Agenda

PLANNING COMMISSION REGULAR
TUESDAY, June 11, 2024 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 – May 14, 2024 – Regular Meeting
2. Minutes – October 11, 2022 – Regular Meeting
3. Site Plan – 2005 Jefferson Park Avenue

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

No hearings scheduled.

IV. COMMISSION'S ACTION ITEMS
Beginning: following Joint meeting
Continuing: until all public hearings and action items are completed
Format: (i) Staff Report, (ii) Applicant, (iii) Hearing (as applicable)

1. Entrance Corridor Review
   A. VERVE – JPA, Stadium Road, Emmet Street, Montebello Circle

V. FUTURE MEETING SCHEDULE/ADJOURN

Tuesday July 9, 2024 – 5:00 PM	Pre-Meeting	

Tuesday July 9, 2024 – 5:30 PM	Regular Meeting	Minutes

Anticipated Items on Future Agendas

Site Plan –240 Stribling Ave, 1613 Grove Street Extended, MACAA – Park Street, VERVE, Mount View PUD (preliminary)

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
5/1/2024 TO 5/31/2024

1. **Preliminary Site Plans**
2. **Final Site Plans**
    a. 1005 Carlton Avenue (P22-0038) Belmont Condominiums – Approvable November 14, 2023, Signed February 4, 2024, Ready for Land Disturbance May 2024
3. **Site Plan Amendments**
    a. 401 Cherry Avenue (William Taylor Plaza PUD – Phase I) Amend #3 – April 23, 2024
4. **Subdivision**
    a. 2005 JPA (Aspen Heights) BLA (PL-24-0027)– May 5, 2024

May 14, 2024 and October 11, 2022 Planning Commission Minutes are included as the last documents in this packet.

CITY OF CHARLOTTESVILLE

NEIGHBORHOOD DEVELOPMENT SERVICES
STAFF REPORT

PLANNING COMMISSION MEETING

APPLICATION FOR APPROVAL OF A FINAL SITE PLAN
APPLICATION NUMBER: P23-0014
DATE OF MEETING: June 11, 2024

Project Planner: Matt Alfele, AICP
Date of Staff Report: May 31, 2024

Applicant: Aspen Heights (Contractor, Contract Purchaser, and Developer)
Applicant's Representative(s): Bryan Cichocki, P.E. Timmons Group
Current Property Owner: Norman Lamson (Trustee of the Gadient Land Trust Agreement)
Property Street Address: 2005/2007 Jefferson Park Avenue and 104 Observatory Avenue ("Subject Properties")
Tax Map & Parcel: 170104000, 170103100, and 170103000
Current Zoning Classification: CX-5 (Corridor Mixed Use 5) with a SUP and conditions
Overlay District: Entrance Corridor for 2005/2007 Jefferson Park Avenue. No Overlay District for 104 Observatory Avenue
Reason for Planning Commission Review: Final site plan reflects the proposed development of a property that is the subject of an approved special permit per 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. Bryan Cichocki, P.E. with the Timmons Group, on behalf of Norman Lamson (Trustee of the Gadient Land Trust Agreement) and Aspen Heights is seeking Planning Commission approval for construction of a new (119) unit residential building at 2005/2007 Jefferson Park Avenue and 104 Observatory Avenue. On September 19, 2022, City Council approved Special Use Permit SP22-00001authorizing an increase in residential density from 21 Dwellings Units per Acre (DUA) to 70 DUA, an increase in height from (45) feet to (75) feet, reduction of onsite parking by 22%, and reduction of the rear-yard setback form (75) to (36) feet. 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 Special Use Permit.

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 C3.0 through C3.7. Due to the fact that land disturbance is over 6,000 square feet, a Stormwater Management Plans is required and can be found on Sheets C6.0 through C7.1.

B. Compliance with applicable CX-5 (Corridor Mixed Use 5) Mixed Use District zoning regulations (Sections 34-2.4.1 and .3)

At the time the plan received a Special Use Permit, and the Site Plan was submitted for review, the Subject Property was zoned R-3 (Medium-density residential). The project complies with all requirements of the R-3 Zoning 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 C0.0 and C0.1.**
2. Existing condition and adjacent property information: **Found on Sheet C2.0.**
3. Phasing plan: **The project will be constructed in one phase.**
4. Topography and grading: **Found on Sheet C5.0.**
5. Existing landscape and trees: **Found on Sheet C2.0.**
6. The name and location of all water features: **N/A.**
7. One hundred-year flood plain limits: **N/A.**
8. Existing and proposed streets and associated traffic information: **No new roads are proposed.**
9. Location and size of existing water and sewer infrastructure: **Found on Sheets C2.0, C4.0, and C7.0.**
10. Proposed layout for water and sanitary sewer facilities and storm drain facilities: **Found of Sheets C2.0, C4.0, C6.8, C7.0, and C7.1.**
11. Location of other existing and proposed utilities and utility easements: **Found on Sheet C4.0.**
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 C4.0, C8.0, and C8.1.**
13. Location and dimensions of all existing and proposed improvements: **Found on Sheets C4.0 through S3.00.**
14. All areas intended to be dedicated or reserved for public use: **Sheet C4.0.**
15. Landscape plan: **Found on Sheets L3.00 though L3.04.**
16. Where deemed appropriate by the director due to intensity of development:
    a. Estimated traffic generation figures for the site based upon current ITE rates: **Found on Sheet C0.0.**
    b. Estimated vehicles per day: **Found on Sheet C0.0.**

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 Special Use Permit granted by City Council on September 19, 2022, includes the following conditions, which are provided as part of the final site plan.

The proposed development is subject to Entrance Corridor review. On June 13, 2023, the Entrance Review Board (ERB) granted a Certificate of Appropriateness

(COA) and this discission was affirmed by City Council on July 17, 2023. The COA can be found on Sheet C0.1.

A Special Use Permit to increase allowable residential density to 70 DUA, to increase building height from 45 feet to 75 feet, to reduce the rear-yard setback from 75 feet to 36 feet, and to reduce (lower by 22%) the amount of on-site parking required by City Code Sec. 34-984.

Found on Sheets C.0.0 and C4.0.

(1) Not more than seventy (70) dwelling units per acre (DUA) shall be permitted within the area of the Property.

Found on Sheet C0.0.

(2) The rear-yard setback applicable within the Property shall be thirty-six (36) feet, and a twenty-five (25) foot buffer shall be provided within the rear yard, to include mature trees and shrubs at the time of planting consistent with the plant materials prescribed for an "S-3" buffer (as listed in City Code §34-871, as in effect on the date of approval of this SUP). The S-3 buffer, and plant materials, shall be detailed within the final Site Plan. Within the rear setback Landowner shall consider construction of a multipurpose path (for bicycles and pedestrians) linking Washington Avenue and Observatory Avenue within the rear setback, in order to establish the block-level scale of the Project as represented within the Application Materials.

Found on Sheets C0.0, C4.0, and L3.00.

(3) The Landowner shall construct within the Project, along Jefferson Park Avenue, a new seven (7) foot sidewalk with a three (3) foot curbside buffer in accordance with the standards set forth within the City's Streets that Work Plan.

Found on Sheet C4.0.

(4) The Landowner, in consultation with the City's Traffic Engineer, shall develop a Master Parking Plan for the site related to the reduction of onsite parking by 22% from what is required by Sec. 34-984 (in effect on the date of Council's approval of this Special Use Permit). The Master Parking Plan shall indicate how available parking spaces will be distributed within the Project, how residents of the Project are informed of their parking opportunities, any offsite parking options for residents, and other potential issues associated with parking. The Master Parking Plan shall be provided as a component of the final approved site plan for the Project, and any subsequent amendments approved to the Master Parking Plan shall be made in consultation with the City's Traffic Engineer and a copy maintained along with the final approved site plan, within the zoning file for the Property.

Found as Attachment C

(5) The Landowner shall upgrade the pedestrian crossing of Jefferson Park Avenue at Harmon Street during construction of the Project, to provide residents within the Project

safe access to public transit options. The Landowner shall work with the City's Traffic Engineer to determine the scope of improvements.
Found on Sheets C2.1 and C4.0.
(6) The arrangement of the buildings within the Property shall be generally consistent with the layout and design presented within the Application Materials for SP22-00001.
Found on Sheet C4.0.

Public Comments Received

Site Plan Conference Required by Z.O. Sec. 34-821
A Site Plan Conference for this project was conducted on April 5, 2023, and was attend by (8) members of the public. The main concern voiced during the meeting was traffic and the impact such a large building will have on the surrounding properties.

Recommendation

Staff recommends approval of the final site plan.

Attachments

A. Final Site Plan dated 02/20/2023 with a final revision date of 04/26/2024
B. Special Use Permit Resolution dated September 19, 2022
C. Parking Management Plan dated December 12, 2023
D. Affordable Housing Donation Letter dated September 7, 2022

ASPEN HEIGHTS (2005 JPA)

FINAL SITE PLAN

CITY OF CHARLOTTESVILLE, VIRGINIA

02/20/2023

SITE DATA:

TAX MAP PARCEL OF PARCELS IMPACTED BY PROJECT:
PARCEL NUMBER, ZONING DISTRICT, PRESENT USE
170104000, CX-5, MULTI-FAMILY RESIDENTIAL
170103000, CX-5, MULTI-FAMILY RESIDENTIAL
170103100, CX-5, MULTI-FAMILY RESIDENTIAL

TOTAL PARCEL AREA: 1.711 ACRES

LIMITS OF DISTURBANCE: 1.96 ACRES

IMPERVIOUS AREA (ON-SITE): EXISTING 0.83 ACRES
PROPOSED 1.36 ACRES

SOURCE OF SURVEY, BOUNDARY, AND TOPOGRAPHY: TIMMONS GROUP
28 IMPERIAL DRIVE
STAUNTON, VA 24401
(540) 885-0920
DATED: JULY 16TH, 2021

DATUM REFERENCE: VERTICAL: NAVD 88 ESTABLISHED THROUGH LEICA SMARTNET
HORIZONTAL: NAD83, VA STATE GRID, SOUTH ZONE

MISS UTILITY TICKET NUMBER: B120000600-00B (DATED 07/19/2021)

USE: CURRENT: MULTI-FAMILY RESIDENTIAL
PROPOSED: MULTI-FAMILY RESIDENTIAL
GROSS FLOOR AREA = 183,648 SF

ZONED: CX-5

OVERLAY DISTRICTS: ENTRANCE CORRIDOR

PROPOSED UNITS: 119 UNITS

DENSITY: ALLOWABLE: UP TO 87 DUA (PER SUP)
PROPOSED: 70 DUA

ALLOWABLE BUILDING HEIGHT: 75' MAX. HEIGHT (PER SUP)
PROPOSED MAX. BUILDING HEIGHT: 69' FROM AVERAGE GRADE PLANE

SETBACKS: PRIMARY STREET FRONTAGE (JEFFERSON AVENUE): 26.35' (AVERAGE OF NEIGHBORING PROPERTIES)
REAR: 36' (PER SUP)
SIDE: 20' (BOTH SIDES)

ADJACENT PARCELS: NORTHWEST - WASHINGTON AVE
NORTHEAST - PARCEL 170105000 - R2U
SOUTHWEST - OBSERVATORY AVE
SOUTHEAST - JEFFERSON PARK AVE

PARKING SPACES REQUIRED: STUDIO, ONE AND TWO BEDROOM APARTMENT: 1 SPACES PER UNIT
THREE OR FOUR BEDROOM APARTMENTS: 2 SPACES PER UNIT

125 SPACES (PER 22% REDUCTION IN REQUIRED SPACES)
MASTER PARKING PLAN (PER SUP CONDITION #4) SHALL BE PROVIDED WITH SECOND SUBMISSION AS DISCUSSED IN THE PRE SUBMISSION MEETING ON 2/2/23

TOTAL PARKING SPACES PROVIDED: 125 SPACES PROVIDED IN GARAGE PARKING

BICYCLE PARKING REQUIRED *(PER SECTION 34-881 OF THE CITY OF CHARLOTTESVILLE CITY CODE)*
1 BICYCLE SPACE / 2 DWELLING UNITS * 119 UNITS = 60 BICYCLE SPACES

BICYCLE PARKING PROVIDED: 96 SPACES

REQUIRED AMENITY AREAS (*PER SECTION 34-366 OF THE CITY OF CHARLOTTESVILLE CITY CODE*):

RECREATIONAL AREAS (25% OF REQUIRED SF SHALL BE INDOOR OR WEATHER PROTECTED
STUDIO: 100 SF OF ADULT SPACE: N/A
ONE BEDROOM UNIT: 200 SF OF ADULT SPACE; (13) ONE BEDROOM UNITS
TWO BEDROOM UNIT: 200 SF OF ADULT SPACE PLUS 20 SF OF CHILD SPACE; (25) TWO BEDROOM UNITS
THREE BEDROOM UNIT: 200 SF OF ADULT SPACE PLUS 40 SF OF CHILD SPACE; (2) THREE
FOUR BEDROOM UNIT: 200 SF OF ADULT SPACE PLUS 60 SF OF CHILD SPACE; (79) FOUR BEDROOM UNITS

REQUIRED ADULT SPACE: (13 UNITS X 200 SF) + (25 UNITS X 200 SF) + (2 UNITS X 200 SF) + (79 UNITS X 200 SF) = 23,800 SF
REQUIRED CHILD SPACE: (25 UNITS X 20 SF) + (2 UNITS X 40 SF) + (79 UNITS X 60 SF) = 5,320 SF
REQUIRED INDOOR OR WEATHERED PROTECTED AMENITY SPACE = 0.25 X (23,800 SF + 5,320 SF) = 7,280 SF

PROVIDED AMENITY AREAS: 10,030 SF OF INDOOR AMENITIES AND 18,719 SF OF EXTERIOR AMENITIES = 28,749 SF OF TOTAL AMENITY SPACE

2,060 SF OF POOL SPACE AND 10,000 SF OF COURTYARD SPACE SUBSTITUTED FOR CHILD SPACE

REQUIRED STORAGE: 3 SF PER BEDROOM, MINIMUM
(390 BEDROOMS X 3 SF) = 1,170 SF

PROVIDED STORAGE: 4,009 SF

PROVIDED LAUNDRY FACILITIES: 1 WASHER AND 1 DRYER PER UNIT
(119 UNITS X 1 WASHER) = 119 WASHERS
(119 UNITS X 1 DRYER) = 119 DRYERS

LOCATION OF NEARBY FIRE HYDRANTS:
1 LOCATED ON THE NORTHEAST CORNER OF THE PROPERTY ALONG WASHINGTON AVENUE.

UTILITIES: CITY OF CHARLOTTESVILLE PUBLIC WATER AND SEWER.

PROJECT TIMING: THE ANTICIPATED START DATE FOR THE PROJECT IS SPRING 2024. CONSTRUCTION ACTIVITIES ARE ANTICIPATED TO LAST APPROXIMATELY 12 - 18 MONTHS.

WETLANDS: NO WETLANDS ARE IMPACTED AS PART OF THIS PROJECT.

FLOODPLAIN: THIS SITE IS NOT WITHIN A 100-YEAR FLOODPLAIN

BUILDING AND SITE SIGNAGE: SIGNAGE PACKAGE WILL BE SUBMITTED UNDER SEPARATE COVER.

SITE LIGHTING: PROVIDED ON SHEETS L4.00 - L4.02

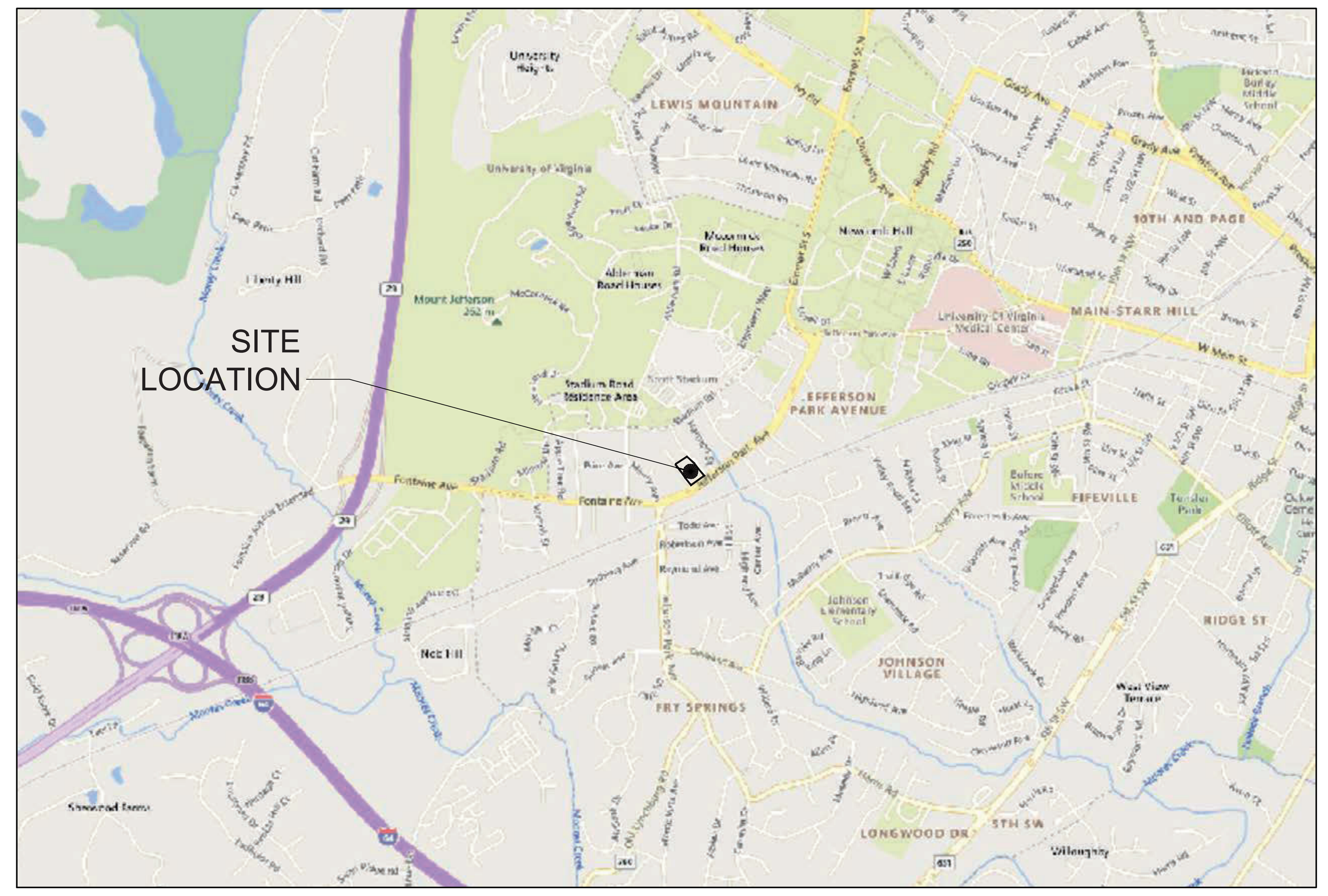
ALL CONCRETE, ASPHALT ETC. IN THE RIGHT OF WAY (ROW) THAT ARE DAMAGED DURING CONSTRUCTION BUT NOT SHOWN ON THE APPROVED SITE PLAN SHALL BE RESTORED PER CITY STANDARDS AT NO COST TO THE CITY.

TRIP GENERATION

Table 6-1: Aspen Heights Trip Generation Summary

LAND USE	ITE CODE	AMOUNT (X)	UNITS	WEEKDAY VEHICULAR TRIPS: ADT TOTAL	AM PEAK HOUR IN (41%)	AM PEAK HOUR OUT (59%)	AM PEAK HOUR TOTAL	MIDDAY PEAK HOUR(1) IN (48%)	MIDDAY PEAK HOUR(1) OUT (52%)	MIDDAY PEAK HOUR(1) TOTAL	PM PEAK HOUR IN (50%)	PM PEAK HOUR OUT (50%)	PM PEAK HOUR TOTAL
Proposed Development													
Off Campus Student Apartment	225	388	Beds	1,230	18	26	44	30	33	63	48	48	96
Trip Reduction	13%			(160)	(2)	(4)	(6)	(4)	(4)	(8)	(6)	(6)	(12)
Total External Primary Trips				1,070	16	22	38	26	29	55	42	42	84

SOURCE: Institute of Transportation Engineers' *Trip Generation Manual* 10th Edition (2017)
(1) Midday peak hour based on the ITE *Trip Generation Manual* 10th Edition, Appendix A time of day distributions for the hour beginning at 12:00 PM
(2) Trip Reduction based on the same percentage used for the parking reduction and approved by the City.



VICINITY MAP

SCALE 1":2000'

OWNER:
NORMAN LAMSON
(TRUSTEE OF THE GADIENT LAND TRUST AGREEMENT)
25 WHITE PINE STREET
SCOTTSVILLE, VA 24590

CONTRACTOR, PURCHASER / DEVELOPER:
ASPEN HEIGHTS
CONTACT: DAN KOEBEL
TELEPHONE: 540-250-4283
EMAIL: DKOEBEL@AHPLIVING.COM

ENGINEER OF RECORD:
TIMMONS GROUP
608 PRESTON AVE. SUITE 200,
CHARLOTTESVILLE, VA 22903
CONTACT: BRYAN CICHOCKI, P.E.
TELEPHONE: 434-327-5380
EMAIL: BRYAN.CICHOCKI@TIMMONS.COM

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. #
URBAN BIORETENTION (#1-#3)	9	1	38.0273 (N)	78.5137 (W)	0.69	0.69	0	0.85	020802040402	
Underground Detention			38.0273 (N)	78.5137 (W)	1.04	0.96	0.08	0	020802040402	

TOTAL LOD (AC)	1.96
TOTAL P REMOVED BY BMP'S (LBS)	0.85
TOTAL P CREDITS PURCHASED (LBS)	0.65
TOTAL P CREDITED TO PROJECT (LBS)	1.5
TOTAL P REQUIRED (LBS)	1.5
***LAND DISTURBING #**	
*** SWM BOND RELEASE DATE**	

* TO BE ENTERED BY CITY OF CHARLOTTESVILLE STAFF

CITY OF CHARLOTTESVILLE - OUTFALL TABULATION CHART

9VAC25-870-66:

Outfall Designation	LOA Designation	Receiving Channel Type	Compliance Method	EXISTING Total DA (acres)	Offsite Contribution (Acres)	CN	Tc (min)	Q1 (CFS)	Q2 (CFS)	Q10 (CFS)	Q100 (CFS)	Runoff Volume 1-Year (Vr/RV)	Runoff Volume Units	PROPOSED Total DA (acres)	Offsite Contribution (Acres)	CN	Tc (min)	Q1 (CFS)	Q2 (CFS)	Q10 (CFS)	Q100 (CFS)	Runoff Volume 1-Year (Vr/RV)	Runoff Volume Units
O4	Outfall 4	Manmade - Curb	B.3.a	1.920	0.31	83	6	5.563	7.434	13.200	24.49	0.273	ac-ft	1.920	0.31	91	6	3.821	4.867	10.63	16.61	0.338	ac-ft
TOTAL				1.920										1.920									

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

Sheet List Table

Sheet Number	Sheet Title
C0.0	COVER
C0.1	SPECIAL USE PERMIT CONDITIONS OF APPROVAL
C1.0	NOTES AND DETAILS
C1.1	NOTES AND DETAILS
C1.2	NOTES AND DETAILS
C1.3	NOTES AND DETAILS
C1.4	NOTES AND DETAILS
C1.5	NOTES AND DETAILS
C2.0	EXISTING CONDITIONS PLAN
C2.1	DEMOLITION PLAN
C3.0	EROSION AND SEDIMENT CONTROL NOTES & DETAILS
C3.1	EROSION AND SEDIMENT CONTROL NOTES & DETAILS
C3.1A	EROSION AND SEDIMENT CONTROL NOTES & DETAILS
C3.2	EROSION AND SEDIMENT CONTROL - PHASE I
C3.3	EROSION AND SEDIMENT CONTROL - PHASE II
C3.4	EROSION AND SEDIMENT CONTROL - PHASE III
C3.5	EROSION AND SEDIMENT CONTROL - PHASE IV
C3.6	EROSION AND SEDIMENT CONTROL - PHASE V
C3.7	EROSION AND SEDIMENT CONTROL - PHASE VI
C4.0	LAYOUT AND UTILITY PLAN
C4.1	EASEMENT PLAN
C5.0	GRADING AND DRAINAGE PLAN
C5.1	DETAILED GRADING PLAN
C5.2	CURB RAMP GRADING ENLARGEMENTS
C6.0	EXISTING STORMWATER MANAGEMENT PLAN
C6.1	PROPOSED STORMWATER MANAGEMENT PLAN
C6.2	STORMWATER MANAGEMENT CALCULATIONS
C6.3	FLOW PATHS ANALYSIS
C6.4	STORMWATER QUALITY SUMMARY
C6.5	STORMWATER DETAILS
C6.6	BIORETENTION DETAILS
C6.7	BIORETENTION DETAILS
C6.8	STORMWATER SUMMARY PLAN
C6.9	PIPE & INLET CALCULATIONS
C7.0	UTILITY PROFILES
C7.1	STORMWATER PROFILES
C8.0	MAINTENANCE OF TRAFFIC PLAN - VEHICULAR
C8.1	MAINTENANCE OF TRAFFIC PLAN - PEDESTRIAN ROUTES
L3.00	OVERALL PLANTING PLAN
L3.01	PLANTING DETAIL PLAN NORTH
L3.02	PLANTING DETAIL PLAN SOUTH
L3.03	PLANTING NOTES AND DETAILS
L3.04	PLANTING SCHEDULE
L4.00	SITE PHOTOMETRICS PLAN
L4.01	SITE LIGHTING CUT SHEETS
L4.02	SITE LIGHTING CUT SHEETS
S1.00	STRUCTURAL NOTES
S2.00	TYPICAL SECTION VIEWS
S3.00	STRUCTURAL DETAILS

TOTAL: 49 SHEETS

21 DAY REVIEW FOR AFFORDABLE DWELLINGS CASH CONTRIBUTION (34-12(d), 34-12(f)):

PROJECT FAR: 2.46 (1.711 ACRES, 74,531 SF/ 183,648 GFA)

PUBLIC UTILITY NOTES:

A. PER THE VIRGINIA DEPARTMENT OF HEALTH WATERWORKS REGULATIONS (PART II, ARTICLE 3, SECTION 12 VAC 5-590 THROUGH 630), ALL BUILDINGS THAT HAVE THE POSSIBILITY OF CONTAMINATING THE POTABLE WATER DISTRIBUTION SYSTEM (HOSPITALS, INDUSTRIAL SITES, BREWERIES, ETC.) SHALL HAVE A BACKFLOW PREVENTION DEVICE INSTALLED WITHIN THE FACILITY. THIS DEVICE SHALL MEET SPECIFICATIONS OF THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE, SHALL BE TESTED IN REGULAR INTERVALS AS REQUIRED, AND TEST RESULTS SHALL BE SUBMITTED TO THE REGULATORY COMPLIANCE ADMINISTRATOR IN THE DEPARTMENT OF UTILITIES.
B. ALL BUILDINGS THAT MAY PRODUCE WASTES CONTAINING MORE THAN ONE HUNDRED (100) PARTS PER MILLION OF FATS, OIL, OR GREASE SHALL INSTALL A GREASE TRAP. THE GREASE TRAP SHALL MEET SPECIFICATIONS OF THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE, MAINTAIN RECORDS OF CLEANING AND MAINTENANCE, AND BE INSPECTED ON REGULAR INTERVALS BY THE REGULATORY COMPLIANCE ADMINISTRATOR IN THE DEPARTMENT OF UTILITIES.
C. PLEASE CONTACT THE REGULATORY COMPLIANCE ADMINISTRATOR AT 970-3032 WITH ANY QUESTIONS REGARDING THE GREASE TRAP OR BACKFLOW PREVENTION DEVICES.

UTILITY DEMANDS

WATER FLOW (AVERAGE DAILY DEMAND)
AVERAGE FLOW RATES (FROM TABLE 9-1 & 9-2, CHARLOTTESVILLE STANDARDS & DESIGN MANUAL):
APARTMENTS/CONDOMINIUMS: 300 GPD X 119 UNITS
TOTAL: 35,700 GPD

AVERAGE HOUR: 35,700 GPD / 24 = 1,478.5 GALLONS PER HOUR

MAX HOUR = 300% OF AVERAGE HOUR = 1,478.5 X 3 = 4,462.5 GALLONS

PEAK HOUR = MAX HOUR X 1.5 = 4,462.5 X 1.5 = 6,693.75 GALLONS = 112 GPM

WATER METER SIZING
SAFE MAXIMUM OPERATING CAPACITY (GPM) FOR A 3" METER = 300 GPM

SEWER FLOW (AVERAGE DAILY FLOW)
AVERAGE FLOW RATES (FROM TABLE 9-1 & 9-2, CHARLOTTESVILLE STANDARDS & DESIGN MANUAL):
APARTMENTS/CONDOMINIUMS: 300 GPD X 119 UNITS
TOTAL: 35,700 GPD

APPROVALS

DIRECTOR OF NEIGHBORHOOD DEVELOPMENT SERVICES

COMMONWEALTH OF VIRGINIA
Bryan D. Cichocki
Lic. No. 53741
4/26/24
PROFESSIONAL ENGINEER

48530

THIS DRAWING PREPARED AT THE
CHARLOTTESVILLE OFFICE
608 Preston Avenue, Suite 200 | Charlottesville, VA 22903
TEL 434.295.5624 FAX 434.295.8317 www.timmons.com

DATE	REVISION DESCRIPTION
01/19/2024	FINAL SITE PLAN RESUBMISSION #1
03/22/2024	FINAL SITE PLAN RESUBMISSION #2
04/26/2024	FINAL SITE PLAN RESUBMISSION #3

FINAL SITE PLAN

DATE: 02/20/2023
DRAWN BY: M. DENHARD
DESIGNED BY: M. DENHARD
CHECKED BY: B. CICHOCKI
SCALE: N/A

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)
CITY OF CHARLOTTESVILLE, VA
COVER

JOB NO. 48530
SHEET NO. C0.0

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SUP APPROVAL DOCUMENT

INTRODUCTION: 2005 JPA is a proposed multi-family residential development on Jefferson Park Avenue. The project consists of residential units over parking and is situated in close proximity (walking distance) to the University of Virginia's central grounds. The project is within an entrance corridor.

LOCATION: 2005, 2007 Jefferson Park Avenue and 104 Observatory Avenue, an assemblage of 3 lots, with frontage on Jefferson Park Avenue between Observatory Avenue and Washington Avenue.

ZONING: The property is currently zoned R-3 in the City of Charlottesville.

PROPOSED USE: Multi-Family Residential

#R-22-117

RESOLUTION
Granting a Special Use Permit (SUP) for Property Located at 2005/2007 Jefferson Park Avenue and 104 Observatory Avenue

WHEREAS Norman Lamson, as Trustee for the Gadient JPA Land Trust ("Landowner") is the owner of certain land identified within City real estate assessment records by Parcel Identification numbers 170104000, 170103100, and 170103000, respectively, currently addressed as "2005/2007 Jefferson Park Avenue" and "104 Observatory Avenue" (collectively referred to as the "Property"), and the Landowner, proposes to redevelop the Property to accommodate a 119-unit multifamily building with underground parking, and

WHEREAS to facilitate this redevelopment, the Landowner seeks City Council's approval of a Special Use Permit to increase allowable residential density to 70 DUA, to increase building height from 45 feet to 75 feet, to reduce the rear-yard setback from 75 feet to 36 feet, and to reduce (lower by 22%) the amount of on-site parking required by City Code Sec. 34-984 (the "Project"); and

WHEREAS the Applicant seeks a Special Use Permit under City Code Secs. 34-420, 34-353(3), and 34-162(a), which collectively,allow the increased residential density, additional building height, and modified [reduced] setbacks and onsite parking requirements 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 application materials submitted by the Landowner in connection with SP22-00001("Application Materials"); and

WHEREAS, the Planning Commission and City Council conducted a joint public hearing on May 10, 2022, after notice and advertisement as required by law; and

WHEREAS following the joint public hearing, the Planning Commission considered and recommended approval of this application at their May 10, 2022 meeting; and

WHEREAS upon consideration of the Planning Commission's recommendation, the City Staff Report, comments received at the joint public hearing, and 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) Not more than seventy (70) dwelling units per acre (DUA) shall be permitted within the area of the Property.

(2) The rear-yard setback applicable within the Property shall be thirty-six (36) feet, and a twenty-five (25) foot buffer shall be provided within the rear yard, to include mature trees and shrubs at the time of planting consistent with the plant materials prescribed for an "S-3" buffer (as listed in City Code §34-871, as in effect on the date of approval of this SUP). The S-3 buffer, and plant materials, shall be detailed within the final Site Plan. Within the rear setback Landowner shall consider construction of a multipurpose path (for bicycles and pedestrians) linking Washington Avenue and Observatory Avenue within the rear setback, in order to establish the block-level scale of the Project as represented within the Application Materials.

(3) The Landowner shall construct within the Project, along Jefferson Park Avenue, a new seven (7) foot sidewalk with a three (3) foot curbside buffer in accordance with the standards set forth within the City's Streets that Work Plan.

(4) The Landowner, in consultation with the City's Traffic Engineer, shall develop a Master Parking Plan for the site related to the reduction of onsite parking by 22% from what is required by Sec. 34-984 (in effect on the date of Council's approval of this Special Use Permit). The Master Parking Plan shall indicate how available parking spaces will be distributed within the Project, how residents of the Project are informed of their parking opportunities, any offsite parking options for residents, and other potential issues associated with parking. The Master Parking Plan shall be provided as a component of the final approved site plan for the Project, and any subsequent amendments approved to the Master Parking Plan shall be made in consultation with the City's Traffic Engineer and a copy maintained along with the final approved site plan, within the zoning file for the Property.

(5) The Landowner shall upgrade the pedestrian crossing of Jefferson Park Avenue at Harmon Street during construction of the Project, to provide residents within the Project safe access to public transit options. The Landowner shall work with the City's Traffic Engineer to determine the scope of improvements.

(6) The arrangement of the buildings within the Property shall be generally consistent with the layout and design presented within the Application Materials for SP22-00001.

	Ave	No
Magill	_absent___	
Payne	_x__	____
Pinkston	_x__	____
Snook	_x__	____
Wade	_x__	____

Approved by Council
September 19, 2022

Kyna Thomas

Kyna Thomas, MMC
Clerk of Council

#R-23-103

RESOLUTION
Approval of Entrance Corridor Certificate of Appropriateness for proposed development of 2005 Jefferson Park Avenue (or *2005 JPA*).

WHEREAS Aspen Topco II Acquisitions, LLC (Applicant) on behalf of Gadient Enterprise, Inc., the owner of certain land identified within City real estate assessment records by Parcel Identification numbers 170104000, 170103100, and 170103000, respectively, and currently addressed as 2005 and 2007 Jefferson Park Avenue and 104 Observatory Avenue (collectively referred to as "2005 JPA"), proposes at 2005 JPA a multi-unit residential building with underground parking (Project), and;

WHEREAS, per City Code §34-307(a)(5), 2005 JPA is within the *Fontaine Avenue/Jefferson Park Avenue Entrance Corridor* and, per City Code §34-309, is therefore subject to design review and a Certificate of Appropriateness (CoA) is required for the Project, and;

WHEREAS on December 20, 2022 the Applicant submitted to the City an application for a CoA for the Project (Application), and;

WHEREAS, per City Code §34-308, the Planning Commission serving as the Entrance Corridor Review Board (ERB), responsible for administering the design review process in Entrance Corridor overlay districts (EC), at public meetings on February 14, 2023 and on March 14, 2023 reviewed the Project and Application, approving with conditions the requested CoA, and;

WHEREAS, as permitted by City Code §34-314(a), following the February 14, 2023 and March 14, 2023 ERB meetings, six parties appealed to City Council the ERB's approval of the CoA (March Appeal), and;

WHEREAS, per City Code §34-314(c), on May 15, 2023, following a review of the March Appeal by Council, no decision was made or formal action taken on the March Appeal; however, to eliminate a potential challenge that notice letters postmarked March 1 for the March 14 ERB meeting did not comply with the fourteen (14) days required by City Code, Council instructed staff to readvertise the CoA request for review by the ERB, and;

WHEREAS, per City Code §34-308, the Planning Commission serving as the Entrance Corridor Review Board (ERB), responsible for administering the design review process in Entrance Corridor overlay districts (EC), at public meetings on June 13, 2023 reviewed the Project and Application, approving with conditions the requested CoA, and;

WHEREAS, as permitted by City Code §34-314(a), following the June 13, 2023 ERB meeting, four parties appealed to City Council the ERB's approval of the CoA (June Appeal), and;

WHEREAS, per City Code §34-314(c), on July 17, 2023 following a review of the June Appeal, the Project, and the Application, and having considered relevant information and opinions, including the ERB's determination and the City Staff Report, this Council determined the Project is consistent with the City's Entrance Corridor Design Guidelines and compatible with the Fontaine Avenue/Jefferson Park Avenue Entrance Corridor; now, therefore,

BE IT RESOLVED by the Council for the City of Charlottesville, Virginia, that a Certificate of Appropriateness is hereby approved for the development of 2005 JPA, subject to the following conditions:

- Glass will be clear, at the locations noted in the staff report.
- New railings, if required, will match the metal rail at the podium terrace [as presented in the submittal dated 12/20/2022].
- All exterior lighting and interior lighting visible from the garage will have lamping that is dimmable, has a Color Temperature [CCT] not exceeding 3,000K, and has a Color Rendering Index [CRI] 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. [Note: This condition addresses two light sources: *exterior lighting* refers to all site and exterior lighting fixtures; *interior lighting visible from the garage* refers to all lighting fixtures within (inside) the garage.]
- Dumpsters and trash and/or recycling bins to be located within the garage and pulled to the curb only on collection days.
- If used for mechanical units, utility/service boxes, storage, trash containers, the *Mech Equip* area noted on sheet 44, at the west elevation, 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.
- 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.
- Stucco used on this site will be a durable synthetic material which is mechanically fastened over appropriate drainage mats with a code compliant water-resistant barrier.
- Bicycle runnels shall be provided as part of the multi-use path at the rear of the site.
- There will be no up-lighting of landscaping on the site.
- The number, size, type and character of all plantings (trees, shrubs etc.) and the biofilter shall be installed and maintained in substantial accordance with the drawings. [Reference sheets 44 through 48 of the submittal dated 12/20/2022.]
- Screening of vehicular lighting at the south wall of the parking garage, particularly at headlight level. [Re: glare and brightness visible outside the garage.]

[Note: The conditions of approval are those approved by the ERB on February 14, 2023, March 14, 2023, and June 13, 2023.]

	Ave	No
Payne	_x__	____
Pinkston	_x__	____
Puryear	_x__	____
Snook	_x__	____
Wade	_x__	____

Approved by Council
July 17, 2023

Kyna Thomas

Kyna Thomas, MMC
Clerk of Council

COMMONWEALTH OF VIRGINIA
Bryan D. Cichocki
Lic. No. 53741
4/26/24
PROFESSIONAL ENGINEER
48530

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REVISION DESCRIPTION
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FINAL SITTE PLAN

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SCALE N/A

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)
CITY OF CHARLOTTESVILLE, VA
SPECIAL USE PERMIT CONDITIONS OF APPROVAL

JOB NO. 48530
SHEET NO. C0.1

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GENERAL NOTES:

UTILITIES

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, OR TO DETERMINE THE METHOD OF PROTECTION ACCEPTABLE TO THE RESPECTIVE OWNER, IF THE METHOD OF PROTECTION IS NOT OTHERWISE SPECIFIED. CONTRACTOR SHALL CONDUCT ITS WORK IN THE VICINITY OF EXISTING UTILITIES IN ACCORDANCE WITH THE RESPECTIVE UTILITY'S RULES AND REGULATIONS. ANY COST INCURRED FOR REMOVING, RELOCATING OR PROTECTING UTILITIES SHALL BE BORNE BY CONTRACTOR UNLESS INDICATED OTHERWISE. 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 DELAYS RESULTING FROM CONTRACTOR'S FAILURE TO CONTACT AND COORDINATE WITH UTILITIES.
3. 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. CONTRACTOR SHALL EXERCISE CARE TO INSURE THAT THE GRADE AND ALIGNMENT OF EXISTING UTILITIES ARE MAINTAINED AND THAT NO JOINTS OR CONNECTIONS ARE DISPLACED. BACKFILL SHALL BE CAREFULLY PLACED AND COMPACTED TO PREVENT FUTURE DAMAGE OR SETTLEMENT TO EXISTING UTILITIES. ANY UTILITIES REMOVED AS PART OF THE WORK, AND NOT INDICATED TO BE REMOVED OR ABANDONED, SHALL BE RESTORED USING MATERIALS AND INSTALLATION EQUAL TO THE UTILITY'S STANDARDS.
4. CONTRACTOR SHALL NOTIFY LANDOWNERS, TENANTS AND THE ENGINEER PRIOR TO THE INTERRUPTION OF ANY SERVICES. SERVICE INTERRUPTIONS SHALL BE KEPT TO A MINIMUM.
5. ALL RECTANGULAR WATER METER BOXES LOCATED IN SIDEWALKS SHALL BE REPLACED WITH ROUND ONES. THE ADJUSTMENT OF ALL MANHOLE TOPS, WATER VALVE BOXES, GAS VALVE BOXES AND WATER METER BOXES SHALL BE THE RESPONSIBILITY OF CONTRACTOR.
6. THE CONTRACTOR SHALL NOTIFY THE CITY UTILITIES DIVISION AT LEAST TWO FULL WORKING DAYS IN ADVANCE TO ARRANGE GAS SERVICE LINE ADJUSTMENTS TO BE PERFORMED BY THE CITY.
7. ALL WATER METER, VALVES AND FIRE HYDRANT ADJUSTMENTS/RELOCATIONS SHALL BE COORDINATED OR PERFORMED BY THE CONTRACTOR IN ACCORDANCE WITH THE CITY OF CHARLOTTESVILLE DEPARTMENT OF UTILITIES REQUIREMENTS.

EROSION CONTROL & WORK AREA PROTECTION AND MAINTENANCE

1. ALL FENCES REQUIRED TO BE REMOVED OR DISTURBED BY CONSTRUCTION SHALL BE SALVAGED, STORED, PROTECTED AND RE-INSTALLED BY CONTRACTOR. IF SUCH FENCE MATERIAL CANNOT BE REUSED DUE TO DAMAGE CAUSED BY CONTRACTOR, CONTRACTOR SHALL INSTALL NEW FENCE OF THE SAME TYPE OF MATERIAL. TEMPORARY FENCING REQUIRED BY PRIVATE PROPERTY OWNERS SHALL BE PROVIDED BY CONTRACTOR. CONTRACTOR IS ADVISED TO CONTACT PROPERTY OWNERS AT LEAST FORTY-EIGHT (48) HOURS IN ADVANCE OF REMOVING ANY FENCE IN ORDER TO COORDINATE RELOCATION AND TO ESTABLISH AND CONFIRM WITH THE OWNER THE PRE-CONSTRUCTION CONDITION OF ANY FENCE TO BE REMOVED, DISTURBED OR REPLACED.
2. CONTRACTOR IS PERMITTED TO WORK IN THE PUBLIC RIGHT-OF-WAY AND ANY TEMPORARY OR PERMANENT EASEMENT SHOWN ON THE PLANS. HOWEVER, CONTRACTOR SHALL NOTIFY PROPERTY OWNER(S) FORTY-EIGHT (48) HOURS PRIOR TO WORKING ON ANY PRIVATE PROPERTY TO COORDINATE ACCESS AND TO DETERMINE A STORAGE AREA FOR MATERIALS IF NEEDED. COORDINATION OF ACCESS TO PUBLIC RIGHT-OF-WAY AND STORAGE OF MATERIALS THEREON SHALL BE COORDINATED WITH THE ENGINEER. CONTRACTOR'S FAILURE TO SO NOTIFY AND COORDINATE WITH PROPERTY OWNERS AND/OR THE ENGINEER MAY RESULT IN DELAYS. NO ADDITIONAL COMPENSATION OR TIME FOR PERFORMANCE WILL BE GIVEN FOR ANY SUCH DELAYS.
3. CONTRACTOR SHALL, AT HIS EXPENSE, MAINTAIN THE WORK SITE IN A CLEAN AND ORDERLY APPEARANCE AT ALL TIMES. ALL DEBRIS AND SURPLUS MATERIAL COLLECTED SHALL BE DISPOSED OF OFF THE WORK SITE BY CONTRACTOR, AT HIS EXPENSE.
4. EXISTING LAWNS, TREES, SHRUBS, FENCES, UTILITIES, CULVERTS, WALLS, WALKS, DRIVEWAYS, POLES, SIGNS, RIGHT-OF-WAY MONUMENTS, MAILBOXES AND THE LIKE SHALL BE PROTECTED FROM DAMAGE DURING THE WORK. ANY DAMAGE CAUSED TO SUCH ITEMS SHALL BE REPAIRED OR REPLACED BY CONTRACTOR AT NO ADDITIONAL COST. PROPERTY PINS DISTURBED BY CONTRACTOR THAT ARE NOT SHOWN ON THE PLANS TO BE DISTURBED SHALL BE RESTORED BY A LICENSED SURVEYOR AT CONTRACTOR'S EXPENSE.
5. CONTRACTOR SHALL EMPLOY EROSION CONTROL DEVICES AND METHODS AS REQUIRED TO MEET THE REQUIREMENTS AND INTENT OF THE CITY EROSION CONTROL ORDINANCE. CONTRACTOR SHALL PROVIDE THE NECESSARY DIVERSION DITCHES, DIKES OR TEMPORARY CULVERTS REQUIRED TO PREVENT MUD AND DEBRIS FROM BEING WASHED ONTO THE STREETS OR PROPERTY. CONTRACTOR'S VEHICLES SHALL BE KEPT CLEAN TO PREVENT MUD OR DUST FROM BEING DEPOSITED ON STREETS. NO AREA SHALL BE LEFT DENUDED FOR MORE THAN SEVEN (7) CALENDAR DAYS.
6. CONTRACTOR SHALL CLEAN UP, RESTORE, PERMANENTLY SEED AND MAINTAIN ALL DISTURBED AREAS IMMEDIATELY UPON COMPLETION OF WORK ON EACH SITE. TOPSOIL, SEED, FERTILIZER AND MULCH SHALL BE PLACED IN ACCORDANCE WITH CITY STANDARDS ON ALL DISTURBED AREAS. A PERMANENT STAND OF GRASS ADEQUATE TO PREVENT EROSION SHALL BE ESTABLISHED PRIOR TO FINAL ACCEPTANCE.
7. AS DETERMINED BY THE ENGINEER, ANY DEFECTIVE, FAULTY, CRACKED, BROKEN OR GRAFFITIED SIDEWALKS, DRIVEWAYS, HANDICAP RAMPS OR CURB & GUTTER SHALL BE REMOVED AND REPLACED PRIOR TO FINAL ACCEPTANCE. NO ADDITIONAL PAYMENT WILL BE MADE FOR SUCH WORK.
8. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ADHERE TO REQUESTS FROM THE CITY'S E&S INSPECTOR TO ADD OR MODIFY E&S MEASURES DURING CONSTRUCTION.

EARTHWORK AND SITE CONDITIONS

1. EXCEPT AS OTHERWISE SHOWN ON THE PLANS, ALL CUTS AND FILLS SHALL MATCH EXISTING SLOPES OR BE NO GREATER THAN 2:1.
2. NO NEW SIDEWALK SHALL EXCEED 1.9% CROSS-SLOPE (PERPENDICULAR TO THE DIRECTION OF PEDESTRIAN TRAFFIC).
3. ALL GRADING AND IMPROVEMENTS TO BE CONFINED TO THE PROJECT AREA UNLESS OTHERWISE INDICATED.
4. ALL MATERIALS AND INSTALLATION DETAILS SHALL CONFORM TO THE CITY OF CHARLOTTESVILLE ENGINEERING DIVISION STANDARDS AND ALL OTHER APPLICABLE CITY ORDINANCES.
5. ANY UNUSUAL OR UNANTICIPATED SUBSURFACE CONDITIONS SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER.
6. CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS AND LOCATIONS PRIOR TO BEGINNING WORK, AND IMMEDIATELY NOTIFY THE ENGINEER IN THE EVENT THERE ARE ANY DISCREPANCIES BETWEEN SUCH CONDITIONS AND THOSE SHOWN ON THE PLANS AND SPECIFICATIONS.

CONCRETE AND ASPHALT

1. ALL FORMS SHALL BE INSPECTED BY THE ENGINEERING INSPECTOR BEFORE ANY CONCRETE IS PLACED. THE ENGINEER INSPECTOR MAY REQUIRE CONTRACTOR, AT NO ADDITIONAL COST, TO REMOVE AND REPLACE CONCRETE PLACED PRIOR TO OR WITHOUT SUCH INSPECTION.
2. ALL MATERIAL INSIDE FORMS SHALL BE CLEAN AND FREE OF ALL ROCKS AND OTHER LOOSE DEBRIS. SUB-BASE MATERIAL SHALL BE COMPACTED BY MECHANICAL MEANS.
3. CONCRETE SHALL NOT BE PLACED UNLESS THE AIR TEMPERATURE IS AT LEAST 40 DEGREES FAHRENHEIT (F) IN THE SHADE AND RISING.
4. CONCRETE SHALL NOT BE PLACED UNTIL STEEL DOWELS HAVE BEEN INSTALLED IN EXISTING CONCRETE IN ACCORDANCE WITH CITY STANDARDS.
5. 1/2" PREMOLDED EXPANSION JOINT MATERIAL SHALL BE PLACED AT A MAXIMUM OF 30' INTERVALS ON NEW SIDEWALK, CURB, CURB & GUTTER, AT EACH END OF DRIVEWAY ENTRANCES, AT EACH END OF HANDICAP RAMPS, SOME POINT ON ENTRANCE WALKS AND STEPS ADJUSTMENTS, AND ALONG BUILDINGS AND WALLS WHERE NEW CONCRETE SIDEWALKS ARE PLACED AGAINST THEM.
6. ALL EXISTING CURBS, CURB & GUTTER, SIDEWALK AND STEPS TO BE REMOVED SHALL BE TAKEN OUT TO THE NEAREST JOINT. DEMOLITION AND DISPOSAL COST TO BE INCLUDED IN OTHER UNIT BID ITEMS. NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK.
7. DRIVEWAY ADJUSTMENTS ARE TO BE DONE IN GENTLE TRANSITIONS RATHER THAN ABRUPT BREAKS AT THE BACK OF WALKS. GRAVEL DRIVEWAYS ABOVE STREET GRADE SHALL BE PAVED FOR A MINIMUM DISTANCE OF 20' BEYOND THE BACK OF THE SIDEWALK OR CURB & GUTTER APRON WHERE APPLICABLE.
8. EXISTING ASPHALT PAVEMENT SHALL BE SAW CUT AND REMOVED AS PER THE SPECIFICATIONS. REMOVAL SHALL BE DONE IN SUCH A MANNER AS TO NOT TEAR, BULGE OR DISPLACE ADJACENT PAVEMENT. EDGES SHALL BE CLEAN AND VERTICAL, ALL CUTS SHALL BE PARALLEL OR PERPENDICULAR TO THE DIRECTION OF TRAFFIC.
9. DISPOSAL OF ALL EXCESS MATERIAL IS THE RESPONSIBILITY OF CONTRACTOR.

DRAINAGE

1. CONTRACTOR SHALL EXERCISE CARE, ESPECIALLY AT INTERSECTIONS AND GUTTER LINES, TO PROVIDE POSITIVE DRAINAGE. ANY AREAS WHERE WATER IS IMPOUNDED SHALL BE CORRECTED BY CONTRACTOR AT NO ADDITIONAL COST. POSITIVE DRAINAGE OF ALL ROADWAY AREAS TO THE STORM DRAIN INLETS OR OTHER ACCEPTABLE DRAINAGE CHANNELS AS NOTED ON THE PLANS IS REQUIRED.
2. CONTRACTOR SHALL MAINTAIN EXISTING STREAMS, DITCHES, DRAINAGE STRUCTURES, CULVERTS AND FLOWS AT ALL TIMES DURING THE WORK. CONTRACTOR SHALL PAY FOR ALL PERSONAL INJURY AND PROPERTY DAMAGE WHICH MAY OCCUR AS A RESULT OF FAILING TO MAINTAIN ADEQUATE DRAINAGE.
3. ALL PIPES, DI'S AND OTHER STRUCTURES SHALL BE INSPECTED BY THE ENGINEERING INSPECTOR BEFORE BEING BACKFILLED OR BURIED. THE ENGINEERING INSPECTOR MAY REQUIRE CONTRACTOR, AT NO ADDITIONAL COST, TO UNCOVER AND RE-COVER SUCH STRUCTURES IF THEY HAVE BEEN BACKFILLED OR BURIED WITHOUT SUCH INSPECTION.
4. REMOVED PIPE SHALL BE THE PROPERTY OF CONTRACTOR AND IF NOT SALVAGED FOR RE-USE, SHALL BE DISPOSED OF LAWFULLY.
5. ALL STORM SEWER PIPE AND DROP INLETS SHALL BE CLEARED OF DEBRIS AND ERODED MATERIAL PRIOR TO FINAL ACCEPTANCE.
6. ALL STORM SEWER PIPE JOINTS SHALL BE SEATED AND SEALED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
7. ALL EXISTING ROOF DRAINS AND OTHER DRAINAGE CONDUIT TIED INTO EXISTING PIPE SHALL BE TIED INTO NEW PIPE. ALL EXISTING ROOF DRAINS AND OTHER DRAINAGE CONDUIT BLOCKED OR DISRUPTED FROM THEIR PRE-CONSTRUCTION DRAINAGE PATTERNS SHALL BE SHORTENED, EXTENDED OR OTHERWISE CONNECTED TO THE NEW WORK USING MATERIALS APPROVED BY THE ENGINEERING INSPECTOR, AND IN SUCH A WAY THAT THE NEW DRAINAGE PATTERNS ARE ACCEPTABLE TO ENGINEER.

VEGETATION

1. PRIOR TO REMOVING ANY VEGETATION, CONTRACTOR SHALL MEET WITH THE PROPERTY OWNERS AND THE ENGINEER TO REVIEW THE LIMITS OF CONSTRUCTION AND OBTAIN PERMISSION TO REMOVE VEGETATION REQUIRED TO DO THE WORK.
2. TREE AND PLANT ROOTS OR BRANCHES THAT MAY INTERFERE WITH THE WORK SHALL BE TRIMMED OR CUT ONLY WITH THE APPROVAL OF THE OWNER AND ENGINEER. ANY TREES OR PLANTS WHICH ARE SHOWN TO REMAIN THAT DO NOT INTERFERE WITH THE WORK, BUT ARE DAMAGED BY CONTRACTOR OR HIS SUBCONTRACTORS, SHALL BE REPAIRED OR REPLACED BY CONTRACTOR AT NO ADDITIONAL COST. THIS SHALL INCLUDE BOTH ABOVE AND BELOW GROUND DAMAGE.

TRAFFIC AND SIGNAGE

1. ALL TEMPORARY NO PARKING REQUIREMENTS SHALL BE PROVIDED BY CONTRACTOR WITH APPROVAL OF THE TRAFFIC ENGINEER.
2. CONTRACTOR SHALL PROVIDE NECESSARY REFLECTORS, BARRICADES, TRAFFIC CONTROL DEVICES AND/OR FLAG PERSONS TO INSURE THE SAFETY OF ITS WORKERS AND THE PUBLIC.
3. CONTRACTOR SHALL MAINTAIN SAFE AND PASSABLE PUBLIC ACCESS TO PROPERTIES AND THE PUBLIC RIGHT-OF-WAY DURING CONSTRUCTION. EXCEPT AS APPROVED IN ADVANCE IN WRITING BY THE ENGINEER, TWO WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES THROUGH WORK AREAS WITHIN THE PUBLIC RIGHT-OF-WAY. THESE TRAFFIC CONTROLS SHALL BE IN ACCORDANCE WITH THE MOST CURRENT MUTCD MANUAL. ACCESS FOR EMERGENCY VEHICLES SHALL BE MAINTAINED AT ALL TIMES. ADDITIONALLY CONTRACTOR SHALL PROVIDE ADEQUATE PEDESTRIAN BARRIERS AND MAINTAIN PEDESTRIAN CIRCULATION DURING CONSTRUCTION.
4. EXCEPT AS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE WORK SHALL BE COORDINATED AND PERFORMED IN A MANNER SO THAT ALL EXISTING FIRE HYDRANTS SHALL BE ACCESSIBLE AT ALL TIMES DURING THE WORK.
5. CONTRACTOR SHALL NOTIFY PROPERTY OWNER(S) FORTY EIGHT (48) HOURS IN ADVANCE OF BLOCKING ANY ENTRANCE. NO ENTRANCE SHALL BE BLOCKED FOR MORE THAN TWELVE (12) HOURS IN ANY 24 HOUR PERIOD WITHOUT APPROVAL OF THE PROPERTY OWNER, EXCEPT WHERE NEW ENTRANCES ARE CONSTRUCTED.
6. WITHIN 24 HOURS OF THEIR REMOVAL, CONTRACTOR SHALL REPLACE MAILBOXES, STREET SIGNS, TRAFFIC SIGNS, AND THE LIKE THAT ARE REMOVED FOR CONSTRUCTION. PERMANENT OR SUITABLE TEMPORARY ITEMS WILL BE USED AS THE STATUS OF WORK PERMITS. PERMANENT OR TEMPORARY STOP SIGNS MUST BE IN PLACE AT ALL TIMES.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE CITY TRAFFIC DIVISION ONE FULL WORKING DAY PRIOR TO ANY CONCRETE POUR WHERE TRAFFIC AND STREET SIGNS ARE TO BE REPLACED. UPON SUCH NOTIFICATION, THE CITY WILL PROVIDE SIGN POST SLEEVES, WHEN NEEDED, AND IDENTIFY THE LOCATION WHERE SIGNS ARE TO BE PLACED.
8. ALL SIGNAGE AND PAVEMENT MARKINGS SHALL BE SHOWN ON PLANS AND SHALL BE CONSISTENT WITH THE MUTCD.
9. A TEMPORARY STREET CLOSURE PERMIT IS REQUIRED FOR CLOSURE OF SIDEWALKS, PARKING PACES, AND ROADWAYS AND IS SUBJECT TO APPROVAL BY THE CITY TRAFFIC ENGINEER.

MISCELLANEOUS

1. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, INSPECTIONS, BONDS, AND OTHER APPROVAL RELATED ITEMS IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, LOCAL, STATE, AND FEDERAL POLICIES. CONTACT FOR CITY STREET/SIDEWALK CUT PERMITS, PLEASE CALL (434) 970-3361.
2. THE CONTRACTOR WILL BE REQUIRED TO PLACE "DEAR NEIGHBOR" DOOR HANGER NOTIFICATIONS ON THE FRONT DOOR OF ALL RESIDENCES AFFECTED BY THE CONSTRUCTION AND "SIDEWALK" SAFETY SIGNS AT EACH LOCATION WITH WORKING CREWS. THIS SHALL BE DONE PRIOR TO ANY WORK STARTING.
3. WATER METERS THAT ARE TO BE MOVED SHALL BE MOVED COMPLETELY IN THE SIDEWALK OR COMPLETELY OUT OF THE SIDEWALK. WATER METERS MOVED IN THE SIDEWALK SHALL BE LOCATED WITHIN 18" OF THE EDGE.
4. RETAINING WALLS WITH A MAX HEIGHT OF 12" OR LESS SHALL BE POURED IN CONTINUITY WITH THE SIDEWALK. WALLS WITH A MAX HEIGHT GREATER THAN 12" SHALL BE SEGMENTAL BLOCK WALLS.
5. ALL SIGNS TO BE RELOCATED SHALL BE LOCATED WITHIN 6 INCHES BEHIND THE BACK EDGE OF THE SIDEWALK.
6. EXISTING ROOF DRAINS SHALL BE ROUTED THROUGH SIDEWALK. ROOF DRAINS LARGER THAN 4" WILL REQUIRE A TROUGH DRAIN.

FIRE DEPARTMENT

1. BUILDING STREET NUMBERS SHALL BE PLAINLY VISIBLE FROM STREET.
2. A KNOXBOX KEY BOX SHALL BE REQUIRED.
3. AN ELEVATOR KEYBOX WILL BE REQUIRED.
4. OVERHEAD WIRING OR OTHER OBSTRUCTIONS SHALL BE HIGHER THAN 13.5'.
5. AN APPROVED WATER SUPPLY DURING CONSTRUCTION SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL ARRIVES ON SITE.
6. IF THE FLOOR LEVEL OF THE HIGHEST STORY IS MORE THAN 30' ABOVE THE LOWEST LEVEL OF FIRE DEPARTMENT VEHICLE ACCESS, THEN A CLASS I STANDPIPE SYSTEM MUST BE INSTALLED IN ADDITION TO THE SPRINKLER SYSTEM.
7. WHERE A BUILDING HAS BEEN CONSTRUCTED TO A HEIGHT GREATER THAN 50' OR FOUR STORIES, AT LEAST ONE TEMPORARY LIGHTED STAIRWELL SHALL BE PROVIDED UNLESS OR MORE PERMANENT STAIR ARE ERECTED AS THE CONSTRUCTION PROGRESSES.
8. BUILDINGS FOUR OR MORE STORIES IN HEIGHT SHALL BE PROVIDED WITH NOT LESS THAN ONE STANDPIPE OR USE DURING CONSTRUCTION. SUCH STANDPIPES SHALL BE INSTALLED WHEN THE PROGRESS OF CONSTRUCTION IS NOT MORE THAN 40' 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.
9. NO SMOKING OR VAPING WITHIN THE CONSTRUCTION SAFETY FENCE. NO SMOKING SIGNS 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 CONSTRUCITON SITE, HE OR SHE MAY REQUEST A 24-HOUR STOP WORK ORDER FROM THE CITY BUILDING OFFICIAL.
10. WASTE DISPOSAL OF COMBUSTIBLE DEBRIS SHALL BE REMOVED FROM THE BUILDING AT THE END OF EACH WORKDAY.
11. 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 HOTWORK OPERATIONS.
12. FIRE EXINGUISHERS SHALL BE PROVIDED WITH NOT LESS THAN ONE APPROVED PORTABLE FIRE EXTINGUISHER AT EACH STAIRWAY ON ALL FLOOR LEVELS WHERE COMBUSTIBLE MATERIALS HAVE BEEN ACCUMULATED.
13. REQUIRED VEHICLE ACCESS FOR FIRE FIGHTING SHALL BE PROVIDED TO ALL CONSTRUCTION OR DEMOLITION SITES. VEHICLE ACCESS SHALL BE PROVIDED WITHIN 100' 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. ALL PAVEMENT SHALL BE CAPABLE OF SUPPORTING FIRE APPARATUS WEIGHING 85,000LBS.
14. A PERMIT IS REQUIRED FOR FIRE LINE INSTALLATION. A DETAILED DRAWING (2 SETS) SHOWING FITTINGS AND THRUST BLOCKS MUST BE SUBMITTED WITH THE PERMIT APPLICATION. ONCE INSTALLED, THE FIRE LINE REQUIRES A VISUAL INSPECTION AND A PRESSURE TEST INSPECTION BY THE FIRE MARSHALL'S OFFICE.
15. FIRE HYDRANTS, FIRE PUMP TEST HEADER, FIRE DEPARTMENT CONNECTIONS OR FIRE SUPPRESSION SYSTEM CONTROL VALVES SHALL REMAIN CLEAR AND UNOBSTRUCTED BY LANDSCAPING, PARKING OR OTHER OBJECTS. LANDSCAPING IN THE AREA OF THESE ITEMS SHALL BE OF THE TYPE THAT WILL NOT ENCROACH ON THE REQUIRED FIVE FOOT RADIUS ON MATURITY OF THE LANDSCAPING.
16. NO VEHICLE/MACHINERY OF ANY TYPE, CONSTRUCTION MATERIALS OR CONSTRUCTION DEBRIS IS TO BE PARKED, PLACED, OR STORED WITHIN 15 FT OF EITHER SIDE OR IN FRONT OF A FIRE HYDRANT.
17. DUMPSTERS, BUILDING MATERIALS AND CONSTRUCTION DEBRIS MUST BE KEPT AT LEAST 30' AWAY FROM BUILDINGS UNDER CONSTRUCTION.

GENERAL SITE PLAN LEGEND

SHEET SPECIFIC LEGEND PROVIDED ON APPLICABLE SHEETS

EXISTING

- PROPERTY LINE
- POST/BOLLARD
- SIGN
- BUMPER BLOCK
- TRAFFIC CONTROL BOX
- UNKNOWN MANHOLE
- STORM SEWER
- STORM SEWER MANHOLE
- CATCH BASIN
- SANITARY SEWER (SAN)
- SANITARY SEWER MANHOLE
- WATER LINE (W)
- WATER MANHOLE
- WATER VALVE
- FIRE HYDRANT
- GAS LINE (G)
- GAS METER
- GAS MARKER
- COMMUNICATIONS/TELEPHONE LINE (UGT)
- TELEPHONE/COMMUNICATIONS MANHOLE
- COMMUNICATIONS VAULT
- ELECTRIC LINE (UGP)
- ELECTRIC MANHOLE
- ELECTRIC PULLBOX
- ELECTRIC METER
- UTILITY POLE
- DECIDUOUS TREE
- GUARDRAIL
- FENCE (X)
- MAJOR CONTOUR (XXX)
- MINOR CONTOUR (XXX)
- SURVEY CONTROL MONUMENT
- SURVEY CONTROL POINT

PROPOSED

- WATER (W)
- GAS (G)
- STORM
- SANITARY (SAN)
- CATCH BASIN
- STORM MANHOLE (1)
- SANITARY MANHOLE (E)
- SANITARY CLEAN OUT
- FIRE HYDRANT
- FDC
- METER
- SETBACK
- WATER VALVE
- BOLLARD
- STREET SIGN
- FENCE (X)
- MAJOR CONTOUR (XXX)
- MINOR CONTOUR (XXX)
- SITE LIGHT
- PARKING SPACE COUNT (X)
- TOP OF CURB (TC)
- TEST PIT (TP)

SPOT SHOT LEGEND

TC: TOP OF CURB
TW: TOP OF WALL
BS: BOTTOM OF STAIRS
SWK: SIDEWALK
FFE: FINISHED FLOOR ELEVATION

GENERAL NOTES

1. CONTRACTOR SHALL COORDINATE ALL REQUIREMENTS FOR AS BUILT DOCUMENTATION, AS REQUIRED BY THE LOCALITY. THIS INCLUDES, BUT IS NOT LIMITED TO, TESTING, INSTALLATION DOCUMENTATION, SURVEY, ETC. ALL REQUIREMENTS SHALL BE DISCUSSED WITH THE LOCALITY PRIOR TO BEGINNING CONSTRUCTION.
2. ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT VIRGINIA DEPARTMENT OF TRANSPORTATION'S SPECIFICATIONS AND STANDARDS.
3. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL CONSULT THE ENGINEER AND VERIFY THE APPROVAL OF THE PLANS BY ALL FEDERAL, STATE AND LOCAL AGENCIES.
4. THE CONTRACTOR SHALL VERIFY THE ELEVATIONS OF ALL POINTS OF CONNECTION OR PROPOSED WORK TO EXISTING CURBS, EXISTING ASPHALT, SANITARY LINES, WATERLINES, ETC, PRIOR TO CONSTRUCTION.
5. UPON DISCOVERY OF SOILS THAT ARE UNSUITABLE FOR FOUNDATIONS, SUBGRADES, OR OTHER ROADWAY CONSTRUCTION PURPOSES, THE CONTRACTOR SHALL IMMEDIATELY CONTACT THE OWNER. THESE AREAS SHALL BE EXCAVATED BELOW PLAN GRADE AS DIRECTED BY THE OWNER, BACKFILLED WITH SUITABLE MATERIAL AND COMPACTED IN ACCORDANCE WITH CURRENT.
6. ALL STORM SEWER DESIGN AND CONSTRUCTION TO BE IN ACCORDANCE WITH VDOT I AND I LD-94 (D) 121.13.
7. ALL RCP STORM SEWER PIPE SHALL BE REINFORCED TONGUE AND GROVE CONCRETE PIPE IN ACCORDANCE WITH ASTM-C-76. PIPE SHALL BE MINIMUM CLASS III OR GREATER IN ACCORDANCE WITH CURRENT VDOT STANDARDS AND SPECIFICATIONS.
8. IF PRE-CAST UNITS ARE TO BE USED CERTIFICATION AND VDOT STAMP WILL BE REQUIRED ON ALL UNITS.
9. ALL CONCRETE SHALL BE A3-AE (AIR ENTRAINED 3,000 PSI), UNLESS OTHERWISE NOTED.
10. DESIGN CHANGES, SPECIFIED MATERIALS CHANGES AND/OR FIELD CHANGES FROM THE APPROVED PLANS NEED TO BE RESUBMITTED TO THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK. A LETTER OF EXPLANATION SHALL ACCOMPANY THE REVISED PLANS AND/OR THE DRAINAGE CALCULATIONS, WHICH MUST BE SUBMITTED AND APPROVED BY THE ENGINEER.
11. CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES SHOWN ON PLANS IN AREAS OF CONSTRUCTION PRIOR TO STARTING WORK. CONTACT ENGINEER IMMEDIATELY IF LOCATION OR ELEVATION IS DIFFERENT FROM THAT SHOWN ON PLAN. IF THERE APPEARS TO BE A CONFLICT, AND/OR UPON DISCOVERY OF ANY UTILITY NOT SHOWN ON THIS PLAN, CALL MISS UTILITY OF CENTRAL VIRGINIA AT 1-800-552-7001.
12. THE INSTALLATION OF SEWER, WATER, AND GAS MAINS (INCLUDING SERVICE LATERALS AND SLEEVES) SHALL BE COMPLETED PRIOR TO THE PLACEMENT OF AGGREGATE BASE COURSE.
13. A PRIME COAT SEAL BETWEEN THE AGGREGATE BASE AND BITUMINOUS CONCRETE WILL BE REQUIRED AT THE RATE OF 0.30 GALLONS PER SQUARE YARD (REC-250 PRIME COAT) PER VDOT STANDARDS AND SPECIFICATIONS.
14. THE SCHEDULING OF AGGREGATE BASE INSTALLATION AND SUBSEQUENT PAVING ACTIVITIES SHALL ACCOMMODATE FORECAST WEATHER CONDITIONS PER SECTION 315 OF THE ROAD AND BRIDGE SPECIFICATIONS.
15. THE OWNERS REPRESENTATIVE SHALL HAVE APPROVED THE AGGREGATE BASE COURSE(S) FOR DEPTH, TEMPLATE AND PERFORMED THE REQUIRED FIELD INSPECTION (PROOF ROLL) PRIOR TO PLACEMENT OF ANY SURFACE COURSE(S). CONTACT THE OWNER FOR INSPECTION FOR THE AGGREGATE BASE COURSE(S) 48 HOURS PRIOR TO APPLICATION OF THE SURFACE COURSE(S).
16. ALL VEGETATION AND ORGANIC MATERIAL MATERIAL IS TO BE REMOVED FROM THE PROPOSED PAVEMENT LIMITS PRIOR TO CONDITIONING OF THE SUBGRADE.
17. CERTIFICATION AND SOURCE OF MATERIALS ARE TO BE SUBMITTED TO THE OWNER FOR ALL MATERIALS AND BE IN ACCORDANCE WITH THE ROAD AND BRIDGE SPECIFICATIONS, AND ROAD AND BRIDGE STANDARDS.
18. CONTRACTOR SHALL PROVIDE A SEQUENCE OF CONSTRUCTION/MAINTENANCE OF TRAFFIC PLAN IN ACCORDANCE WITH THE STANDARDS AND GUIDELINES CONTAINED IN THE 2011 EDITION OF THE VIRGINIA WORK AREA PROTECTION MANUEL FOR REVIEW BY THE ENGINEER, OWNER AND CITY OF CHARLOTTESVILLE PRIOR TO STARTING WORK THAT IMPACTS TRAFFIC ON PUBLIC ROADS.
19. ALL NEW HANDICAP ACCESSIBLE REQUIREMENTS ON-SITE AND WITHIN ALL NEW STRUCTURES SHALL COMPLY WITH THE MOST CURRENT UNIFORM STATEWIDE BUILDING CODE, VIRGINIA CONSTRUCTION CODE, ICC/ANSI A117.1-03 AND 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN.
20. HORIZONTAL AND VERTICAL SIGHT DISTANCES SHALL BE FREE OF PARKED VEHICLES.

COMMONWEALTH OF VIRGINIA
Bryan D. Cichocki
Lic. No. 53741
4/26/24
PROFESSIONAL ENGINEER

48530

THIS DRAWING PREPARED AT THE
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DATE	REVISION DESCRIPTION
01/19/2024	FINAL SITE PLAN RESUBMISSION #1
03/22/2024	FINAL SITE PLAN RESUBMISSION #2
04/26/2024	FINAL SITE PLAN RESUBMISSION #3

FINAL SITE PLAN

DATE: 02/20/2023
DRAWN BY: M. DENHARD
DESIGNED BY: M. DENHARD
CHECKED BY: B. CICHOCKI
SCALE: N/A

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)
CITY OF CHARLOTTESVILLE, VA
NOTES AND DETAILS

JOB NO.: 48530
SHEET NO.: C1.0

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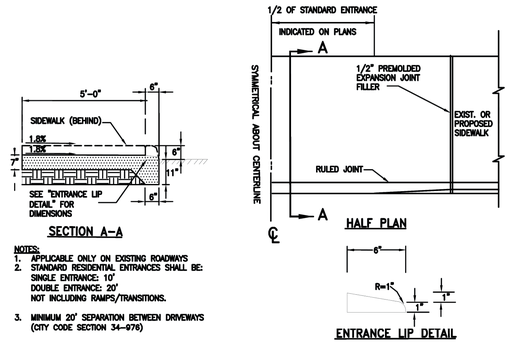
GENERAL NOTES:

1. CONCRETE STRENGTH FOR RIGHT OF WAY ELEMENTS SHALL BE MINIMUM 4000 PSI.
2. CITY STANDARD DETAILS SHALL BE USED FOR ALL CONCRETE WORK IN THE RIGHT OF WAY.

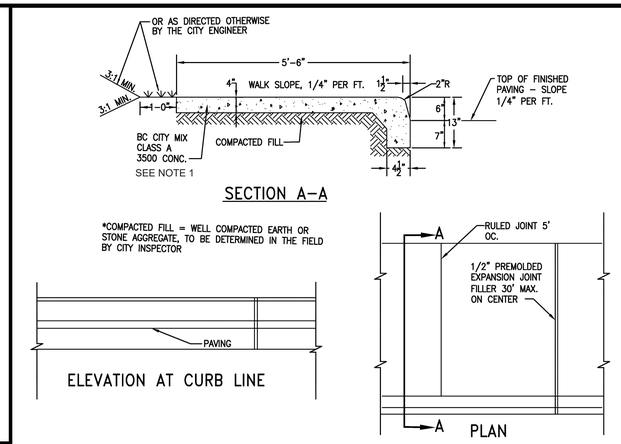


NOTES:
1. APPLICABLE ONLY ON EXISTING ROADWAYS
2. STANDARD RESIDENTIAL ENTRANCES SHALL BE:
   SINGLE ENTRANCE: 10'
   DOUBLE ENTRANCE: 20'
   NOT INCLUDING RAMPS/TRANSITIONS.
3. MINIMUM 20' SEPARATION BETWEEN DRIVEWAYS (CITY CODE SECTION 34-976)

CITY OF CHARLOTTESVILLE

REVISION	DATE
#1 (ADA)	5/2021

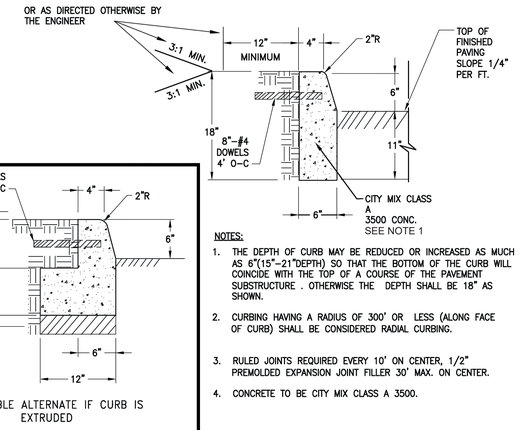
CITY STANDARDS
STANDARD ENTRANCE WITH 5' MONOLITHIC SIDEWALK AND CURB
SCALE: N.T.S. | STANDARD NUMBER: RE-1(1/2)



CITY OF CHARLOTTESVILLE

REVISION	DATE

CITY STANDARDS
STANDARD SIDEWALK MONOLITHIC WITH CURB
SCALE: N.T.S. | STANDARD NUMBER: SW-2

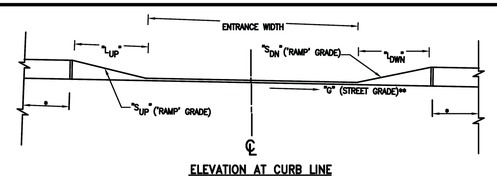


NOTES:
1. THE DEPTH OF CURB MAY BE REDUCED OR INCREASED AS MUCH AS 6"(15"-21"DEPTH) SO THAT THE BOTTOM OF THE CURB WILL COINCIDE WITH THE TOP OF A COURSE OF THE PAVEMENT SUBSTRUCTURE . OTHERWISE THE DEPTH SHALL BE 18" AS SHOWN.
2. CURBING HAVING A RADIUS OF 300' OR LESS (ALONG FACE OF CURB) SHALL BE 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 3500.

CITY OF CHARLOTTESVILLE

REVISION	DATE

CITY STANDARDS
STANDARD CURBING
SCALE: N.T.S. | STANDARD NUMBER: CG-2



*2.5' MIN. TO ADJACENT PROPERTY
** SHALL BE MAXIMUM SURVEYED GRADE WITHIN POTENTIAL SCOPE OF ENTRANCE (ALL GRADES ABSOLUTE)

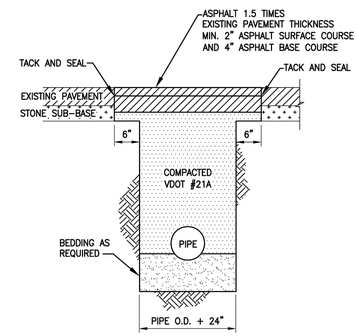
G(%)	L_{UP} (FT)	S_{UP}(%)	L_{DWN}(FT)	S_{DWN} (%)
0.0	6.2	8.1	6.2	8.1
1.0	7.2	8.0	5.5	8.1
2.0	8.3	8.0	5	8.0
3.0	9.9	8.1	5	7.0
4.0	12.2	8.1	5	6.0
5.0	15	8.3	5	5.0
6.0	15	8.3	5	4.0
≥7.0	15	8.3	5	3.0

NOTES:
1) CHART IS PROVIDED FOR INFORMATIONAL PURPOSES. REPRESENTS MINIMUM RAMP LENGTHS FOR CORRESPONDING EXISTING ROAD GRADES WHERE CURB REVEAL IS 6". RAMP LENGTHS AND GRADES SHALL BE DETERMINED BY THE DESIGN PROFESSIONAL FOR SPECIFIC APPLICATIONS.
2) ENTRANCES THAT CANNOT BE PROVIDED TO STRICT COMPLIANCE REQUIRE NARRATIVE JUSTIFICATION AND DETAILED LISTS OF PHYSICAL BARRIERS TO STRICT COMPLIANCE BE NOTED ON THE PLANS OR BE FILED WITH CITY OF CHARLOTTESVILLE PUBLIC WORKS ENGINEERING DIVISION.

CITY OF CHARLOTTESVILLE

REVISION	DATE

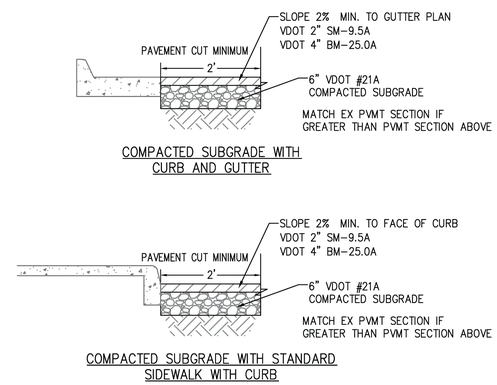
CITY STANDARDS
STANDARD ENTRANCE WITH 5' MONOLITHIC SIDEWALK AND CURB
SCALE: N.T.S. | STANDARD NUMBER: RE-1(2/2)



CITY OF CHARLOTTESVILLE

REVISION	DATE

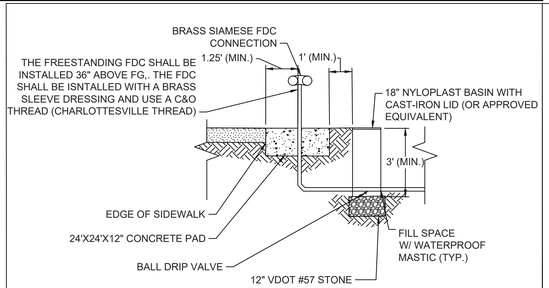
CITY STANDARDS
PERMANENT PAVEMENT REPAIR
SCALE: N.T.S. | STANDARD NUMBER: PR-1



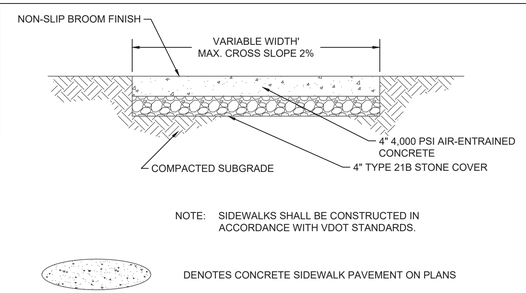
CITY OF CHARLOTTESVILLE

REVISION	DATE

CITY STANDARDS
MINIMUM PAVEMENT PATCH
SCALE: N.T.S. | STANDARD NUMBER: PP-1



FREE-STANDING FDC DETAIL
No Scale



CONCRETE SIDEWALK PAVEMENT SECTION
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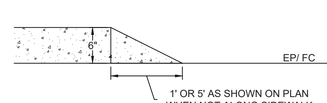

CURB WIPE DOWN DETAIL
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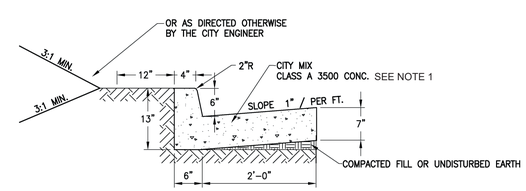

NOTES:
1. THE BOTTOM OF THE CURB AND GUTTER MAY BE CONSTRUCTED PARALLEL TO THE SLOPE OF SUB-SURFACE COURSES PROVIDED A MINIMUM DEPTH OF 7" IS MAINTAINED.
2. COMBINATION CURB & GUTTER HAVING A RADIUS OF 300' OR LESS (ALONG FACE OF CURB) SHALL BE CONSIDERED RADIAL COMBINATION CURB & GUTTER.
3. RULED JOINTS SHALL BE PLACED AT 10' O.C.
4. PLACE 1/2" PREMOLDED EXPANSION JOINT FILLER AT 30' MAX. O.C.

CITY OF CHARLOTTESVILLE

REVISION	DATE

CITY STANDARDS
COMBINATION CURB & GUTTER
SCALE: N.T.S. | STANDARD NUMBER: CG-6

COMMONWEALTH OF VIRGINIA
Bryan D. Cichocki
Lic. No. 53741
4/26/24
PROFESSIONAL ENGINEER
48530

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FINAL SITTE PLAN

REVISION DESCRIPTION	DATE
FINAL SITE PLAN RESUBMISSION #1	03/19/2024
FINAL SITE PLAN RESUBMISSION #2	03/22/2024
FINAL SITE PLAN RESUBMISSION #3	04/26/2024

DATE: 02/20/2023
DRAWN BY: M. DENHARD
DESIGNED BY: M. DENHARD
CHECKED BY: B. CICHOCKI
SCALE: N/A

TIMMONS GROUP

ASPHEN HEIGHTS (2005 JPA)
CITY OF CHARLOTTESVILLE, VA
NOTES AND DETAILS

JOB NO. 48530
SHEET NO. C1.1

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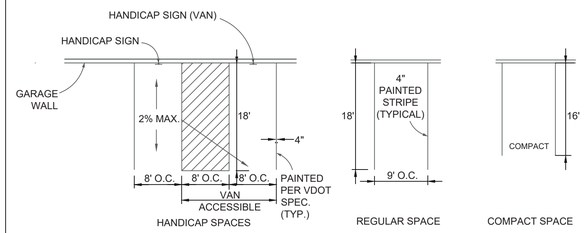
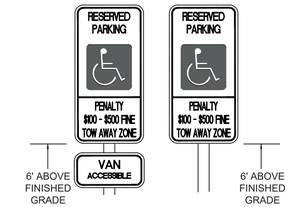
ACCESSIBILITY NOTES:

1. THIS PROJECT IS DESIGNED TO MEET THE INDICATED ACCESSIBILITY REQUIREMENTS CHECKED BELOW:
   a. 2010 ADA STANDARDS ___X___
   b. DRAFT PUBLIC RIGHTS-OF-WAY ACCESSIBILITY GUIDELINES (PROW) _____
   c. FAIR HOUSING ACT DESIGN MANUAL _____
   d. IBS 2009 WITH ICC/ANSI A117.1-2003(VA) _____
   e. UFAS (SECTION 504) _____
2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLIANT CONSTRUCTION OF ALL ACCESSIBILITY REQUIREMENTS IN THE REFERENCED STANDARDS, CONSTRUCTION DRAWINGS AND DETAILS. SPECIFICS REGARDING ANY QUESTION OR CONCERN OF THIS DESIGN SHALL BE PROMPTLY SHARED WITH THE ENGINEER OF RECORD.
3. FOR PURPOSES OF THESE NOTES, ALL REQUIREMENTS FOR ACCESSIBLE ROUTES AND CIRCULATION PATHS APPLY TO PEDESTRIAN ACCESS ROUTES AND THE ACCESSIBLE MEANS OF EGRESS TO THE PUBLIC WAY AND AS SPECIFICALLY INDICATED ON THIS PLAN.
4. ANY PART OF AN ACCESSIBLE ROUTE WITH A SLOPE GREATER THAN 5% (1:20) SHALL BE CONSIDERED A RAMP. (2010 ADA 403.3)
5. RAMPS SHALL BE CONSTRUCTED PER FOR FOLLOWING REQUIREMENTS (2010 ADA 405)
   a. MAXIMUM LONGITUDINAL SLOPE 8.33% (1:12). MAXIMUM CROSS SLOPE 2% (1:48)
   b. BOTH RAMPS AND LANDINGS SHALL HAVE EDGE PROTECTION, CURBING OR PROVIDED WITH HANDRAIL. (2010 ADA 405.9)
   c. SLOPES BETWEEN 5% (1:20) AND 8.33% (1:12) WITH A VERTICAL RISE MORE THAN 6" SHALL HAVE HANDRAILS ON BOTH SIDES (2010 ADA 405.8)
   d. MAXIMUM VERTICAL RISE BETWEEN LANDINGS SHALL BE 30". (2010 ADA 405.6)
   e. RAMPS IN PUBLIC RIGHTS OF WAYS MUST COMPLY WITH PROW UNLESS AHJ ADOPTS SPECIFIC STANDARDS EXPLICITLY STATING THAT HANDRAILS, EDGE PROTECTION, OR LANDINGS ARE NOT REQUIRED.
6. LANDINGS (2010 ADA 405.7):
   a. MAXIMUM SLOPE IN ANY DIRECTION IS 2% (1:48)
   b. LANDINGS SHALL BE MEASURED BETWEEN EDGE PROTECTION
   c. MINIMUM WIDTH SHALL BE AT LEAST AS WIDE AS THE RAMP
   d. MINIMUM LENGTH OF 60"
   e. CHANGE IN DIRECTION REQUIRES MINIMUM SIZE OF 60" BY 60" CLEAR
   f. TOP LANDINGS AT LOCKABLE DOORS SHALL BE 60" BY 60" CLEAR (ICC A117.1 405.7.5)
7. CROSS SLOPE (2010 ADA 403.3):
   a. MAXIMUM CROSS SLOPE ON ANY PART OF THE ACCESSIBLE ROUTE IS 2% (1:48). EXAMPLES BUT NOT LIMITED TO WALKWAYS, SIDEWALKS, POOL DECKS FOR IDENTIFIED ACCESSIBLE ROUTES ON THE PLANS.
   b. CROSS SLOPE IS MEASURED IN ALL DIRECTIONS WHERE THE ACCESSIBLE ROUTE TURNS.
   c. 2% MAXIMUM SLOPE (1:48) WHERE ACCESSIBLE ROUTE CROSSES VEHICULAR TRAVEL WAYS
8. WIDTH OF ACCESSIBLE ROUTE (2010 ADA 403.5):
   a. ON PRIVATE PROPERTY, ACCESSIBLE ROUTE SHALL BE 36" MINIMUM. FOR DISTANCES OF 24" OR LESS, THE ACCESSIBLE ROUTE MAY NARROW TO 32" MINIMUM WITH SEGMENTS OF 36" WIDTH AND 48" LENGTH ON EITHER SIDE OF CONSTRICTION.
   b. WITHIN ANY PUBLIC RIGHT OF WAY, THE MINIMUM WIDTH SHALL BE 48" NO EXCEPTIONS (PROW R302.3)
   c. OBSTRUCTIONS (EG. WHEEL STOPS) MAY NOT REDUCE THE CLEAR WIDTH EXCEPT PER 8a (2010 ADA 403.5.1).
9. PASSING AREAS (2010 ADA 403.5.3)
   a. WHERE ACCESSIBLE ROUTE IS LESS THAN 60" WIDE, EVERY 200' INTERVAL PROVIDE EITHER 60" BY 60" PASSING SPACE OR T-SHAPED INTERSECTION COMPLYING WITH 2010 ADA 304.3.2.
10. OPENINGS ALONG THE ACCESSIBLE ROUTE, INCLUDING DRAIN COVERS, INLETS, AND CONSTRUCTION JOINTS, SHALL NOT EXCEED ½" IN THE DIRECTION OF TRAVEL. LONG DIMENSIONS OF OPENINGS SHALL BE PERPENDICULAR TO THE DOMINANT DIRECTION OF TRAVEL. (2010 ADA 302.3)
11. PROTRUDING OBJECTS (2010 ADA 307):
   a. MINIMUM OVERHEAD CLEARANCE: 80"
   b. WALL-MOUNTED: IF BOTTOM EDGE IS BETWEEN 27" AND 80" ABOVE THE ACCESSIBLE ROUTE, THEN OBJECT CANNOT PROJECT MORE THAT 4" INTO THE CIRCULATION PATH.
   c. POST-MOUNTED: IF BOTTOM EDGE IS BETWEEN 27" AND 80" ABOVE THE ACCESSIBLE ROUTE, THEN OBJECT CANNOT PROJECT MORE THAN 12" INTO THE CIRCULATION PATH.
   d. IF OBJECT IS MOUNTED BETWEEN POSTS AND BOTTOM EDGE IS BETWEEN 27" AND 80" ABOVE THE ACCESSIBLE ROUTE, THEN CLEAR SPACE BETWEEN POSTS IS 12" MAXIMUM.
12. CURB RAMPS IN THE PUBLIC RIGHT OF WAY AND ON PRIVATE PROPERTY SHALL COMPLY WITH VDOT STANDARDS. (2010 ADA 406) SEE VDOT DETAILS FOR ADDITIONAL INFORMATION.
   a. REGARDLESS OF STATE AND LOCAL DETAILS, THE SLOPE OF THE 6" CURB PORTION OF THE CURB RAMP IS 8.33% (1:12) MAXIMUM AND THE COUNTER SLOPE OF GUTTER 5% (1:20) MAXIMUM.
   b. REGARDLESS OF THE STATE AND LOCAL DETAILS, THE COUNTER SLOPE OF THE GUTTER IN ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL BE 2% (1:48) MAXIMUM IN ALL DIRECTIONS.
   c. SLOPE: 8.33% (1:12) MAXIMUM, 6" MAXIMUM VERTICAL RISE.
   d. LENGTH: IN PUBLIC RIGHTS OF WAY, THE LENGTH FOR A CURB RAMP SHALL NOT EXCEED 15' LONG.
   e. LANDING LENGTH AT THE TOP OF CURB RAMPS SHALL BE 36" MINIMUM AND MAXIMUM 2% (1:48) IN ALL DIRECTIONS. LANDING LENGTH IN PUBLIC RIGHTS OF WAY, SHALL BE A MINIMUM OF 48" (PROW R304)
13. WHERE THE ACCESSIBLE ROUTE CROSSES A VEHICULAR TRAVEL WAY AND A CURB RAMP OR A CURB TRANSITION IS USED, PROVIDE A DETECTABLE WARNING THAT COMPLIES WITH VDOT STANDARDS. THE DETECTABLE WARNING SHALL EXTEND THE ENTIRE WIDTH OF THE CIRCULATION PATH AND SHALL BE 24" MINIMUM DEEP. (PROW R305)
14. IN MULTI-FAMILY DEVELOPMENTS THAT ARE COVERED BY FAIR HOUSING, STAIRS ADJACENT TO ACCESSIBLE ROUTES MUST BE ACCESSIBLE. (2010 ADA 505.10)
   a. INSTALL ACCESSIBLE HANDRAILS ON BOTH SIDES.
   b. HANDRAILS SHALL EXTEND OVER THE TOP AND BOTTOM LANDINGS IN THE SAME DIRECTION AS THE FLIGHT OF STAIRS. EXTENSIONS OVER THE TOP LANDING SHALL BE HORIZONTAL AND SHALL EXTEND 12" MINIMUM. EXTENSIONS OVER THE BOTTOM LANDINGS SHALL AT THE SLOPE OF THE HANDRAIL FOR AT LEAST THE DEPTH OF THE TREAD.
15. ALL STEPS THAT PROVIDE PUBLIC ACCESS SHALL MEET ADA-ABA ACCESSIBLE GUIDELINE STANDARDS (ICC A117.1 504).
16. PARKING (2010 ADA 502):
   a. SPACE AND ACCESS AISLE, MAXIMUM SLOPE IN ANY DIRECTION: 2% (1:48)
   b. PARKING IS DIMENSIONED TO THE CENTERLINE OF THE LINES AND TO THE FACE OF CURBS.
   c. VAN SPACES:
      i. PROVIDE AT LEAST ONE. PROVIDE ON VAN SPACE FOR EVERY 6 ACCESSIBLE SPACES.
      ii. WIDTH 132" MINIMUM
   d. ACCESSIBLE SPACE WIDTH, 96" MINIMUM
   e. ACCESS AISLES MINIMUM WIDTH SHALL BE 60"
   f. PARALLEL PARKING IN THE PUBLIC RIGHT OF WAY:
      i. MINIMUM WIDTH 96" (FACE OF CURB TO EDGE OF TRAVEL WAY)
      ii.IF ADJACENT SIDEWALK IS 14' OR LESS IN WIDTH, NO ACCESS AISLE IS REQUIRED. SPACE MUST BE LOCATED AT THE END OF THE BLOCK. (PROW R308.2)
      iii. IF ADJACENT SIDEWALK IS MORE THAN 14' WIDE, THEN PROVIDE ACCESS AISLE THAT IS 60" WIDE MINIMUM. CONNECT ACCESS DIRECTLY TO A CURB RAMP.
   i. CROSSWALKS ON PRIVATE TRAVEL WAYS PROVIDING AN ACCESSIBLE ROUTE MAY PROVIDE A SPEED HUMP (WHEN NECESSARY) FOR CONTRACTOR TO ENSURE THAT LONGITUDINAL STREET GRADE DOES NOT EXCEED 2% (1:50) THROUGH THE WIDTH OF THE CROSSWALK (MIN. 3 FEET WIDE 2010 ADA 403.5).
   j. ACCESSIBLE PAVEMENT MARKINGS AND SIGNAGE SHALL BE PROVIDED BY THE CONTRACTOR PER LOCAL JURISDICTIONAL STANDARDS.



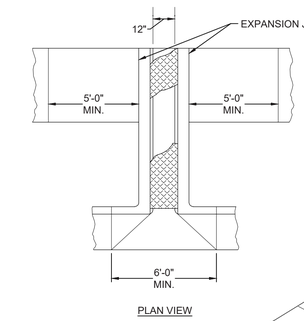
TYPICAL PARKING SPACE DETAILS
No Scale

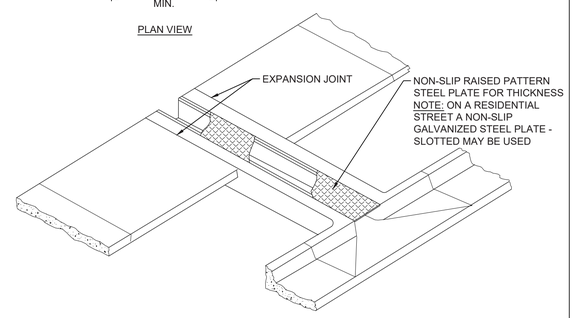


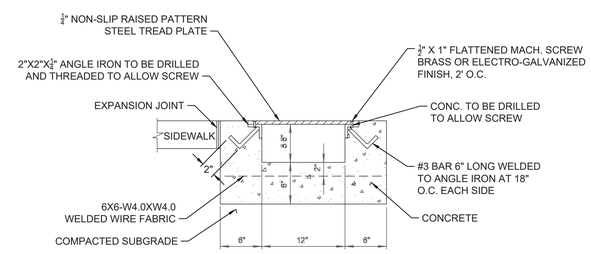
SPACES SHALL BE IDENTIFIED BY ABOVE GRADE SIGNS AS RESERVED FOR PHYSICALLY DISABLED PERSONS. PROVIDE ONE (1) R-7-8 SIGN AT EACH PARKING SPACE INDICATED ON SITE PLAN. SIGN SHALL BE ALUMINUM (PAINTED WHITE) WITH GREEN LETTERS AND INTERNATIONAL WHEELCHAIR SYMBOL. SIGN SHALL BE PLACED ON STEEL POST 1-1/2" O PAINTED BLACK SET IN MIN. 2' OF CONCRETE.

VA. SIGN FOR THE DISABLED ON 0.80 GAUGE ALUMINUM. COLORS: GREEN BORDER & LEGEND, BLUE SYMBOL FOR ACCESSIBILITY, WHITE BACKGROUND.

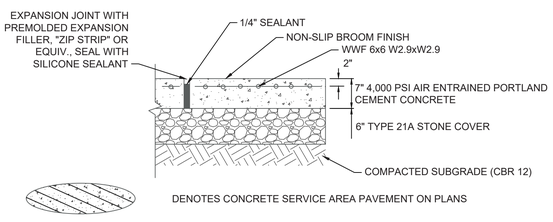
PARKING SIGNS FOR THE DISABLED
No Scale





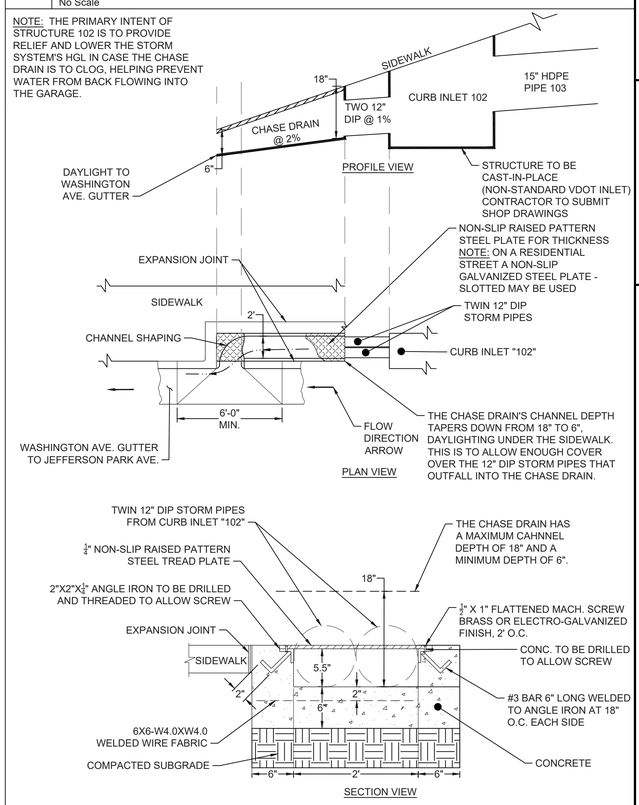


1'-0" SIDEWALK CHASE DRAIN
No Scale — CONTRACTOR TO SUBMIT SHOP DRAWING



HEAVY DUTY CONCRETE SECTION
No Scale

NOTE: THE PRIMARY INTENT OF STRUCTURE 102 IS TO PROVIDE RELIEF AND LOWER THE STORM SYSTEM'S HGL IN CASE THE CHASE DRAIN IS TO CLOG, HELPING PREVENT WATER FROM BACK FLOWING INTO THE GARAGE.



NOTE: THIS DISCHARGE REPRESENTS THE CAPACITY OF AN INDIVIDUAL 12" DIP PIPE AT A 1% SLOPE. TWO (2) 12" DIP STORM PIPES WILL OUTFALL INTO THE 2' CHASE DRAIN. THE COMBINED 10-YR FLOW THROUGH THIS STORM SYSTEM IS 5.828 CFS.

2'-0" CHASE DRAIN FLOW ANALYSIS

Friction Method	Manning Formula
Solve For	Normal Depth
Input Data	
Roughness Coefficient	0.013
Channel Slope	0.020 ft/ft
Bottom Width	2.00 ft
Discharge	5.83 cfs
Results	
Normal Depth	4.9 in
Flow Area	0.8 ft²
Wetted Perimeter	2.8 ft
Hydraulic Radius	3.5 in
Top Width	2.00 ft
Critical Depth	7.7 in
Critical Slope	0.006 ft/ft
Velocity	7.10 ft/s
Velocity Head	0.78 ft
Specific Energy	1.19 ft
Froude Number	1.955
Flow Type	Supercritical

12" DIP STORM PIPE TO 2' CHASE DRAIN CAPACITY (EACH)

Friction Method	Manning Formula
Solve For	Full Flow Capacity
Input Data	
Roughness Coefficient	0.012
Channel Slope	0.010 ft/ft
Normal Depth	12.0 in
Diameter	12.0 in
Discharge	3.86 cfs
Results	
Discharge	3.86 cfs
Normal Depth	12.0 in
Flow Area	0.8 ft²
Wetted Perimeter	3.1 ft
Hydraulic Radius	3.0 in
Top Width	0.00 ft
Critical Depth	10.0 in
Percent Full	100.0 %
Critical Slope	0.010 ft/ft
Velocity	4.91 ft/s
Velocity Head	0.38 ft
Specific Energy	1.38 ft
Froude Number	(N/A)
Maximum Discharge	4.15 cfs
Discharge Full	3.86 cfs
Slope Full	0.010 ft/ft

2'-0" SIDEWALK CHASE DRAIN (UGDS TO WASHINGTON AVE. GUTTER)
No Scale — CONTRACTOR TO SUBMIT SHOP DRAWING

COMMONWEALTH OF VIRGINIA
Bryan D. Cichocki
Lic. No. 53741
4/26/24
PROFESSIONAL ENGINEER
48530

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REVISION DESCRIPTION	DATE
FINAL SITE PLAN RESUBMISSION #1	03/19/2024
FINAL SITE PLAN RESUBMISSION #2	04/22/2024
FINAL SITE PLAN RESUBMISSION #3	04/26/2024

FINAL SITE PLAN

DATE	02/20/2023
DRAWN BY	M. DENHARD
DESIGNED BY	M. DENHARD
CHECKED BY	B. CICHOCKI
SCALE	N/A

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)
CITY OF CHARLOTTESVILLE, VA
NOTES AND DETAILS

JOB NO. 48530
SHEET NO. C1.2

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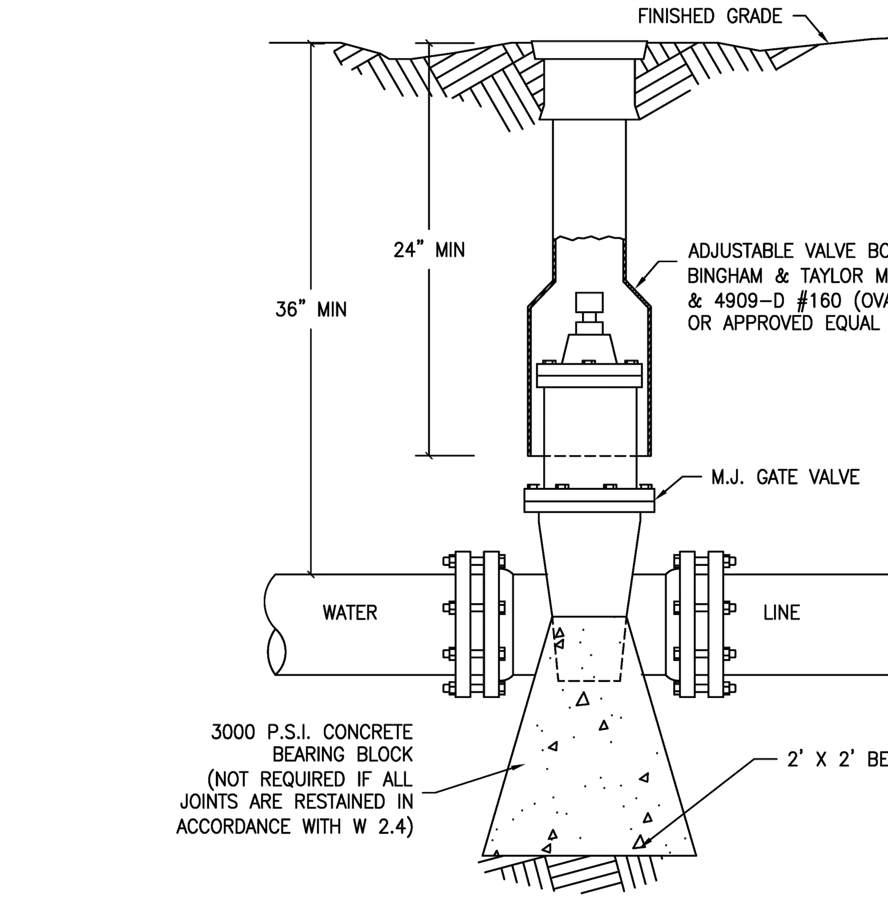
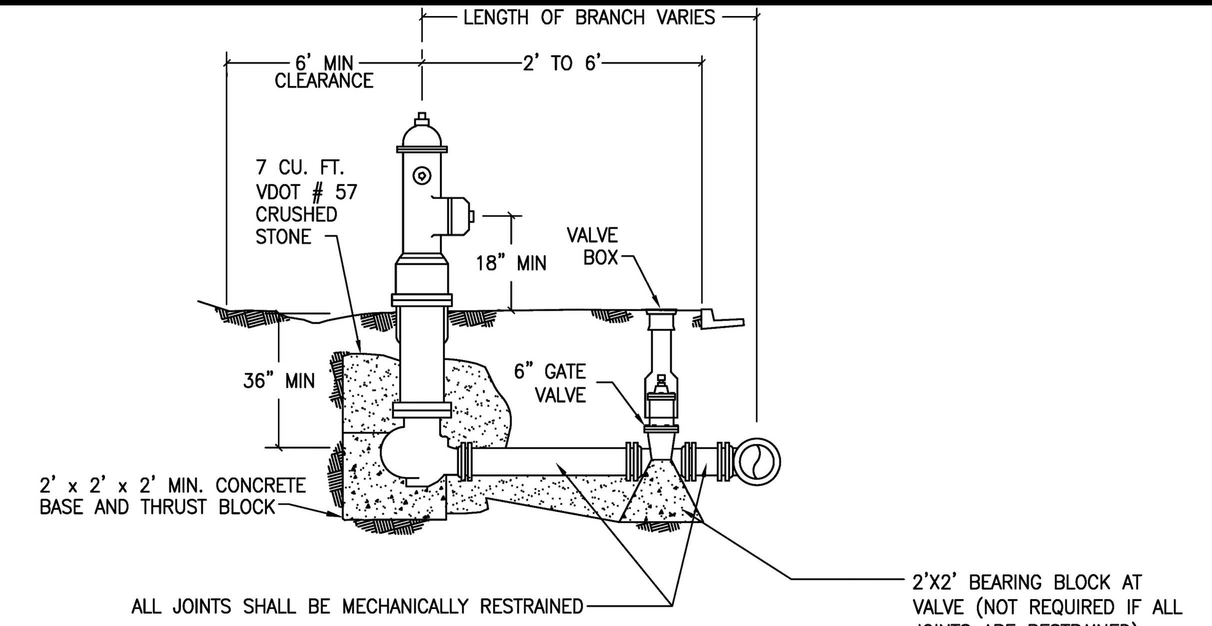


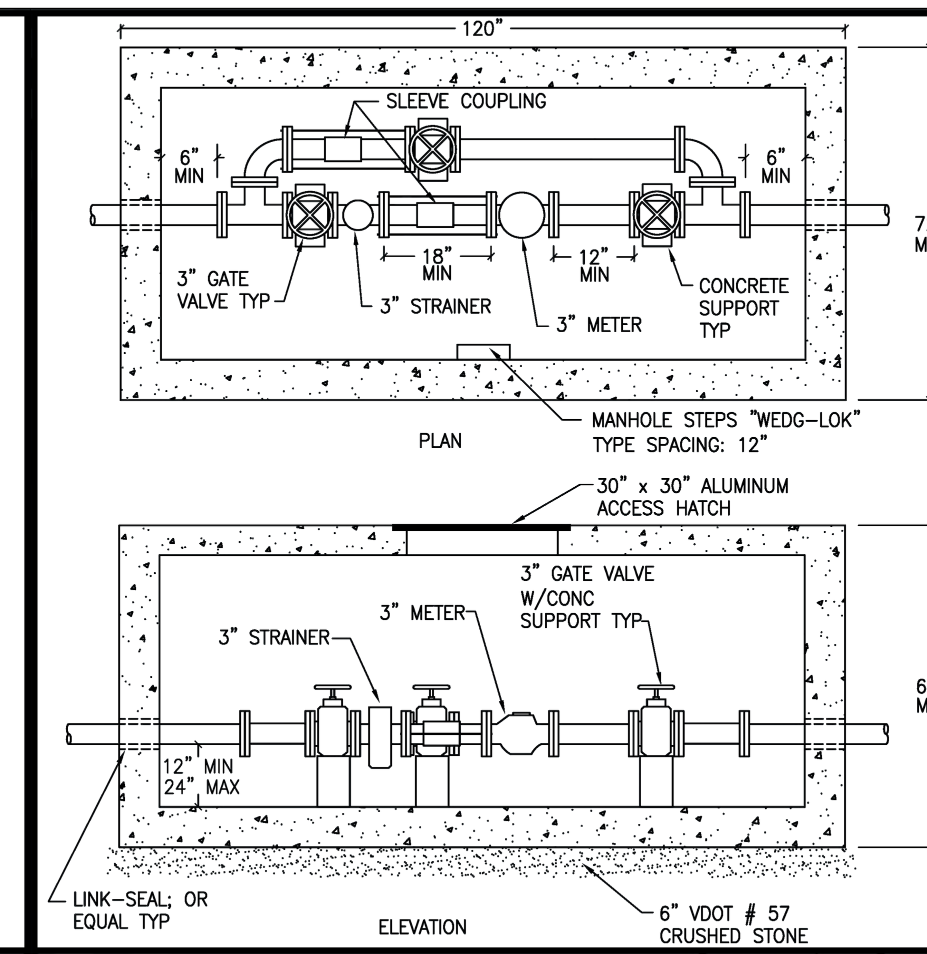
NOTES:
1. IN REMOTE AREAS, VALVE BOXES SHALL EXTEND SIX (6) INCHES ABOVE GRADE.
2. USE RESTRAINED JOINTS IN BOTH DIRECTIONS IN ACCORDANCE WITH DETAIL W2.4.

CITY OF CHARLOTTESVILLE	JULY	2011	CITY STANDARDS
	REVISION	DATE	GATE VALVE – TYPICAL
			SCALE: N.T.S. STANDARD NUMBER: W 4.0



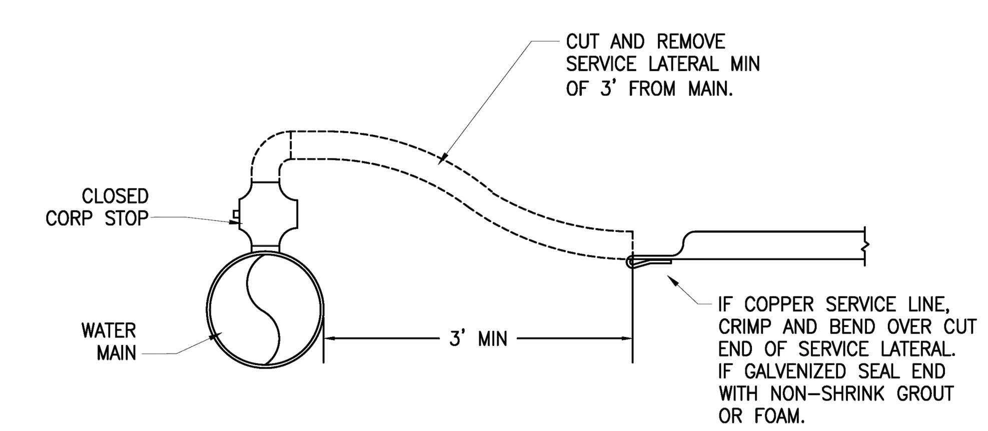
NOTES:
1. SURROUND WEEP HOLES WITH GRAVEL AND KEEP FREE OF CONCRETE.
2. MAINTAIN A 3' MIN. COVER FROM THE MAIN TO THE FIRE HYDRANT (INCLUDING DITCHES).
3. FINISHED GRADE SHALL SLOPE AWAY FROM THE FIRE HYDRANT AND VALVE BOX.
4. GATE VALVE SHALL NOT BE PLACED WITHIN THE DITCH LINES.
5. IF GROUNDWATER IS PRESENT AT THE INSTALLATION SITE, COORDINATE THE RELOCATION OF THE HYDRANT WITH CITY.
6. EACH NEW FIRE HYDRANT SHALL BE FRESHLY PAINTED WITH "GLID" GUARD #45 SAFETY RED, BY "GLIDDEN" 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
	REVISION	DATE	FIRE HYDRANT – TYPICAL
			SCALE: N.T.S. STANDARD NUMBER: W 3.0



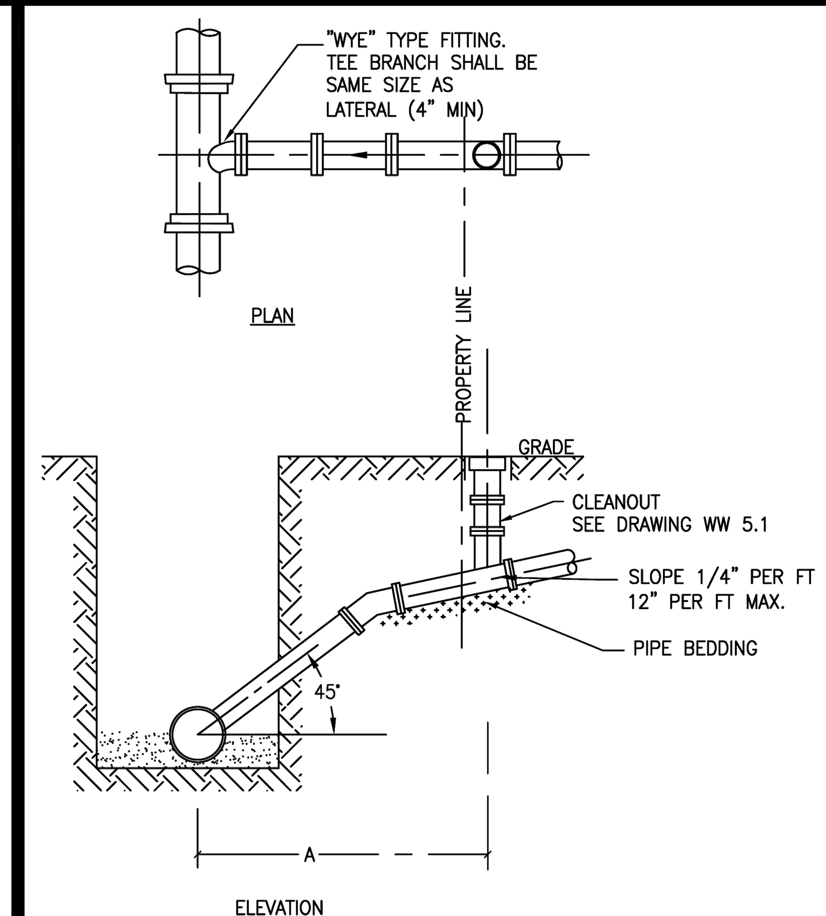
NOTES:
1. MINIMUM WALL THICKNESS FOR PRECAST VAULT SHALL BE 6".
2. OUTSIDE OF VAULT BELOW GRADE SHALL BE COATED WITH AN APPROVED WATER PROOFING COMPOUND.
3. PROVIDE A FLOOR DRAIN WITH A 2" DRAIN RUN TO DAYLIGHT OR INSTALL A SUMP PUMP.
4. CONSULT WITH DEPARTMENT OF PUBLIC WORKS – WATER DIVISION FOR METER LAYING LENGTH.
5. INSTALL WARNING TAPE AND TRACER WIRE WITH SERVICE LATERAL. TERMINATE WIRE IN A LOOP WITHIN METER BOX.

CITY OF CHARLOTTESVILLE	JULY	2011	CITY STANDARDS
	REVISION	DATE	METER VAULT – 3" METER
			SCALE: N.T.S. STANDARD NUMBER: W 6.3



NOTES:
1. METER TO BE REMOVED BY THE CITY.
2. CORPORATION STOPS SHALL BE COMPLETELY CLOSED AND CHECKED FOR LEAKS. LEAKS SHALL BE REPAIRED PRIOR TO BACKFILL.

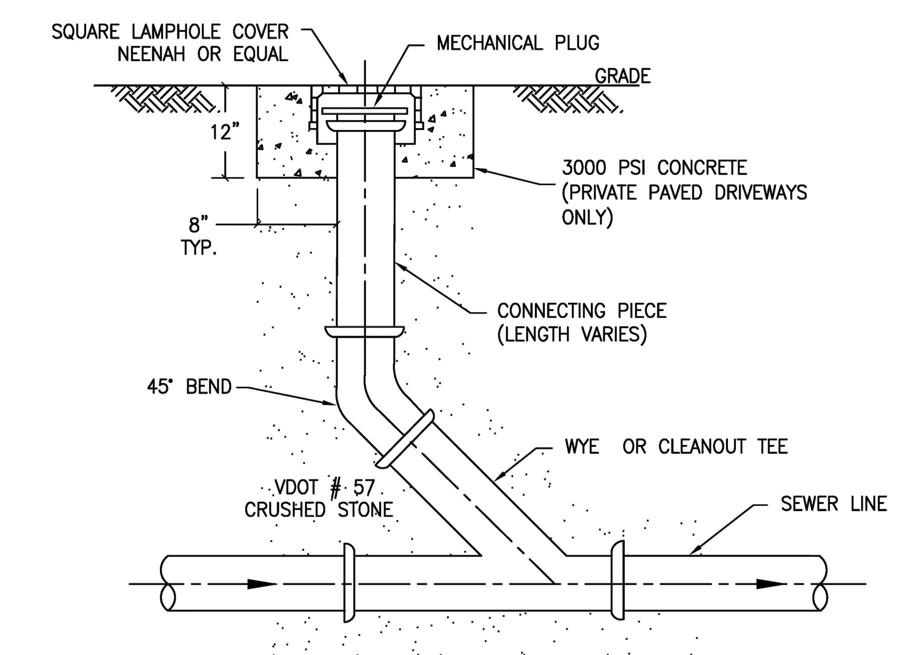
CITY OF CHARLOTTESVILLE	JAN	2012	CITY STANDARDS
	REVISION	DATE	SERVICE LATERAL ABANDONMENT
			SCALE: N.T.S. STANDARD NUMBER: W 7.1



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 "A" 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.

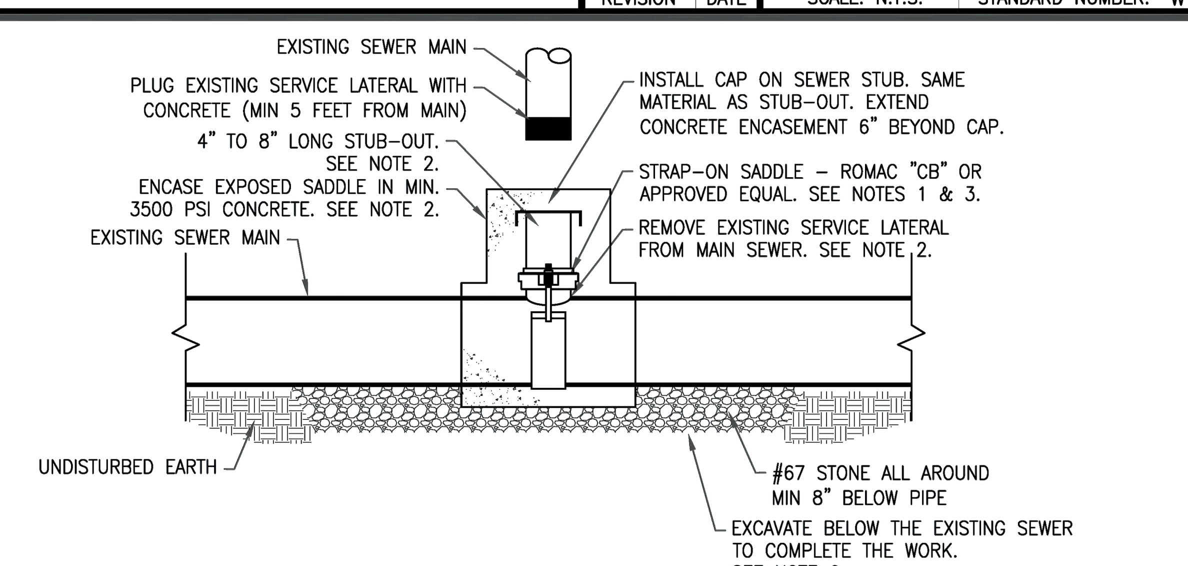
CITY OF CHARLOTTESVILLE	JAN	2011	CITY STANDARDS
	REVISION	DATE	SEWER LATERAL CONNECTION – TYPICAL
			SCALE: N.T.S. STANDARD NUMBER: WW 5.0

NOTE: CLEANOUTS IN PAVED OR CONCRETE SHALL BE TRAFFIC RATED.



NOTE: CLEANOUT TO BE SAME SIZE AND MATERIAL AS SEWER LINE.

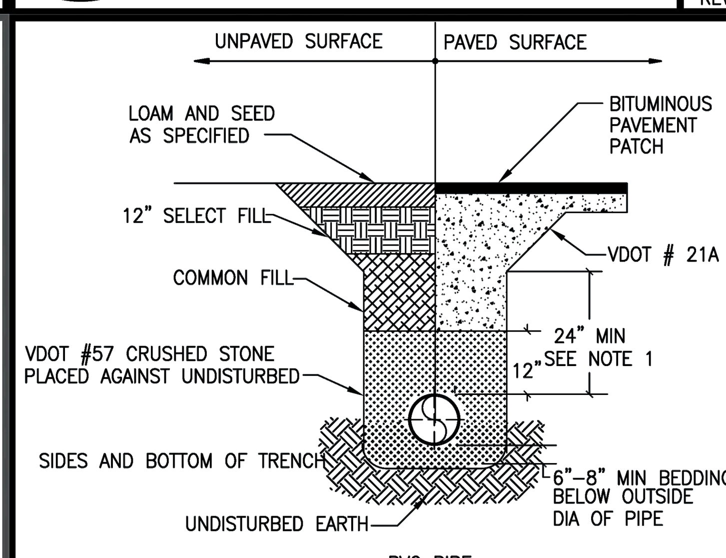
CITY OF CHARLOTTESVILLE	JAN	2011	CITY STANDARDS
	REVISION	DATE	CLEANOUT DETAIL
			SCALE: N.T.S. STANDARD NUMBER: WW 5.1



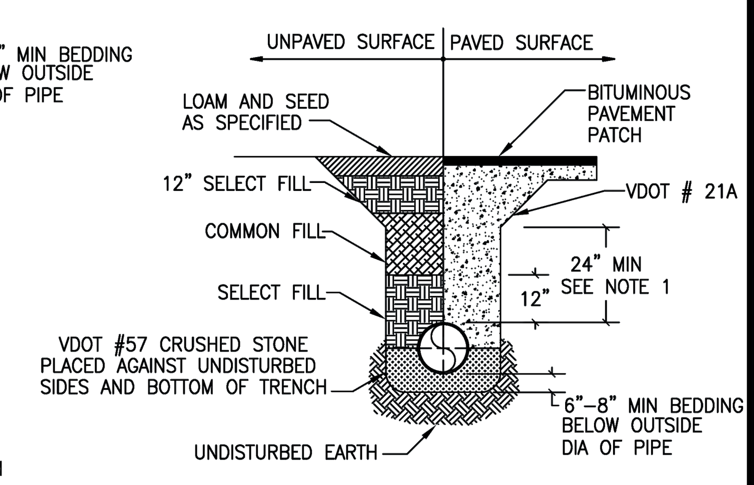
NOTES:
1. REFER TO THIS DETAIL WHEN ABANDONING EXISTING SERVICE LATERALS. SERVICE LATERALS SHALL BE ABANDONED WHEN A NEW LATERAL IS BEING INSTALLED TO SERVE A PROPERTY AND THE NEW LATERAL IS BEING CONNECTED TO THE THE MAIN SEWER AT A DIFFERENT LOCATION, A BUILDING IS BEING DEMOLISHED, OR AS DIRECTED BY UTILITIES ENGINEER. CONTACT PUBLIC UTILITIES (434–970–3800) A MINIUM 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 PERNOTE 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
	REVISION	DATE	SEWER LATERAL ABANDONMENT AT MAIN
			SCALE: N.T.S. STANDARD NUMBER: WW 7.2



PVC PIPE



DUCTILE IRON PIPE

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
	REVISION	DATE	PIPE TRENCHING AND BEDDING – TYPICAL
			SCALE: N.T.S. STANDARD NUMBER: WW 1.0

Conditions	
Laying Condition:	Type 4
Soil Condition:	Clay 2
Depth of Pipe:	3 Feet
Design Pressure:	150 PSI
Safety Factor:	1.5

Fittings and Valves:

	Pipe Diameter				
Type	4-inch	6-inch	8-inch	10-inch	12-inch
90-degree bend					
Horizontal	13	19	25	31	36
Vertical Up	13	19	25	31	36
Vertical Down	27	39	51	62	74
45-degree bend					
Horizontal	6	8	10	13	15
Vertical Up	6	8	10	13	15
Vertical Down	11	16	21	26	31
22.5-degree bend					
Horizontal	3	4	5	6	7
Vertical Up	3	4	5	6	7
Vertical Down	3	4	5	6	7
11.25-degree bend					
Horizontal	1	2	2	3	4
Vertical Up	1	2	2	3	4
Vertical Down	3	4	5	6	7
Cap	14	19	25	31	37
Valve	14	19	25	31	37

Tees and Wyes:

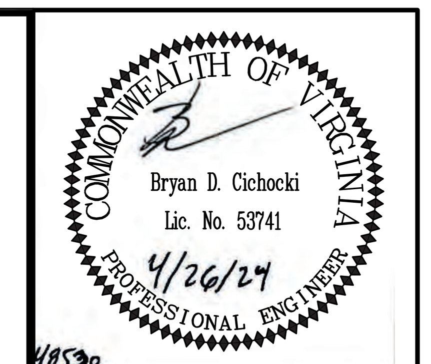
	Run Diameter				
Branch Diameter	4-inch	6-inch	8-inch	10-inch	12-inch
4-inch	13	13	13	13	13
6-inch	19	19	19	19	19
8-inch	25	25	25	25	25
10-inch	31	31	31	31	31
12-inch	37	37	37	37	37

Reducers:

	Small Diameter				
Large Diameter	4-inch	6-inch	8-inch	10-inch	12-inch
4-inch	N/A	N/A	N/A	N/A	N/A
6-inch	10	N/A	N/A	N/A	N/A
8-inch	18	11	N/A	N/A	N/A
10-inch	25	19	10	N/A	N/A
12-inch	32	27	20	11	N/A

* - Distances are given in feet both upstream and downstream from the fitting.

CITY OF CHARLOTTESVILLE	JULY	2011	CITY STANDARDS
	REVISION	DATE	RESTRAINED JOINT PIPE LENGTHS CHARTS
			SCALE: N.T.S. STANDARD NUMBER: W 2.4



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03/22/2024	FINAL SITE PLAN RESUBMISSION #2
04/26/2024	FINAL SITE PLAN RESUBMISSION #3

FINAL SITE PLAN

DATE: 02/20/2023
DRAWN BY: M. DENHARD
DESIGNED BY: M. DENHARD
CHECKED BY: B. CICHOCKI
SCALE: N/A

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)

CITY OF CHARLOTTESVILLE, VA

NOTES AND DETAILS

JOB NO.: 48530
SHEET NO.: C1.3

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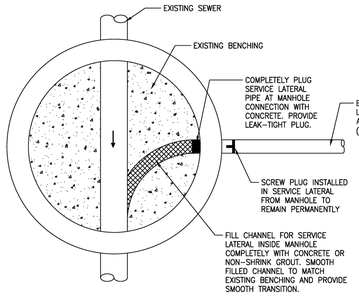
S:\103\48530-JPA_Aspen_Heights\DWG\Sheet\CD\48530-103-C1.0-NTDT.dwg | Plotted on 5/23/2024 9:27 AM | by Tess Bowles



CITY OF CHARLOTTESVILLE	JAN	2012	CITY STANDARDS
			SEWER LATERAL ABANDONMENT AT MANHOLE
	REVISION	DATE	SCALE: N.T.S. / STANDARD NUMBER: WW 7.1

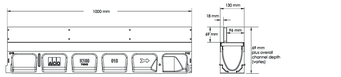
ACO Specification Information

ACO DRAIN®

Steel Brickslot 100

Plan view

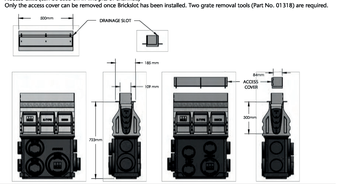
Side elevation (shown with K100 channel)



Description	Part No.	Length (mm)	Invert (mm)	Weight (kg)
Galvanised Brickslot 100 (1m)	**142790**[2]	1000	Channel invert + 69	7.8
Galvanised Brickslot 100 (0.5m)	**142791**[2]	500	Channel invert + 69	3.9
Galvanised Brickslot 100 access unit (0.5m)	**142466**	500	Channel invert + 69	7.4
Stainless Brickslot 100 (1m)[2]	**142792**[1]	1000	Channel invert + 69	7.8
Stainless Brickslot 100 (0.5m)[2]	**142793**[1]	500	Channel invert + 69	3.9
Stainless Brickslot 100 access unit (0.5m)[2]	**142469**	500	Channel invert + 69	7.4
Grate removal tool	**01318**	-	-	0.1
Plastic connector clip	**11143**	-	-	-

Notes:
[1] Grade 304 stainless steel
[2] One plastic connector clip included

Access unit (can be used on in-line pits or channels)
Only the access cover can be removed once Brickslot has been installed. Two grate removal tools (Part No. 01318) are required.



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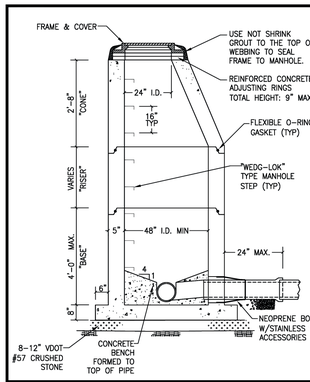
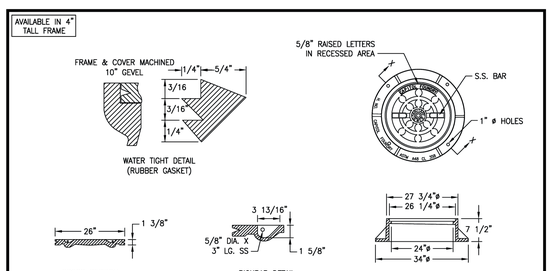
SPEC INFO ACO

© January 2023 ACO Pty Ltd. All reasonable care has been taken in compiling the information in this document. All recommendations and suggestions on



NOTES:
1. ALL JOINTS, LIFT HOLES, INLETS AND OUTLETS SHALL BE GROUTED AND SEALED 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 EXPOXY 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 AJUSTMENT 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. ALL MANHOLES WITHIN THE 100-YEAR FLOODPLAIN OR LOCATED IN AREAS SUBJECT TO LOCALIZED FLOODING ARE TO HAVE WATERTIGHT FRAMES AND COVERS.
2. STANDARD 24" X 7" TALL MANHOLE FRAME AND COVER ASTM A-48 CLASS 35B/AASHTO M105 ITEM #MH-3000*WT OR APPROVED EQUAL.

CITY OF CHARLOTTESVILLE	JULY	2011	CITY STANDARDS
			WATERTIGHT MANHOLE FRAME AND COVER
	REVISION	DATE	SCALE: N.T.S. / STANDARD NUMBER: WW 2.5

ACO Specification Information

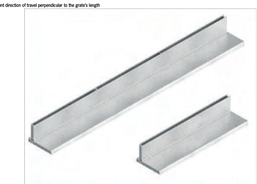
ACO DRAIN®

Steel Brickslot 100

Product Features

- Approximate wheel load of 8,000kg for occasional slow moving vehicles (Load test reports available)
- AS 3996 (Clause 3.3.6) compliant for surface openings in pedestrian areas
- AS 4586 Slip resistance classification dependent on the surrounding pavement
- AS 1428.1 (Clause 4.4c)[1] compliant for wheelchair and walking cane safety
- AS 3996 (Clause 3.3.7) compliant for bicycle tyre penetration resistance
- Discreet 10mm wide inlet slot
- For brick or stone pavers up to a depth of 60mm
- Suitable for use with K100, KS100, H100K, H100KS channels
- Manufactured from either galvanised steel or Grade 304 stainless steel
- Galvanised steel for use in general purpose applications
- Stainless steel used for aesthetics and/or its corrosion resistant properties

[1] Dominant direction of travel perpendicular to the grate's length



Specifications

The slot drain shall be ACO Galvanised/Stainless* Brickslot 100 as manufactured by ACO. The Brickslot 100 has an overall length of 1000mm (or 500mm). Slot widths measure at a maximum of 10mm, and 69mm high for brick or stone pavers up to a depth of 60mm.

Materials & Design
The Brickslot 100 shall be manufactured from galvanised/stainless* steel and have minimum properties and characteristics as follows:

- Manufactured from galvanised/Grade 304 stainless* steel
- Support a wheel load of 8,000kg for occasional slow moving vehicles[1]
- AS 4586 Slip resistance classification dependent on the surrounding pavement
- Meets AS 1428.1 (Clause 4.4c)[2], AS 3996 (Clause 3.3.6 & 3.3.7)
- Intake area of 10,000mm² per metre of Brickslot 100

[1] Load test reports available
[2] Dominant direction of travel perpendicular to the grate's length

For the specification of the ACO Drain channel system selected, click: http://www.acodrain.com.au/product-support

** delete as appropriate*

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March 20, 2024

Roy Nester
City of Charlottesville
Dept. of Utilities
PO Box 911
Charlottesville, VA 22902

RE: 2005 JPA Fire Hydrant Assembly Minimum Clearances Variance Request

Mr. Nester:

This letter is to submit a formal variance request regarding the placement of a proposed fire hydrant along Jefferson Park Avenue. We are seeking approval for a deviation from the standard requirement of a minimum 10-foot horizontal clearance from all proposed structures for a fire hydrant installation in the location shown in the Figure below:

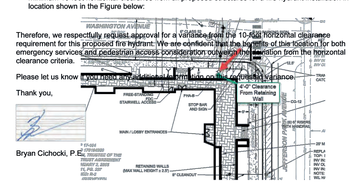

Figure 1: Proposed Fire Hydrant Location

Therefore, we respectfully request approval for a variance from the 10-foot horizontal clearance requirement for this proposed fire hydrant. We are confident that the benefits of this location for both emergency services and pedestrian access consideration outweigh the deviation from the horizontal clearance criteria.

Please let us know if you need any additional information or have questions regarding this variance.

Thank you,

Bryan Cichocki, P.E.

The proposed location for the fire hydrant, which has been coordinated and recommended by the Fire Marshal, presents a challenge due to its proximity to a retaining wall, as shown above. Adhering strictly to the 10-foot clearance requirement would necessitate placing the hydrant within the sidewalk area, which would compromise pedestrian accessibility and safety.

We understand the importance of maintaining adequate clearance around fire hydrants to ensure unobstructed access for firefighting personnel and equipment during emergency situations. However, in this particular case, strict adherence to the clearance requirement would not only create a safety concern but also result in significant disruption to pedestrian foot traffic. The proposed location, although falling short of the minimum clearance requirement, is optimal for emergency services while minimizing pedestrian impacts.

CIVIL ENGINEERING | ENVIRONMENTAL | SURVEYING | GIS | LANDSCAPE ARCHITECTURE | CONSTRUCTION SERVICES

COMMONWEALTH OF VIRGINIA
Bryan D. Cichocki
Lic. No. 53741
4/26/24
PROFESSIONAL ENGINEER
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FINAL SITE PLAN

REVISION DESCRIPTION	DATE
FINAL SITE PLAN RESUBMISSION #1	03/19/2024
FINAL SITE PLAN RESUBMISSION #2	03/22/2024
FINAL SITE PLAN RESUBMISSION #3	04/26/2024

DATE 02/20/2023
DRAWN BY M. DENHARD
DESIGNED BY M. DENHARD
CHECKED BY B. CICHOCKI
SCALE N/A

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)

CITY OF CHARLOTTESVILLE, VA

NOTES AND DETAILS

JOB NO. 48530
SHEET NO. C1.4

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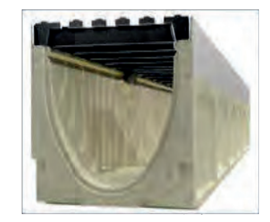
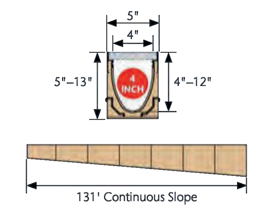
ACO DRAIN
KlassikDrain K100/KS100

KlassikDrain K100/KS100

4" Internal Width General Purpose System





K100 is a 4" internal width, general purpose system with galvanized steel edge rail and the widest choice of grates in different materials and slot styles up to Load Class E (134,885 lbs) featuring either patented DrainLok or QuickLok® boltless locking systems.

KS100 is the same system, but the edge rail is grade 304 stainless steel. KS100 should be used where increased aesthetics are required or where increased corrosion resistance is required.

Typical Applications:

- Parking lots & garages
- Shopping malls
- Pedestrian areas
- Light industrial areas
- Commercial areas
- Internal applications

KLASSIKDRAIN K100/KS100 SELECTION CRITERIA

- Light to industrial duty loads
- Product can be used towards LEED & EPA requirements
- Resistant to many everyday chemicals
- Multiple grate options to meet legal requirements
- Multiple grate options to meet design requirements
- General, everyday hydraulic capacity
- Constant depth and/or sloped depth channels

06

ACO DRAIN

Type 476D Longitudinal ductile iron grate (ADA)

Product Features

- Certified to EN 1433 Load Class C - 56,000 lbs - 1,162 psi
- Uses 'DrainLok' boltless locking system
- Suitable for use with K100, KS100, and H100K-8 channels
- Manufactured from ductile iron to ASTM A 536-84 - Grade 65-45-12
- E- coated for improved resistance against rust
- Complies with ADA - American Disabilities Act of 1990 Section 4.5.4
- Bicycle Tire Penetration Resistant to AS 3996 - 2006

Specifications

General
The surface drainage system shall be ACO Drain K100, KS100, and H100K-8 channels*, complete with ACO Type 476D longitudinal ductile iron grate with 'DrainLok' locking as manufactured by ACO, Inc. or similar approved.

Materials
The covers shall be manufactured from ductile iron and have **minimum** properties as follows:

- ***Independently certified to meet Load Class C to EN 1433 - 56,000 lbs - 1,162 psi***
- ***Ductile iron to ASTM A 536-84 - Grade 65-45-12***
- ***Intake area of 22.6 sq. in. (145.16 cm²) per half meter of grate***

The overall width of 4.85" (123mm) and overall length of 19.69" (500mm). Slots measure at 2.1" (53.34mm) by 0.24" (6.09mm).

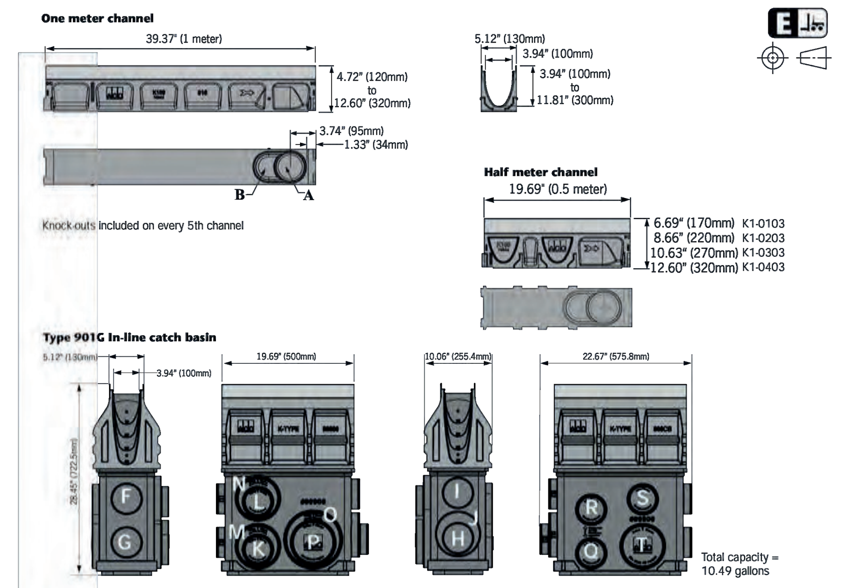
Installation
The trench drain system and grates shall be installed in accordance with the manufacturer's installation instructions and recommendations.
* delete as appropriate

April 2018 www.ACODrain.us

ACO Specification Information

ACO DRAIN

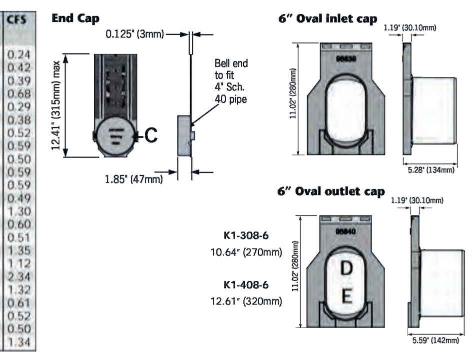
KlassikDrain - K100 Galvanized steel edge rail channel system



Outlet flow rates

Outlet	Product	Outlet size (Sch. 40)	Invert Depth	GPM	CFS
A	Bottom outlet - K00	4" round	3.94"	108	0.24
A	Bottom outlet - K40	4" round	11.81"	187	0.42
B	Bottom outlet - K00	6" oval	3.94"	177	0.39
B	Bottom outlet - K40	6" oval	11.81"	306	0.68
C	End outlet - K20	4" round	7.87"	132	0.29
C	End outlet - K40	4" round	11.81"	171	0.38
D	K1-308-6 6" outlet cap	6" oval	9.84"	233	0.52
E	K1-408-6 6" outlet cap	6" oval	11.81"	264	0.59
F	Type K1-901G	4" round	19.30"	226	0.50
G	Type K1-901G	4" round	25.67"	265	0.59
H	Type K1-901G	4" round	25.30"	263	0.59
I	Type K1-901G	4" round	18.56"	222	0.49
J	Type K1-901G	6" round	25.85"	586	1.30
K	Type K1-901G	4" round	26.43"	269	0.60
L	Type K1-901G	4" round	19.36"	227	0.51
M	Type K1-901G	6" round	27.30"	604	1.35
N	Type K1-901G	6" round	19.99"	505	1.12
O	Type K1-901G	8" round	27.30"	1051	2.34
P	Type K1-901G	6" round	26.43"	593	1.32
Q	Type K1-901G	4" round	27.17"	273	0.61
R	Type K1-901G	4" round	20.68"	235	0.52
S	Type K1-901G	4" round	18.99"	224	0.50
T	Type K1-901G	6" round	27.17"	6.02	1.34

Note: These are the pipe flow rates at the specified outlet, **NOT** channel flow rates. Catch basin flow rates are without trash bucket - using trash bucket reduces flow.



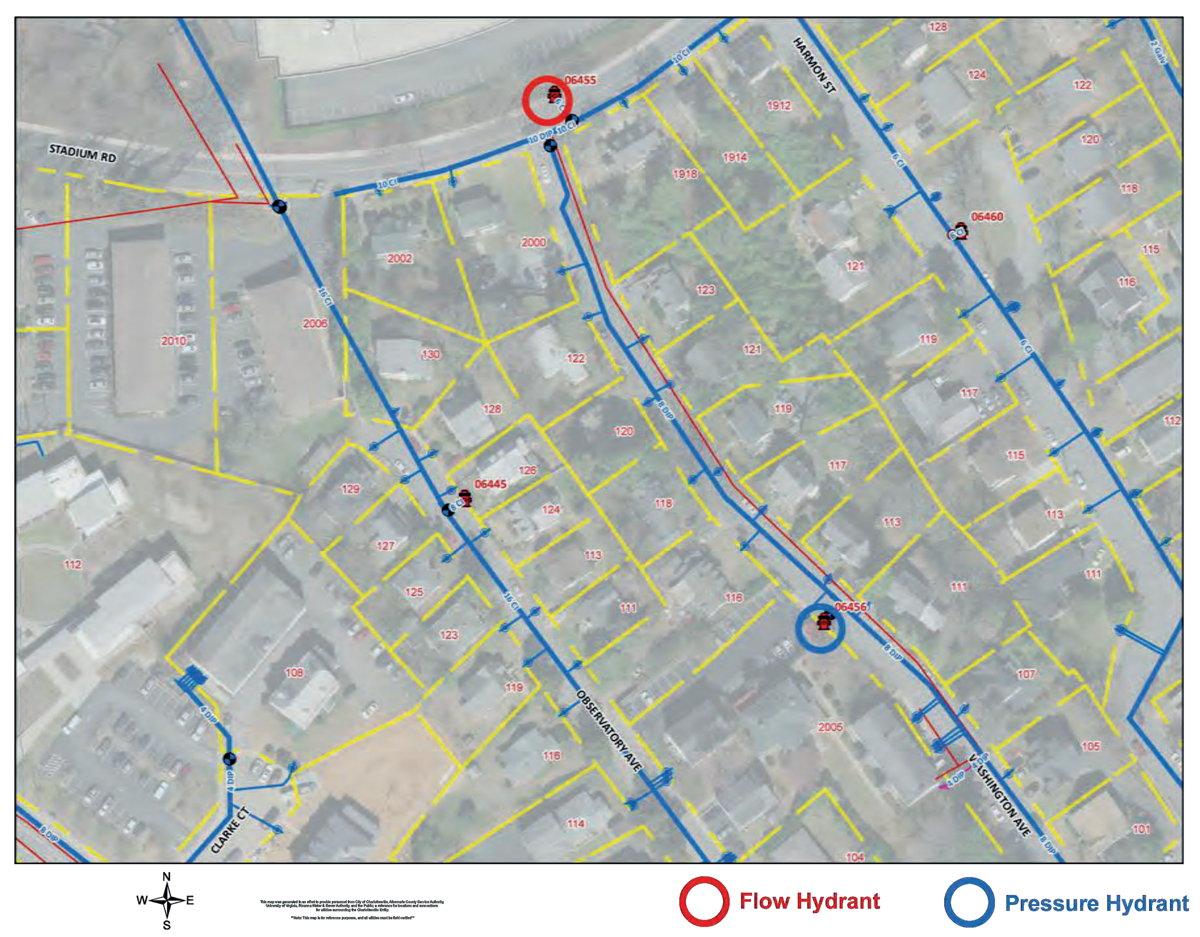
Jan 13/2 www.acodrain.us

ACO Specification Information

Fire Hydrant Test Report SAP: 300620147

Location: 113 Washington Ave								
Date of Test: 2/10/2023				**Time:** 9:10am (am/pm)				
Performed by: (list all) F. Shifflett, J. Scott, T. Marsh, Z. Foster								
	Hydrant ID:	**Location:**	**Pipe Size**	**Nozzle Size (in)**	**Pressure Static**	**Pressure Res.**	**Flow (gpm)**	**Duration (min:sec)**
Residual Hydrant:	06456	*113 Washinton Ave (across the street)*	8	2.5	90	50		
Flow Hydrant #1	06455	*Corner of Stadium Road and Washington Ave*	10	2.5			1000	3.00
Flow Hydrant #2				2.5				
Flow Hydrant #3				2.5				
Flow Hydrant #4				2.5				
Flow Hydrant #5				2.5				
Special Instructions:								

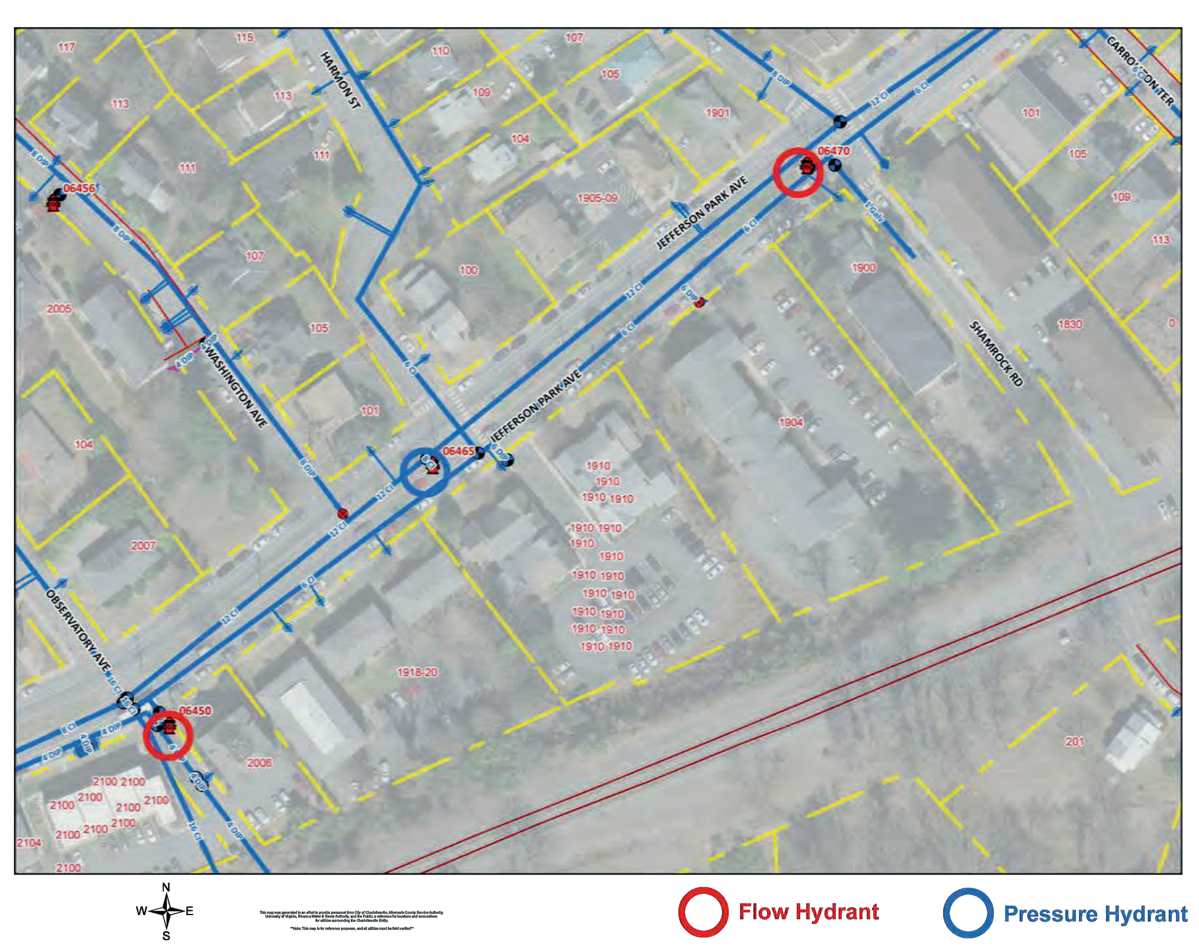
Please attach GIS map with all hydrant locations shown and labeled.



Fire Hydrant Test Report SAP: 300620148

Location: Median of JPA at Harmon St								
Date of Test: 2/10/2023				**Time:** 8:44am (am/pm)				
Performed by: (list all) F. Shifflett,J. Scott, Z. Foster, T. Marsh								
	Hydrant ID:	**Location:**	**Pipe Size**	**Nozzle Size (in)**	**Pressure Static**	**Pressure Res.**	**Flow (gpm)**	**Duration (min:sec)**
Residual Hydrant:	06465	*Median of JPA at Harmon St*	12	2.5	63	60		
Flow Hydrant #1	06470	*Median of JPA at Shamrock*	10	2.5			914	3.00
Flow Hydrant #2	06450	*Intersection of JPA and Observatory Ave*	6	2.5			750	3.00
Flow Hydrant #3				2.5				
Flow Hydrant #4				2.5				
Flow Hydrant #5				2.5				
Special Instructions:								

Please attach GIS map with all hydrant locations shown and labeled.



SIZING WATER SERVICE LINES AND METERS

CITY OF CHARLOTTESVILLE
Water Customer Data Sheet

Customer ________ Address ________
Building Address 2005 Jefferson Park Ave. Zip Code 22903
Subdivision ________ Lot No. ________ Blk. No. ________
Type of Occupancy Residential

Fixture	Fixture Value 60 psi		No. of Fixtures	Fixture Value
Bathtub	8	x	386 =	3088
Bedpan Washers	10	x	=	
Bidet	2	x	=	
Dental Unit	2	x	=	
Drinking Fountain - Public	2	x	1 =	2
Kitchen Sink	2.2	x	122 =	268.4
Lavatory	1.5	x	394 =	591
Showerhead (Shower Only)	2.5	x	5 =	12.5
Service Sink	4	x	10 =	40
Toilet – Flush Valve	35	x	6 =	210
- Tank Type	4	x	399 =	1596
Urinal – Pedestal Flush Valve	35	x	=	
- Wall Flush Valve	16	x	=	
Wash Sink (Each Set of Faucets)	4	x	1 =	4
Dishwasher	2	x	121 =	242
Washing Machine	6	x	119 =	714
Hose (50 ft Wash Down) - 1/2 in.	5	x	=	
- 5/8 in.	9	x	8 =	72
- 3/4 in.	12	x	1 =	12
Combined Fixture Value Total			=	6851.9

Customer Peak Demand From Fig. 4 –2 or 4 –3 x Press. Factor = 110 x1.25 gpm

Add Irrigation - 8 Sections* x 1.16 or 0.40+ = 9.28 gpm

- 3 Hose Bibs x Fixture Value x 1.00 Press. Factor / 12 = 36 gpm

Added Fixed Load = ________ gpm

TOTAL FIXED DEMAND = 182.78 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

28 SIZING WATER SERVICE LINES AND METERS

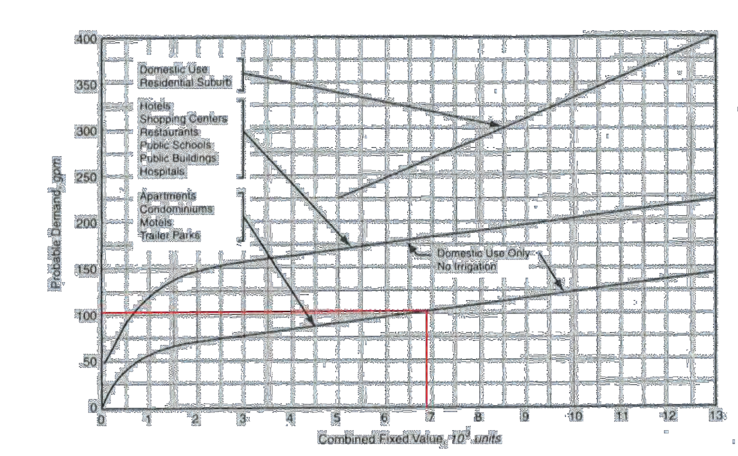


Figure 4-3 Water flow demand per fixture value—high range

FIRE HYDRANT TEST RESULTS
No Scale

COMMONWEALTH OF VIRGINIA
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DATE	REVISION DESCRIPTION
01/19/2024	FINAL SITE PLAN RESUBMISSION #1
03/22/2024	FINAL SITE PLAN RESUBMISSION #2
04/26/2024	FINAL SITE PLAN RESUBMISSION #3

FINAL SITE PLAN

DATE 02/20/2023
DRAWN BY M. DENHARD
DESIGNED BY M. DENHARD
CHECKED BY B. CICHOCKI
SCALE N/A

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)

CITY OF CHARLOTTESVILLE, VA

NOTES AND DETAILS

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SHEET NO. C1.5

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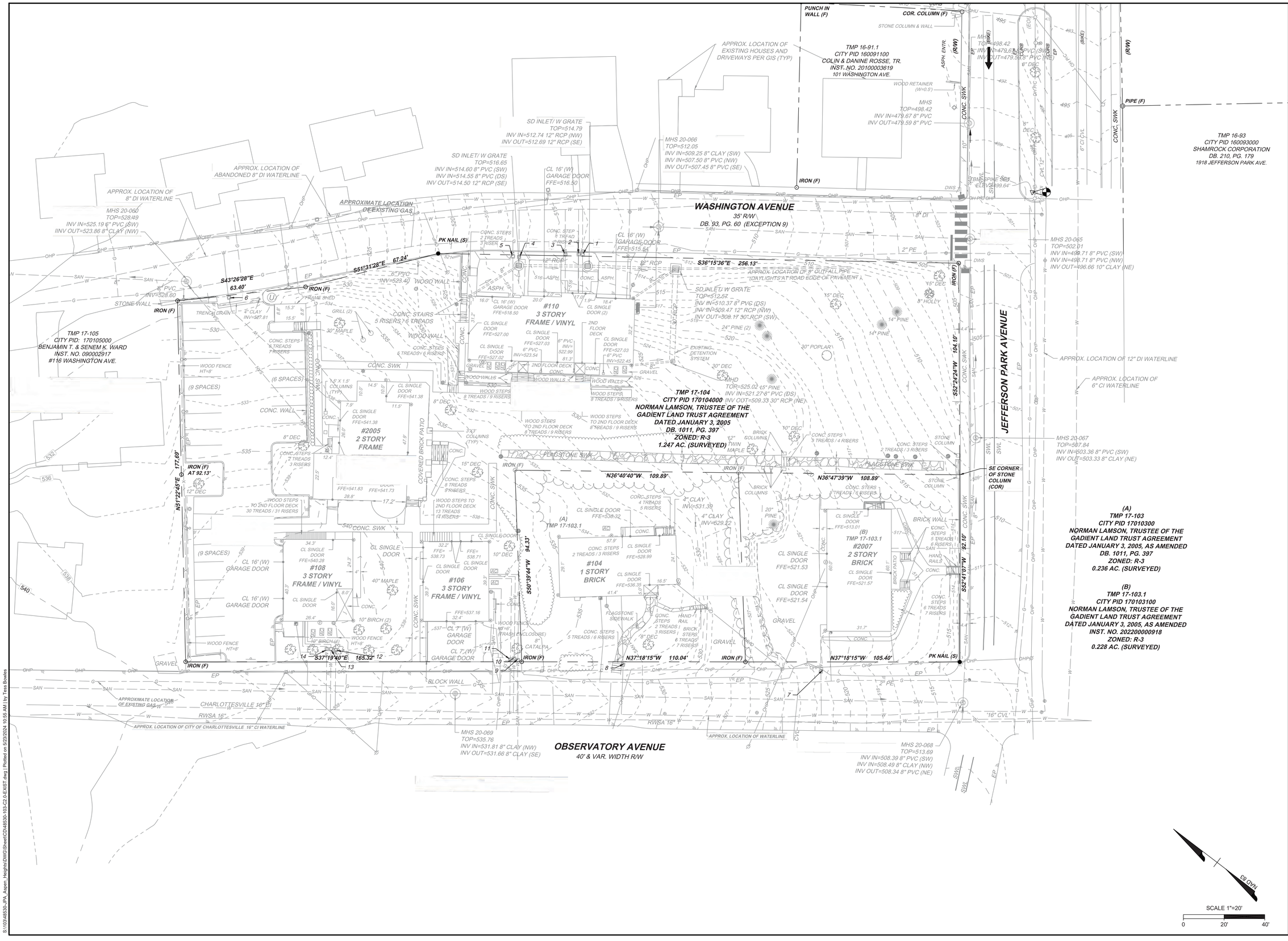

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- FINAL SITE PLAN RESUBMISSION #1
- FINAL SITE PLAN RESUBMISSION #2
- FINAL SITE PLAN RESUBMISSION # 3

DATE
03/19/2024
03/22/2024
04/26/2024

FINAL
SITE PLAN

DATE	02/20/2023
DRAWN BY	M. DENHARD
DESIGNED BY	M. DENHARD
CHECKED BY	B. CICHOCKI
SCALE	1" = 20'

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)

CITY OF CHARLOTTESVILLE, VA

EXISTING CONDITIONS PLAN

JOB NO.	48530
SHEET NO.	C2.0

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Existing Water Meter Table			
NO.	ADDRESS	SIZE	NOTES
1	110 WASHINGTON AVE.	5/8"	
2	110 WASHINGTON AVE.	5/8"	
3	110 WASHINGTON AVE.	5/8"	
4	110 WASHINGTON AVE.	5/8"	
5	110 WASHINGTON AVE.	5/8"	
6	2007 JEFFERSON PARK AVE.	5/8"	
7	2005 JEFFERSON PARK AVE.	5/8"	
8	104 OBSERVATORY AVE.	5/8"	
9	106 OBSERVATORY AVE.	5/8"	
10	106 OBSERVATORY AVE.	5/8"	
11	106 OBSERVATORY AVE.	5/8"	
12	108 OBSERVATORY AVE.	5/8"	
13	108 OBSERVATORY AVE.	5/8"	
14	108 OBSERVATORY AVE.	5/8"	

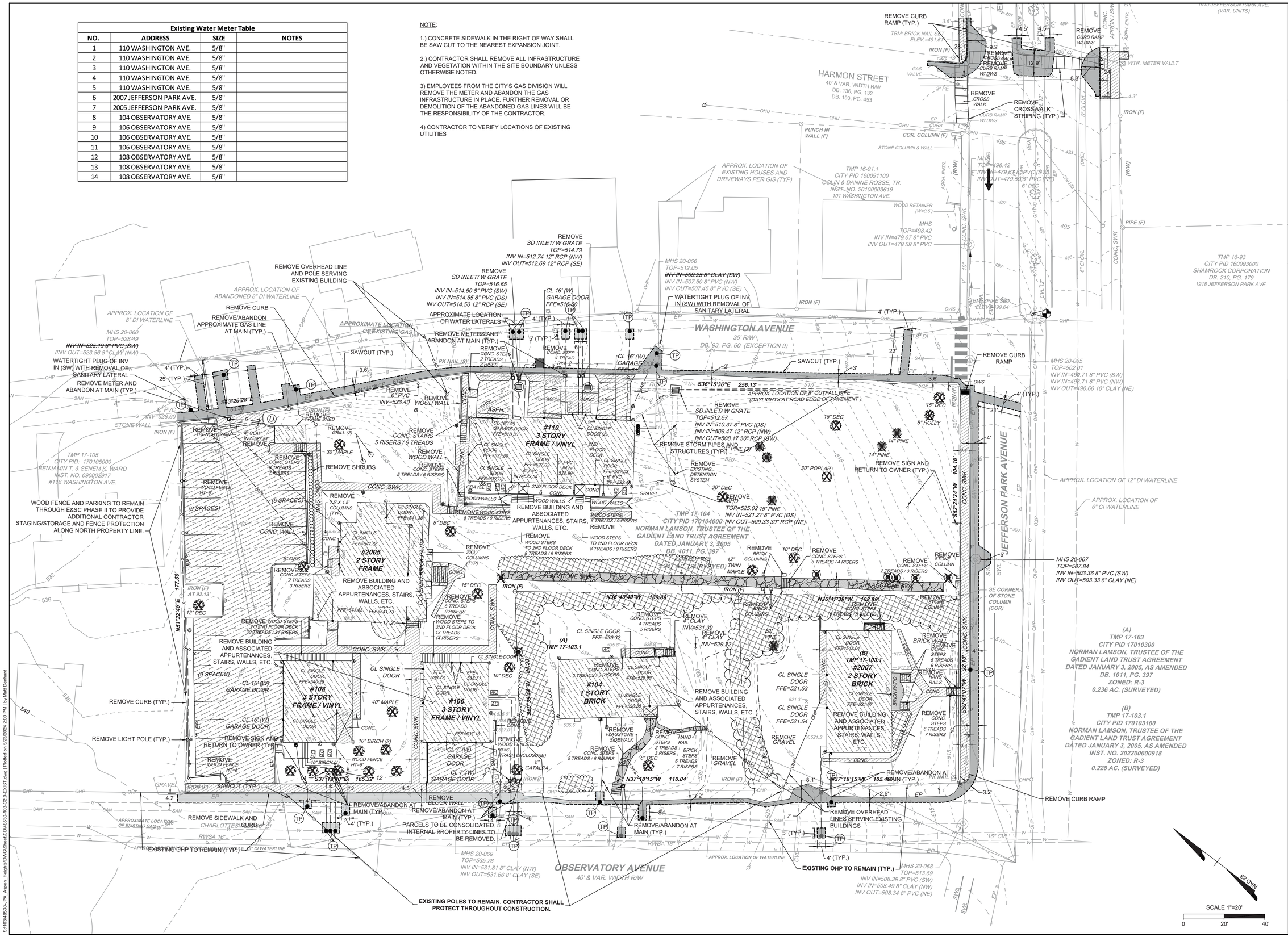
NOTE:

1.) CONCRETE SIDEWALK IN THE RIGHT OF WAY SHALL BE SAW CUT TO THE NEAREST EXPANSION JOINT.

2.) CONTRACTOR SHALL REMOVE ALL INFRASTRUCTURE AND VEGETATION WITHIN THE SITE BOUNDARY UNLESS OTHERWISE NOTED.

3) EMPLOYEES FROM THE CITY'S GAS DIVISION WILL REMOVE THE METER AND ABANDON THE GAS INFRASTRUCTURE IN PLACE. FURTHER REMOVAL OR DEMOLITION OF THE ABANDONED GAS LINES WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

4) CONTRACTOR TO VERIFY LOCATIONS OF EXISTING UTILITIES



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COMMONWEALTH OF VIRGINIA
Bryan D. Cichocki
Lic. No. 53741
4/26/24
PROFESSIONAL ENGINEER
48530

REVISION DESCRIPTION	DATE
FINAL SITE PLAN RESUBMISSION #1	03/19/2024
FINAL SITE PLAN RESUBMISSION #2	03/22/2024
FINAL SITE PLAN RESUBMISSION #3	04/26/2024

FINAL SITE PLAN

DATE 02/20/2023

DRAWN BY M. DENHARD

DESIGNED BY M. DENHARD

CHECKED BY B. CICHOCKI

SCALE 1" = 20'

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)

CITY OF CHARLOTTESVILLE, VA

DEMOLITION PLAN

JOB NO. 48530

SHEET NO. C2.1

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EROSION AND SEDIMENT CONTROL NARRATIVE:

PROJECT DESCRIPTION
THIS PROJECT INCLUDES THE DEMOLITION OF EXISTING RESIDENTIAL BUILDINGS, AS WELL AS THE CONSTRUCTION OF A MULTI-FAMILY RESIDENTIAL BUILDING AND OTHER ASSOCIATED SITE WORK. THE LIMITS OF DISTURBANCE IS 1.96 ACRES.

ADJACENT PROPERTY
THE PROJECT SITE IS BOUND BY WASHINGTON AVENUE AND RESIDENTIAL BUILDINGS TO THE NORTH AND EAST, OBSERVATORY AVENUE AND RESIDENTIAL BUILDINGS TO THE WEST, AND JEFFERSON PARK AVENUE TO THE SOUTH.

EXISTING SITE CONDITIONS
THE SITE CURRENTLY CONTAINS RESIDENTIAL BUILDINGS, AN ASPHALT PARKING LOT, OVERHEAD POWER POLES, AND AN ABUNDANCE OF TREES.

OFF-SITE AREAS
THIS PROJECT INCLUDES WORK WITHIN THE ADJACENT ROW. ADDITIONALLY, DEBRIS AND EXCESS SOIL SHALL BE TAKEN TO AN APPROVED LANDFILL SITE.

CRITICAL EROSION AREAS
THERE ARE NO CRITICAL EROSION AREAS ON THIS SITE.

EROSION AND SEDIMENT CONTROL MEASURES
UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE CURRENT ADDITION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK. THE MINIMUM STANDARDS OF THE VESCH SHALL BE ADHERED TO UNLESS OTHERWISE WAIVED OR APPROVED BY A VARIANCE BY LOCAL AUTHORITIES HAVING JURISDICTION. IT SHALL BE THE CONTRACTORS'S RESPONSIBILITY TO ADHERE TO REQUESTS FROM THE CITY'S E&S INSPECTOR TO ADD OR MODIFY E&S MEASURES DURING CONSTRUCTION.

STORMWATER RUNOFF CONSIDERATIONS
A MAJORITY OF THE STORMWATER RUNOFF WILL BE DIVERTED TO A TEMPORARY SEDIMENT TRAP. THE REST OF THE STORMWATER RUNOFF WILL BE FILTERED BY SILT FENCE AND INLET PROTECTION MEASURES.

STRUCTURAL PRACTICES:
1. TEMPORARY CONSTRUCTION ENTRANCE - 3.02 A TEMPORARY CONSTRUCTION ENTRANCE SHALL BE PROVIDED AT THE LOCATION INDICATED ON THE PLANS. IT IS IMPERATIVE THAT THIS MEASURE BE MAINTAINED THROUGHOUT CONSTRUCTION. ITS PURPOSE IS TO REDUCE THE AMOUNT OF MUD TRANSPORTED ONTO PAVED PUBLIC ROADS BY MOTOR VEHICLES OR RUNOFF.
2. STORM DRAIN INLET PROTECTION - 3.07 STONE FILTERS SHALL BE PLACED AT THE INLET OF ALL DRAINAGE STRUCTURES AS INDICATED ON PLANS. ITS PURPOSE IS TO PREVENT SEDIMENT FROM ENTERING THE STORM DRAINAGE SYSTEM PRIOR TO PERMANENT STABILIZATION.
3. RIGHT OF WAY DIVERSION - 3.11 A RIDGE OF LOOSE ROCK OR GRAVEL WILL BE CONSTRUCTED OVER EXISTING PAVEMENTS TO DIVERT STORMWATER RUNOFF TO APPROPRIATE INLET PROTECTION BEFORE ALLOWING TO FLOW INTO PREVIOUSLY DEVELOPED AREA.
4. DUST CONTROL - 3.39 DUST CONTROL IS TO BE USED THROUGH THE SITE IN AREAS SUBJECT TO SURFACE AND AIR MOVEMENT.
5. SILT FENCE - 3.05-2 EXTRA STRENGTH FILTER CLOTH SEDIMENT BARRIERS THAT SHALL BE INSTALLED DOWNSLOPE OF DISTURBED AREAS WITH MINIMAL GRADES TO FILTER SEDIMENT-LADEN RUNOFF FROM SHEET FLOW AS INDICATED. ITS PURPOSE IS TO INTERCEPT SMALL AMOUNTS OF SEDIMENT FROM DISTURBED AREAS AND PREVENT SEDIMENT FROM LEAVING THE SITE.
6. SUPER SILT FENCE - 3.05-1 WIRE SUPPORTED, STANDARD-STRENGTH FILTER CLOTH SEDIMENT BARRIERS THAT SHALL BE INSTALLED DOWNSLOPE OF DISTURBED AREAS WITH MINIMAL GRADES TO FILTER SEDIMENT-LADEN RUNOFF FROM SHEET FLOW AS INDICATED. SIMILAR TO SILT FENCE, ITS PURPOSE IS TO INTERCEPT AND PREVENT SMALL AMOUNTS OF SEDIMENT FROM DISTURBED AREAS FROM LEAVING THE SITE.
7. SEDIMENT TRAP - 3.13 A TEMPORARY BARRIER OR DAM WITH A CONTROLLED STORMWATER RELEASE TO DETAIN SEDIMENT-LADEN RUNOFF FROM DISTURBED AREAS IN "WET" AND "DRY" STORAGE LONG ENOUGH FOR THE MAJORITY OF SEDIMENT TO SETTLE OUT.
   6.1 MAINTENANCE OF SEDIMENT TRAP - INSPECT TRAP EMBANKMENT WEEKLY TO ENSURE IT IS STRUCTURALLY SOUND AND HAS NOT BEEN DAMAGED DURING CONSTRUCTION ACTIVITIES. THE TRAP SHALL BE CHECKED AFTER EVERY RAINFALL EVENT. ONCE THE SEDIMENT HAS REACHED THE DESIGNATED CLEANOUT LEVEL IT SHALL BE REMOVED AND PROPERLY DISPOSED OF.
8. TEMPORARY DIVERSION DIKE - 3.09 A TEMPORARY RIDGE OF COMPACTED SOIL TO DIVERT WATER AWAY FROM A DISTURBED AREA.

VEGETATIVE PRACTICES:
1. TOPSOIL (TEMPORARY STOCKPILE) - 3.30 TOPSOIL SHALL BE STRIPPED FROM AREAS TO BE GRADED AND STOCKPILED FOR LATER SPREADING. STOCKPILE LOCATIONS SHALL BE LOCATED ONSITE AND SHALL BE STABILIZED WITH TEMPORARY SILT FENCE AND VEGETATION.
2. TEMPORARY SEEDING - 3.31 ALL DENUDED AREAS WHICH WILL BE LEFT DORMANT FOR MORE THAN 14 DAYS SHALL BE SEEDED WITH FAST GERMINATING TEMPORARY VEGETATION IMMEDIATELY FOLLOWING GRADING OF THOSE AREAS. SELECTION OF THE SEED MIXTURE SHALL DEPEND ON THE TIME OF YEAR IT IS APPLIED.
3. PERMANENT SEEDING - 3.32 FOLLOWING GRADING ACTIVITIES, ESTABLISH PERENNIAL VEGETATIVE COVER BY PLANTING SEED TO REDUCE EROSION, STABILIZE DISTURBED AREAS, AND ENHANCE NATURAL BEAUTY.
4. SOIL STABILIZATION BLANKETS & MATTING - 3.36 A PROTECTIVE COVERING BLANKET OR SOIL STABILIZATION MAT SHALL BE INSTALLED ON PREPARED PLANTING AREAS OF CHANNELS TO PROTECT AND PROMOTE VEGETATION ESTABLISHMENT AND REINFORCE ESTABLISHED TURF.

MANAGEMENT STRATEGIES
1. PROVIDE SEDIMENT TRAPPING MEASURES AS A FIRST STEP IN GRADING, SEED AND MULCH IMMEDIATELY FOLLOWING INSTALLATION.
2. PROVIDE TEMPORARY SEEDING OR OTHER STABILIZATION IMMEDIATELY AFTER GRADING.
3. ISOLATE TRENCHING FOR UTILITIES AND DRAINAGE FROM DOWNSTREAM CONVEYANCES IN ORDER TO MINIMIZE PERIMETER CONTROLS.
4. ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE MAINTAINED UNTIL THEY ARE NO LONGER REQUIRED TO COMPLY WITH THE CONTRACT DOCUMENTS OR STATE LAW.

PERMANENT STABILIZATION
ALL NON-PAVED AREAS DISTURBED BY CONSTRUCTION SHALL BE STABILIZED WITH PERMANENT SEEDING IMMEDIATELY FOLLOWING FINISHED GRADING. SEEDING SHALL BE IN ACCORDANCE WITH STD. & SPEC. 3.32, PERMANENT SEEDING. SEED TYPE SHALL BE AS SPECIFIED FOR "MINIMUM CARE LAWNS" AND "GENERAL SLOPES" IN THE HANDBOOK FOR SLOPES LESS THAN 3:1. FOR SLOPES GREATER THAN 3:1, SEED TYPE SHALL BE AS SPECIFIED FOR "LOW MAINTENANCE SLOPES" IN TABLE 3.32-D OF THE HANDBOOK. FOR MULCH (STRAW OR FIBER) SHALL BE USED ON ALL SEEDED SURFACES. IN ALL SEEDING OPERATIONS SEED, FERTILIZER AND LIME SHALL BE APPLIED PRIOR TO MULCHING.

MINIMUM STANDARDS:

AN EROSION AND SEDIMENT CONTROL PROGRAM ADOPTED BY A DISTRICT OR LOCALITY MUST BE CONSISTENT WITH THE FOLLOWING CRITERIA, TECHNIQUES AND METHODS:

MS-1. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 14 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.

MS-2. DURING CONSTRUCTION OF THE PROJECT, SOIL STOCKPILES AND BORROW AREAS SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE APPLICANT IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS BORROW AREAS AND SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.

MS-3. A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT IS UNIFORM, MATURE ENOUGH TO SURVIVE AND WILL INHIBIT EROSION.

MS-4. SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND-DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.

MS-5. STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.

MS-6. SEDIMENT TRAPS AND SEDIMENT BASINS SHALL BE DESIGNED AND CONSTRUCTED BASED UPON THE TOTAL DRAINAGE AREA TO BE SERVED BY THE TRAP OR BASIN.

A. THE MINIMUM STORAGE CAPACITY OF A SEDIMENT TRAP SHALL BE 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA AND THE TRAP SHALL ONLY CONTROL DRAINAGE AREAS LESS THAN THREE ACRES.

B. SURFACE RUNOFF FROM DISTURBED AREAS THAT IS COMPRISED OF FLOW FROM DRAINAGE AREAS GREATER THAN OR EQUAL TO THREE ACRES SHALL BE CONTROLLED BY A SEDIMENT BASIN. THE MINIMUM STORAGE CAPACITY OF A SEDIMENT BASIN SHALL BE 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA. THE OUTFALL SYSTEM SHALL, AT A MINIMUM, MAINTAIN THE STRUCTURAL INTEGRITY OF THE BASIN DURING A 25-YEAR STORM OF 24-HOUR DURATION. RUNOFF COEFFICIENTS USED IN RUNOFF CALCULATIONS SHALL CORRESPOND TO A BARE EARTH CONDITION OR THOSE CONDITIONS EXPECTED TO EXIST WHILE THE SEDIMENT BASIN IS UTILIZED.

MS-7. CUT AND FILL SLOPES SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. SLOPES THAT ARE FOUND TO BE ERODING EXCESSIVELY WITHIN ONE YEAR OF PERMANENT STABILIZATION SHALL BE PROVIDED WITH ADDITIONAL SLOPE STABILIZING MEASURES UNTIL THE PROBLEM IS CORRECTED.

MS-8. CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME OR SLOPE DRAIN STRUCTURE.

MS-9. WHENEVER WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.

MS-10. ALL STORM SEWER INLETS THAT ARE MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.

MS-11. BEFORE NEWLY CONSTRUCTED STORMWATER CONVEYANCE CHANNELS OR PIPES ARE MADE OPERATIONAL, ADEQUATE OUTLET PROTECTION AND ANY REQUIRED TEMPORARY OR PERMANENT CHANNEL LINING SHALL BE INSTALLED IN BOTH THE CONVEYANCE CHANNEL AND RECEIVING CHANNEL.

MS-12. WHEN WORK IN A LIVE WATERCOURSE IS PERFORMED, PRECAUTIONS SHALL BE TAKEN TO MINIMIZE ENCROACHMENT, CONTROL SEDIMENT TRANSPORT AND STABILIZE THE WORK AREA TO THE GREATEST EXTENT POSSIBLE DURING CONSTRUCTION. NONERODIBLE MATERIAL SHALL BE USED FOR THE CONSTRUCTION OF CAUSEWAYS AND COFFERDAMS. EARTHEN FILL MAY BE USED FOR THESE STRUCTURES IF ARMORED BY NONERODIBLE COVER MATERIALS.

MS-13. WHEN A LIVE WATERCOURSE MUST BE CROSSED BY CONSTRUCTION VEHICLES MORE THAN TWICE IN ANY SIX-MONTH PERIOD, A TEMPORARY VEHICULAR STREAM CROSSING CONSTRUCTED OF NONERODIBLE MATERIAL SHALL BE PROVIDED.

MS-14. ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS PERTAINING TO WORKING IN OR CROSSING LIVE WATERCOURSES SHALL BE MET.

MS-15. THE BED AND BANKS OF A WATERCOURSE SHALL BE STABILIZED IMMEDIATELY AFTER WORK IN THE WATERCOURSE IS COMPLETED.

MS-16. UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA:

A. NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.

B. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.

C. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.

D. MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE STABILIZATION.

E. RESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THESE REGULATIONS.

F. APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH.

MS-17. WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED OR PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY VEHICULAR TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PAVED OR PUBLIC ROAD SURFACE, THE ROAD SURFACE SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER. THIS PROVISION SHALL APPLY TO INDIVIDUAL DEVELOPMENT LOTS AS WELL AS TO LARGER LAND-DISTURBING ACTIVITIES.

MS-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 AUTHORITY. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.

MS-19. PROPERTIES AND WATERWAYS DOWNSTREAM FROM DEVELOPMENT SITES SHALL BE PROTECTED FROM SEDIMENT DEPOSITION, EROSION AND DAMAGE DUE TO INCREASES IN VOLUME, VELOCITY AND PEAK FLOW RATE OF STORMWATER RUNOFF FOR THE STATED FREQUENCY STORM OF 24-HOUR DURATION IN ACCORDANCE WITH THE STANDARDS AND CRITERIA LISTED IN THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, CHAPTER 8 PAGES 20-24.

SEQUENCE OF CONSTRUCTION:

*PERMISSION SHALL BE OBTAINED BY THE CITY E&S INSPECTOR PRIOR TO MOVING TO THE NEXT PHASE OF THE E&S PLAN.

PHASE I - SHEET C3.2
1. A PRE-CONSTRUCTION MEETING IS REQUIRED WITH THE CITY OF CHARLOTTESVILLE E&S INSPECTOR, CONTRACTOR, OWNER, AND ENGINEER. THIS MEETING SHALL TAKE PLACE ON SITE. THE CITY SHALL BE NOTIFIED 48 HOURS PRIOR TO THE START OF CONSTRUCTION TO SCHEDULE THE PRE-CONSTRUCTION MEETING.
2. FLAG LIMITS OF DISTURBANCE INDICATED ON SHEET C3.2.
3. INSTALL CHAIN LINK SAFETY FENCE AND ALL PERIMETER CONTROLS (SILT FENCE, SUPER SILT FENCE, AND SILT FENCE BREAKS) AS INDICATED ON SHEET C3.2.
4. INSTALL INLET PROTECTION AS INDICATED ON SHEET C3.2. REMOVE TRENCH DRAIN LOCATED AT DRIVE ENTRANCE AND UNDER CONSTRUCTION ENTRANCE.
5. INSTALL CONSTRUCTION ENTRANCE WITH WASHRACK AS INDICATED ON SHEET C3.2. INSTALL CONCRETE WASHOUT. ANY SEDIMENT TRACKED OFF SITE SHALL BE CLEANED BY THE END OF THE DAY.
6. INSTALL TEMPORARY SEDIMENT TRAP AS SHOWN ON SHEET C3.2. CONTRACTOR SHALL LIMIT LAND DISTURBANCE TO A MINIMUM IN THIS PHASE TO INSTALL THE SEDIMENT TRAP. PROVIDE TEMPORARY SEEDING AND DUST CONTROL.
7. DEMOLISH EXISTING BUILDINGS TO GRADE, LEAVING FOUNDATIONS AND GROUND LEVEL SLABS IN PLACE WITH POSITIVE DRAINAGE TOWARDS PROTECTED INLETS, TRAP, AND PERIMETER CONTROLS.
8. WHEN INSTALLATION OF E&S MEASURES SHOWN ON SHEET C3.2 IS COMPLETE, THE CONTRACTOR MAY CONTINUE TO THE NEXT PHASE ONLY AFTER PERMISSION HAS BEEN GRANTED BY THE CITY E&S INSPECTOR. *

PHASE II - SHEET C3.3
1. INSTALL SECOND CONSTRUCTION ENTRANCE AS SHOWN ON SHEET C3.3. MAINTAIN CONSTRUCTION ENTRANCE FROM PHASE I UNTIL SUCH TIME THAT NEW CONSTRUCTION ENTRANCE IS COMPLETE.
2. INSTALL DIVERSION DIKES AND ADDITIONAL SILT FENCE AS SHOWN ON SHEET C3.3 TO DIRECT ALL STORMWATER DRAINAGE TOWARDS SEDIMENT TRAP AND PERIMETER CONTROLS PRIOR TO LEAVING PROPERTY AS ILLUSTRATED.
3. AFTER ALL E&S MEASURES SHOWN ON SHEET C3.3 AND LISTED ABOVE ARE INSTALLED AND INSPECTED BY THE CITY E&S INSPECTOR, CONTRACTOR CAN COMPLETE FULL DEMOLITION OF EXISTING BUILDING SLABS, FOUNDATIONS, SITE ASPHALT, CONCRETE, AND UTILITIES, AS INDICATED ON SHEET C2.1.
4. INSPECT SILT FENCE AND SEDIMENT TRAP DAILY AND ESPECIALLY AFTER EVERY RAINFALL EVENT TO ENSURE THAT THEY ARE FUNCTIONING PROPERLY. CLEAN OUT TRAP AS NEEDED PER CALCULATIONS ON SHEET C3.1. ADDITIONAL MEASURES OR MODIFICATIONS TO EXISTING MEASURES MAY BE REQUESTED BY CITY E&S INSPECTOR TO ENSURE THAT SEDIMENT-LADEN RUNOFF IS PREVENTED FROM LEAVING THE SITE.

PHASE III - SHEET C3.4
1. INSTALL SHEETING AND SHORING (DESIGNED BY CONTRACTOR) IN PHASED APPROACH WHILE PERFORMING THE CUT ON SITE, EXCAVATING THE BELOW-GRADE PORTION OF THE BUILDING. MAINTAIN DRAINAGE TO SEDIMENT TRAP AS INDICATED ON SHEET C3.4.
2. CONTINUE TO DEMOLISH EXISTING ABANDONED SITE INFRASTRUCTURE (IE UTILITIES) AS NECESSARY DURING EXCAVATION OPERATIONS WITHIN THE PROPOSED BUILDING FOOTPRINT.
3. CONTRACTOR TO ADJUST DIVERSION DIKES AND RIGHT-OF-WAY DIVERSION AS NEEDED TO ENSURE POSITIVE DRAINAGE TOWARDS SEDIMENT TRAP AND PERIMETER CONTROLS.
4. APPLY TEMPORARY SEEDING AND DUST CONTROL IF/AS NECESSARY PER VESCH STANDARDS.
5. PRIOR TO THE INSTALLATION OF THE UNDERGROUND DETENTION, A BMP PRECONSTRUCTION MEETING WITH THE CITY INSPECTOR, TIMMONS GROUP, AND THE CONTRACTOR IS REQUIRED.
6. BEGIN INSTALLING UNDERGROUND DETENTION SYSTEM AND INLET PROTECTION AS SHOWN ON SHEET C3.4. WITH THE INSTALLATION OF THE UNDERGROUND DETENTION FACILITY, INSTALL TEMPORARY SNORKEL FOR DEWATERING PRIOR TO NEXT PHASE TO BE IN PLACE WHEN DEWATERING FROM EXCAVATION IS NECESSARY.
7. AT POINT WHEN CONTRACTOR IS READY TO INSTALL SHEETING AND SHORING ALONG THE REMAINDER OF THE BUILDING AREA, CONTRACTOR TO CALL CITY E&S INSPECTOR TO PROCEED TO PHASE IV.

PHASE IV - SHEET C3.5
1. COMPLETE INSTALLATION OF SHEETING AND SHORING (DESIGN BY CONTRACTOR), ALONG WITH INTERNAL BUILDING GARAGE WALLS (DESIGNED BY STRUCTURAL/ARCHITECT) AS INDICATED ON SHEET C3.5, MAINTAINING POSITIVE DRAINAGE TO THE SEDIMENT TRAP. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SHEETING AND SHORING FOR DURATION OF USE.
2. INSTALL THE STORM SEWER PIPES AND STRUCTURES AS SHOWN ON SHEET C3.5.
3. INSTALL FLOOR DRAIN SUMP PIT AND CONNECT DISCHARGE TO SWM FACILITY FOR DRAINAGE OF THE UPPER GARAGE LEVEL AS IT NEARS FINAL FINISHED FLOOR ELEVATION.
4. CONTINUE TO DIRECT SEDIMENT LADEN DRAINAGE TOWARDS SEDIMENT TRAP AND STABILIZED SECTIONS TO FLOOR DRAIN SUMP PIT(S). SEDIMENT TRAP AND FLOOR DRAIN SUMP PIT TO BE INSPECTED BY CONTRACTOR THROUGHOUT EXCAVATION FOR PROPER FUNCTION.
5. ALL STORMWATER PIPING AND STRUCTURES SHALL BE INSPECTED FOR SILT/SEDIMENT. IF PRESENT, SILT/SEDIMENT SHALL BE CLEANED OUT FROM THE SYSTEM TO THE SATISFACTION OF THE CITY E&S INSPECTOR. INSTALL INLET PROTECTION WHEN STORMWATER STRUCTURES ARE INSTALLED PER SHEET C3.5.*
6. ONCE EXCAVATION IS COMPLETE TO FINAL GRADE, CONTRACTOR TO BEGIN CONSTRUCTING BUILDING FOUNDATION AND GROUND LEVEL SLABS. CONTRACTOR MAY STONE THE AREA AS PRACTICAL TO STABILIZE AND PLACE BASE STONE BENEATH FUTURE SLAB POURS WHILE WORKING THE AREA TO REDUCE SEDIMENT LOADING TO THE SEDIMENT TRAP AND DECREASE THE SIZE AS APPROVED BY THE CITY E&S INSPECTOR. AS AREA UPSTREAM OF SEDIMENT TRAP AND FLOOR DRAIN SUMP PIT IS STABILIZED, SIZE OF SEDIMENT TRAP/SUMP PIT MAY BE REDUCED AT A REDUCTION RATE NO GREATER THAN 134 CY PER AC STABILIZED.
7. AT SUCH TIME WHEN THE CONCRETE SLABS OF THE BUILDING HAVE POSITIVE OVERLAND RELIEF TO PERIMETER CONTROLS AND PROTECTED INLETS, THE SEDIMENT TRAP MAY BE REMOVED* AND DRAINAGE OF STABILIZED SLABS MAY BE PUMPED TO SWM FACILITY. PRIOR TO GOING VERTICAL ON BUILDING CONSTRUCTION, CONTRACTOR IS TO CALL FOR CITY INSPECTION AND RECEIVE APPROVAL FROM THE CITY PRIOR TO PROCEEDING TO THE NEXT PHASE.

PHASE V - SHEET C3.6
1. BUILDING CONSTRUCTION IS ABOVE GRADE AND CONTINUES VERTICALLY IN THIS PHASE.
2. FURTHER INSTALLATIONS OF STORM SEWER SYSTEM AS SHOWN ON SHEET C3.6, PROVIDING INLET PROTECTION. ALL STORMWATER PIPING AND STRUCTURES SHALL BE INSPECTED FOR SILT/SEDIMENT. IF PRESENT, SILT/SEDIMENT SHALL BE CLEANED OUT FROM THE SYSTEM TO THE SATISFACTION OF THE CITY E&S INSPECTOR.
3. AT SUCH TIME IN THIS PHASE THAT THE CONTRACTOR IS READY TO INSTALL THE BIORETENTION FACILITIES A SPECIFIC PRECONSTRUCTION MEETING SHALL BE COORDINATED BY THE CONTRACTOR INCLUDING TIMMONS AND THE CITY INSPECTOR TO BE PRESENT AT A MINIMUM. CONTRACTOR SHALL ACKNOWLEDGE AND ADHERE TO THE BMP PRACTICE DOCUMENTATION NOTE ON SHEET C6.7 AT PRECON MEETING.
4. AFTER PRECON MEETING AND STABILIZATION OF SURROUNDING AND UPSTREAM AREAS, INSTALL BIORETENTION PLANTERS AND PROTECT PERIMETER WITH SILT FENCE. BYPASS FILTER MEDIA WITH TEMPORARY HARD CONNECTIONS FROM ROOF DRAINS INTO THE CONTROL/BYPASS STRUCTURE OF EACH BIORETENTION AS A TEMPORARY MEASURE FOR PROTECTION UNTIL ALL LAND DISTURBANCE AND BUILDING CONSTRUCTION IS COMPLETE (PREDOMINANTLY ROOF AREA). THIS WILL PREVENT UNNECESSARY CONSTRUCTION DUST/DEBRIS FROM DAMAGING THE BIORETENTION PRACTICES.
5. INSTALL STORM DRAIN PIPE WITHIN BUILDING LOWER LEVEL AND MAKE CONNECTION TO SWM FACILITY.
6. INSTALL REMAINING PROPOSED UTILITIES AS SHOWN ON SHEET C3.6.
7. CONTRACTOR IS TO CALL FOR CITY INSPECTION AND RECIEVE APPROVAL PRIOR TO PROCEEDING TO THE NEXT PHASE.

PHASE VI - SHEET C3.7
3. FINISH FINE GRADING AND INSTALLATION OF SITE WALLS, STAIRS, AND HARDSCAPE.
4. APPLY PERMANENT SOIL STABILIZATION WITHIN SEVEN DAYS AFTER FINAL GRADE IS ACHIEVED. MULCH AND SEED ALL AREAS TO BE GRASS IN FINAL CONDITION AS SOON AS FINAL GRADE IS ACHIEVED. PREVIOUSLY PAVED AREAS SHALL BE ROTOTILLED WITH 6" OF AMENDED TOPSOIL PRIOR TO PERMANENT SEEDING BEING APPLIED.
5. INSTALL LANDSCAPING WITHIN URBAN BIORETENTION PLANTERS. DISCONNECT TEMPORARY ROOF DRAIN CONNECTION TO BIORETENTION CONTROL STRUCTURE AND PROVIDE ENERGY DISSIPATION GRAVEL DIAPHRAGM AT ROOF DRAIN SPILL POINT. INSTALL MULCH AND MAINTAIN PROTECTIVE PERIMETER SILT FENCE UNTIL PERMISSION FOR REMOVAL IS GRANTED BY CITY INSPECTOR.
6. ONCE CONSTRUCTION IS COMPLETE AND ALL CONTRIBUTING AREAS ARE FULLY STABILIZED WITH ESTABLISHED VEGETATION OR MULCH, EROSION CONTROL MEASURES CAN BE REMOVED UPON APPROVAL FROM THE CITY E&S INSPECTOR.
7. ENGINEER OF RECORD SHALL CERTIFY THE INSTALLED BIORETENTION FACILITIES AND UNDERGROUND DETENTION AFTER RECEIPT OF CONTRACTOR DOCUMENTATION FOR INSTALLATION PER BMP PRACTICE DOCUMENTATION NOTE ON SHEET C6.7.

SOILS INFORMATION:

121C - CULPEPER, URBAN LAND COMPLEX, 7 TO 15 PERCENT SLOPES. 40-79 INCHES TO RESTRICTIVE FEATURES. HYDROLOGIC SOIL GROUP B.

88 - UDORTHENTS, LOAMY, 2 TO 25 PERCENT SLOPES. MORE THAN 80 INCHES TO RESTRICTIVE FEATURES.

NOTE:
IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ADHERE TO REQUESTS FROM THE CITY'S E&S INSPECTOR TO ADD OR MODIFY E&S MEASURES DURING CONSTRUCTION.

GENERAL EROSION AND SEDIMENT CONTROL NOTES:

ES-1: UNLESS OTHERWISE INDICATED, CONSTRUCT AND MAINTAIN ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE LATEST EDITION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND VIRGINIA REGULATIONS VR 625-02-00 EROSION AND SEDIMENT CONTROL REGULATIONS.

ES-2: THE CONTROLLING EROSION AND SEDIMENT CONTROL AUTHORITY WILL MAKE A CONTINUING REVIEW AND EVALUATION OF THE METHODS AND EFFECTIVENESS OF THE EROSION CONTROL PLAN.

ES-3: PLACE ALL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO OR AS THE FIRST STEP IN CLEARING, GRADING, OR LAND DISTURBANCE.

ES-4: MAINTAIN A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN 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, OFFSITE BORROW OR WASTE AREA), SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE ARCHITECT/ENGINEER AND THE CONTROLLING EROSION AND SEDIMENT CONTROL AUTHORITY FOR REVIEW AND ACCEPTANCE.

ES-6: PROVIDE ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE RESPONSIBLE LAND DISTURBER. (MODIFIED NOTE)

ES-7: ALL DISTURBED AREAS SHALL DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND-DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT.

ES-8: DURING DEWATERING OPERATIONS, PUMP WATER INTO AN APPROVED FILTERING DEVICE, ENSURE THAT PUMP INLET IS KEPT ABOVE SETTLED SEDIMENT.

ES-9: INSPECT ALL EROSION CONTROL MEASURES DAILY AND AFTER EACH RUNOFF- PRODUCING RAINFALL EVENT. MAKE ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES IMMEDIATELY.

COMMONWEALTH OF VIRGINIA
Bryan D. Cichocki
Lic. No. 53741
4/26/24
PROFESSIONAL ENGINEER

48530

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DATE	REVISION DESCRIPTION
01/19/2024	FINAL SITE PLAN RESUBMISSION #1
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FINAL
SITE PLAN

DATE: 02/20/2023
DRAWN BY: M. DENHARD
DESIGNED BY: M. DENHARD
CHECKED BY: B. CICHOCKI
SCALE: N/A

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)

CITY OF CHARLOTTESVILLE, VA

EROSION AND SEDIMENT CONTROL NOTES & DETAILS

JOB NO. 48530
SHEET NO. C3.0

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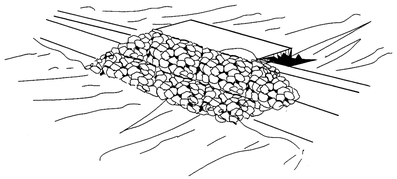
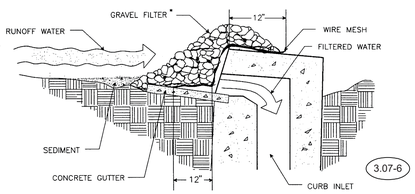
GRAVEL CURB INLET SEDIMENT FILTER





3.07-6

SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE AT CURB INLETS WHERE PONDING IN FRONT OF THE STRUCTURE IS NOT LIKELY TO CAUSE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED AREAS.

* GRAVEL SHALL BE VDOT #3, #357 OR 5 COARSE AGGREGATE.

IP

STORM DRAIN INLET PROTECTION

No Scale

TABLE 3.31-B
ACCEPTABLE TEMPORARY SEEDING PLANT MATERIALS
"QUICK REFERENCE FOR ALL REGIONS"

PLANTING DATES	SPECIES	RATE (LBS./ACRE)
SEPT. 1 - FEB. 15	50/50 MIX OF ANNUAL RYEGRASS (LOLIUM MULTI-FLORUM) & CEREAL (WINTER) RYE (SECALE CEREALE)	50-100
FEB. 16 - APR. 30	ANNUAL RYEGRASS (LOLIUM MULTI-FLORUM)	60-100
MAY 1 - AUG. 31	GERMAN MILLET (SETARIA ITALICA)	50

PS 3.31

TEMPORARY SEEDING PLANT MATERIALS

No Scale

TABLE 3.32-D
SITE SPECIFIC SEEDING MIXTURES FOR PIEDMONT AREA

	TOTAL LBS. PER ACRE
MINIMUM CARE LAWN	
COMMERCIAL OR RESIDENTIAL	175-200 LBS.
KENTUCKY 31 OR TURF-TYPE TALL FESCUE	90-100%
IMPROVED PERENNIAL RYEGRASS	0-5%
KENTUCKY BLUEGRASS	0-5%
GENERAL SLOPE (3:1 OR LESS)	
KENTUCKY 31 FESCUE	128 LBS.
RED TOP GRASS	2 LBS.
SEASONAL NURSE CROP *	20 LBS.
	150 LBS.
LOW-MAINTENANCE SLOPE (STEEPER THAN 3:1)	
* SEE SLOPE STABILIZATION SEED MIX	

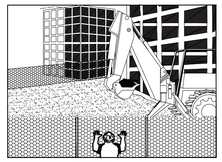
* USE SEASONAL NURSE CROP IN ACCORDANCE WITH SEEDING DATES AS STATED BELOW:
FEBRUARY 16TH THROUGH APRIL..... ANNUAL RYE
MAY 1ST THROUGH AUGUST 15TH..... FOXTAIL MILLET
AUGUST 16TH THROUGH OCTOBER..... ANNUAL RYE
NOVEMBER THROUGH FEBRUARY 15TH..... WINTER RYE

** SUBSTITUTE SERICEA LESPEDEZA FOR CROWNVETCH EAST OF FARMVILLE, VA (MAY THROUGH SEPTEMBER USE HULLED SERICEA, ALL OTHER PERIODS, USE UNHULLED SERICEA). IF FLATPEA IS USED IN LIEU OF CROWNVETCH, INCREASE RATE TO 30 LBS./ACRE. ALL LEGUME SEED MUST BE PROPERLY INOCULATED. WEEPING LOVEGRASS MAY BE ADDED TO ANY SLOPE OR LOW-MAINTENANCE MIX DURING WARMER SEEDING PERIODS; ADD 10-20 LBS./ACRE IN MIXES.

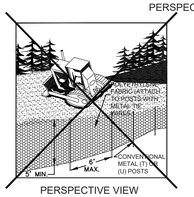
TS 3.32

PERMANENT SEEDING MIX FOR PIEDMONT AREA

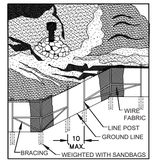
No Scale



PERSPECTIVE VIEW



PERSPECTIVE VIEW
PLASTIC FENCE

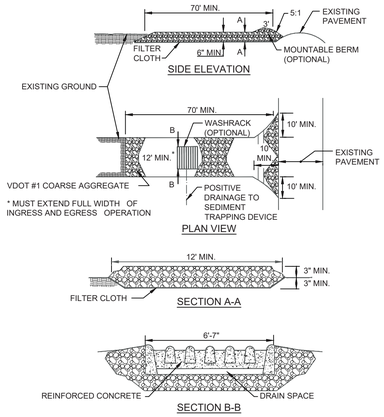


PERSPECTIVE VIEW
METAL FENCE

SAF 3.10

TEMPORARY SAFETY FENCE (CHAIN LINK)

No Scale

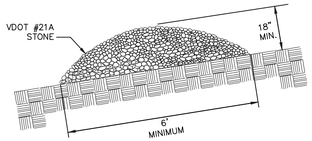


CE 3.02

STONE CONSTRUCTION ENTRANCE

No Scale

TEMPORARY RIGHT-OF-WAY DIVERSIONS

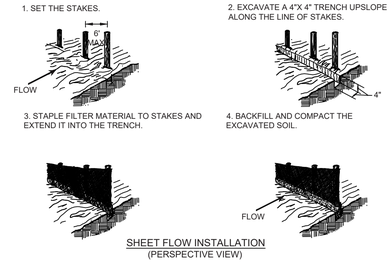


TYPICAL GRAVEL STRUCTURE

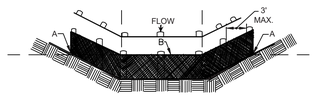
RWD 3.11-1

TEMPORARY RIGHT-OF-WAY DIVERSION

No Scale



SHEET FLOW INSTALLATION
(PERSPECTIVE VIEW)



POINTS A SHOULD BE HIGHER THAN POINT B.

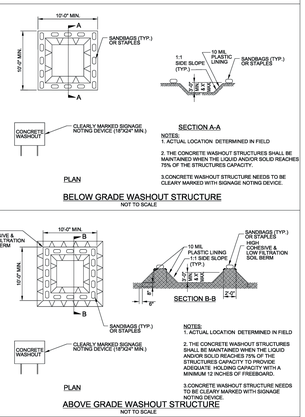
DRAINAGEWAY INSTALLATION
(FRONT ELEVATION)

SSF 3.05-2

SILT FENCE (W/O WIRE SUPPORT)

No Scale

ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER

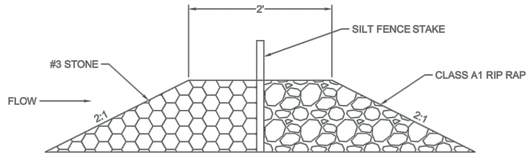


NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD
2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY.
3.CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARY MARKED WITH SIGNAGE NOTING DEVICE.

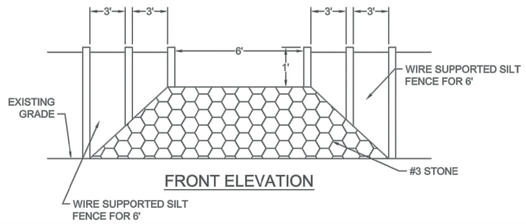
CONCRETE WASHOUT AREA

No Scale

NOTE: SILT FENCE BREAK TO BE PLACED AT LOW POINT IN SILT FENCE LINE



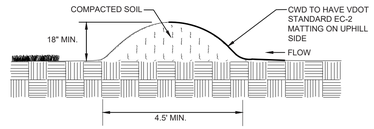
STONE WEIR DETAIL



FRONT ELEVATION

SILT FENCE BREAK

No Scale

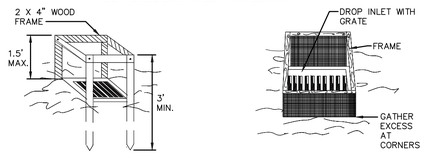


DD CWD 3.09-1

TEMPORARY DIVERSION DIKE

No Scale

SILT FENCE DROP INLET PROTECTION



PERSPECTIVE VIEWS

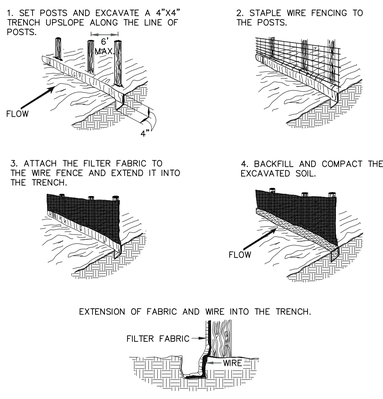
ELEVATION OF STAKE AND FABRIC ORIENTATION

SPECIFIC APPLICATION
THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPE NO GREATER THAN 5%) WHERE THE INLET SHEET OR OVERLAND FLOWS (NOT EXCEEDING 1 C.F.S.) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS.

IP 3.07-1

STORM DRAIN INLET PROTECTION

No Scale



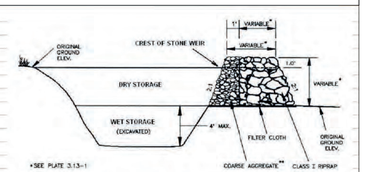
SSF 3.05-1

SILT FENCE (WITH WIRE SUPPORT)

No Scale

Phase II - IV Sediment Trap

Designed for largest drainage area (acres)			1.45
trap volumes:			circle
	elevation (ft)	area (sf)	volume(cy)
	504	502	
	505	786	23.9
	506	1102	35.0
	507	1451	47.3
	508	1832	60.8
	509	2240	75.4
			242.3



**coarse aggregate shall be VDOT #3, #357 of #5

wet storage:			
wet storage required (cy) (67*DA)	97.2		
bottom of stone weir (ft)	507.00		
wet storage provided at this elevation (cy)	106.1	*Contractor to remove sediment once bottom of trap elevation reaches 505.75'.	
slope of wet storage sides	2:1		
		weir length (ft) (6xDA)	8.7
dry storage:		bottom of trap elevation (ft)	504
dry storage required (cy) (67*DA)	97.2	bottom trap dimensions:	8.7' X 57.9'
crest of stone weir	509.0	top of dam elevation (ft)	510.0
dry storage provided at this elevation (cy)	136.2	top width of dam (ft)	4.5
slope of dry storage sides	2:1		

COMMONWEALTH OF VIRGINIA
Bryan D. Cichocki
Lic. No. 53741
4/26/24
PROFESSIONAL ENGINEER
48530

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FINAL SITE PLAN

REVISION DESCRIPTION	DATE
FINAL SITE PLAN RESUBMISSION #1	03/19/2024
FINAL SITE PLAN RESUBMISSION #2	03/22/2024
FINAL SITE PLAN RESUBMISSION #3	04/26/2024

DATE	02/20/2023
DRAWN BY	M. DENHARD
DESIGNED BY	M. DENHARD
CHECKED BY	B. CICHOCKI
SCALE	N/A

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)

CITY OF CHARLOTTESVILLE, VA

EROSION AND SEDIMENT CONTROL NOTES & DETAILS

JOB NO.	48530
SHEET NO.	C3.1

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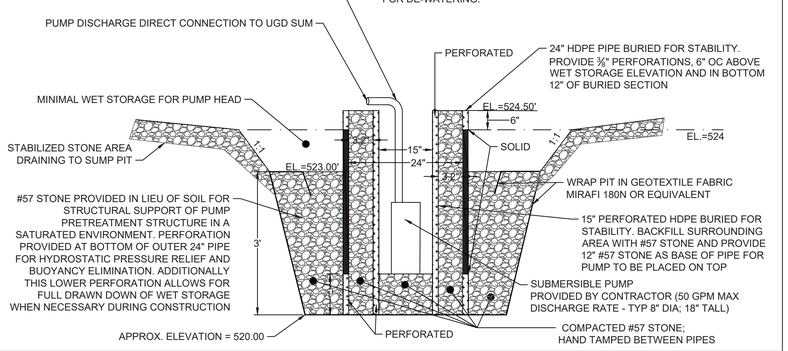
NOTES:
1. SUMP PIT DETAIL PROVIDED FOR DE-WATERING OF STABILIZED STONE AREA DRAINAGE. CONTRACTOR SHALL ONLY DIRECT STABILIZED AREAS TO SUMP PIT FOR DE-WATERING.



PUMP SUMP PIT (USED IN PHASE IV)

No Scale

DEWATERING PUMP RATE CALCULATIONS

UNDERGROUND DETENTION DRY STORAGE VOLUME = 2,970 CF
DEWATERING VOLUME = PUMP DISCHARGE (GPM) X 16
$(\frac{2970}{16})$ = 176 GPM (MAXIMUM ALLOWABLE)

DEWATERING PUMP SHALL BE LIMITED TO A MAXIMUM OF 185 GPM.
DIRTBAG FILTERING CAPACITY WELL EXCEEDS THE MAXIMUM PUMP DISCHARGE RATE.

TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.

608 Preston Avenue
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April 30, 2024

Chris Sibold, PE
Acting City Engineer
City of Charlottesville
Dept. of Public Works
PO Box 911, Charlottesville, VA 22902

RE: VESCH Plate 3.26-1, Portable Sediment Tank Variance Request, 2005 JPA

Mr. Sibold:

This letter is to request a variance in using the VESCH Plate 3.26-1, Portable Sediment Tank as specified in the 1992 Virginia Erosion and Sediment Control Handbook. With the installation of the underground detention basin in Phase III of the site plan E&S (see sheet C3.4) and no municipal storm sewer in proximity to this site, we believe that the best practice to manage dewatering for this site is to outfit the permanent underground detention facility to act as a sediment basin in lieu of a portable sediment tank. On other projects that we have designed in the City of Charlottesville, a straw bale/filter pit has been appropriate to mitigate pumped discharges because the outflow from the system could be directed into the municipal sewer system. Because there is no storm sewer connection for this site, we do not believe that this typical approach would be appropriate in this situation. The straw bale/filter pit would be forced to discharge directly onto Washington Avenue rather than into a protected inlet. This constraint has been considered for the designed release point in the permanent condition, and the underground detention system has been specifically designed to discharge non-concentrated flow into the Washington Avenue gutter to the maximum extent practicable. We believe this permanent design benefit should also be taken advantage of during construction by utilizing the underground detention system for dewatering.

To best meet the intention of the portable sediment tank standard, the outfall of the underground detention facility would be outfitted with a 5" perforated hose as described on the VESCH standard plate 3.26 for the duration of construction to act as a sediment basin, with wet and dry storage volume. The perforated hose would be set at the orifice elevation of 529.80, generating 2,830 CF of wet storage and 2,828 CF of dry storage in the underground system. As shown on the plans, this would require a maximum pumping rate of 176 GPM. The underground detention facility would be required to be maintained during construction and would require full cleaning and sediment removal by the contractor prior to project closeout.

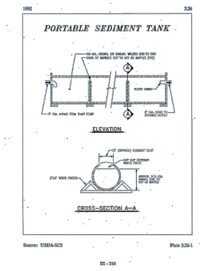
Additionally, the use of the permanent underground treatment facility offers practical advantages in terms of space utilization for the project. With this being an infill project and the building footprint consuming a large portion of the site, it is prudent to the utilize the underground facility, which is already required to be installed early into construction with the cut for the basement. This approach also minimizes disruptions to site operations and maximizes available space for other essential activities.

We respectfully request approval for the use of the permanent underground detention facility in lieu of a portable sediment tank for dewatering purposes.

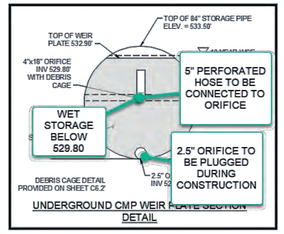
Thank you,

Bryan Cichocki, P.E.

CIVIL ENGINEERING | ENVIRONMENTAL | SURVEYING | GIS | LANDSCAPE ARCHITECTURE | CONSTRUCTION SERVICES



VESCH Plate 3.26-1



Modified UGD Outfall for Temporary Dewatering

COMMONWEALTH OF VIRGINIA
Bryan D. Cichocki
Lic. No. 53741
4/26/24
PROFESSIONAL ENGINEER
48530

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DRAWN BY: M. DENHARD
DESIGNED BY: M. DENHARD
CHECKED BY: B. CICHOCKI
SCALE:

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)
CITY OF CHARLOTTESVILLE, VA
EROSION AND SEDIMENT CONTROL NOTES & DETAILS

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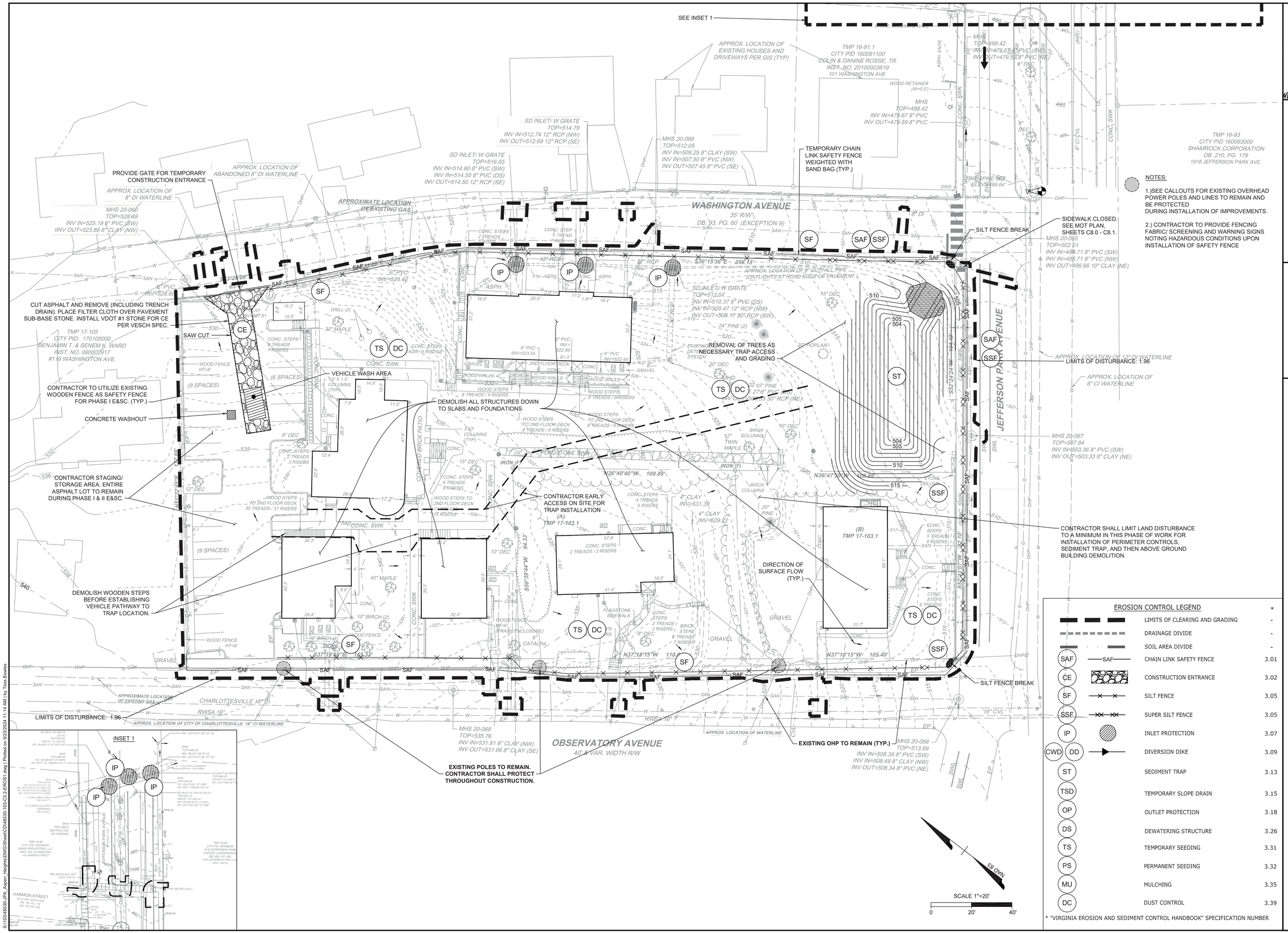

EROSION CONTROL LEGEND

			*
		LIMITS OF CLEARING AND GRADING	-
		DRAINAGE DIVIDE	-
		SOIL AREA DIVIDE	-
SAF	SAF	CHAIN LINK SAFETY FENCE	3.01
CE		CONSTRUCTION ENTRANCE	3.02
SF		SILT FENCE	3.05
SSF		SUPER SILT FENCE	3.05
IP		INLET PROTECTION	3.07
CWD DD		DIVERSION DIKE	3.09
ST		SEDIMENT TRAP	3.13
TSD		TEMPORARY SLOPE DRAIN	3.15
OP		OUTLET PROTECTION	3.18
DS		DEWATERING STRUCTURE	3.26
TS		TEMPORARY SEEDING	3.31
PS		PERMANENT SEEDING	3.32
MU		MULCHING	3.35
DC		DUST CONTROL	3.39

* "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK" SPECIFICATION NUMBER

COMMONWEALTH OF VIRGINIA
Bryan D. Cichocki
Lic. No. 53741
4/26/24
PROFESSIONAL ENGINEER
48530

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REVISION DESCRIPTION

DATE	
03/19/2024	FINAL SITE PLAN RESUBMISSION #1
03/22/2024	FINAL SITE PLAN RESUBMISSION # 2
04/26/2024	FINAL SITE PLAN RESUBMISSION # 3

FINAL SITE PLAN

DATE	02/20/2023
DRAWN BY	M. DENHARD
DESIGNED BY	M. DENHARD
CHECKED BY	B. CICHOCKI
SCALE	1" = 20'

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)

CITY OF CHARLOTTESVILLE, VA

EROSION AND SEDIMENT CONTROL - PHASE I

JOB NO. 48530

SHEET NO. C3.2

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SEE INSET 1

NOTE: SEE CALLOUTS FOR EXISTING OVERHEAD POWER POLES AND LINES TO REMAIN AND BE PROTECTED DURING INSTALLATION OF IMPROVEMENTS.

APPROX. LOCATION OF EXISTING HOUSES AND DRIVEWAYS PER GIS (TYP)

TMP 16-91.1
CITY PID 160091100
COLIN & DANINE ROSSE, TR.
INST. NO. 201000003619
101 WASHINGTON AVE.

MHS
TOP=498.42
INV IN=479.67 8" PVC
INV OUT=479.59 8" PVC

TMP 16-93
CITY PID 160093000
SHAMROCK CORPORATION
DB. 210, PG. 179
1918 JEFFERSON PARK AVE.

MHS 20-066
TOP=512.05
INV IN=509.25 8" CLAY (SW)
INV IN=507.50 8" PVC (NW)
INV OUT=507.45 8" PVC (SE)

TEMPORARY CHAIN LINK SAFETY FENCE WEIGHTED WITH SAND BAG (TYP.)

PROVIDE GATE FOR CONSTRUCTION ENTRANCE

CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE TO SEDIMENT TRAP (TYP.)

APPROX. LOCATION OF ABANDONED 8" DI WATERLINE

APPROX. LOCATION OF 8" DI WATERLINE

MHS 20-060
TOP=528.49
INV IN=525.19 6" PVC (SW)
IINV OUT=523.86 8" CLAY (NW)

CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE TO SEDIMENT TRAP (TYP.)

APPROXIMATE LOCATION OF EXISTING GAS

WASHINGTON AVENUE
35' R/W
DB. 93, PG. 60 (EXCEPTION 9)

SILT FENCE BREAK

MHS 20-065
TOP=502.01
INV IN=499.71 8" PVC (SW)
INV IN=498.71 8" PVC (NW)
INV OUT=496.66 10" CLAY (NE)

STONE WEIR

CLASS A1 RIPRAP ON BANK AT DIVERSION DIKE DISCHARGE
WIDTH = 6'-0"
DEPTH = 2'-0"
UNDERLAIN BY FILTER FABRIC (MIRAFI 140N OR EQUIVALENT)

APPROX. LOCATION OF 12" DI WATERLINE

LIMITS OF DISTURBANCE: 1.96

TMP 17-105
CITY PID: 170105000
BENJAMIN T. & SENEM K. WARD
INST. NO. 090002917
#116 WASHINGTON AVE.

VDOT #1 STONE FROM PHASE I E&SC CE.

CONCRETE WASHOUT

VEHICLE WASH AREA

APPROX. LOCATION OF 6" CI WATERLINE

PHASE II SEDIMENT TRAP
DRAINAGE AREA PHASE II = 1.37 AC
TOTAL STORAGE REQUIRED: 183.58 CY
TOTAL STORAGE PROVIDED: 241 CY
TOP OF DAM ELEVATION: 510
BOTTOM OF STONE WEIR: 507
BOTTOM OF TRAP ELEVATION: 504

CONTRACTOR STAGING/ STORAGE AREA. ENTIRE ASPHALT LOT TO REMAIN DURING PHASE I & II E&SC.

DIRECTION OF SURFACE FLOW (TYP.)

MHS 20-067
TOP=507.84
INV IN=503.36 8" PVC (SW)
INV OUT=503.33 8" CLAY (NE)

CLASS A1 RIPRAP ON BANK AT DIVERSION DIKE DISCHARGE
WIDTH = 6'-0"
DEPTH = 2'-0"
UNDERLAIN BY FILTER FABRIC (MIRAFI 140N OR EQUIVALENT)

REMOVE BUILDING SLABS AND FOUNDATIONS AND MISC. SITE IMPROVEMENT PER DEMOLITION PLAN, SHEET C2.0, AFTER ALL PERIMETER MEASURES ARE IN PLACE.

EXISTING PARALLEL PARKING CLOSED. SEE MOT PLAN .

PROVIDE TEMPORARY SEEDING IF GRADING DOES NOT PROGRESS FOR A PERIOD OF MORE THAN 14 DAYS.

JEFFERSON PARK AVENUE

GRAVEL

APPROXIMATE LOCATION OF EXISTING GAS

CHARLOTTESVILLE 16" CI

RWSA 16"

LIMITS OF DISTURBANCE: 1.96

APPROX. LOCATION OF CITY OF CHARLOTTESVILLE 16" CI WATERLINE

MHS 20-069
TOP=535.76
INV IN=531.81 8" CLAY (NW)
INV OUT=531.66 8" CLAY (SE)

OBSERVATORY AVENUE
40' & VAR. WIDTH R/W

APPROX. LOCATION OF WATERLINE

EXISTING OHP TO REMAIN (TYP.)

MHS 20-068
TOP=513.69
INV IN=508.39 8" PVC (SW)
INV IN=508.49 8" CLAY (NW)
INV OUT=508.34 8" PVC (NE)

SILT FENCE BREAK

EXISTING POLES TO REMAIN. CONTRACTOR SHALL PROTECT THROUGHOUT CONSTRUCTION

INSET 1

SCALE 1"=20'

0 20' 40'

NAD 83

EROSION CONTROL LEGEND

		LIMITS OF CLEARING AND GRADING	-
		DRAINAGE DIVIDE	-
		SOIL AREA DIVIDE	-
SAF	SAF	CHAIN LINK SAFETY FENCE	3.01
CE		CONSTRUCTION ENTRANCE	3.02
SF		SILT FENCE	3.05
SSF		SUPER SILT FENCE	3.05
IP		INLET PROTECTION	3.07
CWD DD		DIVERSION DIKE	3.09
RWD		TEMPORARY RIGHT-OF-WAY DIVERSION	3.11
ST		SEDIMENT TRAP	3.13
TSD		TEMPORARY SLOPE DRAIN	3.15
OP		OUTLET PROTECTION	3.18
DS		DEWATERING STRUCTURE	3.26
TS		TEMPORARY SEEDING	3.31
PS		PERMANENT SEEDING	3.32
MU		MULCHING	3.35
DC		DUST CONTROL	3.39

* "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK" SPECIFICATION NUMBER

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COMMONWEALTH OF VIRGINIA
Bryan D. Cichocki
Lic. No. 53741
4/26/24
PROFESSIONAL ENGINEER
48530

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FINAL SITE PLAN RESUBMISSION # 3

FINAL SITE PLAN

DATE
02/19/2024
03/22/2024
04/26/2024

DATE	02/20/2023
DRAWN BY	M. DENHARD
DESIGNED BY	M. DENHARD
CHECKED BY	B. CICHOCKI
SCALE	1" = 20'

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)

CITY OF CHARLOTTESVILLE, VA

EROSION AND SEDIMENT CONTROL - PHASE II

JOB NO. 48530

SHEET NO. C3.3

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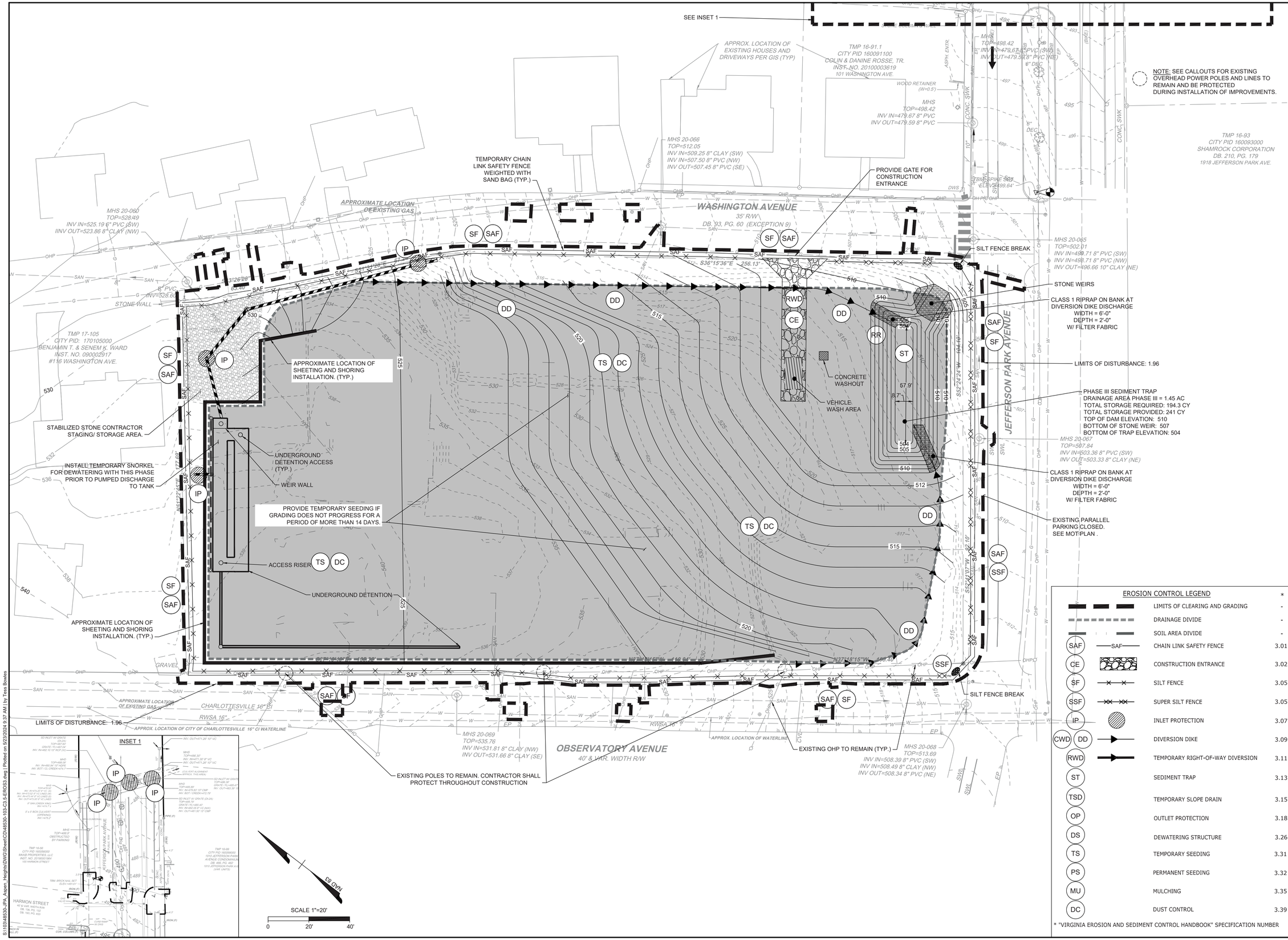

EROSION CONTROL LEGEND

			*
		LIMITS OF CLEARING AND GRADING	-
		DRAINAGE DIVIDE	-
		SOIL AREA DIVIDE	-
SAF	SAF	CHAIN LINK SAFETY FENCE	3.01
CE		CONSTRUCTION ENTRANCE	3.02
SF		SILT FENCE	3.05
SSF		SUPER SILT FENCE	3.05
IP		INLET PROTECTION	3.07
CWD DD		DIVERSION DIKE	3.09
RWD		TEMPORARY RIGHT-OF-WAY DIVERSION	3.11
ST		SEDIMENT TRAP	3.13
TSD		TEMPORARY SLOPE DRAIN	3.15
OP		OUTLET PROTECTION	3.18
DS		DEWATERING STRUCTURE	3.26
TS		TEMPORARY SEEDING	3.31
PS		PERMANENT SEEDING	3.32
MU		MULCHING	3.35
DC		DUST CONTROL	3.39

* "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK" SPECIFICATION NUMBER

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REVISION DESCRIPTION	DATE
FINAL SITE PLAN RESUBMISSION #1	03/19/2024
FINAL SITE PLAN RESUBMISSION #2	03/22/2024
FINAL SITE PLAN RESUBMISSION #3	04/26/2024

DATE	02/20/2023
DRAWN BY	M. DENHARD
DESIGNED BY	M. DENHARD
CHECKED BY	B. CICHOCKI
SCALE	1" = 20'

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)

CITY OF CHARLOTTESVILLE, VA

EROSION AND SEDIMENT CONTROL - PHASE III

JOB NO.	SHEET NO.
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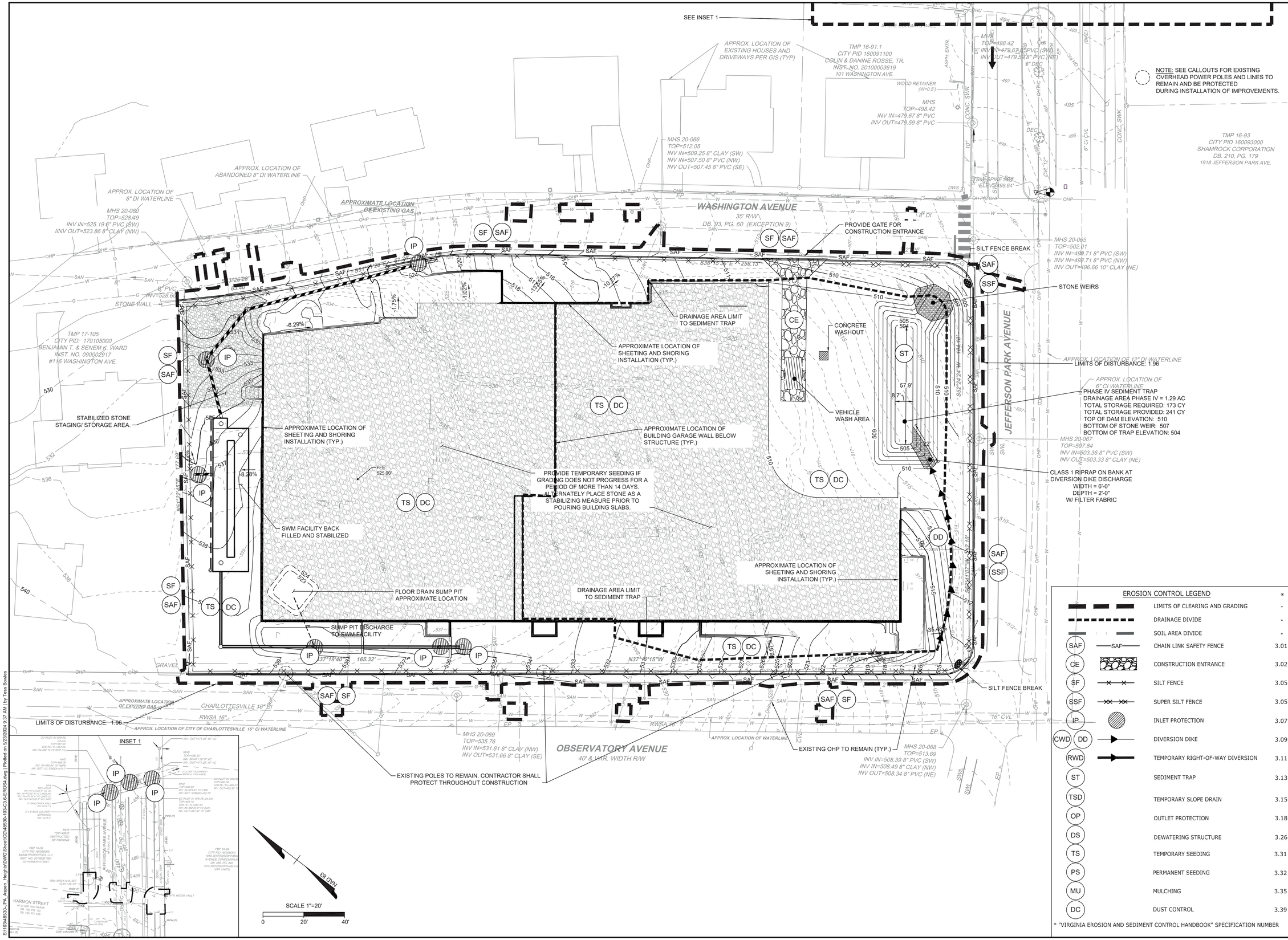

EROSION CONTROL LEGEND

			*
		LIMITS OF CLEARING AND GRADING	-
		DRAINAGE DIVIDE	-
		SOIL AREA DIVIDE	-
SAF	SAF	CHAIN LINK SAFETY FENCE	3.01
CE		CONSTRUCTION ENTRANCE	3.02
SF		SILT FENCE	3.05
SSF		SUPER SILT FENCE	3.05
IP		INLET PROTECTION	3.07
CWD DD		DIVERSION DIKE	3.09
RWD		TEMPORARY RIGHT-OF-WAY DIVERSION	3.11
ST		SEDIMENT TRAP	3.13
TSD		TEMPORARY SLOPE DRAIN	3.15
OP		OUTLET PROTECTION	3.18
DS		DEWATERING STRUCTURE	3.26
TS		TEMPORARY SEEDING	3.31
PS		PERMANENT SEEDING	3.32
MU		MULCHING	3.35
DC		DUST CONTROL	3.39

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04/26/2024	FINAL SITE PLAN RESUBMISSION #3

FINAL SITTE PLAN

DATE	02/20/2023
DRAWN BY	M. DENHARD
DESIGNED BY	M. DENHARD
CHECKED BY	B. CICHOCKI
SCALE	1" = 20'

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)

CITY OF CHARLOTTESVILLE, VA

EROSION AND SEDIMENT CONTROL - PHASE IV

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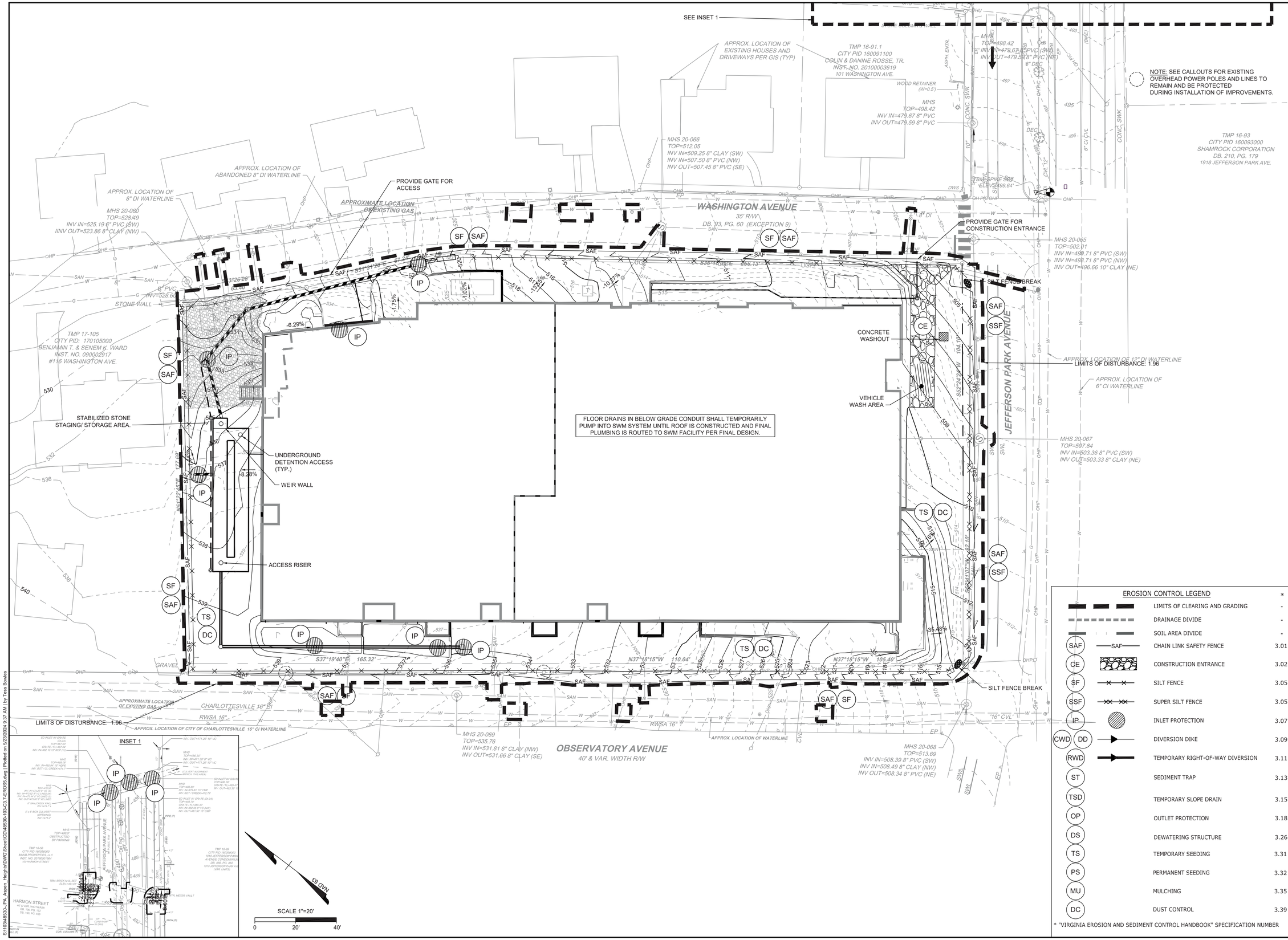

EROSION CONTROL LEGEND

			*
		LIMITS OF CLEARING AND GRADING	-
		DRAINAGE DIVIDE	-
		SOIL AREA DIVIDE	-
SAF	SAF	CHAIN LINK SAFETY FENCE	3.01
CE		CONSTRUCTION ENTRANCE	3.02
SF		SILT FENCE	3.05
SSF		SUPER SILT FENCE	3.05
IP		INLET PROTECTION	3.07
CWD DD		DIVERSION DIKE	3.09
RWD		TEMPORARY RIGHT-OF-WAY DIVERSION	3.11
ST		SEDIMENT TRAP	3.13
TSD		TEMPORARY SLOPE DRAIN	3.15
OP		OUTLET PROTECTION	3.18
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PS		PERMANENT SEEDING	3.32
MU		MULCHING	3.35
DC		DUST CONTROL	3.39

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FINAL SITE PLAN

DATE
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03/22/2024
04/26/2024

DATE	02/20/2023
DRAWN BY	M. DENHARD
DESIGNED BY	M. DENHARD
CHECKED BY	B. CICHOCKI
SCALE	1" = 20'

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)

CITY OF CHARLOTTESVILLE, VA

EROSION AND SEDIMENT CONTROL - PHASE V

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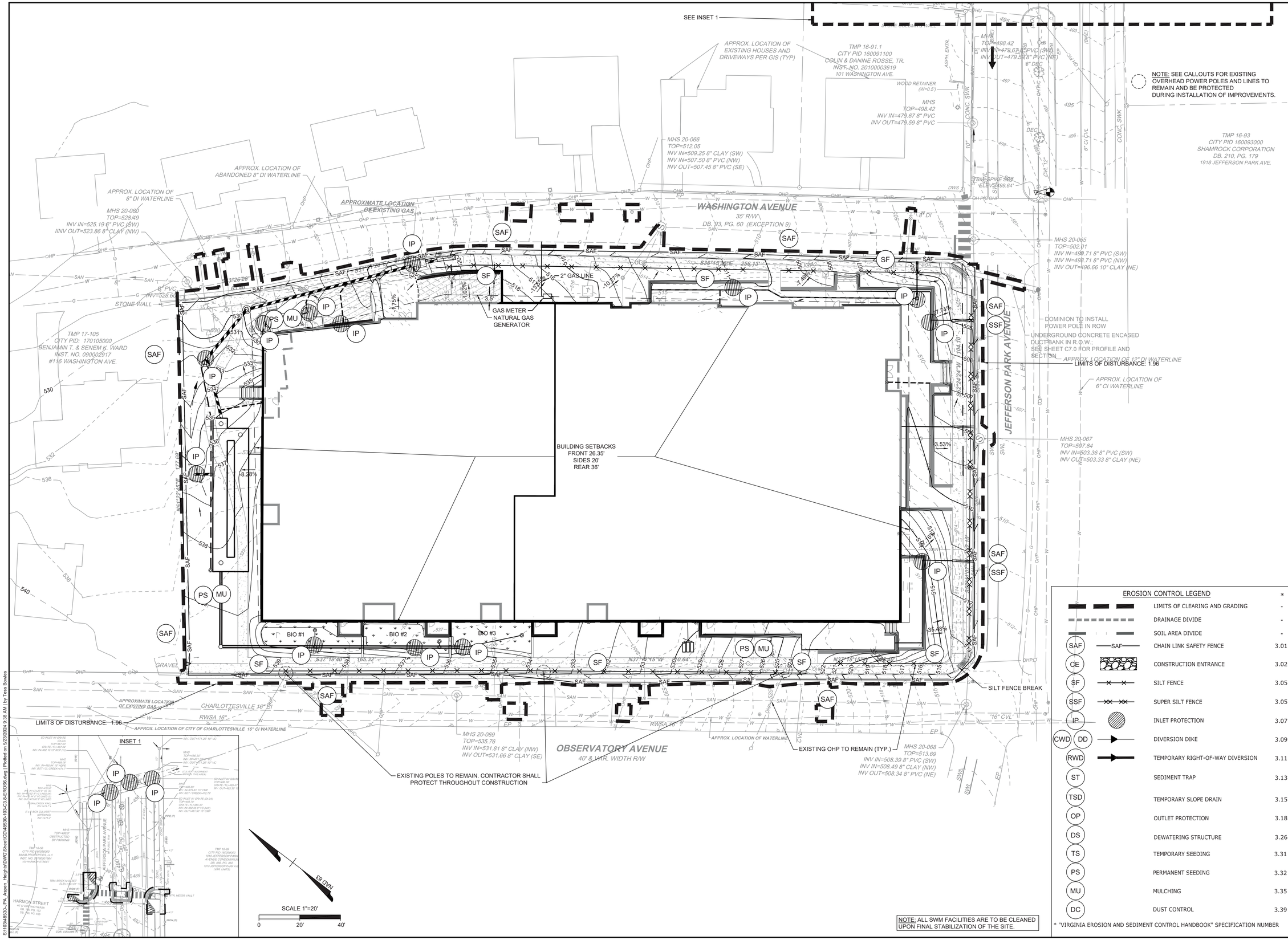

NOTE: ALL SWM FACILITIES ARE TO BE CLEANED UPON FINAL STABILIZATION OF THE SITE.

EROSION CONTROL LEGEND

			*
		LIMITS OF CLEARING AND GRADING	-
		DRAINAGE DIVIDE	-
		SOIL AREA DIVIDE	-
SAF	SAF	CHAIN LINK SAFETY FENCE	3.01
CE		CONSTRUCTION ENTRANCE	3.02
SF		SILT FENCE	3.05
SSF		SUPER SILT FENCE	3.05
IP		INLET PROTECTION	3.07
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FINAL SITE PLAN RESUBMISSION #2
FINAL SITE PLAN RESUBMISSION # 3

FINAL SITTE PLAN

DATE
03/19/2024
03/22/2024
04/26/2024

DATE	02/20/2023
DRAWN BY	M. DENHARD
DESIGNED BY	M. DENHARD
CHECKED BY	B. CICHOCKI
SCALE	1" = 20'

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)

CITY OF CHARLOTTESVILLE, VA

EROSION AND SEDIMENT CONTROL - PHASE VI

JOB NO. 48530

SHEET NO. C3.7

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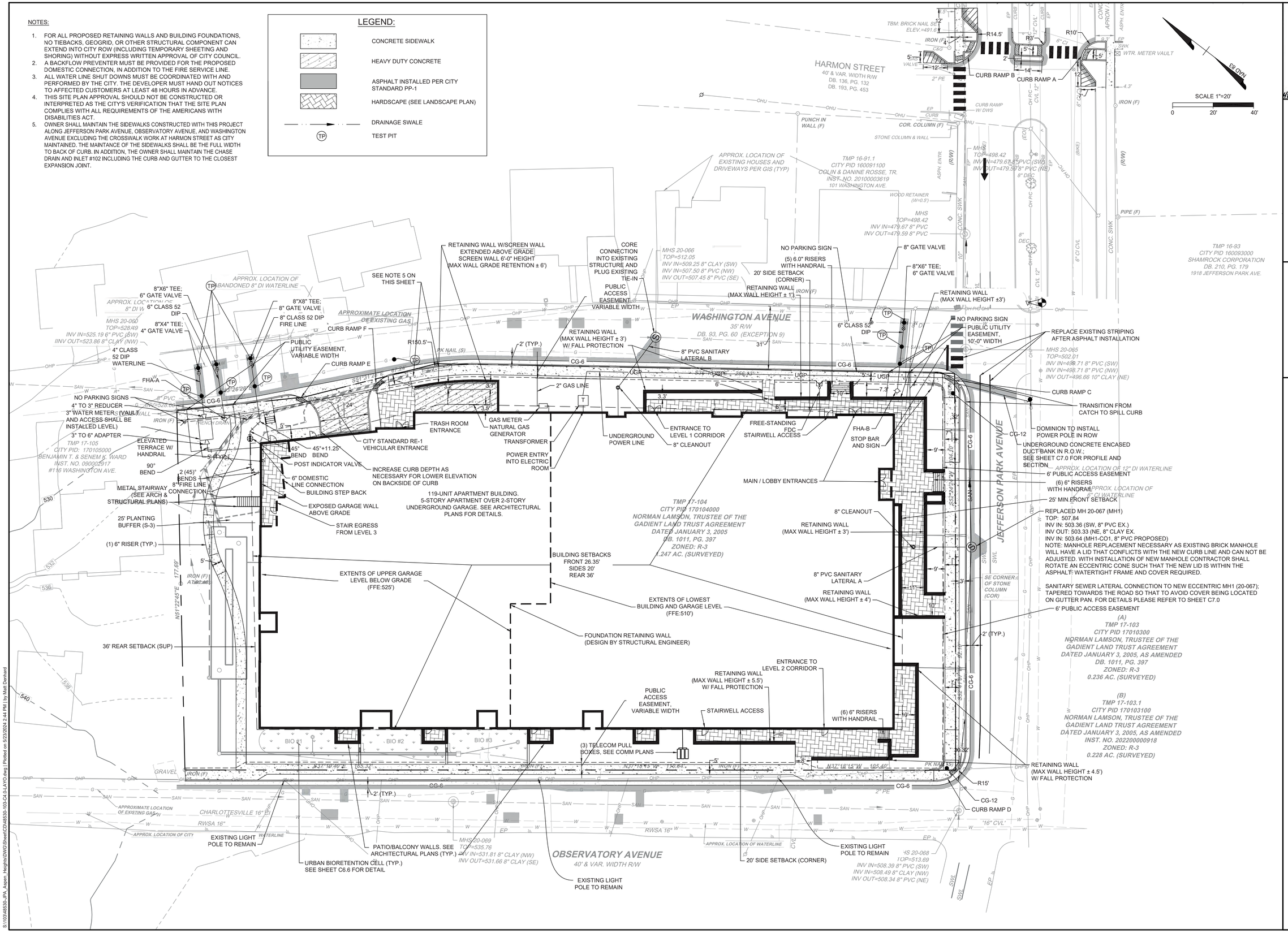
NOTES:

1. FOR ALL PROPOSED RETAINING WALLS AND BUILDING FOUNDATIONS, NO TIEBACKS, GEOGRID, OR OTHER STRUCTURAL COMPONENT CAN EXTEND INTO CITY ROW (INCLUDING TEMPORARY SHEETING AND SHORING) WITHOUT EXPRESS WRITTEN APPROVAL OF CITY COUNCIL.
2. A BACKFLOW PREVENTER MUST BE PROVIDED FOR THE PROPOSED DOMESTIC CONNECTION, IN ADDITION TO THE FIRE SERVICE LINE.
3. ALL WATER LINE SHUT DOWNS MUST BE COORDINATED WITH AND PERFORMED BY THE CITY. THE DEVELOPER MUST HAND OUT NOTICES TO AFFECTED CUSTOMERS AT LEAST 48 HOURS IN ADVANCE.
4. THIS SITE PLAN APPROVAL SHOULD NOT BE CONSTRUCTED OR INTERPRETED AS THE CITY'S VERIFICATION THAT THE SITE PLAN COMPLIES WITH ALL REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT.
5. OWNER SHALL MAINTAIN THE SIDEWALKS CONSTRUCTED WITH THIS PROJECT ALONG JEFFERSON PARK AVENUE, OBSERVATORY AVENUE, AND WASHINGTON AVENUE EXCLUDING THE CROSSWALK WORK AT HARMON STREET AS CITY MAINTAINED. THE MAINTANCE OF THE SIDEWALKS SHALL BE THE FULL WIDTH TO BACK OF CURB. IN ADDITION, THE OWNER SHALL MAINTAIN THE CHASE DRAIN AND INLET #102 INCLUDING THE CURB AND GUTTER TO THE CLOSEST EXPANSION JOINT.

LEGEND:

- CONCRETE SIDEWALK
- HEAVY DUTY CONCRETE
- ASPHALT INSTALLED PER CITY STANDARD PP-1
- HARDSCAPE (SEE LANDSCAPE PLAN)
- DRAINAGE SWALE
- TEST PIT



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Bryan D. Cichocki
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4/26/24
PROFESSIONAL ENGINEER
48530

REVISION DESCRIPTION	DATE
FINAL SITE PLAN RESUBMISSION #1	03/29/2024
FINAL SITE PLAN RESUBMISSION #2	04/22/2024
FINAL SITE PLAN RESUBMISSION #3	04/26/2024

FINAL SITE PLAN

DATE	02/20/2023
DRAWN BY	M. DENHARD
DESIGNED BY	M. DENHARD
CHECKED BY	B. CICHOCKI
SCALE	1" = 20'

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)

CITY OF CHARLOTTESVILLE, VA

LAYOUT AND UTILITY PLAN

JOB NO. 48530

SHEET NO. C4.0

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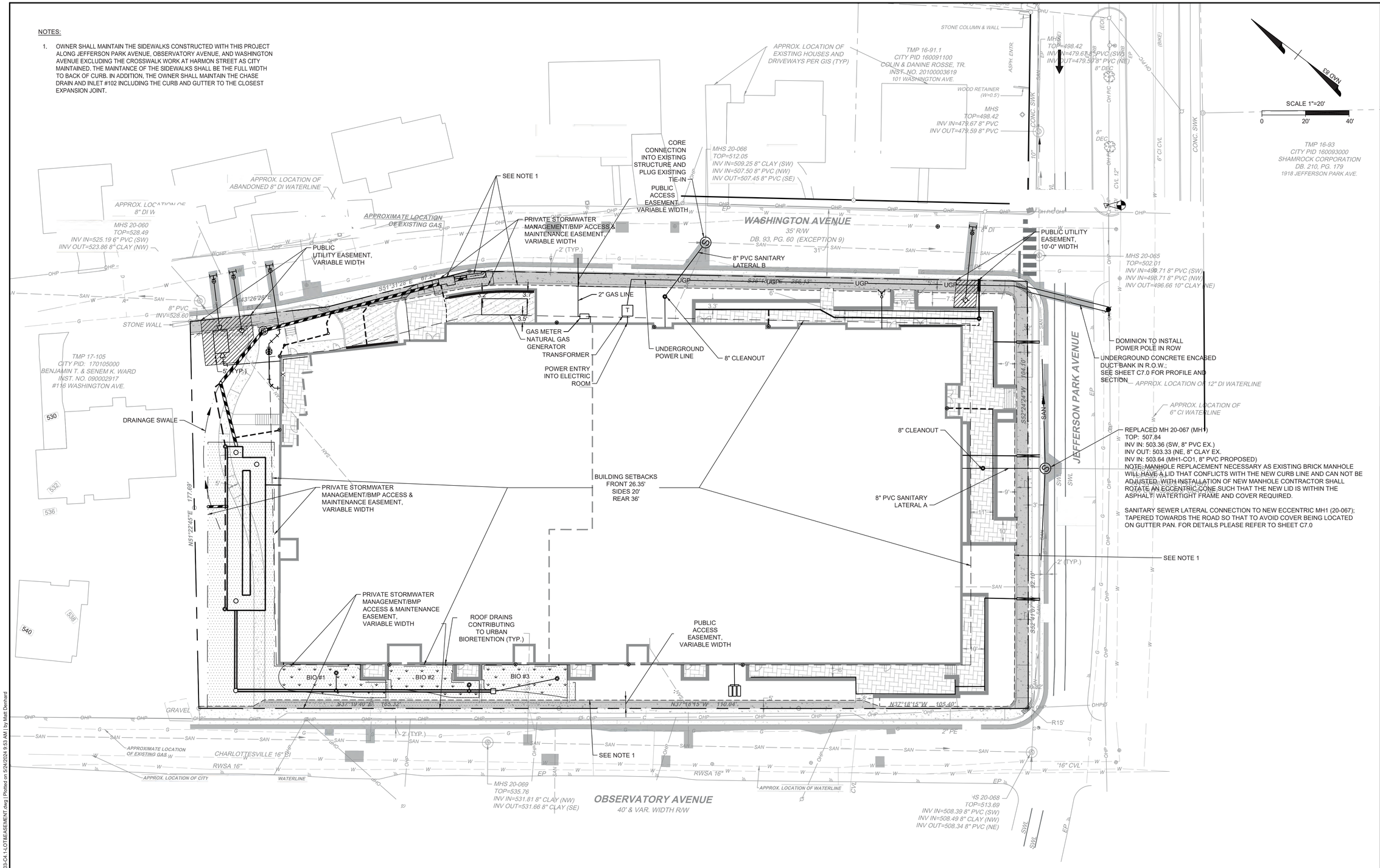
NOTES:

1. OWNER SHALL MAINTAIN THE SIDEWALKS CONSTRUCTED WITH THIS PROJECT ALONG JEFFERSON PARK AVENUE, OBSERVATORY AVENUE, AND WASHINGTON AVENUE EXCLUDING THE CROSSWALK WORK AT HARMON STREET AS CITY MAINTAINED. THE MAINTANCE OF THE SIDEWALKS SHALL BE THE FULL WIDTH TO BACK OF CURB. IN ADDITION, THE OWNER SHALL MAINTAIN THE CHASE DRAIN AND INLET #102 INCLUDING THE CURB AND GUTTER TO THE CLOSEST EXPANSION JOINT.



LEGEND

- VARIABLE WIDTH PUBLIC ACCESS EASEMENT
- VARIABLE WIDTH SWM/BMP PRIVATE MAINTENANCE EASEMENT/ OR DRAINAGE EASEMENT
- VARIABLE WIDTH PUBLIC UTILITY EASEMENT

COMMONWEALTH OF VIRGINIA
Bryan D. Cichocki
Lic. No. 53741
4/26/24
PROFESSIONAL ENGINEER
48530

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REVISION DESCRIPTION
FINAL SITE PLAN RESUBMISSION #1
FINAL SITE PLAN RESUBMISSION #2
FINAL SITE PLAN RESUBMISSION # 3

FINAL SITE PLAN

DATE
03/19/2024
03/22/2024
04/26/2024

DATE	02/20/2023
DRAWN BY	M. DENHARD
DESIGNED BY	M. DENHARD
CHECKED BY	B. CICHOCKI
SCALE	1" = 20'

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)

CITY OF CHARLOTTESVILLE, VA

EASEMENT PLAN

JOB NO.
48530
SHEET NO.
C4.1

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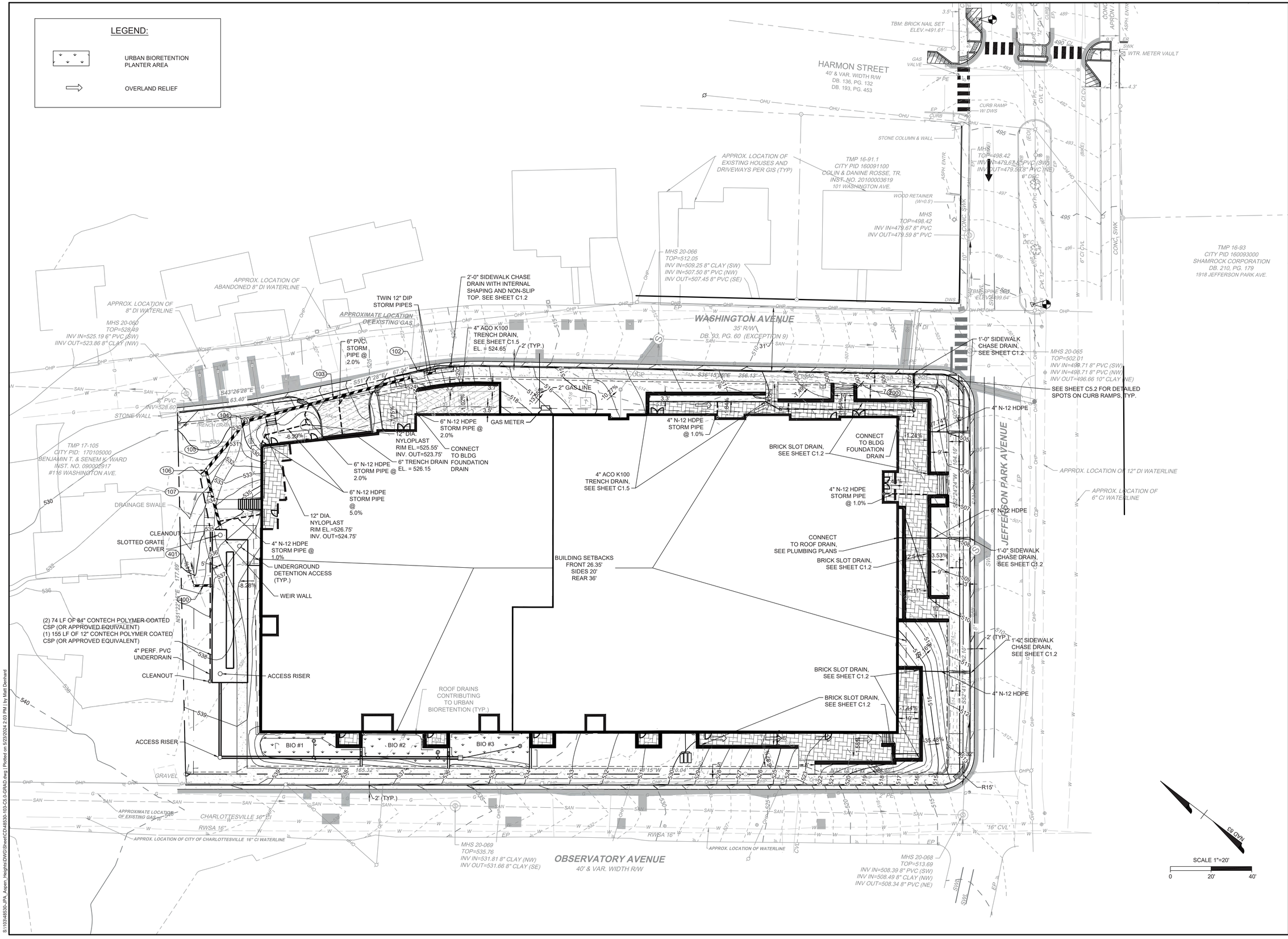

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Bryan D. Cichocki
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FINAL SITE PLAN RESUBMISSION #2	03/22/2024
FINAL SITE PLAN RESUBMISSION #3	04/26/2024

FINAL SITTE PLAN

DATE	02/20/2023
DRAWN BY	M. DENHARD
DESIGNED BY	M. DENHARD
CHECKED BY	B. CICHOCKI
SCALE	1" = 20'

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)

CITY OF CHARLOTTESVILLE, VA

GRADING AND DRAINAGE PLAN

JOB NO.	48530
SHEET NO.	C5.0

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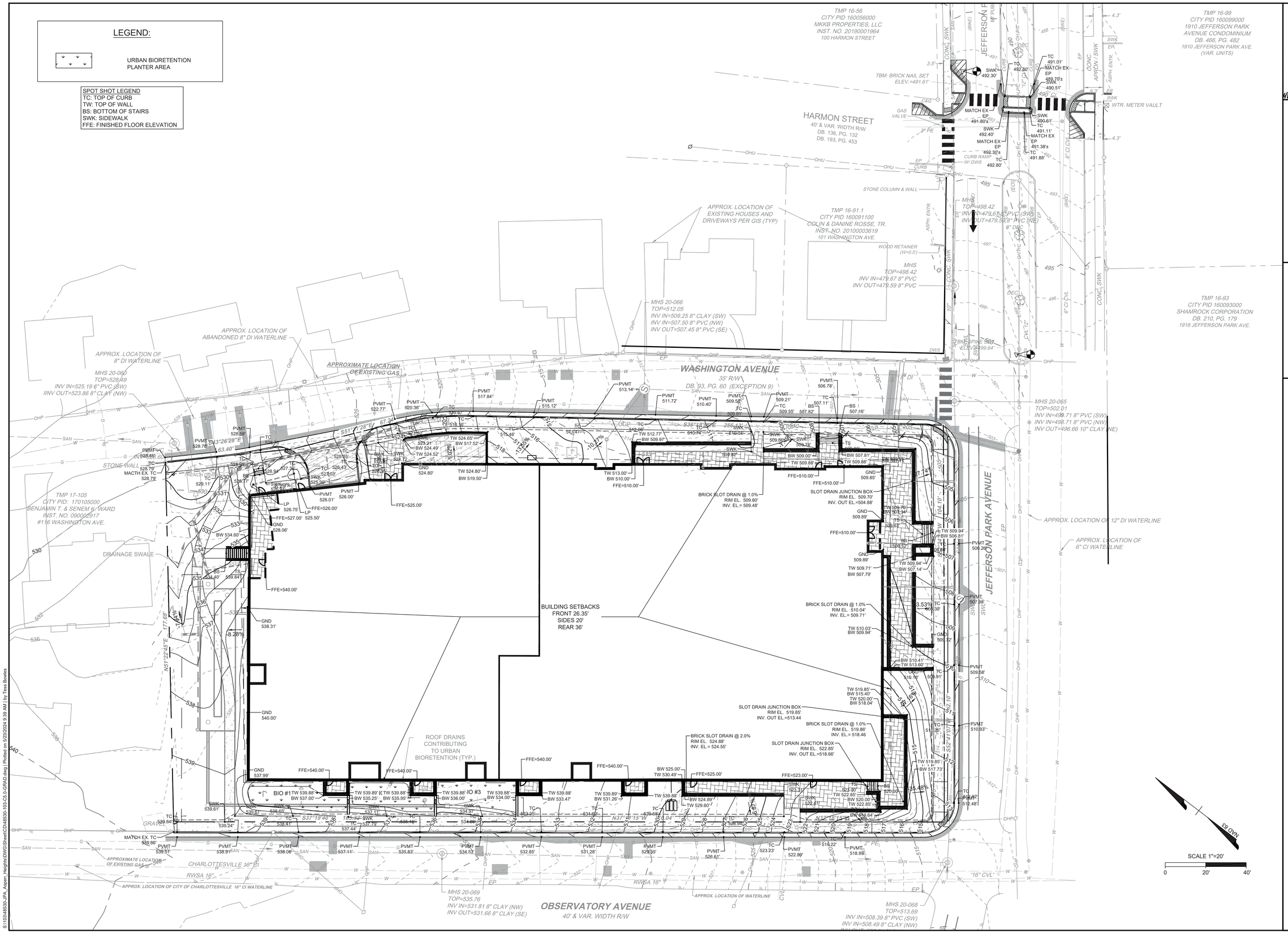

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FINAL SITE PLAN RESUBMISSION #3	04/26/2024

FINAL SITE PLAN

DATE	02/20/2023
DRAWN BY	M. DENHARD
DESIGNED BY	M. DENHARD
CHECKED BY	B. CICHOCKI
SCALE	1" = 20'

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)

CITY OF CHARLOTTESVILLE, VA

DETAILED GRADING PLAN

JOB NO.	48530
SHEET NO.	C5.1

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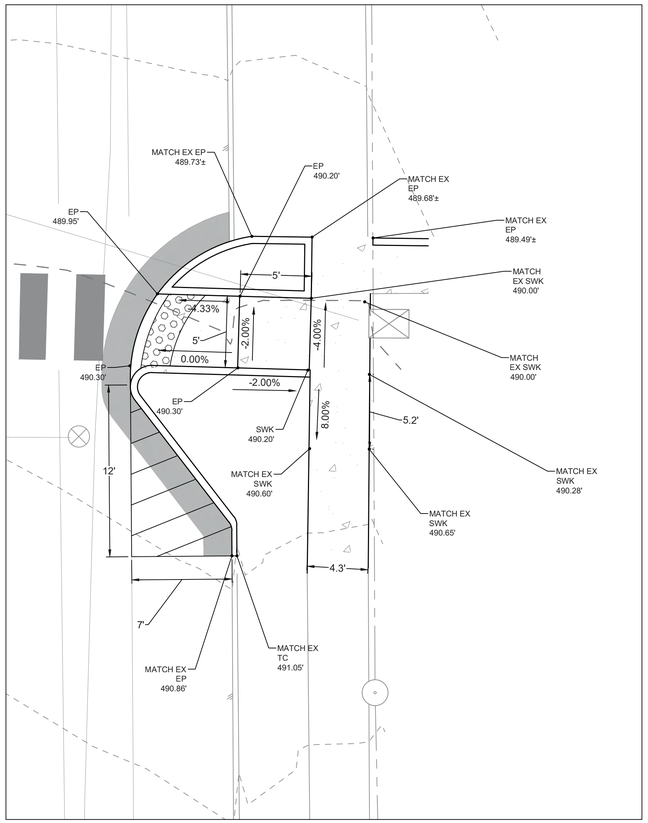
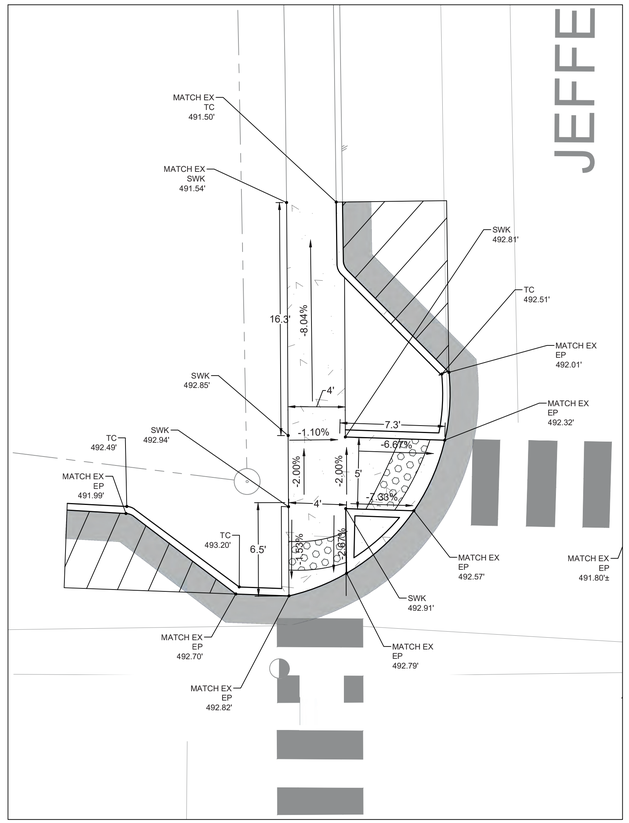


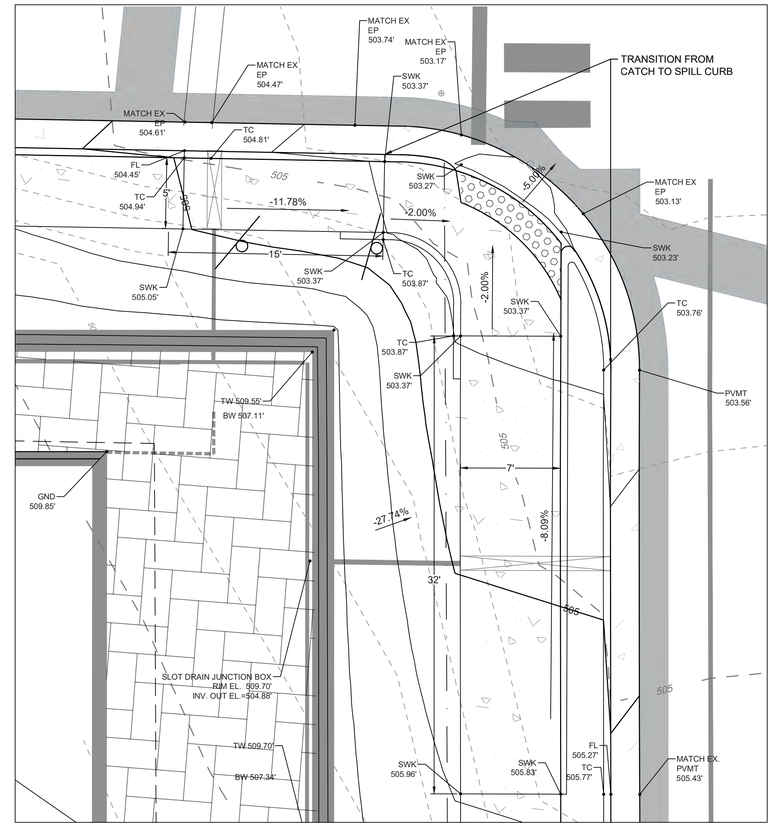
CURB RAMP A

NOTE: PER PROWAG SECTION R202.3, THIS CURB RAMP DOES NOT HAVE ADA COMPLIANT SLOPES DUE TO THE EXISTING SITE CONSTRAINTS, SPECIFICALLY THE ADJACENT DRIVE ENTRANCE AND MIN. SLOPES NECESSARY ACHIEVE POSITIVE DRAINAGE TO JEFFERSON PARK AVENUE.



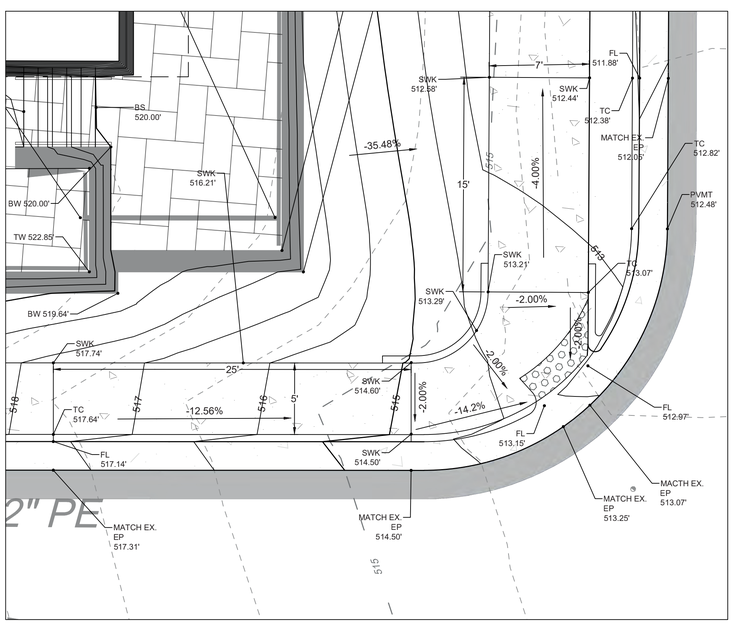
CURB RAMP B

NOTE: THIS CURB RAMP SHALL BE ADA COMPLIANT



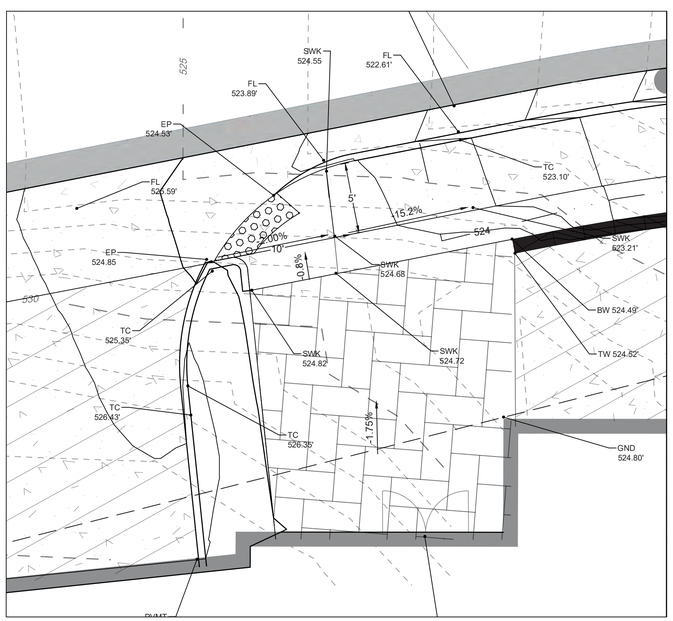
CURB RAMP C

NOTE: PER PROWAG SECTION R202.3, THIS CURB RAMP DOES NOT HAVE ADA COMPLIANT SLOPES DUE TO THE EXISTING SITE CONSTRAINTS, SPECIFICALLY THE ROADWAY PROFILE SLOPES OF JEFFERSON PARK AVENUE AND WASHINGTON AVENUE.



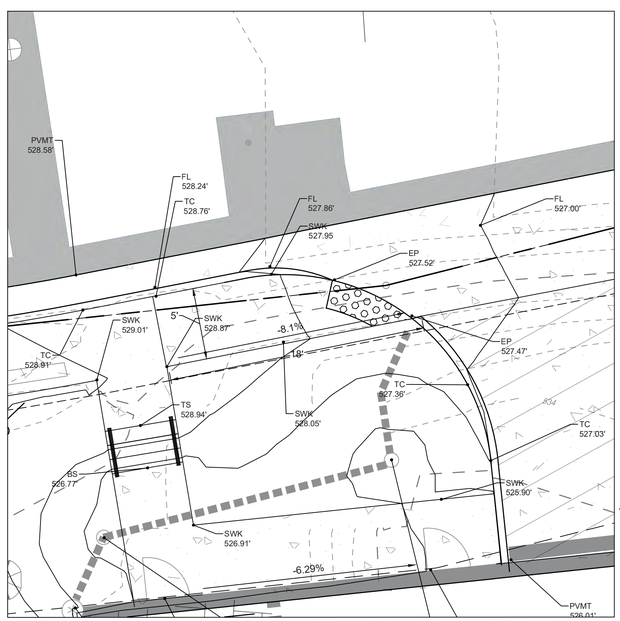
CURB RAMP D

NOTE: PER PROWAG SECTION R202.3, THIS CURB RAMP DOES NOT HAVE ADA COMPLIANT SLOPES DUE TO THE EXISTING SITE CONSTRAINTS, SPECIFICALLY THE ROADWAY PROFILE SLOPES OF JEFFERSON PARK AVENUE AND OBSERVATORY AVENUE.



CURB RAMP E

NOTE: PER PROWAG SECTION R202.3, THIS CURB RAMP DOES NOT HAVE ADA COMPLIANT SLOPES DUE TO THE EXISTING SITE CONSTRAINTS, SPECIFICALLY THE ROADWAY PROFILE SLOPE OF WASHINGTON AVENUE.



CURB RAMP F

NOTE: PER PROWAG SECTION R202.3, THIS CURB RAMP DOES NOT HAVE ADA COMPLIANT SLOPES DUE TO THE EXISTING SITE CONSTRAINTS, SPECIFICALLY THE ROADWAY PROFILE SLOPE OF WASHINGTON AVENUE.

SPOT SHOT LEGEND
TC: TOP OF CURB
PVMT: PAVEMENT
TS: TOP OF STAIRS
BS: BOTTOM OF STAIRS
SWK: SIDEWALK
EP: EDGE OF PAVEMENT
FL: FLOW LINE

NAD 83

SCALE 1"=5'
0 5' 10'

COMMONWEALTH OF VIRGINIA
Bryan D. Cichocki
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REVISION DESCRIPTION
FINAL SITE PLAN RESUBMISSION #1
FINAL SITE PLAN RESUBMISSION #2
FINAL SITE PLAN RESUBMISSION #3

FINAL SITE PLAN

DATE
03/19/2024
03/22/2024
04/26/2024

DATE 02/20/2023
DRAWN BY M. DENHARD
DESIGNED BY M. DENHARD
CHECKED BY B. CICHOCKI
SCALE 1" = 20'

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)

CITY OF CHARLOTTESVILLE, VA

CURB RAMP GRADING ENLARGEMENTS

JOB NO. 48530
SHEET NO. C5.2

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SITE OUTFALL DESCRIPTIONS:

SITE OUTFALL O1 (RUNOFF ALONG OBSERVATORY AVENUE (NORTH) AT INTERSECTION OF OBSERVATORY AVENUE AND JEFFERSON PARK AVENUE):

PRE DRAINAGE AREA 1A: DISTURBED AREA WITHIN THE PROPERTY LIMITS THAT DISCHARGES TO THE O1 INTERSECTION.

PRE DRAINAGE AREA 1R: DISTURBED AREA WITHIN THE ROW THAT DISCHARGES TO THE O1 INTERSECTION.

OFFSITE AREA 1R: UNDISTURBED AREA WITHIN THE ROW THAT DISCHARGES TO THE O1 INTERSECTION.

OFFSITE AREA 1B: UNDISTURBED AREA IN OBSERVATORY AVENUE THAT FLOWS TO THE PROJECT SITE ROW.

SITE OUTFALL O2 (RUNOFF ALONG WASHINGTON AVENUE (SOUTH) AT INTERSECTION OF WASHINGTON AVENUE AND JEFFERSON PARK AVENUE):

PRE DRAINAGE AREA 2A: DISTURBED AREA WITHIN THE PROPERTY LIMITS THAT DISCHARGES TO THE O2 INTERSECTION.

PRE DRAINAGE AREA 2R: DISTURBED AREA WITHIN THE ROW THAT DISCHARGES TO THE O2 INTERSECTION.

OFFSITE AREA 2R: UNDISTURBED AREA WITHIN THE ROW THAT DISCHARGES TO THE O2 INTERSECTION.

SITE OUTFALL O3 (RUNOFF ALONG JEFFERSON PARK (WEST) AT INTERSECTION OF WASHINGTON AVENUE AND JEFFERSON PARK AVENUE):

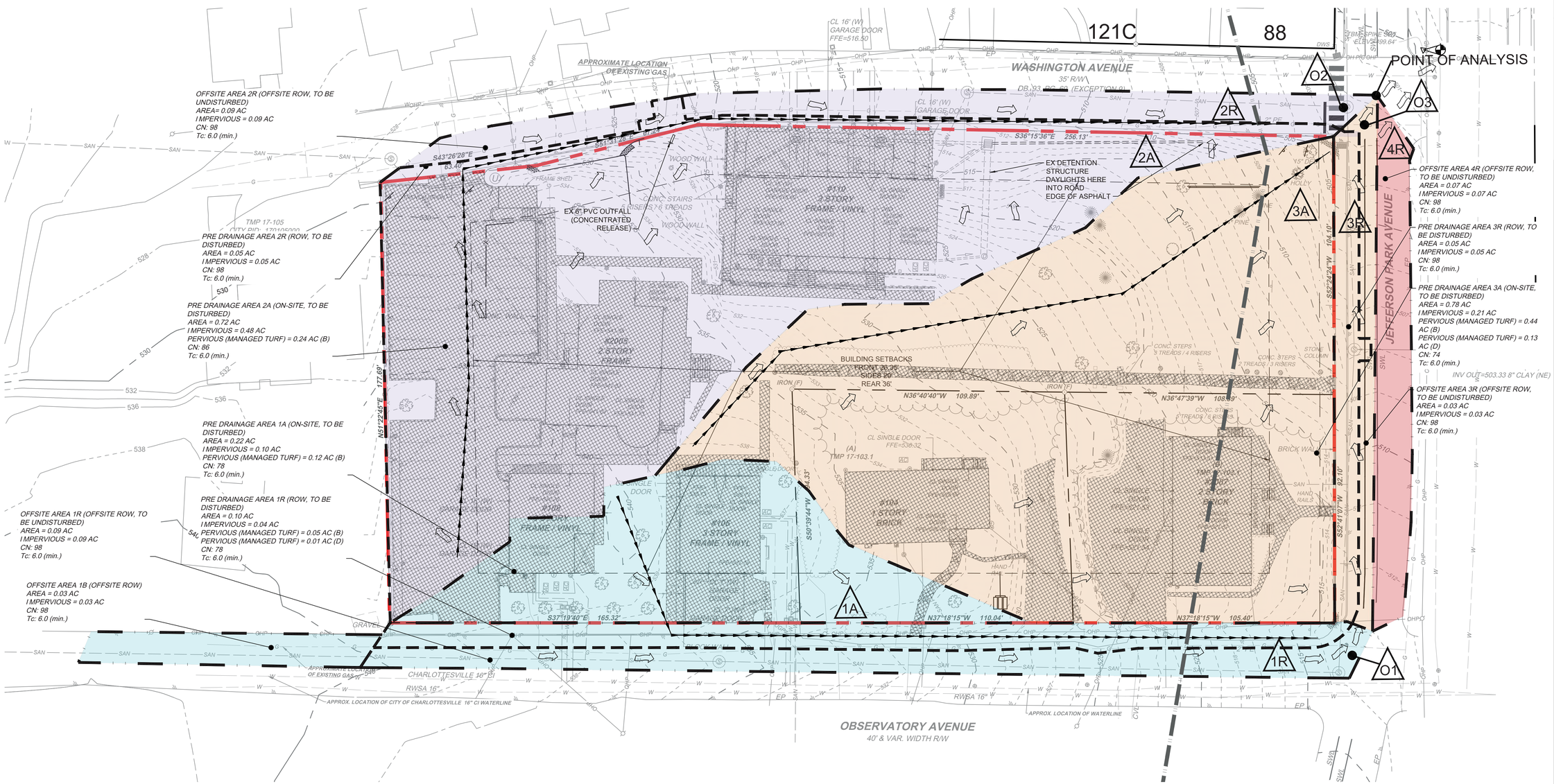
PRE DRAINAGE AREA 3A: DISTURBED AREA WITHIN THE PROPERTY LIMITS THAT DISCHARGES TO THE O3 INTERSECTION.

PRE DRAINAGE AREA 3R: DISTURBED AREA WITHIN THE ROW THAT DISCHARGES TO THE O3 INTERSECTION.

OFFSITE AREA 3R: UNDISTURBED AREA WITHIN THE ROW THAT DISCHARGES TO THE O3 INTERSECTION.

SITE OUTFALL O4 (COMBINED OUTFALL FLOW PLUS OFFSITE AREA 4R):

OFFSITE AREA 4R: UNDISTURBED AREA ALONG JEFFERSON PARK AVENUE WEST THAT COMBINES WITH THE TOTAL OUTFALL.



PRE-DEVELOPED DRAINAGE AREA MAP

SCALE: 1" = 20'

S:\1030\48530_JPA_Aspen_Heights\DWG\Sheet\C\D48530-103-C6.0-STORMWATER MANAGEMENT.dwg | Plotted on 5/23/2024 9:40 AM | by Tess Bowles

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FINAL SITE PLAN RESUBMISSION #3	04/26/2024

FINAL SITE PLAN

DATE	02/20/2023
DRAWN BY	M. DENHARD
DESIGNED BY	M. DENHARD
CHECKED BY	B. CICHOCKI
SCALE	1"=20'

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)

CITY OF CHARLOTTESVILLE, VA

EXISTING STORMWATER MANAGEMENT PLAN

JOB NO.	48530
SHEET NO.	C6.0

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SITE OUTFALL DESCRIPTIONS:

SITE OUTFALL O1 (RUNOFF ALONG OBSERVATORY AVENUE (NORTH) AT INTERSECTION OF OBSERVATORY AVENUE AND JEFFERSON PARK AVENUE):

POST DRAINAGE AREA 1A: DISTURBED AREA WITHIN THE PROPERTY LIMITS THAT DISCHARGES UNTREATED TO THE O1 INTERSECTION.

POST DRAINAGE AREA 1R: DISTURBED AREA WITHIN THE ROW THAT DISCHARGES UNTREATED TO THE O1 INTERSECTION.

OFFSITE AREA 1R: UNDISTURBED AREA WITHIN THE ROW THAT DISCHARGES TO THE O1 INTERSECTION.

OFFSITE AREA 1B: UNDISTURBED AREA IN OBSERVATORY AVENUE THAT FLOWS TO THE PROJECT SITE ROW.

SITE OUTFALL O2 (RUNOFF ALONG WASHINGTON AVENUE (SOUTH) AT INTERSECTION OF WASHINGTON AVENUE AND JEFFERSON PARK AVENUE):

POST DRAINAGE AREA 2A: DISTURBED AREA ROUTED THROUGH THE BIORETENTION BASINS AND UNDERGROUND DETENTION PRACTICE, THEN DISCHARGED TO THE O2 INTERSECTION.

POST DRAINAGE AREA 2B: DISTURBED AREA ROUTED THROUGH THE UNDERGROUND DETENTION PRACTICE, THEN DISCHARGED TO THE O2 INTERSECTION (NOT ROUTED THROUGH BIORETENTION).

POST DRAINAGE AREA 2C: DISTURBED AREA WITHIN THE PROPERTY LIMITS THAT DISCHARGES UNTREATED TO THE O2 INTERSECTION.

POST DRAINAGE AREA 2R: DISTURBED AREA WITHIN THE ROW THAT DISCHARGES UNTREATED TO THE O2 INTERSECTION.

OFFSITE AREA 2R: UNDISTURBED AREA WITHIN THE ROW THAT DISCHARGES TO THE O2 INTERSECTION.

SITE OUTFALL O3 (RUNOFF ALONG JEFFERSON PARK (WEST) AT INTERSECTION OF WASHINGTON AVENUE AND JEFFERSON PARK AVENUE):

POST DRAINAGE AREA 3A: DISTURBED AREA WITHIN THE PROPERTY LIMITS THAT DISCHARGES UNTREATED TO THE O3 INTERSECTION.

POST DRAINAGE AREA 3R: DISTURBED AREA WITHIN THE ROW THAT DISCHARGES UNTREATED TO THE O3 INTERSECTION.

OFFSITE AREA 3R: UNDISTURBED AREA WITHIN THE ROW THAT DISCHARGES TO THE O3 INTERSECTION.

SITE OUTFALL O4 (COMBINED OUTFALL FLOW PLUS OFFSITE AREA 4R):

OFFSITE AREA 4R: UNDISTURBED AREA ALONG JEFFERSON PARK AVENUE WEST THAT COMBINES WITH THE TOTAL OUTFALL)

NOTE: ALL SWM FACILITIES ARE TO BE CLEANED UPON FINAL STABILIZATION OF THE SITE.

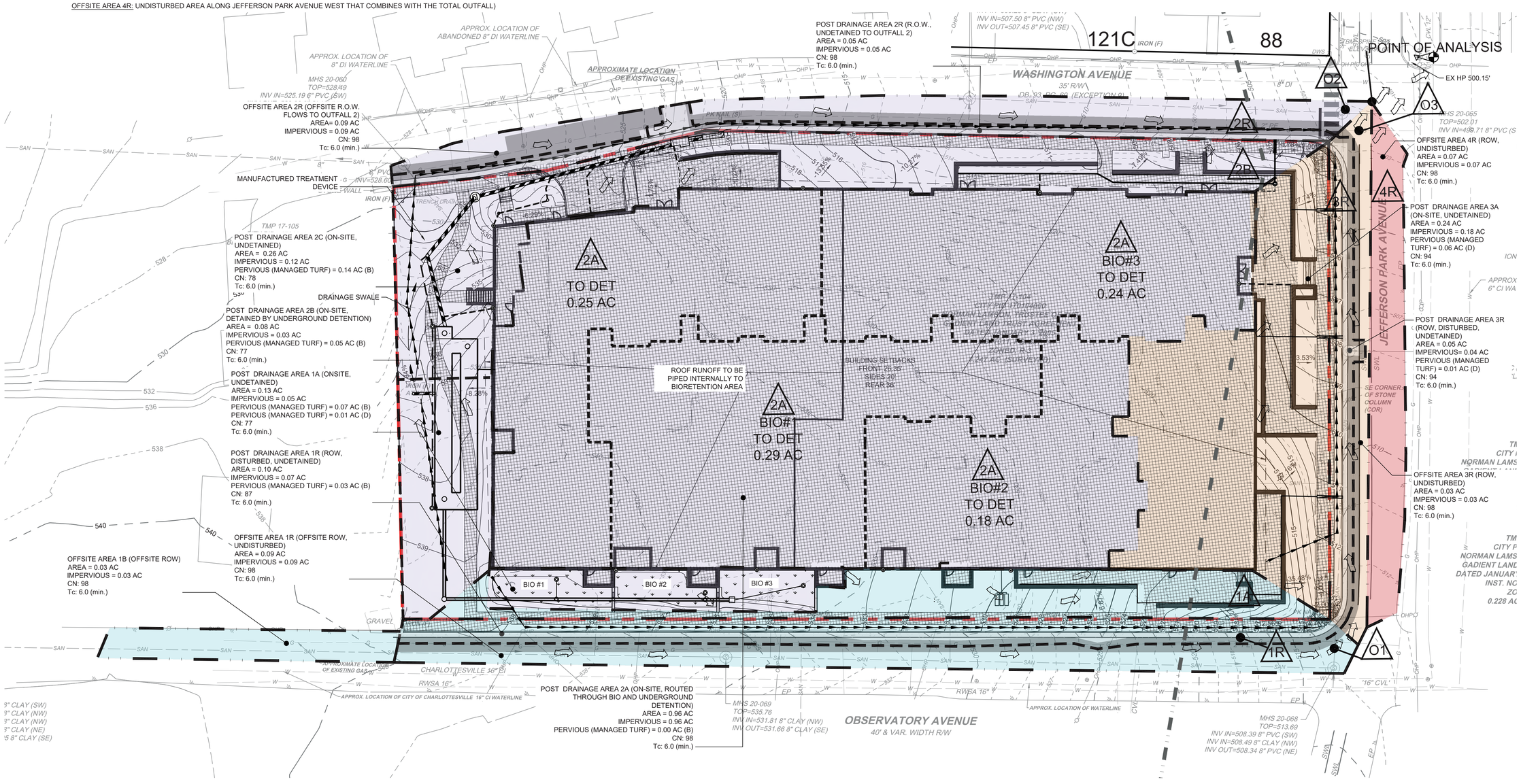
NAD 83

SCALE 1"=20'

0 20' 40'

LEGEND

- IMPERVIOUS AREA
- BIORETENTION AREA
- BASINS DRAINING TO SITE OUTFALL O1
- BASINS DRAINING TO SITE OUTFALL O2
- BASINS DRAINING TO SITE OUTFALL O3
- BASINS DRAINAGE TO SITE OUTFALL O4
- CONCRETE/ASPHALT REPLACEMENT IN R.O.W.
- TIME OF CONCENTRATION FLOW PATH
- PROPERTY BOUNDARY
- DRAINAGE DIVIDE
- LIMITS OF DISTURBANCE
- SOIL MAP DIVIDE
- FLOW DIRECTION
- ROOF DRAINAGE DIVIDE



POST-DEVELOPED DRAINAGE AREA MAP

SCALE: 1" = 20'

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COMMONWEALTH OF VIRGINIA
Bryan D. Cichocki
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4/26/24
PROFESSIONAL ENGINEER

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FINAL SITE PLAN

REVISION DESCRIPTION	DATE
FINAL SITE PLAN RESUBMISSION #1	03/19/2024
FINAL SITE PLAN RESUBMISSION #2	03/22/2024
FINAL SITE PLAN RESUBMISSION #3	04/26/2024

DATE	02/20/2023
DRAWN BY	M. DENHARD
DESIGNED BY	M. DENHARD
CHECKED BY	B. CICHOCKI
SCALE	1"=20'

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)

CITY OF CHARLOTTESVILLE, VA

PROPOSED STORMWATER MANAGEMENT PLAN

JOB NO.	SHEET NO.
48530	C6.1

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WATER QUANTITY ANALYSIS SITE OUTFALL 1

1

DRAINAGE AREA ANALYSIS (PRE-DEVELOPED)

PRE AREA 1A (ON-SITE, TO BE DISTURBED)
AREA = 0.22 ACRES
IMPERVIOUS = 0.10 ACRES
TURF = 0.12 ACRES
Tc = 6.0 MIN.

	Q (CFS)	V(AC-FT)
1 YEAR	0.436	0.020
10 YEAR	1.179	

PRE AREA 1R (ROW, TO BE DISTURBED)
AREA = 0.10 ACRES
IMPERVIOUS = 0.04 ACRES
TURF = 0.06 ACRES
Tc = 6.0 MIN.

	Q (CFS)	V (AC-FT)
1 YEAR	0.198	0.009
10 YEAR	0.536	

COMBINED ON-SITE FLOW

	Q (CFS)	V(AC-FT)
1 YEAR	0.634	0.029
10 YEAR	1.715	

OFFSITE AREA 1R (ROW, TO BE UNDISTURBED)
AREA = 0.09 ACRES
IMPERVIOUS = 0.09 ACRES
Tc = 6.0 MIN.

	Q (CFS)	V (AC-FT)
1 YEAR	0.370	0.020
10 YEAR	0.682	

OFFSITE AREA 1B (OFFSITE OBSERVATORY FLOW)
AREA = 0.03 ACRES
IMPERVIOUS = 0.03 ACRES
Tc = 6.0 MIN.

	Q (CFS)	V (AC-FT)
1 YEAR	0.123	0.006
10 YEAR	0.227	

COMBINED OFFSITE FLOW

	Q (CFS)	V(AC-FT)
1 YEAR	0.493	0.026
10 YEAR	0.909	

TOTAL COMBINED EXISTING FLOW AT ANALYSIS POINT 1:

	Q (CFS)	**V (AC-FT)**
1 YEAR	**1.116**	**0.056**
10 YEAR	**2.624**	

DRAINAGE AREA ANALYSIS (POST-DEVELOPED)

POST AREA 1A (ON-SITE, UNDETAINED)
AREA = 0.13 ACRES
IMPERVIOUS = 0.05 ACRES
TURF = 0.08 ACRES
Tc = 6.0 MIN.

	Q (CFS)	V (AC-FT)
1 YEAR	0.245	0.011
10 YEAR	0.677	

POST AREA 1R (ROW, DISTURBED, UNDETAINED)
AREA = 0.10 ACRES
IMPERVIOUS = 0.07 ACRES
TURF = 0.03 ACRES
Tc = 6.0 MIN.

	Q (CFS)	V (AC-FT)
1 YEAR	0.298	0.013
10 YEAR	0.661	

COMBINED ON-SITE FLOW

	Q (CFS)	V(AC-FT)
1 YEAR	0.543	0.024
10 YEAR	1.338	

OFFSITE AREA 1R (ROW, TO BE UNDISTURBED)
AREA = 0.09 ACRES
IMPERVIOUS = 0.09 ACRES
Tc = 6.0 MIN.

	Q (CFS)	V (AC-FT)
1 YEAR	0.370	0.020
10 YEAR	0.682	

OFFSITE AREA 1B (OFFSITE OBSERVATORY FLOW)
AREA = 0.03 ACRES
IMPERVIOUS = 0.03 ACRES
Tc = 6.0 MIN.

	Q (CFS)	V (AC-FT)
1 YEAR	0.123	0.006
10 YEAR	0.227	

COMBINED OFFSITE FLOW

	Q (CFS)	V(AC-FT)
1 YEAR	0.493	0.026
10 YEAR	0.909	

TOTAL COMBINED FLOW AT ANALYSIS POINT 1:

	Q (CFS)	**V (AC-FT)**
1 YEAR	**1.031**	**0.052**
10 YEAR	**2.248**	

CHANNEL PROTECTION (ENERGY BALANCE):

$Q_{DEVELOPED} \leq 0.80*(Q_{PRE\text{-}DEVELOPED}*RV_{PRE\text{-}DEVELOPED})/RV_{DEVELOPED} + Q_{UNDISTURBED}$

$Q_{MAX\ (1\text{-}YR)} \leq 0.80*(0.634\ CFS * 0.029\ AC\text{-}FT) / (0.025\ AC\text{-}FT) + OFFSITE\ 1R\ \&\ 1B$
$Q_{MAX\ (1\text{-}YR)} = 0.589\ CFS + 0.370\ CFS + 0.123 = 1.133$
$Q_{MAX\ (1\text{-}YR)} = 1.031\ CFS \leq 1.133\ CFS$ OK

FLOOD PROTECTION

POST-DEVELOPED $Q_{10} \leq$ PRE-DEVELOPED Q_{10}

2.248 CFS ≤ 2.624 CFS OK

WATER QUANTITY ANALYSIS SITE OUTFALL 2

2

DRAINAGE AREA ANALYSIS (PRE-DEVELOPED)

PRE AREA 2A (ON-SITE, TO BE DISTURBED)
AREA = 0.72 ACRES
IMPERVIOUS = 0.48 ACRES
TURF = 0.24 ACRES
Tc = 6.0 MIN.

	Q (CFS)	V(AC-FT)
1 YEAR	2.059	0.0960
10 YEAR	4.667	

PRE AREA 2R (ROW, TO BE DISTURBED)
AREA = 0.05 ACRES
IMPERVIOUS = 0.05 ACRES
TURF = 0.00 ACRES
Tc = 6.0 MIN.

	Q (CFS)	V (AC-FT)
1 YEAR	0.206	0.011
10 YEAR	0.379	

COMBINED ON-SITE FLOW

	Q (CFS)	V(AC-FT)
1 YEAR	2.265	0.107
10 YEAR	5.046	

OFFSITE AREA 2R (ROW, TO BE UNDISTURBED)
AREA = 0.09 ACRES
IMPERVIOUS = 0.09 ACRES
Tc = 6.0 MIN.

	Q (CFS)	V (AC-FT)
1 YEAR	0.370	0.0198
10 YEAR	0.682	

COMBINED OFFSITE FLOW

	Q (CFS)	V(AC-FT)
1 YEAR	0.370	0.0198
10 YEAR	0.682	

TOTAL COMBINED EXISTING FLOW AT ANALYSIS POINT 2:

	Q (CFS)	**V (AC-FT)**
1 YEAR	**2.635**	**0.127**
10 YEAR	**5.728**	

DRAINAGE AREA ANALYSIS (POST-DEVELOPED)

POST AREA 2A (ON-SITE, ROOF DRAINAGE ROUTED THROUGH BIOS AND UNDERGROUND DETENTION)
AREA = 0.96 ACRES
IMPERVIOUS = 0.96 ACRES
TURF = 0.00 ACRES
Tc = 6.0 MIN.

	Q (CFS)	V (AC-FT)
1 YEAR	3.947	0.156
10 YEAR	7.274	

POST AREA 2B (ON-SITE, ROUTED THROUGH UNDERGROUND DETENTION)
AREA = 0.08 ACRES
IMPERVIOUS = 0.03 ACRES
TURF = 0.05 ACRES
Tc = 6.0 MIN.

	Q (CFS)	V (AC-FT)
1 YEAR	0.151	0.007
10 YEAR	0.417	

DETENTION OUTFLOW:

1 YEAR: 0.233 CFS
10 YEAR: 4.072 CFS

COMBINED ON-SITE FLOW

	Q (CFS)	V(AC-FT)
1 YEAR	0.939	0.191
10 YEAR	5.177	

POST AREA 2C (ON-SITE, UNDETAINED)
AREA = 0.26 ACRES
IMPERVIOUS = 0.12 ACRES
TURF = 0.14 ACRES
Tc = 6.0 MIN.

	Q (CFS)	V (AC-FT)
1 YEAR	0.515	0.024
10 YEAR	1.393	

POST AREA 2R (ROW, DISTURBED, UNDETAINED)
AREA = 0.05 ACRES
IMPERVIOUS = 0.05 ACRES
Tc = 6.0 MIN.

	Q (CFS)	V (AC-FT)
1 YEAR	0.206	0.011
10 YEAR	0.379	

OFFSITE AREA 2R (ROW, TO BE UNDISTURBED)
AREA = 0.09 ACRES
IMPERVIOUS = 0.09 ACRES
Tc = 6.0 MIN.

	Q (CFS)	V (AC-FT)
1 YEAR	0.370	0.0198
10 YEAR	0.682	

COMBINED OFFSITE FLOW

	Q (CFS)	V(AC-FT)
1 YEAR	0.370	0.0198
10 YEAR	0.682	

TOTAL COMBINED FLOW AT ANALYSIS POINT 2:

	Q (CFS)	**V (AC-FT)**		**Q (CFS)**
1 YEAR	**1.292**	**0.210**	**10 YEAR**	**5.688**

CHANNEL PROTECTION (ENERGY BALANCE):

$Q_{DEVELOPED} \leq 0.80*(Q_{PRE\text{-}DEVELOPED}*RV_{PRE\text{-}DEVELOPED})/RV_{DEVELOPED} + Q_{UNDISTURBED}$

$Q_{MAX\ (1\text{-}YR)} \leq 0.80*(2.265\ CFS * 0.107\ AC\text{-}FT) / (0.191\ AC\text{-}FT) + OFFSITE\ AREA\ 2R$
$Q_{MAX\ (1\text{-}YR)} = 1.015\ CFS + 0.370\ CFS = 1.385\ CFS$

$Q_{MAX\ (1\text{-}YR)} = 1.292\ CFS \leq 1.385\ CFS$ OK

FLOOD PROTECTION
POST-DEVELOPED $Q_{10} \leq$ PRE-DEVELOPED Q_{10}
5.688 CFS ≤ 5.728 CFS OK

WATER QUANTITY ANALYSIS SITE OUTFALL 3

3

DRAINAGE AREA ANALYSIS (PRE-DEVELOPED)

PRE AREA 3A (ON-SITE, TO BE DISTURBED)
AREA = 0.78 ACRES
IMPERVIOUS = 0.21 ACRES
TURF = 0.57 ACRES
Tc = 6.0 MIN.

	Q (CFS)	V(AC-FT)
1 YEAR	1.242	0.057
10 YEAR	3.714	

PRE AREA 3R (ROW, TO BE DISTURBED)
AREA = 0.05 ACRES
IMPERVIOUS = 0.05 ACRES
Tc = 6.0 MIN.

	Q (CFS)	V (AC-FT)
1 YEAR	0.206	0.011
10 YEAR	0.379	

COMBINED ON-SITE FLOW

	Q (CFS)	V(AC-FT)
1 YEAR	1.448	0.068
10 YEAR	4.093	

OFFSITE AREA 3R (ROW, TO BE UNDISTURBED)
AREA = 0.03 ACRES
IMPERVIOUS = 0.03 ACRES
Tc = 6.0 MIN.

	Q (CFS)	V (AC-FT)
1 YEAR	0.123	0.007
10 YEAR	0.227	

COMBINED OFFSITE FLOW

	Q (CFS)	V(AC-FT)
1 YEAR	0.123	0.007
10 YEAR	0.227	

TOTAL COMBINED EXISTING FLOW AT ANALYSIS POINT 3:

	Q (CFS)	**V (AC-FT)**
1 YEAR	**1.556**	**0.075**
10 YEAR	**4.320**	

DRAINAGE AREA ANALYSIS (POST-DEVELOPED)

POST AREA 3A (ON-SITE, UNDETAINED)
AREA = 0.24 ACRES
IMPERVIOUS = 0.18 ACRES
TURF = 0.06 ACRES
Tc = 6.0 MIN.

	Q (CFS)	V (AC-FT)
1 YEAR	0.909	0.045
10 YEAR	1.763	

POST AREA 3R (ROW, DISTURBED, UNDETAINED)
AREA = 0.05 ACRES
IMPERVIOUS = 0.04 ACRES
TURF = 0.01 ACRES
Tc = 6.0 MIN.

	Q (CFS)	V (AC-FT)
1 YEAR	0.189	0.009
10 YEAR	0.367	

COMBINED ON-SITE FLOW

	Q (CFS)	V(AC-FT)
1 YEAR	1.098	0.054
10 YEAR	2.131	

OFFSITE AREA 3R (ROW, TO BE UNDISTURBED)
AREA = 0.03 ACRES
IMPERVIOUS = 0.03 ACRES
Tc = 6.0 MIN.

	Q (CFS)	V (AC-FT)
1 YEAR	0.123	0.007
10 YEAR	0.227	

COMBINED OFFSITE FLOW

	Q (CFS)	V(AC-FT)
1 YEAR	0.123	0.007
10 YEAR	0.227	

TOTAL COMBINED FLOW AT ANALYSIS POINT 3:

	Q (CFS)	**V (AC-FT)**
1 YEAR	**1.221**	**0.060**
10 YEAR	**2.358**	

CHANNEL PROTECTION (ENERGY BALANCE):

$Q_{DEVELOPED} \leq 0.80*(Q_{PRE\text{-}DEVELOPED}*RV_{PRE\text{-}DEVELOPED})/RV_{DEVELOPED} + Q_{UNDISTURBED}$

$Q_{MAX\ (1\text{-}YR)} \leq 0.80*(1.448\ CFS * 0.068\ AC\text{-}FT) / (0.054\ AC\text{-}FT) + OFFSITE\ AREA\ 3R$
$Q_{MAX\ (1\text{-}YR)} = 1.46\ CFS + 0.123\ CFS = 1.583\ CFS$

$Q_{MAX\ (1\text{-}YR)} = 1.098\ CFS \leq 1.583\ CFS$ OK

FLOOD PROTECTION

POST-DEVELOPED $Q_{10} \leq$ PRE-DEVELOPED Q_{10}

2.131 CFS ≤ 4.320 CFS OK

WATER QUANTITY ANALYSIS POINT OF ANALYSIS

DRAINAGE AREA ANALYSIS (PRE-DEVELOPED)

OFFSITE AREA 4R (ROW, TO BE UNDISTURBED)
AREA = 0.07 ACRES
IMPERVIOUS = 0.07 ACRES
TURF = 0.00 ACRES
Tc = 6.0 MIN.

	Q (CFS)	V (AC-FT)
1 YEAR	0.228	0.015
10 YEAR	0.530	

TOTAL COMBINED EXISTING FLOW AT POINT OF ANALYSIS (INCLUDES OUTFALL 1, 2 & 3):

	Q (CFS)	**V (AC-FT)**
1 YEAR	**5.563**	**0.273**
10 YEAR	**13.20**	

DRAINAGE AREA ANALYSIS (POST-DEVELOPED)

OFFSITE AREA 4R (ROW, TO BE UNDISTURBED)
AREA = 0.07 ACRES
IMPERVIOUS = 0.07 ACRES
TURF = 0.00 ACRES
Tc = 6.0 MIN.

	Q (CFS)	V (AC-FT)
1 YEAR	0.228	0.015
10 YEAR	0.530	

TOTAL COMBINED FLOW AT POINT OF ANALYSIS (INCLUDES OUTFALL 1, 2 & 3):

	Q (CFS)	**V (AC-FT)**
1 YEAR	**3.821**	**0.338**
10 YEAR	**10.63**	

WATER QUANTITY NARRATIVE:

IN ORDER TO CONFIRM THAT WATER QUANTITY IS BEING MET FOR THIS SITE, OUTFALLS 1, 2 AND 3 WERE ASSESSED FOR ENERGY BALANCE AND 10-YR PEAK FLOW REQUIREMENTS. OUTFALL 1 AND 3 ARE UNTREATED AND UNDETAINED. IN ORDER TO MEET WATER QUANTITY REQUIREMENTS, THE DRAINAGE AREA AND IMPERVIOUS AREA DRAINING TO EACH OF THESE OUTFALLS HAVE BEEN REDUCED IN PROPOSED CONDITIONS. OUTFALL 2, WHICH CONSISTS OF THE MAJORITY OF THE ROOF OF THE PROPOSED BUILDING (THE LARGEST IMPERVIOUS AREA ON-SITE), IS PIPED TO URBAN-BIORETENTION PRACTICES VIA THE BUILDING PLUMBING. THE CONTROL STRUCTURES OF THE BIORETENTION PRACTICES ARE CONNECTED TO AN UNDERGROUND DETENTION SYSTEM THAT SERVES AS THE PRIMARY WATER QUANTITY CONTROL ON-SITE. RUNOFF REDUCTION CREDIT FROM THE URBAN-BIO PRACTICES HAS BEEN APPLIED TO THE CURVE NUMBER OF POST DRAINAGE AREA 2A AND ROUTING THROUGH THE UNDERGROUND DETENTION SYSTEM HAS BEEN INCLUDED IN THE STORMWATER MANAGEMENT CALCULATIONS TO MEET ENERGY BALANCE AND 10-YR PEAK FLOW REQUIREMENTS.

THE POINT OF ANALYSIS IS A SUMMARY OF THE FLOWS, CONSISTING OF THE COMBINED FLOWS FROM OUTFALLS 1, 2, & 3. THE POINT OF ANALYSIS ILLUSTRATES THE TOTAL RUNOFF EXITING THE PROJECT SITE WITH ALL THE FLOWS IN THE R.O.W..

COMMONWEALTH OF VIRGINIA
Bryan D. Cichocki
Lic. No. 53741
4/26/24
PROFESSIONAL ENGINEER
48530

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REVISION DESCRIPTION	DATE
FINAL SITE PLAN RESUBMISSION #1	03/19/2024
FINAL SITE PLAN RESUBMISSION #2	03/22/2024
FINAL SITE PLAN RESUBMISSION #3	04/26/2024

FINAL SITE PLAN

DATE 02/20/2023
DRAWN BY M. DENHARD
DESIGNED BY M. DENHARD
CHECKED BY B. CICHOCKI
SCALE N/A

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)
CITY OF CHARLOTTESVILLE, VA
STORMWATER MANAGEMENT CALCULATIONS

JOB NO. 48530
SHEET NO. C6.2

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FLOW PATH 1 SUMMARY:

DRAINAGE AREA 1 FLOWS ALONG THE NORTH SIDE OF OBSERVATORY AVENUE, CROSSES AT THE INTERSECTION WITH JEFFERSON PARK AVENUE, AND THEN CONTINUES FLOWING ALONG THE EAST SIDE OF JPA AS SHOWN.

GUTTER/CURB DESCRIPTION:

OBSERVATORY AVENUE: NO CURB IN EXISTING CONDITIONS, CG-6 IN PROPOSED CONDITIONS

JEFFERSON PARK AVENUE (EAST SIDE): CURB (NO GUTTER) EXISTING, NO CHANGE IN PROPOSED CONDITIONS

GUTTER FLOW ANALYSIS SUMMARY (SEE SHEET C6.9):

OBSERVATORY AVENUE (NORTH SIDE) - FLOWS FROM DRAINAGE AREA 1 + OFFSITE FROM NORTHWEST

JEFFERSON PARK (EAST SIDE) - FLOWS FROM DRAINAGE AREA 1 + OFFSITE FROM NORTHWEST

FLOW PATH 3 SUMMARY:

DRAINAGE AREA 3 FLOWS ALONG THE WEST SIDE OF JEFFERSON AVENUE, CROSSIING TO THE TRAVELWAY ON THE LOWER SIDE OF THE AVENUE AT THE INTERSECTION WITH WASHINGTON AVENUE AS SHOWN.

GUTTER/CURB DESCRIPTION:

JEFFERSON PARK AVENUE (WEST SIDE): CURB (NO GUTTER) EXISTING, CG-6 IN PROPOSED

GUTTER FLOW ANALYSIS SUMMARY (SEE SHEET C6.9):

JEFFERSON PARK (WEST SIDE) - FLOWS FROM DRAINAGE AREA 3

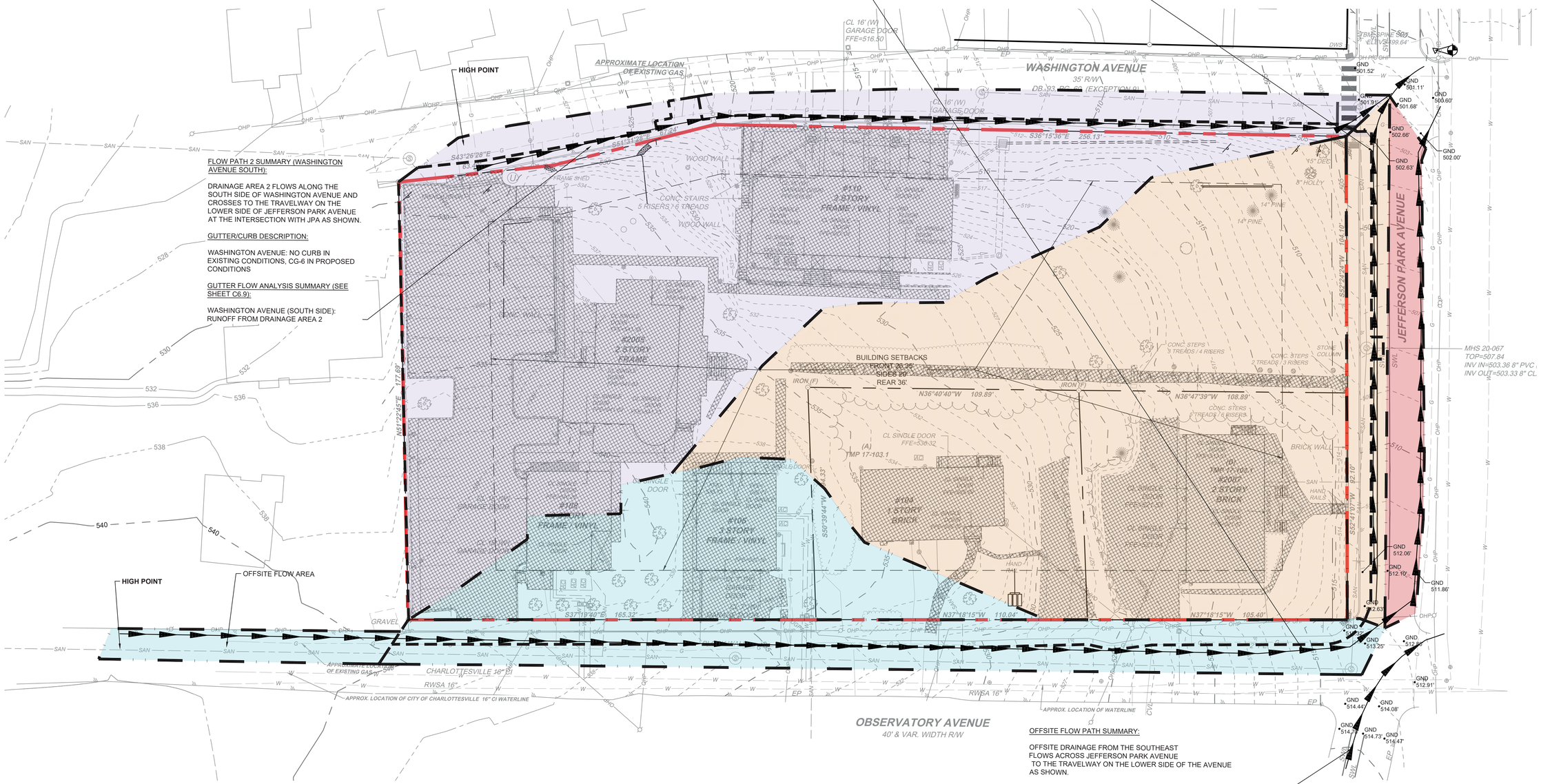
NAD 83

SCALE 1"=20'

0 20' 40'

LEGEND

- IMPERVIOUS AREA
- BIORETENTION AREA
- BASINS DRAINING TO SITE OUTFALL O1
- BASINS DRAINING TO SITE OUTFALL O2
- BASINS DRAINING TO SITE OUTFALL O3
- BASINS DRAINAGE TO SITE OUTFALL O4
- CONCRETE/ASPHALT REPLACEMENT IN R.O.W.
- GUTTER FLOW PATH
- PROPERTY BOUNDARY
- DRAINAGE DIVIDE
- LIMITS OF DISTURBANCE



FLOW PATH 2 SUMMARY (WASHINGTON AVENUE SOUTH):

DRAINAGE AREA 2 FLOWS ALONG THE SOUTH SIDE OF WASHINGTON AVENUE AND CROSSES TO THE TRAVELWAY ON THE LOWER SIDE OF JEFFERSON PARK AVENUE AT THE INTERSECTION WITH JPA AS SHOWN.

GUTTER/CURB DESCRIPTION:

WASHINGTON AVENUE: NO CURB IN EXISTING CONDITIONS, CG-6 IN PROPOSED CONDITIONS

GUTTER FLOW ANALYSIS SUMMARY (SEE SHEET C6.9):

WASHINGTON AVENUE (SOUTH SIDE): RUNOFF FROM DRAINAGE AREA 2

OFFSITE FLOW PATH SUMMARY:

OFFSITE DRAINAGE FROM THE SOUTHEAST FLOWS ACROSS JEFFERSON PARK AVENUE TO THE TRAVELWAY ON THE LOWER SIDE OF THE AVENUE AS SHOWN.

GUTTER FLOW ANALYSIS SUMMARY (SEE SHEET C6.9):

NO CALCS ARE INCLUDED FOR THIS OFFSITE DRAINAGE AS IT NEVER INTERACTS WITH RUNOFF FROM THE PROPOSED IMPROVEMENTS.

DRAINAGE AREA FLOW PATH MAP

SCALE: 1" = 20'

COMMONWEALTH OF VIRGINIA
Bryan D. Cichocki
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4/26/24
PROFESSIONAL ENGINEER
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FINAL SITTE PLAN

REVISION DESCRIPTION	DATE
FINAL SITE PLAN RESUBMISSION #1	03/15/2024
FINAL SITE PLAN RESUBMISSION #2	03/22/2024
FINAL SITE PLAN RESUBMISSION #3	04/26/2024

DATE	02/20/2023
DRAWN BY	M. DENHARD
DESIGNED BY	M. DENHARD
CHECKED BY	B. CICHOCKI
SCALE	1"=20'

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)

CITY OF CHARLOTTESVILLE, VA

FLOW PATHS ANALYSIS

JOB NO.	SHEET NO.
48530	C6.3

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DEQ Virginia Runoff Reduction Method Re-Development Compliance Spreadsheet - Version 3.0

○ 2011 BMP Standards and Specifications | ⦿ 2013 Draft BMP Standards and Specifications

Project Name:	Aspen Heights (2005 JPA)
Date:	1/12/2024
Linear Development Project?	No

CLEAR ALL (Ctrl+Shift+R)

data input cells | constant values | calculation cells | final results

Site Information

Post-Development Project (Treatment Volume and Loads)

Enter Total Disturbed Area *(acres)* → 1.96

Maximum reduction required:	*20%*
The site's net increase in impervious cover (acres) is:	*0.59*
Post-Development TP Load Reduction for Site (lb/yr):	*1.50*

Check:
BMP Design Specifications List: 2013 Draft Stds & Specs
Linear project? No
Land cover areas entered correctly? ✓
Total disturbed area entered? ✓

Pre-ReDevelopment Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed forest/open space					0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be		0.85		0.14	0.99
Impervious Cover (acres)		0.97			0.97
					1.96

Post-Development Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed, protected forest/open space or reforested					0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be		0.32		0.08	0.40
Impervious Cover (acres)		1.50		0.06	1.56
Area Check	OK.	OK.	OK.	OK.	1.96

Constants

Annual Rainfall (inches)	43
Target Rainfall Event (inches)	1.00
Total Phosphorus (TP) EMC (mg/L)	0.26
Total Nitrogen (TN) EMC (mg/L)	1.86
Target TP Load (lb/acre/yr)	0.41
Pj (unitless correction factor)	0.90

Runoff Coefficients (Rv)

	A Soils	B Soils	C Soils	D Soils
Forest/Open Space	0.02	0.03	0.04	0.05
Managed Turf	0.15	0.20	0.22	0.25
Impervious Cover	0.95	0.95	0.95	0.95

LAND COVER SUMMARY -- PRE-REDEVELOPMENT

Land Cover Summary-Pre

Pre-ReDevelopment	Listed	Adjusted[1]
Forest/Open Space Cover (acres)	0.00	0.00
Weighted Rv(forest)	0.00	0.00
% Forest	0%	0%
Managed Turf Cover (acres)	0.99	0.40
Weighted Rv(turf)	0.21	0.21
% Managed Turf	51%	29%
Impervious Cover (acres)	0.97	0.97
Rv(impervious)	0.95	0.95
% Impervious	49%	71%
Total Site Area (acres)	**1.96**	**1.37**
Site Rv	**0.57**	**0.73**

Treatment Volume and Nutrient Load

Pre-ReDevelopment Treatment Volume (acre-ft)	0.0939	0.0838
Pre-ReDevelopment Treatment Volume (cubic feet)	4,089	3,650
Pre-ReDevelopment TP Load (lb/yr)	**2.57**	**2.29**
Pre-ReDevelopment TP Load per acre (lb/acre/yr)	1.31	1.67
Baseline TP Load (lb/yr) (0.41 lbs/acre/yr applied to pre-redevelopment area excluding pervious land proposed for new impervious cover)		0.56

LAND COVER SUMMARY -- POST DEVELOPMENT

Land Cover Summary-Post (Final)

Post ReDev. & New Impervious	
Forest/Open Space Cover (acres)	0.00
Weighted Rv(forest)	0.00
% Forest	0%
Managed Turf Cover (acres)	0.40
Weighted Rv (turf)	0.21
% Managed Turf	20%
Impervious Cover (acres)	1.56
Rv(impervious)	0.95
% Impervious	80%
Final Site Area (acres)	**1.96**
Final Post Dev Site Rv	**0.80**

Land Cover Summary-Post

Post-ReDevelopment	
Forest/Open Space Cover (acres)	0.00
Weighted Rv(forest)	0.00
% Forest	0%
Managed Turf Cover (acres)	0.40
Weighted Rv (turf)	0.21
% Managed Turf	29%
ReDev. Impervious Cover (acres)	0.97
Rv(impervious)	0.95
% Impervious	71%
Total ReDev. Site Area (acres)	**1.37**
ReDev Site Rv	**0.73**

Land Cover Summary-Post

Post-Development New Impervious	
New Impervious Cover (acres)	0.59
Rv(impervious)	0.95

Treatment Volume and Nutrient Load

Final Post-Development Treatment Volume (acre-ft)	0.1305
Final Post-Development Treatment Volume (cubic feet)	5,685
Final Post-Development TP Load (lb/yr)	**3.57**
Final Post-Development TP Load per acre (lb/acre/yr)	1.82

Post-ReDevelopment Treatment Volume (acre-ft)	0.0838
Post-ReDevelopment Treatment Volume (cubic feet)	3,650
Post-ReDevelopment Load (TP) (lb/yr)*	**2.29**
Post-ReDevelopment TP Load per acre (lb/acre/yr)	1.67
Max. Reduction Required (Below Pre-ReDevelopment Load)	20%
TP Load Reduction Required for Redeveloped Area (lb/yr)	**0.46**

Post-Development Treatment Volume (acre-ft)	0.0467
Post-Development Treatment Volume (cubic feet)	2,035
Post-Development TP Load (lb/yr)	**1.28**
TP Load Reduction Required for New Impervious Area (lb/yr)	**1.04**

[1] *Adjusted Land Cover Summary:*
Pre ReDevelopment land cover minus pervious land cover (forest/open space or managed turf) acreage proposed for new impervious cover.

Adjusted total acreage is consistent with Post-ReDevelopment acreage (minus acreage of new impervious cover).

Column I shows load reduction requirement for new impervious cover (based on new development load limit, 0.41 lbs/acre/year).

Post-Development Requirement for Site Area

TP Load Reduction Required (lb/yr)	1.50

Nitrogen Loads (Informational Purposes Only)

Pre-ReDevelopment TN Load (lb/yr)	18.38
Final Post-Development TN Load (Post-ReDevelopment & New Impervious) (lb/yr)	25.55

Drainage Area A

CLEAR BMP AREAS

Drainage Area A Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals	Land Cover Rv
Forest/Open Space (acres)					0.00	0.00
Managed Turf (acres)		0.00			0.00	0.00
Impervious Cover (acres)		0.71			0.71	0.95
				Total	0.71	

Total Phosphorus Available for Removal in D.A. A (lb/yr)	1.54
Post Development Treatment Volume in D.A. A (ft^3)	2,448

Practice	Runoff Reduction Credit (%)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft^3)	Runoff Reduction (ft^3)	Remaining Runoff Volume (ft^3)	Total BMP Treatment Volume (ft^3)	Phosphorus Removal Efficiency (%)	Phosphorus Load from Upstream Practices (lb)	Untreated Phosphorus Load to Practice (lb)	Phosphorus Removed By Practice (lb)	Remaining Phosphorus Load (lb)	Downstream Practice to be Employed
6. Bioretention (RR)													
6.a. Bioretention #1 or Micro-Bioretention #1 or Urban Bioretention (Spec #9)	40	0.00	0.71	0	979	1,469	2,448	25	0.00	1.54	0.85	0.69	None
6.b. Bioretention #2 or Micro-Bioretention #2 (Spec #9)	80			0	0	0	0	50	0.00	0.00	0.00	0.00	None
14. Manufactured Treatment Devices (no RR)													
14.a. Manufactured Treatment Device-Hydrodynamic	0			0	0	0	0	20	0.00	0.00	0.00	0.00	
14.b. Manufactured Treatment Device-Filtering	0			0	0	0	0	50	0.00	0.00	0.00	0.00	

TOTAL IMPERVIOUS COVER TREATED (ac)	0.71	AREA CHECK: OK.
TOTAL MANAGED TURF AREA TREATED (ac)	0.00	AREA CHECK: OK.
TOTAL PHOSPHORUS REMOVAL REQUIRED ON SITE (lb/yr)	1.50	
TOTAL PHOSPHORUS AVAILABLE FOR REMOVAL IN D.A. A (lb/yr)	1.54	
TOTAL PHOSPHORUS REMOVED WITHOUT RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)	0.00	
TOTAL PHOSPHORUS REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)	0.85	
TOTAL PHOSPHORUS LOAD REDUCTION ACHIEVED IN D.A. A (lb/yr)	0.85	
TOTAL PHOSPHORUS REMAINING AFTER APPLYING BMP LOAD REDUCTIONS IN D.A. A (lb/yr)	0.69	

SEE WATER QUALITY COMPLIANCE TAB FOR SITE COMPLIANCE CALCULATIONS

NITROGEN REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)	7.04
NITROGEN REMOVED WITHOUT RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)	0.00
TOTAL NITROGEN REMOVED IN D.A. A (lb/yr)	7.04

Site Results (Water Quality Compliance)

Area Checks	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	AREA CHECK
FOREST/OPEN SPACE (ac)	0.00	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER (ac)	0.71	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER TREATED (ac)	0.71	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA (ac)	0.00	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA TREATED (ac)	0.00	0.00	0.00	0.00	0.00	OK.
AREA CHECK	OK.	OK.	OK.	OK.	OK.	

Site Treatment Volume (ft^3) 5,685

Runoff Reduction Volume and TP By Drainage Area

	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	TOTAL
RUNOFF REDUCTION VOLUME ACHIEVED (ft^3)	979	0	0	0	0	979
TP LOAD AVAILABLE FOR REMOVAL (lb/yr)	1.54	0.00	0.00	0.00	0.00	1.54
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.85	0.00	0.00	0.00	0.00	0.85
TP LOAD REMAINING (lb/yr)	0.69	0.00	0.00	0.00	0.00	0.69
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	7.04	0.00	0.00	0.00	0.00	7.04

Total Phosphorus

FINAL POST-DEVELOPMENT TP LOAD (lb/yr)	3.57
TP LOAD REDUCTION REQUIRED (lb/yr)	1.50
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.85
TP LOAD REMAINING (lb/yr):	2.73
REMAINING TP LOAD REDUCTION REQUIRED (lb/yr):	0.65

Total Nitrogen (For Information Purposes)

POST-DEVELOPMENT LOAD (lb/yr)	25.55
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	7.04
REMAINING POST-DEVELOPMENT NITROGEN LOAD (lb/yr)	18.52

WATER QUALITY NARRATIVE:

IN THE PRE-DEVELOPMENT CONDITION, THERE ARE 0.99 ACRES OF MANAGED TURF AND 0.93 ACRES OF IMPERVIOUS COVER WITHIN THE LIMITS OF DISTURBANCE. IN THE POST-DEVELOPMENT CONDITION, THERE WILL BE 0.40 ACRES OF MANAGED TURF AND 1.52 ACRES OF IMPERVIOUS COVER. PER THE VIRGINIA RUNOFF REDUCTION SPREADSHEET, THIS DEVELOPMENT REQUIRES THAT 1.48 LBS OF PHOSPHOROUS BE REMOVED PER YEAR. **THE TOTAL ON-SITE REDUCTION ACHIEVED IS 0.85 LBS/YEAR, AND THE REMAINING 0.65 LBS/YEAR WILL BE MET BY PURCHASING NUTRIENT CREDITS.**

WATER QUALITY ANALYSIS

SITE DATA

PRE DEVELOPED AREA: 1.86 ACRES (TOTAL)
FOREST/OPEN SPACE = 0.00 ACRES
MANAGED TURF (B SOILS) = 0.85 AC
MANAGED TURF (D SOILS) = 0.14 AC
IMPERVIOUS AREA = 0.93 AC

POST DEVELOPED AREA: 1.86 ACRES (TOTAL)
FOREST/OPEN SPACE = 0.00 ACRES
MANAGED TURF (B SOILS) = 0.32 AC
MANAGED TURF (D SOILS) = 0.08 AC
IMPERVIOUS AREA = 1.52 AC

POST DEVELOPED LOAD (TP) (LB/YR) = 3.48 LB/YR

TOTAL LOAD REDUCTION REQUIRED = 1.48 LB/YR

THE TOTAL LOAD REDUCTION REQUIRED IS BEING MET WITH MICRO-BIORETENTION BASINS (LEVEL 1) ON THE SOUTHWEST SIDE OF THE PROPOSED BUILDING & CREDIT PURCHASE OF 0.65 LB/YR. CALCULATIONS AND DETAILS ARE PROVIDED ON SHEETS C6.5 - C6.6.

COMMONWEALTH OF VIRGINIA
Bryan D. Cichocki
Lic. No. 53741
4/26/24
PROFESSIONAL ENGINEER
48530

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FINAL SITTE PLAN

REVISION DESCRIPTION	DATE
FINAL SITE PLAN RESUBMISSION #1	03/19/2024
FINAL SITE PLAN RESUBMISSION #2	04/22/2024
FINAL SITE PLAN RESUBMISSION #3	04/26/2024

DATE 02/20/2023
DRAWN BY M. DENHARD
DESIGNED BY M. DENHARD
CHECKED BY B. CICHOCKI
SCALE 1"=10'

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)
CITY OF CHARLOTTESVILLE, VA
STORMWATER QUALITY SUMMARY

JOB NO. 48530
SHEET NO. C6.4

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ECOSYSTEM SERVICES, LLC
1102 Carlton Avenue
Charlottesville, VA 22902
540.578.4296
www.ecosystemservices.us
jon@ecosystemservices.us

January 16, 2024

Matt Denhard, PE
Project Engineer
TIMMONS GROUP
608 Preston Avenue, Suite 200
Charlottesville, VA 22903

RE: Nutrient Offset Credit – Credit Availability Letter
Project: Aspen Heights (2005 JPA)
Project Address: 2005 Jefferson Park Avenue, Charlottesville VA, 22903
Project HUC: 02080204
Bank HUC: 02080204
Bank Address: 1705 Lambs Road, Charlottesville, VA 22901

Dear Matt,

We appreciate the opportunity to provide a credit availability letter for **0.65** pounds of phosphorus for the above-referenced project. This letter is to certify that as the date of this letter, Ivy Creek Nutrient Bank has 108.93 pounds of phosphorus (TP), 167.62 pounds of nitrogen (TN), and 34,349.04 pounds of TSS available for transfer to those entities requiring offsets in accordance with the Chesapeake Bay Watershed Nutrient Credit Exchange Program (VA Code § 62.1-44.19:14 et seq.). Those offsets are also transferable in accordance with the Virginia stormwater offset program (VA Code § 62.1-44.15:35) and the Virginia Soil and Water Conservation Board's Guidance Document on Stormwater Nonpoint Nutrient Offsets approved on July 23, 2009, to those regulated entities qualifying for nutrient credits.

We can certainly accommodate your needs and could offer to fulfill the order of **0.65** pounds of phosphorus.

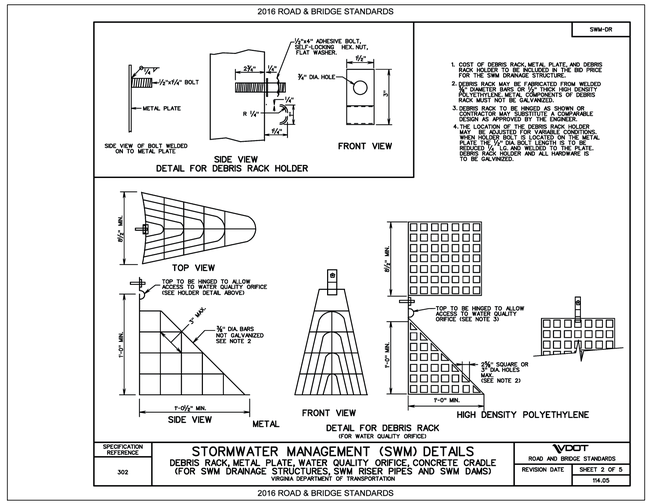
Please feel free to contact us with any questions. I hope we have the opportunity to work together on this project.

Sincerely,
Ecosystem Services, LLC
By:

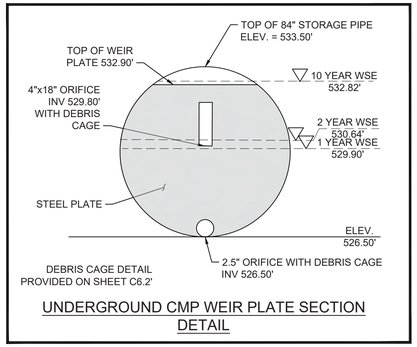
Jonathan R. Roller, AOSE PSS CNMP
Manager – Authorized Representative

BMP PRACTICE DOCUMENTATION NOTE:

CONTRACTOR SHALL NOTIFY TIMMONS GROUP PRIOR TO COMMENCEMENT OF CONSTRUCTION OF BMP PRACTICES INCLUDING THE BIORETENTION FILTERS AND THE UNDERGROUND DETENTION. A SPECIFIC PRECONSTRUCTION MEETING BETWEEN THE CONTRACTOR, ENGINEER, INSPECTOR, AND MANUFACTURER IS HIGHLY RECOMMENDED PRIOR TO INSTALLATION OF THESE PRACTICES TO ENSURE THESE PRACTICES ARE NOT ONLY INSTALLED CORRECTLY BUT ALSO DOCUMENTED THROUGHOUT CONSTRUCTION. IT IS IN THE CONTRACTORS SOLE RESPONSIBILITY TO DOCUMENT THE INSTALLATION OF THESE PRACTICES. CONTRACTORS SHALL TAKE NOTES, PICTURES, AND MEASUREMENTS OF ALL STRATA LAYERS WITHIN THE BIORETENTION FACILITIES DURING CONSTRUCTION AND PROVIDE THIS DOCUMENTATION TO TIMMONS GROUP. IT IS REQUIRED TO TAKE PICTURES OF EACH MEASUREMENT OF EACH STRATA LAYER OF EACH FACILITY TO ILLUSTRATE AND DOCUMENT COMPLIANCE WITH THESE PLANS. WITHOUT DOCUMENTING TO THIS LEVEL OF DETAIL THE CONTRACTOR RUNS THE RISK OF DIGGING THE FACILITIES BACK UP TO CONFIRM THE CORRECT SECTIONS WERE INSTALLED.



*NOTE: CONTRACTOR TO SUBMIT SHOP DRAWING



UNDERGROUND CMP WEIR PLATE SECTION DETAIL

CONTRACTOR SHALL PROVIDE SHOP DRAWING OF DETENTION SYSTEM TO ENGINEER OF RECORD FOR REVIEW AND APPROVAL.

Inspection Activities	Suggested Schedule
• After several storm events or an extreme storm event, inspect for: signs of clogging of the inlet or outlet structures and sediment accumulation.	As Needed
• Inspect for: trash and debris; clogging of the outlet structures and any pilot channels; excessive erosion; sediment accumulation in the basin and inlet/outlet structures; tree growth on dam or embankment; the presence of burrowing animals; standing water where there should be none; vigor and density of the grass turf on the basin side slopes and floor; differential settlement; cracking; leakage; and slope stability.	Semi-annually
• Inspect that the outlet structures, pipes, and downstream and pilot channels are free of debris and are operational. • Note signs of pollution, such as oil sheens, discolored water, or unpleasant odors. • Check for sediment accumulation in the facility. • Check for proper operation of control gates, valves or other mechanical devices.	Annually
Maintenance Activities	**Suggested Schedule**
• Perform structural repairs to inlet and outlets • Clean and remove debris from inlet and outlet structures.	Monthly or as needed
• Repair damage to inlet and outlet structures, control gates, valves, or other mechanical devices; repair undercut or eroded areas.	As Needed
• Clean sediment annually or when sediment build-up exceeds 20% of pipe diameter (whichever is more frequent).	Annually (or more frequently if annual inspection shows more sediment than anticipated)

DETENTION PIPE MAINTENANCE REQUIREMENTS
No Scale

COMMONWEALTH OF VIRGINIA
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Lic. No. 53741
4/26/24
PROFESSIONAL ENGINEER
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FINAL SITE PLAN RESUBMISSION #3	04/26/2024

FINAL SITE PLAN

DATE 02/20/2023
DRAWN BY M. DENHARD
DESIGNED BY M. DENHARD
CHECKED BY B. CICHOCKI
SCALE 1"=10'

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)
CITY OF CHARLOTTESVILLE, VA
STORMWATER DETAILS

JOB NO. 48530
SHEET NO. C6.5

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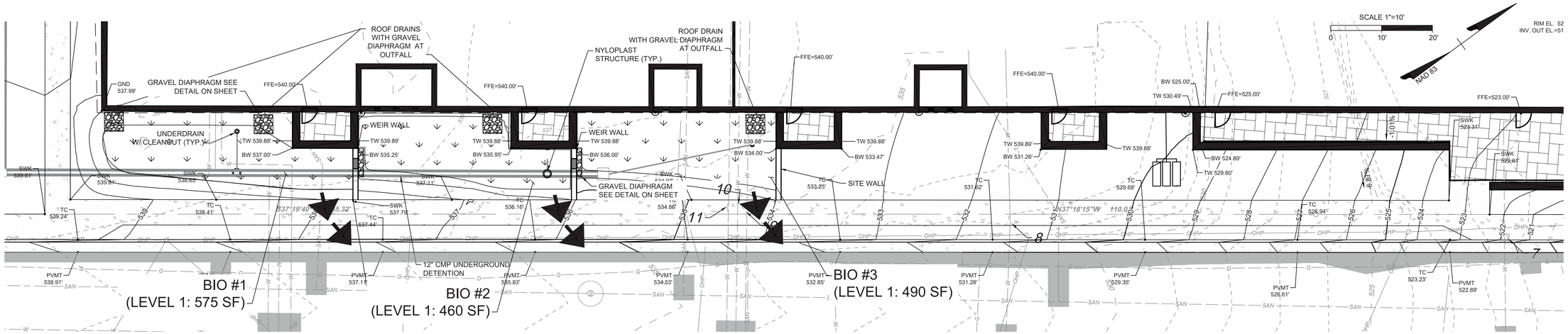
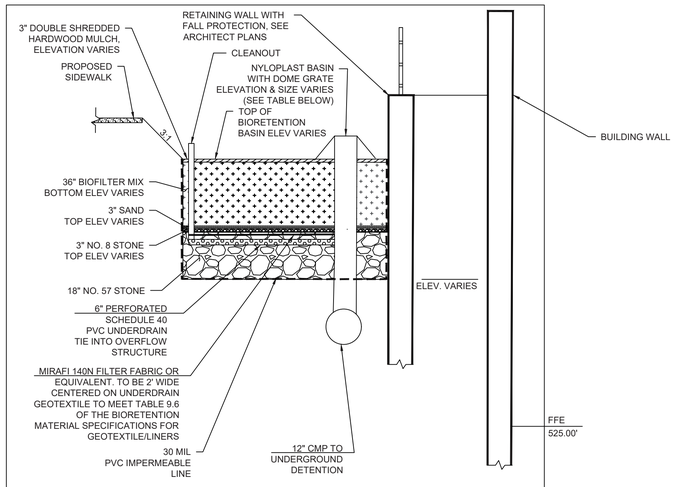


LEGEND:

100-YR FLOW PATH



LEVEL 1 BIORETENTION CROSS SECTION

NO SCALE

NOTES
1. 36" BIOFILTER MEDIA DEPTH SHALL BE THE MINIMUM DEPTH AFTER A SETTLING PERIOD OF THREE DAYS.

BMP: Level 1 Bioretention Basins

Runoff Coefficients (Rv)

	A Soils	B Soils	C Soils	D Soils
Forest/Open Space	0.02	0.03	0.04	0.05
Managed Turf	0.15	0.20	0.22	0.25
Impervious Cover	0.95	0.95	0.95	0.95

Proposed Condition for TR-55

HSG	RCN	Roof Area to Bio #1 (ac)	Roof Area to Bio #2 (ac)	Roof Area to Bio #3 (ac)	%	RCNxArea
I (Impervious)	98	0.29	0.18	0.24	100%	28
B (Managed Turf)	61	0.00	0.00	0.00	0%	0
TOTALS		**0.29**	**0.18**	**0.24**		**98**
RCN =	**98**					

Site Rv (Rv Coefficients x Land Cover %)

Managed Turf B Soils, Rv =		0.00	0.00	0.00	0.00
Impervious, Rv =		0.95	0.95	0.95	0.95
Rv =	**0.00**	**0.95**	**0.95**	**0.95**	**0.95**

Treatment Volume, Tv (Spec. No. 9, Table 9.4)

Tv = [((1.00 in) x (Rv) x (A)) ÷ 12] - volume reduced by upstream BMP	Bio #1	Bio #2	Bio #3	TOTAL	
Drainage Area, A =	12,001	7,626	10,109	17,735	
Upstream Volume Treated =	0	0	0	0	*per RRM 3.0 Column F
Treatment Volume, Tv =	**1,000**	**636**	**842**	**2,478**	**Required**

Treatment Volume - Storage Depth

Bios #1-3	Storage Depth (ft)	Void Ratios
Ponding Depth=	0.50	1.00
Depth of Media Filter & Mulch=	3.00	0.25
Stone Sump Depth=	1.33	0.40

Treatment Volume, Tv = **1.78** ft | **Treatment Volume, Tv =** **0.00** ft

Treatment Volume - Surface Area

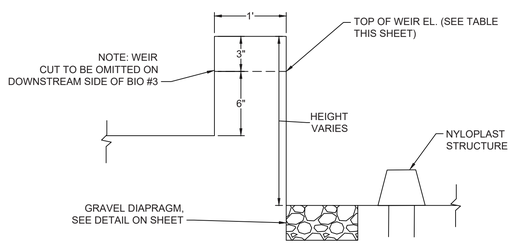
		Bio #1	Bio #2	Bio #3	TOTAL	
Minimum Required Surface Area=	(Average)	561	357	473	1,391	sf
Surface Area Provided=		575	460	490	1,525	sf

Other Design Requirements		Bio 1 Meet Req.	Bio 2 Meet Req.	Bio 3 Meet Req.	Comments	
Contributing DA < 2.5 acres		Yes	Yes	Yes		
Maximum ponding depth		Yes	Yes	Yes	6"	
Filter Media Depth 24"-36"		Yes	Yes	Yes	36"	
Sub-soil Testing		N/A	N/A	N/A		
Min. 12" Stone sump bellow underdrain		Yes	Yes	Yes		
Planting Plan		Yes	Yes	Yes		

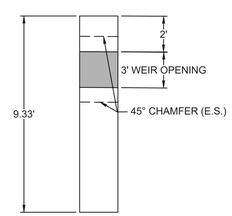
Bioretention Elevation Information

Bioretention Number	1	2	3
Top of Overflow/Weir El.	537.50	535.75	533.75
Structure Connection	15" Nyloplast to 12" CMP, Weir Wall	15" Nyloplast to 12" CMP, Weir Wall	DI-1 to 12" CMP
Top of Mulch Layer	537.00	535.25	533.25
Top of Biofilter Mix	536.75	535.00	533.00
Top of Sand Layer	534.00	532.25	530.25
Top of Stone Layer	533.75	532.00	530.00
Filter Fabric	Centered Over Underdrain	Centered Over Underdrain	Centered Over Underdrain
Bottom of Stone Layer	532.42	530.67	528.67
Underdrain El.	532.42	530.67	528.67

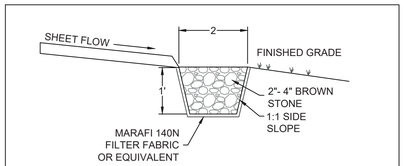
NOTE:
1. CONTRACTOR SHALL DOCUMENT INSTALLATION OF BMP PRACTICES SUCH AS BIORETENTION. DETAILED DOCUMENTATION IS NECESSARY FOR FINAL AS-BUILT REQUIREMENTS. CONTRACTOR SHALL DOCUMENT MEASUREMENTS AND TAKE PHOTOGRAPHS THROUGHOUT INSTALLATION. A GENERAL CHECKLIST IS PROVIDED FOR GUIDANCE TO THE CONTRACTOR FOR THIS DOCUMENTATION. ALL DOCUMENTATION SHALL BE PROVIDED TO TIMMONS GROUP BY THE CONTRACTOR.
2. CONTRACTOR TO SUBMIT SHOP DRAWING FOR NYLOPLAST INLETS PRIOR TO CONSTRUCTION
3. FES-ENVIRONMENTAL SERVICE DIVISION STAFF TO VERIFY SITE STABILIZATION BEFORE BIORETENTION CONSTRUCTION BEGINS.



WEIR WALL TYPICAL CROSS SECTION
N.T.S.



WEIR WALL PLAN
N.T.S.



PRETREATMENT - GRAVEL DIAPHRAGM

No Scale

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FINAL SITE PLAN

DATE 02/20/2023
DRAWN BY M. DENHARD
DESIGNED BY M. DENHARD
CHECKED BY B. CICHOCKI
SCALE 1"=10'

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)
CITY OF CHARLOTTESVILLE, VA
BIORETENTION DETAILS

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VA DCR SPECIFICATION NO. 9 MAINTENANCE

9.1. Maintenance Agreements

The Virginia Stormwater Management regulations (4 VAC 50-60) specify the circumstances under which a maintenance agreement must be executed between the owner and the VSMP authority, and sets forth inspection requirements, compliance procedures if maintenance is neglected, notification of the local program upon transfer of ownership, and right-of-entry for local program personnel.

- All bioretention practices must include a long term maintenance agreements consistent with the provisions of the VSMP regulations, and must include the recommended maintenance tasks and a copy of an annual inspection checklist.
- When micro-scale bioretention practices are applied on private residential lots, homeowners should be educated regarding their routine maintenance needs by being provided a simple document that explains their purpose and routine maintenance needs. .
- A deed restriction, drainage easement or other mechanism enforceable by the VSMP authority must be in place to help ensure that rain gardens and bioretention filters are maintained and not converted or disturbed, as well as to pass the knowledge along to any subsequent owners.
- The mechanism should, if possible, grant authority for the VSMP authority to access the property for inspection or corrective action.

9.2. First Year Maintenance Operations

Successful establishment of bioretention areas requires that the following tasks be undertaken in the first year following installation:

- ***Initial inspections.*** For the first 6 months following construction, the site should be inspected at least twice after storm events that exceed 1/2 inch of rainfall.
- ***Spot Reseeding.*** Inspectors should 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.
- ***Fertilization.*** One-time, spot fertilization may be needed for initial plantings.
- ***Watering.*** Watering is needed once a week during the first 2 months, and then as needed during first growing season (April-October), depending on rainfall.
- ***Remove and replace dead plants.*** Since up to 10% of the plant stock may die off in the first year, construction contracts should include a 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 85% survival of plant material and 100% survival of trees.

9.3. Maintenance Inspections

It is highly recommended that a spring maintenance inspection and cleanup be conducted at each bioretention area. The following is a list of some of the key maintenance problems to look for:

- 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.
- 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.
- Check for any winter- or salt-killed vegetation, and replace it with hardier species.
- Note presence of accumulated sand, sediment and trash in the pre-treatment cell or filter beds, and remove it.
- Inspect bioretention side slopes and grass filter strips for evidence of any rill or gully erosion, and repair it.
- Check the bioretention bed for evidence of mulch flotation, excessive ponding, dead plants or concentrated flows, and take appropriate remedial action.

- Check inflow points for clogging, and remove any sediment.
- Look for any bare soil or sediment sources in the contributing drainage area, and stabilize them immediately.
- 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.

Example maintenance inspection checklists for Bioretention areas can be accessed in Appendix C of Chapter 9 of the *Virginia Stormwater Management Handbook* (2010).

9.4. Routine and Non-Routine Maintenance Tasks

Maintenance of bioretention areas should be integrated into routine landscape maintenance tasks. If landscaping contractors will be expected to perform maintenance, their contracts should contain specifics on unique bioretention landscaping needs, such as maintaining elevation differences needed for ponding, proper mulching, sediment and trash removal, and limited use of fertilizers and pesticides. A customized maintenance schedule must be prepared for each bioretention facility, since the maintenance tasks will differ depending on the scale of bioretention, the landscaping template chosen, and the type of surface cover. A generalized summary of common maintenance tasks and their frequency is provided in **Table 9.8**.

The most common non-routine maintenance problem involves standing water. If water remains on the surface for more than 48 hours after a storm, adjustments to the grading may be needed or underdrain repairs may be needed. The surface of the filter bed should also be checked for accumulated sediment or a fine crust that builds up after the first several storm events. There are several methods that can be used to rehabilitate the filter (try the easiest things first, as listed below):

- Open the underdrain observation well or cleanout and pour in water to verify that the underdrains are functioning and not clogged or otherwise in need of repair. The purpose of this check is to see if there is standing water all the way down through the soil. If there is standing water on top, but not in the underdrain, then there is a clogged soil layer. If the underdrain and stand pipe indicates standing water, then the underdrain must be clogged and will need to be snaked.
- Remove accumulated sediment and till 2 to 3 inches of sand into the upper 8 to 12 inches of soil.
- Install sand wicks from 3 inches below the surface to the underdrain layer. Sand wicks can be installed by excavating or augering (using a tree auger or similar tool) down to the gravel storage zone to create vertical columns which are then filled with a clean open-graded coarse sand material (coarse sand mix similar to the gradation used for the soil media). A sufficient number of wick drains of sufficient dimension should be installed to meet the design dewatering time for the facility.
- Last resort - remove and replace some or all of the soil media.

Table 9.8. Suggested 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 • Prune trees and shrubs	Annually
• Remove sediment in pre-treatment cells and inflow points	Once every 2 to 3 years
• Replace the mulch layer	Every 3 years

Pre-Construction Meeting

- ☐ Pre-construction meeting with the contractor designated to install the bioretention practice has been conducted.
- ☐ Identify the tentative schedule for construction and verify the requirements and schedule for interim inspections and sign-off.
- ☐ Subsurface investigation and soils report supports the placement of an bioretention practice in the proposed location.
- ☐ Impervious cover has been constructed/installed and area is free of construction equipment, vehicles, material storage, etc.
- ☐ All pervious areas of the contributing drainage areas have been adequately stabilized with a thick layer of vegetation and erosion control measures have been removed.
- ☐ Area of bioretention practice has not been impacted during construction.
- ☐ Stormwater has been diverted around the area of the bioretention practice and perimeter erosion control measures to protect the facility during construction have been installed. .

Excavation

- ☐ Compare the bioretention surface and invert design elevations with the actual constructed elevations of the inflow and outlet inverts and adjust design elevations as needed.
- ☐ Area of bioretention excavation is marked and the size and location conforms to plan.
- ☐ If the excavation area has been used as a sediment trap: verify that the bottom elevation of the proposed stone reservoir is lower than the bottom elevation of the existing trap.
- ☐ For Level 2 bioretention, ensure the bottom of the excavation is scarified prior to placement of stone.

- ☐ Subgrade surface is free of rocks and roots, and large voids. Any voids should be refilled with the base aggregate to create a level surface for the placement of aggregates and underdrain (if required).
- ☐ No groundwater seepage or standing water is present. Any standing water is dewatered to an acceptable dewatering device.
- ☐ Excavation of the bioretention practice has achieved proper grades and the required geometry and elevations without compacting the bottom of the excavation.
- ☐ **Certification of Excavation Inspection**: Inspector certifies the successful completion of the excavation steps listed above.

Filter Layer, Underdrain, and Stone Reservoir Placement

- ☐ All aggregates, including, as required, the filter layer (choker stone & sand), the stone reservoir layer or infiltration sump conform to specifications as certified by quarry.
- ☐ Underdrain size and perforations meet the specifications.
- ☐ For Level 2 installations: placement of filter layer and initial lift of stone reservoir layer aggregates with underdrain or infiltration sump, spread (not dumped) to avoid aggregate segregation; or
- ☐ Impermeable liner, when required, meets project specifications and is placed in accordance with manufacturers specifications.
- ☐ Sides of excavation covered with geotextile, when required, prior to placing stone reservoir aggregate; no tears or holes, or excessive wrinkles are present.
- ☐ Placement of underdrain, observation wells, and underdrain fittings (45 degree wyes, cap at the upstream end, etc.) are in accordance with the approved plans.
- ☐ Elevations of underdrain and outlet structure are in accordance with approved plans, or as adjusted to meet field conditions.
- ☐ Placement of remaining lift of stone reservoir layer as needed to achieve the required reservoir depth.
- ☐ **Certification of Filter Layer and Underdrain Placement Inspection:** Inspector certifies the successful completion of the filter layer and underdrain placement steps listed above.

Bioretention Soil Media Placement

- ☐ Soil media is certified by supplier or contractor as meeting the project specifications.

- ☐ Soil media is placed in 12-inch lifts to the design top elevation of the bioretention area. Elevation has been verified after settlement (2 to 4 days after initial placement).
- ☐ Side slopes of ponding area are feathered back at the required slope (no steeper than 3H:1V).
- ☐ **Certification of Soil Media Placement Inspection:** Inspector certifies the successful completion of the soil media steps listed above.

Pretreatment and Plant Installation

- ☐ Placement of energy dissipators and pretreatment practices (forebays, gravel diaphragms, etc.) are installed in accordance with the approved plans.
- ☐ Riser, overflow weir, or other outflow structure is set to the proper elevation and functional; or.
- ☐ External bypass structure is built in accordance with the approved plans.
- ☐ Appropriate number and spacing of plants are installed in accordance with the approved plans.
- ☐ All erosion and sediment control practices have been removed.
- ☐ Follow-up inspection and as-built survey/certification has been scheduled.
- ☐ GPS coordinates have been documented for all bioretention practice installations on the parcel.

VA DCR SPECIFICATION NO. 9 SOIL MEDIA SPECIFICATIONS

Table 9.7. Bioretention Material Specifications

Material	Specification	Notes
Filter Media Composition	Filter Media to contain: • 80% - 90% sand • 10%-20% soil fines • 3%-5% organic matter	The volume of filter media based on 110% of the plan volume, to account for settling or compaction.
Filter Media Testing	Available P between L+ and M per DCR 2005 Nutrient Management Criteria.	The media should be certified by the supplier.
Mulch Layer	Use aged, shredded hardwood bark mulch or stable coarse compost.	Lay a 2 to 3 inch layer on the surface of the filter bed.
Alternative Surface Cover	Use river stone or pea gravel, coir and jute matting, or turf cover.	Lay a 2 to 3 inch layer of to suppress weed growth.
Top Soil For Turf Cover	Loamy sand or sandy loam texture, with less than 5% clay content, pH corrected to between 6 and 7, and an organic matter content of at least 2%.	3 inch surface depth.
Geotextile/Liner	Use a non-woven geotextile fabric with a flow rate of > 110 gal./min./sq. ft. (e.g., Geotex 351 or equivalent)	Apply only to the sides and directly above the underdrain. For hotspots and certain karst sites only, use an appropriate liner on bottom.
Choking Layer	Lay a 2 to 4 inch layer of sand over a 2 inch layer of choker stone (typically #8 or #89 washed gravel), which is laid over the underdrain stone.	
Stone Jacket for Underdrain and/or Storage Layer	1 inch stone should be double-washed and clean and free of all fines (e.g., VDOT #57 stone).	12 inches for the underdrain; 12 to 18 inches for the stone storage layer, if needed
Underdrains, Cleanouts, and Observation Wells	Use 6 inch rigid schedule 40 PVC pipe (or equivalent corrugated HDPE for micro-bioretention), with 3/8-inch perforations at 6 inches on center; position each underdrain on a 1% or 2% slope located nor more than 20 feet from the next pipe.	Lay the perforated pipe under the length of the bioretention cell, and install non-perforated pipe as needed to connect with the storm drain system. Install T's and Y's as needed, depending on the underdrain configuration. Extend cleanout pipes to the surface with vented caps at the Ts and Ys.
Plant Materials	Plant one tree per 250 square feet (15 feet on-center, minimum 1 inch caliper). Shrubs a minimum of 30 inches high planted a minimum of 10 feet on-center. Plant ground cover plugs at 12 to 18 inches on-center; Plant container-grown plants at 18 to 24 inches on-center, depending on the initial plant size and how large it will grow.	Establish plant materials as specified in the landscaping plan and the recommended plant list. In general, plant spacing must be sufficient to ensure the plant material achieves 80% cover in the proposed planting areas within a 3-year period. If seed mixes are used, they should be from a qualified supplier, should be appropriate for stormwater basin applications, and should consist of native species (unless the seeding is to establish maintained turf).

Available Soil Phosphorus (P). Plant-available soil P should be within the range of Low^{+} (L^{+}) to Medium (M) as defined in Table 2.2 of DCR (2005) Virginia Nutrient Management Standards and Criteria. ***For the Mehlich I extraction procedure this equates to a range of 5 to 15 mg/kg P or 18 to 40 mg/kg P for the Mehlich III procedure.***

The filter media should contain sufficient plant available P to support initial plant establishment and plant growth, but not serve as a significant source of P for long term leaching. The media must also be relatively loose and non-compacted to allow for adequate inter-connected porosity to meet the required permeability (Ksat) specification. Saxton et al. (1986) estimated generalized bulk densities and soil-water characteristics from soil texture assumptions. The expected bulk density of the loamy sand soil composition described above should be in the range of 1.6 to 1.7 g/cm^3.

Soil porosity is the fraction of a volume of soil material that is not solid, also referred to as the void space. As the volume of fines, defined as either clay particles (less than 2 microns, or 0.002 mm) or silt particles (between 2 and 50 microns, or 0.002 and 0.05 mm) within a given soil mix is increased, there is a possibility that those fines may be flushed or migrate downward through the soil mix with each runoff event and eventually fill or otherwise clog the void space randomly throughout the mix and create preferential flow paths. In the short term this can lead to short circuiting and reduced volume reduction and pollutant removal, and in the long term may clog the soil layer. This tendency is offset by addition and maintenance of appropriate amounts of soil organic matter which binds soil fines into larger non-mobile aggregates.

- ***General Filter Media Physical Composition.*** The mineral soil texture of the bioretention soil mix should be loamy coarse sand with no more than 10% clay, no more than 20% silt + clay and at least 75% of the sand fraction should be coarse or very coarse sand.
- To allow for appropriate Cation Exchange Capacity (CEC) and nutrient removal, ***the mix should contain at least 10% soil fines (silt + clay)*** while meeting the overall texture specification above. The particle size analysis must be conducted on the mineral fraction only or following appropriate treatments to remove organic matter before particle size analysis.
- The Filter Media should contain ***3% to 5% organic matter*** by conventional Walkley-Black soil organic matter determination method or similar analysis. Soil organic matter is expressed on a dry weight basis and does not include coarse particulate (visible) components.

- The overall particle size distribution of the mix will vary since the sand fraction may contain some finer sizes as will native topsoils if utilized. As stated previously, the goal of the mixture is to achieve the desired constant head permeability. Therefore, the filter media composition noted above serves as the target recipe for the three ingredients, while the ultimate performance goal is to achieve a verified soil permeability or hydraulic conductivity (Ksat) of 1 to 2 inches per hour (or 30 to 60 cm/day).
- The following is the recommended composition of the three media ingredients:
  - **Sand** shall consist of silica based coarse aggregate, angular or round in shape and meet the mixture grain size distribution below. No substitutions of alternate materials such as diabase, calcium carbonate, rock dust or dolomitic sands are accepted. In particular, mica can make up no more than 5% of the total sand fraction. The sand fraction may also contain a limited amount of particles > 2.0 mm and < 9.5 mm per the table below, but the overall sand fraction must meet the specification of >75% being coarse or very coarse sand.

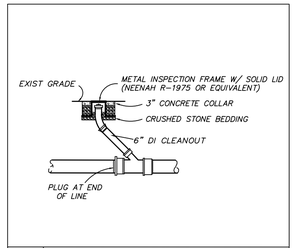
Sieve	Size	% Passing
3/8 in	9.50 mm	100
No. 4	4.75 mm	95 to 100
No. 8	2.36 mm	80 to 100
No. 16	1.18 mm	45 to 85
No. 30	0.6 mm	15 to 60
No. 50	0.3 mm	3 to 15
No. 100	0.15 mm	0 to 4
Effective Particle size (D10) > 0.3mm		
Uniformity Coefficient (D60/D10) < 4.0		

  - **Topsoil** is generally defined as the combination of the other ingredients referenced in the bioretention soil media: sand, fines (silt and clay), and any associated soil organic matter. Since the objective of the specification is to carefully establish the proper blend of these ingredients, the designer (or contractor or materials supplier) must carefully select the topsoil source material in order to not exceed the amount of any one ingredient.

    Generally, the use of a topsoil defined as a loamy sand, sandy loam, or loam (per the USDA Textural Triangle) will be an acceptable ingredient and in combination with the other ingredients meet the overall performance goal of the soil media.
  - **Organic matter** materials used in the soil media mix should consist of well-decomposed natural C-containing organic materials such as peat moss, humus, compost (consistent with the material specifications found in **Design Specification #4 Compost Soil Amendments**), pine bark fines or other organic soil conditioning material. However, per above, the combined soil mix should contain 3% to 5% soil organic matter on dry weight basis (grams organic matter per 100 grams dry soil) by the Walkley-Black method or other similar analytical technique.

BMP PRACTICE DOCUMENTATION NOTE:

CONTRACTOR SHALL NOTIFY THE TIMMONS GROUP PRIOR TO COMMENCEMENT OF CONSTRUCTION OF BMP PRACTICES INCLUDING THE BIORETENTION FILTERS AND THE UNDERGROUND DETENTION. A SPECIFIC PRECONSTRUCTION MEETING BETWEEN THE CONTRACTOR, ENGINEER, INSPECTOR, AND MANUFACTURER IS HIGHLY RECOMMENDED PRIOR TO INSTALLATION OF THESE PRACTICES TO ENSURE THESE PRACTICES ARE NOT ONLY INSTALLED CORRECTLY BUT ALSO DOCUMENTED THROUGHOUT CONSTRUCTION. IT IS THE CONTRACTORS SOLE RESPONSIBILITY TO DOCUMENT THE INSTALLATION OF THESE PRACTICES. CONTRACTOR SHALL TAKE NOTES, PICTURES, AND MEASUREMENTS OF ALL STRATA LAYERS WITHIN THE BIORETENTION FACILITIES DURING CONSTRUCTION AND PROVIDE THIS DOCUMENTATION TO TIMMONS GROUP. IT IS REQUIRED TO TAKE PICTURES OF EACH MEASUREMENT OF EACH STRATA LAYER OF EACH FACILITY TO ILLUSTRATE AND DOCUMENT COMPLIANCE WITH THESE PLANS. WITHOUT DOCUMENTING TO THIS LEVEL OF DETAIL THE CONTRACTOR RUNS THE RISK OF DIGGING THE FACILITIES BACK UP TO CONFIRM THE CORRECT SECTIONS WERE INSTALLED.



CLEANOUT DETAIL
No Scale

COMMONWEALTH OF VIRGINIA
Bryan D. Cichocki
Lic. No. 53741
4/26/24
PROFESSIONAL ENGINEER
48530

THIS DRAWING PREPARED AT THE
CHARLOTTESVILLE OFFICE
608 Preston Avenue, Suite 200 | Charlottesville, VA 22903
TEL 434.295.5624 FAX 434.295.8317 www.timmons.com

REVISION DESCRIPTION
FINAL SITE PLAN RESUBMISSION #1
FINAL SITE PLAN RESUBMISSION #2
FINAL SITE PLAN RESUBMISSION #3

DATE
03/15/2024
03/22/2024
04/26/2024

FINAL SITE PLAN

DATE 02/20/2023
DRAWN BY M. DENHARD
DESIGNED BY M. DENHARD
CHECKED BY B. CICHOCKI
SCALE 1"=10'

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)
CITY OF CHARLOTTESVILLE, VA
BIORETENTION DETAILS

JOB NO. 48530
SHEET NO. C6.7

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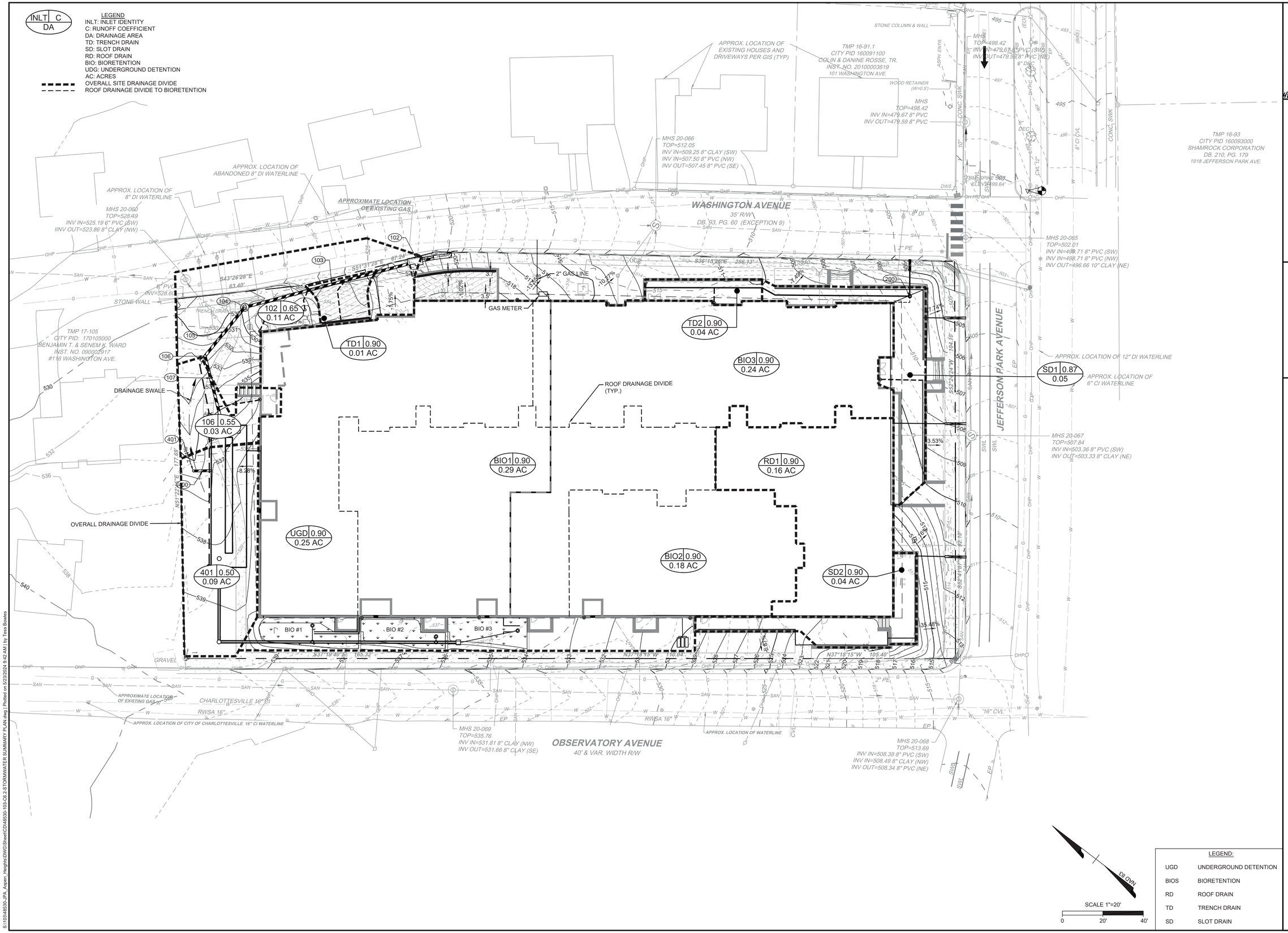

LEGEND:	
UGD	UNDERGROUND DETENTION
BIOS	BIORETENTION
RD	ROOF DRAIN
TD	TRENCH DRAIN
SD	SLOT DRAIN

COMMONWEALTH OF VIRGINIA
Bryan D. Cichocki
Lic. No. 53741
4/26/24
PROFESSIONAL ENGINEER
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REVISION DESCRIPTION
FINAL SITE PLAN RESUBMISSION #1
FINAL SITE PLAN RESUBMISSION #2
FINAL SITE PLAN RESUBMISSION #3

FINAL SITE PLAN

DATE
03/19/2024
03/22/2024
04/26/2024

DATE	02/20/2023
DRAWN BY	M. DENHARD
DESIGNED BY	M. DENHARD
CHECKED BY	B. CICHOCKI
SCALE	1" = 20'

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)

CITY OF CHARLOTTESVILLE, VA

STORMWATER SUMMARY PLAN

JOB NO. 48530

SHEET NO. C6.8

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PIPE AND INLET CALCS:

STORM NETWORK A **PROJECT:** 2005 JPA
HYDRAULIC GRADE LINE ANALYSIS

INCIDENCE PROBABILITY **10** **Year**

INLET OR JUNCTION	INLET STATION	OUTLET WATER SURFACE ELEV.	DIA. PIPE Do (In)	DESIGN DISCH. Qo (CFS)	LENGTH PIPE Lo (Ft)	FRICTION SLOPE, Sfo (FT/FT)	FRICTION LOSS Hf (Ft)	JUNCTION LOSS Vo (Ft)	Ho (Ft)	Qi	Vi	QiVi	Vi^2/2g	Hi	Angle	HΔ	Ht	1.3 Ht	0.5 Ht	FINAL H (Ft)	Inlet Water Surface Elevation	Rim Elev	Comments
102		521.48	12	2.21	7.63	0.0033	0.02	5.09	0.10	4.46	6.06	27.02	0.57	0.20	5.76	0.03	0.33	0	TRUE	0.19	521.67	523.28	OK -1.61
104		522.00	15	4.46	88.88	0.0041	0.36	6.06	0.14	4.04	6.24	25.18	0.60	0.21	35.91	0.26	0.61	0	TRUE	0.67	522.67	529.24	OK -6.57
106		523.43	15	4.04	31.06	0.0033	0.10	6.24	0.15	4.06	6.25	25.34	0.61	0.21	47.29	0.30	0.67	0	FALSE	0.77	524.20	531.75	OK -7.55
401		530.53	12	0.41	9.84	0.0001	0.00	4.09	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.08442	FALSE	0.09	530.61	535.65	OK -5.04

NUMBER	TYPE	LENGTH (FT, M)	STATION	DRAINAGE AREA (AC, HA)	C	CA	ΣCA	I (INHR, mm/HR)	Q INCR. (CFS, CMS)	Qs CARRYOVER (CFS, CMS)	QT GUTTER FLOW (CFS, CMS)	S GUTTER SLOPE (FT/FT, M/M)	Sx CROSS SLOPE (FT/FT, M/M)	T (SPREAD) (FT, M)	W GUTTER WIDTH (FT, M)	W/T	Sw (GUTTER SLOPE) (FT/FT, M/M)	Sw/Sx	Es (App. 9C-8)	a	Sw	Se	COMPUTED LENGTH L, (FT, M)	L SPECIFIED LENGTH (FT, M)	L/LT	E (App. 9C-18)	Q INTERCEPTED (CFS, CMS) or dh	Qb CARRYOVER (CFS, CMS)	Depth at Curb (IN, MM)	Allowable Ponding Depth d (FT, M)	Height of Curb Opening h (FT, M)	d/h	Depth at Inlet (IN, MM)	T SPREAD @ SAG (FT, M)	REMARKS
102	DI-3B	6.000		0.110	0.65	0.0715																													
			0'RIGHT				0.072	4	0.288	0	0.288	0.1200	0.0208	1.138	2.000	1.75747	0.0833	4.00481	1.000	3.50	0.1458	0.1666	6.857	6.000	0.875	0.976	0.281	0.007	1.138						
106	DI-1	1.250		0.030	0.55	0.0165																													Back/Lt.
			0.000'RIGHT				0.017	4	0.068	0																									Back/Lt.
							0	4	0	0																									Ahead/Rt.
											0.068	0.0100			1.250									1.25			0.068						0.291		T > 8.0 ft
401	DI-1	1.000		0.090	0.50	0.045																													Back/Lt.
			0.000'RIGHT				0.045	4	0.18	0																									Back/Lt.
							0	4	0	0																									Ahead/Rt.
											0.180	0.0100			1.000									1			0.180						0.557		T > 8.0 ft

STORM NETWORK A
STORM SEWER DESIGN COMPUTATIONS

PROJECT: 2005 JPA
LOCATION:
COUNTY: City of Charlottesville

STORM FREQUENCY **10**

UNITS **ENGLISH**

PIPE NO	FROM POINT REFERENCE (1)	FROM POINT STA.	TO POINT REFERENCE (2)	TO POINT STA.	DRAIN. AREA "A" Acre (3)	RUNOFF COEFF. "C" (4)	CA INCRE-MENT (5)	CA ADDTL CA	CA ACCUM-ULATED (6)	TOTAL INLET TIME Minutes (7)	RAIN FALL In/Hr (8)	RUNOFF Q CFS (9)	INVERT ELEVATIONS UPPER END (10)	INVERT ELEVATIONS LOWER END (11)	LENGTH of Pipe Ft. (12)	SLOPE Ft./Ft. (13)	SIZE (Dia. Or Span/Rise) In. (14)	SHAPE	Capacity CFS (15)	Friction Slope Ft./Ft.	VEL Vn Ft/Sec (16)	FLOW TIME Min. (17)	REMARKS (18)
107	UGD		106		0.000	0.000	0.000	0.651	0.651	6.000	6.230	4.056	525.000	524.544	39.617	0.011	15.000	Circular	7.503	0.003	6.247	0.106	Flow from UGD
105	106		104		0.030	0.550	0.017	0.000	0.668	6.106	6.199	4.138	522.788	522.431	31.058	0.011	15.000	Circular	7.503	0.003	6.277	0.082	
103	104		102		0.000	0.000	0.000	0.000	0.668	6.188	6.175	4.122	521.894	521.005	88.884	0.010	15.000	Circular	6.996	0.003	5.947	0.249	
Twin 12" DIP	102		CHASE DRAIN		0.110	0.650	0.072	0.000	0.739	6.437	6.104	2.256	520.758	520.682	7.629	0.010	12.000	Circular	3.855	0.003	5.112	0.025	Twin Pipes to Chase Drain
400	401		UGD		0.080	0.820	0.066	0.000	0.066	6.000	6.230	0.409	529.924	529.727	9.839	0.020	12.000	Circular	5.457	0.000	4.090	0.040	Flow to UGD

STORM PIPE TABLE

PIPE #	DIA	FROM - TO	UPSTREAM INVERT	DOWNSTREAM INVERT	SLOPE	LENGTH	DESCRIPTION
101	12"	102 -	519.90	519.83	1.00%	7.63 LF	12" DUCTILE IRON
103	15"	104 - 102	521.89	519.89	2.25%	88.88 LF	15" HDPE
107	15"	- 106	526.50	525.99	1.70%	29.99 LF	15" HDPE
400	12"	401 -	529.92	529.70	2.50%	9.09 LF	12" HDPE

STORM STRUCTURE TABLE

STRUCTURE #	TOP	STRUCTURE HEIGHT	DESCRIPTION
102	522.42	2.58'	DI-3B 6 ft Throat
104	529.21	7.44'	MH-1
106	531.75	9.09'	15" Basin - Circular Grate
401	535.65	5.85'	12" Basin - Circular Grate

EXISTING CONDITIONS:

OBSERVATORY AVENUE (NORTH)

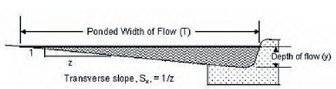
GUTTER SPREAD CALCULATIONS
AT OBSERVATORY AVENUE (NORTH SIDE OF STREET)

FLOW TO GUTTER:
Area: 0.44 AC
C: 59
I: 4 in/hr
Q: 1.04 cfs

$$T = z\left(\frac{Qn}{S_x^{5/3}S^{1/2}}\right)^{3/8}$$

Q = gutter flow rate (cfs or m^3/s)
n = Manning's roughness coefficient
S = longitudinal slope (ft./ft. or m/m)
S_x = pavement cross slope = 1/x (ft./ft. or m/m)
z = 1.24 for English measurements or 1.443 for metric.

$T_{PRE} = 1.24\left[1.04 \times 0.013/\left((0.03)^{5/3} \times (0.04)^{1/2}\right)\right]^{3/8} =$ **4.04 FT.**



*FLOW RATES INCLUDE DRAINAGE AREA 1A, 1R, OFFSITE 1R, OFFSITE 1B

WASHINGTON AVENUE (SOUTH):

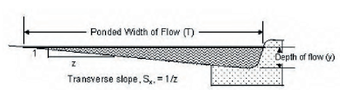
GUTTER SPREAD CALCULATIONS
AT WASHINGTON AVENUE (SOUTH SIDE OF STREET)

FLOW TO GUTTER:
Area: 0.95 AC
C: 69
I: 4 in/hr
Q: 2.64 cfs

$$T = z\left(\frac{Qn}{S_x^{5/3}S^{1/2}}\right)^{3/8}$$

Q = gutter flow rate (cfs or m^3/s)
n = Manning's roughness coefficient
S = longitudinal slope (ft./ft. or m/m)
S_x = pavement cross slope = 1/x (ft./ft. or m/m)
z = 1.24 for English measurements or 1.443 for metric.

$T_{PRE} = 1.24\left[2.64 \times 0.013/\left((0.013)^{5/3} \times (0.05)^{1/2}\right)\right]^{3/8} =$ **9.26 FT.**



*FLOW RATES INCLUDE DRAINAGE AREA 2A, 2R, OFFSITE 2R

JEFFERSON PARK AVENUE (EAST):

GUTTER SPREAD CALCULATIONS
AT JEFFERSON PARK AVENUE (EAST SIDE OF STREET)

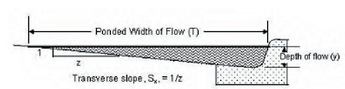
FLOW TO GUTTER:
Area: 0.51 AC
C: 64
I: 4 in/hr
Q: 1.30 cfs

*Includes carryover flow from Observatory Avenue

$$T = z\left(\frac{Qn}{S_x^{5/3}S^{1/2}}\right)^{3/8}$$

Q = gutter flow rate (cfs or m^3/s)
n = Manning's roughness coefficient
S = longitudinal slope (ft./ft. or m/m)
S_x = pavement cross slope = 1/x (ft./ft. or m/m)
z = 1.24 for English measurements or 1.443 for metric.

$T_{PRE} = 1.24\left[1.30 \times 0.013/\left((0.02)^{5/3} \times (0.05)^{1/2}\right)\right]^{3/8} =$ **5.42 FT.**



*FLOW RATES INCLUDE DRAINAGE AREA 1A, 1R, OFFSITE 1R, OFFSITE 1B, OFFSITE 4R

JEFFERSON PARK AVENUE (WEST):

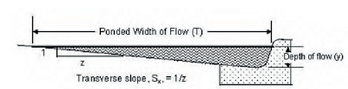
GUTTER SPREAD CALCULATIONS
AT JEFFERSON PARK AVENUE (WEST SIDE OF STREET)

FLOW TO GUTTER:
Area: 0.86 AC
C: 41
I: 4 in/hr
Q: 1.41 cfs

$$T = z\left(\frac{Qn}{S_x^{5/3}S^{1/2}}\right)^{3/8}$$

Q = gutter flow rate (cfs or m^3/s)
n = Manning's roughness coefficient
S = longitudinal slope (ft./ft. or m/m)
S_x = pavement cross slope = 1/x (ft./ft. or m/m)
z = 1.24 for English measurements or 1.443 for metric.

$T_{PRE} = 1.24\left[1.41 \times 0.013/\left((0.01)^{5/3} \times (0.05)^{1/2}\right)\right]^{3/8} =$ **8.63 FT.**



*FLOW RATES INCLUDE DRAINAGE AREA 3A, 3R, OFFSITE 3R

0.15 CFS REDUCTION

0.44 CFS REDUCTION

0.16 CFS REDUCTION

0.28 CFS REDUCTION

PROPOSED CONDITIONS:

OBSERVATORY AVENUE (NORTH)

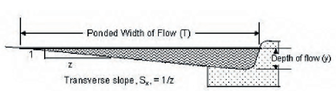
GUTTER SPREAD CALCULATIONS
AT OBSERVATORY AVENUE (NORTH SIDE OF STREET)

FLOW TO GUTTER:
Area: 0.33 AC
C: 67
I: 4 in/hr
Q: 0.89 cfs

$$T = z\left(\frac{Qn}{S_x^{5/3}S^{1/2}}\right)^{3/8}$$

Q = gutter flow rate (cfs or m^3/s)
n = Manning's roughness coefficient
S = longitudinal slope (ft./ft. or m/m)
S_x = pavement cross slope = 1/x (ft./ft. or m/m)
z = 1.24 for English measurements or 1.443 for metric.

$T_{POST} = 1.24\left[0.89 \times 0.013/\left((0.03)^{5/3} \times (0.04)^{1/2}\right)\right]^{3/8} =$ **3.81 FT.**



*FLOW RATES INCLUDE DRAINAGE AREA 1A, 1R, OFFSITE 1R, OFFSITE 1B

WASHINGTON AVENUE: (SOUTH)

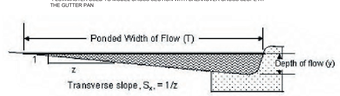
GUTTER SPREAD CALCULATIONS
AT WASHINGTON AVENUE (SOUTH SIDE OF STREET)

FLOW TO GUTTER:
Area: 0.48 AC (Undetained) + 0.96 AC (Detained)
C: 60 (Undetained), 90 (Detained)
I: 4 in/hr
Q: 1.16 cfs (Undetained) + 1.04 (2-Yr Storm SCS Peak Outflow from Detention)
2.20 cfs (Total)

(SEE FIGURE 1 THIS SHEET FOR CALCULATIONS)

$$T = z\left(\frac{Qn}{S_x^{5/3}S^{1/2}}\right)^{3/8}$$

*FLOWMASTER USED TO MODEL CROSS SECTION WITH BREAKOVER CROSS SLOPE AT THE GUTTER PAN



*FLOW RATES INCLUDE DRAINAGE AREA 2A (DETAINED), 2B, 2R, OFFSITE 2R

JEFFERSON PARK AVENUE (EAST):

GUTTER SPREAD CALCULATIONS
AT JEFFERSON PARK AVENUE (EAST SIDE OF STREET)

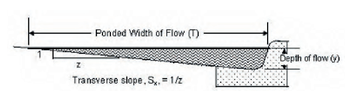
FLOW TO GUTTER:
Area: 0.40 AC
C: 71
I: 4 in/hr
Q: 1.14 cfs

*Includes carryover flow from Observatory Avenue

$$T = z\left(\frac{Qn}{S_x^{5/3}S^{1/2}}\right)^{3/8}$$

Q = gutter flow rate (cfs or m^3/s)
n = Manning's roughness coefficient
S = longitudinal slope (ft./ft. or m/m)
S_x = pavement cross slope = 1/x (ft./ft. or m/m)
z = 1.24 for English measurements or 1.443 for metric.

$T_{POST} = 1.24\left[1.14 \times 0.013/\left((0.02)^{5/3} \times (0.05)^{1/2}\right)\right]^{3/8} =$ **5.16 FT.**



*FLOW RATES INCLUDE DRAINAGE AREA 1A, 1R, OFFSITE 1R, OFFSITE 1B, OFFSITE 4R

JEFFERSON PARK AVENUE (WEST):

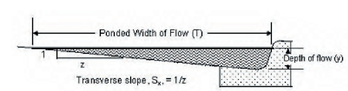
GUTTER SPREAD CALCULATIONS
AT JEFFERSON PARK AVENUE (WEST SIDE OF STREET)

FLOW TO GUTTER:
Area: 0.37 AC
C: 77
I: 4 in/hr
Q: 1.13 cfs

$$T = z\left(\frac{Qn}{S_x^{5/3}S^{1/2}}\right)^{3/8}$$

Q = gutter flow rate (cfs or m^3/s)
n = Manning's roughness coefficient
S = longitudinal slope (ft./ft. or m/m)
S_x = pavement cross slope = 1/x (ft./ft. or m/m)
z = 1.24 for English measurements or 1.443 for metric.

$T_{POST} = 1.24\left[1.13 \times 0.013/\left((0.01)^{5/3} \times (0.05)^{1/2}\right)\right]^{3/8} =$ **7.94 FT.**



*FLOW RATES INCLUDE DRAINAGE AREA 3A, 3R, OFFSITE 3R

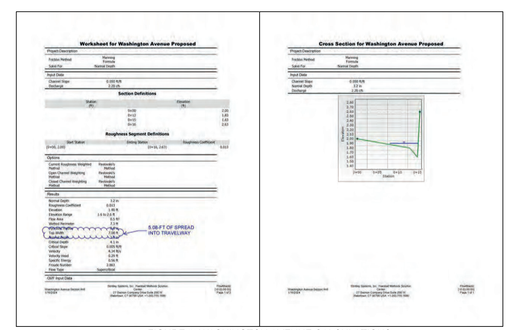


FIGURE 1: WASHINGTON AVENUE CALCULATIONS

Observatory Avenue (North)				
Adjacent Lane Width (Feet)	Description	Allowable Spread (Feet)	Pre-Development Spread (ft)	Post-Development Spread (ft)
12	Driving Lane (No Gutter)	6	4.04	3.81

Washington Avenue (South)				
Adjacent Lane Width (Feet)	Description	Allowable Spread (Feet)	Pre-Development Spread (ft)	Post-Development Spread (ft)
13	Driving Lane (No Gutter)	6.5	9.26	5.08

Jefferson Park Avenue (East)				
Adjacent Lane Width (Feet)	Description	Allowable Spread (Feet)	Pre-Development Spread (ft)	Post-Development Spread (ft)
13	Driving Lane (No Gutter)	6.5	5.42	5.16

Jefferson Park Avenue (West)				
Adjacent Lane Width (Feet)	Description	Allowable Spread (Feet)	Pre-Development Spread (ft)	Post-Development Spread (ft)
N/A	Driving Lane (No Gutter) + Parallel Parking + Bike Lane	12' (Before Cresting Into Travel Lane)	8.63	7.94

COMMONWEALTH OF VIRGINIA
Bryan D. Cichocki
Lic. No. 53741
4/26/24
PROFESSIONAL ENGINEER
48530

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FINAL SITTE PLAN

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FINAL SITE PLAN RESUBMISSION #3	04/26/2024

DATE 02/20/2023
DRAWN BY *M. DENHARD*
DESIGNED BY *M. DENHARD*
CHECKED BY *B. CICHOCKI*
SCALE *N/A*

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)
CITY OF CHARLOTTESVILLE, VA
PIPE & INLET CALCULATIONS

JOB NO. *48530*
SHEET NO. *C6.9*

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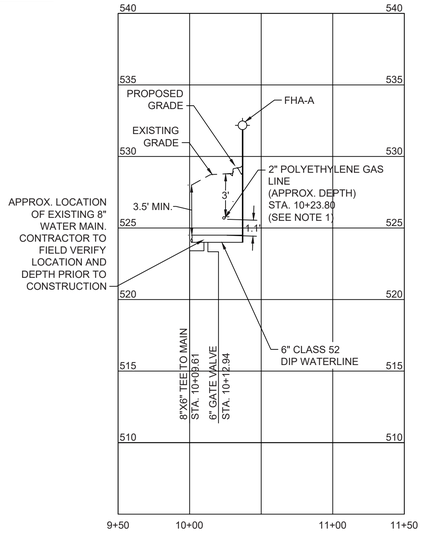
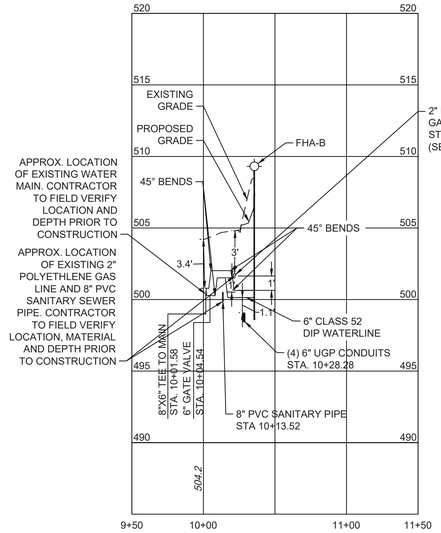
NOTES:
1. CONTRACTOR SHALL TEST PIT THIS GAS LINE PRIOR TO INSTALLATION AND PROVIDE DETAILED INFORMATION TO THE ENGINEER

5
0
0 50
PROFILE SCALE



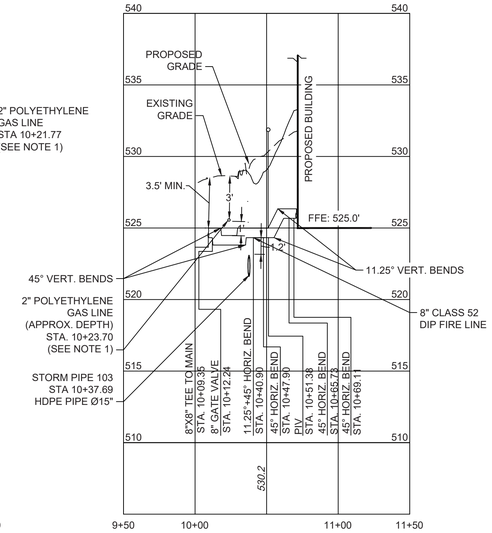
FIRE HYDRANT A

HORIZ SCALE: 1"=50'
VERT SCALE: 1"=5



FIRE HYDRANT B

HORIZ SCALE: 1"=50'
VERT SCALE: 1"=5



FIRE LINE

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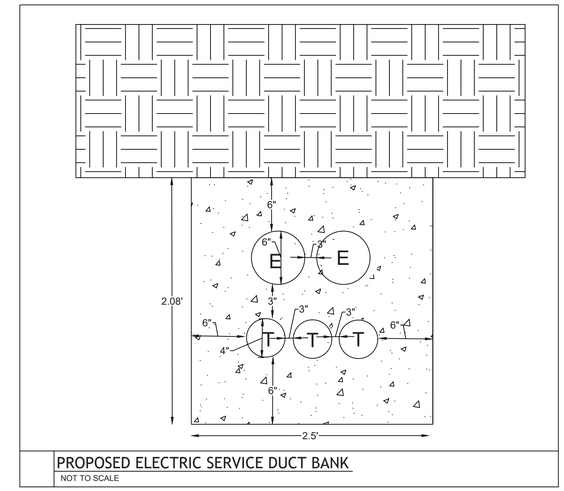
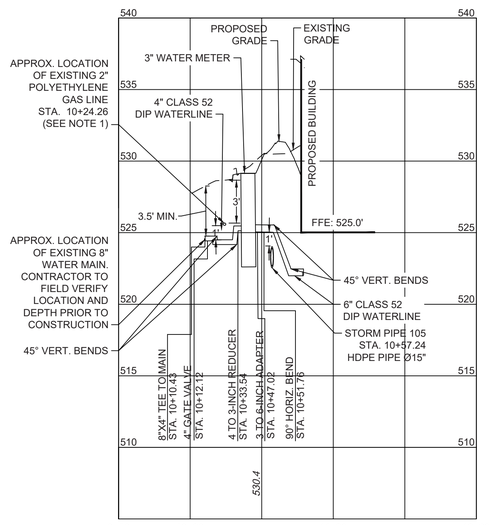
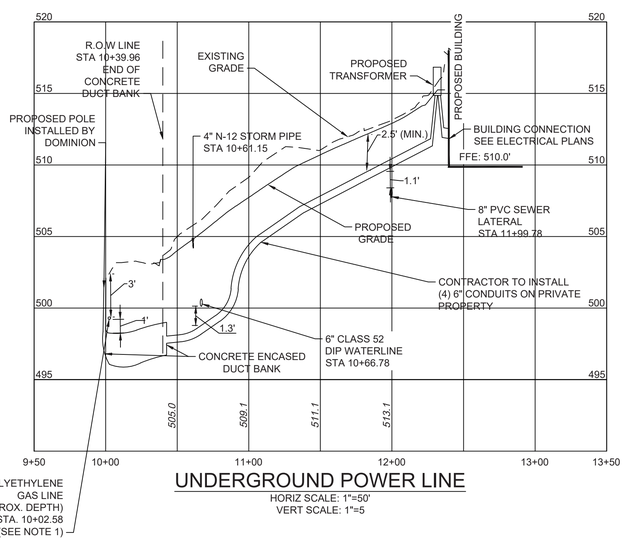


PROPOSED ELECTRIC SERVICE DUCT BANK
NOT TO SCALE



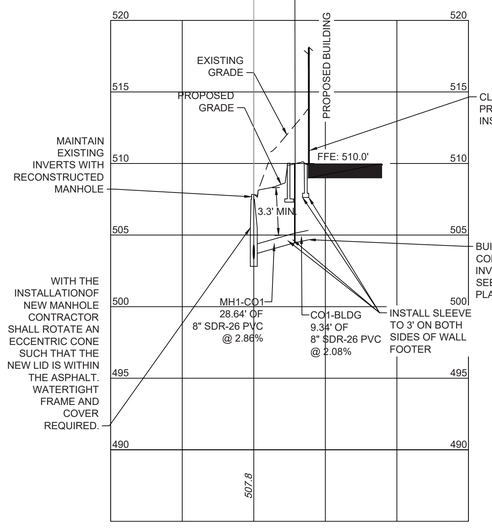
DOMESTIC WATERLINE

HORIZ SCALE: 1"=50'
VERT SCALE: 1"=5



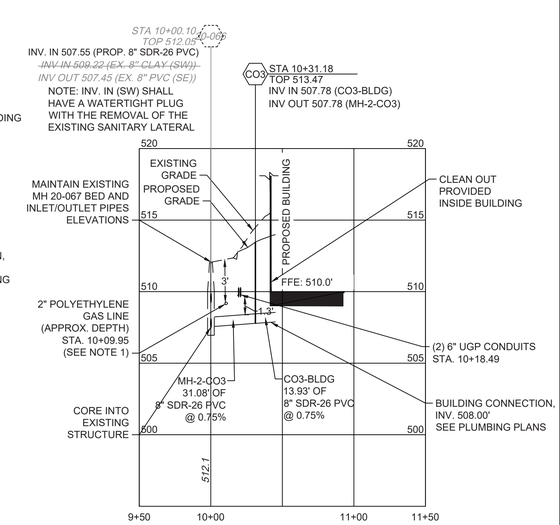
UNDERGROUND POWER LINE

HORIZ SCALE: 1"=50'
VERT SCALE: 1"=5



SANITARY LATERAL A

HORIZ SCALE: 1"=50'
VERT SCALE: 1"=5



SANITARY LATERAL B

HORIZ SCALE: 1"=50'
VERT SCALE: 1"=5

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Bryan D. Cichocki
Lic. No. 53741
4/26/24
PROFESSIONAL ENGINEER
48530

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FINAL SITE PLAN RESUBMISSION #3	04/26/2024

FINAL SITE PLAN

DATE	02/20/2023
DRAWN BY	M. DENHARD
DESIGNED BY	M. DENHARD
CHECKED BY	B. CICHOCKI
SCALE	AS SHOWN

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)

CITY OF CHARLOTTESVILLE, VA

UTILITY PROFILES

JOB NO. 48530

SHEET NO. C7.0

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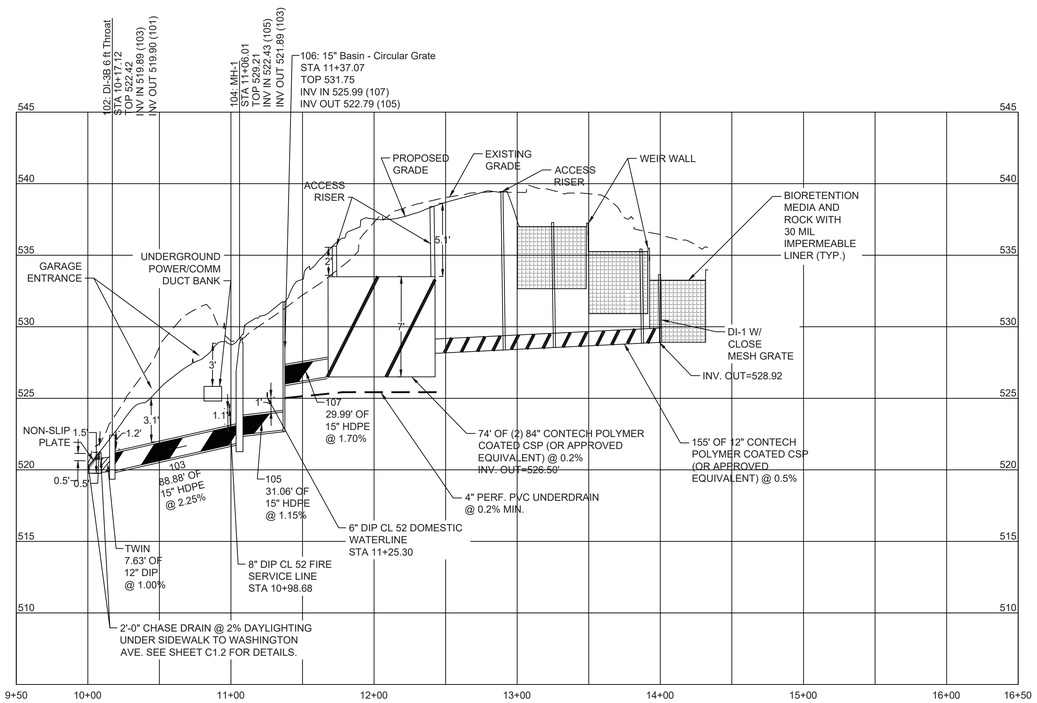
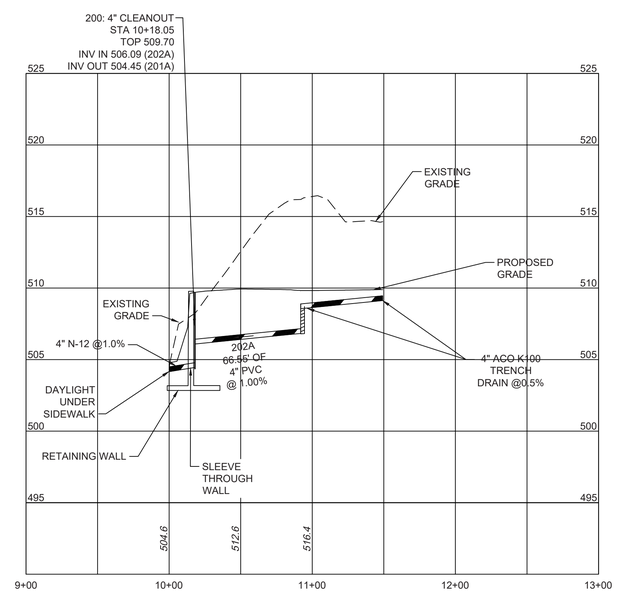
PROFILE SCALE



STRM. CHASE DRAIN - BIORETENTION

HORIZ SCALE: 1"=50'
VERT SCALE: 1"=5



STRM. CHASE DRAIN - TRENCH DRAIN

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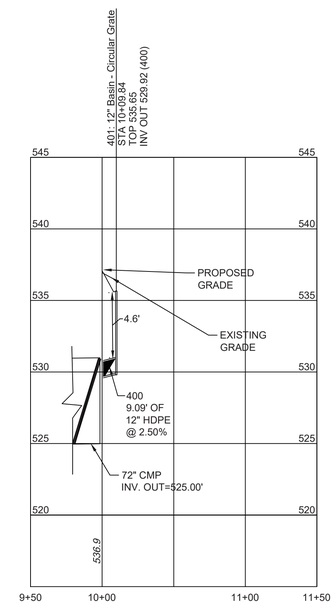
VERT SCALE: 1"=5



UG DETENTION - STR. 401

HORIZ SCALE: 1"=50'
VERT SCALE: 1"=5

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Bryan D. Cichocki
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4/26/24
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FINAL SITE PLAN RESUBMISSION #3

FINAL SITE PLAN

DATE
01/19/2024
03/22/2024
04/26/2024

DATE	02/20/2023
DRAWN BY	M. DENHARD
DESIGNED BY	M. DENHARD
CHECKED BY	B. CICHOCKI
SCALE	AS SHOWN

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)
CITY OF CHARLOTTESVILLE, VA
STORMWATER PROFILES

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SHEET NO. C7.1

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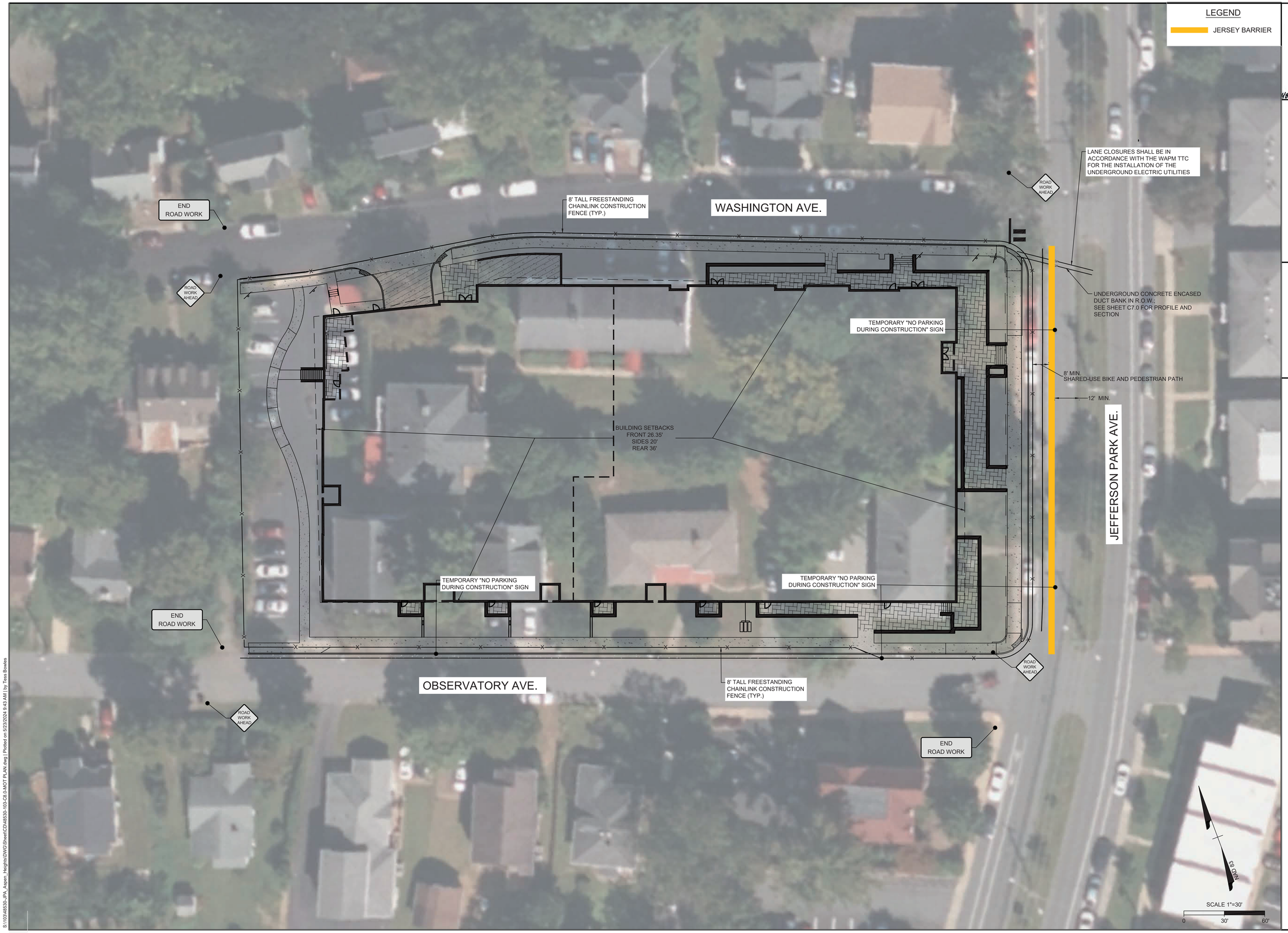

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FINAL SITE PLAN RESUBMISSION #3	04/26/2024

DATE	02/20/2023
DRAWN BY	M. DENHARD
DESIGNED BY	M. DENHARD
CHECKED BY	B. CICHOCKI
SCALE	1"=30'

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)

CITY OF CHARLOTTESVILLE, VA

MAINTENANCE OF TRAFFIC PLAN - VEHICULAR

JOB NO.	SHEET NO.
48530	C8.0

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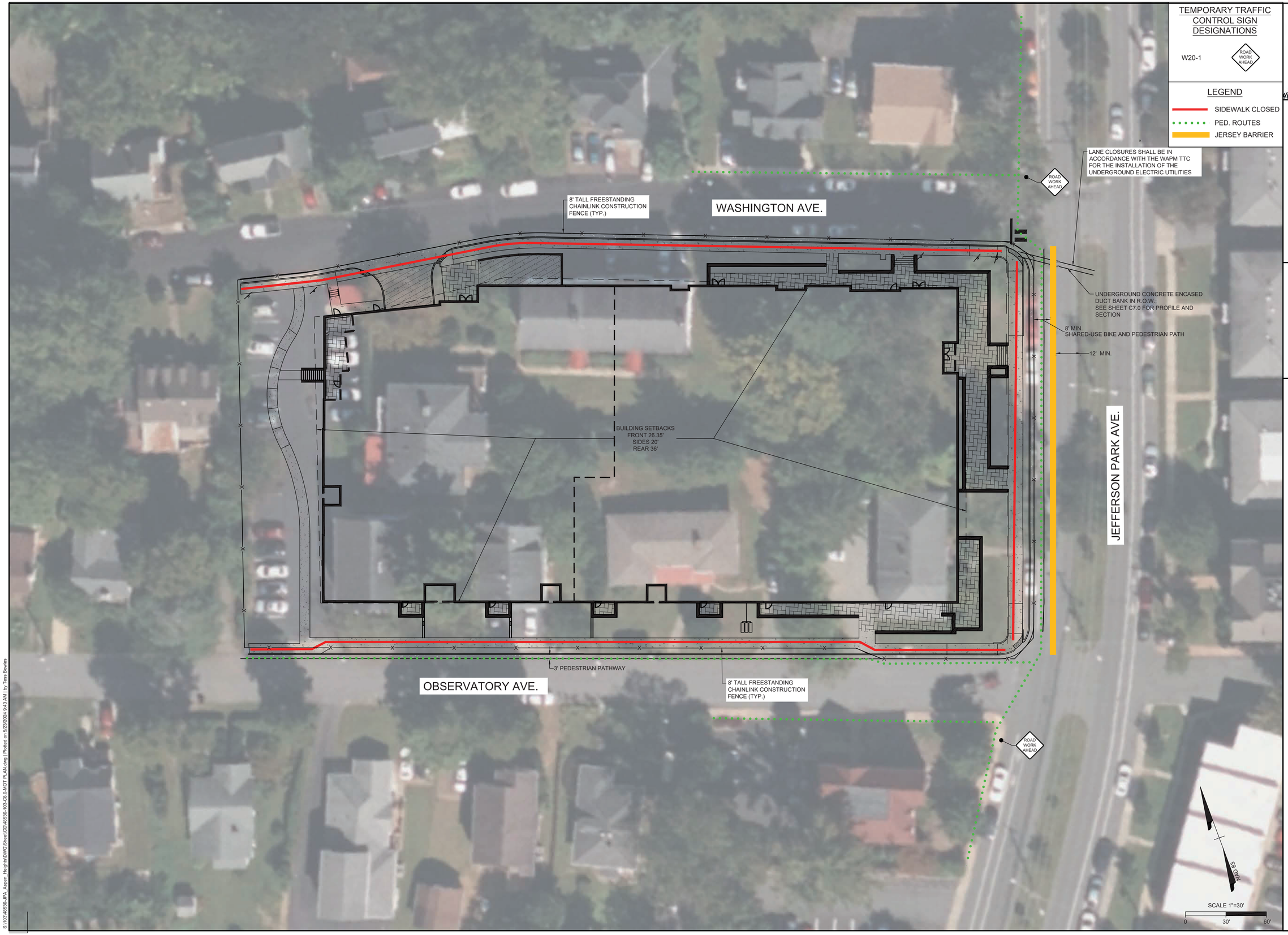

TEMPORARY TRAFFIC CONTROL SIGN DESIGNATIONS

W20-1 — ROAD WORK AHEAD

LEGEND

- SIDEWALK CLOSED
- PED. ROUTES
- JERSEY BARRIER

COMMONWEALTH OF VIRGINIA
Bryan D. Cichocki
Lic. No. 53741
4/26/24
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FINAL SITE PLAN

DATE	02/20/2023
DRAWN BY	M. DENHARD
DESIGNED BY	M. DENHARD
CHECKED BY	B. CICHOCKI
SCALE	1"=30'

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ASPEN HEIGHTS (2005 JPA)

CITY OF CHARLOTTESVILLE, VA

MAINTENANCE OF TRAFFIC PLAN - PEDESTRIAN ROUTES

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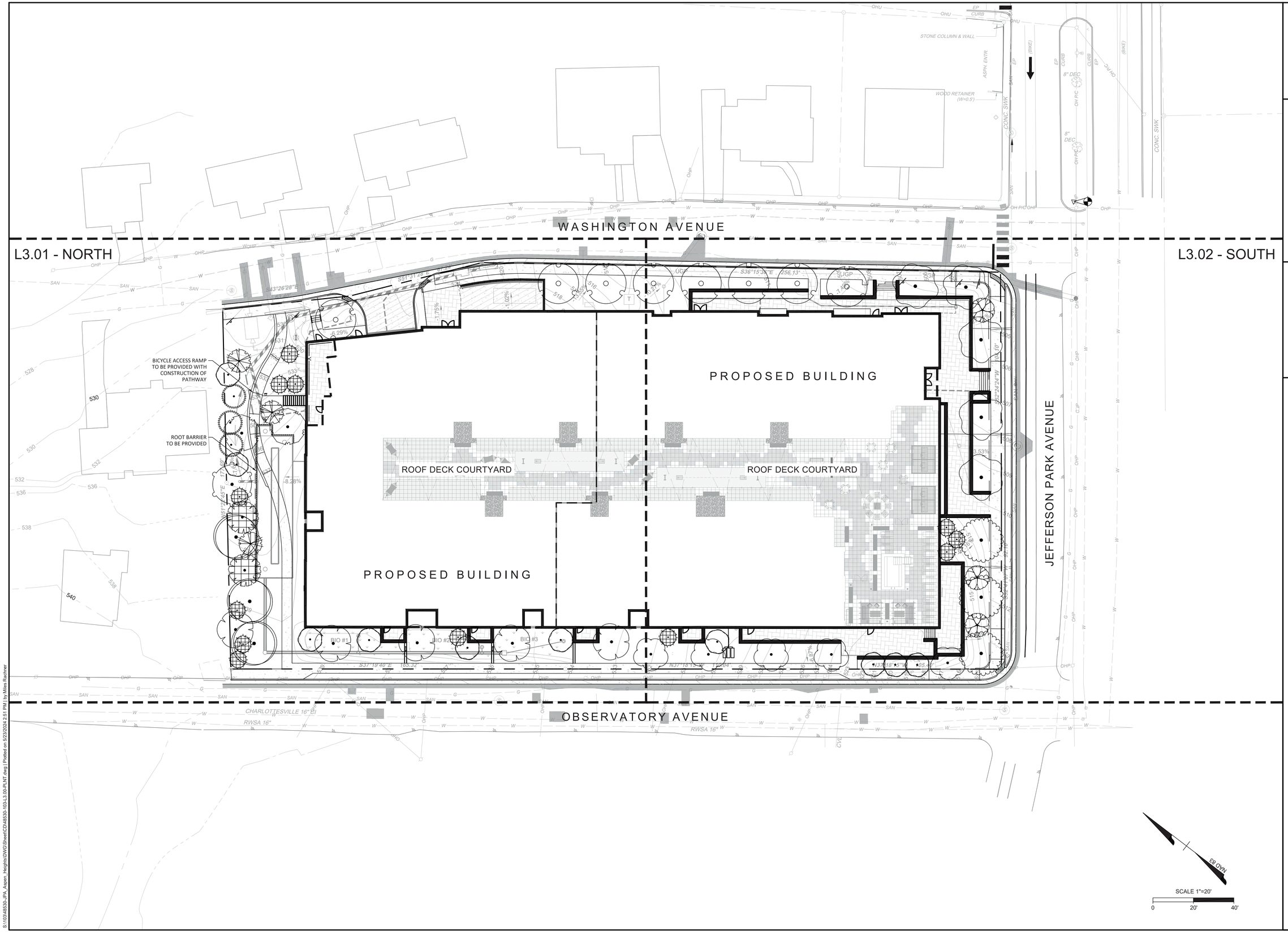

COMMONWEALTH OF VIRGINIA
Carlin R. Tacey
Lic.No.002163
04/26/2024
LANDSCAPE ARCHITECT

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FINAL SITE PLAN RESUBMISSION #3	04/26/2024

DATE	02/20/2023
DRAWN BY	M. RACHNER
DESIGNED BY	C. TACEY
CHECKED BY	C. TACEY
SCALE	1" = 20'

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)

CITY OF CHARLOTTESVILLE, VA

OVERALL PLANTING PLAN

JOB NO.	48530
SHEET NO.	L3.00

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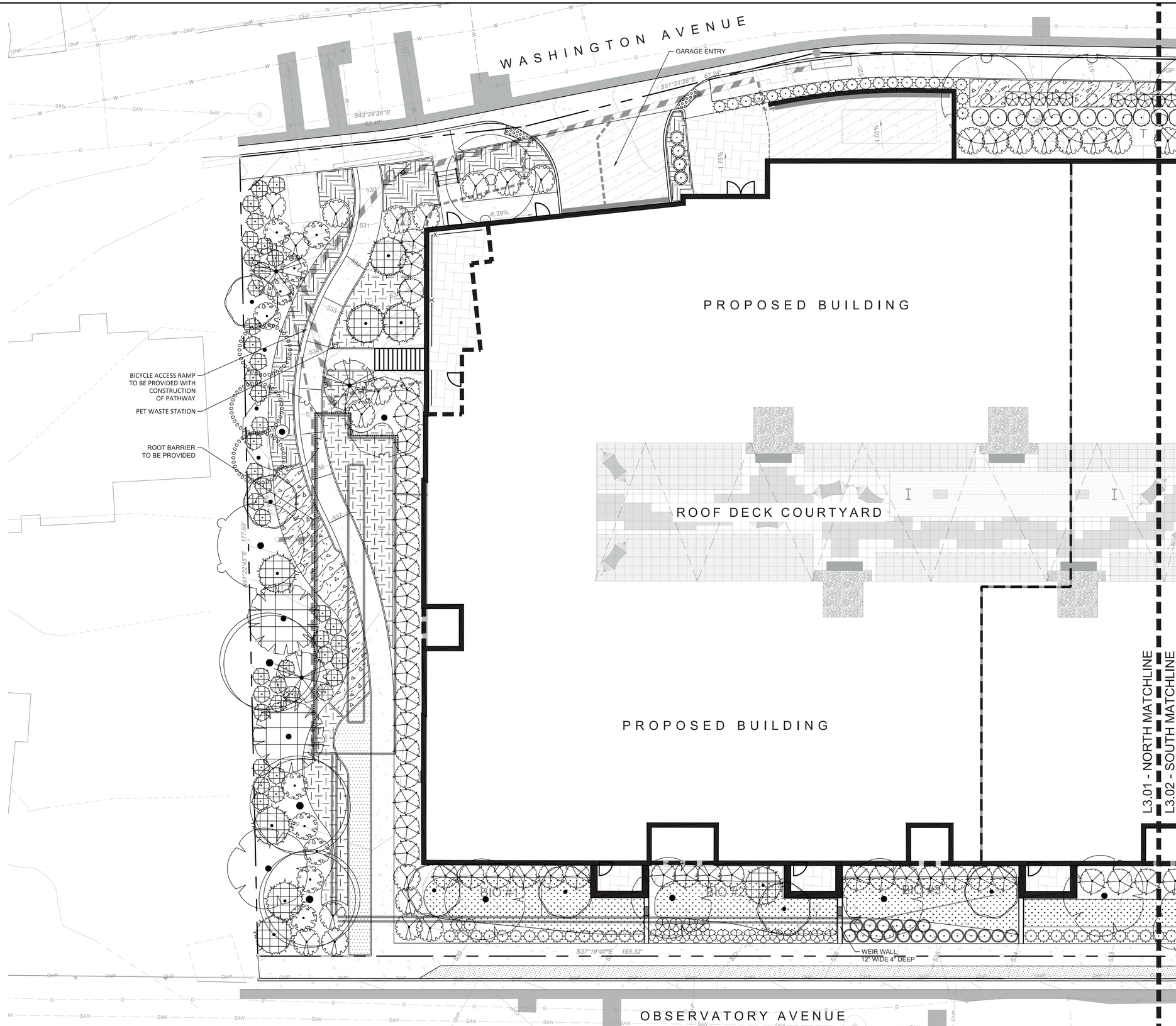
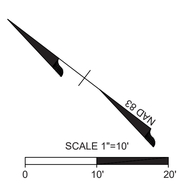
PLANT KEY

SYMBOL	CODE	BOTANICAL NAME
SMALL FLOWERING TREES		
	CER CAN	CERCIS CANADENSIS
	CRA HAW	CRATAEGUS CRUS-GALLI 'CRUZAM'
	HAM VIR	HAMAMELIS VIRGINIANA
	MAG SWE	MAGNOLIA VIRGINIANA
LARGE DECIDUOUS TREES		
	GYM DIO	GYMNOCLADUS DIOICA `ESPRESSO`
	LIQ HAP	LIQUIDAMBAR STYRACIFLUA 'HAPPDELL'
	LIR TUL	LIRIODENDRON TULIPIFERA
	QUE ALB	QUERCUS ALBA
	QUE PHE	QUERCUS PHELLOS
	ULM JEF	ULMUS AMERICANA 'JEFFERSON'
MEDIUM DECIDUOUS TREES		
	CAT BIG	CATALPA BIGNONIOIDES
	NYS SYL	NYSSA SYLVATICA
EVERGREEN TREES		
	ILE AME	ILEX OPACA
	JUN EAS	JUNIPERUS VIRGINIANA
SHRUBS		
	CLE HUM	CLETHRA ALNIFOLIA 'HUMMINGBIRD'
	FOT GAR	FOTHERGILLA GARDENII
	HYD ANN	HYDRANGEA ARBORESCENS 'ANNABELLE'
	HYD WEE	HYDRANGEA QUERCIFOLIA 'PEE WEE'
	ILE HKR	ILEX GLABRA 'DENSA'
	ILE SHA	ILEX GLABRA 'SHAMROCK'
	ILE VER	ILEX VERTICILLATA 'JIM DANDY'
	ILE RED	ILEX VERTICILLATA 'RED SPRITE'
	LIN BEN	LINDERA BENZOIN
	VIB BUL	VIBURNUM NUDUM 'BULK'
	VIB BLA	VIBURNUM PRUNIFOLIUM
GROUND COVERS		
	PAN SHD	PANICUM VIRGATUM 'SHENANDOAH'
GROUND COVER MIXES		
	BIOFILTER PLANTING MIX	
	GROUND COVER MIX 1	
	GROUND COVER MIX 2	
	GROUND COVER MIX 3	
	TURF	

NOTE:
- SEE SHEET L3.04 FOR DETAILED PLANT SCHEDULE.





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Carlin R. Tacey
Lic.No.002163
04/26/2024
LANDSCAPE ARCHITECT

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03/22/2024	FINAL SITE PLAN RESUBMISSION #2
04/26/2024	FINAL SITE PLAN RESUBMISSION #3

FINAL SITE PLAN

DATE	02/20/2023
DRAWN BY	M. RACHNER
DESIGNED BY	C. TACEY
CHECKED BY	C. TACEY
SCALE	1" = 10'

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)

CITY OF CHARLOTTESVILLE, VA

PLANTING DETAIL PLAN NORTH

JOB NO.	SHEET NO.
48530	L3.01

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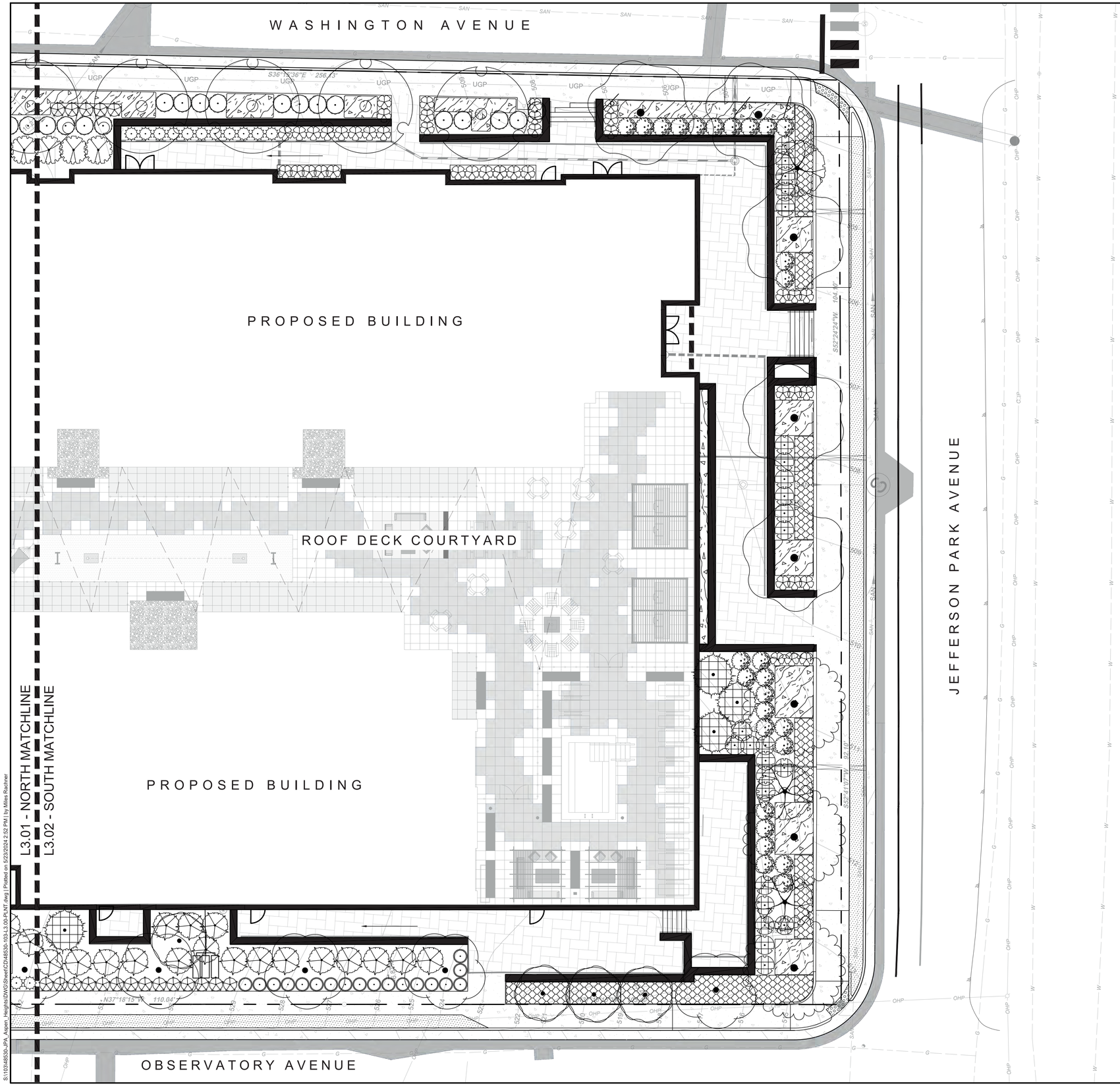

PLANT KEY		
SYMBOL	CODE	BOTANICAL NAME
SMALL FLOWERING TREES		
	CER CAN	CERCIS CANADENSIS
	CRA HAW	CRATAEGUS CRUS-GALLI 'CRUZAM'
	HAM VIR	HAMAMELIS VIRGINIANA
	MAG SWE	MAGNOLIA VIRGINIANA
LARGE DECIDUOUS TREES		
	GYM DIO	GYMNOCLADUS DIOICA `ESPRESSO'
	LIQ HAP	LIQUIDAMBAR STYRACIFLUA 'HAPPDELL'
	LIR TUL	LIRIODENDRON TULIPIFERA
	QUE ALB	QUERCUS ALBA
	QUE PHE	QUERCUS PHELLOS
	ULM JEF	ULMUS AMERICANA 'JEFFERSON'
MEDIUM DECIDUOUS TREES		
	CAT BIG	CATALPA BIGNONIOIDES
	NYS SYL	NYSSA SYLVATICA
EVERGREEN TREES		
	ILE AME	ILEX OPACA
	JUN EAS	JUNIPERUS VIRGINIANA
SHRUBS		
	CLE HUM	CLETHRA ALNIFOLIA 'HUMMINGBIRD'
	FOT GAR	FOTHERGILLA GARDENII
	HYD ANN	HYDRANGEA ARBORESCENS 'ANNABELLE'
	HYD WEE	HYDRANGEA QUERCIFOLIA 'PEE WEE'
	ILE HKR	ILEX GLABRA 'DENSA'
	ILE SHA	ILEX GLABRA 'SHAMROCK'
	ILE VER	ILEX VERTICILLATA 'JIM DANDY'
	ILE RED	ILEX VERTICILLATA 'RED SPRITE'
	LIN BEN	LINDERA BENZOIN
	VIB BUL	VIBURNUM NUDUM 'BULK'
	VIB BLA	VIBURNUM PRUNIFOLIUM
GROUND COVERS		
	PAN SHD	PANICUM VIRGATUM 'SHENANDOAH'
GROUND COVER MIXES		
	BIOFILTER PLANTING MIX	
	GROUND COVER MIX 1	
	GROUND COVER MIX 2	
	GROUND COVER MIX 3	
	TURF	

NOTE:
- SEE SHEET L3.04 FOR DETAILED PLANT SCHEDULE.

NAD 83

SCALE 1"=10'

0 10' 20'

COMMONWEALTH OF VIRGINIA
Carlin R. Tacey
Lic.No.002163
04/26/2024
LANDSCAPE ARCHITECT

THIS DRAWING PREPARED AT THE
CHARLOTTESVILLE OFFICE
608 Preston Avenue, Suite 200 | Charlottesville, VA 22903
TEL 434.295.5624 FAX 434.295.8317 www.timmons.com

REVISION DESCRIPTION
FINAL SITE PLAN RESUBMISSION #1
FINAL SITE PLAN RESUBMISSION #2
FINAL SITE PLAN RESUBMISSION #3

DATE
01/19/2024
03/22/2024
04/26/2024

FINAL SITE PLAN

DATE 02/20/2023
DRAWN BY M. RACHNER
DESIGNED BY C. TACEY
CHECKED BY C. TACEY
SCALE 1" = 10'

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)

CITY OF CHARLOTTESVILLE, VA

PLANTING DETAIL PLAN SOUTH

JOB NO. 48530

SHEET NO. L3.02

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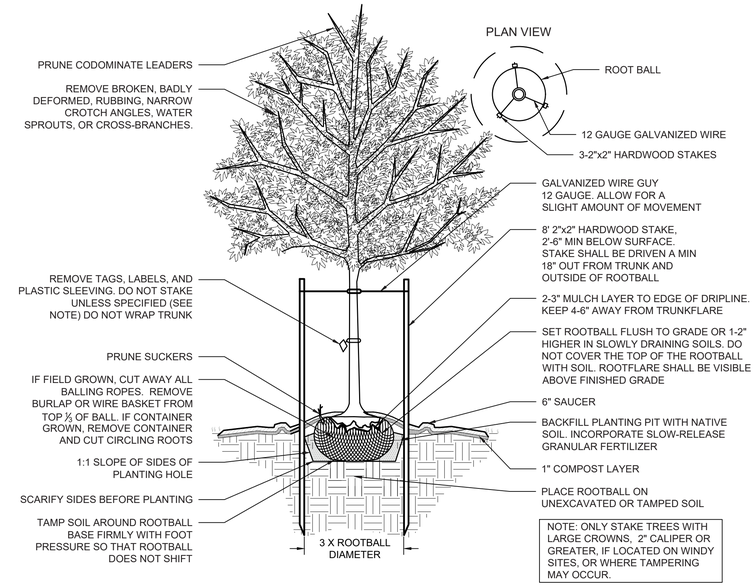
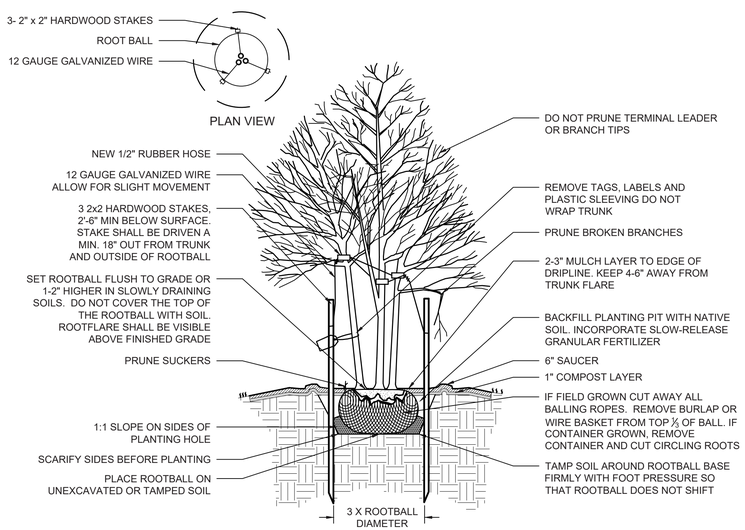
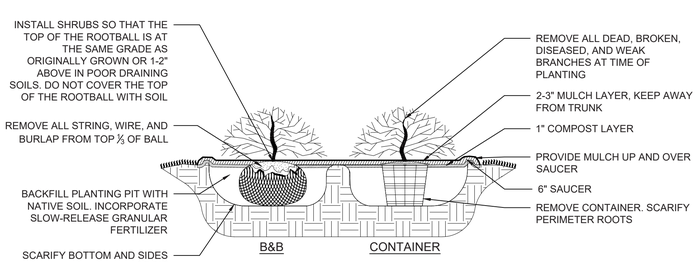


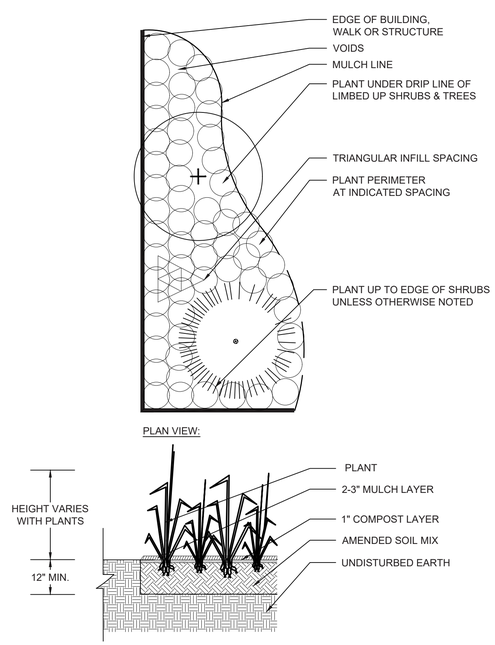
1 DECIDUOUS TREE - STAKING SPECIFIED
NOT TO SCALE



2 MULTI-STEM TREE - STAKING SPECIFIED
NOT TO SCALE



3 SHRUB PLANTING
NOT TO SCALE



4 GROUNDCOVER/ PERENNIAL PLANTING
NOT TO SCALE

GENERAL NOTES

PRE-CONSTRUCTION

- CONTRACTOR IS RESPONSIBLE FOR CONTACTING "MISS UTILITY" AT 1.800.552.7001 FOR LOCATION OF ALL UTILITY LINES.TREES SHALL BE LOCATED A MINIMUM OF 5 FEET FROM SEWER/WATER CONNECTIONS. NOTIFY LANDSCAPE ARCHITECT OF CONFLICTS.
- VERIFY ALL PLANT MATERIAL QUANTITIES ON THE PLAN PRIOR TO BIDDING. PLANT LIST TOTALS ARE FOR CONVENIENCE ONLY AND SHALL BE VERIFIED PRIOR TO BIDDING.
- PROVIDE PLANT MATERIALS OF QUANTITY, SIZE, GENUS, SPECIES, AND VARIETY INDICATED ON PLANS. ALL PLANT MATERIALS AND INSTALLATION SHALL COMPLY WITH RECOMMENDATIONS AND REQUIREMENTS OF ANSI Z60.1 "AMERICAN STANDARD FOR NURSERY STOCK". IF SPECIFIED PLANT MATERIAL IS NOT OBTAINABLE, SUBMIT PROOF OF NON AVAILABILITY TO THE ARCHITECTS, TOGETHER WITH PROPOSAL FOR USE OF EQUIVALENT MATERIAL.
- PROVIDE AND INSTALL ALL PLANTS AS IN ACCORDANCE WITH DETAILS AND CONTRACT SPECIFICATIONS

CONSTRUCTION/INSTALLATION

- LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT ANY PLANTS AND MATERIALS THAT ARE IN AN UNHEALTHY OR UNSIGHTLY CONDITION, AS WELL AS PLANTS AND MATERIALS THAT DO NOT CONFORM TO ANSI Z60.1 "AMERICAN STANDARD FOR NURSERY STOCK"
- LABEL AT LEAST ONE TREE AND ONE SHRUB OF EACH VARIETY AND CALIPER WITH A SECURELY ATTACHED, WATERPROOF TAG BEARING THE DESIGNATION OF BOTANICAL AND COMMON NAME.
- INSTALL LANDSCAPE PLANTINGS AT ENTRANCES/EXITS AND PARKING AREAS ACCORDING TO PLANS SO THAT MATERIALS WILL NOT INTERFERE WITH SIGHT DISTANCES.
- CONTRACTOR IS RESPONSIBLE FOR WATERING ALL PLANT MATERIAL DURING INSTALLATION AND UNTIL FINAL INSPECTION AND ACCEPTANCE BY OWNER. CONTRACTOR SHALL NOTIFY OWNER OF CONDITIONS WHICH AFFECTS THE GUARANTEE.

INSPECTIONS/GUARANTEE

- UPON COMPLETION OF LANDSCAPE INSTALLATION, THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE GENERAL CONTRACTOR WHO WILL VERIFY COMPLETENESS, INCLUDING THE REPLACEMENT OF ALL DEAD PLANT MATERIAL. CONTRACTOR IS RESPONSIBLE FOR SCHEDULING A FINAL INSPECTION BY THE LANDSCAPE ARCHITECT.
- ALL EXTERIOR PLANT MATERIALS SHALL BE GUARANTEED FOR ONE FULL YEAR AFTER DATE OF FINAL INSPECTION AGAINST DEFECTS INCLUDING DEATH AND UNSATISFACTORY GROWTH. DEFECTS RESULTING FROM NEGLECT BY THE OWNER, ABUSE OR DAMAGE BY OTHERS, OR UNUSUAL PHENOMENA OR INCIDENTS WHICH ARE BEYOND THE CONTRACTORS CONTROL ARE NOT THE RESPONSIBILITY OF THE CONTRACTOR
- PLANT MATERIAL QUANTITIES AND SIZES WILL BE INSPECTED FOR COMPLIANCE WITH APPROVED PLANS BY A SITE PLAN REVIEW AGENT OF THE PLANNING DEPARTMENT PRIOR TO THE RELEASE OF THE CERTIFICATE OF OCCUPANCY.
- REMOVE ALL GUY WIRES AND STAKES 12 MONTHS AFTER INSTALLATION.

LANDSCAPING ALONG THE FRONTAGE OF E.C. STREETS
per Sec. 34-870 of the City of Charlottesville Code

STREET	LENGTH	REQUIREMENTS	CALCULATIONS	REQUIRED	PROVIDED
JEFFERSON PARK AVE.	197 LF	1 LG. DEC. TREE/35' WITH INTERSPERSED FLOWERING TREES	(197÷35) = 5.6	6 LARGE TREES	6 LARGE DEC. TREES

LANDSCAPING ALONG INTERIOR STREETS
per Sec. 34-870 of the City of Charlottesville Code

STREET	LENGTH	REQUIREMENTS	CALCULATIONS	REQUIRED	PROVIDED
WASHINGTON AVE.	355 LF	1 LG. DEC. TREE/40'	(355÷40) = 8.88	9 LARGE TREES	9 LARGE DEC. TREES
OBSERVATORY AVE.	381 LF	1 LG. DEC. TREE/40' 1 MED. DEC. TREE/25'	(281÷40) = 7.03 (100÷25) = 4.00	7 LARGE TREES 4 MEDIUM TREES	7 LARGE TREES 4 MEDIUM TREES

TREE COVER CALCULATIONS
per Sec. 34-869 of the City of Charlottesville Code

SITE AREA	REQUIREMENT	CALCULATION	REQUIRED QUANTITY	PROVIDED QUANTITY
2.47 AC (GROSS SITE AREA)	10% COVER	2.47 AC x .1 = 0.247 AC = 10,759.3 SF	10,760 SF	13,109 SF

S-3 SCREENING REQUIREMENTS
** per Sec. 34-871 of the City of Charlottesville Ordinance.*

SCREENING SEGMENT	AREA	LARGE TREES (REQUIRED/PROVIDED)	MEDIUM TREES (REQUIRED/PROVIDED)	UNDERSTORY TREES (REQUIRED/PROVIDED)	EVERGREEN TREES (REQUIRED/PROVIDED)	SHRUBS (REQUIRED/PROVIDED)
SEGMENT #1	1,780 SF	3 / 3	2 / 2	6 / 6	6 / 6	40 / 41

NOTE:
-ALL SITE PLANTINGS OF TREES AND SHRUBS SHALL BE ALLOWED TO REACH, AND BE MAINTAINED AT, MATURE HEIGHT; THE TOPPING OF TREES IS PROHIBITED. SHRUBS AND TREES SHALL BE PRUNED MINIMALLY AND ONLY TO SUPPORT THE OVERALL HEALTH OF THE PLANT.

COMMONWEALTH OF VIRGINIA
Carlin R. Tacey
Lic.No.002163
04/26/2024
LANDSCAPE ARCHITECT

THIS DRAWING PREPARED AT THE
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REVISION DESCRIPTION
FINAL SITE PLAN RESUBMISSION #1
FINAL SITE PLAN RESUBMISSION #2
FINAL SITE PLAN RESUBMISSION #3

FINAL SITE PLAN

DATE
01/19/2024
03/26/2024
04/26/2024

DATE 02/20/2023
DRAWN BY M. RACHNER
DESIGNED BY C. TACEY
CHECKED BY C. TACEY
SCALE N/A

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)
CITY OF CHARLOTTESVILLE, VA
PLANTING NOTES AND DETAILS

JOB NO. 48530
SHEET NO. L3.03

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GROUNDCOVER PLANT SCHEDULE

BIOFILTER PLANTING MIX — 1,453 SF
- ATHYRIUM FILIX-FEMINA / COMMON LADY FERN
- CAREX STRICTA / TUSSOCK SEDGE — 671 EA
- ECHINACEA PURPUREA / CONEFLOWER
- EUPATORIUM DUBIUM 'LITTLE JOE' / LITTLE JOE PYE WEED
- HEUCHERA MACRORHIZA 'AUTUMN BRIDE' / AUTUMN BRIDE CORAL BELLS
- IRIS VIRGINICA / BLUE FLAG IRIS
- JUNCUS EFFUSUS / COMMON RUSH
- OSMUNDA REGALIS / ROYAL FERN

GROUND COVER MIX 1 — 1,494 SF
- HEUCHERA AMERICANA / AMERICAN ALUMROOT — 499 SF
- MATTEUCCIA STRUTHIOPTERIS / OSTRICH FERN — 498 SF
- POLYSTICHUM ACROSTICHOIDES / CHRISTMAS FERN — 498 SF

GROUNDCOVER MIX 2 — 843 SF
- CAREX APPALACHICA / APPALACHIAN SEDGE — 337 SF
- CAREX PENSYLVANICA / PENNSYLVANIA SEDGE — 506 SF

GROUNDCOVER MIX 3 — 600 SF
- CHRYSOGONUM VIRGINIANUM / GREEN-AND-GOLD — 200 SF
- PACHYSANDRA PROCUMBENS / ALLEGHENY SPURGE — 200 SF
- VIOLA SORORIA / WOOLLY BLUE VIOLET — 200 SF

SYNTHETIC TURF — 1,582 SF

PLANT SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	MIN. INSTALLED SIZE	ROOT	CANOPY	CANOPY TOTAL
SMALL FLOWERING TREES								= 13,109SF
	CER CAN	3	CERCIS CANADENSIS	EASTERN REDBUD	1.5" CAL.	B&B	124SF	372SF
	CRA HAW	3	CRATAEGUS CRUS-GALLI 'CRUZAM'	CRUSADER® COCKSPUR HAWTHORN	1.5" CAL.	B&B	184SF	552SF
	HAM VIR	3	HAMAMELIS VIRGINIANA	COMMON WITCH HAZEL	1.5" CAL.	B&B	113SF	339SF
	MAG SWE	10	MAGNOLIA VIRGINIANA	SWEETBAY MAGNOLIA	1.5" CAL.	B&B	113SF	1,130SF = 2,393SF
LARGE DECIDUOUS TREES								
	GYM DIO	5	GYMNOCLADUS DIOICA `ESPRESSO`	KENTUCKY COFFEETREE	2.5" CAL.	B&B	570SF	2,850SF
	LIQ HAP	5	LIQUIDAMBAR STYRACIFLUA 'HAPPDELL'	HAPPIDAZE® SWEET GUM	2.5" CAL.	B&B	249SF	1,245SF
	LIR TUL	1	LIRIODENDRON TULIPIFERA	TULIP POPLAR	2.5" CAL.	B&B	387SF	387SF
	QUE ALB	3	QUERCUS ALBA	WHITE OAK	2.5" CAL.	B&B	243SF	729SF
	QUE PHE	3	QUERCUS PHELLOS	WILLOW OAK	2.5" CAL.	B&B	272SF	816SF
	ULM JEF	8	ULMUS AMERICANA 'JEFFERSON'	JEFFERSON AMERICAN ELM	2.5" CAL.	B&B	397SF	3,176SF = 9,203SF
MEDIUM DECIDUOUS TREES								
	CAT BIG	2	CATALPA BIGNONIOIDES	SOUTHERN CATALPA	2" CAL.	B&B	243SF	486SF
	NYS SYL	5	NYSSA SYLVATICA	TUPELO	2" CAL.	B&B	123SF	615SF = 1,101SF
EVERGREEN TREES								
	ILE AME	2	ILEX OPACA	AMERICAN HOLLY	8` HT, MIN	B&B	86SF	172SF
	JUN EAS	12	JUNIPERUS VIRGINIANA	EASTERN REDCEDAR	6` HT. MIN.	B&B	20SF	240SF = 412SF
SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	MIN. INSTALLED SIZE	ROOT		SPACING
SHRUBS								
	CLE HUM	61	CLETHRA ALNIFOLIA 'HUMMINGBIRD'	HUMMINGBIRD SUMMERSWEET	24" HT./SPRD.	CONTAINER		36" o.c.
	FOT GAR	29	FOTHERGILLA GARDENII	DWARF FOTHERGILLA	24" HT./SPRD.	CONTAINER		36" o.c.
	HYD ANN	25	HYDRANGEA ARBORESCENS 'ANNABELLE'	ANNABELLE HYDRANGEA	24" HT./SPRD.	CONTAINER		48" o.c.
	HYD WEE	30	HYDRANGEA QUERCIFOLIA 'PEE WEE'	PEE WEE OAKLEAF HYDRANGEA	24" HT./SPRD.	CONTAINER		48" o.c.
	ILE HKR	41	ILEX GLABRA 'DENSA'	DENSA INKBERRY HOLLY	24" HT./SPRD.	CONTAINER		48" o.c.
	ILE SHA	67	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY HOLLY	24" HT./SPRD.	CONTAINER		36" o.c.
	ILE VER	61	ILEX VERTICILLATA 'JIM DANDY'	JIM DANDY WINTERBERRY	36" HT./SPRD.	CONTAINER		72" o.c.
	ILE RED	37	ILEX VERTICILLATA 'RED SPRITE'	RED SPRITE WINTERBERRY	24" HT./SPRD.	CONTAINER		36" o.c.
	LIN BEN	29	LINDERA BENZOIN	SPICEBUSH	36" HT./SPRD.	CONTAINER		72" o.c.
	VIB BUL	27	VIBURNUM NUDUM 'BULK'	BRANDYWINE™ VIBURNUM	24" HT./SPRD.	CONTAINER		48" o.c.
	VIB BLA	10	VIBURNUM PRUNIFOLIUM	BLACKHAW VIBURNUM	36" HT./SPRD.	CONTAINER		72" o.c.
GROUND COVERS								
	PAN SHD	314	PANICUM VIRGATUM 'SHENANDOAH'	SHENANDOAH SWITCH GRASS	24" HT./SPRD.	CONTAINER		18" o.c.

COMMONWEALTH OF VIRGINIA
Carlin R. Tacey
Lic.No.002163
04/26/2024
LANDSCAPE ARCHITECT

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REVISION DESCRIPTION
- FINAL SITE PLAN RESUBMISSION # 1 — 01/19/2024
- FINAL SITE PLAN RESUBMISSION # 2 — 03/25/2024
- FINAL SITE PLAN RESUBMISSION # 3 — 04/26/2024

FINAL SITE PLAN

DATE: 02/20/2023
DRAWN BY: M. RACHNER
DESIGNED BY: C. TACEY
CHECKED BY: C. TACEY
SCALE: N/A

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)

CITY OF CHARLOTTESVILLE, VA

PLANTING SCHEDULE

JOB NO. 48530

SHEET NO. L3.04

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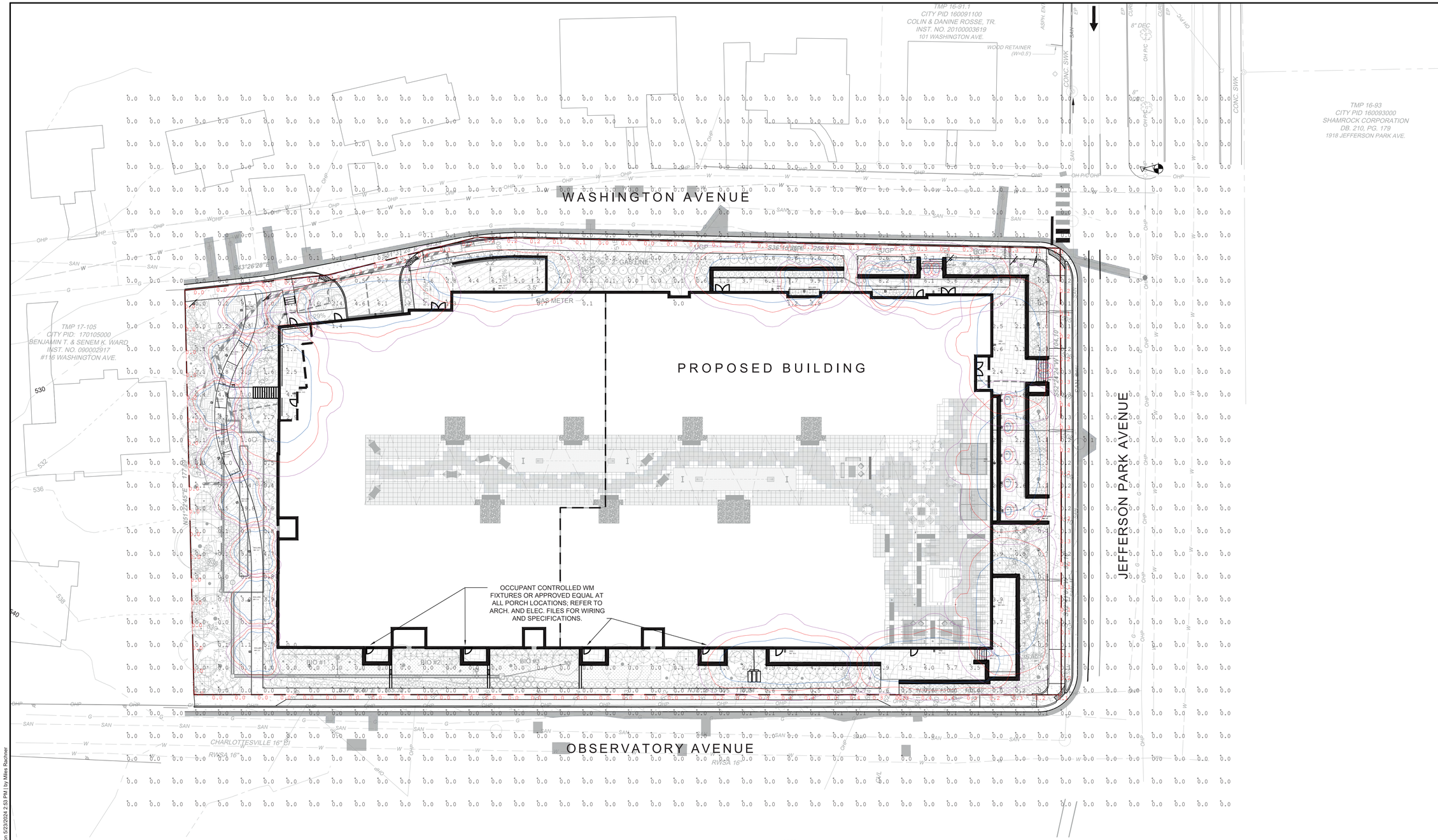


Luminaire Schedule						
Qty	Label	Symbol	LLF	Luminaire Lumens	[MANUFAC]	Description
11	BOLLARD		0.850	2232	LIGMAN	LI-10021-T4-W30
12	STEP LIGHT		0.850	117	LIGMAN	LE-40611-A-W30 Rev_2
6	WM2		0.850	4192	LIGMAN	LI-30011-T2-W30
4	WM3		0.850	4093	LIGMAN	LI-30011-T3-W30

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
PROPERTY LINE	Illuminance	Fc	0.15	0.4	0.0	N.A.	N.A.

Prepared by:
LIGHTING VIRGINIA CENTRAL
400G-2 Southlake Blvd.
Richmond, VA 23236
Tel: 804-379-7777
www.lightingvirginia.com

MH = mounting height in FEET

NOTE: FINAL BUILDING MOUNTED SITE LIGHTING LOCATIONS AND PHOTOMETRICS TO CORRESPOND WITH ARCHITECTURAL DRAWINGS.

REFER TO ELECTRICAL DRAWINGS FOR SITE ELECTRICAL REQUIREMENTS

NOTES:

1. NO ALTERATIONS OR MODIFICATIONS SHALL BE MADE TO THIS PLAN WITHOUT THE PERMISSION OF LIGHTING VIRGINIA CENTRAL, ADAMS PARNELL, LLC.

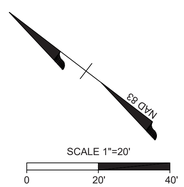
2. THE OUTPUT ON THIS PHOTOMETRIC LAYOUT IS SPECIFIC TO THE MANUFACTURER AND CATALOG NUMBERS LISTED IN THE LUMINAIRE SCHEDULE. SUBSTITUTIONS OR DEVIATIONS FROM THIS PLAN MAY INCUR SIGNIFICANTLY DIFFERENT RESULTS. ANY SUBSTITUTIONS MUST RECEIVE ENGINEER AND ARCHITECT APPROVAL. REVIEW COSTS, REWORKED PHOTOMETRIC LAYOUTS, PRODUCT SUBMITTALS AND A FULL SET OF ITL REPORTS WILL SOLELY BE THE RESPONSIBILITY OF ANY CONTRACTING FIRM MAKING A SUBSTITUTION, AND MUST COMPLY WITH DESIGN CRITERIA AND WITH ANY APPLICABLE JURISDICTIONAL CODES.

3. SITE DETAILS PROVIDED HEREON ARE REPRODUCED ONLY AS A VISUALIZATION AID. FIELD DEVIATIONS MAY SIGNIFICANTLY AFFECT PREDICTED PERFORMANCE. PRIOR TO INSTALLATION, CRITICAL SITE INFORMATION (POLE LOCATIONS, ORIENTATION, MOUNTING HEIGHT, ETC.) SHOULD BE COORDINATED WITH THE CONTRACTOR AND/OR SPECIFIER RESPONSIBLE FOR THE PROJECT.

4. LUMINAIRE DATA IS TESTED TO INDUSTRY STANDARDS UNDER LABORATORY CONDITIONS AND SUPPLIED BY OTHERS TO LIGHTING VIRGINIA. OPERATING VOLTAGE AND NORMAL MANUFACTURING TOLERANCES OF LAMP, BALLAST, AND LUMINAIRE MAY AFFECT FIELD RESULTS.

5. CONFORMANCE TO FACILITY CODE AND OTHER LOCAL REQUIREMENTS IS THE RESPONSIBILITY OF THE OWNER AND/OR THE OWNER'S REPRESENTATIVE.

6. CHECK GRAPHIC SCALE. DOCUMENTS PRINTED OR PLOTTED FROM ELECTRONIC FILES MAY OCCUR AT OTHER THAN THE DESIRED OR ASSUMED GRAPHIC SCALES. IT IS THE RESPONSIBILITY OF THE RECIPIENT TO VERIFY THAT THE PRINTED OR PLOTTED-TO-SCALE DRAWING IS PRINTED TO SCALE.



COMMONWEALTH OF VIRGINIA
Carlin R. Tacey
Lic.No.002163
04/26/2024
LANDSCAPE ARCHITECT

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04/26/2024	FINAL SITE PLAN RESUBMISSION #3

FINAL
SITE PLAN

DATE
02/20/2023

DRAWN BY
M. RACHNER

DESIGNED BY
C. TACEY

CHECKED BY
C. TACEY

SCALE
1" = 20'

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)

CITY OF CHARLOTTESVILLE, VA

SITE PHOTOMETRICS PLAN

JOB NO.
48530

SHEET NO.
L4.00

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Date: Apr 10, 2024 Page 1/1

Transmittal

Lighting Virginia-Central
400 G2 Southlake Blvd.
Richmond VA 23236
Phone: (804) 379-7777
From: Mary Tipton

Project **JPA SITE/ ROOFTOP**
Quote# LV - CENTRAL24-41944
Location
Contact:

ATTACHED WE ARE SENDING YOU 1 COPY OF THE FOLLOWING ITEM:

- ☐ Drawings
- ☐ Prints
- ☐ Plans
- ☐ Specifications
- ☐ Information
- ☐ Submittals
- Other:

THESE ARE TRANSMITTED FOR:

- ☐ Prior Approval
- ☐ Approval
- ☐ Approval as Submitted
- ☐ Approval as Noted
- ☐ Resubmittal for Approval
- ☐ Corrections
- ☐ Your Use
- ☐ Review and Comment
- ☐ Record
- Bids due on:
- Other:

Type	MFG	Part
BOLLARD	Ligman Lighting USA	ULI-10021-29W-T4-W30-XX-120/277V
STEP LIGHT	Ligman Lighting USA	ULE-40611-13.5W-A-W30-XX-120/277V
WALL MOUNT	Ligman Lighting USA	ULI-30011-37W-T4-W30-XX-120/277V
WM2	Ligman Lighting USA	ULI-30011-37W-T2-W30-XX-120/277V
A	Lightcraft	(XX)BK-E26/ BK-LEAD(XX)/ (XX)LED-BK-S14-1-120-FIL/ XX(SHADE)/ ACCESSORIES(XX)
B	US Architectural	AXMRB36"/PLED-V-SQ-W/12LED-350MA/30K/UNV/XXX/CA
C	Kim Lighting	EL807/3L3KUV/XX
WM	Ligman Lighting USA	ULEW-30001-5.5W-T3-W30-XX-120/277V

Submitted by Lighting Virginia-Central

Job Name: JPA SITE/ ROOFTOP

Catalog Number: ULI-10021-29W-T4-W30-XX-120/277V
Notes:

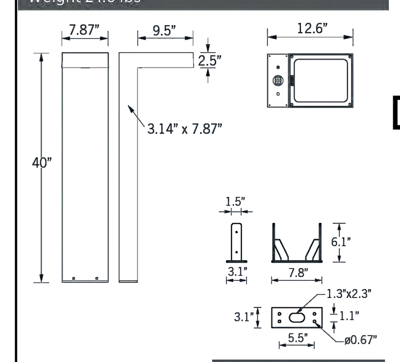
Type: **BOLLARD**
LV - CENTRAL24-41944

ULI-10021

Light Linear PT 1 Single Head Bollard

microVos TECHNOLOGY
LIGMAN LIGHTING USA

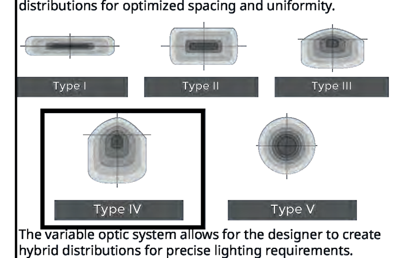
29w LED 3169 Lumens
IP65 • Suitable For Wet Locations
IK08 • Impact Resistant (Vandal Resistant)
Weight 24.6 lbs



Mounting Detail

microVos TECHNOLOGY

Ligman's micro Variable Optical System provides the ability to interchange, mix & rotate optics to provide specific light distributions for optimized spacing and uniformity.



The variable optic system allows for the designer to create hybrid distributions for precise lighting requirements.

HYBRID
TYPE I & TYPE IV

Construction

Aluminum
Less than 0.1% copper content – Marine Grade 6060 extruded & LM6 Aluminum High Pressure die casting provides excellent mechanical strength , clean detailed product lines and excellent heat dissipation.

Pre paint
8 step degrease and phosphate process that includes deoxidizing and etching as well as a zinc and nickel phosphate process before product painting.

Memory Retentive -Silicon Gasket
Provided with special injection molded "fit for purpose" long life high temperature memory retentive silicon gaskets. Maintains the gaskets exact profile and seal over years of use and compression.

Thermal management
LM6 Aluminum is used for its excellent mechanical strength and thermal dissipation properties in low and high ambient temperatures. The superior thermal heat sink design by Ligman used in conjunction with the driver, controls thermals below critical temperature range to ensure maximum luminous flux output, as well as providing long LED service life and ensuring less than 10% lumen depreciation at 50,000 hours.

Surge Suppression
Standard 10kv surge suppressor provided with all fixtures.

BUG Rating
B1 - U0 - G1

Finishing
All Ligman products go through an extensive finishing process that includes fettling to improve paint adherence.

Paint
UV Stabilized 4.9Mil thick powder coat paint and baked at 200 Deg C. This process ensures that Ligman products can withstand harsh environments. Rated for use in natatoriums.

Inspired by Nature Finishes
The Inspired by nature Finishing is a unique system of decorative powder coating. Our metal decoration process can easily transform the appearance of metal or aluminum product into a wood grain finish.

This patented technology enables the simulation of wood grain, and even marble or granite finish through the use of decorative powder coating.

The wood grain finish is so realistic that it's almost undistinguishable from real wood, even from a close visual inspection. The system of coating permeates the entire thickness of the coat and as a result, the coating cannot be removed by normal rubbing, chipping, or scratching.

The Coating Process
After pre-treatment the prepared parts are powder coated with a specially formulated polyurethane powder. This powder provides protection against wear, abrasion, impact and corrosion and acts as the relief base color for the finalized metal decoration.

The component is then wrapped with a sheet of non-porous film with the selected decoration pattern printed on it using special high temperature inks.

This printed film transfer is vacuum-sealed to the surface for a complete thermo print and then transferred into a customized oven. The oven transforms the ink into different forms within the paint layer before it becomes solid. Finally, the film is removed, and a vivid timber look on aluminum remains.

Wood grain coating can create beautiful wood-looking products of any sort. There are over 300 combinations of designs currently in use. Wood grains can be made with different colors, designs, etc.

Our powder coatings are certified for indoor and outdoor applications and are backed by a comprehensive warranty. These coatings rise to the highest conceivable standard of performance excellence and design innovation.

Added Benefits
• Resistance to salt-acid room, accelerated aging
• Boiling water, lime and condensed water resistant
• Anti-Graffiti, Anti-Slip, Anti-Microbial, Anti-Scratch
• Super durable (UV resistant)
• TGIC free (non-toxic)

Hardware
Provided Hardware is Marine grade 316 Stainless steel.

Anti Seize Screw Holes
Tapped holes are infused with a special anti seize compound designed to prevent seizure of threaded connections, due to electrolysis from heat, corrosive atmospheres and moisture.

Crystal Clear Low Iron Glass Lens
Provided with tempered, impact resistant crystal clear low iron glass ensuring no green glass tinge.

Optics & LED
Precise optic design provides exceptional light control and precise distribution of light.
LED CRI > 80

Lumen - Maintenance Life
L80 /B10 at 50,000 hours (This means that at least 90% of the LED still achieve 80% of their original flux)

Area distribution bollard-integrated projectors. Stylish but technically precise area lighting solutions as part of a large flexible family.

Light Linear PT Bollard is an elegant minimalistic bollard that is suitable for both modern and classic architecture. Ideal for creating visual guidance with exceptional visual comfort. The dual sealed optical chamber with integrated heat sinks houses a range of field interchangeable optically controlled LED's, providing Type II, III, IV & V distribution, as well as variations of this for precise light distribution requirements.
An example of this, is using a combination of Type II and Type IV distribution optics inside the same fixture.
This product range is available in 29w and 55w options, as single & double head styles.

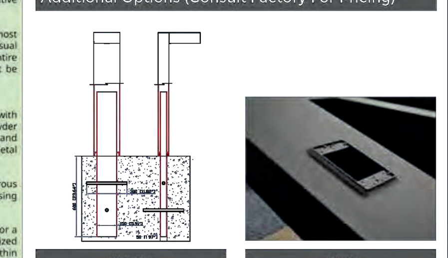
Customer specific wattages can be provided, contact the factory for more information.

Bollards can be provided with GFCI boxes positioned to specific heights specified by the customer.
Internal house side shields are available as an option.

To meet International Dark Sky criteria, 3000k or warmer LEDs must be selected.

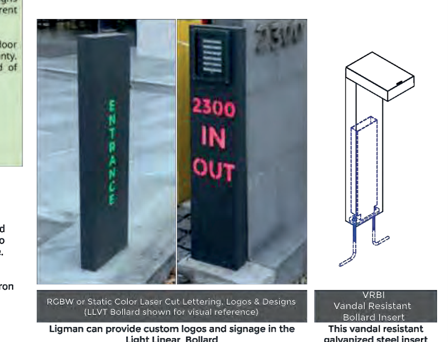
Optional: Security Bollard:
The Light Linear Bollard is available as a traffic rated security bollard.
This security bollard provides restraint of vehicular traffic in unauthorized areas.
Impact calculations shows this bollard will stop a 5,500lb/2.75 tons vehicle, travelling at 30mph.
The galvanized pole must be filled with concrete up to the waterproof driver housing to provide a solid concrete barrier.

Additional Options (Consult Factory For Pricing)



A13391
Security Bollard

GFCI
GFCI Box



RGBW or Static Color Laser Cut Lettering, Logos & Designs (LLVT Bollard shown for visual reference)
Ligman can provide custom logos and signage in the Light Linear Bollard
The images above show this feature in the Light Linear VT Bollard

VRBI
Vandal Resistant Bollard Insert
This vandal resistant galvanized steel insert provides additional support and rigidity in areas with high pedestrian traffic.

Ligman Lighting USA reserves the right to change specifications without prior notice, please contact factory for latest information. Due to the continual improvements in LED technology data and components may change without notice.

Submitted by Lighting Virginia-Central

Job Name: JPA SITE/ ROOFTOP

Catalog Number: ULI-10021-29W-T4-W30-XX-120/277V
Notes:

Type: **BOLLARD**
LV - CENTRAL24-41944

ULI-10021

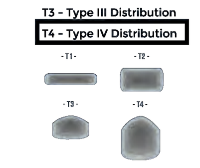
Light Linear PT 1 Single Head Bollard

microVos TECHNOLOGY
LIGMAN LIGHTING USA

PROJECT | DATE
QUANTITY | TYPE | NOTE

ORDERING EXAMPLE || ULI - 10021 - 29w - T2 - W30 - 02 - 120/277v - Options

ULI-10021	29W	T4	W30	XX	120/277V
	LAMP	BEAM	LED COLOR	FINISH COLOR	VOLTAGE
	29w LED 3169 Lumens	T1 - Type I Distribution T2 - Type II Distribution T3 - Type III Distribution T4 - Type IV Distribution	W27 - 2700K W30 - 3000K W35 - 3500K W40 - 4000K	01 - BLACK RAL 9011 02 - DARK GREY RAL 7043 03 - WHITE RAL 9003 04 - METALLIC SILVER RAL 9006 05 - MATTE SILVER RAL 9006 06 - LIGMAN BRONZE 07 - CUSTOM RAL	120/277v Other - Specify



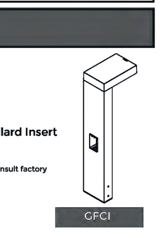
INSPIRED BY NATURE FINISHES
SW01 - OAK FINISH
SW02 - WALNUT FINISH
SW03- PINE FINISH
DF - DOUGLAS FIR FINISH
CW - CHERRY WOOD FINISH
NW - NATIONAL WALNUT FINISH
SU01 - CONCRETE FINISH
SU02 - SOFTSCAPE FINISH
SU03 - STONE FINISH
SU04 - CORTEN FINISH

THERE IS AN ADDITIONAL COST FOR THESE FINISHES

SELECT FROM STD COLORS

ADDITIONAL OPTIONS

NAT - Natatorium Rated	HSS - House Side Shield
F - Frosted Lens	A13391 - Security Bollard
HGT- Custom Bollard Height	EMG - Emergency Pack
DIM - 0-10v Dimming	VRBI - Vandal Resistant Bollard Insert
AMB - Turtle Friendly Amber LED	GFCI - GFCI Box (Standard location on back of bollard, consult factory for different location)



LASER CUT LETTERING (Cannot be used in conjunction with security bollard)

RGBW - Color Changing RGBW
SC - Static Color (Choose Color e.g Red, Blue etc.)

WORDS FRONT WORDS BACK

CONSULT FACTORY FOR CUSTOM DESIGNS, LOGOS AND OTHER SPECIAL REQUIREMENTS
FACTORY DRAWINGS WILL BE PROVIDED PRIOR TO PRODUCTION

More Custom Finishes Available Upon Request
Consult factory for pricing and lead times

Oak, Cherry, Beech, Carbon, Walnut, Chestnut, Bamboo, Galvanized, Pine, Mahogany, Birch, Steel

Example: Inspired by Nature Finish

Ligman Lighting USA reserves the right to change specifications without prior notice, please contact factory for latest information. Due to the continual improvements in LED technology data and components may change without notice.

Submitted by Lighting Virginia-Central

Job Name: JPA SITE/ ROOFTOP

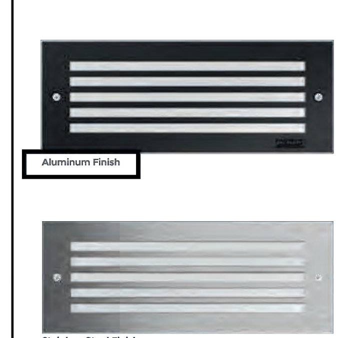
Catalog Number: ULE-40611-13.5W-A-W30-XX-120/277V
Notes:

Type: **STEP LIGHT**
LV - CENTRAL24-41944

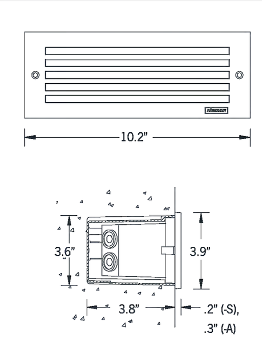
ULE-40611

Legend 3 Recessed

LIGMAN LIGHTING USA



13.5w LED 420/957 Lumens
IP65 • Suitable For Wet Locations
IK07 • Impact Resistant (Vandal Resistant)
Weight 4.1 lbs



Construction

Aluminum Casting
Less than 0.1% copper content – Marine Grade 6060 extruded & LM6 Aluminum High Pressure die casting provides excellent mechanical strength , clean detailed product lines and excellent heat dissipation.

Pre paint
8 step degrease and phosphate process that includes deoxidizing and etching as well as a zinc and nickel phosphate process before product painting.

Memory Retentive -Silicon Gasket
Provided with special injection molded "fit for purpose" long life high temperature memory retentive silicon gaskets. Maintains the gaskets exact profile and seal over years of use and compression.

Thermal management
LM6 Aluminum is used for its excellent mechanical strength and thermal dissipation properties in low and high ambient temperatures. The superior thermal heat sink design by Ligman used in conjunction with the driver, controls thermals below critical temperature range to ensure maximum luminous flux output, as well as providing long LED service life and ensuring less than 10% lumen depreciation at 50,000 hours.

BUG Rating
B0 - U2 - G1

Surge Suppression
Standard 10kv surge suppressor provided with all fixtures.

Finishing
All Ligman products go through an extensive finishing process that includes fettling to improve paint adherence.

Paint
UV Stabilized 4.9Mil thick powder coat paint and baked at 200 Deg C. This process ensures that Ligman products can withstand harsh environments. Rated for use in natatoriums.

Inspired by Nature Finishes
The Inspired by nature Finishing is a unique system of decorative powder coating. Our metal decoration process can easily transform the appearance of metal or aluminum product into a wood grain finish.

This patented technology enables the simulation of wood grain, and even marble or granite finish through the use of decorative powder coating.

The wood grain finish is so realistic that it's almost undistinguishable from real wood, even from a close visual inspection. The system of coating permeates the entire thickness of the coat and as a result, the coating cannot be removed by normal rubbing, chipping, or scratching.

The Coating Process
After pre-treatment the prepared parts are powder coated with a specially formulated polyurethane powder. This powder provides protection against wear, abrasion, impact and corrosion and acts as the relief base color for the finalized metal decoration.

The component is then wrapped with a sheet of non-porous film with the selected decoration pattern printed on it using special high temperature inks.

This printed film transfer is vacuum-sealed to the surface for a complete thermo print and then transferred into a customized oven. The oven transforms the ink into different forms within the paint layer before it becomes solid. Finally, the film is removed, and a vivid timber look on aluminum remains.

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Our powder coatings are certified for indoor and outdoor applications and are backed by a comprehensive warranty. These coatings rise to the highest conceivable standard of performance excellence and design innovation.

Added Benefits
• Resistance to salt-acid room, accelerated aging
• Boiling water, lime and condensed water resistant
• Anti-Graffiti, Anti-Slip, Anti-Microbial, Anti-Scratch
• Super durable (UV restant)
• TGIC free (non-toxic)

Hardware
Provided Hardware is Marine grade 316 Stainless steel.

Anti Seize Screw Holes
Tapped holes are infused with a special anti seize compound designed to prevent seizure of threaded connections, due to electrolysis from heat, corrosive atmospheres and moisture.

High Impact Acrylic Lens
Manufactured with Ultra High Impact, Naturally UV Stabilized Injection Molded Acrylic.

Optics & LED
Precise optic design provides exceptional light control and precise distribution of light.
LED CRI > 80

Lumen - Maintenance Life
L80 /B10 at 50,000 hours (This means that at least 90% of the LED still achieve 80% of their original flux)

Rectangular time-honoured wall recessed accent range. Efficient, flexible and tough family in the classic brick-light proportions.

A range of vandal resistant rectangular wall recessed luminaires. Suitable for indoor or outdoor applications in residential, shopping and pedestrian areas as a decorative guide light. Available in a variety of frame and LED light source options, including turtle friendly amber LED.

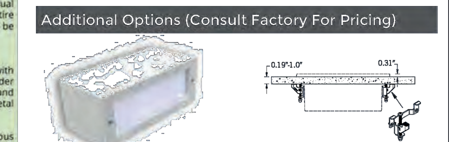
The Legend 1 and 2 is available with powdercoated aluminum or stainless steel frames. This luminaire is provided with a powdercoated high pressure die-cast aluminum back box and can be pre shipped to the jobsite for concrete pour or masonry applications.

As an option, this luminaire can be provided with a special wall clamp bracket that provides a clamping option when installing in drywall or wood panel walls.

Available in amber and white 2700K, 3000K, 3500K and 4000K. Consult factory for additional colors. The Legend steplight range can be provided with colored lenses to provide a decorative architectural touch to the building, please see options.

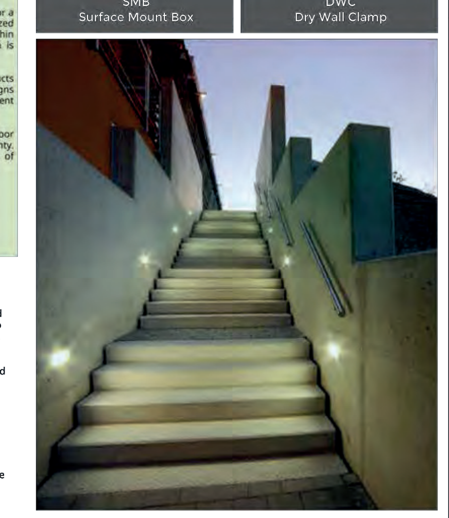
All Ligman fixtures can be manufactured using a special pre-treatment and coating process that ensures the fixture can be installed in natatoriums as well as environments with high concentrations of chlorine or salt and still maintain the 5 year warranty. For this natatorium rated process please specify NAT in options. fixture can be installed in natatoriums as well as environments with high concentrations of chlorine or salt and still maintain the 5 year warranty. For this natatorium rated process please specify NAT in options.

Additional Options (Consult Factory For Pricing)



SMB
Surface Mount Box

DWC
Dry Wall Clamp



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Submitted by Lighting Virginia-Central

Job Name: JPA SITE/ ROOFTOP

Catalog Number: ULE-40611-13.5W-A-W30-XX-120/277V
Notes:

Type: **STEP LIGHT**
LV - CENTRAL24-41944

ULE-40611

Legend 3 Recessed

LIGMAN LIGHTING USA

PROJECT | DATE
QUANTITY | TYPE | NOTE

ORDERING EXAMPLE || ULE-40611 - 13.5w - A - W30 - 02 - 120/277V

ULE-40611	13.5W	A	W30	XX	120/277V
	LAMP	FRAME	LED COLOR	FINISH COLOR	VOLTAGE
	13.5w LED 420 Lumens [A] 957 Lumens [S]	A - Aluminum - CHOOSE FINISH COLOR S - Stainless Steel NO FINISH COLOR	W27 - 2700K W30 - 3000K W35 - 3500K W40 - 4000K	01 - BLACK RAL 9011 02 - DARK GREY RAL 7043 03 - WHITE RAL 9003 04 - METALLIC SILVER RAL 9006 05 - MATTE SILVER RAL 9006 06 - LIGMAN BRONZE 07 - CUSTOM RAL	120/277v Other - Specify

INSPIRED BY NATURE FINISHES
SW01 - OAK FINISH
SW02 - WALNUT FINISH
SW03- PINE FINISH
DF - DOUGLAS FIR FINISH
CW - CHERRY WOOD FINISH
NW - NATIONAL WALNUT FINISH
SU01 - CONCRETE FINISH
SU02 - SOFTSCAPE FINISH
SU03 - STONE FINISH
SU04 - CORTEN FINISH

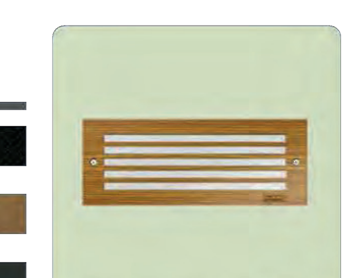
SELECT FROM STD COLORS

ADDITIONAL OPTIONS

DIM - 0-10v Dimming	COLOR FILTERS
NAT - Natatorium Rated	RD - Red Lens
AM - Turtle Friendly Amber LED	BL - Blue Lens
SMB - Surface Mount Box	AM - Amber Lens
C - Clear Lens	GR - Green Lens
DWC - Dry Wall Clamp	

More Custom Finishes Available Upon Request
Consult factory for pricing and lead times

Oak, Cherry, Beech, Carbon, Walnut, Chestnut, Bamboo, Galvanized, Pine, Mahogany, Birch, Steel



Example: Inspired by Nature Finish

Ligman Lighting USA reserves the right to change specifications without prior notice, please contact factory for latest information. Due to the continual improvements in LED technology data and components may change without notice.

COMMONWEALTH OF VIRGINIA
Carlin R. Tacey
Lic.No.002163
04/26/2024
LANDSCAPE ARCHITECT

THIS DRAWING PREPARED AT THE
CHARLOTTESVILLE OFFICE
608 Preston Avenue, Suite 200 | Charlottesville, VA 22903
TEL 434.295.5624 FAX 434.295.8317 www.timmons.com

DATE	REVISION DESCRIPTION
01/19/2024	FINAL SITE PLAN RESUBMISSION #1
03/22/2024	FINAL SITE PLAN RESUBMISSION #2
04/26/2024	FINAL SITE PLAN RESUBMISSION #3

FINAL SITE PLAN

DATE 02/20/2023
DRAWN BY M. RACHNER
DESIGNED BY C. TACEY
CHECKED BY C. TACEY
SCALE N/A

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)

CITY OF CHARLOTTESVILLE, VA

SITE LIGHTING CUT SHEETS

JOB NO. 48530
SHEET NO. L4.01

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S:\103\48530-JPA_Aspen_Heights\DWG\Sheet\CD\48530-103-L4.01-LIGHT-NTDT.dwg | Plotted on 5/23/2024 2:53 PM | by Miles Rachner

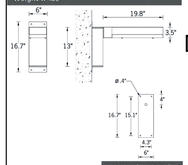
Submitted by Lighting Virginia-Central

Job Name:	Catalog Number:	Type:
JPA SITE/ ROOFTOP	ULI-30011-37W-T4-W30-XX-120/277V Notes:	WALL MOUNT LV - CENTRAL24-41944

ULI-30011
Light Linear PT 12 Surface

microVos TECHNOLOGY — LIGMAN LIGHTING USA

37w LED 4601 Lumens
IP65 • Suitable For Wet Locations
IK08 • Impact Resistant (Vandal Resistant)
Weight 17 lbs



Mounting Detail

Construction

Aluminum
Less than 0.1% copper content - Marine Grade 6060 extruded & LM6 Aluminum High Pressure die casting provides excellent mechanical strength, clean detailed product lines and excellent heat dissipation.

Pre paint
8 step degrease and phosphate process that includes deoxidizing and etching as well as a zinc and nickel phosphate process before product painting.

Memory Retentive ,Silicon Gasket
Provided with special injection molded "fit for purpose" long life high temperature memory retentive silicon gaskets. Maintains the gaskets exact profile and seal over years of use and compression.

Thermal management
LM6 Aluminum is used for its excellent mechanical strength and thermal dissipation properties in low and high ambient temperatures. The superior thermal heat sink design by Ligman used in conjunction with the driver, controls thermals below critical temperature range to ensure maximum luminous flux output, as well as providing long LED service life and ensuring less than 10% lumen depreciation at 50,000 hours.

Surge Suppression
Standard 10kv surge suppressor provided with all fixtures.

BUG Rating
B1 - U0 - G1

Finishing
All Ligman products go through an extensive finishing process that includes fettling to improve paint adherence.

Paint
UV Stabilized 4.9Mil thick powder coat paint and baked at 200 Deg C. This process ensures that Ligman products can withstand harsh environments. Rated for use in natatoriums.

Inspired by Nature Finishes
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This patented technology enables the simulation of wood grain, and even marble or granite finish through the use of decorative powder coating.

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The Coating Process
After pre-treatment the prepared parts are powder coated with a specially formulated polyurethane powder. This powder provides protection against wear, abrasion, impact and corrosion and acts as the relief base color for the finalized metal decoration.

The component is then wrapped with a sheet of non-porous film with the selected decoration pattern printed on it using special high temperature inks.

This primed film transfer is vacuum-sealed to the surface for a complete thermo print and then transferred into a customized oven. The oven transforms the ink into different forms within the paint layer before it becomes solid. Finally, the film is removed, and a vivid timber look on aluminum remains.

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Added Benefits
- Resistance to salt-acid rosin, accelerated aging
- Boiling water, lime and condensed water resistant
- Anti-Graffiti, Anti-Slip, Anti-Microbial, Anti-Scratch
- Super durable (UV resistant)
- TGIC free (non-toxic)

Hardware
Provided Hardware is Marine grade 316 Stainless steel.

Anti Seize Screw Holes
Tapped holes are infused with a special anti seize compound designed to prevent seizure of threaded connections, due to electrolysis from heat, corrosive atmospheres and moisture.

Crystal Clear Low Iron Glass Lens
Provided with tempered, impact resistant crystal clear low iron glass ensuring no green glass tinge.

Optics & LED
Precise optic design provides exceptional light control and precise distribution of light.
LED CRI > 80

Lumen - Maintenance Life
L80 /B10 at 50,000 hours (This means that at least 90% of the LED still achieve 80% of their original flux)

Area distribution wall-mounted projectors. Stylish but technically precise area lighting solutions as part of a large flexible family.

Light Linear PT wall light is an elegant wall mount fixture suitable for both modern and classic architecture. Ideal for creating visual guidance, with exceptional visual comfort.

The dual sealed optical chamber with integrated heat sinks houses a range of field interchangeable optically controlled LED's, providing Type II, III, IV & V distribution, as well as variations of this for precise light distribution requirements. An example of this, is using a combination of Type II and Type IV distribution optics inside the same fixture.

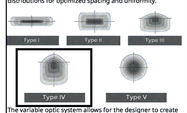
This fixture is unique as it has a IP68 driver housing container that is housed within the IP65 rated light fixture.

This product range is complemented with high performance optics in the bollard and streetlight luminaires, to provide a consistent range of design aesthetics for any project.

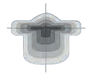
To meet International Dark Sky criteria, 3000k or warmer LEDs must be selected and luminaire fix mounted (+/- 15° allowable to permit leveling).

microVos TECHNOLOGY

Ligman's micro Variable Optical System provides the ability to interchange, mix & rotate optics to provide specific light distributions for optimized spacing and uniformity.

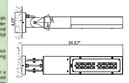


The variable optic system allows for the designer to create hybrid distributions for precise lighting requirements.



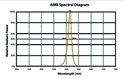
HYBRID
TYPE I & TYPE IV

Additional Options (Consult Factory For Pricing)



SAM
Small Adjustable Arm

CITY OF FLAGSTAFF & TURTLE FRIENDLY COMPLIANT



Narrow-Spectrum Amber LEDs
Peak wavelength between 585 & 595 nanometers and a full width of 50% power no greater than 15 nanometers.

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Submitted On: Apr 10, 2024 1/2 Index Page

Submitted by Lighting Virginia-Central

Job Name:	Catalog Number:	Type:
JPA SITE/ ROOFTOP	ULI-30011-37W-T4-W30-XX-120/277V Notes:	WALL MOUNT LV - CENTRAL24-41944

ULI-30011
Light Linear PT 12 Surface

microVos TECHNOLOGY — LIGMAN LIGHTING USA

PROJECT		DATE	
QUANTITY		TYPE		NOTE	

ORDERING EXAMPLE || ULI - 30011 - 37w - T2 - W30 - 02 - 120/277v - Options

ULI-30011	37W	T4	W30	XX	120/277V
	LAMP	BEAM	LED COLOR	FINISH COLOR	VOLTAGE
	37w LED 4601 Lumens	T1 - Type I Distribution T2 - Type II Distribution T3 - Type III Distribution T4 - Type IV Distribution	W27 - 2700K W30 - 3000K W35 - 3500K W40 - 4000K	01 - BLACK RAL 9011 02 - DARK GREY RAL 7043 03 - WHITE RAL 9003 04 - METALLIC SILVER RAL 9006 05 - MATTE SILVER RAL 9006 06 - LIGMAN BRONZE 07 - CUSTOM RAL INSPIRED BY NATURE FINISHES SW01 - OAK FINISH SW02 - WALNUT FINISH SW03- PINE FINISH DF - DOUGLAS FIR FINISH CW - CHERRY WOOD FINISH NW - NATIONAL WALNUT FINISH SU01 - CONCRETE FINISH SU02 - SOFTSCAPE FINISH SU03 - STONE FINISH SU04 - CORTEN FINISH THERE IS AN ADDITIONAL COST FOR THESE FINISHES	120/277v Other - Specify

ADDITIONAL OPTIONS

NAT - Natatorium Rated
F - Frosted Lens
AMB - Turtle Friendly Amber LED

SELECT FROM STD COLORS

More Custom Finishes Available Upon Request
Consult factory for pricing and lead times

Example: Inspired by Nature Finish

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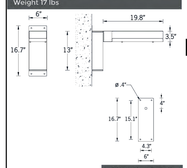
microVos TECHNOLOGY — LIGMAN LIGHTING USA

37w LED 4601 Lumens
IP65 • Suitable For Wet Locations
IK08 • Impact Resistant (Vandal Resistant)
Weight 17 lbs



Mounting Detail

Construction

Aluminum
Less than 0.1% copper content - Marine Grade 6060 extruded & LM6 Aluminum High Pressure die casting provides excellent mechanical strength, clean detailed product lines and excellent heat dissipation.

Pre paint
8 step degrease and phosphate process that includes deoxidizing and etching as well as a zinc and nickel phosphate process before product painting.

Memory Retentive ,Silicon Gasket
Provided with special injection molded "fit for purpose" long life high temperature memory retentive silicon gaskets. Maintains the gaskets exact profile and seal over years of use and compression.

Thermal management
LM6 Aluminum is used for its excellent mechanical strength and thermal dissipation properties in low and high ambient temperatures. The superior thermal heat sink design by Ligman used in conjunction with the driver, controls thermals below critical temperature range to ensure maximum luminous flux output, as well as providing long LED service life and ensuring less than 10% lumen depreciation at 50,000 hours.

Surge Suppression
Standard 10kv surge suppressor provided with all fixtures.

BUG Rating
B1 - U0 - G1

Finishing
All Ligman products go through an extensive finishing process that includes fettling to improve paint adherence.

Paint
UV Stabilized 4.9Mil thick powder coat paint and baked at 200 Deg C. This process ensures that Ligman products can withstand harsh environments. Rated for use in natatoriums.

Inspired by Nature Finishes
The Inspired by nature Finishing is a unique system of decorative powder coating. Our metal decoration process can easily transform the appearance of metal or aluminum product into a wood grain finish.

This patented technology enables the simulation of wood grain, and even marble or granite finish through the use of decorative powder coating.

The wood grain finish is so realistic that it's almost undistinguishable from real wood, even from a close visual inspection. The system of coating permeates the entire thickness of the coat and as a result, the coating cannot be removed by normal rubbing, chipping, or scratching.

The Coating Process
After pre-treatment the prepared parts are powder coated with a specially formulated polyurethane powder. This powder provides protection against wear, abrasion, impact and corrosion and acts as the relief base color for the finalized metal decoration.

The component is then wrapped with a sheet of non-porous film with the selected decoration pattern printed on it using special high temperature inks.

This primed film transfer is vacuum-sealed to the surface for a complete thermo print and then transferred into a customized oven. The oven transforms the ink into different forms within the paint layer before it becomes solid. Finally, the film is removed, and a vivid timber look on aluminum remains.

Wood grain coating can create beautiful wood-looking products of any sort. There are over 300 combinations of designs currently in use. Wood grains can be made with different colors, designs, etc.

Our powder coatings are certified for indoor and outdoor applications and are backed by a comprehensive warranty. These coatings rise to the highest conceivable standard of performance excellence and design innovation.

Added Benefits
- Resistance to salt-acid rosin, accelerated aging
- Boiling water, lime and condensed water resistant
- Anti-Graffiti, Anti-Slip, Anti-Microbial, Anti-Scratch
- Super durable (UV resistant)
- TGIC free (non-toxic)

Hardware
Provided Hardware is Marine grade 316 Stainless steel.

Anti Seize Screw Holes
Tapped holes are infused with a special anti seize compound designed to prevent seizure of threaded connections, due to electrolysis from heat, corrosive atmospheres and moisture.

Crystal Clear Low Iron Glass Lens
Provided with tempered, impact resistant crystal clear low iron glass ensuring no green glass tinge.

Optics & LED
Precise optic design provides exceptional light control and precise distribution of light.
LED CRI > 80

Lumen - Maintenance Life
L80 /B10 at 50,000 hours (This means that at least 90% of the LED still achieve 80% of their original flux)

Area distribution wall-mounted projectors. Stylish but technically precise area lighting solutions as part of a large flexible family.

Light Linear PT wall light is an elegant wall mount fixture suitable for both modern and classic architecture. Ideal for creating visual guidance, with exceptional visual comfort.

The dual sealed optical chamber with integrated heat sinks houses a range of field interchangeable optically controlled LED's, providing Type II, III, IV & V distribution, as well as variations of this for precise light distribution requirements. An example of this, is using a combination of Type II and Type IV distribution optics inside the same fixture.

This fixture is unique as it has a IP68 driver housing container that is housed within the IP65 rated light fixture.

This product range is complemented with high performance optics in the bollard and streetlight luminaires, to provide a consistent range of design aesthetics for any project.

To meet International Dark Sky criteria, 3000k or warmer LEDs must be selected and luminaire fix mounted (+/- 15° allowable to permit leveling).

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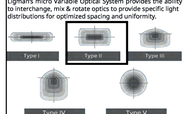

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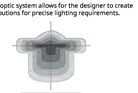

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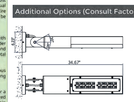

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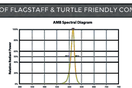

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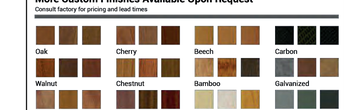

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COMMONWEALTH OF VIRGINIA
Carlin R. Tacey
Lic.No.002163
04/26/2024
LANDSCAPE ARCHITECT

THIS DRAWING PREPARED AT THE
CHARLOTTESVILLE OFFICE
608 Preston Avenue, Suite 200 | Charlottesville, VA 22903
TEL 434.295.5624 FAX 434.295.8317 www.timmons.com

REVISION DESCRIPTION
- FINAL SITE PLAN RESUBMISSION #1
- FINAL SITE PLAN RESUBMISSION #2
- FINAL SITE PLAN RESUBMISSION #3

FINAL SITE PLAN

DATE
01/15/2024
03/22/2024
04/26/2024

DATE 02/20/2023

DRAWN BY M. RACHNER

DESIGNED BY C. TACEY

CHECKED BY C. TACEY

SCALE N/A

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)
CITY OF CHARLOTTESVILLE, VA
SITE LIGHTING CUT SHEETS

JOB NO. 48530

SHEET NO. L4.02

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STRUCTURAL NOTES

DESIGN

DESIGN IS IN ACCORDANCE WITH THE 2018 INTERNATIONAL BUILDING CODE (IBC), AND ASCE 7-16.

DESIGN LOADS

A. GRAVITY - SUPERIMPOSED DEAD LOADS (DL) IN ADDITION TO STRUCTURE DEAD LOADS AND EARTH LOADS: NONE.

B. GRAVITY - LIVE LOADS (LL)

SURCHARGE LIVE LOAD 100 PSF

CONSTRUCTION LIVE LOADS SHALL BE LIMITED TO 100 PSF OR LESS

DESIGN RESPONSIBILITY

TIMMONS GROUP IS THE ENGINEER OF RECORD FOR THE STRUCTURAL DESIGN OF CAST-IN-PLACE RETAINING WALL AND FOOTING SHOWN ON THESE DRAWINGS. ANY OTHER ITEMS REFERENCED ON THESE DRAWINGS ARE NOT PART OF THE SCOPE OF THESE STRUCTURAL DRAWINGS.

ALL NOTES ON STRUCTURAL DRAWINGS SHALL BE ASSUMED TYPICAL UNLESS NOTED OTHERWISE ON DRAWINGS OR SPECIFICATIONS.

SECTIONS AND DETAILS ARE TO BE USED IN ALL SIMILAR LOCATIONS UNLESS OTHERWISE SHOWN BY OTHER DETAILS AND/OR SECTIONS.

PROMPTLY NOTIFY ENGINEER OF ANY STRUCTURAL MEMBER CALLED OUT ON THE CIVIL DRAWINGS THAT IS NOT IDENTIFIED ON THE STRUCTURAL DRAWINGS.

EXISTING CONDITIONS

THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD IMMEDIATELY UPON DISCOVERY OF ANY DISCREPANCIES BETWEEN INFORMATION SHOWN ON THE PLANS TO THE ACTUAL FIELD CONDITIONS. THE CONTRACTOR SHALL BE REQUIRED TO DOCUMENT EXISTING CONDITIONS BY SKETCHES OR OTHER METHODS.

DEPTHS AND LOCATIONS OF EXISTING STRUCTURES AND UTILITY LOCATIONS TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF THE WORK. THE CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO ENSURE THAT EXISTING STRUCTURES AND UTILITIES ARE NOT DAMAGED AS PART OF THE WORK.

PROPOSED DIMENSIONS & ELEVATIONS

THE CONTRACTOR SHALL INDEPENDENTLY VERIFY ALL ELEVATIONS AND DIMENSIONS SHOWN ON THE DRAWINGS BEFORE FABRICATION AND CONSTRUCTION. IF FIELD CONDITIONS AND/OR DIMENSIONS DIFFER FROM THE PLANS, THE CONTRACTOR SHALL USE THE FIELD MEASUREMENTS AND MAKE APPROPRIATE CHANGES TO THOSE SHOWN ON THE PLANS.

CONSTRUCTION METHODS

THE CONTRACTOR SHALL TAKE THE PROPER PRECAUTIONS TO ENSURE THE STABILITY AND SAFE PERFORMANCE OF ALL STRUCTURAL ELEMENTS DURING CONSTRUCTION.

TEMPORARY BRACING

CONTRACTOR IS RESPONSIBLE FOR BRACING, WITHOUT OVERSTRESSING, ALL STRUCTURAL ELEMENTS AS REQUIRED AT ALL STAGES OF CONSTRUCTION UNTIL COMPLETION OF THE PROJECT. PROVIDE TEMPORARY LATERAL SUPPORT FOR ALL WALLS UNTIL THE WALLS ARE ADEQUATELY BRACED BY PERMANENT STRUCTURAL MEANS.

GEOTECHNICAL INFORMATION

DESIGN IS BASED UPON AN ALLOWABLE SOIL BEARING OF 2,500 PSF, UNLESS NOTED OTHERWISE. IF SOIL OF THIS VALUE IS NOT FOUND AT THE FOOTING LOCATIONS, NOTIFY THE S.E.R. PRIOR TO CONTINUING.

THE SITE SHALL BE PREPARED UNIFORM IN ACCORDANCE WITH CIVIL DRAWINGS, SPECIFICATIONS, AND THE DESIGN SOIL BEARING PRESSURE.

ALL EXCAVATIONS AND FOOTINGS SHALL BE INSPECTED BY A LICENSED GEOTECHNICAL ENGINEER TO VERIFY THE DESIGN ASSUMPTIONS AND REPORT ADVERSE CONDITIONS. ALL FOUNDATIONS SHALL BE CONCRETED PROMPTLY FOLLOWING INSPECTION.

WHERE FILL IS REQUIRED, IT SHALL BE PLACED IN ACCORDANCE WITH INSTRUCTIONS OF A LICENSED GEOTECHNICAL ENGINEER TO MAINTAIN DESIGN BEARING PRESSURE.

SOIL BELOW THE FOOTINGS NOT MEETING THE DESIGN BEARING PRESSURE SHALL BE EXCAVATED TO A DEPTH OF VERIFIABLE DESIGN PRESSURE AND BACKFILLED WITH VDOT NO. 57 STONE TO THE LEVEL OF FOUNDATION BEARING. THIS SHALL BE APPROVED BY A LICENSED GEOTECHNICAL ENGINEER.

AFTER STRIPPING MATERIAL FROM AREA TO BE GRADED, REMOVE ALL UNSUITABLE MATERIAL FROM EXPOSED SUB-GRADE, SUCH AS DEBRIS, TRASH, ORGANIC MATTER, OR SOFT SOIL. SOIL SURFACES RECEIVING COMPACTED STRUCTURAL FILL SHALL BE PROOF-ROLLED WITH A LOADED DUMP TRUCK UNDER THE OBSERVATION OF THE GEOTECHNICAL ENGINEER. AREAS EXHIBITING EXCESSIVE PUMPING, WEAVING, OR RUTTING SHALL BE EXCAVATED AND REPLACED WITH COMPACTED STRUCTURAL FILL OR SCARIFIED, DRIED, AND RECOMPACTED AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING FILL.

CONTRACTOR SHALL MAINTAIN ADEQUATE SITE DRAINAGE DURING CONSTRUCTION TO DIRECT WATER AWAY FROM FOUNDATION CONSTRUCTION AREAS. ANY SUB-GRADE SOILS WEAKENED BY THROUGH SATURATION OR DISTURBANCE SHALL BE REMOVED AND REPLACED WITH COMPACTED STRUCTURAL FILL.

MATERIALS

ALL DETAILING, FABRICATION, AND PLACEMENT OF REINFORCING STEEL, FORM WORK, MIXING, HANDLING, PLACING, FINISHING, AND CURING OF CONCRETE SHALL BE IN ACCORDANCE WITH CURRENT EDITIONS OF ACI "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" (ACI-315) AND ACI "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI-318).

A. REINFORCEMENT

REINFORCING STEEL BARS AND ALL SUPPORT DEVICES SHALL BE BLACK BARS AND SHALL CONFORM TO THE REQUIREMENTS OF ASTM A615, GRADE 60.

1. ALL REINFORCING BAR SPLICES SHALL BE ACI CLASS B TENSION LAP SPLICES, U.N.O.
2. CONCRETE CLEAR COVER REQUIREMENTS SHALL BE AS FOLLOWS:

   CAST AGAINST EARTH: 3"
   PERMANENTLY EXPOSED TO EARTH OR WEATHER: 2"

B. CONCRETE

1. 28-DAY STRENGTH: 4,000 PSI
2. DENSITY: NORMAL WEIGHT
3. W/C (MAX): 0.45
4. AIR CONTENT: 6.5% +/- 1.5
5. NOMINAL MAX. AGGREGATE SIZE: 1 IN.

CONCRETE SHALL CONFORM TO ASTM C94. ALL AGGREGATES SHALL CONFORM TO ASTM C33.

CAST SIX CYLINDERS OF EACH CONCRETE POUR. TEST TWO CYLINDERS SEVEN DAYS AFTER CASTING AND TWO 28 DAYS AFTER CASTING. HOLD TWO CYLINDERS FOR POSSIBLE TEST UNTIL 60 DAYS AFTER CASTING. DISPOSE OF CYLINDERS IF TEST IS NOT REQUESTED. SEND REPORTS TO CONTRACTOR, AND STRUCTURAL ENGINEER.

NO ADDITIONAL WATER SHALL BE ADDED TO THE CONCRETE AT THE JOB SITE.

CONTRACTOR TO CHAMFER EXPOSED EDGES OF CONCRETE TO 3/4".

AT LOCATIONS OF NEW CONCRETE PLACED AGAINST IN-PLACE CONCRETE, THE EXISTING CONCRETE SHALL BE ROUGHENED TO A 3/16" AMPLITUDE PRIOR TO APPLYING THE BONDING AGENT AND SUBSEQUENTLY THE NEW CONCRETE.

EXTERIOR GRADE PLYWOOD SUITABLE FOR CONCRETE FORMS COMPLYING WITH DOC PS1, MEDIUM DENSITY OVERLAY, CLASS 1 OR BETTER AND HARD PLASTIC FINISHED PLYWOOD SHALL BE USED AS FORMS.

IF FORM RELEASE AGENT IS USED, FORM RELEASE AGENT SHALL NOT STAIN OR ADVERSELY AFFECT CONCRETE SURFACES THAT WILL PREVENT THE APPROVED FINISH.

C. CONCRETE BONDING AGENT

SHALL BE A CEMENTITIOUS EPOXY RESIN AND CONFORM TO SECTION 243 OF THE VDOT ROAD AND BRIDGE SPECIFICATIONS.

D. EXPANSION JOINT FILLER MATERIAL

SHALL BE PREFORMED AND SHALL MEET THE REQUIREMENTS OF AASHTO M213.
SUBMIT ONE OF THE FOLLOWING PRODUCTS (OR APPROVED EQUAL) FOR ENGINEER'S APPROVAL AND INSTALL PER THE MANUFACTURER'S INSTALLATION REQUIREMENTS:

1. RIGHT JOINT FIBRE EXPANSION JOINT BY RIGHT POINTE, LLC., DEKALB, IL
2. FIBRE EXPANSION JOINT BY W.R. MEADOWS, INC., HAMPSHIRE, IL

E. EXPANSION JOINT SEALANT MATERIAL

SHALL BE HOT APPLIED, SINGLE COMPONENT JOINT SEALANT AND CONFORM TO SECTION 212.02(A) OF THE VDOT ROAD AND BRIDGE SPECIFICATIONS - ASTM D6990, TYPE II. THE EXPANSION JOINT SEALANT MATERIAL SHALL BE APPLIED DIRECTLY OVER THE EXPANSION JOINT FILLER MATERIAL. USE THE SAME MANUFACTURER FOR THE EXPANSION JOINT FILLER MATERIAL AND EXPANSION JOINT SEALANT MATERIAL. COLOR SHALL BE APPROVED BY THE OWNER PRIOR TO INSTALLATION.

F. GEOTEXTILE DRAINAGE FABRIC

SHALL BE A NONWOVEN AND CLOG RESISTANT POLYPROPYLENE MATERIAL, SUITABLE FOR SUBSURFACE APPLICATION, AND THERMALLY AND BIOLOGICALLY STABLE GEOTEXTILE DRAINAGE FABRIC SHALL CONFORM TO SECTION 245.03(C) OF THE VDOT ROAD AND BRIDGE SPECIFICATIONS.

IN ADDITION, THE GEOTEXTILE SHALL COMPLY WITH THE REQUIREMENTS OF AASHTO M288 TABLE 1-GEOTEXTILE STRENGTH PROPERTY REQUIREMENTS, CLASS 3, FOR GRAB STRENGTH.

G. DRAIN PIPE
SHALL BE CORRUGATED, NON-PERFORATED POLYETHYLENE PIPE AND CONFORM TO SECTION 232.02(I) OF THE VDOT ROAD AND BRIDGE SPECIFICATIONS.

H. WEEP HOLES
SHALL CONSIST OF NON-PERFORATED PVC DRAIN PIPES. INSTALL MESH SCREEN OVER WEEP HOLES ALONG THE RETAINING WALL FILL FACE.

SUBMITTALS

CONTRACTOR SHALL PROVIDE THE FOLLOWING PRIOR TO FABRICATION AND INSTALLATION FOR THE ENGINEER'S APPROVAL:

A. PRODUCT DATA SHEETS FOR EACH MATERIAL TO BE INSTALLED.

B. CONCRETE MIX DESIGN FOR CAST-IN-PLACE CONCRETE FACING AND CAST-IN-PLACE RETAINING WALLS.

C. MATERIAL AND MILL CERTIFICATIONS.

STATEMENT OF SPECIAL INSPECTIONS

REFERENCE THE STATEMENT OF SPECIAL INSPECTIONS CHECKLIST, TO BE COMPLETED, BY THE INSPECTOR, FOR REQUIRED INSPECTIONS DURING THE WORK. INSPECTIONS SHALL INCLUDE SOILS AND CONCRETE. THE CONTRACTOR SHALL COORDINATE WITH THE INSPECTOR TO MEET THE SPECIAL INSPECTION REQUIREMENTS.

ABBREVIATIONS AND NOTATIONS:

AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY TRANSPORTATION OFFICIALS
ACI	AMERICAN CONCRETE INSTITUTE
APPROX.	APPROXIMATELY
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS
AWS	AMERICAN WELDING SOCIETY
B	BOTTOM
℄	BASELINE
BTWN	BETWEEN
CIP	CAST-IN-PLACE
CLR	CLEAR CONCRETE COVER
℄	CENTERLINE
CONT.	CONTINUOUS
DIA. OR Ø	DIAMETER
DL	DEAD LOAD
E.F.	EACH FACE
EL. OR ELEV.	ELEVATION
EQ.	EQUAL
EXP.	EXPANSION
E.W.	EACH WAY
G.C.	GENERAL CONTRACTOR
HORIZ.	HORIZONTAL
IBC	INTERNATIONAL BUILDING CODE
JT	JOINT
LL	LIVE LOAD
MAX.	MAXIMUM
MIN.	MINIMUM
MIO.	NOMINAL
N.T.S.	NOT TO SCALE
O.C.	ON-CENTER
PCF	POUNDS PER CUBIC FOOT
PP	POLYPROPYLENE
PSF	POUNDS PER SQUARE FOOT
PVC	POLYVINYL CHLORIDE
S.E.R	STRUCTURAL ENGINEER OF RECORD
TYP.	TYPICAL
U.N.O	UNLESS NOTED OTHERWISE
VDOT	VIRGINIA DEPARTMENT OF TRANSPORTATION
VERT.	VERTICAL

COMMONWEALTH OF VIRGINIA
Gary S. Johnson
Lic. No. 033863
PROFESSIONAL ENGINEER
04/26/2024

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CORPORATE OFFICE
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DATE	REVISION DESCRIPTION
01/19/2024	FINAL SITE PLAN RESUBMISSION #1
03/22/2024	FINAL SITE PLAN RESUBMISSION #2
04/26/2024	FINAL SITE PLAN RESUBMISSION #3

DATE 02/20/2023
DRAWN BY T. DAEKE
DESIGNED BY T. DAEKE
CHECKED BY G. JOHNSON
SCALE AS NOTED

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)
CITY OF CHARLOTTESVILLE - VIRGINIA
STRUCTURAL NOTES

JOB NO. 48530
SHEET NO. S1.00

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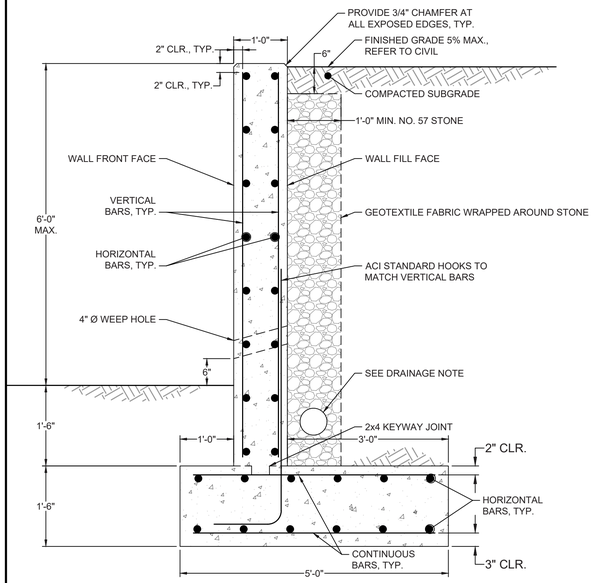
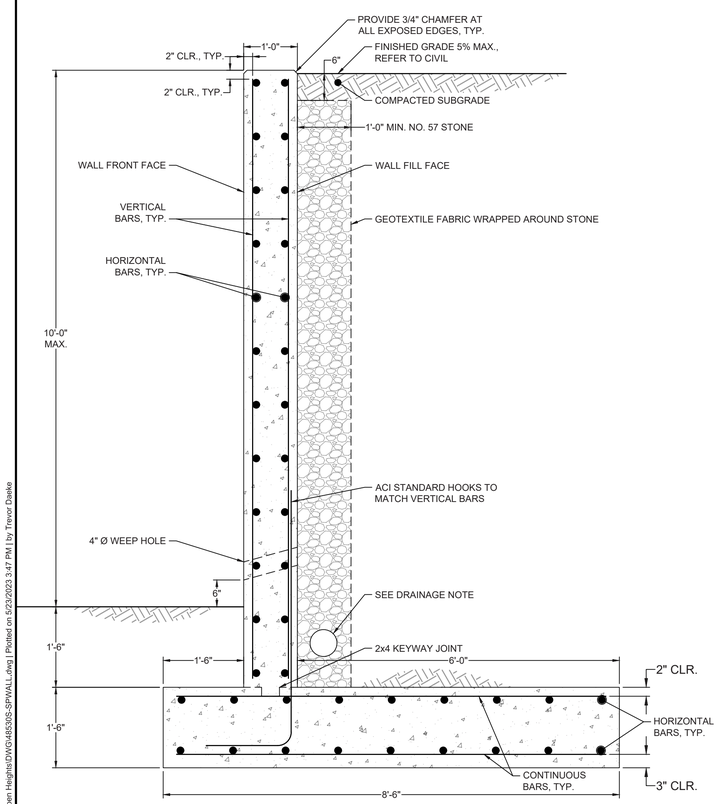
L:\210\48530 - JPA Aspen Heights\DWG\48530S-SPWALL.dwg | Plotted on 5/23/2023 3:47 PM | by Trevor Daeke



1 TYPICAL SECTION - MAX. HEIGHT OF 6FT

SCALE: 3/4" = 1'-0"



2 TYPICAL SECTION - MAX. HEIGHT OF 10FT

SCALE: 3/4" = 1'-0"

WALL DRAINAGE NOTE:

PROVIDE CONTINUOUS 6"Ø PERFORATED COLLECTOR PIPE BEHIND ALL CANTILEVER WALLS. WRAP PERFORATED PIPE WITH NO. 57 STONE AND GEOTEXTILE FABRIC. DAYLIGHT COLLECTOR PIPE 12" ABOVE CULVERT INVERT. PROVIDE 4" Ø WEEPS SPACED AT 8'-0" O.C. (MAX.) THROUGH WALL, TYPICAL.

PERMITTING NOTE: THIS PLAN SHEET IS PROVIDED WITHIN THE CIVIL SITE PLAN SET FOR REFERENCE ONLY. THE CONTRACTOR SHALL SUBMIT SEPARETLY FOR PERMIT OF RETAINING WALLS WITH HEIGHTS OF FOUR (4) FEET OR GREATER. CONTRACTOR SHALL REQUEST FINAL STRUCTURAL DRAWINGS FROM TIMMONS GROUP FOR PERMIT SUBMISSIONS.

WALL DESIGN IS PRELIMINARY AND NOT FOR CONSTRUCTION.

COMMONWEALTH OF VIRGINIA
Gary S. Johnson
Lic. No. 0[illegible]
PROFESSIONAL ENGINEER

04/26/2024

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REVISION DESCRIPTION	DATE
FINAL SITE PLAN RESUBMISSION #1	01/19/2024
FINAL SITE PLAN RESUBMISSION #2	02/22/2024
FINAL SITE PLAN RESUBMISSION #3	04/26/2024

DATE: 02/20/2023
DRAWN BY: T. DAEKE
DESIGNED BY: T. DAEKE
CHECKED BY: G. JOHNSON
SCALE: AS NOTED

TIMMONS GROUP

ASPEN HEIGHTS (2005 JPA)

CITY OF CHARLOTTESVILLE - VIRGINIA

TYPICAL SECTION VIEWS

JOB NO. 48530

SHEET NO. S2.00

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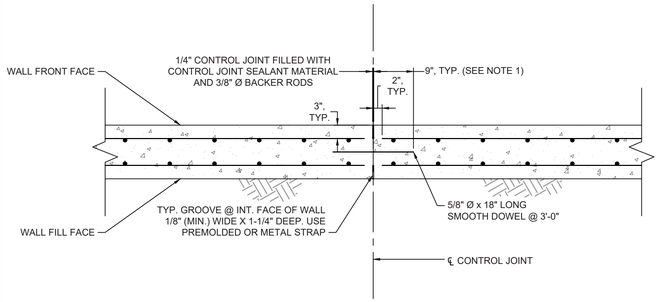
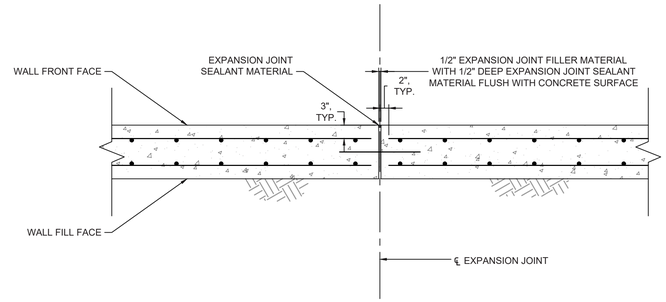


NOTE(S):
1. GREASE ONE 9" LONG SIDE OF EACH SMOOTH DOWEL AT CONTROL JOINTS.
2. MAXIMUM CONTROL JOINT SPACING BETWEEN EXPANSION JOINTS SHALL BE 20 FT O.C.
3. PLACE SMOOTH DOWELS WITHIN 1 FT OF THE TOP OF THE RETAINING WALLS AND AT 3FT O.C. ALONG THE RETAINING WALL HEIGHT. PROVIDE MINIMUM TWO BARS IN VERTICAL WALLS.

1 VERTICAL CONTROL JOINT DETAIL

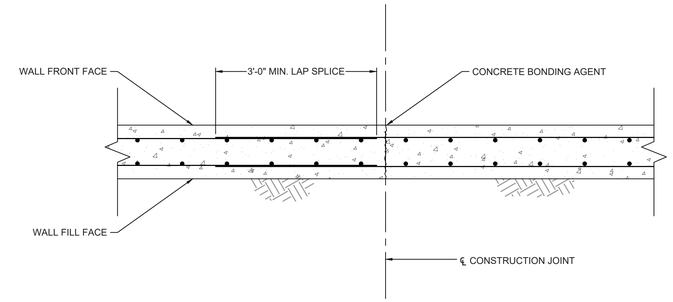
SCALE: 3/4" = 1'-0"



NOTE(S):
1. MAXIMUM EXPANSION JOINT SPACING SHALL BE 60 FT O.C.

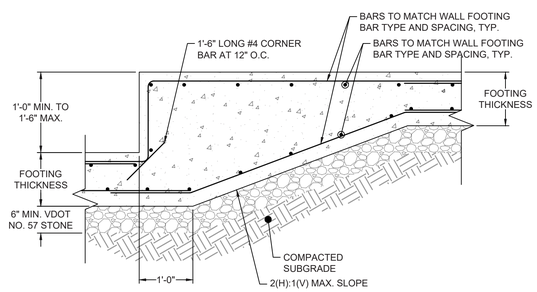
2 EXPANSION JOINT DETAIL

SCALE: 3/4" = 1'-0"



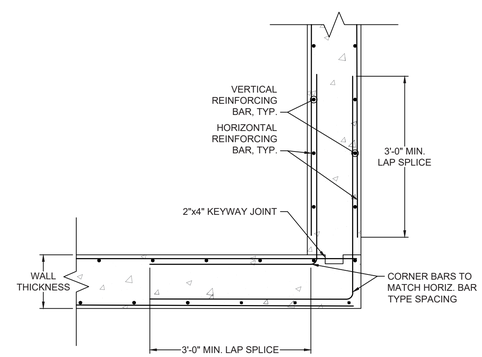
3 VERTICAL CONSTRUCTION JOINT DETAIL

SCALE: 3/4" = 1'-0"



4 TYPICAL STEP FOOTING

SCALE: 3/4" = 1'-0"



5 90 DEGREE CORNER REINFORCEMENT

SCALE: 3/4" = 1'-0"

COMMONWEALTH OF VIRGINIA
Gary S. Johnson
Lic. No. 033969
PROFESSIONAL ENGINEER

04/26/2024

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ASPEN HEIGHTS (2005 JPA)
CITY OF CHARLOTTESVILLE - VIRGINIA
STRUCTURAL DETAILS

JOB NO. 48530
SHEET NO. S3.00

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#R-22-117

RESOLUTION
Granting a Special Use Permit (SUP) for Property Located at 2005/2007 Jefferson Park Avenue and 104 Observatory Avenue

WHEREAS Norman Lamson, as Trustee for the Gadient JPA Land Trust ("Landowner") is the owner of certain land identified within City real estate assessment records by Parcel Identification numbers 170104000, 170103100, and 170103000, respectively, currently addressed as "2005/2007 Jefferson Park Avenue" and "104 Observatory Avenue" (collectively referred to as the "Property"), and the Landowner, proposes to redevelop the Property to accommodate a 119-unit multifamily building with underground parking, and

WHEREAS to facilitate this redevelopment, the Landowner seeks City Council's approval of a Special Use Permit to increase allowable residential density to 70 DUA, to increase building height from 45 feet to 75 feet, to reduce the rear-yard setback from 75 feet to 36 feet, and to reduce (lower by 22%) the amount of on-site parking required by City Code Sec. 34-984 (the "Project"); and

WHEREAS the Applicant seeks a Special Use Permit under City Code Secs. 34-420, 34-353(3), and 34-162(a), which collectively,allow the increased residential density, additional building height, and modified [reduced] setbacks and onsite parking requirements 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 application materials submitted by the Landowner in connection with SP22-00001("Application Materials"); and

WHEREAS, the Planning Commission and City Council conducted a joint public hearing on May 10, 2022, after notice and advertisement as required by law; and

WHEREAS following the joint public hearing, the Planning Commission considered and recommended approval of this application at their May 10, 2022 meeting; and

WHEREAS upon consideration of the Planning Commission's recommendation, the City Staff Report, comments received at the joint public hearing, and 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) Not more than seventy (70) dwelling units per acre (DUA) shall be permitted within the area of the Property.

(2) The rear-yard setback applicable within the Property shall be thirty-six (36) feet, and a

twenty-five (25) foot buffer shall be provided within the rear yard, to include mature trees and shrubs at the time of planting consistent with the plant materials prescribed for an "S-3" buffer (as listed in City Code §34-871, as in effect on the date of approval of this SUP). The S-3 buffer, and plant materials, shall be detailed within the final Site Plan. Within the rear setback Landowner shall consider construction of a multipurpose path (for bicycles and pedestrians) linking Washington Avenue and Observatory Avenue within the rear setback, in order to establish the block-level scale of the Project as represented within the Application Materials.

(3) The Landowner shall construct within the Project, along Jefferson Park Avenue, a new seven (7) foot sidewalk with a three (3) foot curbside buffer in accordance with the standards set forth within the City's Streets that Work Plan.

(4) The Landowner, in consultation with the City's Traffic Engineer, shall develop a Master Parking Plan for the site related to the reduction of onsite parking by 22% from what is required by Sec. 34-984 (in effect on the date of Council's approval of this Special Use Permit). The Master Parking Plan shall indicate how available parking spaces will be distributed within the Project, how residents of the Project are informed of their parking opportunities, any offsite parking options for residents, and other potential issues associated with parking. The Master Parking Plan shall be provided as a component of the final approved site plan for the Project, and any subsequent amendments approved to the Master Parking Plan shall be made in consultation with the City's Traffic Engineer and a copy maintained along with the final approved site plan, within the zoning file for the Property.

(5) The Landowner shall upgrade the pedestrian crossing of Jefferson Park Avenue at Harmon Street during construction of the Project, to provide residents within the Project safe access to public transit options. The Landowner shall work with the City's Traffic Engineer to determine the scope of improvements.

(6) The arrangement of the buildings within the Property shall be generally consistent with the layout and design presented within the Application Materials for SP22-00001.

	Aye	**No**
Magill	_absent	___
Payne	_x__	____
Pinkston	_x__	____
Snook	_x__	____
Wade	_x__	____

Approved by Council
September 19, 2022

Kyna Thomas

Kyna Thomas, MMC
Clerk of Council

To:	**TBD**
From:	**Applicant - Aspen Heights Partners (Aspen Topco II Acquisitions, LLC)**
Date:	**Dec 12th, 2023**
Re:	**2005 JPA - Parking Management Plan**

2005 JPA – Parking Management Plan

Objective

The purpose of this memorandum is to outline the Applicant's parking management plan for the proposed student housing project located at 2005 Jefferson Park Avenue (Application #) in Charlottesville, VA consisting of approximately 119 units (the "Project"). The Project will provide for 125 parking spaces consisting of approximately 8 visitor spaces and 117 reserved resident spaces. This parking plan is meant to explain the policies and procedures that will be implemented at the Project to educate tenants on the parking options, the parking restrictions, and providing foresight to the residents to help avoid parking conflicts.

Background

Our operations team has extensive experience creating and enforcing parking management plans customized for specific communities with each plan influenced by a number of factors. Parking availability, convenience, natural and constructed barriers, campus parking options, transit options, and property location are just some of the variables that shape the plan. Since some of these factors can change, our operation practices provide the flexibility to evolve to facilitate the needs of the community and to mitigate residents and guests parking on the permit parking only streets surrounding the Project.

Parking Management Plan

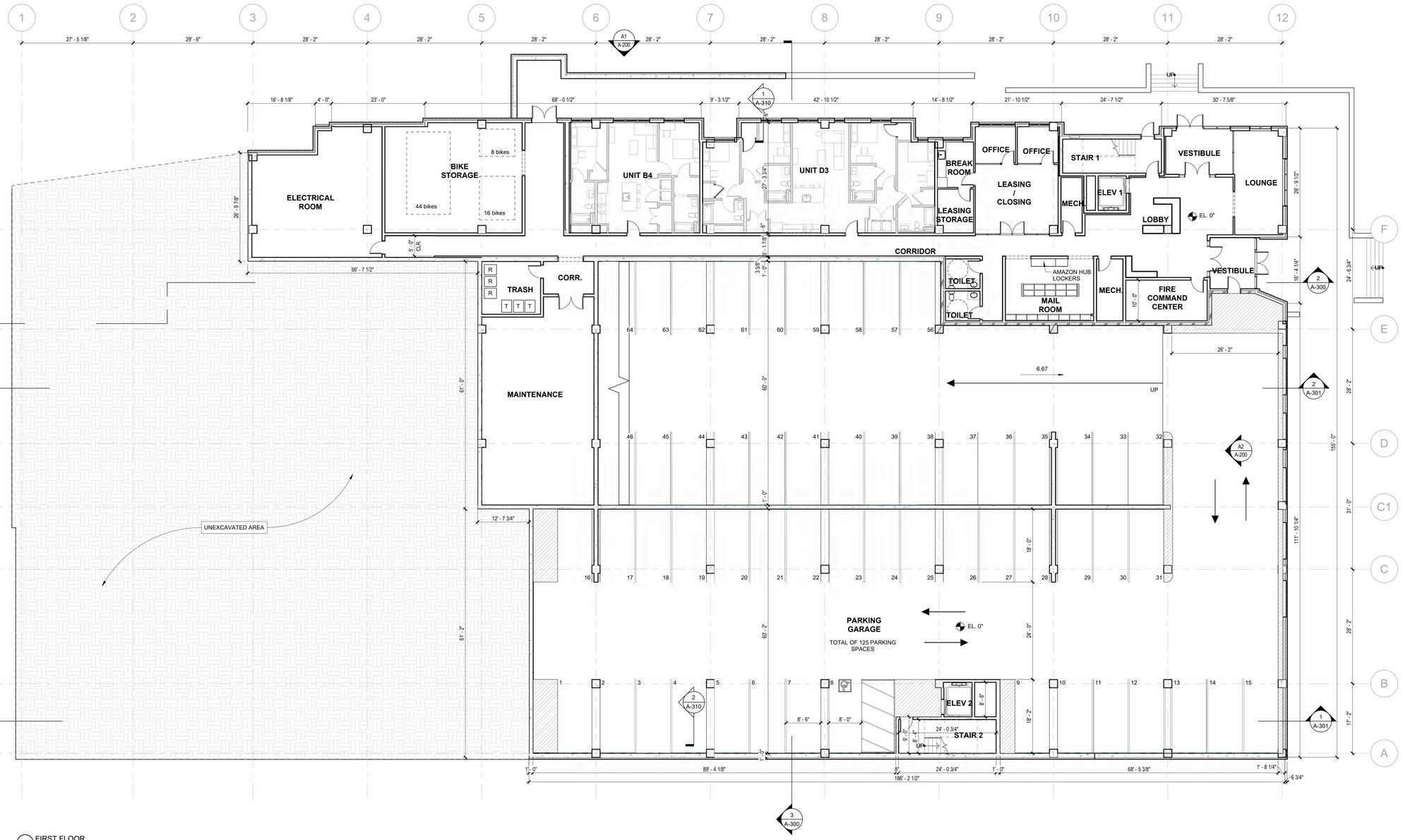
The Parking Management Plan consists of the following components:

1) Implementation and enforcement of resident parking requirements:
    a. All residents and their parental guarantors will sign a lease agreement that addresses the parking policy and will be provided with a Resident Handbook that further details the resident parking requirements. Our Resident Handbook will clearly explain street parking on a permitted street around the property is strictly prohibited and failure to adhere could result in booting, towing, and/or a community violation fee. Multiple infractions could result in eviction. This section will also specifically address that parking along Washington and Observatory is not allowed.
    b. To the extent reasonably possible, all parking will be access controlled and only residents with parking credentials will be given vehicular access.

c. All parking, except for visitor and ADA spaces will be reserved and residents will be required to display the Project's parking pass on their vehicle. This will aid our community patrol team in identifying residents parking in restricted on-street permit parking areas surrounding the Project. Parking passes will be provided to residents by office staff.
d. A towing contract and/or a courtesy patrol contract will be in place to monitor the property and enforce the community policies. These services will be supplemented during peak times such as weekends, large events (i.e. home football games, etc.), and specific holidays.
e. Residents with permits that cannot find a space or access their reserved space will be instructed to park in guest or approved street parking areas and contact the courtesy number/office/towing company to have the vehicle at fault towed.

These policies and procedures will be provided and presented to residents at or before lease signing. This will provide residents with explicit knowledge of how to manage their vehicle and give the resident significant lead time to implement a long-term solution if needed.

2) The onsite property management team will encourage residents to take advantage of local transit near the site, including both CAT & UVA bus routes. Additionally, a list of alternative parking options will be provided to residents that are unable to reserve a spot on-site and in need of long-term vehicle storage.
3) There will be approximately 8 guest parking spaces on site to accommodate visitor parking. These guest spaces, noted in the Parking Plan Exhibit, include Future Resident parking and are subject to change location in the parking deck at owner's discrepancy, in order to improve operational efficiencies.
    a. The tenant's lease agreement will limit both the number of guests allowed to park on the property as well as the number of consecutive days guests are allowed to stay on the property. Violators would be subject to having their vehicle removed from the property.
4) The lease agreement verbiage allows management to make mid-term changes to the parking plan if they become necessary. While we do not foresee issues creating and managing a parking plan for this Project, we have the ability to construct and implement more stringent solutions, such as electronic patrol technologies, parking validation programs, law enforcement partnership programs, etc. if ever warranted. Furthermore, in the event parking demand exceeds expectations creating a burden on the surrounding community and more stringent enforcement methods are not adequately unburdening the surrounding community, the Project will enter into agreements with offsite private or public parking facilities to provide a relief valve.
5) The onsite property management team and team leader, the General Manager, are expected to be good neighbors in their community. As such, they establish business relationships with local first responders and city officials. Our General Managers are encouraged to solicit open and consistent communication and, if desired, host quarterly meetings to ensure expectations are being upheld.



1 FIRST FLOOR
3/32" = 1'-0"

Central File: Update this text with Central file location
Saved: 1/17/2024 5:24:45 PM Current Local File: Autodesk Docs://083281 Charlottesville Apartments/083281_AspenHeights_CharlottesvilleApts_ArchR23.rvt

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49 Dartmouth St
Portland, ME 04101
207.775.1059 www.chasolutions.com

ASPEN HEIGHTS PARTNERS

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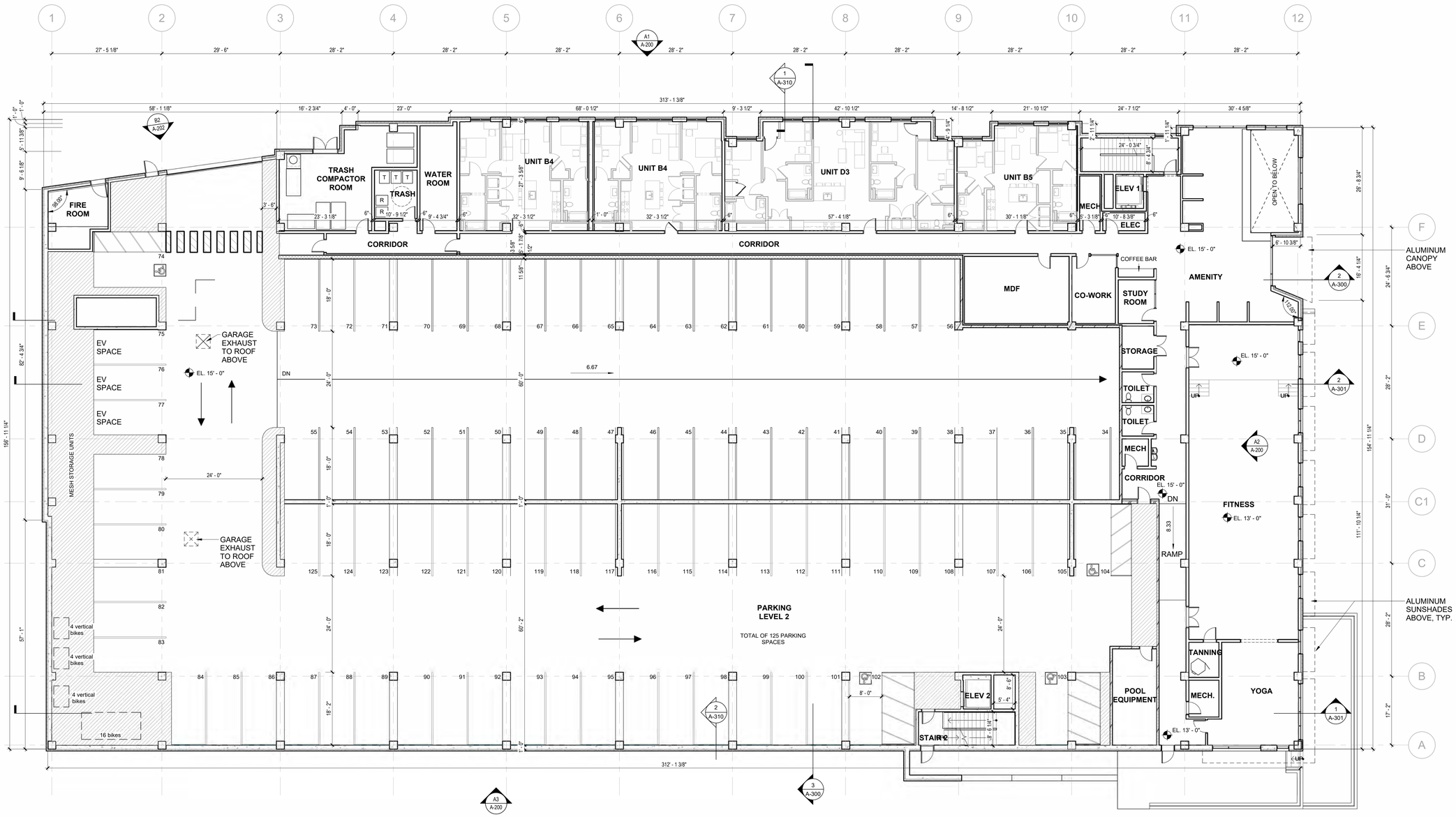
ASPEN HEIGHTS
CHARLOTTESVILLE

No.	Submittal / Revision	App'd	By	Date

FIRST FLOOR - OVERALL FLOOR PLAN

Designed By:	Drawn By:	Checked By:
AG/BC	BC	AG
Issue Date: 01/17/2024	Project No: 083281	Scale: 3/32" = 1'-0"

Drawing No:
A-101



1 SECOND FLOOR
3/32" = 1'-0"

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ASPEN HEIGHTS
CHARLOTTESVILLE

No.	Submittal / Revision	App'd	By	Date

SECOND FLOOR - OVERALL FLOOR PLAN

Designed By:	Drawn By:	Checked By:
AG/BC	Author	AG
Issue Date:	Project No:	Scale:
01/17/2024	083281	3/32" = 1'-0"

Drawing No:
A-102

Central File: Update this text with Central file location
Saved: 1/17/2024 5:24:55 PM Current Local File: Autodesk Docs://083281 Charlottesville Apartments/083281_AspenHeights_CharlottesvilleApts_AcadR23.rvt

September 7, 2022

The City Council of Charlottesville, Virginia
Via E-mail only:
Mayor Snook – lsnook@charlottesville.gov
Vice Mayor Wade – wadej@charlottesville.gov
Sena Magill – smagill@charlottesville.gov
Brian Pinkston – pinkstonb@charlottesville.gov
Michael Payne – mpayne@charlottesville.gov

Re: Affordable Housing Donation to the City of Charlottesville

Dear Members of City Council:

On behalf of Aspen Topco II Acquisition, LLC, ("Aspen Heights Partners") I am pleased to offer this letter setting forth terms of a $568,800 donation to the City of Charlottesville for the City's Housing Fund. This donation is in recognition of the City's deep commitment to equity and inclusion as witnessed by its recent efforts to adopt the March 2021 Affordable Housing Plan, as well as updates to the City's Comprehensive Plan both of which contain express strategies to address affordable housing throughout the City. Aspen Heights Partners is also committed to principles of equity and inclusion and believes that our donation is in keeping with the values that we aspire to every day.

As recommended in the Affordable Housing Plan, the City seeks to commit $10,000,000 annually for affordable housing programs over the next ten years. It is our desire that this donation be used to fund housing programs adopted by the City and consistent with the Affordable Housing Plan.

Aspen Heights Partners has committed to becoming a reliable partner within the Charlottesville community. As you know, we propose to build 119 units of new housing near the grounds of the University -- at 2005 and 2007 Jefferson Park Avenue (the "Project"). As part of the approvals for the Project, we also will be making a cash contribution for affordable housing in the amount of $484,279.78, pursuant to City Code Section 34-12 ("Affordable Dwelling Unit Ordinance"). Our $568,800 donation is separate from, and in addition to this $484,279.78 contribution. The $568,800 donation is not proffered, nor is it intended as any inducement for the City's approving the Project.

Aspen Heights Partners recognizes that the City's Comprehensive Plan, specifically the Zoning Diagnostic and Approach report issued June 16, 2022, indicates a future affordable

housing target as 60% AMI in lieu of the current target of 80% AMI. The City's Office of Community Solutions has yet to develop a methodology for determining potential cash in lieu contributions at the 60% AMI threshold. The Department of Neighborhood Development Services, however, has shared with us an Urban Institute publication suggesting a methodology for determining in-lieu fees in inclusionary zoning policies. We have adopted such a methodology to help us arrive at a cash in lieu contribution using a 60% AMI threshold (the "60% AMI In-lieu Fee Formula"). The use of the 60% AMI In-lieu Fee Formula increases dramatically the resulting total contribution for affordable housing over that which is currently required by the Affordable Dwelling Unit Ordinance.

The Affordable Dwelling Unit Ordinance Worksheet requires in this instance nine units, or a cash in lieu payment of $484,279.78. Accordingly, Aspen Heights Partners' donation for these purposes has been calculated by taking the difference between: (1) the required cash in lieu contribution arrived at using the current Affordable Dwelling Unit Ordinance Worksheet and (2) the cash in lieu contribution arrived at using the Revised ADU to a 60% AMI In-Lieu Fee Formula. See table below:

	$1,053,079.74 (calculation of 9 units @ 60% AMI)
-	$484,279.78 (Affordable Dwelling Unit Ordinance Contribution)
	$ 586,800.00 (Donation)

Payment of the donation shall be conditioned on the issuance of SP 2022-000001 and receipt of a final, non-appealable site plan approval for the Project. The donation shall be made within ninety (90) days of the issuance of a certificate of occupancy for the first unit in the Project.

We are very pleased to make this donation to help address a critical need and look forward to a lasting and mutually beneficial relationship with the Charlottesville community.

Sincerely,

Aspen Topco II Acquisition, LLC

David J Helfrich

8008 CORPORATE CENTER DRIVE, SUITE 201, CHARLOTTE, NORTH CAROLINA 28226 O: (704) 659-1725

cc: Mr. Samuel Sanders
Mr. James Freas
Lisa Robertson, Esq.
Ms. Kyna Thomas, City Council Clerk

8008 CORPORATE CENTER DRIVE, SUITE 201, CHARLOTTE, NORTH CAROLINA 28226 O: (704) 659-1725

City of Charlottesville
Department of Neighborhood Development Services
Staff Report

Entrance Corridor Review Board
CoA Request for 100 Stadium Road (*The Verve*)
(Deferred from April 9, 2024 meeting)

Planning Commission Regular Meeting
Date Of Planning Commission Meeting: June 11, 2024

Project Planner: Matt Alfele
Zoning: PUD (Planned Unit Development, ZM23-00004) with Entrance Corridor Overlay (Fontaine Ave/JPA; Sub-area C.)
FLUM designation: Urban Mixed-Use Corridor
Tax Map Parcels: 160008000, 160005000, 160001000, 160002000*, 160003000*, and 160004000*. This includes the former Woodrow Street, which City Council incorporated into the project area. (* Three parcels are not within the EC; however, as a single project, the entire development is subject to design review by the ERB.)
Site Acreage: approximately 3.3 acres
ERB staff report prepared by: Jeff Werner, AICP, Preservation and Design Planner
Submittal: *Verve Charlottesville, Entrance Corridor Review*, dated March 25, 2024, sheets 1 through 72. **Addendum materials dated June 11, 2024; sheets A1 through A8**.

Note: This was reviewed by the ERB on April 9, 2024. No formal action was taken and the ERB accepted the applicant's request to defer the matter to a later meeting. (Link to initial submittal and the April 9 staff report and appendices: April_9_2024_PC-ERB_Packet)

The following is an addendum to the April 9 staff report, with notes addressing ERB questions and comments, and revisions to the [staff] recommended conditions of approval.

Summary and Staff Recommendation

With satisfactory resolution of questions related to the EIFS material, installation, and details, and with consideration and incorporation of the comments (below) and the recommended conditions (see the draft motion to approve), staff recommends approval of the CoA.

ERB Comments/Questions – April 9, 2024

Note: Sections of the April 9, 2024 (4/9) PC/ERB meeting minutes are referenced below to provide general context. They do not represent everything discussed re: a particular item. Staff encourages the ERB to read the entire excerpt (attached). The meeting video is on-line at: https://www.youtube.com/watch?v=mVYcCYoNDc0

EIFS, generally:

- EIFS spec/address installation and drainage requirements. (See minutes page 19, Schwarz.)
    - Staff: Address with proposed conditions re: EIFS.

- EIFS detail at ground level. (See 4/9 minutes page 16, Schwarz.)
    - Applicant (May 31, 2024): The 10, 2024 email): The EIFS will not intersect with the ground plane. The exposed section below the EIFS will either be the concrete foundation wall or a metal panel, painted/coated to match the *charcoal* color of the brick EIFS.

- EIFS reveal detail. (See 4/9 minutes page 18, Schwarz.)
    - See renderings and details, June 11, 2024 addendum.

- Detail at the EIFS transition to the door/window trim.
    - Applicant will review detail at the June 11, 2024 ERB meeting. [Note: At the EIFS panels between windows, the projected windowsill detail will be continuous. See below.]

EIFS brick panels:

- Brick coursing detail. (See 4/9 minutes page 18, Roettger, Schwarz.)
    - See renderings and details, June 11, 2024 addendum.

- Control joints. (See 4/9 minutes page 9, Schwarz.)
    - Applicant (April 9, 2024): It is probably going to be at around 20-foot intervals. We would locate those strategically with the window pattern. In the charcoal brick, you can see that there are not huge zones of that. There are the sidewalls

that end up being about 60 or 65 feet total. Each of those would have a strategic vertical joint; 2 or 3 of them amongst that longest façade that is 60 feet.

- Corner condition. (See 4/9 minutes page 9, Schwarz.)
    - Applicant (April 9, 2024): Corner condition will look like a full brick.

- Grout/mortar color. (See 4/9 minutes page 12, Mr. Reardon.)
    - Applicant (April 9, 2024): Mortar color will be close or complimentary to the [EIFS brick].

<u>Other materials/elements:</u>

- Trex-laminated to the concrete. Wall type 3. See sheets 47, 48, and 51 of the initial (April 9) submittal. (See 4/9 minutes page 7, Schwarz.)
    - Applicant (May 30, 2024): The final material has not been selected; however, the intent is a poured-concrete wall that is textured and tinted to appear wood-like. Applicant will discuss further at the June 11, 2024, ERB meeting.

- Transformer screening. (See 4/9 minutes page 8, Schwarz.)
    - Staff: Address with proposed conditions re: screening.

- Glass specification. (See 4/9 minutes page 10, Roettger)
    - Staff: Address with proposed conditions re: clear glass.

<u>Public Comments Received</u>

No public comments have been received relative to the requested CoA.

<u>Suggested Motion</u>

Approval: Having considered the standards set forth within the City's Entrance Corridor Design Guidelines, I move to find that the proposed design for 100 Stadium Road [The Verve] is consistent with the Guidelines and compatible with this Entrance Corridor, and that the ERB approves the Certificate of Appropriateness application as submitted, with the following conditions of approval:

1. [Exterior lighting] Lamping for exterior lighting be dimmable, have a Color Temperature not exceeding 3,000K, and have a Color Rendering Index not less than 80, preferably not less than 90. Also, to prevent bright light and glare emanating from the garage openings, lamping for the garage lighting [immediately inside the opening] will comply with the above. Additionally, the owner will address any reasonable public complaints about brightness or glare from exterior lights by either dimming the lamp or replacing the lamps/fixtures. (Note: Compliance with the lamping requirements will be determined during review of the site plan and review of the building permit application.)

2. [Screening] 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.
3. [Screening] Rooftop mechanical equipment will either be screened or set/located back from the wall plane so as to not be visible from adjoining properties.
4. [Screening] 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.
5. [Signs] Signage represented in the submittal is for context only and not subject to this CoA, unless addressed specifically by the ERB. Regardless, all regulated signage will require an approved sign permit.
6. [Plantings] Variation to the specified plant species is allowed, should changes be requested by City staff during the site plan review process.
7. [EIFS] The EIFS material will be a STO product, as specified. Specifically, the synthetic stucco used will be a durable synthetic material which is mechanically fastened over appropriate drainage mats with a code compliant water-resistant barrier.
    - Or: [EIFS] The EIFS/ synthetic stucco material used will be a durable synthetic material which is mechanically fastened over appropriate drainage mats with a code compliant water-resistant barrier.
8. [EIFS] (***Address any necessary clarifications***.)
9. [Clear glass] Glass at commercial/retail storefronts, primarily at Building C, shall be clear, having a VLT not less than 70%. Glass in residential doors and windows to have a VLT not less than 60%. [Note: 60% is a recommended minimum.]

Alternate Motions

Deferral: I move to defer [or, *to accept the applicant's request to defer*] the Entrance Corridor Certificate of Appropriateness application for 100 Stadium Road [The Verve].

Denial: Having considered the standards set forth within the City's Entrance Corridor Design Guidelines, I move to find that the proposed design for 100 Stadium Road [The Verve] 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

A. April 9, 2024, PC/ERB Meeting Minutes (draft), excerpts re: ERB review of The Verve.
B. Applicant's addendum, dated June 11, 2024, sheets A1 through A8.

Planning Commission Regular Meeting Minutes
April 9, 2024 – 5:30 P.M.
Excerpts re: ERB review of The Verve

IV. Commission's Action Items

Chairman Mitchell gaveled the Planning Commission out and gaveled in the Entrance Corridor Review Board for The VERVE Entrance Corridor Review.

1. Entrance Corridor Review
   a. VERVE – JPA, Emmet Street, Stadium Road, Montebello Circle

Staff Report

Jeff Werner, NDS, Preservation & Design Planner – This is an entrance corridor CoA request for 100 Stadium Road (VERVE). It is being reviewed as a PUD request that was approved by City Council. With that, the pre-February 19, 2024 ordinance prevails. This is a 3.3-acre project located within the Fontaine Avenue/JPA Entrance Corridor. You, as the Planning Commission, serve as the Entrance Corridor Review Board and are responsible for the design review of Entrance Corridor projects. The development of the site includes construction of an apartment complex. The current existing structures on the site will be razed. The project, at a street level, presents a continuous façade that I described as starting at JPA and circling counterclockwise along Emmet Street, along Stadium Road, and to the intersection with Montebello Circle. The proposed buildings range in height from 8 to 12 stories and predominantly feature at the first story an EIFS masonry panel. That is what is proposed with the upper stories being EIFS and some metal panels. We will have a continuous sidewalk around the project. It features some stepped walls, terraced public areas, entrances along the facades, a segment of commercial storefront, street trees, and landscaping. The on-site parking will be concealed within the building. There are currently 9 structures on the site that will be razed. Most of the structures were constructed between 1927 and 1961. None of the properties are designated as historic. This is a large project. Looking at the height, massing, scale, and the spacing of the buildings, this project was reviewed at least 2 times when you were looking at the PUD. City Council looked at it twice. Given that review and some of the approvals, I assumed that the heights, spacing, and the scale were appropriate. A lot of what I am talking about is more the design of the buildings themselves. One of the things that I looked at was the building lengths. These building lengths generally fall in the middle. I looked at the project as a city block. It does represent those 4 streets and a building form within it. It is not out of scale with a lot of what is in the city. There is a variation in the building materials, in the color. The wall panels are articulated both physically and materially with the changes. The buildings do vary. There are streetscape elements that encourage pedestrian activity. The overall perception of visual impact of the height, massing, and scale will be mitigated. A big question for this evening is the EIFS, which is a synthetic stucco material. I realize the guidelines, which were written in 2011, do not recommend this. That material has significantly changed in the last several years. There are a lot of synthetic materials that we allow on buildings. You recently approved 2005 JPA, which had some EIFS. There was a specific condition that was added to the CoA. I have recommended that in the proposed conditions. The question had come up about the wall detail. I included that rendering. The panels can have a joint that is 'proud.' By 'proud,' we mean it extends above the surface. It can be in the form of a reveal. That reveal could be slender or wide. That is the 2 kinds of themes that we are talking about here. It can be flush in the sense that the reveal can be tight. It is a like a line, so the

joint is seemingly flush. I will allow the architect to present the information that they have. I know that they did provide and bring some samples tonight. When you look at this project, I know that Council requested that gap as you are coming down Emmet Street. That achieved a lot visually. What is left here is where you stand on this detail of this material. If you have issues with the material overall, we can certainly explore that. I thought that those were the 2 things that, along with the recommendations that I have made, those can be EIFS. The detail question can be resolved. If the conditions I have offered make sense, I would support approval of the project.

Chairman Mitchell – On my first round with the Planning Commission, John Fink was the chairman of the Planning Commission. His counsel to us was always to insist on the use of noble materials in the entrance corridor area. One of the most noble materials in his opinion was EIFS. That was 10 years ago. I hear that it has evolved in a significant way. I am wondering if you can help me get comfortable with the new iteration of EIFS so we can start thinking of it as a noble material.

Mr. Werner – I am not a fan of artificial synthetic materials. I haven't been a builder for almost 25 years. I can't comment on that. I believe a lot of it has to do with how something is done. I could show you some masonry projects that are terrible. It comes down to the execution, a quality material, and qualified mechanics. There are materials out there that are generic. The STOW product has a good reputation with how far you want to go in specifying a particular product. I am not an expert on EIFS. I certainly learned a lot working with the BAR. If it is done right and done well and it is the right product in the right location, it can perform as hoped for. I feel uncomfortable feeling like I want to convince you to use EIFS. I don't know enough to say that you should use it versus something else.

Chairman Mitchell – What is the most recent iteration/use of EIFS in Charlottesville?

Mr. Werner – It is in a lot of places such as West Main.

Commissioner Schwarz – If the apartment buildings were done properly, those would be EIFS. The hotel was a weird non-EIFS synthetic stucco that they had to replace with EIFS. They used synthetic stucco. It wasn't on insulation. I am not sure what they did, but they did have to replace it. It is the apartment building at Ridge and Cherry that is EIFS.

Commissioner d'Oronzio – I have a vast amount of experience with the installation of EIFS and its variations at a detailed and expansive level. What I have seen is that, with EIFS, it is about the installation and the proper monitoring of that installation. I am not sure what should we move forward with? It seems it would come with a stern admonition: "Follow all the directions." I don't know how else to handle that. One of the tragedies of earlier EIFS products was in the installation nobody explained how it had to be done. There are a couple buildings in town where the felt underlayment lies against the plywood. From top to bottom, you need to lap each sheet so that you are creating a path for moisture to stay on top and go down between that and the material. All sorts of buildings were built exactly the opposite. That felt was applied in the opposite fashion. Instead of being overlapping to drive water down, it was underlapping and driving the water into the building. It starts to rot the wood and the termites show up. If it is not installed properly, you have a disaster 15 years from now.

Commissioner Schwarz – The STOW products are a complete system. That is one of the things that you use the complete system, you follow their instructions. They are built in with a drainage plane that is behind the installation. The problem with EIFS is either water got in through infiltration from cracks or people didn't understand how water vapor worked. It would either come from inside the building or from the outside. It was stuck in there. That has been resolved. EIFS is a better product than stucco. Stucco is more problematic. That is my opinion.

Chairman Mitchell – The 'devil' is in the insulation details. When we start talking, we can talk about what we can do to mitigate this to make sure that the installation goes well.

Commissioner Stolzenberg – From an aesthetic perspective, are we talking about installation making it look worse or will it make the building rot inside? As an entrance corridor board member, I don't care about the building rotting.

Mr. Werner – The last house I built; the owner wanted a maintenance free house. We had to explain that there was no such thing. You are looking at aesthetics. There is an assumption that quality materials build a quality building. Something wrong can still be done. We are seeing this proliferation of artificial materials. The jury is still out over what it is going to be in 50 years. The Code Building was supposed to be brick. When they value-engineered it, it was a brick tile. You can't tell the difference. From the aesthetics perspective, if it is the STOW product, we have specifications for materials. From what I understand, with this STOW product, that is the line. If you are going to do it, you will need to do it right. What that building is going to look like in 20 years, I don't know. If it is built right, done right, and maintained, the owner has a built-in interest to keep that building standing and looking nice.

Applicant Presentation

Neil Reardon, Applicant – This is the view as we approach from JPA. There is a street view along JPA at the southeastern corner of the building. You can start to see the major materials; both the STOW brick at the base and the STOW metal panel, 3-color champagne. You have seen this before in previous presentations. This is the direct east elevation at the northeast corner of the project. You can see the keynotes there on the site plan. This is the northeast corner. You have already seen this. Zooming in to understand some of that materiality of the charcoal STOW brick panel. We are looking to achieve this material by using this EIFS product. You can see these 2 major volumes and much of the base of the project. It does have that charcoal masonry material. The 2-story volume turns into a 1-story volume. With the brick base, what we are trying to convey is the depth and materiality you have already seen and approved through the PUD process. At the walkups, there are some accents of metal panel that you see in the tan color and the light fixtures. Another shot of the north side of the building showing those active uses of the walkups and that same materiality. Moving around to the commercial space, there is a question here on the materiality of the decking that we are proposing there at the landscape terrace where this outdoor gathering area would happen in front of that market. What we are proposing there is simple material decking to handle some of the verticals and possibly some of the horizontal changes in that grade change. It will be a nice dynamic piece in front and near the main entrance for people to congregate. The simple decking material will be a tan and earthy colored tone that compliments other things we are doing on the design. On the northwest corner of the building, this landscape triangle is out in the right-of-way where Stadium and Emmet bisect each other. This is the view of the main corner of the building. You can see that charcoal brick volume holding that main entry of the western building. The tricolor

panel majority material in 3 modules on the north building. We have a view pulled back from the same corner. You can see the massing of the north and west buildings. We wanted to show a few more renderings. This is the drop-off zone primarily at level one. At the main entry, there are the storefront windows. We have the relationship at the public right-of-way with bike lanes, sidewalks, and some of the retaining walls.

We have the front and side elevations. We have the masonry panel with the STOW brick, the dark charcoal color. The other major material is the 3-color blend of the champagne colors. This is a metallic finish EIFS product. We do not have any concerns on the water envelope. EIFS has come a long way in the last 15 to 20 years. It is a much different product. We would never do something without a drainage plane. The thermal properties of the EIFS panel and the wall system that you get with the envelope has been significantly enhanced. While many architects were not comfortable specifying this product 20 years ago, it is now something that we are comfortable doing. It allows us to have much more variation in the façade. When we designed this, we wanted to allow for some flexibility with the jointing and the patterning we did here. A key here is having the masonry look at the dark charcoal and having the modularization and jointing pattern on the tricolored champagne be varied and dynamic on these large façades. That was intentional. These products in front of you are allowing us to carry that out.

The applicant did pass around physical samples of the materials to be used.

There is a 4th color of this metallic. That is a dark charcoal version of it. This primarily exists on the upper levels of the floor as we step back. The façade usually changes towards the top of the building. That is representational of some of the texture. What we are not able to do is get an exact sample of the color. It has the thickness of the product itself. The backing and the wall envelope would be much thicker than that. The mortar variation and that texture is improved from that. The photo representing the masonry/mortar color is more representational. It is closer to the actual brick color, which is a key for us to have in these charcoal zones. The photos you see here as supplementary to the material board are conveying the materiality and the depth of that mortar. This is a project in Nashville built by Subtext. It has, while a different masonry color represented in the red brick and a more standard mortar color, the quality there is representational of having a texture on the brick. If this was to be a stenciled brick without any variation, texture, or depth to the mortar, we wouldn't want to do that product because it is not achieving what we are looking for. The climate of cost escalation with the construction market is the spot we are at to achieve the design aesthetic we have set forth on the project.

You can see on this straight-on view the built form of that different color of masonry and a different color of mortar. That conveys what this would touch and feel like from within 10 to 20 feet at the street presence. As we go up the building, you wouldn't need this level of texture and articulation.

Chairman Mitchell – I love The Lawn. I want to make sure we protect the views from The Lawn. You did a pretty good job of 'walking me' through what this is going to look like. This suggests that I will not be able to see this from The Rotunda.

Mr. Reardon – That is correct. These exhibits were submitted in a prior submittal and various points along the project's history. I don't that we have explicitly had them up in front of this body. We are happy to go through them. That is why we included them in the packet.

Chairman Mitchell – There is a lot of concern from the community, especially the University community from people who love the institution. A lot of people are worried about this looming over The Lawn. This suggests that it will not.

Mr. Reardon – This is the view from The Rotunda. We go south in subsequent pages/slides. We tried to pick views where we thought it would be visible. We can say that it isn't visible from anywhere on The Lawn. What we did hear with the views shown in these exhibits was to pick spots where we thought it could be visible. This is the worst possible scenario for visibility. It was not viewable from there mostly due to the buildings that do surround The Lawn and their proximity and closeness to The Lawn. Additionally, our project is down in grade significantly. That is the major reason why it is not seen from much of Grounds.

Commissioner Joy – Can you expand about the process in which you were able to do this montage? I have seen these typically done. You usually see the 3D model of the surrounding environments. It seems that the dashed lines you have identified in each of these images is shockingly close to being visible. There is not a lot of buffer. Knowing that these are crude, photo representation exhibits, how can you ensure the accuracy of what is being shown?

Mr. Reardon – You are not wrong. It is difficult to ascertain the exact specificity of an angle from a half mile away, considering vegetation on trees and the tops of buildings. We know that the buildings do hide it. We specifically chose depictions here where there were no leaves on the trees. We are not counting on that. What we can verify to an extent level of accuracy is that we know the grades exist. We know what grade our building is at and the height of our building. The viewsheds are relatively close to the treetops. The accuracy of the depiction is there to a level. I don't know what kind of level we could do more than this without significant survey work and other items.

Commissioner Joy – Was GIS used to model this? Was it an extrapolation from a 2-dimensional representation and an approximation from a photo point?

Mr. Reardon – We have a 3-dimensional model with accurate grades. On Google Earth, that is public knowledge. There also is GIS public knowledge to buffer it on what those points of elevation are. We didn't randomly pick a viewpoint and assign it a grade-point elevation that we didn't know. We did know what the grade-point elevation was.

Commissioner Schwarz – I am not sure that you gave us the specific products. When I go on STOW's website, you look up architectural panel and there are different products. Have you narrowed that down?

Mr. Reardon – We haven't narrowed it down to a specific product for you. If that was to be something this body would want, we can do that. We were not under the impression that was a requirement for this presentation or your review. Specifying an exact material in many of these cases would be early to commit to something. We want to make sure that product doesn't change in price. We want to make sure that product is available when this project is built. Committing to specifying exact materials is a difficult thing to do.

Commissioner Schwarz – You list these as architectural panels. When I think of a panel, I think of something that is prefabricated and put on the building. Is that what it is? Or are you going to do it with the traditional system where you put up the EIFS and you spray everything?

Mr. Reardon – These would be field finished; not completely panelized in a factory. It is a field finish for both major materials for the tricolor champagne as well as the STOW brick. At the time of the submittal, we were considering a panelized version. One of the reasons we are using this process is that there is a lot of constraints out here, which drives up the labor. That is one of the reasons other materials had that cost price point that didn't work for us.

Commissioner Schwarz – You have the 3 different champagne colors, and you are going to field finish those. Does that mean you must go around the building 3 times?

Mr. Reardon – I don't know the exact process that the contractor would use. It would be quartering off two of the three, finishing one, and subsequently doing that with the other two.

Commissioner Schwarz – That is not really our purview. I was curious how that was going to work. You are showing some deep reveals and profiles on the faux masonry. Are we going to get what we are seeing?

Mr. Reardon –There is a rendering at the northeast corner where you are referring to some brick details in prior renderings. Those renderings from last time are where we were looking to achieve some dynamic things towards the base of the building.

Commissioner Schwarz – You are carrying it all the way up on the renderings. Is that not the case anymore?

Mr. Reardon – Is there an inset or these types of brick details that were conveyed in the renderings? We would love to achieve those. I don't know they will be achievable at all locations using this product. At the base, where you see it between the 2 windows, that would be an instance where we would want to give it some depth to achieve what we have already presented to you as the exterior design.

Commissioner Schwarz – The renderings are a guide at this point.

Mr. Reardon – With a building this big, as the process goes, we are conveying an overall design aesthetic. The execution of those individual details must happen later. I do understand your question and the value that brings to the overall design. Perhaps, if none of those were executed, this doesn't 'sing' in the same way.

Commissioner Schwarz – Without the specific products, you don't have any warranty information. We don't know how long the color is going to last.

Mr. Reardon – We don't know that. I don't think anyone would know that even with a warranty for certain. From a maintenance perspective, operationally, we must have a lifespan here that is nearly equivalent to a more expensive material. I could not speak to an exact warranty date or lifespan. We are comfortable that this is not going to fail like you have seen from EIFS products from 20 years ago fail with either water infiltration or other issues. We use this product in extreme weather conditions. We are comfortable with the technical envelope of this material on a building that is rather large.

Commissioner Schwarz – This is an entrance corridor. It is not an architectural design control district. At the same time, this is going to be the tallest building in Charlottesville on a very prominent location. This is why I am nervous. What is the wood product that you are trying to use on the concrete? **[re: Trex]**

Mr. Reardon – It has not yet been honed in on specifically. We would probably go with a composite deck that would be complimentary. The idea here is that the color of it and the use of it is complimentary of that major champagne color. We have not honed in on the specific texture of it or the exact color of it. We want to compliment what is happening at the lobby on the inside of the building; giving that as a thing that carries through the building. We will also have some of it in the courtyard on the interior of the building and the private side.

Commissioner Schwarz – It is like a trex-like product to laminate the concrete.

Mr. Reardon – It would not be something that would be refinished on a year-to-year basis. That level of maintenance is not what we want. We want it to be given some hard use by people using that space, residents or public accessing that market.

Commissioner Schwarz – I know that staff flagged this. What is your thinking now for the reveal?

Mr. Reardon – One of the things we showed of a zoomed in view of a rendering was an outboard joint, vertically and horizontally. We are not committed to that being an outboard. If it was inboard, that is probably a more likely detailing scenario of those joints. The joints were aligned when we didn't know for certain what material we would be proposing to you in this packet. The pattern and the color summary that you get is meant to be shown to you tonight. With the outboard/inboard question on the detail and the way it is detailed, we are open to how you might see it.

Commissioner Schwarz – Currently, are you thinking it is a typical EIFS detail where you use thicker or thinner insulation?

Mr. Reardon – It will be the thickness of the material. The insulation will probably be varied at that detail. I couldn't draw that exact detail here.

Commissioner Schwarz – It sounds like it is not a metal extrusion.

Mr. Reardon – I don't believe it would be a metal extrusion in this detailing scenario. A fiber cement panel might have a metal extrusion.

Commissioner Schwarz – Do you have any lights that you are planning for the rooftops? I know you have some rooftop decks and the pool.

Mr. Reardon – The pool is in the lower courtyard. Operationally, there is nothing like that on the roof. There is one roof space. It is on the east building at the east end at JPA and Emmet. There is a small exterior roof deck at that location. That would have an exterior roof terrace. There would be some wall-pack lighting associated with that but nothing major. There is no overhead structure that exists on there right now. If we were to do that, that would be set back against the building and nonvisible. The lighting in those areas is not an airport lighting situation. It is minimal. It is creating a comfortable ambiance.

Commissioner Schwarz – Nothing is going to be spilling out onto the street from up there.

Mr. Reardon – I don't anticipate any lighting other than what has already been depicted at the storefronts.

Commissioner Schwarz – You have a transformer that is located on the plan at the corner of Emmet and JPA. It doesn't look like it shows up in the renderings. What is it? How big is it? What are the plans for screening it? **[re: Screening]**

Mr. Reardon – It is shown on the site plan. If you look at the northeast part of the site, there is a transformer location there. It is near the secondary entry. There are some bike racks there. We plan to screen that with vegetation. We plan to screen that as much as possible. We don't love the location of that and why it must be there. This is a big project that requires numerous screenings. We would want to screen that. I would welcome your thoughts on how you see that best being screened out in the right-of-way. Some people like vegetation for that screening.

Commissioner Schwarz – Is there room for vegetation?

Mr. Reardon – There is room for vegetation. It is currently not on the site plan as depicted. We intend to screen that either way with something robust with vegetation or a combination of a structured fence with vegetation on it in the growing season. I don't think the guidelines had anything specific; just that it needed to be screened. Contextually, the other 2 are just different than that one. They are on the side of the building towards the right-of-way. It will be a major entry to the building for residents. Because we have been stuck with that location, we would do an enhanced version of screening. They are 6 feet high. Whether it is a structured fence with vegetation on it or vegetation that grows 6 feet, we are open to both of those things.

Commissioner Schwarz – Six feet is what you are thinking for the typical height.

Mr. Reardon – Yes. You want your screening to be 6 feet. The piece of equipment is 4 to 5 feet. The specific piece of equipment is specified by the utility provider. We would have to make sure we have that. I don't see anywhere around the country that are than 5.5 feet tall. We plan for our screening to cover 6 feet, especially in these front facing locations.

Commissioner Schwarz – You list mechanical louvers on your elevation materials. Where are they?

Mr. Reardon – We have several of them. The major sized louvers would be at the garage. Because of the way the garage faces, any that were on the façade would be in the lowest level of volume along JPA in the dark charcoal panel. There are walkout units there. There is a break, where there is a break or a mechanical room. If we did exhaust the garage from the sidewall, that would be the location.

Commissioner Schwarz – It would be in between some of those units.

Mr. Reardon – It would be. If there is space on the wall, what is more likely, is the garage is ventilated vertically because it is mostly buried. There would be an area well. That grate that is

horizontal is coming up that way. The western half of the garage would be ventilated that way. In these zones where we don't have a walkup condition, we would locate one of those area wells and have that exhaust happen from that arrangement.

Commissioner Schwarz – For the faux masonry, what type of control joints do you need for those? How often are we going to see something that is like a break in the masonry pattern? **[re: joints]**

Mr. Reardon – It is probably going to be at around 20-foot intervals. We would locate those strategically with the window pattern. In the charcoal brick, you can see that there are not huge zones of that. There are the sidewalls that end up being about 60 or 65 feet total. Each of those would have a strategic vertical joint; 2 or 3 of them amongst that longest façade that is 60 feet.

Commissioner Schwarz – With the brick, you can wrap all your details with it so that it looks like it is solid. **[re: corner bricks]**

Mr. Reardon – Compared to a 4-inch masonry with a cavity wall, the brick joints here are easier to deal with. They are easier, less often, and less visible.

Commissioner Schwarz – All your corner conditions are going to look like a full brick.

Mr. Reardon – That is correct. The corners look pretty good. That was a concern of ours with this STOW brick panel and had to come far enough to convey actual corners, so it appears as a 4-inch brick.

Commissioner Schwarz – Each brick isn't stuck on the building. Is it sheet applied?

Mr. Reardon – It is like a sheet applied. There is a factory version of it too. With the field applied version, I am still looking for the exact specifics of how they do that. All I know is that it is field applied. I know what the end-product looks like. I don't think it is one at a time. I think that it is more efficient than that out in the field.

Commissioner Schwarz – You have located streetlights around the building. We have changed our lighting standards. Are we going to get new city streetlights that are 3000 Kelvin instead of being 4000? It would be great if we could do that. Maybe start every time we put in some new poles, and they are the right color.

Mr. Werner – I know they are changing Dominion Power lights.

Commissioner Schwarz – At one point, the Belmont Bridge lights were going to become the new city standard. I don't know if that is now the case.

Mr. Werner – I know that they were developed in the Standards and Design Manual in the past. I urged them to incorporate something relative to the color temperature.

Commissioner Stolzenberg – When you were talking about the dark brick and the patterns that you have there, you have soldier coursing on each floor. You have that thing between windows. Were you saying those might go away?

Mr. Reardon – They will be executed differently than those previous renderings. We were giving ourselves flexibility and conveying overall design aesthetic in the PUD process. That is where those images are from. Through the site plan process here, we will submit updated elevations of those areas. Our intention would be to have some level of depth in between the windows as generally outlined in those renderings. I couldn't say for sure how that is executed. With the specifics on this product, we want it to be that way. Can it be executed like the depth on the inboard of the joint detail and the champagne? Can we convey that thickness change with the efficiency of having one solid wall behind that and not altering the exterior wall?

Commissioner Stolzenberg – What about the soldier coursing? That is at the same depth. It is a change in pattern.

Mr. Reardon – It is a change in pattern. If we can convey it with depth, we would. In any instance, it would be turned, soldiered, and represented that way at the spots where we have done that. It does appear in some zoomed in renderings with that soldier course. On this elevation, you don't get into that level of depth there. Through the site plan review process, I believe we will be continually submitting elevations at each of the iterations of the site plan. That elevation can be updated as we go to clarify what we are doing.

Commissioner Stolzenberg – You note in your material selection you are using U-shaped bike racks. That is good. Your renderings have wave-shaped bike racks.

Mr. Reardon – We would be happy to change those to what is recommended. The renderings were somewhat aspirational.

Commissioner Stolzenberg – Overall, I was focusing on how your streetscape is interacting with the public. You did a pretty good job overall. Where you have the private porches for these walkup units, it would be helpful for defining that private realm if you had a ledge wall.

Mr. Reardon – That is a level of detail we didn't define in these renderings. Your suggestion would be, rather than a privacy railing with a gate, more of a built wall condition.

Commissioner Stolzenberg – A gate would serve that purpose of defining the space. Here, you don't have anything. A wall would be more practical.

Mr. Reardon – We do see walkups around that have 2 walls on the 2 of the 3 sides as a level of privacy. Your comment is not security related. It is the defining of space related. These are public facing. We want to do contextually the best version of them. They change as you go around the building. The ones on Emmet are different than the ones on JPA. They are also at different heights as they go. Through the site plan review process, we did add a few things like this. You will see that come through with those drawing sets.

Commissioner Solla-Yates – Thank you for responding to the public concerns. I see a lot of changes and improvements.

Commissioner Roettger – My first thought was the reflectivity of the windows. That might have been addressed through some other forum. That is also in renderings that might need to be updated. Has that been discussed? **[re: Glass specification]**

Mr. Reardon – We haven't gotten into the specifics of that. It is in the renderings depicted in a very reflective way. With our first pass of renderings, they were quite blue. One of the ways to make the windows not so flashy and distracting is to change that and make them grayer. The lighting changes all of this. We haven't specified exact reflectivity at this point. If there is something that is valuable to convey from this body, we would love to know that.

Mr. Werner – With glass, the number we have settled on is VLT (Visible Light Transmission) as a percentage with 100 percent being clear. Clear glass was the term we used. Anything that is 70 percent or higher is considered clear glass. That is primarily important in a commercial setting such as the Mall. We want that visibility into the street through the storefronts. There is a note in the drawings about using clear glass. That is something that I would check with the construction drawings. The question gets, as you start going up into residential space. I have never looked at the VLT of glass on residential windows. It is in your purview to request a certain level and even a certain color. A good example would be Dairy Central. That front building was reviewed by the BAR. On the east end, there is the glazed cube that has some variation. I think we went as low as 62 percent. There was some tinting of that class allowed so it didn't end up looking like a big flash bulb. The fact that they have specified that they will be using clear glass hits the threshold for me. From a design side of things, if you have some additional views on that, it is in your purview to ask.

Mr. Reardon – At the ground plane, this is where this is important. It is perhaps less applicable to the upper levels. Even more applicable would be the common area spaces during the major entries where we do have storefront glazing. We did note the clear glazing specifically in this presentation.

Ms. Roettger – The massing is great. I know there has been a lot of work to try to break down the number of units getting put on that site. I was asking for the upper levels. I know there is a privacy thing. You don't want to let the metallic paneling be too office building.

Mr. Reardon – One of the things that often comes into play is that these are residential units. Many of these windows are bedrooms. There are shades and those shades are closed. To depict the building as never having a shade closed behind a window would not be realistic. Sometimes in night renderings, we can turn some windows with shades and some not, so you can see it both ways, especially when that is more apparent in the dusk light condition.

Commissioner Stolzenberg – What are you thinking for those walkup units? I can see it going both ways.

Mr. Reardon – Completely clear glass isn't good from a safety perspective. We are not going to frost that glass or do anything like that. That would feel non-residential. As a walkup, we want these to feel residential. The side lights there would have maneuverable shades on each of those. Sometimes, even the door does have those in a public situation because you need that level of privacy on the inside. It speaks to the functionality and operations of those walkup units. We do a lot of those. Most of the time it is controlled on the inside by the resident with a different type of shade than would exist on a higher level of the building.

Commissioner Roettger – My only comment on the materials is that it looks better on paper and the renderings than the sample.

Mr. Reardon – The grout color matters in this. I think it matters in all masonry. I trend towards mortar color being close or complimentary to the actual clay or other masonry product. In this case, it is far better depicted. Our sample maker couldn't get the grout nearly dark enough or have some variation in that grout so that it looks real. Hopefully in the images conveyed on the screen and the digital version of the material sample board, it does come across that way. **[re: Grout/mortar]**

Commissioner Roettger – On the bike lane, what is going on in terms of the JPA bike lane versus this bike lane coming into the sidewalk? It looks fine.

Mr. Reardon – The framework is off-street bike facilities. We are taking the curb coming out with it. That bike lane where it is mostly striped becomes a raised curb. What we wanted to do in most cases, best practice, is locate the tree and green zone between there in the sidewalk for a point of delineation for different users. That is generally the framework. It does swing in and out. One of the places it swings in and join on the east side on JPA would be the spot where the new bus facility would be placed. Right now, there is just a bus sign there. We understand, through the transit agency, that needs to be enhanced. That is one instance where we swing it to make sure that the bike lane comes behind that transit facility. There are a couple other instances where we have curb cuts. One came in the first round of site plan review. It was along Stadium on the west side. It made more sense to combine them. It was a better usage of space if they did combine and stayed consistently that way as to not weave in and out too much. We still do the tree planting canopy. We do it a deeper off the curb. The big picture goal is to have these facilities for each user and have good solid boulevard trees in the right-of-way.

Commissioner Roettger – In terms of the [reveal?], is that still the proud versus the flush reveal? Is that still up in the air? I like, on the rendering, that there is a nice shadow line.

Mr. Reardon – We are open to it being outboard or inboard. It creates a shadow line either way. I don't know which one is better. It will come down to the best way to detail each of those joints. What we wanted to convey here is the overall color texture and the varying 3 colors and what those look like in the general jointing pattern. We are not overly committed to an outboard or inboard joint detail. It might be dictated by the contractor working with us to detail the building.

Commissioner Roettger – I would hope that it remains at least what is shown here in terms of the shadow line.

Mr. Reardon – That is the best version of the exterior façade.

Commissioner Joy – What is Wolf-Ackerman's role in this project?

Mr. Reardon – We have a design team, which includes Wolf-Ackerman. Fred Wolf has been consulting as our local architect on the project. We also have Timmons as our civil engineer. They have been active on the project for the entirety of it. Our landscape architect is AJC, a design firm from Atlanta.

Commissioner Joy – Can you confirm the bed count?

Mr. Reardon – It was specified in the PUD. There was a maximum range given in the PUD. It was 550 DUs (Dwelling Units) and around 1200 beds.

Commissioner Joy – On page 55, there is a dusk rendering of the VERVE signage. It appears to be nonilluminated in the dusk rendering. I wanted to confirm whether the intent was to have it be nonilluminated.

Mr. Reardon – It is not lit in this rendition. The signage is noted here as a thing to be defined later in terms of its size and illumination. I couldn't tell you for sure if we were going to illuminate that right now. It is over the major entry. I think there will be a sign in that vicinity. There is a process here to articulate that.

Commissioner Schwarz – It is above the 2nd floor windowsills. In our old code, it wasn't allowed. I think that sign can't be there.

Mr. Reardon – With your dictation of height on the 2nd floor storefront window, there would not be space for that sign.

Commissioner Schwarz – The regulation is that it must be below the sill of the 2nd floor windows.

Mr. Reardon – We will take that back and apportion signage.

Mr. Werner – It is in the staff report that any signage must meet the ordinance. It is a separate permit. Entrance corridor signage can be illuminated. You all have purview over this. If there is something related to the illuminating, you certainly could address the lighting relative to signs if you wanted to put something in the conditions. I don't want to close the door on it if there is a concern about lighting.

Mr. Reardon – If there is anything you want us to take as a note here tonight, we will comply with the signage ordinance. This rendering does not depict compliance with that. We will make that alteration.

Commissioner Joy – We talked about the EIFS, which is a disappointing development from a durability standpoint. In looking at STOW's recommendations on maintenance, it seems like inspection and regular repair is not uncommon. What roofing infrastructure is being proposed to maintain these significant facades? Will those pieces of infrastructure be visible that currently aren't shown in these renderings? How would one go about servicing this façade?

Mr. Reardon – There is going to be a [davit] system. Window cleaning is more often than any of this. There would be roof anchors on the top. That is how these buildings are serviced. There is a roof anchor. There is a structure that is hung off the side of the building from that for window washing.

Commissioner Joy – It is a portable system so it will collapse. It won't be visible.

Mr. Reardon – That would be the same way any maintenance issues with the envelope of the building would be dealt with if they came up or if there was a resurfacing of the exterior materials. It likely would be done that way as well.

Commissioner Joy – This is my third month of being a non-voting member of the Commission. I represent a significant neighbor to this project. I am aware of your other neighbors, the residential neighbors in this area. Looking for guiding principles on this process, I know there is the 2011 guidelines, which have been brought up for the entrance corridor. "The intent of these guidelines and the review processes is to ensure quality of development compatible with the city's historic, architectural, and cultural resources." Given that this is a 'stone's throw' from a unique site, The Lawn, which is a UNESCO World Heritage Site. They define that as "the world heritage is the designation for places on Earth that are outstanding universal value to humanity. As such, have been inscribed on World Heritage List to be protected for future generations to appreciate and enjoy." Looking at Chapter 1 of the checklist that went through that and was reviewed by the city, there was the last item in the chapter. Respect and enhance Charlottesville's character. The response from the development team was that the building design is of a contemporary nature and does not attempt to be an imitator of a traditional architectural style. It is a unique design that is not lifted from external vernacular sources. The idea is that it is not lifted from external vernacular sources. My understanding is an architecture concerned with domestic and functional rather than public or monumental buildings. I scrolled through the body of work that is The VERVE. I think of this adjacency to a UNESCO World Heritage Site and the 2011 entrance corridor design guidelines with the intent of trying to acknowledge Charlottesville as a unique place, a place that we, as residents, are proud of, a place that has housing issues, which are significant. I have a hard time connecting the dots of meeting the intent of the design guidelines and have seen the context of The VERVE buildings across the country. I am at a loss to figure out how this building represents the intent that this community set forth in previous years, which may or may not change in the future and acknowledge the significance of the adjacency to The Lawn and UVA, which is the only higher education UNESCO World Heritage Site on this continent. It is more of a question for the commissioners and as a community. We have a new zoning ordinance. I know we need housing. Density is good. You have a good site plan. The amenities at the street level are great. With the scale, you have 1200 people. I understand the economics are challenging with the building materials and in this market. I wonder about the concept of stewardship. We, as this Commission, are reviewing projects that more likely will impact future generations than the current lived experience. As an architect at UVA, I am no stranger to reviews and oversight and attempts to try to address the complexity of construction and cost. It is not an easy task. This is a great site with its proximity. This affords a great opportunity. Subtext's commitment to the idea of bigger projects that are more proximate are preferable over doing smaller, scattered sprawling periphery projects. With it comes this challenge.

Mr. Reardon – This is challenging work. There are a lot of buildings. There is a lot of square footage that is built. I try to do it well. These are fabric buildings. We try to do them well. We don't have the budget to execute good brick details all the way through a project. It does not exist in most cases. We try to do it where possible and find the opportunities to do it. Doing the work well is hitting the sweet spot of what you can do, what is in budget, and making sure, at the foremost, that all the things related to the exterior and right-of-way are being done as well as possible.

Mr. Werner – The ERB Guidelines are on my list of things that need to be updated. Your question is a good one. It is why I included the images of buildings around Charlottesville. We are going from seeing monumental scale buildings occasionally. We are going to see them more regularly. What is it that we are trying to emulate? I don't know how to answer the question architecturally. Ultimately, it comes down to that subjective of liking this or not. I don't know how to answer that question. Where I am stuck is that this is the 6th time with the elevations. I went back and looked at

the prior submittals that went to the Planning Commission and City Council. It hasn't changed significantly except for that opening as you come down Emmet Street. We looked at this. I must assume some level of acceptance from the parties that have been reviewing it. When I start to look at it, I am not sure what my canvas is. That is some of the difficulty of an entrance corridor project versus something we review with the BAR. The one thing that is still lingering out there is the idea of these reveal lines. They do present a transition of colors and whether that transition in there was due to shadow or shade. Does the width of that matter? I am not sure how to answer that. If there is something you would prefer to see stylistically architecturally, I would like for you to express it. That is the biggest detail tonight. I want to make sure we get that right.

Commissioner Solla-Yates – There are 8 conditions recommended in the packet from staff. Do you have concerns on those issues?

Mr. Reardon – Of the 8 conditions, we don't have major concerns over any of them. The last 2 are pertaining to EIFS. It sounds like there needs to be some level of specificity with those. I would withhold complete agreement on all 8 conditions. The last condition says that clarification is needed. The condition above that the EIFS product will be a STOW product as specified. It notes a durable synthetic material, which is mechanically fastened over appropriate drainage. We already got into that. We do not have a problem with that one. If there are modifications to any of these, we would want to re-comment on that. No major concerns with those other conditions.

Commissioner Solla-Yates – Condition 8 is part of the site plan process.

Mr. Werner – That was a placeholder. The second one up is identical condition from 2005 JPA. If you wanted to insert something, I put that in there as pneumonic device.

ECRB Discussion and Motion

Commissioner Schwarz – When this first came to us, you won us over with some beautiful renderings. I remember the discussion the last time we saw you. It was about a metal panel building in masonry, which has become all EIFS. The renderings still say metal panel building with masonry. They show some very clear protruded joint details that look like metal extrusions. You have mentioned that with the faux brick that you are going to try to keep the details at the lower levels but get rid of them at the upper levels. We don't know what this joint detail is going to be. Because this is a 12-story building and because materials are important, going back to our guidelines, "choose materials that offer texture and avoid monotonous surfaces." You are trying to get rid of the monotonous surface. I get that. You are doing that with a lot of color. "Use a variation of materials, textures, patterns, colors, and details," with details being the key word "to break down the mass and scale the building." "Use massing reduction techniques of articulated base, water table, string courses, cornices, material changes, patterns, and fenestrations to reduce the apparent height of a large building." There is a whole page on details in our guidelines. Architectural details are important tools to create human scale and architectural character. Techniques include highlighting foundations, lentils, sills, and cornices with contrasting materials and breaking up the mass of the building with bands at floor levels, projections at entries, use articulated elements such as cornices, bell courses, water tables, beta visions, variations in wall plan and roof features to create designs of interest. As much as I don't like our guidelines for the ERB, there is a lot about details. You need to show us what details you want to use. I like your renderings. When you tell me that these are just a guideline, we are going to simplify them, and they are not going to be this, I

don't have enough anymore to go on to approve this. You are moving in a good direction as far as the building is concerned. I would like you to figure out what you want to do with the skin of the building and tell us so that we can approve it or not. Your renderings show a lot of richness. When you tell me that you are going to take the details off the masonry, that does worry me because this is going to be the biggest and tallest building in Charlottesville. We have messed up a couple times with big buildings. The Standard on West Main looked fine on paper. The construction of it was terrible. The way it was finished was terrible. You are telling us that you are going to figure out as you go this 100 percent EIFS building. I am worried about the many ways it could go wrong. Looking on STOW's website, I was feeling Ok about this brick. That sample scares me. You are going to have to convince me that is going to do all the detailing that you say it will. I am not sure if you have another project that you have done that you have used this material that has all the ins and outs with the brick. EIFS can't touch the ground. What are you going to do when the brick comes near the ground? **[re: EIFS at ground level]** How are you going to disguise the fact that it is floating right there? I would like to see some details to understand it. I would suggest that you ask for a deferral unless everybody else wants to approve it. You need to find a way to screen that utility box. With the rooftop lights, no lights greater than 1600 lumens where the light source is visible from beyond the property line. Any building mounted light should be shielded and directed to only light the surface of the building and not shine out from the building. This is something we ran into with some of the buildings on West Main Street. You are showing shielded lights on your façade, which is great. With some of the buildings on West Main, we had to go through and get the developer to reduce the brightness of those lights because they were creating some serious glare issues to people on the streets. Any appreciable loss of canopy trees from the depictions presented in this application, regardless of cause, should require review by the ERB. I am saying that because things happen during the site plan process. Make sure you have that figured out before you promise us that this building is going to be ringed with street trees. Tonight, I am not prepared to approve this without some more detail on what you want to do with the building skin and to beg you to find something else other than the fake brick or do something to convince me that it is going to do what you think it is going to do.

Commissioner Stolzenberg – I don't disagree with Commissioner Schwarz on the fact that these renderings appear to be something different from the cladding that we have been presented tonight. My view of a CoA is that what matters to me and ultimately to most of the ERB guidelines is how that building interfaces with the public realm. While the cladding is not nothing, it is a small piece of that. They have done a good job of building a streetscape here. I think they have done a good job of design in the public realm. While these aren't the cladding decisions I would have made, the guidelines tell me about my preferences for how buildings should be clad and appear are wrong. That building in Nashville looked pretty good. The guidelines would call that a cheap imitation of the Jeffersonian architectural style and say that it is neither appropriate nor desirable. Reading that in the guidelines, the guidelines are asking for buildings that are modern and different. Do I want buildings that are modern and different? Not really. Do I think it complies with the guidelines? I would have to vote to approve a CoA.

Commissioner d'Oronzio – I would 'mirror' a couple of Commissioner Stolzenberg's view on that. I would put it in a more sweeping way. Acknowledging the grittiness level of some of Commissioner Schwarz's concerns there and my own dubious relationship with EIFS that has come from a dreadful experience, I would be inclined to grant the CoA provided we had that solid consensus.

Commissioner Solla-Yates – I taught design at UVA. I don't feel qualified to talk about this. I like the rendering. It makes sense. There is a lot of good in it. I hear Commissioner Schwarz's concerns. I trust them. I don't know the best way procedurally to address those concerns. I am interested in thoughts from staff on that. To Commissioner Joy's concern about how to find a reasonable balance, which is the right question to be asking, I am leaning somewhat on the Comprehensive Plan. On page 24, 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 neighborhoods' historic, architectural, and cultural resources, while allowing for reuse of structures and evolution of uses in these areas.' To me, it is about finding the right balance. It is going to be hard. Broadly, I support the vision here. I see its merit. I am concerned about the details. I am interested in how we can resolve those details.

Commissioner Roettger – I am not sure on the procedures and options that we have available to us. On the architectural side, there are the mockups. Those are things we are doing where you get to see the materials. That is so far down the road that it doesn't come to the Planning Commission. I do like that the public realm has been worked out well. It is in a valley. It is hard to make those ground levels feel important enough. Because of the topography, it feels like it is squashed. That corner is nice. My question is about the material. We need housing for students. It is hard to push the massing and density in there. I drove over there. JPA has 2 ends to it. One end does have stores and more commercial space. The other end is a dead end into UVA, which becomes very historic and protected property. All the activity in the market seems a like very nice balance. The students who live there are usually flowing the other way. It hopefully gives them retail. It would benefit those coming to the UVA side. I support it. I don't know what we can do about the evolution of what happens with the material. We need to have these more approximate student housing to help us with our affordability issues.

Commissioner Joy – The PUD has been approved. My concern is the general massing, density, and the nature of the development. I feel that we are closer to this development discourse than average. I would have a hard time imparting after seeing the presentation and why this is best for this prominent site in Charlottesville and for the students of UVA. I would have a hard time explaining other than it is expensive to build here. I think there is an opportunity for ingenuity and stewardship. That is what I was touching on. It is hard for me to catch the thread of what would make the VERVE at this site the best rendition of what it could be, even with the limitations. With the limitations come design opportunity. You get more to the core of what would make a place great. I concur with everybody here. It is hard to look at that board. I understand the challenge you are in. It is a design issue. I would be hard to advocate in future years.

Chairman Mitchell – The PUD has been approved. Something is going to get built here. I agree with everything that Commissioner Schwarz said. There needs to be more detail, more specificity. If I had to vote today, I would vote not to approve the CoA.

Chairman Mitchell conducted a straw poll on approving or denying the CoA. The straw poll was 3-3.

Chairman Mitchell – If it is deferred, they would have the opportunity to address a lot of the detailed concerns that Commissioner Schwarz raised. We can vote to approve or deny. They can opt to come back to us next month.

Ms. Creasy – They can choose to defer. The ERB applications don't have the same time frames that others do. You could vote for the deferral. They could come back with the same material. It would probably make sense to have some conversation on that with the applicant.

Mr. Reardon – We hadn't planned for that scenario. We do have time through the site plan review process.

Dylan Lambur, Applicant – I would say we are open to deferring. I would assume that means next month. We would be happy to defer and come back with more details for you guys.

Commissioner Stolzenberg – Would you prefer next month?

Mr. Werner – You requesting a deferral puts 'the ball in your court.' The challenge is that you would have to get some back to us. If the applicant requests a deferral, it becomes their decision when to bring it back.

Ms. Creasy – We would let them know the time frames of when we would need materials back. Once those materials are received by Mr. Werner, we work with them to get to an agenda that makes sense.

Commissioner Stolzenberg – Can I understand what you guys are looking for out of a deferral? Are you looking for renderings with EIFS?

Commissioner Roettger – If we could select 1 or 2 renderings and look at the shadow line joints, how the metallic might look. **[re: EIFS reveal]** I don't know if there is an opportunity to do some brick around the immediate entrance. If there is a way to take a rendering and show a corner, we can focus on taking some photos of those more in detail.

Commissioner Schwarz – I want to see a full-height view. If you are going to be reducing the details on the brick, I want to know what you are planning on reducing it down to and understanding what this is going look like. **[re: brick coursing]** It still looks like dark metal strips for all these reveals and understanding what that is going to look like if it is just EIFS as a depression or if it is a protrusion. Is that going to be painted a different color? **[re: EIFS reveal]**

Mr. Reardon – I understand what you are looking for in a future version of this meeting with a deferral. I will summarize in 2 pieces: 1. anywhere where we have an older rendering and where that can be updated and what we are proposing in detail is depicted. 2. Some additional information on how those things you brought up tonight and we spoke on how those are detailed out. You are not asking for specified materials currently but a level of detail with the areas of emphasis from. It is updated graphic illustrations on the things talked about and additional content on details.

Commissioner Schwarz – A section showing the brick. You don't have to show us what is behind the wall.

Mr. Reardon – A key here is the details around materiality depth for the major materials. You are not asking us to detail every canopy overhang but the major repeating instances of the major materials. We would highlight the areas of emphasis and not overwork the other areas as to reach a

timeline for proper staff review. When it comes back to the schedule, whether this is deferred to next month's meeting or thereafter, it would have to work in the timeline that staff have outlined.

Commissioner Joy – It was a great point about having a record that could be referred to. With regards to the EIFS, the guidelines explicitly says that the entrance corridor does not recommend EIFS, and we are going to sit there and put a stamp on a building that is top to bottom EIFS at a highly sensitive site. Is there something in this packet that would be helpful to show something that EIFS from 2011 to 2024 is different? How would we save face with our neighbors?

Commissioner Schwarz – Staff had started this with his proposed condition, talking about having the drainage plane and being a STOW product. We can probably elaborate that out possibly. Maybe you can elaborate on it however much you want to hold yourselves to certain detail standards with the drainage plane, the complete system. Somehow, we need to come up with some language to go with a condition that says why this EIFS is appropriate. **[re: EIFS spec]**

Mr. Reardon – Ideally, we would depict some details here, even a sectional detail that could allow you to provide that language that you were talking about. That would be at the meeting next month or the following month.

Applicant requests a deferral of CoA Application – Commissioner Stolzenberg – I move to accept the applicant's request to defer the Entrance Corridor Certificate of Appropriateness application for 100 Stadium Road [The Verve]. – Second by Commissioner Schwarz. Motion passes 6-0.

MAJOR MATERIALS

BRK-01	4" CLAY BRICK

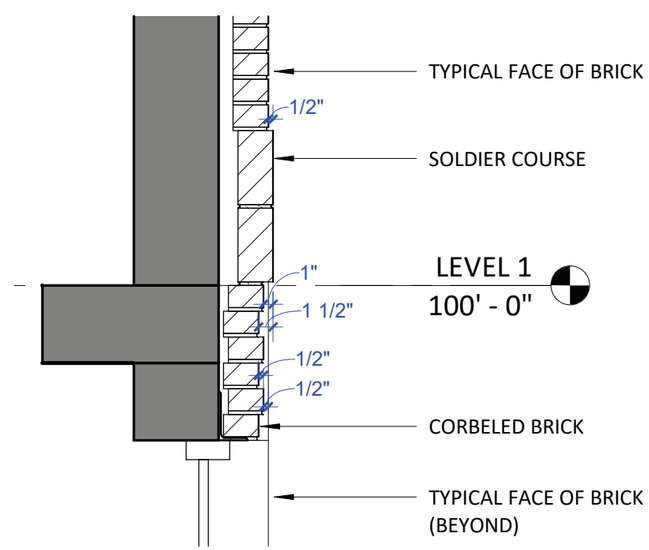
AP-01a	ARCHITECTURAL PANEL STO METALLIC FINISH - CHAMPAGNE COLOR #1
AP-01b	ARCHITECTURAL PANEL STO METALLIC FINISH (EIFS) - CHAMPAGNE COLOR #2
AP-01c	ARCHITECTURAL PANEL STO METALLIC FINISH (EIFS) - CHAMPAGNE COLOR #3

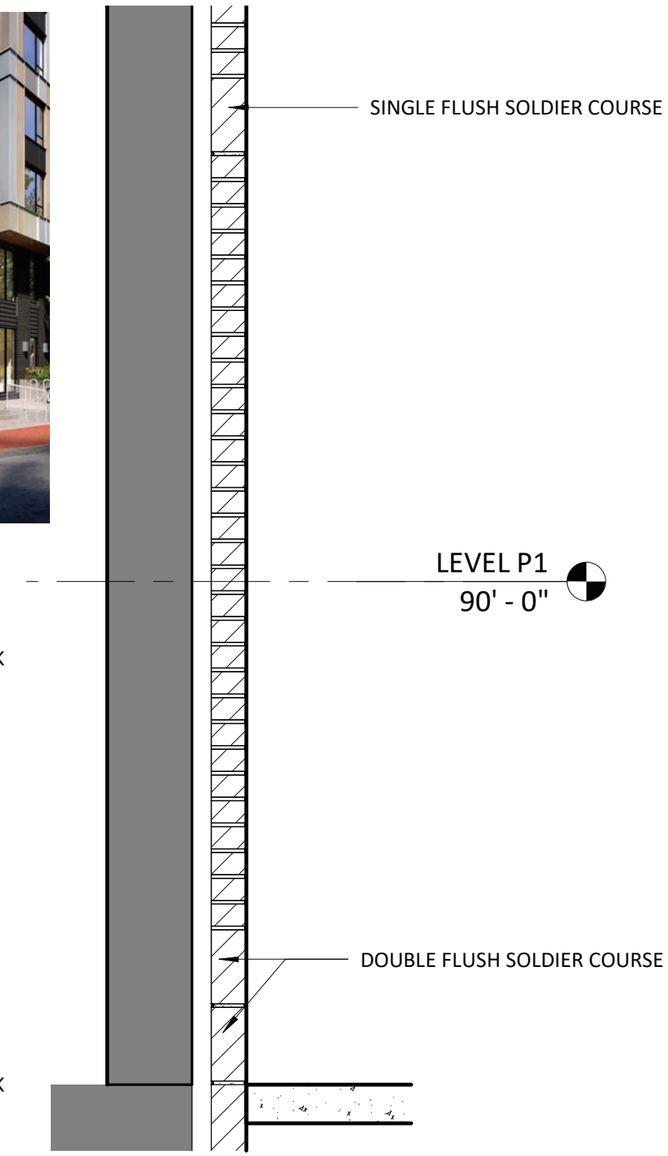
MAJOR MATERIALS

BRK-01 4" CLAY BRICK

MAJOR MATERIALS

BRK-01	4" CLAY BRICK	

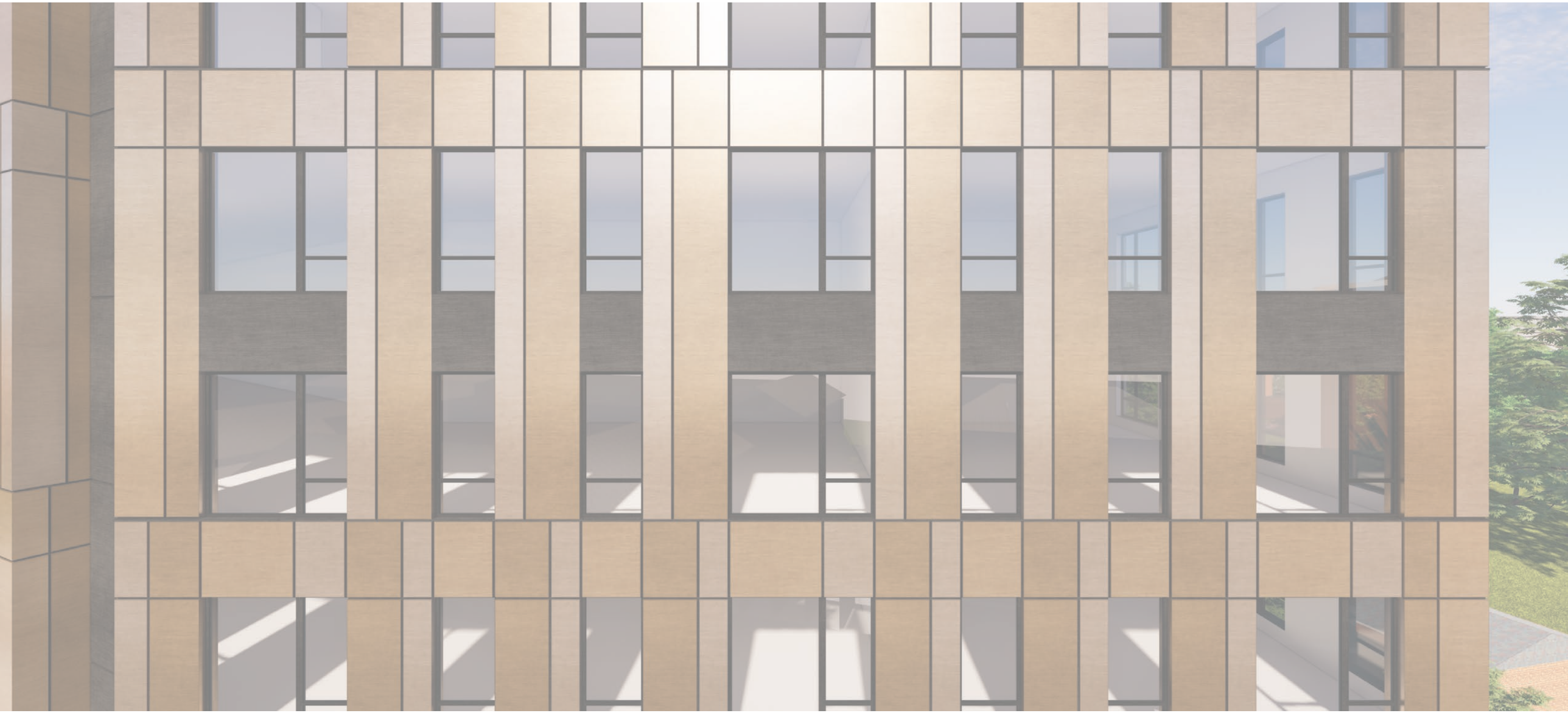




MAJOR MATERIALS

AP-01a	ARCHITECTURAL PANEL STO METALLIC FINISH - CHAMPAGNE COLOR #1
AP-01b	ARCHITECTURAL PANEL STO METALLIC FINISH (EIFS) - CHAMPAGNE COLOR #2
AP-01c	ARCHITECTURAL PANEL STO METALLIC FINISH (EIFS) - CHAMPAGNE COLOR #3

STO PANEL, EIFS
with vertical and horizontal
inboard reveal
1 ” wide
1’ deep



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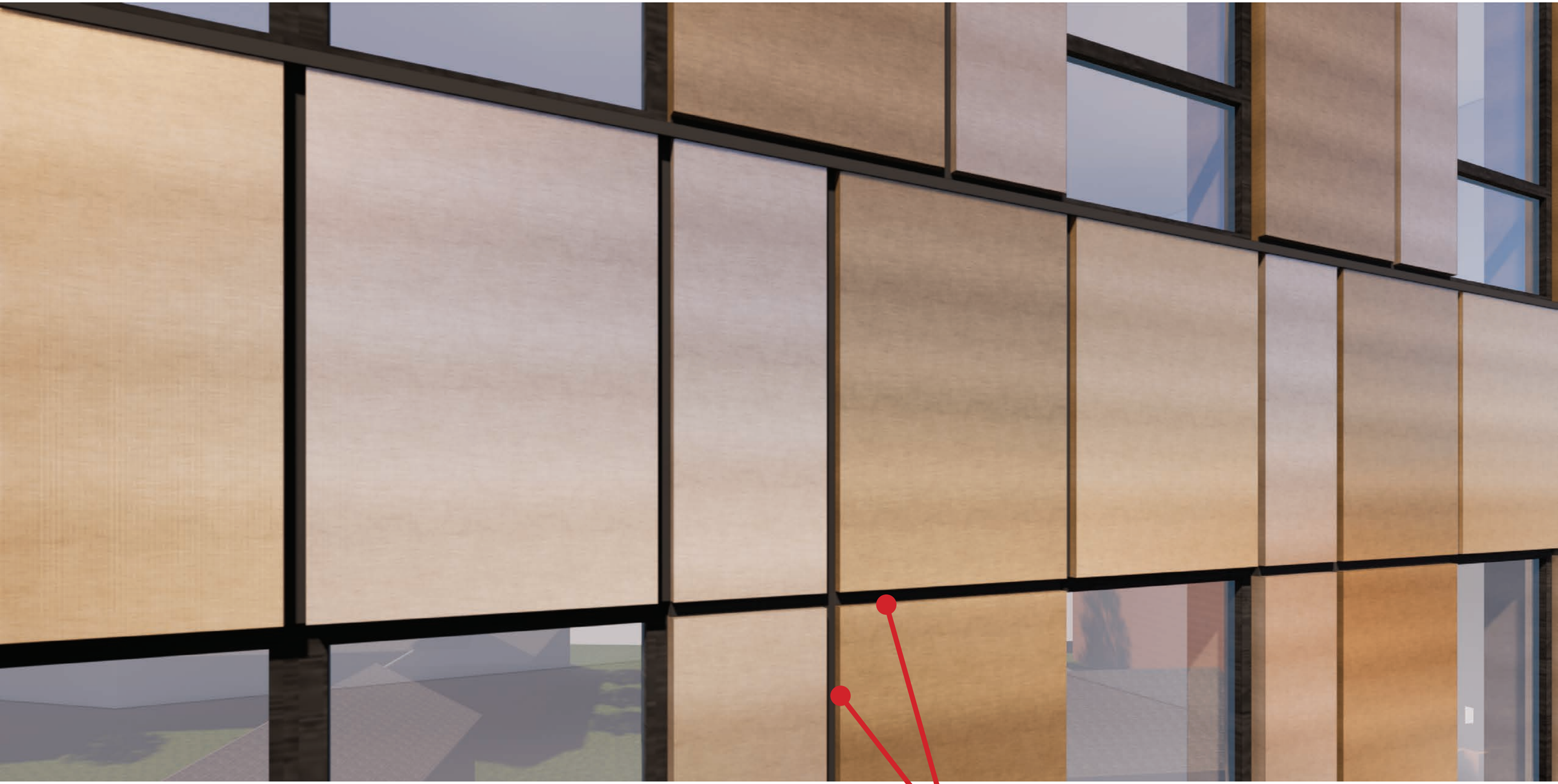

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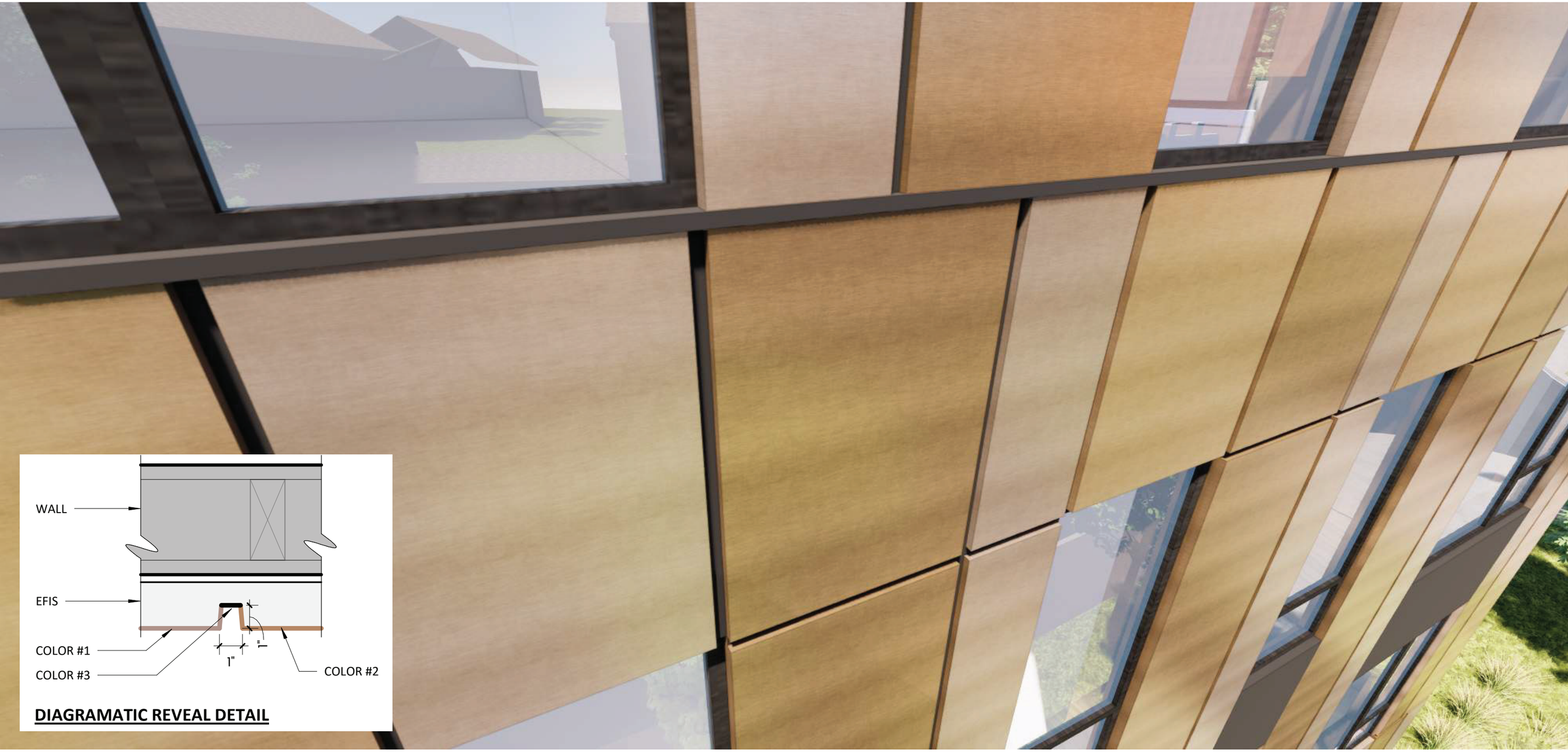

Minutes

PLANNING COMMISSION REGULAR MEETING
May 14, 2024 – 5:30 P.M.
Hybrid Meeting

I. COMMISSION PRE-MEETING (Agenda discussion(s))

Beginning: 4:30 PM
***Location*:** NDS Conference Room
Members Present: Chairman Mitchell, Commissioner Solla-Yates, Commissioner d'Oronzio, Commissioner Schwarz, Commissioner Joy, Commissioner Roettger, Commissioner Stolzenberg
Staff Present: Patrick Cory, Missy Creasy, Sam Sanders, Alex Ikefuna

Chair Mitchell called the meeting to order. Commissioners d'Oronzio, Joy and Schwarz provided grammar/spelling updates to the minutes on the consent agenda. It was noted which commissioners would consider making the motion on the consent agenda in the meeting. Commissioner Schwarz asked if there was clarity that the projects recommended in the CDBG/HOME budget for partial funding would be able to move forward with some of their project. Commissioner d'Oronzio, who is on that Task Force, noted that applicants had to provide information that would answer that question. There was discussion about why this item comes to the Planning Commission. It was noted that that is part of the citizen participation plan, and the applications ask how the project would implement the comprehensive plan. Commissioner Roettger noted there was limited information to review so there was not much for them to go on. It was noted that staff will detail during the presentation.

II. COMMISSION REGULAR MEETING – Meeting called to order by Chairman Mitchell at 5:30 PM

Beginning: 5:30 PM
Location: City Hall Chambers

A. COMMISSIONER'S REPORT

Commissioner Stolzenberg – We had our MPO Tech meeting. The long-range transportation plan is complete. It is out for public comment. There is a public hearing coming up. We are reviewing the draft and giving the 'go ahead.' We had a LUPEC meeting where we learned about the Birdwood genealogy project. I attended a UVA land use class to talk about our Comprehensive Plan and Rezoning process.

Commissioner Schwarz – For April's BAR meeting, we had the First United Methodist Church come back and modify their solar panel application. They want to use a metal roof with asphalt shingles under the solar panels. It was a better solution in the end. We had a preliminary discussion about 218 West Market Street, which is the Artful Lodger site for a future hotel. Overall, the BAR was supportive of what was shown. It was basic massing. It is no longer bound by the SUP. It is a by right project now. They are throwing out the old SUP. One of the conditions that was put on it was a pedestrian cut-through for the site. That will not be part of the project. The BAR did not feel that they had the authority to require that. It will be like the Omni. You can walk through the hotel in a semi-public manner. There is going to be a public connection. It won't be a physical, outside connection.

Commissioner Solla-Yates – I sat in a few student presentations on aging in place and how accessory dwelling units, if they are fronting the street, they provide a base for people to be more involved in their community. Accessory dwelling units are typically hidden in the back for aesthetic reasons. That is conflicting with those

goals. Another presentation was a detailed analysis of our accessory dwelling unit ordinance and the way we are treating it. They were concerned about a detailed issue about how certain buildings, because they are small, they do not allow an accessory structure nearby of a big enough size to be habitable. It is a substantial number of parcels in the city because we have so many small homes. He was recommending a tweak on that.

Commissioner d'Oronzio – The TJPDC met at the beginning of the month. The major piece on the agenda was the Comprehensive Economic Development Strategy Plan. It was very detailed. There seems to have been a lot of process measuring relative to the product in some ways. It was a detailed analysis. The interesting thing about this is that it is moving towards this super-regionalism idea where we are joint with District 9, which is north of us. It encompasses Culpeper and how the corridor between the 2 of them is going to be the next big thing in some respects. One of the major industries that they put out was Defense and ancillary employment that comes from that. There is a lot of interesting work on the region that isn't that regional. The HAC is wrapping up its recommendations for the land bank tomorrow. The Community Development Block Grant Task Force made its recommendations.

Commissioner Roettger – I attended the Tree Commission meeting. I was at a sub-committee for the Tree Commission today. They are amazingly energetic. I learned a lot. I have joined the sub-committee on codes. I can look at the new zoning. It is something to do with codes and looking at state and city codes and where there is wiggle room in promoting trees.

B. UNIVERSITY REPORT

Commissioner Joy – I have a few UVA project updates that I would like to report on. The first one is second year housing. On April 25th, the University posted an RFP requesting statement of qualifications from development teams for a potential partnership for second year housing. UVA is committed to helping address the housing challenges the community is facing. This development proposes 2000 beds in apartment style units along with associated food service venues at 2 potential sites. The first is at the eastern side of the intersection of Emmet Street and Massie Road. It extends down towards the Lambeth Housing Community. The second one is at the juncture of Emmet Street and Ivy Road. It is part of the 14-acre Emmet-Ivy Redevelopment Site. The proposed site sits at the westernmost parcels closest to Copley Road. These potential sites have been reviewed with the adjacent neighborhood associations from Lewis Mountain, University Circle, and Venable Community. The deadline for the interested parties to submit is May 22nd. A short list of qualified teams will be released on June 12th. At that point, I can come back and report. If anybody is interested in additional details of the RFP, it can be found on the UVA's facilities maintenance website. The Master Plan sets out massing and heights that are like the Virginia Guest House. The Buildings and Grounds Committee meeting is between this meeting and the next Planning Commission meeting. I will give you a glimpse of what is coming up on the agenda. The first is the Center for the Arts. The B&G will consider the proposed site for this project, which is the easternmost part of the Emmet-Ivy Corridor. This would bookend the eastern side of Emmet. This project will include the following public amenities: performing arts center, musical performance bases, and a fine art museum. The design is in the early stages. There will be ongoing funding efforts, both with the Commonwealth and philanthropic donors. The North Grounds Parking Garage project is going to the Buildings & Grounds Committee for preliminary design review. This is a 1000-parkingspace structured parking deck. It is going to be located at the northwest corner of Massie Road and Copley. This is near John Paul Jones Arena and opposite Palmer Park. It will be adjacent to all the athletic fields and JPJ Arena. This site was selected after years of planning and analysis. The idea is that these parking spaces will allow us to move away from the old surface lots that were associated with University Hall. We can transition to more pedestrian and bike friendly environments. A portion of this new athletics promenade is nearing completion. The idea is that at this time next year the whole promenade will open up. If you are going to an event at Klockner or Davenport, you will no longer have to walk across parking lots. There will be dedicated pedestrian pathways for those destinations. The structure for the North Ground Parking Garage is purposely set back. In front of it, it provides commuter

amenities such as bike storage, e-bike docking, connection to the UTS bus system. These spaces will do double-duty during the football season to help with tailgating and allow mass transit connections to Scott Stadium. To enable this construction, a portion of the 1960s Copley Hill (garden style apartments) will be demolished to make way for this new garage. The housing effort that I mentioned earlier is meant in the large-scale planning to accommodate the loss of these beds but will supplement them with more beds in the style that is wanted by our students. This project has also been presented to the Lewis Mountain neighborhood. The last project is the update on Fontaine. With the garage and Manning Institute of Biotechnology, construction is underway. At this point, we are in a highly disruptive excavation phase. This is projected to last through July. This puts a temporary limit to the amount of available surface parking in this area. The University has asked visitors to contact their providers for more detailed instructions on how best to arrive for appointments during the next 2 months. Once excavation is complete, parking constraints should ease up. The garage structure will be completed in the fall of 2025. That will bring over 2500 spaces online. The University has convened townhalls with the Fontaine community and adjoining neighborhoods to keep effected parties in the loop as the construction progresses. It will have similar commuter amenities as the North Grounds garage.

C. CHAIR'S REPORT

Chairman Mitchell – Parks & Rec are always busy. There are 3 things that you guys might want to be aware of. We got a presentation from Cultivate Charlottesville. One of their taglines in their presentation is that Charlottesville is known as a 'foodie community.' It is their objective to make Charlottesville a food equity community. That is a key part of Chapter 7 in our Comprehensive Plan. The way they want to get to food equity in our community is through urban agricultural programs. The first one that they are looking at is hoping that one will be in Washington Park. I sent you guys that presentation. I got a presentation regarding the youth and adult programs. Between last winter and today, we have put on 110 classes and 753 people have participated in that. With the Master Plan Process, we are beginning to start the analysis of the feedback we have received from you guys and going through all the data. The objective is to get this approved by Council in January 2025.

D. DEPARTMENT OF NDS

Missy Creasy, NDS Deputy Director – Since the end of March, we have had 15 pre-application meetings with people who are interested in working within our new ordinance. That is just the formal ones. There have been multiple informal discussions that are occurring. We are learning more about the hurdles that remain to move forward with different things. We are learning a lot about what people are putting together for this. We have our first 2 or 3 development plans in. We are hopeful that we will start to see activity. There was a lot of concern that there would be an overrun of activity with this new code. It has followed the path that we anticipated. People would start to learn about it. People would start to see how it might work for them. It would be an incremental change. That is what we are seeing. A lot of our efforts now are still working on the many projects that are under the old code and working to get them to fruition. We have had ground broken on the Belmont Condos property this past week. We are expecting some other projects to get going soon. There is not much coming forward to you all. Commissioner Schwarz provided several items that there was interest from the community in getting some updates on. I have some summary information. I will provide that. Some of these are things that people listening might be interested in. One item is the dockless mobility. That is the scooters and bikes that are around our community that people can rent to get from one destination to another. There has been concern because not all users have been putting vehicles in the proper place when they finish their rides. Our transportation staff has been working together with the company and riders. There is a provision in the contract for fines for vehicles that are placed in the wrong locations. That had not been previously enforced. They wanted to make sure there was an opportunity to do as much as we could before it got to that point. At this point, the riders and company have been on notice for some time. As of June 1st, they are going to begin charging the fines. The fines that get charged work it through the company and some of the funds go back into the program itself. It will be advantageous to have less vehicles put in the wrong location. The company is fined

and pass it onto the user. Usually, the misplacement occurs in the evening. The next morning, it makes it difficult for people who are traveling in those pedestrian areas. The hope is to be able to get that in compliance earlier so that people aren't having that conflict when they are commuting in. Power poles have been another concern. I am sure that people in the community have seen a circumstance where the power pole has a wire on it. As the utilities move to the new pole, the old pole is supposed to be removed. There are a lot of circumstances where that has not been happening. We have had a team with Public Works that has met with Dominion to work through this process and to understand the process that Dominion has for this. It is also an opportunity to work in collaboration. There have been some updates to the ADA requirements, which will require everyone to make sure there is proper spacing for people to move through on sidewalks. We reached out because we want to work in partnership with Dominion to create a better situation for this. Those conversations have started. There are a lot of people on our side who are passionate about trying to get this resolved. Another item had to do with street lighting. Dominion is changing street lighting throughout the whole service area. There is a process of how that is being done. I can give details of what I have from our contacts. The city has somebody in the role of energy management coordinator in the office of sustainability. They have been working with Dominion to understand how this process works. They are doing it on a schedule. They will be able to provide some information about when they are going to do certain things. They were able to provide some information about the type of lighting that they can provide. That will be something coming to the community soon. It has been coming haphazard as something is broken and needs repair. This is going to be a larger effort. We had another question concerning looking at the Standards & Design Manual for updating. Our engineering staff is short-handed right now. They are in the recruitment process for that department. Once we get a few more people onboard, that will be a higher priority.

E. MATTERS TO BE PRESENTED BY THE PUBLIC NOT ON THE FORMAL AGENDA

Tyler Miller (1500 Green) – I wanted to reiterate how important the utility pole issue is and how little clarity we have on it. There is no sense of a timeline or when the public can expect changes, particularly for ADA. That is a big part of the problem. We are missing a real opportunity to work with Dominion to promote undergrounding where it makes sense and promote route efficiency where it makes sense. I have a utility pole on every corner of my lot. I can't drive any vehicle of any size on my lot because of the utility lines. Access of all kinds is limited by the way they have laid out the infrastructure. I was speaking to someone who made a FOIA request on the franchise agreement. I don't know how out of date that is. In that agreement with Dominion, there was a fee that was supposed to be assessed per utility pole. I don't think the city has been taking up that fee for some time. Anything you can do to help the urban canopy in town would be greatly appreciated.

Dan Miller (1107 Avon) – I want to throw 'my weight' behind the undergrounding issue. I just returned from Alexandria. It is nice to walk around some of those neighborhoods. I have a couple mature sycamores in my yard. One of them is getting more and more sent to the side by Dominion. Given the generous dividend that I receive as a shareholder of Dominion, it is interesting that it is put out there as financially impossible for this corporation to do some undergrounding in town. If you are paying a dividend, you are saying we have done enough investment in the infrastructure. We see the most efficient thing to return shareholder value is to give money back. I don't think that is true in this town. I think that relationship can be thought of in a different way. As I understand it, they should be operating in our interest.

Frankie Allen (1500 Green) – I am here emphasizing the importance of powerlines in terms of accessibility and walkability of our city. I care a lot about making our city one that facilitates and empowers people to walk and be a part of our neighborhoods. The powerlines limit egress but also prohibiting things like shade trees on our major roads are the places people want to commute.

F. CONSENT AGENDA

1. Minutes – April 11, 2023 – Regular Meeting
2. Minutes – April 14, 2024 – Regular Meeting

Motion to Approve – Commissioner d'Oronzio – Corrections by Commissioners Joy and d'Oronzio on the approved minutes – Motion passes 6-0.

III. PLANNING COMMISSION PUBLIC HEARINGS

Beginning: 6:00 PM
Continuing: Until all public hearings are complete
Format: (i) Staff Report, (ii) Applicant, (iii) Hearing, (iv) Discussion and Motion

1. **Community Development Block Grant (CDBG) and HOME Investment Partnerships Program (HOME)Funding** – Draft Program Year 2024-25 Annual Action Plan for Community Development Block Grant (CDBG) and HOME Programs. The Planning Commission will be considering projects to be undertaken as part of the proposed PY2024 -25 Annual Action Plan for the CDBG and HOME programs. Staff from the Office of Community Solutions (OCS) and the Thomas Jefferson Planning District Commission (TJPDC) will be presenting funding recommendations for activities designed to address a wide range of community development goals, including economic and workforce development, public service projects that benefit low- and moderate-income citizens, improvements to public facilities and infrastructure, and fair and affordable housing. The United States Department of Housing and Urban Development (HUD) has not yet informed the City of funding to be made available for these programs but based on program year 2023-24 funding, the City anticipates approximately $410,000 in HUD funds for CDBG and approximately $98,000 for HOME. A 30-day period for public comment will commence on May 1, 2024, and run through June 1, 2024. The draft Annual Action Plan is also scheduled to be presented at public hearings before City Council on Monday, May 20, 2024, and Monday, June 3, 2024. Members of the public can provide written comment on the proposed PY24-25 Annual Action Plan in writing to: CDBG/HOME Taskforce, City of Charlottesville City Hall, P.O. Box 911, Charlottesville, Virginia 22902. Report prepared by Anthony Warn at warna@charlottesville.gov

i. Staff Report

Anthony Warn, City Staff – I am here to talk to you about the work of the CDBG and HOME Task Force and to present the funding recommendations that the Task Force has come up with and allow you to consider them. The city participates in 2 programs funded through the US Department of Housing and Urban Development through their office of Community and Planning Development. You might hear them as CPD Programs. The first is the Community Development Block Grant Program, which is entitlement funding that comes through HUD to the city to use for a variety of purposes around impacting our community positively. The other program is the Home Investments Program. That is to support housing opportunities. Both programs, because they are community and planning programs, benefit the members of the community who HUD refers to as low and moderate income, which is typically under 80 percent of the median family income or the median income of the regional metropolitan area. The city has taken it on to commit to bringing those impacts as far down the income scale as we can; typically, 50 percent or below the median income of the area. Those numbers are set by HUD based on their national analysis. They are available on HUD's website. They are presented in a format that is not reader friendly. I have done this for 2 planning cycles. I have converted it to a different format that I find easier to understand. With the Community Development Block Grant, the city is an entitlement community. We received those funds for use as the elected officials see fit according to specific HUD guidelines. The Home Program is a larger area. To qualify, the city doesn't qualify on its own. Around 2001, the city entered a consortium partnership with 5 surrounding counties (Albemarle, Fluvanna, Louisa, Greene, and Nelson). With the Home Program, the money comes in, gets passed through to the Thomas Jefferson Planning District

Commission, which manages that program. The city is the financial agent for those programs. There are some programmatic takeouts. The bulk of the share is divided equally among the counties. It is divided up 6 ways. They refer to it as your pie-share. We get to control how we can impact the community. There is a special set aside that is a bigger piece of the pie that is rotated annually among the different counties for community housing development organizations. We were the recipients last year. The Task Force is entirely volunteer. They come together and review all the requests for funding. They try to figure out where that money can make the maximum impact. We are not talking about huge pots of money on the HOME side. Our HOME share is always under $100,000. It does not go far. That money is used as gap funding for projects that are already in operation. On the Community Development Block Grant side, there are some major categories of activities that we invest in. We can work with public facilities and infrastructure programs, economic development programs, public services programs, and housing opportunities through the CDBG fund often in support of the investment made through the HOME program as well. With the applications that are received, most of the applications come in for these public service programs. HUD has capped the money that you are allowed to invest in those programs every year at 15 percent of the overall allocation. We follow it. A lot of the applications come in and are competing for smaller pieces of the pie. When it comes to making the funding decisions, I am not involved in those. My role is to facilitate the Task Force and provide the information. The Task Force must make the difficult decisions. The consensus from the Task Force is that they would love to fund all applications at 100 percent. That is not possible. That often leads to having to make difficult choices. In some cases, programs may not be recommended for funding. It is not an indication that the application wasn't strong. It is trying to figure out how we can maximize the number of people that can benefit from this limited pot of money. Sometimes, there will be a program where if they don't get full funding, they may not be able to bring it to fruition. The Task Force might back away from that one, put it on the back burner, and see if they can come back to it after they fund these other programs. Both programs were never meant to be permanent funding sources for different programs. There is nothing to stop a locality from funding the same programs every year. It is not recommended because they are trying to build up strength throughout the community.

The funding recommendations from HUD usually come through in January or February. They came through about 1.5 weeks ago. HUD's pool of money to reward out to states and localities is determined by Congress. Nobody knows why it took so long. It has caused a lot of problems for people across the country. It made the work of the Task Force harder. The CDBG program saw a nominal increase in funding this year a little over 6 percent. The Home consortium funds were cut by close to 20 percent. Those are formula grants. There is no judgment for any different localities across the board. The cut to the 6-member Home Consortium was $134,175 this round. I know if people are interested in increasing the amount of money, they should contact their congressional representatives, state representatives. You have a summary of the funding recommendations. A lot of the work of the Task Force in evaluating the current applications was somewhat theoretical. We didn't have real numbers to work with. We took the numbers from last year and used those numbers. We broke up the 'pie' among the applicants. I presented the funding recommendations differently this year. We gave the funding recommendation numbers. We also gave the percent that was requested. What you will notice when you look at the funding recommendations, in some cases, they are over 100 percent of what they asked for, especially on the HOME side. There were 3 applications for HOME funding. The Task Force worked through those applications. They decided to fund 2. When the final numbers came in and those were the 2 programs recommended and we took the percentages that you have, the final number was more than what their application was for. There was some discussion about putting that extra money into the 3rd application. The 3rd application requires a big pot of money to pull off. It doesn't mean the application wasn't worthy. It doesn't mean the application group wasn't worthy. That applicant group has received money from these programs recently for another project that they are going ahead with. In some cases, an application is recommended to not be funded. One of the factors might be that there is other money coming in from the city that might be from another source. I have several pots of money that can support these programs. If there were some programs that were only eligible for city funds through CDBG Program, and we knew that they were likely to get or approved for money through the Affordable Housing Fund, the Housing Operations Program Support, Vibrant

Communities Fund, or some other money, that was a factor in there. You might see some that are very worthy programs that we have funded in the past that we have loved to have funded at 100 percent; it is a limited amount of money in trying to maximize impacts. I did have another sheet that did have the gap between the funding requests and the amount of money that we have available. If you added up the money requested between the 2 programs and if you subtracted the amount of money available to us, it was a little over $1 million gap. If the applications reflect community need, the amount of money coming in is inadequate.

Commissioner Solla-Yates – There is a new item on here CRHA Economic Program Coordinator. Is that a new position? Can you give a brief introduction as to what that is?

Mr. Warn – It is a new position. It is related to some of the larger work that CRHA is trying to do around family self-sufficiency.

Alex Ikefuna, Office of Community Solutions Director – With the CRHA, there have been massive development initiatives. One of the aspects of that is the need to improve the skill levels of the residents of CRHA so they will be able to seek jobs that pay a living wage. Currently, CRHA has a robust family self-sufficiency program. They are seeking funding to develop some of those programs so they will be able to provide economic development skills or training for the residents. This funding will help hire somebody to help them fulfill that need. Even though the city has a financial investment in CRHA, most of those are LI HTC projects. With LI HTC, the money must be paid back to the investors. With the tenants, if your income is below 0 percent, 0 to 30 percent, or 0 to 50 percent, you must pay your due rent so that the CRHA will be able to meet its financial obligations in terms of paying its debtors. This funding is critical in terms of CRHA being able to fulfill that purchasing power. That is why they are seeking the funding.

Commissioner Roetgger – Will that help with Section 3 in training specifically to work with the companies doing redevelopment?

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Mr. Ikefuna – That is part of the process. It is something they haven't done well in the past.

Commissioner Stolzenberg – Do we know how many residents are employed in Section 3 programs?

Mr. Ikefuna – That is information that we can get. We will get that information from the past couple of years and send to the Commission.

Mr. Warn – With Section 3, nationally one of the challenges with different organizations fulfilling that requirement is the availability of certified and trained people to fill those positions. Within our office, that is one of the things that we are trying to explore and whether we can fund or find ways to create subsidized apprenticeship programs. The city gives money to different organizations that do critical repairs on homes, energy efficiency work on homes, and mainly focusing on the interior. One of the ideas that we are talking about is whether we can do something like Hampton Roads where they fund exterior work. If we are going to explore something like that, we would want there to be a Section 3 apprenticeship program. In previous years, we funded a program through the Local Energy Alliance Project (LEAP) where they did that. They hired people to apprentice on the job. While they were doing some of their energy efficiency home repairs and trying to give those people the opportunity to work for LEAP or energy provider like Dominion eventually, there has been some interest from groups who are operating here. We would love ideas about how to support that apprenticeship program. One of the things I would love to see is for people to get experience and help with that licensing fee. You must purchase the materials and pay the licensing fee.

Commissioner d'Oronzio – I am happy to get into where we ended up where we are. That was the bulk of my work whereas Mr. Warn was trying to count money. I would like for you to speak on the Beacon Shared Use

Kitchen. These applications were made towards the end of the year facing some nasty grams from HUD on funding from prior years that was still around. Mr. Warn went to Council with Beacon Shared Use Kitchen and received a substantial piece of funding at the end of the year. The opinion of the Task Force was that although there was a Council priority to spend $90,000 in this category for it. They have done so. If they want to go back and plug that in, that is their lookout. From our point, that freed up funds that we can use elsewhere. Most of those funds ended up going to CRHA for their roofs. They wanted $150,000 to replace some roofs at Dogwood. They are getting $154,000. I am sure that everyone here has no doubt that they will spend $154,000 on these roofs instead of $150,000. We did not overfund initially. It was 100 percent. When we came back around, it kicked over. We did that because Mr. Warn assigned the percentages of the original and carried those over with the new numbers. Since it is replacing roofs, they are going to spend that $4000. Similarly with 6th Street, the soft cost for Habitat development, I am certain that the $2000 that we overfunded is going to go into soft cost with no problem. We based some other decisions that way.

Commissioner Stolzenberg – For other programs that were fractionally funded, for example, the CRHA Economic Program Coordinator is being funded at 80 percent. Do they list that job at the lower salary? Do they make up that money from somewhere else?

Commissioner d'Oronzio – They make it up. They have made that clear.

Commissioner Stolzenberg – Have we talked to the other applicants? Does everyone think their programs are divisible enough that they can do things with that money?

Commissioner d'Oronzio – The short answer is yes. There was a question on there with what to do if given less. We have given the answer that we are proportionally going to have to cut back, or we will find the money. We are reaching out in a lot of directions. The IRC thing is an ongoing fundraiser for their project there.

Mr. Warn – One of the things that I did when I revisited the IRC application, I tried to rework it a little bit to aim for concision but to clarify what the outcomes were. One of the questions that we ask is what they will do if they get less than 100 percent of your ask. Nobody says, 'if you can't give us 100 percent, don't give it.' You need to read between the 'tea leaves' and see whether they can do it. My job was, while the Task Force was deliberating these, to give them background information of how these different organizations have been funded in the past through these programs but also from other sources. In several of the cases, they are getting money from other sources to fill similar purposes. At the end of it, the Task Force members believed even if not funded at 100 percent, it was enough to 'push the ball forward' for each of these programs.

Commissioner Stolzenberg – I have questions about specific programs. The Haven is funded at 0 and AHIP is funded at 0. What was the decision-making process there?

Commissioner d'Oronzio – The Haven has funded a couple of salaried positions from HOPs money. This is like a program that was funded in HOPs. They have hind's coordinator, which is adjacent to this system. There was a feeling that you don't want to make this a permanent funding source. Even though we were pushed that way, we cede money for salary and go find the rest of the money. The Haven received quite a lot of funding from the HOPs round. It was the same thing for AHIP. AHIP received $117,000 on this program from the CAHF. We didn't want to double-dip on that. I believe that AHIP has quite the positive balance with the city in terms of money allocated that they have not yet spent.

Mr. Warn – In terms of that program, their projects often work with older homes. They still require a more extensive environmental review and a lot of background. A lot of their projects are funded between a complex network of city money, these federal funds, philanthropy, and other grant funded programs. Each comes with their own strings. That was one of the programs, considering how many other funding sources there were for

them with a balance in a couple of their programs they are trying to work through. Some programs have a big reserve to get them through whereas other programs are leaner.

Commissioner Stolzenberg – Can you speak to the makeup of the Task Force?

Mr. Warn – The work that the Task Force does to inform these funding recommendations benefits from many voices. We have had people from a variety of different backgrounds in the past. Everybody's contribution is valuable. Historically, this Task Force has never had a complete slot of their 10 seats. One of the challenges is that slots are broken down by priority neighborhoods in some cases. There are people within those neighborhoods, who might want to serve. If that slot is filled, they may not realize there are unfilled seats. One of the next pieces of work is for us to update our citizens participation plan that governs the work of the Task Force, the membership, and the composition. We are going to try to explore having other public agencies and other groups involved. Representation matters. We would love to have more people. We went into this work with a couple members who had to withdraw. The Clerk of Council has advertised the vacancies.

Commissioner d'Oronzio – The Task Force has had a conversation about changing some of those slots. A lot of that reflects 2004 priorities, not 2024 priorities. The way we are looking at neighborhoods is different. It needs a relook and re-presentation to Council.

Commissioner Stolzenberg – Can you speak to our role in the process? Does HUD mandate that the Planning Commission make a recommendation? Is that a Council requirement?

Mr. Warn – You are here tonight as knowledgeable and interested members of the community. HUD's main goal in this is to foster community involvement. I believe that was the initial impetus for involving the Planning Commission one more opportunity to put things before the public, get feedback and input before it went to City Council.

Mr. Ikefuna – The Planning Commission must review the CDBG and HOME application recommendations to City Council. There are 3 review processes for $410,000 in CDBG every year. It is not practical. The primary function of the Planning Commission is land use and transportation. In between, environmental. The Planning Commission review of CDBG recommendations and related activities has been going on for at least 30 years. We are looking at proposing streamlining that process so that when the CDBG Task Force makes a recommendation, instead of coming to the Planning Commission, it goes directly to City Council. That is the way I look at it. Sometimes, it prolongs the review process. There might be a need to do some kind of amendment. Staff is wondering how we can take this to City Council. It is already in the code that you must route it through the Planning Commission for a recommendation to City Council.

Commissioner d'Oronzio – As this body is the Entrance Corridor Review Board, would it make sense to call the CAHF Committee the CDBG Task Force? Is there anything stopping us? One of the reasons I sit on the CDBG Task Force is that I also sit on the CAHF Committee. I am an anti-silo force there. Is there a reason that we can't call the CAHF Committee the CDBG Task Force?

Mr. Ikefuna – As we initiate the revisions, that is something that staff needs to discuss. If that becomes the case, after the discussion with the City Manager and Deputy City Manager, we can take it to City Council as part of the amendment. We need to look at that.

Mr. Warn – HUD's guidance on citizen participation is at times very specific and generally very broad. They have outlined an essential goal facilitating the greatest degree of community involvement as possible especially from populations that are most likely to benefit from these programs. Those are often the least represented groups for a variety of different reasons. We would love to do what we can to encourage that participation. We

are open to considering anything that can help us achieve our goal. There is nothing specific in the HUD guidance or in the code of regulations that specifies the exact nature of the formal review process. You must have a volunteer task force. You must follow certain rules. You must make funding recommendations to an elected body. That elected body has the final approval to appropriate the funds. You must have a period of public comment on those recommendations, which is open for this month. The draft plan is available on the Thomas Jefferson Planning District Commission website. We have a link to it from our city website at the Office of Community Solutions. We have a lot of leeway in terms of how to craft the most efficient and effective structure to get through this work.

Commissioner Solla-Yates – Are we allowed to pay people for their time?

Mr. Warn – We are not allowed to pay people. I think the answer is yes if you use local funds. You are not allowed to use federal funds to provide salaries. There are certain cases where you can provide stipends. I believe that they are narrow. I don't think there is any prohibition in using local funds if they are not reimbursed from the federal money. When I first came into the program and started learning about it, it was described as a reimbursement program. It is a double reimbursement program. We get a line of credit from HUD to the city. We give some recipients the ability to spend money for eligible activities. We approve a scope of work, and they go do those things. They must pay for those out of pocket. They are reimbursed from city funds on the CDBG side and from funds at the Thomas Jefferson Planning District Commission controls and their financial system on the HOME side. Our 2 entities go to HUD to get made whole again through reimbursements. For some of these organizations going out of pocket is a challenge.

ii. Public Hearing

No Public Comments

iii. Discussion and Motion

Commissioner Stolzenberg – I don't feel strongly that the Planning Commission needs to be involved in this process. I don't feel strongly against it or for it. Now, we are in that role. I don't feel, as a commissioner, that I have had enough information to exercise that oversight role. It seems that we were given the final output of the recommendations of the Task Force. In the past, we have received the minutes of the Task Force and applications. While I appreciate the work of the Task Force and staff, I don't feel that I have any information to make an informed decision. I will be abstaining tonight.

Chairman Mitchell – I have had the opportunity to chair the Task Force 3 times. There is a lot of work that goes into what they do. Knowing the work that they put into this and knowing the heart and soul to making the right decisions, I am not about to second guess the work that the Task Force does.

Motion to Approve – Commissioner Solla-Yates – Second by Commissioner Roettger – Motion passes 5-0 with 1 abstention (Commissioner Stolzenberg)

IV. Commission's Action Items

Continuing: until all public hearings and action items are completed.

The meeting was adjourned at 6:52 PM.

Minutes

PLANNING COMMISSION REGULAR MEETING
October 11, 2022 – 5:30 P.M.
Hybrid Meeting

I. COMMISSION PRE-MEETING (Agenda discussion(s))

Beginning: 5:00 PM
***Location*:** City Space
Members Present: Commissioner Schwarz, Chairman Solla-Yates, Commissioner Habbab, Commissioner Mitchell, Commissioner Stolzenberg, Commissioner d'Oronzio, Commissioner Palmer
Members Absent: Commissioner Russell
Staff Present: Patrick Cory, Matt Alfele, Missy Creasy, Carrie Rainey, Remy Trail, James Freas, Dannan O'Connell, Jack Dawson, Javi Gomez Jacome, Brennen Duncan, Sam Sanders

Chair Solla-Yates called the meeting to order at 5:00pm and began by asking for commissioner questions on agenda items. Commissioner Mitchell asked for clarification on the questions he posed related to the critical slope application. Jack Dawson provided clarification concerning the Erosion and Sediment, wetland information and limits of disturbance. He noted that the biggest concern for slopes is during the construction phase. It was noted that the last submission had more information, and it appears this one will change. Commissioner Mitchell asked if there would be a community detriment to remove the 800 sf of wetland. Commissioner Stolzenberg expressed concern about the wetland and stream. Chair Solla-Yates asked Commission Mitchell to present the motion for this item and he noted that he did not yet have a decision in mind.

Commissioner Schwarz asked if the application should be deferred since there is no site plan with sufficient information for engineering to review. Matt Alfele outlined the process for the critical slope waiver request and confirmed that the site plan application does not need to move forward at the same time. Commissioner Schwarz asked how the stormwater would be addressed. Mr. Dawson noted that the conditions outlined in the motion for consideration were developed based on his experience reviewing these applications. They are slightly above the minimum required and he noted that 125% outlined for this project is good. Commissioner Stolzenberg noted concern if they cannot get 125% to work, then there is not a way to address. Mr. Dawson noted that they would have to make it work if there was a condition.

Chair Solla-Yates asked Commissioner Stolzenberg to consider a motion for the consent agenda during the meeting. A question was asked about the Preston Commons application which was addressed by Ms. Rainey. Commissioner Stolzenberg asked about lighting for the Lyndhall application and information was provided by Mr. O'Connell.

II. COMMISSION REGULAR MEETING – Meeting called to order by Chairman Solla-Yates at 5:33 PM

Beginning: 5:30 PM
Location: City Space

A. COMMISSIONER'S REPORT

Commissioner Stolzenberg – I had one meeting of the MPO Technical Committee. I am chair again for another year. We are beginning the planning for the 2050 long-range Transportation Plan, which is the high-level plan that all the projects that will eventually submit to smart-scale and build will come out of. It will be a roughly 2-year process with lots of community engagement, lots of stakeholder groups, etc. There is a grant chart on the TJPDC

website. It should be finishing in roughly May of 2024. That will be an important process. I am sure that I will be telling you guys a lot more about it over the next couple years. Commissioner Habbab mentioned the Safe Streets for All Grant Program. That is the federal grant funding that came out of the bipartisan infrastructure law. It is the first phase where you must create a comprehensive safety action plan with ideas and projects and problem areas. Once you do that, you can submit for more BIF funding in future tranches. TJPDC is spearheading the effort to create this comprehensive safety action plan for all the localities in the district. That will be the first year of funding.

Commissioner Mitchell – The LUPEC Group met. We submitted our biannual report to Council last week. It was a written document. We didn't do a verbal report. I copied you guys by email today. You should have a copy of that report. The LUPEC group met on the 16th. There were several topics. One was presented by Mr. Duncan. He presented the Fifth Street Study. This is something he had already presented to this body. There are a couple of reminders about Fifth Street. Fifth Street is something that we are going to be talking about later today. In that area, there have been 95 crashes between 2017 and 2022. Four people have died in those crashes and six people have been badly injured in that area. He 'walked us through' some possible fixes there. Fixes included roundabouts, guardrails, road diets (limit the lanes), photo enforcement, and bike lane enhancements. We are waiting for some direction and input from Council as to which of these fixes we are going to embrace. The County also presented. They are worried about safety. Their big issue is traffic congestion. They have several projects that will address that. They are talking about bus stops, a roundabout at Fifth Street & Old Lynchburg Road, and shared paths and a concept design for Rio Road. The Rio Road Concept Plan was presented. It focuses on the eastern side of Rio Road as it crosses 29. Another report from Albemarle County was about the 29 and Hydraulic intersection and the improvements they are thinking about there. The improvements will make it more pedestrian friendly and pedestrian safe. What they are talking about is a bridge that goes east to west/west to east across 29. They are looking at it being somewhere between Costco and Stonefield. They are also talking about putting pedestrian crossings in that area as well. They are talking about a roundabout at Hydraulic and District Avenue. That is where you are leaving Stonefield and getting onto Hydraulic. It has been a busy summer with Parks and Recreation. We have a new adaptive recreation manager and a new athletics manager. Vic Garber, who has been with us for a while, is leaving. He is going to Harrisonburg to be assistant director of Harrisonburg Parks and Recreation. There is a new app that our users are going to be able to use to look at scheduling, when facilities are going to be available, and when programs are going to be available. I believe that you will be able to use the app to reserve and schedule things within Parks and Recreation. It is supposed to be online in October. We have a bunch of capital improvement projects happening. With a lot of those capital improvement projects, we can't get bids on because we can't get people to bid on them.

Commissioner Schwarz – With the BAR, one large item was an apartment building on Wertland Street around an old house. The house is staying. The apartment building is coming back again. We deferred it. It was treated like a preliminary discussion. There is a work plan to preserve the house in addition to adding the apartment building. Nothing has yet been approved. There was some discussion on 612 West Main Street, which is a future apartment building where University Tire used to be. That will be coming back next week. They are changing some exterior materials. Next week, I believe we will be looking at the step backs on 218 West Market Street. It has a special use permit from the Planning Commission from September 2019. This month will be busier than last month. With the Bike & Ped Advisory Committee, we talked about crosswalk signals. We are going to be doing some evaluation and measuring how long the signals are, trying to give some advice to the city on some recommended improvements. I understand that the city will be undertaking a large measuring of all the traffic signals this year. There should be a lot of useful information. I am no longer chair of the Bicycle & Pedestrian Committee.

Commissioner D'Oronzio – I did make a brief appearance in my personal capacity at the County Board of Supervisors to express my encouragement of Phase II of the Habitat Southwood Development, where a discussion by everybody but the public happened.

Commissioner Habbab – I had 2 meetings. The first meeting was the Citizen Transportation Advisory Committee. We met September 21st. We had a presentation on the long-range transportation plan kickoff. It is the 20-year plan that is federally mandated. It looks at the next 5 years for funding. Every regional project must be in the long-range transportation plan to receive federal funding. The general push from the MPO Tech Committee is to focus on choice of transportation and mobility & efficiency of system operations. When we were talking transportation, we were talking about rail, air, and car. The Citizen Transportation Advisory Committee will be helping brainstorm public engagement opportunities as part of the public engagement plan for this process. I found out that Charlottesville needs to create a comprehensive safety action plan as one thing that is required to receive some funding. The other meeting was the Tree Commission. That was October 4th. There was a press release last week about some trees on the Downtown Mall that must come down. There are about 9 trees, 5 of which are oaks or the smaller prune trees. There should not be significant tree canopy loss. It has been long overdue. They are going to come down sometime in January/February of next year. There haven't been any discussions on what is going to be replanted in their place. That is something that will happen with public input in the future. RELEAF did an outreach campaign at the 10th & Page Neighborhood, which is the hottest neighborhood in Charlottesville, to try to plant some trees. They went out to homeowners. There are 25 to 30 trees that are going to be planted in the neighborhood. There is an RFP going out at the end of November for planting of 150 trees next year. There is tree pruning that is taking place at Garrett and Second Street this week. This is a general statistic that there is a 10 percent mortality on trees planted in the spring, which is a good number, that most trees that were planted are doing well.

B. UNIVERSITY REPORT

Commissioner Palmer – I want to mention how happy the University was to be able to get the air rights over Emmet Street to put in a new pedestrian bridge that will connect the Contemplative Commons over to the Newcomb Hall area. It was long overdue to have an ADA compliant bikeable route that traverses that.

C. CHAIR'S REPORT

Chairman Solla-Yates – In my personal capacity, the Virginia Department of Housing Community Development Update Committee met. I spoke in favor of allowing 6-story single stair homes, which would save a lot of money per building if the second staircase is not required. It could be a significant affordable housing benefit. My understanding was that it did not go forward in this code cycle. It will be another 3 years into the next code cycle. Affordable housing will be officially considered as part of that cycle for the first time in Virginia history. I spoke to the Nest Realty Group talking about Charlottesville Plans Together and the work on the zoning rewrite. NDS was generous in giving me some prepared slides that were very helpful. I believe that was productive. I got some good questions and feedback on that.

D. DEPARTMENT OF NDS

Ms. Creasy, Deputy NDS Director – We have things clarified for the Planning Commission Retreat. The Planning Commission is going to be at a retreat on October 22nd from 1:30 PM to 4:30 PM. We have reserved The Pavilion on the stage. We are going to monitor the weather. We also have this room reserved. We have a backup place depending on what we need at that point in time. The Chair, I, and Mr. Freas talked with our facilitator today. She has put together an agenda based on some of the goals that we are hoping to move forward with. It is a good opportunity for commissioners to get to know one another and hear what has happened in the past for those who are newer and to plan for life after a new zoning ordinance. We have a lot of projects that are going on in the community. We have some exciting ones on our agenda this evening. We have received a site plan. It is titled 0 East High Street. It is a property in the flood plain. It is also known as the old fairgrounds. It has some frontage on East High Street and Caroline. I wanted to talk a little about process. We have started to get a lot of feedback from the community. I know that it is helpful if you all are aware of what is going on from a process standpoint. The

applicant has submitted a by right site plan. This site plan is, in their opinion, adhering to the regulations that are allowable in the code. The site plan is currently under evaluation by the technical reviewers. There will be comments that will be provided. There are several concerns that have been raised by the community. There are technical concerns that we know are coming to pass as well. The technical review continues to move forward now. Once that letter goes out with the technical details, typically we get additional feedback. Site plans are ministerial. Site plans that are typically by right don't always come to the Planning Commission. There is a code section that outlines moving a site plan forward to the Planning Commission for review. There has been some public feedback about interest in having that occur. It can happen in different ways, either by 2 commissioners, the director, or the applicant. There are many ways that it can potentially come forward. It would be a ministerial review. It would be specific to the code requirements that are involved. It would give an opportunity for some additional public review. Since there is a lot of discussion, that is something to consider. It is amid the technical review. The concerns that are being presented by members of public are concerns that are being looked at, specifically during that review. We will have more information at a later point when the comments are due.

Commissioner Stolzenberg – Do we have a timeline on that? What is the deadline for the comments?

Carrie Rainey, City Planner – We anticipate we will be able to send out the staff comment letter by October 28th, which is a Friday. Regarding critical slopes, there are critical slopes on site. The applicant is not currently proposing to disturb them. No critical slope waiver is currently required based on the design as proposed.

James Freas, NDS Director – With regards to transportation, we did work closely with PDC on creation of that application for the comprehensive safe streets & roads plan as a first step towards accessing those grant funds. We are also working with the County on a grant. We are a formal partner on a county grant application under the same bill under the reconnecting communities grant program for a project that would extend on Rt. 29 north from the intersection with Hydraulic up to the river. There is a portion of that that is part of the city. We have 2 projects under that overall infrastructure bill that the city is part of grant applications for.

With the zoning rewrite, we are meeting tomorrow with our consultant team to look at the schedule going forward for our review process internally and for when this is going to come out. I should have a schedule to share at the November meeting if not beforehand. I want to thank you for what was a productive meeting with the Planning Commission and Council on the 27th.

We have extended an offer for a transportation planner. He will be starting November 1st. I look forward to introducing him to you formally at the November meeting.

Ms. Creasy – Regarding the climate action plan, several of you were part of the presentation that occurred at the Council meeting. I believe there were some communication concerns. I think it was anticipated to be more of a dialogue and not just you watching. We appreciate everyone who was able to participate. We have been working with the staff who are on that. They are working through their process of moving that forward to Council. One of the steps will be coming to the Planning Commission for an abbreviated presentation with a link to the longer one that was held. Many of you were part of that and the opportunity to provide feedback. We are working with 1 or 2 of the November dates, either our regular meeting or our work session depending timing. If you have any written comments that you had from that opportunity, they are excited to take those comments right now.

Councilor Pinkston – With the Mayor and the people on Council, we had hoped to vote on the CAP (Climate Action Plan) at the first meeting in November. That is what we have been discussing. If you have more work to do, we would need to wait and do that later.

Ms. Creasy – There were many discussions concerning scheduling this morning. There were a couple discussions in trying to make sure that the feedback from the community groups is integrated to that prior to it coming to

Council. There is an urgency of getting that to you all. There are 1 or 2 questions that I was hoping would have had resolution on, but I know the climate team is currently working on.

Councilor Pinkston – If Council doesn't approve it until later in the month, we just don't approve it until later in the month.

Mr. Freas – The process we are looking at is including the Climate Action Plan as an amendment to the Comprehensive Plan. The Climate Action Plan is identified in the Comprehensive Plan as something that should be done. It is one of the action items within the Comprehensive Plan. That would entail a joint public hearing with Council and the Planning Commission. It would then come to Council for a vote.

Ms. Creasy – We appreciate the feedback. We will communicate the schedule once it is available to you guys. Part of it is the advertising requirement and negotiating through that. The urgency and commitment on this are high. We are working through those processes but also trying to manage that. We are assisting that group.

E. MATTERS TO BE PRESENTED BY THE PUBLIC NOT ON THE FORMAL AGENDA

Deborah Jackson (Belmont Carlton Neighborhood) – I would like to thank the city staff who were involved in reviewing the critical slope waiver application. Their comments were thorough and insightful. The points that I will make are related to the stormwater management systems that have been proposed. My comments come from the city staff report dated September 13, 2022. Of critical importance is that city staff 'cannot recommend approval under either finding #1 or finding #2. 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.' I will comment on the response letter from Collins Engineering to the June 9, 2022, city staff technical review. Collins Engineering has not reached out to the adjacent neighbors, with one exception, this week, to discuss their plans, inquire about neighborhood concerns, or act in a manner that shows concern for the Belmont Carlton neighborhood. It is impossible to review the CSW without an approved site plan. Collins Engineering requested this approval of the CSW without reviewing the site plan. The 2 go hand-in-hand as these stormwater management systems are dependent on the final site plan. This site is complex. Reviewing the waiver request without the site plan is challenging. 'It is challenging for city staff to provide insightful engineering concerns or comments without engineered plans at this stage.' My second point is about the release outlet that pumps into a stream that flows into the Rivanna River. It does not appear to be filtered. Why is there a need for release outlet? Why doesn't all the water go through the biofilter? Why does this outlet release water onto our adjacent property? Why is it not directed to the east towards the developer property? It is unlikely that there will be any substantial groundwater recharge to offset the reduction caused by the extensive grading in additional impervious surfaces. In the city report, 'at no time shall concentrated water be directed toward the critical slopes without adequate conveyance and down and beyond the slopes to an acceptable outfall.' Without the site plan, how can you determine this? The required retaining walls will be monstrous. They will be 20 to 30 feet high. They will have a huge impact on the neighborhood filling in the ravine.

Elsa Spencer (Chestnut Street) – The previous public speaker did a fine job talking about my concerns about the critical slope. I will leave those concerns in her fine words. She did a good job. I am also a neighbor. The proposal is parallel to Spruce. Given that she covered the slope concern about the functioning stormwater. From what I can tell functioning stormwater management currently in place would be disturbed potentially, I would focus my concern that I want to state about pedestrian safety in this neighborhood. We have 16 children in this block of Chestnut, Spruce, and Myrtle. I have seen some plans that have a proper street, a 2-direction road coming out emptying out onto Spruce Street, which dead ends by the tracks. We have this small double horseshoe situation with 16 children, who feel safe moving around. My concern is having a street access to this new development coming into what has been a safe area where the children have become accustomed to minimal car traffic. I understand that there must be 2 exits. If we can have both exits on Carlton, that would address my concern. It seems more convenient for the people who would live in the condos to access. They are going to want to get to Carlton.

Kimber Hawkey – I would like to second what the previous speakers stated. From the offset, this is an inappropriate development for this site. The fact that the applicant has applied for this critical slope waiver proves that point. It does not follow good planning practices. It should not be approved. The development is too much for this environmentally sensitive area. The city needs to respect the environmental concerns of each site. The environment here has proven not to be appropriate for this development, as per the staff's recommendations. We hope that you will deny it. The area has been compared to the 'lungs of Belmont.' We have already suffered significant tree loss in our neighborhood due to inappropriate development. This is a great time to act for the climate and preserve the environment as much as possible. There are other concerns about the size of this development with the projected 900+ car trips per day. It is already a problematic intersection that has had accidents and 2 cars cannot pass each other. It boggles the mind how you are going to add 900+ car trips per day, especially since there are 2 other developments that are supposed to be coming up in that area as well. Please deny this.

Mark Kavit – I hope that the Planning Commission will not approve this waiver and that you listen to what the staff report had to say. I won't repeat everything previous speakers have said. I echo their comments. I want to comment on the Carlton Road area with the traffic. If you take 2 cars headed on that road, they can't pass unless somebody pulls over into the parking area. If you have cars parked on the side of that road, somebody must back up. I have done that and watched that traffic. There is a potential future issue there.

Kat Maier – I want to thank Ms. Creasy for being incredibly responsive. I know this is about the critical slope waiver. I want to give some background. As a neighborhood, we have been given multiple site plans. We go through them. We are studying it. This is where we have lived for 20 years. This is a vital place for Charlottesville. We go over them. We care about it. They are so full of errors. NDS does this 'deep dive' and recommendations. It is almost that the city is this consultant. They are 'handholding' this company through this development. We have been through this before. You give these great recommendations. It is concerning that they don't have their own consultants. This is a large site. It is special and tender. When it says that, 'City Council may thereafter grant a modification upon finding that public benefits outweigh leaving it as is.' They don't. We have reduced stormwater velocity-not. Where is all this water going to go? There is a green area that looks like a septic zone. I don't even know if people can play there. The other issue is trees. You made the brilliant recommendation with a 3 to 1 ratio replacing the trees. You said that it doesn't look like it is landscaped. I cannot tell you the number of foxes. There is this huge ravine. The wildlife is unbelievable. I am grateful that you pushed back. I hope that this waiver is denied. I cannot understand how you could approve this without a site plan.

Becky Reid (Cherry Street) – I wanted to echo a lot of the same concerns that have already been voiced. I would say my concerns focus on safety in our neighborhood in terms of increased automobile traffic, construction traffic. I am a parent of small children that plays in the neighborhood. Most of our neighborhood does not have sidewalks. I think that 2 or 3 houses have sidewalks in front of them. That would be a concern if we are routing more traffic through our neighborhood, which I don't think is necessary and don't think is of interest to the people who are going to live next door to us. They are going to want to get out to Carlton. We don't want people flying through our neighborhood. I also want to echo the concerns about the multiple site plans that we have seen. I want voice my support for density. I know affordable housing is a massive challenge. I don't know how much this development addresses that. I know density is a key way of housing people close to their jobs. There are maybe some smarter ways we could do some of that. I think preserving neighborhood character and safety through more connectivity for walkers and bikers. They need to get these plans vetted before they come to neighborhoods. I share concerns about our water and the environment. I would like to make that part of my statement.

Norman (Cherry Street) – I echo the concern about the critical slope issue. There are only 5 houses on Cherry Street. This is a closed in area. There are limited sidewalks. The street is not all the way up to the property line where the sidewalk would be. In bringing the lot that was purchased last November, it connects with Spruce Street.

That lot will be paved over, which will bring more water down to the creeks. The idea of bringing that kind of traffic into this neighborhood would require sidewalks for the safety of the children. Who will pay for the sidewalks? The amount of traffic that will come into a small closed residential area is dangerous. There were earlier comments about street safety. You will be creating a street hazard by allowing this development. The lot that was purchased is a residential lot. They have not done anything to maintain it.

Anna Towns (900 Belmont) – I did appreciate that staff requested that this project make a street connection over to Spruce Street. I share my neighbor's concerns about pedestrian safety and about the amount of traffic in the neighborhood. It would be valuable for this new development to be knitted into the city street network.

F. CONSENT AGENDA

1. Minutes – September 14, 2021 – Regular Meeting
2. Major Subdivision – Preston Commons (Robinson Place)
3. Site Plan – Lyndhall Apartments – 64 University Way
4. Entrance Corridor – 1113 5th Street Southwest – Conformance with SUP

Commissioner Stolzenberg – Second by Commissioner Mitchell – Motion passes 4-0 with 2 abstentions (Commissioner D'Oronzio and Commissioner Schwarz-pursuant to the Preston Commons matter conflict of interest)

Mayor Snook called Council to order for the matter of the public hearings.

III. 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. SP22-00007 1113 5th Street Southwest – On October 11, 2022, the Planning Commission and City Council will conduct a joint public hearing for an application for a Special Use Permit ("SUP") for the property located at 1113 5th St. SW and identified in the City's land records as Tax Map and Parcel ("TMP") 21B004400 (the "Subject Property"). The public hearing will be conducted both in-person and via virtual (electronic) means; individuals who wish to participate electronically may register on the City's website. Following the public hearing, it is the intention of the Planning Commission to vote on whether to recommend approval of the SUP. The Law Firm of Williams Mullen, on behalf of the contract purchaser of the Subject Property, Green Clean Albemarle LLC, has submitted a SUP Application for, the Subject Property, which is currently owned by Patriot Bank. Pursuant to City Code Sec. 34-796 and Sec. 34-158, the contract purchaser has applied for a SUP to build a Car Wash on the Subject Property. The Subject Property is approximately 0.81 acres with road frontage on 5th Street SW and Harris Road. The Comprehensive Land Use Map for this area calls for Urban Mixed Use Corridor and the Subject Property is located within the Highway Corridor mixed use zoning district classification. The City's zoning matrix allows car washes in Highway Corridor districts with the approval of a SUP. The property is adjacent to other properties currently used for commercial uses, and is located across from residential housing on the opposite side of Harris Road. Additional information pertaining to this application (SP 22-00007) may be viewed online at www.charlottesville.gov/agenda. Persons interested in the Special Use Permit application may also contact NDS Planner Matt Alfele by e-mail (alfelem@charlottesville.gov) or by telephone (434-970-3636)

i. Staff Report

Matt Alfele, City Planner – You will be having a public hearing and making a recommendation to City Council for a proposed special use permit at 1113 5th Street Southwest. The SUP is for an automatic carwash at the intersection of Harris and 5th Street Southwest. The applicant is proposing to demolish the shuttered bank on the site. The carwash will have a main building fronting on 5th Street Southwest with parking pay stations, vacuums, and a dumpster, and an ingress and egress from Harris Road. Offsite improvements include pedestrian markings across the entrance to the Willoughby Square Shopping Center. Staff has reviewed the application and finds that it meets the general standards for a special use permit and recommends approval with conditions outlined on page 14 of the staff report. Staff's main concerns with the proposed use is any noise created from the vacuum stations. Staff is confident these issues can be mitigated during preliminary or final site plan review by construction of either a small wall or physical barrier to reflect noise back on site, planting large shrubs at time of construction, relocating vacuums to a more internal location of the site, reducing the number of vacuums, and/or installing low noise vacuums.

Commissioner Mitchell – Mr. Duncan, in the report, you suggest that you do not suspect that this implementation/installation is going to have any significant impact on traffic. I want you to think about your presentation to LUPEC and to this board as it relates to the 5th Street safety improvement plan that you have been working on. Can you 'walk us through' how this effort would dovetail into your plans for 5th Street and improving the safety?

Brennen Duncan, Traffic Engineer – I don't know that it is necessarily going to improve safety. As far as being able to compare it to the existing use that is there, from a traffic generation standpoint, they are similar. I think it is less than a 2 or 3 percent difference in traffic generation between the 2 uses. I don't think it would have a negative impact any more so than the current use on the corridor.

Commissioner Mitchell – I think you recommended some pedestrian improvements. That will help with traffic going back and forth on Harris Street. Is that right?

Mr. Duncan – That is correct.

Commissioner Habbab – With one of the conditions, we are saying a way to control the noise or mitigate the noise. Is staff confident that is an appropriate condition, or do we tie it to a specific decibel number? How do we control that? Do we need that at this point?

Mr. Alfele – It is staff's opinion that there are several ways to mitigate the noise. During their presentation, the applicant will talk about their noise study. The conditions are outlined to address it at the site plan stage. I don't think tying it to decibels is going to be appropriate due to enforcement and falling outside that realm of the noise ordinance. Staff wanted to be open to solutions, not only from the applicant, but from the Planning Commission and City Council on addressing that one area to try to mitigate.

Commissioner Stolzenberg – They gave the ambient noise at the area because of cars. I am trying to understand how to consider the noise being generated by this use regarding the ambient noise. In reading the noise ordinance, it doesn't say you can't emit loud noises unless other things are also being loud. Does it make sense to say that the cars are loud anyway? It is Ok for this to be loud.

Mr. Alfele – The noise is absorbed into the ambient background noise. There is some noise that needs to be mitigated. It has to do with off and on of the vacuums. I don't think the machine the cars going through the automatic carwash so much as the vacuum noise where it is periodic of the compressor cutting on and off.

Commissioner Stolzenberg – That makes sense. We did get a public comment about music. Have we heard anything from them about speakers?

Mr. Alfele – Staff went and looked at their carwash at Hollymead. There are speakers. In staff's opinion, that is a noise that could be produced by right. You can have a restaurant with outdoor seating. By right, you could produce music.

Commissioner Stolzenberg – Looking at their noise measurement data, their maximum noise levels that they are measuring, all but one of eight sites they are measuring go above the 65-decibel maximum. Some of them are at 75 decibels. One of them is almost 80 decibels. It is not the average noise level. With the noise ordinance, we should be looking at the maximum level. It doesn't say 'as long as your average noise levels is below 65.' When we are considering the noise impacts, should we be looking to make sure that this site plan or proposal complies with the noise ordinance? Is that a separate matter?

Mr. Alfele – How the noise ordinance is written, it does not apply. It only applies to noise created within a residential zone district or the residential portion of a mixed-use district.

Commissioner Stolzenberg – My reading of the ordinance is that it doesn't apply within the property. If it is 65 decibels across the street in the residential zone at that property line, would it still apply?

Mr. Alfele – The last time I looked at the code it said, noise produced within.

Commissioner Stolzenberg – It says 'to create a sound level in any residential zone in excess of.' It depends on whether you say cause any source of sound to create a sound level. Arguably, it depends on whether you create a sound level or refers to creating it in the residential zone or having the sound level be that in a residential zone.

Assuming the noise ordinance applies, should we use the noise ordinance as our basis for thinking about noise as an adverse impact?

Mr. Alfele – Noise should be handled when we are looking at how there are ways to mitigate it. How staff looked at this is that when you are looking at a by right development on that site versus an SUP at that site, the factor that staff came up with is that sound would be the difference between a by right and what is being proposed and mitigating that. Some of the proposals that staff has put in that condition, staff feels that would mitigate that noise. We don't feel the noise is going to be high pitched for long periods of time. It is that intermediate and how can you reflect some of that back to the site and be absorbed into the ambient background noise.

Commissioner Stolzenberg – When we are thinking about adverse impacts, do we always define them against the most intense or most impactful by right use?

Mr. Alfele – I would say 'yes.' When you are looking at some of the uses in the use matrix and you are looking at what could be done here by right versus what impacts do those produce versus an SUP, if it is producing impacts that are outside that norm of the by right impacts. There are by right uses that could go there that would have an impact that we would not be able to mitigate just because they are by right in use.

Commissioner Stolzenberg – I am wondering whether it is not an impact because there is one by right use that theoretically could go there. That would be impactful versus the probable by right use or some other by right use that wouldn't make any noise.

Mr. Alfele – Some of the other special use things like a drive-thru where the adverse impact is maybe increased congestion of backup in a drive-thru. It depends on the use as to what created that to be an SUP. It doesn't

necessarily mean noise would be the impact for a carwash at every location. If this was located further in that development, there would probably be no impact that staff would have found because it would have spread out by the time it got out there. Staff probably would have still found that it is appropriate in a highway corridor to have a carwash. The noise comes up because it is at the edge of that zoning district.

Commissioner Stolzenberg – I am also thinking about traffic. You could put a restaurant here by right. That would produce a lot of traffic. Can we determine that traffic is an adverse impact because this going to produce a fair amount of traffic, even compared to many by right uses even though there is the possibility of a restaurant?

Mr. Alfele – From staff's standpoint, we would shy away from that. This is traffic oriented. It would be the number of cars going to a bank or a sit-down restaurant that is by right. That is the same traffic you would probably be getting at a carwash. The same amount of traffic going by is stopping at a carwash. You can make the argument that those would have more traffic than something that is a drive-by commodity where you are not necessarily driving by a carwash and stopping.

Councilor Payne – How many months has that bank been not operating?

Mr. Alfele – I know it has been several months. I don't have the exact timeframe.

Councilor Payne – You have estimated that the amount of traffic would be like that bank that was there. I don't have any reason to guess that is not the case. Do we know if there is anything unique to a carwash use that would be likely to create a greater congestion problem than a bank or create any additional problems at that intersection in terms of how traffic enters or is backed up?

Mr. Duncan – I would say no. It would probably be less. There tends to be more off-peak trips. There is less congestion during the peak hours. A lot of this is based on ITE trip generation books that are published. That is where we are comparing the existing use of a bank to a proposed use of a carwash. Every location is a little different. When you are trying to plan these, carwashes have different operating peak hours than a bank would. I don't think that this would have any adverse impact on that intersection. As far as contributing to the traffic at that intersection, it is still probably 1 or 2 percent of the actual traffic that goes through the Harris and 5th Street intersection is going to be this business.

Councilor Pinkston – What is it that is pushing this project over into requiring an SUP versus by right? Is it the noise?

Mr. Alfele – From a technical standpoint, in the use matrix, this requires an SUP. It is one of the uses that requires a bit of extra review.

Mayor Snook – I am thinking about effects that the ordinance talks about that we are supposed to consider as possible negative impacts. One of them is dealing with the question of impacts on community resources. One of the things that is an impact for carwashes, depending on how they are constructed, is how much water they use. There are some carwashes where they brag that they recycle 90 to 95 percent of their water. Do we know what these people are claiming as far as the amount of water that they recycle and their water use?

Mr. Alfele – We do know. When the applicant gives their presentation, they will speak to the water that they do recycle. From a staff perspective, we are talking about approving an SUP. We are talking about that use. If City Council were to approve a carwash and the applicant decided to sell, that use goes with the land. It is not per owner.

Mayor Snook – It gets back to the question: Are we supposed to be looking at what they are proposing, and we approve it unless we find a reason to disapprove it? Are we expecting to look at it from the other side? To say,

prove to us that you are doing something worthwhile so that we ought to be giving you this benefit/boon of approving the SUP. I am concerned that if we spend all our time trying to evaluate whether there are enough negative impacts so that the negativity rises to the level to say 'no,' we are looking at the question backwards.

Councilor Payne – Has there been any analysis or thought on staff side of how this does or doesn't align with future plans in this corridor, including our future smart scale applications and the long-range safety plan?

Mr. Alfele – From a safety plan, I would say not from an improvement plan, other than what was outlined in the report.

Commissioner Stolzenberg – With the bicycle facilities in that area where the crosswalk is being put in, are those compliant with standards?

Mr. Alfele – I believe they follow our bike-pedestrian master plan standards.

Commissioner Stolzenberg – I am referring to the bike lane with no markings within it that suddenly ends.

Mr. Duncan – It ends as it approaches the intersection and goes right into the left turn lanes. The width of it and the markings are correct. As you approach an intersection, and you approach splitting into multiple lanes ending a bike lane where there is no longer room to have a dedicated lane is common practice.

ii. Applicant Presentation

Valerie Long, Applicant –

Next Slide
This is a rendering.

Next Slide
This is the general location. I know you are familiar with the location. I wanted to clarify the zoning of the site and the parcels surrounding it and those on the opposite side of Harris Road and 5th Street. As noted, the zoning is the highway corridor district, which as stated in the ordinance, the purpose is to facilitate development of a commercial nature along auto oriented corridors like 5th Street.

Next Slide
The Comprehensive Plan designation for the parcel is urban mixed-use corridor. It contemplates a higher intensity mixed-use development arranged along corridors between employment, commercial, and civic hubs of the city, which is an appropriate designation for this parcel.

Next Slides
These are images of the existing property. These are from Google Street View. With the bank being vacant, you don't see a lot of activity there right now. I want to point out the state of the landscaping and plantings on site. It is not up to your current standards. We will show you some renderings and plans that will be more what you all would expect.

Next Slide
This is a version of our conceptual plan. At the top center of the page is a proposed sidewalk that does not currently exist. That would go across the travel way entrance and would help with pedestrian safety, given the location of the elementary school down the block. Starting on the left side of the page, you can see the entrance and the 3 rows of the queuing of the cars and the pay stations. The cars would pull forward into the building, proceed through the

building during the wash cycle, and exit the building on the right side. There are parking spaces. Next to each of those parking spaces is a vacuum. If people want to use those vacuums, they are an option. You can also see a sidewalk internal to the site.

Next Slide
This is a copy of the landscaping plan that we also submitted. I circled a note indicating the proposed planting strip adjacent to Harris Road that would be an S3 category buffer, which is the highest level of buffering and screening that your zoning ordinance contemplates. That would be proposed. The rest is conceptual. It is intended to demonstrate the ability to comply with the landscape ordinance. All those specific details would be worked out at the site plan stage.

Next Slides
These are some conceptual renderings we had prepared. This is an overhead view looking at the site if it was developed as planned. That is 5th Street in the lower side of the page and Harris Road on the right. You can see the building adjacent to 5th Street, the parking lot. You can see the black fixtures for the vacuums and the planting buffer there. These are conceptual renderings. We tried to demonstrate what it would look like. We have a view from the opposite direction. We have a conceptual rendering from 5th Street. The proposed plantings across the front of the building do not show up well here. We have a conceptual rendering from Harris Road looking towards the site. The plantings there don't represent a true S3 level screening. It would be more than that. The ordinance calls out specifically what an S3 screening landscape plan requires. You can see the black hoses that represent the vacuums that would be used. You can see in the distance the additional parking and the building. We have a similar view from the corner at Harris Road and the entrance to the shopping center. We have a conceptual image looking at the site from the shopping center entrance road.

Next Slide
We appreciated the questions and comments that were made about the concerns about noise. We had a community meeting last month and heard similar concerns and questions about that. We wanted to provide some ideas of what we have in mind in terms of addressing those. Our team worked hard over the last few days to come up with a few other ideas that we wanted to share with you. This is new to you. The two smaller red circles are areas shown on the plan that are listed as a vacuum pad. The technical term is vacuum producers. Regarding the vacuum noise, it is not so much the vacuums that make the noise. It is the vacuum producers. Once I understood that better, in noting the one that is adjacent to Harris Road, I started asking questions about what we could do to minimize the noise. If that is the noise emitter, we need to be sensitive to the fact that it is adjacent to Harris Road where people have concerns. The central red circle is just a second one. They came up with some good ideas.

Next Slide
The proposal is to relocate both of those vacuum producers inside the dumpster enclosure. The dumpster must be enclosed anyway. They can expand that dumpster, tuck those 2 producers inside, and we feel that will reduce the noise by having them enclosed, but also moving them away as far as possible from Harris Road and the residents on the far side of Harris Road. It will make a significant difference. That is one proposal that the applicant is willing memorialize in a condition if it is the Commission's preference.

Next Slide
The second idea we had was looking at the original plan. In the bottom right is a circled small retaining wall. That wall is going to be more going down the hill given the slope there. We have an opportunity to use that wall to reflect the noise away from Harris Road. There is some noise that comes out of that end of the carwash, the fans, that dry the cars.

Next Slide

We have a conceptual improvement that is a longer wall. It extends further down Harris Road. We are proposing to extend that a little bit and add a few feet to it. It could serve as potentially, not only a screening wall, but a sound mitigator.

Next Slide
From the renderings, where that location is the walls are not drawn correctly in that way. It helped give us an idea of how we might use that to help it serve multiple functions. The proposal would be to extend that wall to the edge of where that circle is.

I would like to address a couple of the questions that came up at the beginning. With the question about water recycling and recapture, our client tells us that they average about 80 percent of their water being reclaimed and recycled. They tell me that is better for water usage than if individuals were washing their car in their personal driveways.

Commissioner Habbab – I saw on one of the images that there was an accessible ADA ramp that had the raised tactile portion. Is that part of the crosswalk?

Ms. Long – I am not certain that it is reflected in that rendering. If it is, that is great. That is what the condition of approval that staff recommends would require. We are agreeable to that requirement.

Commissioner Schwarz – You have 21 vacuum spaces. Does the applicant or owner have an idea what the right percentage of filling those would be. I am assuming they don't anticipate 21 vacuum spaces being used at once. It seems like a lot of spaces to provide. Is there a formula for how many cars they anticipate using it at peak hours?

Craig Van Brennen, Applicant – We provide those as amenities. I don't think that all 20 vacuums will be used at any given time. We like to provide as a service to our customers. We find that customers like to have a little bit more room on either side. Even if they are using one vacuum, it is nice that they can open both their doors and work side by side. Having enough vacuums to maximize the site and maximize the customer experience is important to us. That is why we have so many.

Chairman Solla-Yates – How many vacuums run at the same time? Do all 20 vacuums run at the same time? Is that typical?

Mr. Van Brennen – The vacuums run on a central vacuum system. Those are the vacuum producers. The vacuums are consistently running. The noise that is produced by them does come from those vacuum producers. I encourage you to look at our site on 29. It is more like a suction sound that is on the vacuums themselves. It is not often allowed on-start-stop of a vacuum.

Commissioner Schwarz – Do you have an anticipation to what your peak usage would be? Our traffic engineer has calculated the traffic. I am trying to understand for myself what your peak usage might be.

Mr. Van Brennen – We don't quantify the vacuum usage in that way. It is an amenity. It is something we provide our customers as a complimentary service. We don't have as much data. I can't provide real hard numbers about how many customers wash and use the vacuums.

Commissioner Schwarz – Do you have a model that you have created for how many uses, how many people would go through the carwash?

Mr. Van Brennen – The busiest times for us are on the commute home from work. It is later in the afternoon from probably about 3 to 5, 3 to 6 in the evenings. That is our busiest time.

Commissioner Stolzenberg – That is helpful with the distribution of sound producers and the hoses. Does that mean, regardless of how many hoses are in use, the producers make just as much noise all the time?

Mr. Van Brennen – That is correct. If they are on, they are going to be making the same level of noise. It would be a similar noise level.

Commissioner Stolzenberg – You showed the retaining wall up against the edge. Do you have a sense of how that will block headlights, whether they will still be able to get through Willoughby Towns?

Ms. Long – We have not looked at that specific issue. There is some landscaping that is also proposed there and some existing vegetation. The thought was that the wall would be several feet off the ground.

Ryan Perkins, Applicant – Typically, when we are blocking headlights, even if it is with shrubs, we try to go to 36 inches. We are flexible on this wall, whether it be 36 inches or possibly 42 inches, which is standard fence height. That would block all the headlights. In addition to that on the opposite side of the right-of-way side street side, we would have significant plantings as well. Our goal would be to block all the headlights leaving. It could be accomplished through 36 to 40 inches in height.

Commissioner Stolzenberg – Do you have a sense of how much moving the vacuum pads to the dumpster enclosure will mitigate that noise production relative to the noise study you showed us?

Mr. Perkins – I can't answer that question. We haven't done that calculation yet or done that study. That enclosure is about 8 feet tall. It will be the same height as the producers. It is a block enclosure plus a brick façade that matches the building. It is a significant enclosure.

Commissioner Stolzenberg – I appreciate you offering that crosswalk. Staff are adamant that the traffic is not an adverse impact here. Would you be willing to do any other paint treatment to the bike lanes while you are there? Our traffic engineer and transportation planner might think it is reasonable there.

Mr. Van Brennen – Safety is a big concern for us. We are happy to work with staff. There is something that we can do while we are working the right-of-way to make sure that students can transit to the property and get to the school up there in a safe way. We are happy to help accommodate that the best we can.

Commissioner Palmer – In terms of the employees at this location, are there any staff available?

Ms. Long – I believe the plan is always for at least 3 staff members.

Mr. Van Brennen – That is right. Our sites are staffed all the time every time during the hours that we are open. There are at least 3 staff members. We work to provide good high paying or good quality jobs for people for a fast-growing company in the community. We are providing opportunities for our employees to have some upward mobility. It is an exciting time for our employees. The site is always staffed with at least 3 people.

Councilor Pinkston – I would note that the sound, like light, follows the inverse square law. The further you get it away; it is a geometric falloff. Moving the vacuum producers, the way you did will make a significant improvement.

Mayor Snook – I would have thought that headlights were not really a relevant concern. I would have thought that most people would wash their cars when they could see what they were doing. Is that not the case? Is that really an issue?

Ms. Long – With this business, the cars would go through the building. The carwash facility washes their car. They could decide to drive out and be finished. They might decide to stop in the parking lot and vacuum out their car. There will be light poles on site. The operating hours are until 8 PM on weekdays and 6 PM on Sundays. During certain times of the year when it is dark earlier, it could be an issue. It is often an issue that comes up with drive-throughs. It is something we try to be thoughtful about.

iii. Public Hearing

John Bond (533 Harris Road) – We live directly across from the intersection. Not only are we talking about a wall breaking sound, but we also live on a hill. I feel negative about this thing. I don't mind noise. I don't want a continuous noise. How would you like for someone to run a vacuum inside your house all day? It may be loud. It is the pitch of the thing. It is not right. I don't push my music on anybody else. I don't believe in letting somebody else push their music onto me. I love music. I want to be able to turn my music off and on when I want to and not mess with somebody else. I have nothing against the carwash, except it is not the proper place for it at the edge of a residential community. We can't sit in our front yard without listening to something continuously running. I don't care if it is low or high. It is the wrong place for it. If it was at the other end of the shopping center, that is fine and good. Putting it right there on the edge of a residential community is wrong. You don't see all the piping and all the mechanical works like the one on 29. This is an eyesore in my front yard. We are going to be overlooking all of that. It is not right. It is devaluating residential land. It is not fair.

Claire Denton-Spalding (137 Old Fitch Circle) – I urge you to deny this application. We are opposed to the development of the Green Clean Auto Wash. At that intersection, there is already a lot of traffic. There was a huge car accident there today that stopped traffic. It is a difficult and deadly intersection. Adding a carwash would attract cars to the area and make heavier traffic. I believe that the speakers today have noted that the bank has been closed for some time. The direct comparison between a carwash and a bank isn't one-to-one with the current situation. We are concerned about the increased traffic. It is already overcrowded. It is a difficult intersection. The carwash will attract cars. A carwash is not pedestrian or biker friendly. Over the past years, we have attended some meetings and contributed to re-envisioning 5th Street. There are plans to make 5th Street more walkable and bikeable. Adding a carwash and the increased traffic would counteract those plans. If Charlottesville wants to become less car dependent, the city ought to seek new forms of development that don't directly service cars. We are urging you to deny that application.

iv. Discussion and Motion

Commissioner Mitchell – The noise issue can be mitigated based on some of the things that we have talked about. There have been 95 accidents up and down that corridor the last 3 or 4 years. We have lost 4 lives. There have been 6 serious injuries. That gives me a lot of concern. I know that Mr. Duncan suggests that the traffic won't be significant. Any operation like this must drive more traffic, people turning in off 5th Street onto Harris. The noise doesn't bother me, but the safety does.

Commissioner d'Oronzio – With the noise, I tend to agree with Commissioner Mitchell. There seems to be ways to mitigate that. I deplore this. Background ambient noise disappears when the power cuts off. You recognize how many little motors and engines there are in their house that they don't hear minute-to-minute. With the traffic point, right now it is a vacant bank. Any use is going to be substantially more. To Commissioner Stolzenberg's earlier point, if Bodos comes in, no one is going to have anything to say about the traffic. There is no place to make that complaint. They are going to come in and start moving traffic through there. I don't see the traffic because of this is dramatic. I understand we have 20 spaces. I imagine that some of that is not for a full-fledged vacuum. It is to pause for a second to throw away your trash.

Commissioner Mitchell – By right, we could get a Bodos. The traffic would be as bad. We might not get the help with the work on the streets that we want these guys to do.

Commissioner d'Oronzio – You are going getting a whole lot of cars rolling into that parking lot if you open a Bodos or something similar there.

Commissioner Habbab – Looking at it as a noise issue and everything else could happen by right, the applicant moving those vacuum producers into the site shows that they are listening to the complaints and trying to address them. I am confident that it could be mitigated.

Commissioner Schwarz – I feel stuck on this. Current uses that are by right are a gas station or repair service shop. A repair shop can be noisy. Are we looking at this as something that is a negative that we need to mitigate? Will we only approve it if it is going to bring something better to the area? I realize that our existing zoning and the entrance corridor guidelines talk about car-oriented buildings. Our Comp Plan talks about mixed-use and up to 5 to 8 stories in height. This is a sad use for this corner. I am sure that it is a fantastic use for the applicant. With planning and zoning, it is a little depressing. If we are looking at it in terms of a use that any negatives can be mitigated and then we would approve it, I think they can accomplish that as others have said. If we are looking at it in terms that it needs to bring something special to the area, it doesn't pass that. The lack of a bike lane on Harris, if you look at the city's bicycle and pedestrian master plan, there is an up-and-down 5th Street. It is level 4, which is the highest. There is a small level 4 on Harris, which is the north border of this property, which is where the bike lane ends. I don't know that we can require this applicant to improve that situation. I don't think the city should look at this intersection as complete and satisfactory as far as bikes are concerned.

Commissioner Stolzenberg – I agree with Commissioner Schwarz in a lot of respects. My first impression of this is that it is a sad use for this intersection in what we hoped it would be. It made me wonder if the applicant was aware that there was a zoning determination that the highway corridor has unlimited density by right until we rewrite the zoning code. I believe if you believe that we shouldn't have carwashes in the city, it is not an invalid opinion. The venue to do that is a zoning text amendment that removes carwashes as an allowed use and not by denying an SUP for vague reasons that are not related to adverse impacts. There are adverse impacts here. Noise and light pollution are some of the most classic adverse impacts that we are supposed to be worried about as a body that does zoning. Noise is something I am very worried about especially with this noise study that promises to violate the noise ordinance. I do think that moving the noisy things into an enclosed area would significantly mitigate it. I am wondering if we could craft a condition that limits the noise to some strict level measured from the property line or the nearest residential property line ideally beyond what the noise ordinance would require. It seems like it is an engineering problem that can't be solved. You could bury the vacuum producers. It is a matter of engineering it. I don't know the extent to what putting it in a dumpster enclosure will do. A noise study or something similar could say that this will be less than 50 decibels to the property line or something like that. With lights, we should add a condition that headlights won't bleed over into the neighboring properties. I think it is not required in the code. It is good to hear that they plan on mitigating that. I want to enshrine that as a condition. Similarly, full cutoff lighting. What Commissioner Schwarz said about traffic and bike facilities is right. While it might be a small percentage of trips at the Harris/5th Street intersection, it is still a fair number of trips in that driveway/Harris intersection. We are talking about 42 or 43 trips at the peak hour. If we can get bicycle improvements and paint treatments to that intersection, that would be beneficial in mitigating those impacts. I would ask staff if we could enshrine their representation that they are willing to work with transportation staff as a condition on this. I appreciate that they will hopefully do that. I am ambivalent about it. I am leaning towards approval with some rigorous conditions to make sure that this doesn't have impacts on the neighbors across the street.

Chairman Solla-Yates – I will be pleased for the property owner to be able to do as they desire with their property. I see a benefit to that, to the jobs, and to the revenue. I do see troubles. There are engineering solutions that we can use to mitigate those.

Councilor Payne – The Mayor raised an important point. As I read it, the applicable standard, which is 'Council may approve in its discretion whenever the public necessity, convenience, general welfare, or good zoning practice requires.' Our default would be to look for reasons to approve an SUP. Is there a compelling reason how this benefits the general welfare? That is within our discretion to approve or deny. There is no requirement that we need to look or should look upon an SUP of something which we default to approving. It seems our legislative discretion is broad enough that we can use whatever standard we want that we consider to be advantageous to the general welfare. In either case, this proposal would fail both standards. I see there being adverse impacts on the adjacent residential neighborhoods in terms of noise, light, and traffic. There is the principle of economies of glomeration. If you build one car lot, why are there a bunch of car lots that pop up next to them? It is same with drive-throughs. I would consider this to be a drive-thru use. It is a drive-thru for a carwash rather than a restaurant. My concern is that if we approve this, it is going to be creating a lot of path dependency where the pattern of development in this area will be more drive-throughs and more car-centered uses. We know there has been a fatality at this intersection. There was a crash today at this intersection. There could be a by right development, which is as negative for the neighborhood in the community. There could be a lot of by right uses, which are better and include residential development. I don't see how this benefits the community or that neighborhood. I see how it has adverse impacts in terms of traffic. I don't see how this conforms with our smart scale applications and the safety improvement plans.

Councilor Pinkston – Listening to what people have said, I can see how this might be an amenity to the community to have this option. Even in Charlottesville, people might like to wash their cars from time to time. With the commerce and jobs that would be derived by having that there, I can see those things too. I am not sure that it is the best use for that space. I have concerns in terms of the noise, the light, the traffic, and how it fits into our smart scale work in that area. I am still on the fence about it.

Mayor Snook – A lot of the discussion tonight has been a discussion that is appropriate to the consideration of a site plan. Can you mitigate various effects? Can you deal with screening of the neighbors of sound and light? Although that is part of the SUP consideration, that is not all of it. I feel that an SUP application and SUP granting ought to contribute something to the community in return for getting a deviation from the norm. I have voted to approve every SUP application that has had a housing ramification because I could see that we needed more housing. That was a positive. I will say that I am not morally opposed to carwashes. We must consider more than that. It would be different if there was no other place in the community where you could get your car washed. It would be different if there were not zones and property zoned accordingly that allowed for the installation of a carwash. There is no reason that a carwash is necessarily needed or appropriate here. I don't know what I have in mind for that stretch of the entrance corridor. It is probably not a carwash.

Commissioner Stolzenberg – The intent of the zoning district is for auto-oriented uses. Should we have a zoning district that is encouraging auto-oriented uses? That is a good question. That is the stated intent of the district. We haven't changed it yet. The point I was trying to make about Bodos was that you could have a Bodos here. There could be a lot of traffic by right. We should be considering traffic as an adverse impact. It seems true that the SUPs we have considered before, many of them were in places where there could be a Bodos. We found that traffic was an adverse impact. It is not an unmitigable one. I was hoping that we could craft a condition on noise that puts some teeth, some numbers, and decibel levels on how much that noise had to be mitigated. What is a reasonable noise level to restrict it down to? 65 is the legal limit. We have no idea how much putting it in that enclosure will help.

Commissioner d'Oronzio – Can I get some clarification on where you are going with the noise? Do you want to put the noise such that the decibel level at the nearest residential property line is X or less?

Motion – Commissioner Mitchell – I move that we recommend denial of application SP22-00007. Second by Commissioner Schwarz. The Motion does not pass 4-2.

Discussion following Second of Motion

Commissioner Habbab – The way I am looking at this is that I don't like that it is going to be a carwash. Looking at the zoning itself in the highway corridor district and we are at the stage where our Comp Plan doesn't match the zoning that we have. How do we review these applications? That is where we are all struggling. I wish it was more ambitious and would fit our Future Land Use Map designations. It does meet what is currently in the zoning to some extent even though it is not by right looking at what is there now and what the intent of that district is.

Commissioner d'Oronzio – We are in this limitable state where we have an existing set of rules that we should be applying in some consistent way. Because they are the existing set of rules even though we don't like them and have all sorts of hopes and aspirations for the next set of rules that do not exist yet. Do we paralyze ourselves? That is a tension. Should it be a tension? Are those things that should be compartmentalized? We have something under the current rule that is being presented. We are going to evaluate it that way. When we have developed and crafted new ones, we are going to evaluate it that way. I don't think we are being fair. We are far away from being transparent or clear on what the city will and won't do and wants and won't want. We have a set of rules. We should be applying them. Not that it is absolute either. It should not be our default. That is where we start. These are what the rules are. We have a car-centric zoning. We have something where it is a disused property. Any use of it is going to increase traffic.

Commissioner Stolzenberg – To bring it back to the mayor's point about 34-157 (all discretionary zoning decisions and how to decide them), one of those things of public necessity, convenience, general welfare, or good zoning practice, informally saying something is a prohibited use without taking it out of the use matrix seems like bad zoning practice. We hear from developers building things that we would think are more beneficial for the city about how frustrating and unpredictable this process is. That is why we want to make a more predictable process. Do we plow through and keep doing it unpredictably until we make a new system? Do we try to do good zoning practice in the meantime even if the conditions are not ideal? We have the opportunity here to mitigate the adverse impacts. Things like having a crosswalk so kids can walk to school is a relatively small and cheap benefit. The city isn't doing it. It is a meaningful benefit. We usually recommend conditions even if we recommend denial.

Ms. Creasy – Sometimes, yes but usually in a separate vote.

Commissioner Schwarz – At some point in the past, somebody decided that carwashes would be a special use permit. I am not sure that by denying this we are using bad zoning practice. We are conforming to what is currently in the code. I am not sure that I see a disconnect between applying that with the future Comprehensive Plan, which is about more intensive uses. I don't think we are violating anything by denying this since it is not a by right use to begin with. At some point, someone determined that we need to review it and make sure that there is a reason it should be there.

Commissioner Stolzenberg – If you were to deny it to say that it is on the edge of highway and right across from residential, it is not the right place to do it. That is a reasonable reason to deny a special use permit within a zone that allows it even if it mitigates all the adverse impacts. If we should deny it because carwashes don't make sense in Charlottesville anymore, that seems more arbitrary.

Motion – Commissioner Mitchell – I moved to recommend approval of this application SP22-00007 in the HW zone at 21B004400, 1113 5th Street Southwest to permit a Car Wash with the following listed conditions.
Second by Commissioner Stolzenberg. Motion passes 4-2.

1. **Pedestrian crosswalk striping will be provided along with CG-12 detectable warning surfaces to the west of the Subject Property across the entrance road to the Willoughby Square Shopping Center.**
2. **Operation of the Car Wash will be limited to Monday-Saturday from 7am -8pm and Sunday from 9am -6pm.**
3. **The applicant will work with staff during final site plan review to ensure any noise produced by the vacuum compressors does not exceed 55dB(a) at the nearest residential property line. These solutions may include but are not limited to; construction of a small wall or physical barrier to reflect noise back on site, larger shrubs (at planting), relocation of the vacuum compressors to an enclosure within the site, reduction in the number of vacuums, and/or installation of low noise vacuums.**
4. **The applicant will work with staff during final site plan review to ensure vehicular headlights do not spillover into residential units. Solutions may include but are not limited to; large evergreen shrubs at planting and physical barrier such as 36" to 42" masonry wall or fence (contingent to ERB guidelines and review).**
5. **All outdoor lighting will be full cutoff (contingent to ERB guidelines and review).**
6. **The applicant will provide additional traffic markings on Harris Road at the direction of the City's Traffic Engineer.**

Discussion following Second of Motion

Ms. Long – We have the engineer who prepared the noise study. The experts say that they are very confident that the proposals we have made regarding relocating the vacuum producers to the center of the site and enclosing them within the dumpster will make a significant impact. We are comfortable with the condition that was written by staff, to work with staff to mitigate the noise. It says, 'any noise.' It is stricter. That is vaguer than I might be comfortable with. I wasn't going to object to it because I wanted to convey the message. The applicant is willing and concerned about reducing and preventing any noise impacts on the neighbors. We thought that was the best way to handle it in addition to committing to the 2 new changes with relocating and enclosing the producers and adding the wall and extending the wall. To the extent, that is not sufficient, we are happy to work with more. With regards to a certain decibel level, I will note that Albemarle County has a noise ordinance that has a nighttime limit of 55 decibels and a daytime limit of 65 decibels. That is in the 'residential receiving zone.' That is what the limits are in the county. The county has many challenges with enforcing their ordinance. They do not have the technical equipment necessary to do it. I have handled noise ordinance violation matters in the county. They had to rely on our client's technical experts. It is challenging. In your comment Commissioner Stolzenberg, I think it was table 1 in the noise study, where you noted levels of 78. I am going to ask the expert to confirm this. I believe that is the maximum limit. That is not the standard. That is one time over the average. You measure on an average.

Aaron Heustess, Applicant – Specific to table 1, the elmax values that are listed there are 1-minute max readings from when we took noise measurements on site. We were on site for an hour and collected noise measurements at 2 locations on the site. The 1-hour LEQ noise level that is presented there is the equivalent noise level for that 1-hour period. When we monitor noise levels and when we are looking at the application of noise ordinances across the country, that 1-hour LEQ equivalent noise level is typically what is used for enforcement and planning purposes and ensuring that a particular use is consistent with the adjacent environment. We like to capture both min and max levels while we are out there. We recognize that noise levels fluctuate, not only throughout the day, even in an hour or a few minutes. What we presented here is the data as we collected it.

Regarding specific decibel limits at property lines, this is one of the challenges with noise ordinances across the country. You have run into it through the discussion tonight. How do you set a noise level limit that is enforceable? How do you measure what that noise level is from one site because of the contribution of lots of different sources in the environment out there? What we have shown in our table is that during an hour period on a typical Thursday, noise levels are higher and lower than what is currently specified in the ordinance. We are looking to plan and mitigate noise on our site to be consistent with the existing ambient noise environment. The Inverse Square Law was mentioned earlier. Point sources of noise will typically degrade at about 6 decibels for every doubling of distance. We are predicting a noise level of 65 decibels at 25 feet for the vacuum pump producer. We would expect that to be 59 decibels at 50 feet and 53 decibels at 100. The concrete block wall that will surround the dumpster enclosure could have a 20- to 30-decibel sound transmission loss. You are looking at a 20- to 30-decibel reduction by putting those vacuum producers inside of an enclosure.

Commissioner Stolzenberg – That was helpful. I reject the idea that it matters that it was a momentary noise and not the 5-minute average. The noise ordinance doesn't say anything about a 5-minute average. I recognize that it is hard to enforce noise ordinances. Since this is a constant noise and ideally, I would think something that could be modeled in advance, it seems more doable. The numbers on how much we can expect a reduction from what you earlier proposed is helpful. Are you not confident enough in those numbers that we could take what your projections were and subtract 20 decibels from them and call that the limit? Is the problem more that it is too difficult or not possible to create a model that would say that this site plan in this configuration will be 45 decibels or less?

Mr. Heustess – We did not model and predict future noise levels for the site. We took measurements at the proposed location to measure the ambient background noise levels. We took measurements at another Green Clean facility and made a comparison and made some observations about how those 2 different sets noise measurements compare to the noise ordinance in Charlottesville. We can create a noise model that would give you predicted noise levels in and around the site based on anticipated usage and the sound levels of the various pieces of machinery and any potential abatement measures that would be introduced on site, whether it is the dumpster enclosure, the screen wall at the exit of the dryers. We haven't done the math of the computer modeling; not because it is not possible to do.

Commissioner Stolzenberg – I was assuming that in your current proposal it would be no more than 65 decibels at the nearest residential property line. Otherwise, it would be illegal.

Mr. Heustess – That is correct. Our intent is to comply with the letter and the intent of the noise ordinance, which is 65 decibels at the receiving line of the adjacent property.

Commissioner Stolzenberg – Perhaps a reasonable condition would be that the applicant does produce a noise model and that noise model reach a particular threshold.

Mr. Heustess – We are happy to pull that together. That would ultimately be up to the team to authorize us to do that.

Commissioner Stolzenberg – A possible consideration for the Commission would be making that a condition of the site plan as part of this granted SUP. Are we uncomfortable with approving anything until we have some idea of what is going on because we have insufficient information?

Commissioner d'Oronzio – We have a motion that we are crafting. Let's finish it and see what happens.

Commissioner Habbab – For the noise and sound condition, it is the vacuum equipment. That is what they are measuring and designing, how much noise it is emitting at the property line. When we say noise, are they going

to have to do a model with all the cars and the machinery for the carwash machinery? Are we looking at all that or are we looking at just focusing the design solution that they are going to have to provide to the vacuum? When they enclose it, is that what they are measuring?

Commissioner Stolzenberg – It is reasonable to restrict it to the vacuum. I am assuming that would also make your noise study model easier. I don't want to require a model if it is an exercise and pleasing us to meet some condition. It is going to tell us something we already knew. If you enclose it, it is not going to make much noise.

Commissioner d'Oronzio – I want to know what the thing is at proximity.

Mr. Heustess – There were 2 statements that I made that are getting joined together. They are 2 separate discussions. The first is that I would expect the enclosure around the vacuum producers and the dumpster enclosure to reduce noise levels at the source by 20 to 30 decibels. The second part of the conversation was an example of how point sources of noise reduce by 6 decibels in the ambient environment for each doubling of distance. The example I gave was if you have a 65-decibel noise source that is measured at 25 feet, that same point at 50 feet to be 59 decibels.

Commissioner d'Oronzio – Absent the wall and if you are standing 10 feet away from one of these producers, how loud is it?

Mr. Heustess – I would have to recheck the data and see what the measurements for that are.

Commissioner d'Oronzio – How loud are these things?

Commissioner Stolzenberg – It sounds like they go up to 80 decibels at the edge of the other property they are measuring at.

Ms. Long – I don't have the noise ordinance with me. I assume that it states how the measurement is to be taken. Is it over a 5-minute weighted average?

Mr. Heustess – It does not make a specification on how the measurement should be conducted.

Ms. Long – How would it be enforced when you have ambient noise at the same time as the use occurring? How does that work? If you have an ordinance, it does not say how you measure. Is it the loudest noise?

Mr. Huestess – It would be up to the enforcement bodies and up to a judicial body to determine how that would be enforced.

Commissioner d'Oronzio – The applicant can't tell us how loud their producers are in a static environment. You turn this thing on. You are standing in front of it. How loud is it?

Ms. Long – We could if we undertook a specific measurement with that focus. We can do that. There are plenty of examples to do that.

Councilor Pinkston – If you had the cut sheet on the piece of equipment, they would be able to say this is what the decibels are at 10 feet away. They should be able to tell you if you erect a wall.

Commissioner Stolzenberg – At the property line of this parcel, 45 decibels verified by a sound study in the site plan configuration. It is something to be enforced at site plan via you creating a study. That memorializes the 20-

decibel reduction we can get. For the neighbors, that would sound like a refrigerator running at the property line. Is that too much? Is that unreasonable? Is that too expensive of a demand for a noise study?

Ms. Long – I don't think it is an issue regarding the demand of a study. If the ordinance is 65 decibels in a residential zone to then require it to be no more than 45 decibels at the edge of the site or are you saying 45 on the far side of the street? We are trying to comply with the noise ordinance. What you are proposing is noise ordinance less 20 decibels.

Commissioner Stolzenberg – I was saying the closer lot line. It is not quite double.

Meeting was recessed for five minutes.

IV. COMMISSION'S ACTION ITEMS

Continuing: Until All Action Items Are Concluded

1. Critical Slope Waiver – Belmont Condominiums

i. Staff Report

Matt Alfele, City Planner – Belmont & Carlton Holdings, LLC has submitted a Critical Slope Waiver application prior to submitting a final site plan for a proposed mixed-use development near the intersection of Carlton Avenue and Garden Street. The proposed by-right mixed-use development would include one hundred and thirty (130) residential units, eight-thousand seven-hundred and fifty (8,750) square feet of commercial space, new private street, reconfiguration of Holly Street, new City streets, a connection to Spruce Street, and open space. It is also indicated in the application materials but not defined are 7 affordable dwelling units, accounting for 5 percent of the total. To construct the mixed-use development, as presented in the application, the developer will need to disturb 86.4% of the critical slopes on site. Of that 86.4%, 65.3% needs a waiver from City Council. The remaining percentage of critical slopes is exempt per Section 34-1120(b)(7)(c). You are doing a discussion on the critical slopes. The layout presented with this is a preliminary layout. It is not a site plan. Staff has not reviewed this layout to make sure it conforms to all regulations. Keep in mind that things like setbacks and entrances have not been reviewed by staff. They would be reviewed during site plan. The layout is a general layout, but not one that has been reviewed for site plan conformity. Most of the staff report and accompanying materials are technical in nature.

Commissioner Mitchell – I may realize a direct or indirect benefit or detriment as a result of this application moving forward or not moving forward. The application would be P22-00039, a critical slope waiver for Belmont Condominiums. I live adjacent to this area. I live at 202 Douglas Avenue. This is one of two buildings in that complex. The complex has 42 condo units. I own 2 of those units. There are a host of other owners. There are a lot more owners in those units than me. I have no single benefit what from might happen here. In spite of my proximity to this, the City Attorney has indicated that I may participate in these deliberations if I let everyone know that I live adjacent to the property involved and that I am able to make a recommendation to Council that is fair, objective, and takes into account the greater public interest. I am able to do that. I have given Ms. Creasy and Chairman Solla-Yates a more detailed and signed disclosure that was drafted by the City Attorney.

It is not unusual for a critical slope waiver to come before this body and be approved by this body before we have a good site plan. It is possible for critical slope waivers to be approved by this body, but the site plan not to be approved.

Mr. Alfele – It is just a recommendation from this body.

Commissioner Mitchell – It is not unusual that that happens.

Mr. Alfele – That is correct. Typically, this body, even if a site plan is happening at the same time as the critical slope waiver, when this body is reviewing the critical slope waiver, the site plan is typically not near a state of approval.

Commissioner Mitchell – The engineering department's unwillingness or inability to endorse the application based on findings 1 and 2 is not unusual. I want to make sure that the public knows that. What we are dealing with here is not unusual. The current way that the water is being managed with the surfaces there are impervious as it exists today. How much more impervious will the surfaces be than they are today once this is implemented? I read in some place in either the applicant's writeup or the staff writeup that the conditions might be handled better if the applicant is allowed to make some of the changes that they want to make. It may be handled better than they are handled today. I want to make sure that I read that correctly.

Jack Dawson, City Engineer – I need to check and see what the percent of impervious is. Looking at the map or the plans that were submitted, there is an increase of impervious. If you go out there, it is largely impervious or 60 percent impervious now. The stormwater regulations, while a little complex, speak primarily in quantity to where you release the water. No matter what project it is, whether it has critical slopes or not, requires a land disturbing permit in the city. Therefore, with a stormwater plan approval, you are not allowed in the one-year storm you must meet certain requirements. In a 10-year storm, you are not allowed to increase the amount of water you discharge downstream in most situations. That will occur with this project. To the best we can enforce it and the best it is constructed and inspected, regardless of if it goes forward regardless of any critical provisions. Regarding the recommendation, when I look at this thing, the way the application is written, it states that staff is supposed to make a recommendation based on the findings that are submitted. Those 2 findings are either hardship or the public benefit of the proposed project outweigh the existing public benefits. The way that the code is written, it references primarily environmental impacts when it discusses that. Finding #1 is that the public benefits of allowing disturbance of critical slope outweigh the public benefits of undisturbed slope. It talks about erosion control. Finding #2 is due to unusual size. Eventually an unreasonable restriction clause. Typically, the applicant doesn't address those things. Response #2 is due to unusual size topography, shape, location, or other unusual physical conditions. The applicant's description talks about most existing critical slopes being man-made slopes created with the grading for the existing business site improvements. It does not talk about hardships at all. If I read those, there is no reason that I would recommend based on either of the findings in as the applicant presented that this clearly falls under finding #1 or #2 be approved. There is no recommendation. What is the final condition that was in the report talks about the 125 percent water quality treatment. That is above and beyond what we can require, which would be 100 percent. We typically cannot require that. That is done on site. That is a benefit that is better than what we usually see on private development projects.

Commissioner Mitchell – One of the things that we must consider is whether the benefit of disturbing the slope outweighs the detriment of disturbing the slope. One of the benefits that we are talking about here is the affordability piece. I need to understand that a little bit better. I need to have the applicant help me understand a little bit better. I also need city staff the statement on pg. 8 about existing conditions survey submitted. The existing condition survey submitted with the application is not accurate. What wasn't accurate and where was the survey? I must have missed it.

Mr. Alfele –What Community Solutions was talking about was on Attachment B, which is the layout plan. You have the existing conditions on pg. 3 now. What Community Solutions was pointing out is that it states on the northern end of the property that there are metal buildings on concrete pads. The concrete pads exist but the

buildings have been taken down. I reached out to Community Solutions after your questions to ask for clarification. That is what Community Solutions was talking about. The existing survey had some inaccuracies. That is an example where some of the buildings that are listed as existing are not existing.

Commissioner Mitchell – What confused me was what that has to do with affordability since he was commenting on affordability.

Commissioner Stolzenberg – One of the buildings that was demolished was a resident at some point prior to 2014. It has been gone for some time.

Commissioner Mitchell – With the by right developments that we have seen before, one of them was 2 buildings.

Mr. Alfele – This property has a long history. The previous by right proposal did not disturb critical slopes. It was rentals, not condos. It was 2 buildings on each side of that center critical slope. It is reminiscent of a suburban apartment complex.

Commissioner Mitchell – How many units were in those buildings?

Mr. Alfele – I believe it was the same by right density.

Commissioner Mitchell – If they do by right, they still can do the number of units they are trying to do now. They can do that without disturbing the slopes. There will still be as much traffic going up and down the roads as there are right now.

Mr. Alfele – I would need to double check and look back at those. I believe the site could fit the by right density in a configuration as previously seen in earlier iterations.

Commissioner Habbab – I had a question along the lines of what Commissioner Mitchell was asking about the public benefit. I was looking at pg. 5. It says that it appears as if the development in the proposed conditions will reduce drainage across the steep slopes from existing, helping to preserve onsite and immediately adjacent steep slopes. Most of the erosion of the sensitive features both onsite and downstream are affected during construction of the project. After the construction of the project, is it going to leave it better than it is now?

Mr. Dawson – Essentially, yes. That is typically the result of construction projects on the critical slopes. They are either not disturbing the critical slopes or they are removing the critical slopes. They are in a less erosive state when they are less steep in the built condition. The reference to the silt fence when you are working in those slopes, it rains, and you have disturbed slopes, you need to have things in place that they don't rapidly erode. That is the most important time to protect the slopes. You correctly understood that.

Commissioner Habbab – There is not a survey of existing mature trees in that area.

Mr. Alfele – I am not seeing that in this packet. I am not seeing anything.

Commissioner Habbab – Do we have any idea on the retaining wall heights?

Mr. Dawson – It is not specified on here. I think that they have broken up the retaining walls into terraces. In the last application, there was one big retaining wall. It is now 2 retaining walls pushed apart. I don't think the information is that specific here.

Commissioner Habbab – Is that because it will be part of the site plan?

Mr. Dawson – That is correct.

Commissioner Schwarz – Does the city have an ordinance as to retaining wall height? Is that something that we would require?

Mr. Alfele – We require more details and certification on retaining walls over 4 feet. There is no maximum height if they are engineered correctly.

Commissioner Stolzenberg – In reading the staff report, it seemed like there were 3 sections. Engineering saw that there was no justification for finding 1 or finding 2. OCS said that they didn't have a justification for finding 2. Does NDS have a recommendation for whether the findings are justified?

Mr. Alfele – Not finding 2. It is off. You could develop the site without disturbance for critical slopes.

Commissioner Stolzenberg – Does NDS have an opinion on finding 1?

Mr. Alfele – No. We deferred to engineering because of the environmental feature and nature of it.

Commissioner Stolzenberg – When we say nutrient reduction, what is that relative to? Is that a reduction over an unmitigated development? Is that over existing conditions?

Mr. Dawson – Generally, it is based on the calculation of the disturbance that you do and the conversion from pervious area to impervious area. The soil type is a large part, whether they infiltrate quickly or not. That 'spits' out the pounds per year phosphorus that you are supposed to reduce. When you design the facilities or you purchase nutrient credits to offset that, each facility has a runoff reduction efficiency either through infiltrating it into the ground or reducing it through natural means. Bio-retentions are good at that sort of thing. Each site is tabulated based on the limits of disturbance, the area, soil type, and where your impervious area is going to calculate what that load requirement is. It is a scaled equation. It is not necessarily this is returning it back to existing conditions. I would have to investigate how that works. It is a series of memographs that they go through that spits out all this information to a spreadsheet that the state requires. Everybody must use the same spreadsheet. Here is what you are required to reduce. I can investigate that.

Commissioner Stolzenberg – We heard a concern about an outfall to the property to the northwest. Is there concern that will have erosive impacts? Is it normal for a property to have outflow over another property?

Mr. Dawson – It is. Water always goes downstream. That is typical. This configuration is not an engineered site plan. Since we did get a site plan for this last time in a different configuration, we had some concerns about that. That is one of the more complicated areas of stormwater regulation, what you call an outfall and how you regulate that to where you apply given the flow in a given rain event. You must look at where it leaves the property now and where it leaves the property in the proposed condition and make sure you are not causing erosion or flooding to any of the conveyances downstream of that. I can't look at this plan and tell you this is going to solve that. That is one of the things that we look at for all projects, especially when it is a larger project like this that is diverting water and changing outfall locations to what is to a sensitive area.

Commissioner Stolzenberg – Is it safe to say at the time we get to a final plan, you are going to make sure that it isn't causing adverse erosive impacts on the neighboring property before you approve it?

Mr. Dawson – That is what we try to do.

Commissioner Palmer – One thing that piqued my interest was that by retaining water on site, the reports said it wasn't clear that could be infiltrated due to compaction. Is there anything that could be done design wise to promote that infiltration as they construct this?

Mr. Dawson – In their report, they say that they are perforating these detention systems. They are proposing 3 stormwater facilities. One is a biofilter or a bioretention facility. What we call underground retention facilities are just big pipes of at least 36 inches if not 48 inches or even 6 or 7 feet. That is store water. They put a plate at the end of the pipe. The full section of the pipe can't pass through it. They drill holes or cut out places for the water to spill out. That is where all the engineering to make sure the water, as it reaches different stages in response to different rain events leaves the site at a certain rate. What they are proposing is to perforate that and surround it with gravel. As the water is building up in there to be detained, it is also infiltrating some to the ground. That does something as does the biofilter they are proposing. The reason that I said that was unlikely to cause groundwater recharge is that those are not very effective. You are concentrating large areas, multiple acres into these facilities. When you get anything beyond a small rain event, there is not the time to infiltrate into the ground when you are focusing all the watersheds, runoff into one area of the ground. It is not going to infiltrate as fast if you distribute that across the site. All 3 of their facilities are concentrating large storage areas like that. One way to achieve that is to do a system of smaller facilities spread throughout the site. I didn't design the site. I can't say that it is easier to do that. That is a challenge as well. That is probably one of the easier ones. That wetland is something like, if this site is approved and built, that will be something like 16 feet underground. When you put that much natural fill into a natural environment or manipulate the ground that much, it is hard to predict what is going to happen to the groundwater. It is unlikely that there will be effective recharge.

Commissioner Schwarz – You said that there were previous by right site plans that were submitted for this. Were there any issues with those plans that would have made them unlikely to get a final approval?

Mr. Dawson – I don't think they were by right. I wouldn't say they would get approval. It takes a few rounds of submitting things to get approval. I don't think it was a preliminary plan. I think it was a final plan. It wouldn't have gotten approval. It was not a horrible plan. It was on the right track. This submittal includes a phased exhibit of how they intend to do it. This is a complicated site. When our staff look at it, we see things. It is rare that something this large is going to come through and be approved by the first time. It was a complex erosion sediment control plan. I know a lot of the concerns were more in the weeds of the outfall considerations.

Commissioner Schwarz – If you saw any red flags, a reason that they reconfigured this, that maybe you saw it.

Mr. Alfele – Because this has a long history, what Mr. Dawson and I are talking about it is the most recent site plan submittal. There was a submittal before that that was a by right that didn't disturb critical slopes. It came within a foot of critical slopes. From the layout standpoint, they weren't. The last site plan submittal was all residential development. In this zoning district, to get the density, you had to be mixed-use. I would not say it killed the project. They would have had to add a commercial element to the last submittal. There were several sheets of comments they would have had to address. It was a lot of comments from different departments.

Councilor Payne – There is a 2018 site plan conference where there was a proposal for 130 units, 2 apartment buildings, and a commercial use on the street. This one is condo with no commercial space. Are you referring to that 2018 proposal with 2 apartments and 130 units? Was it that one that did not disturb critical slopes?

Mr. Alfele – That is correct. It came close. They went as close as they could without disturbing it. There was concern from staff that you couldn't construct it without disturbing it. The conversation never went that far. They went back to the drawing board.

Councilor Payne – There are comments and the reporting at the time from councilors and the community that they didn't like that it was all apartments. They thought it was too tall. I like that site plan more. Apartments like City Walk are good and make sense there.

ii. Applicant Presentation

Ashley Davies, Applicant – Tonight is 16 years in the making. It is how long the company has had the property. We have looked at this property and just about every permutation possible over those years.

Next Slide
I am going to start off with some of the background and more planning related comments.

Next Slide
This is an aerial view looking down on the site. Carlton Avenue is towards the bottom. For those of you that haven't had the opportunity to come and look at the site firsthand, it is quite impervious, very industrial. When it was created into the commercial pads that you see now, that did change any of the natural topography that would have existed on this site. What you have now down the middle of it is this ravine that is full of trash, some kudzu, and a fair amount of existing erosion issues. This area handles a lot of the water that is coming through the neighborhood and is flowing in this direction. We feel like this development does have the opportunity to improve and correct some of a past mistake with how they previously handled this project. We think we are going to leave it in better condition than it is today.

Next Slide
This shows the zoning designation (Neighborhood Commercial Corridor). It is also a neighborhood commercial node in the Comprehensive Plan. As the staff report says, the vision for this area is how we get some mixture of uses, housing types, and how we create forms that will begin to blend in with the rest of the neighborhood. This is a 6-acre site. There are no easy sites left. Anything that we are looking at, especially when we are creating housing, there is going to be some challenges and complexities. We understand that. We have done our best to work with the neighborhood throughout the years. We have had to run through many concepts with them. The benefit of that is that we have gotten so much feedback along the way. It has served this final iteration that we are going to talk about tonight.

Next Slide
I have tried to orient these with Carlton Avenue on the left. One of the first concepts for the site was over 300 units. This was a larger apartment complex that would have required a parking deck. It was a dense development of the site. It would have been a special use permit in this case. There would have been impacts to the critical slope. This was looking at how we maximize the density onsite. It is a lovely concept. We got a lot of feedback about the apartments being too large, overbearing, not transitioning well to the neighborhood, and not a lot of support in the community meetings we held with this type of concept.

Next Slide
From there, we looked at how we could still do apartments but potentially looking at more by right options, how we avoid the critical slopes on the site. As you can see in the shaded areas, the critical slopes form these fingers that pull up into the middle of it. It does impact the ways that you can create connectivity on the site and use and zoning requirements with setbacks. You end up with these strange shapes. This was more of a by right look at it. I don't think we heard from anyone that they liked this concept. There was a lot of pushback from staff and neighbors on this one.

Next Slide

This was another look the following year. This one would have required a special use permit. We felt the layout felt better and not quite so odd. We did a traffic study on this one for the 230 apartments that was accepted and approved by the city. Looking at the traffic issues, it is always a concern. That was cleared for this number of units. All our other iterations have been the by right number of units, which is 100 fewer residents. The traffic is covered by the previous study and conversation. We are below what we had previously discussed.

Next Slide
This is another slide with 230 apartments. Looking at it from every direction, we received a lot of feedback from people who thought apartments were not a good fit being so close to all the street networks with single-family homes.

Next Slide
This is the overhead image of the initial site plan that we submitted for a different concept. With what we are generally talking about now, we thought it would be a good idea. We heard that people didn't want that many rentals in the area. This is now more of a 'for sale' product. It gives you a couple of different unit types, townhouses, 2-over-2, more of a network. The feedback we received this time was that it was too much pavement. We did not have that necessary commercial element. City staff wanted us to complete the street grid network so we would have more connections from our property out into the various directions and wanting more meaningful green space.

Next Slide
This is the concept that we are discussing this evening. Over the years, we have been looking at this and working on it. I am pleased with how things are landing here because we can add 130 new residences within walking distance to the Downtown Mall and other amenities. We get quite a variety of different housing types. On Carlton, there is an apartment building with 20 apartments and some commercial up on the street. We have the 2-over-2-unit styles and the 2-over-1s in the back of the property. We can include built affordable units on site. We have reduced the amount of pavement on site while adding this great central green open space amenity that is about 0.5 acres. It has been a good process for us. We have had the ability to listen and learn over all the years. The project benefits greatly because of it.

Scott Collins, Applicant –

Next Slide
I am going to talk more about the engineering aspects about it. I want to talk about the existing conditions. This map shows the amount of impervious area out there. About 3.41 of the 6 acres is impervious with the existing conditions.

Next Slide
Our proposed development does increase the overall impervious area up to 3.96 acres. It is about 24,000 square feet of an additional impervious area. When we talk about overall treating, that was talked about a lot in some of the discussions before our presentation. With Virginia code, when you look at a site that has a lot of existing impervious area, what they ask you to do is to treat what you are proposing to increase. That is what we are doing. The second thing is to treat a percentage of the existing impervious area (about 10 to 15 percent). What we are doing is we are treating what is above the existing impervious area out there now. We are also treating 30 percent. When we talked about roughly 25 percent more, that is what it lands at. That is what we are looking at. When we say that we are treating above what is required by state code, that is where we are at. We would have to treat between 10 and 15 percent per state code and we are about 25 or 30 percent above that. That is where we are with what we are proposing on site. That is the other key thing that the city engineer was noting. We are not buying nutrient credits for this site. Because it is 6 acres, we can do it on site and that is what we are doing. Water quantity is the amount of drainage going from our site and going through our site. Our site is about

6.2 acres. We have about 8 or 9 acres draining through the site to the stream that outfalls toward the Douglas Avenue area and ultimately to the city right-of-way. All that right now is being undetained. It is flowing to the streams, straight to the critical slopes, and straight to everything when it rains. We are going to capture about 8 acres of it. We are taking those 8 acres and putting it into 2 underground retention facilities detaining that, slowing it down, and releasing it at rates that is less than the requirements because we are centralizing most of our drainage to one location where the stream is. We are greatly reducing that runoff rate with our overall drainage pattern, which was draining straight through the existing critical slopes, straight through everything. We are taking that water and capturing it and outfalling it to one location. The outfall that everybody is talking about as far as Douglas is an overflow outfall. The main drainage from that system goes from our underground retention facility to the biofilter. Only does it outfall over the existing stream where it is already going now where 100 percent is going to it now. We are taking the low flow storm events to the biofilter and letting the outfall from the larger storm events go back to where it is going now. We are reducing that. That gets flushed out during the site plan process.

Next Slide
There are several things that came from the connectivity from over at Spruce Street with this proposed iteration of this project. We are now able to tie into the sanitary sewer system that comes down Spruce Street down to Douglas. Because of that, we can tie it in at a lower elevation, which allowed us to lower the amount of fill on our site to get positive gravity from our site to the existing sanitary system along Carlton Avenue. We have been able to lower walls considerably from what a lot of the residents might have been talking about earlier today. I believe some of the iterations did have some higher walls. Most of these walls are about 6 to 8 feet high. If they get above 8 feet, we have staggered them. You might have two 8-foot walls together at 16 feet high. The only place to get up to about 20 feet is at the biofilter area that is on our property there next to the road that goes over to Spruce Street. That is the only spot where it gets high. Those are double walls. We can look at breaking that up to have two 8s and a 4-foot wall. We will look at that during the site plan process to keep them lower if we can. That is where we are with the grading. With this iteration, we have substantially reduced the amount of overall fill on the site. It has reduced the number of walls. Within the underground retention facility within the green park area, we were proposing that to be more of a pervious system to allow some of the water to infiltrate into the ground as much as possible. We know that Virginia soil doesn't allow for whole lot of infiltration. We never rely on that in our stormwater calcs. Anytime you can set up a pervious system that might allow a little infiltration.

Next Slide
Talking about erosion and sentiment control, any E & S plan in the city can be very complex especially because it is all infill. What we are trying to do in this simple exhibit is highlight the fact that we are going to install a sediment basin right there in the low spot of the site and direct all the drainage to the sediment basin during the construction process. We are going to be directing water to that area. What we are proposing to do is to develop the exterior part of the site first (retaining walls, roads, all the improvements highlighted in blue). Before we start bringing in any fill into the site to fill the rest of the site up, we are proposing to get the rest of the improvements around the exterior edge of the site constructed and permanently directing water to our sediment basin. We will come in and fill the rest of the site while everything is going to the sediment basin. That is our goal. That is what allows us to protect the downstream properties, critical slopes, and streams.

Commissioner Mitchell – If we recommend that we grant the waiver, one of the reasons we will do this is because the community benefit of granting the waiver outweighs the protection of the critical slope. One of the things that makes this interesting is the affordability piece. I wonder if you could talk about that. Everything I read is silent. I don't understand what the level of affordability is. I don't understand what the tenure of affordability is. I am not sure what type of units are going to be affordable units. These are going to be mostly 'for sale.' Is there a rental component? What is the rental configuration of this?

Ms. Davies – It is unusual to include affordability in a by right project and as a part of a critical slope waiver. We know the value and benefit that is to the city. That is why we wanted to include it. What we are thinking now is that we have the 7 units. We would like the flexibility. Most of what we are offering on the site is going to be a 'for sale' product. We have the apartment building up front. I imagine that those 20 units will be rental. With the way the 2-over-2s and 2-over-1s work, they will be condos. You can either sell each individual unit or you can sell the vertical 2 units. One of the homeowners could rent out the lower unit or upper unit if they wish. At this point, there is a lot of flexibility in how the affordability can be offered. We are proposing that it is up to the 80 percent AMI level. Because we do a lot of apartments in the area, we see a lot of natural affordability within the apartment style unit. That is one of the additional benefits of the type of residential we are doing on the site because you get a variety of sizes and rental and for sale. The 80 percent AMI for 10 years is what we were imagining we would do here.

Commissioner Mitchell – These would be rental units. The 'for sale' units would be more complicated.

Ms. Davies – It is not that complicated. We could do 'for sale' units and you could deed restrict it for the affordability period. For now, it is nice if we can have that flexibility because we have so many different alternatives that we can offer there. That is the general idea.

Commissioner Mitchell – What type of units is it going to be?

Ms. Davies – Typically, it will be 1-bedroom. There is a design with the 2-over-1 units. I believe that there is a design where you can get that bottom unit as a 2-bedroom unit.

Commissioner Mitchell – For staff, how are we going to do this? This is not a proffer. We don't have anything in writing from the applicant. It is a critical slope waiver that happens to mention on the sidebar affordability. How do we get this structured in a way that is codified and enforceable?

Ms. Creasy – I am not sure that we can. That is not the application that we are working with. It is a wonderful additive to their project. It is not something that we have a way to enforce given the applications that are required to move forward.

Commissioner Mitchell – We can approve the waiver. They can elect not to build any affordable units.

Ms. Creasy – That is an option.

Ms. Davies – We have it written on our plan. If we are approving the documentation with the waiver, if there is something additional that needs to be written on the plan. It is certainly our intention we build in affordable units to pretty much everything we work on nowadays. Whatever makes sense to you, we are happy to do that.

Commissioner Mitchell – The applicant is offering to include affordable housing units in the construction. This is a critical slope waiver application. It is not an SUP where you typically can accept a proffer to embrace the affordability components that they are offering. Is there a way to codify/make enforceable their commitment to provide 7 affordable units? Is there a way to get them to document that it will be at 80 percent AMI over 10 years and the units will be 1-bedroom units?

Javi Gomez Jacome, City Attorney – There is a way that we can codify this. It shouldn't be in conjunction with the critical slope waiver. Any approval that you guys give today should be on the materials that were put in front of you.

Commissioner Mitchell – It is in the waiver request. They outline these offers. It is not an SUP. It is a critical slope waiver.

Ms. Davies – We would be happy for that to be a specific condition of the critical slope waiver approval just as staff has offered other conditions. That gives a slightly greater level of specificity as to the questions that you were asking about what we mean by the 7 affordable units if that is acceptable to the Commission.

Ms. Creasy – It is not something that is linked specifically to the critical slope waiver itself. It is a wonderful opportunity for the project. With the critical slope waiver specifically, the linkage isn't there.

Commissioner Mitchell – I understand that. One of the things that makes this interesting and one of the things that suggests that the community will benefit by waiving the waiver is the fact that we get affordable housing. If you read the ordinance, the ordinance says you can wave the critical slope or you can recommend the critical slope waiver if in fact the benefits of the waiver outweigh the damage done by disturbing the slope.

Commissioner Habbab – If we theoretically approve it as presented with this statement by the applicant, would that bind it to that recommendation?

Ms. Creasy – It is not part of the technical review of a critical slope waiver. That was one of the things as part of our discussions. It is a wonderful opportunity. It doesn't fit this application specifically. We can't connect it to this.

Commissioner Stolzenberg – It seems like the problem is we are saying that is our reasoning for finding #1 is true that the benefits outweigh the harms. For conditions, conditions shall clearly specify the negative impacts that they will mitigate; not conditions that will make sure that your finding #1 benefits still are true.

Commissioner d'Oronzio – Could I suggest that hanging the hat on the benefit of affordable housing on this project at 6 or 7 units is what we are talking about in the present environment is to make the math. You are talking about the apartments. I say this because, in the current environment, you would have to sell a unit to a family of 5 or 6 at under $300,000 to fit at 80 percent AMI. You can start moving a lot of money around in terms of percentage and getting subsidies from outside forces. It doesn't help that much. We are really looking at the apartments because, unless something changes in the cost of funds, we are back to 'normal' cost of funds. We are not looking at a housing thing unless we are talking about some strong subsidy from outside. We are talking about a 10-year affordability. How much enthusiasm is there for outside subsidy at 10 years of affordability going to come? This is a suggestion not to hang too much of a hat. We are talking about likely that it is going to be apartments. Construction costs are not going down.

Commissioner Habbab – Is that central green space open to the public? Will that be a public amenity for the rest of the neighborhood?

Ms. Davies – It is described in the application as a civic amenity.

Commissioner Habbab – With the tree canopy and the existing mature trees, do you have any information on what mature trees exist on the site, if we are looking at replacing them? I was looking at a previous point on this on a report that there was an option to condition a 3-to-1 ratio for replanting.

Ms. Davies – We will be much greater than that. There aren't a lot of wonderful mature trees on this site unfortunately because of the previous development that happened. Even around the critical slopes area, while there is this wild kudzu habitat, it is not the nice beautiful, mature, forested area. Given the size of this site and the extensive landscape plan we are providing, there will be a lot more mature trees.

Commissioner Habbab – On the sediment basin at the low point, it seems like it is near the creek. Is staff confident that the super silt fence in the conditions will mitigate that potential issue?

Mr. Dawson – The trap is near the creek because that is the downhill end of it where you want to collect all the disturbed water. We review this in the site plan phase. The silt fence is constructed first at the perimeter to control the activities as the engineer that did the presentation discussed to convey the rest of the water to the trap. You can then work in that area and bring in all that fill. It is controlled by the trap, which is for a larger drainage area the necessary tool. That is typical.

Commissioner Habbab – With the groundwater recharge, will those conditions be figured out later during the site plan? What happens in a storm that is not the low storm event? What happens to the adjacent properties? How does that compare to what happens now?

Mr. Dawson – When the stormwater regulations apply to certain frequency events, it is not something that is simulated over some broad range of storm events. What happens in between those events, it is interpolated to be similar to what was in existing. Part of the application lists some of the environmental impacts or natural benefits. Groundwater is on there. The applicant stated that this would achieve groundwater recharge. I don't think this is going to effectively replenish the groundwater or recharge the groundwater. That is different from the application of the regulations to how quantity of the stormwaters released to downstreet properties. I am curious to see these plans. I know Mr. Collins was talking about how there is a bypass overflow and things like that. That is getting technical. There are different ways to address the code. It is almost always addressed in that whenever you discharge water from the property to a downstream receiving property. It is the same as it was before the project in the 10-year storm. There is a more complicated equation for the 1-year storm. It depends on the site and the system in place what happens in a 50-year storm, a 100-year storm downstream. That is complicated. The larger the storms get, it is less relevant what smaller scale stormwater things are in place. The water is running off that point. It is presumably similar to what is there now.

Commissioner Stolzenberg – With the changes to this plan in the last 5 years, what happened to the pedestrian bridge?

Ms. Davies – With the railroad, it didn't go anywhere unfortunately. I loved that idea.

Commissioner Stolzenberg – In terms of what changes we have seen since the 2017 plan, there are 183 fewer homes. There is no more bridge. The neighbors said that they didn't want renters. Everything has been turned into condos except for the 20 units in the front in this neighborhood of 44 percent renters. These are now townhouse style 2-over-1s.

Ms. Davies – There are 2-over-2s, 2-over-1s, and apartments being offered.

Commissioner Stolzenberg – Because the neighborhood said that apartments were not an appropriate transition near the other neighbors.

Ms. Davies – They said that they didn't want 100 percent rental. That is a lot of the feedback we received.

Commissioner Stolzenberg – Is Riverbend's opinion that all those changes were good things?

Ms. Davies – We love doing density. We do some high-density projects. Where it has landed is in a good spot given the years of feedback that we have received and the way that it compliments the rest of the neighborhood.

Commissioner Palmer – I was looking at the property line. It is weird how there is an alley going on. There is a lot of the tree cover that you see on the aerial pictures. Will there be any clearing off beyond the property line for this so that some of the canopy that acts as a buffer may remain?

Ms. Davies – That is correct. We maybe didn't describe it well. By making the changes to the stormwater systems on site, it provides some greater protection to those natural areas below. They are not being pounded with every storm event.

Commissioner Palmer – As you go through the site plan, will you be looking at things smaller rain gardens or curb gardens, permeable pavement to get some of that water before it gets into your big stormwater retention?

Mr. Collins – We are looking at other ideas. The problem with some of the things is that we may not get credit for it. We are still looking at potentially doing them. For instance, there is a larger open flat area along the back alleyway or along the roadway here. We talked about maybe doing a linear swale before it gets in the storm system. That is something we are looking at too for additional potential mitigations. We are looking at the idea of possibly doing some pervious parking areas behind the apartment building. We are looking at some of the areas that don't have the high traffic.

Chairman Solla-Yates – I have a statement of excitement. I like the idea of increasing the efficacy of impervious pavement. This is an ineffective use of impervious areas on the property currently. It will be more efficient in terms of homes per impervious acre. That is exciting to see.

Councilor Payne – What is the net impact on the tree canopy for this site that you plan for?

Ms. Davies – It is hard to say without the landscape plan.

Councilor Payne – Could you say that there is not guaranteed to be a overall loss of tree canopy given how many you will plant to replace them?

Ms. Davies – Yes.

iii. Commission Discussion and Motion

Commissioner Mitchell – There are a lot of things about this that I like. I like the fact that you are not going to be buying nutrient credits. You are going to be doing the work on site. I always like it when you guys do that. I like that, based on the feedback that I am getting from Mr. Alfele, this is going to make the streets in that area more walkable as opposed to the 2 big institutional buildings. I like the compact neighborhood center that this creates and these smaller scale buildings. It makes me sad that we can't figure out a way to tie our hands on the affordability piece. If we knew how to do that, I would be all for it. I am told by the legal team and staff that we are not quite able to add a condition in a critical slope waiver.

Mr. Collins – The condition references material that was submitted.

Ms. Creasy – It is not specifically related to the critical slope waiver.

Commissioner Mitchell – Can it be included in the site plan in some way?

Ms. Creasy – They can provide information on the site plan that denotes that. We won't have any way to enforce it because there is not an application that would have the ability to do so. They could outline how they plan to program things there. That would not be a part that we could enforce.

Commissioner d'Oronzio – Up until yesterday, I had not been on this site. I did go down there. This site is farther from my house than it is from Commissioner Mitchell's. I like this civic nature of it. I like density. Like Councilor Payne, I prefer more density. This property has gone from lying fallow to deteriorating. We need forward motion here. I am excited that the proposal is to improve what we have on the ground. The affordability piece does not seem to be that large of a piece of this in the classic definability of affordability or our standard fallback to 80 percent or less. Increased density takes pressure off the housing.

Commissioner Habbab – I agree with all that has been said. Looking at it as a public benefit, there is that civic amenity that we are getting, which is that little pocket park. It increases network connectivity. We did hear from the public on the issue of the sidewalk on Spruce and how it used to be a dead-end street. From the plans we have looked at, there are sidewalks throughout the development that could maybe mitigate that if you are crossing down through the new development to get to your destination. That is not something under the purview of our critical slope recommendation. I am happy to recently discover that there is no net loss of tree canopy. With the affordable housing, it is only 10 years at 80 percent. It does not hurt.

Commissioner Schwarz – I am looking at this from a technical perspective. There are a lot of good things being offered. Even we have gotten a 'fuzzy' answer from staff, it sounds like stormwater is going to be better than existing. That is the whole point of a critical slope. I support this on that simple fact.

Commissioner Stolzenberg – That is spot on from the consideration of a critical slope waiver. The negative impacts of affecting critical slopes are adequately mitigated by the 125 percent nutrient reduction and the other mitigations we have discussed. The fact that this creates a nice bridge structure and a public amenity of a park in the middle are both nice things that are public benefits. I can't help but comment on the development. Every change you have made, aside from the grid format since 2017, has been a real shame. It almost seems like you guys are resigned to it because you want to go the by right route to not drum up any opposition. I remind you that there is a new owner of that railroad. It is no longer a Class One. This is a prime site, prime brownfield site right in the middle of the city that is so close to everything. 21.99 units per acre is practically a waste. The critical slope waiver is a no-brainer.

Chairman Solla-Yates – I have been thinking about ways to establish clarity, especially as this goes to Council. It occurs to me that contract law is a thing. I know something about contract law. Could we buy a promise for $1?

Mr. Jacome – It is an intriguing idea. There is probably a variety of things that I want to read up on before advising you to proceed.

Councilor Payne – I would agree with Commission Schwarz on the technical points. More broadly, I agree that every change that has been made in recent years has made this project worse. I might be alone in people who showed up to speak up at those meetings. I don't think I am alone in the community in agreeing with that. Both the 2018 and 2020 project were preferable to this both in unit type (2020), the number of units and the fact that they were less spread out and more compact and had less impervious surfaces. I don't think it is the majority sentiment that rentals are a negative thing. I feel somewhat confident even speaking on behalf of City Council that our inclination for a project like 2020 requiring an SUP would be to how to work together to get to 'yes' on that rather than wanting to shoot it down and not get there. That might be irrelevant to you all given the path dependency and how much work has gone into this. That is important to say and repeat at every opportunity in terms of how Council is currently thinking. I think staff has worked on things related to the new owners and this bridge. It might be worth re-engaging there. With similar projects in Albemarle County, if you are going to do affordable units and they are homeownership, they have partnered with community land trust to manage those affordable proffers and they have found that to be successful to beneficial both to the developer and have those

affordable units be affordable into perpetuity and offer up a wealth building opportunity across multiple generations that that did not impact the bottom line of the developer and was feasible.

Motion to Approve – Commissioner Mitchell – I move to recommend approval of the critical slope waiver application P22-0039 with the following conditions:
1. Site Plans (VESCP Plans) should include, at a minimum, 4 stages/phases of ESC controls. The first phase shall include "Initial/Preliminary Controls". Outfalls from any proposed 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. "Super Silt Fence" (chain linked backing) shall be installed where perimeter silt fence is specified.
4. Any disturbance occurring outside of conveyances to the 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 critical slopes without adequate conveyance down and beyond the slopes to an acceptable outfall.
6. To document the landowner's representation regarding onsite water quality measures, the Final Plan will include a Virginia Stormwater Management Plan that includes a design for onsite water quality provided by a facility, OR facilities that are either 1) designed in accordance with the BMP Clearinghouse "2013 Draft Design Specifications for Practices 1-15", or 2) proprietary Manufactured Treatment Device(s) approved by DEQ as of the date the Final Plan is submitted. The facility or facilities should provide 125 percent of the onsite Phosphorus removal required by the Virginia Water Quality requirements for the development. Compliance with the 125 percent will be demonstrated by accurate project data set forth within a completed VRRM spreadsheet for the project.
• 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)
• 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) Second by Commissioner d'Oronzio. Motion passes 6-0.

The meeting was adjourned at 10:09 PM.