004000, 160003000, 160002000, and 160001000 (real estate taxes paid current - Sec. 34-10)
Total Square Footage/ Acreage Site: Approx. 3.3 acres (approximately 144,002 square feet)
Comprehensive Plan (General Land Use Plan): Urban Mixed Use Corridor
Current Classification: R-3 (Residential Multifamily) (104 Stadium Road is zoned R-3H and is an Individually Protected Property IPP)
Proposed Zoning Classification: Planned Unit Development ("PUD")
Overlay District: Entrance Corridor
Completeness: The application generally contains all of the information required by Zoning Ordinance (Z.O.) Sec. 34-41
Other Approvals Required: Sidewalk Waiver (P23-0058) for a portion of Montebello Circle, Critical Slope Waiver (P23-0055), and Removal of the IPP (ZT23-09-02)

Applicant's Request (Summary)

Subtext Acquisitions, LLC ("Applicant"), on behalf of Woodrow Apartments, LLC; Woodrow Too, LLC; and 1709 JPA LLC, ("Owner") is requesting a Zoning Map Amendment pursuant to Sections 34-41 of the Code of the City of Charlottesville ("Code") for properties ("Subject Property"). The

applicant is proposing to rezone the Subject Property from Multifamily Residential ("R-3") to Planned Unit Development ("PUD") with a Development Plan and a Proffer Statement. The application and development plan includes parking requirements; a use matrix including a maximum dwelling units per acre ("DUA"); yard and height regulations; open space; and landscaping. The Proffer Statement indicates the applicant will provide a cash contribution to the City's affordable housing fund in the amount equal to double that which is required under Section 34-12(d)(2). The applicant is proposing to redevelop the Subject Property and replace the existing (62) residential units (spread between nine different buildings) with one building containing between (524) to (550) residential units. The proposed building will have a height range of (75) feet to (135) feet and stories that range from (5) to (12). In addition, the proposed PUD includes improved pedestrian and bicycle circulation along Stadium Road, Emmet Street, and Jefferson Park Avenue and road improvements to Montebello Circle.

On October 10, 2023 Planning Commission held a joint Public Hearing with City Council on this proposed rezoning, along with the following applications.

Application P23-0055 - A Critical Slope Waiver per City Code Section 34-516(c). Critical Slopes exist on the Subject Property along the Montebello Circle frontage and will be impacted by the proposed development. *(Planning Commission voted 6-0 to recommend approval.)*

Application P23-0058 - A Sidewalk Waiver per City Code Section 29-182(j)(5) for a portion of Montebello Circle (P23-0058). The applicant's development plan calls for fire access improvements to Montebello Circle, but due to site constraints is requesting a waiver for a sidewalk along approximately 300 feet of frontage. *(City Council will act on this application at a future meeting.)*

An amendment to "An Ordinance Authorizing the Sale of Certain City-Owned Property Located at 409 Stadium Road" adopted May 2, 2011 – The applicant is proposing to amend the ordinance authorizing the sale of city-owned property located at 409 stadium road to allow for development. *(City Council will act on this amendment at a future meeting.)*

Application CP23-00002 – VERVE Charlottesville PUD - Code of Virginia, § 15.2-2232 Review: 106 – 114 Stadium Road, 409 Stadium Road, 104 Stadium Road, 102 Stadium Road, and 100 Stadium Road - The applicant is requesting an amendment to the November 4, 1996 vacation of the Woodrow Street Right of Way (ROW) along with a request to zone the closed portion to Planned Unit Development ("PUD"). Woodrow Street is an unimproved paper street that bisects the Subject Property and is used mainly for off-street parking for the existing residential units. Several public utility lines such as sanitary, water, and gas run through Woodrow Street

and will need to be relocated as part of the proposed development. *(Planning Commission voted 6-0 to find that amending the November 4, 1996 ordinance vacating Woodrow Street ROW to permit the proposed Planned Unit Development (PUD) as described in ZMA application ZM23-00004 and ZTA application ZT23-09-02* ***is substantially in accord*** *with the City's Comprehensive Plan or parts thereof, as amended: City Council will act on this amendment at a future meeting.)*

Application ZTA-23-09-02 – Zoning Text amendment to remove the Individually Protected Property (IPP) designation from 104 Stadium Road. *Planning Commission voted 6-0 to recommend approval.)*

During the October 10, 2023 Public Hearing there was a question regarding the enforceability of the affordable housing statement provided on the Cover Sheet of the PUD Development Plan. It has been determined that to ensure the statement is enforced as proposed by the applicant, it needs to be contained in a Proffer Statement. The applicant has provided the Proffer Statement containing the same language as Planning Commission reviewed on October 10th with no additional changes to the application. The original application and background materials can be found at the following link:

Link to the full application and background materials. The Staff Report starts on page 47.
https://charlottesvilleva.portal.civicclerk.com/event/1788/files

Staff Recommendation

Staff finds the proposed development, as presented in the application(s) materials, would contribute to some goals within the City's Comprehensive Plan such as providing increased residential density at an ideal location within the City, support a wide range of rental and homeownership housing choices that promote, walkability, bikeability, ADA accessibility, public transit use, and creating a connected network of safe, convenient, and pleasant accommodations for pedestrians, bicyclists, and transit riders. However, staff's cannot recommend approval as the proposed scale of the development does not align with the Future Land Use Map of the Comprehensive Plan and City Council's previous actions through ordinances indicate lower density, and preservation within the Subject Property. Staff also finds the proposed development does not meet the higher standards and objectives outlined for a Planned Unit Development.

Suggested Motions

Zoning Map Amendment to rezoning the Subject Property from R-3 Multifamily Residential to Planned Unit Development (PUD) with a Development Plan - **ZM23-00004**

1. I move to recommend that City Council should approve **ZM23-00004**, on the basis that approval of the proposed PUD Development is consistent with the City's adopted Comprehensive Plan and will serve the public necessity, convenience, general welfare and good zoning practice.

OR,

2. I move to recommend that City Council should deny approval of **ZM23-00004**on the basis that approval of the proposed PUD Development is not consistent with the City's adopted Comprehensive Plan and will not serve the public necessity, convenience, general welfare and good zoning practice.

Attachments

A. Proffer Statement Dated October 23, 2023

Attachment A

Original Proffers ____X____
Amendment _____

PROFFER STATEMENT

Project Name: **Verve Charlottesville**

Date: October 23, 2023

Address: 100, 102, 104, 106-114, and 409 Stadium Road and 1705 Jefferson Park Avenue
Parcel Numbers: 160001000, 160002000, 160003000, 160004000, 160005000, 160008000

Owner of Record: **Woodrow Apartments, LLC; Woodrow Too, LLC; 1705 JPA LLC** (the "Owner")

Proposal:

- Rezone 100,102,104,106-114, and 409 Stadium Road and 1705 Jefferson Park Avenue, parcels 160001000, 160002000, 160003000, 160004000, 160005000, 160008000 (3.31 acres) (the "Property"), from R-3 district to Planned Unit Development (PUD) district with proffers (the "Project");

Total land area: Approximately 3.31 acres

The Owner hereby voluntarily proffers that if the City of Charlottesville City Council acts to rezone the property as requested, the Owner shall develop the Property in general accord with the following proffers pursuant to Sections 15.2-2303 and 15.2-2303.4 of the Code of Virginia, 1950, as amended, and pursuant to Section 34-41.d.8 of the City of Charlottesville Zoning Ordinance. The Owner specifically deems the following proffers reasonable and appropriate, as conclusively evidenced by the signatures below. This Proffer Statement shall run with the Property and each reference to the "Owner" within this Proffer Statement shall include within its meaning, and shall be binding upon, Owner's successor(s) in interest and/or the developer(s) of the Property or any portion of the Property.

1. **Affordable Housing:** The Owner shall make a cash contribution to the City's affordable housing fund in the amount equal to double that which would be required under City Code Section 34-12(d)(2) based on the approved final site plan. Such cash contribution shall be delivered to the City prior to the issuance of the first Certificate of Occupancy for the Project.

[SIGNATURE PAGE IMMEDIATELY FOLLOWS]

Signature Page for Proffer Statement for Verve Charlottesville

OWNER:

Woodrow Apartments, LLC
a Virginia limited liability company

By: _____

Printed Name:_____

Title: _____

Woodrow Too, LLC
a Virginia limited liability company

By: _____

Printed Name:_____

Title: _____

1705 JPA, LLC
a Virginia limited liability company

By: _____

Printed Name:_____

Title: _____

CITY OF CHARLOTTESVILLE

DEPARTMENT OF NEIGHBORHOOD DEVELOPMENT SERVICES

STAFF REPORT

JOINT CITY COUNCIL AND PLANNING COMMISSION PUBLIC HEARING

APPLICATION FOR A REZONING OF PROPERTY

APPLICATION NUMBER: ZM23-0002

DATE OF HEARING: November 14, 2023

Project Planner: Carrie Rainey, RLA, AICP
Date of Staff Report: November 7, 2023

Applicant: Green Retro Salvage II Holdings, LLC
Applicant's Representative(s): Justin Shimp, Kelsey Schlein, Rachel Moon of Shimp Engineering, P.C.
Current Property Owner: Green Retro Salvage II Holdings, LLC
Application Information
Property Street Address: 108, 110, 112 Lankford Avenue
Tax Map & Parcel/Tax Status: 260012000 (real estate taxes paid current - Sec. 34-10)
Total Square Footage/ Acreage Site: Approx. 0.948 acres (41,303.59 square feet)
Comprehensive Plan (General Land Use Plan): General Residential
Current Zoning Classification: R-1S (Residential Single Family Small Lot)
Proposed Zoning Classification: R-3 (Multifamily Residential) with Proffers
Overlay District: None

Applicant's Request (Summary)

Green Retro Salvage II Holdings, LLC (applicant and owner) has submitted a Rezoning application per Code Section 34-41 for property located at 108, 110, and 112 Lankford Avenue and identified in the City's land records as Tax Map and Parcel (TMP) 260012000 (Subject Property). The applicant is pursuing a rezoning to change the existing zoning of the Subject Property from Residential Small Lot (R-1S) to R-3 (Multifamily Residential) with proffers. The proffer statement **(Attachment D)** provides 12.5% of residential units to be "for-rent affordable dwelling units." The proffer statement defines "affordable" to mean the cost of rent, including tenant paid utilities, will not exceed 30% of the monthly income of a 60% AMI (area median income) household. The proffer statement requires the affordable units to be affordable for 89 years, beginning from the 10th year following the date on which the first unit of the project receives a certificate of occupancy.

In order to implement the project as presented, the applicant has also applied for a Special Use Permit (SUP) (SP23-00003) to increase residential density from 21 dwelling units per acre (DUA) to 51 DUA and modify required setbacks and screening buffers, as well as a Critical Slope Waiver (P23-0046) to permit disturbance of approximately 285 square feet of critical slope area. Should the rezoning request be approved, 19 residential units would be permitted and should the SUP application be approved 48 residential units would be permitted. Please see the following Staff Reports for more information on the SUP and Critical Slope Waiver applications.

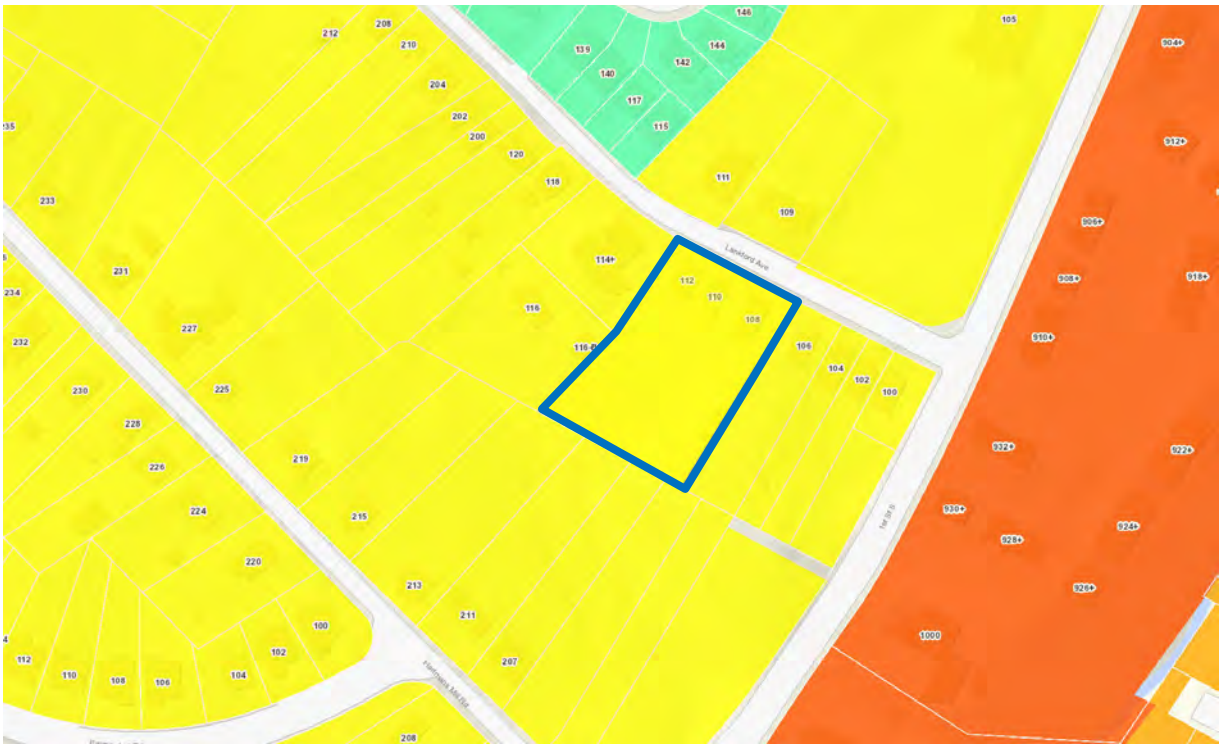
Vicinity Map



Context Map 1



Context Map 2- Zoning Classifications



KEY - Green: PUD, Yellow: R-1S, Dark Orange: R-3, Orange: R-2

Context Map 3- Future Land Use Map, 2021 Comprehensive Plan



KEY – Dark Brown: Higher-Intensity Residential, Yellow: General Residential, Yellow with Blue Dash: General Residential (Sensitive Community Area), Green: Open Spaces and Parks

Standard of Review

City Council may grant an applicant a rezoning request, giving consideration to a number of factors set forth within Section 34-41. The role of the Planning Commission is and make an advisory recommendation to the City Council, as to whether or not Council should approve a proposed rezoning based on the factors listed in Section 34-42(a):

(a) All proposed amendments shall be reviewed by the planning commission. The planning commission shall review and study each proposed amendment to determine:

(1) Whether the proposed amendment conforms to the general guidelines and policies contained in the comprehensive plan;

(2) Whether the proposed amendment will further the purposes of this chapter and the general welfare of the entire community;

(3) Whether there is a need and justification for the change; and

(4) When pertaining to a change in the zoning district classification of property, the effect of the proposed change, if any, on the property itself, on surrounding property, and on public services and facilities. In addition, the commission shall consider the appropriateness of the property for inclusion within the proposed zoning district, relating to the purposes set forth at the beginning of the proposed district classification.

For applicant's analysis of their application per Sec 34-42 & Sec. 34-41(d) see **Attachment B.**

Sec. 34-42(a)(1): Whether the proposed amendment conforms to the general guidelines and policies contained in the comprehensive plan.

Below are specific areas of the Comprehensive Plan for which the request could be in compliance:

a. Housing

Goal 2: Diverse Housing Throughout the City.

Support a wide range of rental and homeownership housing choices that are integrated and balanced across the city, and that meet multiple City goals including community sustainability, walkability, bikeability, ADA accessibility, public transit use, increased support for families with children and low income households, access to food, access to local jobs, thriving local businesses, and decreased vehicle use.

Strategy 2.2 *Promote housing redevelopment and infill development that supports bicycle and pedestrian- oriented infrastructure improvements and robust public transportation to better connect residents to jobs and commercial activity.*

Below are specific areas of the Comprehensive Plan for which the request may not be in compliance:

a. Land Use, Urban Form, and Historic & Cultural Preservation

Objectives for Residential Areas: Encourage incremental "house-sized," contextual infill within existing residential neighborhoods.

Goal 2: Future Land Use Vision.

Guide implementation of the Future Land Use vision contained in this Comprehensive Plan, including support for existing neighborhoods and preventing displacement.

Strategy 2.3 *Evaluate existing and potential new programs for protecting communities at risk of displacement, as well as protecting existing affordable housing, historic buildings, community-based urban agriculture sites, and other resources.*

Sub-strategy: *Where possible, prioritize the preservation of existing structures while encouraging a greater intensity of use. Encourage infill development and reuse of or additions to structures, rather than demolition of existing buildings, to address gaps in established or planned development patterns. This may include strategies that can help preserve existing structures, including the use of Accessory Dwelling*

Units (ADUs), building additions, transitioning larger single-family houses to apartments, etc.

Goal 3: Balance Conservation and Preservation with Change.

Protect and enhance the existing distinct identities of the city's neighborhoods and places while promoting and prioritizing infill development, housing options, a mix of uses, and sustainable reuse in our community.

Strategy 3.1 *Utilize context-sensitive planning tools to maintain and enhance the distinct identities of Charlottesville's neighborhoods and corridors.*

Sub-strategy: *Encourage development that responds to the character of contiguous historic buildings and neighborhoods while allowing enhanced intensity of uses, including multi-family units, in forms and scales that are respectful of the surrounding neighborhood.*

Sub-strategy: *Require adequate transitions (such as step downs in scale and intensity) to mitigate impacts on adjacent residential and historic areas, as well as cemeteries.*

Staff Analysis: The 2021 Comprehensive Future Land Use Map designates the Subject Property and adjacent properties as General Residential. Properties across Lankford Avenue are designated as General Residential (Sensitive Community Areas). The Land Use Category Descriptions of the comprehensive plan states the following for General Residential areas:

Description: Allow for additional housing choice within existing residential neighborhoods throughout the city.
Form: Compatible with existing context, including house-sized structures with similar ground floor footprint area and setbacks as surrounding residential structures.
Height: Up to 2.5 stories.
Use and Affordability: Allow 3 unit per lot. Allow up to 4-unit dwellings if the existing structure is maintained. Allow additional units and height under an affordability bonus program or other zoning mechanism.

Staff finds while the proposed rezoning may contribute to some aspects of the City's Comprehensive Plan, the rezoning is not consistent with the Future Land Use Map, Land Use Category Description, and several aspects of the Comprehensive Plan. The General Residential Land Use Category limits residential units to four (4) per lot while the application proposes 48 residential units through the SUP application and would be permitted 19 residential units should this Rezoning application be approved. Staff is also concerned the scale of the proposed development does not align with the Land Use Category Description for General Residential or goals to implement context-sensitive infill

and respect existing neighborhood patterns and scale. While the existing neighborhood includes a variety of residential use types, the larger site areas, deeper setbacks, smaller footprints, and shared green spaces reduce the density and scale of the community. The application materials (**Attachments B and C**) indicate the proposed buildings will be taller, wider, and closer to the street and adjacent properties than the typical patterns of the neighborhood.

Streets that Work Plan

Lankford Avenue (Honorary Name: Dr. Alvin Edwards Drive) is designated as a Local Street in the Plan. Local Streets are found throughout the City and provide immediate access to all types of land uses. Although Local Streets form the majority of the street network, there is no specific typology associated with them. This is due in part to the many variations in context and rights-of-way, as well as the community's expressed desire to replicate as nearly as possible the feel of older local streets that do not meet current engineering and fire code standards. Local Streets do not have priorities and Neighborhood A or B design element priorities, as laid out in the Streets that Work Plan, should be evaluated when determining design elements. The Streets that Work Plan notes the highest priority design elements for Neighborhood A Streets are sidewalks with a minimum of 5 to 6 feet of clear zone and bicycle facilities such as 5 feet bike lanes and 6 feet climbing lanes. On-street parking is also a high priority for Neighborhood A Streets. Lankford Avenue has a mostly complete sidewalk network with some gaps on the northern side of the street (the Subject Property is located on the southern side of the street). The existing sidewalks are approximately five (5) feet in width, but the clear walk width is reduced by existing power line poles in the sidewalk. In addition, no curbside buffer is provided between the sidewalk and street. The curb-to-curb width of Lankford Avenue varies but is approximately 30-ft in the vicinity of the Subject Property. On-street parking is generally permitted. The proposed development, as shown in **Attachment C**, does not propose any improvements to Lankford Avenue beyond a new driveway entrance on the eastern side of the Subject Property.

Staff Analysis: The existing conditions of Lankford Avenue generally align with the recommendations of the Streets that Work Plan. In addition, the narrow travel lanes and on-street parking limit potential improvements in the right-of-way. The proposed development will meet on-site parking requirements, which will minimize impacts to the availability of on-street parking for other residents in the area.

Bicycle and Pedestrian Master Plan

The 2015 Bicycle and Pedestrian Master Plan does not identify Lankford Avenue as a location for bicycle or pedestrian infrastructure improvements. The Master Plan proposes

improvements to nearby 5th Street SW (bicycle lanes), 6th Street SE (shared roadway and contraflow bicycle lanes), Elliott Avenue (bicycle lanes and sidewalk improvements), and Ridge Street (shared roadway). The City has implemented the proposed bicycle facility improvements on 6th Street SE and is currently working on sidewalk improvements for Elliott Avenue and corridor improvements for 5th Street SW.

Staff Analysis: Based on the application materials, staff concludes that the proposed development will not have an impact to existing bicycle and pedestrian infrastructure. While the Subject Property's proximity to downtown and other amenities may encourage residents to walk and bike, staff finds the existing facilities and future planned public facilities will be adequate to address the potential increase of walkers and bikers in the area.

Sec. 34-42(a)(2): Whether the proposed amendment will further the purposes of this chapter and the general welfare of the entire community.

Staff finds that changing the zoning from R-1S to R-3 with proffers does not align with the 2021 Comprehensive Plan Future Land Use Map and Land Use Descriptions and therefore will not facilitate a harmonious community or protect and enhance the character and stability of the neighborhood.

Sec. 34-42(a)(3): Whether there is a need and justification for the change.

The 2021 Comprehensive Plan Future Land Use Map designates the Subject Property as General Residential. A rezoning of the Subject Property (R-1S to R-3 with proffers) would not be consistent with this standard and is not justified per this code section.

Sec. 34-42(a)(4): When pertaining to a change in the zoning district classification of property, the effect of the proposed change, if any, on the property itself, on surrounding property, and on public services and facilities. In addition, the commission shall consider the appropriateness of the property for inclusion within the proposed zoning district, relating to the purposes set forth at the beginning of the proposed district classification.

Most development within the R-3 zoning district, including the proposed development of multifamily residential units, will require review and approval of a site plan per Section 34-802 before land distribution activities can begin. During the review of the site plan staff would determine if existing public services and facilities would be adequate to support the development or if improvements are required.

The purposes set forth per Section 34-350 are:

Single-family (R-1). The single-family residential zoning districts are established to provide and protect quiet, low-density residential areas wherein the predominant pattern of residential development is the single-family dwelling. There are four (4) categories of single-family zoning districts: **R-1(S) ("small lot").** Consisting of low-density residential areas characterized by small-lot development.

Multifamily. The purpose of the multifamily residential zoning district is to provide areas for medium- to high-density residential development. The basic permitted use is medium-density residential development; however, higher density residential development may be permitted where harmonious with surrounding areas. Certain additional uses may be permitted, in cases where the character of the district will not be altered by levels of traffic, parking, lighting, noise, or other impacts associated with such uses. There are three (3) categories of multifamily residential zoning districts: **R-3** consisting of medium-density residential areas in which medium-density residential developments, including multifamily uses, are encouraged.

The Subject Property is currently zoned R-1S. R-1S lots are one of the most restrictive zoning categories in the City. All by-right, provisional, and special uses allowed within this zoning district are Residential and Related per code Section 34-420 and single-family detached is the most common of these uses. The permitted uses in the R-1S and R-3 residential districts are similar with several key differences. While the R-1S district limits residential use types to single family detached, the R-3 district permits single family detached, single family attached, two-family, townhouses, and multifamily residential developments. While both districts generally prohibit commercial and industrial uses, the R-3 district does allow uses such as health clinics up to 4,000 SF and public health clinics by-right and several commercial uses ancillary to a primary use including consumer service businesses up to 4,000 SF.

Zoning History of the Subject Property:

Year	Zoning District
1949	C Industrial
1958	R-3 Multiple Dwelling
1976	R-3 Residential Multiple Dwelling
1991	R-3 Residential Multiple Dwelling
2003	R-1S Residential

The Subject Property is bordered by:

Direction	Use	Zoning
North	Single family and Two-family	R-1S
South	Single family residential	R-1S
East	Single family residential	R-1S
West	Single family and multifamily residential	R-1S, IPP

Physical Characteristics Requirements:

Current R-1S Zoning		**Proposed R-3 Zoning**	
Physical Characteristics		**Physical Characteristics**	
Front Setback	25’ min	**Front Setback**	25’ min (modification to 10’ min requested*)
Side Setback	5’ min (Single Family Detached) 50’ min (Non-residential) 20’ min (Corner Street Side)	**Side Setback**	Res: Up to 21 DUA: 1’/2’ height, 10’ min 22-43 DUA: 1’/3’ height, 10’ min 44-87 DUA: 1’/4’ height, 10’ min (modification to 10’ min requested*) Non-Residential: 25’ min Corner, street side: 20 feet, min
Rear Setback	25’ min (Residential) 50’ min (Non-residential)	**Rear Setback**	25’ min (Residential)
Additional Setbacks	None	**Additional Setbacks**	Res: 22-43 DUA: 50’ min distance from façade to low density residential district 44-87 DUA: 75’ min from façade to low density residential district (modification to 10’ min side setback and 25’ rear setback requested*)

Land Coverage	No limit outside setbacks	**Land Coverage**	Up to 21 DUA: 75% max 22-87 DUA: 80% max
Height	35’ max	**Height**	45’ max
Min Lot Size	6,000SF (Single Family Detached) No requirement (non-residential)	**Min Lot Size**	6,000SF (Single Family Detached) 2,000SF with 3,600 SF Average (Single Family Attached) 7,200SF (Two-Family) 2,000SF (Townhouse) No requirement (non-residential)
Road Frontage	50’ (Single Family) No requirement (Non-residential)	**Road Frontage**	50’ (Single Family Detached, Two-family, Multifamily) 20’ (Single Family Attached) 16’ (Townhouse) No requirement (Non-residential)
Parking	1 space per unit	**Parking**	Efficiency, 1, and 2 bedroom: = 1 space per unit. 3 and 4 bedroom: = 2 spaces per unit.

* The applicant has also submitted a Special Use Permit application (SP23-00003), which proposes to modify these requirements per Section 34-162.

Staff Analysis: Staff finds a rezoning of the Subject Property would not be consistent with the patterns of development along Lankford Avenue and could negatively impact nearby residential properties. From the applicant materials staff finds that should the properties be rezoned; the proposed development would most likely comply with the zoning standards found within the chapter but would not conform to the purposes set forth at the beginning of the chapter as the proposed development is not harmonious with the surrounding area.

Proffers

The applicant is proposing to rezone the Subject Property from R-1S to R-3 with proffers. The proffer statement includes:

1. Affordable Housing:

The Owner shall provide affordable housing within the Project, as follows:

a. For the purposes of this Proffer, the term "For-Rent Affordable Dwelling Unit" means a dwelling unit where the monthly cost of rent is affordable to households at 60 percent of the Area Median Income (AMI) for the Charlottesville, Virginia Metro Area as published annually by the Federal Department of Housing and Urban Development (HUD). For the purposes of this Proffer, the term "affordable" means that the cost of rent, including tenant paid utilities, does not exceed 30% of the monthly income of a 60 percent AMI household.

i. For-Rent Affordable Dwelling Units shall be reserved for rental to low and moderate-income households having income less than or equal to 60 percent of the AMI.

b. The Owner shall cause 12.5% of the dwelling units constructed within the Project to be For-Rent Affordable Dwelling Units (the "Required Affordable Dwelling Units"). The Required Affordable Dwelling Units shall be identified on a layout plan, by unit, prior to the issuance of any certificate of occupancy for a residential unit within the Property ("Initial Designation"). The Owner reserves the right, from time to time after the Initial Designation, and subject to approval by the City, to change the unit(s) reserved as For-Rent Affordable Dwelling Units, and the City's approval shall not unreasonably be withheld so long as a proposed change does not reduce the number or make-up of Required Affordable Dwelling Units and does not result in an Affordability Period shorter than required by these proffers with respect to any of the Required Affordable Dwelling Units.

i. The Required Affordable Dwelling Units shall be reserved as such throughout a period of eighty-nine (89) years, beginning from the 10th year following the date on which the first unit of the project receives a certificate of occupancy from the City's building official ("Rental Affordability Period"). All Required Affordable Dwelling Units shall be administered in accordance with one or more written declarations of covenants within the land records of the Charlottesville Circuit Court, in a form approved by the Office of the City Attorney.

ii. The Required Affordable Dwelling Units shall be comprised proportional to the unit types constructed.

iii. On or before January 10 of each calendar year, or an alternate date mutually agreed upon by the Owners and the City, the then current owner of each Required Affordable Dwelling Unit shall submit an Annual Report to the City on a template provided by the City's Office of Community Solutions, identifying each Required Affordable Dwelling Unit by address and location, and verifying the household income of the occupant(s) of each Required Affordable Dwelling Unit.

iv. The Required Affordable Dwelling Units shall be constructed proportionally to the number of market rate units at a rate of 12.5 percent, so that for every eight (8) units constructed a minimum of one (1) is designated as a Required Affordable

Dwelling Unit. Notwithstanding the foregoing, the Required Affordable Dwelling Units may be constructed at a rate that exceeds 12.5 percent of the total number of dwelling units. All Required Affordable Dwelling Units shall be constructed prior to the issuance of certificate of occupancy of the 48th dwelling unit.

v. Section 8 Housing Choice Vouchers or similar housing vouchers will be accepted as a form of payment for the Required Affordable Dwelling Units.

vi. The Owner shall provide a marketing plan to the Office of Community Solutions six months prior to the triggered date for affordable housing to be provided as outlined in 1.b.i for a residential unit within the Project. The marketing plan shall demonstrate how the affordable units will be advertised and will be prepared in a form acceptable to the Office of Community Solutions.

c. The land use obligations referenced in 1.a.i and 1.b.i through 1.b.vi shall be set forth within one or more written declarations of covenants recorded within the land records of the Charlottesville Circuit Court, in a form approved by the Office of the City Attorney, so that the Owner's successors in right, title and interest to the Property shall have notice of and be bound by the obligations. The Required Affordable Dwelling Units shall be provided as for rent units throughout the Rental Affordability Period.

Staff Analysis: The Office of Community Solution (OCS) staff cannot ascertain whether this project indeed amounts to 41,303.59 SF (see **Attachment E**) or not, as no plans have been submitted or required in this application process for comparison with the information in the Affordable Dwelling Unit (ADU) worksheet. If construction plans are submitted and approved, the applicant's compliance with Section 34-12, which includes the updated or last submitted ADU worksheet, must align with the total square footage of the site and gross floor area details as provided in the plans.

OCS Staff cautions the City's Planning Commission that staff is concerned about the risk and lost prospects of applying the City's Housing policies equitably and judiciously in a consistent manner. Therefore, OCS Staff does not recommend approval of this applicant's request in the absence of the required details. However, at the very least, if it is permissible staff recommends conditional consideration, whereby the applicant is required to submit construction plans at some point prior to the acceptance of any proffer.

Per Section 34-12(a), should Council approve the rezoning request the applicant will be required to demonstrate compliance with the affordable housing provisions of Section 34-12. Detailed information sufficient to determine applicability must be provided and approved prior to site plan approval. Should the detailed information indicate affordable housing is required per Section 34-12, the applicant's provided proffer will be reviewed for

compliance with the requirements. If the proffer does not meet the affordable housing requirements, the applicant must provide additional affordable housing to meet these requirements.

Public Comments Received

Community Meeting Required by Sec. 34-41(c)(2)

On August 2, 2023, the applicant held a Community Meeting at CitySpace (100 5th Street NE) beginning at 5:00pm. The meeting was attended by four (4) members of the public. Concern was expressed for impacts to traffic and on-street parking (as many existing homes do not have on-site parking), impacts to land values, impacts to the cemetery on the adjacent property (106 Lankford Avenue), and the proposed multifamily building style and heights. Attendees expressed a desire to see single family homes or tiny homes at this location. At the meeting, the applicant team confirmed underground and sonar survey work had been completed in respect to the cemetery on adjacent 106 Lankford Avenue.

Other Comments

As of the date of this report, staff has received comments from one community member. The community member indicated they are not supportive of the proposed Rezoning and SUP applications due to impacts from other developments in the neighborhood including on-street parking availability and difficulty traveling Lankford Avenue due the narrow width. Should any comments come in after the report is posted, those comments will be forwarded to Planning Commission and City Council.

Staff Recommendation

Staff finds the proposed rezoning request contributes to some goals of the Comprehensive Plan to provide additional housing options in proximity to community resources and transit stops. However, staff finds the rezoning request does not match the Future Land Use Map and Land Use Descriptions of the Comprehensive Plan and does not protect and enhance the character and stability of the neighborhood. The proposed rezoning request would permit 19 residential units and approval of the associated Special Use Permit application would permit 48 residential units, neither of which align with the Future Land Use Map General Residential designation maximum of four (4) residential units. In addition, the scale and layout of the proposed development does not align with existing patterns on Lankford Avenue. Staff recommends the rezoning of the Subject Property from R-1S to R-3 will not serve the interests of the general public and good zoning practice.

The rezoning application is being presented in tandem with a Special Use Permit application (SP23-00003) and Critical Slope Waiver application (P23-0046). Additional modifications to the

Subject Property are contained within the SUP and Critical Slope Waiver applications and staff reports.

Suggested Motions

1. I move to recommend denial of this application to rezone the Subject Property from R-1S to R-3, on the basis that the proposal would not serve the interests of the general public and good zoning practice.

OR,

2. I move to recommend approval of this application to rezone the Subject Property from R-1S to R-3, on the basis that the proposal would serve the interests of the general public and good zoning practice.

Attachments

A. Rezoning Application dated June 3, 2022.
B. Narrative dated April 13, 2023.
C. Concept Plan and Exhibits dated April 13, 2023.
D. Preliminary Proffer Statement provided August 28, 2023.
E. Affordable Dwelling Unit Ordinance Worksheet.
F. Community Meeting Materials.

City of Charlottesville

Application for Rezoning

Project Name: 108 Lankford Avenue

Address of Property: 108 Lankford Avenue, 110 Lankford Avenue, 112 Lankford Avenue

Tax Map and Parcel Number(s): 260012000

Current Zoning: R-1S

Proposed Zoning: R-3

Comprehensive Plan Land Use Designation: General Residential

Applicant: Green Retro Salvage II Holdings, LLC

Address: 2450 Lost Hollow Path, Charlottesville, VA 22911

Phone: _____ **Email:** _____

Applicant's Role in the Development (check one):

Owner Owner's Agent Contract Purchaser

Owner of Record: _____

Address: _____

Phone: _____ **Email:** _____

(1) Applicant's and (2) Owner's Signatures

(1) Signature _____ **Print** [illegible] **Date** 06 03 22

Applicant's (Circle One): LLC Member LLC Manager Corporate Officer (specify) _____

Other (specify): _____

(2) Signature _____ **Print** _____ **Date** _____

Owner's (Circle One): LLC Member LLC Manager Corporate Officer (specify) _____

Other (specify): _____

ZM23-00002

City of Charlottesville

Pre-Application Meeting Verification

Project Name: 108 Lankford

Pre-Application Meeting Date: April 13, 2022

Applicant's Representative: Justin Shimp

Planner: Carrie Rainey

Other City Officials in Attendance:

Brennen Duncan

Jack Dawson

The following items will be required supplemental information for this application and must be submitted with the completed application package:

1. Traffic impact study per Sections 34-41(b)(5), 34-158(a)(6), and 34-157
2. Massing diagrams per Sections 34-41(b)(5) and 34-158(a)(4)
3. Affordable housing data per Section 34-41(b)(5)
4. Documentation of community meeting required by Section 34-41(c)(2) as specified by City Council's June 20, 2020 Community Engagement Meeting Requirements
5. Narrative and supplemental materials per Section 34-41(d)

Planner Signature: Carrie Rainey, April 13, 2022

City of Charlottesville

Application Checklist

Project Name: 108 Lankford Avenue

I certify that the following documentation is ATTACHED to this application:

- [✓] 34-157(a)(2) Narrative statement: applicant's analysis of conformity with the Comprehensive Plan
- [✓] 34-157(a)(4) Narrative statement identifying and discussing any potential adverse impacts, as well as any measures included within the development plan, to mitigate those impacts
- [✓] 34-158(a)(6): other pertinent information (narrative, illustrative, etc.)
- [N/A] Completed proffer statement
- [✓] All items noted on the Pre-Application Meeting Verification.

Applicant

Signature _____ **Print** Phoedrus Asghar **Date** 08/03/22

By Its: _____

(For entities, specify: Officer, Member, Manager, Trustee, etc.)

City of Charlottesville

Community Meeting

Project Name: 108 Lankford Avenue

Section 34-41(c)(2) of the Code of the City of Charlottesville (adopted October 19, 2015) requires applicants seeking rezonings and special use permits to hold a community meeting. The purpose of a community meeting is to provide citizens an opportunity to receive information about a proposed development, about applicable zoning procedures, about applicable provisions of the comprehensive plan, and to give citizens an opportunity to ask questions. **No application for a rezoning shall be placed on any agenda for a public hearing, until the required community meeting has been held and the director of neighborhood development services determines that the application is ready for final review through the formal public hearing process.**

By signing this document, the applicant acknowledges that it is responsible for the following, in connection to the community meeting required for this project:

1. Following consultation with the city, the applicant will establish a date, time and location for the community meeting. The applicant is responsible for reserving the location, and for all related costs.
2. The applicant will mail, by U.S. mail, first-class, postage pre-paid, a notice of the community meeting to a list of addresses provided by the City. The notice will be mailed at least 14 calendar days prior to the date of the community meeting. The applicant is responsible for the cost of the mailing. At least 7 calendar days prior to the meeting, the applicant will provide the city with an affidavit confirming that the mailing was timely completed.
3. The applicant will attend the community meeting and present the details of the proposed application. If the applicant is a business or other legal entity (as opposed to an individual) then the meeting shall be attended by a corporate officer, an LLC member or manager, or another individual who can speak for the entity that is the applicant. Additionally, the meeting shall be attended by any design professional or consultant who has prepared plans or drawings submitted with the application. The applicant shall be prepared to explain all of the details of the proposed development, and to answer questions from citizens.
4. Depending on the nature and complexity of the application, the City may designate a planner to attend the community meeting. Regardless of whether a planner attends, the City will provide the applicant with guidelines, procedures, materials and recommended topics for the applicant's use in conducting the community meeting.
5. On the date of the meeting, the applicant shall make records of attendance and shall also document that the meeting occurred through photographs, video, or other evidence satisfactory to the City. Records of attendance may include using the mailing list referred to in #1 as a sign-in sheet (requesting attendees to check off their name(s)) and may include a supplemental attendance sheet. The City will provide a format acceptable for use as the supplemental attendance sheet.

Applicant: _____

By:

Signature _____ **Print** 06 03 27 Phaedra **Date** Aug 15th

Its: _____ (Officer, Member, Trustee, etc.)

City of Charlottesville

Personal Interest Statement

Project Name: 108 Lankford Avenue

I swear under oath before a notary public that:

A member of the City of Charlottesville Planning Commission (identified below), or their immediate family member, has a personal interest in the property or transaction that is the subject of this application.

Planning Commissioner(s): _____

Or

X No member of the City of Charlottesville Planning Commission, or their immediate family member, has a personal interest in the property or transaction that is the subject of this application.

And

A member of the City of Charlottesville City Council (identified below), or their immediate family member, has a personal interest in the property or transaction that is the subject of this application.

City Councilor(s): _____

Or

X No member of the City of Charlottesville Planning Commission, or their immediate family member, has a personal interest in the property or transaction that is the subject of this application.

Applicant: Green Retro Salvage II Holdings LLC

By:

Signature _____ **Print** Phaedrus Acgtblu **Date** 06/3/22

Its: _____ (Officer, Member, Trustee, etc.)

Commonwealth of Virginia

City of Charlottesville

The foregoing instrument was subscribed and sworn before me this 3 day of June, 2022 by Phaedrus Acgtblu.

Notary Signature _____

Registration #: 776374 **Expires** 3/31/2026

NICOLE M. SCRO
NOTARY PUBLIC
REG. #776374
MY COMMISSION EXPIRES
3/31/2026
COMMONWEALTH OF VIRGINIA

City of Charlottesville

Owner's Authorizations

(Not Required)

Project Name: 108 Lankford Avenue

Right of Entry- Property Owner Permission

I, the undersigned, hereby grant the City of Charlottesville, its employees and officials, the right to enter the property that is the subject of this application, for the purpose of gathering information for the review of this rezoning application.

Owner: Greenbrier Lankford II Holdings, LLC **Date** 06 03 22

By (sign name): _____ **Print Name:** _____

Owner's: LLC Member **LLC Manager** **Corporate Officer (specify):** _____

Other (specific): _____

Owner's Agent

I, the undersigned, hereby certify that I have authorized the following named individual or entity to serve as my lawful agent, for the purpose of making application for this rezoning, and for all related purposes, including, without limitation: to make decisions and representations that will be binding upon my property and upon me, my successors and assigns.

Name of Individual Agent: Justin Shimp or Kelsey Schlein or Rachel Moon

Name of Corporate or other legal entity authorized to serve as agent: Shimp Engineering, P.C.

Owner: _____ **Date:** _____

By (sign name): _____ **Print Name:** _____

Circle one:

Owner's: LLC Member **LLC Manager** **Corporate Officer (specify):** _____

Other (specific): _____

City of Charlottesville

Disclosure of Equitable Ownership

Project Name: 108 Lankford Avenue

Section 34-8 of the Code of the City of Charlottesville requires that an applicant for a special use permit make complete disclosure of the equitable ownership "real parties in interest") of the real estate to be affected. Following below I have provided the names and addresses of each of the real parties in interest, including, without limitation: each stockholder or a corporation; each of the individual officers and directors of a corporation; each of the individual members of an LLC (limited liability companies, professional limited liability companies): the trustees and beneficiaries of a trust, etc. Where multiple corporations, companies or trusts are involved, identify real parties in interest for each entity listed.

Name_____ **Address**_____

Name_____ **Address**_____

Name_____ **Address**_____

Name_____ **Address**_____

Attach additional sheets as needed.

Note: The requirement of listing names of stockholders does not apply to a corporation whose stock is traded on a national or local stock exchange and which corporation has more than five hundred (500) shareholders.

Applicant: _____

By:

Signature _____ **Print** Rhodes Duffield **Date** 060322

Its: _____ (Officer, Member, Trustee, etc.)

City of Charlottesville

Fee Schedule

Application Type	Quantity	Fee	Subtotal
Rezoning Application Fee		$2000	
Mailing Costs per letter		$1 per letter	
Newspaper Notice		Payment Due Upon Invoice	
TOTAL			

Office Use Only

Amount Received:_____ **Date Paid**_____ **Received By:** _____

SHIMP ENGINEERING, P.C.
Design Focused Engineering

Project Narrative For: **108 Lankford Avenue**

Parcel Description: **260012000**

Initial Submittal: **April 13, 2023**

Pre-App Meeting Date: **April 13, 2022**

	ACREAGE	EXISTING ZONING	PROPOSED ZONING	COMP PLAN DESIGNATION
TMP 26-12	**0.9482**	**R-1S**	**R-3**	**General Residential**

Location:

TMP 26-12 has a physical address of 108, 110, and 112 Lankford Avenue in Charlottesville, Va. The property is located in Charlottesville's Ridge Street Neighborhood.

Project Proposal:

Green Retro Salvage II Holdings, LLC is the owner (the "owner") of tax map parcel 26-12 in the City of Charlottesville (the "property"). On behalf of the owner, we request a rezoning from R-1S to R-3 and a special use permit to allow for a density of 51 DUA for a total of 48 residential units on the property. In conjunction with the special use permit request and in accordance with Sec. 34-162 of City of Charlottesville's Zoning Ordinance, we request a modification to Sec. 34-353(A) for the required front yard setback, a modification to Sec. 34-353(B)(4) for the minimum distance between a multifamily façade and the adjacent boundary of a low-density residential district, and a modification to Sec. 34-872 for the required landscape buffer. See Table A below outlining the zoning requirement and requested modification proposed pursuant to Sec. 34-162:

TABLE A

	Requirement	**Requested Modification**
Sec. 34-353(A)	Front setback: 25' minimum	Front setback: 10'
Sec. 34-353(B)(4)	Distance between the façade of a multifamily dwelling and the boundary of any low density residential district: 75', where the R-3 property has a density of 44-87 DUA	Distance between the façade of the multifamily dwelling and the boundary of any low density residential district shall conform with the side and rear setbacks as proposed
Sec. 84-872	A 20' landscape buffer shall be provided between any multifamily development and a low density residential property	6' opaque screening fence between the multifamily development and adjacent low density parcels

To establish this residential development near Downtown Charlottesville, we propose the development of 48 units within four multifamily structures. The units are anticipated to be a mixture of studios, 1-bedrooms, and 2-bedrooms. One building is proposed to front on Lankford Avenue and parking would be

relegated behind this structure. The building fronting on Lankford is proposed as three-stories and the remaining three buildings are proposed as three-stories over a basement. The multifamily buildings are to be stepped into the grade, which would nest the structures into the site topography and minimize the scale of the buildings.

The project design will establish:

1. A neighborhood-density residential development that provides additional housing near employment centers, such as IX Art Park, Downtown Charlottesville, and the Avon Street Commercial Corridor.
2. Intentional amenity and greenspace areas for residents to enjoy

Public Benefit & Need

According to the Charlottesville Housing Needs Assessment, the demand for housing is rapidly outpacing the available supply within and around the City limits. Just over half of the Charlottesville housing supply is single-family detached homes and "the city's constrained supply of developable land supply limits the potential for new residential construction" (v). With 108 Lankford's close proximity to City employment centers, the surrounding walkability, and the accessibility to public transportation, the construction of 48 multifamily units would provide strategic density within small multifamily structures. The configuration of the four buildings and the parking area, the installation of an opaque fence along the side and rear of the property, and the proposed landscaping would minimize any impacts to the surrounding area, while providing increased density near the Downtown area. This neighborhood south of Elliott Avenue features a mixture of single-family residential, townhomes, and apartments and the block immediately east of the site is the location of the existing South First Street public housing and redevelopment. At the completion of phase 2 of the redevelopment, there will be 175 new units approximately 300' from the site. Given the mixture of housing in the existing neighborhood context and Lankford's location in proximity to City destinations and public transportation, permitting additional density on the property would align with the surrounding neighborhood while creating housing that is accessible to City resources such as public transportation and employment, service, and recreational destinations.

Consistency with the Comprehensive Plan

Chapter 5 Housing

Goal 2. Diverse Housing Throughout The City

Support a wide range of rental and homeownership housing choices that are integrated and balanced across the city, and that meet multiple City goals including community sustainability, walkability, bikeability, ADA accessibility, public transit use, increased support for families with children and low-income households, access to food, access to local jobs, thriving local businesses, and decreased vehicle use.

A medium-density multi-family development on this property is an opportunity to incorporate more housing options throughout the City and contribute to City goals of achieving a mixture of housing types in as many areas of the City as possible. The adjacent properties to 108 Lankford Avenue are currently single family residential and multi-family, with a mixture of additional housing types within the surrounding block network. Lankford Avenue's location provides a key opportunity to create 48 residential units close to the City Center. 108 Lankford is approximately 0.3-miles from IX Art Park and one-mile from the Downtown Mall. In addition to the CAT Transit Station downtown, several bus stops

are within the walking shed of the property. With the existing bike-ped infrastructure around Downtown Charlottesville and access to CAT public transit, increasing density on Lankford Avenue would place future residents within a well-connected area of the City. These connections provide access to areas of employment, parks and public space, and areas of commercial services. While the Comprehensive Plan designates the property as 'General Residential,' the location of the site could accommodate higher density, due to its location near the urban center. The property would increase housing diversity south of Downtown and would allow at least 48 new residents to live near a variety of City amenities.

Chapter 4 Land Use, Urban Form, and Historic & Cultural Preservation

Goal 2. Future Land Use Vision

Guide implementation of the Future Land Use vision contained in this Comprehensive Plan, including support for existing neighborhoods and preventing displacement.

Increasing the density on this parcel will provide more equitable housing options for current and future city residents, specifically near the City core. While three existing dwelling units are proposed to be removed, 48 new units would be created with the redevelopment. The property is located within the *General Residential area* in the Future Land Use Map, which seeks to "allow for additional housing choice within the existing residential neighborhoods throughout the city." Although General Residential describes the current single family detached uses of the Lankford neighborhood, the proposed rezoning and special use permit request falls in between General Residential and Medium Intensity Residential, which would be appropriate for this southern Downtown area. Although a density of 51 DUA is requested, the redevelopment would align with the General Residential: Outside of Sensitive Areas precedents set forth by the Comprehensive Plan, as a multiplex development.

Goal 3. Balance Conservation and Preservation with Change

Protect and enhance the existing distinct identities of the city's neighborhoods and places while promoting and prioritizing infill development, housing options, a mix of uses, and sustainable reuse in our community.

The rezoning and special use permit request seek to permit an infill development. Currently, there are three single family detached units on the property and, if permitted, the infill development would provide 48 units on the property. Due to the property location, the proposed infill would provide access to various areas of employment and City amenities, while encouraging residents to take advantage of the existing bike-ped and public transit infrastructure available in this area.

Future Land Use Planning Objectives

- *Build upon land use recommendations integrated within the City's citywide studies, Small Area Plans, and the 2021 Affordable Housing Plan.*
- *Ensure citywide, equitable opportunities for additional housing and enhanced community services.*
- *Explore the development potential of vacant or underutilized properties.*
- *Protect, preserve, and enhance natural and cultural resources.*

Objectives for Residential Areas

- *Foster walkable, bikeable, and transit accessible neighborhoods.*

- *Increase opportunities to develop diverse housing options near schools, parks, shopping districts, and employment centers.*

The property is located within the General Residential area of the Future Land Use Map. The rezoning of the property to R-3 to provide multi-family units would achieve the intent of the Charlottesville Affordable Housing Plan to "change zoning and development processes to increase the production of multifamily housing.".[1] Offering multifamily housing in a single family residential neighborhood diversifies the housing options and provide opportunities for rental units, serving a more economically diverse population of residents immediately adjacent to the City center. While three single family detached units are present on the property, a redevelopment of the site would provide up to 48 units. Redevelopment of a site near Downtown Charlottesville would further contribute to the housing supply within the limited City area. The location of the property is ideal for encouraging density. Commercial uses and services are easily accessible by walking or biking, and residents may utilize the Charlottesville Area Transit bus stops immediately adjacent to their homes. A Route 6 bus stop is located at the corner of Elliot Ave and 1st St S and the property is a three-minute walk to IX Art Park, and a ten-minute walk to the Downtown Mall and the CAT Transit Station. With the accessibility of walking and biking infrastructure, the bus network, and the proximity to various City nodes, such as Downtown Belmont and the Downtown Mall, increasing housing opportunities within this area of Belmont would facilitate resident access to areas of City employment and amenities.

Compliance with USBC:

The plans submitted for 108 Lankford Avenue are to comply with the applicable USBC provisions.

Impacts on Public Facilities & Public Infrastructure:

American Community Survey (ACS) 5-year estimates indicate the average household size in Charlottesville is 2.38 people[2].Using the ACS average, a multi-family development with a maximum of 48 proposed units could potentially yield 114 new residents living on the property. ACS estimates include all housing types in their analysis and it is anticipated that the unit types proposed with 108 Lankford would only house one- to two-person households.

The impacts on transportation infrastructure from 48 units will be minimal. Using ITE trip generation estimates for multi-family development, it is estimated that the proposed 48 additional units would create 18 trips in the morning peak hour and 19 trips in the evening peak hour. Given the location, many residents would choose to walk, bike, or use transit.

Impacts on Schools:

This property lies within the Jackson Via Elementary School district. After attending neighborhood elementary schools, all Charlottesville students attend Walker Upper Elementary School, Buford Middle School, and Charlottesville High School.

ACS 2018 5-year estimates show that there are an estimated 4,800 residents between the ages of 5-17 within City limits.[3] By dividing this estimate by the number of occupied housing units in the city, 18,613, it can be approximated that there are approximately .26 school-aged children per housing unit in

[1] Charlottesville Affordable Housing Plan, outlining the recommended land use changes and the following impacts, page 80.
[2] ACS 2013-2017 5 YR Estimates Table B25010 "Average Household Size of Occupied Housing Units by Tenure"
[3] ACS 2018 5 YR Estimates Table DP05 "ACS Demographic and Housing Estimates"

Charlottesville.[4] Since 48 units are proposed on the site, it is estimated there may be an additional 12 school-aged children within the development.

[4] ACS 2018 5 YR Estimates Table DP04 "Selected Housing Characteristics"

REZONING + SPECIAL USE PERMIT
CONCEPT PLAN + EXHIBITS

108 LANKFORD AVENUE

SITE CONTEXT

Ix Art Park

Ridge Street

Burnet Way

Burnet Street

Lankford Avenue

Elliott Avenue

1st Street S

Hartmans Mill Road

Paynes Mill Road

TMP 26-12

Submitted 13 April 2023

project: 22.008

SHIMP ENGINEERING, P.C.

108 LANKFORD AVENUE

SITE, REZONING + SPECIAL USE PERMIT DETAILS

OWNER/DEVELOPER
Green Retro Salvage II Holdings, LLC
2450 Lost Hollow Path
Charlottesville, VA 22911

TMP
26-12

ACREAGE
0.9482

NEIGHBORHOOD
Ridge Street

CRITICAL SLOPES
Critical slopes are present on the property.

FLOODZONE
According to the FEMA Flood Insurance Rate Map, effective date February 4, 2005 (Community Panel 51003C0288D), this property does not lie within a floodplain.

USE
EXISTING: (3) single family residential homes
PROPOSED: Multifamily residential

ZONING
EXISTING: R-1S
PROPOSED: R-3 w/ special use permit for 51 DUA

DENSITY
COMPREHENSIVE PLAN DESIGNATION: General Residential
PROPOSED: 48 units proposed, 51 DUA

TMP 26-12

Submitted 13 April 2023

project: 22.008

SHIMP ENGINEERING, P.C.

REZONING + SPECIAL USE PERMIT
CONCEPT PLAN + EXHIBITS

108 LANKFORD AVENUE

SITE CONTEXT



TMP 26 2

Submitted 13 April 2023

project: 22.008

SHIMP ENGINEERING, P.C.

REZONING + SPECIAL USE PERMIT
CONCEPT PLAN + EXHIBITS

108 LANKFORD AVENUE

ZONING MAP

Sheet 4 of 9

B-1

PUD

R-1S

R-3

R-2

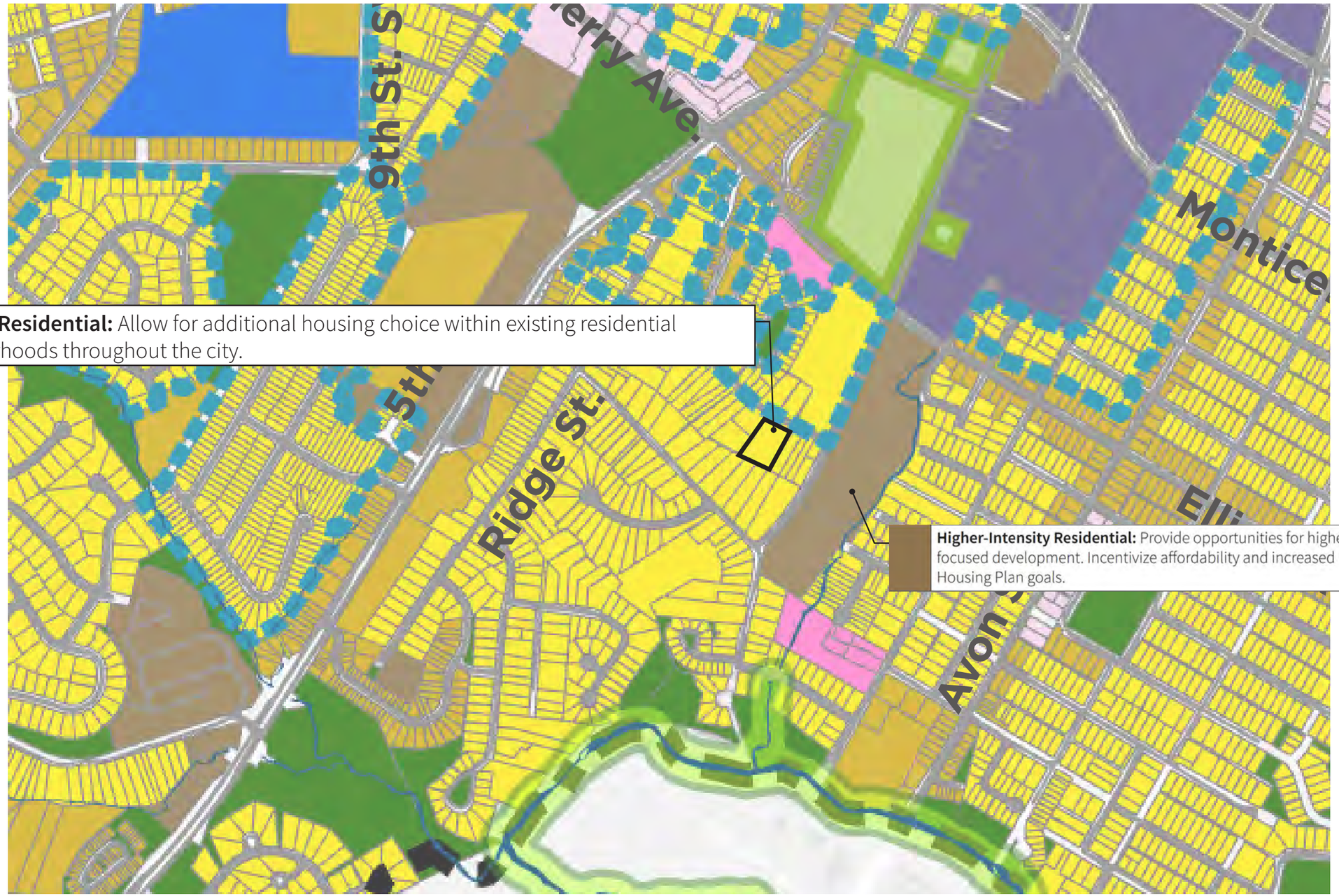
Submitted 13 April 2023

project: 22.008

SHIMP ENGINEERING, P.C.

108 LANKFORD AVENUE

FUTURE LAND USE MAP



TMP 26-12

Submitted 13 April 2023

project: 22.008

SHIMP ENGINEERING, P.C.

REZONING + SPECIAL USE PERMIT
CONCEPT PLAN + EXHIBITS

108 LANKFORD AVENUE

EXISTING CONDITIONS

Sheet 6 of 9



TMP 26-12

Submitted 13 April 2023

project: 22.008

SHIMP ENGINEERING, P.C.

REZONING + SPECIAL USE PERMIT
CONCEPT PLAN + EXHIBITS

108 LANKFORD AVENUE

CONCEPT PLAN

Sheet 7 of 9

Lankford Avenue

10' front setback (requested)

10' side setback

10' side setback

25' rear setback

Rain tank
Underground storage

Underground storage chambers

430

440

490

Additional Notes:

1.) Per Sec. 34-353 of the Charlottesville Zoning Ordinance, land coverage in R-3 shall not exceed 80% of the total site area for 22-87 DUA.

30 0 30 60 90

Graphic Scale: 1"=30'

TMP 26-12

Submitted 13 April 2023

project: 22.008

SHIMP ENGINEERING, P.C.

REZONING + SPECIAL USE PERMIT
CONCEPT PLAN + EXHIBITS

108 LANKFORD AVENUE

MASSING DIAGRAM





TMP 26-12

Submitted 13 April 2023

project: 22.008

SHIMP ENGINEERING, P.C.

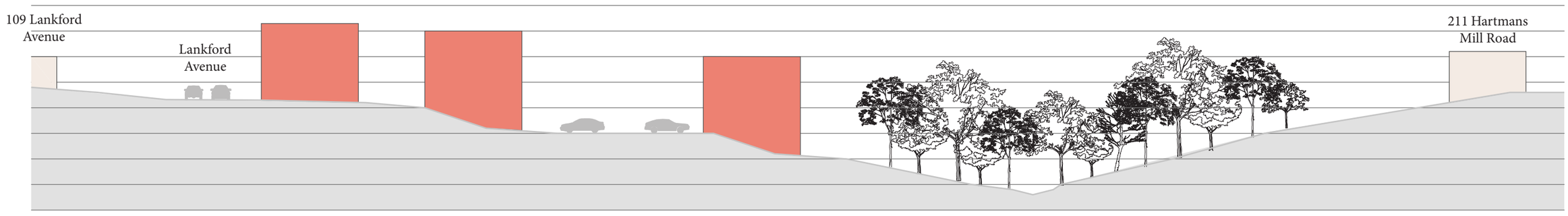
REZONING + SPECIAL USE PERMIT
CONCEPT PLAN + EXHIBITS

108 LANKFORD AVENUE

SITE SECTION

Sheet 9 of 9





40 0 40 80 120

Graphic Scale: 1”=40’

TMP 26-12

Submitted 13 April 2023

project: 22.008

SHIMP ENGINEERING, P.C.

BEFORE THE CITY COUNCIL OF THE CITY OF CHARLOTTESVILLE, VIRGINIA
IN RE: PETITION FOR REZONING (City Application No. ZM22-00002)
STATEMENT OF **DRAFT** PROFFER CONDITIONS
For 108 Lankford Avenue

City of Charlottesville Tax Map 26 Parcel 12

TO THE HONORABLE MAYOR AND MEMBERS OF THE COUNCIL OF THE CITY OF CHARLOTTESVILLE

Green Retro Salvage II Holdings, LLC is the owner of Tax Parcel 260012000 (the "Owner") and seeks to rezone their property (the "Property") which is the subject parcel of rezoning application ZM23-000XX, a project known as 108 Lankford Avenue (the "Project"). The Owner seeks to amend the current zoning of the Property subject to certain voluntary conditions set forth below.

In furtherance of the Project, the Owner hereby proffers for City Council's consideration voluntary development conditions, which the Owner agrees is reasonable. The Owner agrees that, if the Property is rezoned as requested, the use and development of the Property will be subject to and in accordance with the following conditions:

1. **Affordable Housing:**
   The Owner shall provide affordable housing within the Project, as follows:

   a. For the purposes of this Proffer, the term "For-Rent Affordable Dwelling Unit" means a dwelling unit where the monthly cost of rent is affordable to households at 60 percent of the Area Median Income (AMI) for the Charlottesville, Virginia Metro Area as published annually by the Federal Department of Housing and Urban Development (HUD). For the purposes of this Proffer, the term "affordable" means that the cost of rent, including tenant paid utilities, does not exceed 30% of the monthly income of a 60 percent AMI household.
      i. For-Rent Affordable Dwelling Units shall be reserved for rental to low and moderate-income households having income less than or equal to 60 percent of the AMI.

   b. The Owner shall cause 12.5% of the dwelling units constructed within the Project to be For-Rent Affordable Dwelling Units (the "Required Affordable Dwelling Units"). The Required Affordable Dwelling Units shall be identified on a layout plan, by unit, prior to the issuance of any certificate of occupancy for a residential unit within the Property ("Initial Designation"). The Owner reserves the right, from time to time after the Initial Designation, and subject to approval by the City, to change the unit(s) reserved as For-Rent Affordable Dwelling Units, and the City's approval shall not unreasonably be withheld so long as a proposed change does not reduce the number or make-up of Required Affordable Dwelling Units and does not result in an Affordability Period shorter than required by these proffers with respect to any of the Required Affordable Dwelling Units.
      i. The Required Affordable Dwelling Units shall be reserved as such throughout a period of eighty-nine (89) years, beginning from the 10th year following the date on which the first unit of the project receives a certificate of occupancy from the City's building official ("Rental Affordability Period"). All Required Affordable Dwelling

Units shall be administered in accordance with one or more written declarations of covenants within the land records of the Charlottesville Circuit Court, in a form approved by the Office of the City Attorney.

ii. The Required Affordable Dwelling Units shall be comprised proportional to the unit types constructed.

iii. On or before January 10 of each calendar year, or an alternate date mutually agreed upon by the Owners and the City, the then current owner of each Required Affordable Dwelling Unit shall submit an Annual Report to the City on a template provided by the City's Office of Community Solutions, identifying each Required Affordable Dwelling Unit by address and location, and verifying the household income of the occupant(s) of each Required Affordable Dwelling Unit.

iv. The Required Affordable Dwelling Units shall be constructed proportionally to the number of market rate units at a rate of 12.5 percent, so that for every eight (8) units constructed a minimum of one (1) is designated as a Required Affordable Dwelling Unit. Notwithstanding the foregoing, the Required Affordable Dwelling Units may be constructed at a rate that exceeds 12.5 percent of the total number of dwelling units. All Required Affordable Dwelling Units shall be constructed prior to the issuance of certificate of occupancy of the 48th dwelling unit.

v. Section 8 Housing Choice Vouchers or similar housing vouchers will be accepted as a form of payment for the Required Affordable Dwelling Units.

vi. The Owner shall provide a marketing plan to the Office of Community Solutions six months prior to the triggered date for affordable housing to be provided as outlined in 1.b.i for a residential unit within the Project. The marketing plan shall demonstrate how the affordable units will be advertised and will be prepared in a form acceptable to the Office of Community Solutions.

c. The land use obligations referenced in 1.a.i and 1.b.i through 1.b.vi shall be set forth within one or more written declarations of covenants recorded within the land records of the Charlottesville Circuit Court, in a form approved by the Office of the City Attorney, so that the Owner's successors in right, title and interest to the Property shall have notice of and be bound by the obligations. The Required Affordable Dwelling Units shall be provided as for-rent units throughout the Rental Affordability Period.

WHEREFORE, the undersigned Owner stipulates and agrees that the use and development of the Property shall be in conformity with the conditions hereinabove stated, and request that the Property be rezoned as requested, in accordance with the Zoning Ordinance of the City of Charlottesville.

By: _____
Green Retro Salvage II Holdings, LLC

Print Name: _____

Owner’s Address: _____

Affordable Dwelling Unit Ordinance Worksheet-108 Lankford Avenue

Step 1: Total Floor Area Ratio (FAR) of Site

A. Total size of development site: 0.9482 acres

B. Total square footage of site: 0.9482 (# of acres) x 43,560.00 = 41,303.59 square feet (sf)

C. 1.0 Floor Area Ratio (FAR): 41,303.59 *(total sf of site)*

D. Gross Floor Area (GFA) of **ALL** buildings/uses: 40,128.00 sf

E. Total site FAR: 40,128.00 *(total GFA of site)* ÷ 41,303.59 *(1.0 FAR)* = 0.97

F. Is E greater than or equal to 1.0 FAR? NO: Your proposed development does not trigger the ADU ordinance.

YES: Proceed to Step 2 or Step 3.

Step 2: Number of ADUs Required

G. GFA in excess of 1.0 FAR: 40,128.00 *(D: total site GFA)* - 41,303.59 *(B: total SF of site)* = -1,175.59

H. Total GFA of ADUs required: -1,175.59 *(G: GFA in excess of 1.0 FAR)* x 0.05 = -58.78

I. Equivalent density based on Units Per Acre:

i. Dwelling Units per Acre (DUA) approved by SUP: 51.00

ii. SF needed for ADUs: -58.78 *(H: Total GFA of ADUs)* ÷ 43,560.00 = -0.0013494 acres

iii. Total number of ADUs required: -0.0013494 *(ii: ADU acreage)* x 51.00 *(i: DUA approved)* = -0.07

Step 3: Cash-in-Lieu Payment

J. Cash-in-Lieu Amount Residential: 40,128.00 x $2.370 = **$95,103.36**

K. Cash-in-Lieu Amount Mixed-Use:

Total GFA of development site:
GFA Occupied Commercial Space:
GFA Occupied Residential Space:
Total GFA Occupied Space: 0.00
% Residential: #DIV/0!

GFA Non-Occupied Space*: 0.00
Propotionate amount of non-occupied space GFA for residential use: #DIV/0!

Amount of Payment: #DIV/0! x $2.370 = #DIV/0!

**GFA of non-occupied space shall include: (i) basements, elevator shafts and stairwells at each story, (ii) spaces used or occupied for mechanical equipment and having a structural head room of six (6) feet six (6) inches or more, (iii) penthouses, (iv) attic space, whether or not a floor has been laid, having a structural head room of six (6) feet six (6) inches or more, (v) interior balconies, and (vi) mezzanines. GFA shall not include outside balconies that do not exceed a projection of six (6) feet beyond the exterior walls of the building; parking structures below or above grade; or and roof top mechanical structures.*

Step 4: Minimum Term of Affordability

L. Residential Project

i. Households earning up to 80% AMI:

Unit Type	Eff.	1BR	2BR	3BR	4BR	5BR	6BR
Number of Units							
Market Rent							
HUD Fair Market Rents	$752.00	$1,027.00	$1,179.00	$1,478.00	$1,772.00	$2,037.00	$2,303.00
HUD Utility Allowance							
Difference per Month	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Annual Cost of ADU	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

Total Annual Cost of ADUs: 0.00 *(Sum of Annual Cost of ADU)*

Minimum Term of Affordability*: #DIV/0! *(Cash-in-lieu payment / Total annual cost of ADUs)*

***If answer is less than 5, then minimum term of affordability will be 5 years.**

M. Mixed-Use Project

i. Households earning up to 80% AMI:

Unit Type	Eff.	1BR	2BR	3BR	4BR	5BR	6BR
Number of Units							
Market Rent							
HUD Fair Market Rents	$752.00	$1,027.00	$1,179.00	$1,478.00	$1,772.00	$2,037.00	$2,303.00
HUD Utility Allowance							
Difference per Month	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Annual Cost of ADU	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

Total Annual Cost of ADUs: 0.00 *(Sum of Annual Cost of ADU)*

Minimum Term of Affordability: #DIV/0! *(Cash-in-lieu payment / Total annual cost of ADUs)*

***If answer is less than 5, then minimum term of affordability will be 5 years.**

SHIMP ENGINEERING, P.C.
Design Focused Engineering

August 28, 2023

Carrie Rainey
City of Charlottesville
610 East Market Street
Charlottesville, Virginia 22902

RE: 108 Lankford Avenue Community Notification Letter

Dear Carrie,

A notification letter to nearby residents concerning the 108 Lankford Avenue Rezoning, Special Use Permit, and Critical Slopes Waiver request was submitted to a mailing service on July 11, 2023. The mailing service noted delivery on July 14, 2023. This notification letter included details about the project and information about the upcoming community meeting for this project which was held in person at CitySpace, 100 5th St NE, Charlottesville, VA 22902 on **Wednesday, August 2, 2023 at 5:00 PM.**

Please find the letter that was mailed to nearby residents attached; this letter was mailed to all addresses that were provided to us by the City.

Respectfully,

Rachel Moon

KELSEY SCHLEIN
NOTARY PUBLIC
REG. #7907276
MY COMMISSION EXPIRES
01/31/2024
COMMONWEALTH OF VIRGINIA

COMMONWEALTH OF VIRGINIA
CITY/COUNTY OF Charlottesville, to wit:

The foregoing document was acknowledged before me this 28th day of August 2023 by Rachel Moon.

My Commission expires: 01/31/2024

Notary Public

SHIMP ENGINEERING, P.C.
Design Focused Engineering

July 11, 2023

Shimp Engineering
Justin Shimp, Project Representative
912 E High St.
Charlottesville, VA 22902
justin@shimp-engineering.com
(434) 227-5140

RE: Community Meeting for 108 | 110 | 112 Lankford Avenue Rezoning & Special Use Permit

Dear Neighbor,

On behalf of Green Retro Salvage II Holdings, LLC, we, Shimp Engineering, invite you to review information and provide comments regarding our request for a rezoning and special use permit to increase the allowable residential density on tax parcel 260012000. This is a 0.9482-acre parcel with a physical address of 108, 110, and 112 Lankford Avenue in Charlottesville's Ridge Street Neighborhood. This request is to rezone the property from R-1S to R-3 to allow for multifamily housing. Additionally, a special use permit is being requested concurrently with the rezoning to allow for 48 units on the property, or 51 dwelling units per acre. A critical slopes waiver is also requested to permit the project to be developed as shown. The 48 units would be housed within four mid-sized multifamily buildings. The proposed units are proposed primarily as studio apartments, with limited one- and two-bedroom units. Included with this letter is a context map identifying the property and a concept plan that was submitted as part of the application.

We invite you to ask questions and share comments about the proposed project, City review procedures, and relevant regulations and policies of the City applicable to the proposed project on **Wednesday, August 2 at CitySpace, 100 Fifth Street NE, Charlottesville, VA 22902**. Doors will open at 5:00 PM and a short presentation will begin promptly at 5:30 PM.

There are several ways that you can learn more about this project, share your comments, or ask questions about this proposal:
1. Attend the community meeting on Wednesday, August 2
2. Contact me directly by phone or email using the contact information provided at the top left corner of this letter
3. Contact the lead City reviewer directly with questions or comments: Carrie Rainey, raineyc@charlottesville.gov

We look forward to hearing from you.

Best regards,

Justin Shimp, P.E.


Ridge Street
Mt. Zion Baptist Church
Elliott Avenue
IX Art Park
1st Street S
Lankford Avenue
SITE
Hartmans Mill Road


Lankford Avenue
10' front setback (requested)
10' side setback
Rain tank
Underground storage
10' side setback
25' rear setback
Underground storage chambers
Critical slopes

CITY OF CHARLOTTESVILLE

DEPARTMENT OF NEIGHBORHOOD DEVELOPMENT SERVICES

STAFF REPORT

JOINT CITY COUNCIL AND PLANNING COMMISSION PUBLIC HEARING

APPLICATION FOR A SPECIAL USE PERMIT

APPLICATION NUMBER: SP23-00003

DATE OF HEARING: November 14, 2023

Project Planner: Carrie Rainey, RLA, AICP
Date of Staff Report: November 7, 2023

Applicant: Green Retro Salvage II Holdings, LLC
Applicant's Representative(s): Justin Shimp, Kelsey Schlein, Rachel Moon of Shimp Engineering, P.C.
Current Property Owner: Green Retro Salvage II Holdings, LLC
Application Information
Property Street Address: 108, 110, 112 Lankford Avenue
Tax Map & Parcel/Tax Status: 260012000 (real estate taxes paid current - Sec. 34-10)
Total Square Footage/ Acreage Site: Approx. 0.948 acres (41,303.59 square feet)
Comprehensive Plan (General Land Use Plan): General Residential
Current Zoning Classification: R-1S (Residential Single Family Small Lot)
Proposed Zoning Classification (See Rezoning Application ZM23-00002): R-3 (Multifamily Residential) with Proffers
Overlay District: None

Applicant's Request (Summary)

Green Retro Salvage II Holdings, LLC (applicant and owner) has submitted a Special Use Permit (SUP) application per Code Section 34-420 for property located at 108, 110, and 112 Lankford Avenue and identified in the City's land records as Tax Map and Parcel (TMP) 260012000 (Subject Property). The applicant is also pursuing a rezoning to change the existing zoning of the Subject Property from Residential Small Lot (R-1S) to R-3 (Multifamily Residential) with proffers. Should the Rezoning application be approved, approval of the SUP application would permit additional residential density up to 51 dwelling units per acre (DUA) per Section 34-420 and the changes to setback and buffer requirements per Section 34-162:

Front yard setback (Section 34-353(a)): Modified from a 25-foot minimum to 10-feet.

Setback adjacent to low-density residential districts (Section 34-353(b)(4)): Modified from a 75-foot minimum to 10-foot side setback and 25-foot rear setback.
Screening adjacent to low-density residential districts (Section 34-872(a)(1)(a)): Modified from a 20-foot minimum S-2 screen landscape buffer to 6-foot opaque screening fence.

In order to implement the project as presented, the applicant has also applied for a Rezoning application (ZM23-00002) to change the existing zoning of the Subject Property from Residential Small Lot (R-1S) to R-3 (Multifamily Residential) with proffers, as well as a Critical Slope Waiver (P23-0046) to permit disturbance of approximately 285 square feet of critical slope area. Should the rezoning request be approved, 19 residential units would be permitted and should this SUP application be approved 48 residential units would be permitted. Please see the previous Staff Report for more information on the Rezoning application and the following Staff Report for more information on the Critical Slope Waiver application.

Vicinity Map



Context Map 1



Context Map 2- Zoning Classifications



KEY - Green: PUD, Yellow: R-1S, Dark Orange: R-3, Orange: R-2

Context Map 3- Future Land Use Map, 2021 Comprehensive Plan



KEY – Dark Brown: Higher-Intensity Residential, Yellow: General Residential, Yellow with Blue Dash: General Residential (Sensitive Community Area), Green: Open Spaces and Parks

Standard of Review

City Council may grant an applicant a special permit or special use permit, giving consideration to a number of factors set forth within Zoning Ordinance Sec. 34-157. If Council finds that a proposed use or development will have potentially adverse impacts, and if Council identifies development conditions that could satisfactorily mitigate such impacts, then Council may set forth reasonable conditions within its SUP approval. The role of the Planning Commission is to make an advisory recommendation to the City Council, as to (i) whether or not Council should approve a proposed SUP and if so, (ii) whether there are any reasonable development conditions that could mitigate potentially adverse impacts of the proposed use or development.

Section 34-157 of the City's Zoning Ordinance lists a number of factors that Council will consider in making a decision on a proposed SUP. Following below is staff's analysis of those factors, based on the information provided by the applicant.

For the applicant analysis of their application per Sec. 34-157, see **Attachment B**.

(1) Whether the proposed use or development will be harmonious with existing patterns of use and development within the neighborhood.

The properties immediately surrounding the Subject properties are described as:

Direction	Use	Zoning
North	Single family and Two-family	R-1S
South	Single family residential	R-1S
East	Single family residential	R-1S
West	Single family and multifamily residential	R-1S, IPP

The surrounding area is generally residential with mostly single family detached units. The Burnet Commons planned unit development, northwest of the Subject Property, is comprised mostly of single family detached, attached, and townhouse units. The Charlottesville Redevelopment and Housing Authority (CRHA) is currently redeveloping a multifamily residential property on 1st Street South within 500-feet of the Subject Property. The first phase of that redevelopment (southern lot) has a residential density just under 21 DUA while the second phase has a residential density of approximately 14 DUA.

Staff Analysis: While the existing neighborhood includes a variety of residential use types, the larger site areas, deeper setbacks, smaller footprints, and shared green spaces reduce the density and scale of the community. Existing and approved multifamily units in the area are provided at a lower density and closer to amenities such as transit stops, bicycle and pedestrian facilities, and the downtown area. Staff is concerned the proposed residential density of 51 DUA and larger buildings with smaller setbacks are not harmonious with the existing patterns of use.

(2) Whether the proposed use or development and associated public facilities will substantially conform to the city's comprehensive plan.

Below are specific areas of the Comprehensive Plan for which the request could be in compliance:

a. Housing

Goal 2: Diverse Housing Throughout the City.

Support a wide range of rental and homeownership housing choices that are integrated and balanced across the city, and that meet multiple City goals including community sustainability, walkability, bikeability, ADA accessibility, public transit use, increased support for families with children and low incomelow-income households, access to food, access to local jobs, thriving local businesses, and decreased vehicle use.

Strategy 2.2 *Promote housing redevelopment and infill development that supports bicycle and pedestrian- oriented infrastructure improvements and*

robust public transportation to better connect residents to jobs and commercial activity.

Below are specific areas of the Comprehensive Plan for which the request may not be in compliance:

a. Land Use, Urban Form, and Historic & Cultural Preservation

Objectives for Residential Areas: Encourage incremental "house-sized," contextual infill within existing residential neighborhoods.

Goal 2: Future Land Use Vision.

Guide implementation of the Future Land Use vision contained in this Comprehensive Plan, including support for existing neighborhoods and preventing displacement.

Strategy 2.3 *Evaluate existing and potential new programs for protecting communities at risk of displacement, as well as protecting existing affordable housing, historic buildings, community-based urban agriculture sites, and other resources.*

Sub-strategy: *Where possible, prioritize the preservation of existing structures while encouraging a greater intensity of use. Encourage infill development and reuse of or additions to structures, rather than demolition of existing buildings, to address gaps in established or planned development patterns. This may include strategies that can help preserve existing structures, including the use of Accessory Dwelling Units (ADUs), building additions, transitioning larger single-family houses to apartments, etc.*

Goal 3: Balance Conservation and Preservation with Change.

Protect and enhance the existing distinct identities of the city's neighborhoods and places while promoting and prioritizing infill development, housing options, a mix of uses, and sustainable reuse in our community.

Strategy 3.1 *Utilize context-sensitive planning tools to maintain and enhance the distinct identities of Charlottesville's neighborhoods and corridors.*

Sub-strategy: *Encourage development that responds to the character of contiguous historic buildings and neighborhoods while allowing enhanced intensity of uses, including multi-family units, in forms and scales that are respectful of the surrounding neighborhood.*

Sub-strategy: *Require adequate transitions (such as step downs in scale and intensity) to mitigate impacts on adjacent residential and historic areas, as well as cemeteries.*

Staff Analysis: The 2021 Comprehensive Future Land Use Map designates the Subject Property and adjacent properties as General Residential. Properties across Lankford Avenue are designated as General Residential (Sensitive Community Areas). The Land Use Category Descriptions of the comprehensive plan states the following for General Residential areas:

Description: Allow for additional housing choice within existing residential neighborhoods throughout the city.
Form: Compatible with existing context, including house-sized structures with similar ground floor footprint area and setbacks as surrounding residential structures.
Height: Up to 2.5 stories.
Use and Affordability: Allow 3 units per lot. Allow up to 4-unit dwellings if the existing structure is maintained. Allow additional units and height under an affordability bonus program or other zoning mechanism.

Staff finds while the proposed rezoning may contribute to some aspects of the City's Comprehensive Plan, the rezoning is not consistent with the Future Land Use Map, Land Use Category Description, and several aspects of the Comprehensive Plan. The General Residential Land Use Category limits residential units to four (4) per lot while the application proposes 48 residential units. Staff is also concerned that the scale of the proposed development does not align with the Land Use Category Description for General Residential or goals to implement context-sensitive infill and respect existing neighborhood patterns and scale. While the existing neighborhood includes a variety of residential use types, the larger site areas, deeper setbacks, smaller footprints, and shared green spaces reduce the density and scale of the community. The application materials (**Attachments B and C**) indicate the proposed buildings will be taller, wider, and closer to the street and adjacent properties than the typical patterns of the neighborhood.

<u>Streets that Work Plan</u>
Lankford Avenue (Honorary Name: Dr. Alvin Edwards Drive) is designated as a Local Street in the Plan. Local Streets are found throughout the City and provide immediate access to all types of land uses. Although Local Streets form the majority of the street network, there is no specific typology associated with them. This is due in part to the many variations in context and rights-of-way, as well as the community's expressed desire to replicate as nearly as possible the feel of older local streets that do not meet current engineering and fire code standards. Local Streets do not have priorities and Neighborhood A or B design element priorities, as laid out in the Streets that Work Plan, should be evaluated when determining design elements. The Streets that Work Plan notes the highest priority design elements for Neighborhood A Streets are sidewalks with a minimum of 5 to 6 feet of clear

zone and bicycle facilities such as 5 feet bike lanes and 6 feet climbing lanes. On-street parking is also a high priority for Neighborhood A Streets. Lankford Avenue has a mostly complete sidewalk network with some gaps on the northern side of the street (the Subject Property is located on the southern side of the street). The existing sidewalks are approximately five (5) feet in width, but the clear walk width is reduced by existing power line poles in the sidewalk. In addition, no curbside buffer is provided between the sidewalk and street. The curb-to-curb width of Lankford Avenue varies but is approximately 30-ft in the vicinity of the Subject Property. On-street parking is generally permitted. The proposed development, as shown in **Attachment C**, does not propose any improvements to Lankford Avenue beyond a new driveway entrance on the eastern side of the Subject Property.

Staff Analysis: The existing conditions of Lankford Avenue generally align with the recommendations of the Streets that Work Plan. In addition, the narrow travel lanes and on-street parking limit potential improvements in the right-of-way. The proposed development will meet on-site parking requirements, which will minimize impacts to the availability of on-street parking for other residents in the area.

Bicycle and Pedestrian Master Plan

The 2015 Bicycle and Pedestrian Master Plan does not identify Lankford Avenue as a location for bicycle or pedestrian infrastructure improvements. The Master Plan proposes improvements to nearby 5th Street SW (bicycle lanes), 6th Street SE (shared roadway and contraflow bicycle lanes), Elliott Avenue (bicycle lanes and sidewalk improvements), and Ridge Street (shared roadway). The City has implemented the proposed bicycle facility improvements on 6th Street SE and is currently working on sidewalk improvements for Elliott Avenue and corridor improvements for 5th Street SW.

Staff Analysis: Based on the application materials, staff concludes that the proposed development will not have an impact to existing bicycle and pedestrian infrastructure. While the Subject Property's proximity to downtown and other amenities may encourage residents to walk and bike, staff finds the existing facilities and future planned public facilities will be adequate to address the potential increase of walkers and bikers in the area.

(3) Whether proposed use or development of any buildings or structures will comply with all applicable building code regulations.

Based on the information contained within the application, the proposed development would likely comply with applicable building code regulations, but final determination cannot be made until final site plan and building permit review.

(4) Potential adverse impacts, including, but not necessarily limited to:

a) Traffic or parking congestion

Traffic

The applicant's narrative (**Attachment B**) states it is estimated the 48 proposed residential units would create 18 trips in the morning peak hour and 19 trips in the evening peak hour.

Staff Analysis: The City Traffic Engineer has reviewed the application materials and determined no further Traffic Impact Analysis was required. A residential development with this density at this location will not significantly impact the City's street network.

Vehicular Access

The proposed project would have one vehicular access point off Lankford Avenue for access to on-site parking in the same location as the existing driveway entrance and gravel driveway as shown in **Attachment C**.

Staff Analysis: The proposed driveway entrance, which must meet the standards in the City's Standards and Design Manual, provides sufficient space for two-way vehicular travel. Staff finds the proposed vehicular access sufficient for the proposed use.

Parking

The applicant's narrative (**Attachment B**) states the proposed 48 multifamily residential units will be a mix of efficiency, one-bedroom, and two-bedroom units. Per Section 34-984, the development must provide a minimum of one space per unit or 48 parking spaces. The materials provided in **Attachment C** show 51 proposed parking spaces on-site.

Staff Analysis: Based on the provided information, the development as proposed will meet the minimum parking requirements of Section 34-984. However, the existing on-street parking on Lankford Avenue is regularly utilized, as several properties do not have off-street parking, and may be impacted by the additional residential units.

Other Modes of Transportation

There are several transit stops located within a quarter (1/4) mile, including stops on 1st Street South, Elliott Avenue, and Ridge Street along Charlottesville Area Transit (CAT) Bus Route 6. As described above, there are several existing and planned bicycle facilities in the vicinity of the Subject Property.

Staff Analysis: The Subject Property's proximity to existing facilities and the downtown area will encourage residents to use alternative modes of transportation. The application materials do not specify that bicycle storage facilities will be provided. Should the Rezoning and SUP applications be approved, staff recommends the development be required to provide bicycle storage space per Section 34-881(2).

b) Noise, lights, dust, odor, fumes, vibration, and other factors which adversely affect the natural environment

The proposed development will not generally result in any additional dust, odor, fumes, vibration, or other factors that could also be present with any by-right development. It should be noted that due to the increased density and building size, noise and lighting could be more intense than would be present in a by-right development. Any site plan submitted would need to conform to Division 3 *Lighting* of the Zoning Ordinance.

In order to implement the project as presented, the applicant has also applied for a Critical Slope Waiver (P23-0046) to permit disturbance of approximately 285 square feet of critical slope area. Should the rezoning request be approved, 19 residential units would be permitted and should this SUP application be approved 48 residential units would be permitted. Please see the following Staff Report for more information on the Critical Slope Waiver application.

c) Displacement of existing residents or businesses

There are currently three (3) residential units on the Subject Property. These buildings would be removed to accommodate the proposed development. With the replacement of the existing residential units, the net gain for the Subject Property will be 45 units.

d) Discouragement of economic development activities that may provide desirable employment or enlarge the tax base

No discouragement of economic development activities will be associated with the proposed development. The existing use is residential and will remain residential should this SUP application and associated Rezoning and Critical Slope Waiver applications be approved.

e) Undue density of population or intensity of use in relation to the community facilities existing or available

The City's Comprehensive Plan identifies community facilities as fire protection, police enforcement, and emergency response services; public utilities and infrastructure; and public parks and recreation opportunities. Although final determination for capacity and code compliance will take place at Final Site Plan review, each of these departments

have reviewed the SUP applicant and determined the development, as proposed, would not have an adverse impact on community facilities.

f) Reduction in the availability of affordable housing in the neighborhood

There will not be a reduction in the City's affordable housing stock due to this development. The applicant has submitted a preliminary proffer statement **(Attachment D)** which provides 12.5% of residential units to be "for-rent affordable dwelling units." The proffer statement defines "affordable" to mean the cost of rent, including tenant paid utilities, will not exceed 30% of the monthly income of a 60% AMI (area median income) household. The proffer statement requires the affordable units to be affordable for 89 years, beginning from the 10th year following the date on which the first unit of the project receives a certificate of occupancy. Please see preceding Rezoning staff report for analysis on the applicant's proffer statement.

g) Impact on school population and facilities

Because housing is open to all, there is a possibility that families with children could take residence here. Therefore, some impact could be created on school population and facilities.

h) Destruction of or encroachment upon conservation or historic districts

The Subject Property is not within any of these design control districts. However, 114 Lankford Avenue (immediately west of the Subject Property) is an Individually Protected Property (IPP) per Section 34-273. At the rear of 106 Lankford Avenue (immediately east of the Subject Property) is the Goings Family Cemetery.

The City Preservation Planner has provided the following information: In 1845, Robert Goings, a free Black carpenter, purchased land at what is 100 - 106 Lankford Avenue, on which he constructed a log cabin and a planked stable for his family. In 1860, with a second land purchase, Goings owned several acres, roughly the area of present-day 100 - 116 Lankford Avenue. Also in 1860, he constructed a new house for his wife and eight children at 114 Lankford Avenue (IPP). Goings' property was the eastern end of a free Black community that stretched west into Fifeville. Known interments in the Goings Family Cemetery are Robert Goings (c1812-1885), his wife Patsy Coles (c1808-1912), and a son, Robert Goings (c1848-1897), but others may be unrecorded. The applicant must be careful to not disturb the known burial site and be vigilant for any evidence of additional, likely unmarked graves. Staff recommends the applicant retain a licensed archeologist to determine if unknown graves are present on the Subject Property and, if

found, no construction continues until notice is provided to the City Preservation Planner.

i) Conformity with federal, state and local laws, as demonstrated and certified by the applicant

Based on the information contained within the application, the proposed development would likely comply with applicable federal and state laws. As to local ordinances (zoning, water protection, etc.), it generally appears that this project, as detailed in the application, can be accommodated on this site in compliance with applicable local ordinances; however, final determinations cannot be made prior to having the details required for final site plan and building permit approvals. Specific Z.O. requirements reviewed preliminarily at this stage include massing and scale (building height, setbacks, stepbacks, etc.) and general planned uses.

j) Massing and scale of project

The surrounding area on Lankford Avenue is generally residential with smaller footprint single family detached homes mostly one (1) to 2.5 stories in height, generally set back 20-feet or more from the street, and typically less than 40-feet in width. The Burnet Commons planned unit development, northwest of the Subject Property, is comprised mostly of single family detached, attached, and townhouse units. Buildings in the development tend to be 2.5 stories tall with smaller front and side setbacks but maintain smaller footprints similar other homes in the surrounding area. The Charlottesville Redevelopment and Housing Authority (CRHA) is currently redeveloping a multifamily residential property on 1st Street South within 500-feet of the Subject Property. While the CRHA redevelopment includes buildings three (3) stories in height and townhome style residential units set close to 1st Street South, the development also includes several green spaces which separate and reduce the impact of the buildings. The CRHA property is also mostly adjacent to the Mount Zion First African Baptist Church on 1st Street South, the IX mixed use property on Elliott Avenue, and generally buffered from nearby homes in the east by the Pollocks Branch natural area.

The application materials (**Attachments B and C**) indicate the proposed buildings fronting Lankford Avenue would be three (3) stories in height and the rear buildings would be three (3) stories over partially exposed basements. The applicant has requested modified setbacks through this SUP application:

Front yard setback (Section 34-353(a)): Modified from a 25-foot minimum to 10-feet.

Side and rear yard setback (Section 34-353(b)(4)): Modified from a 75-foot minimum to 10-foot side setback and 25-foot rear setback.
Side and rear yard screening (Section 34-872(a)(1)(a)): Modified from a 20-foot minimum S-2 screen landscape buffer to 6-foot-tall opaque screening fence.

Staff Analysis: While the sloping site and existing vegetation behind the Subject Property reduce the visual scale of the proposed buildings from properties to the south, staff is concerned three (3) story buildings set within 10-feet of Lankford Avenue and adjacent properties do not respond to the existing character of the neighborhood, particularly on Lankford Avenue which is mostly smaller footprint single family homes generally shorter in height and set back further from the street. The application materials also show the on-site parking lot as approximately five (5) feet from the adjacent property at 106 Lankford in the application materials (see **Attachment C**). The above request by the applicant to replace the required 20-foot-wide landscape buffer with an opaque fence will minimize headlight trespass from parked vehicles on the Subject Property to the adjacent property, but staff is concerned the proximity and lack of vegetated buffer may result in noise impacts to the adjacent property.

(5) Whether the proposed use or development will be in harmony with the purposes of the specific zoning district in which it will be placed;

The Subject Property is currently zoned R-1S but the applicant's Rezoning application to R-3 must be approved prior to the approval of this SUP application to permit the proposed multifamily residential use.

The purpose of the multifamily residential zoning district is to provide areas for medium- to high-density residential development. The basic permitted use is medium-density residential development; however, higher density residential development may be permitted where harmonious with surrounding areas. Certain additional uses may be permitted, in cases where the character of the district will not be altered by levels of traffic, parking, lighting, noise, or other impacts associated with such uses.

R-3 consists of medium-density residential areas in which medium-density residential developments, including multifamily uses, are encouraged.

Staff Analysis: As previously detailed, the proposed development is not harmonious with the surrounding area and therefore does not align with the purpose of the R-3 district.

(6) Whether the proposed use or development will meet applicable general and specific standards set forth within the zoning ordinance, subdivision regulations, or other city ordinances or regulations; and

Based on the information contained within the application, the proposed development would likely comply with applicable local ordinances. However, final determinations cannot be made prior to having the details required for final site plan and building permit approvals.

(7) When the property that is the subject of the application for a special use permit is within a design control district, city council shall refer the application to the BAR or ERB, as may be applicable, for recommendations as to whether the proposed use will have an adverse impact on the district, and for recommendations as to reasonable conditions which, if imposed, that would mitigate any such impacts. The BAR or ERB, as applicable, shall return a written report of its recommendations to the city council.

The Subject Property is not located within a design control or entrance corridor district.

Public Comments Received

Community Meeting Required by Sec. 34-41(c)(2)

On August 2, 2023, the applicant held a Community Meeting at CitySpace (100 5th Street NE) beginning at 5:00pm. The meeting was attended by four (4) members of the public. Concern was expressed for impacts to traffic and on-street parking (as many existing homes do not have on-site parking), impacts to land values, impacts to the cemetery on the adjacent property (106 Lankford Avenue), and the proposed multifamily building style and heights. Attendees expressed a desire to see single family homes or tiny homes at this location. At the meeting, the applicant team confirmed underground and sonar survey work had been completed in respect to the cemetery on adjacent 106 Lankford Avenue.

Other Comments

As of the date of this report, staff has received comments from one community member. The community member indicated they are not supportive of the proposed Rezoning and SUP applications due to impacts from other developments in the neighborhood including on-street parking availability and difficulty traveling Lankford Avenue due the narrow width. Should any comments come in after the report is posted, those comments will be forwarded to Planning Commission and City Council.

Staff Recommendation

Staff finds the application does not meet the general standards for a Special Use Permit as the proposed development is not harmonious with the existing patterns of use and scale of the

neighborhood and does not align with the Future Land Use Map and other components of the Comprehensive Plan. Should the Planning Commission recommend approval, staff recommends the Commission consider the following conditions.

Recommended Conditions

Should Planning Commission recommend approval to City Council, staff recommends that following conditions be included:

1. Per Section 34-420: Permitted Residential density up to 51 Dwelling Units per Acre (DUA) on the Subject Property.
2. Per Section 34-162: Alter the Lankford Avenue front yard setback requirement to ten (10) feet.
3. Per Section 34-162: Alter the side yard setback requirement to ten (10) feet.
4. Per Section 34-162: Alter the rear setback requirement to twenty-five (25) feet.
5. Per Section 34-162: Require a six (6) foot tall opaque fence in the side and rear yards.
6. The Landowner (including, without limitation, any person who is an agent, assignee, transferee or successor in interest to the Landowner) shall hire a qualified archeologist to determine:
    a. If any human graves are present on the Subject Property and, if found, no construction continues until notice is provided to the City Preservation Planner and upon consultation with the City Attorney's Office, he will provide guidance on the next steps required before development resumes.
    b. If construction activity will disturb the adjacent property at 106 Lankford Avenue, determine if any known or unknown graves will be impacted and assure they are treated appropriately including, if necessary, consulting with the Virginia Department of Historic Resources and securing any required state permit(s).

Suggested Motions

1. I move to recommend denial of this application for a Special Use Permit in the R-3 zone at TMP 260012000 and an address of 108 Lankford Avenue to permit additional density. Or
2. I move to recommend approval of this application for a Special Use Permit in the R-3 zone at TMP 260012000 and an address of 108 Lankford Avenue to permit additional density with the following listed conditions.
    a. The conditions recommended by staff
    b. [alternative conditions, or additional condition(s)…. list here]

Attachments

A. Special Use Permit Application dated June 3, 2022.
B. Narrative dated April 13, 2023.
C. Concept Plan and Exhibits dated April 13, 2023.
D. Preliminary Proffer Statement provided August 28, 2023.
E. Affordable Dwelling Unit Ordinance Worksheet.
F. Community Meeting Materials.

City of Charlottesville

Application for Special Use Permit

Project Name: 108 Lankford Avenue

Address of Property: 108 Lankford Avenue, 110 Lankford Avenue, 112 Lankford Avenue

Tax Map and Parcel Number(s): 260012000

Current Zoning District Classification: R-1S

Comprehensive Plan Land Use Designation: General Residential

Is this an amendment to an existing SUP? ____

If "yes", provide the SUP #: _____

Applicant: Green Retro Salvage II Holdings LLC

Address: 2450 Lost Hollow Path, Charlottesville, VA 22911

Phone: _____ **Email:** _____

Applicant's Role in the Development (check one):

[Owner] Owner's Agent Designer Contract Purchaser

Owner of Record: _____

Address: _____

Phone: _____ **Email:** _____

Reason for Special Use Permit:

Additional height: _____ feet

Additional residential density: 48 units, or 51 units per acre

Authorize specific land use (identify)_____

Other purpose(s) (specify City Code section):_____

(1) Applicant's and (2) Owner's Signatures

(1) Signature _____ **Print** Khadry Sagafi Date 060322

Applicant's (Circle One): LLC Member LLC Manager Corporate Officer (specify) _____

Other (specify): _____

(2) Signature _____ **Print** _____ **Date** _____

Owner's (Circle One): LLC Member LLC Manager Corporate Officer (specify) _____

Other (specify):_____

SP23-00003

City of Charlottesville

Pre-Application Meeting Verification

Project Name: 108 Lankford Avenue

Pre-Application Meeting Date: 04/13/2022

Applicant's Representative: Justin Shimp

Planner: Carrie Rainey

Other City Officials in Attendance:

Brennen Duncan

Jack Dawson

The following items will be required supplemental information for this application and must be submitted with the completed application package:

1. Traffic impact study per Sections 34-158(a)(6) and 34-157
2. Massing diagrams per Section 34-158(a)(4)
3. Affordable housing data per Section 34-158(a)(5)
4. Documentation of community meeting required by Sections 34-158(a) and 34-41(c)(2) as specified by City Council's June 20, 2020 Community Engagement Meeting Requirements
5. Narrative addressing the factors set forth in Section 34-157(a) per Section 34-158(a)(6)

Planner Signature: Carrie Rainey, April 13, 2022

City of Charlottesville

Application Checklist

Project Name: 108 Lankford Avenue

I certify that the following documentation is ATTACHED to this application:

- [N/A] 34-158(a)(1): a site plan (ref. City Code 34-802(generally); 34-1083(communications facilities)
- [✓] 34-158(a)(3): Low-impact development (LID) methods worksheet (required for developments that include non-residential uses, and developments proposing 3 or more SFDs or TFDs)
- [✓] 34-158(a)(4): a building massing diagram, and building elevations (required for applications proposing alteration of a building height or footprint, or construction of any new building(s))
- [✓] 34-158(a)(5) and 34-12: affordable housing data. (i) how many (if any) existing dwelling units on the property are an "affordable dwelling unit" by the city's definitions? (ii) Will existing affordable units, or equivalent affordable units, remain following the development? (iii) What is the GFA of the project? GFA of residential uses? GFA of non-residential uses?
- [✓] 34-157(a)(1) Graphic materials that illustrate the context of the project, and a narrative statement as to compatibility with existing patterns of use and development
- [✓] 34-157(a)(2) Narrative statement: applicant's analysis of conformity with the Comprehensive Plan
- [✓] 34-157(a)(3) Narrative statement: compliance with applicable USBC provisions
- [✓] 34-157(a)(4) Narrative statement identifying and discussing any potential adverse impacts, as well as any measures included within the development plan, to mitigate those impacts
- [✓] 34-158(a)(6): other pertinent information (narrative, illustrative, etc.)
- [✓] All items noted on the Pre-Application Meeting Verification.

Applicant

Signature _____ **Print** Phaedrus Acgtbh **Date** 06 03 22

By Its: Member

(For entities, specify: Officer, Member, Manager, Trustee, etc.)

City of Charlottesville

Community Meeting

Project Name: 108 Lankford Avenue

Section 34-41(c)(2) of the Code of the City of Charlottesville (adopted _____, 2015) requires applicants seeking rezonings and special use permits to hold a community meeting. The purpose of a community meeting is to provide citizens an opportunity to receive information about a proposed development, about applicable zoning procedures, about applicable provisions of the comprehensive plan, and to give citizens an opportunity to ask questions. **No application for a rezoning shall be placed on any agenda for a public hearing, until the required community meeting has been held and the director of neighborhood development services determines that the application is ready for final review through the formal public hearing process**.

By signing this document, the applicant acknowledges that it is responsible for the following, in connection to the community meeting required for this project:

1. Following consultation with the city, the applicant will establish a date, time and location for the community meeting. The applicant is responsible for reserving the location, and for all related costs.
2. The applicant will mail, by U.S. mail, first-class, postage pre-paid, a notice of the community meeting to a list of addresses provided by the City. The notice will be mailed at least 14 calendar days prior to the date of the community meeting. The applicant is responsible for the cost of the mailing. At least 7 calendar days prior to the meeting, the applicant will provide the city with an affidavit confirming that the mailing was timely completed.
3. The applicant will attend the community meeting and present the details of the proposed application. If the applicant is a business or other legal entity (as opposed to an individual) then the meeting shall be attended by a corporate officer, an LLC member or manager, or another individual who can speak for the entity that is the applicant. Additionally, the meeting shall be attended by any design professional or consultant who has prepared plans or drawings submitted with the application. The applicant shall be prepared to explain all of the details of the proposed development, and to answer questions from citizens.
4. Depending on the nature and complexity of the application, the City may designate a planner to attend the community meeting. Regardless of whether a planner attends, the City will provide the applicant with guidelines, procedures, materials and recommended topics for the applicant's use in conducting the community meeting.
5. On the date of the meeting, the applicant shall make records of attendance and shall also document that the meeting occurred through photographs, video, or other evidence satisfactory to the City. Records of attendance may include using the mailing list referred to in #1 as a sign-in sheet (requesting attendees to check off their name(s)) and may include a supplemental attendance sheet. The City will provide a format acceptable for use as the supplemental attendance sheet.

Applicant: _____

By:

Signature _____ **Print** Andrew Asgkhi **Date** 06 03 22

Its: _____ (Officer, ~~Member~~, Trustee, etc.)

City of Charlottesville

Owner's Authorizations

(Not Required)

Right of Entry- Property Owner Permission

I, the undersigned, hereby grant the City of Charlottesville, its employees and officials, the right to enter the property that is the subject of this application, for the purpose of gathering information for the review of this Special Use Permit application.

Owner:_____ **Date** _____

By (sign name):_____ **Print Name:** _____

Owner's: LLC Member **LLC Manager** **Corporate Officer (specify):**_____

Other (specific): _____

Owner's Agent

I, the undersigned, hereby certify that I have authorized the following named individual or entity to serve as my lawful agent, for the purpose of making application for this special use permit, and for all related purposes, including, without limitation: to make decisions and representations that will be binding upon my property and upon me, my successors and assigns.

Name of Individual Agent: Justin Shimp or Kelsey Schlein or Rachel Moon

Name of Corporate or other legal entity authorized to serve as agent: Shimp Engineering, P.C.

Owner: _____ **Date:** _____

By (sign name): _____ **Print Name:** Rhaedrian Argetsinger

Circle one:

Owner's: LLC Member **LLC Manager** **Corporate Officer (specify):**_____

Other (specific): _____

City of Charlottesville

Disclosure of Equitable Ownership

Section 34-8 of the Code of the City of Charlottesville requires that an applicant for a special use permit make complete disclosure of the equitable ownership "real parties in interest") of the real estate to be affected. Following below I have provided the names and addresses of each of the real parties in interest, including, without limitation: each stockholder or a corporation; each of the individual officers and directors of a corporation; each of the individual members of an LLC (limited liability companies, professional limited liability companies): the trustees and beneficiaries of a trust, etc. Where multiple corporations, companies or trusts are involved, identify real parties in interest for each entity listed.

Name_____ **Address**_____

Name_____ **Address**_____

Name_____ **Address**_____

Name_____ **Address**_____

Attach additional sheets as needed.

Note: The requirement of listing names of stockholders does not apply to a corporation whose stock is traded on a national or local stock exchange and which corporation has more than five hundred (500) shareholders.

Applicant: _____

By:

Signature_____ **Print** Phaedrus Agathon **Date** 06 03 22

Its: _____ (Officer, Member, Trustee, etc.)

City of Charlottesville

Fee Schedule

Project Name: 108 Lankford Avenue

Application Type	Quantity	Fee	Subtotal
Special Use Permit (Residential)			
Special Use Permit (Mixed Use/Non-Residential)			
Mailing Costs per letter		$1 per letter	
Newspaper Notice		Payment Due Upon Invoice	
TOTAL			

Office Use Only

Amount Received:_____ **Date Paid**_____ **Received By:** _____

Amount Received:_____ **Date Paid**_____ **Received By:** _____

Amount Received:_____ **Date Paid**_____ **Received By:** _____

Amount Received:_____ **Date Paid**_____ **Received By:** _____

City of Charlottesville

LID Checklist

Project Name: 108 Lankford Avenue

LID Measure	LID Checklist Points	Points
Compensatory Plantings (see City buffer mitigation manual). 90% of restorable stream buffers restored.	5 points or 1 point for each 18% of the total acreage	0
Pervious pavers for parking and driveways with stone reservoir for storage of 0.5 inches of rainfall per impervious drainage area. Surface area must be >1,000 ft.^{2} or ≥ 50% of the total parking and driveway surface area.	7 points or 1 point for each 7% of parking and driveway surface area.	0
Shared parking (must have legally binding agreement) that eliminates >30% of on-site parking required.	5 points or 1 point for each 6% of parking surface eliminated.	0
Impervious Disconnection. Follow design manual specifications to ensure adequate capture of roof runoff (e.g. cisterns, dry wells, rain gardens)	8 points	0
Bioretention. Percent of site treated must exceed 80%. Biofilter surface area must be ≥ 5% of impervious drainage area.	8 points or 1 point for each 10% of site treated.	0
Rain gardens. All lots, rain garden surface area for each lot ≥ 200 ft.^{2}.	8 points or 1 point for each 10% of lots treated.	0
Designed/constructed swales. Percent of site treated must exceed 80%, achieve non-erosive velocities, and able to convey peak discharge from 10 year storm.	8 points or 1 point for each 10% of site treated.	0
Manufactured sand filters, filter vaults (must provide filtering rather than just hydrodynamic). Percent of site treated must exceed 80%. Sizing and volume for water quality treatment based on manufacturer's criteria.	8 points or 1 point for each 10% of site treated.	0
Green rooftop to treat ≥ 50% of roof area	8 points	0
Other LID practices as approved by NDS Engineer.	TBD, not to exceed 8 points	0
Off-site contribution to project in City's water quality management plan. This measure to be considered when on site constraints (space, environmentally sensitive areas, hazards) limit application of LID measures. Requires pre-approval by NDS Director.	5 points	0
	Total Points	0

Applicant's Signature

Signature _____ **Print** Phaedra Agtzidis **Date** 06/3/22

SHIMP ENGINEERING, P.C.
Design Focused Engineering

Project Narrative For: **108 Lankford Avenue**

Parcel Description: **260012000**

Initial Submittal: **April 13, 2023**

Pre-App Meeting Date: **April 13, 2022**

	ACREAGE	EXISTING ZONING	PROPOSED ZONING	COMP PLAN DESIGNATION
TMP 26-12	**0.9482**	**R-1S**	**R-3**	**General Residential**

Location:

TMP 26-12 has a physical address of 108, 110, and 112 Lankford Avenue in Charlottesville, Va. The property is located in Charlottesville's Ridge Street Neighborhood.

Project Proposal:

Green Retro Salvage II Holdings, LLC is the owner (the "owner") of tax map parcel 26-12 in the City of Charlottesville (the "property"). On behalf of the owner, we request a rezoning from R-1S to R-3 and a special use permit to allow for a density of 51 DUA for a total of 48 residential units on the property. In conjunction with the special use permit request and in accordance with Sec. 34-162 of City of Charlottesville's Zoning Ordinance, we request a modification to Sec. 34-353(A) for the required front yard setback, a modification to Sec. 34-353(B)(4) for the minimum distance between a multifamily façade and the adjacent boundary of a low-density residential district, and a modification to Sec. 34-872 for the required landscape buffer. See Table A below outlining the zoning requirement and requested modification proposed pursuant to Sec. 34-162:

TABLE A

	Requirement	**Requested Modification**
Sec. 34-353(A)	Front setback: 25' minimum	Front setback: 10'
Sec. 34-353(B)(4)	Distance between the façade of a multifamily dwelling and the boundary of any low density residential district: 75', where the R-3 property has a density of 44-87 DUA	Distance between the façade of the multifamily dwelling and the boundary of any low density residential district shall conform with the side and rear setbacks as proposed
Sec. 84-872	A 20' landscape buffer shall be provided between any multifamily development and a low density residential property	6' opaque screening fence between the multifamily development and adjacent low density parcels

To establish this residential development near Downtown Charlottesville, we propose the development of 48 units within four multifamily structures. The units are anticipated to be a mixture of studios, 1-bedrooms, and 2-bedrooms. One building is proposed to front on Lankford Avenue and parking would be

relegated behind this structure. The building fronting on Lankford is proposed as three-stories and the remaining three buildings are proposed as three-stories over a basement. The multifamily buildings are to be stepped into the grade, which would nest the structures into the site topography and minimize the scale of the buildings.

The project design will establish:

1. A neighborhood-density residential development that provides additional housing near employment centers, such as IX Art Park, Downtown Charlottesville, and the Avon Street Commercial Corridor.
2. Intentional amenity and greenspace areas for residents to enjoy

Public Benefit & Need

According to the Charlottesville Housing Needs Assessment, the demand for housing is rapidly outpacing the available supply within and around the City limits. Just over half of the Charlottesville housing supply is single-family detached homes and "the city's constrained supply of developable land supply limits the potential for new residential construction" (v). With 108 Lankford's close proximity to City employment centers, the surrounding walkability, and the accessibility to public transportation, the construction of 48 multifamily units would provide strategic density within small multifamily structures. The configuration of the four buildings and the parking area, the installation of an opaque fence along the side and rear of the property, and the proposed landscaping would minimize any impacts to the surrounding area, while providing increased density near the Downtown area. This neighborhood south of Elliott Avenue features a mixture of single-family residential, townhomes, and apartments and the block immediately east of the site is the location of the existing South First Street public housing and redevelopment. At the completion of phase 2 of the redevelopment, there will be 175 new units approximately 300' from the site. Given the mixture of housing in the existing neighborhood context and Lankford's location in proximity to City destinations and public transportation, permitting additional density on the property would align with the surrounding neighborhood while creating housing that is accessible to City resources such as public transportation and employment, service, and recreational destinations.

Consistency with the Comprehensive Plan

Chapter 5 Housing

Goal 2. Diverse Housing Throughout The City

Support a wide range of rental and homeownership housing choices that are integrated and balanced across the city, and that meet multiple City goals including community sustainability, walkability, bikeability, ADA accessibility, public transit use, increased support for families with children and low-income households, access to food, access to local jobs, thriving local businesses, and decreased vehicle use.

A medium-density multi-family development on this property is an opportunity to incorporate more housing options throughout the City and contribute to City goals of achieving a mixture of housing types in as many areas of the City as possible. The adjacent properties to 108 Lankford Avenue are currently single family residential and multi-family, with a mixture of additional housing types within the surrounding block network. Lankford Avenue's location provides a key opportunity to create 48 residential units close to the City Center. 108 Lankford is approximately 0.3-miles from IX Art Park and one-mile from the Downtown Mall. In addition to the CAT Transit Station downtown, several bus stops

are within the walking shed of the property. With the existing bike-ped infrastructure around Downtown Charlottesville and access to CAT public transit, increasing density on Lankford Avenue would place future residents within a well-connected area of the City. These connections provide access to areas of employment, parks and public space, and areas of commercial services. While the Comprehensive Plan designates the property as 'General Residential,' the location of the site could accommodate higher density, due to its location near the urban center. The property would increase housing diversity south of Downtown and would allow at least 48 new residents to live near a variety of City amenities.

Chapter 4 Land Use, Urban Form, and Historic & Cultural Preservation

Goal 2. Future Land Use Vision

Guide implementation of the Future Land Use vision contained in this Comprehensive Plan, including support for existing neighborhoods and preventing displacement.

Increasing the density on this parcel will provide more equitable housing options for current and future city residents, specifically near the City core. While three existing dwelling units are proposed to be removed, 48 new units would be created with the redevelopment. The property is located within the *General Residential area* in the Future Land Use Map, which seeks to "allow for additional housing choice within the existing residential neighborhoods throughout the city." Although General Residential describes the current single family detached uses of the Lankford neighborhood, the proposed rezoning and special use permit request falls in between General Residential and Medium Intensity Residential, which would be appropriate for this southern Downtown area. Although a density of 51 DUA is requested, the redevelopment would align with the General Residential: Outside of Sensitive Areas precedents set forth by the Comprehensive Plan, as a multiplex development.

Goal 3. Balance Conservation and Preservation with Change

Protect and enhance the existing distinct identities of the city's neighborhoods and places while promoting and prioritizing infill development, housing options, a mix of uses, and sustainable reuse in our community.

The rezoning and special use permit request seek to permit an infill development. Currently, there are three single family detached units on the property and, if permitted, the infill development would provide 48 units on the property. Due to the property location, the proposed infill would provide access to various areas of employment and City amenities, while encouraging residents to take advantage of the existing bike-ped and public transit infrastructure available in this area.

Future Land Use Planning Objectives

- *Build upon land use recommendations integrated within the City's citywide studies, Small Area Plans, and the 2021 Affordable Housing Plan.*
- *Ensure citywide, equitable opportunities for additional housing and enhanced community services.*
- *Explore the development potential of vacant or underutilized properties.*
- *Protect, preserve, and enhance natural and cultural resources.*

Objectives for Residential Areas

- *Foster walkable, bikeable, and transit accessible neighborhoods.*

- *Increase opportunities to develop diverse housing options near schools, parks, shopping districts, and employment centers.*

The property is located within the General Residential area of the Future Land Use Map. The rezoning of the property to R-3 to provide multi-family units would achieve the intent of the Charlottesville Affordable Housing Plan to "change zoning and development processes to increase the production of multifamily housing.".[1] Offering multifamily housing in a single family residential neighborhood diversifies the housing options and provide opportunities for rental units, serving a more economically diverse population of residents immediately adjacent to the City center. While three single family detached units are present on the property, a redevelopment of the site would provide up to 48 units. Redevelopment of a site near Downtown Charlottesville would further contribute to the housing supply within the limited City area. The location of the property is ideal for encouraging density. Commercial uses and services are easily accessible by walking or biking, and residents may utilize the Charlottesville Area Transit bus stops immediately adjacent to their homes. A Route 6 bus stop is located at the corner of Elliot Ave and 1st St S and the property is a three-minute walk to IX Art Park, and a ten-minute walk to the Downtown Mall and the CAT Transit Station. With the accessibility of walking and biking infrastructure, the bus network, and the proximity to various City nodes, such as Downtown Belmont and the Downtown Mall, increasing housing opportunities within this area of Belmont would facilitate resident access to areas of City employment and amenities.

Compliance with USBC:

The plans submitted for 108 Lankford Avenue are to comply with the applicable USBC provisions.

Impacts on Public Facilities & Public Infrastructure:

American Community Survey (ACS) 5-year estimates indicate the average household size in Charlottesville is 2.38 people[2].Using the ACS average, a multi-family development with a maximum of 48 proposed units could potentially yield 114 new residents living on the property. ACS estimates include all housing types in their analysis and it is anticipated that the unit types proposed with 108 Lankford would only house one- to two-person households.

The impacts on transportation infrastructure from 48 units will be minimal. Using ITE trip generation estimates for multi-family development, it is estimated that the proposed 48 additional units would create 18 trips in the morning peak hour and 19 trips in the evening peak hour. Given the location, many residents would choose to walk, bike, or use transit.

Impacts on Schools:

This property lies within the Jackson Via Elementary School district. After attending neighborhood elementary schools, all Charlottesville students attend Walker Upper Elementary School, Buford Middle School, and Charlottesville High School.

ACS 2018 5-year estimates show that there are an estimated 4,800 residents between the ages of 5-17 within City limits.[3] By dividing this estimate by the number of occupied housing units in the city, 18,613, it can be approximated that there are approximately .26 school-aged children per housing unit in

[1] Charlottesville Affordable Housing Plan, outlining the recommended land use changes and the following impacts, page 80.
[2] ACS 2013-2017 5 YR Estimates Table B25010 "Average Household Size of Occupied Housing Units by Tenure"
[3] ACS 2018 5 YR Estimates Table DP05 "ACS Demographic and Housing Estimates"

Charlottesville.[4] Since 48 units are proposed on the site, it is estimated there may be an additional 12 school-aged children within the development.

[4] ACS 2018 5 YR Estimates Table DP04 "Selected Housing Characteristics"

REZONING + SPECIAL USE PERMIT
CONCEPT PLAN + EXHIBITS

108 LANKFORD AVENUE

SITE CONTEXT

Ix Art Park

Ridge Street

Burnet Way

Burnet Street

Lankford Avenue

Elliott Avenue

1st Street S

Hartmans Mill Road

Paynes Mill Road

TMP 26-12

Submitted 13 April 2023

project: 22.008

SHIMP ENGINEERING, P.C.

108 LANKFORD AVENUE

SITE, REZONING + SPECIAL USE PERMIT DETAILS

OWNER/DEVELOPER
Green Retro Salvage II Holdings, LLC
2450 Lost Hollow Path
Charlottesville, VA 22911

TMP
26-12

ACREAGE
0.9482

NEIGHBORHOOD
Ridge Street

CRITICAL SLOPES
Critical slopes are present on the property.

FLOODZONE
According to the FEMA Flood Insurance Rate Map, effective date February 4, 2005 (Community Panel 51003C0288D), this property does not lie within a floodplain.

USE
EXISTING: (3) single family residential homes
PROPOSED: Multifamily residential

ZONING
EXISTING: R-1S
PROPOSED: R-3 w/ special use permit for 51 DUA

DENSITY
COMPREHENSIVE PLAN DESIGNATION: General Residential
PROPOSED: 48 units proposed, 51 DUA

TMP 26-12

Submitted 13 April 2023

project: 22.008

SHIMP ENGINEERING, P.C.

REZONING + SPECIAL USE PERMIT
CONCEPT PLAN + EXHIBITS

108 LANKFORD AVENUE

SITE CONTEXT



TMP 26 2

Submitted 13 April 2023

project: 22.008

SHIMP ENGINEERING, P.C.

REZONING + SPECIAL USE PERMIT
CONCEPT PLAN + EXHIBITS

108 LANKFORD AVENUE

ZONING MAP

Sheet 4 of 9

B-1

PUD

R-1S

R-3

R-2

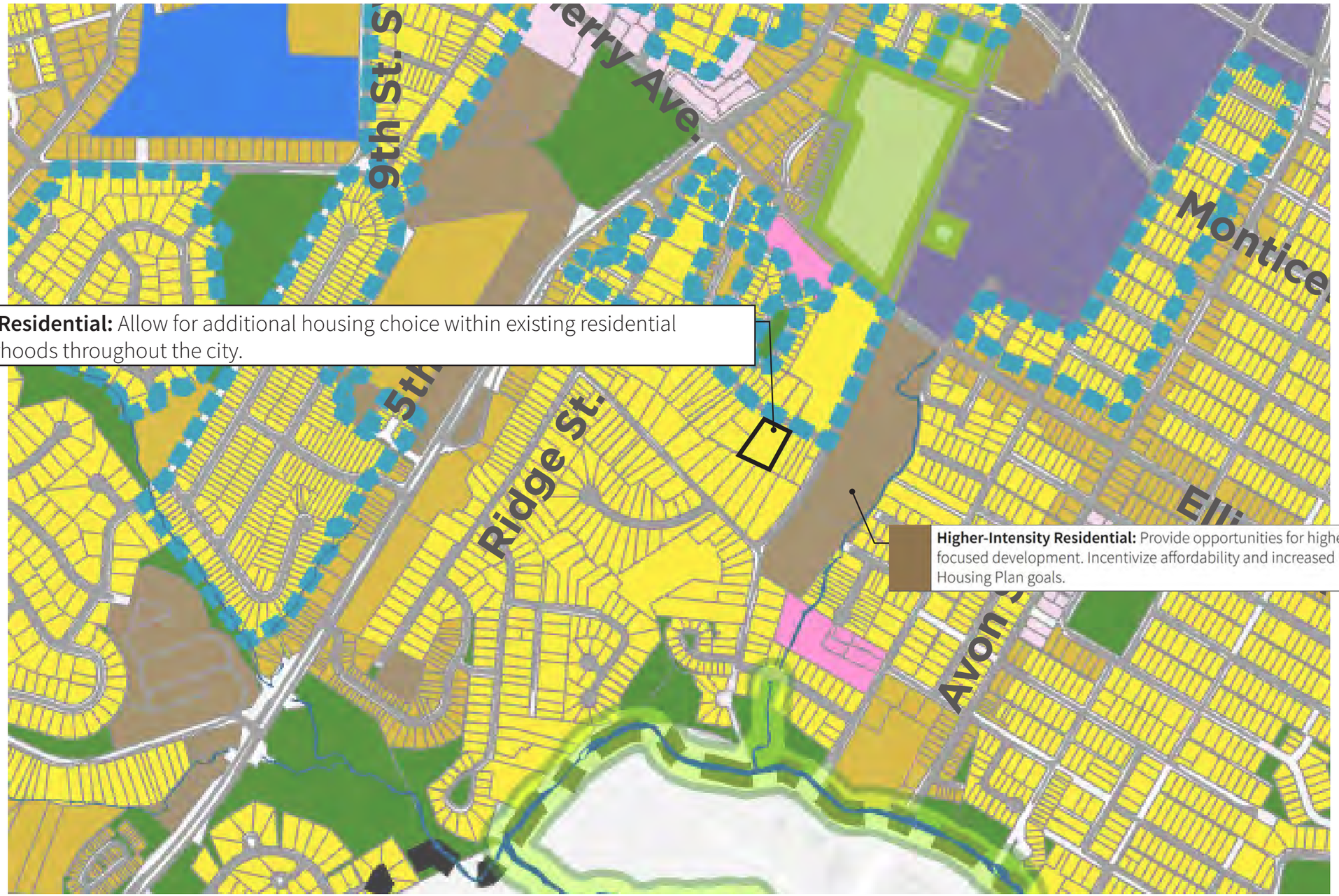
Submitted 13 April 2023

project: 22.008

SHIMP ENGINEERING, P.C.

108 LANKFORD AVENUE

FUTURE LAND USE MAP



TMP 26-12

Submitted 13 April 2023

project: 22.008

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REZONING + SPECIAL USE PERMIT
CONCEPT PLAN + EXHIBITS

108 LANKFORD AVENUE

EXISTING CONDITIONS

Sheet 6 of 9



TMP 26-12

Submitted 13 April 2023

project: 22.008

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REZONING + SPECIAL USE PERMIT
CONCEPT PLAN + EXHIBITS

108 LANKFORD AVENUE

CONCEPT PLAN

Sheet 7 of 9

Lankford Avenue

10' front setback (requested)

10' side setback

10' side setback

25' rear setback

Rain tank
Underground storage

Underground storage chambers

430

440

490

Additional Notes:

1.) Per Sec. 34-353 of the Charlottesville Zoning Ordinance, land coverage in R-3 shall not exceed 80% of the total site area for 22-87 DUA.

30 0 30 60 90

Graphic Scale: 1"=30'

TMP 26-12

Submitted 13 April 2023

project: 22.008

SHIMP ENGINEERING, P.C.

REZONING + SPECIAL USE PERMIT
CONCEPT PLAN + EXHIBITS

108 LANKFORD AVENUE

MASSING DIAGRAM





TMP 26-12

Submitted 13 April 2023

project: 22.008

SHIMP ENGINEERING, P.C.

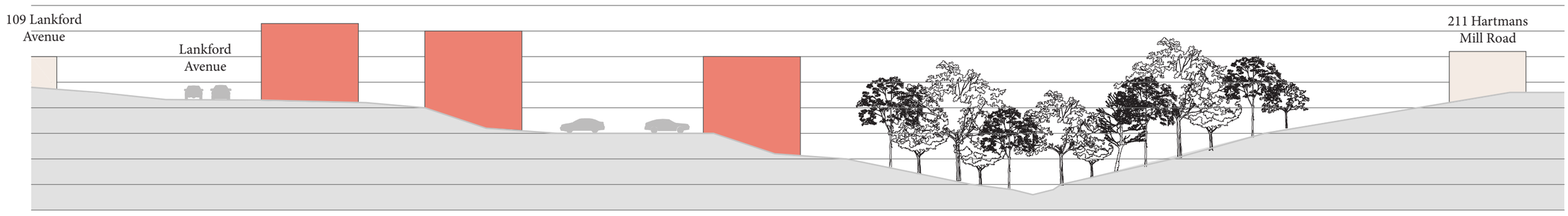
REZONING + SPECIAL USE PERMIT
CONCEPT PLAN + EXHIBITS

108 LANKFORD AVENUE

SITE SECTION

Sheet 9 of 9





40 0 40 80 120

Graphic Scale: 1”=40’

TMP 26-12

Submitted 13 April 2023

project: 22.008

SHIMP ENGINEERING, P.C.

BEFORE THE CITY COUNCIL OF THE CITY OF CHARLOTTESVILLE, VIRGINIA
IN RE: PETITION FOR REZONING (City Application No. ZM22-00002)
STATEMENT OF **DRAFT** PROFFER CONDITIONS
For 108 Lankford Avenue

City of Charlottesville Tax Map 26 Parcel 12

TO THE HONORABLE MAYOR AND MEMBERS OF THE COUNCIL OF THE CITY OF CHARLOTTESVILLE

Green Retro Salvage II Holdings, LLC is the owner of Tax Parcel 260012000 (the "Owner") and seeks to rezone their property (the "Property") which is the subject parcel of rezoning application ZM23-000XX, a project known as 108 Lankford Avenue (the "Project"). The Owner seeks to amend the current zoning of the Property subject to certain voluntary conditions set forth below.

In furtherance of the Project, the Owner hereby proffers for City Council's consideration voluntary development conditions, which the Owner agrees is reasonable. The Owner agrees that, if the Property is rezoned as requested, the use and development of the Property will be subject to and in accordance with the following conditions:

1. **Affordable Housing:**
   The Owner shall provide affordable housing within the Project, as follows:

   a. For the purposes of this Proffer, the term "For-Rent Affordable Dwelling Unit" means a dwelling unit where the monthly cost of rent is affordable to households at 60 percent of the Area Median Income (AMI) for the Charlottesville, Virginia Metro Area as published annually by the Federal Department of Housing and Urban Development (HUD). For the purposes of this Proffer, the term "affordable" means that the cost of rent, including tenant paid utilities, does not exceed 30% of the monthly income of a 60 percent AMI household.
      i. For-Rent Affordable Dwelling Units shall be reserved for rental to low and moderate-income households having income less than or equal to 60 percent of the AMI.

   b. The Owner shall cause 12.5% of the dwelling units constructed within the Project to be For-Rent Affordable Dwelling Units (the "Required Affordable Dwelling Units"). The Required Affordable Dwelling Units shall be identified on a layout plan, by unit, prior to the issuance of any certificate of occupancy for a residential unit within the Property ("Initial Designation"). The Owner reserves the right, from time to time after the Initial Designation, and subject to approval by the City, to change the unit(s) reserved as For-Rent Affordable Dwelling Units, and the City's approval shall not unreasonably be withheld so long as a proposed change does not reduce the number or make-up of Required Affordable Dwelling Units and does not result in an Affordability Period shorter than required by these proffers with respect to any of the Required Affordable Dwelling Units.
      i. The Required Affordable Dwelling Units shall be reserved as such throughout a period of eighty-nine (89) years, beginning from the 10th year following the date on which the first unit of the project receives a certificate of occupancy from the City's building official ("Rental Affordability Period"). All Required Affordable Dwelling

Units shall be administered in accordance with one or more written declarations of covenants within the land records of the Charlottesville Circuit Court, in a form approved by the Office of the City Attorney.

ii. The Required Affordable Dwelling Units shall be comprised proportional to the unit types constructed.

iii. On or before January 10 of each calendar year, or an alternate date mutually agreed upon by the Owners and the City, the then current owner of each Required Affordable Dwelling Unit shall submit an Annual Report to the City on a template provided by the City's Office of Community Solutions, identifying each Required Affordable Dwelling Unit by address and location, and verifying the household income of the occupant(s) of each Required Affordable Dwelling Unit.

iv. The Required Affordable Dwelling Units shall be constructed proportionally to the number of market rate units at a rate of 12.5 percent, so that for every eight (8) units constructed a minimum of one (1) is designated as a Required Affordable Dwelling Unit. Notwithstanding the foregoing, the Required Affordable Dwelling Units may be constructed at a rate that exceeds 12.5 percent of the total number of dwelling units. All Required Affordable Dwelling Units shall be constructed prior to the issuance of certificate of occupancy of the 48th dwelling unit.

v. Section 8 Housing Choice Vouchers or similar housing vouchers will be accepted as a form of payment for the Required Affordable Dwelling Units.

vi. The Owner shall provide a marketing plan to the Office of Community Solutions six months prior to the triggered date for affordable housing to be provided as outlined in 1.b.i for a residential unit within the Project. The marketing plan shall demonstrate how the affordable units will be advertised and will be prepared in a form acceptable to the Office of Community Solutions.

c. The land use obligations referenced in 1.a.i and 1.b.i through 1.b.vi shall be set forth within one or more written declarations of covenants recorded within the land records of the Charlottesville Circuit Court, in a form approved by the Office of the City Attorney, so that the Owner's successors in right, title and interest to the Property shall have notice of and be bound by the obligations. The Required Affordable Dwelling Units shall be provided as for-rent units throughout the Rental Affordability Period.

WHEREFORE, the undersigned Owner stipulates and agrees that the use and development of the Property shall be in conformity with the conditions hereinabove stated, and request that the Property be rezoned as requested, in accordance with the Zoning Ordinance of the City of Charlottesville.

By: _____
Green Retro Salvage II Holdings, LLC

Print Name: _____

Owner’s Address: _____

Affordable Dwelling Unit Ordinance Worksheet-108 Lankford Avenue

Step 1: Total Floor Area Ratio (FAR) of Site

A. Total size of development site: 0.9482 acres

B. Total square footage of site: 0.9482 (# of acres) x 43,560.00 = 41,303.59 square feet (sf)

C. 1.0 Floor Area Ratio (FAR): 41,303.59 *(total sf of site)*

D. Gross Floor Area (GFA) of **ALL** buildings/uses: 40,128.00 sf

E. Total site FAR: 40,128.00 *(total GFA of site)* ÷ 41,303.59 *(1.0 FAR)* = 0.97

F. Is E greater than or equal to 1.0 FAR? NO: Your proposed development does not trigger the ADU ordinance.

YES: Proceed to Step 2 or Step 3.

Step 2: Number of ADUs Required

G. GFA in excess of 1.0 FAR: 40,128.00 *(D: total site GFA)* - 41,303.59 *(B: total SF of site)* = -1,175.59

H. Total GFA of ADUs required: -1,175.59 *(G: GFA in excess of 1.0 FAR)* x 0.05 = -58.78

I. Equivalent density based on Units Per Acre:

i. Dwelling Units per Acre (DUA) approved by SUP: 51.00

ii. SF needed for ADUs: -58.78 *(H: Total GFA of ADUs)* ÷ 43,560.00 = -0.0013494 acres

iii. Total number of ADUs required: -0.0013494 *(ii: ADU acreage)* x 51.00 *(i: DUA approved)* = -0.07

Step 3: Cash-in-Lieu Payment

J. Cash-in-Lieu Amount Residential: 40,128.00 x $2.370 = **$95,103.36**

K. Cash-in-Lieu Amount Mixed-Use:

Total GFA of development site:
GFA Occupied Commercial Space:
GFA Occupied Residential Space:
Total GFA Occupied Space: 0.00
% Residential: #DIV/0!

GFA Non-Occupied Space*: 0.00
Propotionate amount of non-occupied space GFA for residential use: #DIV/0!

Amount of Payment: #DIV/0! x $2.370 = #DIV/0!

**GFA of non-occupied space shall include: (i) basements, elevator shafts and stairwells at each story, (ii) spaces used or occupied for mechanical equipment and having a structural head room of six (6) feet six (6) inches or more, (iii) penthouses, (iv) attic space, whether or not a floor has been laid, having a structural head room of six (6) feet six (6) inches or more, (v) interior balconies, and (vi) mezzanines. GFA shall not include outside balconies that do not exceed a projection of six (6) feet beyond the exterior walls of the building; parking structures below or above grade; or and roof top mechanical structures.*

Step 4: Minimum Term of Affordability

L. Residential Project

i. Households earning up to 80% AMI:

Unit Type	Eff.	1BR	2BR	3BR	4BR	5BR	6BR
Number of Units							
Market Rent							
HUD Fair Market Rents	$752.00	$1,027.00	$1,179.00	$1,478.00	$1,772.00	$2,037.00	$2,303.00
HUD Utility Allowance							
Difference per Month	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Annual Cost of ADU	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

Total Annual Cost of ADUs: 0.00 *(Sum of Annual Cost of ADU)*

Minimum Term of Affordability*: #DIV/0! *(Cash-in-lieu payment / Total annual cost of ADUs)*

***If answer is less than 5, then minimum term of affordability will be 5 years.**

M. Mixed-Use Project

i. Households earning up to 80% AMI:

Unit Type	Eff.	1BR	2BR	3BR	4BR	5BR	6BR
Number of Units							
Market Rent							
HUD Fair Market Rents	$752.00	$1,027.00	$1,179.00	$1,478.00	$1,772.00	$2,037.00	$2,303.00
HUD Utility Allowance							
Difference per Month	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Annual Cost of ADU	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

Total Annual Cost of ADUs: 0.00 *(Sum of Annual Cost of ADU)*

Minimum Term of Affordability: #DIV/0! *(Cash-in-lieu payment / Total annual cost of ADUs)*

***If answer is less than 5, then minimum term of affordability will be 5 years.**

SHIMP ENGINEERING, P.C.
Design Focused Engineering

August 28, 2023

Carrie Rainey
City of Charlottesville
610 East Market Street
Charlottesville, Virginia 22902

RE: 108 Lankford Avenue Community Notification Letter

Dear Carrie,

A notification letter to nearby residents concerning the 108 Lankford Avenue Rezoning, Special Use Permit, and Critical Slopes Waiver request was submitted to a mailing service on July 11, 2023. The mailing service noted delivery on July 14, 2023. This notification letter included details about the project and information about the upcoming community meeting for this project which was held in person at CitySpace, 100 5th St NE, Charlottesville, VA 22902 on **Wednesday, August 2, 2023 at 5:00 PM.**

Please find the letter that was mailed to nearby residents attached; this letter was mailed to all addresses that were provided to us by the City.

Respectfully,

Rachel Moon

KELSEY SCHLEIN
NOTARY PUBLIC
REG. #7907276
MY COMMISSION EXPIRES
01/31/2024
COMMONWEALTH OF VIRGINIA

COMMONWEALTH OF VIRGINIA
CITY/COUNTY OF Charlottesville, to wit:

The foregoing document was acknowledged before me this 28th day of August 2023 by Rachel Moon.

My Commission expires: 01/31/2024

Notary Public

SHIMP ENGINEERING, P.C.
Design Focused Engineering

July 11, 2023

Shimp Engineering
Justin Shimp, Project Representative
912 E High St.
Charlottesville, VA 22902
justin@shimp-engineering.com
(434) 227-5140

RE: Community Meeting for 108 | 110 | 112 Lankford Avenue Rezoning & Special Use Permit

Dear Neighbor,

On behalf of Green Retro Salvage II Holdings, LLC, we, Shimp Engineering, invite you to review information and provide comments regarding our request for a rezoning and special use permit to increase the allowable residential density on tax parcel 260012000. This is a 0.9482-acre parcel with a physical address of 108, 110, and 112 Lankford Avenue in Charlottesville's Ridge Street Neighborhood. This request is to rezone the property from R-1S to R-3 to allow for multifamily housing. Additionally, a special use permit is being requested concurrently with the rezoning to allow for 48 units on the property, or 51 dwelling units per acre. A critical slopes waiver is also requested to permit the project to be developed as shown. The 48 units would be housed within four mid-sized multifamily buildings. The proposed units are proposed primarily as studio apartments, with limited one- and two-bedroom units. Included with this letter is a context map identifying the property and a concept plan that was submitted as part of the application.

We invite you to ask questions and share comments about the proposed project, City review procedures, and relevant regulations and policies of the City applicable to the proposed project on **Wednesday, August 2 at CitySpace, 100 Fifth Street NE, Charlottesville, VA 22902**. Doors will open at 5:00 PM and a short presentation will begin promptly at 5:30 PM.

There are several ways that you can learn more about this project, share your comments, or ask questions about this proposal:
1. Attend the community meeting on Wednesday, August 2
2. Contact me directly by phone or email using the contact information provided at the top left corner of this letter
3. Contact the lead City reviewer directly with questions or comments: Carrie Rainey, raineyc@charlottesville.gov

We look forward to hearing from you.

Best regards,

Justin Shimp, P.E.


Ridge Street
Mt. Zion Baptist Church
Elliott Avenue
IX Art Park
1st Street S
Lankford Avenue
SITE
Hartmans Mill Road


Lankford Avenue
10' front setback (requested)
10' side setback
Rain tank
Underground storage
10' side setback
25' rear setback
Underground storage chambers
Critical slopes

CITY OF CHARLOTTESVILLE

DEPARTMENT OF NEIGHBORHOOD DEVELOPMENT SERVICES

STAFF REPORT

PLANNING COMMISSION REGULAR MEETING

APPLICATION FOR A CRITICAL SLOPE WAIVER

APPLICATION NUMBER: P23-0046

DATE OF MEETING: November 14, 2023

Project Planner: Carrie Rainey, RLA, AICP
Date of Staff Report: November 7, 2023

Applicant: Green Retro Salvage II Holdings, LLC
Applicant's Representative(s): Justin Shimp, Kelsey Schlein, Rachel Moon of Shimp Engineering, P.C.
Current Property Owner: Green Retro Salvage II Holdings, LLC
Application Information
Property Street Address: 108, 110, 112 Lankford Avenue
Tax Map & Parcel/Tax Status: 260012000 (real estate taxes paid current - Sec. 34-10)
Total Project Area (Limits of Disturbance): 0.9482 acres
Total Area of Critical Slopes on Parcel: 0.007 acres (285 SF) |0.7% of site
Area of Proposed Critical Slope Disturbance: 0.007 acres |0.9% of total critical slopes area
Comprehensive Plan (Future Land Use Plan): General Residential
Current Zoning Classification: R-1S with Rezoning application for R-3 (Residential Multifamily)
Overlay District: None

Applicant's Request (Summary)

Green Retro Salvage II Holdings, LLC (applicant and owner) has submitted a Critical Slope Waiver application requesting a waiver from Section 34-1120(b) of the City's Critical Slope Ordinance as part of a plan to redevelop 108 Lankford Avenue (Subject Property). Critical Slopes are limited to the rear of the property, where the applicant proposes stormwater management facilities. In order to implement the project as presented, the applicant has also applied for a Rezoning application (ZM23-00002) to change the existing zoning of the Subject Property from Residential Small Lot (R-1S) to R-3 (Multifamily Residential) with proffers, as well as a Special Use Permit (SUP) (SP23-00003) to increase residential density from 21 dwelling units per acre (DUA) to 51 DUA and modify required setbacks and screening buffers. Should the

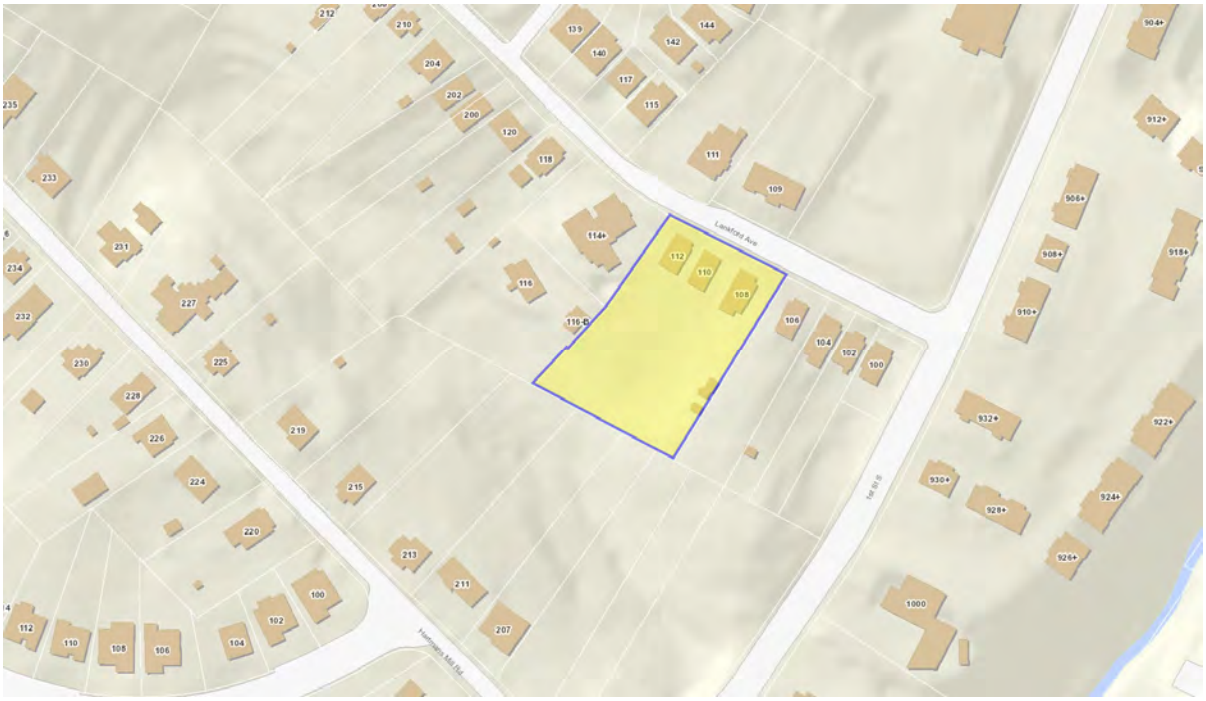
rezoning request be approved, 19 residential units would be permitted and should the SUP application be approved 48 residential units would be permitted. Please see the previous Staff Reports for more information on the Rezoning and SUP applications.

Existing critical slopes areas located on this Property include 0.007 acres or 0.7 percent of the site. The applicable definition of "critical slope" is as follows:

> Any slope whose grade is 25% or greater, **and** (a) a portion of the slope has a horizontal run of greater than 20 feet, and its total area is 6,000 SF or greater, **and** (b) a portion of the slope is within 200 feet of a waterway. *See* City Code Sec. 34-1120(b)(2).

Based on the information presented within the application materials, Staff verifies that the area for which this waiver is sought meets all the above-referenced components of the definition of "critical slope".

Vicinity Map



Critical Slopes per the Zoning Ordinance



Standard of Review

Per Sec. 34-1120(d)(6): The Planning Commission shall make a recommendation to city council in accordance with the criteria set forth in this section, and city council may thereafter grant a modification or waiver upon making a finding that:

> (i)The public benefits of allowing disturbance of a critical slope outweigh the public benefits of the undisturbed slope (public benefits include, but are not limited to, stormwater and erosion control that maintains the stability of the property and/or the quality of adjacent or environmentally sensitive areas; groundwater recharge; reduced stormwater velocity; minimization of impervious surfaces; and stabilization of otherwise unstable slopes); or
>
> (ii)Due to unusual size, topography, shape, location, or other unusual physical conditions, or existing development of a property, one (1) or more of these critical slopes provisions would effectively prohibit or unreasonably restrict the use, reuse or redevelopment of such property or would result in significant degradation of the site or adjacent properties.

If the recommendation is for City Council to grant the requested waiver, the Planning Commission may also make recommendations as to the following: In granting a modification or waiver, city council may allow the disturbance of a portion of the slope but may determine that

there are some features or areas that cannot be disturbed. These include, but are not limited to:

(i)Large stands of trees;
(ii)Rock outcroppings;
(iii)Slopes greater than 60%.

City Council shall consider the potential negative impacts of the disturbance and regrading of critical slopes, and of resulting new slopes and/or retaining walls. City council may impose conditions as it deems necessary to protect the public health, safety or welfare and to insure that development will be consistent with the purpose and intent of these critical slopes provisions. Conditions shall clearly specify the negative impacts that they will mitigate. Conditions may include, but are not limited to:

(i)Compliance with the "Low Impact Development Standards" found in the City Standards and Design Manual.
(ii)A limitation on retaining wall height, length, or use;
(iii)Replacement of trees removed at up to three-to-one ratio;
(iv)Habitat redevelopment;
(v)An increase in storm water detention of up to 10% greater than that required by city development standards;
(vi)Detailed site engineering plans to achieve increased slope stability, ground water recharge, and/or decrease in stormwater surface flow velocity;
(vii)Limitation of the period of construction disturbance to a specific number of consecutive days;
(viii)Requirement that reseeding occur in less days than otherwise required by City Code.

Project Review and Analysis

Each applicant for a critical slopes waiver is required to articulate a justification for the waiver, and to address how the land disturbance, as proposed, will satisfy the purpose and intent of the Critical Slopes Regulations, as found within City Code Sec. 34-1120(b)(1). The applicant has provided information in the attached critical slopes waiver narrative **(Attachment B)** for Application Finding #1 and Finding #2.

Staff Analysis 34-1120(b)(6)(d)(i) Application Finding #1 and #2:

The City's Future Land Use Map of the Comprehensive Plan calls for the Subject Property to be General Residential. The description for this land use category calls for additional housing choice within existing residential neighborhoods. The form for General Residential should respond to existing context, including house-sized structures with similar ground floor footprint area and setbacks as surrounding residential structures. Building heights up to 2.5 stories are

permitted. Uses should allow 3 residential unit per lot, with up to 4-unit dwellings if the existing structure is maintained. Additional units and height under an affordability bonus program or other zoning mechanism may be permitted. Staff's analysis of the Rezoning and SUP application (see preceding Staff Reports) found the proposed development does not conform to the City's Future Land Use Map and the Land Use chapter of the Comprehensive Plan.

Finding #1 *(The public benefits of allowing disturbance of a critical slope outweigh the public benefits of the undisturbed slope (public benefits include, but are not limited to, stormwater and erosion control that maintains the stability of the property and/or the quality of adjacent or environmentally sensitive areas; groundwater recharge; reduced stormwater velocity; minimization of impervious surfaces; and stabilization of otherwise unstable slopes.)*

It should be noted that regardless of any information submitted for a Critical Slope Waiver, all development plans over 6,000 square feet must meet VSMP minimum requirements and additionally, any project over an acre must obtain a Stormwater Pollution Prevention Plan (SWPPP).

The application rightly states that discharging to a channel (with appropriately designed outfall) at the bottom of a slope is much more environmentally responsible than discharging concentrated water to slopes which is likely to cause erosion. However, as stated in the application, the channel proposed in this application is not located on the property. No matter the design of the system it cannot discharge to the channel as stated, but in fact would be discharging to the slopes immediately upstream of the critical slopes intended to be protected. The most basic SWM guidance is contained in VA Administrative Code 9 VAC 25-870-66 "Water quantity". This section requires that "concentrated stormwater flow shall be released into a stormwater conveyance system and shall meet the criteria in subdivision 1, 2 or 3 of [9 VAC 25-870-66], where applicable[.]". A stormwater conveyance system can be constructed of different materials, but it generally requires a channel or other 'section' which can be analyzed for capacity and erosivity. Slopes, especially "critical slopes" are not eligible as stormwater conveyance channels. The design as described and depicted is also in conflict with the Virginia and Erosion & Sediment Control Handbook Spec 3.19 "outlet protection" detail which requires that outlet protection be discharged either to a "well defined channel" or a "flat area with no defined channel." An excerpt from a plan within the "108 Lankford-Rezoning + Special Use Permit- Narrative" (See Rezoning and SUP Staff Reports Attachments C) is attached below which shows the outlet is not discharging to a conveyance system, is not discharging to a well-defined channel or a flat area, and that the discharge will both be across steep slopes and enter at an acute angle to the existing channel flow, very likely causing erosion.

Blue markups are provided by City Engineering:



Finding #2 *(Due to unusual size, topography, shape, location, or other unusual physical conditions, or existing development of a property, one (1) or more of these critical slopes provisions would effectively prohibit or unreasonably restrict the use, reuse or redevelopment of such property or would result in significant degradation of the site or adjacent properties.)*

Per the applicant's Narrative (**Attachment B**), Critical Slopes make up less than one (1) percent of the total site area. Staff finds there are no unusual physical conditions on the Subject Property which would require disturbance of Critical Slopes to implement the proposed development. Staff believes protecting the Critical Slopes will not prohibit effective and reasonable use of the Subject Property.

Staff Recommendation

The development as proposed does not meet the City's Future Land Use Map and the Land Use chapter of the Comprehensive Plan. Staff believes disturbance of the Critical Slopes on site would have a negative impact on the stability and quality of Critical Slopes outside the Subject Property and have concerns the development will not meet state stormwater requirements.

Staff finds that any benefit to allowing disturbance of Critical Slopes on the Subject Property does not outweigh the benefits provided by the undisturbed Critical Slopes. In addition, no unusual conditions exist on the Subject Property for which protection of the Critical Slopes would limit use and development of the Subject Property.

Suggested Motions

1. "I move to recommend denial of the critical slope waiver for Tax Map Parcel 260012000 based on the finding that the public benefit of allowing the disturbance does not outweigh the benefits afforded by the existing undisturbed critical slope per Section 34-1120(b)(6)(d)(i) and the finding that no unusual physical conditions or existing development of the Subject Property prohibit or unreasonable restrict use or development of the property per Section 34-1220(b)(6)(d)(ii).
2. "I move to recommend approval of the critical slope waiver for Tax Map Parcel 260012000 as requested, with no reservations or conditions, based on a finding that ***[reference at least one finding]:***
    - Finding #1: The public benefits of allowing the disturbance outweigh the benefits afforded by the existing undisturbed critical slope, per Section 34-1120(b)(6)(d)(i)
    - Finding #2: Due to unusual physical conditions, or the existing development of the property, compliance with the City's critical slopes regulations would prohibit or unreasonably restrict the use or development of the property, per Section 34-1120(b)(6)(d)(ii)
3. "I move to recommend approval of the critical slope waiver for Tax Map Parcel 260012000 as requested, with conditions, based on a finding that ***[reference at least one finding]:***
    - Finding #1: The public benefits of allowing the disturbance outweigh the benefits afforded by the existing undisturbed critical slope, per Section 34-1120(b)(6)(d)(i)
    - Finding #2: Due to unusual physical conditions, or the existing development of the property, compliance with the City's critical slopes regulations would prohibit or unreasonably restrict the use or development of the property, per Section 34-1120(b)(6)(d)(ii)

    With the following conditions:
    1. …
    2. …

Attachments

A. Critical Slope Waiver Application, signed May 27, 2023
B. Critical Slope Waiver Supplement Narrative, received June 12, 2023
C. Critical Slope Waiver Exhibit, dated April 13, 2023

Application for a Critical Slope Waiver

Department of Neighborhood Development Services
P. O. Box 911, City Hall
Charlottesville, VA 22902
Telephone: (434) 970-3182

Tax Map and Parcel Number(s) 26000120000

Address(es) 108 Lankford Avenue, 110 Lankford Avenue, 112 Lankford Avenue

Applicant Contact Information

Name Same as owner, contact: Shimp Engineering, P.C.

Company

Phone 434-227-5140

Email justin@shimp-engineering.com

Owner Contact Information

Name Green Retro Salvage || Holdings, LLC

Address 2450 Lost Hollow Path, Charlottesville, VA, 22911

Phone

Email

Owner's Signature:

Owner

03/27/23

Date

Required application materials and fee:

- All materials requested during the preapplication meeting with the City Planner.
- Correct application fee. Checks payable to "City of Charlottesville".

Note: Incomplete applications will not be processed.

Date Received: 6/12/2023	Received by: O. Epanlo
Fee: 500.00	Cash/Check # 3581

Revision Date: May 19, 2022

P23-0046

Application for a Critical Slope Waiver

Department of Neighborhood Development Services
P. O. Box 911, City Hall
Charlottesville, VA 22902
Telephone: (434) 970-3182

Critical Slopes Wavier and Modification Supplement Requirements

Please review City Zoning Ordinance Section 34-1120(b) and submit a completed Application using this form, Supplement, and *Critical Slope Exhibit.

**Critical Slope Exhibit: Survey indicating location and area of critical slopes and what portion of critical slopes are proposed to be disturbed. Survey shall be prepared, sealed, signed, and dated by a professional engineer or land surveyor licensed to practice within the Commonwealth of Virginia.*

Project Narrative and Description of Proposed Development:

See attached Critical Slopes Waiver Request Supplement

Existing Conditions:

See attached Critical Slopes Waiver Request Supplement

Total Site Area: Acres .9482 **Square Feet** 4,1303.59

Current Zoning R-1S **Proposed Zoning (if applicable)** R-3

Any SUP or other Waivers being requested:

SUP to be submitted with this request

Note: Incomplete applications will not be processed.

Date Received:_____ Received by:_____

Revision Date: May 19, 2022

Application for a Critical Slope Waiver

Department of Neighborhood Development Services
P. O. Box 911, City Hall
Charlottesville, VA 22902
Telephone: (434) 970-3182

Percentage of Area that is made up of Critical Slopes– meets criteria set forth in Section 34-1120(b)(2) *Definition of Critical Slope:* greater than or equal to 25% slopes and (a) portion of the slope has a horizontal run of greater than twenty (20) feet and its area is six thousand (6,000) square feet or greater; and (b) a portion of the slope is within two hundred (200) feet of any waterway:

Total Critical Slope Area:

Critical Slopes make up .007 **acres of the site's** .9482 **acres, or** .7 **% of the site area.**

**If critical slopes extend beyond property line, quantify total critical slope area as well as provide area of critical slope that falls within site area.*

Critical Slope Area Disturbed:

.007 **acres of the total critical slope area identified above will be disturbed, or** .9 **% of the total critical slope area. Proposed critical slope area to be disturbed is** .7 **% of the site area.**

This application should be used to explain how the proposed project meets some or all of the requirements as described in Section 34-1120(b)(6) "Modification or waiver." The applicant is expected to address finding #1 and/or finding #2 and justify the finding by utilizing the "Critical Slope Provisions" as a guide. Completing this application will help staff make their recommendation to the Planning Commission and City Council.

City Council may grant a modification or waiver, upon making one or more of the following findings:

Note: Incomplete applications will not be processed.

Date Received:_____ Received by:_____

Revision Date: May 19, 2022

Application for a Critical Slope Waiver

Department of Neighborhood Development Services
P. O. Box 911, City Hall
Charlottesville, VA 22902
Telephone: (434) 970-3182

Finding #1:

The public benefits of allowing disturbance of Critical slope outweigh the public benefits of the undisturbed slope (public benefits include, but are not limited to, stormwater and erosion control that maintains the stability of the property and/or the quality of adjacent or environmentally sensitive areas; groundwater recharge; reduced stormwater velocity; minimization of impervious surfaces; and stabilization of otherwise unstable slopes)

See attached Critical Slopes Waiver Request Supplement

Finding #2:

Due to unusual size, topography, shape, location, or other unusual physical conditions, or existing development of a property, one (1) or more of these Critical Slopes provisions would effectively prohibit or unreasonably restrict the use, reuse or redevelopment of such property of would result in significant degradation of the site or adjacent properties.

See attached Critical Slopes Waiver Request Supplement

Note: Incomplete applications will not be processed.

Date Received:_____ Received by:_____

Revision Date: May 19, 2022

Application for a Critical Slope Waiver

Department of Neighborhood Development Services
P. O. Box 911, City Hall
Charlottesville, VA 22902
Telephone: (434) 970-3182

Please address how Finding #1 and/or Finding #2 will be met utilizing the "Critical Slope Provisions" noted in 1—6

1. Erosion affecting the structural integrity of those features:

See attached Critical Slopes Waiver Request Supplement

2. Stormwater and erosion-related impacts on adjacent properties:

See attached Critical Slopes Waiver Request Supplement

3. Stormwater and erosion-related impacts to environmentally sensitive areas such as stream and wetlands:

See attached Critical Slopes Waiver Request Supplement

Note: Incomplete applications will not be processed.

Date Received:_____ Received by:_____

Revision Date: May 19, 2022

Application for a Critical Slope Waiver

Department of Neighborhood Development Services
P. O. Box 911, City Hall
Charlottesville, VA 22902
Telephone: (434) 970-3182

4. Increased stormwater velocity due to loss of vegetation:

See attached Critical Slopes Waiver Request Supplement

5. Decreased groundwater recharge due to changes in site hydrology:

See attached Critical Slopes Waiver Request Supplement

6. Loss of natural or topographic features that contribute substantially to the natural beauty and visual quality of the community such as loss of tree canopy, forested areas and wildlife habitat:

See attached Critical Slopes Waiver Request Supplement

List all attachments supporting this application and Provisions 1—6:

See attached Critical Slopes Waiver Request Supplement

Note: Incomplete applications will not be processed.

Date Received:_____ Received by:_____

City of Charlottesville
CRITICAL SLOPES WAIVER REQUEST SUPPLEMENT

Please review city zoning ordinance section 34-1120(b) "Critical Slopes" and submit a completed Waiver Application Form, Critical Slopes Waiver Request Supplement and a Critical Slope Exhibit*.

Applicant: Green Retro Salvage II Holdings, LLC

Property Owner: Green Retro Salvage II Holdings, LLC

Project Description: (4) multifamily structures; 48 units total for a residential density of 51 DUA.

Existing Conditions: (3) single-family detached structures

Total Site Area: 0.9482 AC

Zoning (if applying for rezoning-please note existing and intended change): R-1S, rezoning to R-3 with a special use permit for additional residential density up to 46 DUA.

Percentage of Area that is made up of critical slopes - meets criteria set forth in Sec. 34-1120(b)(2) *Definition of critical slope*: greater than or equal to 25% slopes and a) a portion of the slope has a horizontal run of greater than twenty (20) feet and its area is six thousand (6,000) square feet or greater; and b) a portion of the slope is within two hundred (200) feet of any waterway:

Total Critical Slope Area:
Contiguous critical slope area is **34,490 SF** or **0.79 acres**. Of this contiguous area, **285 SF** or **0.007 acres** of slopes is located on the property.

Critical Slope Area Disturbed:
0.007 acres of the total 0.79 acres of critical slope area (**0.9%** of the total critical slope area) identified above will be disturbed. Critical slopes comprise 0.7% of the 0.9482 acres of the site area. Proposed critical slope area to be disturbed is **0.7%** of the site area.

Project Background & Critical Slopes Description:
Green Retro Salvage II Holdings, LLC is the Owner (the"Owner") of tax map parcel 26-12 in the City of Charlottesville (the "property"). The owner seeks to develop four multi-family buildings for a total of 48 residential units on the property. A rezoning and special use permit request is currently submitted with this request, to rezone the parcel to R-3 and to allow for additional residential density up to 51 DUA to realize this development. There are currently three single-family detached homes on the property. The property is located on Lankford Avenue, approximately 200' west of the Lankford Avenue and 1st Street South intersection.

285 SF of the critical slopes present on the property are part of 34,490 SF of contiguous critical slopes. The critical slopes are associated with a water course, located south of the property. The area of critical slopes on the property proposed to be disturbed is not part of the stream bank system. The area of critical slopes is within the 25' rear setback and the proposed disturbance would remain in open space. The proposed disturbance would allow for stormwater management of the site, to discharge stormwater into the nearby channel.

This application should be used to explain how the proposed project meets some or all of the requirements as described in Section 34-1120(6) "Modification or waiver." The applicant is expected to address finding #1 and/or finding #2 and justify the finding by utilizing the "critical slope provisions" as a guide. Completing this application will help staff make their recommendation to the Planning Commission and City Council.

City Council may grant a modification or waiver, upon making one or more of the following findings:

Finding #1: The public benefits of allowing disturbance of critical slope outweigh the public benefits of the undisturbed slope (public benefits include, but are not limited to, stormwater and erosion control that maintains the stability of the property and/or the quality of adjacent or environmentally sensitive areas; groundwater recharge; reduced stormwater velocity; minimization of impervious surfaces; and stabilization of otherwise unstable slopes)

Allowing the disturbance of critical slopes would provide for direct discharge into the channel. Without slopes disturbance, stormwater collected from the site would outlet before reaching the slopes and would contribute to further erosion from the sheet flow. Permitting the slopes disturbance and direct discharge would improve erosion control and quality of the adjacent channel, relative to the condition of sheet flow. See further discussion of stormwater and erosion control measures below.

Finding #2. Due to unusual size, topography, shape, location, or other unusual physical conditions, or existing development of a property, one (1) or more of these critical slopes provisions would effectively prohibit or unreasonably restrict the use, reuse or redevelopment of such property or would result in significant degradation of the site or adjacent properties.

Critical slopes encompass 0.7% of the property and run along the rear of the site. While stormwater could be provided for without slopes disturbance, avoidance of the slopes would ultimately contribute to more rapid erosion over time. Critical slopes disturbance and direct discharge into the channel permits a more effective redevelopment of the property while managing the increased runoff.

Please address how Finding #1 and/or Finding #2 will be met utilizing the "critical slope provisions" noted below.

1. **Erosion affecting the structural integrity of those features.**
   The proposed disturbance to install stormwater infrastructure for direct discharge into the channel requires cutting into existing slopes. Cutting into existing slopes provides stronger stability, relative to placing fill atop critical slopes. In the circumstance that the slopes are not to be disturbed, stormwater would run along atop the slopes, causing more rapid erosion, and this erosion would have more of an impact on the structural integrity of these slopes.
2. **Stormwater and erosion-related impacts on adjacent properties.**
   Regarding erosion & sediment control, cutting into the critical slopes and piping stormwater under grade would allow minimal to no opportunities for erosion to occur from that activity. Stormwater from the redevelopment would be captured and routed through the appropriate stormwater infrastructure, as opposed to outletting prior to the slopes and allowing the stormwater to sheet flow to the channel. Development on the site will be in accordance with VSMP regulations ensuring there are no stormwater and erosion related impacts on adjacent properties.

3. **Stormwater and erosion-related impacts to environmentally sensitive areas such as streams and wetlands.**
   The watercourse associated with the critical slopes is a channel that connects to Pollocks Branch. The connecting watercourse is approximately 20' from the rear property boundary, where the slopes proposed to be disturbed are located. In its present condition, stormwater flows down the critical slopes into this connecting branch. Direct discharge into the channel would prevent further degradation of these slopes.

4. **Increased stormwater velocity due to loss of vegetation.**
   The proposed disturbance of 285 SF would not create significant loss of vegetation. The slopes on the property is 0.9% of the contiguous critical slopes area and the edge of these slopes are on the property. Additionally, stormwater is proposed to be captured on-site and would outlet directly to the channel, as opposed to sheet flowing from the development. While some vegetation would be removed with the slopes disturbance, additional landscaping would be replanted in the rear of the site, to provide screening and enhance the rear amenity space. In addition to the stormwater infrastructure and the proposed replanting around the disturbed slopes and throughout the site, increased stormwater velocity would not occur as a result of the critical slopes disturbance.

5. **Decreased groundwater recharge due to changes in site hydrology.**
   No adverse impacts to groundwater recharge are anticipated as a result of the disturbance of the slopes. As established, stormwater flows down the critical slopes and into the watercourse and these slopes would have little meaningful groundwater recharge in their existing conditions. Disturbance of such slopes would not negatively impact groundwater recharge in this circumstance.

6. **Loss of natural or topographic features that contribute substantially to the natural beauty and visual quality of the community such as loss of tree canopy, forested areas and wildlife habitat.**
   The contiguous slope area provides a wooded treeline to the rear of the properties on Lankford Avenue and Hartmans Mill Road. However, the requested area of disturbance is not significant, of 285 SF of the contiguous 34,490 SF. Allowing for the disturbance of approximately 300 SF of area would not substantially impact the existing wooded areas and would improve existing stormwater runoff conditions. The proposed area of disturbance would be planted with native landscaping to replace loss of vegetation and overall provide a greater public benefit.

Please list all attachments that should be viewed as support to the above explanations.

- **108 Lankford Avenue Critical Slopes Disturbance Exhibit**

Please sign the following statement.

I certify that, to the best of my knowledge, the information I have provided above is based on sound engineering and surveying data and that this site has been carefully inspected and reviewed for the purposes of completing this application accurately. I certify that as the property owner/applicant I have not given false information that may affect the decisions made regarding this development.

Green Retro Salvage manager

Property Owner

Same as Property Owner

Applicant

Please do not write below this line. For office use only.

Planner's Comments/Recommendations:

Engineer's Comments/Recommendations:

108 Lankford Avenue Critical Slopes Disturbance

April 13, 2023



SHIMP ENGINEERING, P.C.
LAND PLANNING • PROJECT MANAGEMENT
912 E HIGH STREET, CHARLOTTESVILLE VA 22902 • 434-227-5140 • JUSTIN@SHIMP-ENGINEERING.COM

CITY OF CHARLOTTESVILLE

DEPARTMENT OF NEIGHBORHOOD DEVELOPMENT SERVICES

STAFF REPORT

JOINT CITY COUNCIL AND PLANNING COMMISSION PUBLIC HEARING

APPLICATION FOR A REZONING OF PROPERTY

APPLICATION NUMBER: ZM23-00003

DATE OF HEARING: November 14, 2023

Project Planner: Dannan O'Connell
Date of Staff Report: November 6, 2023

Applicant: Williams Mullen
Current Property Owner: RMD Properties, LLC

Application Information

Property Street Address: 2117 Ivy Road
Tax Map & Parcel/Tax Status: 070001200 (real estate taxes paid current - Sec. 34-10)
Total Square Footage/ Acreage Site: Approx. 1.027 acres (44,736 square feet)
Comprehensive Plan (General Land Use Plan): Urban Mixed-Use Corridor
Current Zoning Classification: Urban Corridor (URB)
Proposed Zoning Classification: Planned Unit Development (PUD) with proffers
Overlay District: Entrance Corridor Overlay
Completeness: The application generally contains all the information required by Sec. 34-41 and Sec. 34-490 of the Code of City of Charlottesville (1990), as amended.

Applicant's Request (Summary)

Williams Mullen (Applicant), on behalf of RMD Properties, LLC (Owner), has submitted an application pursuant to City Code 34-490 seeking a zoning map amendment to change the zoning district classifications of the above parcels of land. The application proposes to change the zoning classification of the Subject Property from "URB" (Urban Corridor) to "PUD" (Planned Unit Development) subject to proffered development conditions.

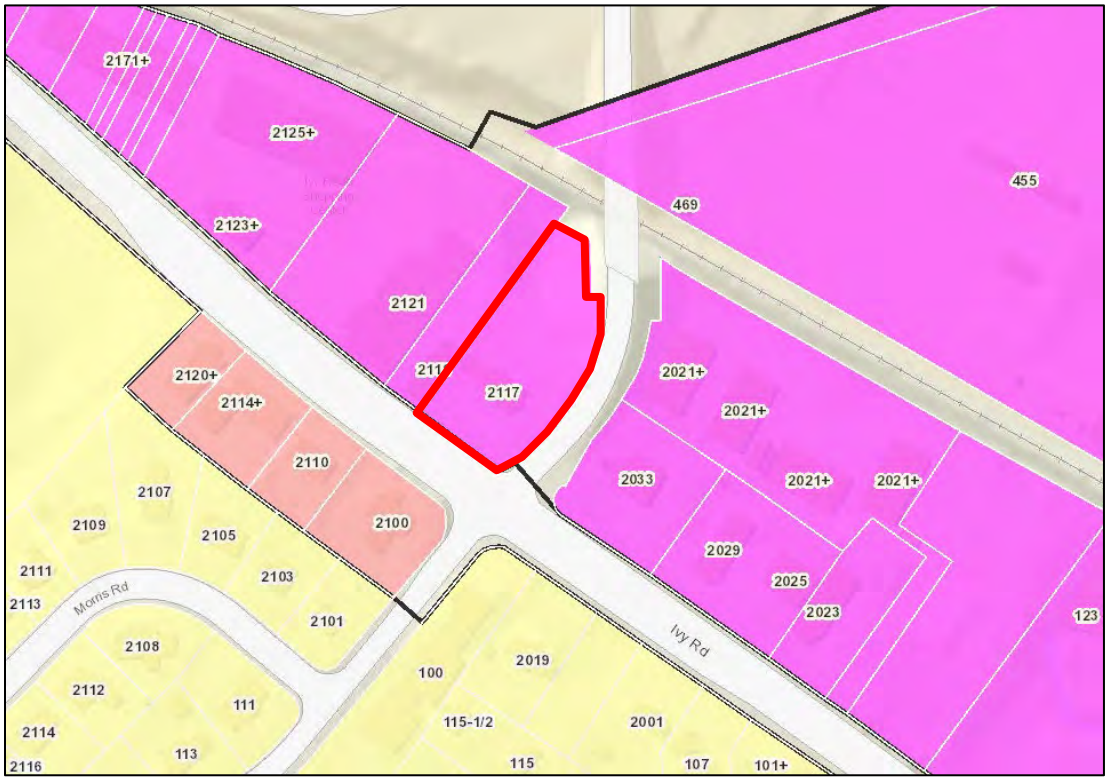
Vicinity Map



Context Map 1



Context Map 2- Zoning Classifications



KEY - Purple: Urban Corridor (URB); Pink: Business (B-1); Yellow: Single-Family Residential (R-1U)

Context Map 3- Future Land Use Map, 2021 Comprehensive Plan



KEY - Purple: Urban Mixed-Use Corridor; Blue: Education; Yellow: General Residential; Light Brown: Medium Intensity Residential; Hatched: University of Virginia properties

Rezoning Standard of Review

City Council may grant an applicant a rezoning request, giving consideration to a number of factors set forth within Sec. 34-41 of the Code of the City of Charlottesville (1990), as amended. The role of the Planning Commission is and make an advisory recommendation to the City Council, as to whether or not Council should approve a proposed rezoning based on the factors listed in Sec. 34-42(a):

(a) All proposed amendments shall be reviewed by the planning commission. The planning commission shall review and study each proposed amendment to determine:

(1) Whether the proposed amendment conforms to the general guidelines and policies contained in the comprehensive plan;

(2) Whether the proposed amendment will further the purposes of this chapter and the general welfare of the entire community;

(3) Whether there is a need and justification for the change; and

(4) When pertaining to a change in the zoning district classification of property, the effect of the proposed change, if any, on the property itself, on surrounding property, and on public services and facilities. In addition, the commission shall consider the appropriateness of the property for inclusion within the proposed zoning district, relating to the purposes set forth at the beginning of the proposed district classification.

Planned Unit Development Standard of Review

Sec. 34-490. - In reviewing an application for approval of a planned unit development (PUD) or an application seeking amendment of an approved PUD, in addition to the general considerations applicable to any rezoning the city council and planning commission shall consider whether the application satisfies the following objectives of a PUD district:

1. To encourage developments of equal or higher quality than otherwise required by the strict application of zoning district regulations that would otherwise govern;
2. To encourage innovative arrangements of buildings and open spaces to provide efficient, attractive, flexible and environmentally sensitive design.
3. To promote a variety of housing types, or, within a development containing only a single housing type, to promote the inclusion of houses of various sizes;
4. To encourage the clustering of single-family dwellings for more efficient use of land and preservation of open space;
5. To provide for developments designed to function as cohesive, unified projects;
6. To ensure that a development will be harmonious with the existing uses and character of adjacent property, and/or consistent with patterns of development noted with respect to such adjacent property;

7. To ensure preservation of cultural features, scenic assets and natural features such as trees, streams and topography;
8. To provide for coordination of architectural styles internally within the development as well as in relation to adjacent properties along the perimeter of the development; and
9. To provide for coordinated linkages among internal buildings and uses, and external connections, at a scale appropriate to the development and adjacent neighborhoods;
10. To facilitate access to the development by public transit services or other single-vehicle-alternative services, including, without limitation, public pedestrian systems.

For applicant's analysis of their application per Sec 34-42, Sec. 34-41(d), & 34-490 see Attachment C.

Sec. 34-42(a)(1): Whether the proposed amendment conforms to the general guidelines and policies contained in the comprehensive plan.

Below are specific areas of the Comprehensive Plan for which the request is in compliance:

a. Land Use, Urban Form, Historic and Cultural Preservation

i. **Goal 2 – Future Land Use Vision:** Guide implementation of the Future Land Use vision contained in this Comprehensive Plan, including support for existing neighborhoods and preventing displacement.

ii. **Goal 7 - Entrance Corridors:** Ensure that the quality of development in Charlottesville's designated Entrance Corridor Overlay Districts is compatible with the City's requirements and standards, and with the adjacent neighborhood's historic, architectural, and cultural resources, while allowing for reuse of structures and evolution of uses in these areas.

b. Housing

i. **Goal 2 – Citywide Diverse Housing:** Support a wide range of rental and homeownership housing choices that are integrated and balanced across the city, and that meet multiple City goals including community sustainability, walkability, bikeability, ADA accessibility, public transit use, increased support for families with children and low-income households, access to food, access to local jobs, thriving local businesses, and decreased vehicle use.

c. Transportation

i. **Goal 1 – Complete Streets:** Create and maintain a connected network of safe, convenient, and pleasant accommodations for pedestrians, bicyclists, and transit riders, including people of all ages and abilities.

ii. **Goal 2 - Coordination with Land Use & Community Design:** Improve quality of life and promote active living by reducing automobile use and congestion and supporting multimodal options for safe and convenient travel in conjunction with implementation of the Future Land Use Vision.

Below are specific areas of the Comprehensive Plan for which the request may not be in compliance:

a. Land Use, Urban Form, Historic and Cultural Preservation

i. **Goal 2 – Future Land Use Vision:** Guide implementation of the Future Land Use vision contained in this Comprehensive Plan, including support for existing neighborhoods and preventing displacement.

ii. **Goal 3 – Balancing Preservation with Change:** Protect and enhance the existing distinct identities of the city's neighborhoods and places while promoting and prioritizing infill development, housing options, a mix of uses, and sustainable reuse in our community.

iii. **Goal 7 - Entrance Corridors:** Ensure that the quality of development in Charlottesville's designated Entrance Corridor Overlay Districts is compatible with the City's requirements and standards, and with the adjacent neighborhood's historic, architectural, and cultural resources, while allowing for reuse of structures and evolution of uses in these areas.

Comprehensive Plan- Staff Analysis:

The 2021 Future Land Use Map designates 2117 Ivy Road as part of an Urban Mixed-Use Corridor. Urban Mixed-Use Corridors are described as containing higher-intensity mixed-use development arranged along corridors between employment, commercial, and civic hubs of the City. Building forms should respond to existing residential, environmental, and historic context. No density is specified, but up to five stories in building height is allowed, and greater heights of up to eight stories are permitted along key intersections (i.e. along Downtown, Industrial, Mixed Use, or Neighborhood corridors per the City's Streets That Work Plan).

The proposed use does not fully conform to the categories identified in the 2021 Future Land Use Map. Although the proposed multi-family and ground-floor commercial uses are acceptable within an Urban Mixed-Use Corridor, the proposed building is over two stories taller than the maximum of eight stories described within the Comprehensive Plan. The proposed building is also out of scale with adjacent commercial and low-density residential uses to the west and south.

Streets that Work Plan:

The Subject Property has frontage on both Ivy Road and Copeley Road. Ivy Road is designated a "Mixed Use B" street in the Streets That Work Plan. Mixed Use B streets are characterized by one vehicular travel lane in each direction, intermittent center turn lanes, sidewalks and bicycle facilities. These streets should support high levels of walking, bicycling, and transit as they connect important destinations within the City and

surrounding county. The adjacent land uses may be commercial, higher density residential or institutional, and future development is expected to include a dense mix of uses. Ivy Road is currently developed as a three-lane striped roadway with two westbound lanes and one eastbound lane.

Copeley Road is designated a "Local Street" in the Streets That Work Plan. Local streets have no defined typology, given the diversity of size and condition of rights-of-way within this category. Copeley Road is currently developed as a two-lane striped roadway with a width of 40 feet.

Aside from pedestrian and bicycle striping (described below), no changes are proposed to either of these roadways.

Bicycle and Pedestrian Master Plan:

The Bicycle and Pedestrian Master Plan identifies Ivy Road as an important arterial corridor. These routes will carry the highest number of bicyclists and provide direct routes across the City. Ivy Road is currently developed with two-way un-separated bike lanes as well as curb and sidewalk along both sides. The Master Plan identifies Copeley Road as a local corridor; no bike lanes currently exist along Copeley Road, and only the eastern side of the road (opposite the Subject Property) is developed with a sidewalk.

The applicants are proposing a striped pedestrian crossing along Copeley Road at the intersection, as well as painted 'bicycle boxes' along Ivy Road leading to the intersection to provide a safe area for bicyclists waiting to cross the Ivy/Copeley/Alderman Road intersection. Sidewalk would be provided along Ivy Road and most of Copeley Road (connecting building entrances to the intersection), to provide pedestrian and bicycle connectivity between the Subject Property and adjacent properties, particularly the adjacent University of Virginia campus.

The applicants have included a Transportation Demand Management Plan (Attachment E) as part of their PUD rezoning application. This Plan, as well as the PUD Development Plan, specify that two hundred sixty-four (264) indoor bicycle spaces as well as twenty-eight (28) outdoor bicycle spaces and thirty-two (32) scooter spaces will be provided on the premises. The proposed building's underground parking area will also include two car-share spaces for residents.

Sec. 34-42(a)(2): Whether the proposed amendment will further the purposes of this chapter and the general welfare of the entire community.

Staff finds that a land use change from URB to PUD, with proffers, as described in the application materials, could benefit the community by providing additional multi-family housing within close proximity of the University of Virginia.

Sec. 34-42(a)(3): Whether there is a need and justification for the change.

According to the City's 2021 Future Land Use Map, this portion of the City should be Urban Mixed Use Corridor and offer higher intensity mixed-use developments. The proposed PUD would significantly increase the density of the Subject Parcel and change the existing use from commercial, to a mix of multi-family with some ground-floor commercial space. The proposed uses do align with the Future Land Use Map, but the proposed building height exceeds the maximum suggested height of eight stories for this district.

Sec. 34-42(a)(4): When pertaining to a change in the zoning district classification of property, the effect of the proposed change, if any, on the property itself, on surrounding property, and on public services and facilities. In addition, the commission shall consider the appropriateness of the property for inclusion within the proposed zoning district, relating to the purposes set forth at the beginning of the proposed district classification.

Any development on the subject properties would be evaluated during site plan review and need to meet all current regulations related to public utilities and facilities. Due to the location of the subject properties, staff believes all public services and facilities would be adequate to support any development contemplated by the Comprehensive Plan for this area.

The Subject Property is currently zoned Urban Corridor (URB) and is within an Entrance Corridor overlay district (EC). The intent of the Urban Corridor district is to allow close-in urban commercial activity. Development in this district is both pedestrian and auto oriented but is evolving to more of a pedestrian center development pattern. Current regulations provide for both mixed-use and single-use commercial activities. The district encourages parking located behind structures and development of a scale and character that is respectful to adjacent neighborhoods and university uses.

The Entrance Corridor overlay district (EC) is intended to implement the comprehensive plan goal of protecting the city's historic, architectural, and cultural resources, by ensuring a quality of development compatible with those resources through design control measures. The purposes of this article are to stabilize and improve property values; to protect and enhance the city's attractiveness to tourists and other visitors; to sustain and enhance the

economic benefits accruing to the city from tourism; to support and stimulate development complimentary to the prominent afforded properties and districts having historic, architectural or cultural significance; all of the foregoing being deemed to advance and promote the health, safety and welfare of the general public.

Zoning Comparison Chart: Physical Characteristics

Current URB Zoning		**Proposed PUD Zoning**	
Physical Characteristics		**Physical Characteristics**	
Height	60’ max; 80’ with SUP	142’ max and/or 10 stories	
Setbacks	5’ min, 30’ max (primary street) 5’ min, 20’ max (linking street) 10’ min (side and rear – adjacent single-family districts) 0’ min (side and rear - other)	0’ min, 20’ max (primary street - Ivy Road) 0’ min, 20’ max (side streets - Copeley Road) 0’ min (side and rear lot lines)	
Screening	Adjacent to any low-density residential district, side and rear buffers (S-2 type) shall be required, five (5) feet, minimum	None specified	
Residential Density	21 DUA max by-right; 64 DUA max with SUP	Maximum of 287 dwelling units specified.	
Parking	370 spaces per Section 34-984	164 (no calculation. This is a set number for the development.)	
Massing	None specified	275’ width max (Ivy Road) 15’ min active depth (Ivy Road) 0’ min active depth (Copeley Road)	
Ground Story Height	None specified	10’ min (residential) 14’ min (non-residential)	
Finished Floor Elevation	None specified	2’ min, 5’ max (residential) -2’ min, 5’ max (non-residential)	
Transparency	None specified	*Ivy Road:* 35% min (residential) 50% min (non-residential) 20% min (upper story) 25’ max blank wall width	*Copeley Road:* 30% min (residential) 30% min (non-residential) 20% min (upper story) 25’ max blank wall width
Entrances	None specified	40’ max entry spacing (Ivy Road) 75’ max entry spacing (Copeley Road) Entry feature required for both roads	
Walls & Fences	None specified	5’ max height (Ivy Road)	
Lot Area	None specified	40’ min width (front access) 15’ min width (side or rear access)	

Build-to Width	None specified	75% min (Ivy Road) 45% min (Copeley Road)
Parking Location	None specified	Side and rear yard only

Zoning Comparison Chart: Uses (For a full list see Sheet A-002 of attachment D. This chart is only showing uses that differ from URB and the PUD for By-right uses)

Residential Use (By Proposed Allowances)	**URB**	**PUD**
Convent/monastery	B	
Home occupation	P	B
Residential occupancy: 3 unrelated persons		B
Residential treatment facility: 1 -8 residents	B	
Residential treatment facility: 8+ residents	S	
Shelter care facility	S	
Single room occupancy facility	S	B
Temporary family healthcare structure		B

Key- A: Ancillary Use, B: By-Right, GFA: Gross Floor Area, P: Provisional Use Permit, S: Special Use Permit, T: Temporary Use Permit

Non-Residential: Commercial/Retail Use (By Proposed Allowances)	**URB**	**PUD**
Access to adjacent multi-family, commercial, industrial or mixed-use development or use		B
Amusement center	P	B
Animal boarding/grooming/kennels:		B
With outside runs or pens:		B
Art gallery (GFA up to 10,000 SF)	S	B
Auditoriums, theaters		
Max. capacity less than 300 persons		B
Max. capacity 300 or more persons		B
Assembly (outdoor)		
Amphitheater	S	
Temporary (outdoor church services, etc.)	T	B
Automobile uses		
Auto parts and equipment sales	S	
Gas station	S	
Auto rental/leasing	S	B
Repair/servicing	S	
Tire sales and recapping	B	
Bakery, wholesale (GFA up to 10,000 SF)		B
Car wash	S	
Health clinic (no GFA limit)		B
Attached facilities visible from an adjacent street or property		B

(painted to match attachment structure)		
Carrier on wheels		T
Data center	B	
Educational facilities		
Colleges and universities		B
Artistic instruction, up to 10,000 SF GFA		B
Vocational		B
Funeral home (without crematory, >4,000 SF)	B	
Funeral home (without crematory, up to 10,000 SF)	S	
Laundromats		B
Small breweries	S	B
Mobile food units	P	B
Movie theaters, cineplexes	S	B
Property management office (ancillary to multi-family)	A	B
Outdoor storage, accessory	S	
Parking garage	A/S	B
Surface parking lot (>20 spaces)	A	B
Temporary parking facilities		T
Photographic processing, blueprinting		B
Outdoor parks, etc. (private)	S	
Restaurants		
All night	S	B
Drive-thru windows	S	
24 hour		B
Utility facilities	S	
Farmer's market	S	B
Greenhouses/nurseries	S	
Home improvement center		B
Shopping centers	S	B
Shopping malls	S	B

Key- A: Ancillary Use, B: By-Right, GFA: Gross Floor Area, P: Provisional Use Permit, S: Special Use Permit, T: Temporary Use Permit

Non-Residential: Industrial Use (By Proposed Allowances)	**URB**	**PUD**
Laboratory, medical (>4,000 SF)		B
Laboratory, pharmaceutical (>4,000 SF)		B
Printing/publishing facility	S	
Research and testing laboratories		B

Key- A: Ancillary Use, B: By-Right, GFA: Gross Floor Area, P: Provisional Use Permit, S: Special Use Permit, T: Temporary Use Permit

Zoning History of the Subject Property

Year	Zoning District
1949	A-1 Residential
1958	B-1 Business
1976	B-2 Business
1991	B-2 Business
2003	URB Urban Corridor

The Subject Property is bordered by:

Direction	Use	Zoning
North	University of Virginia	
South	Church, Single-Family Residences	R-1U
East	University of Virginia	URB
West	Commercial Retail, Office, Private School	URB, B-1, R-1U

Zoning - Staff Analysis: The proposed PUD will enable a significantly higher building height and residential density than what is currently permitted on the Subject Property by-right. Under the current Urban Corridor zoning district, by-right residential density is limited to twenty-one (21) dwelling units per acre (DUA), with a maximum building height of sixty (60) feet. An increase to sixty-four (64) DUA and eighty (80) feet is permitted with an approved Special Use Permit. The Subject Property is just over an acre in size and would thus support a maximum of 65 DUA.

The proposed PUD Development Plan allows for a maximum of two hundred eighty-seven (287) dwelling units and a maximum building height of one hundred forty-two (142) feet and/or ten stories. The proposed mixed-use residential structure has a depicted height of around one hundred thirty (130) feet and contains ten stories plus rooftop amenity/elevator space. The proposed structure contains two hundred forty-two (242) residential units and a proposed bedroom count of six hundred thirty-four (634). This would give a total DUA of two hundred forty-nine (249), which is one hundred eighty-five units more than the maximum DUA permitted under the URB zoning district.

The applicant has included additional standards for building massing, ground story height, finished floor elevation, transparency, entrance spacing, wall and fence height, lot area, build-to width and parking location which are not currently required by the Urban Corridor district.

The applicant has provided an ADU worksheet to the Office of Community Solution (OCS) (Attachment G), who determined that this project would trigger the City's current ADU ordinance (Sec. 34-12(c) and 34-12(d)). The applicant has provided a draft proffer statement (Attachment B) requiring one of the following actions to address affordable housing:

1. The applicant shall provide affordable bedrooms in an amount that is equivalent to providing 10% of the total Units within the proposed development [detailed conditions follow];
2. The applicant shall make a cash contribution to the City's affordable housing fund in the amount equal to double that which would be required under City Code Section 34-12(d)(2) based on the approved final site plan.

The quantity of units required, or the amount contributed to the City affordable housing fund, is subject to change based on the final plan design of the proposed development. If the rezoning is approved OCS will review any required site plan to insure it complies to applicable affordable housing code sections.

The applicant has provided a Traffic Impact Analysis (Attachment F) that has been reviewed by the City Traffic Engineer. The Impact Analysis (TIA) indicates that while the adjacent Ivy/Alderman/Copeley Road intersection experiences congestion and low levels of service during peak hours, the proposed development of the Subject Property would not downgrade this level of service based on future projections. The TIA does not recommend any intersection improvements, and none are proposed as part of this PUD rezoning application.

The applicant has also included a Transportation Demand Management Plan (Attachment E), outlining proposed bicycle/scooter parking and bicycle/pedestrian infrastructure improvements.

Overall, the proposed mixed-use multi-family building would be a dramatic departure in height and density from the surrounding area, which is currently developed with low-density commercial and residential uses around one or two stories in height. The University of Virginia is constructing several nearby structures of a similar scale to the proposed PUD as part of its redevelopment of the Ivy Road Corridor; however, these structures appear to incorporate fewer stories and are at a significantly lower elevation to the Subject Property, which makes their absolute heights lower than the proposed PUD structure.

The Subject Property lies at the corner of a heavily trafficked intersection. The proposed PUD Development Plan attempts to mitigate the increase in traffic this development will bring by

reducing the proposed amount of off-street parking spaces below what would be required by current City zoning and providing a significant number of bicycle and scooter parking spaces, along with additional pedestrian connections along Copeley Road. The proposed PUD can be expected to generate significant pedestrian and bicycle traffic along the Ivy Road corridor, to and from the University of Virginia campus and adjacent commercial or non-residential uses.

Planned Unit Development Standard of Review

Sec. 34-490. - In reviewing an application for approval of a planned unit development (PUD) or an application seeking amendment of an approved PUD, in addition to the general considerations applicable to any rezoning the city council and planning commission shall consider whether the application satisfies the following objectives of a PUD district:

1. **To encourage developments of equal or higher quality than otherwise required by the strict application of zoning district regulations that would otherwise govern;**
   While the proposed development would not be permitted at this height and density within the Urban Corridor Residential Zoning District, staff finds the development of multifamily residential units, at this density, would be equal in quality to multi-family structures located in other areas of the City that are by-right. The proposed PUD will allow a height that is 41' higher than the maximum height allowed (101 feet) within any of the City's current zoning districts. Nothing within the application materials indicates the proposed development would not be equal to other developments within the City.

2. **To encourage innovative arrangements of buildings and open spaces to provide efficient, attractive, flexible and environmentally sensitive design;**
   Staff does not find the proposed development to be designed in a particularly innovative arrangement in terms of building placement, open space, or environmentally sensitive design. The proposed design does improve interaction with the surrounding streets and improve pedestrian and bicyclist experiences along the building's frontage. Although these features are appreciated, they are not unique to the PUD and could be achieved through utilizing existing zoning districts or an SUP.

3. **To promote a variety of housing types, or, within a development containing only a single housing type, to promote the inclusion of houses of various sizes;**
   The current PUD Development Plan proposes two hundred and forty-two (242) multi-family residential units, including ninety-eight (98) one-bedroom, sixteen (16) two-bedroom, sixteen (16) three-bedroom, and one hundred twelve (112) four-bedroom units. The development plan indicates that these figures are approximate and specifies a

maximum of two hundred eighty-seven (287) residential units, but no limit on residential density or housing type is noted within this PUD.

4. **To encourage the clustering of single-family dwellings for more efficient use of land and preservation of open space;**
   Single-family dwellings are not proposed as part of the PUD and are not a permitted use according to the PUD Development Plan Use Matrix.

5. **To provide for developments designed to function as cohesive, unified projects;**
   The proposed development is planned as a single structure, and nothing indicates it would not function as a cohesive project. Nothing in the development plan indicates this will be a phased development.

6. **To ensure that a development will be harmonious with the existing uses and character of adjacent property, and/or consistent with patterns of development noted with respect to such adjacent property;**
   This development is not harmonious with the currently existing commercial uses along the north side of Ivy Road, or with the low-density residential uses to the south within the Lewis Mountain neighborhood. It is significantly taller than any existing structure along the Ivy Road corridor and would allow for a significantly higher residential density which is currently not permitted by the area's existing zoning districts.

   The proposed development does appear to be similar in scale to the ongoing redevelopment of the Ivy Road/Copeley Road/Emmet Street Corridor being undertaken by the University of Virginia. However, this area is not subject to City zoning or the Charlottesville Comprehensive Plan, and consists of educational and hospitality uses, not multi-family residential construction.

7. **To ensure preservation of cultural features, scenic assets and natural features such as trees, streams and topography;**
   The development will not impact critical slopes or water features. The development site is currently paved and occupied by a commercial bank use and parking lot.

8. **To provide for coordination of architectural styles internally within the development as well as in relation to adjacent properties along the perimeter of the development;**
   The application materials (Attachment D) include renderings and elevations that do not provide detailed information regarding architectural style but do indicate façade differentiation and the variation of streetscape materials and windows. The proposed

PUD is also within the City's Entrance Corridor Overlay district. The applicant has not requested to be removed from this overlay district; therefore, it will be subject to Entrance Corridor design review prior to site plan approval.

9. **To provide for coordinated linkages among internal buildings and uses, and external connections, at a scale appropriate to the development and adjacent neighborhoods;** Coordinated pedestrian linkages and open space are provided to scale with the neighborhood. The applicant is proposing sidewalk improvements along the building's frontage with Ivy Road and Copeley Road, as well as pedestrian striping and bicycle boxes along the adjacent street intersection.

10. **To facilitate access to the development by public transit services or other single-vehicle-alternative services, including, without limitation, public pedestrian systems.** Public sidewalks are proposed along the building's road frontage to provide pedestrian and bicycle access to and from the property. No City bus route directly serves this property, although several University of Virginia (UTS) bus lines pass through the adjacent road intersection and have nearby stops along Ivy Road and Alderman Road.

    The proposed development includes two hundred sixty-four (264) indoor bicycle spaces as well as twenty-eight (28) outdoor bicycle spaces and thirty-two (32) scooter spaces as part of their Transportation Demand Management Plan (Attachment E). The building's underground parking area will also include two car-share spaces for residents.

Proffers

The proffered development conditions (Attachment B) include the following:

1. **Affordable Housing**

    For the Project, the Applicant shall at its option satisfy either (A) or (B) below:

    A. Provide affordable bedrooms ("Affordable Bedrooms") in an amount that is equivalent to providing 10% of the total Units as affordable units, as provided herein.

    1) The number of Affordable Bedrooms shall be roughly proportional to the number of bedrooms provided in each type of units within the Project, and shall be dispersed throughout the Project in a mix of units that is roughly proportionate to the overall unit mix within the Project, such that:

        i. the number of Affordable Bedrooms located in Efficiency/Studio units shall be roughly proportionate to the number of Efficiency/Studio units within the Project;

ii. the number of Affordable Bedrooms located in one-bedroom units shall be roughly proportionate to the number of one-bedroom units within the Project;
iii. the number of Affordable Bedrooms located in two-bedroom units shall be roughly proportionate to the number of two-bedroom units within the Project;
iv. the number of Affordable Bedrooms located in three-bedroom units shall be roughly proportionate to the number of three-bedroom units within the Project; and
v. the number of Affordable Bedrooms located in four-bedroom units shall be roughly proportionate to the number of four-bedroom units within the Project.

1) In this Project containing a total of 241 units with a mixture of one-bedroom, two-bedroom, three-bedroom, and four-bedroom units, Applicant would provide a total of 24 Affordable Units which may be allocated as follows:
   i. If the total number of one-bedroom units within the Project is 88, there shall be the equivalent of 9 one-bedroom Affordable Units, for a total of 9 Affordable Bedrooms located within one-bedroom units.
   ii. If the total number of two-bedroom units within the Project is 25, there shall be the equivalent of 7 two-bedroom Affordable Units, for a total of 14 Affordable Bedrooms located in two-bedroom units.
   iii. If the total number of three-bedroom units within the Project is 16, there shall be the equivalent of 4 three-bedroom Affordable Units, for a total of 12 Affordable Bedrooms located in three-bedroom units.
   iv. If the total number of four-bedroom units within the Project is 112, there shall be the equivalent of 4 four-bedroom Affordable Units, for a total of 16 Affordable Bedrooms located in four-bedroom units.
   v. These counts and allocations are subject to the final approved PUD and building permit and may be adjusted provided 10% of the total Units are provided as affordable units.

2) Fractional Affordable Units. If the calculation of the required number of affordable units that are required to provide 10% of the total units within the Project as affordable units results in a fraction of a unit less than 0.5, the Project shall provide a fractional in-lieu fee equal to the corresponding percent of the affordable unit as specified in the applicable formula in the adopted Affordable Dwelling Unit Monitoring and Procedures Manual. For example, in an example project containing 242 units, such example project must provide Affordable Bedrooms in an amount that is equivalent to providing 24 affordable units (10% of 242) as provided in paragraph 1(a) herein, and shall also provide a fractional fee in-lieu equal to two-

tenths of the fee in-lieu established for a one-bedroom unit in the adopted Affordable Dwelling Unit Monitoring and Procedures Manual.

3) To provide tenants with the freedom of choice to lease an Affordable Bedroom in a particular unit type of their choosing (subject to availability), and to comply with Fair Housing Law and HUD regulations, the Applicant upon mutual agreement with Qualifying Tenants shall be allowed to float (locate) the Affordable Bedrooms throughout the Project subject to satisfying the requirements of section 1(a) herein.

4) Qualifying Tenants: Students who qualify for any level of federal Pell grants shall be Qualifying Tenants eligible to rent an Affordable Bedroom. For all other tenants, those persons and households who shall be certified from time to time by the Applicant to have combined adjusted annual income that does not exceed the applicable median family income for the applicable calendar year shall be Qualified Tenants eligible to rent an Affordable Bedroom. The City may require a certification of tenant eligibility on a form approved by or provided by the City, in which the prospective qualifying tenant certifies as to annual income (for non-students) or Pell grant eligibility, as applicable.

5) Affordable Rents: The rent rate for Affordable Bedrooms shall be calculated as described herein based on the current year Area Media Income ("AMI") for the Charlottesville area, as provided by HUD. If utilities are separately metered, the maximum allowable rent will be reduced to reflect the Tenant's payment of utilities.
   i. Efficiency/Studio Rent: The rent for an Affordable Bedroom in an Efficiency/Studio unit shall be the HUD Adjusted Home Rent limit for 1 person at 60% AMI, multiplied by 30% of total income set aside for housing, divided by 12.
   ii. One-bedroom Rent: The rent for an Affordable Bedroom in a one-bedroom unit shall be the average of the HUD Adjusted Home Rent limit for 1 person at 60% AMI and the HUD Adjusted Home Rent limit for 2 people at 60% AMI, multiplied by 30% of total income set aside for housing, divided by 12.
   iii. Two-bedroom Rent: The rent for an Affordable Bedroom in a two-bedroom unit shall be 60% of the rent for an Affordable Bedroom in a one-bedroom unit.
   iv. Three-bedroom and four-bedroom Rent: The rent for an Affordable Bedroom in a three-bedroom unit or in a four-bedroom unit shall be 60% of the rent for an Affordable Bedroom in an Efficiency/Studio unit.

6) Term of affordability: The requirements of this paragraph 1 shall remain in effect for 25 years from the date of the issuance of the Certificate of Occupancy for the Project.

7) Equivalency of Affordable Bedrooms.
   i. Affordable Bedrooms must reflect the composition of the over Project units in exterior appearance and overall quality of construction
   ii. Affordable Bedrooms must include the same interior features as the other bedrooms in the same Project, but appliances and finishes need not be the same make, model, or style, so long as they are new and of good quality.
   iii. Affordable Bedrooms must be evenly distributed throughout the Project and not concentrated on any particular floors, building sides, or locations, provided that the Affordable Bedrooms are not required to be located in the top two floors of the Project. The Applicant at time of applying for a building permit shall submit a compliance plan to the site plan agent that identifies the units within the Project that are designated for the Affordable Bedrooms consistent with paragraph 1(a) herein.
   iv. Affordable Bedrooms must be comparable in size to other units within the Project with the same number of bedrooms. The average floor area of the Affordable Bedroom must not be less than 80% of the average floor area of the other bedrooms within in the same unit type.
8) Affordable Bedrooms shall have the same access to property amenities and building access points provided to other bedrooms within the Project.
9) Housing Choice Vouchers. In the case of tenants using a Section 8 voucher or other rental assistance program, the Project may collect the fully allowed rental reimbursement amount even if the total rent for the Affordable Bedroom exceeds the maximum allowable rent for such Affordable Bedroom, so long as the household using the rental assistance is not paying more than 30% of the household's monthly income. In the event the fully allowed rental reimbursement amount is less than the total rent for the Affordable Bedroom, the Qualifying Tenant shall be responsible for the difference between the rental reimbursement and the applicable rent for the Affordable Bedroom.

B. Make a cash contribution to the City's affordable housing fund in the amount equal to double that which would be required under City Code Section 34-12(d)(2) based on the approved final site plan. Such cash contribution shall be delivered to the City prior to the issuance of the first Certificate of Occupancy for the Project.

Public Comments Received

Community Meeting Required by Z.O. Sec. 34-41(c)(2)

On May 18, 2023 the applicant held a community meeting in-person at St. Mark Lutheran Church. The applicant gave an overview of the project as it related to the need for a rezoning. Thirty-three members of the public attended the meeting and voiced the following concerns:

- The proposed structure is significantly out of scale with the surrounding neighborhood.
- The Ivy/Alderman/Copeley Road intersection experiences significant traffic slowdowns during peak hours and special events. Redevelopment of the parcel would exacerbate this traffic.
- Insufficient off-street parking is proposed, which will cause parking problems for the adjacent residential neighborhood.
- No significant affordable housing contribution was initially proposed as part of this rezoning.

Other Comments

As of the date of this report (November 6, 2023), staff has received the following concerns through email, phone calls or in person conversations (any email staff received was forwarded to Planning Commission and City Council (Attachment H)):

- The proposed development is out of scale with both the surrounding neighborhood and the proposed Ivy Corridor redevelopment undertaken by the University of Virginia.
- Additional traffic would exacerbate slowdowns around the Ivy/Alderman/Copeley Road intersection.
- Proposed off-street parking is insufficient.
- The proposed building design is not in line with the Entrance Corridor Review Board's Design Guidelines.

Staff Recommendation

Staff finds the proposed development as presented in the application materials could contribute to some goals within the City's Comprehensive Plan, such as the provision of additional multi-family housing and the encouragement of walkable, bikeable, and public transit-accessible residential areas. The uses presented in the proposed development are consistent with adopted 2021 Future Land Use Map.

The proposed structure is significantly taller than the eight-story maximum recommended by the Future Land Use Map. If approved, this PUD rezoning should contain a clear proffered commitment to Affordable Housing to justify the significant height increase. The Entrance Corridor Review Board shall also review the proposed structure prior to site plan approval to

determine its appropriateness and compatibility with the City's Entrance Corridor Design Guidelines.

Suggested Motions

1. I move to recommend that City Council should approve ZM23-00003 on the basis that approval of the proposed PUD Development Plan is consistent with the Comprehensive Plan and will serve the public necessity, convenience, general welfare and good zoning practice.

OR,

2. I move to recommend that City Council should deny approval of ZM23-00003.

Attachments

A. Rezoning Application Dated May 15, 2023
B. Proffer Statement Dated October 23, 2023
C. 2117 Ivy Road PUD Application Narrative Dated August 31, 2023
D. 2117 Ivy Road PUD Development Plan Dated October 6, 2023
E. 2117 Ivy Road PUD Transportation Demand Management Plan Dated October 6, 2023
F. Traffic Impact Analysis for 2117 Ivy Road PUD Dated May 15, 2023
G. Adjusted Affordable Dwelling Unit (ADU) Worksheet
H. Emails received prior to November 6, 2023

City of Charlottesville

Application for Rezoning

Project Name: 2117 Ivy Road

Address of Property: 2117 Ivy Road

Tax Map and Parcel Number(s): 070001200

Current Zoning: URB

Proposed Zoning: PUD

Comprehensive Plan Land Use Designation: Urban Mixed Use Corridor

Applicant: Valerie W. Long, Williams Mullen

Address: 323 2nd Street SE, Suite 900 Charlottesville, VA 22902

Phone: 434-951-5709 **Email:** vlong@williamsmullen.com

Applicant's Role in the Development (check one):

Owner (Owner's Agent) Contract Purchaser

Owner of Record: Nishant Bakaya, RMD Properties, LLC

Address: 560 W Washington BLVD, Suite 200 Chicago, IL 60661

Phone: (312) 878-3778 **Email:** sbus@upcampusproperties.com

(1) Applicant's and (2) Owner's Signatures

(1) Signature Valerie W. Long **Print** Valerie W. Long **Date** 5/18/2023

Applicant's (Circle One): LLC Member LLC Manager Corporate Officer (specify) _____

Other (specify): Owner's Agent

(2) Signature Nishant Bakaya AUTHORIZED SIGNER **Print** Nishant Bakaya **Date** 5/16/2023

Owner's (Circle One): LLC Member (LLC Manager) Corporate Officer (specify) _____

Other (specify): _____

City of Charlottesville

Pre-Application Meeting Verification

Project Name: 2117 Ivy Road

Pre-Application Meeting Date: 01/06/2023

Applicant's Representative: Valerie Long (Williams Mullen), Clint Shifflett (Timmons Group)

Planner: Dannan O'Connell

Other City Officials in Attendance:

Chris Sibold, Beck Grimm - City Engineering

Roy Nester, Tyler Hunter - Utilities Engineering; Brennan Duncan - Traffic Engineering

Jeff Werner - Preservation Planner; Chuck Miller - Building Official

James Freas - NDS Director; Stephen Walton - Fire Dept.

The following items will be required supplemental information for this application and must be submitted with the completed application package:

1. Affordable Dwelling Unit (ADU) worksheet; draft proffers for affordable dwelling units if required
2. Building elevations, massing and landscaping plans
3.
4.
5.

Planner Signature: Dannan O'Connell

City of Charlottesville

Application Checklist

Project Name: 2117 Ivy Road

I certify that the following documentation is ATTACHED to this application:

- [x] 34-157(a)(2) Narrative statement: applicant's analysis of conformity with the Comprehensive Plan
- [x] 34-157(a)(4) Narrative statement identifying and discussing any potential adverse impacts, as well as any measures included within the development plan, to mitigate those impacts
- [x] 34-158(a)(6): other pertinent information (narrative, illustrative, etc.)
- [n/a] Completed proffer statement
- [x] All items noted on the Pre-Application Meeting Verification.

Applicant

Signature Valerie W. Long **Print** Valerie W. Long **Date** 5/18/2023

By Its: Owner's Agent

(For entities, specify: Officer, Member, Manager, Trustee, etc.)

City of Charlottesville

Community Meeting

Project Name: 2117 Ivy Road

Section 34-41(c)(2) of the Code of the City of Charlottesville (adopted October 19, 2015) requires applicants seeking rezonings and special use permits to hold a community meeting. The purpose of a community meeting is to provide citizens an opportunity to receive information about a proposed development, about applicable zoning procedures, about applicable provisions of the comprehensive plan, and to give citizens an opportunity to ask questions. **No application for a rezoning shall be placed on any agenda for a public hearing, until the required community meeting has been held and the director of neighborhood development services determines that the application is ready for final review through the formal public hearing process**.

By signing this document, the applicant acknowledges that it is responsible for the following, in connection to the community meeting required for this project:

1. Following consultation with the city, the applicant will establish a date, time and location for the community meeting. The applicant is responsible for reserving the location, and for all related costs.
2. The applicant will mail, by U.S. mail, first-class, postage pre-paid, a notice of the community meeting to a list of addresses provided by the City. The notice will be mailed at least 14 calendar days prior to the date of the community meeting. The applicant is responsible for the cost of the mailing. At least 7 calendar days prior to the meeting, the applicant will provide the city with an affidavit confirming that the mailing was timely completed.
3. The applicant will attend the community meeting and present the details of the proposed application. If the applicant is a business or other legal entity (as opposed to an individual) then the meeting shall be attended by a corporate officer, an LLC member or manager, or another individual who can speak for the entity that is the applicant. Additionally, the meeting shall be attended by any design professional or consultant who has prepared plans or drawings submitted with the application. The applicant shall be prepared to explain all of the details of the proposed development, and to answer questions from citizens.
4. Depending on the nature and complexity of the application, the City may designate a planner to attend the community meeting. Regardless of whether a planner attends, the City will provide the applicant with guidelines, procedures, materials and recommended topics for the applicant's use in conducting the community meeting.
5. On the date of the meeting, the applicant shall make records of attendance and shall also document that the meeting occurred through photographs, video, or other evidence satisfactory to the City. Records of attendance may include using the mailing list referred to in #1 as a sign-in sheet (requesting attendees to check off their name(s)) and may include a supplemental attendance sheet. The City will provide a format acceptable for use as the supplemental attendance sheet.

Applicant: RMD Properties, LLC

By:

Signature Valerie W. Long **Print** Valerie W. Long **Date** 5/18/2023

Its: Owner's Agent (Officer, Member, Trustee, etc.)

City of Charlottesville

Personal Interest Statement

Project Name: 2117 Ivy Road

I swear under oath before a notary public that:

A member of the City of Charlottesville Planning Commission (identified below), or their immediate family member, has a personal interest in the property or transaction that is the subject of this application.

Planning Commissioner(s): _____

Or

X No member of the City of Charlottesville Planning Commission, or their immediate family member, has a personal interest in the property or transaction that is the subject of this application.

And

A member of the City of Charlottesville City Council (identified below), or their immediate family member, has a personal interest in the property or transaction that is the subject of this application.

City Councilor(s): _____

Or

X No member of the City of Charlottesville City Council, or their immediate family member, has a personal interest in the property or transaction that is the subject of this application.

Applicant: RMD Properties, LLC

By:

Signature Valerie W. Long **Print** Valerie W. Long **Date** 5/18/2023

Its: Owner's Agent (Officer, Member, Trustee, etc.)

Commonwealth of Virginia

City of Charlottesville

The foregoing instrument was subscribed and sworn before me this _____ day of _____, 20____ by _____.

Notary Signature _____

Registration #: _____ **Expires** _____

City of Charlottesville

Owner's Authorizations

(Not Required)

Project Name: 2117 Ivy Road

Right of Entry- Property Owner Permission

I, the undersigned, hereby grant the City of Charlottesville, its employees and officials, the right to enter the property that is the subject of this application, for the purpose of gathering information for the review of this rezoning application.

Owner: RMD Properties, LLC **Date** 5/16/2023

By (sign name): Nishant Bakaya **Print Name:** Nishant Bakaya

Owner's: LLC Member (LLC Manager) **Corporate Officer (specify):** _____

Other (specific): _____

Owner's Agent

I, the undersigned, hereby certify that I have authorized the following named individual or entity to serve as my lawful agent, for the purpose of making application for this rezoning, and for all related purposes, including, without limitation: to make decisions and representations that will be binding upon my property and upon me, my successors and assigns.

Name of Individual Agent: Valerie W. Long, Williams Mullen

Name of Corporate or other legal entity authorized to serve as agent: _____

Owner: RMD Properties, LLC **Date:** 5/16/2023

By (sign name): Nishant Bakaya **Print Name:** Nishant Bakaya

Circle one:

Owner's: LLC Member (LLC Manager) **Corporate Officer (specify):** _____

Other (specific): _____

City of Charlottesville

Disclosure of Equitable Ownership

Project Name: 2117 Ivy Road

Section 34-8 of the Code of the City of Charlottesville requires that an applicant for a special use permit make complete disclosure of the equitable ownership "real parties in interest") of the real estate to be affected. Following below I have provided the names and addresses of each of the real parties in interest, including, without limitation: each stockholder or a corporation; each of the individual officers and directors of a corporation; each of the individual members of an LLC (limited liability companies, professional limited liability companies): the trustees and beneficiaries of a trust, etc. Where multiple corporations, companies or trusts are involved, identify real parties in interest for each entity listed.

Name_____ **Address**_____

Name_____ **Address**_____

Name_____ **Address**_____

Name_____ **Address**_____

Attach additional sheets as needed.

Note: The requirement of listing names of stockholders does not apply to a corporation whose stock is traded on a national or local stock exchange and which corporation has more than five hundred (500) shareholders.

Applicant: RMD Properties, LLC

By:

Signature Nishant Bakaya **Print** Nishant Bakaya **Date** 5/16/2023

Its: OFFICER (Officer, Member, Trustee, etc.)

May 16, 2023

City of Charlottesville
Neighborhood Development Services
605 E. Main Street
Charlottesville, VA 22902

Re: **AUTHORIZATION TO SUBMIT LAND USE APPLICATIONS**

RMD Properties, LLC (the "Owner"), is the owner of City of Charlottesville parcel ID number(s) 07000120 (the "Property"). The Owner desires to submit land use applications affecting the Property, such as, but not limited to, Rezoning applications, Special Use Permit applications, Site Plan applications, and other similar land use applications affecting the Property (collectively, the "Land Use Applications"). The Owner hereby authorizes the following individuals and entities to submit Land Use Applications on behalf of the Owner in connection with the Property: Valerie W. Long, of the law firm of Williams Mullen; Stephen Bus, of Up Campus Student Living, LLC; Nishant Bakaya, of Up Campus Student Living, LLC. This authorization includes the authority to take any other steps, and submit any other documentation to the City of Charlottesville necessary to effectuate the Land Use Applications on behalf of the Owner.

RMD Properties, LLC
a Virginia corporation

By: _____

Printed Name: Frank Beck

Title: Manager

Date: May 17, 2023

Original Proffers ____X____
Amendment _____

PROFFER STATEMENT

Project Name: **2117 Ivy Road**

Date: October 23, 2023

Address: 2117 Ivy Road
Parcel Number: 070001200

Owner of Record: **RMD Properties, LLC** (the "Owner" and "Applicant")

Proposal:

- Rezone 2117 Ivy Road, parcel 070001200 (1.02 acres) (the "Property"), from Urban Corridor (URB) district to Planned Unit Development (PUD) district with proffers (the "Project")

Total land area: Approximately 1.02 acres

The Applicant hereby voluntarily proffers that if the City of Charlottesville City Council acts to rezone the property as requested, the Applicant shall develop the Property in general accord with the following proffers pursuant to Sections 15.2-2303 and 15.2-2303.4 of the Code of Virginia, 1950, as amended, and pursuant to Section 34-41.d.8 of the City of Charlottesville Zoning Ordinance. The Applicant specifically deems the following proffers reasonable and appropriate, as conclusively evidenced by the signatures below.

1. Affordable Housing

The Project is proposed to be student housing rented by the bedroom. The Applicant shall at its option satisfy either (A) or (B) below:

A. Provide affordable bedrooms ("Affordable Bedrooms") in an amount that is equivalent to providing 10% of the total Units as affordable units, as provided herein.

1) The number of Affordable Bedrooms shall be roughly proportional to the number of bedrooms provided in each type of units within the Project, and shall be dispersed throughout the Project in a mix of units that is roughly proportionate to the overall unit mix within the Project, such that:

i. the number of Affordable Bedrooms located in Efficiency/Studio units shall be roughly proportionate to the number of Efficiency/Studio units within the Project;

ii. the number of Affordable Bedrooms located in one-bedroom units shall be roughly proportionate to the number of one-bedroom units within the Project;

iii. the number of Affordable Bedrooms located in two-bedroom units shall be roughly proportionate to the number of two-bedroom units within the Project;

iv. the number of Affordable Bedrooms located in three-bedroom units shall be roughly proportionate to the number of three-bedroom units within the Project; and

v. the number of Affordable Bedrooms located in four-bedroom units shall be roughly proportionate to the number of four-bedroom units within the Project.

1) In this Project containing a total of 241 units with a mixture of one-bedroom, two-bedroom, three-bedroom, and four-bedroom units, Applicant would provide a total of 24 Affordable Units which may be allocated as follows:

   i. If the total number of one-bedroom units within the Project is 88, there shall be the equivalent of 9 one-bedroom Affordable Units, for a total of 9 Affordable Bedrooms located within one-bedroom units.

   ii. If the total number of two-bedroom units within the Project is 25, there shall be the equivalent of 7 two-bedroom Affordable Units, for a total of 14 Affordable Bedrooms located in two-bedroom units.

   iii. If the total number of three-bedroom units within the Project is 16, there shall be the equivalent of 4 three-bedroom Affordable Units, for a total of 12 Affordable Bedrooms located in three-bedroom units.

   iv. If the total number of four-bedroom units within the Project is 112, there shall be the equivalent of 4 four-bedroom Affordable Units, for a total of 16 Affordable Bedrooms located in four-bedroom units.

   v. These counts and allocations are subject to the final approved PUD and building permit and may be adjusted provided 10% of the total Units are provided as affordable units.

2) Fractional Affordable Units. If the calculation of the required number of affordable units that are required to provide 10% of the total units within the Project as affordable units results in a fraction of a unit less than 0.5, the Project shall provide a fractional in-lieu fee equal to the corresponding percent of the affordable unit as specified in the applicable formula in the adopted Affordable Dwelling Unit Monitoring and Procedures Manual. For example, in an example project containing 242 units, such example project must provide Affordable Bedrooms in an amount that is equivalent to providing 24 affordable units (10% of 242) as provided in paragraph 1(a) herein, and shall also provide a fractional fee in-lieu equal to two-tenths of the fee in-lieu established for a one-bedroom unit in the adopted Affordable Dwelling Unit Monitoring and Procedures Manual.

3) To provide tenants with the freedom of choice to lease an Affordable Bedroom in a particular unit type of their choosing (subject to availability), and to comply with Fair Housing Law and HUD regulations, the Applicant upon mutual agreement with Qualifying Tenants shall be allowed to float (locate) the Affordable Bedrooms throughout the Project subject to satisfying the requirements of section 1(a) herein.

4) Qualifying Tenants: Students who qualify for any level of federal Pell grants shall be Qualifying Tenants eligible to rent an Affordable Bedroom. For all other tenants, those persons and households who shall be certified from time to time by the Applicant to have combined adjusted annual income that does not exceed the applicable median family income for the applicable calendar year shall be Qualified Tenants eligible to rent an Affordable Bedroom. The City may require a certification of tenant

eligibility on a form approved by or provided by the City, in which the prospective qualifying tenant certifies as to annual income (for non-students) or Pell grant eligibility, as applicable.

5) Affordable Rents: The rent rate for Affordable Bedrooms shall be calculated as described herein based on the current year Area Media Income ("AMI") for the Charlottesville area, as provided by HUD. If utilities are separately metered, the maximum allowable rent will be reduced to reflect the Tenant's payment of utilities.

    i. Efficiency/Studio Rent: The rent for an Affordable Bedroom in an Efficiency/Studio unit shall be the HUD Adjusted Home Rent limit for 1 person at 60% AMI, multiplied by 30% of total income set aside for housing, divided by 12.

    ii. One-bedroom Rent: The rent for an Affordable Bedroom in a one-bedroom unit shall be the average of the HUD Adjusted Home Rent limit for 1 person at 60% AMI and the HUD Adjusted Home Rent limit for 2 people at 60% AMI, multiplied by 30% of total income set aside for housing, divided by 12.

    iii. Two-bedroom Rent: The rent for an Affordable Bedroom in a two-bedroom unit shall be 60% of the rent for an Affordable Bedroom in a one-bedroom unit.

    iv. Three-bedroom and four-bedroom Rent: The rent for an Affordable Bedroom in a three-bedroom unit or in a four-bedroom unit shall be 60% of the rent for an Affordable Bedroom in an Efficiency/Studio unit.

6) Term of affordability: The requirements of this paragraph 1 shall remain in effect for 25 years from the date of the issuance of the Certificate of Occupancy for the Project.

7) Equivalency of Affordable Bedrooms.

    i. Affordable Bedrooms must reflect the composition of the over Project units in exterior appearance and overall quality of construction

    ii. Affordable Bedrooms must include the same interior features as the other bedrooms in the same Project, but appliances and finishes need not be the same make, model, or style, so long as they are new and of good quality.

    iii. Affordable Bedrooms must be evenly distributed throughout the Project and not concentrated on any particular floors, building sides, or locations, provided that the Affordable Bedrooms are not required to be located in the top two floors of the Project. The Applicant at time of applying for a building permit shall submit a compliance plan to the site plan agent that identifies the units within the Project that are designated for the Affordable Bedrooms consistent with paragraph 1(a) herein.

    iv. Affordable Bedrooms must be comparable in size to other units within the Project with the same number of bedrooms. The average floor area of the Affordable Bedroom must not be less than 80% of the average floor area of the other bedrooms within in the same unit type.

8) Affordable Bedrooms shall have the same access to property amenities and building access points provided to other bedrooms within the Project.

9) Housing Choice Vouchers. In the case of tenants using a Section 8 voucher or other rental assistance program, the Project may collect the fully allowed rental reimbursement amount even if the total rent for the Affordable Bedroom exceeds the maximum allowable rent for such Affordable Bedroom, so long as the household using the rental assistance is not paying more than 30% of the household's monthly income. In the event the fully allowed rental reimbursement amount is less than the total rent for the Affordable Bedroom, the Qualifying Tenant shall be responsible for the difference between the rental reimbursement and the applicable rent for the Affordable Bedroom.

B. Make a cash contribution to the City's affordable housing fund in the amount equal to double that which would be required under City Code Section 34-12(d)(2) based on the approved final site plan. Such cash contribution shall be delivered to the City prior to the issuance of the first Certificate of Occupancy for the Project.

OWNER and APPLICANT:

RMD Properties, LLC
a Virginia limited liability company

By: _____

Printed Name: _____

Title: _____

103233021.2

May 15, 2023
Revised August 31, 2023

2117 Ivy Road

PUD Rezoning Application Narrative

Project Description

RMD Properties, LLC (the "Applicant") is the owner of property located at 2117 Ivy Road, at the corner of Ivy Road and Copeley Road, in the City of Charlottesville. The Applicant wishes to develop the property as a mixed-use development, with a small retail/commercial space and multi-family/student apartments (the "Project"). The subject property is further described and shown below (the "Property"):

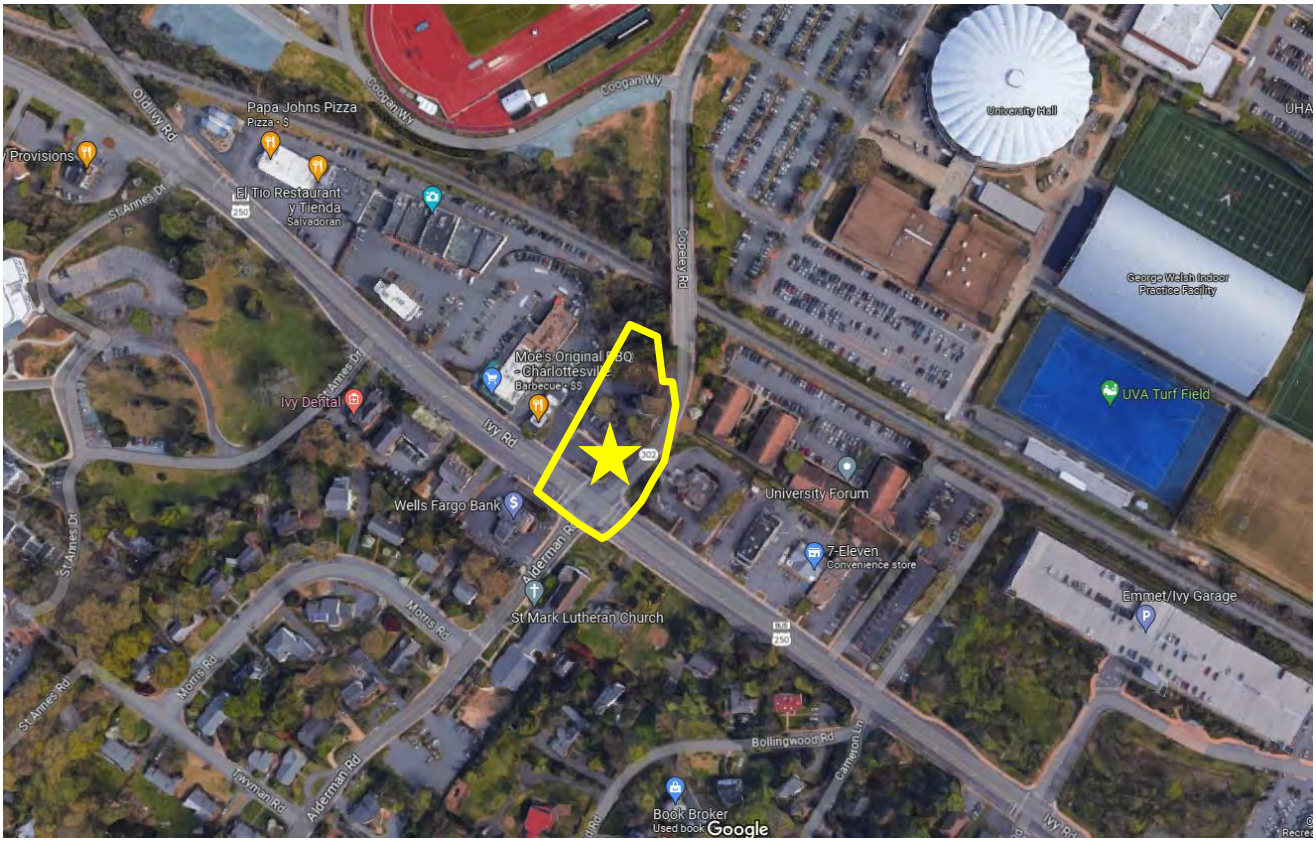
Tax Map Parcel	Acreage per Assessor's Records	Owner
070001200	1.02 ac.	RMD Properties, LLC



The Property currently contains a drive thru bank, is zoned Urban Corridor (URB) with the Entrance Corridor Zoning Overlay and is designated in the City of Charlottesville Future Land Use Map ("FLUM") as Urban Mixed Use Corridor and is proposed to be zoned CX-8 Corridor Mixed Use 8 under the draft Chapter 34 of the City's new zoning code. The Applicant proposes to rezone the Property from URB to Planned Unit Development ("PUD") to develop a mixed-use building to include non-residential and multi-family and student apartments, which PUD is generally consistent with the Zoning and Building criteria set forth in the draft Chapter 34.

Surrounding Area & Planning Context

The surrounding area is comprised of a large variety of commercial, retail, residential uses, and institutional uses at The University of Virginia ("UVA"). UVA's Athletic Complex including Lannigan Track, Davenport Field, Klockner Stadium, Palmer Park, George Welsh Indoor Practice Facility, and John Paul Jones Arena are located north of the Property; to the south, are commercial buildings, St. Mark Lutheran Church, and the Lewis Mountain neighborhood; to the east, across Copeley Road, currently houses a number of buildings including apartments and a 7-Eleven Convenience store, which properties are planned to be redeveloped per UVA's Office of the Architect Ivy Corridor Plan (see "Emmet Ivy Corridor" image below). To the west are the Moe's BBQ restaurant and the Ivy Square Shopping Center, which houses a number of commercial and retail businesses, as well as the grocery store, Foods of All Nations. Below is a map showing the Property and surrounding area and an aerial depicting existing/under construction and near-term planned UVA buildings along Ivy Road.





Comprehensive Plan Land Use Designation

The FLUM designates the Property as Urban Mixed-Use Corridor which is described as “higher intensity mixed use development arranged along corridors between employment, commercial, and civic hubs of the city.” The Property is outlined in red on the image below from the FLUM. The height recommendations in the FLUM state a maximum of 5 stories, up to 8 stories at key intersections.



Draft Zoning District

While the adoption of the City's new Zoning Code has not occurred to date, the district proposed for this parcel is CX-8 "Corridor Mixed Use 8", shown below in yellow. This designation includes a maximum height of 8 stories with a bonus up to 10 stories for affordable housing. The submitted PUD plan includes detailed comparison of the proposed CX-8 zoning code side-by-side with the proposed Project.



Application Plan

The proposed PUD Plan prepared by WDG Architecture and Timmons Group, dated May 12, 2023, revised August 2, 2023 (the "PUD Plan") is enclosed with this application. The Project proposes a 10-story building that contains approximately 1,800± square feet of non-residential space, and a maximum of 287 multi-family residential dwelling units with structured parking and modern amenities. Envisioned amenities include a second-floor courtyard and pool, fitness/yoga studio, club room/study area, and rooftop terrace and gathering space.

The Project is designed to meet the standards of both existing and within the draft zoning code and includes a greenscape buffer along the streets, wide sidewalks, multiple pedestrian entrances, pedestrian outdoor amenity space at the café-retail, outdoor public bike & scooter spaces, and indoor electric scooter & bike storage. The Project includes structured parking, as well as secured bike parking for its residents.

Consistency with the Comprehensive Plan
The Project conforms to the City's Comprehensive Plan in the following areas:

Chapter 4: Land Use, Urban Form, and Historic & Cultural Preservation
As stated above, the FLUM designated this Property as Urban Mixed-Use Corridor, which is a mixed use district, and includes the following description:

	Urban Mixed Use Corridor Higher intensity mixed use development arranged along corridors between employment, commercial, and civic hubs of the city.	Respond to existing residential, environmental, historic context.	5 stories, up to 8 at key intersections, such as intersections of *Streets That Work* Downtown, Industrial, Mixed Use, or Neighborhood corridors	Commercial, employment, residential. Include an inclusionary zoning mechanism to support housing affordability.

In addition to the above, the Comprehensive Plan lists the following Objectives for Mixed-Use Areas:

- *Facilitate economic activity in the City and ensure the availability of sites for incremental business growth and expansion.*

  The Project meets this objective by providing commercial and retail space, as well as providing space for electric bike and scooter rentals.

- *Support the redevelopment of "underutilized" gray-field sites along community corridors.*

  The Project is a redevelopment of an underutilized site within the Ivy Road corridor.

- *Provide opportunities to develop a variety of housing options near employment and community services.*

  The Project provides housing options for students (graduate and undergraduate), faculty/staff, and young professionals near the largest employer in Charlottesville, UVA. Ivy Road also contains a

number of nearby community services within walking and biking distance from the Project, including a grocery store approximately 80 feet away.

- *Develop buildings and public spaces that are human-scaled and contribute to placemaking & Charlottesville's authentic community identity.*

  The Project is designed to create building and public spaces that are human-scaled by providing outdoor pedestrian outdoor or café space, enhanced pedestrian facilities that include greenscape and sidewalk, architectural variety with material and design, all of which will engage the street and provide community placemaking.

- *Promote and encourage design elements that enhance community livability such as active uses at the ground floor level along key street frontages.*

  The ground floor engages the street frontages of both Ivy and Copeley Roads by providing active uses including the potential for café, retail, and lobby spaces, as well as using the bike storage rooms to provide engaging art space at the pedestrian level.

- *Encourage compact block and street networks and a built environment that facilitates walking, biking, and bus riding.*

  The Project is located within an existing block and street network and will be enhancing the existing built environment by providing streetscape elements that engage the pedestrian and encourage walking, biking and transit. There is an existing bike lane along Ivy Road that will remain along the frontage of the Project, University Transit Service has a stop location within 1/3 of a mile from the Project, and Charlottesville Area Transit stops along Emmett Street, which are within ½ of a mile from the Project.

<u>Chapter 5: Housing</u>
The proposed Project will increase the City's housing stock in a location that can both support increased density and that has been designated by the City for increased residential use. Specifically, it will increase the student and young professional housing stock, which will decrease the pressure on single-family residential neighborhoods that have been populated by student rentals. By placing increased height and reasonable residential density in an area that can accommodate the growth. The Project supports the City's goals and vision. Not only will the Project add to the City's existing housing stock, it will also comply with the affordable housing ordinance, thereby supporting affordable housing throughout the City. The Project expands the diversity of housing choices and provides increased density in close proximity to UVA, where increased density is desired, which promotes a more sustainable City. Specifically, the Project supports the following strategies within the Housing Chapter:

Goal 2: Diverse Housing Throughout the City- Support a wide range of rental and homeownership housing choices that are integrated and balanced across the city, and that meet multiple City goals including community sustainability, walkability, bikeability, ADA accessibility, public transit use, increased support for families with children and low-income households, access to food, access to local jobs, thriving local businesses, and decreased vehicle use.

Strategy 2.1: Encourage mixed-use and mixed-income neighborhoods and housing developments throughout the city and support zoning changes to allow them by-right.

Strategy 2.2: Promote housing redevelopment and infill development that supports bicycle and pedestrian- oriented infrastructure improvements and robust public transportation to better connect residents to jobs and commercial activity.

Chapter 6: Transportation

The Project will allow its residents to live in easy walking and biking distance to UVA, nearby commercial areas, as well as within walking distance to a bus stop. Specifically, the Project supports the following goals and strategies within the Transportation Chapter.

Goal 1: Complete Streets: Create and maintain a connected network of safe, convenient, and pleasant accommodations for pedestrians, bicyclists, and transit riders, including people of all ages and abilities.

Strategy 1.1: Continue to implement projects from the City's Bicycle and Pedestrian Master Plan, Streets that Work Design Guidelines, Safe Routes to School planning, and small areas plans, prioritizing underserved neighborhoods, locations lacking connectivity to key destinations in the city, and improvements needed within Future Land Use Map nodes, corridors, and other areas of increased development.

Strategy 1.2: Consistently apply universal design features, including ADA (Americans with Disabilities) standards as outlined in the Public Right of Way Accessibility Guidelines (PROWAG), and ensure that sidewalks are free of obstructions and that accessible curb ramps exist at all pedestrian crossings where conditions allow.

Goal 2: Coordination with Land Use & Community Design- Improve quality of life and promote active living by reducing automobile use and congestion and supporting multimodal options for safe and convenient travel in conjunction with implementation of the Future Land Use Vision.

Strategy 2.2: Through development processes, implement and incentivize improved facilities and amenities for non-motorized travelers, including those needed to support multimodal travel by residents, workers, and visitors.

Goal 3: Parking Supply and Management- Provide a balanced approach to parking that supports economic vitality, achieves urban form goals, minimizes environmental impacts, and accommodates pedestrians, bicycles, transit users, and disabled individuals.

Consistency with the proposed Zoning District

The objectives of a PUD and how the Project addresses them are as follows:

(1) *To encourage developments of equal or higher quality than otherwise required by the strict application of zoning district regulations that would otherwise govern;*

The rezoning of the Project to PUD allows a higher quality and type of development that is desired by the City, as described within its Comprehensive Plan, to be built. The current district of URB does not allow for the type of development envisioned and described within the City's Comprehensive Plan, and this district allow the flexibility to provide a development that meets the City's goals, especially in light of the draft CX-8 zoning district for this site.

(2) *To encourage innovative arrangements of buildings and open spaces to provide efficient, attractive, flexible and environmentally sensitive design.*

The arrangement, design, and architecture of the proposed building and open spaces creates an efficient, attractive, flexible and environmentally sensitive design while creating public, pedestrian friendly, placemaking spaces.

(3) To promote a variety of housing types, or, within a development containing only a single housing type, to promote the inclusion of houses of various sizes;

The Project includes a variety of apartment sizes which addresses this objective.

(4) To encourage the clustering of single-family dwellings for more efficient use of land and preservation of open space;

This objective is not applicable since single family dwellings are not proposed at this location. However, the location of the Project and the density proposed efficiently uses the land to allow additional housing to be provided which addresses the City's lack of housing supply.

(5) To provide for developments designed to function as cohesive, unified projects;

The Project is designed to create a cohesive, unified building with quality amenities and placemaking spaces.

(6) To ensure that a development will be harmonious with the existing uses and character of adjacent property, and/or consistent with patterns of development noted with respect to such adjacent property;

As we discussed with staff at a meeting on July 20th, patterns of development can also include a more holistic view of proposed and anticipated change within the area including with regard to uses and building height, and not just consider the existing pattern of development from the sole purpose of height.

a. Regarding height, Sheet A-011 in the Plans illustrates this by showing how CX-8, CX-5 (100' Bonus Height max), and other mixed-use corridor designations for property along Ivy Road in the draft Zoning Ordinance are indicative of the future pattern of development.
b. Regarding use, the proposed use pattern is also consistent (student/educational uses with retail-commercial) with existing and proposed uses along the Ivy Road corridor.

The consistency with the patterns of development is further supported in reviewing UVA's plans for this area UVA's most recent Grounds Master Plan dated March 2023, Ivy Corridor Master Plan, and the North Grounds Athletics Master Plan, are creating patterns of development that support the City's vision as outlined in the Comprehensive Plan and draft Zoning Ordinances. These plans also demonstrate that the proposed project is consistent with UVA's plans, and therefore with the patterns of development. While exact heights are not shown, in the presentation to UVA's Board of Visitors on June 2, 2023, the plans for the Karsh Center show the building to be 6 levels and due to the use of the proposed space, these levels or stories are anticipated to have a larger floor to ceiling height than a typical building resulting in a taller building. The hotel and conference center were also shown in the same presentation, and appears to have approximately 8-9 stories, with the first few floors appearing to have a larger floor to ceiling height than a typical building. These images along with a rendering of the proposed building are shown on Sheet A-011 and demonstrate that the proposed plans are consistent with patterns of development.

(7) To ensure preservation of cultural features, scenic assets and natural features such as trees, streams and topography;

This objective is not applicable, the Project is a redevelopment of an existing bank.

(8) To provide for coordination of architectural styles internally within the development as well as in relation to adjacent properties along the perimeter of the development; and

The proposed Project will have coordinated architectural styles and will provide traditional materials with a transitional-contemporary style that will complement existing and future redevelopment in the Ivy corridor.

(9) To provide for coordinated linkages among internal buildings and uses, and external connections, at a scale appropriate to the development and adjacent neighborhoods;

The proposed Project provides enhanced pedestrian facilities along the frontage of Ivy and Copeley Road that connects to the nearby commercial and retail uses, and to UVA. The proposed streetscape also meets the design standards outlined in the draft zoning code by providing a greenscape area and wide sidewalk.

(10) To facilitate access to the development by public transit services or other single-vehicle-alternative services, including, without limitation, public pedestrian systems.

As stated above, the Project provides enhanced pedestrian facilities that will connect to the existing sidewalks, and the location is within walking distance to a large number of services and destinations. There are existing bike lanes on Ivy Road that will remain, and transit stops are within walking distance of the Project. Please see updated Civil Plans that have added the Crosswalk and Bike Lane Refuge Areas (the "green box") paint-striping improvement in order to enhance the safety for pedestrians and bicyclists and enhance the multimodal/transit nature of the project.

In addition, the Project is providing bike storage, both private and secured for the residents, but also space for a public electric bike and scooter rental location. All of these options will provide the residents with alternative forms of transportation other than single vehicle use and will reduce the overall transportation impacts. Timmons Group has prepared a Transportation Demand Management Plan (TDMP) that outlines the multi-prong strategy to manage and reduce parking demand, which includes the following:

- Additional rental fee for an on-site parking space which results in student/residents self-selecting to not bring a car due to the abundance of alternate modes of transportation available, including walkability to Grounds, necessity retail (grocery), and entertainment.
- Pedestrian improvements to sidewalks and crosswalks
- Bike lane improvements on adjacent streets
- Transit notifications to tenants on arrivals/headway time for UVA and City transit on routes near, adjacent to the site
- Long Term Bike Parking: dedicated rooms in the building for bikes and scooters
- Short Term Bike Parking: dedicated areas outside the building for bikes and scooters
- Resident Car Share: the property will incorporate spaces for the dedicated on-site resident car share for car use by residents of the development.

Impact on Public Facilities and Infrastructure:

Public Transportation Facilities:
Included with this Application is a Traffic Impact Analysis prepared by Timmons Group (the "Traffic Study"). Traffic counts were conducted on January 26, 2023. The Traffic Study is subject to review and comment by the City, and full details are included in the Traffic Study, but a summary of its key conclusions are as follows:

- The signalized intersection of Ivy Road and Copeley Road continues to operate in similar conditions to 2028 background at an overall LOS C. There are no significant changes in queueing between background and future conditions and all queues are contained within their existing storage.

- The signalized intersection of Ivy Road and Rotherey Road/Parking Garage Access continues to operate in similar conditions to 2028 background. All queues are contained within their existing storage with the exception of the southbound left in the PM peak which extends 145 feet beyond the provided storage.

- The signalized intersection of Ivy Road and Emmet Street continues to operate in similar conditions to 2028 background. All queues are contained within their existing storage.

- The signalized intersection of Massie Road and Copeley Road continues to operate in similar conditions to 2028 background with an overall LOS B during both peaks. All queues are contained within their existing storage.

- At the unsignalized site entrance, the eastbound approach operates at LOS B during both peaks with a maximum queue of 47 feet in the AM peak and 234 feet in the PM peak. The northbound approach operates at LOS A during both peaks with a maximum queue of 73 feet in the AM peak and 136 feet in the PM peak. The southbound approach operates at LOS A during both peaks with a maximum queue of 176 feet in the AM peak and 364 feet in the PM peak. The queues will not impact the operations of the traffic signal at Ivy Road.

Other Public Transportation and Multi-modal Infrastructure:

As further described in the Transportation Demand Management Plan, the Project implements a multi-prog strategy for all modes of transportation. The Project proposes to replace the existing standard concrete sidewalk along the Ivy Road frontage (*and the Copeley Road frontage has no sidewalk*) of the Property with an enhanced streetscape that includes a greenscaped area and wide sidewalk that will improve the existing pedestrian infrastructure. Crosswalk and Bike Lane Refuge Areas (the “green box”) paint-striping improvements have been provided in order to enhance the safety for pedestrians and bicyclists and enhance the multimodal/transit nature of the project. In addition, as stated above, internal bike and scooter storage are provided to the residents, as well as a public electric bike and scooter rental location, which will further support and enhance multi-modal transportation. The Project is also located within walking distance to transit stops~~,~~ and is in a prime location where goods and services, educational and athletic facilities, and employment areas are within close walking distance and the need for using a personal vehicle is not necessary.

Schools:
The Applicant expects that the Project’s residents will consist mainly of UVA students, faculty/staff, and young professionals and will have minimal impact on the City’s school system.

Fire/Rescue/Safety:
This project will be served by the nearby Fontaine Fire Station on Jefferson Park Avenue, which provides fire and rescue services to this area.

Public Parks:
The Project will include a variety of amenity areas on site, which will likely include a roof-top amenity space, pool and courtyard, yoga/fitness studio space, club room, and workspace. As mentioned, many of the residents are expected to be affiliated with UVA and will also have access to the University’s amenities, gyms, and nearby athletic complexes. Given this variety of high-quality on-site amenities and nearby UVA affiliated facilities, we do not expect there to be a material impact on public parks.

Impacts on Environmental Features
As proposed, the Project does not create any detrimental impacts to any environmental features. There are no critical slopes on site. The Project will meet the requirements of the City and the Department of Environmental Quality.

Affordable Housing:
The Project will comply with the requirements of proposed draft Affordable Dwelling Unit Ordinance § 4.2.2 with additional amendments for "Student Eligible Housing" from a similar inclusionary zoning/affordable housing ordinances.

Historic Resources:
There are no known historic resources on the Property.

(102596378.4)

2117 IVY ROAD

CHARLOTTESVILLE, VA 22903

PLANNED UNIT DEVELOPMENT PLAN SUBMITTAL
MAY 15, 2023 - REVISED AUGUST 02, 2023 - REVISION #2 OCTOBER 6, 2023

SITE VICINITY MAP





NOTE: ALL DRAWINGS ARE PROVIDED FOR ILLUSTRATIVE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PER FINAL ARCHITECTURAL, CIVIL, AND SITE DESIGN. PROPERTY IS LOCATED WITHIN A CITY DESIGNATED ENTRANCE CORRIDOR, AND FINAL DESIGN WILL BE SUBJECT TO REVIEW AND APPROVAL BY THE ENTRANCE CORRIDOR REVIEW BOARD.

DRAWING INDEX - CIVIL

SHEET NUMBER	SHEET NAME
C-001	ALTA NSPS LAND TITLE SURVEY
C-002	EXISTING CONDITIONS PLAN
C-003	LAYOUT & UTILITIES PLAN
C-004	GRADING AND DRAINAGE PLAN
C-005	LANDSCAPE PLAN

DRAWING INDEX - ARCHITECTURE

Sheet Number	Sheet Name
A-001	COVER
A-002	ZONING INFORMATION
A-003	ARCHITECTURAL SITE PLAN AND BUILDING INFORMATION
A-004	CONCEPTUAL OUTDOOR AMENITY SPACE DIAGRAM
A-005	CONCEPTUAL FLOOR PLANS
A-005A	ENLARGED FLOOR PLANS - LEVEL B1
A-005B	ENLARGED FLOOR PLANS - LEVEL 1
A-005C	ENLARGED FLOOR PLANS - LEVEL 2
A-005D	ENLARGED FLOOR PLANS - LEVEL 3 (TYPICAL)
A-005E	ENLARGED FLOOR PLANS - LEVEL ROOF
A-006	CONCEPTUAL ELEVATIONS
A-007	CONCEPTUAL ELEVATIONS
A-008	CONCEPTUAL BUILDING SECTIONS
A-009	CONCEPTUAL BUILDING SECTIONS
A-010	CONCEPTUAL PERSPECTIVE IMAGES
A-010A	CONCEPTUAL PERSPECTIVE IMAGES
A-011	CONCEPTUAL SITE SECTION
A-012	INTERIOR COURTYARD VIEWS
A-013	SOLAR STUDY
A-014	SOLAR STUDY

IMPLEMENTATION OF PLANNED UNIT DEVELOPMENT REGULATIONS:

THIS PUD SHALL BE REGULATED CONSISTENT WITH SECTION 34-518 AND 34-519 OF THE CITY ZONING ORDINANCE IN EFFECT AS OF OCTOBER 2023

NOT FOR CONSTRUCTION

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PUD SUBMISSION	05/15/23
PUD RESPONSE	08/02/23
PUD RESPONSE #2	10/06/23

NOT TO SCALE

WDG PROJECT NO:
© 2023
WA22014

COVER

A-001

CURRENT URB ZONING

Use Types under Existing Zoning Ordinance

B = Permitted; ( ) = Use Not Allowed; P = Provisional Use Permit; S = Special Use Permit; T = Temporary Use Permit; A = Ancillary Use

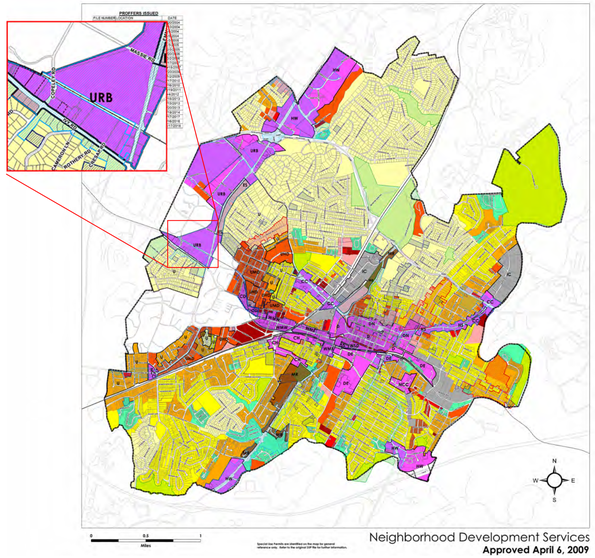
	Proposed PUD	Existing Zoning: URB (*for Reference*)	Notes
RESIDENTIAL AND RELATED USES			
Accessory apartment, internal			
Accessory apartment, external			
Accessory buildings, structures and uses (residential)	B	B	
Adult assisted living			
1—8 residents			
Greater than 8 residents			
Adult day care			
Amateur radio antennas, to a height of 75 ft.			
Bed-and-breakfasts:			
Homestay	B	B	
B & B	B	B	
Inn	B	B	
Boarding: fraternity and sorority house			
Boarding house (rooming house)			
Convent/monastery		B	
Criminal justice facility			
Dwellings:			
Multifamily	B	B	
Single-family attached			
Single-family detached			
Townhouse			
Two-family			
Family day home			
1—5 children			
6—12 children			
Home occupation	B	P	
Manufactured home parks			
Night watchman's dwelling unit, accessory to industrial use			
Nursing homes			
Occupancy, residential			
3 unrelated persons	B		Permitted by-right under draft ZO
4 unrelated persons	B	B	
Residential treatment facility			
1—8 residents		B	
8+ residents		S	Permitted by-right under draft ZO
Shelter care facility		S	
Single room occupancy facility	B	S	Permitted by-right under draft ZO
Temporary family health care structure	B		Permitted by-right under draft ZO
NON-RESIDENTIAL: GENERAL AND MISC. COMMERCIAL			
Access to adjacent multifamily, commercial, industrial or mixed-use development or use	B		
Accessory buildings, structures and uses	B	B	
Amusement center	B	P	Permitted by-right under draft ZO as General Indoor entertainment and recreation
Amusement enterprises (circuses, carnivals, etc.)			
Amusement park (putt-putt golf; skateboard parks, etc.)			
Animal boarding/grooming/kennels:	B		Permitted by-right under draft ZO as Personal Service
With outside runs or pens	B		Permitted by-right under draft ZO as Personal Service
Without outside runs or pens			
Animal shelter			
Art gallery:			
GFA 4,000 SF or less	B	B	
GFA up to 10,000 SF	B	S	Permitted by-right under draft ZO as General retail
Art studio, GFA 4,000 SF or less	B	B	
Art workshop	B	B	
Assembly (indoor)			
Arena, stadium (enclosed)			
Auditoriums, theaters			
Maximum capacity less than 300 persons	B		
Maximum capacity greater than or equal to 300 persons	B		Permitted under draft ZO as General Indoor entertainment and recreation
Houses of worship	B	B	Permitted under draft ZO as General Indoor entertainment and recreation
Assembly (outdoor)			
Amphitheater		S	
Arena, stadium (open)			
Temporary (outdoor church services, etc.)	B	T	Permitted under draft ZO as Temporary Outdoor Assemblies
Assembly plant, handcraft			
Assembly plant			
Automobile uses:			
Auto parts and equipment sales		S	
Gas station		S	
Rental/leasing (such as Zipcar or similar car share only)	B	S	
Repair/servicing business		S	
Sales			
Tire sales and recapping		B	
Bakery, wholesale			
GFA 4,000 SF or less	B	B	
GFA up to 10,000 SF	B		Permitted by-right under draft ZO
Banks/financial institutions	B	B	
Bowling alleys			
Car wash		S	
Catering business	B	B	
Cemetery			
Clinics:			
Health clinic (no GFA limit)	B		Permitted by-right under draft ZO
Health clinic (up to 10,000 SF, GFA)	B	B	
Health clinic (up to 4,000 SF, GFA)	B	B	
Public health clinic	B	B	
Veterinary (with outside pens/runs)			
Veterinary (without outside pens/runs)			
Clubs, private	B	B	
Communications facilities:			
Attached facilities utilizing utility poles as the attachment structure	B	B	
Attached facilities not visible from any adjacent street or property	B	B	
Attached facilities visible from an adjacent street or property (if painted to match attachment structure)	B		
Carrier on wheels (COW)	T		
Towers			
Monopole tower			
Guyed tower			
Lattice tower			
Self-supporting tower			
Contractor or tradesman's shop, general			
Crematorium (independent of funeral home)			
Data center >4,000		B	
<4,000		B	
Daycare facility	B	B	
Dry cleaning establishments	B	B	
Educational facilities (non-residential)			
Elementary	B	B	
High schools	B	B	
Colleges and universities	B		Permitted by-right under draft ZO as Education
Artistic instruction, up to 4,000 SF, GFA	B	B	
Artistic instruction, up to 10,000 SF, GFA	B		Permitted by-right under draft ZO as Education
Vocational, up to 4,000 SF, GFA	B		Permitted by-right under draft ZO as Education
Vocational, up to 10,000 SF, GFA	B		Permitted by-right under draft ZO as Education

Use Types under Existing Zoning Ordinance

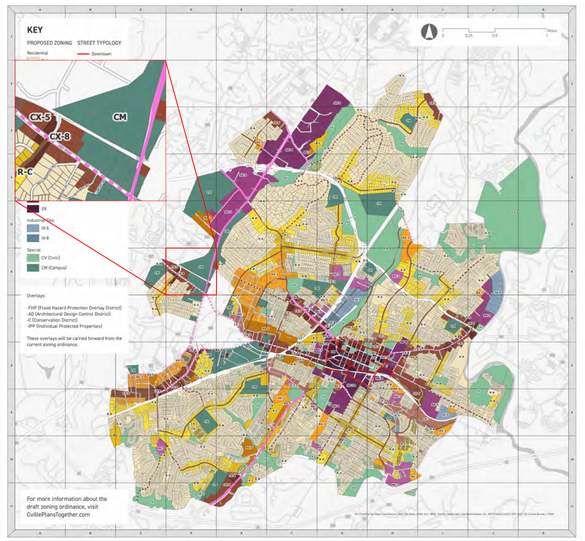
B = Permitted; ( ) = Use Not Allowed; P = Provisional Use Permit; S = Special Use Permit; T = Temporary Use Permit; A = Ancillary Use

	Proposed PUD	Existing Zoning: URB (*for Reference*)	Notes
Electronic gaming café			
Funeral home (without crematory)			
GFA 4,000 SF or less		B	
GFA up to 10,000 SF		S	
Funeral homes (with crematory)			
GFA 4,000 SF or less			
GFA up to 10,000 SF			
Golf course			
Golf driving range			
Helipad			
Hospital			
Hotels/motels:			
Up to 100 guest rooms	B	B	
100+ guest rooms	B	B	
Laundromats	B		Permitted by-right under draft ZO as Personal Service
Libraries	B	B	
Manufactured home sales			
Micro-producers	B	B	
Small Breweries	B	S	Permitted by-right under draft ZO
Mobile food units	B	P	
Movie theaters, cineplexes	B	S	Permitted by-right under draft ZO as General Indoor entertainment and recreation
Municipal/governmental offices, buildings, courts	B	B	
Museums:			
Up to 4,000 SF, GFA	B	B	
Up to 10,000 SF, GFA	B	B	
Music hall	B	B	
Offices:			
Business and professional	B	B	
Medical	B	B	
Philanthropic institutions/agencies	B	B	
Property management (ancillary to MFD)	B	A	
Other offices (non-specified)	B	B	
Outdoor storage, accessory		S	
Parking:			
Parking garage	B	A/S	Permitted under draft ZO
Surface parking lot (19 or less spaces)	B	B	
Surface parking lot (more than 20 spaces)	B	A	Permitted under draft ZO
Temporary parking facilities	T		Permitted under draft ZO as Temporary Surface Parking Lot
Photography studio	B	B	
Photographic processing; blueprinting	B		
Radio/television broadcast stations	B	B	
Recreational facilities:			
Indoor: health/sports clubs; tennis club; swimming club; yoga studios; dance studios, skating rinks, recreation centers, etc. (on City-owned, City School Board-owned, or other public property)	B	B	
Indoor: health/sports clubs; tennis club; swimming club; yoga studios; dance studios, skating rinks, recreation centers, etc. (on private property)			
GFA 4,000 SF or less	B	B	
GFA (4,001—10,000 SF)	B	B	
GFA more than 10,000 SF	B	S	Permitted by-right under draft ZO
Outdoor: Parks, playgrounds, ball fields and ball courts, swimming pools, picnic shelters, etc. (city-owned), and related concession stands	B	B	
Outdoor: Parks, playgrounds, ball fields and ball courts, swimming pools, picnic shelters, etc. (private)		S	
Restaurants:			
All night	B	S	Permitted by-right under draft ZO as General food and beverage
Drive-through windows		S	
Fast food	B	B	Permitted by-right under draft ZO as General food and beverage
Full service	B	B	Permitted by-right under draft ZO as General food and beverage
24-hour	B		Permitted by-right under draft ZO as General food and beverage
Towing service, automobile			
Technology-based businesses	B	B	
Taxi stand	B	B	
Transit facility	B	B	
Utility facilities		S	
Utility lines	B	B	
NON-RESIDENTIAL USES: RETAIL			
Accessory buildings, structures and uses	B	B	
Consumer service businesses:			
Up to 4,000 SF, GFA	B	B	
Up to 10,000 SF, GFA	B	B	
10,001+ GFA	B	B	
Farmer's market	B	S	Permitted by-right under draft ZO
Greenhouses/nurseries		S	
Grocery stores:			
Convenience	B	B	
General, up to 10,000 SF, GFA	B	B	
General, more than 10,000 SF, GFA	B	B	
Home improvement center	B		Permitted by-right under draft ZO as General retail
Pharmacies:			
1—1,700 SF, GFA	B	B	
1,701—4,000 SF, GFA	B	B	
4,001+ SF, GFA	B	B	
Shopping centers	B	S	Permitted by-right under draft ZO as General retail
Shopping malls	B	S	Permitted by-right under draft ZO as General retail
Temporary sales, outdoor (flea markets, craft fairs, promotional sales, etc.)	T	T	
Other retail stores (non-specified):			
Up to 4,000 SF, GFA	B	B	
4,001 SF to 20,000 SF GFA	B	B	
More than 20,000 SF, GFA	B	B	
NON-RESIDENTIAL: INDUSTRIAL			
Accessory buildings, structures and uses			
Assembly, industrial			
Beverage or food processing, packaging and bottling plants			
Brewery and bottling facility			
Compounding of cosmetics, toiletries, drugs and pharmaceutical products			
Construction storage yard			
Temporary construction yard	T	T	
Contractor or tradesman shop (HAZMAT)			
Frozen food lockers			
Greenhouse/nursery (wholesale)			
Industrial equipment: service and repair			
Janitorial service company			
Kennels			
Laboratory, medical >4,000 sq. ft.	B		
<4,000 sq. ft.	B	B	
Laboratory, pharmaceutical >4,000 sq. ft.	B		
<4,000 sq. ft.	B	B	
Landscape service company			
Laundries			
Manufactured home sales			
Manufacturing, light			
Moving companies			
Printing/publishing facility		S	
Open storage yard			
Outdoor storage, accessory to industrial use			
Research and testing laboratories	B		
Self-storage companies			
Warehouses			
Welding or machine shop			
Wholesale establishments			

CURRENT ZONING MAP



NEW DRAFT ZONING MAP



PROPOSED CX-8 ZONING

Use Types under Draft Zoning Code

P = Use allowed; S= Special Use Permit required; (*) = Use standards apply; (-) = Use Not Allowed

	Proposed PUD	Draft Zoning Code: CX-8
RESIDENTIAL USES		
Household Living		
General household living	P	P
Manufactured home park	–	–
Group Living		
General group living (up to 8 residents)	P	P
General group living (8+ residents)	P	P
Adult assisted living (up to 8 residents)	P	P
Adult assisted living (8+ residents)	P	P
Residential treatment facility (up to 8 residents)	P	P
Residential treatment facility (8+ residents)	P	P
PUBLIC AND INSTITUTIONAL USES		
Civic		
General Civic	P	P
Religious assembly	P	P
Shelter	P	P
Criminal justice facility	–	–
Day Care		
Day care center (1 to 12 persons)	P	P
Day care center (12+ persons)	P	P
Education		
General Education	P	P
College, university or vocational school	P	P
Parks & Open Space		
General parks and open space	P	P
Cemetery	–	–
Utilities		
Utility, major	S	S
Utility, minor	P	P
Communication facility, attached (utility pole or not visible)	P*	P*
Communication facility, attached (visible- painted to match attachment structure)	P*	–
Communication facility, tower	–	–
COMMERCIAL USES		
Entertainment & Recreation		
General indoor entertainment and recreation (up to 4,000 SF)	P	P
General indoor entertainment and recreation (4,000+ SF)	P	P
General outdoor entertainment and recreation	S	S
Club, private	P	P
Electronic gaming café	–	–
Golf course	–	–
Golf driving range	–	–
Food & Beverage		
General food and beverage (up to 4,000 SF)	P	P
General food and beverage (4,000+ SF)	P	P
Micro-producer	P	P
Small brewery	P	P
Lodging		
General lodging (up to 10 guest rooms)	P	P
General lodging (10+ guest rooms)	P	P
Medical		
General medical (up to 4,000 SF)	P	P
General medical (4,000+ SF)	P	P
Hospital	S	S
Medical laboratory (up to 4,000 SF)	P	P
Medical laboratory (4,000+ SF)	P	–
Office		
General Office (up to 4,000 SF)	P	P
General Office (4,000+ SF)	P	P
Parking		
Commercial surface parking	P*	P*
Commercial structured parking	P*	P*
Remote parking	P*	P*
Personal Service		
General personal service (up to 4,000 SF)	P	P
General personal service (4,000+ SF)	P	P
Animal Care, outdoor	P	P
Gym or studio	P	P
Retail		
General retail (up to 4,000 SF)	P	P
General retail (4,000+ SF)	P	P
Artisan workshop	P	P
Farmer's market	P	P
Greenhouse or nursery	–	–
Transportation		
Passenger terminal	P	P
Helipad	–	–
Vehicle Sale & Service		
Vehicle repair or service (up to 1 acre)	–	–
Vehicle repair or service (1+ acres)	–	–
Vehicle sale or rental (such as Zipcar or similar car share only)	P	–
Fueling station	–	–
INDUSTRIAL USES		
Industrial & Manufacturing		
Bakery, wholesale (up to 4000 SF)	P	P
Bakery, wholesale (4000+ SF)	P	–
Low-impact industrial and manufacturing (up to 4000 SF)	P	–
Low-impact industrial and manufacturing (4000+ SF)	–	–
High-impact industrial and manufacturing	–	–
Research and development	P	–
Warehouse & Distribution		
General warehouse and distribution (up to 25,000 SF)	–	–
General warehouse and distribution (25,000+ SF)	–	–
Data center	P*	P*
Distribution storage yard	–	–
Recycling drop-off center	–	–
Self-service storage	–	–
Vehicle storage yard	–	–
ACCESSORY USES		
Alcohol sales for on-premise consumption	P	P
Drive-through		
Family day home	P	P
Home occupation	P*	P*
Homestay	P*	P*
Outdoor dining	P*	P*
Outdoor display	P*	P*
Outdoor entertainment	P*	P*
Outdoor storage	P*	P*
TEMPORARY USES		
Temporary outdoor assemblies	P*	P*
Temporary outdoor sales	P*	P*
Amusement enterprises	P*	P*
Mobile food unit	P*	P*
Temporary family health care structures	P*	P*
Temporary construction yard	P*	P*
Temporary surface parking lot	P*	P*
Carrier on wheels (COW)	P	–

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CHARLOTTESVILLE, VA 22903

OWNER\APPLICANT
RMD PROPERTIES
211 E HIGH ST.
CHARLOTTESVILLE, VA 22902
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WDG PROJECT NO: WA22014

ZONING INFORMATION

A-002

BUILDING REGULATION COMPARISON

Building Regulations	Proposed PUD		Draft Zoning Code: CX-8	
1. HEIGHT				
Overall height (max stories/feet)				
		Base		Bonus
Stories (max)	10	8		10
Height (max)	142'	114'		142'
2. MASSING				
Width (max)				
Primary street: Ivy Rd	275'	275'		
Side street: Copeley Rd	0'	0'		
Active Depth (min)				
Primary street: Ivy Rd	15'	15'		
Side street: Copeley Rd	0'	9'		
3. GROUND STORY				
Story height (min)				
Residential	10'	10'		
Nonresidential	14'	14'		
Finished floor elevation (min/max)				
Residential	2' / 5'	2' / 5'		
Nonresidential	-2' / 5'	-2' / 5'		
4. TRANSPARENCY				
	Primary St: Ivy Rd	Side St: Copeley Rd	Primary St: Ivy Rd	Side St: Copeley Rd
Ground story (min)				
Residential	35%	30%	35%	30%
Nonresidential	50%	30%	50%	30%
Upper story (min)	20%	20%	20%	20%
Blank wall width (max)	25'	25'	15'	25'
5. ENTRANCES				
	Primary St: Ivy Rd	Side St: Copeley Rd	Primary St: Ivy Rd	Side St: Copeley Rd
Street-facing entry spacing (max)	40'	75'	40'	60'
Entry Feature	Yes	Yes	Yes	Yes
6. WALLS & FENCES				
Front yard height (max): Ivy Rd	4'		4'	
Side street yard height (max): Copeley Rd	None		6'	

ZONING LOT REGULATIONS

Zoning Lot Regulations	Proposed PUD	Draft Zoning Code: CX-8
1. SIZE FOR SUBDIVISION		
Area (min)	None	None
Width (min)		
Front access	40'	40'
Side/rear access	15'	15'
2. DENSITY		
Dwellings per zoning lot (max)	Unlimited	Unlimited
3. COVERAGE		
Building coverage (max)	None	None
Outdoor amenity space	10%	10%
4. BUILDING SETBACKS		
Primary street lot line (min/max): Ivy Rd	0' / 20'	0' / 10'
Side street lot line (min/max): Copeley Rd	0' / 20'	0' / 10'
Side lot line (min)	0'	0'
Rear lot line (min)	0'	0'
5. BUILD TO		
Build-to-width (min)		
Primary street: Ivy Rd	75%	75%
Side street: Copeley Rd	45%	45%
6. TRANSITION		
Transition type	None	None
7. PARKING LOCATION		
Front yard	Not allowed	Not allowed
Side street yard	Not allowed	Not allowed
Side yard	Allowed	Allowed
Rear yard	Allowed	Allowed

PARKING SUMMARY

PARKING INFORMATION	Factor	Spaces	Spaces/ Unit	Spaces/Bed
VEHICULAR PARKING				
Required Residential Parking (per Zoning Section 34-984 - Boarding House - 0.3 spaces /bedroom):	634	**190**	0.79	0.30
Required Retail Commercial Parking (per Zoning Section 34-984 - General - 3.5 spaces/ 1,000 sf):	1,757 SF	**6**		
Provided:				
Standard Parking Spaces:		100		
Compact Parking Spaces:		4		
Tandem - Standard Parking Spaces:		41		
Tandem - Compact Parking Spaces:		9		
Additional "Effective Parking" - Resident Car Share - (1 is equivalent to 30 standard spaces):	2	60		
Accessible Parking Spaces (includes HC van and car spaces):		8		
Total Vehicular Parking Provided (including car share "Effective Spaces"):		**222**	**0.92**	**0.35**
BICYCLE AND SCOOTER PARKING				
Required:				
Long Term (per Zoning Section 4.3.3.C.1)				
Residential Household Living - 1 per unit:	242	**242**	1.00	0.38
Commerical - 1 per 2,500 SF, min. 2	1,757 SF	**2**		
Short Term (per Zoning Section 4.3.3.C.1)				
Residential Household Living - 1 per 10 units):	242	**24**	0.10	0.04
Commerical - 1 per 5,000 SF, min. 2	1,757 SF	**2**		
Scooter:		N/A	–	–
Provided:				
Long Term:		**264**	1.09	0.42
Short Term:		**28**	0.12	0.04
Scooter:		**32**	0.13	0.05

ALL FIGURES ARE APPROXIMATE

BUILDING PARKING STATEMENT:
PROJECT SHALL INCLUDE AT ALL TIMES INCLUDE A MINIMUM OF 244 LONG TERM BICYCLE SPACES AND 26 SHORT TERM BICYCLE SPACES. ALL BICYCLE SPACES MAY BE USED FOR SCOOTERS AND THE TERM "BICYCLE SPACES" SHALL ALSO PERMIT PRIVATE SCOOTERS IN LIEU OF BICYCLES IN SUCH SPACES.

BUILDING AREA AND UNIT SUMMARY

AREA SUMMARY

RESIDENTIAL	LOBBY, AMENITY	COMMERCIAL, OTHER	COMMON	SERVICE	PARKING	EXTERIOR AMENITY AREA	TOTAL GSF
216,689 SF	15,640 SF	1,757 SF	29,426 SF	8,647 SF	54,892 SF	12,639 SF	327,051 SF

PLANNING, ZONING STATISTICS:

BUILDING FOOTPRINT	34,043 SF
LOT AREA	44,736 SF
LOT COVERAGE	76.1%
FLOOR AREA RATIO (FAR)	6.08

UNIT SUMMARY

UNIT TYPE	Studio	1-Bed	2-Bed	3-Bed	4-Bed	PROPOSED UNIT COUNT	MAX. # UNITS	PROPOSED BEDROOM COUNT
TOTAL UNIT by TYPE	0	98	16	16	112	**242**	**287**	**634**
% of TOTAL	**0.0%**	**40.5%**	**6.6%**	**6.6%**	**46.3%**	**100.0%**		

ALL FIGURES ARE APPROXIMATE

AFFORDABLE HOUSING STATEMENT

AFFORDABLE HOUSING STATEMENT

The Project is proposed to be student housing rented by the bedroom as contemplated in the DRAFT Chapter 34, Section 4.2.2(C)(b)(iii). For the Project, the Applicant shall at its option satisfy either (1) or (2) below:

1) Provide affordable bedrooms ("Affordable Bedrooms") in an amount that is equivalent to providing 10% of the total Units as affordable units, as provided herein.

a) The number of Affordable Bedrooms shall be roughly proportional to the number of bedrooms provided in each type of units within the Project, and shall be dispersed throughout the Project in a mix of units that is roughly proportionate to the overall unit mix within the Project, such that:
i) the number of Affordable Bedrooms located in Efficiency/Studio units shall be roughly proportionate to the number of Efficiency/Studio units within the Project;
ii) the number of Affordable Bedrooms located in one-bedroom units shall be roughly proportionate to the number of one-bedroom units within the Project;
iii) the number of Affordable Bedrooms located in two-bedroom units shall be roughly proportionate to the number of two-bedroom units within the Project;
iv) the number of Affordable Bedrooms located in three-bedroom units shall be roughly proportionate to the number of three-bedroom units within the Project; and
v) the number of Affordable Bedrooms located in four-bedroom units shall be roughly proportionate to the number of four-bedroom units within the Project.

b) In this Project containing a total of 241 units with a mixture of one-bedroom, two-bedroom, three-bedroom, and four-bedroom units, Applicant would provide a total of 24 Affordable Units may be allocated as follows:
i) If the total number of one-bedroom units within the Project is 88, there shall be the equivalent of 9 one-bedroom Affordable Units, for a total of 9 Affordable Bedrooms located within one-bedroom units.
ii) If the total number of two-bedroom units within the Project is 25, there shall be the equivalent of 7 two-bedroom Affordable Units, for a total of 14 Affordable Bedrooms located in two-bedroom units.
iii) If the total number of three-bedroom units within the Project is 16, there shall be the equivalent of 4 three-bedroom Affordable Units, for a total of 12 Affordable Bedrooms located in three-bedroom units.
iv) If the total number of four-bedroom units within the Project is 112, there shall be the equivalent of 4 four-bedroom Affordable Units, for a total of 16 Affordable Bedrooms located in four-bedroom units.
v) These counts and allocations are subject to the final approved PUD and building permit and may be adjusted provided 10% of the total Units are provided as affordable units.

c) Fractional Affordable Units. If the calculation of the required number of affordable units that are required to provide 10% of the total units within the Project as affordable units results in a fraction of a unit less than 0.5, the Project shall provide a fractional in-lieu fee equal to the corresponding percent of the affordable unit as specified in the applicable formula in the adopted Affordable Dwelling Unit Monitoring and Procedures Manual. For example, in an

example project containing 242 units, such example project must provide Affordable Bedrooms in an amount that is equivalent to providing 24 affordable units (10% of 242) as provided in paragraph 1(a) herein, and shall also provide a fractional fee in-lieu equal to two-tenths of the fee in-lieu established for a one-bedroom unit in the adopted Affordable Dwelling Unit Monitoring and Procedures Manual.

d) To provide tenants with the freedom of choice to lease an Affordable Bedroom in a particular unit type of their choosing (subject to availability), and to comply with Fair Housing Law and HUD regulations, the Applicant upon mutual agreement with Qualifying Tenants shall be allowed to float (locate) the Affordable Bedrooms throughout the Project subject to satisfying the requirements of section 1(a) herein.

e) Qualifying Tenants: Students who qualify for any level of federal Pell grants shall be Qualifying Tenants eligible to rent an Affordable Bedroom. For all other tenants, those persons and households who shall be certified from time to time by the Applicant to have combined adjusted annual income that does not exceed the applicable median family income for the applicable calendar year shall be Qualified Tenants eligible to rent an Affordable Bedroom. The City may require a certification of tenant eligibility on a form approved by or provided by the City, in which the prospective qualifying tenant certifies as to annual income (for non-students) or Pell grant eligibility, as applicable.

f) Affordable Rents: The rent rate for Affordable Bedrooms shall be calculated as described herein based on the current year Area Media Income ("AMI") for the Charlottesville area, as provided by HUD. If utilities are separately metered, the maximum allowable rent will be reduced to reflect the Tenant's payment of utilities.
i) Efficiency/Studio Rent: The rent for an Affordable Bedroom in an Efficiency/Studio unit shall be the HUD Adjusted Home Rent limit for 1 person at 60% AMI, multiplied by 30% of total income set aside for housing, divided by 12.
ii) One-bedroom Rent: The rent for an Affordable Bedroom in a one-bedroom unit shall be the average of the HUD Adjusted Home Rent limit for 1 person at 60% AMI and the HUD Adjusted Home Rent limit for 2 people at 60% AMI, multiplied by 30% of total income set aside for housing, divided by 12.
iii) Two-bedroom Rent: The rent for an Affordable Bedroom in a two-bedroom unit shall be 60% of the rent for an Affordable Bedroom in a one-bedroom unit.
iv) Three-bedroom and four-bedroom Rent: The rent for an Affordable Bedroom in a three-bedroom unit or in a four-bedroom unit shall be 60% of the rent for an Affordable Bedroom in an Efficiency/Studio unit.

g) Term of affordability: The requirements of this paragraph 1 shall remain in effect for 25 years from the date of the issuance of the Certificate of Occupancy for the Project.

h) Equivalency of Affordable Bedrooms.

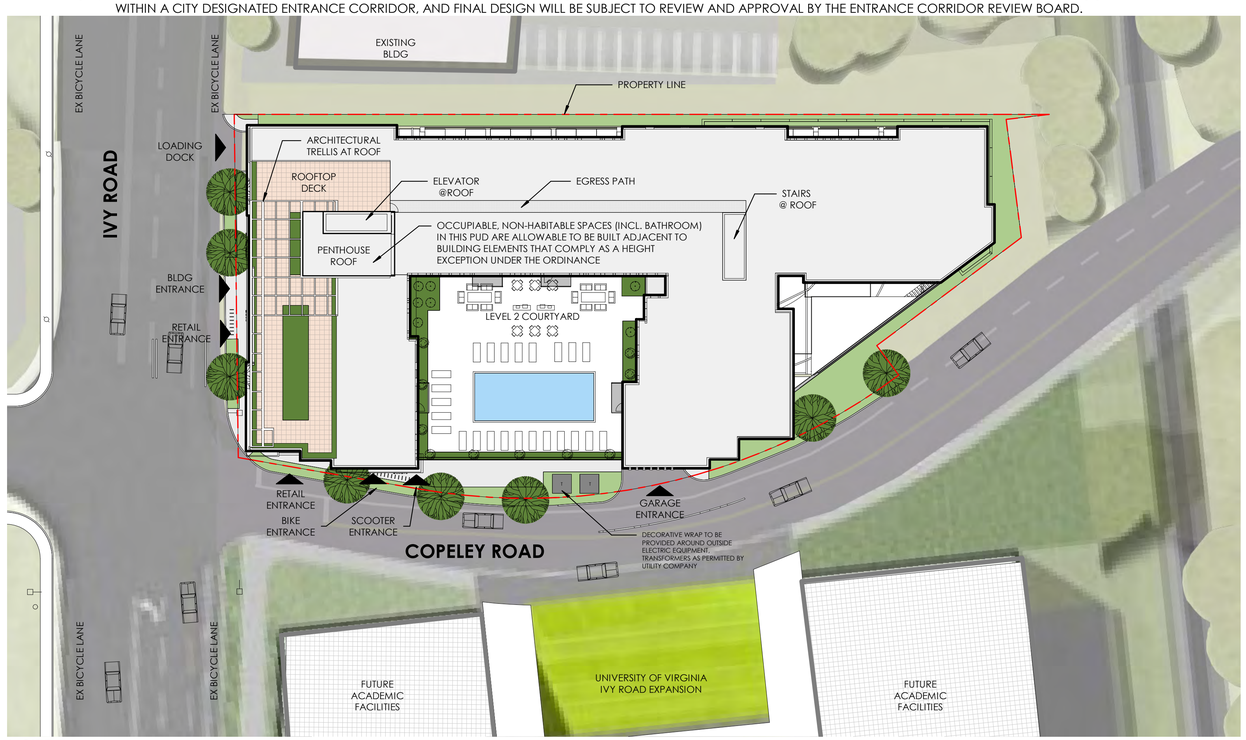
i) Affordable Bedrooms must reflect the composition of the over Project units in exterior appearance and overall quality of construction
ii) Affordable Bedrooms must include the same interior features as the other bedrooms in the same Project, but appliances and finishes need not be the same make, model, or style, so long as they are new and of good quality.

iii) Affordable Bedrooms must be evenly distributed throughout the Project and not concentrated on any particular floors, building sides, or locations, provided that the Affordable Bedrooms are not required to be located in the top two floors of the Project. The Applicant at time of applying for a building permit shall submit a compliance plan to the site plan agent that identifies the units within the Project that are designated for the Affordable Bedrooms consistent with paragraph 1(a) herein.
iv) Affordable Bedrooms must be comparable in size to other units within the Project with the same number of bedrooms. The average floor area of the Affordable Bedroom must not be less than 80% of the average floor area of the other bedrooms within in the same unit type.
v) Affordable Bedrooms shall have the same access to property amenities and building access points provided to other bedrooms within the Project.

i) Housing Choice Vouchers. In the case of tenants using a Section 8 voucher or other rental assistance program, the Project may collect the fully allowed rental reimbursement amount even if the total rent for the Affordable Bedroom exceeds the maximum allowable rent for such Affordable Bedroom, so long as the household using the rental assistance is not paying more than 30% of the household's monthly income. In the event the fully allowed rental reimbursement amount is less than the total rent for the Affordable Bedroom, the Qualifying Tenant shall be responsible for the difference between the rental reimbursement and the applicable rent for the Affordable Bedroom.

2) Make a cash contribution to the City's affordable housing fund in the amount equal to double that which would be required under City Code Section 34-12(d)(2) based on the approved final site plan. Such cash contribution shall be delivered to the City prior to the issuance of the first Certificate of Occupancy for the Project.

NOTE: ALL DRAWINGS ARE PROVIDED FOR ILLUSTRATIVE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PER FINAL ARCHITECTURAL, CIVIL, AND SITE DESIGN. PROPERTY IS LOCATED WITHIN A CITY DESIGNATED ENTRANCE CORRIDOR, AND FINAL DESIGN WILL BE SUBJECT TO REVIEW AND APPROVAL BY THE ENTRANCE CORRIDOR REVIEW BOARD.



LEGEND - SITE PLAN
- GRASS @ LEVEL 1
- SYNTHETIC TURF/ VEGETATION (@ LEVEL 2) (@ ROOF LEVEL)
- BOXWOOD @ ROOF
- ROOFTOP DECK
- EGRESS PATH
- LEVEL 2 PAVING @ PRIVATE TERRACES @ COURTYARD
- SIDEWALK
- POOL
- PROPOSED TRANSFORMER LOCATION
- TREES @ STREET LEVEL
- EXISTING TRAFFIC LIGHT
- EXISTING POLES

1 CONCEPTUAL ARCHITECTURAL SITE PLAN
SCALE: 1" = 30'-0"

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ARCHITECTURAL SITE PLAN AND BUILDING INFORMATION

SCALE: As indicated

A-003

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Open Space/Outdoor Amenity: Proposed PUD	
Required Open Space Square Footage	
15% of gross area of parcel	6,710
20% of gross floor of commercial uses	3,608
Total SF Required:	**10,318**
Conceptual Open Space Square Footage	
2nd Floor Courtyard	6,215
Roof Deck	4,350
Total SF Provided:	**10,565**

Open Space/Outdoor Amenity: Draft Zoning Code CX-8	
Required Open Space Square Footage	
10% of gross area of parcel	4,474
Total SF Required:	**4,474**
Conceptual Open Space Square Footage	
2nd Floor Courtyard (Common Outdoor Amenity)	6,215
Roof Deck (Common Outdoor Amenity)	4,350
Total SF Provided:	**10,565**



1 CONCEPTUAL OUTDOOR AMENITY SPACE - 2ND FLOOR & ROOF
SCALE: 1" = 30'-0"

0' 7'-6" 15' 30' 60'

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CONCEPTUAL OUTDOOR AMENITY SPACE DIAGRAM

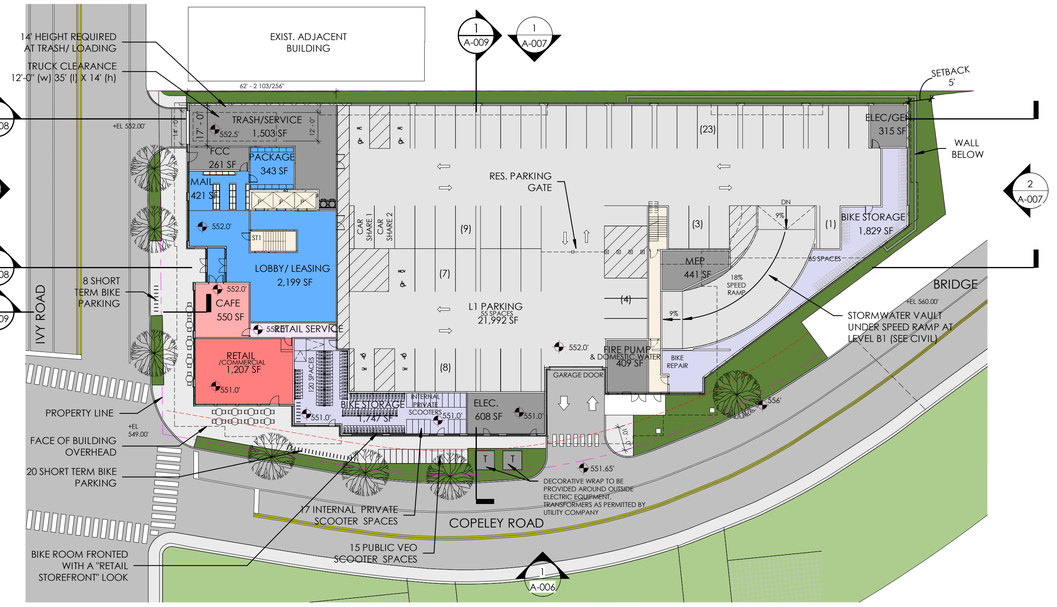
SCALE: As indicated

A-004

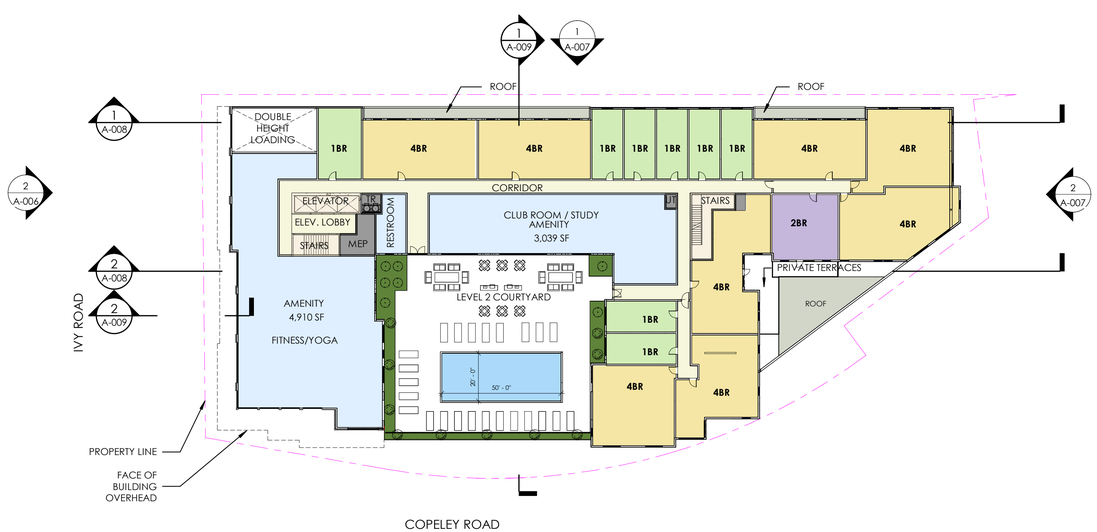
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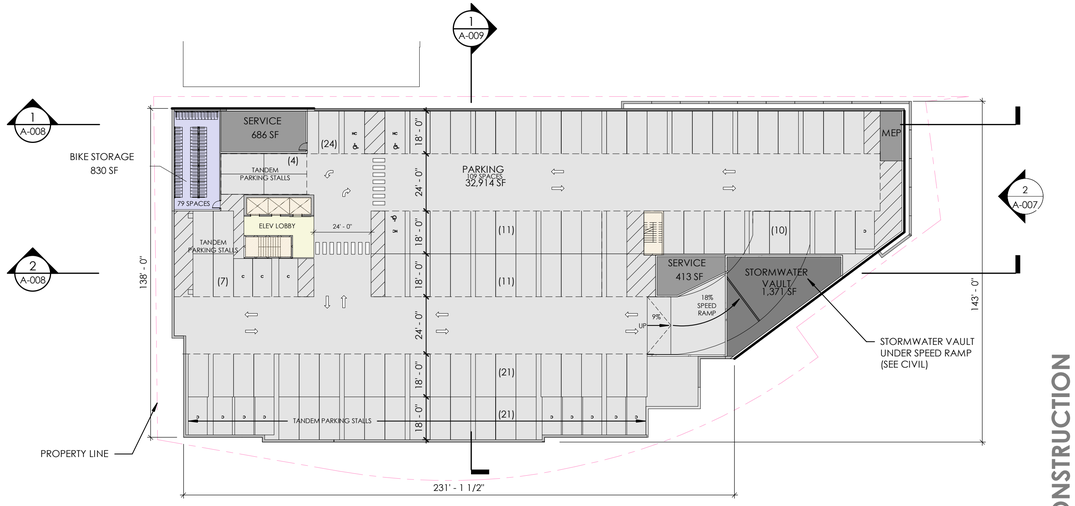
4 CONCEPTUAL TYPICAL FLOOR PLAN - LEVEL 3 - 10
SCALE: 1" = 30'-0"



2 CONCEPTUAL FLOOR PLAN - LEVEL 1
SCALE: 1" = 30'-0"



3 CONCEPTUAL FLOOR PLAN - LEVEL 2
SCALE: 1" = 30'-0"



1 CONCEPTUAL FLOOR PLAN - LEVEL B1
SCALE: 1" = 30'-0"

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CONCEPTUAL FLOOR PLANS

SCALE: As indicated

A-005

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2 SOUTH ELEVATION @ IVY ROAD
SCALE: 1/16" = 1'-0"



1 EAST ELEVATION @ COPELEY ROAD
SCALE: 1/16" = 1'-0"

LEGEND - EXTERIOR MATERIALS

- WALL TYPE A - DARK BRICK
- WALL TYPE B - COMPOSITE PANEL B TERRACOTA, BRICK PATTERN
- WALL TYPE B - COMPOSITE PANEL B HORIZONTAL PATTERN
- WALL TYPE C - COMPOSITE PANEL C GRAY SMOOTH
- WALL TYPE C - COMPOSITE PANEL C GRAY, HORIZONTAL PATTERN
- VINYL WINDOWS
- ALUMINUM STOREFRONT
- DARK GRAY BLOCK
- METAL MESH SCREEN
- SECTIONAL LOADING DOCK DOOR W/METAL FRAME & TRANSLUCENT PANELS
- GLASS WINDSCREEN
- METAL RAILING SYSTEM
- MECHANICAL SCREEN
- CONCRETE WALL

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CONCEPTUAL ELEVATIONS

SCALE: 12" = 1'-0"

A-006

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② NORTH ELEVATION @ RAILROAD
SCALE: 1/16" = 1'-0"



① WEST ELEVATION
SCALE: 1/16" = 1'-0"

0' 4' 8' 16' 32'

LEGEND - EXTERIOR MATERIALS

- WALL TYPE A - DARK BRICK
- WALL TYPE B - COMPOSITE PANEL B TERRACOTA, BRICK PATTERN
- WALL TYPE B - COMPOSITE PANEL B HORIZONTAL PATTERN
- WALL TYPE C - COMPOSITE PANEL C GRAY SMOOTH
- WALL TYPE C - COMPOSITE PANEL C GRAY, HORIZONTAL PATTERN
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- METAL RAILING SYSTEM
- MECHANICAL SCREEN
- CONCRETE WALL

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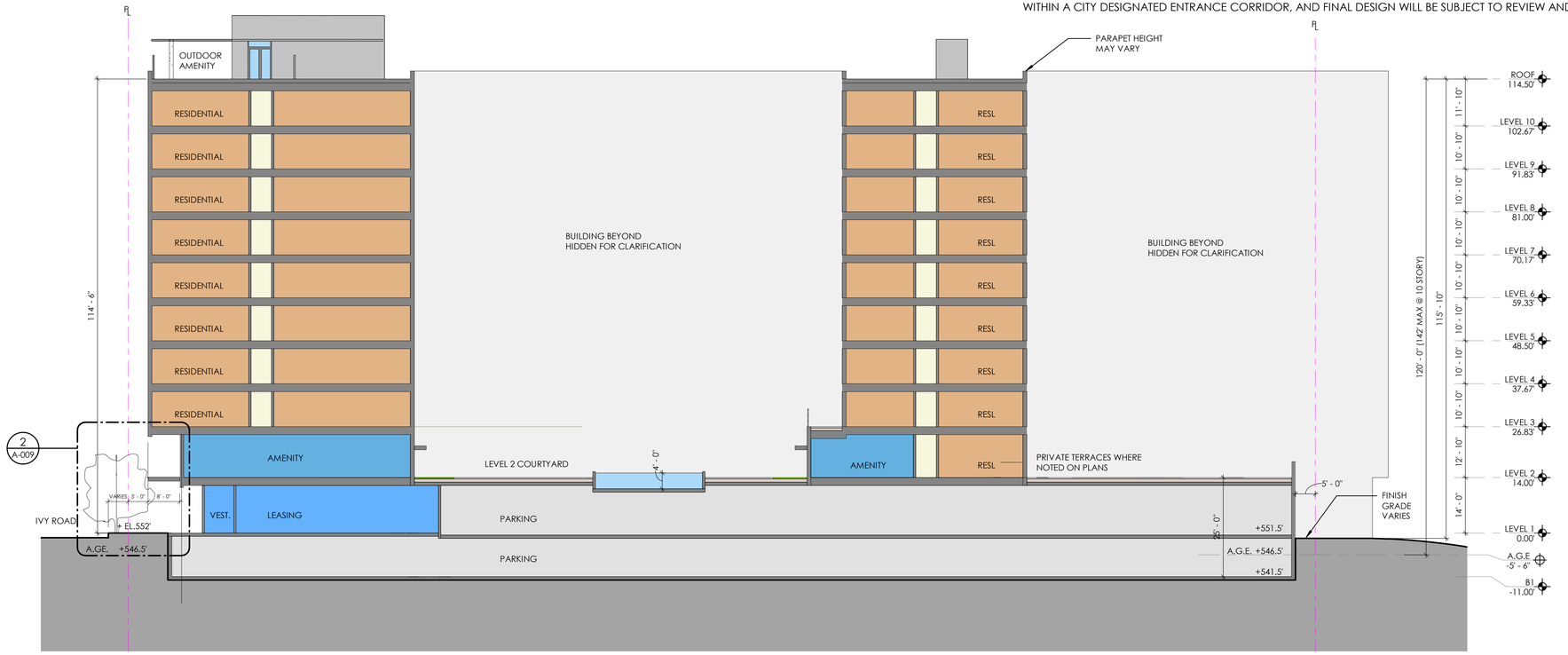
WDG PROJECT NO:
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CONCEPTUAL ELEVATIONS

SCALE: 12" = 1'-0"

A-007

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2 A-009

2 BUILDING SECTION LOOKING WEST
SCALE: 1/16" = 1'-0"

1 BUILDING SECTION
SCALE: 1/16" = 1'-0"

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PUD RESPONSE #2	10/06/23

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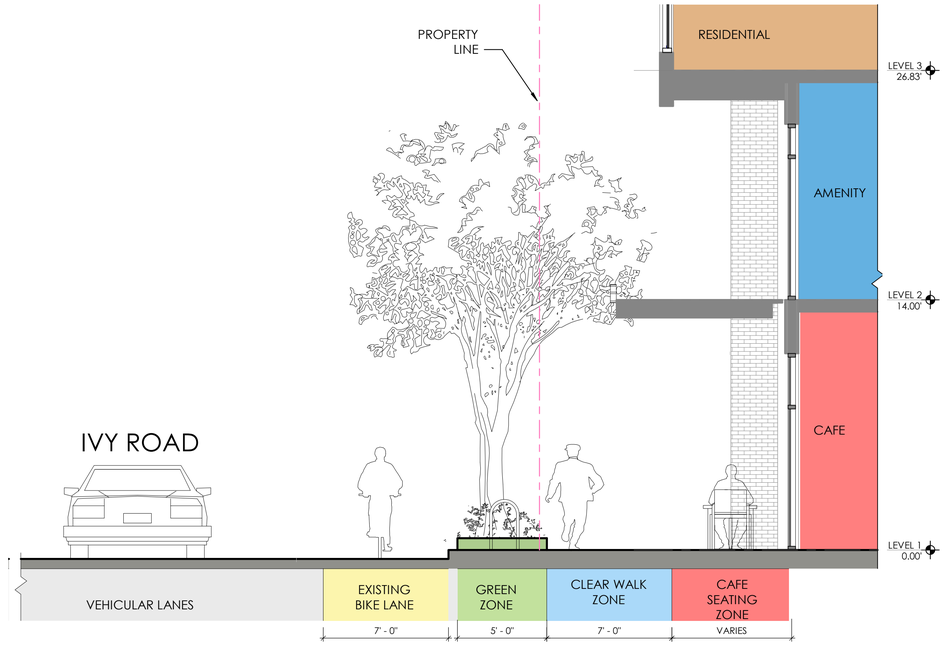
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CONCEPTUAL BUILDING SECTIONS

SCALE: As indicated

A-008

NOT FOR CONSTRUCTION



2 CONCEPTUAL STREET SECTION
SCALE: 1/4" = 1'-0"



1 CONCEPTUAL BUILDING SECTION LOOKING NORTH
SCALE: 1/16" = 1'-0"

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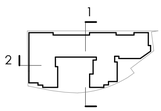
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RMD PROPERTIES
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CONCEPTUAL BUILDING SECTIONS

SCALE: As indicated

A-009

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4 - PERSPECTIVE - IVY RD



2 - DETAIL PERSPECTIVE - IVY & COPELEY



3 - PERSPECTIVE - COPELEY



1 - PERSPECTIVE - COPELEY & IVY

NOT TO SCALE

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CONCEPTUAL
PERSPECTIVE IMAGES

SCALE: 12" = 1'-0"

A-010

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2 - DETAIL PERSPECTIVE - IVY ROAD



3 - PERSPECTIVE - FROM ALDERMAN DRIVE



1 - PERSPECTIVE - IVY ROAD

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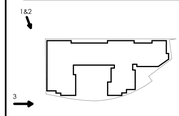
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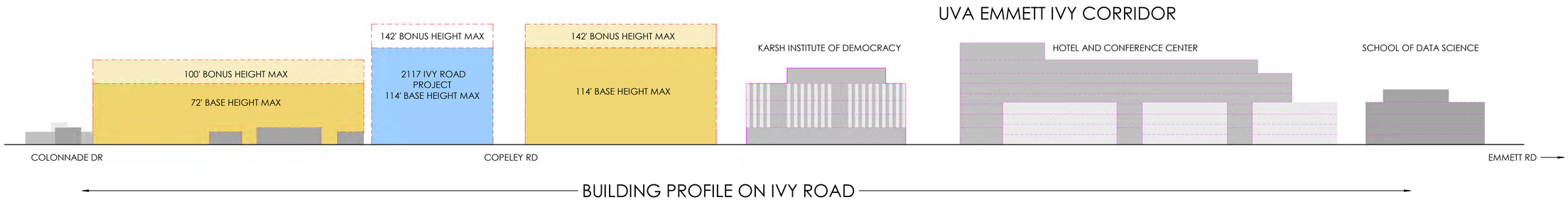


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CONCEPTUAL
PERSPECTIVE IMAGES

SCALE: 12" = 1'-0"

A-010A



1 Concept Site Section
SCALE: 1" = 60'-0"



16

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CONCEPTUAL SITE SECTION

SCALE: 1" = 60'-0"

A-011

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2 CONCEPTUAL NORTH INTERIOR COURTYARD ELEVATION
SCALE 1/16" = 1'-0"



1 CONCEPTUAL SOUTH INTERIOR COURTYARD ELEVATION
SCALE 1/16" = 1'-0"

CONCEPTUAL LEGEND - EXTERIOR MATERIALS

- WALL TYPE A - DARK BRICK
- WALL TYPE B - COMPOSITE PANEL
- WALL TYPE C - COMPOSITE PANEL
- WALL TYPE D - COMPOSITE PANEL
- WALL TYPE E - COMPOSITE PANEL
- VINYL WINDOWS
- ALUMINUM STOREFRONT
- DARK GRAY BLOCK
- METAL MESH SCREEN
- SECTIONAL LOADING DOCK DOOR W/METAL FRAME & TRANSLUCENT PANELS
- GLASS WINDSCREEN
- METAL RAILING SYSTEM
- MECHANICAL SCREEN
- CONCRETE WALL

ALL MATERIALS SUBJECT TO ENTRANCE REVIEW BOARD APPROVAL

0' 4' 8' 16' 32'

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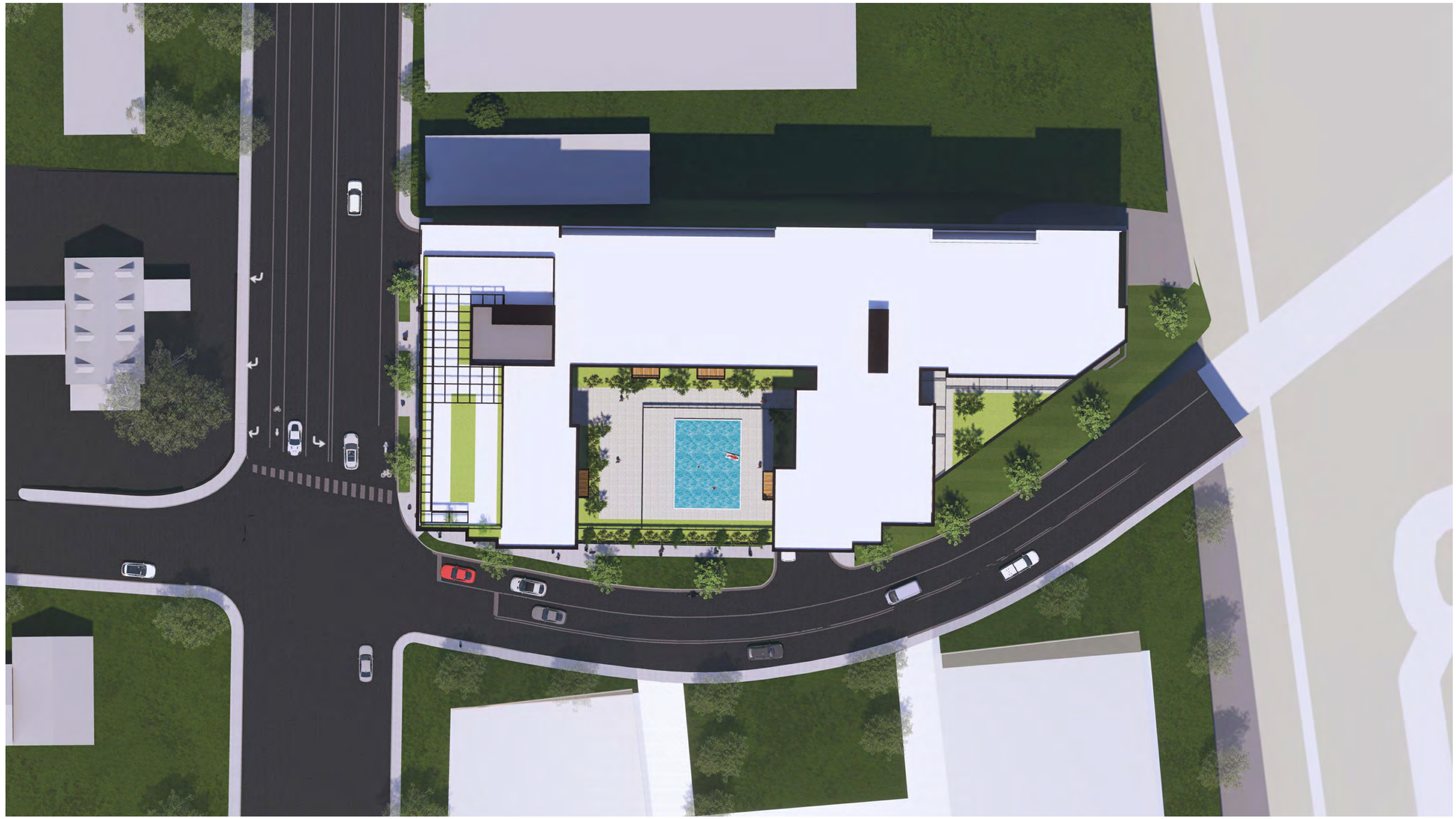
PROFESSIONAL SEAL

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INTERIOR COURTYARD VIEWS

SCALE: As indicated

NEW **A-012**



1 SOLAR STUDY JUN 21 12 PM
SCALE: 12" = 1'-0"

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SOLAR STUDY

SCALE: 12" = 1'-0"

A-013



SOLAR STUDY: MAR 21 - 10 AM



SOLAR STUDY: JUN 21 - 10 AM



SOLAR STUDY: SEP 23 - 10 AM



SOLAR STUDY: DEC 22 - 10 AM



SOLAR STUDY: MAR 21 - 12 PM



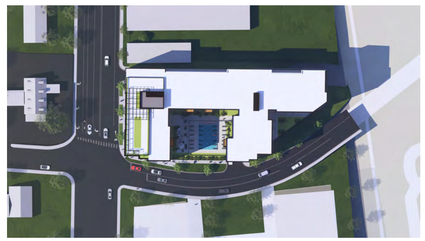
SOLAR STUDY: JUN 21 - 12 PM



SOLAR STUDY: SEP 23 - 12 PM



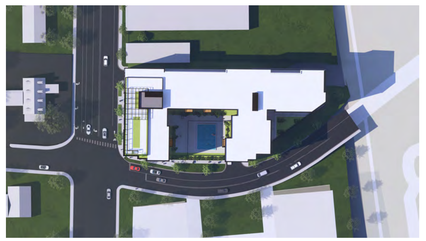
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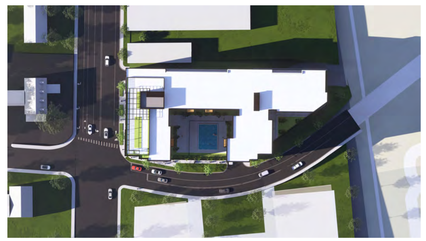
SOLAR STUDY: MAR 21 - 2 PM



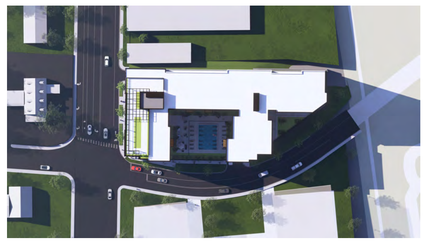
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SOLAR STUDY: SEP 23 - 2 PM



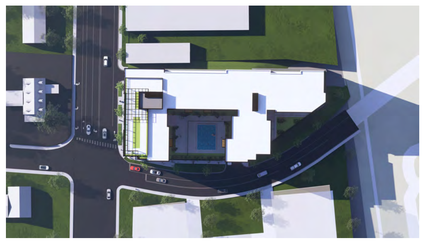
SOLAR STUDY: DEC 22 - 2 PM



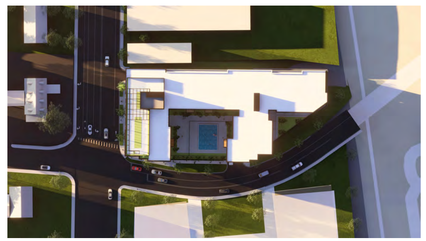
SOLAR STUDY: MAR 21 - 4 PM



SOLAR STUDY: JUN 21 - 4 PM



SOLAR STUDY: SEP 23 - 4 PM



SOLAR STUDY: DEC 22 - 4 PM

1 SOLAR STUDY
SCALE: 12" = 1'-0"

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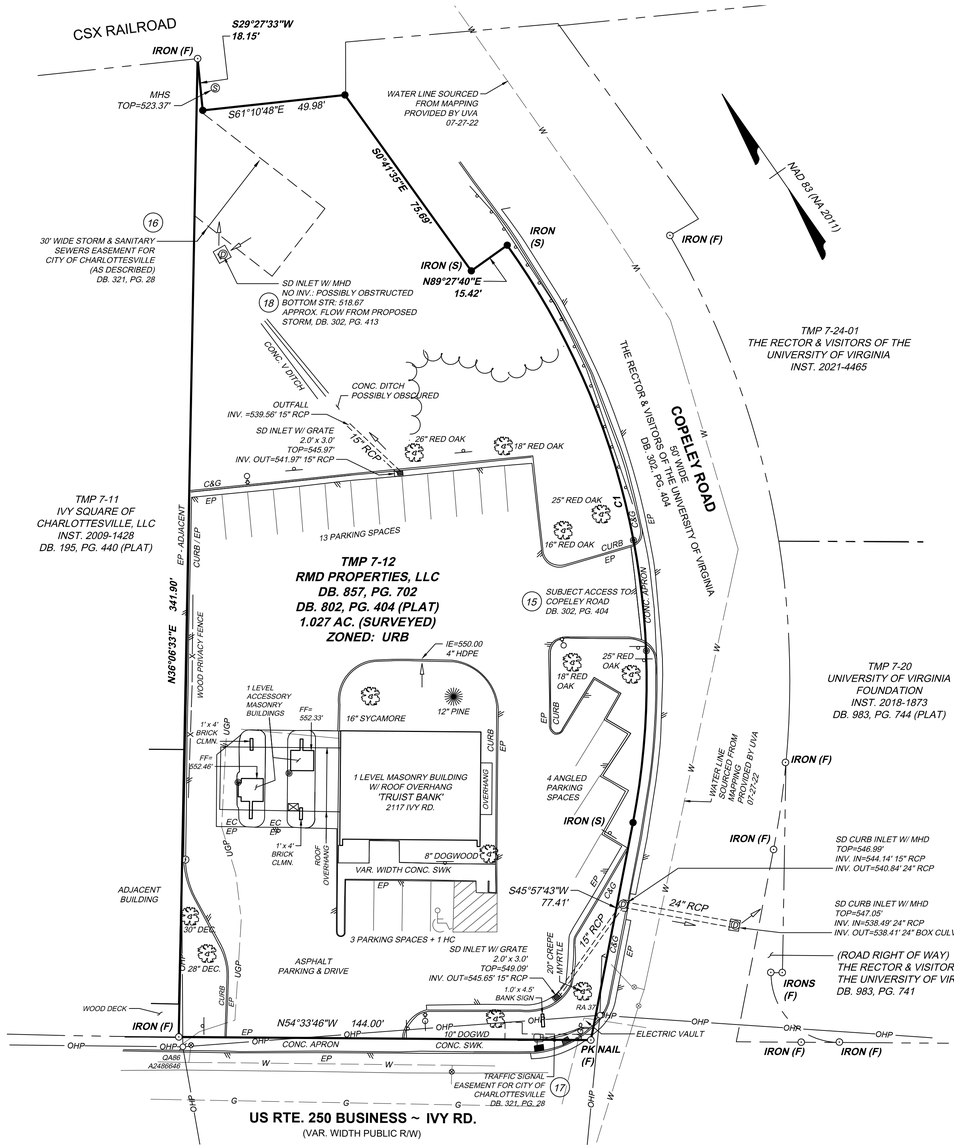
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SOLAR STUDY

SCALE: 12" = 1'-0"

A-014



LEGEND

- WATER VALVE
- SANITARY SEWER MANHOLE (MHS)
- STORM DRAINAGE MANHOLE
- STORM DRAINAGE (SD) GRATE INLET
- DRAINAGE / FLOW DIRECTION
- RCP REINFORCED CONCRETE PIPE
- HDPE HIGH DENSITY POLYETHYLENE PIPE
- LIGHT POLE
- UTILITY BOX / VAULT AS NOTED
- UTILITY POLE
- ELECTRIC METER
- OHP OVERHEAD POWER
- W UNDERGROUND WATER UTILITY
- SAN SANITARY SEWER PIPE
- G UNDERGROUND GAS LINE
- UGP UNDERGROUND POWER UTILITY
- GUARD RAIL
- EDGE OF PAVEMENT (EP)
- TREE / VEGETATION LINE
- DECIDUOUS (DEC) TREE
- CONIFEROUS TREE
- SIGN
- BOLLARD
- C&G CURB & GUTTER
- SWK SIDEWALK
- EP EDGE OF PAVEMENT
- DB. DEED BOOK
- PG. PAGE
- INST. INSTRUMENT
- (F) PROPERTY COR. FOUND, AS NOTED

CONTOUR INTERVAL = 1'

CURVE TABLE						
CURVE	RADIUS	LENGTH	TANGENT	DELTA	CHORD BEARING	CHORD
C1	261.52'	212.25'	112.36'	46°30'03"	S22°42'42"W	206.47'

SCALE 1"=25'

0 25' 50'

SURVEY NOTES:

1. PROPERTY & ZONING INFORMATION:
SUBJECT PROPERTY:
OWNER: RMD PROPERTIES, LLC
REFERENCE: DEED BOOK 857, PAGE 702

CITY PID: 070001200 (TMP 7-12)
PROPERTY ADDRESS: 2117 IVY ROAD
AREA: 1.027 ACRES (SURVEYED)
ZONED: URB

2. DIMENSIONAL ZONING REGULATIONS, PER CITY OF CHARLOTTESVILLE CODE, CHAPTER 34, ARTICLE VI:
SETBACKS:
PRIMARY STREET FRONTAGE - 5 FEET MINIMUM, 30 FEET MAX.
LINKING STREET FRONTAGE - 5 FEET MINIMUM, 20 FEET MAX.
SIDE - NONE

MAX. STRUCTURE HEIGHT - 60 FEET

3. EXISTING PARKING: STRIPED / DESIGNATED PARKING SPACES OBSERVED AND DEPICTED HEREON.

4. THE BOUNDARY SHOWN HEREON IS BASED ON A FIELD SURVEY BY TIMMONS GROUP COMPLETED ON JULY 15, 2022.

5. HORIZONTAL DATUM IS BASED ON NAD83 (NA2011), VIRGINIA STATE GRID, SOUTH ZONE. DATUM ESTABLISHED THROUGH NETWORK GPS (LEICA SmartNET) OBSERVATIONS.

6. BASED ON FEMA FLOOD INSURANCE RATE MAP (FIRM), MAP NO. 51003C0287D, PANEL 287 OF 575, EFFECTIVE DATE FEBRUARY 4, 2005, THE PROPERTY SHOWN HEREON LIES IN UNSHADED ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

7. THIS PLAT WAS PREPARED WITH THE BENEFIT OF A TITLE REPORT, NOTED AS FOLLOWS:
- COMMITMENT NO. SHTC22-1195, FROM CHICAGO TITLE INSURANCE COMPANY, DATED JULY 06, 2022.

8. THE LANDS SURVEYED ARE THE SAME AS DESCRIBED IN THE REFERENCED TITLE COMMITMENT.

9. THERE IS NO OBSERVABLE EVIDENCE OF BUILDING CONSTRUCTION OR BUILDING ADDITIONS ON THE SUBJECT PROPERTY; NO EVIDENCE OF RECENT EARTH MOVING WORK OBSERVED (INCIDENTAL TO SUBSTANTIAL GRADING CHANGES). DEMOLITION OF HOUSE APPARENT

10. NO EVIDENCE OF CEMETERY OR BURIAL GROUND OBSERVED IN THE PROCESS OF CONDUCTING THE SURVEY FIELD-WORK.

11. ON THE DATE OF THE SURVEY, THERE WAS NO VISUAL EVIDENCE OF SITE USE AS A SOLID WASTE DUMP, SUMP, OR SANITARY LANDFILL. (COLLECTIONS OF RESIDENTIAL RUBBISH OBSERVED IN SOME AREAS.)

12. REGARDING TABLE A, ITEM 11, LOCATION OF UNDERGROUND UTILITIES SHOWN HEREON ARE DERIVED FROM THE FOLLOWING METHODS;

- OBSERVED EVIDENCE COLLECTED DURING FIELD PROCEDURES AND SURVEY OF SITE;

- MISS UTILITY (811) TICKET INITIATION, TICKET NO. A219300827. NO FORMAL UNDERGROUND UTILITY INVESTIGATION (SUE) BEYOND INFORMATION PROVIDED BY MISS UTILITY HAS BEEN CONDUCTED BY THIS FIRM.

- WATER LINE AND VALVES ON COPELEY ROAD DEPICTED VIA GIS DATA PROVIDED BY THE UNIVERSITY OF VIRGINIA.

SCHEDULE B, PART II EXCEPTIONS FROM COVERAGE

THIS PLAT WAS PREPARED WITH THE BENEFIT OF A TITLE REPORT, COMMITMENT NO. SHTC22-1195 FROM CHICAGO TITLE INSURANCE COMPANY, ISSUED JULY 06, 2022.

SCHEDULE B, PART II EXCEPTIONS ARE AS FOLLOWS:

1. ANY DEFECT, LIEN, ENCUMBRANCE, ADVERSE CLAIM, OR OTHER MATTER THAT APPEARS FOR THE FIRST TIME IN THE PUBLIC RECORDS OR IS CREATED, ATTACHES, OR IS DISCLOSED BETWEEN THE COMMITMENT DATE AND THE DATE ON WHICH ALL OF THE SCHEDULE B, PART I-REQUIREMENTS ARE MET. ***NOT A SURVEY MATTER***.
2. ANY LIEN, OR RIGHT TO A LIEN, FOR SERVICES, LABOR, OR MATERIAL HERETOFORE OR HEREAFTER FURNISHED, IMPOSED BY LAW, AND NOT SHOWN BY THE PUBLIC RECORDS. ***NOT A SURVEY MATTER***.
3. EASEMENTS OR CLAIMS OF EASEMENTS NOT SHOWN BY THE PUBLIC RECORDS. ***NOT A SURVEY MATTER***.
4. RIGHTS OF TENANTS IN POSSESSION UNDER UNRECORDED LEASES SOLELY AS TENANTS AND SOLELY WITH RESPECT TO SPACE OCCUPIED BY EACH SUCH TENANT, TOGETHER WITH NON-EXCLUSIVE RIGHTS IN COMMON WITH OTHER TENANTS IN AREAS USED BY ALL TENANTS. ***NOT A SURVEY MATTER***.
5. TAXES, STORM WATER, UTILITY, RECYCLING AND SPECIAL ASSESSMENTS WHICH BECOME DUE AND PAYABLE SUBSEQUENT TO THE EFFECTIVE DATE HEREOF, LIENS, AND SUPPLEMENTAL TAXES WHICH MAY COME DUE AND ALL TAXES FOR SUBSEQUENT FISCAL YEARS, BUT NOT YET DUE AND PAYABLE. ***NOT A SURVEY MATTER***.
6. SUCH STATE OF FACTS AS WOULD BE DISCLOSED BY AN ACCURATE SURVEY END INSPECTION OF THE PREMISES. ***INCIDENTAL TO SURVEY DEPICTED HEREON.***
7. ANY ENCROACHMENT, ENCUMBRANCE, VIOLATION, VARIATION, OR ADVERSE CIRCUMSTANCE AFFECTING THE TITLE THAT WOULD BE DISCLOSED BY AN ACCURATE AND COMPLETE LAND SURVEY OF THE LAND. THE TERM "ENCROACHMENT" INCLUDES ENCROACHMENTS OF EXISTING IMPROVEMENTS LOCATED ON THE LAND ONTO ADJOINING LAND, AND ENCROACHMENTS ONTO THE LAND OF EXISTING IMPROVEMENTS LOCATED ON ADJOINING LAND.
NOTE: UPON RECEIPT OF SATISFACTORY PLAT OF SURVEY AND INSPECTION REPORT, THIS EXCEPTION WILL BE ELIMINATED OR AMENDED IN ACCORDANCE WITH THE FACTS DISCLOSED THEREBY. ***INCIDENTAL TO SURVEY DEPICTED HEREON.***
15. TERMS, PROVISIONS, AND CONDITIONS OF THAT CERTAIN DEED DATED APRIL 24, 1968, RECORDED OCTOBER 17, 1968, IN DEED BOOK 302, PAGE 404.
   a. SLOPE EASEMENT - ***AFFECTS, NOT PLOTTABLE.***
   b. ACCESS TO COPELEY ROAD - ***AFFECTS AS SHOWN.***
16. EASEMENT: GRANTED UNTO THE CITY OF CHARLOTTESVILLE DATED JULY 23, 1970, RECORDED IN DEED BOOK 321, PAGE 28. GRANTS EASEMENT FOR A SEWER LINE OR OTHER UTILITIES AND APPURTENANCES THERETO, AT 30' WIDE DESIGNATED AND UNDESIGNATED LOCATIONS, WITH INGRESS, EGRESS AND CLEARAGE. PLAT RECORDED THEREWITH SHOWS EASEMENT. ***AFFECTS AS SHOWN.***
17. EASEMENT: GRANTED UNTO THE CITY OF CHARLOTTESVILLE, VIRGINIA, DATED NOVEMBER 21, 1984, RECORDED MARCH 15, 1985, IN DEED BOOK 461, PAGE 74. GRANTS EASEMENT TO INSTALL AND MAINTAIN A TRAFFIC SIGNAL DEVICE AND APPURTENANCES THERETO, AT DESIGNATED AND UNDESIGNATED LOCATIONS, WITH INGRESS, EGRESS AND CLEARAGE. ***AFFECTS AS SHOWN.***
18. PLAT MADE BY WILLIAM S. ROUDABUSH, JR. &ASSOCIATES DATED APRIL 1966, REVISED MAY 6, 1966 AND DECEMBER 27, 1967, ENTITLED, "PLAT SHOWING PROPERTY AND EASEMENTS TO BE ACQUIRED BY THE RECTOR AND VISITORS OF THE UNIVERSITY OF VIRGINIA - FROM R. MARSHALL DAVIS & ROSA LEE DAVIS, AND MARGARET UPSHUR BROWN MASSIE, CHARLOTTESVILLE, VIRGINIA• RECORDED WITH DEED IN DEAD BOOK 302, PAGE 404, SHOWS THE FOLLOWING:
   a. EXISTING STREAM. ***NOT LOCATABLE OR PLOTTABLE.***
   b. PROPOSED STORM DRAIN. ***AFFECTS AS SHOWN.***

RECORD DESCRIPTION:

ALL THOSE CERTAIN LOTS OR PARCELS OF LAND SITUATE, LYING AND BEING IN THE CITY OF CHARLOTTESVILLE, VIRGINIA, DESIGNATED AS "PARCEL X-1, PARCEL X-2 AND PARCEL F-4" ON THAT CERTAIN PLAT MADE BY WILLIAM S. ROUDABUSH, JR. & ASSOCIATES, ENTITLED, "PLAT SHOWING PROPERTY AND EASEMENTS TO BE ACQUIRED BY THE RECTOR AND VISITORS OF THE UNIVERSITY OF VIRGINIA- FROM R. MARSHALL DAVIS & ROSA LEE DAVIS. AND MARGARET UPSHUR BROWN MASSIE, CHARLOTTESVILLE, VIRGINIA", DATED APRIL 1966, REVISED MAYE. 1966, AND DECEMBER 27, 1967, AND RECORDED IN THE CLERK'S OFFICE, CIRCUIT COURT, CITY OF CHARLOTTESVILLE, VIRGINIA, WITH DEED IN DEED BOOK 302, PAGE 413.

BEING THE SAME REAL ESTATE CONVEYED TO RMD PROPERTIES, LLC, A VIRGINIA LIMITED LIABILITY COMPANY BY DEED OF GIFT FROM R. MARSHALL DAVIS AND FRANCIS L. BUCK, TRUSTEES OF THE ROSA LEE DAVIS LIVING TRUST DATED JULY 8, 1996, DATED JUNE 20, 2002, RECORDED JUNE 21, 2002, IN THE CLERK'S OFFICE, CIRCUIT COURT, CITY OF CHARLOTTESVILLE, VIRGINIA, IN DEED BOOK 857, PAGE 702.

ALTA/NSPS SURVEYOR'S CERTIFICATION

TO: CHICAGO TITLE INSURANCE COMPANY, RMD PROPERTIES, LLC, & UP CAMPUS HOLDINGS, LLC, A DELAWARE LIMITED LIABILITY COMPANY, ITS SUCCESSORS AND / OR ASSIGNS:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE "2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS," JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 6(a-b), 8, 11(a), 13, 14, 16, 17, 18, & 19 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON OCTOBER 4, 2021. PURSUANT TO THE ACCURACY STANDARDS AS ADOPTED BY ALTA AND NSPS AND IN EFFECT ON THE DATE OF THIS CERTIFICATION, UNDERSIGNED FURTHER CERTIFIES THAT IN MY PROFESSIONAL OPINION, AS A LAND SURVEYOR REGISTERED IN THE COMMONWEALTH OF VIRGINIA, THE RELATIVE POSITIONAL ACCURACY OF THIS SURVEY DOES NOT EXCEED THAT WHICH IS SPECIFIED THEREIN.

COMMONWEALTH OF VIRGINIA
JOSEPH C. MEDLEY
Lic. No. 3385
08-05-22
LAND SURVEYOR

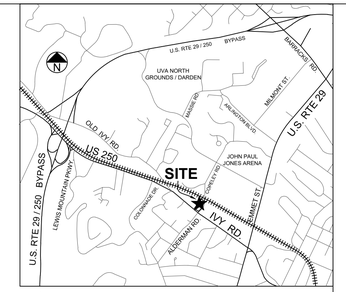
'ALTA/NSPS LAND TITLE SURVEY'

OF 1.027 ACRES
FRONTING IVY ROAD
BEING
CITY PID 070001200
IN THE
CITY OF CHARLOTTESVILLE, VIRGINIA

Venable Area	Charlottesville, VA
DATE: August 5, 2022	SCALE: 1" = 25'
SHEET 1 OF 1	J.N.: 54985
DRAWN BY: MKT - JCM	CHECK BY: JCM
LAST REVISED: -	

Property Information within 500 feet of Proposed PUD

Property Owner	Property Address	Address	City, State	Zip Code	Parcel ID Number	Zoning
BOLLINGWOOD PROPERTIES, LLC	115 BOLLINGWOOD RD	580 MASSIE RD	CHARLOTTESVILLE VA	22903	70024000	R-1U
BOYADJIAN, SIMON K	2120 IVY RD	2120 IVY RD	CHARLOTTESVILLE VA	22903	70003000	B-1
C & O RAILWAY COMPANY	0 UNKNOWN	C-12 500 WATER	JACKSONVILLE FL	32202	350555000	MLTP
CAPONE, GERARD, JR	2107 MORRIS RD	2107 MORRIS RD	CHARLOTTESVILLE VA	22903	70003700	R-1U
DAVIS, ROGER HB JR & JEANNE S, TRUSTS	13 IVY RD	6207 RIVERSIDE FARM LN	CAPE CHARLES VA	23310	70001400	URB
ELIAS, WILLIAM J & JULIANA B	123 BOLLINGWOOD RD	123 BOLLINGWOOD RD	CHARLOTTESVILLE VA	22903	70022000	R-1UH
EQUITY SHELTER, LLC	2114 IVY RD	P O BOX 6156	CHARLOTTESVILLE VA	22906	70003210	B-1
FIELDS, MARY ELIZABETH	111 ALDERMAN RD	111 ALDERMAN RD	CHARLOTTESVILLE VA	22903	70003180	R-IU
GORMAN, NEAL A & CARLA DURAN-GORMAN, TRUSTEES	2108 MORRIS RD	2108 MORRIS RD	CHARLOTTESVILLE VA	22903	70003110	R-IU
HILINSKI, MICHAEL & DAPHNA BASSOK	2109 MORRIS RD	2109 MORRIS RD	CHARLOTTESVILLE VA	22903	70003600	R-IU
IVY SQUARE OF CHARLOTTESVILLE, LLC	2121 IVY RD	1 BOAR'S HEAD POINTE	CHARLOTTESVILLE VA	22903	70001000	URB
IVY SQUARE OF CHARLOTTESVILLE, LLC	2119 IVY RD	1 BOAR'S HEAD POINTE	CHARLOTTESVILLE VA	22903	70001100	URB
IVY SQUARE OF CHARLOTTESVILLE, LLC	2123-25 IVY RD	1 BOAR'S HEAD POINTE	CHARLOTTESVILLE VA	22903	70001300	URB
JEFFERSON, NATIONAL BANK	2100 IVY RD	P O BOX 2609	CARLSBAD CA	92018	70003201	B-1
LEE, SEUNG HUN & LOUCA, DESPO A	2103 MORRIS RD	2103 MORRIS RD	CHARLOTTESVILLE VA	22903	70003900	R-1U
LESSARD, STEPHEN C	2101 MORRIS RD	228 E 13TH ST APT 26	NEW YORK NY	10003	70003100	R-1U
MONTAGUE, PERCY, IV & ANNE C	117 BOLLINGWOOD RD	117 BOLLINGWOOD RD	CHARLOTTESVILLE VA	22903	70023000	R-1U
SMITH, MARK J & MARINA M HEISS	2105 MORRIS RD	2105 MORRIS RD	CHARLOTTESVILLE VA	22903	70003800	R-1U
ST ANNE'S-BELFIELD, INC	2132 IVY RD	2132 IVY RD	CHARLOTTESVILLE VA	22903	70001101	R-1U
ST MARKS EVAN LUTHERAN CHURCH	100 ALDERMAN RD	100 ALDERMAN RD	CHARLOTTESVILLE VA	22903	70003101	R-1U
STEBBINS, DENISE C	113 ALDERMAN RD	113 ALDERMAN RD	CHARLOTTESVILLE VA	22903	70003170	R-1U
THE RECTOR & VISITORS OF THE UNIVERSITY OF VIRGINIA	2023 IVY RD	PO BOX 400884	CHARLOTTESVILLE VA	22904	70002200	URB
THE RECTOR & VISITORS OF THE UNIVERSITY OF VIRGINIA	2015 IVY RD	PO BOX 400884	CHARLOTTESVILLE VA	22904	70002300	URB
THE RECTOR & VISITORS OF THE UNIVERSITY OF VIRGINIA	2015 IVY RD	PO BOX 400884	CHARLOTTESVILLE VA	22904	70002401	URB
THE RECTOR & VISITORS OF THE UNIVERSITY OF VIRGINIA	101 EMMET ST N	PO BOX 400884	CHARLOTTESVILLE VA	22904	80001000	MLTP
THE STORY HOUSE LLC	2110 IVY RD	2110 IVY RD	CHARLOTTESVILLE VA	22903	70003190	B-1
UNIVERSITY OF VIRGINIA, FOUNDATION	2033 IVY RD	PO BOX 400218	CHARLOTTESVILLE VA	22904	70002000	URB
UNIVERSITY OF VIRGINIA FOUNDATION	2025-29 IVY RD	PO BOX 400218	CHARLOTTESVILLE VA	22904	70002100	URB
UNIVERSITY OF VIRGINIA FOUNDATION	2019 IVY RD	PO BOX 400218	CHARLOTTESVILLE VA	22904	70025000	R-1U
UNIVERSITY OF VIRGINIA FOUNDATION	0 IVY RD	PO BOX 400218	CHARLOTTESVILLE VA	22904	70026000	R-1U
UNIVERSITY OF VIRGINIA FOUNDATION	2001 IVY RD	PO BOX 400218	CHARLOTTESVILLE VA	22904	70027000	R-1U
UNIVERSITY OF VIRGINIA FOUNDATION	107 BOLLINGWOOD RD	PO BOX 400218	CHARLOTTESVILLE VA	22904	70028000	R-1U
UNIVERSITY OF VIRGINIA FOUNDATION	101 BOLLINGWOOD RD	PO BOX 400218	CHARLOTTESVILLE VA	22904	70029000	R-1U



VICINITY MAP 1" = 2,000'

WDG ARCHITECTURE, PLLC
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PUD SUBMISSION	05/15/23
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ALTA NSPS LAND TITLE SURVEY

SCALE: 1" = 25'

C-001

S:\103\54985-2117_IvyRoad\DWG\Sheet\C0\54985-C1.0-SURVEYSHEET.dwg | Plotted on 10/6/2023 2:50 PM | by Clint Shifflett

LEGEND

- WATER VALVE
- SANITARY SEWER MANHOLE (MHS)
- STORM DRAINAGE MANHOLE
- STORM DRAINAGE (SD) GRATE INLET
- DRAINAGE / FLOW DIRECTION
- RCP REINFORCED CONCRETE PIPE
- HDPE HIGH DENSITY POLYETHYLENE PIPE
- LIGHT POLE
- UTILITY BOX / VAULT AS NOTED
- UTILITY POLE
- ELECTRIC METER
- OHP OVERHEAD POWER
- UNDERGROUND WATER UTILITY
- SANITARY SEWER PIPE
- G UNDERGROUND GAS LINE
- UNDERGROUND POWER UTILITY
- GUARD RAIL
- EDGE OF PAVEMENT (EP)
- TREE / VEGETATION LINE
- DECIDUOUS (DEC) TREE
- CONIFEROUS TREE
- SIGN
- BOLLARD
- C&G CURB & GUTTER
- SWK SIDEWALK
- EP EDGE OF PAVEMENT
- DB. DEED BOOK
- PG. PAGE
- INST. INSTRUMENT
- (F) PROPERTY COR. FOUND, AS NOTED

CONTOUR INTERVAL = 1'

CURVE TABLE						
CURVE	RADIUS	LENGTH	TANGENT	DELTA	CHORD BEARING	CHORD
C1	261.52'	212.25'	112.36'	46°30'03"	S22°42'42"W	206.47'

SCALE 1"=20'
0 20' 40'

US RTE. 250 BUSINESS ~ IVY RD.
(VAR. WIDTH PUBLIC R/W)

ALDERMAN ROAD

COPELEY ROAD
50' WIDE
THE RECTOR & VISITORS OF THE UNIVERSITY OF VIRGINIA
DB. 302, PG. 404

CSX RAILROAD

BRIDGE

TMP 7-11
2119 IVY LLC
INST. 2009-1428
DB. 195, PG. 440 (PLAT)

TMP 7-12
RMD PROPERTIES, LLC
DB. 857, PG. 702
DB. 802, PG. 404 (PLAT)
1.027 AC. (SURVEYED)
ZONED: URB

TMP 7-24-01
THE RECTOR & VISITORS OF THE UNIVERSITY OF VIRGINIA
INST. 2021-4465

TMP 7-20
UNIVERSITY OF VIRGINIA FOUNDATION
INST. 2018-1873
DB. 983, PG. 744 (PLAT)

(ROAD RIGHT OF WAY)
THE RECTOR & VISITORS OF THE UNIVERSITY OF VIRGINIA
DB. 983, PG. 741

PARCEL BOUNDARY LINE

N36°06'33"E 341.90'

S29°27'33"W 18.15'

S61°19'26"E 19.96'

S50°41'35"E 75.69'

N89°27'40"E 15.42'

S45°57'43"W 77.41'

S 54°33'54" W 144.00'

1 LEVEL MASONRY BUILDING W/ ROOF OVERHANG "TRUIST BANK" 2117 IVY RD.

1 LEVEL ACCESSORY MASONRY BUILDINGS

13 PARKING SPACES

3 PARKING SPACES + 1 HC

4 ANGLED PARKING SPACES

ASPHALT PARKING & DRIVE

CONC. APRON

CONC. DITCH POSSIBLY OBSCURED

CONC. V DITCH

OUTFALL INV. =539.58' 15" RCP

SD INLET W/ GRATE 2.0' x 3.0' TOP=545.97' INV. OUT=541.97' 15" RCP

SD INLET W/ GRATE 2.0' x 3.0' TOP=549.09' INV. OUT=545.65' 15" RCP

SD INLET W/ MHD TOP=523.43' INV. IN=522.38' SOUTH (THROAT - AT GROUND) INV. IN=521.97 NORTH (THROAT) WATER LEVEL AT 521.6' ± BOTTOM STR: 518.67 ±

SD INLET W/ GRATE (2.5' x 2.5') TOP=541.68' INV. OUT=529.68' 18" RCP

SD CURB INLET W/ MHD TOP=546.99' INV. IN=544.14' 15" RCP INV. OUT=540.84' 24" RCP

SD CURB INLET W/ MHD TOP=547.05' INV. IN=538.49' 24" RCP INV. OUT=538.41' 24" BOX CULVERT

SD INLET W/ GRATE (2.0' x 3.0') TOP=525.77' INV. IN=510.50' 60" RCP INV. OUT=511.19' 60" RCP BOT=510.33' WATER LEVEL=511.01' (OUT NOTED AS HIGHER)

MH-SSWR TOP=533.64' INV. IN=519.74' 12" CI INV. OUT=518.80' 12" CI

MH-SSWR TOP=523.38' INV. IN=513.41' 12" CI INV. IN=512.50' 8" PVC (SW) INV. OUT=512.27' 12" CI

MHS TOP=523.37'

MH-SSWR TOP=526.93' NOT MEASURED NO WEST CONNECTION

IE=550.00 4" HDPE

IE=548.49 4" HDPE

IE=548.49 4" HDPE

IE=548.49 4" HDPE

30' WIDE STORM & SANITARY SEWERS EASEMENT FOR CITY OF CHARLOTTESVILLE (AS DESCRIBED) DB. 321, PG. 28

TRAFFIC SIGNAL EASEMENT FOR CITY OF CHARLOTTESVILLE DB. 321, PG. 28

SUBJECT ACCESS TO COPELEY ROAD DB. 302, PG. 404

WATER LINE SOURCED FROM MAPPING PROVIDED BY UVA 07-27-22

WATER LINE SOURCED FROM MAPPING PROVIDED BY UVA 07-27-22

EXISTING BICYCLE LANE - IVY ROAD

IRON (F)

IRON (S)

IRONS (F)

PK NAIL (F)

ELECTRIC VAULT

26" RED OAK

30" DEC.

28" DEC.

10" DOGWOOD

8" DOGWOOD

16" SYCAMORE

12" PINE

20" CREPE MYRTLE

1.0' x 4.5' BANK SIGN

18" RED OAK

16" RED OAK

25" RED OAK

WOOD PRIVACY FENCE

1' x 4' BRICK CLMN.

ROOF OVERHANG

VAR. WIDTH CONC. SWK.

EX. SIDEWALK

EX. GUTTER PAN

FF= 552.48'

FF= 552.33'

C1

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	4
PUD SUBMISSION	05/15/23
PUD RESUBMISSION	08/11/23
PUD RESUBMISSION	10/06/23

PROFESSIONAL SEAL

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WDG PROJECT NO: PWA2022005

EXISTING CONDITIONS PLAN

SCALE: 1" = 20'

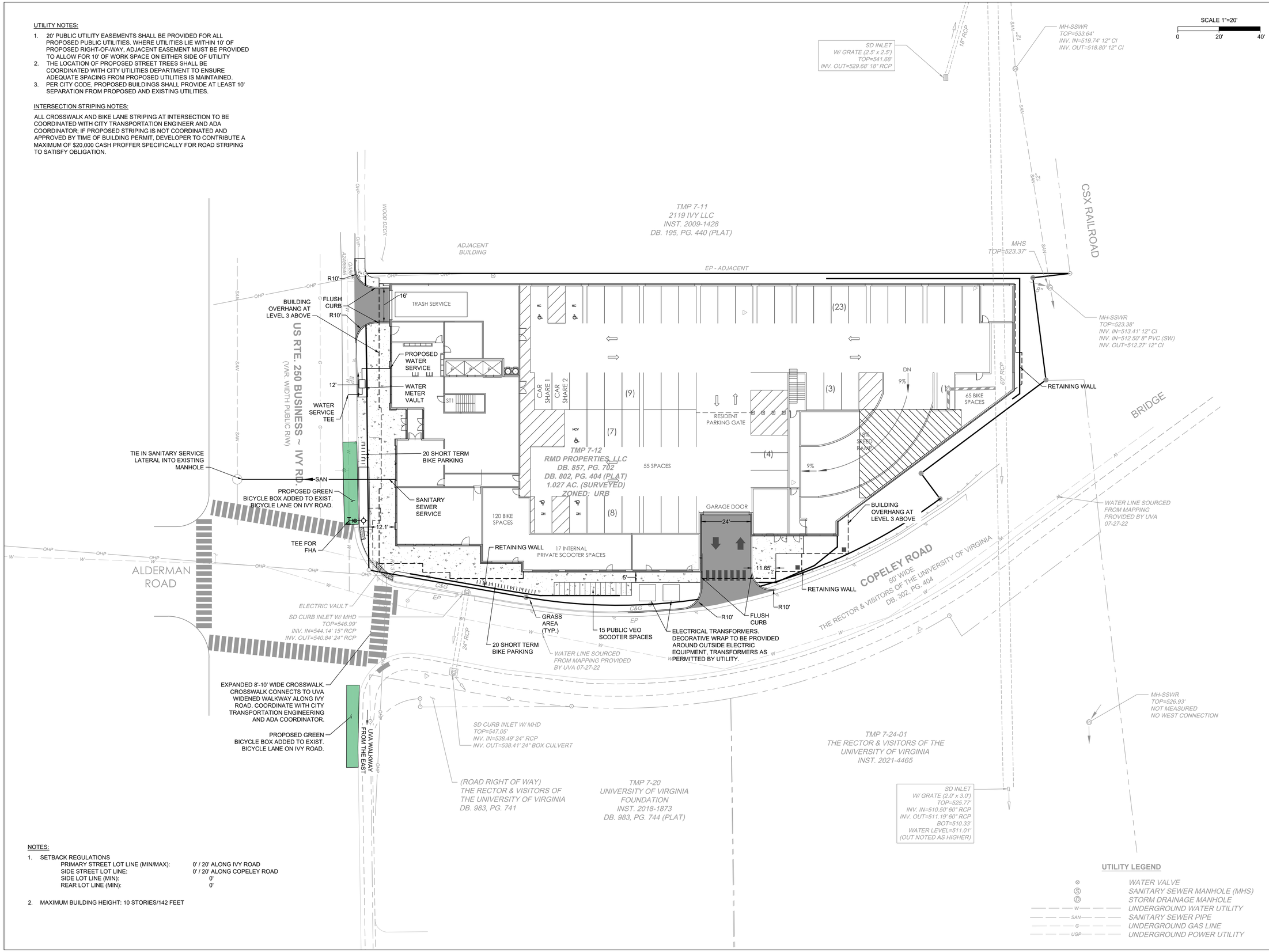
C-002

UTILITY NOTES:

1. 20' PUBLIC UTILITY EASEMENTS SHALL BE PROVIDED FOR ALL PROPOSED PUBLIC UTILITIES. WHERE UTILITIES LIE WITHIN 10' OF PROPOSED RIGHT-OF-WAY, ADJACENT EASEMENT MUST BE PROVIDED TO ALLOW FOR 10' OF WORK SPACE ON EITHER SIDE OF UTILITY
2. THE LOCATION OF PROPOSED STREET TREES SHALL BE COORDINATED WITH CITY UTILITIES DEPARTMENT TO ENSURE ADEQUATE SPACING FROM PROPOSED UTILITIES IS MAINTAINED.
3. PER CITY CODE, PROPOSED BUILDINGS SHALL PROVIDE AT LEAST 10' SEPARATION FROM PROPOSED AND EXISTING UTILITIES.

INTERSECTION STRIPING NOTES:

ALL CROSSWALK AND BIKE LANE STRIPING AT INTERSECTION TO BE COORDINATED WITH CITY TRANSPORTATION ENGINEER AND ADA COORDINATOR; IF PROPOSED STRIPING IS NOT COORDINATED AND APPROVED BY TIME OF BUILDING PERMIT, DEVELOPER TO CONTRIBUTE A MAXIMUM OF $20,000 CASH PROFFER SPECIFICALLY FOR ROAD STRIPING TO SATISFY OBLIGATION.



NOTES:

1. SETBACK REGULATIONS
   - PRIMARY STREET LOT LINE (MIN/MAX): 0' / 20' ALONG IVY ROAD
   - SIDE STREET LOT LINE: 0' / 20' ALONG COPELEY ROAD
   - SIDE LOT LINE (MIN): 0'
   - REAR LOT LINE (MIN): 0'
2. MAXIMUM BUILDING HEIGHT: 10 STORIES/142 FEET

UTILITY LEGEND

- WATER VALVE
- SANITARY SEWER MANHOLE (MHS)
- STORM DRAINAGE MANHOLE
- UNDERGROUND WATER UTILITY
- SANITARY SEWER PIPE
- UNDERGROUND GAS LINE
- UNDERGROUND POWER UTILITY

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WDG PROJECT NO: PWA2022005

LAYOUT & UTILITIES PLAN

SCALE: 1" = 20'

C-003

INTERSECTION STRIPING NOTES:

ALL CROSSWALK AND BIKE LANE STRIPING AT INTERSECTION TO BE COORDINATED WITH CITY TRANSPORTATION ENGINEER AND ADA COORDINATOR; IF PROPOSED STRIPING IS NOT COORDINATED AND APPROVED BY TIME OF BUILDING PERMIT, DEVELOPER TO CONTRIBUTE A MAXIMUM OF $20,000 CASH PROFFER SPECIFICALLY FOR ROAD STRIPING TO SATISFY OBLIGATION.

SCALE 1"=20'
0 20' 40'

TMP 7-11
2119 IVY LLC
INST. 2009-1428
DB. 195, PG. 440 (PLAT)

ADJACENT BUILDING

EP - ADJACENT

CSX RAILROAD

R10'
BUILDING OVERHANG AT LEVEL 3 ABOVE
FLUSH CURB
R10'
16'
TRASH SERVICE
PROPOSED WATER SERVICE
12'
WATER METER VAULT
WATER SERVICE TEE
ST1
CAR SHARE 1
CAR SHARE 2
(9)
(7)
(8)
(23)
(3)
(4)
HC
HCV
RESIDENT PARKING GATE
55 SPACES
120 BIKE SPACES
65 BIKE SPACES
DN 9%
9%
RETAINING WALL
BRIDGE
20 SHORT TERM BIKE PARKING
SANITARY SEWER SERVICE
GARAGE DOOR
24'
BUILDING OVERHANG AT LEVEL 3 ABOVE
17 INTERNAL PRIVATE SCOOTER SPACES
RETAINING WALL
11.65'
5'
R10'
FLUSH CURB
R10'
GRASS AREA (TYP.)
15 PUBLIC VEO SCOOTER SPACES
20 SHORT TERM BIKE PARKING
ELECTRICAL TRANSFORMERS. DECORATIVE WRAP TO BE PROVIDED AROUND OUTSIDE ELECTRIC EQUIPMENT, TRANSFORMERS AS PERMITTED BY UTILITY.

TIE IN SANITARY SERVICE LATERAL INTO EXISTING MANHOLE
SAN
PROPOSED GREEN BICYCLE BOX ADDED TO EXIST. BICYCLE LANE ON IVY ROAD.
12.1'
TEE FOR FHA
US RTE. 250 BUSINESS ~ IVY RD.
(VAR. WIDTH PUBLIC R/W)
ALDERMAN ROAD
COPELEY ROAD
EXISTING CROSSWALKS TO REMAIN
EXPANDED 8'-10' WIDE CROSSWALK. CROSSWALK CONNECTS TO UVA WIDENED WALKWAY ALONG IVY ROAD. COORDINATE WITH CITY TRANSPORTATION ENGINEERING AND ADA COORDINATOR.
PROPOSED GREEN BICYCLE BOX ADDED TO EXIST. BICYCLE LANE ON IVY ROAD.
UVA WALKWAY FROM THE EAST

(ROAD RIGHT OF WAY)
THE RECTOR & VISITORS OF THE UNIVERSITY OF VIRGINIA
DB. 983, PG. 741

TMP 7-20
UNIVERSITY OF VIRGINIA FOUNDATION
INST. 2018-1873
DB. 983, PG. 744 (PLAT)

THE RECTOR & VISITORS OF THE UNIVERSITY OF VIRGINIA
INST. 2021-4465

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AERIAL ROAD & BIKE LANE STRIPING EXHIBIT

SCALE: 1" = 20'

C-003.1

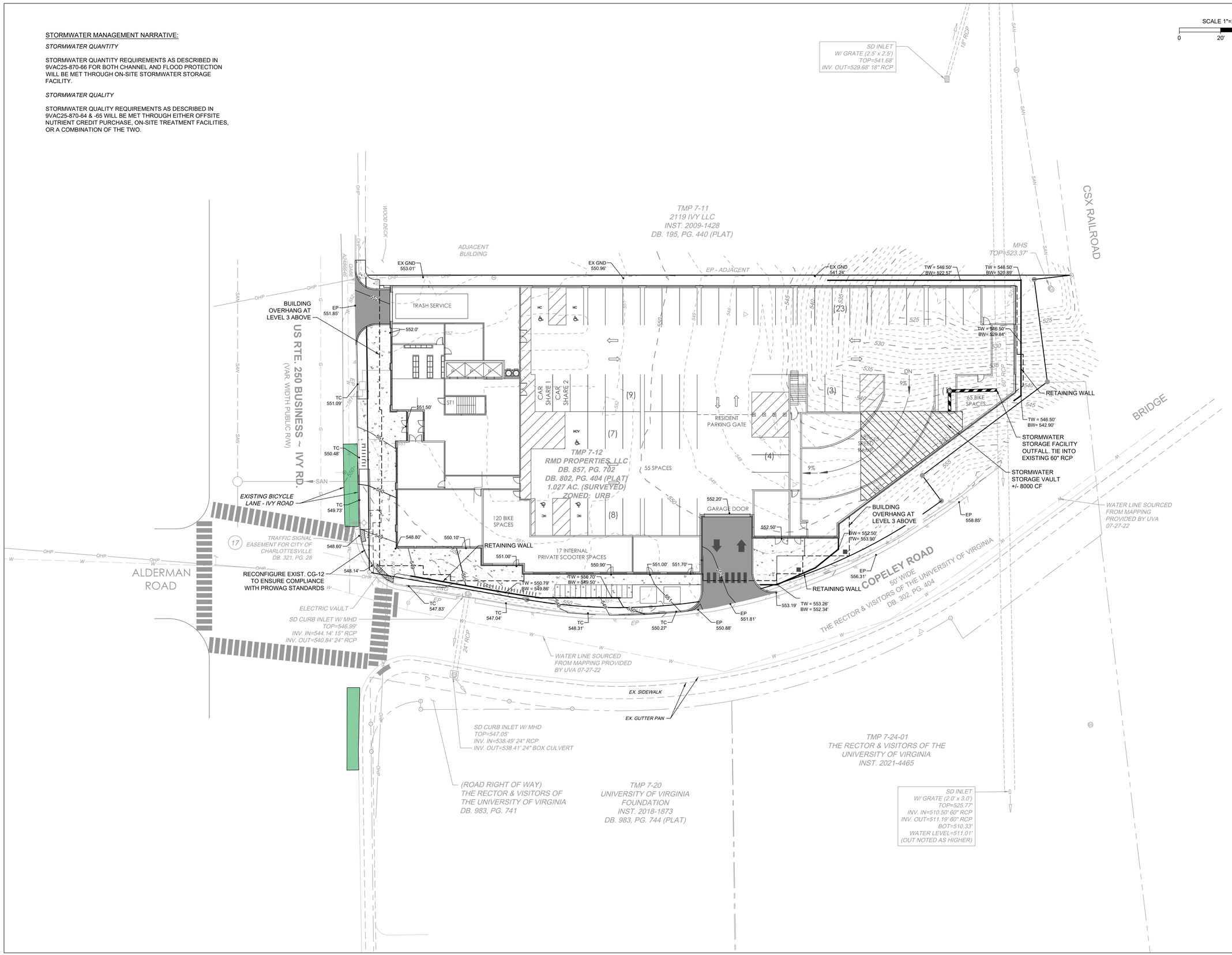
STORMWATER MANAGEMENT NARRATIVE:

STORMWATER QUANTITY

STORMWATER QUANTITY REQUIREMENTS AS DESCRIBED IN 9VAC25-870-66 FOR BOTH CHANNEL AND FLOOD PROTECTION WILL BE MET THROUGH ON-SITE STORMWATER STORAGE FACILITY.

STORMWATER QUALITY

STORMWATER QUALITY REQUIREMENTS AS DESCRIBED IN 9VAC25-870-64 & -65 WILL BE MET THROUGH EITHER OFFSITE NUTRIENT CREDIT PURCHASE, ON-SITE TREATMENT FACILITIES, OR A COMBINATION OF THE TWO.



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WDG PROJECT NO: PWA2022005

GRADING AND DRAINAGE PLAN

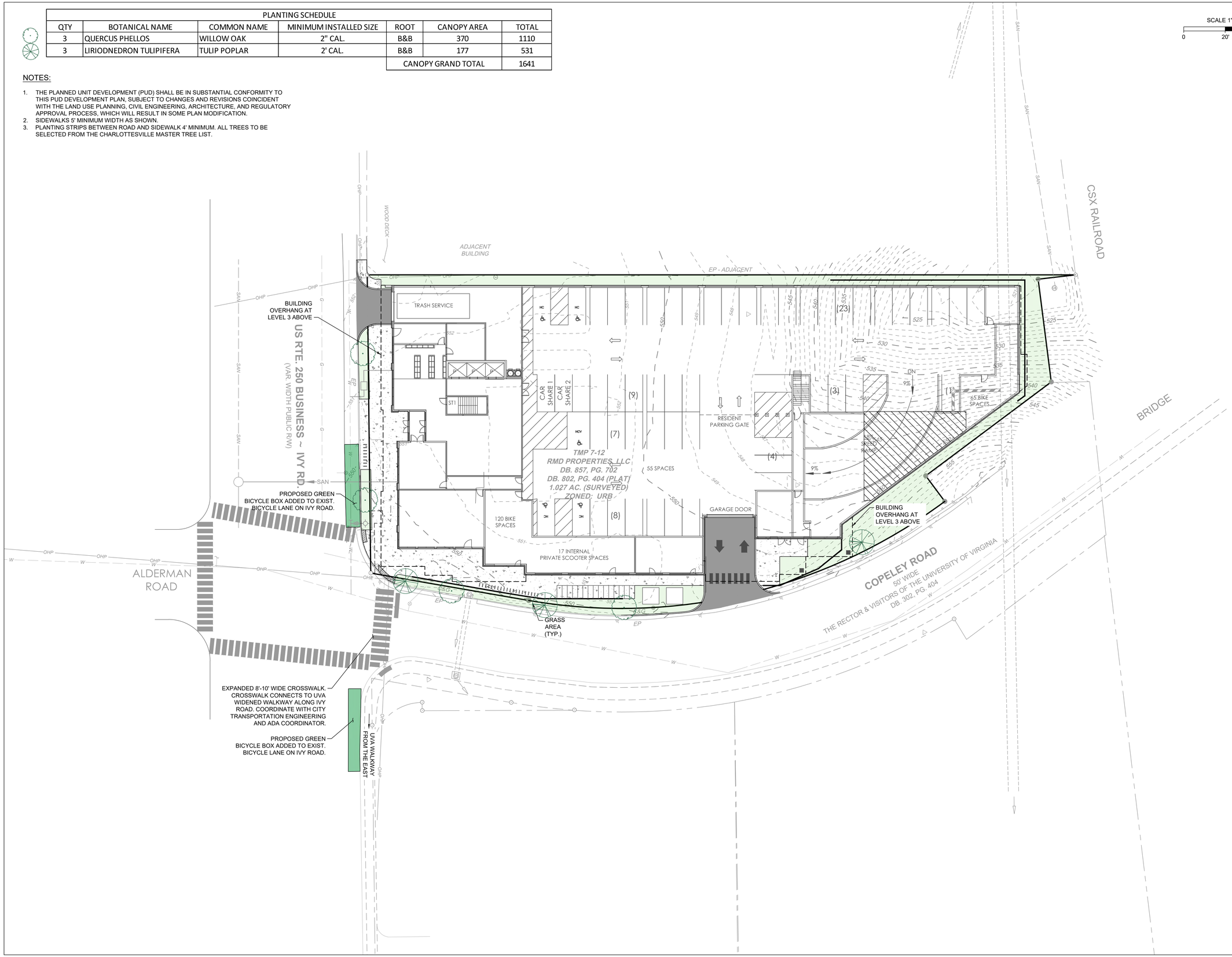
SCALE: 1" = 20'

C-004

PLANTING SCHEDULE						
QTY	BOTANICAL NAME	COMMON NAME	MINIMUM INSTALLED SIZE	ROOT	CANOPY AREA	TOTAL
3	QUERCUS PHELLOS	WILLOW OAK	2" CAL.	B&B	370	1110
3	LIRIODNEDRON TULIPIFERA	TULIP POPLAR	2' CAL.	B&B	177	531
				CANOPY GRAND TOTAL		1641

NOTES:

1. THE PLANNED UNIT DEVELOPMENT (PUD) SHALL BE IN SUBSTANTIAL CONFORMITY TO THIS PUD DEVELOPMENT PLAN, SUBJECT TO CHANGES AND REVISIONS COINCIDENT WITH THE LAND USE PLANNING, CIVIL ENGINEERING, ARCHITECTURE, AND REGULATORY APPROVAL PROCESS, WHICH WILL RESULT IN SOME PLAN MODIFICATION.
2. SIDEWALKS 5' MINIMUM WIDTH AS SHOWN.
3. PLANTING STRIPS BETWEEN ROAD AND SIDEWALK 4' MINIMUM. ALL TREES TO BE SELECTED FROM THE CHARLOTTESVILLE MASTER TREE LIST.



WDG ARCHITECTURE, PLLC
1025 CONNECTICUT AVENUE NW
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WASHINGTON DC 20036
TEL 202 857 8300
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2117 IVY ROAD
CHARLOTTESVILLE, VA 22903

OWNER
RMD PROPERTIES
211 E. HIGH STREET
CHARLOTTESVILLE, VA 22902
TEL. 217.474.5904

PUD SUBMISSION	05/15/23
PUD RESUBMISSION	08/11/23
PUD RESUBMISSION	10/06/23

PROFESSIONAL SEAL

© 2023
WDG PROJECT NO: PWA2022005

LANDSCAPE PLAN

SCALE: 1" = 20'

C-005

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To: Dannan O'Connell, AICP
Senior Planner
City of Charlottesville
610 E. Market Street
Charlottesville, VA 22902

From: Thomas Ruff, PE, PTOE, AICP

RE: 2117 Ivy Road
Travel Demand Management Plan (TDMP)

Date: October 6, 2023

Copy: Stephen Bus (Up Campus for RMD Properties, LLC as Applicant)
Clint Shifflett (Timmons Group)
Valerie Long (Williams Mullen)

Introduction

RMD Properties, LLC is currently proposing a project to redevelop a parcel of land located 2117 Ivy Road near the University of Virginia. The project site occupies the parcel located at the northwest corner of the intersection of Copeley Road and Ivy Road. Today, the site is occupied by the land use Bank/Financial Institution. The site is currently zoned Mixed Use within a designated Urban Corridor.

The proposed development includes a mixed-use development with mid-rise student housing, structured parking, a café, and a small-scale retail use (generally consistent with CX-8 under the draft City ordinance changes). All resident parking for the mid-rise student housing is fully enclosed and accessed mid-block on Copeley Road. Trash service occurs at Ivy Road.

The following is a detailed breakdown of the proposed project:

- 327,051 Total Gross Floor Area (GFA)
- 242 Residential Units with up to 634 Bedrooms
- On-Site Parking
    - 162 regular parking spaces (222 effective parking spaces)
        - 2 resident car share spaces equivalent to 60 regular spaces
    - 264 long-term secure bicycle spaces in locked and monitored rooms
    - 28 short-term (outdoor) bicycle spaces
    - 32 scooter spaces
- 1,757 Square Feet (SF) of commercial space

Figure 1 shows the location of the proposed development and the surrounding roadway network (all figures can be found at the end of the of this memo).

Travel Demand Management Plan Overview

A Travel Demand Management Plan (TDMP) is a strategic approach to reducing traffic congestion, promoting sustainable transportation options, and improving overall transportation efficiency within a specific area or region. The primary purpose of a TDMP is to encourage a shift in travel behavior away from single-occupancy vehicles towards more sustainable modes of transportation, such as public transit, carpooling, biking, and walking. This helps to alleviate traffic congestion, reduce air pollution, conserve energy, and create more livable and accessible communities.

The City of Charlottesville emphasizes the need for a balanced transportation system that contributes to neighborhood livability and offers a range of travel choices to and from its businesses and institutions. The goal of this TDMP is to support the city of Charlottesville in this endeavor. This TDMP identifies actions to help manage and minimize vehicle trips and parking generation by the development. This TDMP highlights alternative modes to single occupancy vehicle transportation and demonstrates how the proposed development encourages a multi-modal transportation system.

City of Charlottesville Transportation Goals

The City's Comprehensive Plan establishes a vision of providing a transportation network that offers choices in travel modes. The following transportation vision statement is included in the City of Charlottesville Comprehensive Plan, Adopted November 15, 2021:

> "Charlottesville will enhance the reliability, safety, efficiency, and equitable distribution of the transportation system, and continued integration with the regional transportation network. The City will expand transportation options for walking, bicycling, and transit, while efficiently managing and serving vehicular travel. A continuous, connected, and well-maintained network of sidewalks, bicycle facilities, and trails, as well as frequent, affordable, and expanded transit coverage, will support increased walking, bicycling, and public transit use, particularly in areas currently lacking access, prioritizing lower-wealth areas, areas near schools and parks, and development areas."

The following transportation goals are included in Chapter 6 (Transportation) of the Comprehensive Plan.

- Goal 1. Complete Streets: Create and maintain a connected network of safe, convenient, and pleasant accommodations for pedestrians, bicyclists, and transit riders, including people of all ages and abilities.

- Goal 2. Coordination with Land Use & Community Design: Improve quality of life and promote active living by reducing automobile use and congestion and supporting multimodal options for safe and convenient travel in conjunction with implementation of the Future Land Use Vision.

- Goal 3. Efficient Mobility and Access: Maintain a safe and efficient transportation system to provide mobility and access.

- Goal 4. Parking Supply and Management: Provide a balanced approach to parking that supports economic vitality, achieves urban form goals, minimizes environmental impacts, and accommodates pedestrians, bicycles, transit users, and disabled individuals.

- Goal 5. Transit System: Support a robust and convenient transit system that increases local and regional mobility and provides a reliable and efficient travel option for Charlottesville's residents, workers, and visitors.
- Goal 6. Regional Transportation: Continue to work with appropriate governing bodies to create a robust regional multimodal transportation network.

- Goal 7. Sustainable Transportation: Infrastructure Manage City-owned transportation assets and equipment in equitable, efficient, innovative, and environmentally responsible ways.

- Goal 8. Infrastructure Funding: Identify and seek new sources of sustainable funding mechanisms for the maintenance of existing multimodal infrastructure and facilities and future development of the transportation system.

Travel Demand Management Plan Goals

The purpose of this TDMP is to support the overall City of Charlottesville Transportation Goals as noted in the section above, which help encourage residents and visitors of the proposed development to use alternative modes of transportation to and from the site. This TDMP identifies actions and goals to help manage and minimize vehicle trips and parking generation by the development.

The identified transportation goals are attainable due to a number of factors working in favor of the development. With the location of this development – and its proximity to the University of Virginia, nearby bus/transit routes, bike lanes, shared bicycle/car stations, electric scooter stations, and various taxi/ride-sharing services – residents and visitors will have access to numerous alternative forms of transportation. These various modes and factors are detailed below.

1 Pedestrian Amenities

The City of Charlottesville, a Gold-Level Walk Friendly Community, currently has more than 175 miles of sidewalk, 20+ miles of multi-use and soft surface trails, and 825 marked crosswalks. There are pedestrian signals and crosswalks at a majority of the City's 74 signalized intersections and marked crosswalks at many other stop-controlled and mid-block locations. The City of Charlottesville and the University of Virginia have established an extensive network of sidewalks that seamlessly connect the project site with the surrounding area.

All signalized intersections near in proximity to the site have pedestrian crosswalks and amenities, as well as sidewalk infrastructure connecting all roadways adjacent to the development frontage and nearby properties. **Table 1** provides further information about the principal roadways surrounding the proposed development.

The project location is ideally situated within walking distance of numerous amenities. The University of Virginia is a 10-minute walk (0.5 miles) to the southeast along Ivy Road and University Avenue. Scott Stadium is accessible via a 17-minute walk (0.8 miles) to the south along Alderman Road. The new School of Data Science is 5-minute walk (0.25 miles) via a wide-pedestrian path along Ivy Road. John Paul Jones Arena can be reached within a 8-minute walk (0.4 miles) to the north along Copley Road. Adding to this accessibility, the Barracks Road Shopping Center, offering restaurants, grocery stores, and retail options, is an 18-minute walk (0.9 miles) to the north along Copley Road and Emmet Street. There are well-maintained sidewalks on all mentioned roads.

Excellent public transportation is also within walking distance. A total of 17 Charlottesville Area Transit (CAT) stations and 3 UVA Transit Service (UTS) stops are all positioned within a 20-minute walk from the development, and two stops are within a 5-minute walk. These bus routes significantly enhance citywide connectivity.

Figure 2 highlights the sidewalk network in the area and provides information about travel distances for 5, 10, 15, and 20-minute walks.

Figure 3 shows the area accessible by foot within a 0.5- and 1-mile walk.

The City is always striving to improve pedestrian and bicycle connectivity. The map shown on **Figure 4** displays priority projects from the Streets that Work Plan and Bicycle and Pedestrian Master Plan. These projects will be prioritized for implementation in the next 10 years. In addition to implementing these priority projects, development and redevelopment projects that include new streets must comply with design concepts outlined in the Streets that Work Plan and relevant Small Area Plans.

The 2117 Ivy Road project will coordinate with city staff during site plan review to incorporate sidewalk improvements as needed to ensure that the entire frontage of the development provides a consistent and ADA-compliant pedestrian access route through and around the property.

Table 1 – Nearby Roadway Fact Sheet

Roadway Typical Section	Functional Classification	Number of Lanes	Posted Speed (mph)	Pavement Width (ft)	Bus Stops	Sidewalk	Bicycle Accommodations
Ivy Road from Project Site to Emmet Street	Principal Arterial	4	35	62	UTS Blue Line – Emmet/Ivy Garage	Yes	Fully Separated Bike Lanes
Emmet Street from Ivy Road to Arlington Road	Principal Arterial	4	35	62	CAT Route 7 – Emmet St at Rothberry Rd	Yes	Proposed and Funded
Emmet Street from Ivy Road to Jefferson Park Avenue	Principal Arterial	2	25	40	Multiple CAT Route 7 Stops	Yes	Fully Separated Bike Lanes
Copeley Road from Ivy Road to Emmet Street	Major Collector	2	25	40	No	Yes	Proposed
Alderman Road from Ivy Road to Stadium Road	Minor Arterial	2	25	32	Free Trolley – Alderman at AFC	Yes	Mix of Fully Separated Bike Lanes and Sharrows

2 Bicycle Accommodations

Charlottesville boasts a well-developed and increasingly robust bicycle infrastructure that promotes sustainable transportation and enhances the overall livability of the city. The City and community have actively invested in creating a network of bike lanes, paths, and facilities that cater to cyclists of all levels.

The City is recognized as a Silver Level Bicycle Friendly Community by the League of American Bicyclists in part due to its network of bicycle facilities. The City has more than 30 miles of on-road bicycle facilities and more than 10 miles of paved trails. In addition, the city has a network of low-volume, low speed local streets that serve people bicycling.

Bike racks, dockless mobility scooters, and a bike-sharing program have also been implemented to encourage cycling for short trips and errands.

As part of the 2117 Ivy Road project on-site bicycle and scooter parking will be provided for residents, retail employees, retail patrons, and visitors. Bike storage and parking will be located inside the garage. There are approximately 264 long-term secure bicycle parking spaces in locked and monitored rooms, and 17 internal spaces for resident owned motorized scooters. In addition, as part of the long-term secure bicycle parking spaces, the bicycle storage rooms will feature a bicycle repair station.

Bike racks and scooter spaces for retail patrons and visitors will be installed on-street along the exterior sidewalk for parking 28 bikes, and 15 public motorized scooter spaces are provided along Copley Road.

Figure 5 shows existing and proposed bike lanes in the area, as well as accessible bicycle racks.

Figure 6 shows the area accessible by 5, 10, and 15-minute bike ride.

3 Micro-Mobility

In 2023, the City updated a permit program allowing electric scooters and bicycles to operate. The program allows multiple operators to apply for a permit with a cumulative cap of 700 devices allowed across all vendors. Following regulations and a permitting program for electric scooters and bikes finalized in 2019, Lime and Bird electric scooters no longer operate in Charlottesville.

The City of Charlottesville provides the following operating requirements within the "Dockless Mobility Permit Program Regulations," for operating an electric scooter within the right-of-way to ensure user and pedestrian safety:

IV. Operating Requirements

A. Equipment

i) No DMB may deploy any Dockless Mobility Device, or component of such a device, before the City Manager, or the City Manager's designee, has approved its type, form, equipment, and appearance. To obtain approval, the DMB must furnish design specifications, certifications of compliance with applicable design standards included in this section, and illustrative images of the device and device components that the DMB proposes to deploy. DMBs must allow City staff an opportunity to inspect and test-ride the same model that they propose to deploy.

ii) All Dockless Mobility Devices deployed pursuant to a permit must meet the applicable equipment requirements set forth in Article VI of Chapter 15 (Motor Vehicles and Traffic) of the Municipal Code of the City of Charlottesville.

iii) All bicycles must meet the safety standards outlined in Code of Federal Regulations Title 16, Chapter II, Subchapter C, Part 1512 – Requirements for Bicycles. In addition, all bicycles must meet the standards established in the Code of Virginia (§ 46.2-1015), including any standards for lighting during nighttime operation. City Code sections Sec. 15-237 et. seq.

iv) Any electric power-assisted bicycles deployed pursuant to a permit issued under this program must fit the definition of electric power-assisted bicycle in Virginia Code § 46.2-100. Electric power-assisted bicycles may not have a top motor-powered speed that exceeds 20 mph.

v) Any motorized skateboard or scooter deployed pursuant to a permit issued under this program must fit the definition of motorized skateboard or scooter in Virginia Code § 46.2-100. Motorized skateboards or scooters may not have a top motor-powered speed that exceeds 15 mph.

vi) All Dockless Mobility Devices must be equipped with an on-board GPS device capable of providing real-time location data in accordance with the specifications described in the "Data Sharing Requirements" section of this application.

vii) All Dockless Mobility Devices must be certified as safe to operate under any applicable standard by Underwriters Laboratories or an equivalent safety rating agency.

viii) All Dockless Mobility Devices must be equipped with technology that allows one by remote means to render the device inoperable if it has been reported as being damaged or defective.

The 2117 Ivy Road project proposes 15 public motorized scooter spaces (available for Dockless Mobility Business') along Copeley Road.

In addition, the city is serviced by two Transportation Network companies (TNCs) / Mobility Service Providers (MSP), Uber and Lyft. These companies rely on online enabled platforms to connect users and drivers. Their services provide further mobility alternatives.

4 Car Sharing

RideShare is a program housed within the Thomas Jefferson Planning District Commission (TJPDC), in cooperation with the Central Shenandoah Planning District Commission (CSPDC), working to reduce traffic congestion and increase mobility throughout Central Virginia and the Central Shenandoah Valley. Services include free carpool matching, vanpool coordination, and a Guaranteed Ride Home program to provide free rides home in an emergency. However, due to the location of the project and expectation of UVA students being the primary occupants, it is not anticipated that residents will make frequent use of RideShare

The project will also offer a test-pilot of a resident car-share program using Envoy (or other similar car-share program) specifically for residents only. Envoy is a community-based electric car sharing service and platform, providing electric vehicles as an exclusive amenity to apartments, hotels, and workplaces. Envoy electric vehicles will be conveniently located on property with dedicated parking spaces and EV charging stations and can be reserved through the Envoy car sharing app.

5 Public Transit

The proposed 2117 Ivy Road project location is well positioned within walking distance of several University of Virginia and City of Charlottesville transit stops. All transit systems are fare free and provide access to the greater Charlottesville area.

5.1 Charlottesville Area Transit (CAT)

Public transportation the greater Charlottesville area and the urban areas of Albemarle County is provided by Charlottesville Area Transit (CAT). CAT operates six days a week, Monday-Saturday. CAT offers 14 daytime and four (4) nighttime routes, serving an average of 7,500 riders daily during the workweek. The routes with the highest ridership are the Free Trolley, running from Downtown to UVA (33% of trips); Route 7, running from Downtown to Fashion Square Mall (25% of trips); and Route 5, running from Barracks Road to Wal-Mart (10% of trips).

The CAT Route 7 runs along Emmett Street with stops approximately 0.4 miles from the proposed 2117 Ivy Road site (8-minute walk, 5-minute bike ride). Route 7 runs from Emmett Street to UVA and into downtown Charlottesville.

Figure 7 shows CAT routes in the vicinity of the project site.

5.2 University Transit Service (UTS)

The University of Virginia operates a separate bus service – the University Transit Service (UTS). UTS was established in 1972 and provides safe and reliable transportation and charter services to all students, employees, and visitors of the University of Virginia. Currently, UTS runs nine (9) fixed routes and transports more than three million passengers annually. UTS routes circulate both on city streets and across University-maintained streets during the school year. There are also numerous stops that function as transfer points to CAT routes. When school is out for holidays and during summer break, a reduced level of service is offered.

The Silver Line of the UVA Campus Bus Route runs along Alderman/Copeley/Massie with a stop 0.3 miles (7-minute walk, 3-minute bike ride) from the proposed 2117 Ivy Road site on Massie Road.

The Gold Line also runs along Massie Road and serves the same nearby stop as the Gold Line.

The Blue Line of the UVA Health Commuter Bus Route has a stop 400 feet away from the proposed 2117 Ivy Road site, located at the Emmet/Ivy garage (3-minute walk, 2-minute bike ride).

Figure 8 and **Figure 9** show UTS routes in the vicinity of the project site.

6 Traffic Operations

The transportation impacts of the 2117 Ivy Road proposed redevelopment are summarized below.

6.1 2023 Existing and 2028 Background Conditions

- The signalized intersection of Ivy Road and Copeley Road operates at overall LOS C during both peaks. The eastbound, westbound, and northbound approaches all operate at LOS C or better during both peaks. The southbound approach operates at LOS D during both peaks. The northbound left queue extends beyond the provided storage by 4 feet. All other queues are contained within the existing storage.

- The signalized intersection of Ivy Road and Rothery Road/Parking Garage Access operates at LOS A during the AM peak and LOS B during the PM peak. All approaches operate at LOS B or better during both peaks. The southbound left queue extends beyond the provided storage by 100 feet during the PM peak. All other queues are contained within the existing storage.

- The signalized intersection of Ivy Road and Emmet Street operates at LOS C during both peaks. All approaches operate at LOS C during both peaks. Queues are contained within the existing storage provided.

- The signalized intersection of Massie Road and Copeley Road operates at LOS B during both peaks. All approaches operate at LOS B or better during both peaks. All queues are contained within the provided storage.

- Continues to operate under conditions similar to 2023 existing conditions.

6.2 2028 Build Conditions

- The signalized intersection of Ivy Road and Copeley Road continues to operate in similar conditions to 2028 background at an overall LOS C. There are no significant changes in queueing between background and future conditions and all queues are contained within their existing storage.

- The signalized intersections of Ivy Road at Rotherey Road/Parking Garage Access, Ivy Road at Emmet Street, and Massie Road at Copeley Road continue to operate in similar conditions to 2028 background. All queues are contained within their existing storage.

- At the proposed unsignalized site entrance, the eastbound approach operates at LOS B during both peaks with a maximum queue of 48 feet in the AM peak and 215 feet in the PM peak. The northbound approach operates at LOS A during both peaks with a maximum queue of 58 feet in the AM peak and 132 feet in the PM peak. The southbound approach operates at LOS A during both peaks with a maximum queue of 192 feet in the AM peak and 329 feet in the PM peak.

- Based on the results of the operational analysis, there are no vehicular and roadway network improvements required based on the additional development traffic volumes.

7 Parking Impacts

7.1 City of Charlottesville Zoning Ordinance

The current City of Charlottesville zoning ordinance sets the number of required spaces for each land use. It should be noted that the zoning ordinance is in the process of being replaced. In accordance with Section 34-984 of the Ordinance, shown below in Table 2, the number of parking spaces per unit for multi-family units is based upon the number of bedrooms.

Table 2: Multifamily Required Parking – City of Charlottesville Zoning Ordinance

Multifamily dwellings (See special provisions of section 34-353(d)(2))		
	Efficiency; 1 bedroom unit	1 space/unit
	2 bedroom unit	1 space/unit
	3 bedroom unit	2 spaces/unit
	4 bedroom unit	2 spaces/unit

The City of Charlottesville zoning ordinance would require total parking for the 242 multi-family apartment units to be 370 parking spaces to satisfy the zoning ordinance (98*1.0 + 16*1.0 + 16*2.0 + 112*2.0). The multifamily dwelling parking rates are based on generally based on suburban locations and are generally not as applicable to infill student housing projects within an urban area with transit, bicycle, and pedestrian infrastructure. City Code also provides other more "university oriented" parking ratios such as a boarding house, which more closely factors in the users and proximity to campus.

Table 3: Boarding House Required Parking – City of Charlottesville Zoning Ordinance

Rooming house, boarding house, bed and breakfast		0.3 space/per bedroom

If the development is classified as a boarding house, per the City of Charlottesville zoning ordinance, a total of 188 parking spaces will be required (626 * 0.3). It should be noted that the ratio for boarding houses is similar to the ITE parking generation for a university land use, therefore, it was considered appropriate.

Parking Reductions

Section 34-985(b) of the City Ordinance allows for a reduction in required parking at a rate of one space for every five bicycle lockers provided on site. The development provides 264 locked bicycle spaces which potentially reduces the required parking spaces by 58.

7.2 Charlottesville Zoning Rewrite

As of September 1, 2023, the City of Charlottesville is currently working on a complete rewrite of the City's Zoning Code to ensure growth takes place in a coordinated, equitable manner consistent with the citywide plan's vision. The new code will vastly change Charlottesville's parking requirements. The latest draft of the Zoning Ordinance was consolidated August 14, 2023. Under this version, off-street parking is not required. However, any project with over 50,000 square feet of gross floor area must submit a Traffic Demand Management Plan (TDMP) to be approved by the Administrator. Section 4.5.4.C of the draft Zoning Code details the TDMP requirements, all of which are met by this plan. Moreover, the section highlights many TDM strategies including, but not limited to, the following:

i. New or enhanced infrastructure to improve pedestrian and bicyclist safety and comfort.

ii. Walking, cycling, ridesharing, and transit promotion and education.

iii. Parking cash-out programs or unbundling parking/market rate pricing.

iv. Shared parking arrangements.

v. Enhanced bicycle parking and services (above the minimum requirement).

vi. Support for car-share and bike-share services and facilities.

vii. Carpooling or van-pooling programs or benefits.

viii. Free or subsidized commuter transit passes, transit-to-work shuttles, or enhanced transit facilities (such as bus shelters).

ix. Promotion of "live near your work" programs.

The proposed 2117 Ivy Road Development incorporates many of these strategies and will seamlessly align with the City's vision for the region and long-term green, sustainable goals.

7.3 ITE Parking Generation & Prior Tier 1 University Off-Campus Parking Examples

The Institute of Transportation Engineers (ITE) Parking Generation Manual, 5th Edition, contains data on parking demands for specific uses based on studies nationwide, including for multi-family dwelling units (land use code 222). The average rate for multi-family dwelling units is dependent upon both the number of stories and the number of bedrooms per unit. The proposed building is a 10-story multi-family building and is on the threshold between mid- and high-rise. Given its proximity to campus, necessity retail, and student uses, the Urban High-Rise code is more appropriate. The parking spaces per dwelling unit is listed in Table 4 below.

Table 4: Required Parking – ITE Parking Generation

LAND USE	AMOUNT	UNITS	Parking Rate	Parking Spaces
Multi-Family Housing (High-Rise)	242	Dwelling Units	1.25(DU) - 105.47	197

SOURCE: Institute of Transpirtation Engineer' *Parking Generation Manual 5th Edition (2019)*

Using the ITE high-rise code parking demand per bedroom per unit, the 242 multifamily units at the 2117 Ivy Road development will require 197 parking spaces. It should be noted that the ITE multifamily parking requirement is not fully applicable for student housing since each person is not taking trips to/from a typical 9-to-5 job similar to a working-age adult in a suburban location.

The proposed 162 actual spaces plus the two resident car share spaces (2 x 30 residents served by each) results in 222 effective spaces, which exceeds the ITE parking recommendations. In addition, the array of bicycle, pedestrian, public transit, and micro-mobility (scooter) options on-site greatly reduce the demand for vehicles and excessive on-site parking.

Figures 10 and 11 summarize parking for similarly located off-campus student housing projects within blocks of Tier 1 large state schools. These figures indicate parking ratios (the rate of parking spaces to residents) at places like U of Maryland of 27%, with some parking rations in the range of 14-18%. These similar conditions suggest that the Ivy Road Development's proposed actual parking spaces to beds ratio of 26% (162 spaces / 634 beds) and the effective parking ratio of 35% (222 spaces / 634 beds) will be sufficient to meet the demand for parking.

Lastly, the development will encourage the use of electric vehicles by featuring 1-2 EV charging stations in the retail portion of the parking garage.

8 Conclusion

The proposed 2117 Ivy Road mixed-use redevelopment will implement a variety of strategies described within the Transportation Demand Management Plan for the site to align with the City's vision for the region and long-term green, sustainable goals. The site location allows for easy access to the City of Charlottesville's robust pedestrian, bicycle, and public transportation network which greatly reduces the reliance on cars for transportation. The development also provides extensive bicycle parking, vehicular parking, access to the bicycle/pedestrian network, and amenities to link into the City's electric scooter program.

These factors will significantly limit the number of single-occupancy vehicle trips associated with the proposed residential development and help the City achieve its goal of creating a vibrant, economically viable, diverse, walkable, bike friendly destination to truly become "a great place to live for all of our citizens."

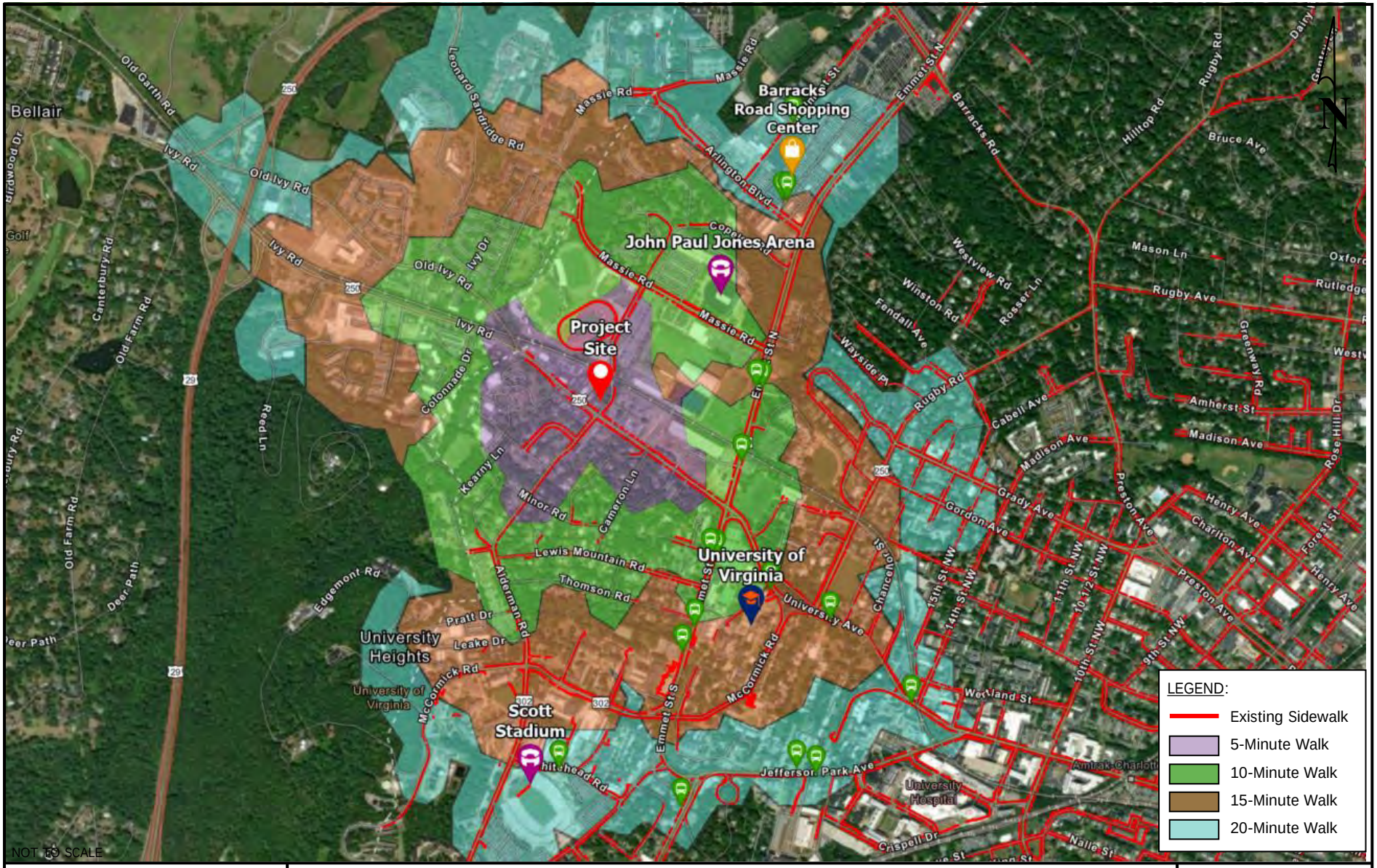
The expectation of UVA students being the primary occupants of the proposed residential development at 2117 Ivy Road is supported by the robust access to walking, biking, and transit opportunities that allow easy and direct access to UVA's main campus, the sports campus, and the graduate campus. There is sufficient public right-of-way and infrastructure in place along the surrounding roadway network on Ivy Road, Alderman Road, Copeley Road, Massie Road, and Emmet Street to move all modes of transportation to and from the site without negatively impacting the vehicular traffic operations. In addition, the noted infrastructure will ensure that students will not need to utilize cut-through roadways or access through private property to reach necessary destinations.



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Surrounding Roadway Network and Site Location
2117 Ivy Road
Charlottesville, Virginia

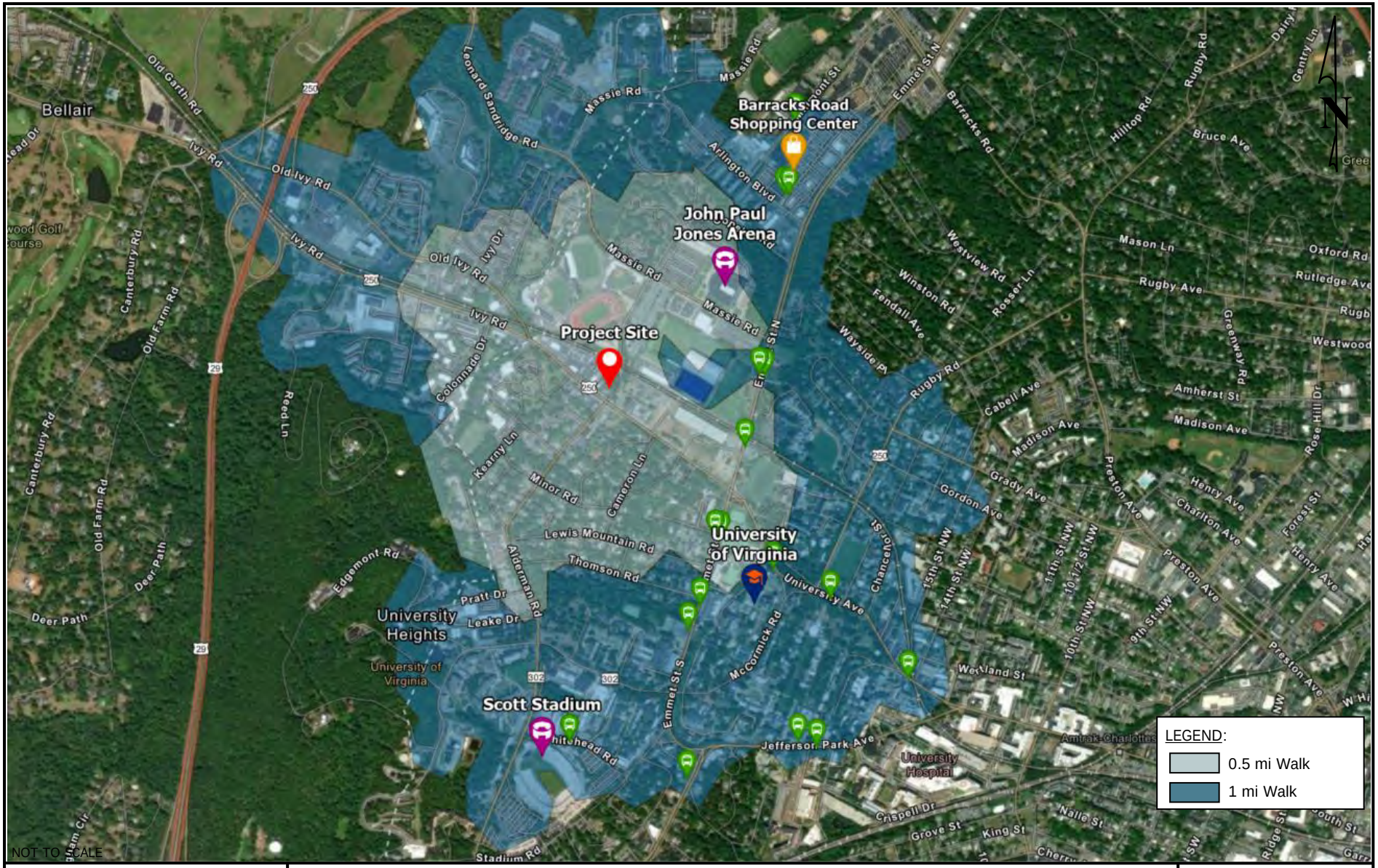
Figure
1



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Walk Times, Sidewalk Network, and Points of Interest
2117 Ivy Road
Charlottesville, Virginia

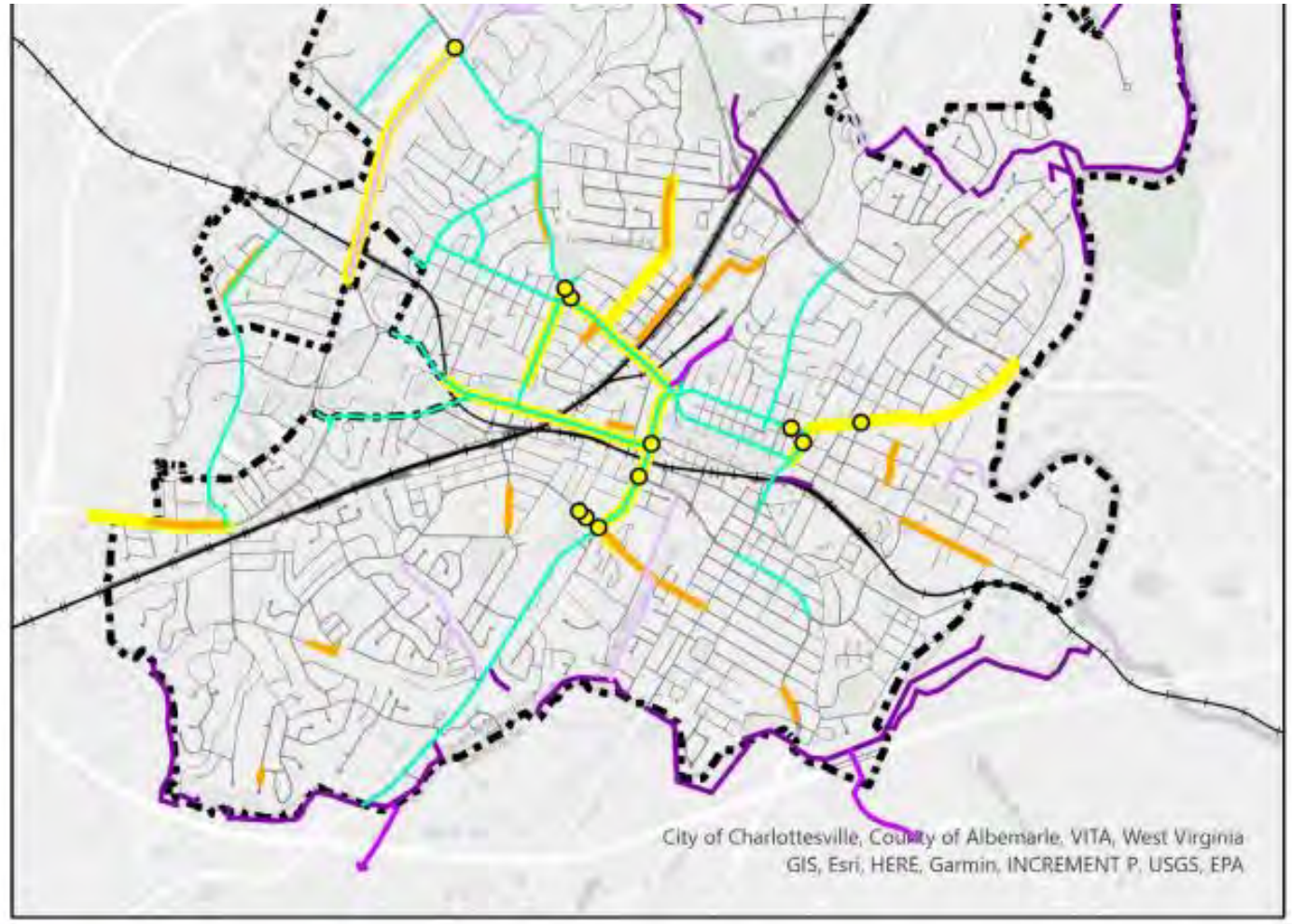
Figure
2



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Pedestrian Distances and Points of Interest
2117 Ivy Road
Charlottesville, Virginia

Figure
3

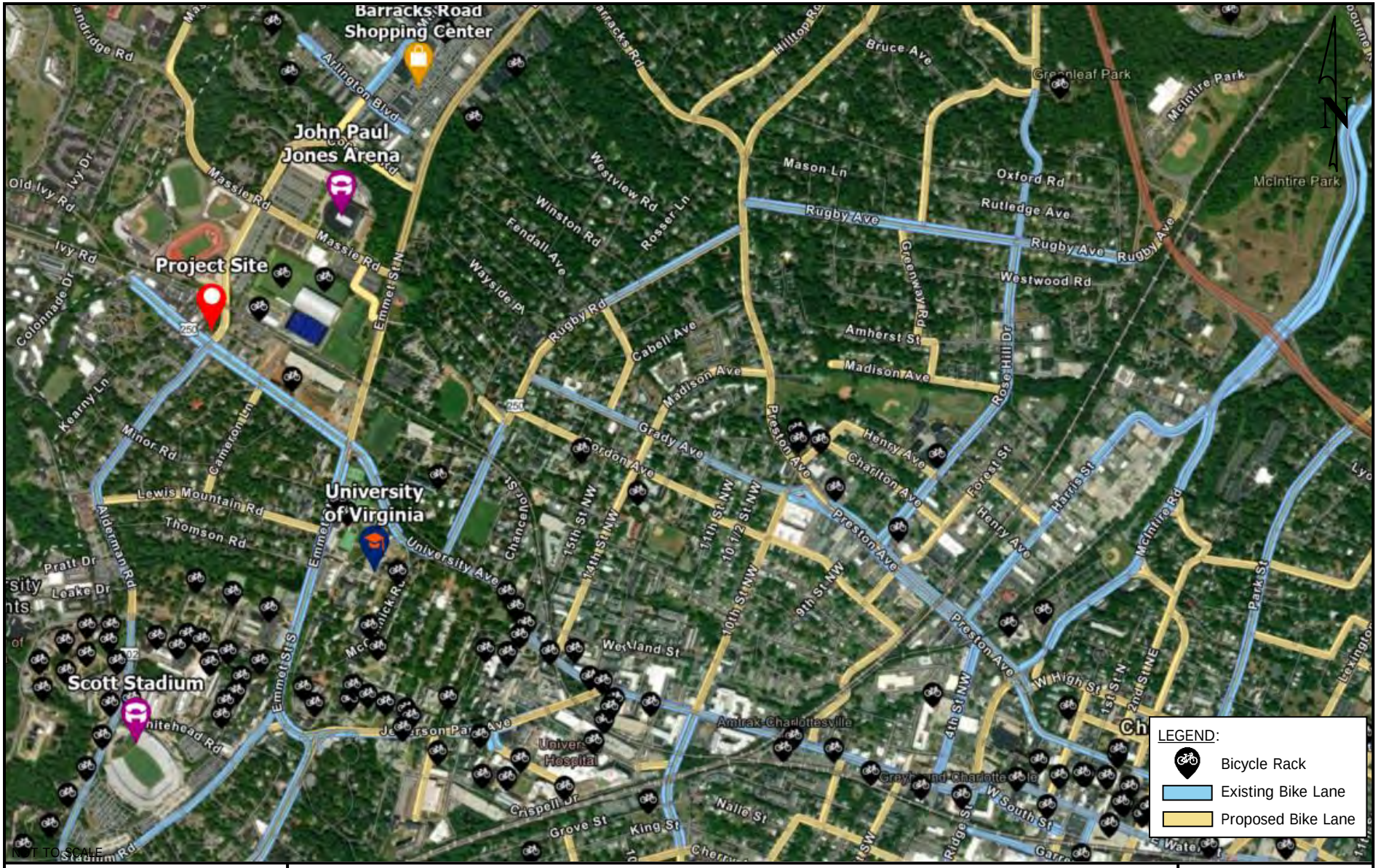


NOT TO SCALE

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Planned City Projects on Bicycle/Pedestrian Network
2117 Ivy Road
Charlottesville, Virginia

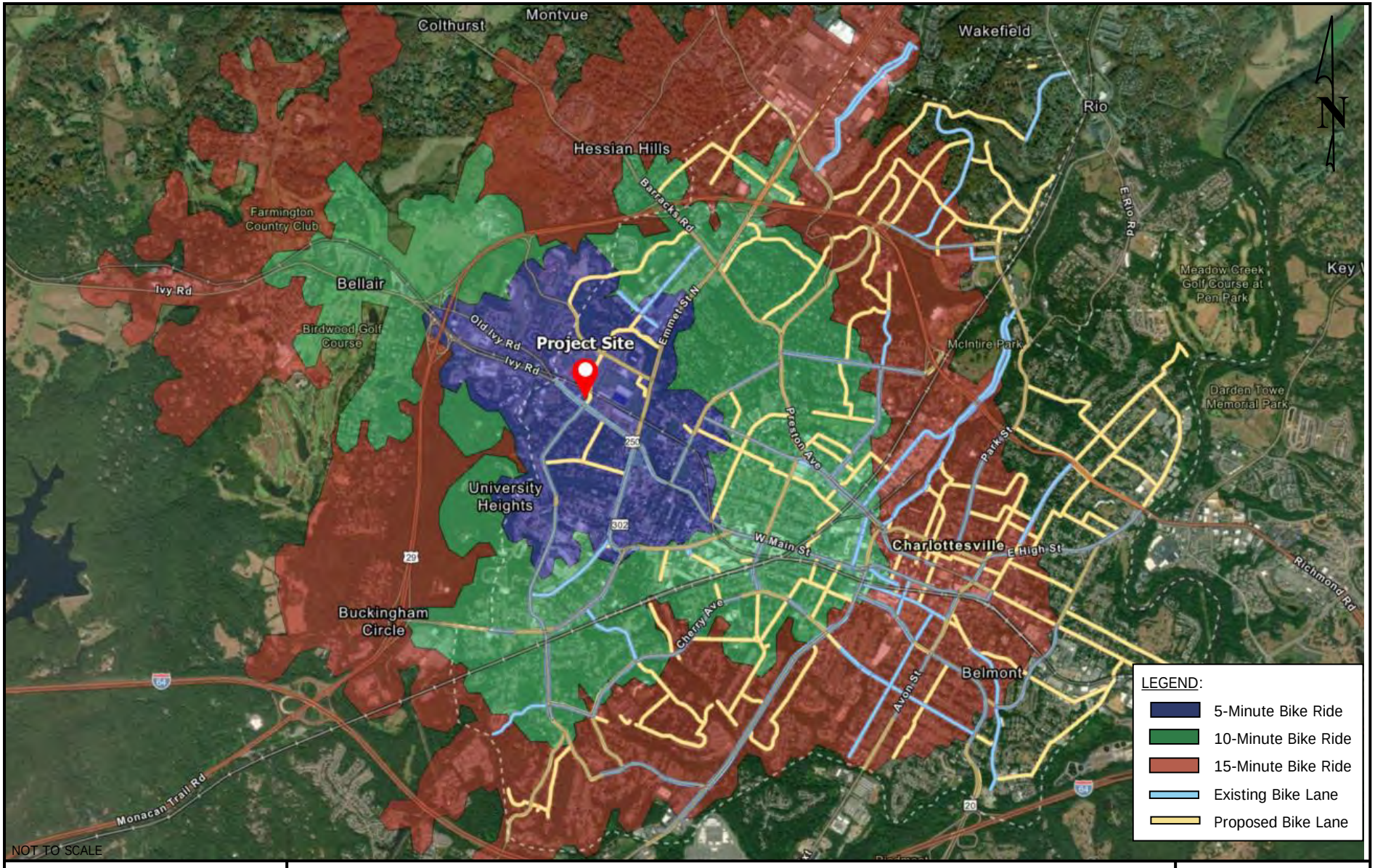
Figure
4



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Surrounding Bike Lane Network and Bicycle Racks
2117 Ivy Road
Charlottesville, Virginia

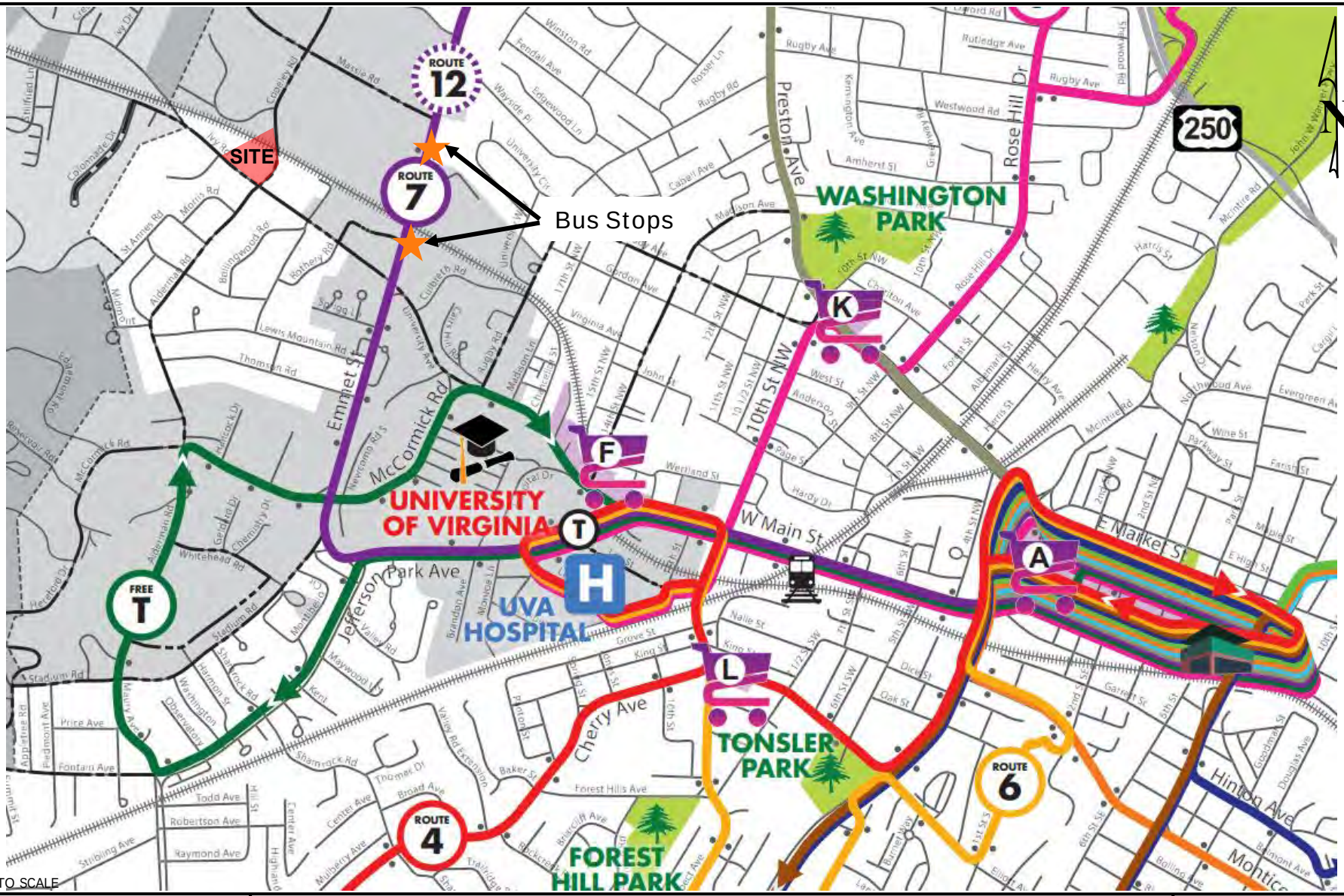
Figure
5



TIMMONS GROUP
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Bike Times and Sidewalk Network
2117 Ivy Road
Charlottesville, Virginia

Figure
6

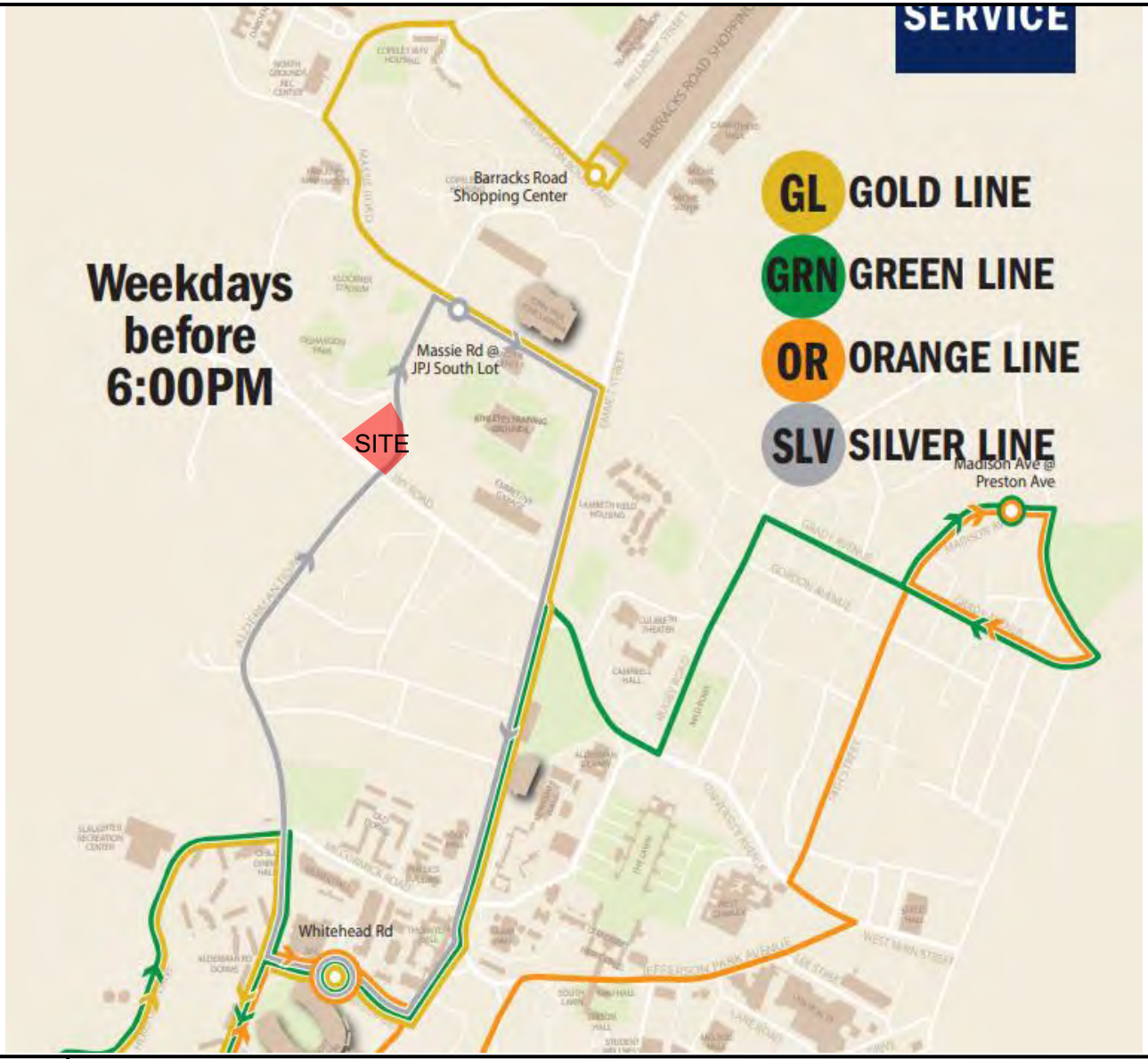


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Charlottesville Area Transit (CAT) Service Map
2117 Ivy Road
Charlottesville, Virginia

Figure
7



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UVA Transit Service Map
2117 Ivy Road
Charlottesville, Virginia

Figure
8



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UVA Transit Service Map
2117 Ivy Road
Charlottesville, Virginia

Figure
9

Campus	Photo, Rendering	Project	Year Built	Stories	Units	Beds	Retail SF	Property Size (SF)	Property Size (Acres)	Parking Spaces (Residential)	Parking Ratio % Spaces per Bed
Maryland		4500 College Avenue, College Park, MD ("Landmark")	2015	7	276	829	14,000	111,949	2.57	205	24.7%
									Retail Spaces:	49	
Virginia		1000 W Main St, Charlottesville, VA ("Lark", fka "Uncommon")	2016	6	172	355	5,945	55,650	1.28	120	33.8%
		As-Approved SUP:		*10*	*240*	*640*			Retail Spaces:	18	
Virginia		2117 Ivy Road, Charlottesville, VA	TBD	10	242	634	1,757	44,736	1.03	156	24.6%
									Retail Spaces:	8	
Minnesota		Fieldhouse Dinkytown (15th & 8th)	2023	12	274	882	2,100	51,000	1.17	200	22.7%
Purdue - West Lafayette		Campus Edge (134 Pierce Street)	2018	10	289	599	None	35,940	0.83	178	29.7%
Illinois		1008 S. 4th Street, Champaign, IL	2016	5	66	158		27,430	0.63	44	27.8%
Illinois		908 S. 1st Street, Champaign, IL	2016	5	68	96		19,096	0.44	25	26.0%
Kentucky		Hub Lexington (500 S Upper)	2019	6	154	492	19,981	54,132	1.24	152	30.9%

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Similar Project Parking Summary – Part 1
2117 Ivy Road
Charlottesville, Virginia

Figure
10

Purdue - West Lafayette		Hub on State Street (101 State Street)	2019	12	230	608	14,718	42,916	0.99	185	30.4%
Wisconsin		Hub Madison	2014	14	313	963	10,000	70,711	1.62	161	16.7%
Wisconsin		The James (Hub 2)	2017	14	367	850	10,000	36,575	0.84	152	17.9%
Michigan		Landmark (601 S Forest @ S University)	2012	12	200	606	4,000	42,000	0.96	85	14.0%
Michigan		Hub Ann Arbor (515 Huron St)	2018	12	114	304		25,871	0.59	85	28.0%
East Lansing		Hub East Lansing (918 E Grand River Rd)	2019	12	347	577	11,228	44,028	1.01	164	24.0%
Minnesota		Hub Minneapolis	2019	27	407	707	10,658	20,000	0.46	144	20.4%
									Other:	46 Leased to church	
U of Arizona		1020 N Tyndall Avenue, Tucson, AZ (LEVEL,LUNA)	2013	14	176	586	0	33,000	0.76	108	18.4%
U of Arizona		1031 N Park Avenue, Tucson, AZ (NEXT,SOL)	2014	13	165	389	10900	25,000	0.57	90	23.1%

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UVA Transit Service Map
2117 Ivy Road
Charlottesville, Virginia

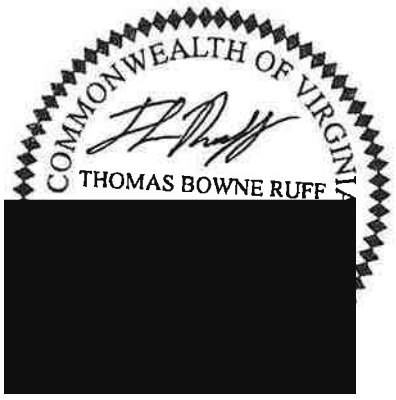
Figure
11

2117 IVY ROAD

CITY OF CHARLOTTESVILLE, VIRGINIA

Traffic Impact Analysis

May 2023



Prepared For:

RMD Properties, LLC

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1 EXECUTIVE SUMMARY

1.1 PROJECT SUMMARY

This report presents the findings of the traffic impact analysis prepared for the proposed 2117 Ivy Road off-campus student housing development in the City of Charlottesville, Virginia. The proposed development is located at the northwest corner of the intersection of Copeley Road and Ivy Road in the northwest corner as shown in Figure 1-1 (all figures are located at the end of their respective chapter).

The site is currently zoned Mixed Use within a designated Urban Corridor. The proposed development will consist of approximately 287 units with 632 residents of off-campus student housing apartments and 3,000 square feet of retail on the first floor. The applicant is submitting this traffic impact analysis in support of a Planned Unit Development (PUD).

Vehicular access to the site will be provided via one (1) full movement entrance on Copeley Road, located at the approximate location of the existing bank entrance. A conceptual plan is shown on Figure 1-2.

For the purposes of this analysis, the development was assumed to be complete and occupied by 2028, which represents 5 years from the existing conditions.

Utilizing ITE baseline projections, the proposed development will generate a total of 51 trips (24 in and 27 out) during the AM peak, 165 trips (79 in and 86 out) during the PM peak, and 1,788 average weekday daily trips.

1.2 STUDY PARAMETERS

The purpose of this analysis is to determine the impact of the proposed development on the surrounding roadway network. As agreed upon in the scoping meeting with the City of Charlottesville, the study limits include the following four (4) existing intersections for 2023 existing and 2028 background analyses:

1. Ivy Road and Copeley Road (Signalized);
2. Ivy Road and Rothery Road/Parking Garage Entrance (Signalized);
3. Ivy Road and Emmet Street (Signalized); and
4. Massie Road and Copeley Road (Signalized).

In addition, the site entrance will be analyzed in future conditions (2028).

In accordance with the scoping agreement, analyses were completed for the following scenarios:

1. 2023 Existing Traffic Conditions;
2. 2028 Background Conditions (without development of the site); and
3. 2028 Future Traffic Conditions (with development of the site).

The following steps were taken to determine the potential traffic impacts associated with this project:

1. Data Collection – Existing AM, Midday, and PM peak hour traffic counts were collected at the existing study intersections on January 26, 2023.

2. Traffic Growth – In order to be conservative and account for development outside the study area, a 0.2% annual growth rate was applied to the existing vehicle traffic counts at all study intersections for the 2023 and 2028 analysis scenarios.

3. Trip Generation – Traffic generated by the proposed development was estimated using the 11th edition of the Institute of Transportation Engineers' *Trip Generation Manual*.

4. Traffic Distributions – The distribution of trips generated by the proposed developed was based on the existing traffic volumes, the nature of the use, and local knowledge.

5. Site Traffic Projections – Future traffic volumes were determined by combining the 2023 and 2028 background traffic volumes with proposed new trips generated by the site to create the 2023 and 2028 total traffic volumes used in the analysis.

6. Traffic Capacity Analysis – Level of service calculations for existing, background, and future conditions were performed using SYNCHRO Version 11 with SimTraffic for signalized and unsignalized intersections.

7. Queuing Analysis – The 95th percentile queue lengths (Synchro) and maximum queues (SimTraffic) were reviewed at the intersections listed above.

1.3 PRINCIPAL FINDINGS

Based on the operational analyses the following is offered:

- Under 2023 existing conditions:
    - The signalized intersection of Ivy Road and Copeley Road operates at overall LOS C during both peaks. The eastbound, westbound, and northbound approaches all operate at LOS C or better during both peaks. The southbound approach operates at LOS D during both peaks. The northbound left queue extends beyond the provided storage by 4 feet. All other queues are contained within the existing storage.
    - The signalized intersection of Ivy Road and Rothery Road/Parking Garage Access operates at LOS A during the AM peak and LOS B during the PM peak. All approaches operate at LOS B or better during both peaks. The southbound left queue extends beyond the provided storage by 100 feet during the PM peak. All other queues are contained within the existing storage.
    - The signalized intersection of Ivy Road and Emmet Street operates at LOS C during both peaks. All approaches operate at LOS C during both peaks. Queues are contained within the existing storage provided.
    - The signalized intersection of Massie Road and Copeley Road operates at LOS B during both peaks. All approaches operate at LOS B or better during both peaks. All queues are contained within the provided storage.

- Under 2028 background conditions (without the proposed development):
    - Continues to operate under conditions similar to 2023 existing conditions.
    - The signalized intersection of Ivy Road and Copeley Road continues to operates at LOS C during both peaks. The northbound, eastbound, and westbound approaches continue to operate at LOS C or better and the southbound approach continues to operate at LOS D during both peaks. There are no significant changes in queueing from 2023 existing conditions.
    - The signalized intersection of Ivy Road and Rothery Road/Parking Garage Access continues to operate at LOS A in the AM peak and LOS B in the PM peak. All approaches continue to operate at LOS C or better during both peaks. There are no significant changes in queueing between existing and background conditions.
    - The signalized intersection of Ivy Road and Emmet Street continues to operate at LOS C during both peaks. All approaches continue to operate at LOS C or better during both peaks. There are no significant changes in queueing from 2023 existing conditions.
    - The signalized intersection of Massie Road and Copeley Road continues to operate at LOS B during both peaks. All approaches continue to operate at LOS B or better during both peaks with no significant changes in queueing from 2023 existing conditions.

- Under 2028 total future conditions (with the proposed development):

    - The signalized intersection of Ivy Road and Copeley Road continues to operate in similar conditions to 2028 background at an overall LOS C. There are no significant changes in queueing between background and future conditions and all queues are contained within their existing storage.

    - The signalized intersection of Ivy Road and Rotherey Road/Parking Garage Access continues to operate in similar conditions to 2028 background. All queues are contained within their existing storage with the exception of the southbound left in the PM peak which extends 147 feet beyond the provided storage.

    - The signalized intersection of Ivy Road and Emmet Street continues to operate in similar conditions to 2028 background. All queues are contained within their existing storage.

    - The signalized intersection of Massie Road and Copeley Road continues to operate in similar conditions to 2028 background with an overall LOS B during both peaks. All queues are contained within their existing storage.

    - At the proposed unsignalized site entrance, the eastbound approach operates at LOS B during both peaks with a maximum queue of 48 feet in the AM peak and 215 feet in the PM peak. The northbound approach operates at LOS A during both peaks with a maximum queue of 58 feet in the AM peak and 132 feet in the PM peak. The southbound approach operates at LOS A during both peaks with a maximum queue of 192 feet in the AM peak and 329 feet in the PM peak.

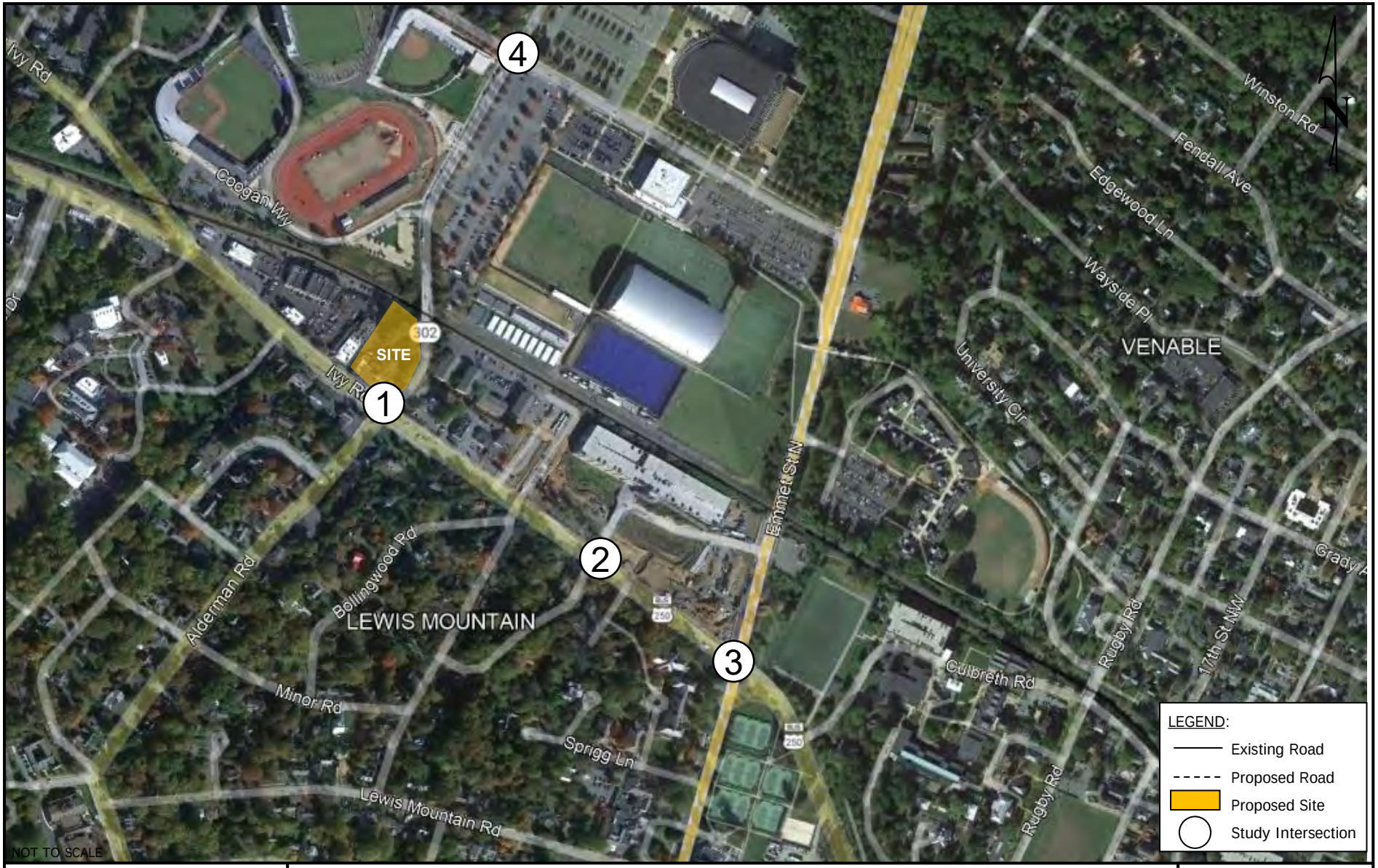
1.4 RECOMMENDATIONS

Based on the results of the operational analysis, there are no vehicular and roadway network improvements required based on the additional development traffic volumes. The site will increase the residential density in the area and add to the pedestrian, bicycle, and transit volumes. To address the additional pedestrian, bicycle, and transit volumes, the applicant plans to install sidewalks along the entire frontage of the property. All property frontage along Ivy Road and Copeley Road is included in this recommendation, with exception for the railroad overpass area along Copeley Road.

The proposed site will operate well with the single full access entrance on Copeley Road. There are no improvements recommended to Copeley Road. It is recommended that the site ensure that any entrance gate system installed will allow for multiple vehicles to have space outside of the roadway to allow for safe ingress into the site and reduce time within the roadway.

The proposed garage entrance will be designed as recessed from Copeley Road to allow for at least 1 vehicle of queuing outside of the right-of-way, sidewalk, and crosswalk.

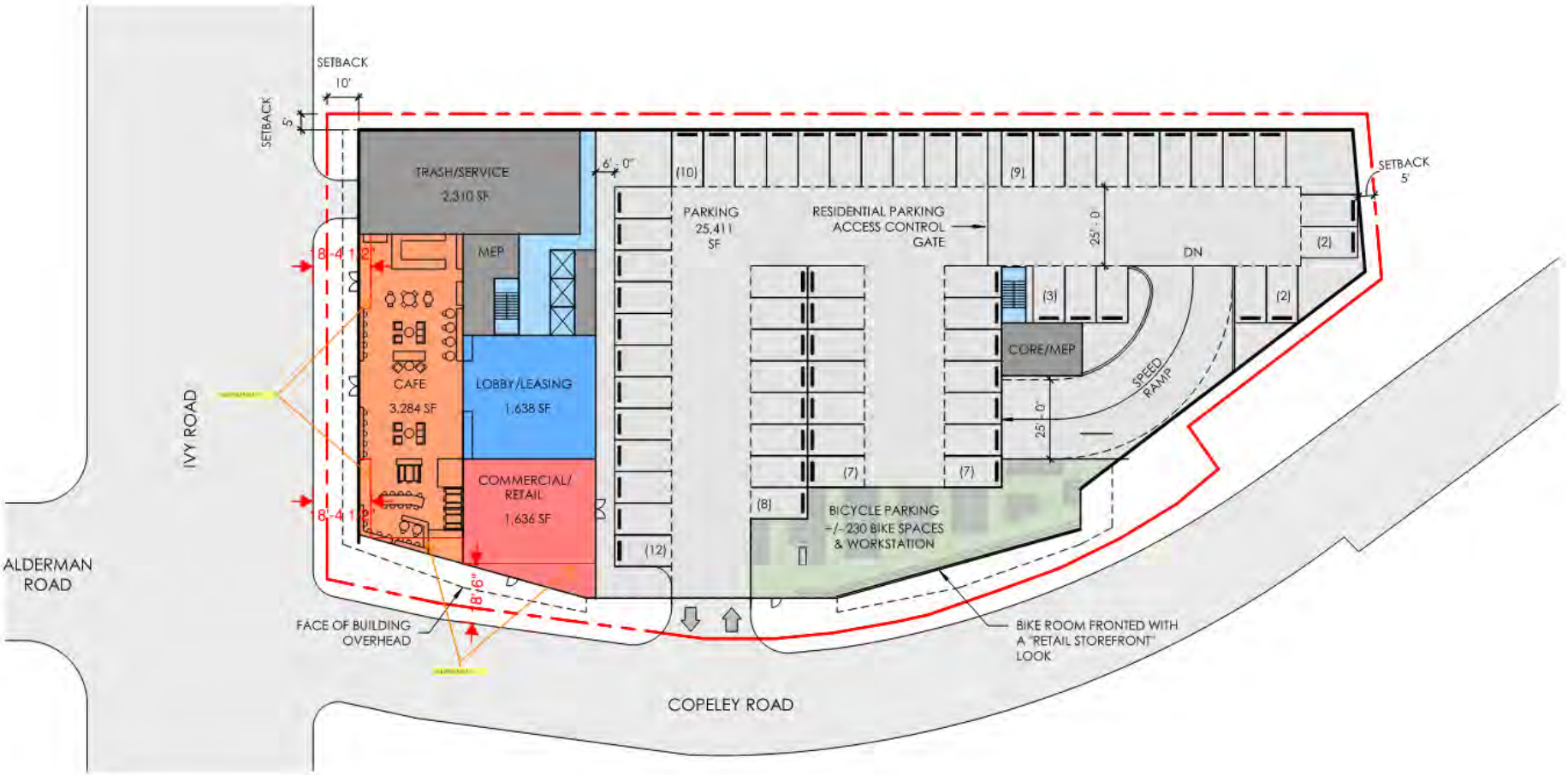
Additionally, it is recommended that the City evaluate enhanced pavement markings and signage for the existing crosswalks at the Ivy Road and Copeley Road intersection and the pavement markings for bike lanes along Ivy Road.



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Surrounding Roadway Network and Site Location
2117 Ivy Road
Charlottesville, Virginia

Figure
1-1



PARKING SPACES: 60

SCALE: 1" = 30'-0"

LEVEL 1 FLOOR PLAN T.2.1

WDG PWA2022005 | 12/08/22

RMD PROPERTIES | 2117 IVY ROAD | CHARLOTTESVILLE, VA 22903

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Conceptual Site Layout
2117 Ivy Road
Charlottesville, Virginia

Figure
1-2

2 BACKGROUND INFORMATION

This report presents the findings of the traffic impact analysis prepared for the proposed 2117 Ivy Road residential development in the City of Charlottesville, Virginia.

2.1 DESCRIPTION OF ON-SITE DEVELOPMENT

The proposed development is located at the intersection of Copeley Road and Ivy Road in the northwest corner. The site is currently zoned Mixed Use- Urban Corridor. The proposed development will consist of approximately 287 units with 632 residents of off-campus student housing apartments and 3,000 square feet of retail shopping. The applicant is submitting this traffic impact analysis in support of a Planned Unit Development (PUD).

For purposes of this analysis, the development was assumed to be complete and occupied by 2028.

2.2 STUDY LIMITS

As agreed upon in the scoping meeting, the study limits include the following four (4) existing intersections:

1. Ivy Road and Alderman Road/Copeley Road (Signalized);
2. Ivy Road and Rothery Road/Parking Garage Access (Signalized);
3. Ivy Road/University Avenue and Emmet Street (Signalized); and
4. Massie Road and Copeley Road (Signalized).

In addition, the proposed site entrance will be analyzed in future conditions (2028).

2.3 EXISTING ROADWAYS NETWORK

The 2023 existing lane use and traffic control at the study intersections is shown on Figure 2-1. The following roadways are found within the study area and there general information is listed below.

Ivy Road is a four-lane, undivided major arterial with a posted speed limit of 35 mph. According to 2019 VDOT AADT data, Ivy Road services 12,000 vehicles per day in the vicinity of the site entrance.

Copeley Road is a two-lane, undivided local road with a posted speed limit of 25 mph. There is no available AADT data for Copeley Road.

Massie Road is a two-lane, undivided local road with a posted speed limit of 25 mph. According to 2019 VDOT AADT data, Massie Road services 5,600 vehicles per day.

Emmet Street is a two-lane, undivided major collector road with a posted speed limit of 35 mph. According to 2019 VDOT AADT data, Emmet Street services 23,000 vehicles per day in the vicinity of the site.

Rothery Road is a two-lane, undivided local road with a posted speed limit of 25 mph. There is no available AADT data for Rothery Road.

Parking Garage Access is a two-lane, undivided driveway with a posted speed limit of 15 mph.

2.4 FUTURE IMPROVEMENTS

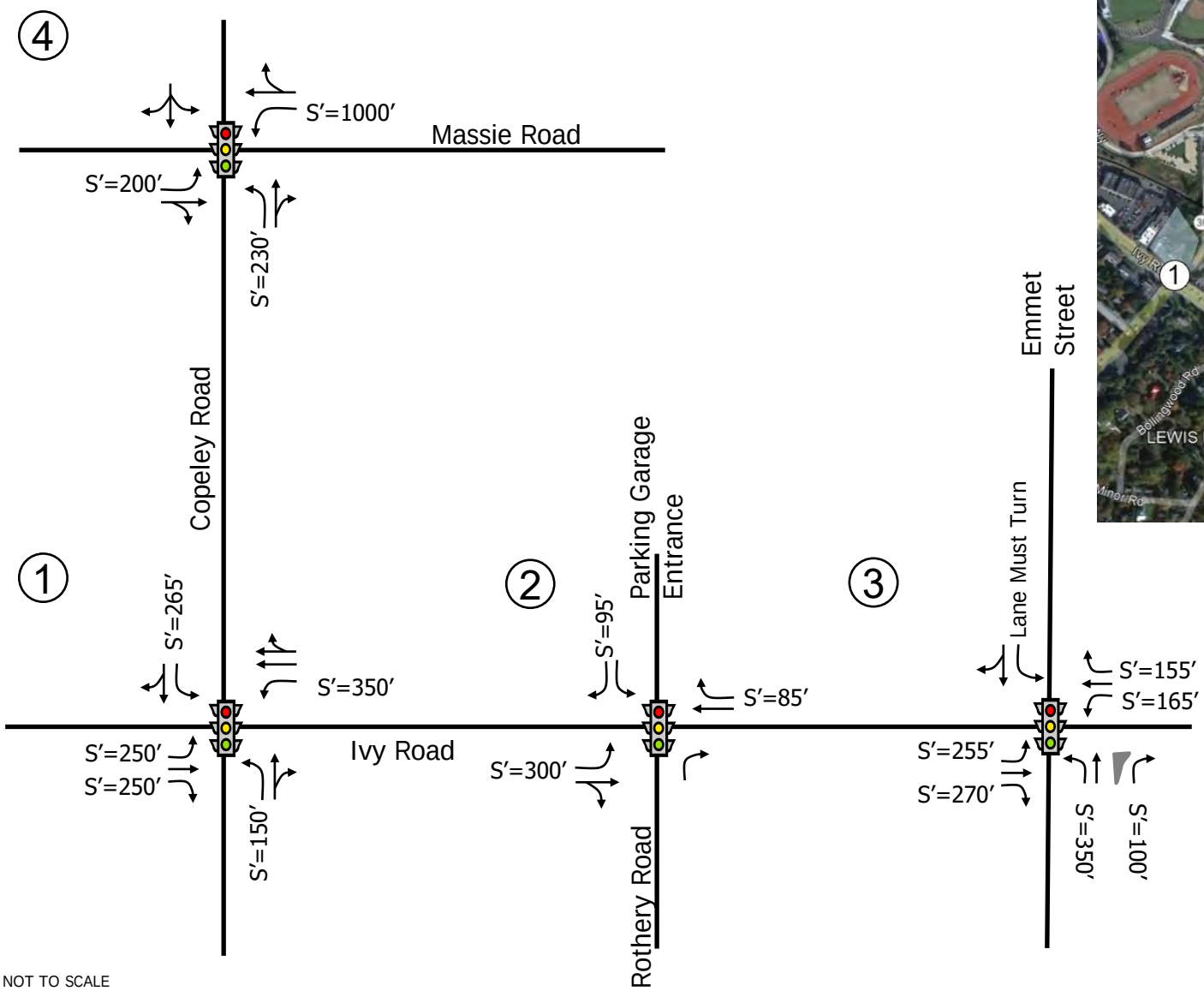
There are no future roadway improvements planned in the vicinity of the site.

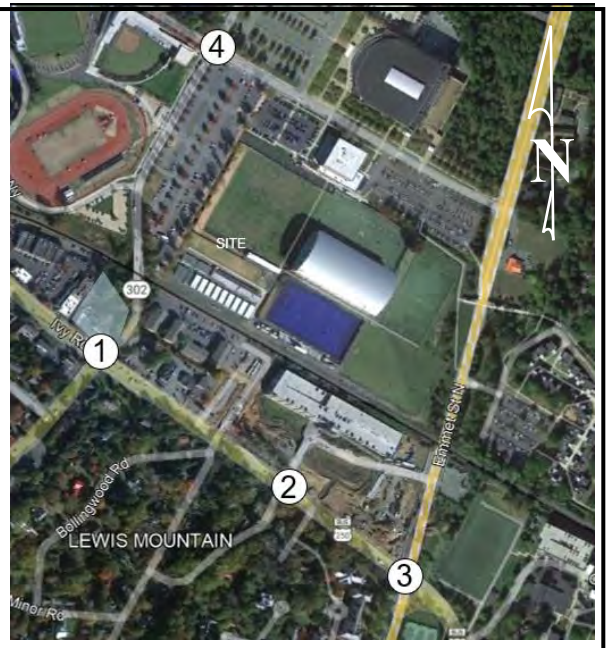
2.5 OTHER MODES OF TRANSPORTATION

Currently, there are sidewalks and bike lanes throughout the study area that connect the proposed site to the UVA campus and greater Charlottesville. The applicant is proposing to maintain the existing pedestrian facilities with the construction of the site and to add sidewalks along the frontage of the property on Ivy Road and Copeley Road. A map showing the proposed development and City trails and bike lanes is included on Figure 2-2.

The Charlottesville Area Transit (CAT) Route 7 runs along Emmett Street with stops approximately 0.6 miles from the proposed site. Route 7 runs from Emmett Street to UVA and into downtown Charlottesville. Additionally, the silver line of the UVA Campus Bus Route services the site with a stop 0.3 miles from the proposed site on Massie Road.

Transit routes in the vicinity of the site are shown for CAT and UVA Transit on Figures 2-3 and 2-4, respectively.





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LEGEND:

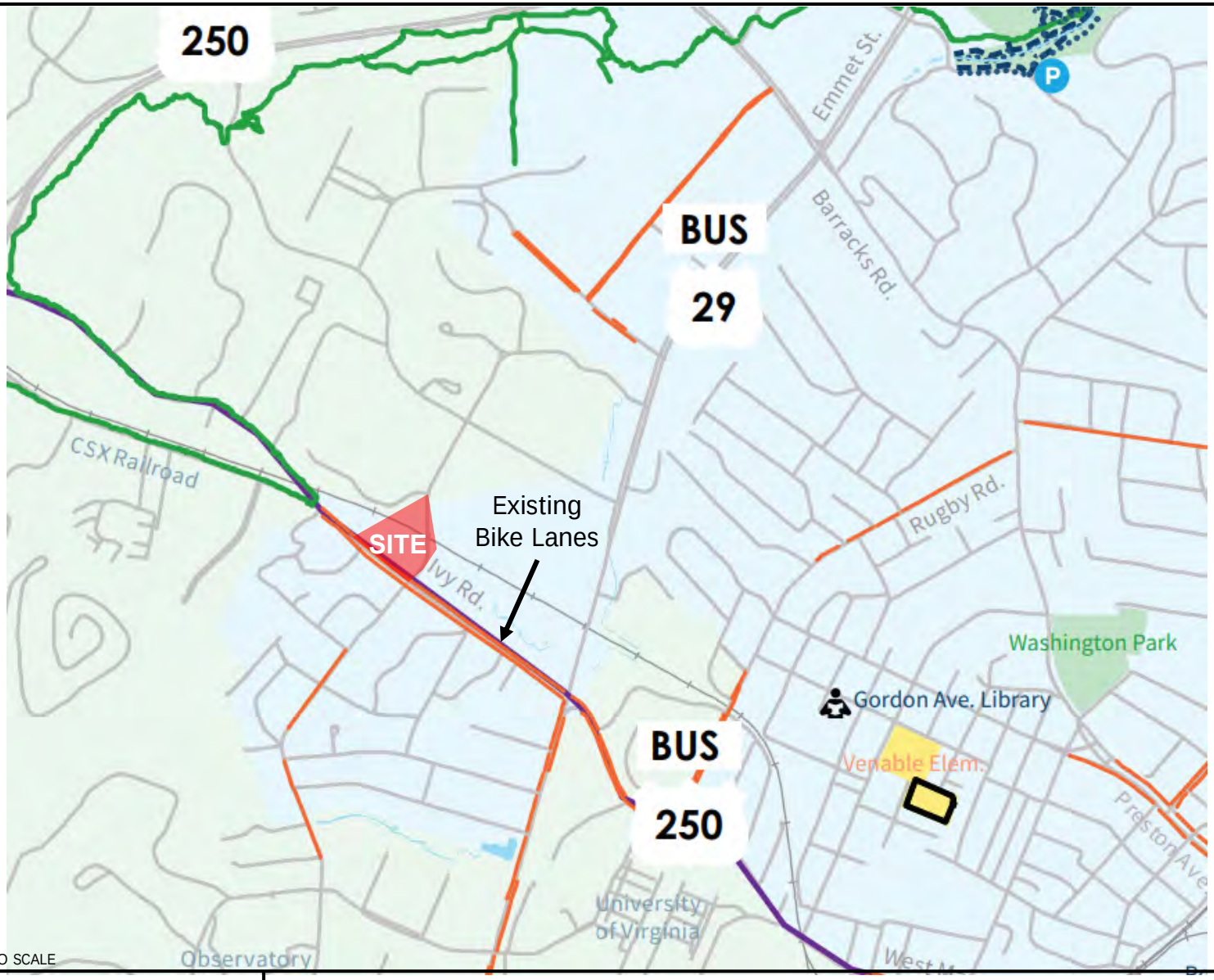
- Existing Road
- Proposed Road
- Signalized Intersection
- Stop Controlled Intersection
- Stop Sign Location
- Lane Configuration
- Channelization
- Yield

* Per TOSAM Guidelines, effective storage (S') equals the full width storage length plus ½ the taper length

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Existing Intersection Geometry
2117 Ivy Road
Charlottesville, Virginia

Figure
2-1

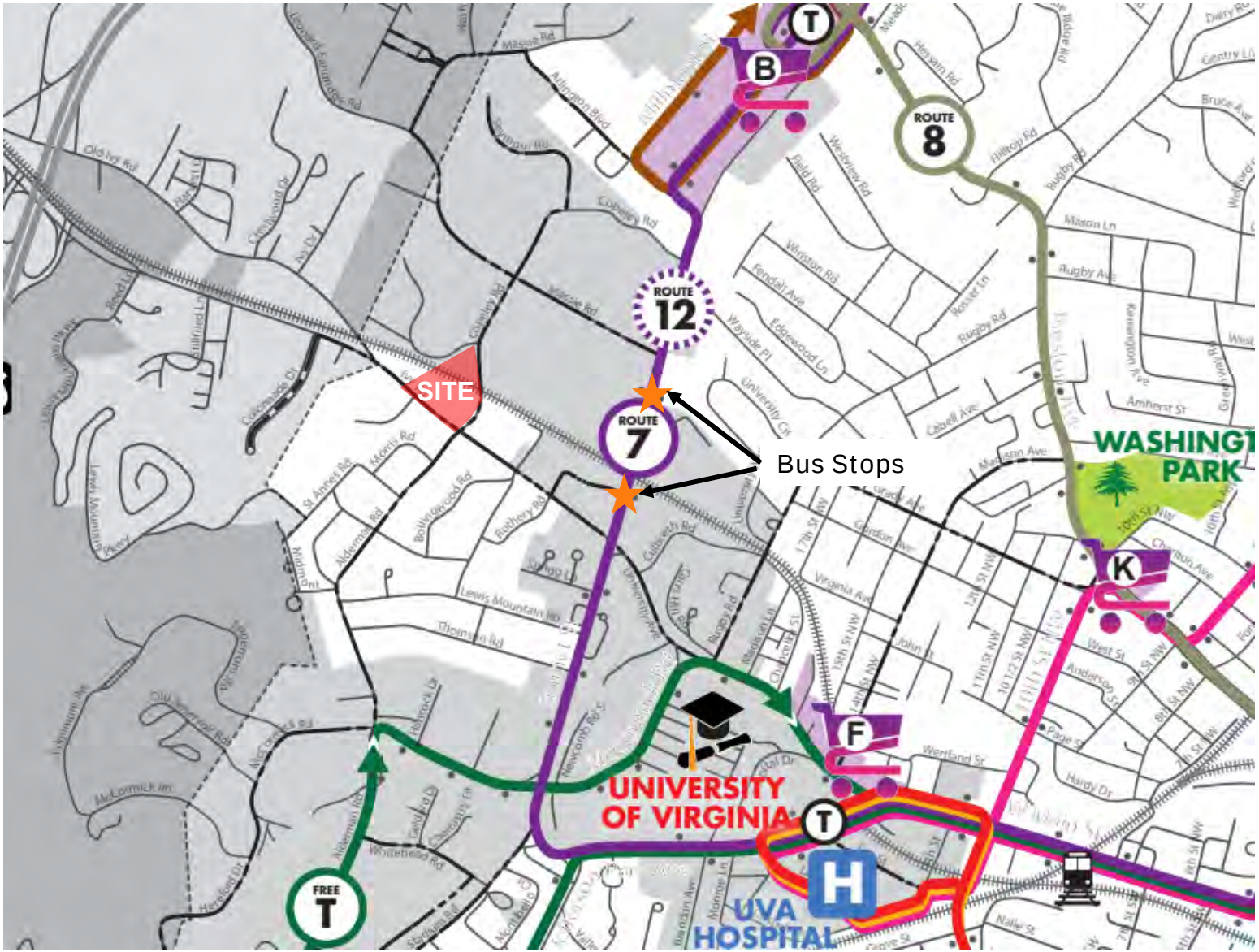


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Bike Lanes Near Site
2117 Ivy Road
Charlottesville, Virginia

Figure
2-2

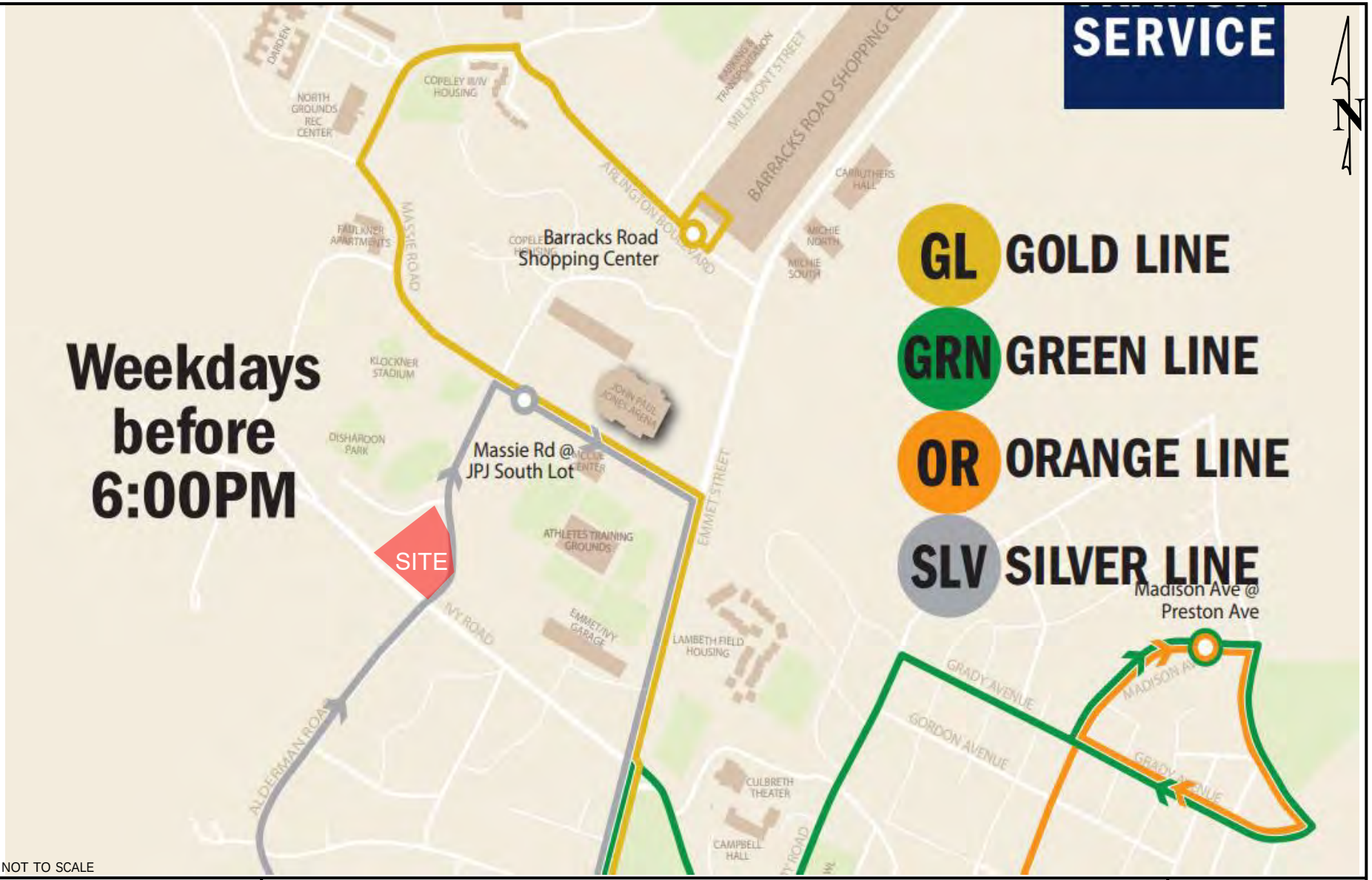


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Charlottesville Area Transit (CAT) Service Map
2117 Ivy Road
Charlottesville, Virginia

Figure
2-3



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UVA Transit Service Map
2117 Ivy Road
Charlottesville, Virginia

Figure
2-4

3 2023 EXISTING CONDITIONS

3.1 EXISTING TRAFFIC VOLUMES

Existing peak hour turning movement counts were conducted at each of the study intersections during the AM (7:00-9:00) and PM (4:00-6:00) peak hour timeframes. The counts were conducted on January 26, 2023 on a typical weekday when public schools and the University of Virginia were in session. The counts included heavy vehicles by movement, pedestrians, and bikes.

The common peak hours across all study intersections were found to be 7:45–8:45 AM, and 4:45–5:45 PM. The existing vehicle traffic counts are shown on Figure 3-1. Existing bike and pedestrian volumes are shown on Figures 3-2 and 3-3, respectively.

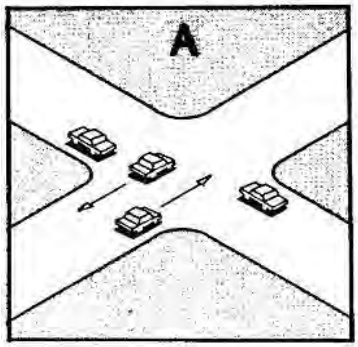
Existing signal timings for all intersections were provided by the City of Charlottesville and are included in Appendix B.

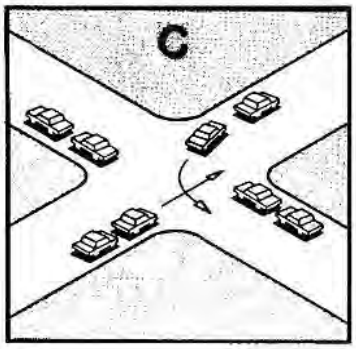
3.2 CAPACITY ANALYSIS

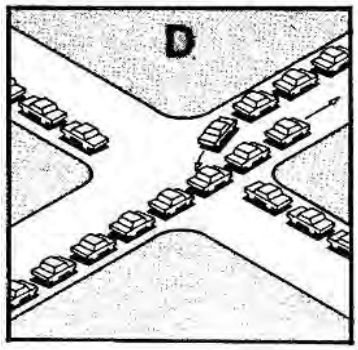
Capacity analysis allows traffic engineers to determine the impacts of traffic on the surrounding roadway network. The Transportation Research Board's (TRB) *Highway Capacity Manual* (HCM) methodologies govern how the capacity analyses are conducted and how the results are interpreted. There are six letter grades of Levels of Service (LOS) from A to F, with LOS A representing the best operating conditions and LOS F the worst operating conditions. Table 3-1 shows in detail how each of these levels of service are interpreted.

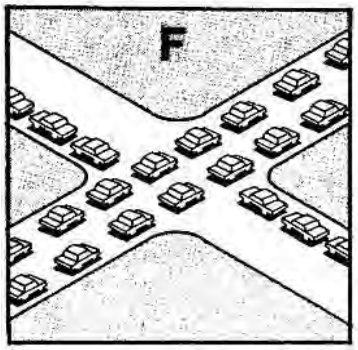
Table 3-1: Level of Service Definitions

Level of Service	Roadway Segments or Controlled Access Highways	Intersections
A	Free flow, low traffic density.	No vehicle waits longer than one signal indication.
B	Delay is not unreasonable, stable traffic flow.	On a rare occasion motorists wait through more than one signal indication.
C	Stable condition, movements somewhat restricted due to higher volumes, but not objectionable for motorists.	Intermittently drivers wait through more than one signal indication, and occasionally backups may develop behind left turning vehicles, traffic flow still stable and acceptable.
D	Movements more restricted, queues and delays may occur during short peaks, but lower demands occur often enough to permit clearing, thus preventing excessive backups.	Delays at intersections may become extensive with some, especially left-turning vehicles waiting two or more signal indications, but enough cycles with lower demand occur to permit periodic clearance, thus preventing excessive backups.
E	Actual capacity of the roadway invloves delay to all motorists due to congestion.	Very long queues may create lengthly delays, especially for left-turning vehicles.
F	Forced flow with demand volumes greater than capacity resulting in complete congestion. Volumes drop to zero in extreme cases.	Backups from locations downstream restrict or prevent movement of vehicles out of approach creating a storage ares during part or all of an hour.









SOURCE: *"A Policy on Design of Design of Urban Highways and Arterial Streets"* - AASHTO, 1973 based upon material published in *"Highway Capacity Manual"*, National Academy of Sciences, 1965.

For signalized and unsignalized intersections, level of service is defined in terms of delay, a measure of driver discomfort, frustration, fuel consumption and lost travel time. Table 3-2 summarizes the delay associated with each LOS category:

Table 3-2: Signalized and Unsignalized Intersection Level of Service Criteria

Signalized Intersections		Unsignalized Intersections	
Level of Service	Control Delay per Vehicle (sec/veh)	Level of Service	Average Control Delay (sec/veh)
A	≤ 10	A	0 to 10
B	> 10 to ≤ 20	B	> 10 to ≤ 15
C	> 20 to ≤ 35	C	> 15 to ≤ 25
D	> 35 to ≤ 55	D	> 25 to ≤ 35
E	> 55 to ≤ 80	E	> 35 to ≤ 50
F	> 80	F	> 50

Source: Exhibit 16-2 and Exhibit 17-2 from TRB's "Highway Capacity Manual 2000"

Capacity analyses were performed to assess existing (2023), background (2028), and future (2028) operational conditions. The signalized and unsignalized intersections were analyzed using SYNCHRO Version 11 based on HCM 2000 methodologies with the following assumptions:

- Level terrain;
- 12-foot lane widths;
- Existing peak hour factor as determined by the traffic counts (by intersection) for existing scenario;
- The higher of the existing peak hour factor as determined by traffic counts (by intersection) or a peak hour factor of 0.92 for the background and total future scenarios.
- Heavy vehicle percentage as determined by the traffic counts (by movement); and
- Traffic signals timing data provided by the City of Charlottesville.

3.3 EXISTING CONDITIONS CAPACITY ANALYSIS RESULTS

Table 3-3 summarizes the 2023 existing intersection LOS, delay, 95th percentile queue lengths (Synchro), and longest queue lengths (SimTraffic) based on the 2023 existing intersection geometry (Figure 2-1) and peak hour traffic volumes shown on Figure 3-1. The corresponding SYNCHRO and SimTraffic reports are included in Appendix C. Note that the intersection numbers shown on the LOS, delay, and queue length summary tables correspond with the intersection numbers used in the SYNCHRO models and report figures.

As shown in Table 3-1, under 2023 existing conditions:

- The signalized intersection of Ivy Road and Copeley Road operates at overall LOS C during both peaks. The eastbound approach operates at LOS B in the AM peak and LOS C in the PM peak. The westbound approach operates at LOS B in the AM peak and LOS C in the PM peak. The northbound approach operates at LOS C during both peaks. The southbound approach operates at LOS D during both peaks. The northbound left queue extends beyond the provided storage by 4 feet. All other queues are contained within the existing storage.

- The signalized intersection of Ivy Road and Rothery Road/Parking Garage Access operates at LOS A during the AM peak and LOS B during the PM peak. The eastbound approach operates at LOS A during both peaks. The westbound approach operates at LOS A during both peaks. The northbound and southbound approaches operate at LOS C during both peaks. The southbound left queue extends beyond the provided storage by 100 feet during the PM peak. All other queues are contained within the existing storage.

- The signalized intersection of Ivy Road and Emmet Street operates at LOS C during both peaks. The eastbound and westbound approaches operate at LOS C during both peaks. The northbound and southbound approaches operate at LOS C during both peaks. All queues are contained within the existing storage provided.

- The signalized intersection of Massie Road and Copeley Road operates at LOS B during both peaks. The eastbound approach operates at LOS B during both peaks. The westbound approach operates at LOS A during both peaks. The northbound approach operates at LOS B during both peaks. The southbound approach operates at LOS B during the AM peak and LOS A during the PM peak. All queues are contained within the provided storage.

Table 3-3: Intersection Level of Service and Delay Summary
2023 Existing Peak Hour Traffic

Intersection and Type of Control	Movement and Approach	Turn Lane Storage (ft)	AM PEAK HOUR				PM PEAK HOUR			
			Delay [1] (sec/veh)	LOS [1]	HCS 95th Percentile Queue Length (ft)	Simulated Maximum Queue Length (ft)	Delay [1] (sec/veh)	LOS [1]	HCS 95th Percentile Queue Length (ft)	Simulated Maximum Queue Length (ft)
1. Ivy Road (E-W) at	EB Left	250	11.8	B	57	163	15.9	B	54	93
Copeley Road (N-S)	EB Thru		22.8	C	#330	341	23.8	C	209	217
Signalized	EB Right	250	16.7	B	48	239	19.7	B	46	79
	EB Approach		*19.7*	*B*	--	--	*21.2*	*C*	--	--
	WB Left	350	16.1	B	37	110	19.1	B	36	98
	WB Thru-Right		19.4	B	86	118	27.9	C	225	259
	WB Approach		*18.8*	*B*	--	--	*27.3*	*C*	--	--
	NB Left	150	21.1	C	88	149	32.4	C	#201	149
	NB Thru-Right		25.6	C	140	229	22.1	C	189	288
	NB Approach		*23.8*	*C*	--	--	*26.8*	*C*	--	--
	SB Left	265	26.2	C	31	129	23.7	C	24	161
	SB Thru-Right		36.7	D	190	277	39.4	D	#273	380
	SB Approach		*35.4*	*D*	--	--	*38.4*	*D*	--	--
	Overall		23.3	C	--	--	27.9	C	--	--
2. Ivy Road (E-W) at	EB Left	300	2.7	A	23	91	3.8	A	4	24
Rothery Road/ Parking Garage	EB Thru-Right		3.3	A	60	116	4.5	A	96	172
Signalized	*EB Approach*		*3.2*	*A*	--	--	*4.5*	*A*	--	--
	WB Thru		7.8	A	99	162	8.6	A	214	188
	WB Right	85	6.5	A	23	84	5.5	A	0	31
	WB Approach		*7.3*	*A*	--	--	*8.6*	*A*	--	--
	NB Right		25.9	C	0	24	23.1	C	0	30
	NB Approach		*25.9*	*C*	--	--	*23.1*	*C*	--	--
	SB Left	95	26.1	C	14	42	26.1	C	88	195
	SB Right		26.0	C	0	69	23.9	C	51	95
	SB Approach		*26.0*	*C*	--	--	*24.9*	*C*	--	--
	Overall		5.8	A	--	--	12.2	B	--	--
3. Ivy Road (E-W) at	EB Left	255	34.3	C	47	108	54.4	D	#172	243
Emmet Street (N-S)	EB Thru		27.5	C	174	212	24.4	C	136	346
Signalized	EB Right	270	19.5	B	0	90	19.7	B	12	189
	EB Approach		*27.3*	*C*	--	--	*33.6*	*C*	--	--
	WB Left	165	36.4	D	73	137	44.5	D	#100	161
	WB Thru		22.8	C	138	204	29.8	C	171	551
	WB Right	155	19.4	B	46	152	22.7	C	57	155
	WB Approach		*23.5*	*C*	--	--	*28.6*	*C*	--	--
	NB Left	350	18.4	B	37	140	18.0	B	52	288
	NB Thru		23.1	C	150	255	32.5	C	#285	496
	NB Right	100	19.7	B	5	100	19.3	B	7	100
	NB Approach		*21.5*	*C*	--	--	*27.9*	*C*	--	--
	SB Left	LMT[2]	16.0	B	#202	229	21.9	C	#187	255
	SB Thru-Right		32.0	C	#406	418	36.0	D	#398	502
	SB Approach		*25.8*	*C*	--	--	*31.0*	*C*	--	--
	Overall		24.7	C	--	--	30.1	C	--	--
4. Massie Road (E-W) at	EB Left	200	11.3	B	19	50	12.0	B	17	42
Copeley Road (N-S)	EB Thru-Right		12.8	B	74	127	13.2	B	68	172
Signalized	*EB Approach*		*12.6*	*B*	--	--	*13.1*	*B*	--	--
	WB Left	1000	6.3	A	24	79	7.6	A	38	73
	WB Thru-Right		5.8	A	15	64	6.7	A	34	86
	WB Approach		*6.1*	*A*	--	--	*7.1*	*A*	--	--
	NB Left	230	10.7	B	56	110	11.1	B	110	164
	NB Thru-Right		9.9	A	38	92	9.5	A	42	110
	NB Approach		*10.2*	*B*	--	--	*10.4*	*B*	--	--
	SB L-T-R		10.2	B	55	100	9.8	A	60	107
	SB Approach		*10.2*	*B*	--	--	*9.8*	*A*	--	--
	Overall		10.4	B	--	--	10.5	B	--	--

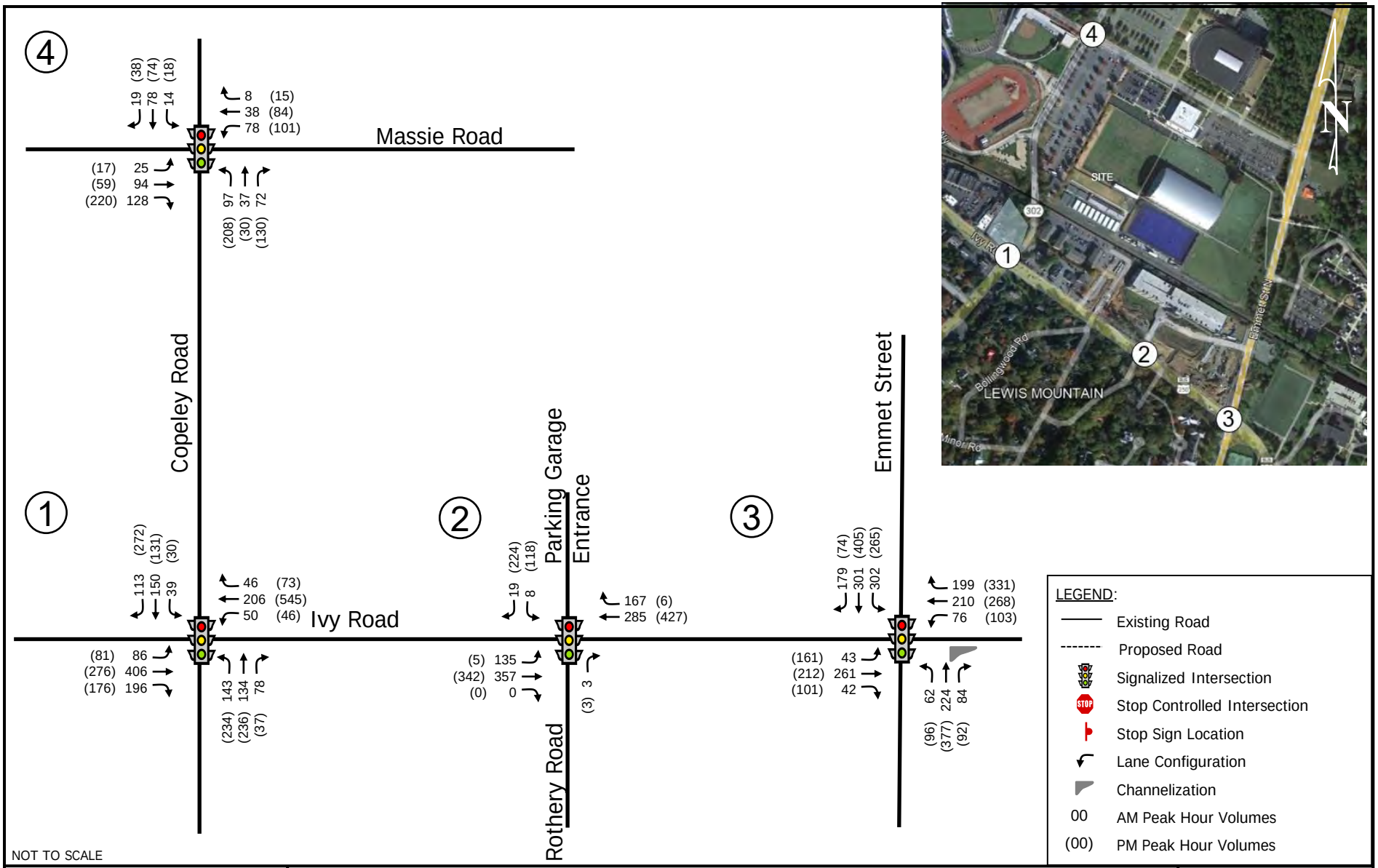
[1] *Overall intersection LOS and delay reported for signalized intersections only.*

[2] *Lane Must Turn*

- 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

m - Volume for 95th percentile queue is metered by upstream signal.

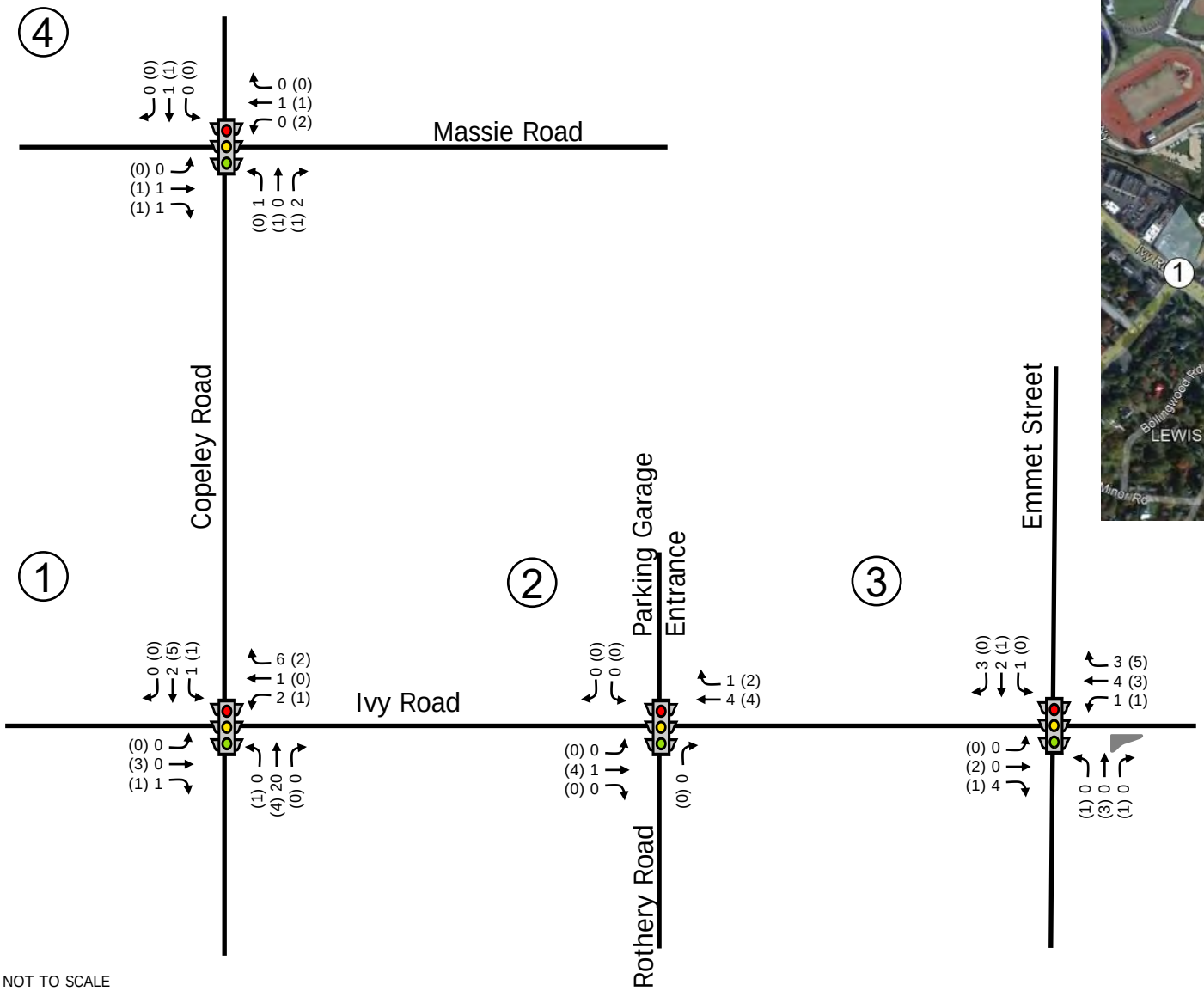
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2023 Existing Peak Hour Volumes
2117 Ivy Road
Charlottesville, Virginia

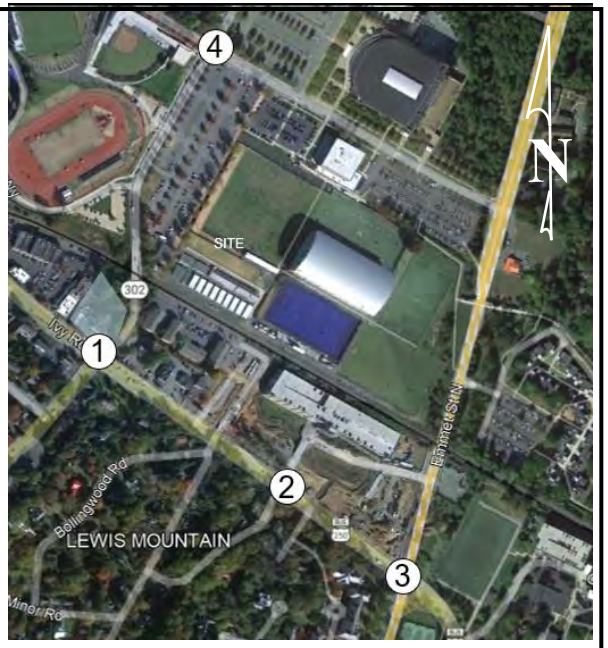
Figure
3-1

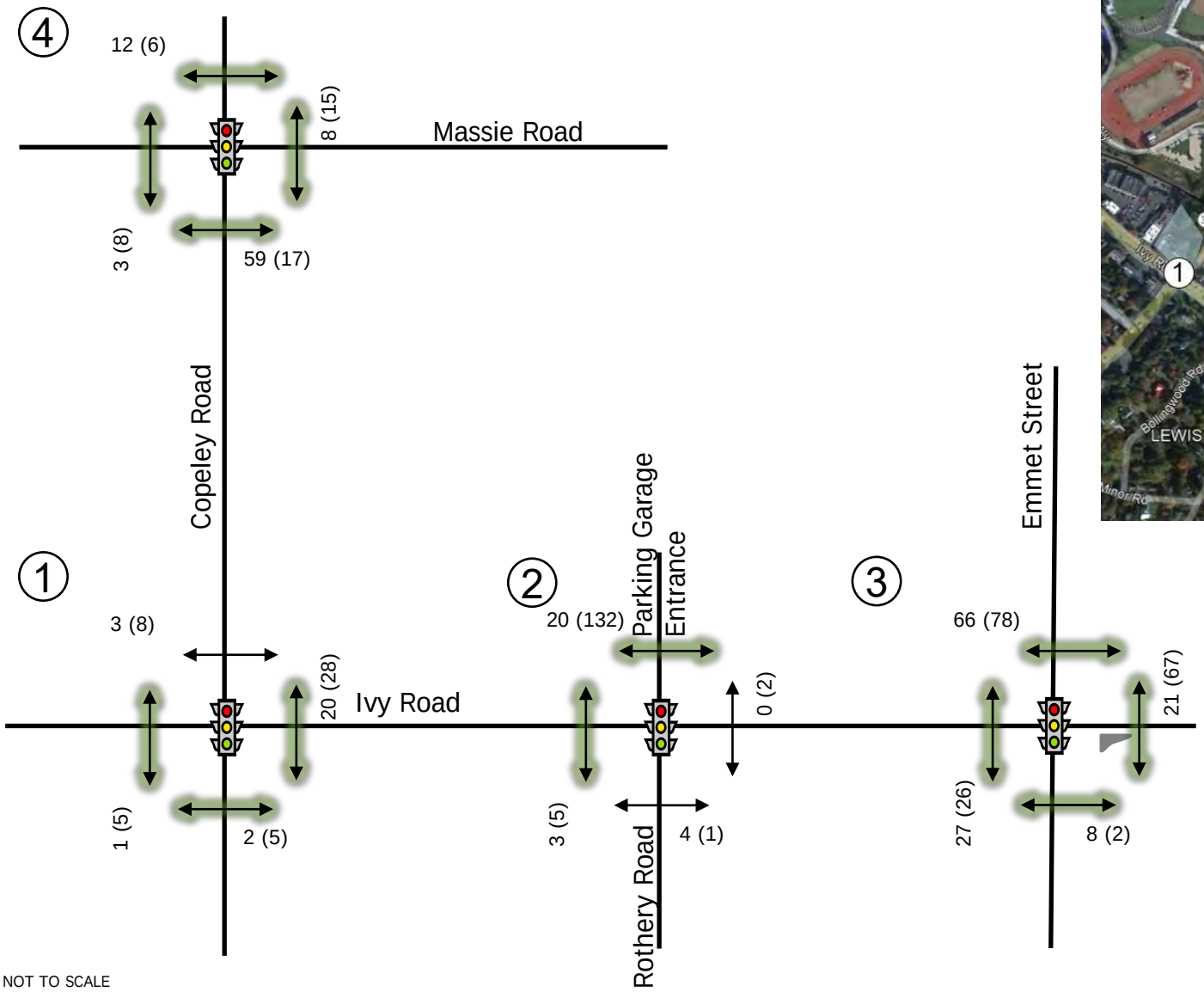


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2023 Existing Bicycle Volumes
2117 Ivy Road
Charlottesville, Virginia

Figure
3-2





NOT TO SCALE

LEGEND:

- Existing Road
- Proposed Road
- Signalized Intersection
- Stop Controlled Intersection
- Stop Sign Location
- Lane Configuration
- Channelization
- Marked Crosswalk

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2023 Existing Pedestrian Volumes
2117 Ivy Road
Charlottesville, Virginia

Figure
3-3

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4 2028 BACKGROUND CONDITIONS

The background 2028 volumes were analyzed assuming existing intersection geometry in conjunction with projected background traffic volumes.

4.1 2028 BACKGROUND TRAFFIC VOLUMES

The 0.2% annual growth rates discussed above were compounded annually for the five-year period from 2023 to 2028 and was applied to all movements at the study intersections. The resulting 2028 vehicle background (existing + growth) volumes are shown on Figure 4-1.

4.2 APPROVED BACKGROUND 2028 DEVELOPMENTS

Per coordination with the City of Charlottesville, no background developments are expected to be completed within the vicinity of the proposed development. There are also no expected transportation improvements in the vicinity of the site or on the study area roadways.

4.3 BACKGROUND 2028 CAPACITY ANALYSIS RESULTS

Table 4-1 summarizes the 2028 background intersection LOS, delay, 95th percentile queue lengths (Synchro), and maximum queue lengths (SimTraffic) based on the intersection geometry (Figure 2-1) and 2028 background peak hour traffic volumes shown on Figure 4-1. The corresponding SYNCHRO and SimTraffic reports are included in Appendix D. Note that the intersection numbers shown on the LOS, delay, and queue length summary tables correspond with the intersection numbers used in the SYNCHRO models and report figures.

As shown in Table 4-1 under 2028 background conditions:

- Levels of service at the study intersections are not expected to change significantly from 2023 existing to 2028 background conditions.
    - The signalized intersection of Ivy Road and Copeley Road continues to operates at LOS C during both peaks. The northbound, eastbound, and westbound approaches continue to operate at LOS C or better and the southbound approach continues to operate at LOS D during both peaks. There are no significant changes in queueing from 2023 existing conditions.
    - The signalized intersection of Ivy Road and Rothery Road/Parking Garage Access continues to operate at LOS A in the AM peak and LOS B in the PM peak. All approaches continue to operate at LOS C or better during both peaks. There are no significant changes in queueing between existing and background conditions.
    - The signalized intersection of Ivy Road and Emmet Street continues to operate at LOS C during both peaks. All approaches continue to operate at LOS C or better during both peaks. There are no significant changes in queueing from 2023 existing conditions.
    - The signalized intersection of Massie Road and Copeley Road continues to operate at LOS B during both peaks. All approaches continue to operate at LOS B or better during both peaks with no significant changes in queueing from 2023 existing conditions.

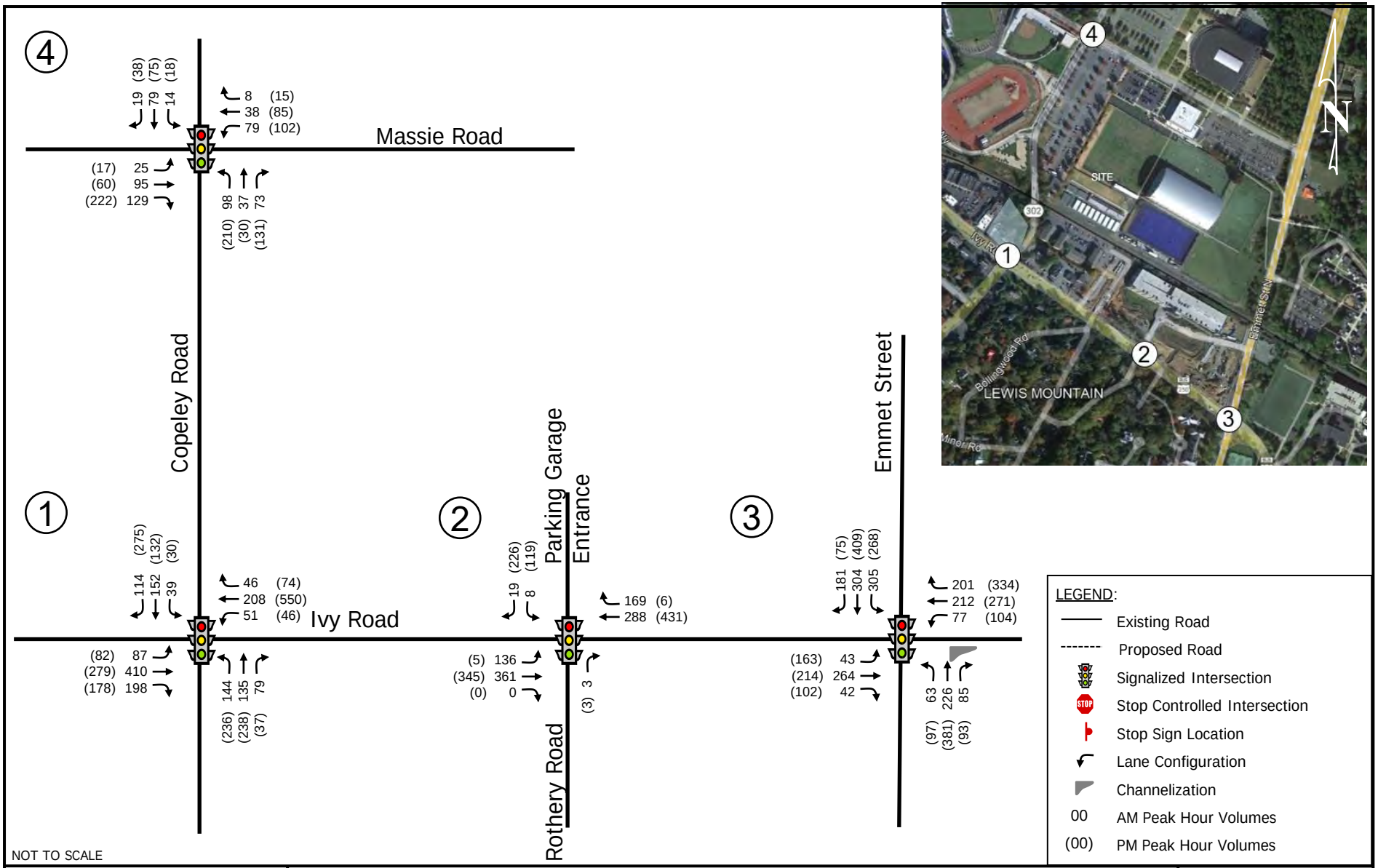
Table 4-1: Intersection Level of Service and Delay Summary
2028 Total Background Peak Hour Traffic

Intersection and Type of Control	Movement and Approach	Turn Lane Storage (ft)	AM PEAK HOUR				PM PEAK HOUR			
			Delay [1] (sec/veh)	LOS [1]	HCS 95th Percentile Queue Length (ft)	Simulated Maximum Queue Length (ft)	Delay [1] (sec/veh)	LOS [1]	HCS 95th Percentile Queue Length (ft)	Simulated Maximum Queue Length (ft)
1. Ivy Road (E-W) at	EB Left	250	11.9	B	58	186	16.1	B	55	97
Copeley Road (N-S)	EB Thru		22.9	C	#350	346	24.1	C	211	221
Signalized	EB Right	250	16.7	B	48	211	19.8	B	45	146
	EB Approach		*19.8*	*B*	--	--	*21.5*	*C*	--	--
	WB Left	350	16.2	B	38	96	19.2	B	36	105
	WB Thru-Right		19.4	B	87	116	28.2	C	227	232
	WB Approach		*18.9*	*B*	--	--	*27.6*	*C*	--	--
	NB Left	150	21.1	C	88	148	32.7	C	#205	150
	NB Thru-Right		25.5	C	141	239	22.0	C	190	286
	NB Approach		*23.7*	*C*	--	--	*27.0*	*C*	--	--
	SB Left	265	26.2	C	31	146	23.5	C	24	203
	SB Thru-Right		36.8	D	192	270	39.8	D	#281	369
	SB Approach		*35.5*	*D*	--	--	*38.7*	*D*	--	--
	Overall		23.3	C	--	--	28.2	C	--	--
2. Ivy Road (E-W) at	EB Left	300	2.7	A	23	104	3.8	A	4	27
Rothery Road/ Parking Garage	EB Thru-Right		3.3	A	60	131	4.4	A	96	222
Signalized	*EB Approach*		*3.2*	*A*	--	--	*4.4*	*A*	--	--
	WB Thru		7.8	A	100	184	8.5	A	214	166
	WB Right	85	6.5	A	23	84	5.4	A	0	35
	WB Approach		*7.4*	*A*	--	--	*8.5*	*A*	--	--
	NB Right		25.9	C	0	24	23.2	C	0	24
	NB Approach		*25.9*	*C*	--	--	*23.2*	*C*	--	--
	SB Left	95	26.1	C	14	35	26.2	C	87	182
	SB Right		26.0	C	0	64	24.0	C	51	95
	SB Approach		*26.0*	*C*	--	--	*24.8*	*C*	--	--
	Overall		5.8	A	--	--	12.2	B	--	--
3. Ivy Road (E-W) at	EB Left	255	34.3	C	47	100	53.7	D	#174	231
Emmet Street (N-S)	EB Thru		27.8	C	174	210	24.5	C	137	291
Signalized	EB Right	270	19.6	B	0	91	19.7	B	12	142
	EB Approach		*27.6*	*C*	--	--	*33.4*	*C*	--	--
	WB Left	165	36.9	D	74	135	45.2	D	#101	161
	WB Thru		23.0	C	140	216	30.3	C	174	530
	WB Right	155	19.5	B	46	151	22.8	C	57	155
	WB Approach		*23.7*	*C*	--	--	*28.9*	*C*	--	--
	NB Left	350	18.3	B	38	138	18.1	B	52	330
	NB Thru		22.9	C	151	249	32.9	C	#290	538
	NB Right	100	19.5	B	5	100	19.3	B	8	100
	NB Approach		*21.4*	*C*	--	--	*28.2*	*C*	--	--
	SB Left	LMT[2]	16.1	B	#206	233	22.9	C	#198	280
	SB Thru-Right		32.6	C	#411	435	37.1	D	#403	505
	SB Approach		*26.2*	*C*	--	--	*32.0*	*C*	--	--
	Overall		24.9	C	--	--	30.5	C	--	--
4. Massie Road (E-W) at	EB Left	200	11.2	B	19	51	11.9	B	18	42
Copeley Road (N-S)	EB Thru-Right		12.7	B	76	132	13.1	B	73	152
Signalized	*EB Approach*		*12.6*	*B*	--	--	*13.1*	*B*	--	--
	WB Left	1000	6.3	A	24	69	7.5	A	41	78
	WB Thru-Right		5.8	A	15	70	6.6	A	37	80
	WB Approach		*6.1*	*A*	--	--	*7.1*	*A*	--	--
	NB Left	230	10.7	B	57	110	11.3	B	112	168
	NB Thru-Right		9.9	A	38	95	9.6	A	42	98
	NB Approach		*10.3*	*B*	--	--	*10.6*	*B*	--	--
	SB L-T-R		10.2	B	56	98	9.9	A	61	107
	SB Approach		*10.2*	*B*	--	--	*9.9*	*A*	--	--
	Overall		10.3	B	--	--	10.5	B	--	--

[1] *Overall intersection LOS and delay reported for signalized intersections and roundabouts only.*

[2] *Lane Must Turn*

- 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.



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2028 Background Peak Hour Volumes
2117 Ivy Road
Charlottesville, Virginia

Figure
4-1

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5 TRIP GENERATION

Site traffic for the proposed development was estimated based on the site characteristics and subsequently distributed to the surrounding roadway network.

The site is currently zoned Mixed Use within a designated Urban Corridor. The proposed development will consist of approximately 287 units with 632 residents of off-campus student housing apartments and 3,000 square feet of retail. The applicant is submitting this traffic impact analysis in support of a Special Use Permit (SUP) to allow for the additional density beyond the existing zoning. Access to the site is proposed via one (1) full movement entrance on Copeley Road.

5.1 SITE TRIP GENERATION

The site-generated traffic volumes shown in Table 6-1 were estimated using the 11th Edition of the Institute of Transportation Engineers' (ITE) *Trip Generation Manual* and were calculated using the number of beds as the independent variable and with "adjacent to campus" subcategory. The retail site trips were calculated using the square footage as the independent variable and the "peak hour of the adjacent roadway" subcategory.

Table 5-1: 2117 Ivy Road Trip Generation Summary

Buildout				Weekday						
			Land Use	AM Peak Hour			PM Peak Hour			Average
Land Use	Size	Units	Code	In	Out	Total	In	Out	Total	Daily Trips
Off-Campus Student Apartment (4-10 Story)	632	Bedrooms	226	20	24	44	62	70	132	1624
Retail Shopping (<40k Total)	3,000	SF	822	4	3	7	17	16	33	163
TOTAL				**24**	**27**	**51**	**79**	**86**	**165**	**1,788**

SOURCE: Institute of Transportation Engineers' *Trip Generation Manual, 11th Edition*

As shown in Table 5-1, the proposed development will generate a total of 51 trips (24 in and 27 out) during the AM peak, 165 trips (79 in and 86 out) during the PM peak, and 1,788 average weekday daily trips.

5.2 External Trip Distributions

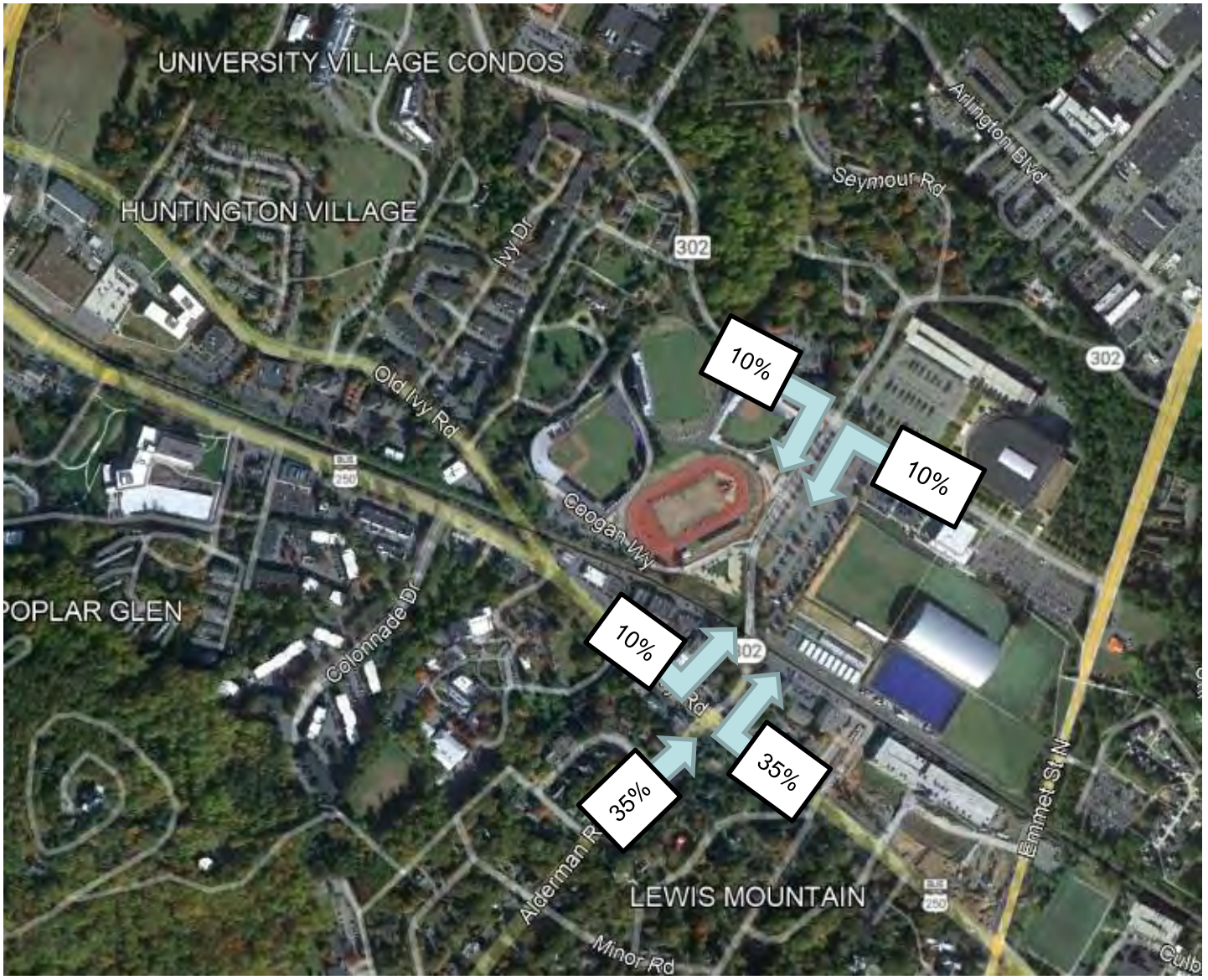
The distribution of external trips generated by the development was based on the existing travel patterns, the nature of the use, the 2023 existing traffic volumes, and local knowledge.

The following directional distributions were assumed for the site and are shown on Figure 5-1:

- 35% to/from the east on Ivy Road;
- 10% to/from the west on Ivy Road;
- 10% to/from the east on Massie Road;
- 10% to/from the west on Massie Road; and
- 35% to/from the south on Alderman Road.

5.3 Traffic Assignment

The trip distribution percentages for the external trips from Figure 5-2 were applied to the trip generation table (Table 5-1) to distribute the external trips to the surrounding roadway network. The resulting site generated external trips are shown on Figure 5-3.

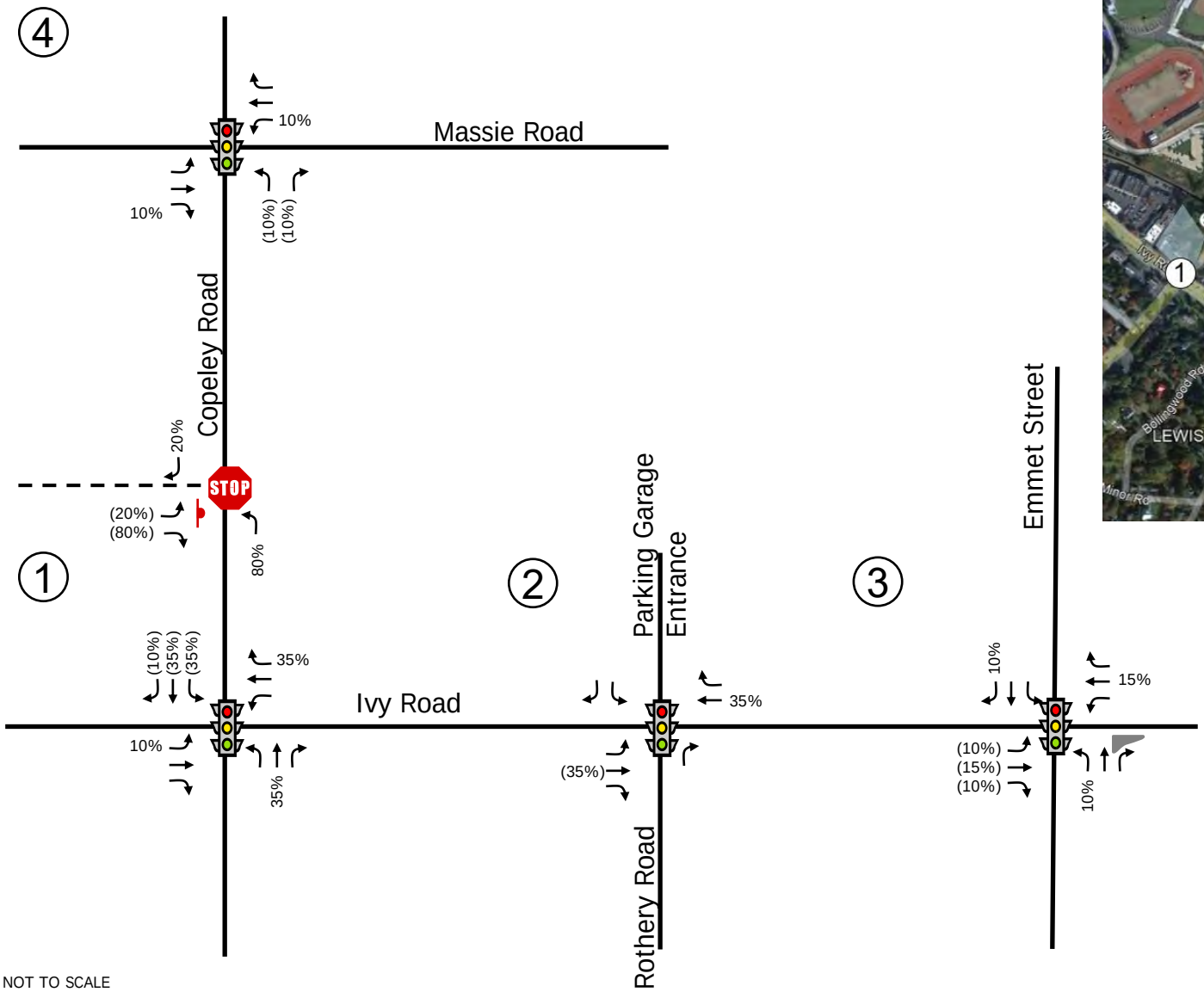


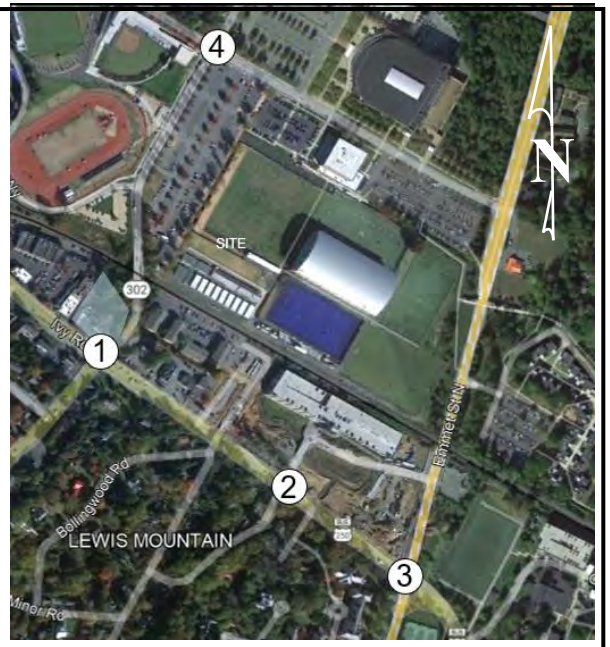
NOT TO SCALE

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Overall Site Trip Distributions
2117 Ivy Road
Charlottesville, Virginia

Figure
5-1





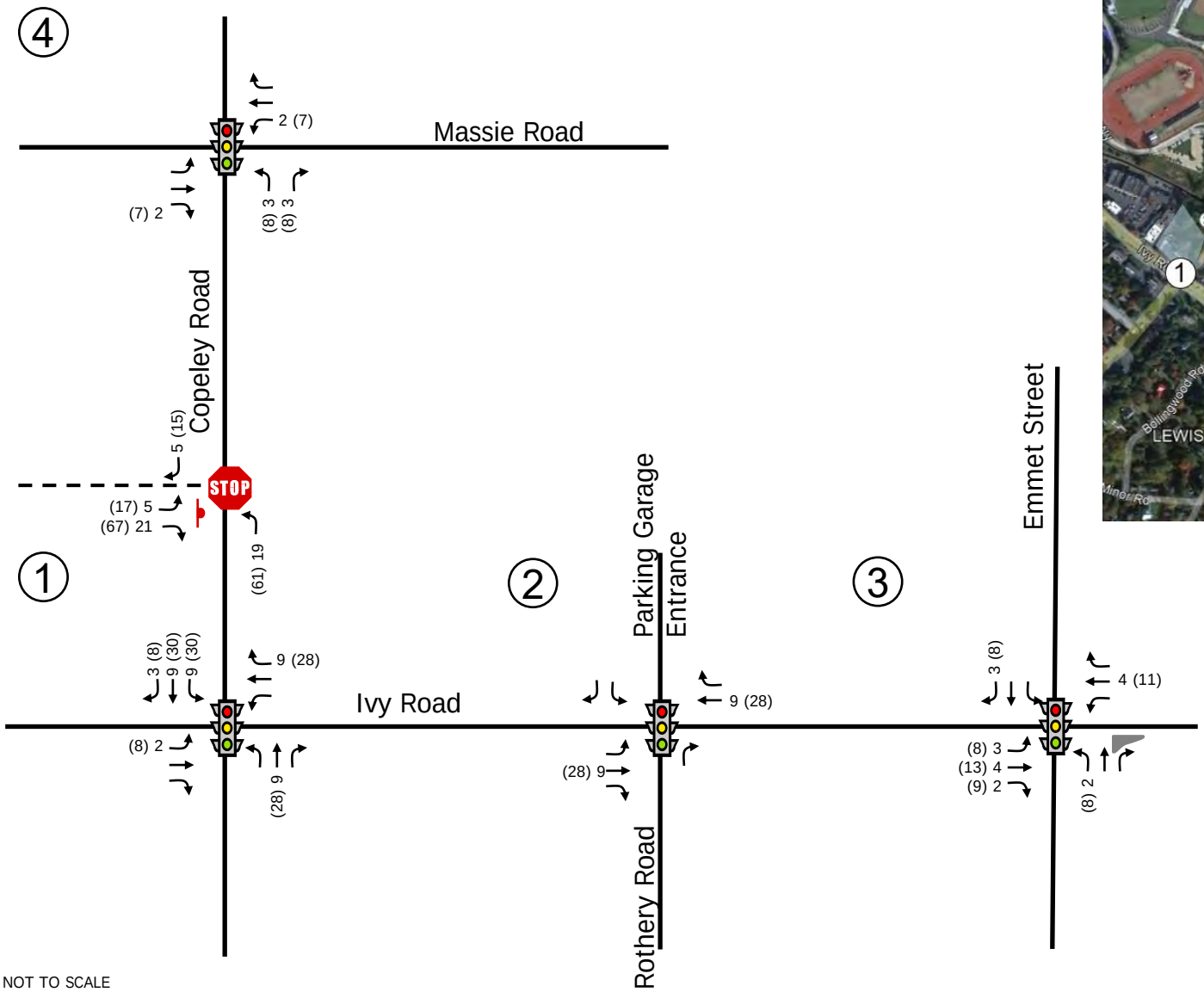
LEGEND:

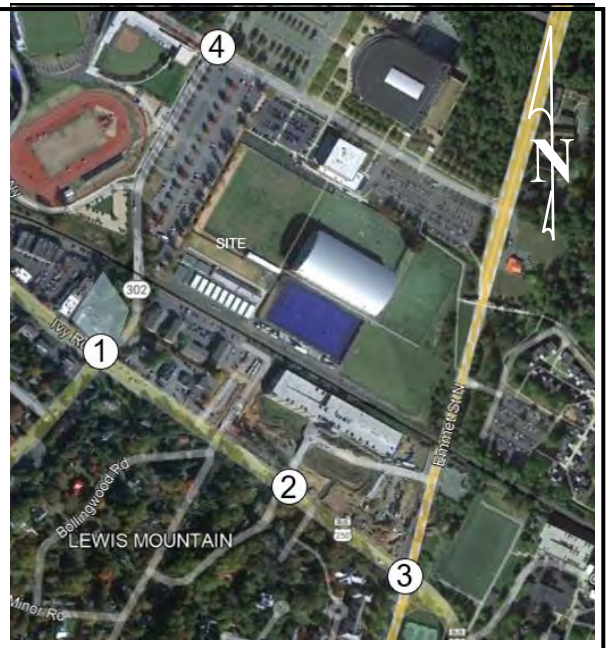
- Existing Road
- Proposed Road
- Signalized Intersection
- Stop Controlled Intersection
- Stop Sign Location
- Lane Configuration
- Channelization
- 00% Entering Peak Hour Distributions
- (00%) Exiting Peak Hour Distributions

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Site Peak Hour Trip Distributions
2117 Ivy Road
Charlottesville, Virginia

Figure
5-2





LEGEND:

- Existing Road
- Proposed Road
- Signalized Intersection
- Stop Controlled Intersection
- Stop Sign Location
- Lane Configuration
- Channelization
- 00 AM Peak Hour Trips
- (00) PM Peak Hour Trips

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Total Site Peak Hour Trips
2117 Ivy Road
Charlottesville, Virginia

Figure
5-3

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6 2028 TOTAL FUTURE CONDITIONS

To complete the analysis of 2028 total conditions (with the proposed development), the estimated site trips were added to the background 2028 traffic volumes. The projected volumes were then used to complete the capacity analysis.

6.1 TOTAL FUTURE TRAFFIC VOLUMES

To generate the 2028 total future traffic volumes, the external site trips shown on Figure 5-3 were added to the background 2028 vehicle volumes shown in Figure 4-1. The resulting 2028 total future traffic volumes are shown on Figure 6-1.

6.2 2028 FUTURE CONDITIONS ANALYSIS RESULTS

Table 6-1 summarizes the 2023 total future intersection LOS, delay, 95th percentile queue lengths (Synchro), and maximum queue lengths (SimTraffic) based on the intersection geometry and 2028 total future peak hour traffic volumes shown on Figures 2-1 and 6-1, respectively. The corresponding SYNCHRO and SimTraffic reports are included in Appendix E. Note that the intersection numbers shown on the LOS, delay, and queue length summary tables correspond with the intersection numbers used in the SYNCHRO models and report figures.

As shown in Table 6-1, under 2028 total future conditions with development of the site:

- Levels of service at the study intersections are not expected to change significantly from 2028 background to 2028 total future conditions.
    - The signalized intersection of Ivy Road and Copeley Road continues to operate in similar conditions to 2028 background at an overall LOS C. There are no significant changes in queueing between background and future conditions and all queues are contained within their existing storage.
    - The signalized intersection of Ivy Road and Rotherey Road/Parking Garage Access continues to operate in similar conditions to 2028 background. All queues are contained within their existing storage with the exception of the southbound left in the PM peak which extends 147 feet beyond the provided storage.
    - The signalized intersection of Ivy Road and Emmet Street continues to operate in similar conditions to 2028 background. All queues are contained within their existing storage.
    - The signalized intersection of Massie Road and Copeley Road continues to operate in similar conditions to 2028 background with an overall LOS B during both peaks. All queues are contained within their existing storage.
    - At the proposed unsignalized site entrance, the eastbound approach operates at LOS B during both peaks with a maximum queue of 48 feet in the AM peak and 215 feet in the PM peak. The northbound approach operates at LOS A during both peaks with a maximum queue of 58 feet in the AM peak and 132 feet in the PM peak. The southbound approach operates at LOS A during both peaks with a maximum queue of 192 feet in the AM peak and 329 feet in the PM peak.

Table 6-1: Intersection Level of Service and Delay Summary
2028 Total Future Traffic

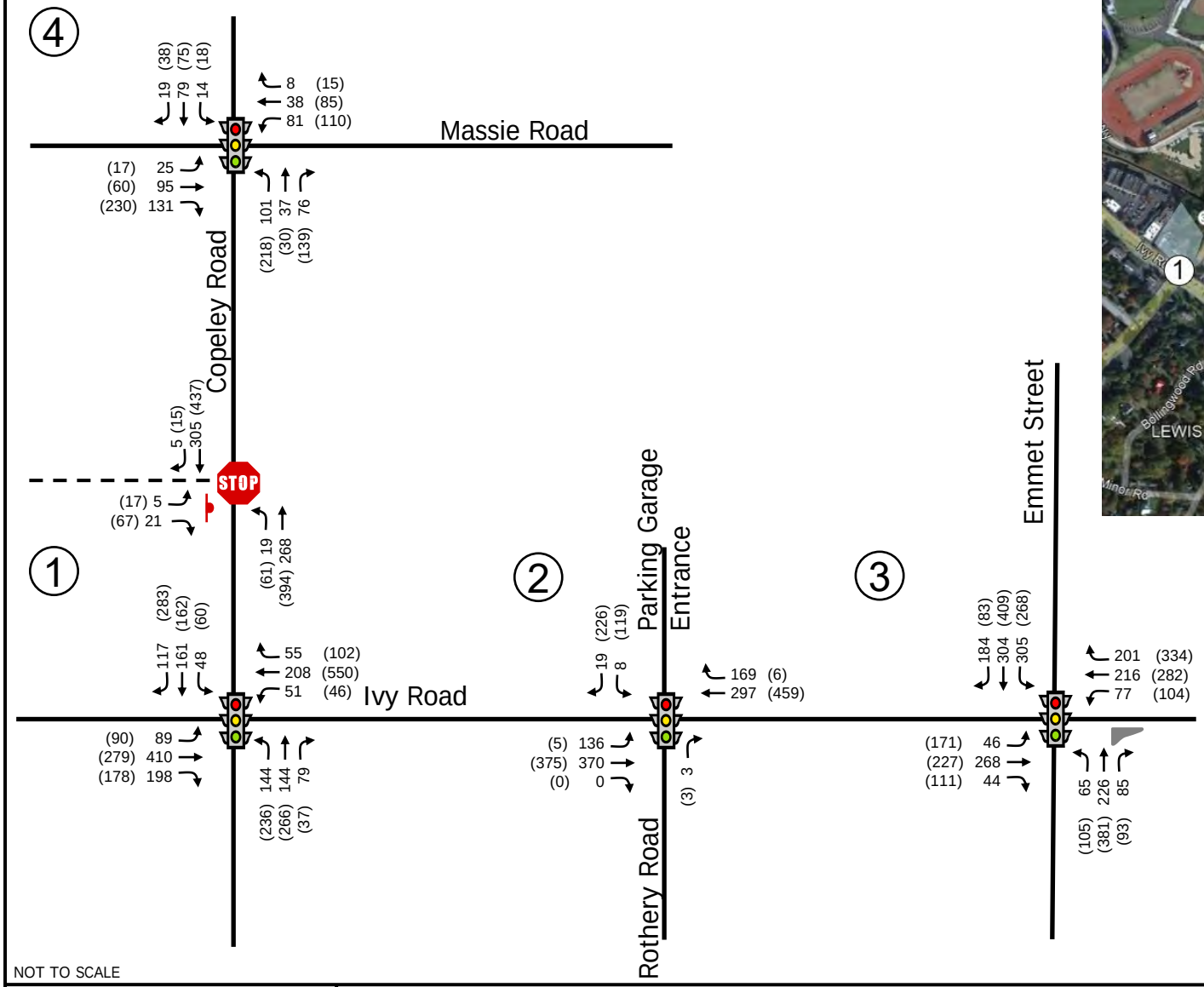
Intersection and Type of Control	Movement and Approach	Turn Lane Storage (ft)	AM PEAK HOUR				PM PEAK HOUR			
			Delay [1] (sec/veh)	LOS [1]	HCS 95th Percentile Queue Length (ft)	Simulated Maximum Queue Length (ft)	Delay [1] (sec/veh)	LOS [1]	HCS 95th Percentile Queue Length (ft)	Simulated Maximum Queue Length (ft)
1. Ivy Road (E-W) at	EB Left	250	12.4	B	60	160	17.1	B	60	133
Copeley Road (N-S)	EB Thru		23.7	C	#350	343	25.0	C	211	263
Signalized	EB Right	250	17.2	B	48	238	20.5	C	45	179
	EB Approach		*20.4*	*C*	--	--	*22.3*	*C*	--	--
	WB Left	350	16.7	B	39	110	19.9	B	36	91
	WB Thru-Right		19.9	B	88	135	30.0	C	237	241
	WB Approach		*19.4*	*B*	--	--	*29.3*	*C*	--	--
	NB Left	150	20.7	C	87	149	33.3	C	#211	150
	NB Thru-Right		25.2	C	147	257	22.8	C	219	307
	NB Approach		*23.4*	*C*	--	--	*27.4*	*C*	--	--
	SB Left	265	25.6	C	35	126	22.2	C	41	127
	SB Thru-Right		36.6	D	201	149	46.8	D	#364	163
	SB Approach		*35.0*	*C*	--	--	*43.9*	*D*	--	--
	Overall		23.6	C	--	--	30.4	C	--	--
2. Ivy Road (E-W) at	EB Left	300	2.7	A	23	104	3.9	A	4	49
Rothery Road/ Parking Garage	EB Thru-Right		3.4	A	62	118	4.6	A	106	282
Signalized	*EB Approach*		*3.2*	*A*	--	--	*4.6*	*A*	--	--
	WB Thru		7.9	A	103	185	8.8	A	232	191
	WB Right	85	6.5	A	23	84	5.4	A	0	52
	WB Approach		*7.4*	*A*	--	--	*8.8*	*A*	--	--
	NB Right		25.9	C	0	31	23.2	C	0	27
	NB Approach		*25.9*	*C*	--	--	*23.2*	*C*	--	--
	SB Left	95	26.1	C	14	41	26.2	C	87	242
	SB Right		26.0	C	0	68	24.0	C	51	95
	SB Approach		*26.0*	*C*	--	--	*24.8*	*C*	--	--
	Overall		5.8	A	--	--	12.1	B	--	--
3. Ivy Road (E-W) at	EB Left	255	34.4	C	49	77	58.6	E	#184	245
Emmet Street (N-S)	EB Thru		28.2	C	178	214	24.9	C	146	418
Signalized	EB Right	270	19.7	B	0	69	19.7	B	16	224
	EB Approach		*28.0*	*C*	--	--	*35.1*	*D*	--	--
	WB Left	165	36.9	D	74	123	45.2	D	#101	164
	WB Thru		23.3	C	143	224	31.1	C	180	510
	WB Right	155	19.6	B	46	152	22.8	C	57	155
	WB Approach		*23.9*	*C*	--	--	*29.3*	*C*	--	--
	NB Left	350	18.4	B	39	116	18.4	B	55	349
	NB Thru		22.8	C	151	217	32.9	C	#290	552
	NB Right	100	19.5	B	5	100	19.3	B	8	100
	NB Approach		*21.3*	*C*	--	--	*28.1*	*C*	--	--
	SB Left	LMT [2]	16.0	B	#205	229	23.4	C	#197	324
	SB Thru-Right		32.7	C	#414	428	40.3	D	#411	543
	SB Approach		*26.3*	*C*	--	--	*34.4*	*C*	--	--
	Overall		25.1	C	--	--	31.7	C	--	--
4. Massie Road (E-W) at	EB Left	200	11.2	B	19	54	12.9	B	18	43
Copeley Road (N-S)	EB Thru-Right		12.7	B	78	126	14.2	B	72	167
Signalized	*EB Approach*		*12.6*	*B*	--	--	*14.2*	*B*	--	--
	WB Left	1000	6.3	A	25	71	7.4	A	42	86
	WB Thru-Right		5.7	A	15	62	6.4	A	36	77
	WB Approach		*6.1*	*A*	--	--	*6.9*	*A*	--	--
	NB Left	230	10.8	B	59	105	12.4	B	118	143
	NB Thru-Right		9.9	A	39	91	10.4	B	43	99
	NB Approach		*10.3*	*B*	--	--	*11.5*	*B*	--	--
	SB L-T-R		10.3	B	56	103	10.7	B	62	107
	SB Approach		*10.3*	*B*	--	--	*10.7*	*B*	--	--
	Overall		10.4	B	--	--	11.3	B	--	--
5. Copeley Road (N-S) at	EB Left-Right	300	11.0	B	3	48	15.2	B	19	215
Site Entrance (E)	*EB Approach*		*11.0*	*B*	--	--	*15.2*	*B*	--	--
Unsignalized	NB Left-Thru		0.7	A	1	58	1.8	A	5	132
	NB Approach		*0.7*	*A*	--	--	*1.8*	*A*	--	--
	SB Thru-Right	95	0.0	A	0	192	0.0	A	0	329
	SB Approach		*0.0*	*A*	--	--	*0.0*	*A*	--	--

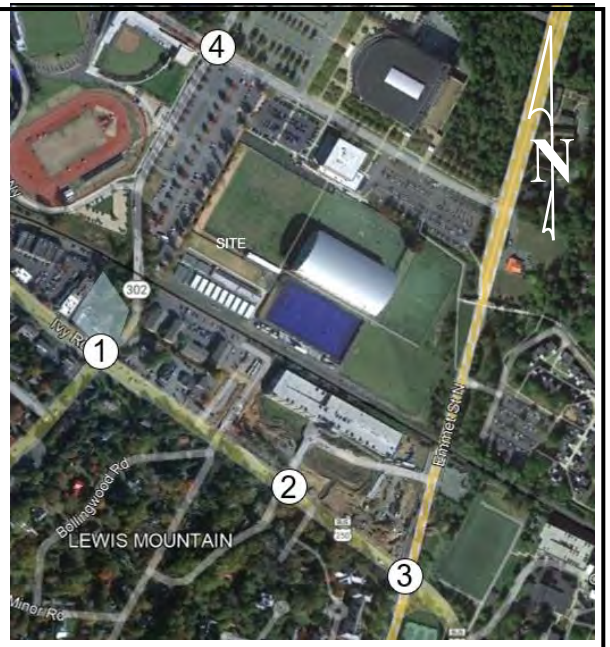
[1] *Overall intersection LOS and delay reported for signalized intersections and roundabouts only.*

[2] *Lane Must Turn*

- 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

m - Volume for 95th percentile queue is metered by upstream signal.





LEGEND:

- Existing Road
- Proposed Road
- Signalized Intersection
- Stop Controlled Intersection
- Stop Sign Location
- Lane Configuration
- Channelization
- 00 AM Peak Hour Volumes
- (00) PM Peak Hour Volumes

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2028 Total Future Volumes
2117 Ivy Road
Charlottesville, Virginia

Figure
6-1

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7 CONCLUSIONS

7.1 PRINCIPAL FINDINGS

Based on the operational analyses the following is offered:

- Under 2023 existing conditions:
    - The signalized intersection of Ivy Road and Copeley Road operates at overall LOS C during both peaks. The eastbound, westbound, and northbound approaches all operate at LOS C or better during both peaks. The southbound approach operates at LOS D during both peaks. The northbound left queue extends beyond the provided storage by 4 feet. All other queues are contained within the existing storage.
    - The signalized intersection of Ivy Road and Rothery Road/Parking Garage Access operates at LOS A during the AM peak and LOS B during the PM peak. All approaches operate at LOS B or better during both peaks. The southbound left queue extends beyond the provided storage by 100 feet during the PM peak. All other queues are contained within the existing storage.
    - The signalized intersection of Ivy Road and Emmet Street operates at LOS C during both peaks. All approaches operate at LOS C during both peaks. Queues are contained within the existing storage provided.
    - The signalized intersection of Massie Road and Copeley Road operates at LOS B during both peaks. All approaches operate at LOS B or better during both peaks. All queues are contained within the provided storage.

- Under 2028 background conditions (without the proposed development):
    - Continues to operate under conditions similar to 2023 existing conditions.
    - The signalized intersection of Ivy Road and Copeley Road continues to operates at LOS C during both peaks. The northbound, eastbound, and westbound approaches continue to operate at LOS C or better and the southbound approach continues to operate at LOS D during both peaks. There are no significant changes in queueing from 2023 existing conditions.
    - The signalized intersection of Ivy Road and Rothery Road/Parking Garage Access continues to operate at LOS A in the AM peak and LOS B in the PM peak. All approaches continue to operate at LOS C or better during both peaks. There are no significant changes in queueing between existing and background conditions.
    - The signalized intersection of Ivy Road and Emmet Street continues to operate at LOS C during both peaks. All approaches continue to operate at LOS C or better during both peaks. There are no significant changes in queueing from 2023 existing conditions.
    - The signalized intersection of Massie Road and Copeley Road continues to operate at LOS B during both peaks. All approaches continue to operate at LOS B or better during both peaks with no significant changes in queueing from 2023 existing conditions.

- Under 2028 total future conditions (with the proposed development):

    - The signalized intersection of Ivy Road and Copeley Road continues to operate in similar conditions to 2028 background at an overall LOS C. There are no significant changes in queueing between background and future conditions and all queues are contained within their existing storage.

    - The signalized intersection of Ivy Road and Rotherey Road/Parking Garage Access continues to operate in similar conditions to 2028 background. All queues are contained within their existing storage with the exception of the southbound left in the PM peak which extends 147 feet beyond the provided storage.

    - The signalized intersection of Ivy Road and Emmet Street continues to operate in similar conditions to 2028 background. All queues are contained within their existing storage.

    - The signalized intersection of Massie Road and Copeley Road continues to operate in similar conditions to 2028 background with an overall LOS B during both peaks. All queues are contained within their existing storage.

    - At the proposed unsignalized site entrance, the eastbound approach operates at LOS B during both peaks with a maximum queue of 48 feet in the AM peak and 215 feet in the PM peak. The northbound approach operates at LOS A during both peaks with a maximum queue of 58 feet in the AM peak and 132 feet in the PM peak. The southbound approach operates at LOS A during both peaks with a maximum queue of 192 feet in the AM peak and 329 feet in the PM peak.

7.2 RECOMMENDATIONS

Based on the results of the operational analysis, there are no vehicular and roadway network improvements required based on the additional development traffic volumes. The site will increase the residential density in the area and add to the pedestrian, bicycle, and transit volumes. To address the additional pedestrian, bicycle, and transit volumes, the applicant plans to install sidewalks along the entire frontage of the property. All property frontage along Ivy Road and Copeley Road is included in this recommendation, with exception for the railroad overpass area along Copeley Road.

The proposed site will operate well with the single full access entrance on Copeley Road. There are no improvements recommended to Copeley Road. It is recommended that the site ensure that any entrance gate system installed will allow for multiple vehicles to have space outside of the roadway to allow for safe ingress into the site and reduce time within the roadway.

The proposed garage entrance will be designed as recessed from Copeley Road to allow for at least 1 vehicle of queuing outside of the right-of-way, sidewalk, and crosswalk.

Additionally, it is recommended that the City evaluate enhanced pavement markings and signage for the existing crosswalks at the Ivy Road and Copeley Road intersection and the pavement markings for bike lanes along Ivy Road.

Appendix A
Traffic Count Data

Data Collection Group

LSmith@DataCollectionGroup.net

File Name : Copeley and Massie
Site Code :
Start Date : 1/26/2023
Page No : 1

Groups Printed- Passenger Veh - Trucks

	Copeley Rd From North				Massie Rd From East				Copeley Rd From South				Massie Rd From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	2	1	3	11	9	1	21	5	11	3	19	3	2	10	15	58
07:15 AM	1	12	3	16	12	8	1	21	18	7	10	35	5	6	16	27	99
07:30 AM	3	16	4	23	18	10	2	30	20	6	13	39	3	15	18	36	128
07:45 AM	3	19	6	28	31	14	4	49	15	9	15	39	8	23	34	65	181
Total	7	49	14	70	72	41	8	121	58	33	41	132	19	46	78	143	466
08:00 AM	2	27	7	36	16	6	1	23	29	12	16	57	8	23	31	62	178
08:15 AM	3	16	3	22	18	7	0	25	28	7	16	51	4	33	41	78	176
08:30 AM	6	16	3	25	13	11	3	27	25	9	25	59	5	15	22	42	153
08:45 AM	1	22	5	28	19	8	1	28	24	9	27	60	8	6	29	43	159
Total	12	81	18	111	66	32	5	103	106	37	84	227	25	77	123	225	666
04:00 PM	3	14	9	26	22	12	5	39	45	4	31	80	3	12	45	60	205
04:15 PM	4	8	9	21	25	9	0	34	47	16	36	99	3	4	41	48	202
04:30 PM	2	19	11	32	13	16	0	29	36	7	44	87	4	15	54	73	221
04:45 PM	4	21	8	33	24	17	5	46	41	7	26	74	3	16	42	61	214
Total	13	62	37	112	84	54	10	148	169	34	137	340	13	47	182	242	842
05:00 PM	9	16	11	36	25	27	2	54	56	8	24	88	6	12	52	70	248
05:15 PM	2	18	8	28	33	15	1	49	67	6	31	104	4	14	68	86	267
05:30 PM	3	19	11	33	19	25	7	51	44	9	49	102	4	17	58	79	265
05:45 PM	7	14	8	29	26	21	1	48	42	4	27	73	0	11	63	74	224
Total	21	67	38	126	103	88	11	202	209	27	131	367	14	54	241	309	1004
Grand Total	53	259	107	419	325	215	34	574	542	131	393	1066	71	224	624	919	2978
Apprch %	12.6	61.8	25.5		56.6	37.5	5.9		50.8	12.3	36.9		7.7	24.4	67.9		
Total %	1.8	8.7	3.6	14.1	10.9	7.2	1.1	19.3	18.2	4.4	13.2	35.8	2.4	7.5	21	30.9	
Passenger Veh	52	244	105	401	317	199	32	548	525	124	372	1021	70	205	599	874	2844
% Passenger Veh	98.1	94.2	98.1	95.7	97.5	92.6	94.1	95.5	96.9	94.7	94.7	95.8	98.6	91.5	96	95.1	95.5
Trucks	1	15	2	18	8	16	2	26	17	7	21	45	1	19	25	45	134
% Trucks	1.9	5.8	1.9	4.3	2.5	7.4	5.9	4.5	3.1	5.3	5.3	4.2	1.4	8.5	4	4.9	4.5

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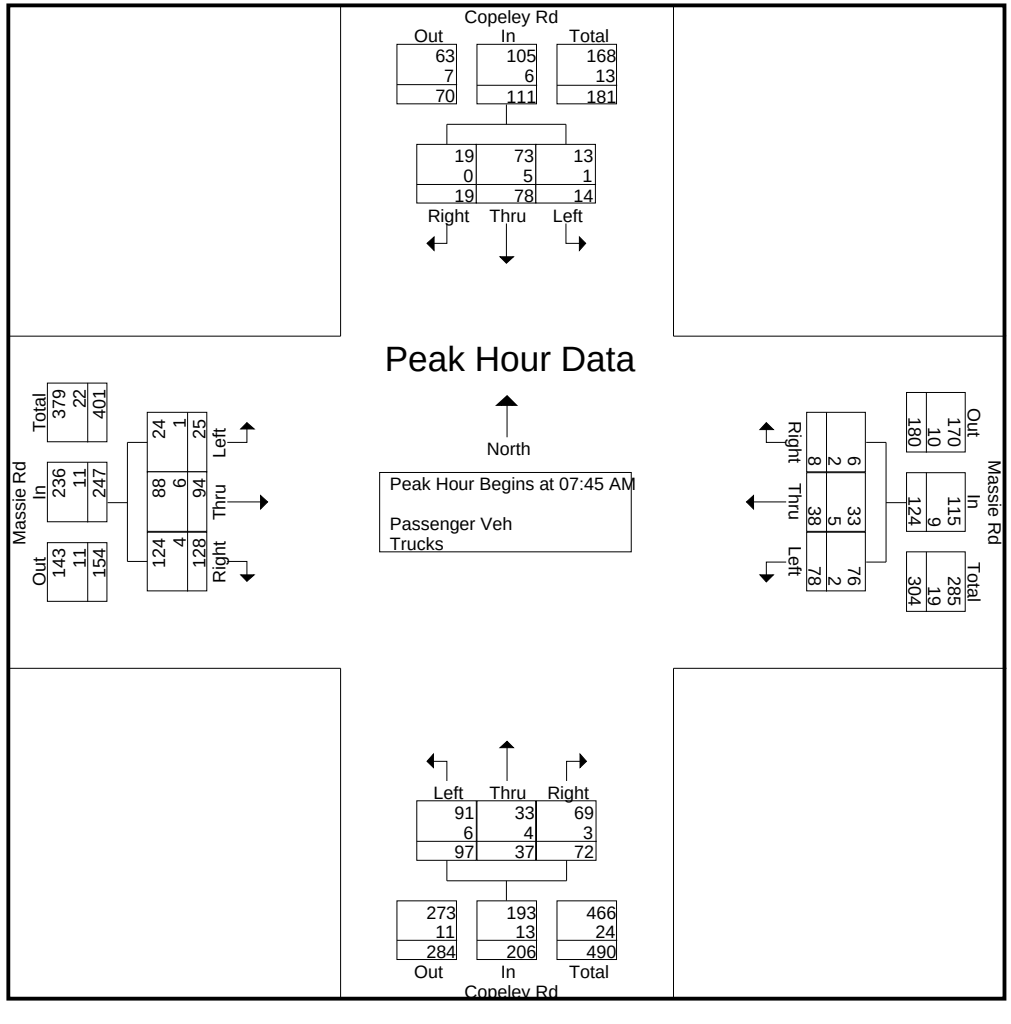
File Name : Copeley and Massie
Site Code :
Start Date : 1/26/2023

	Copeley Rd From North				Massie Rd From East				Copeley Rd From South				Massie Rd From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	3	19	6	28	**31**	**14**	**4**	**49**	15	9	15	39	**8**	23	34	65	**181**
08:00 AM	2	**27**	**7**	**36**	16	6	1	23	**29**	**12**	16	57	8	23	31	62	178
08:15 AM	3	16	3	22	18	7	0	25	28	7	16	51	4	**33**	**41**	**78**	176
08:30 AM	**6**	16	3	25	13	11	3	27	25	9	**25**	**59**	5	15	22	42	153
Total Volume	14	78	19	111	78	38	8	124	97	37	72	206	25	94	128	247	688
% App. Total	12.6	70.3	17.1		62.9	30.6	6.5		47.1	18	35		10.1	38.1	51.8		
PHF	.583	.722	.679	.771	.629	.679	.500	.633	.836	.771	.720	.873	.781	.712	.780	.792	.950
Passenger Veh	13	73	19	105	76	33	6	115	91	33	69	193	24	88	124	236	649
% Passenger Veh	92.9	93.6	100	94.6	97.4	86.8	75.0	92.7	93.8	89.2	95.8	93.7	96.0	93.6	96.9	95.5	94.3
Trucks	1	5	0	6	2	5	2	9	6	4	3	13	1	6	4	11	39
% Trucks	7.1	6.4	0	5.4	2.6	13.2	25.0	7.3	6.2	10.8	4.2	6.3	4.0	6.4	3.1	4.5	5.7

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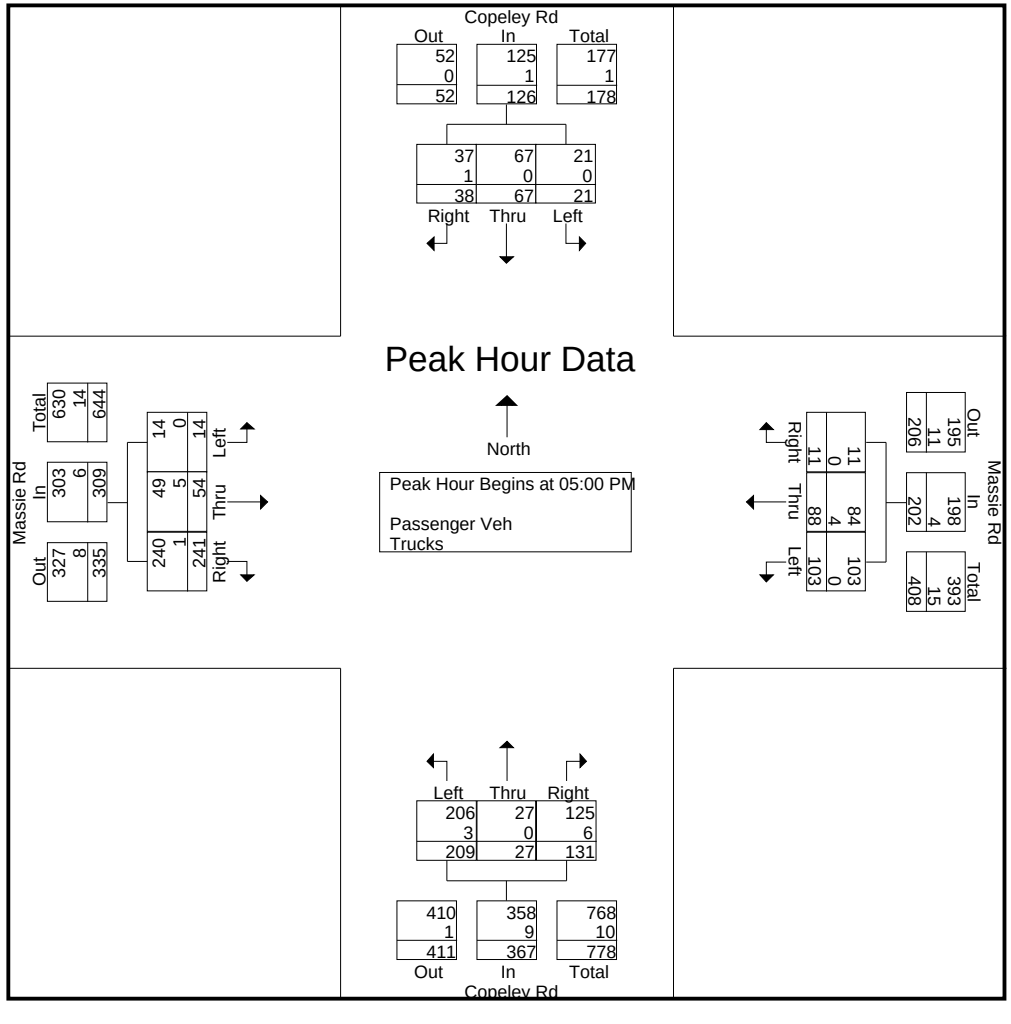
File Name : Copeley and Massie
Site Code :
Start Date : 1/26/2023
Page No : 4

	Copeley Rd From North				Massie Rd From East				Copeley Rd From South				Massie Rd From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 06:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**9**	16	**11**	**36**	25	**27**	2	**54**	56	8	24	88	**6**	12	52	70	248
05:15 PM	2	18	8	28	**33**	15	1	49	**67**	6	31	**104**	4	14	**68**	**86**	**267**
05:30 PM	3	**19**	11	33	19	25	**7**	51	44	**9**	**49**	102	4	**17**	58	79	265
05:45 PM	7	14	8	29	26	21	1	48	42	4	27	73	0	11	63	74	224
Total Volume	21	67	38	126	103	88	11	202	209	27	131	367	14	54	241	309	1004
% App. Total	16.7	53.2	30.2		51	43.6	5.4		56.9	7.4	35.7		4.5	17.5	78		
PHF	.583	.882	.864	.875	.780	.815	.393	.935	.780	.750	.668	.882	.583	.794	.886	.898	.940
Passenger Veh	21	67	37	125	103	84	11	198	206	27	125	358	14	49	240	303	984
% Passenger Veh	100	100	97.4	99.2	100	95.5	100	98.0	98.6	100	95.4	97.5	100	90.7	99.6	98.1	98.0
Trucks	0	0	1	1	0	4	0	4	3	0	6	9	0	5	1	6	20
% Trucks	0	0	2.6	0.8	0	4.5	0	2.0	1.4	0	4.6	2.5	0	9.3	0.4	1.9	2.0

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Site Code :
Start Date : 1/26/2023
Page No : 5



Data Collection Group

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File Name : Copeley and Massie
Site Code :
Start Date : 1/26/2023
Page No : 1

Groups Printed- Bikes - Peds

	Copeley Rd From North					Massie Rd From East					Copeley Rd From South					Massie Rd From West							
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	0	2	0	0	0	0	3	0	0	0	0	0	0	0	0	0	5	0	10	0	10
07:15 AM	0	0	0	0	0	0	0	0	3	0	0	0	0	2	0	0	0	0	0	0	5	0	5
07:30 AM	0	0	0	10	0	0	0	0	4	0	0	0	0	36	0	0	0	0	0	0	50	0	50
07:45 AM	0	1	0	9	1	0	1	0	1	1	0	0	1	37	1	0	0	0	1	0	48	3	51
Total	0	1	0	21	1	0	1	0	11	1	0	0	1	75	1	0	0	0	6	0	113	3	116
08:00 AM	0	0	0	0	0	0	0	0	2	0	0	0	0	8	0	0	1	0	0	1	10	1	11
08:15 AM	0	0	0	1	0	0	0	0	3	0	1	0	1	9	2	0	0	1	2	1	15	3	18
08:30 AM	0	0	0	2	0	0	0	0	2	0	0	0	0	5	0	0	0	0	0	0	9	0	9
08:45 AM	0	0	1	3	1	1	0	0	3	1	0	0	0	3	0	0	1	0	3	1	12	3	15
Total	0	0	1	6	1	1	0	0	10	1	1	0	1	25	2	0	2	1	5	3	46	7	53
04:00 PM	0	0	0	3	0	0	1	0	1	1	1	1	0	4	2	0	0	0	0	0	8	3	11
04:15 PM	0	0	0	7	0	0	0	0	3	0	0	0	1	5	1	0	0	0	1	0	16	1	17
04:30 PM	0	0	0	4	0	0	0	0	0	0	0	1	0	0	1	0	2	1	1	3	5	4	9
04:45 PM	0	0	0	1	0	0	1	0	1	1	0	0	0	4	0	0	0	0	1	0	7	1	8
Total	0	0	0	15	0	0	2	0	5	2	1	2	1	13	4	0	2	1	3	3	36	9	45
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	6	1	0	0	0	1	0	7	1	8
05:15 PM	0	1	0	3	1	0	0	0	10	0	0	0	0	4	0	0	1	0	3	1	20	2	22
05:30 PM	0	0	0	2	0	2	0	0	4	2	0	0	1	3	1	0	0	1	3	1	12	4	16
05:45 PM	0	0	0	2	0	0	0	0	1	0	1	0	0	18	1	0	0	1	1	1	22	2	24
Total	0	1	0	7	1	2	0	0	15	2	1	1	1	31	3	0	1	2	8	3	61	9	70
Grand Total	0	2	1	49	3	3	3	0	41	6	3	3	4	144	10	0	5	4	22	9	256	28	284
Apprch %	0	66.7	33.3			50	50	0			30	30	40			0	55.6	44.4					
Total %	0	7.1	3.6		10.7	10.7	10.7	0		21.4	10.7	10.7	14.3		35.7	0	17.9	14.3		32.1	90.1	9.9	
Bikes	0	2	1		3	3	3	0		6	3	3	4		10	0	5	4		9	0	0	28
% Bikes	0	100	100	0	5.8	100	100	0	0	12.8	100	100	100	0	6.5	0	100	100	0	29	0	0	9.9
Peds	0	0	0		49	0	0	0		41	0	0	0		144	0	0	0		22	0	0	256
% Peds	0	0	0	100	94.2	0	0	0	100	87.2	0	0	0	100	93.5	0	0	0	100	71	0	0	90.1

Data Collection Group

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File Name : Ivy and Alderman
Site Code :
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Groups Printed- Passenger Veh - Trucks

	Copeley Rd From North				Ivy Rd From East				Alderman Rd From South				Ivy Rd From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	4	17	6	27	7	26	5	38	10	16	13	39	8	77	19	104	208
07:15 AM	3	29	17	49	10	39	10	59	17	17	16	50	16	106	29	151	309
07:30 AM	6	29	15	50	15	61	7	83	21	23	9	53	21	107	59	187	373
07:45 AM	8	45	30	83	15	49	10	74	32	31	16	79	16	104	60	180	416
Total	21	120	68	209	47	175	32	254	80	87	54	221	61	394	167	622	1306
08:00 AM	10	40	27	77	14	53	14	81	42	33	18	93	26	98	52	176	427
08:15 AM	9	36	32	77	10	56	18	84	31	29	18	78	25	105	42	172	411
08:30 AM	12	29	24	65	11	48	4	63	38	41	26	105	19	99	42	160	393
08:45 AM	7	42	23	72	7	46	6	59	21	44	11	76	33	102	55	190	397
Total	38	147	106	291	42	203	42	287	132	147	73	352	103	404	191	698	1628
04:00 PM	10	44	60	114	11	108	16	135	49	37	11	97	26	68	26	120	466
04:15 PM	8	30	66	104	18	107	18	143	59	59	9	127	24	85	32	141	515
04:30 PM	13	32	73	118	14	97	9	120	56	51	14	121	24	62	32	118	477
04:45 PM	12	31	45	88	19	152	24	195	60	44	11	115	10	67	37	114	512
Total	43	137	244	424	62	464	67	593	224	191	45	460	84	282	127	493	1970
05:00 PM	7	26	78	111	11	137	15	163	61	69	9	139	24	70	48	142	555
05:15 PM	4	37	71	112	10	135	15	160	63	67	9	139	18	74	28	120	531
05:30 PM	7	37	78	122	6	121	19	146	50	56	8	114	29	65	63	157	539
05:45 PM	5	29	68	102	14	85	11	110	32	36	13	81	19	71	88	178	471
Total	23	129	295	447	41	478	60	579	206	228	39	473	90	280	227	597	2096
Grand Total	125	533	713	1371	192	1320	201	1713	642	653	211	1506	338	1360	712	2410	7000
Apprch %	9.1	38.9	52		11.2	77.1	11.7		42.6	43.4	14		14	56.4	29.5		
Total %	1.8	7.6	10.2	19.6	2.7	18.9	2.9	24.5	9.2	9.3	3	21.5	4.8	19.4	10.2	34.4	
Passenger Veh	120	522	698	1340	142	1296	197	1635	631	626	206	1463	329	1337	703	2369	6807
% Passenger Veh	96	97.9	97.9	97.7	74	98.2	98	95.4	98.3	95.9	97.6	97.1	97.3	98.3	98.7	98.3	97.2
Trucks	5	11	15	31	50	24	4	78	11	27	5	43	9	23	9	41	193
% Trucks	4	2.1	2.1	2.3	26	1.8	2	4.6	1.7	4.1	2.4	2.9	2.7	1.7	1.3	1.7	2.8

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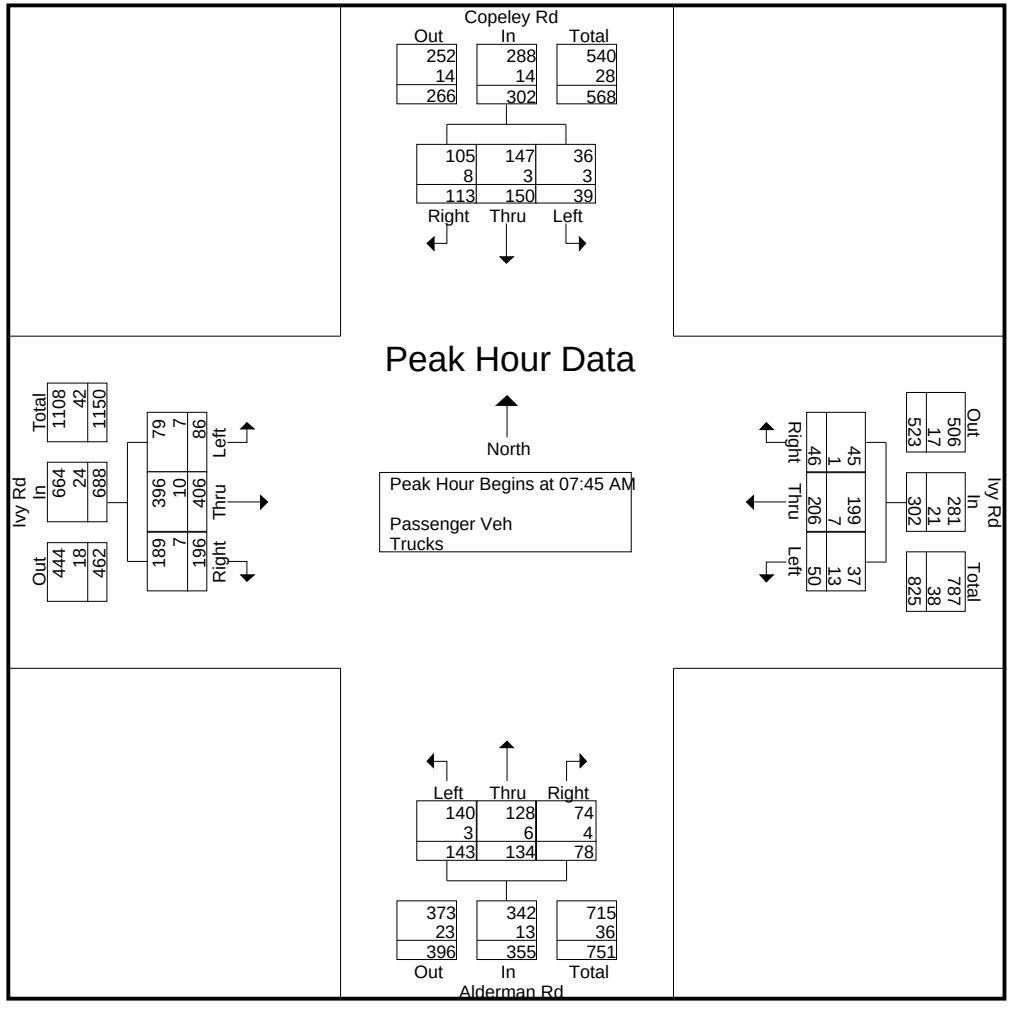
File Name : Ivy and Alderman
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	Copeley Rd From North				Ivy Rd From East				Alderman Rd From South				Ivy Rd From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	8	**45**	30	**83**	**15**	49	10	74	32	31	16	79	16	104	**60**	**180**	416
08:00 AM	10	40	27	77	14	53	14	81	**42**	33	18	93	**26**	98	52	176	**427**
08:15 AM	9	36	**32**	77	10	**56**	**18**	**84**	31	29	18	78	25	**105**	42	172	411
08:30 AM	**12**	29	24	65	11	48	4	63	38	**41**	**26**	**105**	19	99	42	160	393
Total Volume	39	150	113	302	50	206	46	302	143	134	78	355	86	406	196	688	1647
% App. Total	12.9	49.7	37.4		16.6	68.2	15.2		40.3	37.7	22		12.5	59	28.5		
PHF	.813	.833	.883	.910	.833	.920	.639	.899	.851	.817	.750	.845	.827	.967	.817	.956	.964
Passenger Veh	36	147	105	288	37	199	45	281	140	128	74	342	79	396	189	664	1575
% Passenger Veh	92.3	98.0	92.9	95.4	74.0	96.6	97.8	93.0	97.9	95.5	94.9	96.3	91.9	97.5	96.4	96.5	95.6
Trucks	3	3	8	14	13	7	1	21	3	6	4	13	7	10	7	24	72
% Trucks	7.7	2.0	7.1	4.6	26.0	3.4	2.2	7.0	2.1	4.5	5.1	3.7	8.1	2.5	3.6	3.5	4.4

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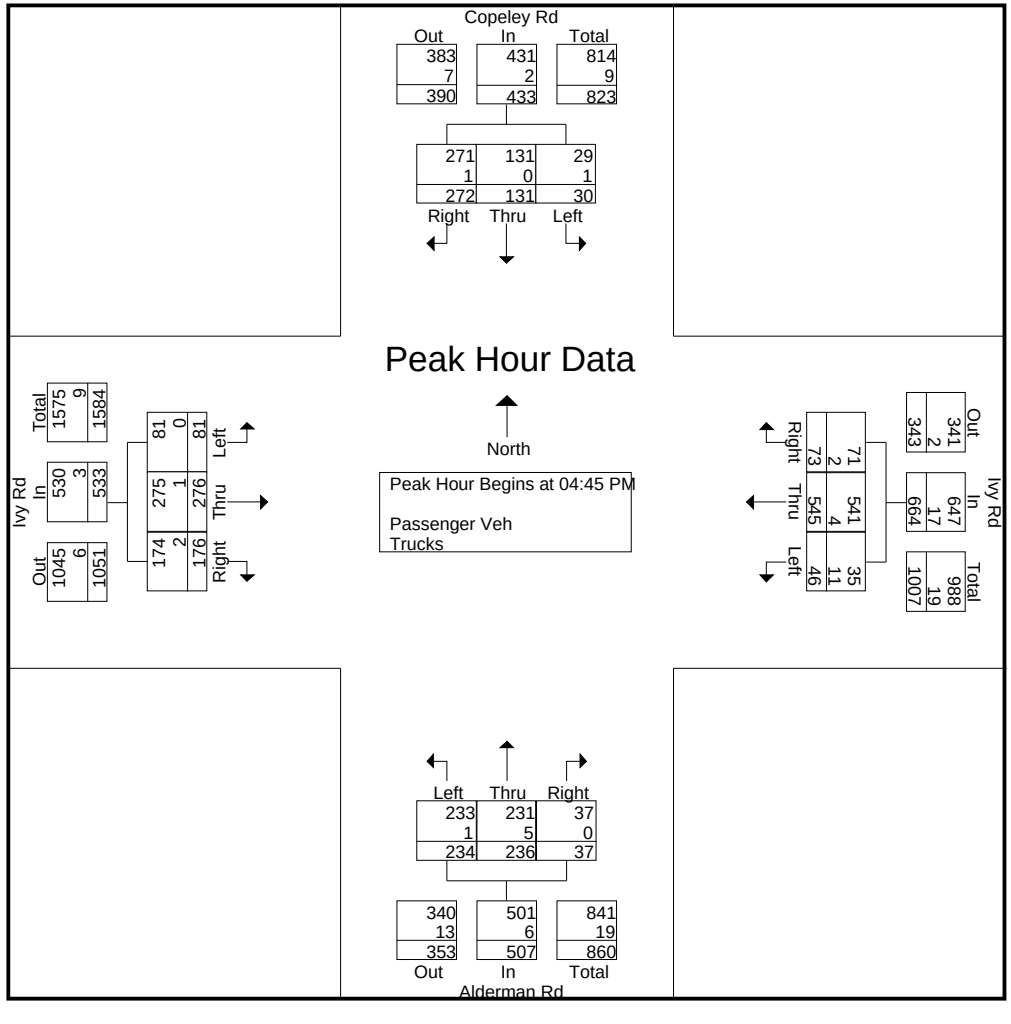
File Name : Ivy and Alderman
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	Copeley Rd From North				Ivy Rd From East				Alderman Rd From South				Ivy Rd From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**12**	31	45	88	**19**	**152**	**24**	**195**	60	44	**11**	115	10	67	37	114	512
05:00 PM	7	26	**78**	111	11	137	15	163	61	**69**	9	**139**	24	70	48	142	**555**
05:15 PM	4	**37**	71	112	10	135	15	160	**63**	67	9	139	18	**74**	28	120	531
05:30 PM	7	37	78	**122**	6	121	19	146	50	56	8	114	**29**	65	**63**	**157**	539
Total Volume	30	131	272	433	46	545	73	664	234	236	37	507	81	276	176	533	2137
% App. Total	6.9	30.3	62.8		6.9	82.1	11		46.2	46.5	7.3		15.2	51.8	33		
PHF	.625	.885	.872	.887	.605	.896	.760	.851	.929	.855	.841	.912	.698	.932	.698	.849	.963
Passenger Veh	29	131	271	431	35	541	71	647	233	231	37	501	81	275	174	530	2109
% Passenger Veh	96.7	100	99.6	99.5	76.1	99.3	97.3	97.4	99.6	97.9	100	98.8	100	99.6	98.9	99.4	98.7
Trucks	1	0	1	2	11	4	2	17	1	5	0	6	0	1	2	3	28
% Trucks	3.3	0	0.4	0.5	23.9	0.7	2.7	2.6	0.4	2.1	0	1.2	0	0.4	1.1	0.6	1.3

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Groups Printed- Bikes - Peds

	Copeley Rd From North					Ivy Rd From East					Alderman Rd From South					Ivy Rd From West							
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	0	1	0	0	2	1	8	3	0	0	0	0	0	0	0	0	1	0	10	3	13
07:15 AM	0	0	0	0	0	0	0	0	12	0	0	0	0	1	0	0	0	0	0	0	13	0	13
07:30 AM	0	0	0	4	0	0	2	0	4	2	0	0	0	0	0	0	0	0	2	0	10	2	12
07:45 AM	0	1	0	1	1	1	1	0	5	2	0	5	0	0	5	0	0	0	1	0	7	8	15
Total	0	1	0	6	1	1	5	1	29	7	0	5	0	1	5	0	0	0	4	0	40	13	53
08:00 AM	0	0	0	1	0	0	0	4	3	4	0	5	0	0	5	0	0	1	0	1	4	10	14
08:15 AM	1	1	0	0	2	1	0	2	8	3	0	9	0	1	9	0	0	0	0	0	9	14	23
08:30 AM	0	0	0	1	0	0	0	0	4	0	0	1	0	1	1	0	0	0	0	0	6	1	7
08:45 AM	0	0	0	3	0	0	2	1	11	3	0	0	0	1	0	0	0	0	0	0	15	3	18
Total	1	1	0	5	2	1	2	7	26	10	0	15	0	3	15	0	0	1	0	1	34	28	62
04:00 PM	0	1	0	1	1	0	0	1	3	1	0	0	0	0	0	0	0	0	1	0	5	2	7
04:15 PM	0	0	1	5	1	0	0	0	20	0	0	3	0	0	3	0	0	0	0	0	25	4	29
04:30 PM	0	3	0	2	3	0	0	0	6	0	0	1	0	2	1	0	2	0	0	2	10	6	16
04:45 PM	0	1	0	1	1	1	0	0	2	1	0	1	0	0	1	0	1	0	0	1	3	4	7
Total	0	5	1	9	6	1	0	1	31	2	0	5	0	2	5	0	3	0	1	3	43	16	59
05:00 PM	0	0	0	1	0	0	0	2	13	2	1	1	0	3	2	0	0	0	0	0	17	4	21
05:15 PM	0	1	0	3	1	0	0	0	9	0	0	0	0	1	0	0	1	1	2	2	15	3	18
05:30 PM	1	3	0	3	4	0	0	0	4	0	0	2	0	1	2	0	1	0	3	1	11	7	18
05:45 PM	1	2	0	2	3	0	0	0	5	0	0	1	0	0	1	0	1	0	1	1	8	5	13
Total	2	6	0	9	8	0	0	2	31	2	1	4	0	5	5	0	3	1	6	4	51	19	70
Grand Total	3	13	1	29	17	3	7	11	117	21	1	29	0	11	30	0	6	2	11	8	168	76	244
Apprch %	17.6	76.5	5.9			14.3	33.3	52.4			3.3	96.7	0			0	75	25					
Total %	3.9	17.1	1.3		22.4	3.9	9.2	14.5		27.6	1.3	38.2	0		39.5	0	7.9	2.6		10.5	68.9	31.1	
Bikes	3	13	1		17	3	7	11		21	1	29	0		30	0	6	2		8	0	0	76
% Bikes	100	100	100	0	37	100	100	100	0	15.2	100	100	0	0	73.2	0	100	100	0	42.1	0	0	31.1
Peds	0	0	0		29	0	0	0		117	0	0	0		11	0	0	0		11	0	0	168
% Peds	0	0	0	100	63	0	0	0	100	84.8	0	0	0	100	26.8	0	0	0	100	57.9	0	0	68.9

Data Collection Group

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File Name : Ivy and Rothery
Site Code :
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Groups Printed- Passenger Veh - Trucks

	Parking Garage Access From North				Ivy Rd From East				Rothery Rd From South				Ivy Rd From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	4	4	0	30	48	78	0	0	0	0	53	32	0	85	167
07:15 AM	0	0	1	1	0	60	56	116	0	0	0	0	63	55	1	119	236
07:30 AM	1	0	2	3	0	73	48	121	0	0	1	1	69	49	0	118	243
07:45 AM	1	0	2	3	0	76	34	110	0	0	1	1	41	86	0	127	241
Total	2	0	9	11	0	239	186	425	0	0	2	2	226	222	1	449	887
08:00 AM	2	0	10	12	0	73	45	118	0	0	1	1	33	87	0	120	251
08:15 AM	4	0	2	6	0	79	47	126	0	0	0	0	33	83	0	116	248
08:30 AM	1	0	5	6	0	57	41	98	0	0	1	1	28	101	0	129	234
08:45 AM	0	0	3	3	0	53	31	84	0	0	0	0	15	114	0	129	216
Total	7	0	20	27	0	262	164	426	0	0	2	2	109	385	0	494	949
04:00 PM	14	0	25	39	0	102	2	104	0	0	1	1	2	81	0	83	227
04:15 PM	35	0	52	87	0	81	1	82	0	0	0	0	2	101	0	103	272
04:30 PM	25	0	38	63	0	83	3	86	0	0	0	0	1	83	0	84	233
04:45 PM	32	0	78	110	0	107	2	109	0	0	0	0	1	89	0	90	309
Total	106	0	193	299	0	373	8	381	0	0	1	1	6	354	0	360	1041
05:00 PM	23	0	46	69	0	112	1	113	0	0	1	1	1	89	0	90	273
05:15 PM	31	0	53	84	0	112	0	112	0	0	2	2	2	82	0	84	282
05:30 PM	32	0	47	79	0	96	3	99	0	0	0	0	1	82	0	83	261
05:45 PM	18	0	23	41	0	77	1	78	0	0	0	0	0	92	0	92	211
Total	104	0	169	273	0	397	5	402	0	0	3	3	4	345	0	349	1027
Grand Total	219	0	391	610	0	1271	363	1634	0	0	8	8	345	1306	1	1652	3904
Apprch %	35.9	0	64.1		0	77.8	22.2		0	0	100		20.9	79.1	0.1		
Total %	5.6	0	10	15.6	0	32.6	9.3	41.9	0	0	0.2	0.2	8.8	33.5	0	42.3	
Passenger Veh	218	0	383	601	0	1197	361	1558	0	0	8	8	340	1269	1	1610	3777
% Passenger Veh	99.5	0	98	98.5	0	94.2	99.4	95.3	0	0	100	100	98.6	97.2	100	97.5	96.7
Trucks	1	0	8	9	0	74	2	76	0	0	0	0	5	37	0	42	127
% Trucks	0.5	0	2	1.5	0	5.8	0.6	4.7	0	0	0	0	1.4	2.8	0	2.5	3.3

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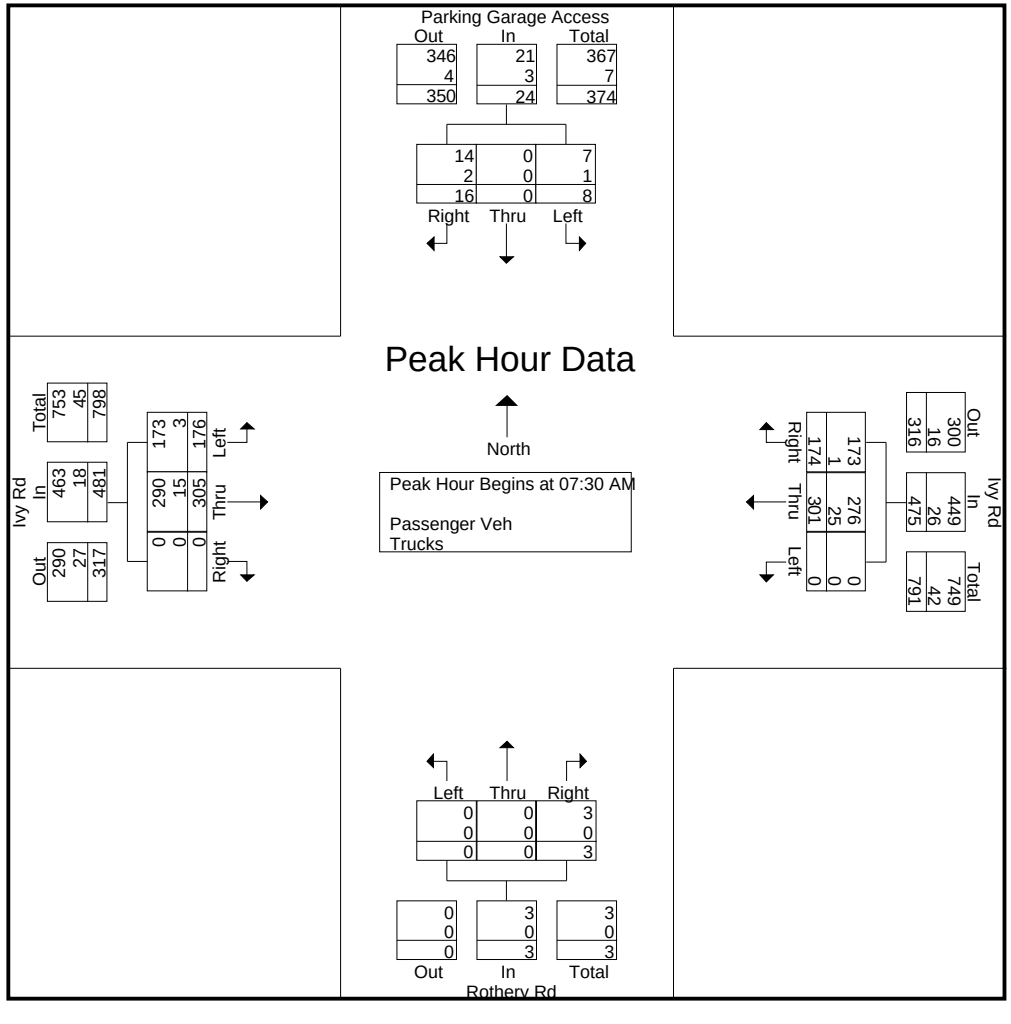
File Name : Ivy and Rothery
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	Parking Garage Access From North				Ivy Rd From East				Rothery Rd From South				Ivy Rd From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	1	0	2	3	0	73	**48**	121	0	0	**1**	**1**	**69**	49	0	118	243
07:45 AM	1	0	2	3	0	76	34	110	0	0	1	1	41	86	0	**127**	241
08:00 AM	2	0	**10**	**12**	0	73	45	118	0	0	1	1	33	**87**	0	120	**251**
08:15 AM	**4**	0	2	6	0	**79**	47	**126**	0	0	0	0	33	83	0	116	248
Total Volume	8	0	16	24	0	301	174	475	0	0	3	3	176	305	0	481	983
% App. Total	33.3	0	66.7		0	63.4	36.6		0	0	100		36.6	63.4	0		
PHF	.500	.000	.400	.500	.000	.953	.906	.942	.000	.000	.750	.750	.638	.876	.000	.947	.979
Passenger Veh	7	0	14	21	0	276	173	449	0	0	3	3	173	290	0	463	936
% Passenger Veh	87.5	0	87.5	87.5	0	91.7	99.4	94.5	0	0	100	100	98.3	95.1	0	96.3	95.2
Trucks	1	0	2	3	0	25	1	26	0	0	0	0	3	15	0	18	47
% Trucks	12.5	0	12.5	12.5	0	8.3	0.6	5.5	0	0	0	0	1.7	4.9	0	3.7	4.8

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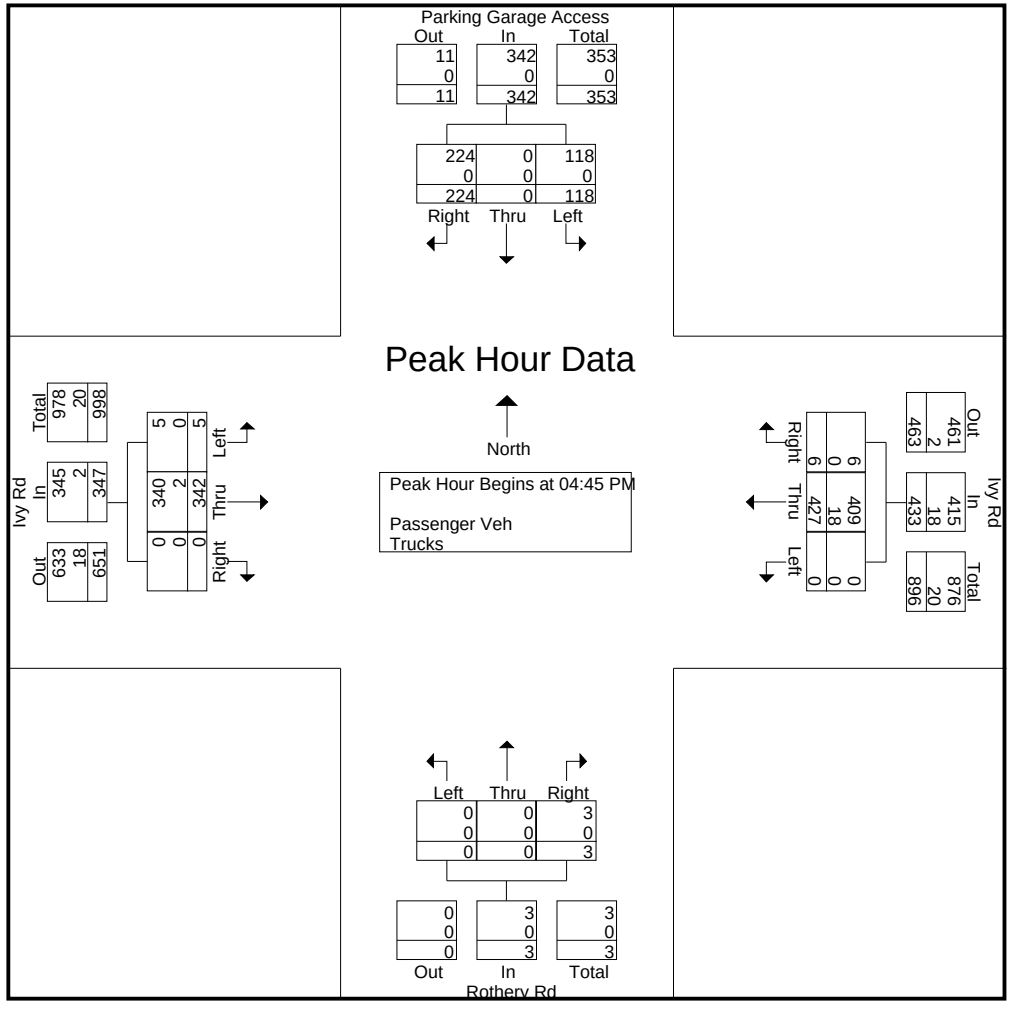
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	Parking Garage Access From North				Ivy Rd From East				Rothery Rd From South				Ivy Rd From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**32**	0	**78**	**110**	0	107	2	109	0	0	0	0	1	**89**	0	**90**	**309**
05:00 PM	23	0	46	69	0	**112**	1	**113**	0	0	1	1	1	89	0	90	273
05:15 PM	31	0	53	84	0	112	0	112	0	0	**2**	**2**	**2**	82	0	84	282
05:30 PM	32	0	47	79	0	96	**3**	99	0	0	0	0	1	82	0	83	261
Total Volume	118	0	224	342	0	427	6	433	0	0	3	3	5	342	0	347	1125
% App. Total	34.5	0	65.5		0	98.6	1.4		0	0	100		1.4	98.6	0		
PHF	.922	.000	.718	.777	.000	.953	.500	.958	.000	.000	.375	.375	.625	.961	.000	.964	.910
Passenger Veh	118	0	224	342	0	409	6	415	0	0	3	3	5	340	0	345	1105
% Passenger Veh	100	0	100	100	0	95.8	100	95.8	0	0	100	100	100	99.4	0	99.4	98.2
Trucks	0	0	0	0	0	18	0	18	0	0	0	0	0	2	0	2	20
% Trucks	0	0	0	0	0	4.2	0	4.2	0	0	0	0	0	0.6	0	0.6	1.8

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File Name : Ivy and Rothery
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Page No : 5



Data Collection Group

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Site Code :
Start Date : 1/26/2023
Page No : 1

Groups Printed- Bikes - Peds

	Parking Garage Access From North					Ivy Rd From East					Rothery Rd From South					Ivy Rd From West							
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	1	0	0	5	1	0	2	0	0	2	0	0	0	0	0	0	0	0	1	0	6	3	9
07:15 AM	0	0	0	15	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	16	0	16
07:30 AM	0	1	0	21	1	0	2	0	0	2	0	0	0	1	0	0	0	0	0	0	22	3	25
07:45 AM	0	0	0	8	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	11	0	11
Total	1	1	0	49	2	0	4	0	1	4	0	0	0	3	0	0	0	0	2	0	55	6	61
08:00 AM	0	0	0	2	0	0	3	0	0	3	0	0	0	1	0	0	0	0	0	0	3	3	6
08:15 AM	0	0	0	4	0	0	1	0	0	1	0	0	0	0	0	0	1	0	1	1	5	2	7
08:30 AM	0	0	0	6	0	0	0	1	0	1	0	0	0	1	0	0	0	0	1	0	8	1	9
08:45 AM	2	0	0	7	2	0	1	0	0	1	0	0	0	3	0	0	0	0	0	0	10	3	13
Total	2	0	0	19	2	0	5	1	0	6	0	0	0	5	0	0	1	0	2	1	26	9	35
04:00 PM	0	0	0	14	0	0	1	0	0	1	0	0	0	1	0	1	0	0	1	1	16	2	18
04:15 PM	0	0	0	13	0	0	0	0	2	0	0	0	0	10	0	0	1	0	4	1	29	1	30
04:30 PM	0	0	0	21	0	0	1	0	0	1	0	0	0	2	0	0	0	0	0	0	23	1	24
04:45 PM	0	0	0	38	0	0	3	1	0	4	0	0	0	1	0	0	1	0	1	1	40	5	45
Total	0	0	0	86	0	0	5	1	2	6	0	0	0	14	0	1	2	0	6	3	108	9	117
05:00 PM	0	0	0	24	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	25	1	26
05:15 PM	0	0	0	48	0	0	0	1	1	1	0	0	0	0	0	0	1	0	1	1	50	2	52
05:30 PM	0	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	2	0	3	2	25	2	27
05:45 PM	0	0	0	26	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	2	27	2	29
Total	0	0	0	120	0	0	1	1	2	2	0	0	0	1	0	0	5	0	4	5	127	7	134
Grand Total	3	1	0	274	4	0	15	3	5	18	0	0	0	23	0	1	8	0	14	9	316	31	347
Apprch %	75	25	0			0	83.3	16.7			0	0	0			11.1	88.9	0					
Total %	9.7	3.2	0		12.9	0	48.4	9.7		58.1	0	0	0		0	3.2	25.8	0		29	91.1	8.9	
Bikes	3	1	0		4	0	15	3		18	0	0	0		0	1	8	0		9	0	0	31
% Bikes	100	100	0	0	1.4	0	100	100	0	78.3	0	0	0	0	0	100	100	0	0	39.1	0	0	8.9
Peds	0	0	0		274	0	0	0		5	0	0	0		23	0	0	0		14	0	0	316
% Peds	0	0	0	100	98.6	0	0	0	100	21.7	0	0	0	100	100	0	0	0	100	60.9	0	0	91.1

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Page No : 1

Groups Printed- Passenger Veh - Trucks

	Emmet St From North				University Ave From East				Emmet St From South				Ivy Rd From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	27	59	43	129	5	22	44	71	16	35	5	56	7	27	6	40	296
07:15 AM	38	63	51	152	4	42	47	93	20	36	4	60	3	33	12	48	353
07:30 AM	50	89	54	193	10	48	48	106	15	54	10	79	3	35	10	48	426
07:45 AM	64	73	34	171	23	55	74	152	20	75	18	113	12	66	9	87	523
Total	179	284	182	645	42	167	213	422	71	200	37	308	25	161	37	223	1598
08:00 AM	63	78	57	198	20	50	40	110	9	55	20	84	14	58	6	78	470
08:15 AM	102	74	45	221	12	65	40	117	13	43	26	82	6	72	13	91	511
08:30 AM	73	76	43	192	21	40	45	106	20	51	20	91	11	65	14	90	479
08:45 AM	91	94	30	215	22	35	36	93	16	46	33	95	26	81	21	128	531
Total	329	322	175	826	75	190	161	426	58	195	99	352	57	276	54	387	1991
04:00 PM	55	67	25	147	27	59	73	159	22	85	11	118	27	55	24	106	530
04:15 PM	61	93	21	175	21	47	66	134	16	95	18	129	54	51	18	123	561
04:30 PM	49	108	29	186	17	46	66	129	8	98	20	126	39	53	11	103	544
04:45 PM	51	95	19	165	30	64	70	164	30	75	36	141	50	55	24	129	599
Total	216	363	94	673	95	216	275	586	76	353	85	514	170	214	77	461	2234
05:00 PM	65	95	21	181	30	79	96	205	16	96	14	126	31	56	27	114	626
05:15 PM	71	98	20	189	19	67	77	163	30	111	20	161	42	53	19	114	627
05:30 PM	78	117	14	209	24	58	88	170	20	95	22	137	38	48	31	117	633
05:45 PM	64	128	19	211	28	52	73	153	13	108	20	141	32	52	34	118	623
Total	278	438	74	790	101	256	334	691	79	410	76	565	143	209	111	463	2509
Grand Total	1002	1407	525	2934	313	829	983	2125	284	1158	297	1739	395	860	279	1534	8332
Apprch %	34.2	48	17.9		14.7	39	46.3		16.3	66.6	17.1		25.7	56.1	18.2		
Total %	12	16.9	6.3	35.2	3.8	9.9	11.8	25.5	3.4	13.9	3.6	20.9	4.7	10.3	3.3	18.4	
Passenger Veh	993	1343	512	2848	297	823	976	2096	222	1123	285	1630	388	848	262	1498	8072
% Passenger Veh	99.1	95.5	97.5	97.1	94.9	99.3	99.3	98.6	78.2	97	96	93.7	98.2	98.6	93.9	97.7	96.9
Trucks	9	64	13	86	16	6	7	29	62	35	12	109	7	12	17	36	260
% Trucks	0.9	4.5	2.5	2.9	5.1	0.7	0.7	1.4	21.8	3	4	6.3	1.8	1.4	6.1	2.3	3.1

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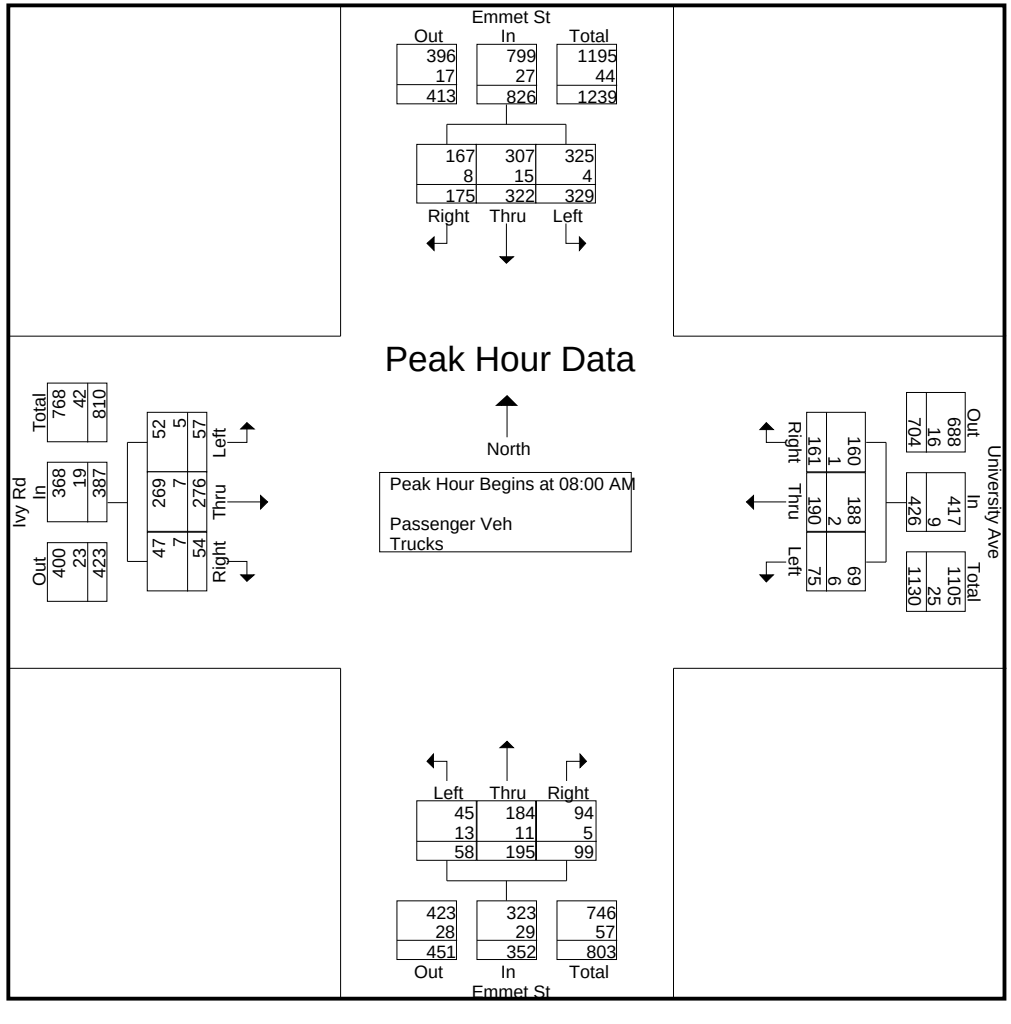
File Name : Ivy and Emmet
Site Code :
Start Date : 1/26/2023
Page No : 2

	Emmet St From North				University Ave From East				Emmet St From South				Ivy Rd From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	63	78	**57**	198	20	50	40	110	9	**55**	20	84	14	58	6	78	470
08:15 AM	**102**	74	45	**221**	12	**65**	40	**117**	13	43	26	82	6	72	13	91	511
08:30 AM	73	76	43	192	21	40	**45**	106	**20**	51	20	91	11	65	14	90	479
08:45 AM	91	**94**	30	215	**22**	35	36	93	16	46	**33**	**95**	**26**	**81**	**21**	**128**	**531**
Total Volume	329	322	175	826	75	190	161	426	58	195	99	352	57	276	54	387	1991
% App. Total	39.8	39	21.2		17.6	44.6	37.8		16.5	55.4	28.1		14.7	71.3	14		
PHF	.806	.856	.768	.934	.852	.731	.894	.910	.725	.886	.750	.926	.548	.852	.643	.756	.937
Passenger Veh	325	307	167	799	69	188	160	417	45	184	94	323	52	269	47	368	1907
% Passenger Veh	98.8	95.3	95.4	96.7	92.0	98.9	99.4	97.9	77.6	94.4	94.9	91.8	91.2	97.5	87.0	95.1	95.8
Trucks	4	15	8	27	6	2	1	9	13	11	5	29	5	7	7	19	84
% Trucks	1.2	4.7	4.6	3.3	8.0	1.1	0.6	2.1	22.4	5.6	5.1	8.2	8.8	2.5	13.0	4.9	4.2

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Site Code :
Start Date : 1/26/2023
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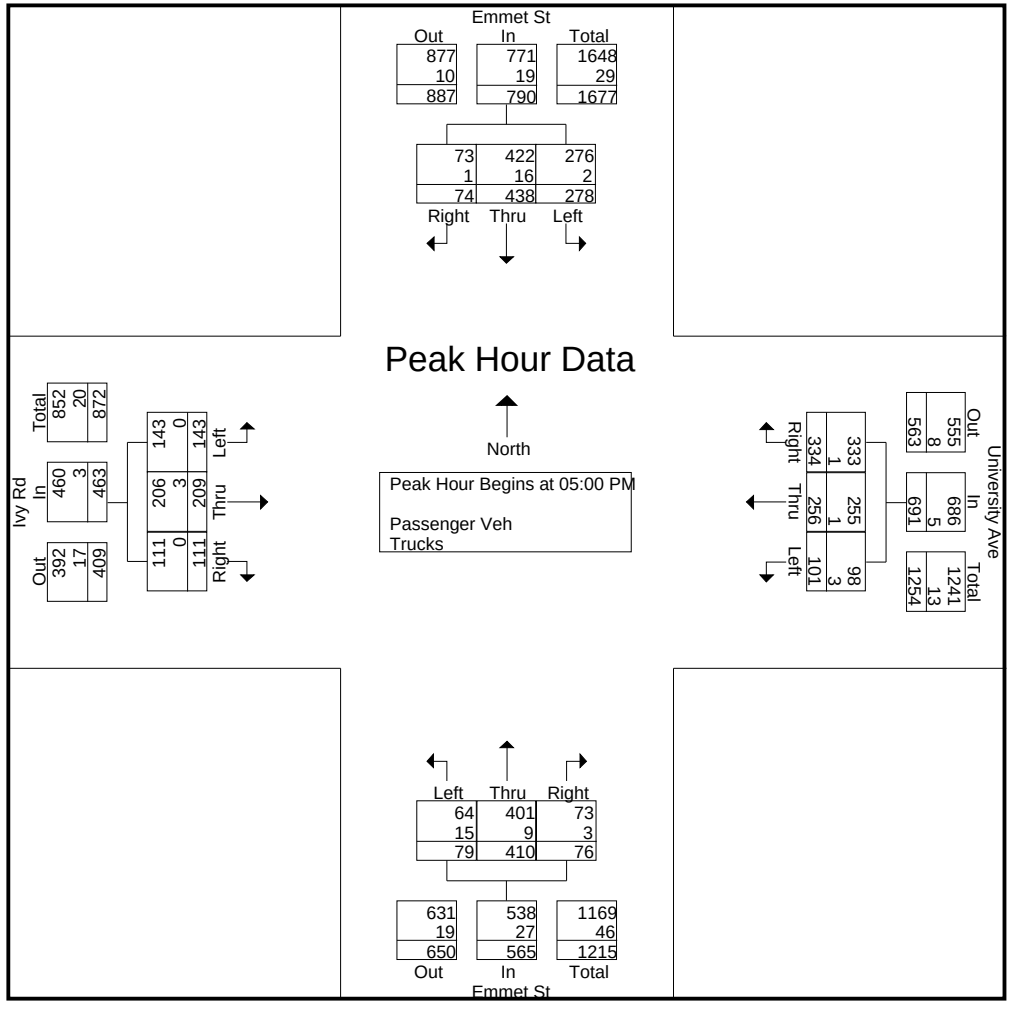
File Name : Ivy and Emmet
Site Code :
Start Date : 1/26/2023
Page No : 4

	Emmet St From North				University Ave From East				Emmet St From South				Ivy Rd From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	65	95	**21**	181	**30**	**79**	**96**	**205**	16	96	14	126	31	**56**	27	114	626
05:15 PM	71	98	20	189	19	67	77	163	**30**	**111**	20	**161**	**42**	53	19	114	627
05:30 PM	**78**	117	14	209	24	58	88	170	20	95	**22**	137	38	48	31	117	**633**
05:45 PM	64	**128**	19	**211**	28	52	73	153	13	108	20	141	32	52	**34**	**118**	623
Total Volume	278	438	74	790	101	256	334	691	79	410	76	565	143	209	111	463	2509
% App. Total	35.2	55.4	9.4		14.6	37	48.3		14	72.6	13.5		30.9	45.1	24		
PHF	.891	.855	.881	.936	.842	.810	.870	.843	.658	.923	.864	.877	.851	.933	.816	.981	.991
Passenger Veh	276	422	73	771	98	255	333	686	64	401	73	538	143	206	111	460	2455
% Passenger Veh	99.3	96.3	98.6	97.6	97.0	99.6	99.7	99.3	81.0	97.8	96.1	95.2	100	98.6	100	99.4	97.8
Trucks	2	16	1	19	3	1	1	5	15	9	3	27	0	3	0	3	54
% Trucks	0.7	3.7	1.4	2.4	3.0	0.4	0.3	0.7	19.0	2.2	3.9	4.8	0	1.4	0	0.6	2.2

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Start Date : 1/26/2023
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Data Collection Group

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File Name : Ivy and Emmet
Site Code :
Start Date : 1/26/2023
Page No : 1

Groups Printed- Bikes - Peds

	Emmet St From North					University Ave From East					Emmet St From South					Ivy Rd From West							
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	1	0	0	3	1	0	1	0	0	1	1	0	0	1	1	0	0	0	7	0	11	3	14
07:15 AM	1	0	0	6	1	1	0	0	3	1	0	1	0	4	1	0	0	0	4	0	17	3	20
07:30 AM	0	0	1	12	1	0	1	0	5	1	0	1	0	0	1	0	0	0	2	0	19	3	22
07:45 AM	1	2	1	23	4	1	0	0	4	1	0	0	0	5	0	0	0	1	9	1	41	6	47
Total	3	2	2	44	7	2	2	0	12	4	1	2	0	10	3	0	0	1	22	1	88	15	103
08:00 AM	0	0	1	14	1	0	3	0	5	3	0	0	0	0	0	0	0	1	7	1	26	5	31
08:15 AM	0	0	0	10	0	0	0	3	2	3	0	0	0	0	0	0	0	0	2	0	14	3	17
08:30 AM	0	0	1	19	1	0	1	0	10	1	0	0	0	3	0	0	0	2	9	2	41	4	45
08:45 AM	1	0	0	29	1	0	1	0	4	1	0	0	0	3	0	0	1	0	11	1	47	3	50
Total	1	0	2	72	3	0	5	3	21	8	0	0	0	6	0	0	1	3	29	4	128	15	143
04:00 PM	0	0	0	8	0	0	1	0	8	1	0	1	0	9	1	0	0	0	5	0	30	2	32
04:15 PM	0	0	0	21	0	0	0	0	4	0	0	0	0	3	0	0	1	0	10	1	38	1	39
04:30 PM	1	0	0	22	1	1	1	1	9	3	0	1	0	0	1	0	0	0	8	0	39	5	44
04:45 PM	0	1	0	22	1	1	2	2	22	5	0	2	1	2	3	0	1	0	8	1	54	10	64
Total	1	1	0	73	2	2	4	3	43	9	0	4	1	14	5	0	2	0	31	2	161	18	179
05:00 PM	0	0	0	20	0	0	1	0	19	1	1	1	0	0	2	0	0	0	8	0	47	3	50
05:15 PM	0	0	0	22	0	0	0	1	10	1	0	0	0	0	0	0	0	1	4	1	36	2	38
05:30 PM	0	0	0	14	0	0	0	2	16	2	0	0	0	0	0	0	1	0	6	1	36	3	39
05:45 PM	0	4	0	8	4	0	0	0	5	0	0	0	0	0	0	0	2	0	6	2	19	6	25
Total	0	4	0	64	4	0	1	3	50	4	1	1	0	0	2	0	3	1	24	4	138	14	152
Grand Total	5	7	4	253	16	4	12	9	126	25	2	7	1	30	10	0	6	5	106	11	515	62	577
Apprch %	31.2	43.8	25			16	48	36			20	70	10			0	54.5	45.5					
Total %	8.1	11.3	6.5		25.8	6.5	19.4	14.5		40.3	3.2	11.3	1.6		16.1	0	9.7	8.1		17.7	89.3	10.7	
Bikes	5	7	4		16	4	12	9		25	2	7	1		10	0	6	5		11	0	0	62
% Bikes	100	100	100	0	5.9	100	100	100	0	16.6	100	100	100	0	25	0	100	100	0	9.4	0	0	10.7
Peds	0	0	0		253	0	0	0		126	0	0	0		30	0	0	0		106	0	0	515
% Peds	0	0	0	100	94.1	0	0	0	100	83.4	0	0	0	100	75	0	0	0	100	90.6	0	0	89.3

Appendix B
Existing Traffic Signal Timings

1000020 - Emmet @ Ivy
Table 1 - Timing and Functions Page 0
3/9/2023
8:18 AM

					SBLT	NB	EBLT	WB	NBLT	SB	WBLT	EB
0 + Key			Phase + Key					Phase				
FUNCTION	KEY	12345678	FUNCTION	KEY	Ph 1	Ph 2	Ph 3	Ph 4	Ph 5	Ph 6	Ph 7	Ph 8
Vehicle Recall	0	2 6	Max I	0	25	55	20	30	25	55	20	30
Ped Recall	1		Max II/HFDW	1	0	0	0	0	0	0	0	0
Red Lock	2		Walk	2	0	7	0	7	0	7	0	7
Yellow Lock	3		Flashing DW	3	0	14	0	14	0	14	0	14
Permits	4	12345678	Max Initial	4	7	10	7	10	7	10	7	10
Ped Phases	5	2 4 6 8	Min Green	5	7	10	7	10	7	10	7	10
Lead Phases	6	1 3 5 7	TBR	6	10	10	10	10	10	10	10	10
Double Entry	7		TTR	7	10	10	10	10	10	10	10	10
Sequential Timing	8		Observe Gap	8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Startup Green	9	2 6	Passage	9	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Overlap A	A		Min Gap	A	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Overlap B	B		Added Actuation	B	2.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Overlap C	C		Yellow	C	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Overlap D	D		Red Clear	D	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Exclusive	E		Red Revert	E	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Simultaneous Gap	F		Walk II	F	0	0	0	3	0	0	0	3

1000020 - Emmet @ Ivy
Table 2 - Overlaps Page 0
3/9/2023
8:18 AM

9 + Key			C + F + Key		
FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE
Short Power Down	0	4	Page ID	0	0
Long Power Down	1	4	Reserved	1	0
EVA Delay Type	2	0	Reserved	2	0
EVB Delay Type	3	0	Reserved	3	0
EVC Delay Type	4	0	OLA Red	4	0.0
EVD Delay Type	5	0	OLB Red	5	0.0
RR Delay Type	6	0	OLC Red	6	0.0
Ped Inhibit	7	0	OLD Red	7	0.0
OLA Green	8	0.0			12345678
OLA Yellow	9	0.0	Overlap E	8	
OLB Green	A	0.0	Overlap F	9	
OLB Yellow	B	0.0	Red Rest	A	
OLC Green	C	0.0	Max Recall	B	
OLC Yellow	D	0.0	Flash Green	C	
OLD Green	E	0.0	Flash Walk	D	
OLD Yellow	F	0.0	Advance Walk	E	4 8
			Restrictive Phase	F	

1000020 - Emmet @ Ivy
Table 3 - Preempts
3/9/2023
8:18 AM

C + Key			E + Key		
FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE
Year	0	7	EVA Delay	0	0
Month	1	8	EVA Minimum	1	3
Day of Month	2	22	EVB Delay	2	0
		1234567	EVB Minimum	3	3
Day of Week	3	4	EVC Delay	4	0
		VALUE	EVC Minimum	5	3
Hour	4	13	EVD Delay	6	0
Minute	5	10	EVD Minimum	7	3
Second	6	53	OL Red Revert	8	0.0
Reserved	7	0	RR Delay	9	0
Triggers On In Flash	8	0	RR Clear	A	0
		12345678			12345678
Startup Yellow	9		RR Clear Phases	B	
EVA Phases	A	2 5	RR Permit	C	
EVB Phases	B	4 7	RR OL Permit	D	
EVC Phases	C	1 6	NEMA Hold Phases	E	
EVD Phases	D	3 8	Reserved	F	
Handicap Ped	E				
Reserved	F				

1000020 - Emmet @ Ivy
Table 5 - TOD/DOW Events 1-32
3/9/2023
8:18 AM

A + Code											
EVENT	1234567	HOUR	MIN	FUNC	CODE	EVENT	1234567	HOUR	MIN	FUNC	CODE
1	1234567	6	0	1	80-83	17		0	0	0	C0-C3
2	1234567	9	0	2	84-87	18		0	0	0	C4-C7
3	1234567	15	0	3	88-8B	19		0	0	0	C8-CB
4	1234567	20	0	20	8C-8F	20		0	0	0	CC-CF
5		0	0	0	90-93	21		0	0	0	D0-D3
6		0	0	0	94-97	22		0	0	0	D4-D7
7		0	0	0	98-9B	23		0	0	0	D8-DB
8		0	0	0	9C-9F	24		0	0	0	DC-DF
9		0	0	0	A0-A3	25		0	0	0	E0-E3
10		0	0	0	A4-A7	26		0	0	0	E4-E7
11		0	0	0	A8-AB	27		0	0	0	E8-EB
12		0	0	0	AC-AF	28		0	0	0	EC-EF
13		0	0	0	B0-B3	29		0	0	0	F0-F3
14		0	0	0	B4-B7	30		0	0	0	F4-F7
15		0	0	0	B8-BB	31		0	0	0	F8-FB
16		0	0	0	BC-BF	32		0	0	0	FC-FF

1000020 - Emmet @ Ivy
Table 6 - Coordination Functions
3/9/2023
8:18 AM

B + 0 + Key			D + Key		
FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE
Present Plan	0	0	Floating Ped	2E	0
TOD/DOW Plan	1	0	ID Number	2F	20
Hardwire Plan	2	0	No Coord Ped Recall	3E	0
Modem Plan	3	0	Rest In Walk	3F	0
Mode (0-4)	4	1	Adv Warning EOG	4E	0
Master (0 = Off)	5	0	Adv Warning SOG	4F	0
Master Clock	6	0	RR Red Clear	5E	0
Local Clock	7	0	RR Clear Color	5F	0
Dwell Clock	8	35	Bus Delay	6D	0.0
Reserved	9	0	Bus Free T1	6E	0
Reserved	A	0	Bus Free T3	6F	0
Reserved	B	0	EV Min After Clear	7E	1
		12345678	EV Indicators	7F	1
Reserved	C		NEMA Inputs	66	0
NEMA CNA Phase	D		Reserved		0
Adv Warning Phase	E		Reserved		0
MRI Phase	F				

1000020 - Emmet @ Ivy
Table 7 - Coordination Plans 1-9
3/9/2023
8:18 AM

B + Plan + Key						Plan				
FUNCTION	KEY	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5	Plan 6	Plan 7	Plan 8	Plan 9
Cycle Length	0	103	107	118	0	0	0	0	0	0
Forceoff Phase 1	1	85	84	85	0	0	0	0	0	0
Forceoff Phase 2	2	0	0	0	0	0	0	0	0	0
Forceoff Phase 3	3	30	34	35	0	0	0	0	0	0
Forceoff Phase 4	4	60	64	65	0	0	0	0	0	0
Forceoff Phase 5	5	75	79	85	0	0	0	0	0	0
Forceoff Phase 6	6	0	0	0	0	0	0	0	0	0
Forceoff Phase 7	7	30	34	35	0	0	0	0	0	0
Forceoff Phase 8	8	60	64	65	0	0	0	0	0	0
Offset	9	8	13	61	0	0	0	0	0	0
Permissive Length	A	15	15	15	0	0	0	0	0	0
Max Dwell	B	20	20	20	0	0	0	0	0	0
		12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678
Lead Phases	C	1 3 5 7	1 3 5 7	1 3 5 7						
Coord Phases	D	2 6	2 6	2 6						
Perm 2 Phases	E									
Min Recall	F									

1000020 - Emmet @ Ivy
Table 8 - Bus Preemption
3/9/2023
8:18 AM

B + A + Key			B + B + Key			B + C + Key		
FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE
Bus P1 T1	0	0	Bus P4 T1	0	0	Bus P7 T1	0	0
Bus P1 T2	1	0	Bus P4 T2	1	0	Bus P7 T2	1	0
Bus P1 T3	2	0	Bus P4 T3	2	0	Bus P7 T3	2	0
Bus P2 T1	3	0	Bus P5 T1	3	0	Bus P8 T1	3	0
Bus P2 T2	4	0	Bus P5 T2	4	0	Bus P8 T2	4	0
Bus P2 T3	5	0	Bus P5 T3	5	0	Bus P8 T3	5	0
Bus P3 T1	6	0	Bus P6 T1	6	0	Bus P9 T1	6	0
Bus P3 T2	7	0	Bus P6 T2	7	0	Bus P9 T2	7	0
Bus P3 T3	8	0	Bus P6 T3	8	0	Bus P9 T3	8	0
Perm 2 P1	9	0	Perm 2 P4	9	0	Perm 2 P7	9	0
Perm 2 P2	A	0	Perm 2 P5	A	0	Perm 2 P8	A	0
Perm 2 P3	B	0	Perm 2 P6	B	0	Perm 2 P9	B	0
		12345678			12345678			12345678
Flash Yellow	C	2 6	OL Flash Yellow	C		Coordinated Max	C	
Flash Circuit	D		OL Flash Clear	D		TOD Red Rest	D	
TOD/DOW Max	E		TOD/DOW Ped	E		OLA Switchpack	E	
OLB Switchpack	F		OLC Switchpack	F		OLD Switchpack	F	

1000020 - Emmet @ Ivy
Table 10 - Output Reassignments Page 0
3/9/2023
8:18 AM

A + 0 + Key			A + 1 + Key			A + 2 + Key			A + 3 + Key		
FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE
04 D/W	0	0	08 D/W	0	0	02 Ped Yellow	0	99	01 D/W	0	0
04 Walk	1	0	08 Walk	1	0	06 Ped Yellow	1	99	01 Walk	1	0
04 Red	2	0	08 Red	2	0	04 Ped Yellow	2	99	OLB Red	2	0
04 Yellow	3	0	08 Yellow	3	0	08 Ped Yellow	3	99	OLB Yellow	3	0
04 Green	4	0	08 Green	4	0	03 Ped Yellow	4	0	OLB Green	4	0
03 Red	5	0	07 Red	5	0	01 Ped Yellow	5	0	OLA Red	5	0
03 Yellow	6	0	07 Yellow	6	0	Flash	6	0	OLA Yellow	6	0
03 Green	7	0	07 Green	7	0	Watchdog	7	0	OLA Green	7	0
02 D/W	8	0	06 D/W	8	0	03 D/W	8	0	Reserved	8	0
02 Walk	9	0	06 Walk	9	0	03 Walk	9	0	SD	9	0
02 Red	A	0	06 Red	A	0	OLD Red	A	0	LTT	A	0
02 Yellow	B	0	06 Yellow	B	0	OLD Yellow	B	0	ID (MSB)	B	0
02 Green	C	0	06 Green	C	0	OLD Green	C	0	Group 1	C	0
01 Red	D	0	05 Red	D	0	OLC Red	D	0	Group 2	D	0
01 Yellow	E	0	05 Yellow	E	0	OLC Yellow	E	0	Group 3	E	0
01 Green	F	0	05 Green	F	0	OLC Green	F	0	Group 4	F	0

1000020 - Emmet @ Ivy
Table 11 - Extended Outputs Page 0
3/9/2023
8:18 AM

D + B + 0 + Key			D + B + 1 + Key			D + B + 2 + Key		
FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE
05 D/W	0	0	OLE Green	0	0	Cycle 2	0	0
05 Walk	1	0	OLF Green	1	0	Cycle 3	1	0
OLL Red	2	0	OLE Yellow	2	0	Offset 1	2	0
OLL Yellow	3	0	OLF Yellow	3	0	Offset 2	3	0
OLL Green	4	0	Adv Warning	4	0	Offset 3	4	0
OLK Red	5	0	RR Flash Yellow	5	0	Reserved	5	0
OLK Yellow	6	0	Detector Reset	6	0	Free	6	0
OLK Green	7	0	RR On	7	0	Flash	7	0
07 D/W	8	0	EVA On	8	51	Coord Plan 1,2,3	8	0
07 Walk	9	0	EVB On	9	53	Coord Plan 4,5,6	9	0
OLJ Red	A	0	EVC On	A	52	Coord Plan 7,8,9	A	0
OLJ Yellow	B	0	EVD On	B	54	Coord Plan 10,11,12	B	0
OLJ Green	C	0	Ring 1, Bit B	C	0	Coord Plan 13,14,15	C	0
OLH Red	D	0	Ring 1, Bit C	D	0	Coord Plan 16,17,18	D	0
OLH Yellow	E	0	Ring 2, Bit B	E	0	Reserved	E	0
OLH Green	F	0	Ring 2, Bit C	F	0	Reserved	F	0

1000020 - Emmet @ Ivy
Table 13 - Additional Overlaps
3/9/2023
8:18 AM

D + 9 + 0 + Key			D + 9 + 3 + Key			E + F + Key		
FUNCTION	KEY	12345678	FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE
Overlap H	0		OLH Green	0	0.0	RR Max II	0	0
Overlap J	1		OLH Yellow	1	0.0	Ped Perm Plan 1	1	0
Overlap K	2		OLH Red	2	0.0	Ped Perm Plan 2	2	0
Overlap L	3		OLJ Green	3	0.0	Ped Perm Plan 3	3	0
OLH Switchpack	4		OLJ Yellow	4	0.0	Ped Perm Plan 4	4	0
OLJ Switchpack	5		OLJ Red	5	0.0	Ped Perm Plan 5	5	0
OLK Switchpack	6		OLK Green	6	0.0	Ped Perm Plan 6	6	0
OLL Switchpack	7		OLK Yellow	7	0.0	Ped Perm Plan 7	7	0
Reserved	8		OLK Red	8	0.0	Ped Perm Plan 8	8	0
Reserved	9		OLL Green	9	0.0	Ped Perm Plan 9	9	0
Reserved	A		OLL Yellow	A	0.0	Long Power Outs	A	0
Reserved	B		OLL Red	B	0.0	Short Power Outs	B	0
Reserved	C		Reserved	C	0	Failed Detectors	C	0
Reserved	D		Reserved	D	0	Max II On	D	0
Reserved	E		Reserved	E	0	No Daylight Savings	E	99
Reserved	F		Reserved	F	0	Revision Level	F	60

1000021 - Ivy @ Alderman
Table 1 - Timing and Functions Page 0
3/9/2023
8:23 AM

0 + Key			Phase + Key		Phase						
FUNCTION	KEY	12345678	FUNCTION	KEY	Ph 1	Ph 2	Ph 3	Ph 4	Ph 5	Ph 6	Ph 7	Ph 8
Vehicle Recall	0	2 6	Max I	0	20	40	20	40	15	40	0	40
Ped Recall	1		Max II/HFDW	1	0	0	0	0	0	0	0	0
Red Lock	2		Walk	2	0	7	0	7	0	7	0	7
Yellow Lock	3		Flashing DW	3	0	14	0	17	0	17	0	17
Permits	4	123456 8	Max Initial	4	7	10	7	7	10	10	0	7
Ped Phases	5	2 4 6 8	Min Green	5	7	10	7	7	10	10	0	7
Lead Phases	6	1 3 5 7	TBR	6	10	10	10	10	10	10	0	10
Double Entry	7		TTR	7	5	10	5	5	10	10	0	5
Sequential Timing	8		Observe Gap	8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Startup Green	9	2 6	Passage	9	2.5	3.0	2.5	2.5	3.0	3.0	0.0	2.5
Overlap A	A		Min Gap	A	2.0	2.5	2.5	2.5	2.0	2.5	0.0	2.5
Overlap B	B		Added Actuation	B	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overlap C	C		Yellow	C	3.0	3.0	3.0	3.0	3.0	3.0	0.0	3.0
Overlap D	D		Red Clear	D	2.0	2.0	2.0	2.0	2.0	2.0	0.0	2.0
Exclusive	E		Red Revert	E	5.0	5.0	5.0	5.0	5.0	5.0	0.0	5.0
Simultaneous Gap	F		Walk II	F	0	0	0	0	0	0	0	0

1000021 - Ivy @ Alderman
Table 2 - Overlaps Page 0
3/9/2023
8:23 AM

9 + Key			C + F + Key		
FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE
Short Power Down	0	4	Page ID	0	0
Long Power Down	1	4	Reserved	1	0
EVA Delay Type	2	0	Reserved	2	0
EVB Delay Type	3	0	Reserved	3	0
EVC Delay Type	4	0	OLA Red	4	0.0
EVD Delay Type	5	0	OLB Red	5	0.0
RR Delay Type	6	0	OLC Red	6	0.0
Ped Inhibit	7	0	OLD Red	7	0.0
OLA Green	8	0.0			12345678
OLA Yellow	9	0.0	Overlap E	8	
OLB Green	A	0.0	Overlap F	9	
OLB Yellow	B	0.0	Red Rest	A	
OLC Green	C	0.0	Max Recall	B	
OLC Yellow	D	0.0	Flash Green	C	
OLD Green	E	0.0	Flash Walk	D	
OLD Yellow	F	0.0	Advance Walk	E	
			Restrictive Phase	F	

1000021 - Ivy @ Alderman
Table 2 - Overlaps Page 1
3/9/2023
8:23 AM

D + C + 9 + Key			D + C + B + Key		
FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE
Short Power Down	0	0	Page ID	0	1
Long Power Down	1	0	Reserved	1	0
EVA Delay Type	2	0	Reserved	2	0
EVB Delay Type	3	0	Reserved	3	0
EVC Delay Type	4	0	OLA Red	4	0.0
EVD Delay Type	5	0	OLB Red	5	0.0
RR Delay Type	6	0	OLC Red	6	0.0
Ped Inhibit	7	0	OLD Red	7	0.0
OLA Green	8	0.0			12345678
OLA Yellow	9	0.0	Overlap E	8	
OLB Green	A	0.0	Overlap F	9	
OLB Yellow	B	0.0	Red Rest	A	
OLC Green	C	0.0	Max Recall	B	
OLC Yellow	D	0.0	Flash Green	C	
OLD Green	E	0.0	Flash Walk	D	
OLD Yellow	F	0.0	Advance Walk	E	
			Restrictive Phase	F	

1000021 - Ivy @ Alderman
Table 2 - Overlaps Page 2
3/9/2023
8:23 AM

D + D + 9 + Key			D + D + B + Key		
FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE
Short Power Down	0	0	Page ID	0	2
Long Power Down	1	0	Reserved	1	0
EVA Delay Type	2	0	Reserved	2	0
EVB Delay Type	3	0	Reserved	3	0
EVC Delay Type	4	0	OLA Red	4	0.0
EVD Delay Type	5	0	OLB Red	5	0.0
RR Delay Type	6	0	OLC Red	6	0.0
Ped Inhibit	7	0	OLD Red	7	0.0
OLA Green	8	0.0			12345678
OLA Yellow	9	0.0	Overlap E	8	
OLB Green	A	0.0	Overlap F	9	
OLB Yellow	B	0.0	Red Rest	A	
OLC Green	C	0.0	Max Recall	B	
OLC Yellow	D	0.0	Flash Green	C	
OLD Green	E	0.0	Flash Walk	D	
OLD Yellow	F	0.0	Advance Walk	E	
			Restrictive Phase	F	

1000021 - Ivy @ Alderman
Table 3 - Preempts
3/9/2023
8:23 AM

C + Key			E + Key		
FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE
Year	0	4	EVA Delay	0	0
Month	1	11	EVA Minimum	1	10
Day of Month	2	16	EVB Delay	2	0
		1234567	EVB Minimum	3	10
Day of Week	3	3	EVC Delay	4	0
		VALUE	EVC Minimum	5	10
Hour	4	7	EVD Delay	6	0
Minute	5	21	EVD Minimum	7	10
Second	6	42	OL Red Revert	8	0.0
Reserved	7	0	RR Delay	9	0
Triggers On In Flash	8	0	RR Clear	A	0
		12345678			12345678
Startup Yellow	9		RR Clear Phases	B	
EVA Phases	A	4	RR Permit	C	
EVB Phases	B	1 6	RR OL Permit	D	
EVC Phases	C	3 8	NEMA Hold Phases	E	
EVD Phases	D	2 5	Reserved	F	3456 8
Handicap Ped	E				
Reserved	F				

1000021 - Ivy @ Alderman
Table 5 - TOD/DOW Events 1-32
3/9/2023
8:23 AM

A + Code											
EVENT	1234567	HOUR	MIN	FUNC	CODE	EVENT	1234567	HOUR	MIN	FUNC	CODE
1	1234567	6	0	1	80-83	17		0	0	0	C0-C3
2	1234567	14	0	2	84-87	18		0	0	0	C4-C7
3	1234567	20	0	15	88-8B	19		0	0	0	C8-CB
4		0	0	0	8C-8F	20		0	0	0	CC-CF
5		0	0	0	90-93	21		0	0	0	D0-D3
6		0	0	0	94-97	22		0	0	0	D4-D7
7		0	0	0	98-9B	23		0	0	0	D8-DB
8		0	0	0	9C-9F	24		0	0	0	DC-DF
9		0	0	0	A0-A3	25		0	0	0	E0-E3
10		0	0	0	A4-A7	26		0	0	0	E4-E7
11		0	0	0	A8-AB	27		0	0	0	E8-EB
12		0	0	0	AC-AF	28		0	0	0	EC-EF
13		0	0	0	B0-B3	29		0	0	0	F0-F3
14		0	0	0	B4-B7	30		0	0	0	F4-F7
15		0	0	0	B8-BB	31		0	0	0	F8-FB
16		0	0	0	BC-BF	32		0	0	0	FC-FF

1000021 - Ivy @ Alderman
Table 6 - Coordination Functions
3/9/2023
8:23 AM

B + 0 + Key			D + Key		
FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE
Present Plan	0	0	Floating Ped	2E	0
TOD/DOW Plan	1	0	ID Number	2F	21
Hardwire Plan	2	0	No Coord Ped Recall	3E	0
Modem Plan	3	0	Rest In Walk	3F	0
Mode (0-4)	4	0	Adv Warning EOG	4E	0
Master (0 = Off)	5	0	Adv Warning SOG	4F	0
Master Clock	6	0	RR Red Clear	5E	0
Local Clock	7	0	RR Clear Color	5F	0
Dwell Clock	8	0	Bus Delay	6D	0.0
Reserved	9	0	Bus Free T1	6E	12
Reserved	A	0	Bus Free T3	6F	0
Reserved	B	0	EV Min After Clear	7E	1
		12345678	EV Indicators	7F	1
Reserved	C		NEMA Inputs	66	0
NEMA CNA Phase	D		Reserved		0
Adv Warning Phase	E		Reserved		0
MRI Phase	F				

1000021 - Ivy @ Alderman
Table 7 - Coordination Plans 1-9
3/9/2023
8:23 AM

B + Plan + Key						Plan				
FUNCTION	KEY	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5	Plan 6	Plan 7	Plan 8	Plan 9
Cycle Length	0	90	120	0	0	0	0	0	0	0
Forceoff Phase 1	1	79	79	0	0	0	0	0	0	0
Forceoff Phase 2	2	0	0	0	0	0	0	0	0	0
Forceoff Phase 3	3	37	37	0	0	0	0	0	0	0
Forceoff Phase 4	4	65	65	0	0	0	0	0	0	0
Forceoff Phase 5	5	79	79	0	0	0	0	0	0	0
Forceoff Phase 6	6	0	0	0	0	0	0	0	0	0
Forceoff Phase 7	7	0	0	0	0	0	0	0	0	0
Forceoff Phase 8	8	65	65	0	0	0	0	0	0	0
Offset	9	39	39	0	0	0	0	0	0	0
Permissive Length	A	60	60	0	0	0	0	0	0	0
Max Dwell	B	0	0	0	0	0	0	0	0	0
		12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678
Lead Phases	C	1 3 5 7	1 3 5 7							
Coord Phases	D	2 6	2 6							
Perm 2 Phases	E									
Min Recall	F									

1000021 - Ivy @ Alderman
Table 7 - Coordination Plans 10-18
3/9/2023
8:23 AM

B + D + Key1 + Key2		Plan 10	Plan 11	Plan 12	Plan 13	Plan 14	Plan 15	Plan 16	Plan 17	Plan 18
						Key1				
FUNCTION	Key2	7	8	9	A	B	C	D	E	F
Cycle Length	0	0	0	0	0	0	0	0	0	0
Forceoff Phase 1	1	0	0	0	0	0	0	0	0	0
Forceoff Phase 2	2	0	0	0	0	0	0	0	0	0
Forceoff Phase 3	3	0	0	0	0	0	0	0	0	0
Forceoff Phase 4	4	0	0	0	0	0	0	0	0	0
Forceoff Phase 5	5	0	0	0	0	0	0	0	0	0
Forceoff Phase 6	6	0	0	0	0	0	0	0	0	0
Forceoff Phase 7	7	0	0	0	0	0	0	0	0	0
Forceoff Phase 8	8	0	0	0	0	0	0	0	0	0
Offset	9	0	0	0	0	0	0	0	0	0
Permissive Length	A	0	0	0	0	0	0	0	0	0
Max Dwell	B	0	0	0	0	0	0	0	0	0
		12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678
Lead Phases	C									1
Coord Phases	D									
Reserved	E									
Min Recall	F									

1000021 - Ivy @ Alderman
Table 8 - Bus Preemption
3/9/2023
8:23 AM

B + A + Key			B + B + Key			B + C + Key		
FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE
Bus P1 T1	0	0	Bus P4 T1	0	0	Bus P7 T1	0	0
Bus P1 T2	1	0	Bus P4 T2	1	0	Bus P7 T2	1	0
Bus P1 T3	2	0	Bus P4 T3	2	0	Bus P7 T3	2	0
Bus P2 T1	3	0	Bus P5 T1	3	0	Bus P8 T1	3	0
Bus P2 T2	4	0	Bus P5 T2	4	0	Bus P8 T2	4	0
Bus P2 T3	5	0	Bus P5 T3	5	0	Bus P8 T3	5	0
Bus P3 T1	6	0	Bus P6 T1	6	0	Bus P9 T1	6	0
Bus P3 T2	7	0	Bus P6 T2	7	0	Bus P9 T2	7	0
Bus P3 T3	8	0	Bus P6 T3	8	0	Bus P9 T3	8	0
Perm 2 P1	9	0	Perm 2 P4	9	0	Perm 2 P7	9	0
Perm 2 P2	A	0	Perm 2 P5	A	0	Perm 2 P8	A	0
Perm 2 P3	B	0	Perm 2 P6	B	0	Perm 2 P9	B	0
		12345678			12345678			12345678
Flash Yellow	C	2 6	OL Flash Yellow	C		Coordinated Max	C	
Flash Circuit	D		OL Flash Clear	D		TOD Red Rest	D	
TOD/DOW Max	E		TOD/DOW Ped	E		OLA Switchpack	E	
OLB Switchpack	F		OLC Switchpack	F		OLD Switchpack	F	

1000021 - Ivy @ Alderman
Table 9 - Input Reassignments Page 0
3/9/2023
8:23 AM

A + 4 + Key			A + 5 + Key			A + 6 + Key		
C1 PIN	KEY	VALUE	C1 PIN	KEY	VALUE	C1 PIN	KEY	VALUE
39	0	0	55	0	32	67	0	0
40	1	0	56	1	31	68	1	0
41	2	0	57	2	0	69	2	0
42	3	0	58	3	0	70	3	0
43	4	0	59	4	0	71	4	0
44	5	0	60	5	0	72	5	0
45	6	0	61	6	0	73	6	0
46	7	0	62	7	0	74	7	0
47	8	0	N/U	8	0	75	8	0
48	9	0	N/U	9	0	76	9	0
49	A	0	N/U	A	0	77	A	0
50	B	0	N/U	B	0	78	B	0
51	C	0	63	C	0	79	C	0
52	D	0	64	D	0	80	D	0
53	E	0	65	E	0	81	E	0
54	F	0	66	F	0	82	F	0

1000021 - Ivy @ Alderman
Table 10 - Output Reassignments Page 0
3/9/2023
8:23 AM

A + 0 + Key			A + 1 + Key			A + 2 + Key			A + 3 + Key		
FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE
04 D/W	0	0	08 D/W	0	0	02 Ped Yellow	0	99	01 D/W	0	0
04 Walk	1	0	08 Walk	1	0	06 Ped Yellow	1	99	01 Walk	1	0
04 Red	2	0	08 Red	2	0	04 Ped Yellow	2	99	OLB Red	2	0
04 Yellow	3	0	08 Yellow	3	0	08 Ped Yellow	3	99	OLB Yellow	3	0
04 Green	4	0	08 Green	4	0	03 Ped Yellow	4	0	OLB Green	4	0
03 Red	5	0	07 Red	5	0	01 Ped Yellow	5	0	OLA Red	5	0
03 Yellow	6	0	07 Yellow	6	0	Flash	6	0	OLA Yellow	6	0
03 Green	7	0	07 Green	7	0	Watchdog	7	0	OLA Green	7	0
02 D/W	8	0	06 D/W	8	0	03 D/W	8	0	Reserved	8	0
02 Walk	9	0	06 Walk	9	0	03 Walk	9	0	SD	9	0
02 Red	A	0	06 Red	A	0	OLD Red	A	0	LTT	A	0
02 Yellow	B	0	06 Yellow	B	0	OLD Yellow	B	0	ID (MSB)	B	0
02 Green	C	0	06 Green	C	0	OLD Green	C	0	Group 1	C	0
01 Red	D	0	05 Red	D	0	OLC Red	D	0	Group 2	D	0
01 Yellow	E	0	05 Yellow	E	0	OLC Yellow	E	0	Group 3	E	0
01 Green	F	0	05 Green	F	0	OLC Green	F	0	Group 4	F	0

1000021 - Ivy @ Alderman
Table 11 - Extended Outputs Page 0
3/9/2023
8:23 AM

D + B + 0 + Key			D + B + 1 + Key			D + B + 2 + Key		
FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE
05 D/W	0	0	OLE Green	0	0	Cycle 2	0	0
05 Walk	1	0	OLF Green	1	0	Cycle 3	1	0
OLL Red	2	0	OLE Yellow	2	0	Offset 1	2	0
OLL Yellow	3	0	OLF Yellow	3	0	Offset 2	3	0
OLL Green	4	0	Adv Warning	4	0	Offset 3	4	0
OLK Red	5	0	RR Flash Yellow	5	0	Reserved	5	0
OLK Yellow	6	0	Detector Reset	6	0	Free	6	0
OLK Green	7	0	RR On	7	0	Flash	7	0
07 D/W	8	0	EVA On	8	51	Coord Plan 1,2,3	8	0
07 Walk	9	0	EVB On	9	53	Coord Plan 4,5,6	9	0
OLJ Red	A	0	EVC On	A	52	Coord Plan 7,8,9	A	0
OLJ Yellow	B	0	EVD On	B	54	Coord Plan 10,11,12	B	0
OLJ Green	C	0	Ring 1, Bit B	C	0	Coord Plan 13,14,15	C	0
OLH Red	D	0	Ring 1, Bit C	D	0	Coord Plan 16,17,18	D	0
OLH Yellow	E	0	Ring 2, Bit B	E	0	Reserved	E	0
OLH Green	F	0	Ring 2, Bit C	F	0	Reserved	F	0

1000021 - Ivy @ Alderman
Table 13 - Additional Overlaps
3/9/2023
8:23 AM

D + 9 + 0 + Key			D + 9 + 3 + Key			E + F + Key		
FUNCTION	KEY	12345678	FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE
Overlap H	0		OLH Green	0	0.0	RR Max II	0	0
Overlap J	1		OLH Yellow	1	0.0	Ped Perm Plan 1	1	0
Overlap K	2		OLH Red	2	0.0	Ped Perm Plan 2	2	0
Overlap L	3		OLJ Green	3	0.0	Ped Perm Plan 3	3	0
OLH Switchpack	4		OLJ Yellow	4	0.0	Ped Perm Plan 4	4	0
OLJ Switchpack	5		OLJ Red	5	0.0	Ped Perm Plan 5	5	0
OLK Switchpack	6		OLK Green	6	0.0	Ped Perm Plan 6	6	0
OLL Switchpack	7		OLK Yellow	7	0.0	Ped Perm Plan 7	7	0
Reserved	8		OLK Red	8	0.0	Ped Perm Plan 8	8	0
Reserved	9		OLL Green	9	0.0	Ped Perm Plan 9	9	0
Reserved	A		OLL Yellow	A	0.0	Long Power Outs	A	0
Reserved	B		OLL Red	B	0.0	Short Power Outs	B	0
Reserved	C		Reserved	C	0	Failed Detectors	C	0
Reserved	D		Reserved	D	0	Max II On	D	0
Reserved	E		Reserved	E	0	No Daylight Savings	E	0
Reserved	F		Reserved	F	0	Revision Level	F	48

1000068 - Ivy @ Rothery
Table 1 - Timing and Functions Page 0
3/9/2023
8:28 AM

0 + Key			Phase + Key									
					Phase							
FUNCTION	KEY	12345678	FUNCTION	KEY	Ph 1	Ph 2	Ph 3	Ph 4	Ph 5	Ph 6	Ph 7	Ph 8
Vehicle Recall	0	2 6	Max I	0	0	50	0	22	8	37	0	8
Ped Recall	1		Max II/HFDW	1	0	0	0	0	0	0	0	0
Red Lock	2		Walk	2	0	0	0	7	0	7	0	0
Yellow Lock	3		Flashing DW	3	0	0	0	14	0	14	0	0
Permits	4	2 456 8	Max Initial	4	0	20	0	7	7	20	0	7
Ped Phases	5	4 6	Min Green	5	0	20	0	7	7	20	0	7
Lead Phases	6	1 3 5 7	TBR	6	0	20	0	7	7	20	0	7
Double Entry	7		TTR	7	0	20	0	7	7	20	0	7
Sequential Timing	8		Observe Gap	8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Startup Green	9	2 6	Passage	9	0.0	3.0	0.0	3.0	2.0	3.0	0.0	2.0
Overlap A	A		Min Gap	A	0.0	3.0	0.0	3.0	2.0	2.0	0.0	2.0
Overlap B	B		Added Actuation	B	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overlap C	C		Yellow	C	0.0	3.0	0.0	3.0	3.0	3.0	0.0	3.0
Overlap D	D		Red Clear	D	0.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0
Exclusive	E	4 8	Red Revert	E	0.0	5.0	0.0	5.0	5.0	5.0	0.0	5.0
Simultaneous Gap	F		Walk II	F	0	0	0	0	0	0	0	0

1000068 - Ivy @ Rothery
Table 1 - Timing and Functions Page 2
3/9/2023
8:28 AM

D + D + 0 + Key			D + D + Phase + Key					Phase				
FUNCTION	KEY	12345678	FUNCTION	KEY	Ph 1	Ph 2	Ph 3	Ph 4	Ph 5	Ph 6	Ph 7	Ph 8
Vehicle Recall	0		Max I	0	0	0	0	0	0	0	0	0
Ped Recall	1		Max II/HFDW	1	0	0	0	0	0	0	0	0
Red Lock	2		Walk	2	0	0	0	0	0	0	0	0
Yellow Lock	3		Flashing DW	3	0	0	0	0	0	0	0	0
Permits	4		Max Initial	4	0	0	0	0	0	0	0	0
Ped Phases	5		Min Green	5	0	0	0	0	0	0	0	0
Lead Phases	6		TBR	6	0	0	0	0	0	0	0	0
Double Entry	7		TTR	7	16	0	0	0	0	0	0	0
Sequential Timing	8		Observe Gap	8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Startup Green	9		Passage	9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overlap A	A		Min Gap	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overlap B	B		Added Actuation	B	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overlap C	C		Yellow	C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overlap D	D		Red Clear	D	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exclusive	E		Red Revert	E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Simultaneous Gap	F		Walk II	F	0	0	0	0	0	0	0	0

1000068 - Ivy @ Rothery
Table 2 - Overlaps Page 0
3/9/2023
8:28 AM

9 + Key			C + F + Key		
FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE
Short Power Down	0	4	Page ID	0	0
Long Power Down	1	4	Reserved	1	0
EVA Delay Type	2	0	Reserved	2	0
EVB Delay Type	3	0	Reserved	3	0
EVC Delay Type	4	0	OLA Red	4	0.0
EVD Delay Type	5	0	OLB Red	5	0.0
RR Delay Type	6	0	OLC Red	6	0.0
Ped Inhibit	7	0	OLD Red	7	0.0
OLA Green	8	0.0			12345678
OLA Yellow	9	0.0	Overlap E	8	
OLB Green	A	0.0	Overlap F	9	
OLB Yellow	B	0.0	Red Rest	A	
OLC Green	C	0.0	Max Recall	B	
OLC Yellow	D	0.0	Flash Green	C	
OLD Green	E	0.0	Flash Walk	D	
OLD Yellow	F	0.0	Advance Walk	E	
			Restrictive Phase	F	

1000068 - Ivy @ Rothery
Table 2 - Overlaps Page 1
3/9/2023
8:28 AM

D + C + 9 + Key			D + C + B + Key		
FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE
Short Power Down	0	0	Page ID	0	1
Long Power Down	1	0	Reserved	1	0
EVA Delay Type	2	0	Reserved	2	0
EVB Delay Type	3	0	Reserved	3	0
EVC Delay Type	4	0	OLA Red	4	0.0
EVD Delay Type	5	0	OLB Red	5	0.0
RR Delay Type	6	0	OLC Red	6	0.0
Ped Inhibit	7	0	OLD Red	7	0.0
OLA Green	8	0.0			12345678
OLA Yellow	9	0.0	Overlap E	8	
OLB Green	A	0.0	Overlap F	9	
OLB Yellow	B	0.0	Red Rest	A	
OLC Green	C	0.0	Max Recall	B	
OLC Yellow	D	0.0	Flash Green	C	
OLD Green	E	0.0	Flash Walk	D	
OLD Yellow	F	0.0	Advance Walk	E	
			Restrictive Phase	F	

1000068 - Ivy @ Rothery
Table 2 - Overlaps Page 2
3/9/2023
8:28 AM

D + D + 9 + Key			D + D + B + Key		
FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE
Short Power Down	0	0	Page ID	0	2
Long Power Down	1	0	Reserved	1	0
EVA Delay Type	2	0	Reserved	2	0
EVB Delay Type	3	0	Reserved	3	0
EVC Delay Type	4	0	OLA Red	4	0.0
EVD Delay Type	5	0	OLB Red	5	0.0
RR Delay Type	6	0	OLC Red	6	0.0
Ped Inhibit	7	0	OLD Red	7	0.0
OLA Green	8	0.0			12345678
OLA Yellow	9	0.0	Overlap E	8	
OLB Green	A	0.0	Overlap F	9	
OLB Yellow	B	0.0	Red Rest	A	
OLC Green	C	0.0	Max Recall	B	
OLC Yellow	D	0.0	Flash Green	C	
OLD Green	E	0.0	Flash Walk	D	
OLD Yellow	F	0.0	Advance Walk	E	
			Restrictive Phase	F	

1000068 - Ivy @ Rothery
Table 3 - Preempts
3/9/2023
8:28 AM

C + Key			E + Key		
FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE
Year	0	7	EVA Delay	0	0
Month	1	3	EVA Minimum	1	3
Day of Month	2	30	EVB Delay	2	0
		1234567	EVB Minimum	3	3
Day of Week	3	6	EVC Delay	4	0
		VALUE	EVC Minimum	5	3
Hour	4	8	EVD Delay	6	0
Minute	5	33	EVD Minimum	7	3
Second	6	56	OL Red Revert	8	0.0
Reserved	7	0	RR Delay	9	0
Triggers On In Flash	8	0	RR Clear	A	0
		12345678			12345678
Startup Yellow	9		RR Clear Phases	B	
EVA Phases	A	2 6	RR Permit	C	
EVB Phases	B		RR OL Permit	D	
EVC Phases	C		NEMA Hold Phases	E	
EVD Phases	D		Reserved	F	2 5
Handicap Ped	E				
Reserved	F				

1000068 - Ivy @ Rothery
Table 4 - Detectors Timing
3/9/2023
8:28 AM

D + Col + Key									
Detector Type			Delay				Carryover		
Column No.			2		3		4		5
KEY	CHANNEL (*)	PH	TIME	PH	TIME	PH	TIME	PH	TIME
0	BOTH (1)	1	0.0	5	5.0	1	0.0	5	5.0
1	UPPER (9)	1	0.0	5	0.0	1	0.0	5	0.0
2	UPPER (2)	2	0.0	6	0.0	2	0.0	6	0.0
3	LOWER (2)	2	0.0	6	0.0	2	0.0	6	0.0
4	UPPER (3)	2	0.0	6	0.0	2	0.0	6	0.0
5	LOWER (3)		0.0		0.0	2	0.0	6	0.0
6	BOTH (4)	2	0.0	6	0.0	2*	0.0	6*	0.0
7	BOTH (5)	3	0.0	7	0.0	3	0.0	7	0.0
8	LOWER (9)	3	0.0	7	0.0	3	0.0	7	0.0
9	UPPER (6)	4	3.0	8	5.0	4	0.0	8	0.0
A	LOWER (6)	4	3.0	8	0.0	4	0.0	8	0.0
B	UPPER (7)	4	0.0	8	0.0	4	0.0	8	0.0
C	LOWER (7)		0.0		0.0	4	0.0	8	0.0
D	BOTH (8)	4	0.0	8	0.0	4*	0.0	8*	0.0
E	Reserved		0		0		0		0
F	Reserved		0		0		0		0
Note: * = Set Type 3 Detector									

1000068 - Ivy @ Rothery
Table 5 - TOD/DOW Events 1-32
3/9/2023
8:28 AM

A + Code											
EVENT	1234567	HOUR	MIN	FUNC	CODE	EVENT	1234567	HOUR	MIN	FUNC	CODE
1	1234567	6	0	1	80-83	17		0	0	0	C0-C3
2	1234567	12	0	2	84-87	18		0	0	0	C4-C7
3	1234567	18	0	20	88-8B	19		0	0	0	C8-CB
4	1234567	22	0	33	8C-8F	20		0	0	0	CC-CF
5	1234567	5	55	32	90-93	21		0	0	0	D0-D3
6		0	0	0	94-97	22		0	0	0	D4-D7
7		0	0	0	98-9B	23		0	0	0	D8-DB
8		0	0	0	9C-9F	24		0	0	0	DC-DF
9		0	0	0	A0-A3	25		0	0	0	E0-E3
10		0	0	0	A4-A7	26		0	0	0	E4-E7
11		0	0	0	A8-AB	27		0	0	0	E8-EB
12		0	0	0	AC-AF	28		0	0	0	EC-EF
13		0	0	0	B0-B3	29		0	0	0	F0-F3
14		0	0	0	B4-B7	30		0	0	0	F4-F7
15		0	0	0	B8-BB	31		0	0	0	F8-FB
16		0	0	0	BC-BF	32		0	0	0	FC-FF

1000068 - Ivy @ Rothery
Table 6 - Coordination Functions
3/9/2023
8:28 AM

B + 0 + Key			D + Key		
FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE
Present Plan	0	0	Floating Ped	2E	0
TOD/DOW Plan	1	0	ID Number	2F	68
Hardwire Plan	2	0	No Coord Ped Recall	3E	0
Modem Plan	3	0	Rest In Walk	3F	1
Mode (0-4)	4	0	Adv Warning EOG	4E	0
Master (0 = Off)	5	0	Adv Warning SOG	4F	0
Master Clock	6	0	RR Red Clear	5E	0
Local Clock	7	0	RR Clear Color	5F	0
Dwell Clock	8	0	Bus Delay	6D	0.0
Reserved	9	0	Bus Free T1	6E	0
Reserved	A	0	Bus Free T3	6F	0
Reserved	B	0	EV Min After Clear	7E	1
		12345678	EV Indicators	7F	1
Reserved	C		NEMA Inputs	66	0
NEMA CNA Phase	D		Reserved		0
Adv Warning Phase	E		Reserved		0
MRI Phase	F				

1000068 - Ivy @ Rothery
Table 7 - Coordination Plans 1-9
3/9/2023
8:28 AM

B + Plan + Key						Plan				
FUNCTION	KEY	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5	Plan 6	Plan 7	Plan 8	Plan 9
Cycle Length	0	90	120	0	0	0	0	0	0	0
Forceoff Phase 1	1	0	0	0	0	0	0	0	0	0
Forceoff Phase 2	2	0	0	0	0	0	0	0	0	0
Forceoff Phase 3	3	0	0	0	0	0	0	0	0	0
Forceoff Phase 4	4	46	35	0	0	0	0	0	0	0
Forceoff Phase 5	5	64	71	0	0	0	0	0	0	0
Forceoff Phase 6	6	0	0	0	0	0	0	0	0	0
Forceoff Phase 7	7	0	0	0	0	0	0	0	0	0
Forceoff Phase 8	8	19	53	0	0	0	0	0	0	0
Offset	9	0	72	0	0	0	0	0	0	0
Permissive Length	A	0	0	0	0	0	0	0	0	0
Max Dwell	B	15	15	0	0	0	0	0	0	0
		12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678
Lead Phases	C	1 3 5 7	1 3 5 7							
Coord Phases	D	2 6	2 6							
Perm 2 Phases	E									
Min Recall	F									

1000068 - Ivy @ Rothery
Table 8 - Bus Preemption
3/9/2023
8:28 AM

B + A + Key			B + B + Key			B + C + Key		
FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE
Bus P1 T1	0	0	Bus P4 T1	0	0	Bus P7 T1	0	0
Bus P1 T2	1	0	Bus P4 T2	1	0	Bus P7 T2	1	0
Bus P1 T3	2	0	Bus P4 T3	2	0	Bus P7 T3	2	0
Bus P2 T1	3	0	Bus P5 T1	3	0	Bus P8 T1	3	0
Bus P2 T2	4	0	Bus P5 T2	4	0	Bus P8 T2	4	0
Bus P2 T3	5	0	Bus P5 T3	5	0	Bus P8 T3	5	0
Bus P3 T1	6	0	Bus P6 T1	6	0	Bus P9 T1	6	0
Bus P3 T2	7	0	Bus P6 T2	7	0	Bus P9 T2	7	0
Bus P3 T3	8	0	Bus P6 T3	8	0	Bus P9 T3	8	0
Perm 2 P1	9	0	Perm 2 P4	9	0	Perm 2 P7	9	0
Perm 2 P2	A	0	Perm 2 P5	A	0	Perm 2 P8	A	0
Perm 2 P3	B	0	Perm 2 P6	B	0	Perm 2 P9	B	0
		12345678			12345678			12345678
Flash Yellow	C	2 6	OL Flash Yellow	C		Coordinated Max	C	
Flash Circuit	D		OL Flash Clear	D		TOD Red Rest	D	
TOD/DOW Max	E		TOD/DOW Ped	E		OLA Switchpack	E	
OLB Switchpack	F		OLC Switchpack	F		OLD Switchpack	F	

1000068 - Ivy @ Rothery
Table 9 - Input Reassignments Page 0
3/9/2023
8:28 AM

A + 4 + Key			A + 5 + Key			A + 6 + Key		
C1 PIN	KEY	VALUE	C1 PIN	KEY	VALUE	C1 PIN	KEY	VALUE
39	0	0	55	0	15	67	0	0
40	1	0	56	1	0	68	1	0
41	2	0	57	2	0	69	2	0
42	3	0	58	3	0	70	3	0
43	4	31	59	4	0	71	4	0
44	5	0	60	5	0	72	5	0
45	6	0	61	6	0	73	6	0
46	7	0	62	7	0	74	7	0
47	8	0	N/U	8	0	75	8	0
48	9	0	N/U	9	0	76	9	0
49	A	0	N/U	A	0	77	A	0
50	B	0	N/U	B	0	78	B	0
51	C	0	63	C	0	79	C	0
52	D	0	64	D	0	80	D	0
53	E	0	65	E	0	81	E	0
54	F	0	66	F	0	82	F	0

1000068 - Ivy @ Rothery
Table 10 - Output Reassignments Page 0
3/9/2023
8:28 AM

A + 0 + Key			A + 1 + Key			A + 2 + Key			A + 3 + Key		
FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE
04 D/W	0	0	08 D/W	0	0	02 Ped Yellow	0	0	01 D/W	0	0
04 Walk	1	0	08 Walk	1	0	06 Ped Yellow	1	99	01 Walk	1	0
04 Red	2	0	08 Red	2	0	04 Ped Yellow	2	99	OLB Red	2	0
04 Yellow	3	0	08 Yellow	3	0	08 Ped Yellow	3	0	OLB Yellow	3	1
04 Green	4	0	08 Green	4	0	03 Ped Yellow	4	0	OLB Green	4	94
03 Red	5	0	07 Red	5	0	01 Ped Yellow	5	0	OLA Red	5	0
03 Yellow	6	0	07 Yellow	6	0	Flash	6	0	OLA Yellow	6	0
03 Green	7	0	07 Green	7	0	Watchdog	7	0	OLA Green	7	0
02 D/W	8	0	06 D/W	8	0	03 D/W	8	0	Reserved	8	0
02 Walk	9	0	06 Walk	9	0	03 Walk	9	0	SD	9	0
02 Red	A	0	06 Red	A	0	OLD Red	A	0	LTT	A	0
02 Yellow	B	0	06 Yellow	B	0	OLD Yellow	B	0	ID (MSB)	B	0
02 Green	C	0	06 Green	C	0	OLD Green	C	0	Group 1	C	0
01 Red	D	0	05 Red	D	0	OLC Red	D	0	Group 2	D	0
01 Yellow	E	0	05 Yellow	E	0	OLC Yellow	E	0	Group 3	E	0
01 Green	F	0	05 Green	F	0	OLC Green	F	0	Group 4	F	0

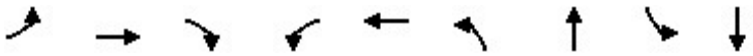
1000068 - Ivy @ Rothery
Table 11 - Extended Outputs Page 0
3/9/2023
8:28 AM

D + B + 0 + Key			D + B + 1 + Key			D + B + 2 + Key		
FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE
05 D/W	0	0	OLE Green	0	0	Cycle 2	0	0
05 Walk	1	0	OLF Green	1	0	Cycle 3	1	0
OLL Red	2	0	OLE Yellow	2	0	Offset 1	2	0
OLL Yellow	3	0	OLF Yellow	3	0	Offset 2	3	0
OLL Green	4	0	Adv Warning	4	0	Offset 3	4	0
OLK Red	5	0	RR Flash Yellow	5	0	Reserved	5	0
OLK Yellow	6	0	Detector Reset	6	0	Free	6	0
OLK Green	7	0	RR On	7	0	Flash	7	0
07 D/W	8	0	EVA On	8	52	Coord Plan 1,2,3	8	0
07 Walk	9	0	EVB On	9	53	Coord Plan 4,5,6	9	0
OLJ Red	A	0	EVC On	A	0	Coord Plan 7,8,9	A	0
OLJ Yellow	B	0	EVD On	B	0	Coord Plan 10,11,12	B	0
OLJ Green	C	0	Ring 1, Bit B	C	0	Coord Plan 13,14,15	C	0
OLH Red	D	0	Ring 1, Bit C	D	0	Coord Plan 16,17,18	D	0
OLH Yellow	E	0	Ring 2, Bit B	E	0	Reserved	E	0
OLH Green	F	0	Ring 2, Bit C	F	0	Reserved	F	0

1000068 - Ivy @ Rothery
Table 13 - Additional Overlaps
3/9/2023
8:28 AM

D + 9 + 0 + Key			D + 9 + 3 + Key			E + F + Key		
FUNCTION	KEY	12345678	FUNCTION	KEY	VALUE	FUNCTION	KEY	VALUE
Overlap H	0		OLH Green	0	0.0	RR Max II	0	0
Overlap J	1		OLH Yellow	1	0.0	Ped Perm Plan 1	1	0
Overlap K	2		OLH Red	2	0.0	Ped Perm Plan 2	2	0
Overlap L	3		OLJ Green	3	0.0	Ped Perm Plan 3	3	0
OLH Switchpack	4		OLJ Yellow	4	0.0	Ped Perm Plan 4	4	0
OLJ Switchpack	5		OLJ Red	5	0.0	Ped Perm Plan 5	5	0
OLK Switchpack	6		OLK Green	6	0.0	Ped Perm Plan 6	6	0
OLL Switchpack	7		OLK Yellow	7	0.0	Ped Perm Plan 7	7	0
Reserved	8		OLK Red	8	0.0	Ped Perm Plan 8	8	0
Reserved	9		OLL Green	9	0.0	Ped Perm Plan 9	9	0
Reserved	A		OLL Yellow	A	0.0	Long Power Outs	A	0
Reserved	B		OLL Red	B	0.0	Short Power Outs	B	0
Reserved	C		Reserved	C	0	Failed Detectors	C	0
Reserved	D		Reserved	D	0	Max II On	D	0
Reserved	E		Reserved	E	0	No Daylight Savings	E	177
Reserved	F		Reserved	F	0	Revision Level	F	48

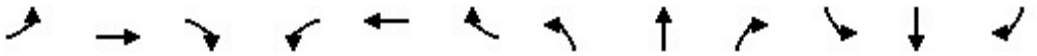
Appendix C
SYNCHRO & SimTraffic Reports for 2023 Existing Conditions



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	90	423	204	52	263	149	221	41	274
v/c Ratio	0.16	0.50	0.25	0.15	0.19	0.48	0.42	0.14	0.76
Control Delay	12.9	23.8	4.3	13.7	18.7	24.3	23.9	17.7	41.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.9	23.8	4.3	13.7	18.7	24.3	23.9	17.7	41.3
Queue Length 50th (ft)	24	184	0	14	46	57	87	15	124
Queue Length 95th (ft)	57	#330	48	37	86	88	140	31	190
Internal Link Dist (ft)		887			909		725		1415
Turn Bay Length (ft)	250		250	350		150		265	
Base Capacity (vph)	570	842	813	348	1382	322	533	447	510
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.50	0.25	0.15	0.19	0.46	0.41	0.09	0.54

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



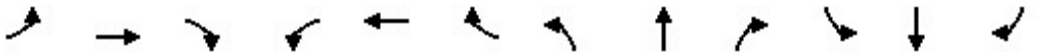
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	86	406	196	50	206	46	143	134	78	39	150	113
Future Volume (vph)	86	406	196	50	206	46	143	134	78	39	150	113
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		4.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.95		1.00	0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1671	1863	1553	1433	3415		1770	1720		1671	1706	
Flt Permitted	0.53	1.00	1.00	0.40	1.00		0.28	1.00		0.62	1.00	
Satd. Flow (perm)	932	1863	1553	603	3415		514	1720		1091	1706	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	90	423	204	52	215	48	149	140	81	41	156	118
RTOR Reduction (vph)	0	0	120	0	19	0	0	23	0	0	34	0
Lane Group Flow (vph)	90	423	84	52	244	0	149	198	0	41	240	0
Heavy Vehicles (%)	8%	2%	4%	26%	3%	2%	2%	4%	5%	8%	2%	7%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Actuated Green, G (s)	44.8	36.6	36.6	37.4	32.9		32.9	26.0		21.6	18.7	
Effective Green, g (s)	44.8	36.6	36.6	37.4	32.9		32.9	26.0		21.6	18.7	
Actuated g/C Ratio	0.50	0.41	0.41	0.42	0.37		0.37	0.29		0.24	0.21	
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		4.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	2.5	3.0		2.5	2.5		0.2	2.5	
Lane Grp Cap (vph)	537	766	638	295	1262		319	502		283	358	
v/s Ratio Prot	c0.02	c0.23		0.01	0.07		c0.05	0.12		0.00	c0.14	
v/s Ratio Perm	0.07		0.05	0.07			0.12			0.03		
v/c Ratio	0.17	0.55	0.13	0.18	0.19		0.47	0.40		0.14	0.67	
Uniform Delay, d1	11.7	20.0	16.3	15.9	19.0		20.3	25.2		26.2	32.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	2.9	0.4	0.2	0.3		0.8	0.4		0.1	4.4	
Delay (s)	11.8	22.8	16.7	16.1	19.4		21.1	25.6		26.2	36.7	
Level of Service	B	C	B	B	B		C	C		C	D	
Approach Delay (s)		19.7			18.8			23.8			35.4	
Approach LOS		B			B			C			D	

Intersection Summary			
HCM 2000 Control Delay	23.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	89.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	66.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	WBT	WBR	NBR	SBL	SBR
Lane Group Flow (vph)	139	368	294	172	3	8	20
v/c Ratio	0.18	0.28	0.28	0.17	0.01	0.05	0.08
Control Delay	3.0	3.4	8.4	1.8	0.0	26.8	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	3.0	3.4	8.4	1.8	0.0	26.8	0.6
Queue Length 50th (ft)	12	35	56	0	0	3	0
Queue Length 95th (ft)	23	60	99	23	0	14	0
Internal Link Dist (ft)		909	611				
Turn Bay Length (ft)	300			85			95
Base Capacity (vph)	778	1323	1037	1013	828	515	510
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.28	0.28	0.17	0.00	0.02	0.04

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	135	357	0	0	285	167	0	0	3	8	0	19
Future Volume (vph)	135	357	0	0	285	167	0	0	3	8	0	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0			5.0	5.0			5.0	5.0		5.0
Lane Util. Factor	1.00	1.00			1.00	1.00			1.00	1.00		1.00
Frt	1.00	1.00			1.00	0.85			0.86	1.00		0.85
Flt Protected	0.95	1.00			1.00	1.00			1.00	0.95		1.00
Satd. Flow (prot)	1752	1792			1759	1599			1644	1597		1335
Flt Permitted	0.51	1.00			1.00	1.00			1.00	0.95		1.00
Satd. Flow (perm)	933	1792			1759	1599			1644	1597		1335
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	139	368	0	0	294	172	0	0	3	8	0	20
RTOR Reduction (vph)	0	0	0	0	0	73	0	0	3	0	0	18
Lane Group Flow (vph)	139	368	0	0	294	99	0	0	0	8	0	2
Heavy Vehicles (%)	3%	6%	2%	2%	8%	1%	2%	2%	0%	13%	2%	21%
Turn Type	pm+pt	NA			NA	Perm			Perm	Perm		Perm
Protected Phases	5	2			6							
Permitted Phases	2					6			8	4		4
Actuated Green, G (s)	48.0	48.0			37.3	37.3			7.0	7.0		7.0
Effective Green, g (s)	48.0	48.0			37.3	37.3			7.0	7.0		7.0
Actuated g/C Ratio	0.74	0.74			0.57	0.57			0.11	0.11		0.11
Clearance Time (s)	5.0	5.0			5.0	5.0			5.0	5.0		5.0
Vehicle Extension (s)	2.0	3.0			3.0	3.0			2.0	3.0		3.0
Lane Grp Cap (vph)	760	1323			1009	917			177	171		143
v/s Ratio Prot	0.02	c0.21			0.17							
v/s Ratio Perm	0.12					0.06			0.00	c0.01		0.00
v/c Ratio	0.18	0.28			0.29	0.11			0.00	0.05		0.02
Uniform Delay, d1	2.7	2.8			7.1	6.3			25.9	26.0		25.9
Progression Factor	1.00	1.00			1.00	1.00			1.00	1.00		1.00
Incremental Delay, d2	0.0	0.5			0.7	0.2			0.0	0.1		0.0
Delay (s)	2.7	3.3			7.8	6.5			25.9	26.1		26.0
Level of Service	A	A			A	A			C	C		C
Approach Delay (s)		3.2			7.3			25.9			26.0	
Approach LOS		A			A			C			C	

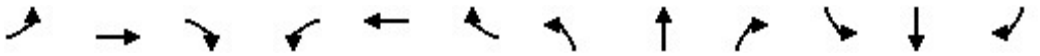
Intersection Summary			
HCM 2000 Control Delay	5.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	39.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	45	275	44	80	221	209	65	236	88	318	505
v/c Ratio	0.26	0.49	0.08	0.47	0.35	0.31	0.27	0.57	0.18	0.71	0.85
Control Delay	32.9	25.7	0.3	39.1	22.1	4.9	14.6	29.1	1.3	26.6	38.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.9	25.7	0.3	39.1	22.1	4.9	14.6	29.1	1.3	26.6	38.8
Queue Length 50th (ft)	18	109	0	33	84	0	14	86	0	82	190
Queue Length 95th (ft)	47	174	0	73	138	46	37	150	5	#202	#406
Internal Link Dist (ft)		611			1011			820			1650
Turn Bay Length (ft)	255		270	165		155	350		100		
Base Capacity (vph)	180	577	560	174	653	686	248	478	523	447	596
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.48	0.08	0.46	0.34	0.30	0.26	0.49	0.17	0.71	0.85

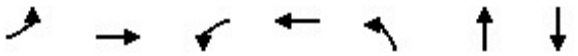
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



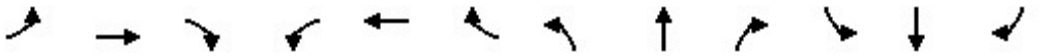
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	261	42	76	210	199	62	224	84	302	301	179
Future Volume (vph)	43	261	42	76	210	199	62	224	84	302	301	179
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1687	1863	1442	1626	1900	1599	1456	1810	1524	1770	1713	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.25	1.00	1.00	0.40	1.00	
Satd. Flow (perm)	1687	1863	1442	1626	1900	1599	390	1810	1524	742	1713	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	45	275	44	80	221	209	65	236	88	318	317	188
RTOR Reduction (vph)	0	0	33	0	0	150	0	0	65	0	27	0
Lane Group Flow (vph)	45	275	11	80	221	59	65	236	23	318	478	0
Heavy Vehicles (%)	7%	2%	12%	11%	0%	1%	24%	5%	6%	2%	4%	6%
Turn Type	Prot	NA	Prot	Prot	NA	Prot	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2	2	1	6	6	3	8		7	4	
Permitted Phases							8		8	4		
Actuated Green, G (s)	4.4	18.1	18.1	6.0	19.7	19.7	22.6	18.0	18.0	32.4	23.3	
Effective Green, g (s)	4.4	18.1	18.1	6.0	19.7	19.7	22.6	18.0	18.0	32.4	23.3	
Actuated g/C Ratio	0.06	0.26	0.26	0.09	0.28	0.28	0.32	0.26	0.26	0.46	0.33	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	106	481	372	139	534	450	195	465	391	488	570	
v/s Ratio Prot	0.03	c0.15	0.01	c0.05	0.12	0.04	0.02	0.13		c0.09	c0.28	
v/s Ratio Perm							0.09		0.01	0.21		
v/c Ratio	0.42	0.57	0.03	0.58	0.41	0.13	0.33	0.51	0.06	0.65	0.84	
Uniform Delay, d1	31.6	22.6	19.4	30.8	20.5	18.8	17.4	22.2	19.6	12.9	21.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.7	4.9	0.2	5.7	2.4	0.6	1.0	0.9	0.1	3.1	10.4	
Delay (s)	34.3	27.5	19.5	36.4	22.8	19.4	18.4	23.1	19.7	16.0	32.0	
Level of Service	C	C	B	D	C	B	B	C	B	B	C	
Approach Delay (s)		27.3			23.5			21.5			25.8	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	24.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	67.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	26	234	82	48	102	115	117
v/c Ratio	0.08	0.47	0.16	0.07	0.26	0.20	0.21
Control Delay	12.6	11.2	5.7	4.5	15.2	7.6	12.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.6	11.2	5.7	4.5	15.2	7.6	12.6
Queue Length 50th (ft)	4	24	7	3	18	6	17
Queue Length 95th (ft)	19	74	24	15	56	38	55
Internal Link Dist (ft)		596		1342		1415	566
Turn Bay Length (ft)	200		1000		230		
Base Capacity (vph)	753	987	1041	1561	702	957	980
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.24	0.08	0.03	0.15	0.12	0.12

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	94	128	78	38	8	97	37	72	14	78	19
Future Volume (vph)	25	94	128	78	38	8	97	37	72	14	78	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5			4.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Frt	1.00	0.91		1.00	0.97		1.00	0.90			0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1736	1665		1752	1611		1703	1609			1755	
Flt Permitted	0.73	1.00		0.42	1.00		0.68	1.00			0.96	
Satd. Flow (perm)	1326	1665		770	1611		1222	1609			1693	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	26	99	135	82	40	8	102	39	76	15	82	20
RTOR Reduction (vph)	0	73	0	0	4	0	0	53	0	0	10	0
Lane Group Flow (vph)	26	161	0	82	44	0	102	62	0	0	107	0
Heavy Vehicles (%)	4%	6%	3%	3%	13%	25%	6%	11%	4%	7%	6%	0%
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases		4		3	8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	9.6	9.6		18.0	18.0		11.8	11.8			11.8	
Effective Green, g (s)	9.6	9.6		18.0	18.0		11.8	11.8			11.8	
Actuated g/C Ratio	0.25	0.25		0.46	0.46		0.30	0.30			0.30	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5			4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	328	411		455	747		371	489			514	
v/s Ratio Prot		c0.10		c0.02	0.03			0.04				
v/s Ratio Perm	0.02			0.07			c0.08				0.06	
v/c Ratio	0.08	0.39		0.18	0.06		0.27	0.13			0.21	
Uniform Delay, d1	11.2	12.2		6.1	5.7		10.3	9.8			10.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.6		0.2	0.0		0.4	0.1			0.2	
Delay (s)	11.3	12.8		6.3	5.8		10.7	9.9			10.2	
Level of Service	B	B		A	A		B	A			B	
Approach Delay (s)		12.6			6.1			10.2			10.2	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	10.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	38.8	Sum of lost time (s)	13.5
Intersection Capacity Utilization	42.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Intersection: 1: Alderman Road/Copeley Road & Ivy Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	163	341	239	110	103	118	149	229	129	277
Average Queue (ft)	38	143	50	38	37	50	70	83	22	138
95th Queue (ft)	100	264	145	85	80	98	131	172	73	241
Link Distance (ft)		915			918	918		754		1393
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	250		250	350			150		265	
Storage Blk Time (%)	0	1	0				1	2	0	1
Queuing Penalty (veh)	0	2	0				1	2	0	0

Intersection: 2: Rothery Road /Parking Garage & Ivy Road

Movement	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	TR	T	R	R	L	R
Maximum Queue (ft)	91	116	162	84	24	42	69
Average Queue (ft)	41	41	54	28	1	7	19
95th Queue (ft)	77	98	122	70	10	29	55
Link Distance (ft)		918	603		436	429	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	300			85			95
Storage Blk Time (%)			2	0			0
Queuing Penalty (veh)			3	1			0

Intersection: 3: Emmet Street & Ivy Road

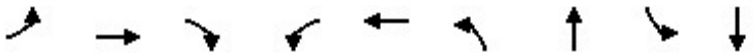
Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	R	L	TR
Maximum Queue (ft)	108	212	90	137	204	152	140	255	100	229	418
Average Queue (ft)	30	101	14	55	81	79	47	115	24	109	201
95th Queue (ft)	70	184	54	108	151	136	95	201	92	188	361
Link Distance (ft)		603			1051			859		1681	1681
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	255		270	165		155	350		100		
Storage Blk Time (%)		0	0	0	1	0	0	12	0		
Queuing Penalty (veh)		0	0	0	2	1	0	18	1		

Intersection: 4: Copeley Road & Massie Road

Movement	EB	EB	WB	WB	NB	NB	SB
Directions Served	L	TR	L	TR	L	TR	LTR
Maximum Queue (ft)	50	127	79	64	110	92	100
Average Queue (ft)	16	57	34	17	40	35	38
95th Queue (ft)	44	101	63	47	84	73	77
Link Distance (ft)		640		1382		1393	610
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	200		1000		230		
Storage Blk Time (%)							
Queuing Penalty (veh)							

Network Summary

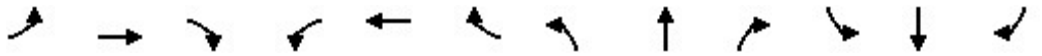
Network wide Queuing Penalty: 32



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	84	288	183	48	644	244	285	31	419
v/c Ratio	0.23	0.38	0.25	0.12	0.53	0.81	0.43	0.09	0.87
Control Delay	16.1	24.1	4.7	15.6	27.3	40.5	23.5	14.9	41.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.1	24.1	4.7	15.6	27.3	40.5	23.5	14.9	41.6
Queue Length 50th (ft)	27	132	0	15	165	84	115	9	164
Queue Length 95th (ft)	54	209	46	36	225	#201	189	24	#273
Internal Link Dist (ft)		887			909		725		1415
Turn Bay Length (ft)	250		250	350		150		265	
Base Capacity (vph)	362	752	743	384	1208	303	656	497	563
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.38	0.25	0.13	0.53	0.81	0.43	0.06	0.74

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



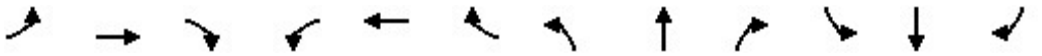
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	276	176	46	545	73	234	236	37	30	131	272
Future Volume (vph)	81	276	176	46	545	73	234	236	37	30	131	272
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		4.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.98		1.00	0.90	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1805	1900	1599	1456	3503		1805	1829		1752	1708	
Flt Permitted	0.24	1.00	1.00	0.54	1.00		0.15	1.00		0.59	1.00	
Satd. Flow (perm)	455	1900	1599	825	3503		279	1829		1079	1708	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	84	288	183	48	568	76	244	246	39	31	136	283
RTOR Reduction (vph)	0	0	118	0	11	0	0	6	0	0	88	0
Lane Group Flow (vph)	84	288	65	48	633	0	244	279	0	31	331	0
Heavy Vehicles (%)	0%	0%	1%	24%	1%	3%	0%	2%	0%	3%	0%	0%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Actuated Green, G (s)	39.6	31.6	31.6	32.0	27.8		38.2	31.7		24.7	22.2	
Effective Green, g (s)	39.6	31.6	31.6	32.0	27.8		38.2	31.7		24.7	22.2	
Actuated g/C Ratio	0.44	0.36	0.36	0.36	0.31		0.43	0.36		0.28	0.25	
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		4.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	2.5	3.0		2.5	2.5		0.2	2.5	
Lane Grp Cap (vph)	323	674	567	326	1094		308	651		318	426	
v/s Ratio Prot	c0.02	c0.15		0.01	c0.18		c0.10	0.15		0.00	0.19	
v/s Ratio Perm	0.09		0.04	0.05			c0.24			0.02		
v/c Ratio	0.26	0.43	0.11	0.15	0.58		0.79	0.43		0.10	0.78	
Uniform Delay, d1	15.4	21.8	19.3	18.9	25.7		19.7	21.8		23.6	31.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.4	2.0	0.4	0.2	2.2		12.6	0.3		0.0	8.3	
Delay (s)	15.9	23.8	19.7	19.1	27.9		32.4	22.1		23.7	39.4	
Level of Service	B	C	B	B	C		C	C		C	D	
Approach Delay (s)		21.2			27.3			26.8			38.4	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM 2000 Control Delay	27.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	89.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	79.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	WBT	WBR	NBR	SBL	SBR
Lane Group Flow (vph)	5	376	469	7	3	130	246
v/c Ratio	0.01	0.29	0.39	0.01	0.00	0.46	0.54
Control Delay	4.0	5.1	8.4	0.0	0.0	29.7	8.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.0	5.1	8.4	0.0	0.0	29.7	8.3
Queue Length 50th (ft)	1	46	61	0	0	48	0
Queue Length 95th (ft)	4	96	214	0	0	88	51
Internal Link Dist (ft)		909	611				
Turn Bay Length (ft)	300			85			95
Base Capacity (vph)	622	1297	1192	1095	823	583	688
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.29	0.39	0.01	0.00	0.22	0.36

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	342	0	0	427	6	0	0	3	118	0	224
Future Volume (vph)	5	342	0	0	427	6	0	0	3	118	0	224
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0			5.0	5.0			5.0	5.0		5.0
Lane Util. Factor	1.00	1.00			1.00	1.00			1.00	1.00		1.00
Frt	1.00	1.00			1.00	0.85			0.86	1.00		0.85
Flt Protected	0.95	1.00			1.00	1.00			1.00	0.95		1.00
Satd. Flow (prot)	1805	1881			1827	1615			1644	1805		1615
Flt Permitted	0.39	1.00			1.00	1.00			1.00	0.95		1.00
Satd. Flow (perm)	736	1881			1827	1615			1644	1805		1615
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	5	376	0	0	469	7	0	0	3	130	0	246
RTOR Reduction (vph)	0	0	0	0	0	3	0	0	3	0	0	207
Lane Group Flow (vph)	5	376	0	0	469	4	0	0	0	130	0	39
Heavy Vehicles (%)	0%	1%	0%	2%	4%	0%	2%	2%	0%	0%	0%	0%
Turn Type	pm+pt	NA			NA	Perm			Perm	Perm		Perm
Protected Phases	5	2			6							
Permitted Phases	2					6			8	4		4
Actuated Green, G (s)	44.8	44.8			38.4	38.4			10.2	10.2		10.2
Effective Green, g (s)	44.8	44.8			38.4	38.4			10.2	10.2		10.2
Actuated g/C Ratio	0.69	0.69			0.59	0.59			0.16	0.16		0.16
Clearance Time (s)	5.0	5.0			5.0	5.0			5.0	5.0		5.0
Vehicle Extension (s)	2.0	3.0			3.0	3.0			2.0	3.0		3.0
Lane Grp Cap (vph)	530	1296			1079	954			257	283		253
v/s Ratio Prot	0.00	c0.20			c0.26							
v/s Ratio Perm	0.01					0.00			0.00	c0.07		0.02
v/c Ratio	0.01	0.29			0.43	0.00			0.00	0.46		0.15
Uniform Delay, d1	3.8	3.9			7.3	5.5			23.1	24.9		23.7
Progression Factor	1.00	1.00			1.00	1.00			1.00	1.00		1.00
Incremental Delay, d2	0.0	0.6			1.3	0.0			0.0	1.2		0.3
Delay (s)	3.8	4.5			8.6	5.5			23.1	26.1		23.9
Level of Service	A	A			A	A			C	C		C
Approach Delay (s)		4.5			8.6			23.1			24.7	
Approach LOS		A			A			C			C	

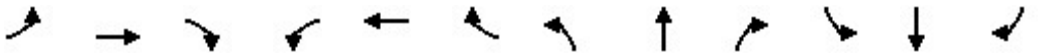
Intersection Summary			
HCM 2000 Control Delay	12.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	44.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	164	216	103	105	273	338	98	385	94	270	489
v/c Ratio	0.82	0.40	0.18	0.57	0.58	0.52	0.39	0.83	0.18	0.76	0.87
Control Delay	64.9	24.3	1.9	43.1	28.7	5.9	16.6	41.7	1.5	32.4	42.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.9	24.3	1.9	43.1	28.7	5.9	16.6	41.7	1.5	32.4	42.9
Queue Length 50th (ft)	71	80	0	44	105	0	23	154	0	70	201
Queue Length 95th (ft)	#172	136	12	#100	171	57	52	#285	7	#187	#398
Internal Link Dist (ft)		611			1011			820			1650
Turn Bay Length (ft)	255		270	165		155	350		100		
Base Capacity (vph)	199	573	601	187	507	678	256	490	537	355	565
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.82	0.38	0.17	0.56	0.54	0.50	0.38	0.79	0.18	0.76	0.87

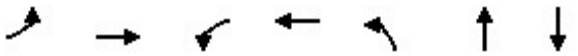
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



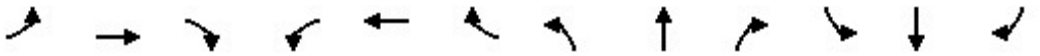
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	161	212	101	103	268	331	96	377	92	265	405	74
Future Volume (vph)	161	212	101	103	268	331	96	377	92	265	405	74
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	1881	1599	1752	1900	1615	1543	1845	1568	1805	1792	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.22	1.00	1.00	0.22	1.00	
Satd. Flow (perm)	1805	1881	1599	1752	1900	1615	351	1845	1568	420	1792	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	164	216	103	105	273	338	98	385	94	270	413	76
RTOR Reduction (vph)	0	0	76	0	0	258	0	0	69	0	9	0
Lane Group Flow (vph)	164	216	27	105	273	80	98	385	25	270	480	0
Heavy Vehicles (%)	0%	1%	1%	3%	0%	0%	17%	3%	3%	0%	4%	1%
Turn Type	Prot	NA	Prot	Prot	NA	Prot	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2	2	1	6	6	3	8		7	4	
Permitted Phases							8		8	4		
Actuated Green, G (s)	7.7	18.3	18.3	6.0	16.6	16.6	24.5	18.5	18.5	30.9	21.7	
Effective Green, g (s)	7.7	18.3	18.3	6.0	16.6	16.6	24.5	18.5	18.5	30.9	21.7	
Actuated g/C Ratio	0.11	0.26	0.26	0.09	0.24	0.24	0.35	0.26	0.26	0.44	0.31	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	198	491	418	150	450	382	225	487	414	367	555	
v/s Ratio Prot	c0.09	0.11	0.02	0.06	c0.14	0.05	0.04	0.21		c0.10	c0.27	
v/s Ratio Perm							0.12		0.02	0.23		
v/c Ratio	0.83	0.44	0.06	0.70	0.61	0.21	0.44	0.79	0.06	0.74	0.86	
Uniform Delay, d1	30.5	21.6	19.4	31.1	23.8	21.4	16.7	23.9	19.2	14.4	22.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	23.9	2.8	0.3	13.4	6.0	1.2	1.4	8.5	0.1	7.5	13.2	
Delay (s)	54.4	24.4	19.7	44.5	29.8	22.7	18.0	32.5	19.3	21.9	36.0	
Level of Service	D	C	B	D	C	C	B	C	B	C	D	
Approach Delay (s)		33.6			28.6			27.9			31.0	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	30.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	72.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	18	300	109	106	224	172	140
v/c Ratio	0.06	0.52	0.22	0.15	0.43	0.27	0.23
Control Delay	15.8	8.7	8.4	6.8	15.0	5.4	10.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.8	8.7	8.4	6.8	15.0	5.4	10.6
Queue Length 50th (ft)	3	12	13	10	40	5	18
Queue Length 95th (ft)	17	68	38	34	110	42	60
Internal Link Dist (ft)		596		1342		1415	566
Turn Bay Length (ft)	200		1000		230		
Base Capacity (vph)	694	970	979	1616	804	922	915
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.31	0.11	0.07	0.28	0.19	0.15

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	59	220	101	84	15	208	30	130	18	74	38
Future Volume (vph)	17	59	220	101	84	15	208	30	130	18	74	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5			4.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Frt	1.00	0.88		1.00	0.98		1.00	0.88			0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1805	1622		1787	1753		1787	1615			1777	
Flt Permitted	0.69	1.00		0.32	1.00		0.81	1.00			0.95	
Satd. Flow (perm)	1308	1622		604	1753		1516	1615			1700	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	18	63	237	109	90	16	224	32	140	19	80	41
RTOR Reduction (vph)	0	182	0	0	9	0	0	93	0	0	20	0
Lane Group Flow (vph)	18	118	0	109	97	0	224	79	0	0	120	0
Heavy Vehicles (%)	0%	8%	2%	1%	7%	0%	1%	0%	4%	2%	2%	2%
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases		4		3	8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	9.4	9.4		17.8	17.8		13.4	13.4			13.4	
Effective Green, g (s)	9.4	9.4		17.8	17.8		13.4	13.4			13.4	
Actuated g/C Ratio	0.23	0.23		0.44	0.44		0.33	0.33			0.33	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5			4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	305	379		382	776		505	538			566	
v/s Ratio Prot		0.07		c0.03	0.06			0.05				
v/s Ratio Perm	0.01			c0.10			c0.15				0.07	
v/c Ratio	0.06	0.31		0.29	0.13		0.44	0.15			0.21	
Uniform Delay, d1	12.0	12.7		7.2	6.6		10.5	9.4			9.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.5		0.4	0.1		0.6	0.1			0.2	
Delay (s)	12.0	13.2		7.6	6.7		11.1	9.5			9.8	
Level of Service	B	B		A	A		B	A			A	
Approach Delay (s)		13.1			7.1			10.4			9.8	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM 2000 Control Delay	10.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	40.2	Sum of lost time (s)	13.5
Intersection Capacity Utilization	55.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Intersection: 1: Alderman Road/Copeley Road & Ivy Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	93	217	79	98	223	259	149	288	161	380
Average Queue (ft)	38	103	32	35	115	135	93	103	24	202
95th Queue (ft)	77	182	62	81	186	212	155	209	101	349
Link Distance (ft)		915			918	918		754		1393
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	250		250	350			150		265	
Storage Blk Time (%)		0					1	2	0	6
Queuing Penalty (veh)		0					3	5	0	2

Intersection: 2: Rothery Road /Parking Garage & Ivy Road

Movement	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	TR	T	R	R	L	R
Maximum Queue (ft)	24	172	188	31	30	195	95
Average Queue (ft)	2	62	71	2	2	74	67
95th Queue (ft)	14	144	153	16	15	146	105
Link Distance (ft)		918	603		436	429	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	300			85			95
Storage Blk Time (%)			3	0		3	1
Queuing Penalty (veh)			0	0		7	1

Intersection: 3: Emmet Street & Ivy Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	R	L	TR
Maximum Queue (ft)	243	346	189	161	551	155	288	496	100	255	502
Average Queue (ft)	145	132	42	83	238	142	92	242	49	109	250
95th Queue (ft)	256	377	134	156	468	179	244	458	129	195	442
Link Distance (ft)		603			1051			859		1681	1681
Upstream Blk Time (%)		1									
Queuing Penalty (veh)		5									
Storage Bay Dist (ft)	255		270	165		155	350		100		
Storage Blk Time (%)	8	3	0	0	10	15	0	40	1		
Queuing Penalty (veh)	26	8	0	3	43	55	0	74	3		

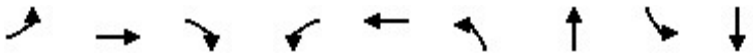
Intersection: 4: Copeley Road & Massie Road

Movement	EB	EB	WB	WB	NB	NB	SB
Directions Served	L	TR	L	TR	L	TR	LTR
Maximum Queue (ft)	42	172	73	86	164	110	107
Average Queue (ft)	11	70	37	30	71	43	44
95th Queue (ft)	36	128	65	64	126	83	83
Link Distance (ft)		640		1382		1393	610
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	200		1000		230		
Storage Blk Time (%)		0					
Queuing Penalty (veh)		0					

Network Summary

Network wide Queuing Penalty: 234

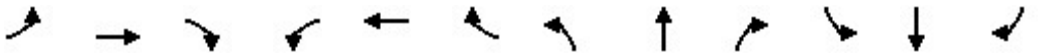
Appendix D
SYNCHRO & SimTraffic Reports for 2028 Background Conditions



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	91	427	206	53	265	150	223	41	277
v/c Ratio	0.16	0.51	0.25	0.15	0.19	0.49	0.42	0.14	0.76
Control Delay	13.0	24.0	4.3	13.9	18.9	24.2	23.8	17.5	41.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.0	24.0	4.3	13.9	18.9	24.2	23.8	17.5	41.5
Queue Length 50th (ft)	24	187	0	14	47	58	88	14	126
Queue Length 95th (ft)	58	#350	48	38	87	88	141	31	192
Internal Link Dist (ft)		887			909		725		1415
Turn Bay Length (ft)	250		250	350		150		265	
Base Capacity (vph)	568	839	813	344	1376	321	536	449	509
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.51	0.25	0.15	0.19	0.47	0.42	0.09	0.54

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



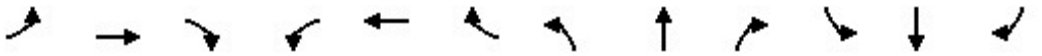
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	87	410	198	51	208	46	144	135	79	39	152	114
Future Volume (vph)	87	410	198	51	208	46	144	135	79	39	152	114
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		4.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.94		1.00	0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1671	1863	1553	1433	3416		1770	1720		1671	1707	
Flt Permitted	0.53	1.00	1.00	0.39	1.00		0.27	1.00		0.62	1.00	
Satd. Flow (perm)	930	1863	1553	596	3416		509	1720		1089	1707	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	91	427	206	53	217	48	150	141	82	41	158	119
RTOR Reduction (vph)	0	0	121	0	18	0	0	23	0	0	33	0
Lane Group Flow (vph)	91	427	85	53	247	0	150	200	0	41	244	0
Heavy Vehicles (%)	8%	2%	4%	26%	3%	2%	2%	4%	5%	8%	2%	7%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Actuated Green, G (s)	44.7	36.6	36.6	37.3	32.9		33.0	26.2		21.6	18.8	
Effective Green, g (s)	44.7	36.6	36.6	37.3	32.9		33.0	26.2		21.6	18.8	
Actuated g/C Ratio	0.50	0.41	0.41	0.42	0.37		0.37	0.29		0.24	0.21	
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		4.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	2.5	3.0		2.5	2.5		0.2	2.5	
Lane Grp Cap (vph)	534	766	638	291	1262		319	506		282	360	
v/s Ratio Prot	c0.02	c0.23		0.01	0.07		c0.05	0.12		0.00	c0.14	
v/s Ratio Perm	0.07		0.05	0.07			0.13			0.03		
v/c Ratio	0.17	0.56	0.13	0.18	0.20		0.47	0.40		0.15	0.68	
Uniform Delay, d1	11.7	20.0	16.3	15.9	19.1		20.3	25.1		26.2	32.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.2	2.9	0.4	0.2	0.3		0.8	0.4		0.1	4.5	
Delay (s)	11.9	22.9	16.7	16.2	19.4		21.1	25.5		26.2	36.8	
Level of Service	B	C	B	B	B		C	C		C	D	
Approach Delay (s)		19.8			18.9			23.7			35.5	
Approach LOS		B			B			C			D	

Intersection Summary			
HCM 2000 Control Delay	23.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	89.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	67.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	WBT	WBR	NBR	SBL	SBR
Lane Group Flow (vph)	140	372	297	174	3	8	20
v/c Ratio	0.18	0.28	0.29	0.17	0.01	0.05	0.08
Control Delay	3.0	3.4	8.4	1.8	0.0	26.8	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	3.0	3.4	8.4	1.8	0.0	26.8	0.6
Queue Length 50th (ft)	12	36	57	0	0	3	0
Queue Length 95th (ft)	23	60	100	23	0	14	0
Internal Link Dist (ft)		909	611				
Turn Bay Length (ft)	300			85			95
Base Capacity (vph)	776	1323	1037	1014	826	515	510
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.28	0.29	0.17	0.00	0.02	0.04

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	136	361	0	0	288	169	0	0	3	8	0	19
Future Volume (vph)	136	361	0	0	288	169	0	0	3	8	0	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0			5.0	5.0			5.0	5.0		5.0
Lane Util. Factor	1.00	1.00			1.00	1.00			1.00	1.00		1.00
Frt	1.00	1.00			1.00	0.85			0.86	1.00		0.85
Flt Protected	0.95	1.00			1.00	1.00			1.00	0.95		1.00
Satd. Flow (prot)	1752	1792			1759	1599			1644	1597		1335
Flt Permitted	0.50	1.00			1.00	1.00			1.00	0.95		1.00
Satd. Flow (perm)	929	1792			1759	1599			1644	1597		1335
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	140	372	0	0	297	174	0	0	3	8	0	20
RTOR Reduction (vph)	0	0	0	0	0	74	0	0	3	0	0	18
Lane Group Flow (vph)	140	372	0	0	297	100	0	0	0	8	0	2
Heavy Vehicles (%)	3%	6%	2%	2%	8%	1%	2%	2%	0%	13%	2%	21%
Turn Type	pm+pt	NA			NA	Perm			Perm	Perm		Perm
Protected Phases	5	2			6							
Permitted Phases	2					6			8	4		4
Actuated Green, G (s)	48.0	48.0			37.3	37.3			7.0	7.0		7.0
Effective Green, g (s)	48.0	48.0			37.3	37.3			7.0	7.0		7.0
Actuated g/C Ratio	0.74	0.74			0.57	0.57			0.11	0.11		0.11
Clearance Time (s)	5.0	5.0			5.0	5.0			5.0	5.0		5.0
Vehicle Extension (s)	2.0	3.0			3.0	3.0			2.0	3.0		3.0
Lane Grp Cap (vph)	758	1323			1009	917			177	171		143
v/s Ratio Prot	0.02	c0.21			0.17							
v/s Ratio Perm	0.12					0.06			0.00	c0.01		0.00
v/c Ratio	0.18	0.28			0.29	0.11			0.00	0.05		0.02
Uniform Delay, d1	2.7	2.8			7.1	6.3			25.9	26.0		25.9
Progression Factor	1.00	1.00			1.00	1.00			1.00	1.00		1.00
Incremental Delay, d2	0.0	0.5			0.7	0.2			0.0	0.1		0.0
Delay (s)	2.7	3.3			7.8	6.5			25.9	26.1		26.0
Level of Service	A	A			A	A			C	C		C
Approach Delay (s)		3.2			7.4			25.9			26.0	
Approach LOS		A			A			C			C	

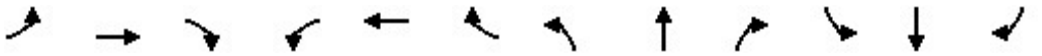
Intersection Summary			
HCM 2000 Control Delay	5.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	39.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	45	278	44	81	223	212	66	238	89	321	511
v/c Ratio	0.26	0.50	0.08	0.47	0.35	0.32	0.27	0.56	0.19	0.72	0.85
Control Delay	32.9	25.9	0.3	39.3	22.1	4.9	14.8	29.0	1.4	27.1	39.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.9	25.9	0.3	39.3	22.1	4.9	14.8	29.0	1.4	27.1	39.3
Queue Length 50th (ft)	18	110	0	33	84	0	15	87	0	84	194
Queue Length 95th (ft)	47	176	0	74	140	46	38	151	5	#206	#411
Internal Link Dist (ft)		611			1011			820			1650
Turn Bay Length (ft)	255		270	165		155	350		100		
Base Capacity (vph)	180	571	555	174	647	684	247	478	523	447	600
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.49	0.08	0.47	0.34	0.31	0.27	0.50	0.17	0.72	0.85

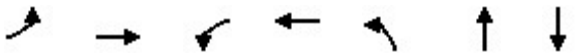
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



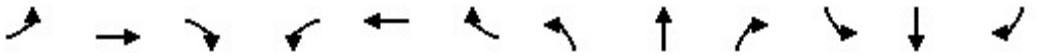
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	264	42	77	212	201	63	226	85	305	304	181
Future Volume (vph)	43	264	42	77	212	201	63	226	85	305	304	181
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1687	1863	1442	1626	1900	1599	1456	1810	1524	1770	1712	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.25	1.00	1.00	0.40	1.00	
Satd. Flow (perm)	1687	1863	1442	1626	1900	1599	377	1810	1524	742	1712	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	45	278	44	81	223	212	66	238	89	321	320	191
RTOR Reduction (vph)	0	0	33	0	0	153	0	0	66	0	28	0
Lane Group Flow (vph)	45	278	11	81	223	59	66	238	23	321	483	0
Heavy Vehicles (%)	7%	2%	12%	11%	0%	1%	24%	5%	6%	2%	4%	6%
Turn Type	Prot	NA	Prot	Prot	NA	Prot	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2	2	1	6	6	3	8		7	4	
Permitted Phases							8		8	4		
Actuated Green, G (s)	4.4	18.0	18.0	6.0	19.6	19.6	22.8	18.2	18.2	32.5	23.4	
Effective Green, g (s)	4.4	18.0	18.0	6.0	19.6	19.6	22.8	18.2	18.2	32.5	23.4	
Actuated g/C Ratio	0.06	0.26	0.26	0.09	0.28	0.28	0.33	0.26	0.26	0.46	0.33	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	106	479	370	139	532	447	193	470	396	488	572	
v/s Ratio Prot	0.03	c0.15	0.01	c0.05	0.12	0.04	0.02	0.13		c0.09	c0.28	
v/s Ratio Perm							0.09		0.02	0.21		
v/c Ratio	0.42	0.58	0.03	0.58	0.42	0.13	0.34	0.51	0.06	0.66	0.84	
Uniform Delay, d1	31.6	22.7	19.5	30.8	20.6	18.8	17.3	22.1	19.5	12.9	21.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.7	5.1	0.2	6.1	2.4	0.6	1.1	0.9	0.1	3.2	11.0	
Delay (s)	34.3	27.8	19.6	36.9	23.0	19.5	18.3	22.9	19.5	16.1	32.6	
Level of Service	C	C	B	D	C	B	B	C	B	B	C	
Approach Delay (s)		27.6			23.7			21.4			26.2	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	24.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	67.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	26	236	83	48	103	116	118
v/c Ratio	0.08	0.47	0.16	0.07	0.27	0.21	0.22
Control Delay	12.6	11.3	5.7	4.5	15.3	7.6	12.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.6	11.3	5.7	4.5	15.3	7.6	12.7
Queue Length 50th (ft)	4	25	7	3	18	6	18
Queue Length 95th (ft)	19	76	24	15	57	38	56
Internal Link Dist (ft)		596		1342		1415	566
Turn Bay Length (ft)	200		1000		230		
Base Capacity (vph)	700	924	973	1560	679	929	950
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.26	0.09	0.03	0.15	0.12	0.12

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	95	129	79	38	8	98	37	73	14	79	19
Future Volume (vph)	25	95	129	79	38	8	98	37	73	14	79	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5			4.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Frt	1.00	0.91		1.00	0.97		1.00	0.90			0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1736	1665		1752	1611		1703	1609			1755	
Flt Permitted	0.73	1.00		0.42	1.00		0.68	1.00			0.96	
Satd. Flow (perm)	1326	1665		771	1611		1221	1609			1694	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	26	100	136	83	40	8	103	39	77	15	83	20
RTOR Reduction (vph)	0	71	0	0	4	0	0	54	0	0	10	0
Lane Group Flow (vph)	26	165	0	83	44	0	103	62	0	0	108	0
Heavy Vehicles (%)	4%	6%	3%	3%	13%	25%	6%	11%	4%	7%	6%	0%
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases		4		3	8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	9.7	9.7		18.0	18.0		11.8	11.8			11.8	
Effective Green, g (s)	9.7	9.7		18.0	18.0		11.8	11.8			11.8	
Actuated g/C Ratio	0.25	0.25		0.46	0.46		0.30	0.30			0.30	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5			4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	331	416		453	747		371	489			515	
v/s Ratio Prot		c0.10		c0.02	0.03			0.04				
v/s Ratio Perm	0.02			0.07			c0.08				0.06	
v/c Ratio	0.08	0.40		0.18	0.06		0.28	0.13			0.21	
Uniform Delay, d1	11.1	12.1		6.1	5.7		10.3	9.8			10.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.6		0.2	0.0		0.4	0.1			0.2	
Delay (s)	11.2	12.7		6.3	5.8		10.7	9.9			10.2	
Level of Service	B	B		A	A		B	A			B	
Approach Delay (s)		12.6			6.1			10.3			10.2	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	10.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	38.8	Sum of lost time (s)	13.5
Intersection Capacity Utilization	42.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Intersection: 1: Alderman Road/Copeley Road & Ivy Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	186	346	211	96	110	116	148	239	146	270
Average Queue (ft)	40	148	45	39	39	52	72	87	25	139
95th Queue (ft)	107	273	128	84	82	99	132	176	89	239
Link Distance (ft)		915			918	918		754		1393
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	250		250	350			150		265	
Storage Blk Time (%)	0	1	0				1	2	0	1
Queuing Penalty (veh)	0	3	0				1	2	0	0

Intersection: 2: Rothery Road /Parking Garage & Ivy Road

Movement	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	TR	T	R	R	L	R
Maximum Queue (ft)	104	131	184	84	24	35	64
Average Queue (ft)	41	43	57	33	1	5	18
95th Queue (ft)	78	100	132	74	12	24	53
Link Distance (ft)		918	603		436	429	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	300			85			95
Storage Blk Time (%)			2	0			0
Queuing Penalty (veh)			3	1			0

Intersection: 3: Emmet Street & Ivy Road

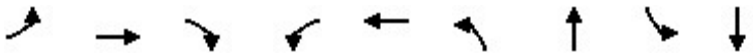
Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	R	L	TR
Maximum Queue (ft)	100	210	91	135	216	151	138	249	100	233	435
Average Queue (ft)	29	99	15	56	85	82	50	116	25	114	208
95th Queue (ft)	72	182	55	109	161	140	96	200	94	193	361
Link Distance (ft)		603			1051			859		1681	1681
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	255		270	165		155	350		100		
Storage Blk Time (%)	0	0	0	0	1	0	0	12	0		
Queuing Penalty (veh)	0	0	0	0	2	1	0	18	1		

Intersection: 4: Copeley Road & Massie Road

Movement	EB	EB	WB	WB	NB	NB	SB
Directions Served	L	TR	L	TR	L	TR	LTR
Maximum Queue (ft)	51	132	69	70	110	95	98
Average Queue (ft)	16	56	32	17	40	34	36
95th Queue (ft)	43	99	60	49	84	72	73
Link Distance (ft)		640		1382		1393	610
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	200		1000		230		
Storage Blk Time (%)		0					
Queuing Penalty (veh)		0					

Network Summary

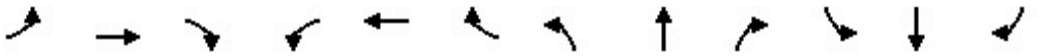
Network wide Queuing Penalty: 33



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	85	291	185	48	650	246	287	31	424
v/c Ratio	0.24	0.39	0.25	0.13	0.54	0.81	0.43	0.09	0.87
Control Delay	16.1	24.3	4.7	15.7	27.5	41.2	23.5	14.9	42.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.1	24.3	4.7	15.7	27.5	41.2	23.5	14.9	42.2
Queue Length 50th (ft)	27	134	0	15	167	85	115	9	166
Queue Length 95th (ft)	55	211	45	36	227	#205	190	24	#281
Internal Link Dist (ft)		887			909		725		1415
Turn Bay Length (ft)	250		250	350		150		265	
Base Capacity (vph)	358	748	741	379	1201	303	660	499	563
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.39	0.25	0.13	0.54	0.81	0.43	0.06	0.75

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



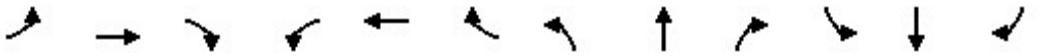
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	82	279	178	46	550	74	236	238	37	30	132	275
Future Volume (vph)	82	279	178	46	550	74	236	238	37	30	132	275
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		4.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.98		1.00	0.90	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1805	1900	1599	1456	3503		1805	1830		1752	1708	
Flt Permitted	0.23	1.00	1.00	0.53	1.00		0.15	1.00		0.58	1.00	
Satd. Flow (perm)	446	1900	1599	817	3503		277	1830		1077	1708	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	85	291	185	48	573	77	246	248	39	31	138	286
RTOR Reduction (vph)	0	0	120	0	11	0	0	6	0	0	88	0
Lane Group Flow (vph)	85	291	65	48	639	0	246	281	0	31	336	0
Heavy Vehicles (%)	0%	0%	1%	24%	1%	3%	0%	2%	0%	3%	0%	0%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Actuated Green, G (s)	39.4	31.4	31.4	31.8	27.6		38.4	31.9		24.9	22.4	
Effective Green, g (s)	39.4	31.4	31.4	31.8	27.6		38.4	31.9		24.9	22.4	
Actuated g/C Ratio	0.44	0.35	0.35	0.36	0.31		0.43	0.36		0.28	0.25	
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		4.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	2.5	3.0		2.5	2.5		0.2	2.5	
Lane Grp Cap (vph)	319	670	564	322	1086		308	655		320	429	
v/s Ratio Prot	c0.02	c0.15		0.01	c0.18		c0.10	0.15		0.00	0.20	
v/s Ratio Perm	0.09		0.04	0.05			c0.25			0.02		
v/c Ratio	0.27	0.43	0.12	0.15	0.59		0.80	0.43		0.10	0.78	
Uniform Delay, d1	15.6	22.0	19.4	19.0	25.9		19.7	21.6		23.5	31.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.5	2.0	0.4	0.2	2.3		13.1	0.3		0.0	8.8	
Delay (s)	16.1	24.1	19.8	19.2	28.2		32.7	22.0		23.5	39.8	
Level of Service	B	C	B	B	C		C	C		C	D	
Approach Delay (s)		21.5			27.6			27.0			38.7	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM 2000 Control Delay	28.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	89.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	79.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	WBT	WBR	NBR	SBL	SBR
Lane Group Flow (vph)	5	375	468	7	3	129	246
v/c Ratio	0.01	0.29	0.39	0.01	0.00	0.46	0.54
Control Delay	4.0	5.0	8.3	0.0	0.0	29.6	8.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.0	5.0	8.3	0.0	0.0	29.6	8.3
Queue Length 50th (ft)	1	46	61	0	0	47	0
Queue Length 95th (ft)	4	96	214	0	0	87	51
Internal Link Dist (ft)		909	611				
Turn Bay Length (ft)	300			85			95
Base Capacity (vph)	624	1298	1193	1095	823	583	688
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.29	0.39	0.01	0.00	0.22	0.36

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	345	0	0	431	6	0	0	3	119	0	226
Future Volume (vph)	5	345	0	0	431	6	0	0	3	119	0	226
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0			5.0	5.0			5.0	5.0		5.0
Lane Util. Factor	1.00	1.00			1.00	1.00			1.00	1.00		1.00
Frt	1.00	1.00			1.00	0.85			0.86	1.00		0.85
Flt Protected	0.95	1.00			1.00	1.00			1.00	0.95		1.00
Satd. Flow (prot)	1805	1881			1827	1615			1644	1805		1615
Flt Permitted	0.39	1.00			1.00	1.00			1.00	0.95		1.00
Satd. Flow (perm)	739	1881			1827	1615			1644	1805		1615
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	375	0	0	468	7	0	0	3	129	0	246
RTOR Reduction (vph)	0	0	0	0	0	3	0	0	3	0	0	208
Lane Group Flow (vph)	5	375	0	0	468	4	0	0	0	129	0	38
Heavy Vehicles (%)	0%	1%	0%	2%	4%	0%	2%	2%	0%	0%	0%	0%
Turn Type	pm+pt	NA			NA	Perm			Perm	Perm		Perm
Protected Phases	5	2			6							
Permitted Phases	2					6			8	4		4
Actuated Green, G (s)	44.9	44.9			38.5	38.5			10.1	10.1		10.1
Effective Green, g (s)	44.9	44.9			38.5	38.5			10.1	10.1		10.1
Actuated g/C Ratio	0.69	0.69			0.59	0.59			0.16	0.16		0.16
Clearance Time (s)	5.0	5.0			5.0	5.0			5.0	5.0		5.0
Vehicle Extension (s)	2.0	3.0			3.0	3.0			2.0	3.0		3.0
Lane Grp Cap (vph)	533	1299			1082	956			255	280		250
v/s Ratio Prot	0.00	c0.20			c0.26							
v/s Ratio Perm	0.01					0.00			0.00	c0.07		0.02
v/c Ratio	0.01	0.29			0.43	0.00			0.00	0.46		0.15
Uniform Delay, d1	3.8	3.9			7.3	5.4			23.2	25.0		23.7
Progression Factor	1.00	1.00			1.00	1.00			1.00	1.00		1.00
Incremental Delay, d2	0.0	0.6			1.3	0.0			0.0	1.2		0.3
Delay (s)	3.8	4.4			8.5	5.4			23.2	26.2		24.0
Level of Service	A	A			A	A			C	C		C
Approach Delay (s)		4.4			8.5			23.2			24.8	
Approach LOS		A			A			C			C	

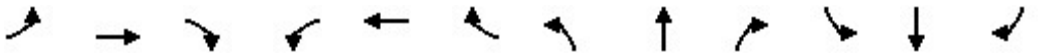
Intersection Summary			
HCM 2000 Control Delay	12.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	45.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	166	218	104	106	277	341	99	389	95	273	494
v/c Ratio	0.83	0.40	0.18	0.57	0.59	0.52	0.39	0.84	0.18	0.78	0.87
Control Delay	65.7	24.4	2.0	43.5	28.9	5.9	16.7	42.6	1.6	33.8	44.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.7	24.4	2.0	43.5	28.9	5.9	16.7	42.6	1.6	33.8	44.1
Queue Length 50th (ft)	72	80	0	44	106	0	24	156	0	72	205
Queue Length 95th (ft)	#174	137	12	#101	174	57	52	#290	8	#198	#403
Internal Link Dist (ft)		611			1011			820			1650
Turn Bay Length (ft)	255		270	165		155	350		100		
Base Capacity (vph)	200	571	600	187	504	678	256	488	536	352	565
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.83	0.38	0.17	0.57	0.55	0.50	0.39	0.80	0.18	0.78	0.87

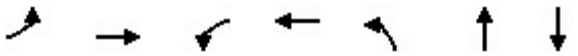
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



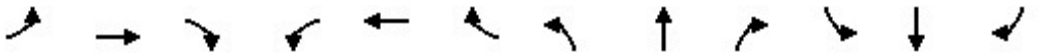
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	163	214	102	104	271	334	97	381	93	268	409	75
Future Volume (vph)	163	214	102	104	271	334	97	381	93	268	409	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	1881	1599	1752	1900	1615	1543	1845	1568	1805	1792	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.22	1.00	1.00	0.22	1.00	
Satd. Flow (perm)	1805	1881	1599	1752	1900	1615	351	1845	1568	410	1792	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	166	218	104	106	277	341	99	389	95	273	417	77
RTOR Reduction (vph)	0	0	77	0	0	261	0	0	70	0	9	0
Lane Group Flow (vph)	166	218	27	106	277	80	99	389	25	273	485	0
Heavy Vehicles (%)	0%	1%	1%	3%	0%	0%	17%	3%	3%	0%	4%	1%
Turn Type	Prot	NA	Prot	Prot	NA	Prot	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2	2	1	6	6	3	8		7	4	
Permitted Phases							8		8	4		
Actuated Green, G (s)	7.8	18.3	18.3	6.0	16.5	16.5	24.5	18.5	18.5	30.9	21.7	
Effective Green, g (s)	7.8	18.3	18.3	6.0	16.5	16.5	24.5	18.5	18.5	30.9	21.7	
Actuated g/C Ratio	0.11	0.26	0.26	0.09	0.24	0.24	0.35	0.26	0.26	0.44	0.31	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	201	491	418	150	447	380	225	487	414	364	555	
v/s Ratio Prot	c0.09	0.12	0.02	0.06	c0.15	0.05	0.04	0.21		c0.10	c0.27	
v/s Ratio Perm							0.12		0.02	0.23		
v/c Ratio	0.83	0.44	0.07	0.71	0.62	0.21	0.44	0.80	0.06	0.75	0.87	
Uniform Delay, d1	30.4	21.6	19.4	31.1	23.9	21.5	16.7	24.0	19.3	14.5	22.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	23.3	2.9	0.3	14.1	6.3	1.3	1.4	8.9	0.1	8.4	14.2	
Delay (s)	53.7	24.5	19.7	45.2	30.3	22.8	18.1	32.9	19.3	22.9	37.1	
Level of Service	D	C	B	D	C	C	B	C	B	C	D	
Approach Delay (s)		33.4			28.9			28.2			32.0	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	30.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	73.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	18	304	110	107	226	173	141
v/c Ratio	0.06	0.53	0.22	0.15	0.44	0.27	0.24
Control Delay	16.2	8.8	8.6	7.0	15.2	5.4	10.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.2	8.8	8.6	7.0	15.2	5.4	10.7
Queue Length 50th (ft)	3	13	12	10	41	5	18
Queue Length 95th (ft)	18	73	41	37	112	42	61
Internal Link Dist (ft)		596		1342		1415	566
Turn Bay Length (ft)	200		1000		230		
Base Capacity (vph)	750	1033	1058	1605	896	1015	1020
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.29	0.10	0.07	0.25	0.17	0.14

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	60	222	102	85	15	210	30	131	18	75	38
Future Volume (vph)	17	60	222	102	85	15	210	30	131	18	75	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5			4.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Frt	1.00	0.88		1.00	0.98		1.00	0.88			0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1805	1623		1787	1753		1787	1615			1778	
Flt Permitted	0.69	1.00		0.32	1.00		0.80	1.00			0.95	
Satd. Flow (perm)	1307	1623		603	1753		1512	1615			1701	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	18	65	239	110	91	16	226	32	141	19	81	41
RTOR Reduction (vph)	0	182	0	0	9	0	0	94	0	0	19	0
Lane Group Flow (vph)	18	122	0	110	98	0	226	79	0	0	122	0
Heavy Vehicles (%)	0%	8%	2%	1%	7%	0%	1%	0%	4%	2%	2%	2%
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases		4		3	8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	9.6	9.6		18.0	18.0		13.3	13.3			13.3	
Effective Green, g (s)	9.6	9.6		18.0	18.0		13.3	13.3			13.3	
Actuated g/C Ratio	0.24	0.24		0.45	0.45		0.33	0.33			0.33	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5			4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	311	386		383	782		498	532			561	
v/s Ratio Prot		0.08		c0.03	0.06			0.05				
v/s Ratio Perm	0.01			c0.10			c0.15				0.07	
v/c Ratio	0.06	0.32		0.29	0.13		0.45	0.15			0.22	
Uniform Delay, d1	11.9	12.6		7.1	6.5		10.6	9.5			9.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.5		0.4	0.1		0.7	0.1			0.2	
Delay (s)	11.9	13.1		7.5	6.6		11.3	9.6			9.9	
Level of Service	B	B		A	A		B	A			A	
Approach Delay (s)		13.1			7.1			10.6			9.9	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM 2000 Control Delay	10.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	40.3	Sum of lost time (s)	13.5
Intersection Capacity Utilization	56.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Intersection: 1: Alderman Road/Copeley Road & Ivy Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	97	221	146	105	205	232	150	286	203	369
Average Queue (ft)	36	100	32	36	116	138	95	111	28	190
95th Queue (ft)	73	182	80	80	182	212	158	222	114	319
Link Distance (ft)		915			918	918		754		1393
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	250		250	350			150		265	
Storage Blk Time (%)		0	0				2	2	0	4
Queuing Penalty (veh)		0	0				4	6	0	1

Intersection: 2: Rothery Road /Parking Garage & Ivy Road

Movement	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	TR	T	R	R	L	R
Maximum Queue (ft)	27	222	166	35	24	182	95
Average Queue (ft)	3	66	67	2	3	71	66
95th Queue (ft)	17	171	139	18	17	140	104
Link Distance (ft)		918	603		436	429	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	300			85			95
Storage Blk Time (%)		1	3	0		3	1
Queuing Penalty (veh)		0	0	0		8	1

Intersection: 3: Emmet Street & Ivy Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	R	L	TR
Maximum Queue (ft)	231	291	142	161	530	155	330	538	100	280	505
Average Queue (ft)	128	112	38	83	219	140	96	262	53	122	265
95th Queue (ft)	240	316	109	149	468	181	255	470	133	222	457
Link Distance (ft)		603			1051			859		1681	1681
Upstream Blk Time (%)		1									
Queuing Penalty (veh)		6									
Storage Bay Dist (ft)	255		270	165		155	350		100		
Storage Blk Time (%)	6	3	0	1	8	12	0	45	1		
Queuing Penalty (veh)	19	7	0	8	37	47	0	85	3		

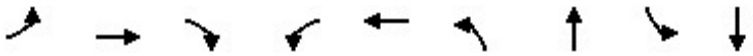
Intersection: 4: Copeley Road & Massie Road

Movement	EB	EB	WB	WB	NB	NB	SB
Directions Served	L	TR	L	TR	L	TR	LTR
Maximum Queue (ft)	42	152	78	80	168	98	107
Average Queue (ft)	11	68	36	30	72	41	43
95th Queue (ft)	35	121	66	63	131	80	81
Link Distance (ft)		640		1382		1393	610
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	200		1000		230		
Storage Blk Time (%)		0			0		
Queuing Penalty (veh)		0			0		

Network Summary

Network wide Queuing Penalty: 232

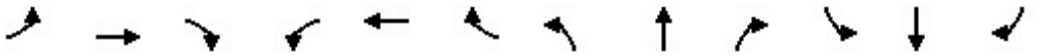
Appendix E
SYNCHRO & SimTraffic Reports for 2028 Total Conditions



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	93	427	206	53	274	150	232	50	290
v/c Ratio	0.17	0.52	0.26	0.16	0.20	0.48	0.43	0.16	0.77
Control Delay	13.5	24.5	4.4	14.3	18.8	23.7	24.1	17.4	41.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.5	24.5	4.4	14.3	18.8	23.7	24.1	17.4	41.7
Queue Length 50th (ft)	25	189	0	14	48	57	93	18	133
Queue Length 95th (ft)	60	#350	48	39	88	87	147	35	201
Internal Link Dist (ft)		887			909		725		121
Turn Bay Length (ft)	250		250	350		150		265	
Base Capacity (vph)	555	827	804	335	1354	322	542	455	509
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.52	0.26	0.16	0.20	0.47	0.43	0.11	0.57

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



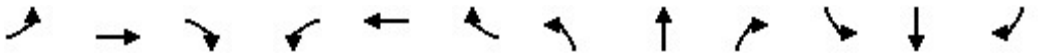
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	89	410	198	51	208	55	144	144	79	48	161	117
Future Volume (vph)	89	410	198	51	208	55	144	144	79	48	161	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		4.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.95		1.00	0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1671	1863	1553	1433	3402		1770	1724		1671	1710	
Flt Permitted	0.52	1.00	1.00	0.39	1.00		0.27	1.00		0.61	1.00	
Satd. Flow (perm)	920	1863	1553	587	3402		497	1724		1080	1710	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	93	427	206	53	217	57	150	150	82	50	168	122
RTOR Reduction (vph)	0	0	123	0	23	0	0	21	0	0	32	0
Lane Group Flow (vph)	93	427	83	53	251	0	150	211	0	50	258	0
Heavy Vehicles (%)	8%	2%	4%	26%	3%	2%	2%	4%	5%	8%	2%	7%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Actuated Green, G (s)	43.9	35.9	35.9	36.5	32.2		33.8	26.7		22.7	19.6	
Effective Green, g (s)	43.9	35.9	35.9	36.5	32.2		33.8	26.7		22.7	19.6	
Actuated g/C Ratio	0.49	0.40	0.40	0.41	0.36		0.38	0.30		0.26	0.22	
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		4.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	2.5	3.0		2.5	2.5		0.2	2.5	
Lane Grp Cap (vph)	521	751	626	281	1230		320	517		296	376	
v/s Ratio Prot	c0.02	c0.23		0.01	0.07		c0.05	0.12		0.01	c0.15	
v/s Ratio Perm	0.07		0.05	0.07			0.13			0.04		
v/c Ratio	0.18	0.57	0.13	0.19	0.20		0.47	0.41		0.17	0.69	
Uniform Delay, d1	12.2	20.6	16.7	16.4	19.6		19.9	24.8		25.5	31.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.2	3.1	0.4	0.2	0.4		0.8	0.4		0.1	4.7	
Delay (s)	12.4	23.7	17.2	16.7	19.9		20.7	25.2		25.6	36.6	
Level of Service	B	C	B	B	B		C	C		C	D	
Approach Delay (s)		20.4			19.4			23.4			35.0	
Approach LOS		C			B			C			C	

Intersection Summary			
HCM 2000 Control Delay	23.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	89.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	67.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	WBT	WBR	NBR	SBL	SBR
Lane Group Flow (vph)	140	381	306	174	3	8	20
v/c Ratio	0.18	0.29	0.30	0.17	0.01	0.05	0.08
Control Delay	3.0	3.5	8.5	1.8	0.0	26.8	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	3.0	3.5	8.5	1.8	0.0	26.8	0.6
Queue Length 50th (ft)	12	37	59	0	0	3	0
Queue Length 95th (ft)	23	62	103	23	0	14	0
Internal Link Dist (ft)		909	611				
Turn Bay Length (ft)	300			85			95
Base Capacity (vph)	768	1323	1037	1014	819	515	510
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.29	0.30	0.17	0.00	0.02	0.04

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	136	370	0	0	297	169	0	0	3	8	0	19
Future Volume (vph)	136	370	0	0	297	169	0	0	3	8	0	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0			5.0	5.0			5.0	5.0		5.0
Lane Util. Factor	1.00	1.00			1.00	1.00			1.00	1.00		1.00
Frt	1.00	1.00			1.00	0.85			0.86	1.00		0.85
Flt Protected	0.95	1.00			1.00	1.00			1.00	0.95		1.00
Satd. Flow (prot)	1752	1792			1759	1599			1644	1597		1335
Flt Permitted	0.50	1.00			1.00	1.00			1.00	0.95		1.00
Satd. Flow (perm)	917	1792			1759	1599			1644	1597		1335
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	140	381	0	0	306	174	0	0	3	8	0	20
RTOR Reduction (vph)	0	0	0	0	0	74	0	0	3	0	0	18
Lane Group Flow (vph)	140	381	0	0	306	100	0	0	0	8	0	2
Heavy Vehicles (%)	3%	6%	2%	2%	8%	1%	2%	2%	0%	13%	2%	21%
Turn Type	pm+pt	NA			NA	Perm			Perm	Perm		Perm
Protected Phases	5	2			6							
Permitted Phases	2					6			8	4		4
Actuated Green, G (s)	48.0	48.0			37.3	37.3			7.0	7.0		7.0
Effective Green, g (s)	48.0	48.0			37.3	37.3			7.0	7.0		7.0
Actuated g/C Ratio	0.74	0.74			0.57	0.57			0.11	0.11		0.11
Clearance Time (s)	5.0	5.0			5.0	5.0			5.0	5.0		5.0
Vehicle Extension (s)	2.0	3.0			3.0	3.0			2.0	3.0		3.0
Lane Grp Cap (vph)	750	1323			1009	917			177	171		143
v/s Ratio Prot	0.02	c0.21			0.17							
v/s Ratio Perm	0.12					0.06			0.00	c0.01		0.00
v/c Ratio	0.19	0.29			0.30	0.11			0.00	0.05		0.02
Uniform Delay, d1	2.7	2.8			7.1	6.3			25.9	26.0		25.9
Progression Factor	1.00	1.00			1.00	1.00			1.00	1.00		1.00
Incremental Delay, d2	0.0	0.5			0.8	0.2			0.0	0.1		0.0
Delay (s)	2.7	3.4			7.9	6.5			25.9	26.1		26.0
Level of Service	A	A			A	A			C	C		C
Approach Delay (s)		3.2			7.4			25.9			26.0	
Approach LOS		A			A			C			C	

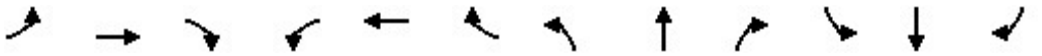
Intersection Summary			
HCM 2000 Control Delay	5.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	40.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	48	282	46	81	227	212	68	238	89	321	514
v/c Ratio	0.27	0.51	0.09	0.47	0.36	0.32	0.28	0.56	0.18	0.72	0.86
Control Delay	33.2	26.0	0.3	39.3	22.2	4.9	14.9	28.7	1.4	27.0	39.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.2	26.0	0.3	39.3	22.2	4.9	14.9	28.7	1.4	27.0	39.6
Queue Length 50th (ft)	19	112	0	33	86	0	15	87	0	84	197
Queue Length 95th (ft)	49	178	0	74	143	46	39	151	5	#205	#414
Internal Link Dist (ft)		611			1011			820			1650
Turn Bay Length (ft)	255		270	165		155	350		100		
Base Capacity (vph)	180	568	553	174	644	682	246	478	523	448	601
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.50	0.08	0.47	0.35	0.31	0.28	0.50	0.17	0.72	0.86

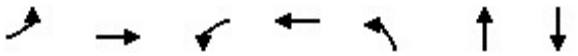
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



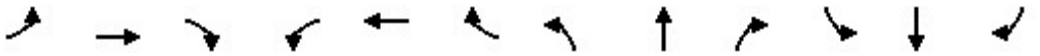
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	268	44	77	216	201	65	226	85	305	304	184
Future Volume (vph)	46	268	44	77	216	201	65	226	85	305	304	184
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1687	1863	1442	1626	1900	1599	1456	1810	1524	1770	1711	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.24	1.00	1.00	0.40	1.00	
Satd. Flow (perm)	1687	1863	1442	1626	1900	1599	374	1810	1524	744	1711	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	48	282	46	81	227	212	68	238	89	321	320	194
RTOR Reduction (vph)	0	0	34	0	0	153	0	0	66	0	28	0
Lane Group Flow (vph)	48	282	12	81	227	59	68	238	23	321	486	0
Heavy Vehicles (%)	7%	2%	12%	11%	0%	1%	24%	5%	6%	2%	4%	6%
Turn Type	Prot	NA	Prot	Prot	NA	Prot	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2	2	1	6	6	3	8		7	4	
Permitted Phases							8		8	4		
Actuated Green, G (s)	4.5	17.9	17.9	6.0	19.4	19.4	22.9	18.3	18.3	32.6	23.5	
Effective Green, g (s)	4.5	17.9	17.9	6.0	19.4	19.4	22.9	18.3	18.3	32.6	23.5	
Actuated g/C Ratio	0.06	0.26	0.26	0.09	0.28	0.28	0.33	0.26	0.26	0.47	0.34	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	108	476	368	139	526	443	193	473	398	490	574	
v/s Ratio Prot	0.03	c0.15	0.01	c0.05	0.12	0.04	0.02	0.13		c0.09	c0.28	
v/s Ratio Perm							0.09		0.02	0.21		
v/c Ratio	0.44	0.59	0.03	0.58	0.43	0.13	0.35	0.50	0.06	0.66	0.85	
Uniform Delay, d1	31.5	22.9	19.5	30.8	20.8	19.0	17.2	22.0	19.4	12.8	21.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.9	5.3	0.2	6.1	2.6	0.6	1.1	0.8	0.1	3.1	11.1	
Delay (s)	34.4	28.2	19.7	36.9	23.3	19.6	18.4	22.8	19.5	16.0	32.7	
Level of Service	C	C	B	D	C	B	B	C	B	B	C	
Approach Delay (s)		28.0			23.9			21.3			26.3	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	25.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	68.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	26	238	85	48	106	119	118
v/c Ratio	0.08	0.47	0.16	0.07	0.27	0.21	0.22
Control Delay	12.6	11.4	5.8	4.5	15.4	7.5	12.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.6	11.4	5.8	4.5	15.4	7.5	12.7
Queue Length 50th (ft)	4	25	7	3	19	6	18
Queue Length 95th (ft)	19	78	25	15	59	39	56
Internal Link Dist (ft)		596		1342		1219	566
Turn Bay Length (ft)	200		1000		230		
Base Capacity (vph)	698	922	971	1556	677	927	947
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.26	0.09	0.03	0.16	0.13	0.12

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	95	131	81	38	8	101	37	76	14	79	19
Future Volume (vph)	25	95	131	81	38	8	101	37	76	14	79	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5			4.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Frt	1.00	0.91		1.00	0.97		1.00	0.90			0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1736	1664		1752	1611		1703	1607			1755	
Flt Permitted	0.73	1.00		0.42	1.00		0.68	1.00			0.96	
Satd. Flow (perm)	1326	1664		772	1611		1221	1607			1693	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	26	100	138	85	40	8	106	39	80	15	83	20
RTOR Reduction (vph)	0	72	0	0	4	0	0	56	0	0	10	0
Lane Group Flow (vph)	26	166	0	85	44	0	106	63	0	0	108	0
Heavy Vehicles (%)	4%	6%	3%	3%	13%	25%	6%	11%	4%	7%	6%	0%
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases		4		3	8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	9.8	9.8		18.1	18.1		11.8	11.8			11.8	
Effective Green, g (s)	9.8	9.8		18.1	18.1		11.8	11.8			11.8	
Actuated g/C Ratio	0.25	0.25		0.47	0.47		0.30	0.30			0.30	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5			4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	334	419		454	749		370	487			513	
v/s Ratio Prot		c0.10		c0.02	0.03			0.04				
v/s Ratio Perm	0.02			0.07			c0.09				0.06	
v/c Ratio	0.08	0.40		0.19	0.06		0.29	0.13			0.21	
Uniform Delay, d1	11.1	12.1		6.1	5.7		10.3	9.8			10.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.6		0.2	0.0		0.4	0.1			0.2	
Delay (s)	11.2	12.7		6.3	5.7		10.8	9.9			10.3	
Level of Service	B	B		A	A		B	A			B	
Approach Delay (s)		12.6			6.1			10.3			10.3	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	10.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	38.9	Sum of lost time (s)	13.5
Intersection Capacity Utilization	42.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	21	19	268	305	5
Future Volume (Veh/h)	5	21	19	268	305	5
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	23	21	291	332	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				201	1299	
pX, platoon unblocked	0.92					
vC, conflicting volume	668	334	337			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	594	334	337			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	97	98			
cM capacity (veh/h)	422	707	1222			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	28	312	337
Volume Left	5	21	0
Volume Right	23	0	5
cSH	631	1222	1700
Volume to Capacity	0.04	0.02	0.20
Queue Length 95th (ft)	3	1	0
Control Delay (s)	11.0	0.7	0.0
Lane LOS	B	A	
Approach Delay (s)	11.0	0.7	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	39.7%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection: 1: Alderman Road/Copeley Road & Ivy Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	160	343	238	110	108	135	149	257	126	149
Average Queue (ft)	44	155	59	38	46	58	72	94	34	116
95th Queue (ft)	106	275	152	88	89	111	137	195	87	163
Link Distance (ft)		928			917	917		754		128
Upstream Blk Time (%)									0	12
Queuing Penalty (veh)									0	38
Storage Bay Dist (ft)	250		250	350			150		265	
Storage Blk Time (%)	0	1	0				0	2	0	12
Queuing Penalty (veh)	0	3	0				0	3	0	6

Intersection: 2: Rothery Road /Parking Garage & Ivy Road

Movement	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	TR	T	R	R	L	R
Maximum Queue (ft)	104	118	185	84	31	41	68
Average Queue (ft)	42	41	62	33	2	5	16
95th Queue (ft)	80	93	136	74	16	27	52
Link Distance (ft)		917	603		436	429	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	300			85			95
Storage Blk Time (%)			2	0		0	0
Queuing Penalty (veh)			4	1		0	0

Intersection: 3: Emmet Street & Ivy Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	R	L	TR
Maximum Queue (ft)	77	214	69	123	224	152	116	217	100	229	428
Average Queue (ft)	29	99	12	56	86	86	52	110	19	116	213
95th Queue (ft)	64	185	41	105	156	143	97	188	82	197	359
Link Distance (ft)		603			1051			859		1681	1681
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	255		270	165		155	350		100		
Storage Blk Time (%)		0		0	0	1		11	0		
Queuing Penalty (veh)		0		0	1	2		17	1		

Intersection: 4: Copeley Road & Massie Road

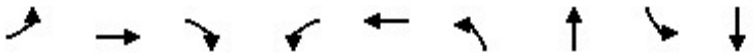
Movement	EB	EB	WB	WB	NB	NB	SB
Directions Served	L	TR	L	TR	L	TR	LTR
Maximum Queue (ft)	54	126	71	62	105	91	103
Average Queue (ft)	15	58	32	17	38	36	38
95th Queue (ft)	43	106	58	47	79	76	80
Link Distance (ft)		640		1380		1215	610
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	200		1000		230		
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 5: Copeley Road & Site Entrance

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	48	58	192
Average Queue (ft)	17	7	41
95th Queue (ft)	40	34	134
Link Distance (ft)	272	128	1215
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

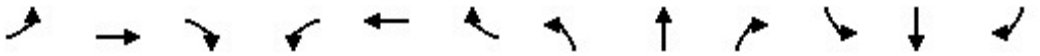
Network wide Queuing Penalty: 77



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	94	291	185	48	679	246	316	63	464
v/c Ratio	0.28	0.41	0.26	0.13	0.60	0.81	0.48	0.17	0.91
Control Delay	17.3	25.3	4.8	16.1	29.2	40.7	25.2	15.2	48.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.3	25.3	4.8	16.1	29.2	40.7	25.2	15.2	48.2
Queue Length 50th (ft)	31	137	0	16	178	83	129	19	196
Queue Length 95th (ft)	60	211	45	36	237	#211	219	41	#364
Internal Link Dist (ft)		887			909		725		121
Turn Bay Length (ft)	250		250	350		150		265	
Base Capacity (vph)	332	713	715	359	1135	304	653	515	553
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.41	0.26	0.13	0.60	0.81	0.48	0.12	0.84

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



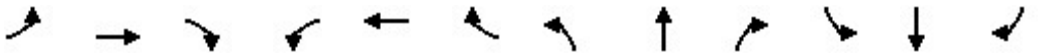
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	279	178	46	550	102	236	266	37	60	162	283
Future Volume (vph)	90	279	178	46	550	102	236	266	37	60	162	283
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		4.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.98		1.00	0.90	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1805	1900	1599	1456	3480		1805	1833		1752	1719	
Flt Permitted	0.21	1.00	1.00	0.53	1.00		0.14	1.00		0.57	1.00	
Satd. Flow (perm)	397	1900	1599	808	3480		267	1833		1049	1719	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	94	291	185	48	573	106	246	277	39	62	169	295
RTOR Reduction (vph)	0	0	122	0	16	0	0	5	0	0	72	0
Lane Group Flow (vph)	94	291	63	48	663	0	246	311	0	63	392	0
Heavy Vehicles (%)	0%	0%	1%	24%	1%	3%	0%	2%	0%	3%	0%	0%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Actuated Green, G (s)	38.4	30.4	30.4	30.8	26.6		39.4	31.5		27.4	23.5	
Effective Green, g (s)	38.4	30.4	30.4	30.8	26.6		39.4	31.5		27.4	23.5	
Actuated g/C Ratio	0.43	0.34	0.34	0.35	0.30		0.44	0.35		0.31	0.26	
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		4.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	2.5	3.0		2.5	2.5		0.2	2.5	
Lane Grp Cap (vph)	297	648	546	310	1040		306	648		353	453	
v/s Ratio Prot	c0.03	c0.15		0.01	c0.19		c0.10	0.17		0.01	0.23	
v/s Ratio Perm	0.11		0.04	0.05			c0.26			0.05		
v/c Ratio	0.32	0.45	0.12	0.15	0.64		0.80	0.48		0.18	0.87	
Uniform Delay, d1	16.5	22.8	20.1	19.7	27.0		19.6	22.4		22.1	31.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	2.2	0.4	0.2	3.0		13.8	0.4		0.1	15.6	
Delay (s)	17.1	25.0	20.5	19.9	30.0		33.3	22.8		22.2	46.8	
Level of Service	B	C	C	B	C		C	C		C	D	
Approach Delay (s)		22.3			29.3			27.4			43.9	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM 2000 Control Delay	30.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	89.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	82.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	WBT	WBR	NBR	SBL	SBR
Lane Group Flow (vph)	5	408	499	7	3	129	246
v/c Ratio	0.01	0.31	0.42	0.01	0.01	0.46	0.54
Control Delay	4.0	5.2	8.6	0.0	0.0	29.6	8.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.0	5.2	8.6	0.0	0.0	29.6	8.3
Queue Length 50th (ft)	1	51	67	0	0	47	0
Queue Length 95th (ft)	4	106	232	0	0	87	51
Internal Link Dist (ft)		909	611				
Turn Bay Length (ft)	300			85			95
Base Capacity (vph)	601	1298	1193	1095	800	583	688
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.31	0.42	0.01	0.00	0.22	0.36

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	375	0	0	459	6	0	0	3	119	0	226
Future Volume (vph)	5	375	0	0	459	6	0	0	3	119	0	226
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0			5.0	5.0			5.0	5.0		5.0
Lane Util. Factor	1.00	1.00			1.00	1.00			1.00	1.00		1.00
Frt	1.00	1.00			1.00	0.85			0.86	1.00		0.85
Flt Protected	0.95	1.00			1.00	1.00			1.00	0.95		1.00
Satd. Flow (prot)	1805	1881			1827	1615			1644	1805		1615
Flt Permitted	0.37	1.00			1.00	1.00			1.00	0.95		1.00
Satd. Flow (perm)	700	1881			1827	1615			1644	1805		1615
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	408	0	0	499	7	0	0	3	129	0	246
RTOR Reduction (vph)	0	0	0	0	0	3	0	0	3	0	0	208
Lane Group Flow (vph)	5	408	0	0	499	4	0	0	0	129	0	38
Heavy Vehicles (%)	0%	1%	0%	2%	4%	0%	2%	2%	0%	0%	0%	0%
Turn Type	pm+pt	NA			NA	Perm			Perm	Perm		Perm
Protected Phases	5	2			6							
Permitted Phases	2					6			8	4		4
Actuated Green, G (s)	44.9	44.9			38.5	38.5			10.1	10.1		10.1
Effective Green, g (s)	44.9	44.9			38.5	38.5			10.1	10.1		10.1
Actuated g/C Ratio	0.69	0.69			0.59	0.59			0.16	0.16		0.16
Clearance Time (s)	5.0	5.0			5.0	5.0			5.0	5.0		5.0
Vehicle Extension (s)	2.0	3.0			3.0	3.0			2.0	3.0		3.0
Lane Grp Cap (vph)	507	1299			1082	956			255	280		250
v/s Ratio Prot	0.00	c0.22			c0.27							
v/s Ratio Perm	0.01					0.00			0.00	c0.07		0.02
v/c Ratio	0.01	0.31			0.46	0.00			0.00	0.46		0.15
Uniform Delay, d1	3.9	4.0			7.4	5.4			23.2	25.0		23.7
Progression Factor	1.00	1.00			1.00	1.00			1.00	1.00		1.00
Incremental Delay, d2	0.0	0.6			1.4	0.0			0.0	1.2		0.3
Delay (s)	3.9	4.6			8.8	5.4			23.2	26.2		24.0
Level of Service	A	A			A	A			C	C		C
Approach Delay (s)		4.6			8.8			23.2			24.8	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM 2000 Control Delay	12.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	46.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

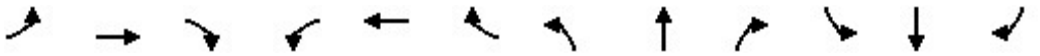


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	174	232	113	106	288	341	107	389	95	273	502
v/c Ratio	0.85	0.43	0.20	0.57	0.61	0.52	0.42	0.84	0.18	0.78	0.90
Control Delay	69.1	24.6	2.4	43.5	29.5	5.9	17.4	43.2	1.6	34.4	47.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.1	24.6	2.4	43.5	29.5	5.9	17.4	43.2	1.6	34.4	47.4
Queue Length 50th (ft)	76	86	0	44	110	0	26	156	0	72	~218
Queue Length 95th (ft)	#184	146	16	#101	180	57	55	#290	8	#197	#411
Internal Link Dist (ft)		611			1011			820			1650
Turn Bay Length (ft)	255		270	165		155	350		100		
Base Capacity (vph)	204	573	601	187	502	677	256	487	535	349	558
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.85	0.40	0.19	0.57	0.57	0.50	0.42	0.80	0.18	0.78	0.90

Intersection Summary

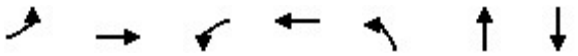
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



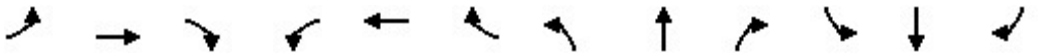
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	171	227	111	104	282	334	105	381	93	268	409	83
Future Volume (vph)	171	227	111	104	282	334	105	381	93	268	409	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	1881	1599	1752	1900	1615	1543	1845	1568	1805	1789	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.22	1.00	1.00	0.22	1.00	
Satd. Flow (perm)	1805	1881	1599	1752	1900	1615	351	1845	1568	414	1789	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	174	232	113	106	288	341	107	389	95	273	417	85
RTOR Reduction (vph)	0	0	83	0	0	261	0	0	70	0	10	0
Lane Group Flow (vph)	174	232	30	106	288	80	107	389	25	273	492	0
Heavy Vehicles (%)	0%	1%	1%	3%	0%	0%	17%	3%	3%	0%	4%	1%
Turn Type	Prot	NA	Prot	Prot	NA	Prot	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2	2	1	6	6	3	8		7	4	
Permitted Phases							8		8	4		
Actuated Green, G (s)	7.9	18.4	18.4	6.0	16.5	16.5	24.6	18.5	18.5	30.6	21.5	
Effective Green, g (s)	7.9	18.4	18.4	6.0	16.5	16.5	24.6	18.5	18.5	30.6	21.5	
Actuated g/C Ratio	0.11	0.26	0.26	0.09	0.24	0.24	0.35	0.26	0.26	0.44	0.31	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	203	494	420	150	447	380	227	487	414	361	549	
v/s Ratio Prot	c0.10	0.12	0.02	0.06	c0.15	0.05	0.04	0.21		c0.10	c0.28	
v/s Ratio Perm							0.12		0.02	0.23		
v/c Ratio	0.86	0.47	0.07	0.71	0.64	0.21	0.47	0.80	0.06	0.76	0.90	
Uniform Delay, d1	30.5	21.7	19.4	31.1	24.1	21.5	16.8	24.0	19.3	14.6	23.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	28.1	3.2	0.3	14.1	7.0	1.3	1.5	8.9	0.1	8.7	17.1	
Delay (s)	58.6	24.9	19.7	45.2	31.1	22.8	18.4	32.9	19.3	23.4	40.3	
Level of Service	E	C	B	D	C	C	B	C	B	C	D	
Approach Delay (s)		35.1			29.3			28.1			34.4	
Approach LOS		D			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	31.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	74.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	18	312	118	107	234	181	141
v/c Ratio	0.06	0.56	0.24	0.14	0.49	0.29	0.25
Control Delay	16.2	9.3	8.5	6.8	17.0	5.5	11.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.2	9.3	8.5	6.8	17.0	5.5	11.3
Queue Length 50th (ft)	4	13	14	11	43	5	18
Queue Length 95th (ft)	18	72	42	36	118	43	62
Internal Link Dist (ft)		596		1342		1219	566
Turn Bay Length (ft)	200		1000		230		
Base Capacity (vph)	633	913	897	1602	760	897	882
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.34	0.13	0.07	0.31	0.20	0.16

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	60	230	110	85	15	218	30	139	18	75	38
Future Volume (vph)	17	60	230	110	85	15	218	30	139	18	75	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5			4.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Frt	1.00	0.88		1.00	0.98		1.00	0.88			0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1805	1622		1787	1753		1787	1612			1778	
Flt Permitted	0.69	1.00		0.29	1.00		0.79	1.00			0.95	
Satd. Flow (perm)	1307	1622		548	1753		1488	1612			1699	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	18	65	247	118	91	16	234	32	149	19	81	41
RTOR Reduction (vph)	0	191	0	0	9	0	0	101	0	0	20	0
Lane Group Flow (vph)	18	121	0	118	98	0	234	80	0	0	121	0
Heavy Vehicles (%)	0%	8%	2%	1%	7%	0%	1%	0%	4%	2%	2%	2%
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases		4		3	8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	9.5	9.5		19.7	19.7		13.5	13.5			13.5	
Effective Green, g (s)	9.5	9.5		19.7	19.7		13.5	13.5			13.5	
Actuated g/C Ratio	0.23	0.23		0.47	0.47		0.32	0.32			0.32	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5			4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	294	365		423	818		476	515			543	
v/s Ratio Prot		0.07		c0.04	0.06			0.05				
v/s Ratio Perm	0.01			c0.09			c0.16				0.07	
v/c Ratio	0.06	0.33		0.28	0.12		0.49	0.15			0.22	
Uniform Delay, d1	12.8	13.7		7.0	6.4		11.6	10.3			10.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.5		0.4	0.1		0.8	0.1			0.2	
Delay (s)	12.9	14.2		7.4	6.4		12.4	10.4			10.7	
Level of Service	B	B		A	A		B	B			B	
Approach Delay (s)		14.2			6.9			11.5			10.7	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	11.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	42.2	Sum of lost time (s)	13.5
Intersection Capacity Utilization	56.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	17	67	61	394	437	15
Future Volume (Veh/h)	17	67	61	394	437	15
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	18	73	66	428	475	16
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				201	1299	
pX, platoon unblocked	0.85					
vC, conflicting volume	1043	483	491			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	960	483	491			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	92	87	94			
cM capacity (veh/h)	226	584	1072			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	91	494	491
Volume Left	18	66	0
Volume Right	73	0	16
cSH	445	1072	1700
Volume to Capacity	0.20	0.06	0.29
Queue Length 95th (ft)	19	5	0
Control Delay (s)	15.2	1.8	0.0
Lane LOS	C	A	
Approach Delay (s)	15.2	1.8	0.0
Approach LOS	C		

Intersection Summary			
Average Delay	2.1		
Intersection Capacity Utilization	63.1%	ICU Level of Service	B
Analysis Period (min)	15		

Intersection: 1: Alderman Road/Copeley Road & Ivy Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	133	263	179	91	216	241	150	307	127	163
Average Queue (ft)	49	114	46	36	132	151	99	126	46	135
95th Queue (ft)	96	201	96	81	199	223	161	252	116	162
Link Distance (ft)		928			917	917		754		128
Upstream Blk Time (%)									0	31
Queuing Penalty (veh)									0	158
Storage Bay Dist (ft)	250		250	350			150		265	
Storage Blk Time (%)	0	0	0				2	3	0	31
Queuing Penalty (veh)	0	1	0				5	8	1	19

Intersection: 2: Rothery Road /Parking Garage & Ivy Road

Movement	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	TR	T	R	R	L	R
Maximum Queue (ft)	49	282	191	52	27	242	95
Average Queue (ft)	4	107	73	3	2	83	66
95th Queue (ft)	46	368	152	24	15	196	106
Link Distance (ft)		917	603		436	429	
Upstream Blk Time (%)		0				1	
Queuing Penalty (veh)		1				0	
Storage Bay Dist (ft)	300			85			95
Storage Blk Time (%)	0	6	4	0		5	1
Queuing Penalty (veh)	0	0	0	0		12	1

Intersection: 3: Emmet Street & Ivy Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	R	L	TR
Maximum Queue (ft)	245	418	224	164	510	155	349	552	100	324	543
Average Queue (ft)	170	206	66	76	230	140	110	274	51	128	265
95th Queue (ft)	294	541	205	141	456	182	288	528	131	254	489
Link Distance (ft)		603			1051			859		1681	1681
Upstream Blk Time (%)		5						0			
Queuing Penalty (veh)		24						0			
Storage Bay Dist (ft)	255		270	165		155	350		100		
Storage Blk Time (%)	19	8	0	0	9	13	0	44	1		
Queuing Penalty (veh)	64	23	0	1	40	50	0	87	3		

Intersection: 4: Copeley Road & Massie Road

Movement	EB	EB	WB	WB	NB	NB	SB
Directions Served	L	TR	L	TR	L	TR	LTR
Maximum Queue (ft)	43	167	86	77	143	99	107
Average Queue (ft)	10	70	41	29	74	44	47
95th Queue (ft)	36	128	72	63	126	81	87
Link Distance (ft)		640		1380		1215	610
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	200		1000		230		
Storage Blk Time (%)		0					
Queuing Penalty (veh)		0					

Intersection: 5: Copeley Road & Site Entrance

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	215	132	329
Average Queue (ft)	77	36	130
95th Queue (ft)	200	108	301
Link Distance (ft)	272	128	1215
Upstream Blk Time (%)	3	1	
Queuing Penalty (veh)	0	3	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 505

Affordable Dwelling Unit Ordinance Worksheet Adjusted

Adjusted based on conversations with City Staff on 5/18/2023

Step 1: Total Floor Area Ratio (FAR) of Site

A. Total size of development site: 1.027 acres

B. Total square footage of site: 1.027 (# of acres) x 43,560.00 = 44,736.12 square feet (sf)

C. 1.0 Floor Area Ratio (FAR): 44,736.12 *(total sf of site)*

D. Gross Floor Area (GFA) of **ALL** buildings/uses: 274,830.00 sf

E. Total site FAR: 274,830.00 *(total GFA of site)* ÷ 44,736.12 *(1.0 FAR)* = 6.14

F. Is E greater than or equal to 1.0 FAR?

NO: Your proposed development does not trigger the ADU ordinance.

YES: Proceed to Step 2 or Step 3.

Step 2: Number of ADUs Required

G. GFA in excess of 1.0 FAR: 274,830.00 *(D: total site GFA)* - 44,736.12 *(B: total SF of site)* = 230,093.88

H. Total GFA of ADUs required: 230,093.88 *(G: GFA in excess of 1.0 FAR)* x 0.05 = 11,504.69

Project Avg unit size	767 sf
Project ADU's Required	15.00 units

OR

I. Equivalent density based on Units Per Acre:

i. Dwelling Units per Acre (DUA) approved by SUP: 279.00

ii. SF needed for ADUs: 11,504.69 *(H: Total GFA of ADUs)* ÷ 43,560.00 = 0.2641114 acres

iii. Total number of ADUs required: 0.2641114 *(ii: ADU acreage)* x 279.00 *(i: DUA approved)* = 73.69

Step 3: Cash-in-Lieu Payment

J. Cash-in-Lieu Amount Residential: x $2.680 = **$0.00**

K. Cash-in-Lieu Amount Mixed-Use: 2,022.00 x $2.68

Total GFA of development site:	274,830.00
GFA Occupied Commercial Space:	3,608.00
GFA Occupied Residential Space:	271,222.00
Total GFA Occupied Space:	274,830.00

% Residential: 0.99

Sec. 34-12. Affordable dwelling units.

(a) Upon approval of a rezoning or special use application approving a residential project, or the residential portion of a mixed-use project with a density equal to or greater than 1.0 floor-area ratio (FAR), or an equivalent density based on units per acre, the applicant shall provide on-site affordable dwelling units as part of the project, and the total gross square footage of such units shall be five (5) percent of the amount of the gross floor area of the project that exceeds 1.0 FAR or an equivalent density based on units per acre.

(b) For purposes of this section, "applicant" shall mean the person or entity submitting a rezoning or special use application for approval of a residential or mixed-use project that contains residential dwelling units in the city and shall include the successors or assigns of the applicant.

(c) For purposes of this section, "affordable dwelling units" means dwelling units that are affordable to households with incomes at not more than 80% of the area median income and that are committed to remain affordable for a term of not more than thirty (30) years. However, the city may establish a minimum term as it deems necessary to ensure the establishment of committed affordable dwelling units provided pursuant to subsection (a), above, or (d)(1), below.

(d) As an alternative, upon approval of a rezoning or special use application approving a residential project, or the residential portion of a mixed-use project with a density equal to or greater than 1.0 FAR, or an equivalent density based on units per acre, the applicant may elect to provide any one (1) of the following:

(1) Affordable dwelling units at an off-site location in the city, the total gross square footage of such units shall be five (5) percent of the amount of the gross floor area of the project that is over 1.0 FAR, or an equivalent density based on units per acre; or

(2) A cash contribution to the city's affordable housing fund, which contribution shall be calculated as follows for each of the density tiers described below:

a. Two dollars ($2.00) per square foot of gross floor area for residential projects greater than 1.0 FAR or an equivalent density based on units per acre.

b. For mixed-use projects, cash contributions shall be calculated by applying the proportionate amount of residential gross floor area at two dollars ($2.00) per square foot.

(e) The cash contribution shall be indexed to the Consumer Price Index for Housing in the South Urban Region as published by the Bureau of Labor Statistics and shall be adjusted annually based upon the changes made in January to such index.

(f) Except as otherwise provided, upon approval of a rezoning or special use permit that is subject to this section, any site plan submitted for review in conjunction therewith shall be acted upon by the director of neighborhood development services or planning commission within twenty-one (21) days after the date such plan was officially submitted.

(g) The city council may from time to time adopt regulations by resolution, for the administration of the provisions of this section. Pursuant to section 34-82(b)(1), the failure of any person to comply with such regulations shall constitute unlawful conduct in violation of this section.

(3-16-09(1); 5-20-13(4); 11-18-13; 6-15-15(2))

GFA Non-Occupied Space*:	36,365.00		Propotionate amount of non-occupied space GFA for residential use:		35,887.60
Amount of Payment:	307,109.60	x	$2.680 / 2022 - $2.68	=	$823,053.72

**GFA of non-occupied space shall include: (i) basements, elevator shafts and stairwells at each story, (ii) spaces used or occupied for mechanical equipment and having a structural head room of six (6) feet six (6) inches or more, (iii) penthouses, (iv) attic space, whether or not a floor has been laid, having a structural head room of six (6) feet six (6) inches or more, (v) interior balconies, and (vi) mezzanines. GFA shall not include outside balconies that do not exceed a projection of six (6) feet beyond the exterior walls of the building; parking structures below or above grade; or and roof top mechanical structures.*

Step 4: Minimum Term of Affordability

L. Residential Project

M. Mixed-Use Project

i. Households earning up to 50% AMI:

Unit Type	Eff.	1BR	2BR	3BR	4BR	5BR	6BR
Number of Units							
Market Rent							
HUD Low HOME Rents	$917.00	$983.00	$1,180.00	$1,362.00	$1,520.00	$1,677.00	$1,834.00
HUD Utility Allowance	$68.00	$92.00	$116.00	$141.00	$178.00		
Difference per Month	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Monthly Cost of ADU	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Annual Cost of ADU	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

Total Annual Cost of ADUs: 0.00 *(Sum of Annual Cost of ADU)*

Minimum Term of Affordability: #DIV/0! *(Cash-in-lieu payment / Total annual cost of ADUs)*

***If answer is less than 5, then minimum term of affordability will be 5 years.**

ii. Households earning 51% to 80% AMI:

Unit Type	Eff.	1BR	2BR	3BR	4BR	5BR	6BR
Number of Units	5	4	3	2	1		
Market Rent	$1,599.00	$1,825.00	$1,998.00	$3,825.00	$4,500.00		
HUD High HOME Rents	$1,024.00	$1,063.00	$1,264.00	$1,562.00	$1,918.00	$2,097.00	$2,278.00
HUD Utility Allowance	$68.00	$92.00	$116.00	$141.00	$178.00		
Difference per Month	$643.00	$854.00	$850.00	$2,404.00	$2,760.00	$0.00	$0.00
Monthly Cost of ADU	$3,215.00	$3,416.00	$2,550.00	$4,808.00	$2,760.00	$0.00	$0.00
Annual Cost of ADU	$38,580.00	$40,992.00	$30,600.00	$57,696.00	$33,120.00	$0.00	$0.00

Total Annual Cost of ADUs: 200,988.00 *(Sum of Annual Cost of ADU)*

Minimum Term of Affordability: 4.10 *(Cash-in-lieu payment / Total annual cost of ADUs)*

***If answer is less than 5, then minimum term of affordability will be 5 years.**

U.S. DEPARTMENT OF HUD
STATE:VIRGINIA

2022 HOME PROGRAM RENTS

PROGRAM	EFFICIENCY	1 BR	2 BR	3 BR	4 BR	5 BR	6 BR
Blacksburg-Christiansburg-Radford, VA HUD Metro FMR Area							
LOW HOME RENT LIMIT	743	801	935	1120	1250	1379	1508
HIGH HOME RENT LIMIT	743	801	935	1328	1569	1712	1856
For Information Only:							
FAIR MARKET RENT	743	801	935	1328	1600	1840	2080
50% RENT LIMIT	755	808	970	1120	1250	1379	1508
65% RENT LIMIT	961	1031	1239	1424	1569	1712	1856
Giles County, VA HUD Metro FMR Area							
LOW HOME RENT LIMIT	494	616	702	875	976	1077	1177
HIGH HOME RENT LIMIT	494	616	702	939	999	1149	1299
For Information Only:							
FAIR MARKET RENT	494	616	702	939	999	1149	1299
50% RENT LIMIT	590	631	757	875	976	1077	1177
65% RENT LIMIT	746	801	963	1104	1211	1318	1425
Pulaski County, VA HUD Metro FMR Area							
LOW HOME RENT LIMIT	590	616	702	923	1030	1136	1242
HIGH HOME RENT LIMIT	590	616	702	980	1202	1382	1509
For Information Only:							
FAIR MARKET RENT	590	616	702	980	1202	1382	1563
50% RENT LIMIT	621	665	798	923	1030	1136	1242
65% RENT LIMIT	789	846	1017	1166	1281	1396	1509
Charlottesville, VA MSA							
LOW HOME RENT LIMIT	917	983	1180	1362	1520	1677	1834
HIGH HOME RENT LIMIT	1024	1063	1264	1562	1918	2097	2278
For Information Only:							
FAIR MARKET RENT	1024	1063	1264	1562	1959	2253	2547
50% RENT LIMIT	917	983	1180	1362	1520	1677	1834
65% RENT LIMIT	1173	1258	1511	1737	1918	2097	2278

Virginia Housing | Housing Choice Voucher Program

Allowances for Tenant-Furnished Utilities and Other Services

Family Name: _____
Unit Address: _____

Voucher Size*: _____ **Unit Bedroom Size*:** _____
Use smaller size to calculate tenant-supplied utilities and appliances.

		Unit Type: 1 Exposed Wall				Effective Date: 07/01/2023			
		Monthly Dollar Amount							
Utility	**Usage**	**0 BR**	**1 BR**	**2BR**	**3BR**	**4BR**	**5 BR**	**6 BR**	**7BR**
Appliance	Range/Microwave	$2.00	$2.00	$2.00	$2.00	$2.00	$2.00	$2.00	$2.00
	Refrigerator	$3.00	$3.00	$3.00	$3.00	$3.00	$3.00	$3.00	$3.00
Bottled Gas	Cooking	$11.00	$15.00	$20.00	$24.00	$31.00	$35.00	$40.00	$44.00
	Home Heating	$61.00	$85.00	$109.00	$133.00	$169.00	$194.00	$218.00	$242.00
	Water Heating	$27.00	$37.00	$48.00	$58.00	$74.00	$85.00	$95.00	$106.00
Electricity	Cooking	$4.00	$5.00	$6.00	$8.00	$10.00	$11.00	$13.00	$14.00
	Cooling (A/C)	$7.00	$10.00	$13.00	$15.00	$20.00	$22.00	$25.00	$28.00
	Home Heating	$25.00	$34.00	$44.00	$54.00	$69.00	$78.00	$88.00	$98.00
	Other Electric	$14.00	$20.00	$25.00	$31.00	$39.00	$45.00	$50.00	$56.00
	Water Heating	$13.00	$18.00	$23.00	$28.00	$35.00	$40.00	$45.00	$50.00
Natural Gas	Cooking	$2.00	$2.00	$3.00	$3.00	$4.00	$5.00	$5.00	$6.00
	Home Heating	$9.00	$13.00	$16.00	$20.00	$25.00	$29.00	$32.00	$36.00
	Water Heating	$4.00	$6.00	$7.00	$9.00	$11.00	$13.00	$14.00	$16.00
Oil	Home Heating	$55.00	$77.00	$99.00	$121.00	$154.00	$176.00	$198.00	$220.00
	Water Heating	$24.00	$33.00	$42.00	$52.00	$66.00	$75.00	$85.00	$94.00
Sewer	Other	$21.00	$29.00	$38.00	$46.00	$59.00	$67.00	$76.00	$84.00
Trash Collection	Other	$15.00	$15.00	$15.00	$15.00	$15.00	$15.00	$15.00	$15.00
Water	Other	$18.00	$25.00	$32.00	$40.00	$50.00	$58.00	$65.00	$72.00
UTILITY ALLOWANCE TOTAL:		$	$	$	$	$	$	$	$

Minutes

PLANNING COMMISSION ZONING ORDINANCE PUBLIC HEARING
September 14, 2023 – 4:00 P.M.
Hybrid Meeting

***Location*:** City Hall Chambers
Members Present: Commissioner Solla-Yates, Chairman Mitchell, Commissioner Schwarz, Commissioner Habbab, Commissioner d'Oronzio, Commissioner Stolzenberg, Commissioner Palmer
Staff Present: Patrick Cory, Missy Creasy, Remy Trail, Caroline Rice, Matt Alfele, Carrie Rainey, Ben Kolby, James Freas, Read Brodhead

1. **ZT23-08-02**: An ordinance to amend and re-ordain a new Chapter 34 of the Charlottesville City Code, Charlottesville Development Code. The Development Code would replace the current Zoning Ordinance Chapter 34 and current Subdivision Ordinance Chapter 29 in order to provide for reorganization of the ordinance into the following 7 Articles:
   Article 1. Introductory Provisions
   Article 2. Zoning Districts
   Article 3. Use Regulations
   Article 4. Development Standards
   Article 5. Administration
   Article 6. Subdivision
   Article 7. General Standards and Definitions
   The new Chapter 34 also includes: the addition of new zoning district classifications; affordable dwelling unit regulations; new and revised development standards; and various other new and revised standards/regulations which help to implement the principles and actions outlined in the Charlottesville Comprehensive Plan, adopted November 15, 2021.
2. **ZM23-0010**: An ordinance to ordain a new official zoning map for the City of Charlottesville, encompassing the entire City within the boundaries. The map may be viewed at this link: https://cvilleplanstogether.com/draft-zoning/. Proposed changes to zoning designations would affect all of the properties within the City. The new map would reflect the changes outlined in the proposed new Charlottesville Development Code, Chapter 34 of the Charlottesville City Code, including the creation of new zoning districts to carry out the principles and actions of the Charlottesville Comprehensive Plan, adopted November 15, 2021, as well as new and/or revised classifications concerning the uses to which land, buildings and structures within such classifications may be put for development and use.

Chairman Mitchell gaveled the Planning Commission to order at 4:00 PM.

A. STAFF PRESENTATION

James Freas, NDS Director – Our goal for this evening is to listen to the public. I am going to keep my remarks brief. This evening, we are conducting a public hearing for the proposed Charlottesville Development Code.

Next Slide – Cville Plans Together
This is the culmination of our 3-part Cville Plans Together process. Back in 2021, the city adopted the Affordable Housing Plan and the Comprehensive Plan. We are moving into the rewrite of the zoning ordinance, which is the implementation of that prior work.

Next Slide – What is Zoning?
Zoning refers to a set of regulations that govern the use and development of land.

Next Slides – Central Elements of Zoning
There are two parts to the Zoning Ordinance. There is the zoning map, which divides the city up into districts, by which the regulations are applied to different parts of the city. There is the text, which provides those rules in terms of rules for use, rules for development, those rules that apply specifically within different districts, those rules that are applied generally throughout the city, and those rules for administration that govern how we administer and enforce the zoning ordinance. The public hearing for tonight is on both the map and the text.

Next Slide – Comp Plan and Zoning Relationship
The purpose of this zoning ordinance rewrite is to implement our adopted Comprehensive Plan and Affordable Housing Plan. The zoning is one of the primary tools we have for implementation of the visioning goals of these plans.

Next Slide – Land Use Vision from Comp Plan
The Vision speaks to the supply and affordability of housing within the city, looks at the issues of inequities in the distribution of land uses and the impacts of development, and looks at how we can make the city walkable, more people-focused, protective of the natural environment, and allow additional housing types, and a greater mix of uses. It also speaks to the urban design and the historic preservation goals of the city.

Next Slide – Future Land Use Objectives
Within the Comprehensive Plan, we have a set of future land use objectives. These echo many of the things that we saw within the Vision itself, speaking to increased opportunities for development near community hubs and amenities, utilization of vacant and underutilized land, walkability, bikeability, and things like the long-term economic sustainability of the city.

Next Slide – Land Use Chapter
The Land Use Chapter goes into detail on various strategies to pursue, particularly within the Zoning Ordinance. Goal #1 of the Comprehensive Plan speaks to adopting a new zoning ordinance and provided us with the basis for moving forward with the drafting of this zoning ordinance.

Next Slide – Affordable Housing Plan
The Affordable Housing Plan had 3 major initiatives within it. The idea of allocating $10 million annually towards affordable housing, building a governance system for the allocation of those funds and for our policy around housing that was inclusive, and adopting a progressive and inclusionary zoning reforms.

Next Slide – Challenge

The challenge we faced as we went into this effort to draft this development code was how to promote the creation of more affordable housing, how to create opportunities for a range of housing choices in all neighborhoods of the city, and how to craft a zoning ordinance that advances all of they city's goals as identified in the Comprehensive Plan. Our result is the draft development code. As noted in the staff report, the draft ordinance grants property owners more rights and places more responsibilities on development aimed at helping our community reach its goals related to housing, particularly affordable housing, economic development, our environmental goals, and ultimately goals for quality of life. Through the work we have engaged with over the last couple of years, there are no easy answers in this work. I don't believe this draft we have before us is our final draft. I believe we will see changes over the course of this adoption process and over the course of the future as we respond to changing conditions in the city. I would expect that we will see amendments to the code. As we hear new ideas, new perspectives, it is important that we can respond and make tweaks as necessary.

I want to thank you, my staff, and the others who have been involved in the process. I look forward to working with you to see us through to the end of the project and a recommendation to the City Council.

B. ZONING ORDINANCE PUBLIC HEARING COMMENTS

Robin Kells (2503 Westerly) – Community doesn't flow from the top down. It is not tightly organized. It grows like a forest. It is all these little parts that come together and grow organically from individual elements. As appealing as the overview of the plan is and as many wonderful terms I hear in the plan, it still concerns me because it seems very top-down and tidy. It is like the difference between a pine plantation and a functioning forest. I am not opposed to increasing residential density. I applaud that. I applaud the acknowledgement that the community needs more affordable dwelling spaces and more accessible amenities, but we need to be careful in how this is achieved. Our neighborhood is very funky. It is not the greatest thing to look at when you drive through it. It is wonderful. It also has some of the best tree cover in the entire city. It is next to Observatory Hill. It is ecologically a miracle. It is a wonderful place to live. It has some of the most congenial neighbors I have ever experienced. I have lived in many places. People have been there for decades. With one of the neighbors, her parents built the house where she was born. We have single-family units, multifamily units, and even a group home. It all works. We, as a neighborhood, are very concerned that we are not going to be heard. My neighbors don't feel they are being heard.

Scott Clark (2503 Westerly) – I want to focus on one element of the draft ordinance, which is the RX Mixed-Use districts. We heard the vision for the future of the city about density, affordability, walkability, and transit. I support all those things. However, I feel that the RX Mixed-Use districts will not help us achieve that. As those regulations are written, there is nothing in there to require a mix of uses. They simply permit institutional, commercial, or residential by right equally. That means for neighborhoods like ours between the University, the hospital, and the research park, along a major highway, there is going to be immense economic pressure to convert our residential neighborhood to institutional and medical uses. There is nothing in that Mixed-Use regulation that will keep our neighborhood residential or allow it to evolve to Mixed-Use or walkability. The fact that the RX regs allow by right remote parking means that we could become infrastructure for the highway-related uses on Fontaine rather than a Mixed-Use neighborhood. This means that there is going to be a huge increase in impervious cover in our neighborhood. Please rewrite or place those Mixed-Use regs with actual mixed-use regs and please take away the mixed-use designation for our block. RB is fine.

Diane Wakat (2319 Tarleton) – I am representing myself and many of my neighbors in the Greenbrier area, particularly those, who live on Tarleton Drive, who have major concerns about the impact of your proposed changes on our zoning designation, a life-changing impact with major consequences. The signed petition that we presented to you is for the following action. Do not change the current RA zoning in the Greenbrier neighborhood, specifically the entrance onto Greenbrier Avenue from Rio Road and the length of Tarleton Drive until it crosses Banbury Street. We oppose the potential zoning changes because this area of Greenbrier, Tarleton Drive is a family-focused part of Charlottesville. It is populated by those who want their children to be able to safely walk to Greenbrier Elementary School, who want to walk their dogs and ride their bikes along the road without having to dodge cars that drive fast. They want to have yards and spaces to live in. They want to grow our gardens and our flowers so they can enjoy the work of our labor. To change this street and subject our families to more traffic, less safety, the density of multiple unit complexes, and to change the nature of the property is not a wise, appropriate, or necessary decision by the Planning Commission. This is not a neighborhood of wealthy people, who should suffer damonution of their quality of life for no good reason. We have all worked hard, often with multiple jobs to be able to purchase and live in a town in a neighborhood that we love; one that should not have its beauty, peace, and character changed forever by a wrong decision by the Planning Commission to change our zoning. This is what Charlottesville purports to be. Do not change our zoning. Growing up in Illinois, the state took our property through eminent domain to add to an adjacent state park. No more yard, home, and loss of value. That is what your proposed plan to rezone our homes and yards feels like to me.

Valerie Long – I am with Williams Mullen. Our office is located at 323 2nd Street Southeast. I appreciate the opportunity to share these comments. I am speaking on behalf of our client Tarleton Oak LLC, which owns 9 parcels downtown, located on the block that is down by East High Street, Lexington Avenue, and 9th Street Northeast. All the parcels are in common ownership. We ask that you consider zoning all the Tarleton Oak parcels as NX-10. Eight of the nine parcels are designated as Urban Mixed-Use Node on the Land Use Map. The 9th is designated for Urban Mixed-Use Corridor. The map provides the Urban Mixed-Use Node as appropriate up to 10 stories. The property supports the higher zoning and is consistent with zoning proposed nearby. The draft zoning map continues to propose the zoning as a mixture of NX-10, NX-8, and CX-8. We request that you consider the request to zone all of it as NX-10, given its prominent location downtown, the lack of adverse impacts that would be associated with the taller buildings, and the fact all the properties are under common ownership. This decision is consistent with the decision that was made at a recent work session regarding the former Martha Jefferson Hospital property directly across Lexington Avenue. That property was originally shown on the initial zoning map as NX-8. Following a request by the owner, it was changed to NX-10. Unfortunately, at that same meeting, there were no discussions specifically about the Tarleton Oak request. We respectfully ask that you consider that request to change all the parcels to NX-10.

Doug Turnbull (108 Robinson Woods) – My family has had some relationship to Charlottesville for nearly 100 years. My great uncle lived on Chancellor Street for a time. His home has since become student apartments. My dad would visit my aunt on Brandon Avenue where she owned an acre of land. He would walk to the drugstore on the corner for ice cream. Brandon Avenue has had a massive influx of housing. Over the decades, the area has changed a lot; mostly for the better. New students and neighbors can be a great thing. I fear what will happen if we suddenly stop change and stop growth. This morning, I had my teeth cleaned. I have had two dental hygienists in the past two years. Both have moved away to more affordable areas; areas where they can afford a home that doesn't require a long drive. My third

dental hygienist is a new graduate. She has had to move in with her parents to live here. She must commute 45 minutes, putting more strain on the region's transportation system. It is possible that she will find a home and live farther away. She will have to drive down 250 or she will give up, move away, and healthcare will gradually become less affordable for everyone. If we do not approve the draft plan, my question would be: What will be the plan for increasing the transportation network to account for dental hygienists, restaurant workers, hospital orderlies, teachers, firefighters, and police that keep our city running? How many of us want to see Greenbrier, Preston, Barracks, McIntire turned into superhighways because we want commuters instead of neighbors? I would rather have neighbors than commuters. People will move here. They will live far away in Greene and Louisa and put more cars on the road. Or they will live nearby and put less cars on the road. I hope we choose density.

Jonathan Rice (1144 Meriwether) – I appreciate all the hard work that has gone into this planning process. I agree that we need greater housing density and affordable housing. I would love to see the city become less dependent on cars to get around. That is essential to manage higher density and to reduce our carbon emissions. I agree that parking lots are a tremendous waste of space. I am skeptical that reducing parking is going to get us to a place where we're less dependent on cars. It is going to annoy a lot of people and be harmful to many city residents. I worry that city planners might be projecting their own personal and professional circumstances onto our city's population when they view this problem. Not every city resident is able to bike to get around town or to walk. E-bikes are not the solution because of the fire hazard posed by the batteries. Many city residents have limitations in terms of disabilities effecting their ability to walk or ride a bike to get around town. To my knowledge, these people aren't being considered. A lot of people have the privilege to work remotely or have professional status that frees them from having to be at work. A low-income retail worker must be at work for a precise time.

Phillip Harway (707 Altavista) – I wish to thank you for your efforts on the FLUM plan. I wish to say to dial it back. I am very disappointed that we are close to approving a drastic change in our Zoning, without having adequately planned for things not working out the way you expect. Many of us are concerned that changing our city so drastically will create unforeseen problems. We should have fewer cars on our roads. It is a significant factor in global climate change, and we should all be concerned about that. That said, it is wishful thinking that the present citizens will do away with most of their cars. We walk where we can, and wish we could bicycle more, except it is very dangerous to do so in Charlottesville, as told to us by our neighbor who said he no longer bicycles except on the sidewalk because he is a father and cannot afford to take the chance. We use our car to go places that are too far for us to walk. Your plan is about to eliminate the need for developers to provide parking for their new customers. There are very few places in the city where so much free parking exists that this will not create a huge problem. You are about to penalize the citizens who have lived in the city many years to allow new development without requiring some parking with that development. We have been told since the beginning that this FLUM document is a living document and that nothing is set until it is finished. This gave hope for many of us who saw the haste of doing everything you are doing all at once, rather than to develop it in stages and adjust to what happens before moving on. We have asked that a parking plan be recommended by a land planner out west, allowing block by block permit parking if most of the block wants. it, to be included. This plan would give two permits per lot, including the lot a developer was about to develop. In that scenario it is the developer who must worry about the parking for his new customers, rather than the existing citizens. I was told by planning that it would be considered and told by a council member that one part of the city did not want this, but none of this prevents it from having been put in the final plan and I expect that many other good ideas from your citizens have not been seriously considered.

Geraline Scott (Tarleton) – I have lived on Tarleton Drive for over 50 years. It has been wonderful. My worry is that the impact of the zoning is going to change our entire neighborhood. Right now, it is so safe. It is a good neighborhood. I would like to encourage people to not change the zoning in our area because it is perfect right now.

Eric Gunderson (Yorktown Drive) – There are a couple observations about the process. It seemed to me, as this came underway, it was under the auspices of primarily affordability. It seems like affordability has transitioned more into development. It might be a bait and switch. If you want affordability, there might be other ways to get to affordability through tax code, through capping property taxes on people with a fixed income, or when they are no longer working. I also want to talk about the neighborhood. As I have been losing sleep over this, mulling over the issue of eminent domain. While eminent domain might refer to the seizure of property, in this instance, it applies analogously to taking the fabric of a neighborhood and changing it. Part of the charm of Charlottesville are the neighborhoods. We get to pick where we're going to live. They all have their own charm, their character. Greenbrier is fantastic. It is perfect for us: the trees, the space between houses, and the sidewalks. We know our neighbors. We talk to them. It is a fantastic place to live. We have remodeled. We're staying for the next several decades. We're not going anywhere. I am concerned about how the rezoning is going to shift the character of the neighborhood. I hope that you would consider that for the people that are there, who have invested, and are hoping to live there for many years, to keep that quality, not just for Greenbrier, but of the other important neighborhoods. I think that is a mandate for this city to help the people who are there.

Elizabeth Stark (408 Fairway) – I am a renter who lives in dense housing. I have raised my children here. I too love my neighborhood. I would love to have more neighbors and better use of the land in this neighborhood to accommodate more people so they can enjoy the river, proximity to downtown, and all the amenities that me and my family have enjoyed. Everyone in Charlottesville deserves quality of life, walkable communities, and access to these amenities. I appreciate all the people who have been saying that they love their neighborhood. I think more neighbors is a better thing for us. I support much of the zoning code. I think it will improve our community and help to welcome even more community members into the fold. I ask that you pay special attention to the neighborhoods that have been at high risk for displacement, specifically historically black neighborhoods, and the places where these historically black neighborhoods abut commercial areas. These neighborhoods have already borne the brunt of Charlottesville's growth. Many people, who lived here for generations, have been displaced. Please provide an anti-displacement overlay for these sensitive neighborhoods. I also ask that you allow more density in historically exclusionary neighborhoods to address race equity. We know that many of our neighborhoods have been explicitly racist. They have had explicitly racist covenants. We need to make that right. These historically exclusionary neighborhoods should have more density. I also ask that you restore the 4-story height limit and reinstate height bonuses to link density to bigger affordability. Expansion of affordability, especially at 50 percent AMI, is essential. We do need more affordability. The only way to do that is incentivize deep affordability for developers and people that are moving to the city.

Kelly Chamberlain (1158 Farrow) – I was in the military 21 years. I have lived in big cities across the country. Unfortunately, what happens with growth, is that they put the cart before the horse, which is the direction that we are going. The expansion is looked at. There is no infrastructure in place. One of the best places I lived in was Pensacola, FL. They wanted to bring a small baseball team in there. They said not until 'you build the roads, the schools, utility system, and have law enforcement in place' before you can

do that. They never expanded. We need to stay focused on that. The one thing that concerns me with having an Airbnb, closing it down, and catering to the big businesses (hotels) so they can charge more money and pushing out the Airbnbs, a small business, who now pay an occupation tax, which renters don't pay. The city has already closed it down. People, who have an Airbnb, must park on their property where renters can park in the street. That is backwards. You have somebody here for less than 30 days. They can't park in the street. You have someone, who does park in the street, who pays no taxes on that. That's something to look at. If you do away with Airbnbs, you also open up those owners and make them become renters. They must worry about squatters, squatters' rights, and go through a long-term rental process if they need to get rid of some people. There are a lot of people who would like to have a small business. You're taking away that opportunity. Doing away with Airbnbs and having them be rentals may meet the requirement of making more affordable housing available, it won't.

Renee Aichele (518 Meade) – I am calling to extend the conversation about Airbnbs and homestays from a different angle. The city has gotten out of control with commercial building and how it is not formed to plan. We need a comprehensive transportation and housing plan that incorporates Albemarle County and beyond. I did request answers. My answer from the city was that you're looking to solving some of the short-term rental crisis in the city with taking Airbnbs away. That would be at the expense of the Airbnb and homestay owners. We are renters. We no longer do homestay. When we did homestay, we housed a lot of UVA students, parents, people coming to look at the University, and a lot of the hospital systems. We have a transient city. We have a place that needs short-term rentals for these families. You're taking that away. They need a place that they can afford, can cook their own meals, not have to stay at expensive hotels, and go out to restaurants. That is what the homestays are good for. Who is going to house all the people going to football games? Has UVA been challenged to address their own issue with having so many renters in the city? We need a plan that incorporates the real character of our city and our real business sector, in addition to the new corporate overbuilding, which has taken place. The transportation plan needs to incorporate going out further like every other city that grows and have some sort of mass transit plan in place.

Len Schoppa (1439 Westwood) – I am going to speak in favor of one part of the plan that has not yet been mentioned and raise some concerns about another part of the plan. The part of the plan that makes the biggest difference for affordable housing is the one that requires 10 percent of units to be set aside if you build more than 10. Future multiuse, multiunit housing developments that are built around the city won't have one-by-one separate negotiations that might lead to small sums of money that may not be delivered. Under this new plan, you have set a high bar for how much money needs to be set aside if you want to buy your way out of providing units that are affordable at 50 percent AMI. I encourage you to keep that level at 50 percent AMI. Keep the kinds of formulas you have for what you need to pay if you don't provide it. Stick with the plan that says to put the money up front. That's the one financial incentive that is going to encourage these developers to include some reasonably priced units in their buildings instead of everyone trying to buy out, which is what they have done. My concerns with the plan are that we learned that the protections for the sensitive communities have disappeared. When the Comprehensive Plan was passed, we were told that we could have RA with 3 units of housing for every lot. In the sensitive communities, there would be some very strict provisions that would say 'you could only have those 3 units if your first unit is affordable, if you preserved an existing unit.' We're told that we can't do that. I would encourage you to avoid the charge that you're doing that only in some neighborhoods, is to extend that kind of protection for affordable, old houses on small lots to more of the city. If you do just sensitive communities, you could be vulnerable to some legal challenges.

Nancy Summers (Blue Ridge) – You must reconsider upzoning the Barracks Road and Preston Corridor from R-1 to high intensity residential/commercial. This historic corridor is one of the busiest in Charlottesville. Barracks Road has steep embankments and contains critical slopes, which make it nearly impossible to widen. There is a plan in place to build a sidewalk on the south side of Barracks Road and narrow the lanes. A few years ago, the city refused to allow a large apartment complex to be built in the Meadowbrook Shopping Center because of the limitations of Barracks Road. Barracks Road was given an F grade in the associated traffic study as well as a presenting watershed and its critical slopes issues. The city is now proposing that apartments be permitted all along this very busy, narrow, non-expandable corridor. Although this is required by state law, the city did not do a traffic analysis when it developed the Comprehensive Plan, on which the zoning is based. Had the city done so, the plan to increase the density on Barracks would surely have been nixed. Similarly, the city should have conducted an environmental impact study, including watersheds and critical slopes as they prepared the FLUM. They did not do so. Had these studies been done, the limitations of development on Barracks would have been evident. There is a reason the Barracks/Rugby/Preston Corridor from Emmet Street to Washington Park has been zoned R-1. It has nothing to do with exclusionary zoning and everything to do with the limitations of the natural and built environment. The city is eliminating parking requirements for developments. There is no room for parking on Barracks Road. There is a good reason that the state requires localities to engage in 'careful and comprehensive surveys and studies' as it prepares its comprehensive plan. This reason is to protect the city and its citizens from thoughtless and destructive decisions.

Roy Van Dorne (1522 Rugby) – I wish to address the consequence of RC setbacks for the Rugby Ave and Rose Hill neighborhoods. The Planning Commission and city staff have repeatedly promised to protect the community from teardowns and developments built out of scale with neighboring homes. Yet for those who have posted dozens of yellow signs on Rugby Ave, we believe the RC designation and this proposal violates quiet enjoyment of our homes. Rugby Ave is unique as it was built in the 40s to be a major east-west boulevard. When the neighborhood was built out in the 50s the homes were purposely set back 50' from the street to reflect the road noise and traffic, this was before sound walls. All homes on Rugby Ave are set back 40' from the sidewalk as Rugby Ave was then the defacto east-west bypass. That setback is treated much differently than Avon St., where high fences and hedges dominate to shield homes from the street. Rugby Ave homes openly embrace sidewalks, neighbors, and community. As proposed, a developer (who will not be a neighbor) can build a 38' high, 3-story, 8-unit apartment building 5' from the sidewalk by right. That results in a multi-story wall that consumes 87.5% of each neighbor's front yard. This is totally out of scale and creates a sawtooth development for the entire neighborhood and makes a mockery out of the promise made by the Planning Commission to keep development "house scaled". The result, if not corrected, will be the Avonning of Rugby – hedges and fences will be built to isolate homes from this massive out-of-scale development. The Planning Commission is VERY aware of this concern as they specified in RA and RB, to protect neighborhoods from this sawtooth with a concept, adopted "Existing Range". There are several homes on Rugby Ave where there are 3 and 4 units on their lot (1620 and 1630). If you walk by – they have maintained their 40' setback but are multi-structure and maintain the character of the neighborhood. Protection of the neighborhood and high density can work. But not unless the Existing Range is included. The Proposed Zoning needs to include "Existing Range" in RC setbacks or better yet, designate Rugby Ave and Rose Hill as RB.

Katie Darden (1638 Meridian) – We're homeowners. I am a small business owner. Thank you to everybody that is working on this draft zoning code. I know that it is incredibly complicated and difficult. We really appreciate your efforts to make Charlottesville a more inclusive, welcoming, and sustainable community. I support zoning reform that lets more people live in Charlottesville. My husband and I live on a wonderful street that includes single-family homes, duplexes, and apartments. We are lucky to have bought our house in 2011. Home prices were much lower than they are currently. We chose our house because it was one of the few on the market that we could afford at the time. We still needed family help to make the down payment. We love the fact that, in this neighborhood, we can see kids with bikes in the yards, kids playing outside. When my 11-year-old was younger, there was a pack of children that played together outside on the street. Over the years, most of them have moved away. We have seen friends and neighbors leave the area because of the high cost of housing. We miss them. I am not sure there is going to be any kids for my 3-year-old daughter to play with because so few families can afford to live here. We have heard from people who want their children to be able to walk to Greenbrier School, which is great. Others have talked about being able to pick the neighborhood where they live. Let's not forget about the people who would like to be able to choose to live in Charlottesville in any neighborhood and for their kids to attend Charlottesville schools. For many of them, the out-of-control housing market makes it impossible for them to live anywhere near the city, even as they work here. I understand that people have concerns about the zoning update. We're never going to get it perfect. With so many families suffering with the high cost of housing, we don't have time to get it perfect.

Liam Keough – If we are serious about the Comprehensive Plan, we cannot give credence to letting older neighbors prevent change. I would like to make an observation. Everyone who is against the proposed ordinance is mostly older. We cannot let the privileges of our older residents outweigh the needs of the thousands of new residents, low-income residents, and non-white residents. I would also like to make an observation that the dog whistles, such as protecting the safety, charm, and the peace of their neighborhoods inhibit the change. We cannot let these dog whistles also dis-sway the change needed to address the vast increase in population in Charlottesville. We cannot allow quaint neighborhoods to impede change. My main point with the 10th and Page proposed development is that at the beginning of this meeting, it was alluded to that the Comprehensive Plan is aimed at some of the poor tenants of historic preservation, affordable housing, and economic development. We cannot have this in the Comprehensive Plan but also propose this Dairy Market expansion, which directly contradicts the wishes of the neighbors of the 10th & Page neighborhood, most of whom are low-income and non-white.

Al Pola (1624 Amherst) – Much has been said so far that I wanted to talk about. I support the 50 percent AMI that was mentioned earlier by Mr. Schoppa. Those are good starts to this. My concern (I hope the Planning Commission pays attention to this) is that, while I am in favor, as a Latino homeowner, of increased density, increased density across the city does not necessarily translate to increased affordability. That only happens if we have multiple units that have affordable housing. With the new Cherry Avenue development, if that was done as a new development, it would have been done by right. Look at the number of changes that it had to go through because they were forced to have input from the neighborhood. It is the same thing with the Dairy Market. It increases the number of units. It vastly increases the amount of density on Preston. How much of that is going to be affordable? I haven't seen anything that says any of those units are going to be affordable. Increased density does not mean increased affordability. Increased density without attention to infrastructure is something that this plan does not address. How are you going to translate increased density on Preston, where there is no buffer between pedestrians on the sidewalks and traffic? What are you going to do about the stormwater,

schools, and all the other infrastructure needs that increased density brings? If we are serious about changing the zoning code and increasing density, we must address what increased density brings and do that before we allow increased density by right.

Andrew Shelton (County) – I have lived here my entire life. A good portion of that time was within the city limits. Unfortunately, my wife and I had to move out of town a few years ago because the price of housing simply wasn't affordable for us. I am not talking about designated affordable housing. We have good jobs. I am a carpenter and my wife books buses for a travel company. The existing housing market is not sustainable for young people, who don't have existing investment in their home that has been built for 30 years. I have lived here long enough to remember when they changed the zoning in the 90s. I was a kid. I remember hearing all these people talk about how we needed to control growth and make sure that the existing residents aren't driven out. That happened because we don't have enough housing for the number of people who want to live here. This is a wonderful place to live. A lot of people want to move here. A lot of them have the money to afford, what I would consider, exorbitant prices for homes. If they can buy them, I can't. I would like to live in town, the town that I grew up in. I am not able to. I would like to ask you to please support the recommendations in the Housing Coalition letter that was signed by dozens of local organizations, including neighborhood organizations and racial justice organizations. I believe that they are good recommendations. I am happy with the process and the current recommendations so far. I believe that they can be improved. That would be a good set of recommendations to do it with. I would like to ask you to pay attention to the need to not displace black neighborhoods and to hopefully expand density in the neighborhoods that have historically had exclusionary zoning.

Kathy Galvin (712 Lyons) – Zoning impacts land value, often driving the most profitable legal land use of the land. How will the city counter rising land values sparked by the citywide upzoning, which may ultimately raise housing costs? Developers can either build 10 percent affordable housing on site or pay into a housing fund. How is that any different from what we do now? How is it better than what we do now? Increased building height does not automatically promote affordability and lower unit prices. That is because the height directly impacts the cost of structural and mechanical systems. Why are we giving away 10 story buildings by right instead of using additional building height above what we currently allow as leverage to get what we most need? Affordable housing and public open space. Do we really need more luxury apartments and office space? Turning areas south of the Downtown Mall into the 'navy yard' in DC could make sense if the public right of way along Garrett and 2nd Streets were 120 feet wide, 12-foot-wide sidewalks, protected bike lanes, street trees, and other green infrastructure features that mitigate flooding and manage stormwater. They're not. At best, they are the typical 60 to 70-foot right of way with 5-foot-wide sidewalks cluttered with utility poles and no bike lanes. Mature canopy trees would cut down within the public right of way along Garrett Street to accommodate redevelopment. The new zoning does nothing to prevent this in the future. After 2003, with the zoning change on West Main Street, nothing was done to accommodate greater foot, bike, and vehicular traffic. It became one the city's 10 most dangerous streets that led to a 3-year public process to create an improvement plan and VDOT funding. After years of delay, the funded was returned, it was never built. How can the public trust city officials?

Bill Emory (1604 East Market) – The implementation of the draft zoning ordinance will further decrease the city's shrinking tree canopy. How low can the canopy percentage go? The code writers say that we can't ask developers for more than 20 percent canopy coverage, the state's maximum requirement. The

developers and landlords can be incentivized. The code's green-scape zones and setbacks can be adjusted. We can ask our city councilors to join us in this goal. Look at the money that the city takes in; about $100 million in real estate taxes. The city spends 1/1000 of that money planting trees. 'We talk the green city talk. Let's start walking the walk.' Trees and density can coexist if you just act. Plant a $10 tree in the ground, care for it, and step back. In 1975, the city had a plan to plant a multitude of trees. In Woolen Mills, 90 trees would line East Market from Firefly to the Rivanna: Shade, walkability, habitat, carbon sequestration, oxygen production, stormwater control. Of the 90 trees, one has been planted at 1606 East Market. Square that lack of follow through with the Standards and Design Manual that reads that "trees must be installed along all right of ways regardless of the location of overhead or underground utilities." Ask the city to plant and to support designs that incorporate nature and housing. I am a small-scale affordable housing provider going for 100 percent canopy. We can get this done. We need to promote development that does not destroy our environment.

Ellen Tully (1442 Westwood) – I would like to support 100 percent the previous speaker. One of my big interests is in preserving the tree canopy. It is extremely difficult, if not impossible, to replace a 50-year-old tree in 5 years. We need to save as many big trees as we can. You can only do that by putting 'teeth' for the developers. Nobody will preserve a tree unless they absolutely must. Even people building private houses will cut down trees rather than have their architect redesign it. I am 100 percent in favor of tree canopy. I also support the 'teeth' in the 'over 9 unit' requirement for affordable housing. It is very important that be maintained that you don't let it slide. Developers will try to get out of having to do anything that cuts into their bottom line and to preserve the affordable housing in the city. You need to 'hold their feet to the fire.' A third thing is lighting. I would like the zoning regulations to include requirements that lighting be limited to shining where it is needed.

James Scott (1863 Winston) – I am the current president of the Venable Neighborhood Association. The Venable neighborhood is quite diverse. Our neighborhood has a broad spectrum of opinions about the Comprehensive Plan, the Future Land Use Map, and proposed zoning changes. Our board of directors asked me to share the following thoughts that we feel are relevant regardless of individual perspectives on the proposed zoning changes and feels the following items are critical for the success of any future planning. The city, county, and University must establish a more collaborative joint effort/venture approach to addressing affordable housing challenges in our area. Student housing continues to overtake lower-income residential neighborhoods in historically African American neighborhoods adjacent to the University. UVA, to date, has been unable to develop actionable plans to deliver on its commitment to house all second-year undergraduate students. The city needs to address, not just the infrastructure plans outlined in Mr. Freas' memo to Council on July 7th, but also needs to work with The Rivanna Water & Sewer to ensure that the available water supply can support any planned growth. Global warming has put pressure on water supplies worldwide and our area is not exempt from that, as evidenced by the front-page article in the Daily Progress yesterday. Mr. Freas' memo clearly outlines the excellent work the city is doing to upgrade our water distribution networks. As far as we can tell, there hasn't been any adjustment to the water supply assumptions based on the impact of global warming and more frequent droughts. We understand that large numbers of city government positions are vacant. This includes vacancies in Neighborhood Development Services and Building Inspector positions. To support the planned future growth, these critical positions must be filled in advance of any newly permitted growth so that any future development can be done safely and in accordance with code in an appropriate and timely manner. Plans for appropriate public transportation systems in pre-k through 12 education capacity need to be in place before the growth occurs. We're aware that the city is not going to be able to provide

transportation for many of the students. Will there be room for our schools provide quality education for future students and will the city be able to transport them to school?

Sarah Malpass (626 Bailey) – I am a resident of Fifeville and vice-president of the Fifeville Neighborhood Association. The FNA has signed on to the Housing Coalition letter because our residents want to see all forms of housing of all kinds of people in every neighborhood in our city. We especially want the city to pass policies and programs that will stop the displacement of black residents from our community and remedy the racist, long-term effects of exclusionary single-family zoning in Charlottesville. The Fifeville Neighborhood is hopeful that the city will provide zoning funding and programmatic tools to prevent displacement from our historically black community and at the same time, expand opportunities for affordable housing in communities across the city. I want to share that finding housing at affordable rents is an awful experience in the city. I recently walked with a black Cville mom, who was attempting to find housing before the birth of her first child. She had a housing voucher but no available housing to use it on. Despite her extremely proactive search from the start of her pregnancy, it took many months to find an apartment that was available. It was so many months that she was not housed when her child was born. She had to continue looking for housing in the weeks after the birth of the baby. She should have been able to spend that time resting in her own home and bonding with her new baby. Due to the housing crisis, she had to be up and 'pounding the streets' to find housing so soon after giving birth. This is not acceptable. Housing is a human right. The city should do everything it can to make housing more affordable for everyone and to stop displacement of black residents and low-income residents. I support CLIHC's recommendations and the Housing Coalition's letter and ask that you continue to improve the zoning code by allowing for more housing and medium-intensity zoning and inclusionary zoning regulations.

Tyler Miller (1500 Green) – To the displacement of residents, I am thinking of my neighbor, an 18-year black resident of the neighborhood, who has been driving buses in the city for all that time, who was recently told that he had to move out of his house because the developer that owns it is "turning it into as many units as possible." It sometimes goes both ways. We need to upzone modestly by working with homeowners to add housing, while not further comedizing housing. The RC tier is commercial-like zoning. It is geared towards revenue generation and not adding affordable units. RC designations will pick winners in neighborhoods. Those lots fetch a premium as they are essentially commercial. That granularity will increase inequality, not lessen it. I point you to the work of Strong Towns and MIT PhD candidate Nia Freemark, who have done great work in that area. 5.4.4.d.8 was moved to a new location. The designation of a particular violation in the schedule of civil penalties cannot be construed to allow the imposition of a civil penalty. That needs to be removed. I would also point you to the way that making most of the city by right would open it to VA code 15.2-2313, which allows people, who do not receive notice of development, the right to sue, which is antithetical to the goal of removing that overhead of meetings and notice.

Jeff Gamin (1534 Trailridge) – As I looked over the plans, they look like they assume that everyone is coming out of this with a good intention and that people are basically good. The heart of man is deceitful, wicked, and desperately sick. We must remember this because the investors that are going to be investing in these properties are not necessarily always good people. Our intentions are not always going to be to watch out for our neighbors. We must be aware of that. As I looked through the documentation, I found examples of cities that have done things like this but haven't seen any resounding successes, the increased affordability, density. I saw examples of "we tried this, and it didn't work. We're back to the drawing

board. “Can we have some examples of places that have worked? We need to model ourselves after something that is successful. I am not sure that it is out there. We also must keep in mind that we have heard comments from people to not think about the older people that have been here for a long time, who grew up in the area. Remember that people make choices when they buy houses. Some of us buy houses because we want our children to go to certain schools. We buy them because we like the community, neighbors. I have a proposal. Let’s take that $10 million and invest in businesses that will come in. Let’s train to work in those businesses. Let’s give people the dignity instead of keeping people stuck in lower incomes. Let’s give them the dignity of having a good income, working for a company, and being able to survive and move forward.

Bern Ewert (1609 St. Annes) – We have lived there for 30 years. Prior to that, when I was deputy city manager, Greenbrier for 5.5 years. We oppose this badly designed and unpredictable ordinance that will dramatically increase density. I know of nobody in my neighborhood who supports it. I was a commercial developer for 20 years. You have put your faith in commercial real estate developers. That’s a mistake. Citizens expect predictable behavior. What can you count on from City Council? This plan isn’t effective or predictable. That’s no surprise since you have done no impact studies. Peggy Van Yahres reminded us that the tree canopy is reduced by 25 percent. If this ordinance goes through, it will reduce it by another 25 percent. If there are 1000 new school children, it will increase operating expenses for the city by $15 million a year. In terms of traffic pollution, no study was done. The deputy director of planning lied to VDOT saying that there would be no impact from your proposal on traffic. I am sorry to say that you deceived your citizens and VDOT. I have a simple plan for you. Rezone the city to R-2 and buy land that you can build affordable housing on so we can be sure that it is affordable forever. We know that you can do that. Good luck to you. Let’s try to be practical. This is a very complicated issue.

Brad Campbell (852 St. Charles) – I strongly support the new zoning code. It is a substantial improvement over what we currently have in place. It will enable more neighbors, more people to be able to live in Charlottesville, which is a good thing. It is critical for our environmental goals that people can live close to amenities, jobs, and the city of Charlottesville. The zoning code allows for more types of housing. More flexibility will enable this. Thank you for your hard work and for allowing us to have these comments today.

John Pfaltz (1501 Rugby) – The recently proposed development at Dairy Central on Preston Avenue appears to embody the central themes of this rezoning proposal. It is a dense multistory residential development. There are relaxed parking requirements. It was in a commercially zoned, high-density site. I ask the Planning Commission: Do you agree that this would be approved automatically under the new zoning? If not, why not? I know that you’re not going to answer. I would very much appreciate an email response to my questions.

Crystal Passmore (14304 Forest Ridge) – I believe that it is important for our community, equity, and the environment that we reverse the restrictive zoning that was put into place decades ago. The zoning we currently have only serves to make Charlottesville more segregated, more expensive, and more exclusionary. I believe that these are the features of current homeowners calling in and want to preserve when they think that their neighborhoods are perfect, when they are afraid of more people, when they are afraid of duplexes. The things they like are the segregation and that their housing costs a lot of money. It is a simple matter of math. If we continue to add jobs in the community, we must also add the housing to support the workers. If we fail to do this, new workers will either bid up the price of housing in the city if

they are rich or if poor and middleclass, they will find housing farther and farther out in the suburbs. If they are forced to do that, they must have long commutes. They create traffic, pollution, and deforestation. If people are concerned about the tree canopy, the number of trees lost, when people build duplexes, apartments in the city pales in comparison if you have ever seen deforestation when people build single-family homes in areas where they are currently aren't any, which is what people will do if Charlottesville and Albemarle continue to push single-family housing as the model that they want to chase. I agree with the Housing Coalition letter. We need to allow more housing to be built in the city.

Jeff Levien (600 West Main) – I have listened to this today. A lot of this is very complex, very emotional, and it effects people to the core. I would like to focus on something that is more technical and doesn't come within reason of review of the zoning code. In every draft, there seems to be consistency on height limitation in feet. There is this limitation to that by stories. Common architecture principles, efficient residential development principles will tell you that you can get more stories in the feet that you have proposed. I am not talking about the lower density. I am talking about CX-5 or DX where you can go with the bonus to 12 stories or 170 feet. You can build 12 stories in 135 and 140 feet. I don't understand the loss of use of those extra feet. I don't know why we're not just approving in height. We can debate and argue over the right height. I don't know why there would be any limitation to what a story is. If there is some public policy about a residential story, I would strongly urge you to exclude that from the definition of a story non-residential use. It would be for parking, mechanical, non-residential. The market is going to dictate parking. Even if there is no parking restriction, developers are going to have to provide parking. If you allow parking to be excluded from the naming of a story, it will allow some above-grade parking to be built, which is more cost efficient than underground parking. Whatever we're going to do, we want to make it so there is common sense if we want to make those good principles.

Candace Zamperini (East Water) – This is my first meeting. I barely see anybody taking notes. I watched 3 of you fall asleep. I am so sorry that it is so boring to you. For those of us who live here, it is important. I have 2 simple things I would like for you to write down. The only new green trees I have seen downtown are on top of the Code Building. You're obviously not honoring your planning when you said that you would put more trees in our city. There aren't trees. You built the AA building near Three Notched. Where is the park for the kids to play in? There is no green space planning. With the Belmont Bridge, it is beautiful. It is the biggest graffiti eyesore in the city. How are you going to get rid of the graffiti? I have talked to the head of the police and construction workers. Supposedly, the plan is that when the bridge is done, they will get rid of the graffiti. What is going to prevent it from more graffiti? You have zero No Trespassing signs, poor lighting, no consequences for putting graffiti up. There is no planning there. I wish you would write down graffiti. How do we get rid of it? Will you put in some green space? I wish that when you agree to something like planting trees, you will plant them.

Mark Kavit (400 Altamont) – To those people on the opposite side of the fence, we agree on many points. We think the proposed plan will not achieve the stated goals of the city in recommended modifications. Concerning signs, signs have been put up on private property and replaced with different signs. Need to remind those individuals that are doing that, this is a misdemeanor crime and when they are removed off private property. We have placed cameras on some locations to catch anyone removing signs. The downtown area is being proposed as a high-density district. This district would run south of the Mall, north to High Street, including all buildings on High. What concerns me and others is that there has been talk by the PC in work sessions to increase height to 8 to 10 stories. This could result in putting existing buildings in jeopardy of being torn down and replaced. Just because this area is an ADC district,

it does not give them protection. We need to have some protection in there. I don't believe that the City Council and the city wants to see that happen. State law has a process for owners to replace buildings. Don't give a financial incentive to tear down 200-year-old buildings that have been well-maintained to be replaced with new structures. Be careful what you give by right. Maybe keep the current SUPs for very high buildings. If you want to preserve the area and character of the area, which I believe City Council wants to do, be careful. Phasing in the plan is also another suggestion that I would like to make.

Anna Askounis (Lewis Mountain) – My number one concern is infrastructure. As many of you have noticed with the increase in traffic in Charlottesville, I am very concerned that the roads that we have are not able to handle the traffic we currently have. The Virginia Department of Transportation has given Emmet, Ivy, and Alderman an F in terms of their ability to handle the current traffic. I am very concerned that we are out of compliance with state law, that we are out of compliance with the Virginia Department of Transportation regulations about having an infrastructure in place before you increase density. I don't see that happening. I don't see the Planning Commission being concerned about the roads, the traffic, the increase for the schools. All these things need to be in place before we increase density. I have lived in the city. When you have increased density, you have problems with noise, pollution, crime, and parking. If you think that people in the city of Charlottesville are going to give up their cars, you're living in a fantasy world. When the students go to see their parents, they take a car. They move their furniture in. They go to the grocery store. They take a car. I love to walk, ride a bike. It is not practical to do that for everything you need in Charlottesville. If we were following state law, Virginia Department of Transportation, that makes sense to me.

Jamel Bouie – I want to urge the Planning Commission to incorporate the recommendations of the Housing Coalition. This letter was signed by 30 organizations, including affordable housing groups, racial justice groups, student groups, and neighborhood associations. I want to urge the Planning Commission to maintain medium intensity zoning, modify the inclusionary zoning regulations to include improve financial feasibility, and achieve deeper affordability. I also urge the Planning Commission to provide the flexibility, rules, and standards to ensure that new housing can be built and to proceed with the original plan for sensitive areas. I want to speak about my own experience in Charlottesville as a renter and homeowner. I have lived here since 2017. By the time, my wife and I returned to Charlottesville that year, the housing crisis in the city was already out of control. We struggled to find an apartment at affordable rates. We now own a home. The reason we were able to own a home in this ruinously expensive housing market for many people is because I happen to have a lucrative job for my career. The Charlottesville housing crisis has touched people across the income spectrum, including gainfully employed young people, who hope to live in this city, hope to contribute to this city for decades, who are unable to afford housing and unable to contribute to the community that they love and cherish. I have heard a lot of concern in the conversation about what might happen, lots of reflexive claims of futility and perversity. If you make this change, you will make things worse. Let's look at what is happening: broad displacement, ruinously expensive prices, increased homelessness. You should not have to be a New York Times columnist to afford a home in Charlottesville, Virginia. That is not right.

Carmelita Wood – I am the current president of the Fifeville Neighborhood Association. This zoning rewrite will allow more housing to be made affordable and hopefully solve some of the housing needs in the city, giving all the people the opportunity to live and raise their families in neighborhoods they choose to live in. I believe that this rewrite will stop displacement in areas that are high for it. My family, along with other families, were displaced long ago. It is not fun. We lost a lot such as generational wealth,

generational motivation, social status, and put in schools where we weren't welcome. People need fair and affordable housing for their families to thrive and the future generations to increase that generational wealth, their social status, and to stop educational detention. Isn't this what we all want for our families and our kids? One reason the FNA signed on to the Housing Coalition letter was to speak volume to the rewrite. Stop displacement, stop fighting people with the back and forth about the rezoning, learn to share our spaces. People stay in their lanes. We can't take it with us when we go. We must leave it for someone. We voted councilors in. We have the Planning Commission. We hired them to do their jobs. Let them do it. If they don't get it right, it is on them. If they mess it up, have the faith that they were correct.

Matthew Gillikan (Fifeville) – I am the co-chair of Livable Cville and the parent of three children in Charlottesville City Schools. I want to express my appreciation for the hard work each of you have put into this process. Some of you have been at it for the past 6 or 7 years. The vision is becoming reality. Housing is a human right. Charlottesville is in an affordable housing crisis. We are also in a state of climate emergency that must be addressed locally. The current zoning code does not serve our community well when it comes to housing or when it comes to climate. It is creating harm, displacing black, brown, and low-income residents. It is resulting in a worsening homelessness issue in the area. It is a significant challenge for families with small children and community helpers like teachers, nurses, and social workers to find a place to live here. In 2017, when there was a lot of talk and a lot of action around taking statues down, a lot of people said: "Why are you focused on statues? Why don't you do something substantive and meaningful?" I think that we're doing both. We have taken down the statues. We're now addressing our affordable housing crisis. Each of you have an opportunity to play a role in that substance. We have taken down the symbols. Let's make some substantive changes. The Affordable Housing Plan calls for a ladder of housing opportunity. We need to allow a much wider range of housing types and increase funding for affordable housing to make that ladder possible. Every neighborhood should be open to some change but not drastic change. Rate of change analysis that has been done indicates that there will be gradual change in the low-density areas of the city. When people talk about how great their neighborhoods are, I hope they would do that with an attitude of wanting more people to experience that quality of life. The draft zoning code is a significant step forward from what we currently have. It does need some work. We need to allow for more housing in the medium-intensity areas and consider allowing a four-story as a bonus to include designated affordable homes. We can improve the inclusionary zoning ordinance through tax abatements and proceed with the original Comprehensive Plan for the ani-displacement zones.

James Van Franken (625 Ridge) – I am here to speak in favor of the zoning plan. I grew up in a city that roughly has the same area as Charlottesville but twice the population. When I moved here, I felt like an imposter any time I wasn't in a car. Walking here is horrible. Cycling here is horrible. Driving is expensive. We had to sell our car. The traffic is bad. It is possible to fix those things. We need more density. Density will give us more money and more demand for buses, better roads, less traffic, more cycling infrastructure. I want to thank you for eliminating parking mandates. I am excited about that. That is huge for the city. I love that commercial uses will now be allowed in residential areas. I encourage you to allow as many of those by right as possible, especially small-scale commercial enterprises. I think navigating and obtaining a special use permit could be prohibitive for new business owners. I encourage you to reduce or eliminate the standard setback requirements. They are a bit arbitrary. Nobody looks at beautiful cities in France and Italy and thinks that those buildings should be further from the street. I am excited that the new residential zoning will allow for more density, especially in those neighborhoods that have grown wealthy off the back of historic and ongoing segregation. I don't understand a lot of minutiae

of this zoning code. I feel so strongly in support of it because we're living with an old zoning code that was largely created to stop black people moving into white neighborhoods. It aims to prevent home ownership for the poor and segregate the city. Regardless of the intentions of everyone in this room, it is still preventing homeownership for the poor.

Kimber Hawkey – I have lived in Charlottesville for 20 years. This whole process needs to be put on a pause and reviewed in more depth before sending it to Council. There are illegal actions that need to be fixed. The city has failed to hold a competitive bidding process to begin. The city failed to submit a new transportation plan. The city has illegally upzoned parcels that violate legal proffers as per the map. This is not a thoughtful house by house, block by block analysis with house sized development that has repeatedly been promised by the city. There has been a proof of failure of commercial and residential neighborhoods. There have been 4 grocery stores in the Belmont area that have failed. The businesses that have established here are noisy, take up parking, and have driven out families who can no longer sleep or enjoy their homes. If housing is a human right, why are we taking away housing for unnecessary commercial and residential neighborhoods? Most importantly is the blatant propaganda about affordable housing. This plan does not and cannot guarantee affordable housing. I would like to insist that UVA house its own students. That will free up housing for middle-income and affordable housing for families. There are many unused and underutilized areas in Charlottesville that can be used for housing and infill. This has been proven by an NDS study that was done about 5 years ago as well as the research by Citizens for Responsible Planning, who showed that there are places that can be used for infill. I want to state that this idea of revenge zoning is bizarre. It is shameful that you are allowing classist and ages statements while claiming to be an equitable city. Those same statements could not be made about other things.

Josh Carp (1430 Forest Ridge) – Updating the zoning ordinance is part of the plan for the future of our community. As I think about the draft zoning code, I think about the kind of future that I want for my children and all the kids in the community. I first think about the kind of lessons that I want to teach to my children. I try to teach them to be welcoming and accepting of all kinds of people. Our current rules don't live up to the ideals. We limit most lands in the city to detached, single-family homes, which are the single most expensive kind of housing that exists. That means that we increasingly exclude all but the wealthiest families from living here. The proposed zoning ordinance isn't perfect. It is a lot better than the status quo. It would allow a broader mix of housing forms, including lower cost housing like townhouses and small apartments. It would allow more housing to be built in the city, which we know from research, will push down housing prices. These are the values that I want to pass down to my kids and all the kids in the community. Anybody who works, learns, or plays in our community should be welcome to live here. To accomplish that, we need to allow all kinds of housing for all kinds of people. When I think about the kids' future, the other thing I think about is climate change. The floods, wildfires, and the hurricanes of the last few months alone are a reminder that the climate is changing fast, and we don't do enough to stop it. One of the most impactful things that we can do on climate as a community is to allow more housing in the city. We have been adding jobs faster than we have been adding housing for a long time. More and more people, who work here, are driving farther and farther to get to work. The proposed zoning changes would allow more housing in the city. Each home that we add here means one less family commuting from Albemarle, Louisa, Greene, or farther. That means fewer cars on the road, less greenhouse emissions, and less traffic. Our current patterns of sprawl and car dependency are climate disasters. The current draft ordinance represents real progress in reversing this destructive pattern. I see

current proposal as making real progress towards the kind of community we all want to build for our children and for our future.

Zyahna Bryant – I am a Charlottesville resident. I want to start by asking that any recommendations made to Council holds space in advocating for increased affordable housing, while also looking ahead in a way that protects neighborhoods that are already under the threat of displacement due to systemic racism, rising costs and taxes, and other related housing costs. It is important that we understand that displacement can be slow and does not always happen abruptly. We know this from past experiences. We ask the Planning Commission and City Council to keep this at the forefront of their discourse throughout the process. I also believe that there is a need for deeply affordable housing. We believe that those in neighborhoods like 10th and Page deserve to have their voices heard and neighborhoods respected in the process, such as this zoning process, planning processes, and future development. The Dairy Market debacle has been a clear example of how developers make promises, and they don't always keep them. We need to recognize the anti-displacement zones and put protections into place that respond to the needs of those neighborhoods and prioritize deeply affordable housing. When we say deeply affordable, we mean less than 40 percent AMI or around 40 percent AMI. It is important that we are committed to equity. If we say that we are truly committed to equity, we would understand the need for both. Since we have been talking about the tree canopy, 10th and Page has a horrible tree canopy. We see that as being a consistent trend across low-income and black neighborhoods. It is important that we think about that. We think about the fact that these neighborhoods have historically not had ecological effects weighed in when thinking about the development in those neighborhoods. If we're going to talk about it being important on Park Street, in Woolen Mills, we need to have those same conversations in neighborhoods like Fifeville, 10th & Page, Cherry, and Rose Hill. Those neighborhoods deserve the same amount of consideration.

Dorian Brown (104 Eric Place) – I want to agree with the people who have spoken in favor of the tree canopy. It seems like against the commitment of the city to reduce the heat quotient that we produce or small contribution that we make to global climate change and pay attention to the plant life in the city and make sure that is protected. It looks like a small area in the city can be occupied by just buildings and concrete. We need to counteract that by bringing in plant life. I am concerned that homeowners opening their properties to development can be 'scalped' by developers. Developers can come in and offer ridiculous prices for their property and take over the property. It seems like that the plan allows for division of an acre of property into 4 parcels. My quarter acre property could be divided into 4 16th of an acre sizes. They could develop on that as they wish. I could be misunderstanding the plan. I want to make sure that you know that I am concerned about developers being able to make a 'heyday' of this and make a huge profit at the cost of affordability. I would like to suggest that lowering taxes is one of the things that can help in the process of lowering the cost of living.

Don Dunham – I want to thank all of you for the amazing amount of time that you have put into this. I would like for you to think hard. You're developing your legacy for the work that you are doing. Twenty years from now, you're going to see the results of this. I strongly encourage you to listen to what you have heard here. We will judge you by the number of changes that you make to this plan. You have heard a lot of them. I have been to many of the processes along the way. I don't feel like anybody is listening to the neighborhood. When you vote 5-0 to everything, I don't think that is listening. I just finished today an 18-month process of building an affordable housing unit in Woolen Mills. That was hard. That is with free land and not any additional taxes. When I challenge my taxes this year, I was told by the assessor that as soon as this is passed, they are going to raise the value of your land to what it could be by what you

could build, not what you're going to build. I was told that by the assessor's office. If you could build 12 units, you're going to be taxed for 12 units. That is not right. I believe that the code of Virginia requires a transportation plan. We need it. What I would encourage you to do, is to scale this back to 2 things: affordable housing because it is a huge problem. Let's work on that diligently. The second thing is a transportation plan. If you can solve those, you have the right to do all this other stuff.

Sadie Van Vranken (Ridge Street) – I am a middle-school history teacher. I support myself and my husband on a teaching salary. We spend 48 percent of our post-tax income on our rent. It is a basement, 1-bedroom apartment. We're very grateful to live near downtown. Since we don't own a car, it is important for us to live within walking distance of downtown. We sacrificed half of our income to do this. I know so many people in this city are unable, despite spending 40 to 50 percent of their income on rent, to find housing that meets their needs. People are being forced to make ridiculous compromises to find housing, living far from town, living with other families, living in decrepit buildings. Increasing density across all neighborhoods in Charlottesville is a vital priority, which is why I support the draft zoning code. Upzoning single-family homes to 3-unit lots will be a step in the right direction. Some of these will initially be luxury but so was Ridge Street when it was first built. Let's be in it for the long haul. I urge you to recommend the draft zoning ordinance to Council. Everyone in our community should have access to housing that meets their needs and finances. I appreciate your expertise and hard work on all of this.

Planning Commission was recessed for 5 minutes.

Genevieve Keller – President of Preservation Piedmont. Thank you already for addressing some of our concerns, especially those affecting our commercial urban core. We presented our remaining concerns in a letter on 9/11/23 and a detailed letter in August. We ask that you 6 men address those in your amendments tonight. We remain concerned about the number of historic streets delineated as RB. Section 4.2.1, existing structure preservation bonus, which defines the preservation of an existing structure as maintaining 25 feet behind the façade, needs elaboration for historic properties. That definition should be qualified that any proposed demolition or partial demolition of a designated property, including those subject to the 25 percent rule be subject to BAR review and approval. We believe that the RC properties should include a bonus provision for preserving the original structure. This bonus is especially warranted in areas with existing affordable dwellings. Some streets and neighborhoods, where houses could be lost unnecessarily are the Ridge Street area, Rugby Avenue, Rose Hill Drive, Avon Street, Elliott Avenue, and Cherry Avenue. All are listed or eligible in part for the National Register of Historic Places. Many properties in areas designated as RC are quite large, enabling preservation of the existing house, while still allowing additional units, such as properties on Rugby Road, Rugby Road Extended, and Oaklawn on Cherry Avenue. If a lot is too small to accommodate the original structure plus additional units, we ask why it is RC. Please take another look at the RC districts and determine if that is really an appropriate designation for our most iconic streets. Preservation Piedmont remains concerned about the role of this code in future teardowns, on affordability, and displacement. We support the Tree Commission and RELEAF in retaining front setbacks that can support shade trees.

Robin Hoffman (524 Caroline) – The back of my house is going to be a parking lot. We have all our sewer pipes back there. Most people here aren't for pipes. They wanted to replace them and they're sitting there. We don't know where the pipes are going to go. It is like a waste of money. We must live with poor sewage drainage. We have no surveys in the Woolen Mills area because they built a lot of these houses without permits for the workers. I don't know who is going to pay for all that. I am thinking that it is

going to be the city and the taxpayers. With the rain bombs, we have been petitioning for all sorts of things. We are losing our trust in the neighborhood structure. If we write a petition for something, a blind person needs an ADA crossing. The last 10 years that I have lived in this house, we have been doing it as protocol. We have not been seen. I want to say to those people who have been speaking out, it is true every time that I participated in any of the planning meetings. It is as though we say nothing. They get somebody from Richmond to do the things. People are working every day. They need to be able to get to where they're going. They will tell you what they need. If they write a petition and they have an association, that is how you should move forward about your zoning.

Aileen Bartels (710 Stonehenge) – I am in favor of the new zoning. Nobody should have to live with housing insecurity. Anyone, who needs to live in Charlottesville, should be able to find a safe and affordable home. The current zoning rules are bad and unfair, particularly to black residents. City leadership has an obligation to change them. The proposed zoning is not perfect. It is much better to approve the plan that you have now and refine it in the future than to do nothing. It is common sense that a densely built community will be more energy efficient and burn fewer fossil fuels. Not building more housing in the city forces ever larger numbers of people to live far out of town and use more gasoline. When my daughter, who was a teacher moved here, the only housing she could afford was in Scottsville, which meant an hour of driving every day. There is no environmental benefit to suburban sprawl. Tree cover is important. Preserving trees in the city means more trees cut down in outlying areas. Mixing commercial and residential development would improve quality of life throughout the city. It is a neighborhood amenity to be able to safely walk or cycle to buy groceries, get a haircut, or a cup of coffee. I am happy to see that lots on Avon Street, directly adjacent to my house, are designated CX-3, Mixed Use Corridor in the new plan. This has potential to improve my life and that of my neighbors. I used to believe that only affordable housing should be built in the city. I now realize that if this was case, people with more wealth would simply out compete people with less and all the housing would continue to go to rich people. What we need is more units of all kinds, affordable and market rate, which means we need multifamily buildings and allowance for greater height for buildings, making it easier for more people from many backgrounds to find housing in Charlottesville.

Kip White (1012 Locust) – I am concerned that the new residential zoning district, RC, has inadequate setback requirements of 10-foot minimum from primary street lines and omits a key reference to preserving the existing range of adjacent structures. The RA and RB districts observe the existing range. I strongly recommend that the Planning Commission adopt the same consistent standard for RC districts, which will be located along the same streetscapes. The existing range of building setbacks on a residential street will be important to uphold for key safety reasons, including pedestrian, bike, and traffic visibility at intersections and along winding residential streets. I urge you to consider using existing range as the setback standard for all 3 new districts RA, RB, and RC. The visibility and safety issue will only be compounded by the increase in on-street parking and construction activity resulting from the new density. Many RC districts are located on residential neighborhood corners where current dwellings are set back by more than 10 feet, providing safe sight lines and visibility. By reducing the setback requirements for dwellings in these RC districts, particularly on street corners, the city will impair visibility and lead to more dangerous traffic conditions.

Martha Smythe (Rutledge Avenue) – It is a racially diverse street from the 1950s and 1960s. I am in favor of affordable housing. I would love to know more about the ways that it would be paid for. That is the crux of the matter. I am suggesting some changes to the new zoning (draft zoning ordinance) and that

the city make these changes before implementing the law. The select areas should be reconsidered. They represent the sincere intention to do right by the people, who live in them. If this is not legally prudent, at least prohibit tall buildings that would barricade these and other less affluent neighborhoods. A five-story building may as well be 10 if you're across a residential street from it. Phase the rollout of the DZO. Dial it back. Strategically select one area to implement the new zoning. The first area is a test. Thoroughly assess the results, make adjustments to the zoning and plans as indicated by the outcome, and select subsequent areas for zoning changes based on what was learned. Develop and communicate the guidelines for what commercial ventures will be permitted in residential and mixed-residential neighborhoods. Even better, permit those that are in the current code only. Keep it simple and make it manageable. I would like to see us improve the communications about ongoing zoning and plan changes. The Charlottesville Plans Together website badly needs a redo. It is cumbersome and difficult to use. Evolving information is not transparent if it is even there. Please avoid using the term 'redline' when identifying changes to the future zoning revisions. Let's make it a blueline next time.

Cameron Lynch (1869 Tinkers Cove) – I am speaking in favor of the plan. I am a resident in the county. I would have loved to have lived in the city when we bought our house. There is no inventory. The stuff that was available was rough. We would love to see more housing built whether that is high density, single-family homes. It doesn't matter to me. It seems to come down to supply and demand.

Katie Ebinger – I work at a local nonprofit, The Community Climate Collaborative is in favor of inclusionary zoning towards climate social justice. I want to speak on behalf of my own experience as someone, who has a front row seat to what it is like to rent a multi-family house in a largely single-family neighborhood. I live in North Downtown. It really does provide the opportunity for a wide range of people of different incomes to live in a historically exclusionary neighborhood. I live in a split-level duplex. From the street, you wouldn't even know it is a multi-family house. On the weekend, you might find my housemate and I weeding in our garden. We don't just rent here. We do live here. We're a household that includes a teacher, a climate advocate, librarian, and people who could not normally afford to live in a neighborhood like this. When you open up exclusionary neighborhoods like North Downtown and allow multi-family homes to exist here, we can bring more people of various income levels into exclusionary neighborhoods. I am in support of inclusionary zoning and say that the draft zoning code, as presented, is a great step in the right direction.

Peter Debere (1040 Locust) – I support your attempts to make Charlottesville more inclusive. The plan, which you call an inclusionary zoning proposal, has not much to do with affordable housing, especially in residential areas. Affordable housing is only required for structures with more than 10 units, which is a lot and does not affect residential (RA, RB, and RC). Developers can also buy out low-income people. Increased density does not mean increased affordability. I am an economist. I am amazed by the extent to which the plan caters to the interests of developers and not to those of the community. I worry about how financial incentives will drive decisions, especially for RC. You offer a financial bonanza for those who sell a parcel that is open for a developer irrespective of what the community wishes. They increase density created by RA and RB will already create a large challenge. Neighborhoods may be willing to engage it with incentives for inclusive affordable housing. Take away the RC in my neighborhood. We want to bring more people to Charlottesville. I see no mobility plan. I see no attempt to increase biking and walking. I see no plan as to how our schools and our stressed infrastructure will deal with this inflow. Make adjustments. We can do better than this.

Jason Espie (145 Baylor) – I want to thank the Planning Commission and the staff for all the hard work that you have done to get us here. I affirm the strong support of the proposed zoning ordinance. I love the city and our home. We are not expanding our borders. Our options are upwards and infill. While maintaining tree canopy, green space, environmental care, I know that it is going to be a tough balance to accomplish all that. To the extent that we can, we can do our best. The framework for these changes will guide Charlottesville to a more equitable, inclusive, affordable, and livable place for all. It will respond locally at the largely existential crisis of climate change. It strives to address the historical racism that is embedded in the code. I have read the changes. I see the good, progressive ideas in there and I support them. I trust the implementation of these will be necessary to be thoughtful and done correctly. We will be among many communities across the Commonwealth and elsewhere who are doing similar reforms to address legacies of racist underpinnings that segregated a united people. Housing is a human right. We need reforms like this to make housing more affordable for everyone and to decrease the displacement of black residents. I want my daughter to be able to afford to live here and not just in my basement. I still want her to be able to live here in Charlottesville. We're more diverse, inclusive. We're not just an inclusive enclave of wealthy people. Change happens. Let's embrace it.

Charlie Hanley (500 Court Square) – I am grateful for immense amount of work that has gone into this process. I strongly support the proposed ordinance, the increased density, the elimination of parking minimums, and the limited commercial uses permitted in residential zones. I urge you to stay the course on those. Let's legalize housing for people and steer our future toward housing abundance. I have one minor suggestion to put forward. I believe the ground floor transparency requirements in residential zones of 30 percent by area might be excessive. 30 percent in my area is quite a lot of glazing. That makes a lot of sense in commercial buildings or large buildings but less sense for small residential buildings. My concern is for energy efficiency. In our climate, we want windows mostly on the south side. Windows on the west side can overheat. Windows on the north side bleed energy. You can overcome that with expensive windows. That is going to add to costs. If the primary street for a building happens to be west, a building requiring a whole bunch of glazing area is going to cause an energy penalty or increase costs for the project. I recommend that you consider reducing the 30 percent requirement in residential zones, especially RA or maybe for smaller buildings for more flexibility for energy efficient buildings.

Elizabeth Sloan (2024 Minor) – Thank you Planning Commission for your work on preparing the new zoning ordinance. I appreciate your commitment to improving our city and I support the desire to increase density in eliminating the single-family use group. This is important work. What is the rush? Let's get it right. My major concern is that the letter that was sent to property owners in August from Neighborhood Development Services was not clear. I think that most people do not understand zoning and how it works. I don't think they understood the letter or knew what Chapter 34 referred to. In an ideal world, the city would contact each property owner and let them know how this new zoning ordinance would change the use of their property. The actual zoning document is obtuse and confusing. I am an architect. Even I find it very difficult to sort through it. It is over 400 pages long. I wanted to print it out. I uploaded and sent it out to various printing places. It would have cost me almost $300 to print the document out in color as it has been written. I think more printed copies should be available at an affordable cost and affordable to purchase provided by the city. There are a couple of documents at the local libraries. There needs to be more. I would like to say use group adjacencies are too vast. I suggest that RA should not abut CX uses. I am concerned about the loss and reduction of rear yard setbacks.

John Hossack (Locust Grove) – I agree with previous comments about the problems with the draft ordinance. I wish to focus on the bait and switch aspect. Many promises were made in the original document. Many of the ones critical to resident livability and affordable housing were quietly dropped. From the beginning, the city has sold this plan and a promise of affordable housing. According to multiple statements, especially in recent work sessions, the plans will produce only a handful of affordable housing units. Dimensional criteria for current neighborhoods have been ignored. Suggested development adjacent to residential properties are not as initially promised to be house-sized. This especially applies in RB and RC. It has been said that RB and RC density is being dropped and made less dense. That neglects the fact that the lots can be cut down to 2500 square feet from the original of 6000. Demolition is largely by right. Only a worthless bonus is offered in RB if you retain the original structure. Has anybody found a house that can be divided into the original structure? A FLUM was passed as I watched all 5 councilors used words to that effect. Only the most modest of changes were functionally made to the FLUM. The reason given was that we wanted to respect a transparent process, which was neither transparent nor a process. What few changes that were made were not communicated or explained to citizens but occurred via silent text changes. The Affordable Housing Plan stated that critical to success were 3 principles: Equity, regional collaboration, and comprehensive approach. Upon examination, none of these 3 goals were made. The reasons I have explained before Council, thus the underlying plan tells us that this ordinance cannot succeed. Extensive analysis by CFRP has shown that the ordinance is flawed in both premise and execution.

Peter Gray – The primary goal of this rezoning is to create affordable housing. This is a goal that my wife, myself, many of my neighbors, and many of the people in the room accept as important and necessary. Charlottesville needs more affordable housing. The city's own staff has gone on public record to say that this will result in little if any affordable housing. The consultant report commissioned this summer by the city confirms that the per square foot development costs will be so high that there is no way any units built will be affordable. Developers make money by maximizing the revenue that they can obtain for a piece of land. What this means is that developers will build expensive housing to maximize their return on adjustment. It is a fundamental mistake to believe that developers will, out of the goodness of their hearts, leave money on the table and choose to build affordable housing. Charlottesville does not need more high-end development in the city. That is exactly what this new zoning will encourage. Please place restrictions on the zoning code to discourage high-end luxury housing and encourage more affordable housing. I would also like to ask you to ensure that the proposed zoning isn't exploited by developers to build more luxury student housing. It is easy to see how all the provisions of the draft zoning could be used to build a lot of high-end housing for students. This isn't the goal of the new zoning code. Please implement restrictions in the new zoning code to limit its exploitation this way. Make sure that supportable affordable units cannot go to full-time students. Please make per bedroom lease rentals a separate category from normal rentals and place strong limits on the ability of developers to use up land that could be used for affordable housing in this way. Without restrictions, this new zoning will only lead to more displacement of low-income residents. I don't think the Planning Commission or City Council wants this to be their legacy. Please take action to make sure it isn't.

Rob Warner (712 Highland) – I have looked at the plan. This is the perfect plan for 2043, not 2023. This plan involves all of us learning how to ride the electric scooters or walk and to give up our cars. I am not in favor of that. I do have a plan for you. You can take this plan, put it in a box, mark the box 'do not open until 2043.' We will be right on schedule. Today, you are adding unwanted pressure and grief for those of us and the wonderful people who live in these neighborhoods. The fact that this plan has no

affordable housing in it; I don't know what to tell you. Today's contractors love your plan. The previous commenter had a perfect explanation. You work for the people of Charlottesville, not for the contractors. I want to thank Ms. Creasy for keeping all of us behaving the whole time that this has been going on.

Adam Smith (2313 Tarleton) – I am a teacher at Burley Middle School. I have a lot of students that could use more affordable housing. I am in favor of that affordable housing. Both sides have been very respectful. I love that about this community. We can express different opinions and still get along. My issues with it are that we're increasing density with unaddressed existing problems. In the 10 years I have lived on Tarleton, the main line on our street has been repaired 4 or 5 times. Many people have expressed that continues to be an issue with many communities. Greenbrier Elementary School is not overcrowded. They don't have a cafeteria. There is no room to expand for that. The bathrooms are atrocious. I don't think that they have been renovated in 50 years. We have problems that aren't being addressed. We're going to increase the density and put more people in there and not deal with those underlying issues. Nobody here has been in favor of commercial expansion. Across the street from us, there are empty storefronts. Albemarle Square Mall and Fashion Square Mall sit empty. There is no demand for this. There is no demand for more commercial. I don't see why we're moving for that. Commercial development really isn't something that we need. I think that affordable housing is wise.

John Dudley (1615 Meadowbrook Heights) – I want to echo the many good statements that were made, especially those involving lack of infrastructure to support increased density. We're all for affordable housing. The plan is apparently not going to provide that. I just found out that something mandated by the traffic was not done. Here is what I think will happen. If multi-family dwellings are built, where residential is currently, there will be some kind of subsidy given to the developer. The streets will be widened. Provide on-street parking. That will take half of my front yard. There will be all these things done by the city at taxpayers' expense, steps taken with developers. The present property owners will be paying for this. It will reduce our own property value. I object to that. There is no way all this increased density will have parking. What is wrong with expansion into the county? Everyone acts like it is a million miles away. There are lot of units being built out there. We could have electric buses bring people in. It is a 10-minute ride on a bus.

Mary Whittle – As you consider this final draft of the zoning ordinance, I urge you to consider the state's chief intended purpose of zoning ordinances. This is to improve the health, safety, convenience, and welcome citizens and plan for the future of development of communities to the end that transportation systems be carefully planned. I have been extremely concerned that this central purpose of zoning that transportation systems be carefully planned has been entirely ignored throughout the entire Cville Plans Together process. At no point, were any zoning supported plans made. No transportation, consulting, or engineering firms were engaged. No transportation analyzes were ever undertaken despite state law that explicitly requires such planning and analysis to occur. In requesting proposals for the Comprehensive Plan, the city categorized its transportation plan as complete. That is before the planning and zoning began. An additional primary purpose of zoning has enumerated in state law is "to reduce or prevent congestion in the public streets." I was shocked when earlier this week, a Charlottesville transportation planning official informed me and a group of concerned residents that part of the "philosophy of the zoning ordinance was to make the streets so congested that people would be forced to walk." This official also said that the city planned to make no upgrades to its roadway system and that he envisioned cars, bikes, walkers, scooters, and buses all sharing the roadway and moving along at 12 to 15 miles an hour.

Your lack of a transportation plan defies common sense and law. I am not opposed to upzoning. It must be done thoughtfully by professional planners and in compliance with the law.

Lakeshia Washington (Huntley Avenue) – I want to thank you all for all the work you have put so far into this draft. I support the recommendations that were sent into the Commissioners by the HAC and the letter that the Housing Coalition put together. I work for a nonprofit, Habitat for Humanity. I have the pleasure of working with families who are working towards becoming homeowners one day. Outside of my work, I spend a lot of time helping one of my coworkers look for other options for people who call in because they are facing hardship and they can't live in the current place that they currently have. Although I have heard people say slow down, there is not a sense of urgency. It is for families who are working several jobs. It is for families who are struggling to make ends meet. It is for families who have their rent increase every year and they don't know how they are going to make it. It is for families who don't have transportation and must ride the bus and leave home 2 hours prior because the bus system takes an hour to get around town. It is a sense of urgency for these families. I know that there are things that we could be addressing, keep in mind that this is a living document. This is the right step and the right path to doing the work. I get those 20 calls weekly where people are trying to find affordable housing that we're trying to navigate for them.

Victoria Horrock – I am an attorney for the Legal Aid Justice Center. We are here as a poverty law firm that represents low-income tenants throughout the city and the county, an organizational resident of the 10th and Page neighborhood, and a founding member of the Charlottesville Low-Income Housing Coalition. We want to lift the comments of some of the people from the 10th and Page neighborhood and other historically black neighborhoods in the city. We think it is important that those peoples' voices are heard in this process. The other thing that we wanted to press upon the Commission is that this ordinance needs to go further in 2 respects. One is to increase affordable housing opportunities throughout the city. The other is to protect historically black neighborhoods. The Charlottesville Low-Income Housing Coalition has laid out several recommendations. We support those. The first is to prevent further displacement in historically black neighborhoods by providing anti-displacement zoning overlay. The other one is to adopt neighborhood friendly transition zones between sensitive areas and commercial corridors. It is especially important in areas like the 10th and Page neighborhood that have been put next to a commercial corridor because of historic systematic racism in the planning. The other thing that should happen is to allow more density in historically exclusionary neighborhoods by reinstating the 4-story height limit and height bonuses and continuing to link density bonuses to affordability. The other one is to expand affordability, which includes providing tax abatements and keeping the new voucher provisions of the draft ordinance intact to address the greatest housing need. We need deeply affordable housing in this area.

Kate Frayle (1716 Yorktown) – Thank you for your work. I support the recommendations made by the Charlottesville Low-Income Housing Coalition. I will focus on allowing more density in historically exclusionary neighborhoods. My neighborhood is and was developed as an exclusionary neighborhood. If we, the primarily white people of Greenbrier fight more diversity in Greenbrier, we will worsen the exclusion because the homes will be even more expensive. That will be intentional on our part. If the city does not increase density in Greenbrier, the city will be party to worsening Charlottesville's segregation by wealth and race. That will be intentional. This is a moral issue. We cannot use our privilege and power to extend segregation as those before us have always done. We cannot use our privilege and power to

prevent people who want to live in our neighborhood from doing so. I support more affordable housing in Greenbrier. I look forward to meeting new neighbors.

Grey Webbert (1215 Wertland) – I want to begin by saying thank you for drafting this new zoning code. It is markedly better than what we currently have. There is more that can be done. Affordable housing in the city is truly a crisis and many residents must move to Albemarle to afford to live. As a student that wasn't an option. The parking near UVA isn't affordable and isn't an option. I must live near it. Developers and landlords take advantage of this and charge egregious rent. Some of my friends who live with 4 or more roommates pay $850 per month per person. They live more than a 20-minute walk from UVA. Others who choose to live closer are paying $1000 per person or more every month. This is not including utilities. That is with 3 other roommates. We all know that UVA students have caused a lot of the rent increases in areas near UVA. New developments are being proposed because of the growth of UVA to accommodate more students. We are aware of this. We aren't happy about it either, I am speaking for other students that can't afford the egregious rent in this area and who don't rely on financial assistance from our families to go to UVA. We want to make sure that UVA's effects don't displace more low-income residents because of these developments. Low-income students want more affordable housing and want to be prioritized for future low-income students, who must stay here to finish their studies and can't afford to live in UVA's expensive, on-grounds housing. There are multiple recommendations that have already been made and submitted in a Housing Coalition letter that Livable Cville drafted that has the support of many organizations within the city and fellow student organizations. I believe that housing is a human right. Affordable housing must be our priority for any urban development. Those who are most marginalized are always pushed out first when rents increase because of gentrification. I am speaking on behalf of more than 250 students who support implementing all the recommendations within the Housing Coalition letter. Please implement more dense and more affordable housing requirements in this new plan.

Vern Buchanan (2135 Tarleton) – I appreciate your work. I appreciate you keeping this civil. I have a problem with unintended circumstances. I am not so sure that we are going to get what you think you're trying to get. That bothers me. I like the idea of a test area that was put out by one of the speakers. Our infrastructure is a serious problem. I don't think that we have addressed that very well. Transportation is an issue. I am in favor of affordable housing. It is a grand idea. I don't see that this plan is going to do that. That bothers me very much. That's the crux of what this was all about. I don't think by right is going to be very effective in getting this done.

Sam Gulland (123 Goodman) – It was important for me to speak tonight in favor of the zoning ordinance. At a high level, this will increase property rights in a commonsense way. I think you should be able to build a duplex on your land. You should be able to operate a small business on your land. I am excited about the potential for higher density in certain parts of the city. This whole process was done in a very thorough manner with very thorough public input. I have seen other counties and localities in Virginia do comprehensive plan rewrites, zoning rewrites. This is the most thorough public engagement that I have seen. I did send a few comments. I broadly support this revision. I sent a few comments to staff and to the Planning Commission and Council. I hope that you will consider them. I think the section on rules for zoning districts included a lot of new rules. There were guidelines for porch width, rules about building transparency. If these are addressing problems that the city has seen, that is Ok. If these are new rules to follow for the sake of rules, they could maybe be dropped. The city should consider allowing outdoor recreation uses on RA land. There are some big RA lots where those types of business could

operate. I hope that you will investigate that. I do support the decision not to include sensitive communities. It struck me as odd that we are creating this new district that would have a lot of great benefits to people who live there and people who might in the future. Some neighborhoods would not get that. It seemed like a main purpose of that concept was to have a zoning ordinance that would discriminate racially. No matter how well-meaning the intentions are, I don't think that the city should do that. This is a good ordinance.

Ben Heller (Blue Ridge Road) – Dramatic policy initiative should be supported by extensive data with deep careful analysis. That is simply not the case with the Comprehensive Plan or the draft zoning ordinance that comes out of it. There is almost zero comparative work to place Charlottesville in the national context, no quality analysis of the impact of student housing. I don't blame anybody sitting there. I think you were done hard by a consultant who did a poor job. That happens when you have only one that responds to an RFP. Dramatic change without the supporting analysis might still be justified in an acute crisis. Data shows that Charlottesville's housing market is less distorted than most. It is simply tracking with a lag that changes the national housing market, which are the products of pandemic shifts, supply change issues, transitory disruption, housing production, and swings in interest rates. In the absence of that kind of crisis and without requisite fundamental analysis, the right approach is to consider taking an incremental approach and applying the changes least likely to have unattended consequences. The zoning ordinance is clear, easy to read. It has a simpler use table forcing NDS to quickly respond. That is great. Allowing duplexes and triplexes everywhere and liberalizing the ADU rules are low risk and very good. With some of the more dramatic changes, please try in smaller areas and see how it goes. Start in areas that are already gentrified so you reduce that gentrification risk.

Felix Worhen (Lambeth Field) – I would like to thank you for the development of this proposal. I would like to express my support for it. It amounts to a step in the right direction. I am a university student. I have been through the process of looking for rental housing in Charlottesville. It is a nightmare. I am not expecting it to be fun. There is a creeping dread. The creeping dread is the inevitably unpayable housing costs. I am not even living here permanently. I believe a city should be a place where people can live. That means a range of housing options, so we don't displace anyone. That means medium intensity zoning. That means multi-story housing and dense housing. We need housing that students can afford but should not come at the expense of vulnerable Charlottesville residents, especially those in historically marginalized black and brown neighborhoods. This means that we must protect anti-displacement zones. To those saying, 'what is the rush,' the stakes are high. If Charlottesville does not embrace this kind of accessibility and this kind of population density, the consequence is human. People will be evicted from their homes, forced onto the street. I maintain that we ought to adopt the recommendations outlined in the Housing Coalition letter. This is how we make Charlottesville livable.

Randy Solzem (324 11th Street) – I used to be a transportation writer. There has been quite a bit of discussion about that. Look into a project out of Australia called Travel Smart. They have successfully decreased vehicle miles traveled by 10 to 15 percent every place that they have used it. It is a huge saver of everything. I am here for one purpose. In one area, the process has gone backwards. That is in removing Airbnbs from owner-occupied housing. My wife and I own 6 properties in town. Our average cost per bedroom that we rent it for is between $350 and $400. That is now affordable. If we lost the ability to Airbnb our own house, which we owe a lot. My wife travels a lot, and I often go with her. We will lose the money that we have set aside to keep prices low in Charlottesville. It is our retirement money. We Airbnb our house for university functions when we're out of town. We make more money

there than we do out of most of our rentals. One of our bedrooms is Section 8. In our 5-bedroom house, we have a refugee family from the Congo where there is 6 children and one single mother. We would have to go up on our prices if we can't Airbnb our house. It is the thing that makes us money while we're waiting for our retirement. Please consider that one small piece.

Melvin Grady (238 Harmans Mill) – My son's birthday is today. He passed away. I am going to speak on his behalf. I am from Charlottesville. I was born in 1968 and raised here. I went to UVA and got my Math Degree at UVA. I came back to teach in Charlottesville City Schools. I have been teaching for 25 years. I am a Charlottesville resident. With NIMBY, I live in my house where I am right now. I started a petition to ask City Council not to allow the hotel on Cherry and Ridge Street. The developer said that they could bring jobs to that place. I don't see major jobs there. It is there right in my backyard. Behind my house, there were 3 acres of wooded area. The owner bought it, knocked it down, and put up 25 homes back there for $500,000. My property taxes went up. They are mainly white. That's Ok. It is Ok to have people come and live around you. It is Ok. Please make affordable housing real and not just talk.

Ted Pearson wife (Oxford Road) – What is the rush? Is it for the developers so that what they are pushing and proposing can be passed legitimately? Is the money that needed? I am frustrated. This would possibly be very tolerable if it was focusing more on affordable housing. If places like the Preston Avenue area, which now wants to be more like Dairy Market and its housing, it should be stores on the first floor and affordable housing above. No builders want to have that restriction. Everything else that is needed is within walking distance there, a drugstore, grocery store, hardware store, laundromat cleaners, restaurants, veterinarian. They are already there. There is a great bus system. They could be upgraded if needed. They are all available. If you do something like having parking on the first floor when you expand Preston Avenue, have parking on the first floor or parking behind the first floor. If the parking can't be used, they could rent it. We need more shops and stores that are walkable for people. We need more affordable housing, which could go onto West Street.

Rosaline (Rugby Hills) – I am concerned that this plan does not promote affordable housing the way it claims. If developments only need 10 percent affordable housing, that is temporary and not permanent. As soon as that temporary time rolls up, those units will go to the market. Ten percent is not enough even if those units permanently stay as affordable housing. The fact that my lot can now hold 3 houses and I am going to get taxed for 3 houses before those 3 houses are built, you just ran me out of the neighborhood. I am part of that mix of people. That is problematic. There is nothing in this plan that addresses infrastructure. It allows for a lot of unnecessary parking. If they build 12-unit apartment building on Rugby Avenue, there is going to be 12 cars or probably closer to 24 cars. It is fictional that people will walk and bike to a grocery store. People don't walk to buy their groceries. They drive their car and fill up their car with heavy things. It is not realistic. You're going to create congestion on the streets because you haven't addressed infrastructure for parking. When you remove residential zoning, and make it commercial, you have destroyed residential housing permanently. How is putting commercial in a residential neighborhood helpful for affordable housing? Rose Hill has dilapidated stores and empty storefronts. It is not pleasant to walk on. If it is empty, it is not safe.

Mo Van De Sompel (608 Cabell) – We have heard a lot disproportionally from homeowners tonight. I am glad to have seen more renters as the meeting has progressed. The tenants are most Charlottesville's residents, more than 60 percent. We are nurses, students, servers, and bus drivers. We are struggling to make rent. Most of us couldn't make it here tonight. We're too busy working. Charlottesville's tenants are

being choked by a lack of adequate supply. Many of the University students, who are part of the community, are eligible for food stamps because rent eats up most of their income. Average rent for all tenants jumped by 20 percent last year alone. This is the kind of thing that landlords can only get away with because they know their tenants have nowhere else to move. We must build more apartments yesterday. We have heard a lot tonight from homeowners that like the idea of affordable housing. They are concerned about these 'luxury apartments.' I am an economics graduate student. There is no such thing. When you increase supply, you decrease price. All new housing makes affordable housing by alleviating pressure. More supply anywhere pulls down rent everywhere. I want this up-zoning passed so that we don't get an epidemic of homelessness among the University student population. If you think the undergrads are annoying now, just wait until they are living in tents and parks like they do in Berkley, CA, another college town that refused to up-zone. The only critique that I have of this plan is that it doesn't go further. It is a massive improvement over what we currently have. We don't have time for another 3 years of rewriting the specifics. Tenants are struggling right now. A vote against this plan inherently puts the aesthetic preferences of Charlottesville's wealthiest over the desperate pleas for relief from its poorest. If you care about inequality, believe housing is a human right, want to cut down homelessness, recommend this plan.

Jay Oschrin (1217 Meriwhether) – I have spent my career building facilities and landscape architecture. I want to highlight 3 things. The current draft allows 3-story builds in RA if you build a triplex. If you want to build a duplex, you are limited to 2.5 stories. A half-story generally involves dormers and reduced square footage. It will naturally increase cost, which helps defeat our desire to build affordably. This height restriction for duplexes is inexplicable and should be changed to 3 stories as it is with triplexes. The current draft includes a 40-foot width restriction on RA lots that are 60 feet or less. Currently, the BZA does not have a width restriction on construction because side setbacks do that. This additional restriction is inexplicable and unnecessary. Please remove it. There is a concern over the loss of tree canopy. The current draft specifies that the removal of a tree 8 inches or greater in diameter will require a permit. There are two ways to combat the loss of tree canopy: plant trees and don't cut them down. The city has unfortunately chosen the latter approach. This is a bad idea because it will be an administrative burden. It will increase the cost of construction. It will result in the preservation of trees of low value only for the sake of preserving them. It will give Council too much discretion in determining what housing can be built and where. Develop a program of street tree planting instead of wasting time and money being tree police. I would like to remind everyone the NIMBYs in the room and at home that in the recent City Council election, the candidate that received the most votes ran on a platform of increased density and more housing. This candidate received nearly 3 times more than the candidate that was against upzoning. The people of Charlottesville have already spoken. Let's not waste time relitigating this. Let's stop putting up arbitrary and unnecessary roadblocks. Let's let the designers design and the builders build. Let's keep in mind that developers build houses. Developers built Greenbrier.

Stephanie Dowell (1302 Chesapeake) – I don't support this. This does not accomplish what you set out to do for affordable housing. This is mostly about density. If we are concerned about the gentrification that has taken place in areas of Charlottesville, such as Belmont, this is going to be amplified tremendously in the city with this plan and with the by right of being able to build. This is a developer's dream. Charlottesville was voted #1 city to live in. We're trying to change it away from everything why people chose to come here. I understand the need for affordable housing. Density doesn't bring affordable housing. You must have the regulations to make that happen. Density for density's sake won't do it. I hope that you give some more thought to this. When I had 3 small kids, walking and biking are great.

How is a mom with 3 kids supposed to bike her kids to the grocery store? You need to be able to have parking for the places that are going to these new apartments that are going to have so many more people living there.

James Aller (Locust Grove) – A lot of R-1 zoning of the city has been upzoned to RA, RB, and RC. The question relates to clarity about the tax implications of the upzoning. If somebody in RB has neighbors that develop the property nearby and they are in the same situation where they could also develop their property even if they do not care to, the City Assessor's office tells us that their property is now much more valuable, and their taxes will go up. There are people that may have no interest in developing their property. What I am interested in from the Planning Commission and City Council is whether the upzoning is going to have tax implications for many people in the city. We know that a lot of property cannot be developed even if it is rezoned. There is plenty of property that can be developed.

Deborah Jackson – I want to second Mr. Heller's and Ms. Dowell's comments. Affordable housing is not guaranteed by more housing intensity. I understand the supply and demand argument. I would like to see developers required to create affordable housing somewhere in Charlottesville and not have this 10-unit exclusion. I am concerned that they will start developing just 9 units and not 10 to get around that issue.

Larry Richards (1621 Trail Ridge) – Every morning, I see all these families wandering by. It is a steady stream of students, their parents, some with dogs and strollers headed for the pass that leads into Johnson School from Trail Ridge Road. Later in the day, I see all these people coming back. When I must, I go to my office. I must drive on Cherry Avenue. I am aware of all the traffic that we have already created surrounding Johnson School on Trail Ridge Road, Shamrock Road, and Cherry Avenue. The proposed rezoning on the north side of Trail Ridge Road and Shamrock Road will be a big mistake. It will create even more traffic than we now have and threats to the children in the neighborhood. The purpose of zoning around schools should be to decrease traffic and congestion, not to increase it. Johnson Village is interesting. It has seen tremendous development. When I moved in with my wife in 1968, it was a little conclave. We now have development on all sides. This might be a case study for what people have been talking about. We have Cherry Hill, which backs right up to the school. It is all townhouses. We have Beacon Hill, which is all apartments. We have a high-end development at the end of Highland Avenue. We have everything that everybody has been talking about. Where is the affordable housing? What has happened in between is all around us. It is forest that has been taken away. Some developers were told that they had to replant trees. They planted maybe 5 trees after cutting down over 200. They didn't bother taking care of the 5 trees. The kids can reach the school walking from different directions. The proposed rezoning of these streets will do nothing to reduce traffic, nothing to increase the safety for school kids, nothing to provide affordable housing, and nothing to promote the long-term viability of the neighborhood.

Vazena Howard (10th & Page) – I am the President of the 10th & Page Neighborhood Association. I am here to speak up about the need for a close look at our anti-displacement zones and areas. We have seen what happens to neighborhoods like 10th and Page, when developments come in and take over. Developers come in and make decisions and put profit before people. I am asking that you think about restoring the 4-story height limit when big buildings come into a neighborhood that is already congested as 10th and Page. We run the risk of being pushed out and put a lot of burden onto the long-time residents such as traffic and other issues. Please think about this and consider what I said tonight.

Danny Yoder (349 10th Street) – I am here to speak in support of the draft zoning ordinance. I want to thank all of you for the time that you have put into the process that brought us to this point. Cities are always changing and remaking themselves no matter how hard we try to freeze them in place. When a city's economy like Charlottesville grows and offers a desirable quality of life, the city can either add more homes to accommodate more residents or keep the buildings the same but swap the residents for wealthier ones who can afford the rising rents. I would argue that this dynamic is central to the upscaling and rising home prices in Charlottesville. Although there is not a single 'silver bullet' to solve the housing crisis, this draft zoning ordinance is a great step in the right direction. Housing discrimination, displacement, household financial burdens, and homelessness are made worse by housing scarcity. We have chosen housing scarcity over many decades of zoning and land use decisions. I urge this Commission and our elected leadership to choose housing abundance instead and approve a zoning code that allows more homes of all kinds and places where people want to live. We recently had a primary election for City Council where one candidate ran on a vision of abundant and dense housing. That candidate received more votes than any other candidate, including the incumbent Council members. You're hearing a lot of voices from a lot of people tonight. The people of Charlottesville are ready for the kind of change that this ordinance will bring about.

Michelle Rowan – I am surprised at the lack of civility all around. People really need to be conscious that this is a community of lots of different people from lots of different areas. We have heard nasty comments about that, nasty comments about race, ageism, hate speech like NIMBY. It is inappropriate. Everybody needs to take a deep breath. This is a very complex issue. With an ethical responsibility to effectively engage all the stakeholders, the data shows that you aren't reaching all the stakeholders. The city proceeded with this plan under a falsehood that the citizens either embraced it or they didn't care. The truth is that you didn't reach people. A lot of people are still unaware of what is going on. The voters that voted. They're not all the stakeholders in town. Everybody's voice should be heard. Most of the single-family homes in Charlottesville are modest. All of them were purchased with hard-earned wages. The families here are interested in what is going on. Many feel that they are being ignored, that their investment in the community is ignored, and the sacrifices that their families have made to pay the mortgages to stay rooted here are being dismissed. They have noted that you have not sought out a common ground that embraces single-family home ownership or single-family home renters. They feel like they are being disposed of.

Mike Parisi (932 Charlton) – I want to start off with a big idea. I hope that this new zoning code will help build more housing of all types from the bottom to the top, while protecting and enriching our black neighbors. That is the most important part of this to me and hopefully to others. I do want to acknowledge that some of these developments next to black neighborhoods (Cherry Avenue, Preston Avenue) are only possible anymore because historically these neighborhoods have seen their property values depressed. It is up to the City and University to do more to build more affordable housing. The market is not going to do it all by itself no matter what kind of zoning we adopt. I don't think that the 50 percent AMI guideline will do that much. I don't think we should not do it. We're going to need to build 5000 new units to get 500 affordable ones. I don't see that happening in any reasonable timeframe. It is important to build new luxury housing. When I walk around the city, I see lots of small houses, affordable houses being bought at high prices by wealthier residents or new wealthy residents. They're going to improve those houses and probably add onto them. Those houses are never going to come back. I understand that on both sides it does feel frustrating to see new luxury housing be built. I think it is necessary.

Emily Dreyfus – I work with Legal Aid Justice Center and the Public Housing Association of Residents. I support CLIHC's recommendations. I also support the Housing Advisory Committee's primary recommendations. Charlottesville has systemically disrupted black people's lives for many decades. Without intervention, this ethnocide will continue. I wanted to bring up Richard Shackleford, who graced these halls many times. Mr. Shackleford really exhibited commitment and courage. I know that is what it is going to take to pass this zoning change. We need that. There have been many reasons. I hope that Mr. Shackleford's spirit can help you all through. His three magic words were: It's our turn.

George Snyder (Lewis Mountain Road) – I am here because I am concerned about what is going to happen to our neighborhood. I am just being honest with the zoning plan. I read in the paper that somebody in Fry Springs was concerned about a tall apartment building being next door to him. He had lived there a long time. I have lived on Lewis Mountain Road a long time. It is not very appealing. That's how I feel. Affordable housing is important. I have thought about it and heard about it for many years. I am not sure that the way this plan is going about it is going to achieve that. I don't know why the city has not considered purchasing land and building affordable housing that will always be affordable housing and funding it. We must fund it as city taxpayers that would have to fund it along with state and federal funding. I think it would achieve your goal better than what is going to happen with the plan as it is now.

Chancellor Reynolds (316 14th Street) – I am a second-year undergraduate student in the Urban Environmental Planning Program at UVA. I have loved living in Charlottesville these past 2 years. I attribute that primarily to living in a rent-locked home. Even though I am still sharing a room with someone, the price is far more affordable than anything else on 14th Street. If I had to pay market rent, I would not be able to live anywhere close to grounds. I would be forced to commute every day. That is something that I am extremely blessed for and has been a desirable aspect. Having this as a student is nice. This is something that every citizen in Charlottesville should be able to experience. I am living within a walkable community with plenty of amenities. I think you have done great work with this new zoning code. There is room for more improvement, including the inclusionary zoning, especially what was outlined in the Housing Coalition letter. We need to keep the backbone of Charlottesville in our community and not have them searching for affordable housing out in Albemarle County.

Dwayne Jones – I have been listening intently to the commentary. I believe in affordable housing. There is a lack of housing stock in Charlottesville. I don't see how this plan is going to help us grow this housing stock. I am really concerned about our capacity to provide services for the increase in the population particularly being able to provide affordable housing for renters, whether it be university students or people that have spent their lifetime working at UVA Hospital. I find that there has been a lack of in-person engagement during this planning process. Most of this has been done during COVID. I don't feel that you have had a chance to listen to enough voices and tried to come up with a plan that works for Charlottesville. I am concerned five and eight-story structures being built in their backyard. I am concerned about the roadways, transportation, the ability to deal with the overcrowding. I heard an earlier speaker mention Greenbrier Elementary School and how they don't even have a cafeteria. Our roadways are in disrepair. The city probably repairs two water mains twice a week. We're not keeping things kept up. I am not saying that we must pause everything. Why don't we have more conversations?

Laura Ferraro (1712 Cherry) – Changes do need to happen in our city. There needs to be more density, more affordability, and that can happen throughout the city in a way that is more amenable to everyone

involved. A zoning code that allows a developer to act entirely by right is flawed as far as the long-term neighborhood or community interests are involved. An interesting case that is very different from any of this is the redevelopment in Albemarle County of the Southwood Mobile Home Park. It has been fascinating to see how those community members have had complete involvement. The result is a true betterment of their personal housing and their ownership. That is very different than anything else that we're talking about here in Charlottesville for obvious reasons. An ideal zoning code would allow a collaboration between the developer, the abutting property owners, and the larger neighborhood. Instead of feeling like you're being bought out, you can have buy-in. That would make for happier neighbors. If the city is concerned that this would require a continued oversight, the alternative is that the developers get all the benefits up front and the city and residents are left to work out the problems. One idea is to come up with a percentage of land and every neighborhood must allow for high density and affordability. For those impacted by that development, they would have say-in the process and perhaps some meaningful compensation if they are being encroached. We need to think creatively to reach solutions that will not harm those who have called Charlottesville home.

James Ruffner (3 different streets) – I was not aware that this was even happening. I don't like that. There were these 2 economists in here. My undergraduate degree was in economics. There is an old phrase: There is no free lunch. You can talk about affordable housing. Somebody must pay for that. One way or another, that money must come from somewhere. The real solution for any of this, which there is no solution for any of it, you can look at a city like New York City. They have all kinds of different areas in New York that are good, bad, and indifferent. Anywhere you go in any state, you're going to have that. You cannot come in and remake anything into your vision. People live the way they want to live. Sometimes, they're in a bad situation and things don't go well for them. I grew up in Arlington. My parents were from east Tennessee. My father went up there because he saw a good job. He was an accountant.

The meeting was recessed for a 15-minute break.

Bob Pinot – I have lived in Charlottesville for 35 years in the Woolen Mills area. I stand before you today as a dedicated resident of Charlottesville and a long-time standing member of the design community. I started our architectural firm in 2007. I have had the immense pleasure of working in the city and county connecting people to place. I am impassioned by the vision of a thriving and inclusive community. I have spent a majority of my career working towards those ends. Our city is at a crossroads. I firmly believe that the new zoning ordinance is the right step at the right time. My optimism in this work lies in our capacity to nurture and safeguard the treasures that we possess, while embracing the potential for growth and inviting more souls and more opportunity to illuminate and expand our shared journey. From a design perspective, I believe that the rewrite will increase affordable housing, efficient land use, reduced environmental impact, increased public transportation, increased community engagement, allow for more mixed-use development, create opportunities for architectural innovation, and preservation of green spaces. I want to thank the Planning Commission, the City Council, and the members of the Neighborhood Development Services for their hard work and dedication. I want to extend my strong support for the courage and vision of their leadership and strongly support adoption of this new zoning ordinance.

Kathryn Laughon – I live in the city of Charlottesville. I am calling in to express my support for the Housing Coalition letter and particularly support for increased density. I think that you need to go a little

farther. I would like to see increased height. I would like to see that tied to affordable housing. I would like to see you address the anti-displacement measures that are being talked about in the anti-displacement overlay; what were called sensitive areas. I hope that you will move forward with this plan. We need more housing in the city. We need it quickly.

Anne Tilney (1618 Oxford) – More density in our neighborhood will cause additional traffic to an already overused, narrow, and dangerous Oxford Road as a cut-through street. We will need to create a way to make people slow down on our street if this happens. We should do it now anyway. I am for affordable housing. I am not for housing purchased and built by developers, who will reap big financial benefits, while the people we are trying to serve will be subservient tenants supporting distant landlords. If the city and community can come up with some creative ways for people who need housing to own their own housing, I am all for it. The tax ramification question was asked by a gentleman earlier. I am curious with how we would get the answer to that question. If we have larger density next door to us, how will that affect our taxes if we don't do that? I have lived here for 28 years. UVA has doubled in size in those 28 years. They own more real estate than anyone else in Charlottesville but pay no tax revenue. Can the collaborate with UVA? If so, why not? How will questions that have been asked of this committee tonight be responded to?

Claire Fetgatter (1215 Wertland) – I am here for you to understand the human aspects behind affordable housing needs. Right now, we have both students and civilians that desperately need this housing. I have been on some ridiculous apartment tours of buildings that were dilapidated, had dead bugs sitting in stairwells, of renters who purposely kept raid cans by the doors to signal to us that this is horrible housing. Even though it was affordable, you should not take that risk. I had to tour a messy apartment of a single black mother with 2 children under 10 that couldn't pay next month's rent. We had to look through their messy apartment because at that point, we had already agreed to the tour. We, as students, are displacing people. As someone, who is currently a graduate student and wants to maintain my connection to Charlottesville, to live here if possible. We do need to accept this in these new zoning ordinances. They do need to be improved. Please accept them so that we can then do the work to figure out what we need to do. A lot of the people that have protested these new ordinances believe in affordable housing. They see the immediate consequences of property taxes going up for them. With inflation and everything else, property taxes are probably going to go up for most homeowners in the area. My main priority is to make sure that as many people have a roof over their heads as possible.

Jamir Smith (Albemarle County) – Three years ago, I got to figure out the Comprehensive Plan and the Future Land Use Map. It was something that brought me a lot of excitement. I was able to be civically engaged in my community in a way that I wasn't before when I was a UVA student. Now that I am 3 years past it, I think about how so many people have said that this has been so rushed. I think about the past few years as possibly the longest 3 years of anybody's lives. I am thinking that if you had no time to be involved then, I don't understand how you missed on that boat. The thing that gets me the most is that I find the ability to get affordable housing to be linear. You need to be in support of the zoning ordinance. Building market rate housing is going to bring more options and more stock for people that live here, giving more powers to the renters. Once you give people the ability of choice, that's going to force developers to compete for the person's price. That also brings more development and more tax dollars into the city. You can put that money into a pot so that the city can also invest into affordable housing. Preventing development from coming into the city and forcing the city to try to do something about

affordable housing when the tax base isn't growing, is ridiculous. Approve the zoning ordinance for what it is. We will figure it out. It is a living document.

Justin Reed (10th and Page) – I am the secretary of the 10th & Page Neighborhood Association. I want to encourage some amendments. We want to see friendly neighborhood transitions between 10th and Page and the commercial corridors. Preston Avenue is currently proposed to become CX-5 and CX-8. With the bonuses, we're looking at 7 to 10 stories, which we find unacceptable. Preston Avenue corridor exists because of past racial discrimination. We must ask ourselves why that section of Preston Avenue is expanded. It wasn't expanded going through Rugby. It was because of the history of past discrimination. This current zoning, as it exists, is simply doubling down on that historical discrimination. I would like to see this move forward. I hope that we will spend the next few months engaging around the anti-displacement zoning overlay districts, hammering out those details, what policies are most effective, incentivizing nonprofit and public housing developers requiring neighborhood consultation, looking at more robust city land holding, and right of first refusal. Let's spend these next few months ironing out a strong anti-displacement overlay zone for the proposed ordinance. I encourage us to spend more time engaging those who aren't in the room, who haven't been attending these meetings, and come to those neighborhoods, meet people in their neighborhoods, and begin to hear more about what we're hoping to see happen. I don't want a suburban experience. I moved to Charlottesville because I want to live in a city.

Maanasi Gupta (Grady Avenue) – I am a 4th year student at the University of Virginia. I am advocating for the Commission to adopt the recommendation as put forth by the Housing Coalition letter to the draft zoning code. As a student at the University, I often reckon with my place as a resident in the city of Charlottesville. As the University grows, we students have nowhere else to go, continually displacing community members, a contemporary manifestation of UVA's dark history. I don't want to be contributing to these long-term issues as a temporary resident. I don't want to drive families out of their generational homes and force evictions as monopolizing landlords raise their rents. For the first time in a long time, the city can amend its zoning code, to protect minority residents from displacement. While the current draft of the zoning code has already made several improvements, I ask that the Commission expand on these improvements by modifying the inclusionary zoning regulations to provide financial feasibility and affordability and by proceeding with the plan for anti-displacement zones as in the original draft plan. The history and the present reality of housing in Charlottesville has been intertwined with a pattern of continued racial injustices in our community. These recommendations can begin to rectify some of that wrong. While my own implication in this crisis cannot be ignored, we can move forward to a more equitable city. This is an opportunity for Charlottesville to support its minority residents and stop their displacement. Housing is a human right that has been denied for too long, I ask the Commission to implement these recommendations to the zoning draft.

Brian Ng (Kent Residence) – I am standing before you today to express my continued support for this plan, even though I am new student at UVA. I have loved the exchange of ideas that we have had today. I have heard a lot of misconceptions that I need to address. An earlier speaker claimed that UVA should provide housing to all its students if we want to fix this problem. It does. It promises housing to all full-time students, who want it for 4 years. It is something that most colleges in Virginia don't even do. Some students elect to live off-grounds. We should give them the opportunity to do so. As we're settling in, we must think about our housing situation in the month of October. If we want to live off-grounds, we must sign our leases by November for the following academic year. Most families and typical homeowners

don't have to plan that far in advance. Why should a group of college students, who have so much on their plate, must do that? Let's consider the larger impacts. I, along with many others who spoke before me, came to Charlottesville because it is a diverse and has become an accepting community in spirit. In practice, Charlottesville, in many ways, still lives under de facto segregation. To anyone who argues that, look at our overall neighbor graphics and the demographics of the unhoused. The question is how willing are we to change that? Are we willing to upend our zoning code to change that? Based on what I have seen of the people of Charlottesville, it seems like we're willing. I hope that we're willing. Let's not cower in fear of change when we're almost there. We are doing great. As a previous speaker said, this plan would be best in 2043. The reality is that we cannot wait until 2043. We must implement this plan today.

Rosa Key (500 10 ½ Street) – I grew up here in Charlottesville behind the Jefferson School. The house that I used to live in is still standing. Some rich lady walked in there, bought it, and remodeled it inside. Next door was Harrison Furniture Shop. The guy is still making furniture. I do not want the Dairy Market to extend down Preston Avenue and West Street. It will make our houses go up with the taxes. It will be 'an arm and a leg.' We cannot afford that. I am on a fixed income. I am a senior citizen. I retired at 62. I only have one income. I can barely afford what I have now. I don't approve of it.

Henry Alexander – Charlottesville's affording housing crisis has accelerated in recent years, disproportionally impacting black and brown community members. As housing prices have increased, displacement of low-income residents has become common. Black community members make up an outsized percentage of our area's rapidly growing homeless population. New housing voucher recipients often return their vouchers because they are unable to find a rental that meets HUD's affordability metrics, even with government support. These long-time residents make Charlottesville vibrant, diverse, and welcoming. We strongly urge City Council to prioritize their well-being through aggressive and effective action on the zoning code rather than prioritizing a particular building and neighborhood aesthetics. While the affordability crisis is dire and acute from those residents earning less than 50 percent AMI, the high cost of housing also impacts a wider range of city residents, including public service employees, essential to the well-being of our community. Teacher, nurses, firefighters, city staff, and other community helpers commonly report having to move into Albemarle County and beyond to find housing that meets their budgets. I oppose the current plan for the zoning. It needs to be reworked. We need to have more voices in the matter. I agree with the previous commenter with the Dairy Market. We should not allow them to expand. It is creating more crises for housing for people.

Charlie Westinger – I would like to speak in favor of the new zoning code and in support of the Housing Coalition letter. Charlottesville, like most cities around the country, is facing an affordable housing crisis. More and more people are facing housing insecurity. Long-time residents, particularly black residents, are being pushed out of their homes, drastically weakening the community and character of the city, as well as depriving community members of the basic human right. If the city is truly serious about building affordable housing, as stated in the Comprehensive Plan, updating the zoning code is a necessity. By implementing inclusionary zoning, creating an incentive system for affordable housing, and allowing for and promoting a robust diversity of multi-family missing middle housing units, we can increase our supply of affordable housing options, lower the price, and move to achieve the stated goals of equity and accessibility in housing. While housing improvements have justifiably dominated this conversation, these are only one of the countless benefits of the improved zoning code. The denser, more mixed-use zoning that this code encourages and has been overwhelmingly voted for has been proven to stimulate economic

activity, promote healthier lifestyles, reduced traffic, reduced carbon emissions, lower transportation costs, and cultivate a strong and lively sense of community. Actions in the code, such as removing parking minimums and more explicitly preserving historic buildings help to achieve these improvements. Big changes are needed to achieve these changes. We must be proactive, not reactive. This means that we must not wait to make these improvements. People are being evicted. The cost here is real. You cannot truly value and support affordable housing, as many of the nays here have claimed, unless you're willing to prioritize its construction.

Syleethia Carr (800 Rose Hill) – I am voicing today about affordable housing. It is needed within the community. The poverty level has risen within Charlottesville. We need housing now, not tomorrow, not next year, and not 2043. We need it right now. On September 16th at 4 PM, we're having an affordable housing rally. There will be many people that will speak up at that time. When they speak, we listen to what they want. What they have said is that they want housing now.

Kevin Lynch (609 Locust) – I have been in the city since 1980. In 1992, when I bought my house, it was affordable housing. I spend more money taxes to the city every year than I spent for my down payment. It is even getting tough for those of us, who were fortunate. I know that somethings that have worked for affordable housing, which we desperately need, and a lot of things that haven't worked. We need to be cognizant of that. The upzoning around the University that allowed for more students to be around the University worked for a couple of reasons. It allowed more students to come in close. It also pulled them from the outlying county areas and made those areas more affordable. That did help quite a bit. Adding the accessory apartments in the early 2000s helped. When you look at other cities like Dallas or Phoenix that aren't constrained geography, they can grow outwards. We can't do that. We're constrained by topography. I am very concerned that the wholesale rezoning, where by right, we could go with 3 units on every lot. That is not going to accomplish what you all are hoping to do. The other thing that I have seen be successful is working with housing nonprofits (PHA, Habitat, Southwood, etc.). Those things work when you have a dedicated and committed partner to bring affordable housing. The developers are there to make money. They're not there to do affordable housing.

Josh Krahn (630 North) – I am speaking tonight in support of a zoning plan that encourages increased density, infill construction, and neighborhood commercial amenities. When my wife and I bought our house, we looked at neighborhoods like Belmont and 10th & Page, places that have stores and other amenities within walking distance. The prices in those places were too high for us. We ended up trading walkability for a house that we could afford. I love many things about Locust Grove. It is very car dependent. The draft zoning code, while a huge improvement in many ways, doesn't do enough to improve this. 15-minute cities have become a culture war meme. It is a useful metric to measure trips that most people are willing to make without a car. I made a map of all the places I can walk in 15 minutes from my house and overlaid it with the draft zoning map. There is virtually no place on the map where someone could build or open a corner store, a pharmacy, or a coffee shop. The draft zoning allows some uses by SUP at the discretion of City Council. Discretionary review has a chilling effect on the kind of vibrant, walkable neighborhoods that the Comprehensive Plan envisions. It politicizes every step of the process, and it kills ideas and projects before they begin. If we don't allow and encourage more small-scale commercial uses within residential neighborhoods, we're forcing a lifetime of car dependency on residents like me and my family. We're resigning ourselves to a future of more traffic, more parking anxiety, unsafe and polluted streets, economic inequality, and social isolation.

Molly Bowerman (715 Madison) – I live at Madison Avenue because I had to turn down a Lawn room because it was far more expensive than my apartment off grounds. This is not an uncommon experience. Students are being forced into off grounds housing because they cannot afford the on grounds housing, which is a complete failure by UVA. It is unacceptable, given UVA's history of extracting from Charlottesville and especially from Charlottesville's black community. Students are being forced to participate in this displacement. Increasing the affordable housing options by providing more density is critical to alleviating both the burden on all of Charlottesville's communities and on students, who do not want to be participating in this. They have no other options. One of my roommates is on EBT and Medicaid. The other one is FGLI. There are students, who are low-income and need these affordability options from the city or from UVA. I also want to stress and respond to some of the points people have made regarding density, creating congestion and traffic. This is a complete fabrication and misconception. Denser areas are fundamentally more walkable. Eliminating parking minimums in the zoning code, paired with investments in transit, will reduce traffic and make Charlottesville more walkable and reduce the congestion. I want to point out the stakes that are evident and what is going to happen to people if the zoning code is not enacted. The wealthy, white homeowners in these single-family zones will be fine. If these affordable options are not created, it is going to be the people who are already marginalized who continue to suffer.

Kayshawn Sudan – This new zoning code is an incredible step in the right direction. While many speakers have pointed out that this new zoning code is not perfect, it certainly represents a significant step forward in the fight for zoning equity and opportunity. Charlottesville needs to be a place that is affordable and inclusive for all people. Regardless of federal aid or other programs to help them pay for these residences, we need more housing in the city. Having more housing in the city would drive down overall prices for all residents and allow more people to find that missing middle housing. We don't want Charlottesville to become like northern Virginia and be sprawling with mansions. That's why we need more medium intensity zoning. Having more places that are corner stores, local grocery stores, and other amenities that are near housing will decrease the amount of traffic that we have and make the city more walkable. Charlottesville is a city, and it needs to stay a city. Charlottesville shouldn't become a suburb and Charlottesville certainly shouldn't become a suburb sprawling with mansions as some want it to be.

Charlotte Meadows (2135 Tarleton) – I have a very intense desire and need to be involved in Charlottesville and what is going on and to make it a viable, wonderful community. I want to make it clear that I believe in affordable housing. I also want to make it clear that I do not think that this is the best route to do this. There needs to be a lot more studies. I hear people wanting to rush into it. It doesn't mean rushing into it will fix anything. Trying to fix it after the fact doesn't work. Unfortunately, the city has ruined a lot of people's faith and trust in doing the right thing. The city has not penalized developers when they did not provide affordable housing. They have not made them pay; everyone suffers. Having more housing does not mean that it is going to be affordable. If you look at the cost of all the raw materials, that is the most logical thing that you can come up with, it won't mean affordable housing. I also want to point out that some of this development that has happened in our past is not only Vinegar Hill. Another area is where the Habitat Store is. All the housing was affordable. It happened to be prime territory for commercial development. That was wiped out. How many families were displaced from that? I don't know. It was affordable housing.

Victoria Metcala (130 Roy's Place) – I support the Housing Coalition recommendations regarding affordable housing. It recognizes that, while zoning is a critical part of the solution, the proposed zoning

plan does not meet our community's needs. We see that it weakens standards for affordable housing because it doesn't contain an overlay for high displacement neighborhoods and further restricts height, density, and historically exclusionary neighborhoods. I know we have heard a lot today about Charlottesville's history. Most of the affordable housing that we see in the city and supports the city is in the county in neighborhoods like Barracks West or Abington. We know that those have stayed the biggest feeders of the eviction docket since the pandemic. I do urge that these recommendations are considered as we consider this zoning plan.

Allison Wrabel (York Place) – I have lived in the city as a renter for 8 years. I am here in support of more housing and more housing types throughout the city. We are a majority renting city. About 61 percent of the housing in the city is renter occupied. I would highly encourage you all to talk with more renters. We are hearing from more tonight than there was earlier this evening. It has been an underrepresented group. I strongly encourage you all recommend a zoning ordinance that does include more housing types throughout the city. The only constant in life is change. You all can help and decide whether that change is the current path we're going down where our city is only affordable to those who are wealthy or if it allows more housing types. We are a city. I sometimes feel that we don't have enough housing. It would be great to see more housing types throughout the city.

David Lehman – We have heard from a lot of different perspectives tonight. It seems clear that the most important goals are shared goals. Those are increasing the supply of housing and the affordability of housing. I want to thank you for your efforts to pursue these important goals. There also seems to be a shared agreement that the proposal is not going to accomplish these goals. Some councilors say that they expect it to have little to no impact on affordable housing. Some commissioners say that the expected number of new housing units is minimal at best. The consultants say that this is an experiment, and we don't know the outcomes. That sounds about right. This is a radical change. Uncertainty is par for the course. That doesn't mean that we should do nothing. We should do something sooner rather than later. We have heard a lot of good reasons tonight for urgent action. It also means that we should act wisely, not foolishly. Anyone familiar with experiments understand the wisdom of staring small, learning, and iterating. This experiment, according to many city officials, has turned many of the dials all the way up. How can you turn the dials back? First, adjust the parameters (the setbacks, building height, etc.) The FLUM promised house-sized buildings. Deliver on your promise. Designate all residential zones as RA. It is easier down the road to dial up than dial down. The mayor was repeatedly proposed this solution. I think many in the city support it. If RB and RC are retained, create a process for appropriately designating streets. I live on a street that is tagged as RB. All 5 councilors have visited our street and say that this designation is an error due to its width and lack of sidewalks. Please review the designations based on infrastructure and allow for fixing mistakes that are already in the plan. Keep commercial use out of residential zones. The logic of mixed nodes is to get commercialization closer to neighborhoods. I love it. It makes the logic fall apart for further commercial and residential.

Brandon Collins – I have been here for a long time. I believe that Vinegar Hill was still a vacant space when I was born. I support CLIHC's concerns about the zoning ordinance. We need a zoning ordinance passed. CLIHC's concerns are major and hit at what the original principles behind the Future Land Use Map were. All the effort is coming up on 8 years of planning to get to this point where we would have a zoning code that could be compatible with other strategies to support affordable housing and protect vulnerable neighborhoods from gentrification and displacement. Those were great goals. One of the best ways that we propose to meet those goals were by increasing density in R-1 neighborhoods and protecting

vulnerable neighborhoods from that increase. It is a no-brainer. Displacement and gentrification is really hard to address. Affordable housing is hard to address. It takes zoning, policy, and money. I believe that this city is committed to having policies to support affordable housing creation and policies to support home ownership and to support long-time people to stay in their neighborhoods. The city is deeply committed to providing funding for the creation of affordable housing.

C. COMMISSION DISCUSSION AND MOTION

The Planning Commission determined that they were not ready to vote this evening.

Motion – Commissioner Schwarz – I will make a motion that we continue our discussion next Tuesday – Second by Commissioner d'Oronzio. Motion passes 6-0.

D. ADJOURNMENT

The meeting was adjourned at 9:05 PM.

. Minutes

PLANNING COMMISSION REGULAR MEETING
July 11, 2023 – 5:30 P.M.
Hybrid Meeting

I. COMMISSION PRE-MEETING (Agenda discussion(s))

Beginning: 5:00 PM
***Location*:** City Space
Members Present: Commissioner D'Oronzio, Chairman Solla-Yates, Commissioner Schwarz, Commissioner Stolzenberg, Commissioner Mitchell, Commissioner Habbab
Staff Present: Patrick Cory, Matt Alfele, James Freas, Missy Creasy, Remy Trail, Jay Stroman, Dannan O'Connell, Sam Sanders, Mike Rogers, Kyna Thomas

Called to order at 5:09. Chair Solla-Yates asked if there were any concerns with the consent agenda. No concerns were noted. Mr. Stolzenberg noted that he would prepare to make a motion during the regular meeting. Chair Solla-Yates noted that we do not have a vice chair and that will be brought up in the regular meeting.

Salvation Army - Commissioner Schwarz asked if the applicant had a plan to address parking when the building is under construction. Mr. Alfele noted that the applicant can talk about it more during the meeting but that no Salvation Army services will be interrupted during construction.

Mr. Jay Stroman, City Attorney provided a response to Commissioner Stolzenberg's question concerning if RULPA would apply to the case. It does not appear to play a role in the Attorney's advice on this item currently. The religious aspects are outside of the land use question. He also noted a change in state law concerning advertising and clarified if Planning Commission provides a recommendation, then he will ask Council to address a motion in reference to the statute. If Planning Commission does not provide a recommendation, the attorney will provide language for the Planning Commission to provide a motion to allow for compliance. Commissioner Mitchell asked for additional details on the state law and Mr. Stroman provided those details.

Commissioner Stolzenberg had a question on the Seminole Square subdivision. What is the purpose of that right of way dedication and how will it be maintained? Mr. O'Connell noted that the city will need to maintain. Rather than a variance, the applicant dedicated ROW to the city.

Commissioner Schwarz noted that we received a comment on the Salvation Army application providing suggestions for several pedestrian comments to address some of the traffic situation. He read the suggestions. Are any of those possible? Mr. Alfele noted that offsite improvements would not be addressed with a special use permit. Commissioner Schwarz asked if these were even possible? Mr. Alfele noted the improvements adjacent may create concern due to zero setbacks. They are not required to provide due to setbacks. There is a smart scale project that may address some of these items though that is mostly focused on bike lanes.

Commissioner Stolzenberg stated that we don't have the ROW to get to 5th Street for this project. Mr. Alfele noted the pedestrian bridge is a hopeful project in the future. Commissioner Stolzenberg was

concerned that the bridge project is not likely to happen due to topography. There is a concern with pedestrian cut through traffic and this redevelopment would cut down on that.
Commissioner Habbab asked if there were any considerations to having an easement to the Noland property? Mr. Alfele noted that the applicant will be asked to address.

COMMISSION REGULAR MEETING – Meeting called to order by Chairman Solla-Yates at 5:30 PM.
Beginning: 5:30 PM
Location: City Space

A. COMMISSIONER'S REPORT

Commissioner Stolzenberg – At the Downtown Mall Committee meeting, we discussed side streets and access. Every side street has a slightly different pattern of traffic, parking, and how much of it is bricked and pedestrian and how much of it is not. Some of them work Ok. Some of them work very poorly. Some of them are through streets. There was a robust discussion that spiraled into talking about an all-around access and loading plan. Next week, we have an MPO Tech meeting. We will be talking about and moving towards that 2050 long range transportation plan. We did not get the raised grant for preliminary engineering for the Rivanna River pedestrian bridge.

Commissioner Mitchell – No Report.

Commissioner Schwarz – At last month's BAR meeting, we approved restoration/preservation of the historic painted signs on 2nd Street Southeast. That will be an interesting project to watch. They're going to do that in August. It should take a week or two for the artist to complete it. There are a lot of layered signs on there. It is a fun thing that is going to be happening. We also looked at the Salvation Army project. There will be no BAR meeting this month because there were no applications.

Commissioner D'Oronzio – The HAC met the 3rd Wednesday of June. They reviewed Module 3. One member of that committee wrote up recommendations provided to you (Mr. Solla-Yates, Mayor Snook, and Mr. Freas). Most of it was regarding compactness in terms of alleys from 20 feet to 10 feet and narrowing of things like easements. I think that some committee members may offer some edits on that. That document is available. It might be worth looking at the document for the work session on Thursday. The CAHF committee met today as a workshop to figure out how Tick Tock, policies, and procedures. The CDBG-Home Task Force will be meeting twice in July to contend for the latest round of funding to get it to this body as soon as possible.

Commissioner Habbab – The Tree Commission rescheduled their meeting for today from last week since it was a holiday. I will report on it next time as I get notes from the Commission. On the agenda, the Codes Committee submitted recommendations for Modules 1 through 3 in June in a meeting with city staff and consultants. On the invasive plant control, the city will be using goats to make initial entry on Fry Springs and Washington Park. They will return to do some spot herbicide applications on regrowth. They're doing some chemical treatments and mulching at Forest Hill Park, Azalea Park, and the trail system from Jordan Park to 5th Street Station.

B. UNIVERSITY REPORT

Commissioner Palmer – Not Present

C. CHAIR'S REPORT

Chairman Solla-Yates – No Vice-Chair

Commissioner D'Oronzio moved to appoint Commissioner Mitchell as interim Vice-Chair. Second by Commissioner Stolzenberg – Motion passes 6-0. Commissioner Mitchell will serve as Vice-Chair until a new Vice-Chair can be appointed.

D. DEPARTMENT OF NDS

Ms. Creasy – We have a work session this Thursday at 5 PM. This work session is in the basement conference room of City Hall. We will discuss Module 3 and the residential districts in the zoning ordinance. We will have some visuals to share; some of the things that have been requested. The discussion will be higher level. If you all have some concerns or thoughts that you want to dig into, let us know. We will make sure that we are prepared for that.

E. MATTERS TO BE PRESENTED BY THE PUBLIC NOT ON THE FORMAL AGENDA

William Emory – I know that you aren't talking about zoning tonight. Regarding Wrights (sometimes the gray fields, a scrap yard, property down in a hole), you are potentially veering away from the mapping logic document, which would suggest that this is supposed to be a neighborhood mixed use parcel. You're trending more towards NX-5. Commissioners have argued that Wrights needs to be an urban center like the Downtown Mall but with light industrial. Commissioners have spoken about landing the plane on this. In your May work session, that would be hard to check. I would like to suggest that before you deviate from the mapping logic document, that you land the plane regarding the Woolen Mills 1988 formal small area plan request to City Council. I would encourage you to speak with the scrapyard property owner and the adjacent neighbors regarding your plans. NX-3 seems more appropriate in most cases. It seems like when you drop mixed use into new neighborhoods, you do NX-3 as opposed NX-5. Where you have done NX-5, like Star Hill, they have had the benefit of a small area plan.

Robin Hoffman – I am concerned about the rain bombs that we have been having over near East High. We have been having continuous flooding in the streets. It is something that you don't see unless you're here. It is getting worse. As soon as it rains, the water comes from everywhere. It rushes through the streets on Fairway, Caroline, and Meade Avenue. It doesn't have a place to go. Do you guys understand that's happening? Is that area in the field a watershed area? I am wondering if anybody knows and what happens if that field is no longer a field.

F. CONSENT AGENDA

1. Minutes – December 14, 2021 – Regular Meeting
2. Final Subdivision – Seminole Square Shopping Center/Hillsdale Apartments
3. Site Plan – Hillsdale Place – Hydraulic Road

Commissioner Stolzenberg moved to approve the Consent Agenda. Second by Commissioner D'Oronzio. Motion passes 5-0 with one abstention (Commissioner Schwarz).

Meeting was recessed until 6:00 PM for the Joint Meeting.

Meeting was called back to order by Chairman Solla-Yates at 6:00 PM. Mayor Snook called Council to order.

II. JOINT MEETING OF COMMISSION AND COUNCIL

Beginning: 6:00 PM
Continuing: Until all public hearings are complete
Format: (i) Staff Report, (ii) Applicant, (iii) Hearing, (iv) Discussion and Motion

1. **SP23-00004 – 207 & 211 Ridge Street (The Salvation Army)** – Mitchell Matthews and Associates, LTD ("Applicant"), on behalf of The Salvation Army, is requesting a SUP pursuant to Section 34-796 and Section 34-162 of the Code of the City of Charlottesville ("Code") for the following property ("Property"):
Parcel Number: 290029000
207 & 211 Ridge Street, Charlottesville, VA, 22902
The purpose of this SUP is for expanding its Shelter Care Facility ("Shelter"), modifying its yard requirements, and modifying its onsite parking requirements. The Salvation Army is proposing to redevelop the Property and expand their existing services. To date, the existing use of the Shelter is legally nonconforming, and any expansion of the use will require a SUP. The Applicant is proposing to expand from 58 emergency shelter beds to 114 emergency shelter beds; expand meal capacity from 80 seats to 120 seats; increase the size of the multi-purpose room from 1,928 square feet to 2,415 square feet; and expand the meeting rooms capacity from 40 seats to 84 seats. To facilitate the proposed expansions, the Applicant, in addition to requesting a SUP for the Shelter, is also requesting alterations to Section 34-638(a)(1)-(2) of the Code, whereby the yard setback requirements are altered from 5 feet minimum and 12 feet maximum on 4th St. SW to 10 minimum and no maximum; "build-to" percentages are altered from 80% minimum along the primary streets and 40% minimum along linking streets to 32% along primary streets and no minimum along linking streets; the required onsite parking is reduced, pursuant to Section 34-984 of the Code, from 52 spaces to 32 spaces; and Section 34-642(c) of the Code is modified to remove the requirement that for more than 20 off-street parking spaces, no more than 50% of such spaces shall consist of open-air surface parking. The Property is approximately 1.27 acres with road frontage on Ridge Street and 4th St. SW. The Comprehensive Land Use Map designates this area in the Urban Mixed Use Node. The Property is zoned West Main East Corridor ("WME") with an Architectural Design Control District overlay. This application may be viewed online at http://www.charlottesville.org/departments-and-services/departments-h-z/neighborhood-development-services or a copy is on file in the Department of Neighborhood Development Services, 2nd Floor of City Hall, 610 East Main Street. Persons interested in this SUP request may contact NDS Planner Matt Alfele by e-mail (alfelem@charlottesville.gov) or by telephone (434-970-3636).

i. Staff Report

Matt Alfele, City Planner – The applicant is pursuing a SUP to expand the existing Shelter Care Facility, modify yard setback requirements, and reduce onsite parking. The Salvation Army is proposing to redevelop the property and expand their existing services. To date, the use of the Shelter is legally nonconforming, and any expansion of that use beyond what is permitted in Section 34-1147(b) will require approval of an SUP. That code section speaks to non-conforming uses other than structures that may be expanded on the area of the lot, not originally devoted to the non-conforming use, provided such expansions meet all current requirements of this chapter and applicable only to the expansion. It goes on to state that permitted expansion for non-residential, non-conforming uses that require a special or provisional use permit are required to obtain a special or provisional use permit only when such expansion exceeds 25 percent of the gross floor area of the existing structure. The code only speaks to non-conforming use expanding within existing structures and does not address new construction, addition, or renovation. The shelter could expand by 25 percent within the existing building. Any new building expansion or redevelopment requires the applicant to obtain an SUP under the current code. The applicant is proposing to expand from 58 emergency shelter beds to 114 emergency shelter beds; expand meal capacity from 80 seats to 120 seats; increase the size of the multi-purpose room from 1,928 square feet to 2,415 square feet; and expand the meeting rooms capacity from 40 seats to 84 seats. To facilitate these expansions, the applicant, in addition to requesting a SUP for the shelter care facility use, is also requesting alterations to the yard setback street wall requirements and onsite parking requirements. The specific requirements can be found in the staff report. Although it is not in your report, I would like to go over the existing zoning and what is being proposed in the draft zoning and how it would deal with this plan. The reason I didn't put it in the staff report is because we know the draft is still a draft until it is adopted by City Council. There is not a full analysis done on the draft. Shelter care facility, under the current code, requires an SUP. With the SUP that they are pursuing it would be allowed. Under the draft zoning, it would be a by right use. The height would stay the same with having a minimum 35 feet height. You have a minimum and a maximum of 52. That would stay the same. Under the proposed code, an 8-story building could be built but could be up to 10 stories depending on if shelter care is considered affordable. Under our current code, shelter care facility is under the residential portion of the code. It is under Civic, under the draft zoning ordinance. Parking under the current code is required based on uses. What they're requesting is a reduction to zero. Their plan is showing 32. It would be around 32. Staff does address that in some of the draft conditions. Under the proposed draft zoning ordinance, parking would not be required for this site.

Staff and Planning Commission have received a lot of public comments related to the SUP. Many of these comments express support, while others are concerned with increased traffic, trash, parking, and the impact the development would have on 4th Street Southwest.

Commissioner Mitchell – I have a couple of questions about the recommendations. Parking is a major concern for many people. You have a recommendation that will allow them to reduce the parking to 32 and go to 0 so they can eventually build in the space that those 32 are parking spaces. Is that accurate?

Mr. Alfele – I don't think there is an immediate plan to go to 0 parking. It leaves them some flexibility for future phasing. It would not go that low for what they're proposing right now. The traffic engineer did review this application. They felt around that the 32 range was fine. If they dropped below that, we know traffic is a concern. This would give the city staff/traffic engineer a chance to work through any type of plan as the number drops.

Commissioner Mitchell – The objective of your recommendation is to give them the flexibility to go there if they need to.

Mr. Alfele – It gives them the flexibility to keep reducing parking. It does allow the city to influence that as it relates to how they're going to handle parking moving forward and whether that is an off-site alternative form. It gives the flexibility to plan for the future but also an avenue for the city to help make sure parking does not become an issue.

Commissioner Mitchell – The objective of that is, not only to help them, but also help with the parking and manage the parking as it becomes more difficult. With recommendation #6, it was to give them 2 more years. That's just phasing.

Mr. Alfele – That is my understanding. The applicant can speak to this. They're about two-thirds to their fundraising goal. How our code is set up, an SUP could expire after 18 months if they don't have an approved site plan. City Council can adjust the timeframes. If they were needed to come forward and request an extension of the SUP, the code outlines a year. This would give that an extra year.

Commissioner Stolzenberg – This is an increase in parking over the current conditions?

Mr. Alfele – It is a reduction.

Commissioner Stolzenberg – It is a reduction versus what they would have to do with the expansion given our parking requirements.

Mr. Alfele – That's correct. I believe that it is around 50 to 52 spaces that would be required under current regulations.

Commissioner Stolzenberg – Where does the ratio of parking spots to beds for a shelter come from for that requirement? How do we get that number?

Mr. Alfele – I don't have a good answer. It is basically using what is in the code.

ii. Applicant Presentation

Erin Hannegan, Applicant –

Next Slide
The Salvation Army is a nonprofit, faith-based organization that works to alleviate human suffering and distress without discrimination. They provide disaster relief and emergency assistance. The Salvation Army has been serving Charlottesville since 1912. They have occupied this site at 207 Ridge Street since around 1965. The Salvation Army is the only year-round shelter available in Charlottesville. Last year, they helped more than 21,000 individuals and families with critical social services. They currently cannot accommodate all the unhoused individuals and families who need their help.

The Salvation Army's goal is to have each person they serve partner with the Salvation Army in the Pathway of Hope program. Their plan is to assist in breaking the cycle of poverty and to assist individuals and families to achieve their goals through securing stable jobs, housing, and becoming self-sufficient.

Next Slide
Here, we're looking at existing aerial photos of the site. The existing site is occupied by 3 buildings built between 1965 and 1992. The chapel, administrative offices, and gymnasium were first developed in 1965. This is the building at the street. The two buildings closest to the street are labeled 207. It stretches back along the Noland side of the property. Around 1980, they built the emergency shelter at 211 Ridge Street, which is the building on the 4th Street side of the site. Around 1992, they added the transitional housing building and the soup kitchen. The issues cited with the existing conditions include that the facilities no longer have the capacity to serve the need. The men's shelter is constantly full. There is no good space to accommodate families or clients with other specific needs. The current facilities are in 3 buildings. Even though it is an addition for transitional housing, they are not directly connected through interior corridors. The programs that they house are disconnected. It makes it difficult to staff the facility. Currently, the transitional housing is not being used. Additionally, they mentioned poor wayfinding on the site. The main entrance doors, seen off Ridge Street, lead into the chapel, which is not the services that most people are looking for when they arrive on site for help. There is lack of visibility for the community to all the services that are provided on site.

Next 3 Slides
This is another angle. We're above Monticello Avenue at this point.

This is above 4th Street Southwest. You can see the emergency shelter building. There is a parking lot that stretches into the site. This is the transitional housing facility and soup kitchen. There is a small area reserved for a playground as the site dog legs around the rear of the fire department.

This is an aerial from above. You can see how the site wraps around the back of the fire station.

Next Slide
The site is a double frontage lot. It is well connected to the public transportation routes. It is easily walkable to downtown and all the amenities located there. It is located between the fire department and Noland Plumbing. Because of the site's proximity to the fire department and the intersection at Monticello Avenue, all vehicular access must occur from 4th Street Southwest.

Next Slide
This is the survey. This outline here is the existing shelter at the rear of the site. This is the 2 buildings that were built at the front. The most important goal for this project is allowing the existing shelter to remain operational during redevelopment. This did drive the site plan and the proposal that you're going to see. Both the design team and the BAR agreed that the 56-inch oak tree, that sits on Ridge Street, should be maintained during redevelopment. These 2 requirements are the primary drivers of the footprint of the building and its overall massing.

Next Slide
The goals include:

- Increased capacity for shelter, food, and services.

- Providing dedicated family spaces.
- Providing inclusive spaces to meet diverse client situations.
- Providing increased privacy and dignity for clients: in the shelter and when receiving social services.
- Providing increased security and separation within the shelter to address safety concerns of the clients and the staff.
- Connect the various programs and improve adjacencies.
- Provide a better way finding to main entries and the various programs like the social services or training programs.
- Allow for future flexibility and growth over time.
- Show the community of Charlottesville the need that is present here, as well as the work and services that are provided by the Salvation Army and its volunteers.

Next Slide
The site is in the West Main East Mixed-Use District. This designation governs the uses permitted on the site that, as well as the height, density, and form of the building.

Next Slide
The same use currently exists on site. We're asking for increased capacity. The use is broken down into two functions: the house of worship, which is referred to as the core, and the Center of Hope, which is the shelter care facility. A house of worship is a by right use. The shelter care facility is only granted by the special use permit. The color coding is repeated in other tables and drawings to show the relationship between the various programs. You can see that we're increasing the capacity on site. It is primarily for the shelter and soup kitchen and secondarily increasing the classrooms and meeting rooms, which are shared between the uses.

Next Slides
I am going to go through a series of perspective views with the before and after conditions.

This first one is from the intersection of Ridge and Monticello. We're saving this oak tree at the front. You have that oak tree and pulling the building away from it. To preserve it requires some of these modifications to the zoning requirements.

This is a view standing approximately on the bridge over the railroad tracks looking towards the Salvation Army. A view on that side. We have tried to be frugal and efficient in the design while also reflecting the character of Charlottesville. The project is being funded by donations. The Capital Campaign is in its early stages. Donations would be most appreciated. The project is currently being repriced. I bring this up to inform you that the project might change in appearance, as it continues through the public approval process. The site requires a certificate of appropriateness from the BAR.

This is the current view from 4th Street. That is the building that will need to be maintained during construction. In its place is the parking lot, which can be the last component added to the site.

This is the aerial view looking towards downtown and West Main Street.

Next Slide

We're asking for relief because it is a double frontage lot with both Ridge Street, as a primary street, and 4th Street Southwest, as a linking street. We're asking for setback relief on the linking street. It is required to have a setback between a 5-foot minimum and a 12-foot maximum. We proposed a 10-foot minimum and no maximum. This allows us to pull the building towards Ridge Street and have a greater setback on 4th Street. It helps with constructability so that the existing shelter can remain intact during construction. The green space and part of the parking lot can be used for down space. The project goals were to utilize the available height and leave undeveloped area open for future expansion. This means that we're pushing the project towards Ridge Street so that we have space to expand in the future, which hopefully won't be necessary but has been the pattern since they have inhabited the site. Modifying the minimum to 10 feet aligns with the street buffer requirements of 10 feet, which would remain during future expansions. No maximum permits what is shown here. What you're seeing in red is the section cut. Most of the building rises in the background behind it. The darker purple fill is the building envelope under the current zoning conditions. We're meeting the setback with a chapel that pops out to Ridge Street on this side. This is the 4th Street side where it is set back much deeper on that side. This piece is the multi-purpose room that stretches towards 4th Street along the parking lot. These lines represent the height that is proposed as 8 stories under the future zoning ordinance. If it was 10 stories, depending on how a shelter care facility is defined for affordable, it would be able to go up to 10 stories. Setbacks would force the building towards both streets, which would run into the same problem that we're currently having. We're not trying to maximize the lot by making the building short and spreading out. We're trying to utilize the vertical area currently available and leave open space for future development.

Next Slide
This is showing the footprint of the building to demonstrate the reduction in the build-to percentage requirements. The purple building here in the parking lot is the existing shelter that must remain during construction. This salmon-colored footprint is the one-story condition of the shelter. This darker pink condition is rising to 4 stories closest to Ridge Street. This allows future expansion to happen over the multi-purpose room in this vicinity or a separate standalone structure to occur here, which will be in the short-term developed as open space, green space, and playground space if the budget allows and convert again to a building. That is probably 20 years out; no immediate goal to do another expansion in the near term. The requirements for this are to be in the build-to zone 80 percent at Ridge Street and 40 percent on 4th Street. We're only 32 percent at Ridge Street. We're asking for it not to be required at 4th Street. At Ridge Street, this leaves a space for the protected 56-inch oak to remain. At 4th Street, it gives us this advantage of keeping the shelter occupied during construction and leaving open space.

Next Slide
This is the overall site plan. The next two items that we're asking for modification relate to the parking. It is located off 4th Street Southwest and along the southern property line where the existing emergency shelter currently stands. That is this dashed outline that runs through the parking lot. The position of this parking allows for the larger green space to the north, which gives us a larger, more open space with a larger footprint for a future expansion.

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We have calculated that the required parking quantity would be 52. We have added a table since the application. We will show how we got to 52. We're proposing 32 spaces. We're asking not to have covered parking, which is a unique requirement to the West Main East zoning district. We believe that

both clients and other visitors to the site would be more comfortable and feel safer without it being covered. We're asking for it not to be required.

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With the parking table here, these are the major spaces in the facility. All the spaces in the facility are lumped into these categories. The zoning code has a requirement for spaces based on either the square footage of that space or the quantity of bedrooms. We have calculated across the required parking for each of these categories. That brings us to 56 spaces. There is an allowable reduction of 2 spaces per use in the ordinance. We have taken 2 spaces for the house of worship and 2 spaces for the shelter care facility out of that. That brings us to 52. We want to relay to you why we are proposing the quantity of spaces as we are. It has come up as a neighborhood concern. The chapel is generating a significant number of spaces (10.8). The soup kitchen is creating 11.2 spaces. The multipurpose room is requiring 12.1 spaces. Those three spaces are never going to be used simultaneously. They are programmed for different times of the day and different days of the week. The chapel has service on Sunday at 11 AM and Bible study on Wednesday evenings at 6 PM. The soup kitchen serves breakfast, lunch, and dinner with dinner being the major service at 5:30 PM. The multipurpose room is in the program to allow space for clients and visitors to stay prior to being allowed to go into the dining room for meal service. It is also for special events that may occur once or twice a year for the telethon and coat drive that are limited occurrences. Those would not be scheduled at the same time as church service. If we take out 2 of these 3 generators of parking, it brings us down to 30 spaces. There are currently 30 spaces on site. We're currently proposing 32 spaces. We're asking for condition four; even though it already has flexibility in it, to use 30 as the number rather than 32 to give more flexibility to the Salvation Army so they don't need to hire a professional to create the parking plan, should there be a slight change needed to the quantity. This allows them to potentially deal with trash that was unanticipated or a donation box that might not be currently shown on the site plan. There could be something else that comes up that eliminates the need for them to spend money on professional services. It immediately gives them that buffer so that the money that they're raising through donations is going to the people that need it.

Next Slide
These are counts taken by staff over the course of the last week. Even though there are 30 spots on site, 15 was the highest quantity used when they were able to count them. That was on Sunday for Church service. It is when there is also a lot of on-street parking available. With 15 for the current facility, we're increasing it. We're hoping that you will gravitate towards 30.

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This last one demonstrates that there are seven parcels that have either frontage or a side yard on 4th Street Southwest that are residential parcels on that street. Six of those, which are shown shaded in red, have off street parking on their lot. By my count, there are at least seven on street parking spaces along the one side of 4th Street that has parking. When I was there to do this analysis, there were only 3 cars on the street. There was plenty of available parking on street, which hopefully addresses some of the comments that have come up from the neighborhood about concerns about parking and traffic on 4th Street.

Next Slide
Campbell Bolton, Applicant – Another concern that was brought up was the entrance location. The entrance location currently along 4th Street is around 30 feet to the north. Given that we're switching where the parking lot in the building goes, the entrance gets shifted south, which brings it closer to those

off-street parking spaces. We did look at this. There is still some distance; approximately 16 feet there between the entrances. A typical entrance like this would have a stop sign on the way out. People exiting the parking lot would have to stop and look. It is a relatively typical situation of cars coming out from two different sides of the street. We have looked at this. With a stop sign at the Salvation Army, we don't foresee any issues with this condition.

Ms. Hannegan – This isn't currently written as a condition. It was a concern brought up by the one neighbor that attended our community meeting. That neighbor asked for a stop sign exiting the parking lot. We can oblige that without a problem. We were already intending to propose that.

Commissioner Mitchell – Do you really think that you can save the oak?

Ms. Hannegan – We have had a tree expert come out and analyze it. They believe that it is in healthy condition now. There is no basement under the chapel. It is closest to it. Demolition will have to be done with care. We will be expanding the soil area at the tree. That will hopefully lead to a healthier tree in the end.

Mr. Bolton – In reality, it is going to be difficult. We don't know what the tree roots have attached to underground if they are attached to some of the building that they're going to take out. With the plan, we're trying to give it more space. We will work with the experts to do all that we can to save it.

Commissioner Mitchell – You guys are spending a lot of money to try to save the oak. Hopefully, you can.

Commissioner Schwarz – You're obviously doing a more important thing, which is preserving the existing shelter during construction. Do you have a plan for how the parking is going to work during construction?

Ms. Hannegan – At the moment, the Salvation Army has a donation center on Cherry Avenue. They haven't yet created a plan. They have talked about how they will ask staff to park at the donation center and commute them over from there during construction.

Commissioner Schwarz – The chapel is pulled up to the minimum setback, not the maximum setback.

Ms. Hannegan – It is in between.

Commissioner Schwarz – I thought that you were all the way at the back.

Ms. Hannegan – It is closer to the back than it is to the front to get that ramp in there.

Commissioner Schwarz – The front wall of the chapel is about halfway between the minimum and maximum setback line.

Commissioner Stolzenberg – You showed us that parking table. You talked about the cooperative parking reduction. As I understand, that is in the code and only needs administrative approval from the NDS Director. Is there any reason you're asking us for it?

Ms. Hannegan – I don't think that we had gotten to the point of putting it in the packet when we made the application. We are asking for zero as opposed to 30.

Commissioner Stolzenberg – In the pre-meeting, I asked about this pedestrian crossing from Ridge Street to 4th Street. It looks like there is a sidewalk along the north side of the site. Is the idea that you're blocking pedestrian crossings?

Ms. Hannegan – The existing condition does have a sidewalk along the northern boundary line between the fire department and the building. The client asked us to block it because they told us that there are numerous people who trespass across the property to shortcut through it, rather than taking the city sidewalks. They cause problems with the clients on site. I have not witnessed that. I can't speak exactly to what happens. There are interactions that occur that they want to limit. They're asking us to put in fencing that would block that cross traffic so those people who are just walking their dog or cutting across the property are forced to truly follow the street network.

Commissioner Stolzenberg – Have you given any thought to doing a bump-out at that crosswalk or to shorten the crosswalk and potentially zigzag the sidewalk around to give you more soil or pervious area by the tree? I imagine many of your clients are crossing there to get to Food Master or downtown.

Mr. Bolton – We have not really looked at that. We're proposing to leave the wall in front of the tree as the existing wall. Tearing that down would be more disruptive to the tree. That wall would stay. We have not looked at a bump-out. It is certainly something that we can look at. There is some on-street parking in there that we're trying to keep as well. It is something we could look at. It is all in the right-of-way. We are proposing changes to the right-of-way right now. If that is something that comes up in the site plan process, we can certainly investigate it.

Chairman Solla-Yates – In some of the public comments, there were concerns that the police are regularly being called on the guests here. Is that standard? What is happening?

Ms. Hannegan – I don't know. I am going to have to defer to the Salvation Army about that. I will say that Captain Mark Van Meter is new to Charlottesville. His predecessor retired mid-June. He has only been here 2 or 3 weeks. I don't know if they will have a response.

Mark Van Meter, Applicant – Any time you bring together a group of individuals, you're going to have the potential of issues. We all know that homelessness is often promoted by various reasons: loss of job, family situations. Some homelessness comes because of mental health issues and drug issues. We're in a place of service to the community. We see a number of those people come to our property. My staff is not trained for physical restraint or anything like that. We're not a medical facility. The best course of reaction is to make sure that our local police department is attentive and in servicing us well. It keeps us safe and keeps the clients safe. It provides a better environment.

Chairman Solla-Yates – Who should be handling that interaction? Should members of the public be handling that interaction?

Mr. Van Meter – It is better handled by us. We're typically the ones that have the relationship with the clients. We can help de-escalate situations. It is like any given situation. You have individuals who want to promote their own cause and reasons. Often, it goes against our policies. We must have somebody step in and help make sure that the policies are held strong.

Councilor Pinkston – This is a great project. I am excited to see that this is happening. I have been in the building twice with Vice-Mayor Wade. It is a real 'hodge-podge' of buildings. This is exciting to see. On Council, one of the things that we're reckoning with is how best to help those in our community, who are unhoused. With the increase in beds, what are we looking at? Is this twice as much?

Ms. Hannegan – The current shelter has 58 beds. The proposed capacity is 114 beds. That is in the emergency shelter component. That is adding 56 beds. With the transitional housing, it is currently 28 beds spread across 9 units. We're going to get those same 28 beds in 7 units. There is no change to the transitional housing portion.

Councilor Pinkston – You mentioned that the build-to was within specifications. On the back side, it was not. What is build-to? Is that the width of the building compared to the lot lines?

Ms. Hannegan – Those are 2 different issues. The building façade is in the setback. The build-to percentage is a relationship of the width of the building frontage versus the overall width of the lot expressed as a percentage. That is where the width is less than what is required in the zoning ordinance. That is on the front and the back. We're less on the front because of the tree. We're not meeting it at all on the back because we don't have any building that is within that zone in the back.

Councilor Payne – With the parking, when you did the analysis, was there any sense of what the difference is between the number of parking spaces used over time, between the Salvation Army guest, volunteer, and staff versus its uses as an informal parking lot that is overflow at events or things that happen at Tonsler Park?

Mr. Van Meter – I asked my staff to randomly count throughout the day, as they were coming, were leaving for lunch. I would say about a third of our numbers represent staff. The balance represents individuals who are either coming to meet with us or are coming for the various shelter programs or soup kitchen. Typically, four to six cars for staff and up to nine for shelter guests and people coming for meals service.

Councilor Payne – One of the proposed conditions is an S3 screening along the 4th Street Southwest boundary. Have you given any specific thought or plans for what that would be?

Ms. Hannegan – A buffer is already required. I think that staff's language changed it to an S3 screening that gives us a little bit more flexibility to do it with either a fence or plantings. I believe that we have proposed that, not necessarily in our rendered site drawings. If you look at the civil landscape drawings, we do have plantings along 4th Street. They were represented in the perspective view from 4th Street. There will be screenings through here and in this transitional zone before the parking starts and all the way up 4th Street. We also have a fence that surrounds the playground area. There will be layers of trees, shrubs, and the fence along that boundary.

Councilor Payne – We have several people who live there. I do think it is fair to go above and beyond the bare minimum in terms of the screening for the people who are going to live there the whole time.

Councilor Puryear – I am glad to see that you have greenery, particularly shrubs. The fence looks Ok. What are you doing for your playground?

Ms. Hannegan – That is probably going to depend on the budget. Now, we don't know whether it will be in or out of the budget. Long-term, they hope to have playground equipment. They currently have a swing set and some other basic playground equipment. The goal is to replace all of that.

Councilor Puryear – You're doing separate fundraising for your playground?

Ms. Hannegan – Not yet.

Councilor Puryear – It is happening?

Ms. Hannegan – It will depend on whether they can meet the fundraising goals.

Councilor Puryear – The fundraising that you are now doing is for your structure and the increase in the beds for your residents. You are saying that at some point, you will be doing something to improve the playground. At some point, that will be happening.

Ms. Hannegan – At some point, the goal is to install a playground.

Councilor Puryear – What are we doing as it relates to construction to protect the kids and the current residents?

Ms. Hannegan – The current residents are in that building that is at the rear. There is a sidewalk along the front of that building. Grades are very difficult because there is also a lower-level entrance there. There will need to be a temporary sidewalk ramp extension happening that connects that to 4th Street to allow egress that will also need to be protected from any of the construction activity.

Councilor Puryear – What is your plan B for the oak tree?

Ms. Hannegan – To replace it as staff calls for with a large canopy tree should it not survive.

Councilor Puryear – Do you have renderings of that?

Ms. Hannegan – No.

Mayor Snook – What are the expectations/hope when you would do the construction?

Ms. Hannegan – Once the fundraising reaches 50 percent of the construction costs, the Salvation Army will fund the remaining construction costs so that construction can start. Fundraising will be ongoing to raise the rest of that construction cost.

Mayor Snook – What was the two-thirds figure I heard?

Mr. Van Meter – The campaign goal is $22 million. The construction goal is $17 million. We are at $5 million for our major dollar gifts. I suspect that we will be at 50 percent by the first of the year.

Mayor Snook – Are we thinking that this might be coming online in 18 months?

Ms. Hannegan – Since we must work around the existing structure and that is going to be tricky and extend the timeline on site, construction will take anywhere between 18 and 24 months to construct the facility. I think the site plan process will be the longest lead time, leading up into when we can begin construction if fundraising stays on track. The timeline for site plan approval would probably be in the spring of 2025.

Commissioner Stolzenberg – We are coming out of a global pandemic where congregate shelters were problematic at best. I don't know if you stayed open. Are you looking at sort of enhanced ventilation or filtration that might reduce spread?

Ms. Hannegan – This is the shelter floor plan. The floor plan has 2 wings. This wing has the transitional housing, and this wing is the shelter portion. The conditions for the men's shelter are one large room with bunk beds. All 58 beds are in one large bunkroom. To increase privacy, dignity, and separation, we're creating alcoves where there will be 4 people to an alcove. Around the perimeter of this, the building will be fully, mechanically ventilated. It will meet OSRE standards for ventilation. Filtration is the necessary part of that to control contaminants and spread of communicable diseases. We also have separate bunkrooms on both floors. There are beds in this bunkroom with its own bathroom in this bunkroom. Those allow for either special accommodations or isolation if someone needs to be out of the general shelter area. That happens on the men's and women's floor.

Commissioner Stolzenberg – Are those lockers in front of those alcoves?

Ms. Hannegan – That's correct.

iii. Public Hearing

Frank Flasheim (405 Dice) – I live on 4th Street and Dice Street, near the main entry for the property. We were shown a picture of five houses that are on 4th Street. When you went and took your survey with that street and the available parking there, that was probably during the daytime. Most of those houses one off-street parking spot, if they have one. The house next to me does not have any. They have two vehicles. The one next to them has an ADU in the back that they rent out as an Airbnb. They have two vehicles on top of that with one space. When there are cars parked on that street, that road is a single lane road. You're talking about having construction vehicles coming down that road for entry into the property and all residents. I understood that there would be 6 staff vehicles there. I am sure that there is more than 6 staff. I am definitely in favor of this. I would want the city to address that street. It does dead end there. It is limited access. The city needs to figure out what that looks like for the neighborhood. That is my main commentary there. Even Dice Street is a single lane road when cars are parked on it. It is limited access.

Bryan Crenshaw (225 4th Street SW) – I am directly behind the Salvation Army. I am concerned about the Salvation Army proposed changes to onsite parking and the removal of covered parking requirements. They are requesting a reduction of onsite parking from 52 spaces to no minimum. While the applicant has proposed providing 32 spaces, the request to eliminate the minimum requirement is problematic. The streets are very small. In its own drawing from the applicant, they indicate that the driveway would be moved. It would eliminate a parking space for my neighbor. There are also plans with the Monticello-Ridge intersection to eliminate all on street parking on Ridge Street. This is a great project. It is something that we need to move forward for. We also need to understand that the expansion that is being asked for is 50 percent more beds. While they say that the people do not drive, I confirm that the parking lot has been full. With an additional bed space, you will see more people. The request to remove all parking is not in line with the use that they are proposing. I also want to express my objection to removing the requirement that limits the percentage of off-street parking spaces. There can be open surface parking. The reason why they have that requirement in this zone is because this is the entrance. It is an important part that we hide the parking, and we don't push all the parking down to the residential streets and cause issues there, I am in favor of the project but not with the current reductions or the removal of the structured parking requirement.

Chris Dunbar (227 4th Street) – What has been said is true in talking with our neighbors. We're in favor of the project. Our concerns are the entrance on 4th Street. Only one car can go at a time. There are emergency vehicles that go down there. There are dumpsters and trash pickups. I wasn't aware that the sidewalk would be cut off too. You're also looking at more foot traffic coming around the Noland's sidewalk. If you go on a snowy day, you will see that it is rarely shoveled. It is in states of disrepair. On our block, there are 7 houses. There are 2 domiciles set back. There are technically nine parties that need parking on that street. There is a little more parking necessary on that street. There are 5 children under the age of five in that 6-block radius. Adding more traffic might not be the best idea, especially if you have Ridge Street. I don't know how much the project looks at an entrance from Ridge Street. It seems like a natural entrance as opposed to a dead-end 4th Street behind the Salvation Army. I don't see a lot of parking from Tonsler Park.

Brenda Smith – I am the resident program manager of the Salvation Army shelter. I have been with the Salvation Army for 18 years, 6 years in the position of the shelter manager. I want to share a few stories with you on what I have been able to see with the shelter residents and how much this new facility is needed. A lady by the name of Joy and her husband Patrick checked in. Joy is from Michigan and Patrick is from Virginia. He was transferred here from another area in Virginia. He had an IT job waiting for him in Charlottesville. They didn't know anybody here in Charlottesville. They moved out after a couple of months after working very hard. They lost custody of their 2 girls because they were traveling. They didn't want to bring the girls on the road with them. When they found the housing, they gained custody of their two children. They are doing well. There is a gentleman by the name of Michael. He was one of my favorite stories. He checked in July. He was with us for nearly a year. He checked into his new apartment. When he arrived, he was just evicted from his place he was sharing with other people. They left him to pay the bill. He had to humble himself to come to the Salvation Army. They also tried to get him to pay the full amount that was due. We referred him to legal aid to help with that bill. They cut the rent in half so he can pay. He was referred to another organization that paid off some hospital bills. When he left the Salvation Army, he left with $10,000 and was able to get his own apartment. These are the people that come into our residence for help. BH was a single mother who was pregnant. She had 2 children. At the

time, she was staying from house to house. Her mother said that she had a terrible attitude. I broke her out of that. What we must do is show love. We must meet people where they are and show them compassion.

Mark Van Meter – In 1934, the general of the Salvation Army was Evangeline Booth. She said the following words: "There is no reward equal to that of doing the most good to the most people in the most need." Last year, the Salvation Army provided over 15,000 nights of lodging in our shelter. The Salvation Army is one of those agencies that you wish you could work out a business. I have been in management for 30 years, 15 years with the Salvation Army. Unfortunately, I have not seen much of a dent in that. Homelessness is part of our society. It is part of our population. It is one that we want to deal with, with integrity and bring them to the opportunity to better their lives. I have only been here 3 weeks. I see a staff, a facility that have been working hard with what they have. Last year, we served over 60,000 meals out of our soup kitchen. Those are substantial numbers. During a pandemic, the Salvation is built on pivoting. We know how to pivot. When it comes to natural disasters, communicable diseases, and these types of events, we have learned how to pivot and work. In my last community, we were serving approximately 200 people/cases per month. During the height of COVID, we served over 2,000. Those numbers transfer to a community like Charlottesville. We don't close our doors. We can't close our doors. Where do the homeless go? Where do people go for their meals, for lodging? We remained open. I have known for a short time that we were coming to Charlottesville. I started looking at videos and pictures. I have been very impressed with the staff, facility, and the work the Salvation Army has done in this community. I encourage you to honestly look at this project. We are not working ourselves out of business, unfortunately. We must plan for the future, for the opportunities to serve in our community in the future.

iv. Commission Discussion and Motion

Commissioner Mitchell – I walked this site yesterday. They have a beautiful playground over there right now. Fourth Street is a challenge. It is very narrow with sidewalks only on the eastern end. Parking is on the western end. Parking will be an issue that we will have to deal with. Hopefully, pieces of recommendation #4 in the staff report will help us to work on that and keep the city engaged with the applicant as we develop it. We need to do this. The work that is being done there is important, and it is important to expand the work that has been done. I am hoping that we can work out the parking issue. I am willing to recommend that we approve this application.

Commissioner d'Oronzio – I don't see any need to repeat Commissioner Mitchell's concerns about the parking. I have them too. The traffic issue with that narrow street is what it is. My sentiments mirror Commissioner Mitchell.

Commissioner Habbab – I hear everyone about the parking. I hope that there is a way to work that out in the site plan. This project is much needed. It is a great project. I will vote to approve it.

Commissioner Schwarz – I agree on all of that. We are proposing some streetscape standards in our new zoning code. I recognize that they are going through a huge effort to save this large tree. If they were to try to meet what our future zoning code is going to be, there would be a requirement for some additional trees on Ridge Street. That is not a deal killer for me. I did want to bring that up for the rest of the Commission in case it seems like it is a missed opportunity if we don't catch it now, especially, since the

large oak tree may not be there forever. It would be good to try and re-establish some streetscape along Ridge Street.

Commissioner Stolzenberg – I don't agree with the parking issue based on those parking counts. If you look at street-view and all the historical aerials, it is almost practically empty. It sounds like if there is any parking issue at all, it is an event parking issue, which I think needs a different solution. You can throw a giant parking lot at it for a couple of days a year. Shared parking is more effective. One technical point that I think came out of one of the public comments is that I think it might be useful to everybody. If it could be done with the fire department without disrupting vehicles, to get an access easement during construction so that construction vehicles could cut through that parking lot instead of going down 4th Street, it seems like that would be more convenient for everybody. I don't know who you would need to talk to make that happen. I would like to commend you all for doing this project.

Chairman Solla-Yates – I would love for you all to be out of business and find something else to apply your talents and hard work. That is the world I want to be in. It is going to be a while. I am excited to see this project come forward. I see tremendous value for a tremendous need for it. I am encouraged about the parking analysis. It is mixed use. This is the 'dream' of the zoning code to mix the parking demand and the parking issues. With the tree issues, I am hopeful about the parking lot or possibly the playground area. I don't think that it is necessary.

Councilor Payne – In terms of the parking, I don't know if this is what the neighborhood would want or if it would be a solution. I wonder if permit parking for residents could play any role in terms of being a solution to that concern. I would agree with the point that if more tree canopy could be there, that would be a positive thing. The screening along 4th Street Southwest, if done intentionally, could make a real positive different long term versus if it is just the bare minimum. This is a project that it is critical that we find a way to get it done and not become an obstacle.

Councilor Pinkston – I agree with what Councilor Payne just said. It is a great project. I am sympathetic to the concerns about parking. This is something we're going to face throughout the city in terms of the new zoning we're trying to do and being thoughtful about how we manage parking, permit parking, or other options like that. Hopefully, there will be some creativity around how we address that. It is a good project. We certainly need it. I am grateful to see that this is moving forward.

Councilor Puryear – I appreciate the concerns of the residents and their willingness to be supportive of the effort. I am concerned about their concerns as it relates to parking. Hopefully, there is a way that the residents and the people doing the construction can come up with a solution. If the city needs to assist in helping them with the solution, we can do that. I am glad to know that the playground is to Commissioner Mitchell's standards. Working with children, as I have done, there is always something new and great on the playground scene. I feel that the residents of the Salvation Army deserve what everyone else has. I want the playground to be the latest and greatest. If we need to have a separate fundraising effort for the playground, we need to get on that.

Mayor Snook – I am looking at condition 4 suggested by staff, which deals with parking. I don't understand how that is expected to work in practice. It says: 'no minimum parking is required on the subject property but should the number drop below 32 spaces, applicant will work with the city traffic to develop master parking plan.' If by the time the site plan is brought forward, there are fewer than 32

spaces shown on the site plan that somebody will do something. Is that the trigger point that we're talking about here?

Mr. Alfele – During their application, the different departments looked at this. The traffic engineer was one of them. He didn't have an issue with 32 spaces. They are requesting zero. The condition is to be: You're showing 32, but you're asking for zero. During your site plan configuration, that number could drop down if you drop below 32. We want to look at that again to make sure that you're meeting parking needs. If there is some other solution, we can come up with through this parking plan, that is what the number is. We looked at this at 32, you might go below that. If you're going below it, we will want to look at it again.

Mr. Freas – In the condition of 20 years from now, if they make the decision to build on that site, that is going to require a site plan amendment. Once it is in the build condition, are reduction is going to trigger a site plan amendment, which would then trigger that condition.

Mr. Alfele – We haven't gotten to site plan review. Between when City Council adopts this, it could grant them what they are asking for, which is zero. Between that and the first time we look at it, which would be a preliminary or final site plan review, they're showing 28. That drops below the 32. There needs to be some sort of parking plan that comes out of it. It could be there at 32. If they come back in 20 years and they are below that 32, we would create a parking plan. It is trying to catch that. We looked at it at 32 for what was shown in the materials. They're requesting less than 32. It is a way to try to accommodate the request for that zero but gives staff the opportunity to come up with a plan if they drop below what they have shown.

Mayor Snook – If we end up saying zero, there is nothing further for you to do as it relates to parking?

Mr. Alfele – It is part of their site plan. If Council says zero and as part of their site plan, they show 32 spaces, we wouldn't require this written document showing how they're going to manage parking. Once they drop below that 32, that is where we would require it. It is to leave that room so they can adjust. If they change it, it will look different than what we saw during the SUP application to what we see during preliminary or final site plan or site plan amendment in the future.

Mayor Snook – I think that I understand how you are going to handle the issue. I am not sure that I understand it. If we're saying, 'no minimum parking is required.' If it drops below 32, we have some work to be doing. Doesn't it sound like there is some minimum parking being required?

Mr. Alfele – By doing the plan with the city engineer, it could come up with something different. It could come up with cooperative parking, off-site parking that would count toward it. It is trying to give that flexibility of there needs to be a parking demand plan in place if you're going to drop below 32 spaces.

Mayor Snook – I gather that the essence of condition four is that the eventual remedy that is going to be worked out is not going to involve the Planning Commission or City Council.

Mr. Alfele – That is correct. It would just be staff.

Mayor Snook – I was listening through the part where you were talking about 32 and different overlapping uses and different times. What is the argument for zero?

Ms. Hannegan – The argument for zero is because of two reasons. It gives the site more flexibility in the future. What we understand is that when the new zoning ordinance is adopted, this site with its current SUP will become non-conforming. The SUP will ride. The new zoning ordinance will not be the rules in effect if we go into develop something else. We would have to come in and modify the SUP as for a rezoning.

Mr. Freas – The SUP will control indefinitely. If you come in and you're redeveloping the site and it is consistent with the design, you will be able to move forward under the new zoning. Otherwise, you must seek an amendment to the special use permit.

Ms. Hannegan – In order to not have to seek an amendment to the special use permit and not have to go through a rezoning application in the future after the new zoning ordinance is approved, we're asking for zero so that it aligns with what is currently proposed as the future zoning ordinance.

Mayor Snook – If you know that you're going to have your own staff, it is unrealistic to think that you would not have at least 10 parking spaces.

Ms. Hannegan – Possibly.

Mayor Snook – Each one of the three uses you have designated, one would require ten, one would require eleven, one would require twelve. No matter what the use is, going to need at least 10 spaces.

Ms. Hannegan – We identified that we think there is 30 spaces needed. That is why we're asking for the 32 to drop to 30. We don't have a problem with recommended condition four triggering that. We would like a little more flexibility so that between now and when we submit the site plan, if we lose two spaces because we get into other requirements on site like increased trash requirements after we go through full analysis of that with the trash hauler or we find that they want to place a donation box there for donations that take up a parking space without having to decrease the playground.

Mayor Snook – Why don't we say, 'we know even if it is only to provide for your staff and nobody else coming into the property, you're going to need at least 10 spaces.' Instead of saying no minimum parking required, we're going to require at least 10. If you want to go below it to 32, we will go through that whole process at the site plan process. I don't understand why you would have a situation like that where you would ever want to have no parking spaces. If you're never going to have no parking spaces, what is the harm in requiring at least some parking spaces?

Ms. Hannegan – We can have it listed that way. We don't have an issue with that.

John Matthews, Applicant – What we're asking for will comply with the future ordinance, which is zero. How does what we're proposing compare to what is being floated as part of the future ordinance. We were thinking, to get the maximum flexibility, is go with what you currently are proposing in the future ordinance. That is where that came from. We're happy with ten.

Mayor Snook – What you're referring to is what consultants have proposed, not the Planning Commission and not City Council.

Commissioner Stolzenberg – They say that they're going to zero during construction. Is that going to violate this ordinance as phrased? The requirement applies all the time.

Mr. Alfele – If they did not receive the reduction to zero, it would probably need to come up during their site plan. How are you going to handle this during construction to meet your parking requirements?

Commissioner Stolzenberg – If there is a '10' requirement, they would have to have 10 on site during construction.

Mr. Alfele – It depends on what they're serving in the building. That requirement might dip. If the staff was originally 6 and you needed 8 spaces. During construction you're still open. Your staff is down to 2.

Commissioner Stolzenberg – Let's say they close everything but the shelter, which required 8. It would be 8, no matter how many staff work there. If you don't go to zero during construction, you're violating it. You can't meet it. You need that flexibility for a minimum for during construction.

Mr. Alfele – It would be a little nuanced. It will be looked at during the site plan phase. They would need to provide parking to match whatever they're doing on site. Typically, we're looking at construction where there is nothing going on site. We don't think about it. For this, we would, as staff would be looking at it. You're going to still be doing X on site. How are you parking X? X might be smaller during that. There might be a way. The code does have temporary construction parking. I can't give you a satisfactory answer. It would be looked at during site plan.

Commissioner Habbab – Was their solution of having the shuttle satisfy that? Or does it need to be on site that project?

Mr. Alfele – It depends on if we're looking at saying that we're following current code for parking requirements. Or are we using this or going to zero but having a parking demand? It will be a lot stricter under just current code. You would have to follow current code, whatever that lays out to be. I believe 25 or 30 percent is the maximum you can reduce parking through cooperative parking or bike racks. You can never reduce that 100 percent under current code. There is a maximum you can reduce.

Councilor Puryear – The parking would be reduced at the center during construction regardless. If you have 30 spaces there now and we have all these trucks, you can't have 30 spaces there for people to park. You have your construction crews there. What do we do to have space for the people that have to work in that building or people coming to volunteer in that building? Everything that happens in that building is not remote. If you're saying that you're going to have zero parking and 15 people must be there, what are you going to do?

Mr. Alfele – That is something that must be worked out. It is something that we look at during site plan review. We don't typically look at it at the SUP level. We look at it when we're getting the documents. If they were to get the SUP, when they submit a site plan, there is a site plan conference that is open to the public. At the end of the process when there is an approved plan, there is a pre-construction meeting that

is staffed with the applicant that talks through all the construction aspects. This would be more complicated because you're keeping a lot of the things going on site. It does add another level of complexity.

Commissioner Stolzenberg – Unless we give them maximum flexibility and parking requirements, the code is going to require some amount of parking on site. They must either shut down activities, close the shelter, or somehow get an on-site parking spot.

Mr. Alfele – If we look at it that they must follow the code for parking and if they are going to be doing activities that are allowed in the zoning code that has parking requirements, they will need to meet those parking requirements. The number might fluctuate depending on what they're doing on site at the time. It will be almost phased. They will need whatever the corresponding amount to whatever activities they are providing on site.

Commissioner Habbab – Could we temporarily say during construction there will be zero? They're providing that shuttle.

Mr. Alfele – That is a reasonable condition the Planning Commission could suggest. They're trying to keep their services going. Addressing parking for construction could be a condition that Planning Commission could address.

Councilor Puryear – If you have an activity that needs 15 parking spaces, what do you do then?

Mr. Alfele – They are asking for zero. The Planning does not have to recommend zero. Planning Commission can have a number. What they are asking for is the use, which is a shelter care facility. The City Council can adjust things like setbacks and parking requirements. City Council could suggest a different number.

Councilor Puryear – If you're volunteering to serve meals, you're going to have the people coming to serve the meals. They're going to go to the facility.

Ms. Hannegan – The uses that are in the emergency shelter are at the rear of the site that is being maintained during construction. That building only has the emergency shelter in it. The soup kitchen is in one of the other buildings that is more central to the site. Meal service will occur on that site during construction. It will only be the shelter use. There are some social service offices that are also in the building that is being maintained.

Mr. Van Meter – The shelter only currently has 3 to 4 employees working in that building. The kitchen staff, administrative staff will have to be moved off-site. It is just the shelter staff. When we talk about having people park at our thrift store building, we're talking about a minivan to do that. We're not talking about our bus to transport people. We can simply require of our shelter guests. We cannot accommodate vehicles at this time.

Motion – Commissioner Stolzenberg – I move to recommend approval of this application for a Special Use Permit in the WME zone at 290029000, 207 & 211 Ridge Street to permit a Shelter

Care Facility with alterations to Streetwall and Parking regulations as indicated in the application with the following listed conditions.

1. Per Section 34-796: Permitted Shelter Care Facility on the Subject Property with supporting services and no restrictions on number of beds.
2. Per Section 34-162: Alter the Ridge Street Streetwall requirement to state that at least thirty-two (32) percent of the building façade width of a building must be in the build-to zone on the Subject Property.
3. Per Section 34-162: Alter the 4th ST SW Streetwall requirements to state that setbacks shall be ten (10) feet minimum; no maximum and no percentage of the building façade width of a building must be in the build-to zone.
4. Per Section 34-162: No minimum parking shall be required during construction. The applicant will work with the city's traffic engineer to develop a parking plan for the subject property for uses during construction. No minimum parking is required on the subject property. Should the number drop below 30 spaces, the applicant will work with the city's traffic engineer to develop a master parking plan for the subject property. This plan will be kept on file with the city and may be updated or altered from time to time with authorization of the city's traffic engineer. The plan shall indicate how the developer will distribute available parking spots on site, how potential residents/employees are informed of their parking opportunities, and any possible offsite parking arrangements, etc.…
5. Per Section 34-162: Onsite parking shall not be required to have fifty (50) percent covered.
6. Per Section 34-162: An extension of the SUP may be granted for up to two (2) years if requested by the applicant or landowner pursuant to Section 34-164(d).
7. Per Section 34-157(b): Trash receptacle (dumpsters) must be provided and secured in a facility that is adequate and cannot be accessed by the public.
8. Per Section 34-157(b): If the large oak tree [at Ridge Street] dies, then another large canopy tree will be planted [in its place].
9. Per Section 34-157(b): S-3 Screening shall be provided along the 4th ST SW boundary of the property. Second by Commissioner d'Oronzio.

Jay Stroman, City Attorney – Pursuant to the discussion and the short memo, Council to consider a motion pursuant to the 2023 amendments to the code of Virginia in Section 15.2-2204 to defer further consideration of Council's intention to adopt SP23-004 to Council's August 7, 2023 meeting or such later meeting as Council may direct.

Councilor Payne – Motion – So moved. Second by Councilor Pinkston. Motion passes 4-0.

III. COMMISSION'S ACTION ITEMS

Continuing: until all action items are concluded

1. Discussion – Zoning Ordinance Update – Zoning Work Session on Thursday evening at 5:00 PM in the City Hall Basement Conference Room.

The meeting was adjourned at 7:41 PM.