

CITY OF CHARLOTTESVILLE

Department of Neighborhood Development Services

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February 22, 2019

**TO: Charlottesville Planning Commission, Neighborhood Associations & News Media**

# Please Take Notice

A Special Meeting of the Charlottesville Planning Commission will be held on **Tuesday, March 5, 2019 at 5pm in the NDS Conference Room (610 East Market Street)**

## AGENDA

1. Major Subdivision – 900-1000 1st Street (CRHA)
2. Public Comment

cc: City Council  
Mike Murphy  
Alexander Ikefuna  
Planners  
Jeff Werner, Camie Mess  
Lisa Robertson

**CITY OF CHARLOTTESVILLE**  
**DEPARTMENT OF NEIGHBORHOOD DEVELOPMENT SERVICES**  
**STAFF REPORT**



**APPLICATION FOR APPROVAL OF A SUBDIVISION**

**PLANNING COMMISSION SPECIAL MEETING**

**DATE OF HEARING: March 5, 2019**

**Project Planner:** Carrie Rainey

**Date of Staff Report:** February 27, 2019

**Development:** South First Street at 900-1000 1<sup>st</sup> Street S (Tax Map 26 Parcel 115)

**Applicant:** Grant Duffield of Charlottesville Redevelopment and Housing Authority (CRHA)

**Applicant's Representative(s):** Ashley Davies of Riverbend Development

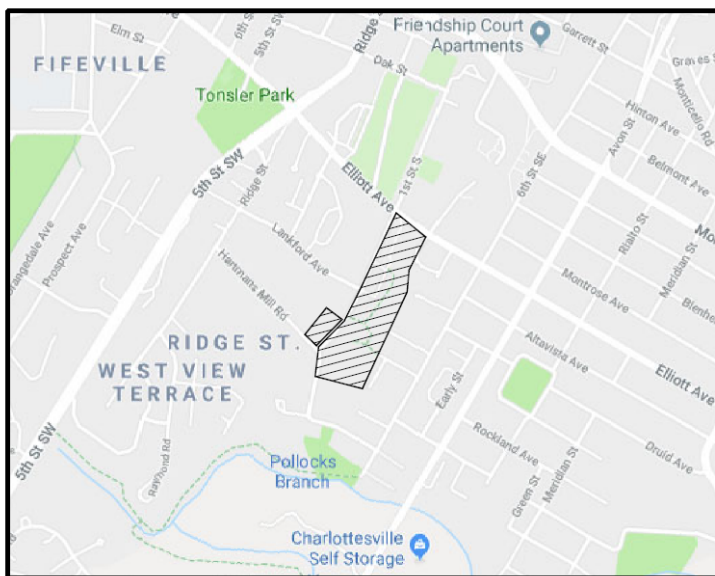
**Current Property Owner:** Charlottesville Redevelopment Housing Authority (CRHA)

**Applicable City Code Provisions:** 29-1 through 29-126 (Subdivision)

**Zoning District:** Multifamily Residential (R-3) and Single-Family Small Lot Residential (R-1S)

**Reason for Planning Commission Review:** The Planning Commission shall review major subdivisions per Section 29-76(a).

**Vicinity Map**



Provided on Final Site Plan by Collins Engineering



## **Standard of Review**

Approval of a subdivision is a ministerial function, as to which the Planning Commission has little or no discretion. When an applicant has submitted a subdivision that complies with the requirements of the City's Subdivision Ordinance, then approval of the plat must be granted. In the event the Planning Commission determines there are grounds upon which to deny approval of a subdivision, the motion must clearly identify the deficiencies in the subdivision, that are the basis for the denial, by reference to specific City Code sections and requirements. Further, upon disapproval of a subdivision, the Planning Commission must identify the modifications or corrections that would permit approval of the subdivision.

## **Summary**

Ashley Davies of Riverbend Development, acting as agent for CRHA, is requesting approval of a major subdivision to construct a new multi-family residential development. Per Section 29-3, this subdivision is considered major because it involves extension of public utilities.

The land within the proposed major subdivision is identified on City Real Estate Tax Map 26, Parcel 115, and it has frontage on 1<sup>st</sup> Street S, Elliott Avenue, and Hartman's Mill Road. The site contains approximately 11.99 acres. The applicant has submitted four (4) prior versions of the proposed plat; with each submission, staff has made a good faith effort to identify all deficiencies (if any) so that the applicant could be in a position to submit an approvable final plat to you for consideration and approval prior to March 5, 2019.

## **Subdivision Review**

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

As "subdivision agent" the Planning Commission is performing an administrative function, and there are only two possible actions: (1) *Approval*--if the proposed subdivision meets all applicable requirements, the Planning Commission must approve it, or (2) if the Planning Commission determines that the proposed subdivision does not meet all applicable requirements, then the Planning Commission must disapprove the plat, and must articulate specific reasons why the subdivision does not meet the requirements—with reference to specific laws, ordinances and regulations.

## **Subdivision Requirements—Sections 29-1 through 29-261**

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

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

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

1. Blocks: No new blocks will be created as a result of this subdivision.
2. Lots: The applicant is proposing to create three (3) lots.
3. Parks, Schools, and other Public Land: No new parks or schools will be created with this subdivision. A public pedestrian ingress and egress easement is provided for trail access (see Sheet 9).
4. Preservation of natural features and amenities: Critical slopes as defined by Section 34-1120(b)(2) are found on the site. The proposed site plan associated with the development shows the limits of critical slopes (see Attachment 2). City Council is considering a critical slope waiver request for the site at their March 4<sup>th</sup>, 2019 meeting. If Council has not granted the waiver before the Planning Commission makes a decision on the proposed subdivision, then the subdivision cannot be approved. Sections 29-140 and 29-110(a)(16) require subdivision plats to be in conformance with applicable requirements of the zoning ordinance, which includes the Critical Slopes regulations and building site requirements (Section 34-1120).
5. Items Listed in Section 29-111(b): The applicant has submitted a proposed final site plan for staff's administrative review. The documents and information referenced in Section 29-111(b) are included in the site plan that is under review, therefore they do not need to be addressed in this subdivision plat.
6. Monuments: The subdivision plat demonstrates that the following requirements of Section 29-160 have been satisfied:

- a. All boundaries (exterior and interior) of the original survey for the subdivision have monuments in accordance with the Standards & Design Manual (see, e.g., Sheet 3).
- b. The applicant has verified that these monuments will be set prior to recordation of the subdivision plat, or prior to conveyance of either lot with reference to this plat.

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

The proposed subdivision does not include any new public street. Land along 1<sup>st</sup> Street S (wherein existing road and sidewalk facilities exist) is dedicated to public use through this subdivision plat, and is anticipated to be accepted by City Council at a later date; however, as a practical matter this process is undertaken to clear up gaps in the City's land records, and will not change the dimensions or use of the existing 1<sup>st</sup> Street South (see Note 7 on Sheet 2).

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

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

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

If City Council approves the applicant's critical slope waiver request each of the lots within this subdivision will contain building sites compliant with the requirements of City Code 34-1120. The dimensions (area, frontage, building site, etc.) of two lots will, in staff's assessment, comply with the requirements of the R-3 multi-family residential zoning district, and the dimensions of the third lot will, in staff's assessment, comply with the requirements of the R-1S single-family residential zoning district. See Section 34-1123 and Section 29-161.

**F. Compliance with the Water Protection Ordinance (City Code Chapter 10).** Per Section 29-202 every development must be designed to achieve state and local requirements for post-development stormwater management, including measures addressing both the quantity and quality of stormwater, as set forth within Chapter 10 of the City Code (Water Protection).

1. Stormwater Management Plan: a stormwater management concept has been submitted in the final site plan along with the final plat materials, as required by Section 29-111(a)(2). The applicant has also submitted a proposed final Stormwater Management Plan for consideration by the City's VESMP Agent. Such improvements, facilities and treatments are identified within the final site plan, which is currently under administrative review by staff.
2. Erosion & Sediment Control: the applicant will submit an erosion and sediment control plan as part of the construction plans that are part of the site plan that is concurrently under review. This is permitted by Section 29-111(b).

**Public Comments Received**

No comments received.

**Suggested Motions**

Motion to Approve: I move to approve the final subdivision plat dated February 21, 2019 for Tax Map 26 Parcel 115.

Motion to Deny Approval: I move to deny approval of the final subdivision plat dated February 21, 2019 for Tax Map 26 Parcel 115, based on the following deficiencies:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

**Attachments**

1. Final Subdivision Plat dated February 21, 2019
2. Final Site Plan under staff review dated February 25, 2019
3. Applicable code sections from Chapters 29 and 34

SUBDIVISION PLAT  
OF  
PROPERTY OF  
**CHARLOTTESVILLE REDEVELOPMENT AND  
HOUSING AUTHORITY**

HAVING PARCEL NUMBER 260115000  
CITY OF CHARLOTTESVILLE, VA  
1" = 80'  
DECEMBER 6, 2018



LOCATION MAP 1" = 2000'

SOURCE OF TITLE:

THE PARCEL(S) ENCOMPASSED WITHIN THIS SUBDIVISION WERE ACQUIRED BY THE CHARLOTTESVILLE REDEVELOPMENT AND HOUSING AUTHORITY FROM FRANK IX AND SONS OF VA, INC. IN DEED BOOK 306 AT PAGE 254. ADDITIONAL LAND WAS OBTAINED BY THE CHARLOTTESVILLE REDEVELOPMENT AND HOUSING AUTHORITY AS AN ADJACENT PROPERTY OWNER TO THE CLOSURE OF A PORTION OF WARE STREET AS FOUND IN STREET CLOSURE BOOK 1 AT PAGE 79. ADDITIONALLY THERE IS INDICATION OF A STREET CLOSURE FOR A PORTION OF WARE STREET AT ROBINSON PLACE HOWEVER NO CLOSURE INFORMATION HAS BEEN FOUND. PLEASE REFERENCE D.B. 599, PG. 799 FOR ADJACENT PARCEL MAP INDICATING CLOSURE.

OWNERS STATEMENT

THE PLATTING OR DEDICATION OF THE FOLLOWING DESCRIBED LAND, "SUBDIVISION PLAT OF PROPERTY OF CHARLOTTESVILLE REDEVELOPMENT AND HOUSING AUTHORITY" LOCATED IN THE CITY OF CHARLOTTESVILLE, VIRGINIA IS WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRE OF THE UNDERSIGNED OWNERS PROPRIETORS AND TRUSTEES, IF ANY.

FOR CHARLOTTESVILLE REDEVELOPMENT AND HOUSING AUTHORITY:

SIGNED: GRANT DUFFIELD, TITLE: EXECUTIVE DIRECTOR DATE \_\_\_\_\_

CERTIFICATE OF NOTARIZATION

STATE OF VIRGINIA

CITY/COUNTY OF \_\_\_\_\_, TO WIT:

I, \_\_\_\_\_ A NOTARY PUBLIC IN AND FOR THE CITY/COUNTY AND STATE AFORESAID, DO HEREBY CERTIFY THAT \_\_\_\_\_

WHOSE NAME IS SIGNED TO THE FOREGOING WRITING HAS ACKNOWLEDGED THE SAME BEFORE ME IN THE CITY/COUNTY AFORESAID.

GIVEN UNDER MY HAND THIS \_\_\_\_ DAY OF \_\_\_\_\_, 2019.

MY COMMISSION EXPIRES \_\_\_\_\_

NOTARY PUBLIC \_\_\_\_\_

REGISTRATION NUMBER \_\_\_\_\_

CITY OF CHARLOTTESVILLE  
APPROVAL

\_\_\_\_\_  
PLANNING COMMISSION, CHAIRPERSON

\_\_\_\_\_  
PLANNING COMMISSION, SECRETARY

REVISED PER CITY COMMENT 02-21-19  
REVISED PER CITY COMMENT 02-07-19  
REVISED PER CITY COMMENT 01-25-19



PROJECT #: 18082.0  
FIELD BY:  
TSC-JSP-OSL-NJB  
FIELD DATES:  
09-18 TO 12-18  
DRAWN BY: TSC  
**SHEET**  
1 OF 16

MAS-LD

MidAtlantic Surveying and Land Design

5305 Cleveland Street, Suite 102  
Virginia Beach, VA 23462  
757-557-0888  
WWW.MAS-LD.COM  
ADMIN@MAS-LD.COM

DWG NAME: C:\USERS\T\CAMPID\PROBOX (MAS-LD)\2018\18082.0 SOUTH 1ST ST- CRHA - CHARLOTTESVILLE - SUBDIVISIONS\18082.0 1ST STREET SE-CRHA - CHARLOTTESVILLE - SUBDIVISION PLAT.DWG PLOTTED BY TCAMP 2/24/2019 10:53 PM LAST SAVED 2/24/2019 10:43 PM

SURVEY NOTES:

1. THIS SURVEY WAS PRODUCED WITHOUT THE BENEFIT OF A TITLE REPORT. ALL EASEMENTS, RESTRICTIONS AND SERVITUDES MAY NOT BE SHOWN.
2. THE REFERENCE MERIDIAN IS BASED ON THE VIRGINIA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE (4502), NAD 1983/1993 (HARN) AS DETERMINED BY THE LEICA SMARTNET REAL TIME KINAMATIC (RTK) GPS NETWORK. COORDINATE VALUES SHOWN ARE EXPRESSED IN U.S. SURVEY FEET. ELEVATIONS ARE REFERRED TO NAVD 88 AS DETERMINED FROM THE LEICA SMARTNET RTK GPS NETWORK AND COMPARED TO ELEVATIONS INDICATED ON A PREVIOUS SITE PLAN FOR THIS PROPERTY.
3. THE PROPERTY ENCOMPASSED BY THIS SUBDIVISION APPEARS TO LIE IN FLOOD ZONE X AND X (SHADED) AS SHOWN ON THE FEMA NFIP F.I.R.M. FOR THE CITY OF CHARLOTTESVILLE, VA, COMMUNITY-PANEL NUMBER 510033 0288 D DATED FEBRUARY 4, 2005. FLOOD INFORMATION INDICATED HEREON SHOULD NOT BE CONSTRUED AS A DETERMINATION OF THE NEED OR LACK OF NEED FOR FLOOD INSURANCE. PROPERTY OWNERS SHOULD CONTACT A LOCAL FLOOD OFFICIAL. FLOOD DATA HEREON IS SCALED.
4. PLEASE SEE THE AREA TABLE FOR INFORMATION ON THE AREA OF THE PARCEL(S) INVOLVED IN THIS SUBDIVISION.
5. CRITICAL SLOPE AREAS EXIST ON THE PARCELS INVOLVED IN THIS SUBDIVISION.
6. ANY STREAM BUFFER(S) SHOWN HEREON SHALL BE MAINTAINED IN ACCORDANCE WITH CHAPTER 10 OF THE CITY CODE, THE CITY OF CHARLOTTESVILLE WATER PROTECTION ORDINANCE.
7. THE RIGHT-OF-WAY FOR 1ST STREET SOUTH IS SHOWN AS FOUND ON RECORDED DOCUMENTS AND ON UNRECORDED DRAWINGS FOUND IN THE RECORDS OF THE CHARLOTTESVILLE REDEVELOPMENT AND HOUSING AUTHORITY. THE UNRECORDED DRAWINGS WERE USED PRIMARILY FOR THE PORTION OF 1 ST. STREET SOUTH OF LANKFORD AVENUE. A STREET DEDICATION 35' IN WIDTH FROM LANKFORD AVE. TO HARTMANS MILL ROAD AS FOUND IN STREET RESOLUTION BOOK 1 AT PAGE 114 WAS PROVIDED BY THE CITY ATTORNEY'S OFFICE. FOUND MONUMENTATION SUPPORTS A 56' RIGHT-OF-WAY BUT NO SUPPORTING DOCUMENTS FOR THAT WIDTH WERE FOUND IN THE CLERK'S OFFICE OF THE CITY OF CHARLOTTESVILLE. THEREFORE, THE PORTION BETWEEN THE 35' DEDICATION AND THE FOUND MONUMENTATION HAS BEEN SHOWN AS "HEREBY DEDICATED FOR PUBLIC USE" AS DISCUSSED WITH THE CITY OF CHARLOTTESVILLE'S LEGAL OFFICE.

UNRECORDED DOCUMENTS FOUND IN THE RECORDS OF THE CHARLOTTESVILLE REDEVELOPMENT AND HOUSING AUTHORITY:

- "CHARLOTTESVILLE REDEVELOPMENT AND HOUSING AUTHORITY SCHEMATIC PRESENTATION - VA 16-2"  
BY STAINBACK AND SCRIBNER ARCHITECTS, DATED (NO DATE).
- "CHARLOTTESVILLE REDEVELOPMENT AND HOUSING AUTHORITY PLANTING PLAN AND SCHEDULE - PROJECT VA 16-4" BY STAINBACK AND SCRIBNER ARCHITECTS, ISSUED DATE 8-20-79.

8. THE CITY OF CHARLOTTESVILLE GEOGRAPHIC INFORMATION SYSTEM (GIS) AS PRESENTED ON LINE INDICATES A CLOSURE OF THE PORTION OF WARE STREET AT THE END OF ROCKLAND AVENUE HOWEVER NO INFORMATION WAS FOUND IN THE CLERKS OFFICE.
9. TIE LINES ARE SHOWN FOR CLARITY.
10. PARCEL STREET ADDRESS: 900 - 1000 1ST STREET SOUTH, CHARLOTTESVILLE, VA 22903.
11. THE SUBJECT PROPERTY IS DELINEATED AS TAX MAP PARCEL 260115000.
12. ZONE: R-3 MULTIFAMILY (PARCELS A AND B) AND R-1S SINGLE FAMILY (PARCEL C).
13. SET BACK LINES ARE AS SHOWN ON SHEET 5 THROUGH 7 OF 17.
14. EACH PARCEL CREATED BY THIS SUBDIVISION PLAT WILL CONTAIN A BUILDING SITE THAT COMPLIES WITH THE REQUIREMENTS OF THE CITY OF CHARLOTTESVILLE ZONING, WATER PROTECTION AND SUBDIVISION ORDINANCES.
15. ALL NEW PUBLIC UTILITY EASEMENTS INDICATED HEREON ARE DEDICATED TO THE CITY OF CHARLOTTESVILLE, VIRGINIA.
16. APPROXIMATE LOCATION OF VIRGINIA ELECTRIC AND POWER COMPANY COMPANY EASEMENT OF UNSPECIFIED WIDTH AS SHOWN IN DEEED BOOK 415 AT PAGE 193 (GRAPHICALLY DEPICTED ON PLAT CH-91-80 ON PAGE 195). LOCATION AS SHOWN IS BASED ON PAINTED UTILITIES AND RECORDS FOUND IN THE OFFICES OF CHARLOTTESVILLE REDEVELOPMENT AND HOUSING AUTHORITY.
17. APPROXIMATE LOCATION OF "20' STORM SEWER EASEMENT" AND "20' SANITARY SEWER EASEMENT" AS SHOWN ON SHEET C1 OF A SITE PLAN TITLED "C.R.H.A. MAINTENANCE FACILITY RENOVATION AND ADDITION" FOUND IN THE RECORDS OF THE CHARLOTTESVILLE REDEVELOPMENT AND HOUSING AUTHORITY. NO DEED OR PLAT REFERENCE WAS INDICATED ON THE SITE PLAN.

REVISED PER CITY COMMENT 02-21-19  
 REVISED PER CITY COMMENT 02-07-19  
 REVISED PER CITY COMMENT 01-25-19



PROJECT #: 18082.0  
 FIELD BY:  
 TSC-JSP-OSL-NJB  
 FIELD DATES:  
 09-18 TO 12-18  
 DRAWN BY: TSC  
**SHEET**  
**2 OF 16**

**MAS-LD**  
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 757-557-0888  
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DWG NAME: C:\USERS\T\CAMPIDROPBOX (MAS-LD)\2018\18082.0 SOUTH 1ST ST- CRHA - CHARLOTTSVILLE - SUBDRAWINGS\18082.0 1ST STREET SE-CRHA - CHARLOTTSVILLE - SUBDIVISION PLAT.DWG PLOTTED BY TCAMP 2/24/2019 10:54 PM LAST SAVED 2/24/2019 10:43 PM

LINE TABLE			
LINE	BEARING	DISTANCE	(P/F)
L1	S 08°58'38" W	92.21'	(P/F)
L2	S 14°42'22" E	20.55'	(P/F)
L3	N 69°52'45" W	11.37'	(P/F)
L4	S 09°33'05" W	40.69'	(P/F)
L5	S 69°52'45" E	27.41'	(F)
L6	S 09°22'15" W	98.38'	(F)
L7	N 66°56'05" W	58.22'	(F)
L8	N 62°54'12" W	9.01'	(P/F)
L9	S 61°35'22" E	24.50'	(P/F)
L10	S 61°35'22" E	27.56'	(F)
L11	S 36°04'55" W	50.47'	(F)
L12	N 61°41'07" W	28.65'	(P/F)
L13	N 61°32'22" W	16.42'	(P/F)
L14	N 44°18'22" W	9.18'	(F)
L15	N 09°03'55" E	17.86'	(F)
L16	N 09°03'55" E	12.83'	(F)
L17	N 44°18'22" W	28.38'	(F)
L18	N 44°18'22" W	35.00'	(F)
L19	N 44°18'22" W	27.98'	(F)
L20	S 61°46'12" E	9.59'	(F)
L21	S 62°11'00" E	7.98'	(F)

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH	TANGENT
C1	35.37'	55.22'	36°42'11"	N 27°25'01" E	34.77'	18.32'
C2	55.84'	274.61'	11°39'04"	N 39°56'34" E	55.75'	28.02'
C3	44.29'	218.61'	11°36'31"	S 39°57'50" W	44.22'	22.22'
C4	31.39'	20.00'	89°55'32"	N 89°16'08" W	28.27'	19.97'
C5	46.50'	229.11'	11°37'48"	N 39°57'12" E	46.43'	23.33'
C6	53.61'	264.11'	11°37'48"	S 39°57'12" W	53.52'	26.90'

TIE LINE TABLE		
LINE	BEARING	DISTANCE
TL1	S 71°37'35" W	13.87'
TL2	N 68°10'12" W	51.38'
TL3	N 69°52'45" W	89.33'
TL4	N 61°42'46" W	25.23'
TL5	N 36°14'27" E	9.93'
TL6	S 45°41'09" E	174.00'
TL7	S 29°42'43" W	257.07'
TL8	S 27°54'49" W	257.13'
TL9	N 19°57'53" W	81.09'
TL10	N 03°31'34" W	19.49'

CONTROL POINT DATA				
POINT #	NORTH	EAST	ELEVATION	DESCRIPTION
CP1	3,894,903.41'	11,486,314.51'	416.66'	BRASS DISK IN SIDE WALK
CP2	3,898,893.00'	11,486,935.42'	411.27'	MAG NAIL WITH DISK IN CURB
CP3	3,895,967.42'	11,487,294.15'	392.80'	MAG NAIL WITH DISK IN ASPHALT
CP4	3,894,654.63'	11,486,570.16'	375.53'	MAG HUB WITH DISK

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TABLE OF ADJACENT PARCELS

DESIGNATOR (CIRCLED)	NOW OR FORMERLY (N/F)	DEED (BOOK, PAGE OR INSTRUMENT)	PLAT (BOOK, PAGE OR INSTRUMENT)	PARCEL NUMBER
A	RAYMOND A. NEDZEL	INSTR. #2014001451	D.B. 599, PG. 799	270072800
B	DARIN W. GARRISON	D.B. 670, PG. 578	D.B. 167, PG. 474	270096000
C	NO OWNER SPECIFIED	D.B. 670, PG. 578	D.B. 167, PG. 474	NO NUMBER
D	ABEL KINKAID OKUGAWA-WRIGHT AND RACHEL RAHMA VON BRIESEN	INSTR. #2008005643	D.B. 167, PG. 474	270097000
E	ORTIZ-CLOTHIAUX, ANA-AEQI	NONE FOUND	S.C.B. 1, PG. 83 INSTR. #201700001738	270098000
F	TREE HOUSES, LLC	INSTR. #201700002425	D.B. 159, PG. 113; INSTR. #201700001738	270114000
G	GREEN RETRO SALVAGE II HOLDINGS, LLC	INSTR. #2013000321	D.B. 159, PG. 113 D.B. 676, PG. 166	270114000
H	LOCAL BOYS LLC	D.B. 1122, PG. 509	D.B. 253, PG. 43	260109000
J	MARY E. MACNEIL	D.B. 850, PG. 407	D.B. 674, PG. 4	260110000
K	ALEATA D. BARBOUR	D.B. 781, PG. 843	D.B. 674, PG. 4	260110100
L	BARBARA B. THOMPSON	INSTR. #2009004568	D.B. 674, PG. 4	260111000
M	BARBARA B. THOMPSON	INSTR. #2009004602	D.B. 674, PG. 4	260111100
N	SEAN DAVID MCDONALD	INSTR. #201700000177	D.B. 674, PG. 4	260112000
P	DEANDRA F. IRVING	INSTR. #201500001529	D.B. 674, PG. 4	260112100
Q	MARY FRANCIS JOHNSON	D.B. 1067, PG. 159	D.B. 674, PG. 4	260113000
R	BODI BROCK REAL ESTATE, LLC.	INSTR. #2014004369	D.B. 674, PG. 4	260113100
S	DAVID A. KULMAN AND ALISON L. ROTHSCHILD KULMAN	INSTR. #2014004037	D.B. 253, PG. 43	260114000
T	1515 6TH STREET, LLC	INSTR. #201600002376	D.B. 155, PG. 414 ALTA-INSTR. #201500004109	260095000
U	IDA R. WOODFOLK	D.B. 516, PG. 237	D.B. 214, PG. 315	260094000
V	SAMUEL W. LEBEAU	INSTR. #2014001930	NONE FOUND (UNRECORDED PLAT)	260017000
W	JENNIE MAE FORD, LIFE ESTATE	WB. 48, PG. 366	D.B. 159, PG. 429	260014000
X	GREEN RETRO SALVAGE II HOLDINGS, LLC	INSTR. #201700003054	D.B. 159, PG. 429 SURVEY-INSTR. #201700003054	260015000
Y	JEFFERY D. MATTIE	INSTR. #201800000554	D.B. 159, PG. 429 SURVEY-INSTR. #20150001440	260016000

TABLE OF AREAS

PARCEL	AREA (S.F. / ACRES)	REFERENCE
EAST OF 1 ST. STREET SOUTH	481,739 S.F. / 11.059 ACRES	D.B. 306, PG. 254; PLAT-D.B. 306, PGS. 358 AND 359
WEST OF 1 ST. STREET SOUTH	40,234 S.F. / 0.924 ACRES	D.B. 306, PG. 254; PLAT-D.B. 306, PGS. 358 AND 359
1 ST. STREET SOUTH (35' R.O.W.)	23,041 S.F. / 0.5289 ACRES	STREET RESOLUTION BOOK PAGE 114
TOTAL	545,014 S.F. / 12.512 ACRES	
STREET CLOSURE (WARE AT STONEHENGE)	8,778 S.F. / 0.202 ACRES	INSTR. #201700001738
STREET CLOSURE (SHOWN IN D.B. 599, PG. 799)	2,626 S.F. / 0.060 ACRES	SHOWN IN D.B. 599, PG. 799
TOTAL	11,404 S.F. / 0.262 ACRES	
A	342,843 S.F. / 7.870 ACRES	
B	130,666 S.F. / 3.000 ACRES	
C	37,090 S.F. / 0.851 ACRES	
1ST. STREET SOUTH DEDICATION (HATCHED)	11,462 S.F. / 0.263 ACRES	
TOTAL	522,061 S.F. / 11.985 ACRES	

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 REVISED PER CITY COMMENT 02-07-19  
 REVISED PER CITY COMMENT 01-25-19



PROJECT #: 18082.0  
 FIELD BY:  
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 FIELD DATES:  
 09-18 TO 12-18  
 DRAWN BY: TSC  
**SHEET**  
 4 OF 16

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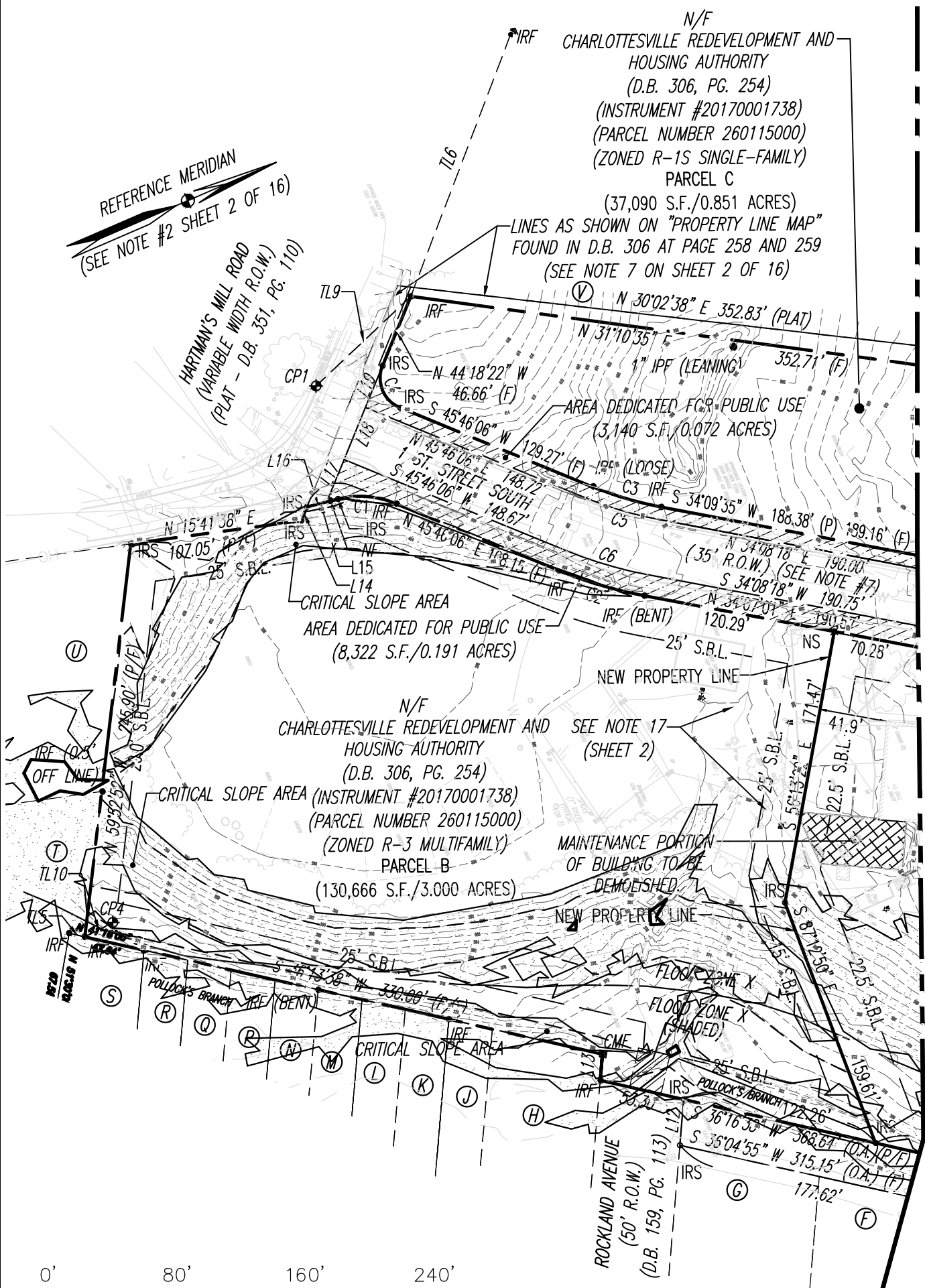


REFERENCE MERIDIAN  
(SEE NOTE #2 SHEET 2 OF 16)

HARTMAN'S MILL ROAD  
(VARIABLE WIDTH R.O.W.)  
(PLAT - D.B. 351, PG. 110)

N/F  
CHARLOTTESVILLE REDEVELOPMENT AND  
HOUSING AUTHORITY  
(D.B. 306, PG. 254)  
(INSTRUMENT #20170001738)  
(PARCEL NUMBER 260115000)  
(ZONED R-1S SINGLE-FAMILY)  
PARCEL C  
(37,090 S.F./0.851 ACRES)

LINES AS SHOWN ON "PROPERTY LINE MAP"  
FOUND IN D.B. 306 AT PAGE 258 AND 259  
(SEE NOTE 7 ON SHEET 2 OF 16)



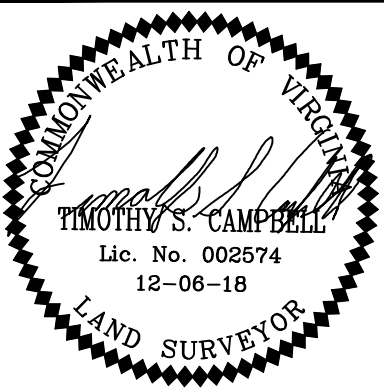
MATCHLINE "A"



PLEASE SEE SHEET 3 FOR LINE AND CURVE TABLE INFORMATION

PLEASE SEE SHEETS 9 THROUGH 16 FOR EASEMENTS  
PERTAINING TO PARCELS INDICATED HEREON

REVISED PER CITY COMMENT 02-21-19  
REVISED PER CITY COMMENT 02-07-19  
REVISED PER CITY COMMENT 01-25-19

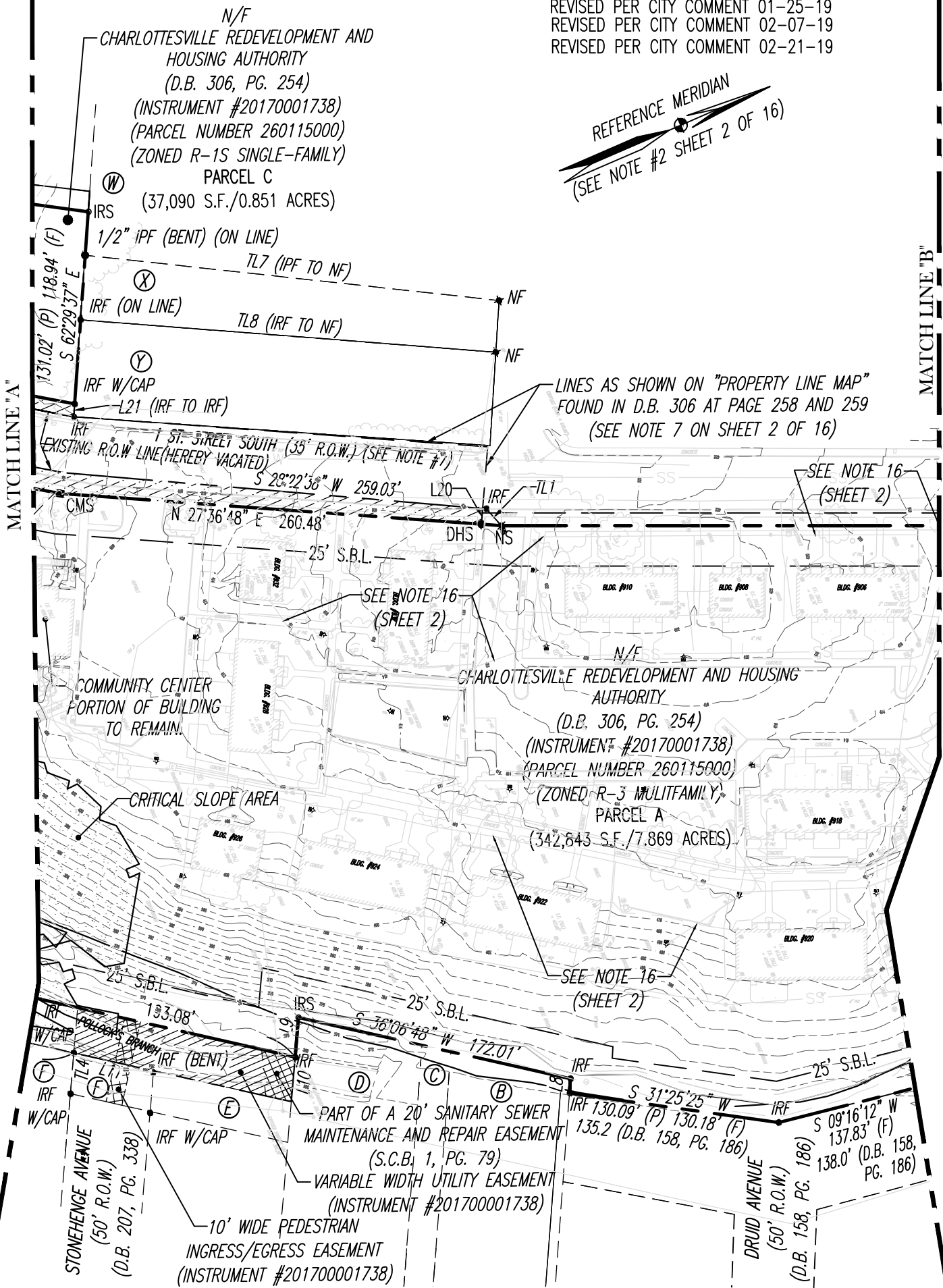
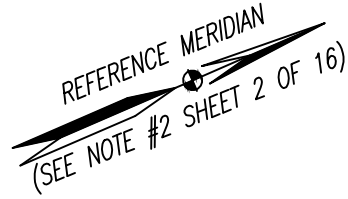


PROJECT #: 18082.0
FIELD BY: TSC-JSP-OSL-NJB
FIELD DATES: 09-18 TO 12-18
DRAWN BY: TSC
<b>SHEET</b> 5 OF 16

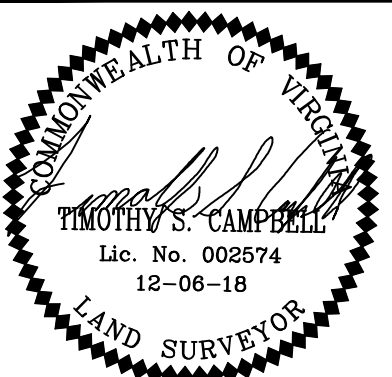
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PLEASE SEE SHEET 3 FOR LINE AND CURVE TABLE INFORMATION  
 PLEASE SEE SHEETS 9 THROUGH 16 FOR EASEMENTS  
 PERTAINING TO PARCELS INDICATED HEREON



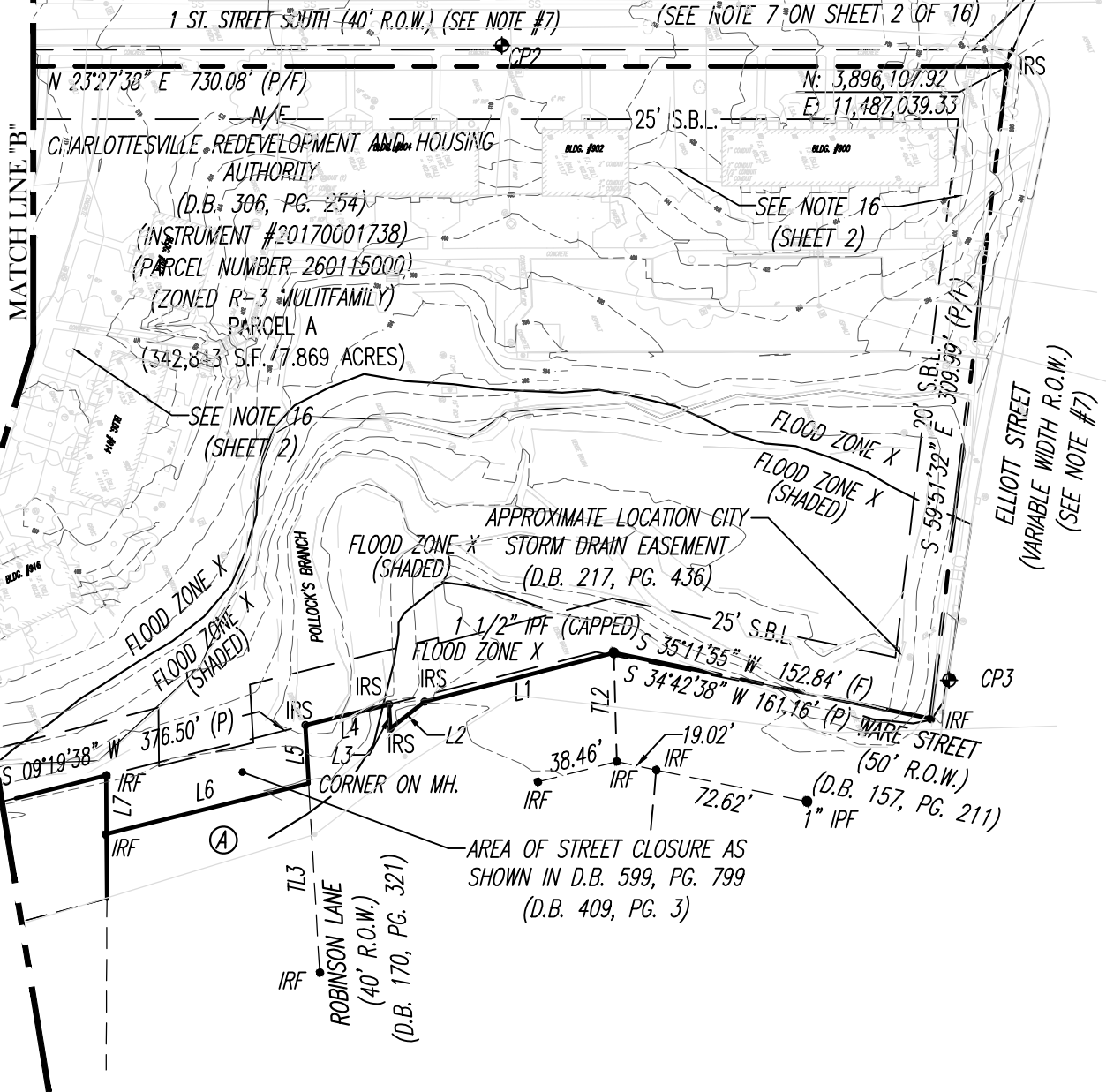
PROJECT #: 18082.0  
 FIELD BY:  
 TSC-JSP-OSL-NJB  
 FIELD DATES:  
 09-18 TO 12-18  
 DRAWN BY: TSC  
**SHEET**  
**6 OF 16**

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REFERENCE MERIDIAN  
(SEE NOTE #2 SHEET 2 OF 16)



LINES AS SHOWN ON "PROPERTY LINE MAP"  
FOUND IN D.B. 306 AT PAGE 258 AND 259  
(SEE NOTE 7 ON SHEET 2 OF 16)



LINE AND HATCH LEGEND		
LINE TYPE	DESCRIPTION	HATCH
---	BOUNDARY: ADJACENT PROPERTY LINE	N/A
---	BOUNDARY: PROPERTY LINE	N/A
---	EASEMENT (INGRESS/EGRESS)	[Grid Hatch]
---	EASEMENT (SEWER)	[Diagonal Hatch]
---	EASEMENT (UTILITY)	[Diagonal Hatch]
---	SET BACK LINE (##' S.B.L.)	N/A
---	FORMER 1ST STREET RIGHT-OF-WAY	[Diagonal Hatch]

PLEASE SEE SHEET 3 FOR  
LINE AND CURVE TABLE  
INFORMATION.

PLEASE SEE SHEETS 9 THROUGH  
15 FOR EASEMENTS PERTAINING  
TO PARCELS INDICATED HEREON.

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PROJECT #: 18082.0  
FIELD BY:  
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FIELD DATES:  
09-18 TO 12-18  
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**SHEET**  
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ABBREVIATION AND SYMBOL LEGEND		
ABBREVIATION	DESCRIPTION	SYMBOL
<i>C#</i>	<i>CURVE # (SEE CURVE TABLE)</i>	
<i>CMF</i>	<i>CONCRETE MONUMENT FOUND</i>	⊞
<i>CMS</i>	<i>CONCRETE MONUMENT SET</i>	■
<i>CONC.</i>	<i>CONCRETE</i>	
<i>D.B.</i>	<i>DEED BOOK</i>	
<i>DHS</i>	<i>DRILL HOLE SET</i>	●
<i>E</i>	<i>EAST</i>	
<i>(F)</i>	<i>FIELD (DISTANCE)</i>	
<i>GPIN</i>	<i>GEOREFERENCED PARCEL IDENTIFICATION NUMBER</i>	
<i>HARN</i>	<i>HIGH ACCURACY REFERENCE NETWORK</i>	
<i>INSTR.</i>	<i>INSTRUMENT</i>	
<i>IPF</i>	<i>IRON PIPE FOUND</i>	●
<i>IRF</i>	<i>IRON ROD FOUND</i>	●
<i>IRS</i>	<i>IRON ROD SET</i>	○
<i>L#</i>	<i>LINE # (SEE LINE TABLE)</i>	
<i>M.B.</i>	<i>MAP BOOK</i>	
<i>MH</i>	<i>MANHOLE</i>	
<i>N</i>	<i>NORTH</i>	
<i>NF</i>	<i>NAIL FOUND</i>	✦
<i>NS</i>	<i>NAIL SET</i>	✦
<i>N/F</i>	<i>NOW OR FORMERLY</i>	
<i>(O.A.)</i>	<i>OVER ALL (DISTANCE)</i>	
<i>(P)</i>	<i>PLAT (DISTANCE)</i>	
<i>(P/F)</i>	<i>PLAT DISTANCE SAME AS FIELD DISTANCE</i>	
<i>PG.</i>	<i>PAGE</i>	
<i>R.O.W.</i>	<i>RIGHT-OF-WAY</i>	
<i>S</i>	<i>SOUTH</i>	
<i>S.C.B.</i>	<i>STREET CLOSURE BOOK</i>	
<i>S.F.</i>	<i>SQUARE FEET</i>	
<i>TL#</i>	<i>TIE-LINE # (SEE TIE-LINE TABLE)</i>	
<i>W</i>	<i>WEST</i>	
<i>W/</i>	<i>WITH</i>	

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 REVISED PER CITY COMMENT 01-25-19



PROJECT #: 18082.0

FIELD BY:  
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FIELD DATES:  
09-18 TO 12-18

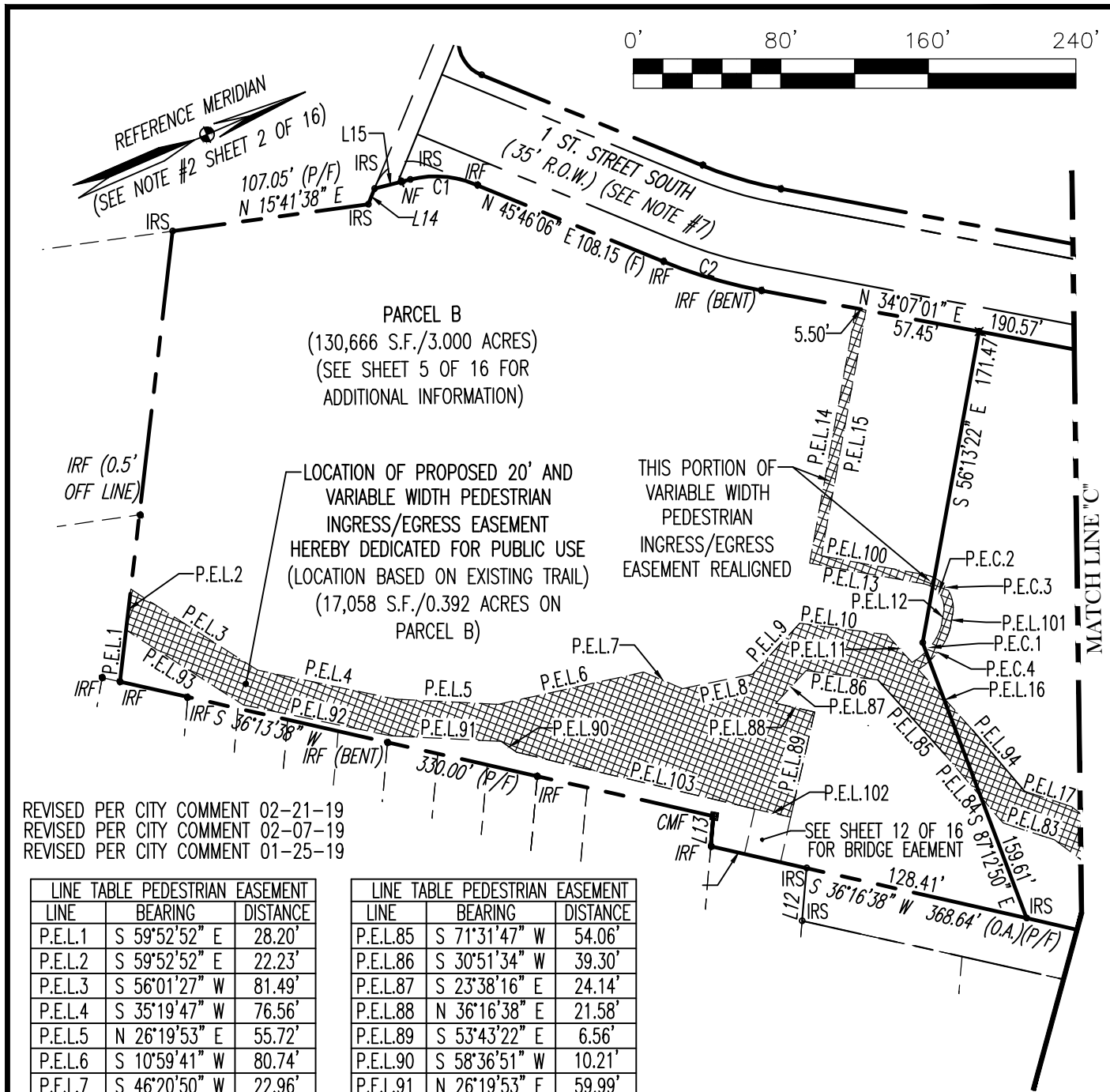
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**SHEET**  
8 OF 16

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LINE	BEARING	DISTANCE
P.E.L.1	S 59°52'52" E	28.20'
P.E.L.2	S 59°52'52" E	22.23'
P.E.L.3	S 56°01'27" W	81.49'
P.E.L.4	S 35°19'47" W	76.56'
P.E.L.5	N 26°19'53" E	55.72'
P.E.L.6	S 10°59'41" W	80.74'
P.E.L.7	S 46°20'50" W	22.96'
P.E.L.8	N 11°40'00" E	38.93'
P.E.L.9	S 23°42'58" E	37.48'
P.E.L.10	N 30°51'34" E	47.61'
P.E.L.11	N 71°31'47" E	20.37'
P.E.L.12	N 56°32'29" E	9.51'
P.E.L.13	S 33°46'38" W	62.94'
P.E.L.14	N 56°13'32" W	140.39'
P.E.L.15	S 56°13'32" E	135.36'
P.E.L.16	S 71°31'47" W	43.94'
P.E.L.17	N 41°28'08" E	26.73'
P.E.L.83	S 41°28'08" W	29.13'
P.E.L.84	S 73°07'01" W	49.08'

LINE	BEARING	DISTANCE
P.E.L.85	S 71°31'47" W	54.06'
P.E.L.86	S 30°51'34" W	39.30'
P.E.L.87	S 23°38'16" E	24.14'
P.E.L.88	N 36°16'38" E	21.58'
P.E.L.89	S 53°43'22" E	6.56'
P.E.L.90	S 58°36'51" W	10.21'
P.E.L.91	N 26°19'53" E	59.99'
P.E.L.92	N 35°19'47" E	81.78'
P.E.L.93	S 56°01'27" W	75.43'
P.E.L.94	S 73°07'01" W	43.69'
P.E.L.95	S 63°42'36" E	30.13'
P.E.L.96	S 89°56'38" W	27.60'
P.E.L.97	S 53°43'22" E	6.56'
P.E.L.98	S 36°16'38" W	20.00'
P.E.L.99	S 89°56'38" W	25.72'
P.E.L.100	S 33°46'38" W	57.44'
P.E.L.101	S 56°32'35" W	10.11'
P.E.L.102	S 36°16'38" W	20.00'
P.E.L.103	S 36°16'38" W	20.00'
P.E.L.104	S 36°52'00" W	132.74'

CURVE	ARC	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD	TANGENT
P.E.C.1	25.54'	34.29'	42°39'49"	N 27°13'00" W	24.95'	13.39'
P.E.C.2	19.43'	13.36'	83°20'21"	S 75°14'38" W	17.76'	11.89'
P.E.C.3	27.01'	18.36'	84°17'36"	N 75°43'15" E	24.64'	16.61'
P.E.C.4	28.51'	39.29'	41°34'00"	S 28°17'28" E	27.89'	14.91'

P.E.L.# = PEDESTRIAN EASEMENT LINE  
 P.E.C.# = PEDESTRIAN EASEMENT CURVE  
 (AS SHOWN IN THE LINE TABLES FOUND ON SHEETS 9 THROUGH 11) AND ON THIS CURVE TABLE

PLEASE SEE SHEET 3 FOR LINE AND CURVE TABLE INFORMATION.  
 PLEASE SEE SHEETS 1 THROUGH 4 FOR NOTES AND OWNERSHIP INFORMATION

PROPOSED 20' AND VARIABLE WIDTH PEDESTRIAN INGRESS/EGRESS EASEMENT HEREBY DEDICATED FOR PUBLIC USE (SHEETS 9 THROUGH 11)  
 1" = 80'



PROJECT #: 18082.0

FIELD BY:  
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FIELD DATES:  
09-18 TO 12-18

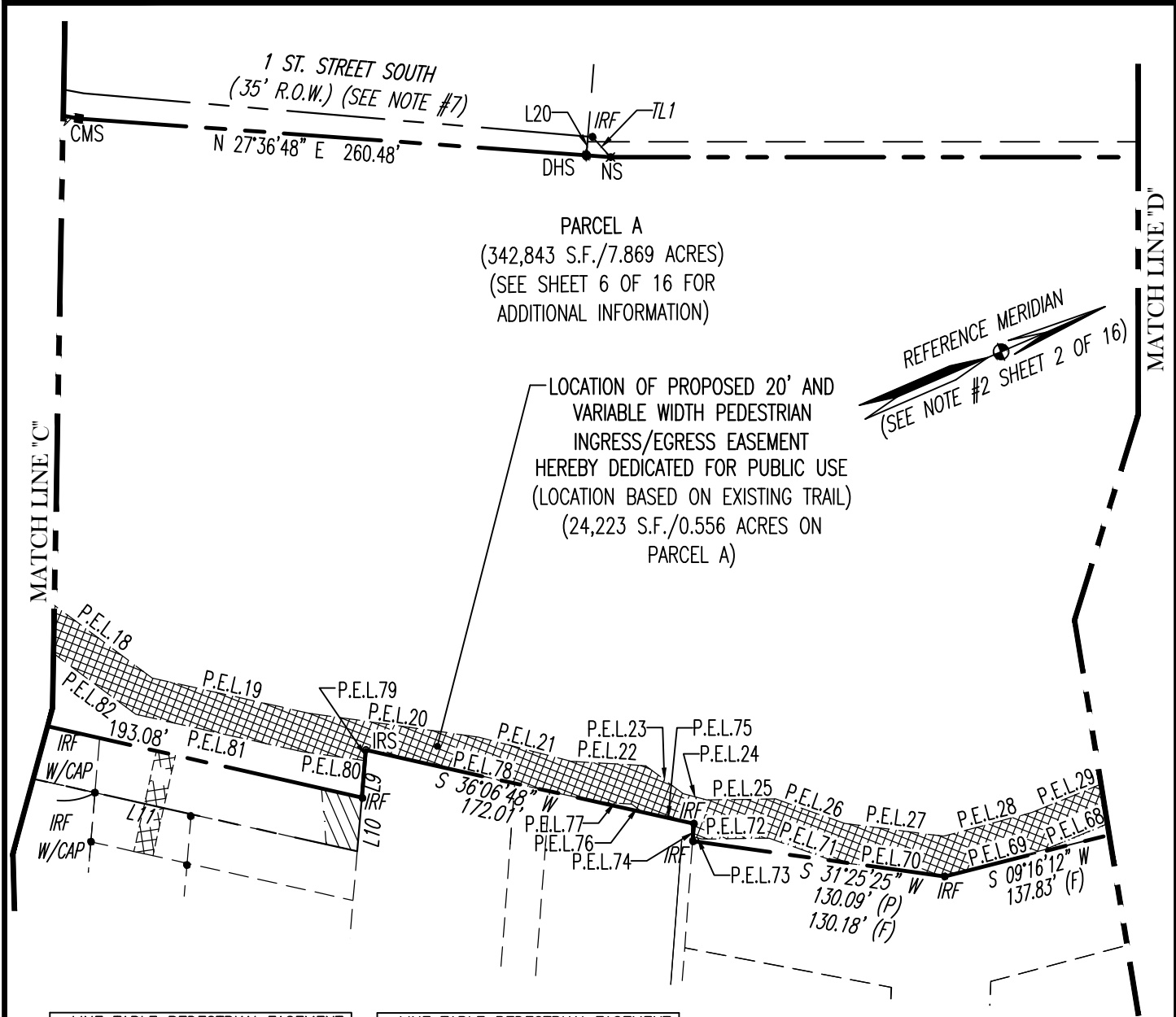
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**SHEET**  
9 OF 16

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PARCEL A  
 (342,843 S.F./7.869 ACRES)  
 (SEE SHEET 6 OF 16 FOR  
 ADDITIONAL INFORMATION)

LOCATION OF PROPOSED 20' AND  
 VARIABLE WIDTH PEDESTRIAN  
 INGRESS/EGRESS EASEMENT  
 HEREBY DEDICATED FOR PUBLIC USE  
 (LOCATION BASED ON EXISTING TRAIL)  
 (24,223 S.F./0.556 ACRES ON  
 PARCEL A)

REFERENCE MERIDIAN  
 (SEE NOTE #2 SHEET 2 OF 16)

LINE	BEARING	DISTANCE
P.E.L.18	S 60°03'14" W	70.59'
P.E.L.19	S 36°06'30" W	82.01'
P.E.L.20	S 31°29'28" W	88.00'
P.E.L.21	S 38°12'58" W	48.52'
P.E.L.22	N 26°53'03" E	38.58'
P.E.L.23	S 60°11'14" W	23.92'
P.E.L.24	N 38°16'18" E	12.57'
P.E.L.25	N 22°38'15" E	35.21'
P.E.L.26	S 43°01'08" W	37.41'
P.E.L.27	N 30°48'47" E	51.26'
P.E.L.28	N 08°24'41" E	46.78'
P.E.L.29	N 01°10'32" E	42.51'
P.E.L.68	S 01°10'32" W	40.26'

LINE	BEARING	DISTANCE
P.E.L.69	N 08°24'41" E	52.00'
P.E.L.70	N 30°48'47" E	57.36'
P.E.L.71	S 43°01'08" W	35.95'
P.E.L.72	S 22°38'15" W	34.36'
P.E.L.73	S 38°16'18" W	4.88'
P.E.L.74	N 62°54'12" W	6.68'
P.E.L.75	S 36°06'48" W	26.83'
P.E.L.76	N 60°11'14" E	6.95'
P.E.L.77	N 26°53'03" E	17.68'
P.E.L.78	N 36°06'48" E	121.39'
P.E.L.79	N 61°35'22" W	5.37'
P.E.L.80	N 31°29'28" E	32.76'
P.E.L.81	N 36°06'30" E	87.06'
P.E.L.82	N 60°03'14" E	71.55'

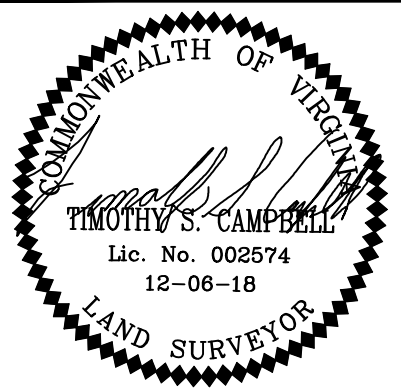
P.E.L.# = PEDESTRIAN EASEMENT LINE  
 (AS SHOWN IN THE LINE TABLES FOUND ON  
 SHEETS 9 THROUGH 11)

PLEASE SEE SHEET 3 FOR LINE AND  
 CURVE TABLE INFORMATION.  
 PLEASE SEE SHEETS 1 THROUGH 4 FOR  
 NOTES AND OWNERSHIP INFORMATION



PROPOSED 20' AND VARIABLE WIDTH  
 PEDESTRIAN INGRESS/EGRESS EASEMENT  
 HEREBY DEDICATED FOR PUBLIC USE  
 (SHEETS 9 THROUGH 11)  
 1" = 80'

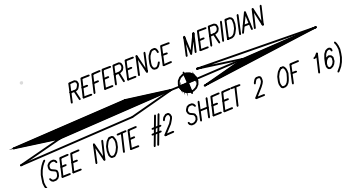
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PROJECT #: 18082.0  
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 FIELD DATES:  
 09-18 TO 12-18  
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**SHEET**  
**10 OF 16**

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0' 80' 160' 240'



1 ST. STREET SOUTH (40' R.O.W.) (SEE NOTE #7)

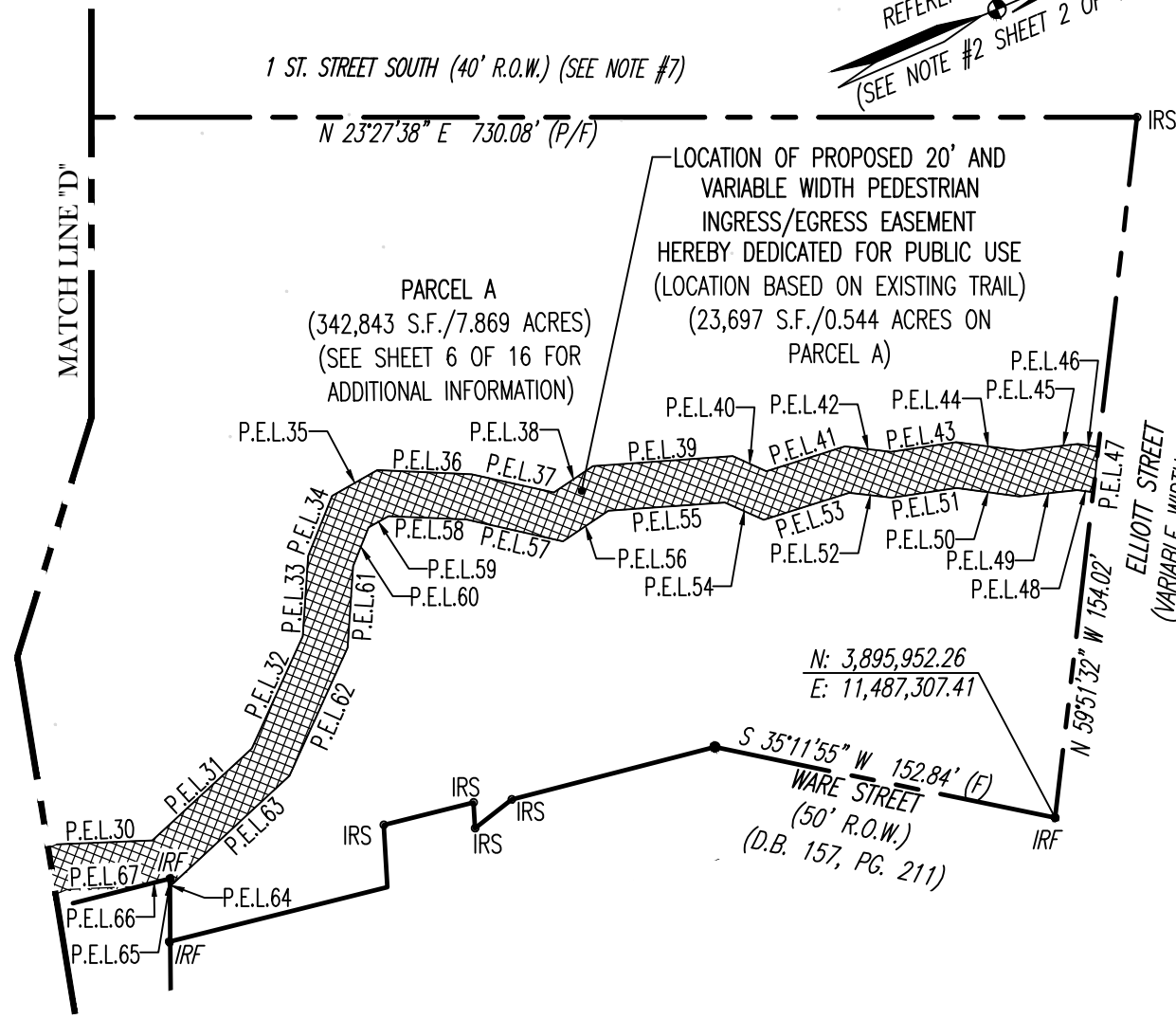
N 23°27'38" E 730.08' (P/F)

MATCH LINE "D"

PARCEL A  
(342,843 S.F./7.869 ACRES)  
(SEE SHEET 6 OF 16 FOR  
ADDITIONAL INFORMATION)

LOCATION OF PROPOSED 20' AND  
VARIABLE WIDTH PEDESTRIAN  
INGRESS/EGRESS EASEMENT  
HEREBY DEDICATED FOR PUBLIC USE  
(LOCATION BASED ON EXISTING TRAIL)  
(23,697 S.F./0.544 ACRES ON  
PARCEL A)

ELLIOTT STREET  
(VARIABLE WIDTH R.O.W.)  
(SEE NOTE #7)



LINE	BEARING	DISTANCE
P.E.L.30	N 21°07'37" E	42.05'
P.E.L.31	N 19°15'05" W	59.47'
P.E.L.32	N 42°08'48" W	54.24'
P.E.L.33	N 62°38'40" W	35.38'
P.E.L.34	N 44°50'36" W	28.47'
P.E.L.35	N 06°02'30" W	22.84'
P.E.L.36	N 25°54'59" E	41.54'
P.E.L.37	N 36°01'43" E	37.00'
P.E.L.38	N 10°33'09" W	20.69'
P.E.L.39	N 19°21'19" E	61.68'
P.E.L.40	N 47°31'23" E	16.20'
P.E.L.41	N 05°52'24" E	36.17'
P.E.L.42	N 30°06'54" E	20.42'
P.E.L.43	N 15°07'58" E	29.00'
P.E.L.44	N 30°59'11" E	28.28'
P.E.L.45	N 17°03'12" E	25.61'
P.E.L.46	N 31°51'06" E	9.13'
P.E.L.47	N 59°51'32" W	20.01'

LINE	BEARING	DISTANCE
P.E.L.48	S 31°51'06" W	7.02'
P.E.L.49	S 17°10'54" W	25.69'
P.E.L.50	S 30°59'11" W	27.82'
P.E.L.51	S 15°07'58" W	28.84'
P.E.L.52	S 30°06'54" W	18.75'
P.E.L.53	S 05°52'24" W	39.48'
P.E.L.54	S 47°31'23" W	18.78'
P.E.L.55	S 19°21'19" W	51.32'
P.E.L.56	S 10°33'09" E	24.04'
P.E.L.57	S 36°09'43" W	43.56'
P.E.L.58	S 25°54'59" W	34.28'
P.E.L.59	S 06°02'30" E	10.07'
P.E.L.60	S 44°50'36" E	18.29'
P.E.L.61	S 62°38'40" E	35.86'
P.E.L.62	S 42°08'48" E	61.91'
P.E.L.63	S 19°15'05" E	70.87'
P.E.L.64	S 21°07'37" W	0.54'
P.E.L.65	S 66°56'05" E	2.90'
P.E.L.66	S 09°16'12" W	14.12'
P.E.L.67	S 21°07'37" W	31.63'

P.E.L.# = PEDESTRIAN EASEMENT LINE  
(AS SHOWN IN THE LINE TABLES FOUND ON  
SHEETS 9 THROUGH 11)

PLEASE SEE SHEET 3 FOR LINE AND  
CURVE TABLE INFORMATION.  
PLEASE SEE SHEETS 1 THROUGH 4 FOR  
NOTES AND OWNERSHIP INFORMATION

PROPOSED 20' AND VARIABLE WIDTH  
PEDESTRIAN INGRESS/EGRESS EASEMENT  
HEREBY DEDICATED FOR PUBLIC USE  
(SHEETS 9 THROUGH 11)  
1" = 80'

REVISED PER CITY COMMENT 02-21-19  
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REVISED PER CITY COMMENT 01-25-19

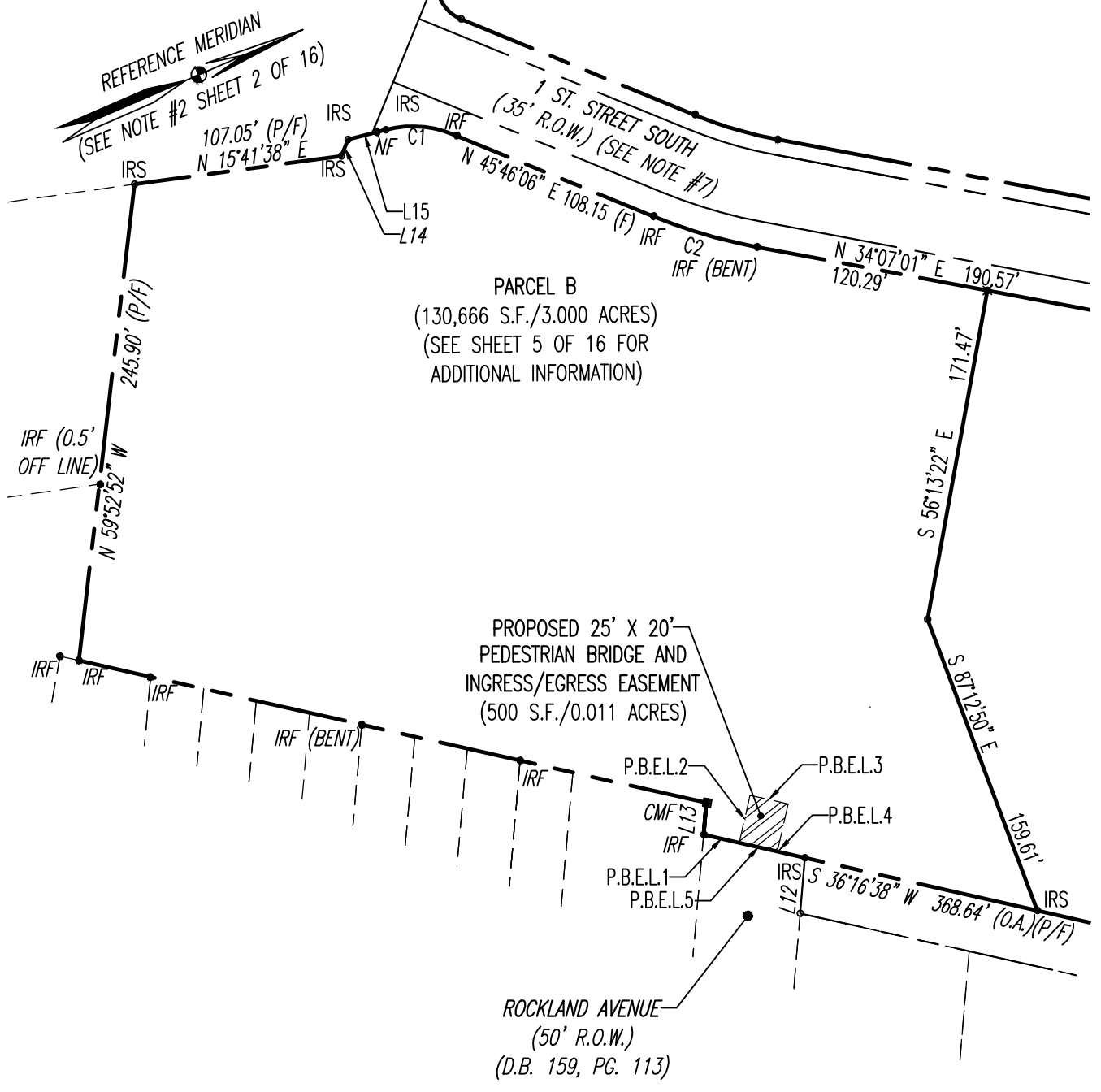


PROJECT #: 18082.0
FIELD BY: TSC-JSP-OSL-NJB
FIELD DATES: 09-18 TO 12-18
DRAWN BY: TSC
<b>SHEET</b> 11 OF 16

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DWG NAME: C:\USERS\T\CAMPIDROPBOX (MAS-LD)\2018\18082.0 SOUTH 1ST ST- CRHA - CHARLOTTESVILLE - SUBIDRAWINGS\18082.0 1ST STREET SE-CRHA - CHARLOTTESVILLE - SUBDIVISION PLAT.DWG PLOTTED BY TCAMP 2/24/2019 11:04 PM LAST SAVED 2/24/2019 10:43 PM



P.B.E.L.# = PEDESTRIAN BRIDGE  
EASEMENT LINE  
(REFERS TO THE LINE TABLE INDICATED  
HEREON ONLY)

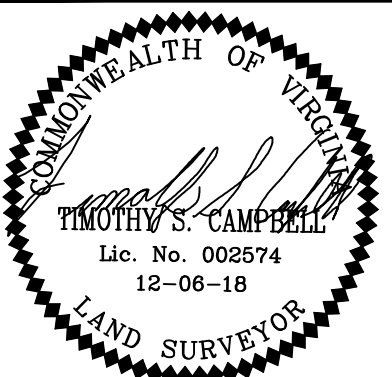


LINE TABLE PEDESTRIAN BRIDGE EASEMENT		
LINE	BEARING	DISTANCE
P.B.E.L.1	N 36°16'38" E	18.76'
P.B.E.L.2	N 53°43'22" W	25.00'
P.B.E.L.3	N 36°16'38" E	20.00'
P.B.E.L.4	S 53°43'22" E	25.00'
P.B.E.L.5	S 36°16'38" W	20.00'

PLEASE SEE SHEET 3 FOR LINE AND  
CURVE TABLE INFORMATION.  
PLEASE SEE SHEETS 1 THROUGH 4 FOR  
NOTES AND OWNERSHIP INFORMATION

PROPOSED PEDESTRIAN  
BRIDGE EASEMENT  
1" = 80'

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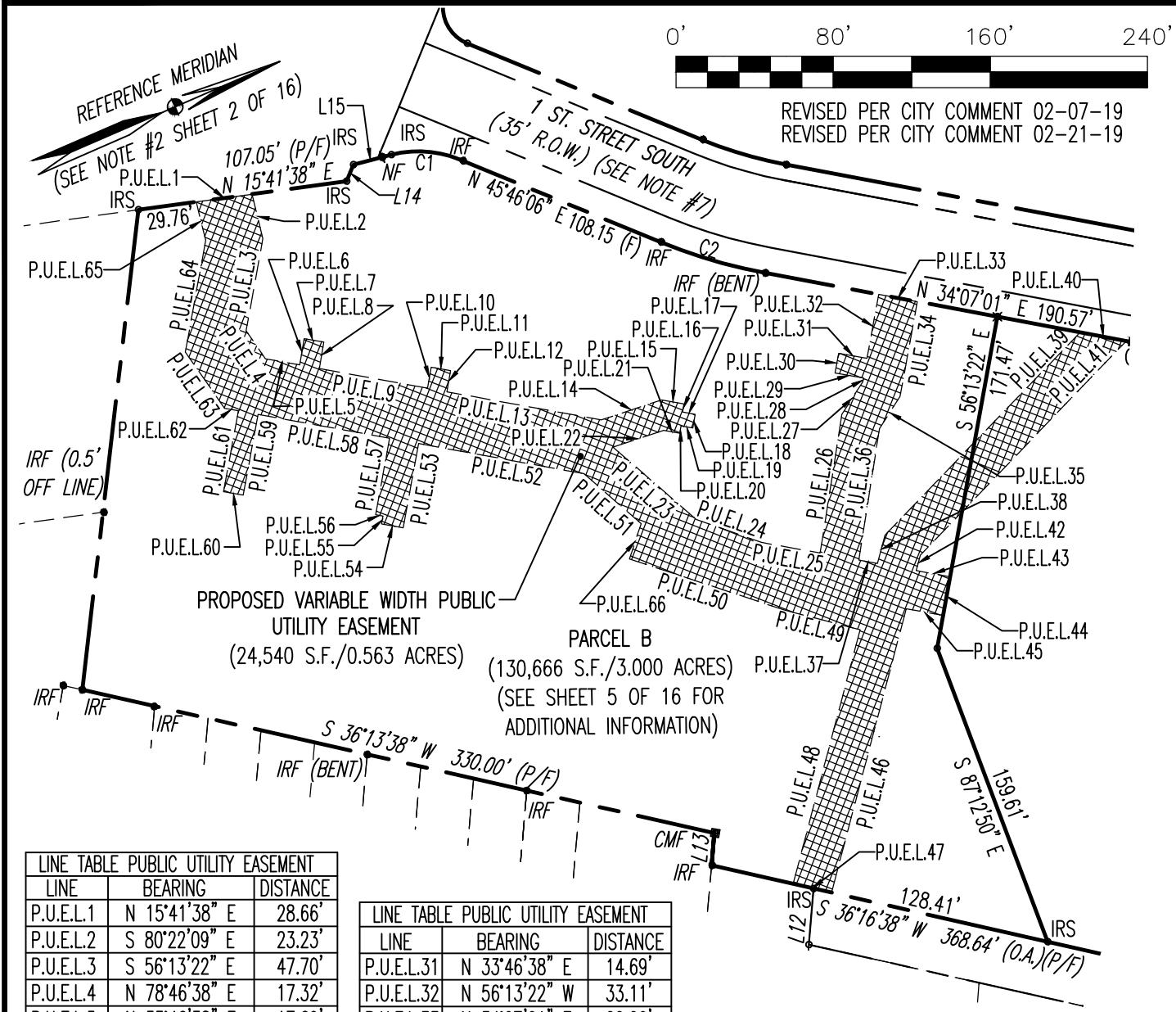


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**SHEET**  
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LINE	BEARING	DISTANCE
P.U.E.L.1	N 15°41'38" E	28.66'
P.U.E.L.2	S 80°22'09" E	23.23'
P.U.E.L.3	S 56°13'22" E	47.70'
P.U.E.L.4	N 78°46'38" E	17.32'
P.U.E.L.5	N 33°46'38" E	17.69'
P.U.E.L.6	N 56°44'42" W	13.62'
P.U.E.L.7	N 33°15'18" E	10.17'
P.U.E.L.8	S 56°44'42" E	13.71'
P.U.E.L.9	N 33°46'38" E	55.99'
P.U.E.L.10	N 56°13'22" W	10.91'
P.U.E.L.11	N 33°46'38" E	10.00'
P.U.E.L.12	S 56°13'22" E	10.91'
P.U.E.L.13	N 33°46'38" E	79.92'
P.U.E.L.14	N 05°09'00" E	32.37'
P.U.E.L.15	N 33°46'38" E	11.60'
P.U.E.L.16	S 56°13'22" E	4.21'
P.U.E.L.17	N 33°46'38" E	6.57'
P.U.E.L.18	S 56°13'22" E	7.06'
P.U.E.L.19	S 33°46'38" W	6.02'
P.U.E.L.20	S 56°13'22" E	3.73'
P.U.E.L.21	S 33°46'38" W	8.33'
P.U.E.L.22	S 05°09'00" W	27.17'
P.U.E.L.23	N 64°28'00" E	56.19'
P.U.E.L.24	N 42°49'45" E	35.04'
P.U.E.L.25	N 33°46'38" E	30.53'
P.U.E.L.26	N 57°38'23" W	71.50'
P.U.E.L.27	N 33°43'22" W	19.61'
P.U.E.L.28	N 56°13'22" W	1.97'
P.U.E.L.29	S 33°46'38" W	14.69'
P.U.E.L.30	N 56°13'22" W	10.17'

LINE	BEARING	DISTANCE
P.U.E.L.31	N 33°46'38" E	14.69'
P.U.E.L.32	N 56°13'22" W	33.11'
P.U.E.L.33	N 34°07'01" E	20.00'
P.U.E.L.34	S 56°13'22" E	49.12'
P.U.E.L.35	S 33°43'22" E	19.35'
P.U.E.L.36	S 57°38'23" E	67.76'
P.U.E.L.37	N 33°46'38" E	9.65'
P.U.E.L.38	N 51°46'46" W	14.91'
P.U.E.L.39	N 22°37'15" W	143.32'
P.U.E.L.40	N 34°07'01" E	23.92'
P.U.E.L.41	S 22°37'15" E	151.23'
P.U.E.L.42	S 51°46'46" E	8.15'
P.U.E.L.43	N 33°46'38" E	17.51'
P.U.E.L.44	S 56°13'22" E	20.00'
P.U.E.L.45	S 33°46'38" W	19.06'
P.U.E.L.46	S 51°46'46" E	149.33'
P.U.E.L.47	S 36°16'38" W	20.01'
P.U.E.L.48	N 51°46'46" W	133.64'
P.U.E.L.49	S 33°46'38" W	60.21'
P.U.E.L.50	S 41°41'49" W	83.27'
P.U.E.L.51	S 64°28'00" W	38.71'
P.U.E.L.52	S 33°46'38" W	85.53'
P.U.E.L.53	S 56°13'22" E	43.59'
P.U.E.L.54	S 33°46'38" W	11.23'
P.U.E.L.55	N 56°13'22" W	4.00'
P.U.E.L.56	S 33°46'38" W	3.77'
P.U.E.L.57	N 56°13'22" W	39.59'
P.U.E.L.58	S 33°46'38" W	68.07'

LINE	BEARING	DISTANCE
P.U.E.L.59	S 56°13'22" E	41.82'
P.U.E.L.60	S 33°46'38" W	10.17'
P.U.E.L.61	N 56°13'22" W	41.82'
P.U.E.L.62	S 33°46'38" W	7.13'
P.U.E.L.63	S 78°29'49" W	34.86'
P.U.E.L.64	N 56°13'22" W	57.82'
P.U.E.L.65	N 80°22'09" W	20.16'
P.U.E.L.66	N 48°18'11" W	18.93'

P.U.E.L.# = PUBLIC UTILITY EASEMENT LINE  
(REFERS TO THE LINE TABLE INDICATED  
HEREON ONLY)

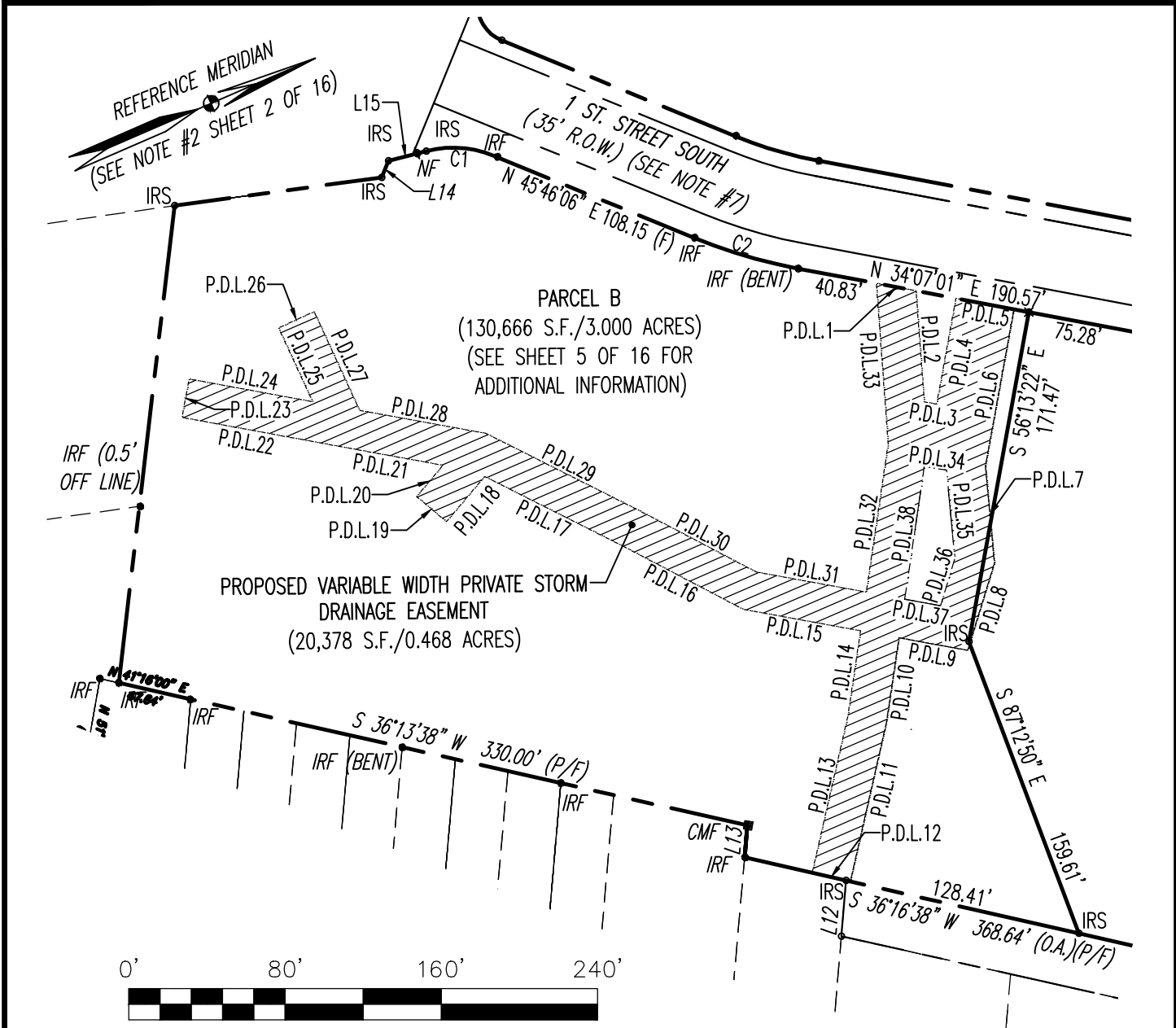
PLEASE SEE SHEET 3 FOR LINE AND  
CURVE TABLE INFORMATION.  
PLEASE SEE SHEETS 1 THROUGH 4 FOR  
NOTES AND OWNERSHIP INFORMATION

PROPOSED VARIABLE WIDTH  
PUBLIC UTILITY EASEMENT  
1" = 80'



PROJECT #: 18082.0  
FIELD BY:  
TSC-JSP-OSL-NJB  
FIELD DATES:  
09-18 TO 12-18  
DRAWN BY: TSC  
**SHEET**  
**13 OF 16**

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LINE TABLE PRIVATE DRAINAGE EASEMENT		
LINE	BEARING	DISTANCE
P.D.L.1	N 34°07'01" E	20.69'
P.D.L.2	S 70°46'12" E	57.00'
P.D.L.3	N 33°15'11" E	8.95'
P.D.L.4	N 56°13'22" W	54.96'
P.D.L.5	N 34°07'01" E	30.25'
P.D.L.6	S 56°13'22" E	81.57'
P.D.L.7	S 71°49'31" E	49.91'
P.D.L.8	S 49°28'21" E	46.68'
P.D.L.9	S 33°48'41" W	35.75'
P.D.L.10	S 58°07'04" E	43.86'
P.D.L.11	S 53°43'22" E	83.37'
P.D.L.12	S 36°16'38" W	20.00'
P.D.L.13	N 53°43'22" W	82.60'
P.D.L.14	N 58°07'04" W	43.77'
P.D.L.15	S 33°48'41" W	61.07'
P.D.L.16	S 51°09'49" W	70.19'
P.D.L.17	S 50°10'52" W	78.65'
P.D.L.18	S 26°19'36" E	30.32'
P.D.L.19	S 63°40'24" W	20.00'

LINE TABLE PRIVATE DRAINAGE EASEMENT		
LINE	BEARING	DISTANCE
P.D.L.20	N 26°19'36" W	20.92'
P.D.L.21	S 33°46'38" W	52.23'
P.D.L.22	S 33°53'56" W	83.58'
P.D.L.23	N 56°06'04" W	20.00'
P.D.L.24	N 33°53'56" E	64.29'
P.D.L.25	S 88°44'30" W	41.59'
P.D.L.26	N 01°15'30" W	20.00'
P.D.L.27	N 88°44'30" E	55.67'
P.D.L.28	N 33°46'38" E	65.74'
P.D.L.29	N 50°10'52" E	88.15'
P.D.L.30	N 51°09'49" E	67.31'
P.D.L.31	N 33°48'41" E	57.34'
P.D.L.32	N 58°07'04" W	76.70'
P.D.L.33	N 70°46'12" W	82.37'
P.D.L.34	N 31°50'43" E	11.53'
P.D.L.35	S 71°49'31" E	45.76'
P.D.L.36	S 49°28'21" E	24.94'
P.D.L.37	S 33°48'41" W	18.64'
P.D.L.38	N 58°07'04" W	68.49'

P.D.L.# = PRIVATE EASEMENT DRAINAGE LINE  
(REFERS TO THE LINE TABLE INDICATED  
HEREON ONLY)

PLEASE SEE SHEET 3 FOR LINE AND  
CURVE TABLE INFORMATION.  
PLEASE SEE SHEETS 1 THROUGH 4 FOR  
NOTES AND OWNERSHIP INFORMATION

PROPOSED VARIABLE WIDTH PRIVATE  
STORM DRAINAGE EASEMENT  
1" = 80'

REVISED PER CITY COMMENT 02-21-19  
REVISED PER CITY COMMENT 02-07-19

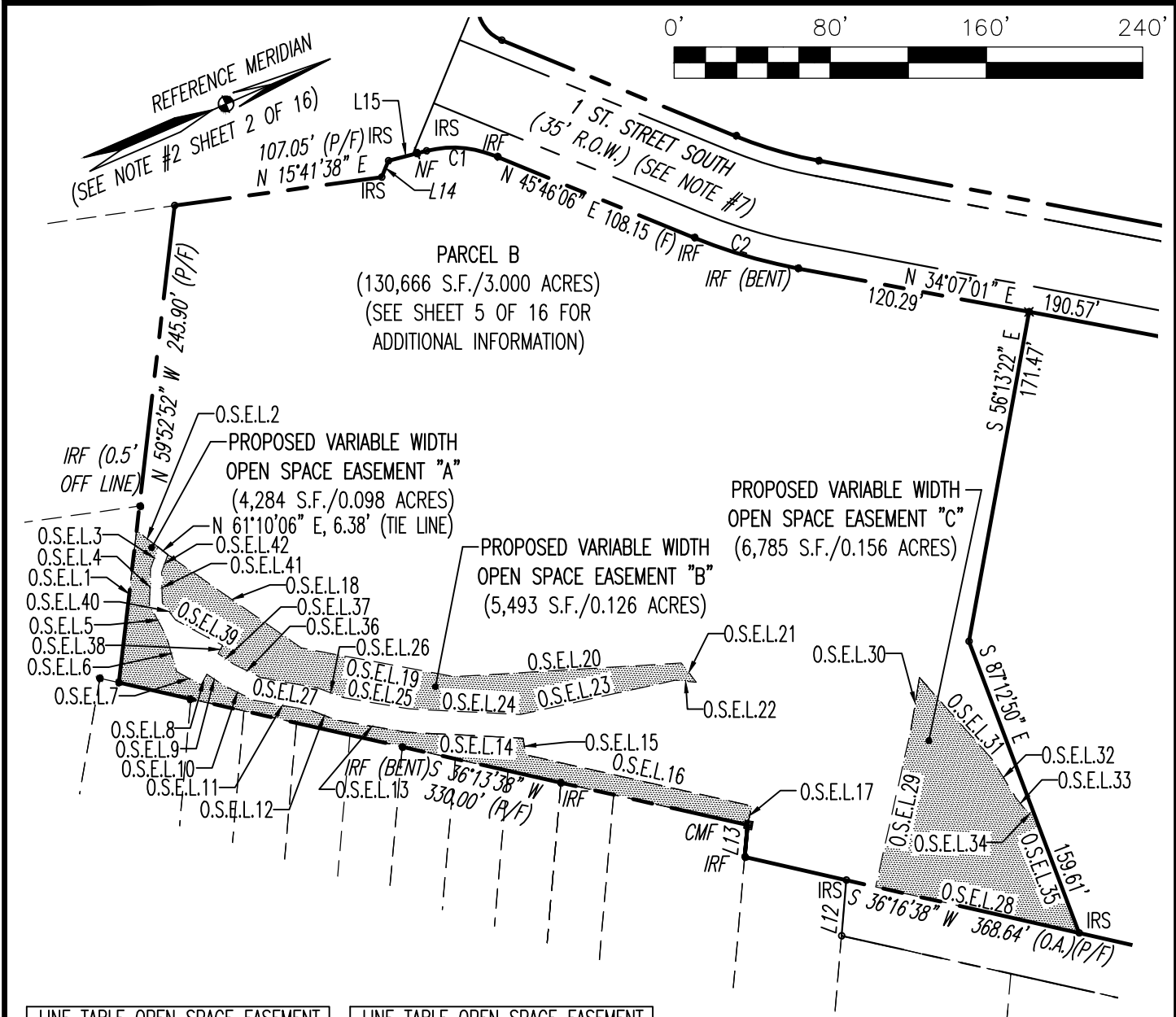


PROJECT #: 18082.0  
FIELD BY:  
TSC-JSP-OSL-NJB  
FIELD DATES:  
09-18 TO 12-18  
DRAWN BY: TSC  
**SHEET**  
14 OF 16

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DWG NAME: C:\USERS\ITCAMP\DROPBOX (MAS-LD)\2018\18082.0 SOUTH 1ST ST- CRHA - CHARLOTTSVILLE - SUBIDRAWINGS\18082.0 1ST STREET SE-CRHA - CHARLOTTSVILLE - SUBDIVISION PLAT.DWG PLOTTED BY T-CAMP 2/24/2019 11:09 PM LAST SAVED 2/24/2019 10:43 PM



LINE	BEARING	DISTANCE
O.S.E.L.1	N 59°52'52" W	78.08'
O.S.E.L.2	N 61°10'06" E	13.79'
O.S.E.L.3	N 47°56'40" W	11.85'
O.S.E.L.4	N 64°51'33" W	18.52'
O.S.E.L.5	N 84°55'08" E	17.44'
O.S.E.L.6	S 83°10'37" E	19.63'
O.S.E.L.7	N 51°49'23" E	14.21'
O.S.E.L.8	N 38°10'37" W	6.18'
O.S.E.L.9	N 57°40'14" E	9.10'
O.S.E.L.10	N 49°58'00" E	18.07'
O.S.E.L.11	N 33°48'57" E	30.39'
O.S.E.L.12	N 43°55'04" E	14.05'
O.S.E.L.13	N 33°13'08" E	36.19'
O.S.E.L.14	N 26°19'53" E	59.56'
O.S.E.L.15	S 74°43'02" E	8.59'
O.S.E.L.16	N 36°13'38" E	118.78'
O.S.E.L.17	S 53°46'22" E	10.00'
O.S.E.L.18	N 58°26'35" E	83.32'
O.S.E.L.19	N 34°04'35" E	80.08'
O.S.E.L.20	N 19°59'22" E	116.09'
O.S.E.L.21	N 75°29'48" E	12.47'
O.S.E.L.22	S 28°48'47" W	10.83'

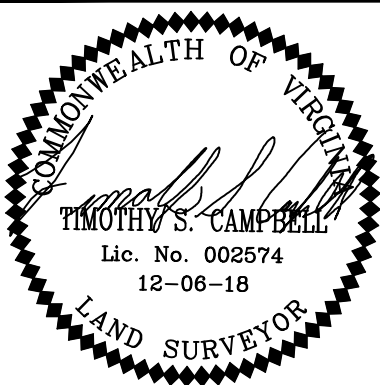
LINE	BEARING	DISTANCE
O.S.E.L.23	S 10°59'41" W	81.27'
O.S.E.L.24	S 26°19'53" W	56.68'
O.S.E.L.25	S 33°13'08" W	34.35'
O.S.E.L.26	S 43°55'04" W	13.99'
O.S.E.L.27	S 33°48'57" W	29.75'
O.S.E.L.28	S 36°16'38" W	106.81'
O.S.E.L.29	S 53°54'37" E	82.73'
O.S.E.L.30	N 57°11'04" W	26.68'
O.S.E.L.31	N 71°41'59" E	55.29'
O.S.E.L.32	N 81°40'27" E	23.38'
O.S.E.L.33	N 75°35'32" E	8.29'
O.S.E.L.34	N 57°46'09" E	6.01'
O.S.E.L.35	S 87°12'50" E	63.81'
O.S.E.L.36	S 49°58'00" W	15.56'
O.S.E.L.37	S 57°40'14" W	9.52'
O.S.E.L.38	N 38°10'37" W	4.76'
O.S.E.L.39	S 51°49'23" W	27.28'
O.S.E.L.40	S 75°44'38" W	11.16'
O.S.E.L.41	N 67°36'27" W	15.56'
O.S.E.L.42	N 47°46'16" W	9.65'

O.S.E.L.# = OPEN SPACE EASEMENT LINE  
(REFERS TO THE LINE TABLE INDICATED  
HEREON ONLY)

PLEASE SEE SHEET 3 FOR LINE AND  
CURVE TABLE INFORMATION.  
PLEASE SEE SHEETS 1 THROUGH 4 FOR  
NOTES AND OWNERSHIP INFORMATION

PROPOSED VARIABLE WIDTH  
OPEN SPACE EASEMENT  
1" = 80'

REVISED PER CITY COMMENT 02-21-19



PROJECT #: 18082.0

FIELD BY:  
TSC-JSP-OSL-NJB

FIELD DATES:  
09-18 TO 12-18

DRAWN BY: TSC

**SHEET**  
15 OF 16

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REFERENCE MERIDIAN  
(SEE NOTE #2 SHEET 2 OF 16)

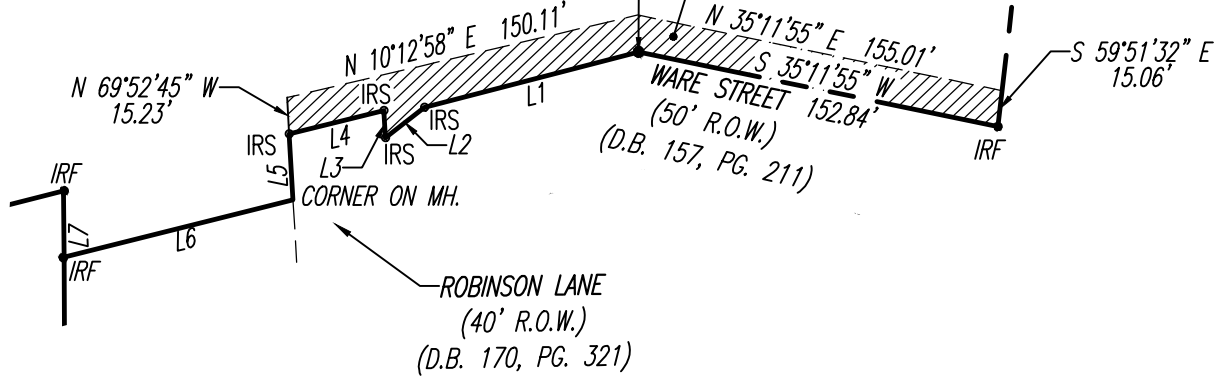
1 ST. STREET SOUTH (40' R.O.W.) (SEE NOTE #7)

N 23°27'38" E 730.08' (P/F)

PARCEL A  
(342,843 S.F./7.869 ACRES)  
(SEE SHEET 6 OF 16 FOR  
ADDITIONAL INFORMATION)

PROPOSED VARIABLE WIDTH PUBLIC UTILITY  
EASEMENT  
(4,755 S.F./0.109 ACRES)

1 1/2" IPF (CAPPED)



PLEASE SEE SHEET 3 FOR LINE AND  
CURVE TABLE INFORMATION.  
PLEASE SEE SHEETS 1 THROUGH 4 FOR  
NOTES AND OWNERSHIP INFORMATION



PROPOSED VARIABLE WIDTH  
PUBLIC UTILITY EASEMENT  
1" = 80'

REVISED PER CITY COMMENT 02-21-19



PROJECT #: 18082.0

FIELD BY:  
TSC-JSP-OSL-NJB

FIELD DATES:  
09-18 TO 12-18

DRAWN BY: TSC

SHEET  
16 OF 16

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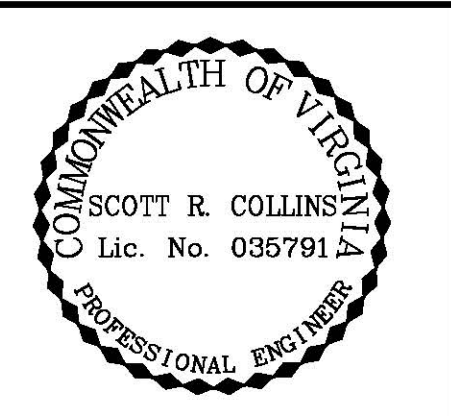
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**REVISIONS**

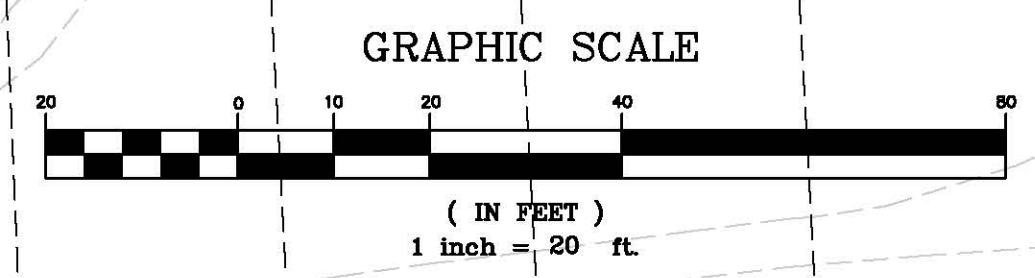
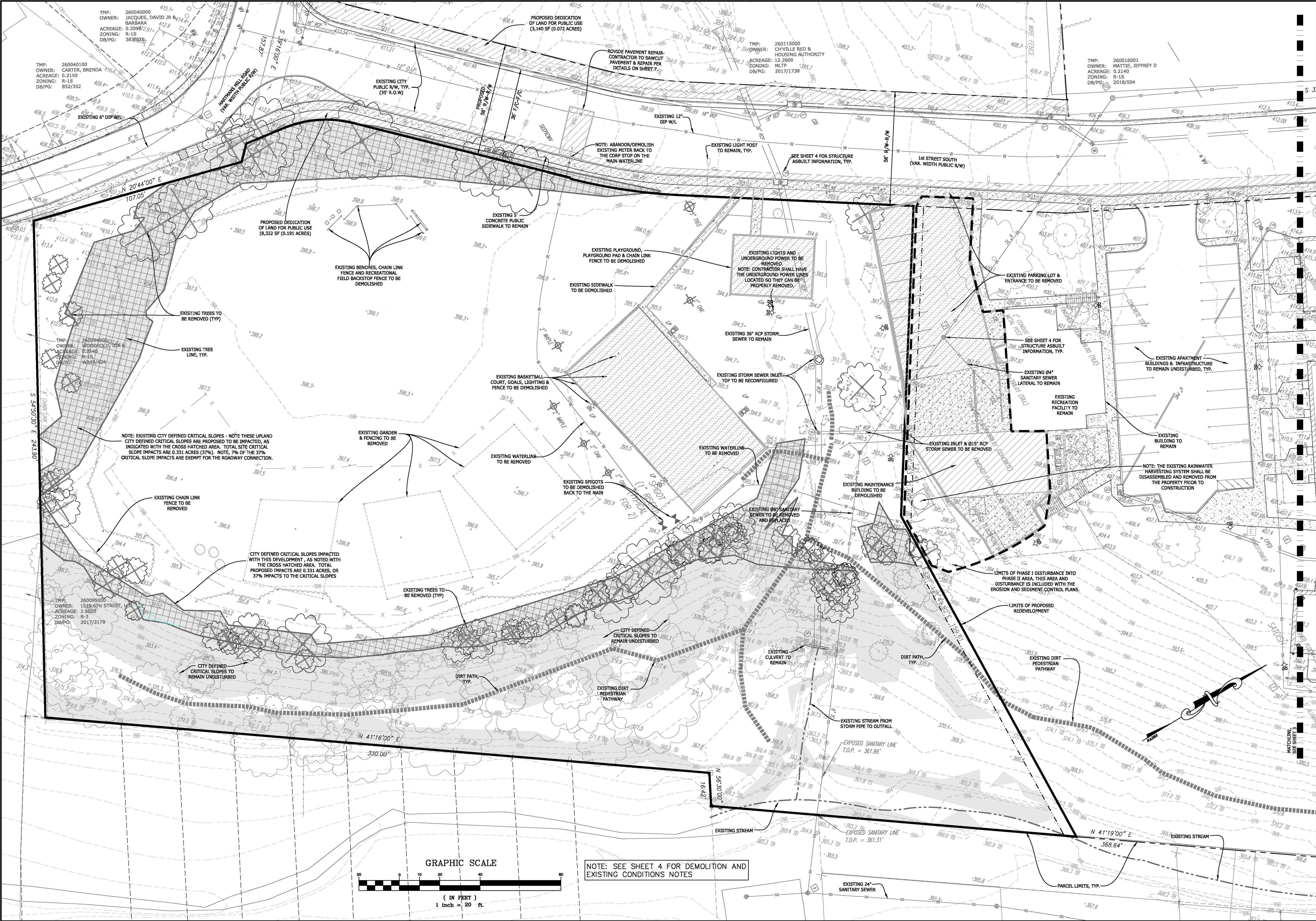
REVISION DESCRIPTION	DATE
INITIAL SUBMITTAL	1/25/19
REVISED PLANS PER COMMENTS DATED 2/1/19	2/8/19
REVISED PLANS PER COMMENTS DATED 2/21/19	2/25/19

**COLLINS ENGINEERING**  
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**1st STREET SOUTH APARTMENTS - PHASE I FINAL SITE PLAN**  
 EXISTING CONDITIONS & DEMOLITION PLAN

PROJECT	182158
JOB NO.	182158
SCALE	1"=20'
SHEET NO.	2

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NOTE: SEE SHEET 4 FOR DEMOLITION AND EXISTING CONDITIONS NOTES





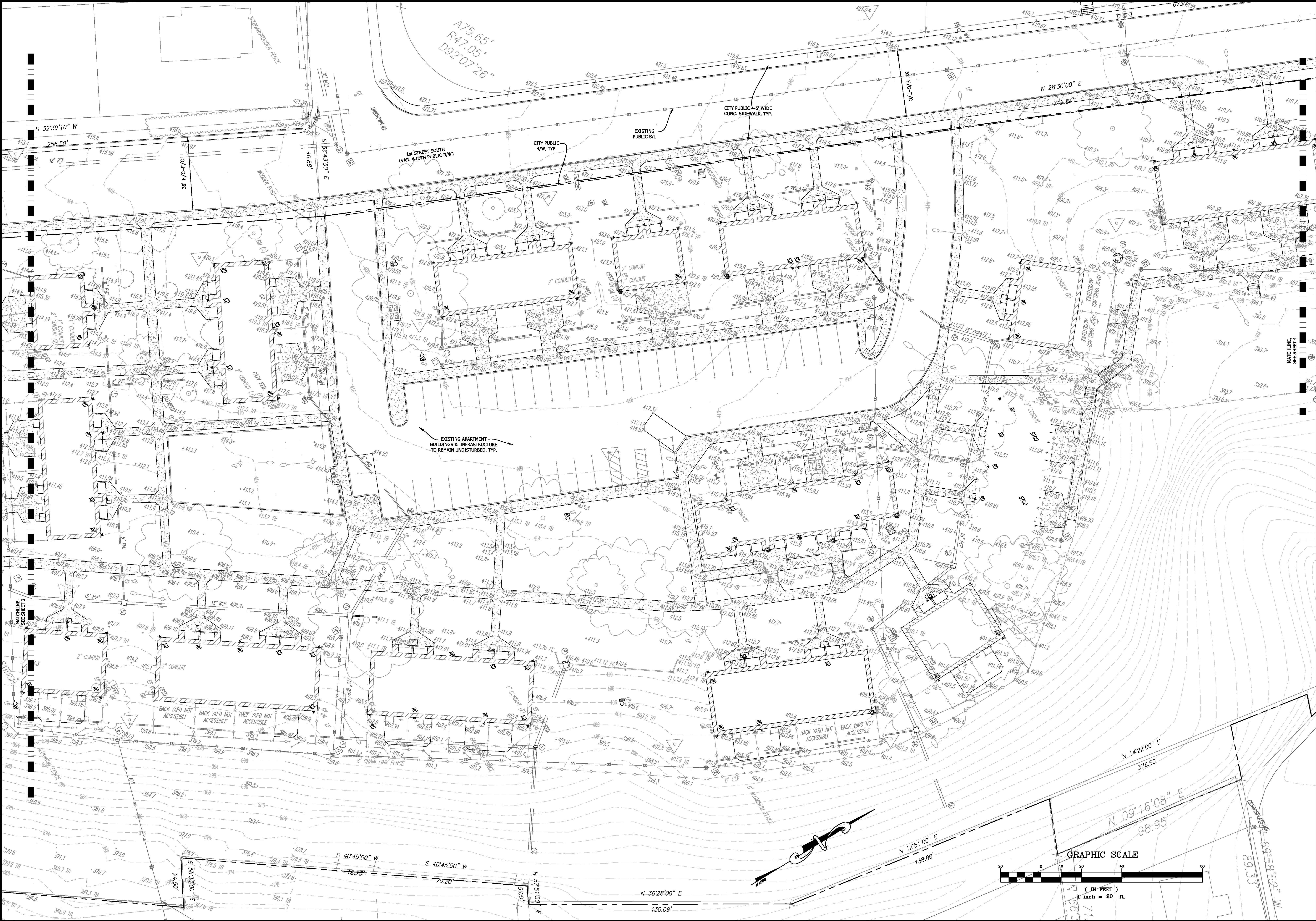
**REVISIONS**

DATE	REVISION DESCRIPTION
1/25/19	INITIAL SUBMITTAL
2/8/19	REVISED PLANS PER COMMENTS DATED 2/1/19
2/25/19	REVISED PLANS PER COMMENTS DATED 2/21/19

**COLLINS ENGINEERING**  
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**1st STREET SOUTH APARTMENTS - PHASE I FINAL SITE PLAN**  
 EXISTING CONDITIONS

PROJECT	182158
JOB NO.	182158
SCALE	1"=20'
SHEET NO.	3



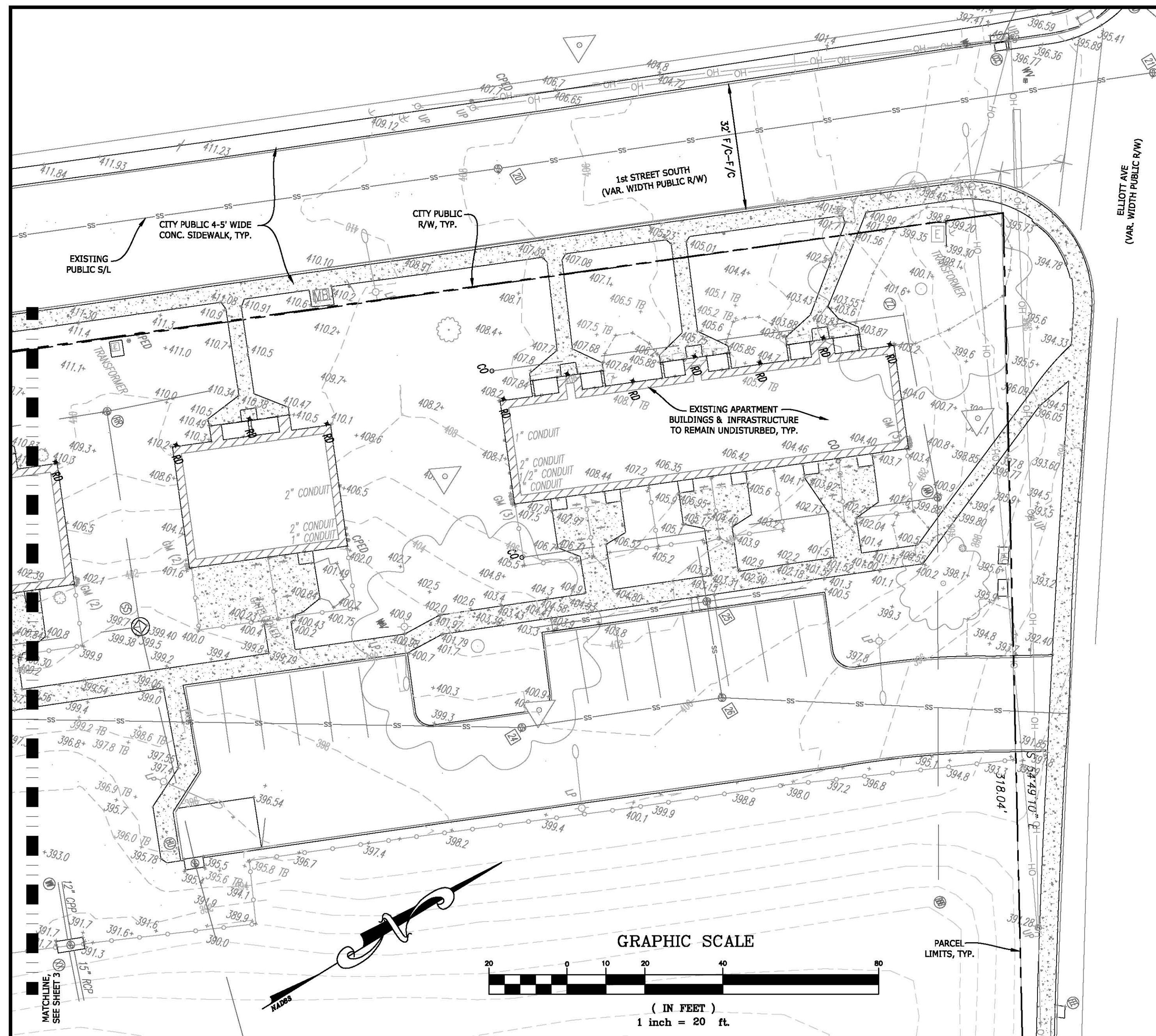
GRAPHIC SCALE



( IN FEET )  
1 inch = 20 ft.

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- DEMOLITION NOTES:**
- PRIOR TO DEMOLITION AND CONSTRUCTION, A FIRE PREVENTION PLAN MEETING MUST OCCUR AND A FIRE PREVENTION PLAN MUST BE SUBMITTED TO AND APPROVED BY THE FIRE MARSHAL.
  - THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR ALL UNDERGROUND UTILITIES NOT SHOWN ON THIS PLAN SHEET AND SHALL DEMOLISH ALL DISCOVERED UTILITIES IF NOT IN USE, AS REQUIRED.
  - THE CONTRACTOR SHALL VIDEOTAP AND INSPECT ALL SANITARY SEWER PIPES AND MANHOLES SLATED TO REMAIN TO DETERMINE ADEQUATE STRUCTURAL INTEGRITY. IF EXISTING SANITARY SEWER IS DAMAGED, THE CONTRACTOR SHALL CONTACT THE ENGINEER.
  - THE CONTRACTOR SHALL EXAMINE THE STRUCTURAL INTEGRITY OF EXISTING STORM SEWER STRUCTURES TO REMAIN AND REPLACE TOPS AS NECESSARY. THIS CONDITION SHALL BE REFLECTED IN THE CONTRACTOR BID.
  - ALL EXISTING WATER, SANITARY, AND STORM SEWER SLATED FOR DEMOLITION SHALL BE REMOVED TO THE PROPERTY LINE OR MAIN, AS DETERMINED BY THE ENGINEER AND INSPECTOR, UNLESS THEY ARE TO REMAIN.
  - UTILITIES THAT ARE DISCONNECTED SHALL BE PROPERLY ABANDONED AT THE MAIN LINE. FOR WATER SERVICE LINES, THE CORP STOP MUST BE TURNED OFF AT THE MAIN LINE AND THE SERVICE DISCONNECTED FROM THE MAIN. FOR SEWER LATERALS, THE LATERAL TAP MUST BE SEALED AT THE MAIN LINE SO THAT IT IS WATER TIGHT AND THE LATERAL REMOVED FROM THE MAIN LINE. FOR SANITARY MANHOLES TO BE ABANDONED THE TOP 2" OF THE MANHOLE STRUCTURE SHALL BE REMOVED. ALL LINES DISCONNECTED, AND THE MANHOLE SHALL BE REMOVED. ALL TAPS MUST BE LOCATED AND DISCONNECTED PER PROCEDURE ABOVE WHERE APPLICABLE.
  - EXISTING ROOF DRAINS SLATED TO BE DEMOLISHED SHALL BE DISCONNECTED AND REMOVED; ROOF DRAINS TO BE RELOCATED SHALL BE COORDINATED WITH THE ARCHITECT.
  - EXISTING DOMINION OVERHEAD/UNDERGROUND ELECTRICAL LINES AND OVERHEAD UTILITIES THAT ARE ACTIVE SHALL BE DISCONNECTED AND REROUTED.
  - ANY EXISTING UNDERGROUND STORAGE TANKS FOUND SHALL BE PROPERLY DRAINED AND DISPOSED OF BY THE OWNER AND CONTRACTOR.
  - THE EXISTING MAINTENANCE BUILDING IS PROPOSED TO BE DEMOLISHED. WHERE A BUILDING IS BEING DEMOLISHED AND A STANDPIPE IS EXISTING WITHIN SUCH A BUILDING, THE CITY REQUIRES SUCH STANDPIPES TO BE MAINTAINED IN AN OPERABLE CONDITION SO AS TO BE AVAILABLE FOR USE BY THE FIRE DEPARTMENT. SUCH STANDPIPES SHALL BE DEMOLISHED WITH THE BUILDING BUT SHALL NOT BE DEMOLISHED MORE THAN ONE FLOOR BELOW THE FLOOR BEING DEMOLISHED.
  - SEE "FIRE DEPARTMENT NOTES" ON THE SHEET 1 FOR ADDITIONAL CONSTRUCTION REQUIREMENTS.

- GENERAL PARCEL NOTES:**
- A FLOODPLAIN EXISTS ON THE SUBJECT PROPERTY PER FEMA MAP #51003C0288D, DATED FEBRUARY 4, 2005. HOWEVER THERE ARE NOT PROPOSED DISTURBANCES WITHIN THE FLOODPLAIN.
  - BEFORE BEGINNING SITE WORK, THE CONTRACTOR SHALL INVESTIGATE AND VERIFY THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES, MECHANICAL AND ELECTRICAL SYSTEMS, AND OTHER CONSTRUCTION AFFECTING THE WORK. BEFORE CONSTRUCTION THE CONTRACTOR SHALL VERIFY THE LOCATION AND INVERT ELEVATIONS AT POINTS OF CONNECTION OF SANITARY SEWER, STORM SEWER, AND WATER-SERVICE PIPING; UNDERGROUND ELECTRICAL SERVICES, AND OTHER UTILITIES. THE CONTRACTOR SHALL FURNISH LOCATION DATA FOR WORK RELATED TO PROJECT THAT MUST BE PERFORMED BY PUBLIC UTILITIES SERVING THE PROJECT SITE.
  - ALL WATER AND SANITARY SEWER LATERALS BEING DEMOLISHED SHALL BE IDENTIFIED BY THE CONTRACTOR AND DEMOLISHED BACK TO THE MAIN WATER LINE AND SANITARY SEWER LINES IN THE STREET WHERE APPLICABLE. NEW SERVICES SHALL BE INSTALLED FOR THE PROPOSED BUILDINGS.
  - CONTRACTOR SHALL VERIFY SIZE, TYPE & LOCATION OF EXISTING WATER LINE IN 1st STREET SOUTH.
  - THE MISS UTILITY DESIGN TICKET NUMBER FOR THIS PROJECT WAS PREVIOUSLY PROCESSED. THE TICKET NUMBER IS AB34000868.

- SANITARY SEWER AS-BUILT INFORMATION**
- EXISTING SANITARY SEWER MANHOLE  
RIM = 410.21'  
INV. 8" (SSE) = 406.23'  
INV. 8" (WNW) = 406.11'
  - EXISTING SANITARY SEWER MANHOLE  
RIM = 396.94'  
T.O.R. 4" (E) = 393.94'  
INV. 8" (SE) = 385.15'  
INV. 6" (NW) = 385.25'
  - EXISTING SANITARY SEWER MANHOLE  
RIM = 389.14'  
INV. 8" (E) = 375.34'  
INV. 6" (SW) = 375.54'  
INV. 8" (NW) = 377.28'
  - EXISTING SANITARY SEWER MANHOLE (NOT OPENED)  
RIM = 365.90'
  - EXISTING SANITARY SEWER MANHOLE  
RIM = 412.60'  
INV. 6" (ESE) = 407.06'
  - EXISTING SANITARY SEWER MANHOLE (NOT FOUND IN FIELD)
  - EXISTING SANITARY SEWER MANHOLE (NOT FOUND IN FIELD)
  - EXISTING SANITARY SEWER MANHOLE  
RIM = 398.06'  
INV. 10" (E) = 387.11'  
INV. 6" (SSW) = 387.96'  
INV. 10" (NNE) = 387.85'
  - EXISTING SANITARY SEWER MANHOLE  
RIM = 420.12'
  - EXISTING SANITARY SEWER MANHOLE  
RIM = 408.79'
  - EXISTING SANITARY SEWER MANHOLE  
RIM = 400.24'
  - EXISTING SANITARY SEWER MANHOLE  
RIM = 402.22'
  - EXISTING SANITARY SEWER MANHOLE (NOT FOUND IN FIELD)
  - EXISTING SANITARY SEWER MANHOLE  
RIM = 409.30'
  - EXISTING SANITARY SEWER MANHOLE  
RIM = 413.60'
  - EXISTING SANITARY SEWER MANHOLE  
RIM = 415.10'
  - EXISTING SANITARY SEWER MANHOLE  
RIM = 419.64'
  - EXISTING SANITARY SEWER MANHOLE  
RIM = 421.44'
  - EXISTING SANITARY SEWER MANHOLE  
RIM = 412.06'
  - EXISTING SANITARY SEWER MANHOLE  
RIM = 407.50'
  - EXISTING SANITARY SEWER MANHOLE  
RIM = 395.42'
  - EXISTING SANITARY SEWER MANHOLE  
RIM = 408.86'
  - EXISTING SANITARY SEWER MANHOLE  
RIM = 400.95'
  - EXISTING SANITARY SEWER MANHOLE  
RIM = 399.62'
  - EXISTING SANITARY SEWER MANHOLE  
RIM = 402.99'
  - EXISTING SANITARY SEWER MANHOLE  
RIM = 399.73'

- STORM SEWER AS-BUILT INFORMATION**
- EXISTING STORM DRAIN MANHOLE  
RIM = 418.39'  
INV. 12" RCP (WNW) = 412.99'  
INV. 15" RCP (NE) = 412.54'
  - EXISTING STORM CURB DROP INLET  
RIM = 418.37'  
INV. 15" RCP (SW) = 411.96'  
INV. 18" RCP (SE) = 409.80'
  - EXISTING STORM DRAIN MANHOLE  
RIM = 415.00'  
INV. 18" RCP (WNW) = 408.45'  
INV. 18" RCP (NNE) = 408.39'
  - EXISTING STORM 36" FLARED END SECTION  
INV. = 384.30'
  - EXISTING STORM CURB DROP INLET  
RIM = 394.67'  
INV. 18" RCP (NNE) = 388.41'  
INV. 18" RCP (S) = 388.29'
  - EXISTING STORM CURB DROP INLET  
RIM = 394.79'  
INV. 36" RCP (ESE) = 382.41'  
INV. 36" RCP (W) = 382.50'
  - EXISTING STORM CATCH BASIN (NOT FOUND IN FIELD - DATA FROM "PARTIAL TOPO" DRAWING ADJUSTED TO PROJECT DATUM)  
RIM = 389.23'  
INV. 36" RCP (WNW) = 379.90'  
INV. 15" RCP (NNE) = 380.63'  
INV. 36" RCP (ESE) = 379.63'
  - EXISTING STORM DRAIN MANHOLE  
RIM = 395.97'  
INV. 15" RCP (WSW) = 390.17'
  - EXISTING STORM DRAIN MANHOLE  
RIM = 421.36'  
INV. 18" RCP (SSE) = 413.67'  
INV. 18" RCP (WSW) = 413.81'
  - EXISTING STORM DRAIN MANHOLE  
RIM = 412.57'  
INV. 4" PVC (NE) = 408.10'  
INV. 6" PVC (SE) = 408.94'
  - EXISTING STORM CURB DROP INLET  
RIM = 406.68'  
INV. 6" PVC (WNW) = 402.40'  
INV. 15" RCP (NE) = 399.12'
  - EXISTING STORM DRAIN MANHOLE (NOT FOUND IN FIELD)
  - EXISTING STORM DRAIN MANHOLE  
RIM = 406.59'  
INV. 15" RCP (NE) = 401.15'  
INV. 15" RCP (SW) = 401.24'  
INV. 6" PVC (NW) = 401.52'
  - EXISTING STORM DRAIN MANHOLE  
RIM = 413.02'  
INV. 6" PVC (NNE) = 408.13'  
INV. 6" PVC (ESE) = 408.13'  
INV. 6" PVC (WNW) = 408.31'
  - EXISTING STORM DRAIN MANHOLE  
RIM = 408.50'  
INV. 6" PVC (NE) = 405.28'  
INV. 15" RCP (SE) = 399.04'  
INV. 15" RCP (SW) = 399.26'  
INV. 15" RCP (NW) = 399.32'

- EXISTING STORM DRAIN MANHOLE  
RIM = 400.91'  
INV. 15" RCP (NNE) = 393.51'  
INV. 6" PVC (SSW) = 393.99'  
INV. 15" RCP (WSW) = 393.56'
- EXISTING STORM DRAIN MANHOLE  
RIM = 410.14'  
INV. 18" RCP (SE) = 404.35'
- EXISTING STORM DRAIN MANHOLE  
RIM = 400.85'  
INV. 18" RCP (ESE) = 387.96'  
INV. 6" PVC (S) = 396.00'  
INV. 15" RCP (SSW) = 387.97'  
INV. 18" RCP (NW) = 394.39'
- EXISTING STORM XX" FLARED END SECTION  
INV. = XXX'XX"
- EXISTING STORM DRAIN MANHOLE  
RIM = 420.94'  
INV. 6" PVC (NNE) = 417.05'  
INV. 6" PVC (WNW) = 418.26'
- EXISTING STORM DRAIN MANHOLE  
RIM = 416.58'  
INV. 6" PVC (SE) = 411.38'  
INV. 6" PVC (SW) = 411.66'
- EXISTING STORM DRAIN MANHOLE  
RIM = 414.84'  
INV. 6" PVC (NE) = 410.91'  
INV. 6" PVC (SSW) = 411.22'  
INV. 6" PVC (SW) = 411.96'  
INV. 6" PVC (WSW) = 411.22'
- EXISTING STORM CURB DROP INLET  
RIM = 413.15'  
INV. 15" RCP (NNE) = 409.29'  
INV. 6" PVC (SE) = 408.83'
- EXISTING STORM DRAIN MANHOLE  
RIM = 412.28'  
INV. 6" PVC (N) = 407.25'  
INV. 18" RCP (SE) = 407.04'  
INV. 15" RCP (SW) = 407.28'
- EXISTING STORM DRAIN MANHOLE  
RIM = 414.09'  
INV. 6" RCP (NE) = 411.07'  
INV. 6" PVC (S) = 411.35'
- EXISTING STORM DRAIN MANHOLE  
RIM = 411.39'  
INV. 15" RCP (SE) = 406.05'  
INV. 6" PVC (SW) = 406.15'  
INV. 15" RCP (NW) = 406.07'
- EXISTING STORM CATCH BASIN  
RIM = 409.35'  
INV. 15" RCP (SSE) = 405.30'  
INV. 6" PVC (SW) = 406.03'  
INV. 15" RCP (NW) = 405.95'
- EXISTING STORM DRAIN MANHOLE  
RIM = 410.83'  
INV. 15" RCP (E) = 403.38'  
INV. 6" PVC (SSW) = 407.02'  
INV. 15" RCP (NNW) = 404.51'
- EXISTING STORM DRAIN MANHOLE (NOT LOCATED IN FIELD)
- EXISTING STORM CATCH BASIN  
RIM = 398.80'  
INV. 15" RCP (ESE) = 390.51'  
INV. 6" PVC (SW) = 396.20'  
INV. 15" RCP (W) = 395.80'
- EXISTING STORM CURB DROP INLET  
RIM = 410.10'
- EXISTING STORM DRAIN MANHOLE  
RIM = 410.06'
- EXISTING STORM CURB DROP INLET  
RIM = 410.20'
- EXISTING STORM DRAIN MANHOLE  
RIM = 410.92'
- EXISTING STORM DRAIN MANHOLE  
RIM = 408.47'
- EXISTING STORM CATCH BASIN  
RIM = 399.41'
- EXISTING STORM CATCH BASIN  
RIM = 400.41'
- EXISTING STORM CURB DROP INLET  
RIM = 395.65'

**REVISIONS**

REVISION DESCRIPTION	DATE
INITIAL SUBMITTAL	1/25/19
REVISED PLANS PER COMMENTS DATED 2/17/19	2/8/19
REVISED PLANS PER COMMENTS DATED 2/21/19	2/25/19

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

**1st STREET SOUTH APARTMENTS - PHASE I FINAL SITE PLAN**  
EXISTING CONDITIONS

JOB NO.	182158
SCALE	1"=20'
SHEET NO.	4

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**REVISIONS**

REVISION DESCRIPTION	DATE
INITIAL SUBMITTAL	1/25/19
REVISED PLANS PER COMMENTS DATED 2/1/19	2/8/19
REVISED PLANS PER COMMENTS DATED 2/21/19	2/25/19

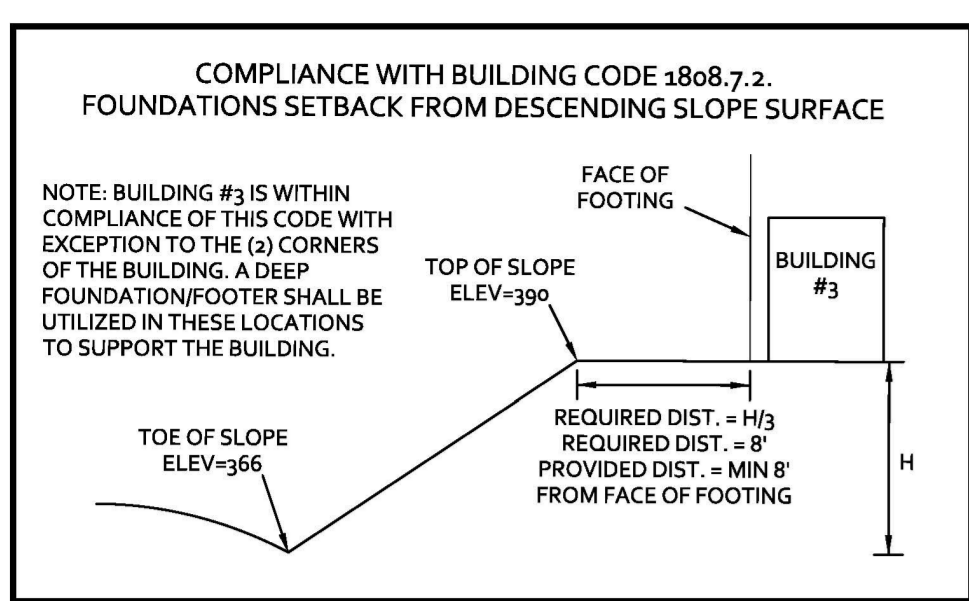
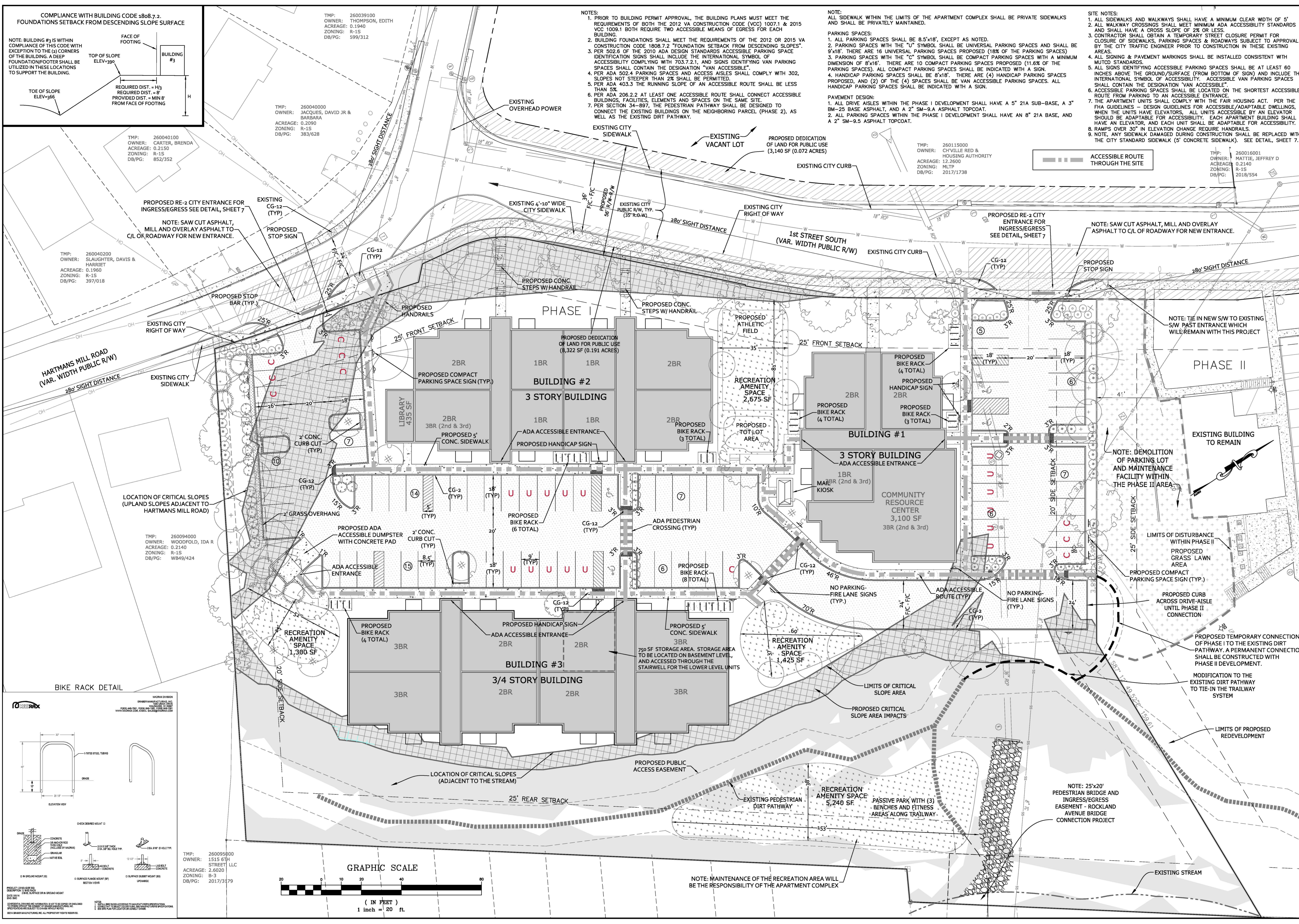
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**1st STREET SOUTH APARTMENTS - PHASE I FINAL SITE PLAN**

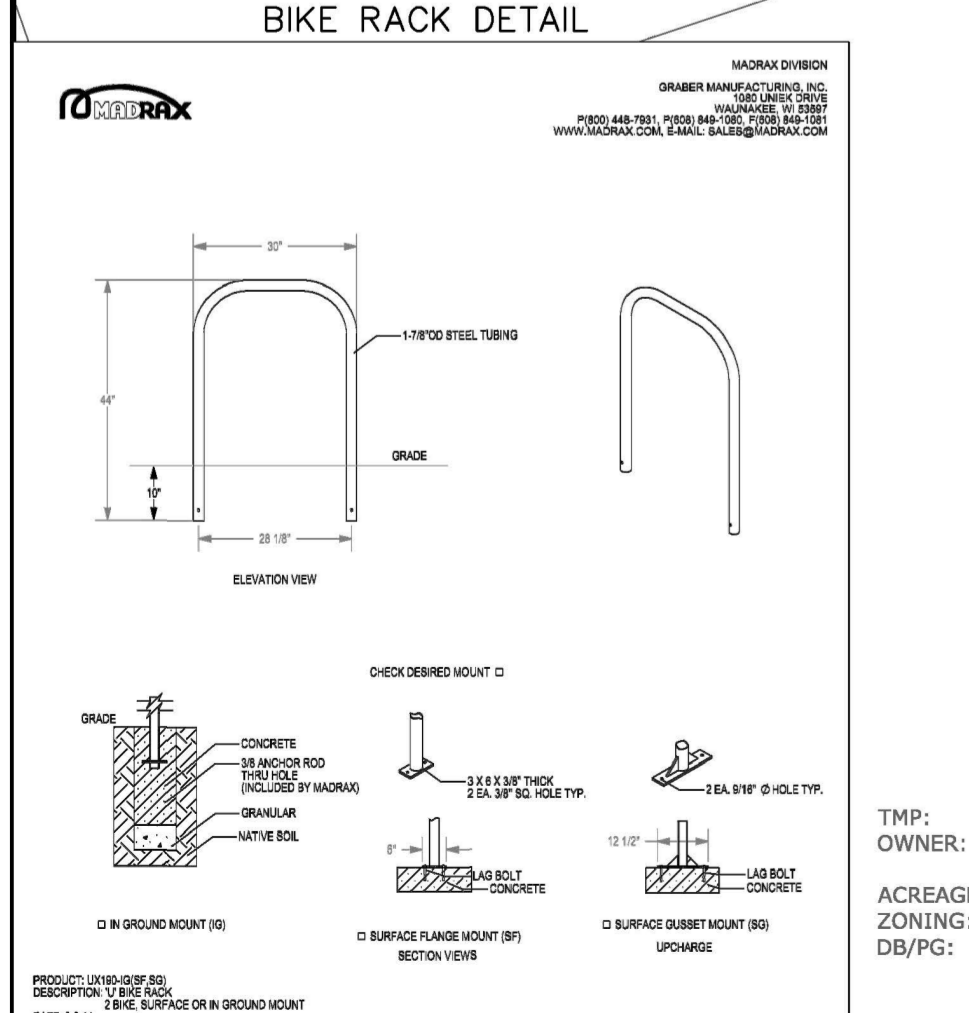
PROJECT SHEET TITLE

JOB NO. 182158  
SCALE 1"=20'  
SHEET NO. 5

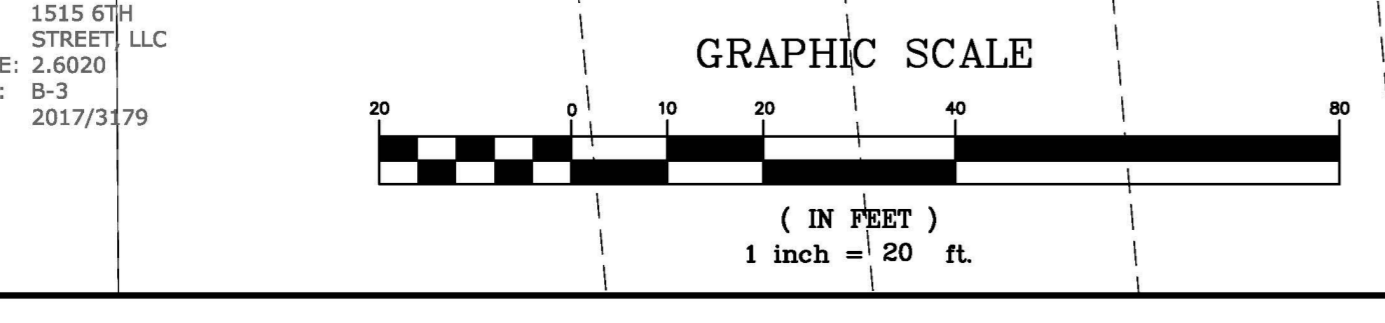


TMP: 260040200  
OWNER: SLAUGHTER, DAVIS & HARRIET  
ACREAGE: 0.1960  
ZONING: R-15  
DB/PG: 397/018

TMP: 260094000  
OWNER: WOODFOLD, IDA R  
ACREAGE: 0.2140  
ZONING: R-15  
DB/PG: WB49/424



TMP: 260093000  
OWNER: 1515 6TH STREET, LLC  
ACREAGE: 2.6020  
ZONING: B-3  
DB/PG: 2017/3179



**NOTES:**

- PRIOR TO BUILDING PERMIT APPROVAL, THE BUILDING PLANS MUST MEET THE REQUIREMENTS OF BOTH THE 2012 VA CONSTRUCTION CODE (VCC) 1007.1 & 2015 VCC 1009.1 BOTH REQUIRE TWO ACCESSIBLE MEANS OF EGRESS FOR EACH BUILDING.
- BUILDING FOUNDATIONS SHALL MEET THE REQUIREMENTS OF THE 2012 OR 2015 VA CONSTRUCTION CODE 1808.7.2 "FOUNDATION SETBACK FROM DESCENDING SLOPES".
- PER 502.6 OF THE 2010 ADA DESIGN STANDARDS ACCESSIBLE PARKING SPACE IDENTIFICATION SIGNS SHALL INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY COMPLYING WITH 703.2.1, AND SIGNS IDENTIFYING VAN PARKING SPACES SHALL CONTAIN THE DESIGNATION "VAN ACCESSIBLE".
- PER ADA 502.4 PARKING SPACES AND ACCESS AISLES SHALL COMPLY WITH 302. SLOPES NOT STEEPER THAN 2% SHALL BE PERMITTED.
- PER ADA 403.3 THE RUNNING SLOPE OF AN ACCESSIBLE ROUTE SHALL BE LESS THAN 5%.
- PER ADA 206.2.2 AT LEAST ONE ACCESSIBLE ROUTE SHALL CONNECT ACCESSIBLE BUILDINGS, FACILITIES, ELEMENTS AND SPACES ON THE SAME SITE.
- PER SECTION 34-897, THE PEDESTRIAN PATHWAY SHALL BE DESIGNED TO CONNECT THE EXISTING BUILDINGS ON THE NEIGHBORING PARCEL (PHASE 2), AS WELL AS THE EXISTING DIRT PATHWAY.

**NOTES:**

ALL SIDEWALKS WITHIN THE LIMITS OF THE APARTMENT COMPLEX SHALL BE PRIVATE SIDEWALKS AND SHALL BE PRIVATELY MAINTAINED.

**PARKING SPACES:**

- ALL PARKING SPACES SHALL BE 8.5'x18', EXCEPT AS NOTED.
- PARKING SPACES WITH THE "U" SYMBOL SHALL BE UNIVERSAL PARKING SPACES AND SHALL BE 9'x18'. THERE ARE 16 UNIVERSAL PARKING SPACES PROPOSED (18% OF THE PARKING SPACES).
- PARKING SPACES WITH THE "C" SYMBOL SHALL BE COMPACT PARKING SPACES WITH A MINIMUM DIMENSION OF 8'x16'. THERE ARE 10 COMPACT PARKING SPACES PROPOSED (11.8% OF THE PARKING SPACES). ALL COMPACT PARKING SPACES SHALL BE INDICATED WITH A SIGN.
- HANDICAP PARKING SPACES SHALL BE 8'x18'. THERE ARE (4) HANDICAP PARKING SPACES PROPOSED, AND (2) OF THE (4) SPACES SHALL BE VAN ACCESSIBLE PARKING SPACES. ALL HANDICAP PARKING SPACES SHALL BE INDICATED WITH A SIGN.

**PAVEMENT DESIGN:**

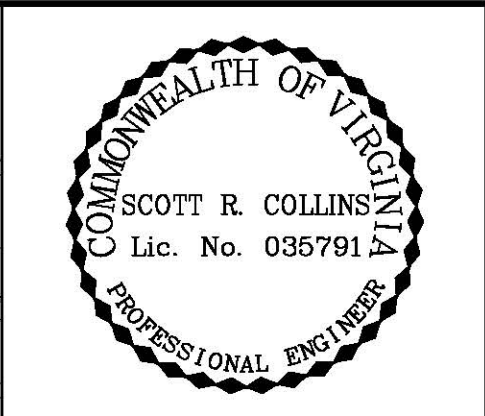
- ALL DRIVE AISLES WITHIN THE PHASE I DEVELOPMENT SHALL HAVE A 5" 21A SUB-BASE, A 3" 6M-25 BASE ASPHALT, AND A 2" SM-9.5 ASPHALT TOPCOAT.
- ALL PARKING SPACES WITHIN THE PHASE I DEVELOPMENT SHALL HAVE AN 8" 21A BASE, AND A 2" SM-9.5 ASPHALT TOPCOAT.

**SITE NOTES:**

- ALL SIDEWALKS AND WALKWAYS SHALL HAVE A MINIMUM CLEAR WIDTH OF 5'.
- ALL WALKWAY CROSSINGS SHALL MEET MINIMUM ADA ACCESSIBILITY STANDARDS AND SHALL HAVE A CROSS SLOPE OF 2% OR LESS.
- CONTRACTOR SHALL OBTAIN A TEMPORARY STREET CLOSURE PERMIT FOR CLOSURE OF SIDEWALKS, PARKING SPACES & ROADWAYS SUBJECT TO APPROVAL BY THE CITY TRAFFIC ENGINEER PRIOR TO CONSTRUCTION IN THESE EXISTING AREAS.
- ALL SIGNING & PAVEMENT MARKINGS SHALL BE INSTALLED CONSISTENT WITH MUTCD STANDARDS.
- ALL SIGNS IDENTIFYING ACCESSIBLE PARKING SPACES SHALL BE AT LEAST 60 INCHES ABOVE THE GROUND/SURFACE (FROM BOTTOM OF SIGN) AND INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY. ACCESSIBLE VAN PARKING SPACES SHALL CONTAIN THE DESIGNATION "VAN ACCESSIBLE".
- ACCESSIBLE PARKING SPACES SHALL BE LOCATED ON THE SHORTEST ACCESSIBLE ROUTE FROM PARKING TO AN ACCESSIBLE ENTRANCE.
- THE APARTMENT UNITS SHALL COMPLY WITH THE FAIR HOUSING ACT. PER THE FHA GUIDELINES - DESIGN GUIDELINES FOR ACCESSIBLE/ADAPTABLE DWELLINGS, WHEN THE UNITS HAVE ELEVATORS, ALL UNITS ACCESSIBLE BY AN ELEVATOR SHOULD BE ADAPTABLE FOR ACCESSIBILITY. EACH APARTMENT BUILDING SHALL HAVE AN ELEVATOR, AND EACH UNIT SHALL BE ADAPTABLE FOR ACCESSIBILITY.
- RAMP OVER 30" IN ELEVATION CHANGE REQUIRE HANDRAILS.
- NOTE, ANY SIDEWALK DAMAGED DURING CONSTRUCTION SHALL BE REPLACED WITH THE CITY STANDARD SIDEWALK (5" CONCRETE SIDEWALK). SEE DETAIL, SHEET 7.

NOTE: MAINTENANCE OF THE RECREATION AREA WILL BE THE RESPONSIBILITY OF THE APARTMENT COMPLEX





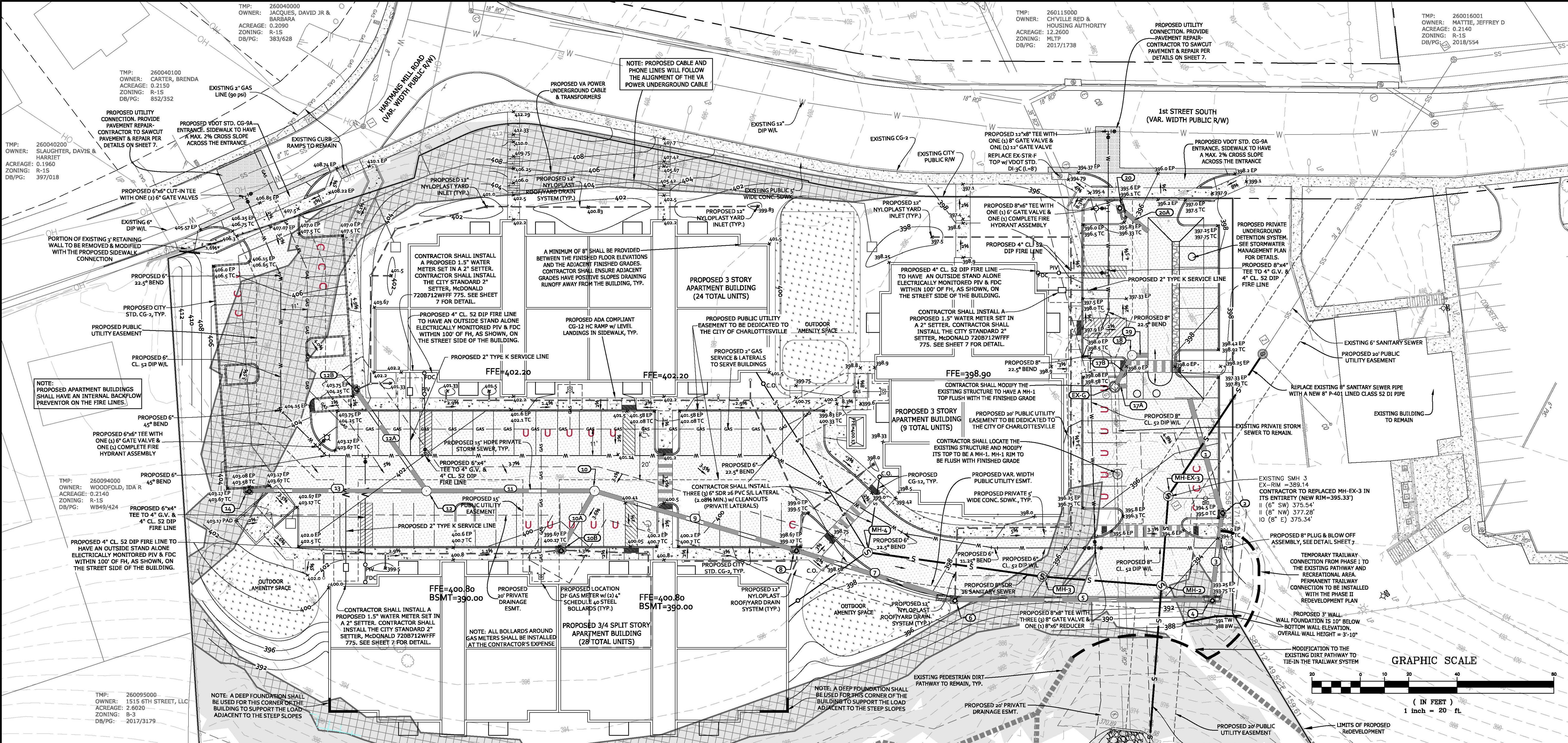
**REVISIONS**

REVISION DESCRIPTION	DATE
INITIAL SUBMITTAL	1/25/19
REVISED PLANS PER COMMENTS DATED 2/1/19	2/8/19
REVISED PLANS PER COMMENTS DATED 2/21/19	2/25/19

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

**1st STREET SOUTH APARTMENTS - PHASE I FINAL SITE PLAN**  
 UTILITY & GRADING PLAN

PROJECT: 182158  
 SCALE: 1"=20'  
 SHEET NO. 6



**GENERAL GRADING & DRAINAGE NOTES:**

- BUILDING AND WALL FOUNDATIONS SHALL NOT BE CONSTRUCTED WITHIN 10' OF ANY PUBLIC STORM, SANITARY, WATER OR GAS MAIN, THIS INCLUDES ALL STRUCTURES THAT ARE AN INTEGRAL PART OF THE UTILITY SYSTEM.
- MINIMUM DEPTH OF COVER FOR STORM SEWER SHALL BE 3'.
- A MINIMUM OF 18" VERTICAL & 10" HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN WATER LINES & SANITARY SEWER. A MINIMUM OF 12" VERTICAL AND 5' HORIZONTAL SHALL BE MAINTAINED BETWEEN PARALLEL SANITARY AND STORM SEWER.
- ALL PUBLIC STORM SEWER SHALL BE RCP OR HDPE & SHALL HAVE A MINIMUM OF 15" DIAMETER WITH A MINIMUM SLOPE OF 0.50% WITHIN THE R/W.
- ALL CONSTRUCTION CROSSING POINTS SHALL MEET ADA ACCESSIBLE STANDARDS. AND IN ACCORDANCE WITH SECTION 403.3, THE CROSS SLOPES OF THE WALKWAYS SHALL NOT BE STEEPER THAN 2% . ADDITIONALLY, ANY CHANGE IN LEVEL GREATER THAN 1/2" HIGH SHALL BE RAMPED AND SHALL COMPLY WITH SECTIONS 405 OR 406 PER SECTION 303.4.
- CONTRACTOR SHALL INSTALL, AND MODIFY AS NECESSARY THE EXISTING RETAINING WALLS BEING UTILIZED, AND ENSURE HANDRAILS AND GUARDRAILS ARE LOCATED ON ALL RETAINING WALLS IN COMPLIANCE WITH ALL CURRENT CITY & STATE REQUIREMENTS. 42" GUARDRAILS ARE REQUIRED IN ACCORDANCE WITH 2012 VA CONSTRUCTION CODE 1013 AT THE TOP OF ANY RETAINING WALL WITH A DIFFERENCE IN GRADE EXCEEDING 30"
- FINAL DESIGN OF BUILDING FOUNDATIONS, WALLS, FACADES & THE CORRESPONDING WATERPROOFING SHALL BE COMPLETED BY THE ARCHITECT TO ALLOW FOR THE PROPOSED GRADE CHANGES SHOWN.
- DURING CONSTRUCTION THE ACTUAL WALL HEIGHTS MAY VARY FROM THE DESIGN & THE PROPOSED WALL ELEVATIONS ARE AN APPROXIMATION. THE CONTRACTOR SHALL CONSULT A PROFESSIONAL LICENSED STRUCTURAL ENGINEER FOR THE CONSTRUCTION OF THE RETAINING WALLS. DESIGNS ARE NOT FURNISHED BY COLLINS ENGINEERING AND ALL FINAL DESIGNS OF THE RETAINING WALLS SHALL BE PROVIDED TO COLLINS ENGINEERING PRIOR TO CONSTRUCTION FOR VERIFICATION. WALL DESIGN SHALL INCORPORATE ALL SITE PLANIMETRICS, INCLUDING BUT NOT LIMITED TO ANY VEHICULAR GUARDRAILS, PEDESTRIAN HANDRAILS, PARKING SPACE OVERHANGS AND LANDSCAPING.
- CONTRACTOR SHALL GRADE THE AREAS SURROUNDING THE BUILDING SUCH THAT RUNOFF DRAINS AWAY FROM IT, ENSURING POSITIVE DRAINAGE AT ALL TIMES. PATIOS, SIDEWALKS AND PAVEMENT SHALL BE SLOPED AWAY FROM THE BUILDING WITH A MAXIMUM 1/4" PER 1' CROSS SLOPE WHERE LOCATED WITHIN THE ACCESSIBLE ROUTES AND PERVIOUS SURFACING SHALL BE SLOPED A MINIMUM OF 1/4" PER 1' FOR THE INITIAL 10' WHERE LOCATED WITHIN THE PROPERTY LIMITS.
- CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE AT ALL TIMES WITHIN THE PARKING LOT. THE SITE SHALL HAVE POSITIVE DRAINAGE THROUGHOUT AND SHALL DIRECT RUNOFF TO PROPOSED OR EXISTING DRAINAGE STRUCTURES.
- CONTRACTOR SHALL VERIFY ALL TIE-IN CONNECTIONS FOR THE PARKING LOTS TO THE EXISTING ROADS. CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE ENGINEER OF ANY DISCREPANCIES BETWEEN THE EXISTING ROADS AND/OR CURB AND GUTTER AND THE PROPOSED ROADS, CURB & GUTTER. CONTRACTOR SHALL CONTACT ENGINEER TO INSPECT CURB, ROADWAY & PAVEMENT CONNECTIONS TO EXISTING ROADS, PRIOR TO ANY CONCRETE OR PAVEMENT BEING PLACED.
- CONTRACTOR SHALL PROVIDE ENGINEER SURVEY WORKSHEETS OF ALL PARKING LOTS, SANITARY SEWER CLEANOUTS, WATER METERS AND DRAINAGE STRUCTURES PRIOR TO INSTALLATION OF CURBING, DRAINAGE, OR UTILITIES TO COLLINS ENGINEERING FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. COLLINS ENGINEERING SHALL VERIFY ALL SURVEY SHEETS TO ENSURE POSITIVE DRAINAGE AND PROPER ELEVATIONS FOR CONSTRUCTION.
- THE PROPOSED PARKING LOTS AND ITS STORM SEWER ARE PRIVATE.
- ALL STORM DRAIN LINES LOCATED WITHIN PUBLIC CITY RIGHT OF WAY SHALL BE CONSTRUCTED WITH RCP OR HDPE AND HAVE A MINIMUM DIAMETER OF 15" WITH A MINIMUM SLOPE OF 0.50%.
- ALL STORM DRAIN LINES, BOTH PUBLIC AND PRIVATE, SHALL BE CLASS III RCP OR HDPE WITH MINIMUM STONE BED REQUIREMENTS.
- CONTRACTOR SHALL GRADE THE SITE TO AVOID STANDING WATER. CONTRACTOR TO PROVIDE A SMOOTHLY GRADED TRANSITION FROM DISTURBED AREAS TO UNDISTURBED AREAS. FINISH GRADE SHALL HAVE A CLEAN TOPSOIL. CONTRACTOR SHALL SEED AND STRAW, AND/OR LANDSCAPE ALL BARE AND DISTURBED AREAS. CONTRACTOR TO PROVIDE GROUND COVER MATERIALS OR SOIL FOR SLOPES STEEPER THAN 20%. FOUNDATION PLANS SHALL BE PLANTED IN THE FRONT OF THE BUILDING. OUTSIDE THE LIMITS OF THE SIGHT DISTANCE. CONTRACTOR TO CLEAN THE SITE AND DISPOSE OF ALL CONSTRUCTION DEBRIS. GRASS SHALL BE ESTABLISHED PRIOR TO PROJECT CLOSEOUT.
- CONTRACTOR TO REMOVE ALL DEAD BUSHES, TREES, TREE-STUMPS, AND THEIR ABOVE-GROUND ROOTS AND REMOVE ALL PORTIONS OF TREE BRANCHES THAT OVERHANG ROOFS AND ALL BRANCHES THAT COME WITHIN 10 FEET OF ROOFS.
- CONTRACTOR SHALL WORK DIRECTLY WITH THE GEOTECHNICAL ENGINEER AND THE STRUCTURAL ENGINEER AND SHALL ENSURE ALL OF THEIR DESIGN REQUIREMENTS ARE MET.

**GENERAL UTILITY NOTES:**

- THE MISS UTILITY DESIGN TICKET NUMBER FOR THIS PROJECT WAS PREVIOUSLY PROCESSED. THE TICKET NUMBER IS A83400868.
- BUILDING AND WALL FOUNDATIONS SHALL NOT BE CONSTRUCTED WITHIN 10' OF ANY PUBLIC STORM, SANITARY, WATER OR GAS MAIN, THIS INCLUDES ALL STRUCTURES THAT ARE AN INTEGRAL PART OF THE UTILITY SYSTEM.
- A MINIMUM OF 18" VERTICAL & 10" HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN WATER LINES & SANITARY SEWER. A MINIMUM OF 12" VERTICAL AND 5' HORIZONTAL SHALL BE MAINTAINED BETWEEN PARALLEL SANITARY AND STORM SEWER.
- MINIMUM DEPTH OF COVER FOR WATER LINES SHALL BE 3'.
- MINIMUM DEPTH OF COVER FOR SANITARY SEWER SHALL BE 2'.
- AT ALL UTILITY CROSSINGS A MINIMUM VERTICAL SEPARATION OF 12" SHALL BE MAINTAINED. A MINIMUM VERTICAL SEPARATION OF 18" IS REQUIRED BETWEEN THE BOTTOM OF THE WATER LINE AND THE TOP OF THE SANITARY SEWER LINE.
- CONTRACTOR SHALL CONTACT IRENE PETERSON OF CHARLOTTEVILLE GAS ONCE CONSTRUCTION HAS BEGUN (434-970-3822.)
- CONTRACTOR SHALL VERIFY ALL UTILITY TIE-IN CONNECTIONS TO EXISTING OR UNDER CONSTRUCTION INFRASTRUCTURE. CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE ENGINEER OF ANY DISCREPANCIES BETWEEN THE EXISTING UTILITIES AND THE PROPOSED UTILITIES.
- GATE VALVES SHALL NOT BE CONSTRUCTED WITHIN THE CURBS, GUTTER PANS OR PAVERS. SIGNS AND MARKINGS TO DELINEATE FIRE LANES, AS DESIGNATED BY THE FIRE OFFICIAL, SHALL BE PROVIDED AND INSTALLED BY THE OWNER OR HIS/HER AGENT OF THE PROPERTY INVOLVED.
- ALL WATERLINE MATERIALS SHALL BE CONSTRUCTED OF CLASS 52 DIP.
- ALL PAVEMENT SHALL BE CAPABLE OF SUPPORTING FIRE APPARATUS WEIGHING 85,000 LBS.
- PER THE VIRGINIA DEPARTMENT OF HEALTH WATERWORKS REGULATIONS (PART II, ARTICLE 3, SECTION 12 VAC 5-590 THRU 5-599), 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.
- 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.
- PLEASE CONTACT THE REGULATORY COMPLIANCE ADMINISTRATOR AT 970-3032 WITH ANY QUESTIONS REGARDING THE GREASE TRAP OR BACKFLOW PREVENTION DEVICES.
- ALL CURB & GUTTER MUST BE INSTALLED AND FINAL GRADE MUST BE WITHIN 6" PRIOR TO THE INSTALLATION OF THE GAS MAIN.

**FIRE DEPARTMENT NOTES:**

- ALL FIRE HYDRANTS, FIRE PUMP TEST HEADER, FIRE DEPARTMENT CONNECTIONS OR FIRE SUPPRESSION SYSTEM CONTROL VALVES SHALL REMAIN CLEAR AND UNOBSERVED BY LANDSCAPING, PARKING OR OTHER OBJECTS. A 3' CLEAR STRIPED AREA HAS BEEN PROVIDED IN FRONT OF EACH FDC METER FOR FIRE ACCESS.
- THE MINIMUM REQUIRED FIRE FLOW FOR ALL BUILDINGS IS 1,500 GALLONS PER MINUTE. THE OVERALL FIRE FLOW FOR THE DEVELOPMENT IS IN EXCESS OF 2,200 GALLONS PER MINUTE.
- SMOKING TO BE ALLOWED IN ONLY DESIGNATED SPACES WITH PROPER RECEPTACLES. "NO SMOKING" SIGNS SHALL BE POSTED AT EACH BUILDING SITE AND WITHIN EACH BUILDING DURING CONSTRUCTION. SPECIFICALLY, SMOKING WILL ONLY BE ALLOWED OUTSIDE THE CONSTRUCTION SITE FENCING.
- FIRE LANES SHALL BE A MINIMUM OF 20 FEET IN WIDTH. SIGNS AND MARKINGS TO DELINEATE FIRE LANES AS DESIGNATED BY THE FIRE OFFICIAL SHALL BE PROVIDED AND INSTALLED BY THE OWNER OR HIS/HER AGENT OF THE PROPERTY. FIRE APPARATUS ROADS 20' TO 26' IN WIDTH SHALL BE POSTED OR MARKED ON BOTH SIDES "NO PARKING-FIRE LANE".
- THE BUILDING STREET NUMBER SHALL BE PLAINLY VISIBLE FROM THE STREET FOR EMERGENCY RESPONDERS.

**GAS DEPARTMENT NOTES:**

- THE LOCATION OF THE GAS SERVICES SHALL BE IN ACCORDANCE WITH THE CITY OF CHARLOTTEVILLE GAS REQUIREMENTS. CONTRACTOR SHALL COORDINATE WITH THE GAS COMPANY ON THE FINAL LOCATION OF THE GAS SERVICE METERS.

TMP: 26004000  
 OWNER: SLAUGHTER, DAVID H  
 HARRIET  
 ACREAGE: 0.1960  
 ZONING: R-15  
 DB/PG: 397/018

TMP: 260094000  
 OWNER: WOODFOLD, TDA R  
 ACREAGE: 0.2140  
 ZONING: R-15  
 DB/PG: WB49/424

TMP: 260095000  
 OWNER: 1515 6TH STREET, LLC  
 ACREAGE: 2.6020  
 ZONING: B-3  
 DB/PG: 2017/3179

TMP: 26004000  
 OWNER: JACQUES, DAVID JR &  
 BARBARA  
 ACREAGE: 0.2090  
 ZONING: R-15  
 DB/PG: 383/628

TMP: 260115000  
 OWNER: CHVILLE RED &  
 HOUSING AUTHORITY  
 ACREAGE: 12.2600  
 ZONING: MLTP  
 DB/PG: 2017/1738

TMP: 260016001  
 OWNER: MATTIE, JEFFREY D  
 ACREAGE: 0.2140  
 ZONING: R-15  
 DB/PG: 2018/554

NOTE: PROPOSED APARTMENT BUILDINGS SHALL HAVE AN INTERNAL BACKFLOW PREVENTOR ON THE FIRE LINES.

NOTE: A DEEP FOUNDATION SHALL BE USED FOR THIS CORNER OF THE BUILDING TO SUPPORT THE LOAD ADJACENT TO THE STEEP SLOPES

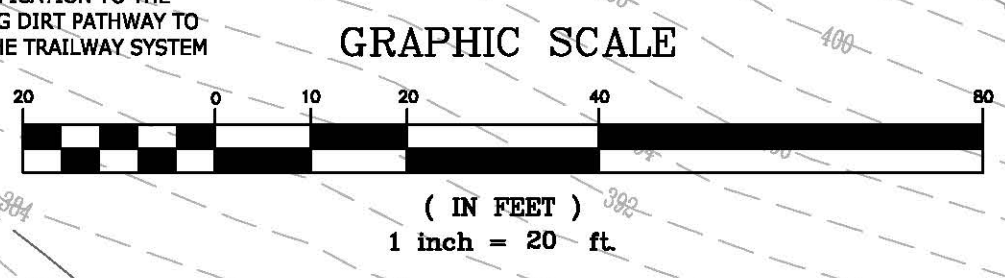
NOTE: PROPOSED CABLE AND PHONE LINES WILL FOLLOW THE ALIGNMENT OF THE VA POWER UNDERGROUND CABLE

NOTE: A DEEP FOUNDATION SHALL BE USED FOR THIS CORNER OF THE BUILDING TO SUPPORT THE LOAD ADJACENT TO THE STEEP SLOPES

PROPOSED UTILITY CONNECTION. PROVIDE PAVEMENT REPAIR. CONTRACTOR TO SAWCUT PAVEMENT & REPAIR PER DETAILS ON SHEET 7.

PROPOSED VDOT STD. CG-9A ENTRANCE. SIDEWALK TO HAVE A MAX. 2% CROSS SLOPE ACROSS THE ENTRANCE

REPLACE EXISTING 8" SANITARY SEWER PIPE WITH A NEW 8" P-401 LINED CLASS 52 DI PIPE







REVISIONS

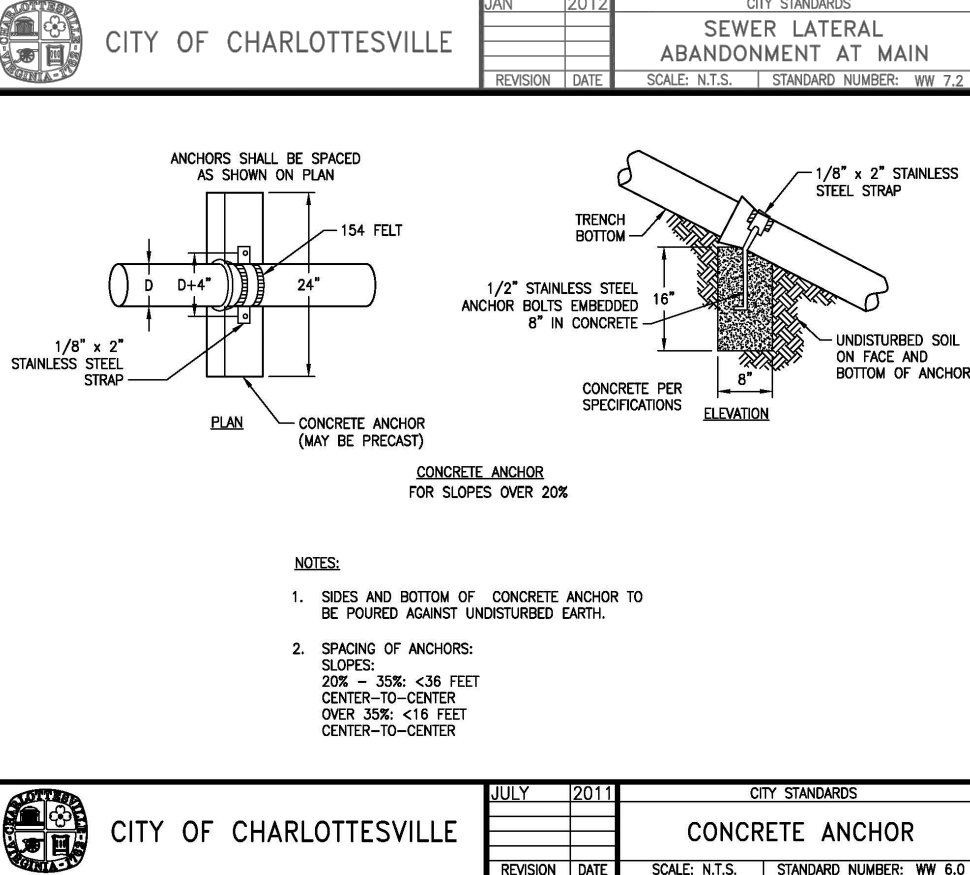
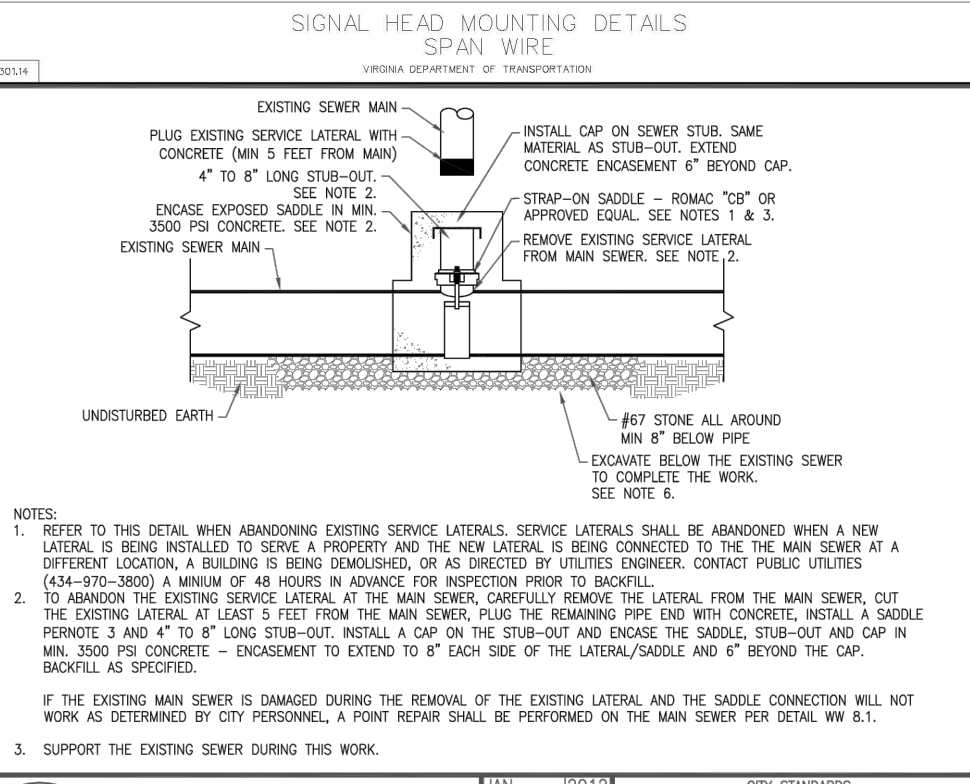
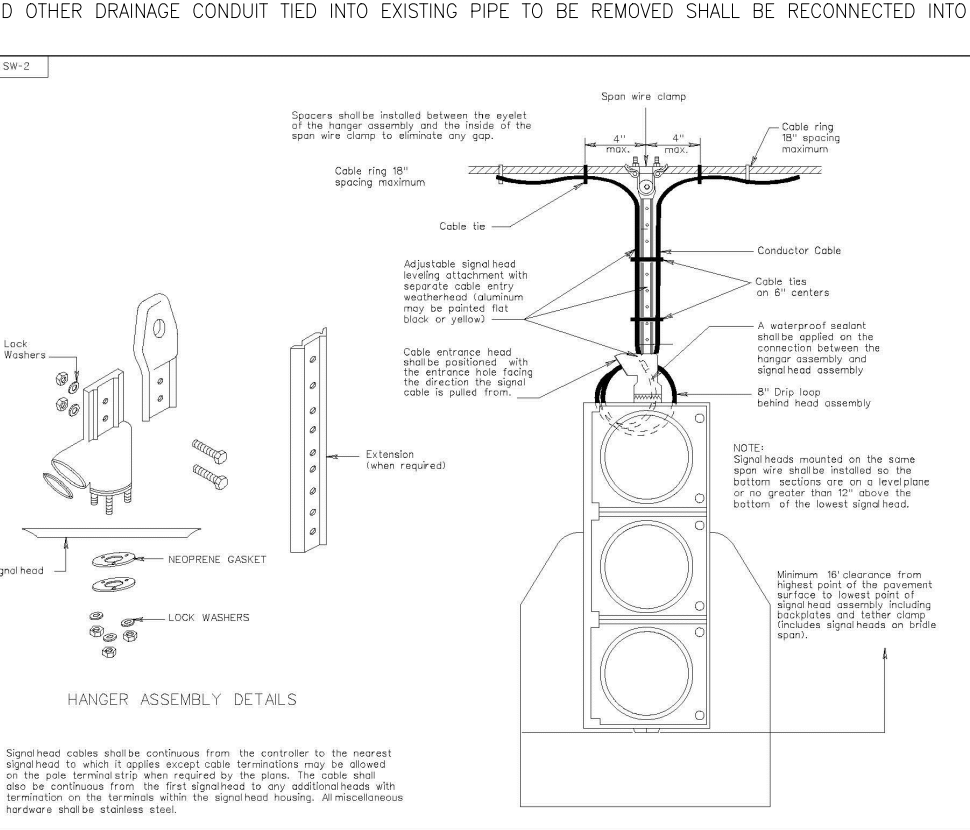
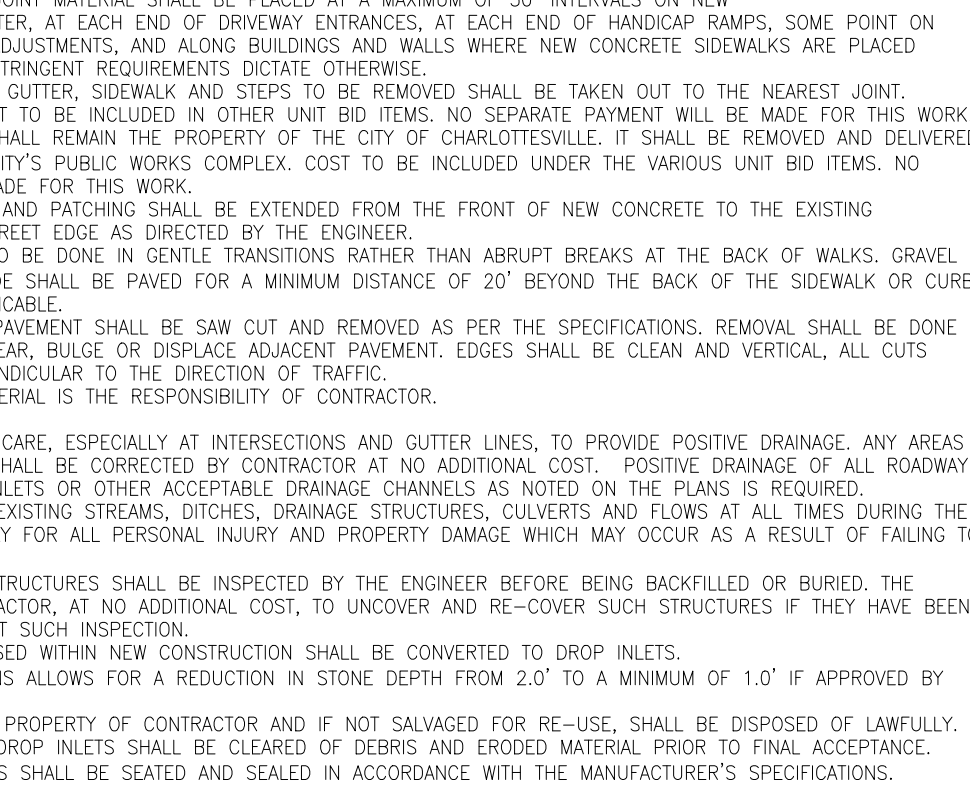
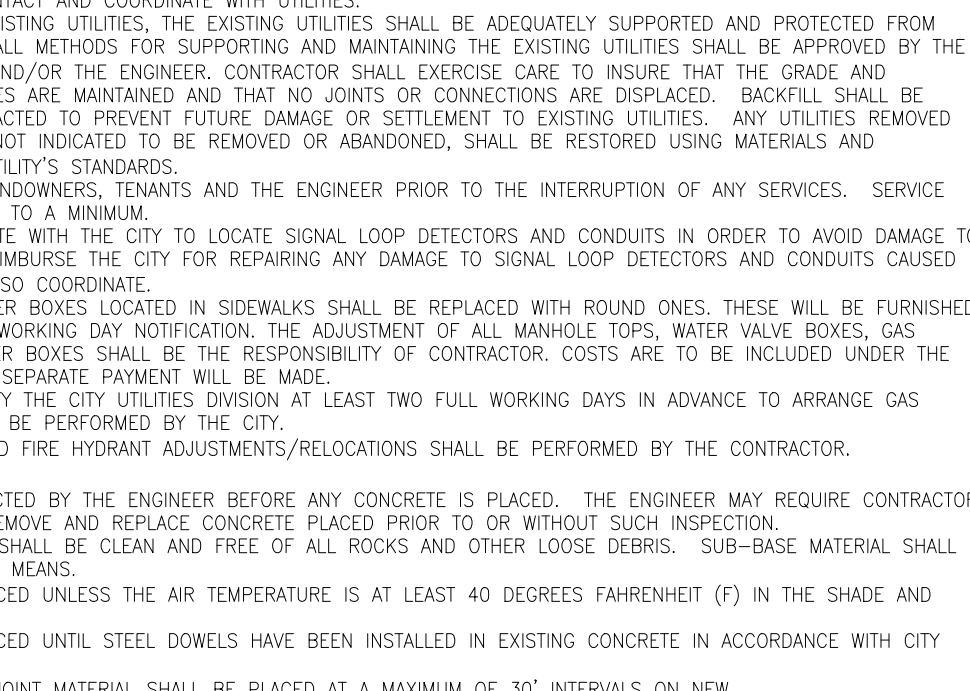
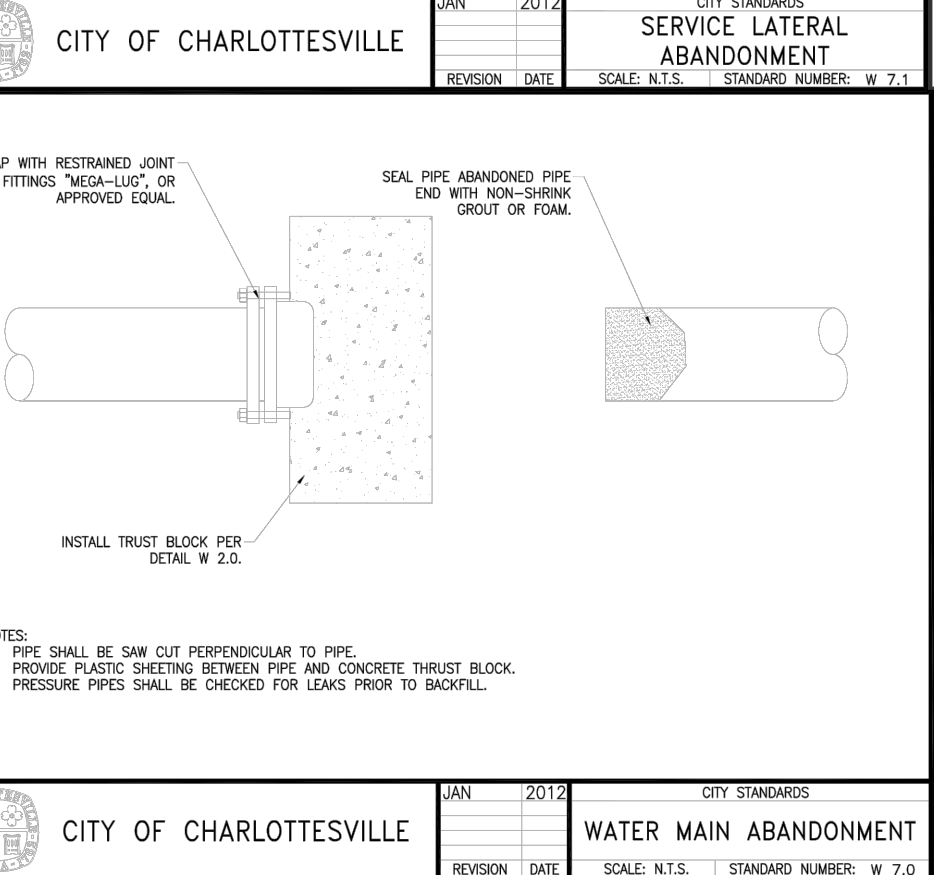
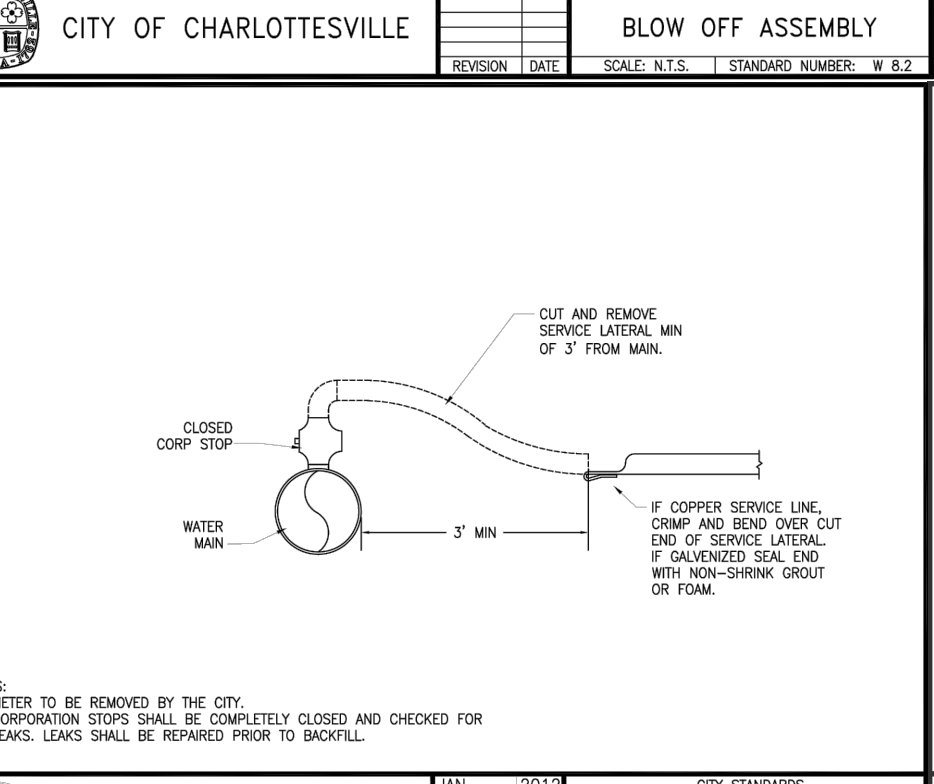
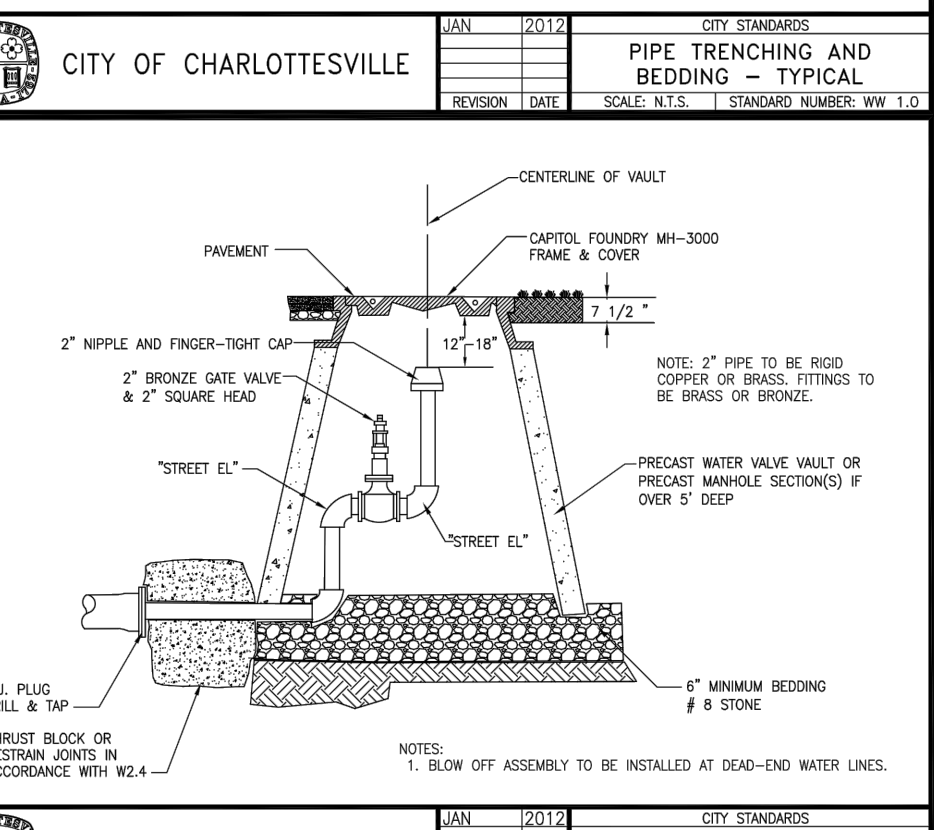
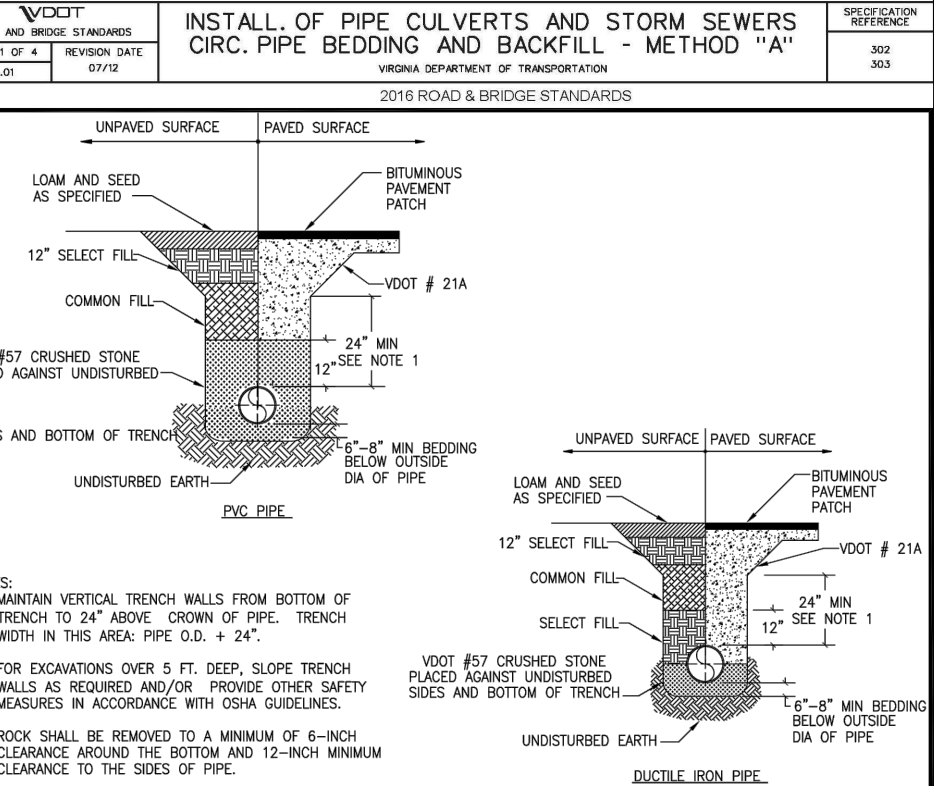
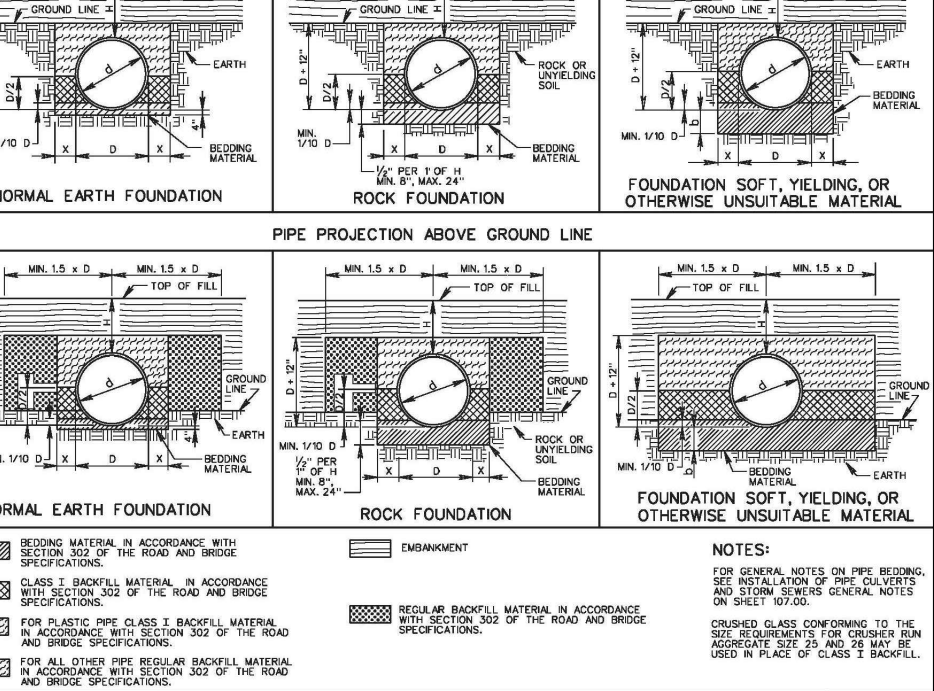
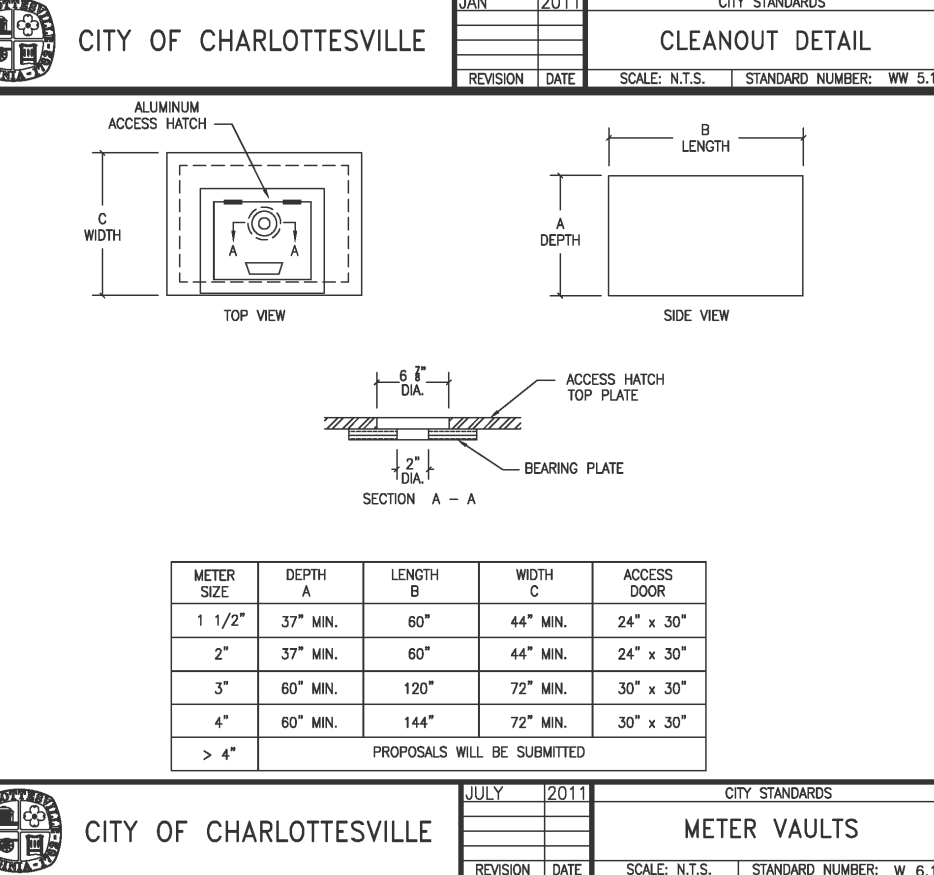
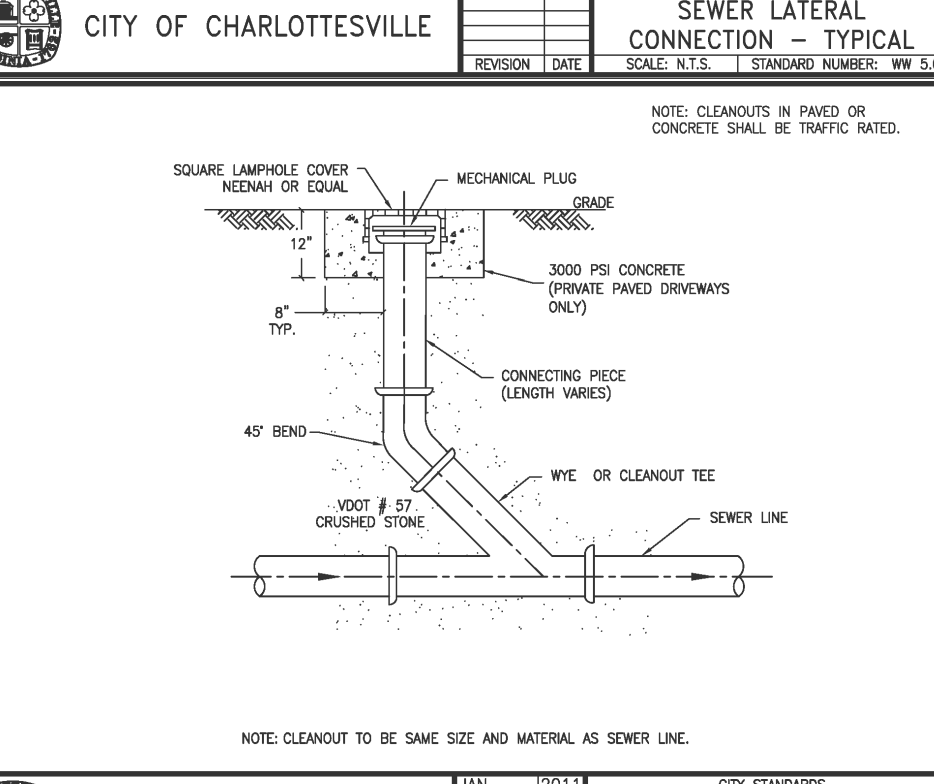
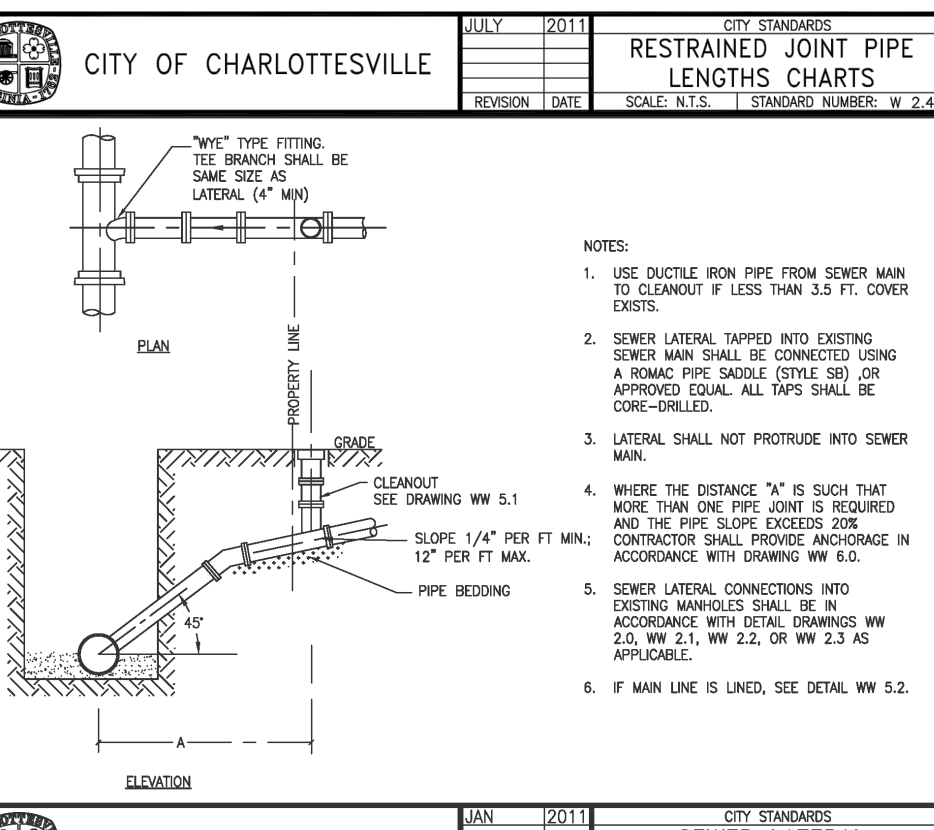
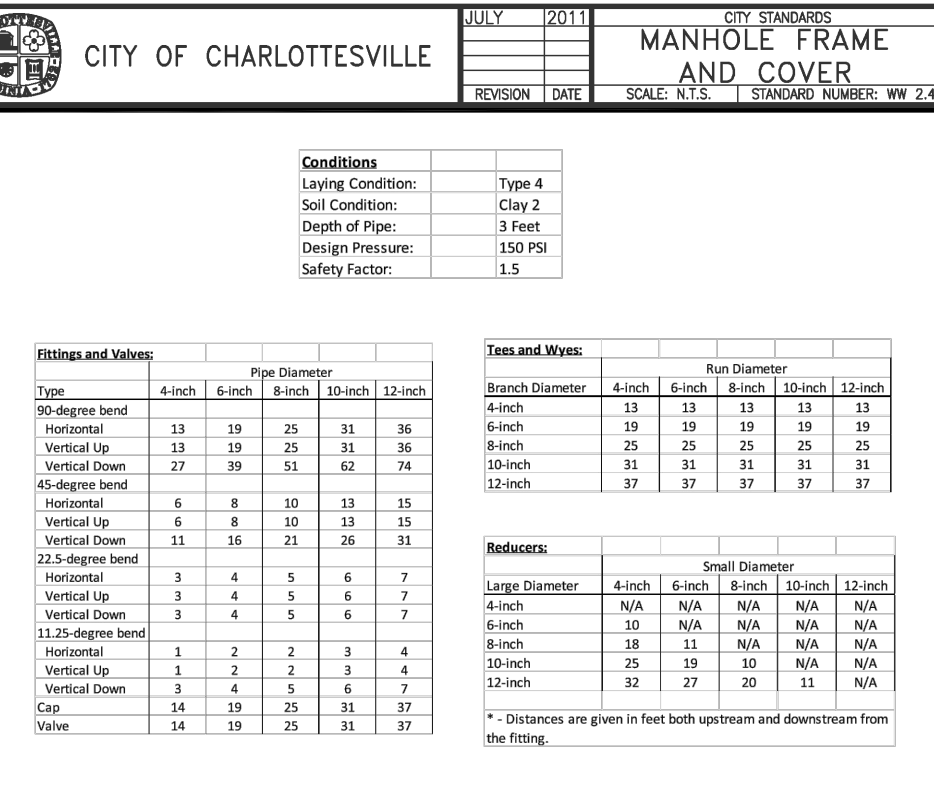
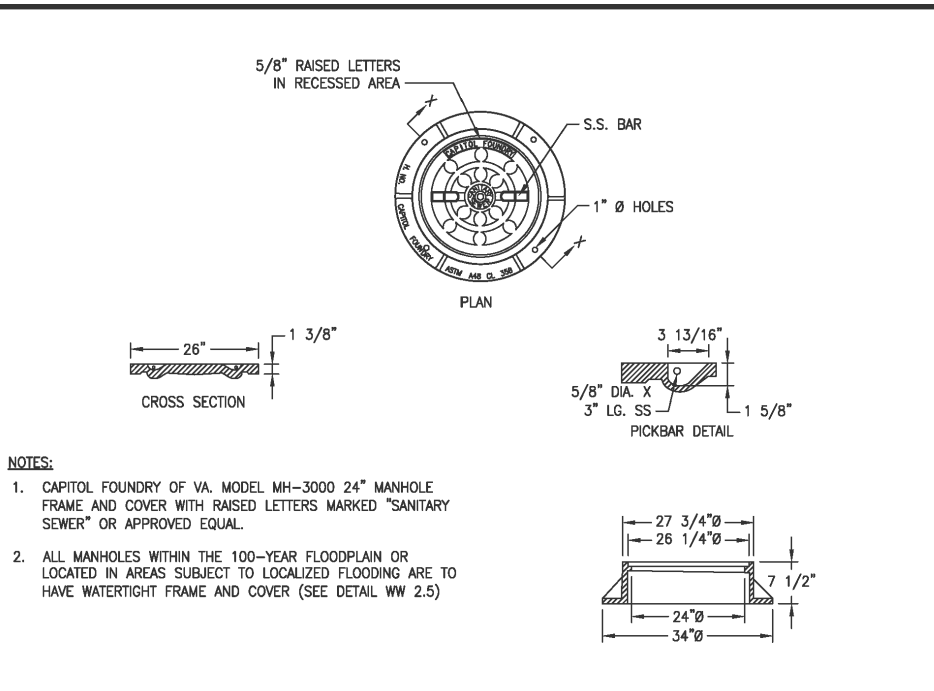
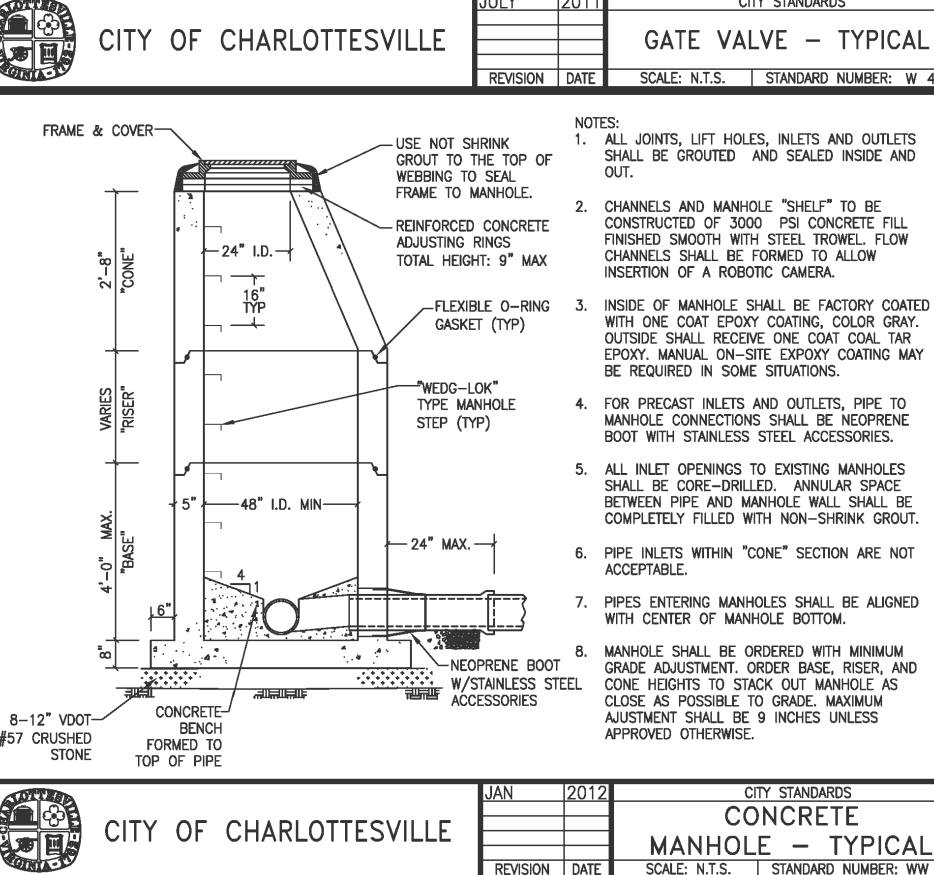
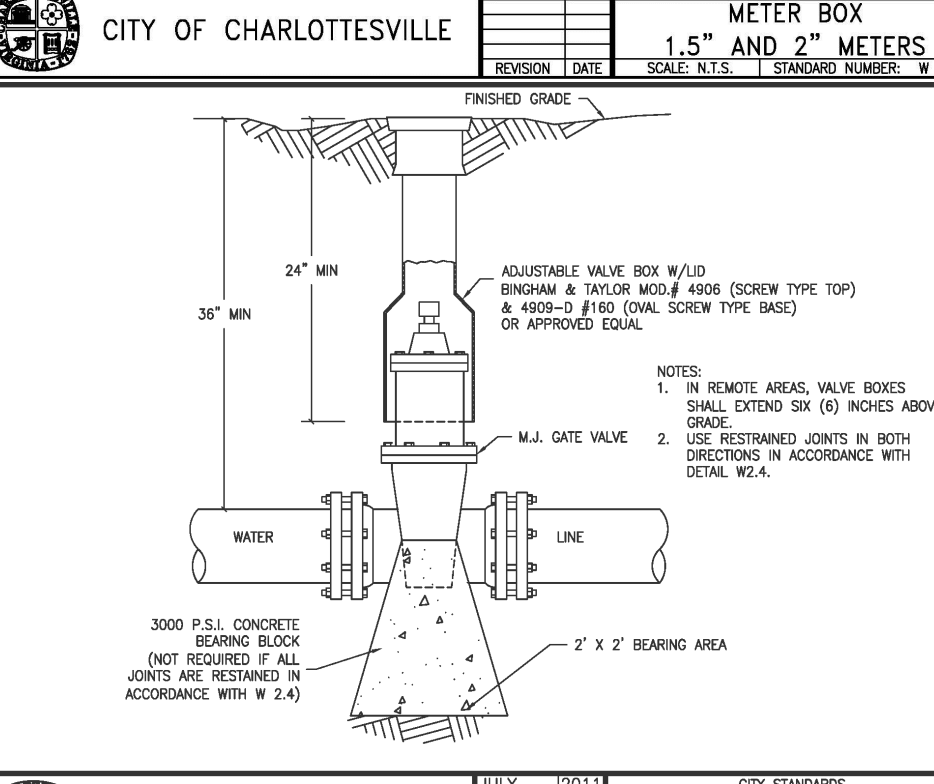
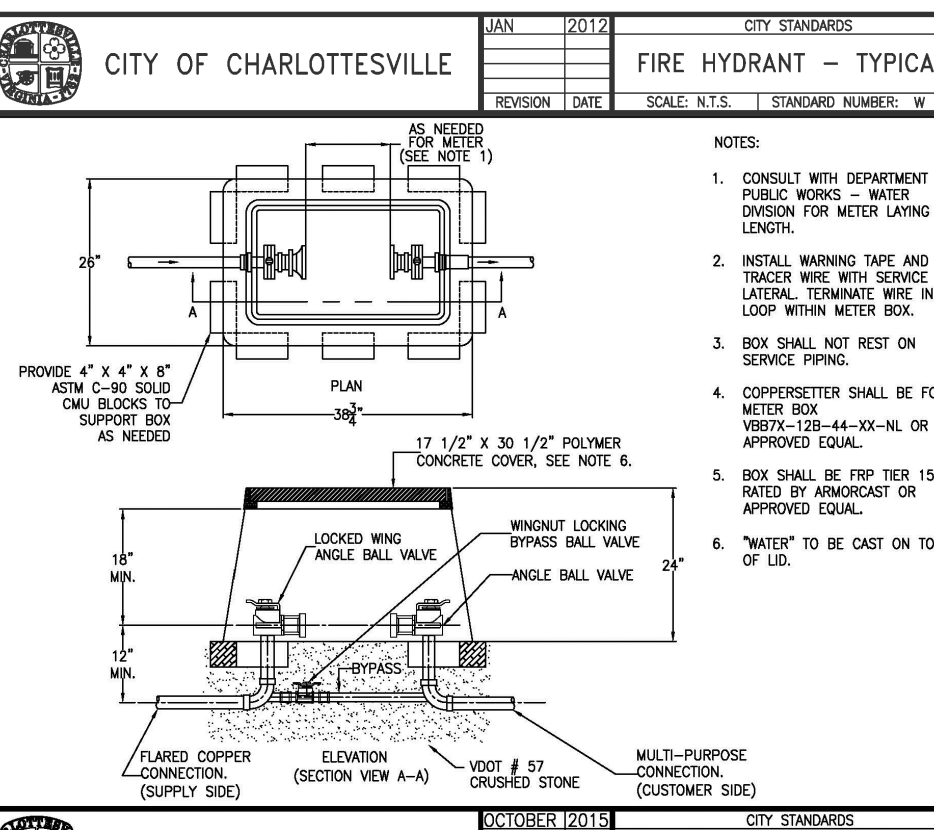
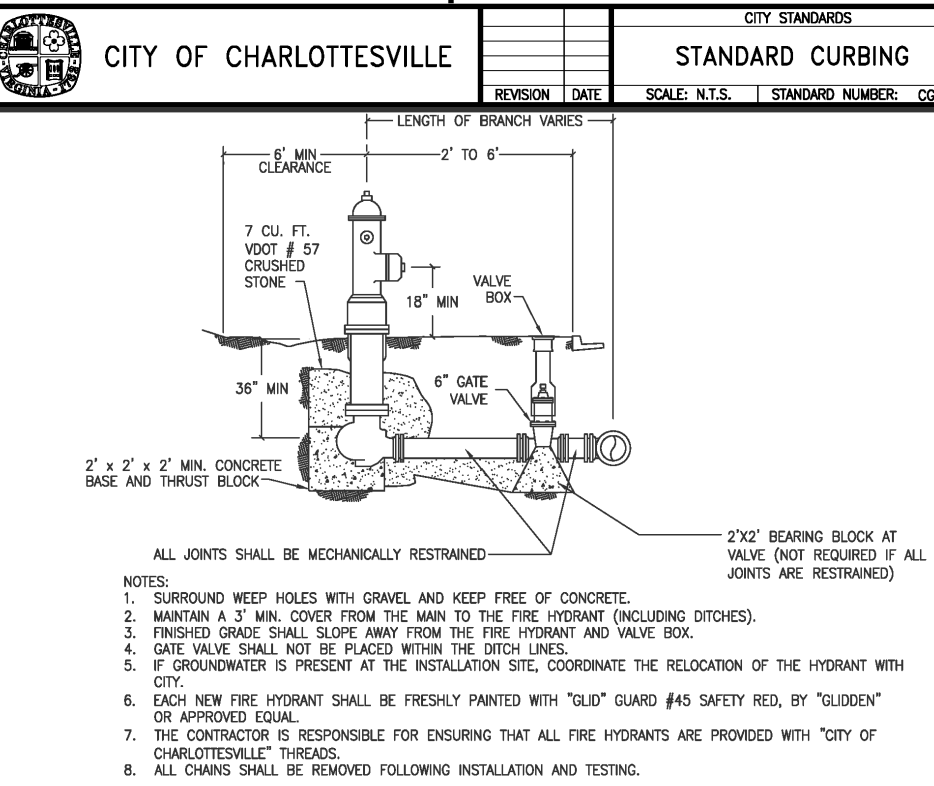
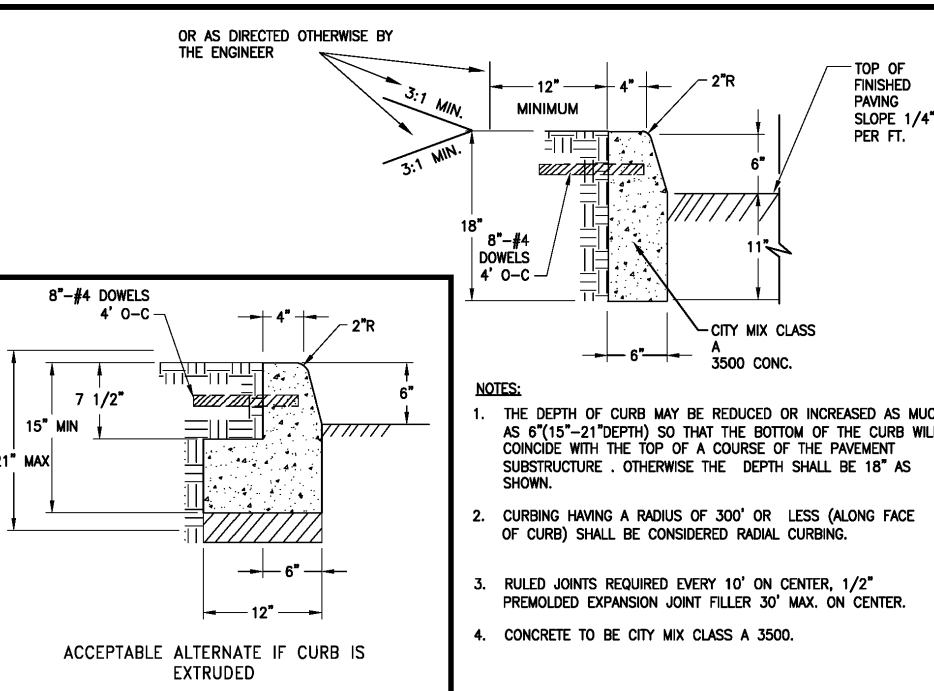
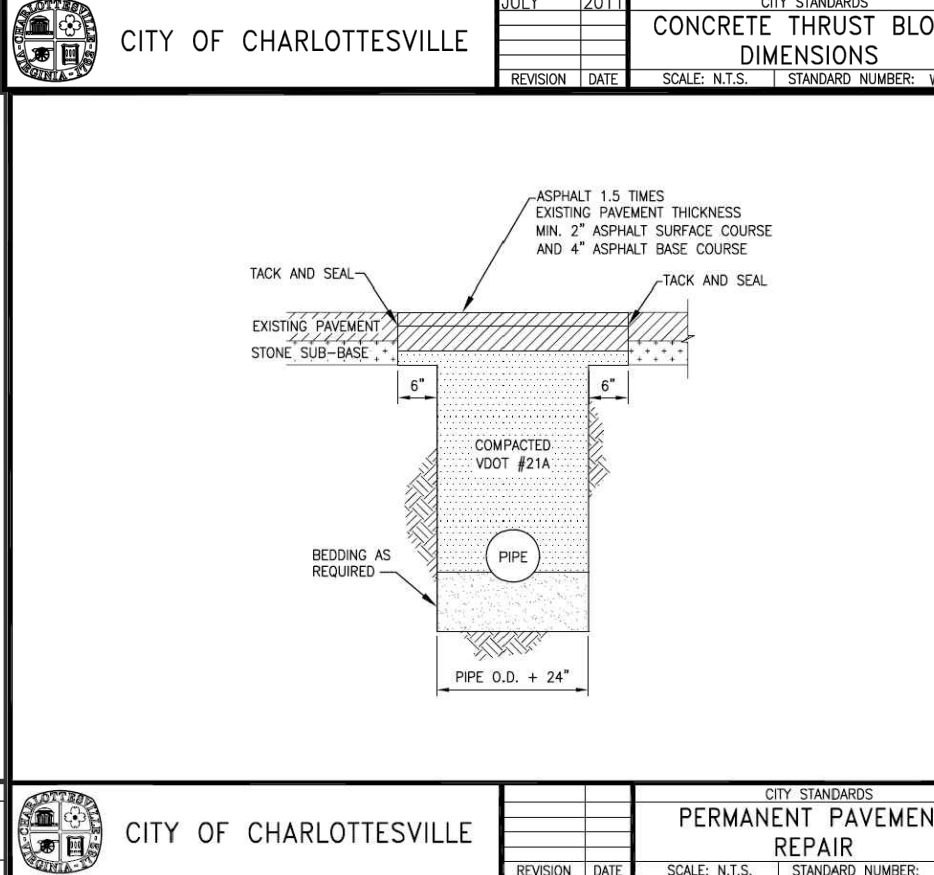
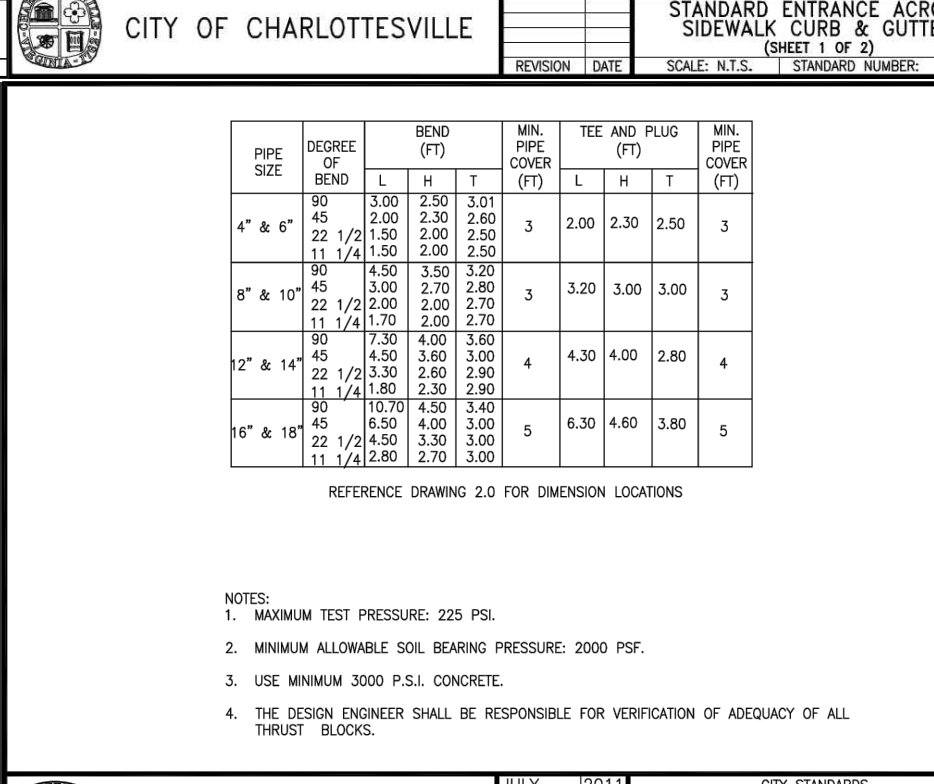
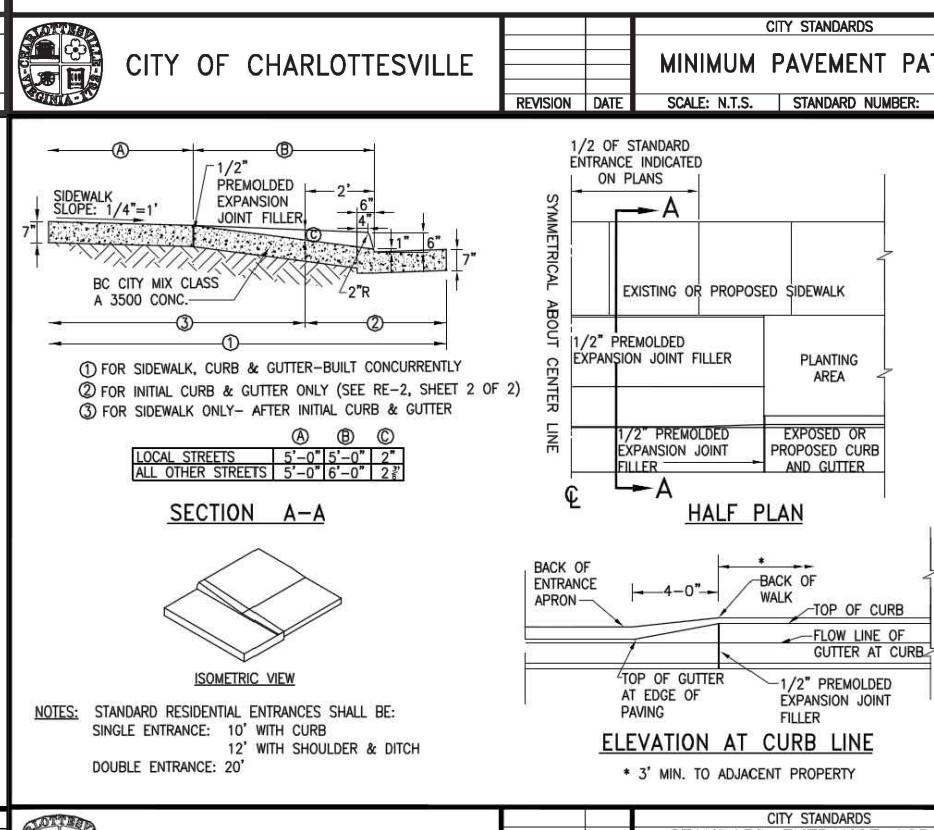
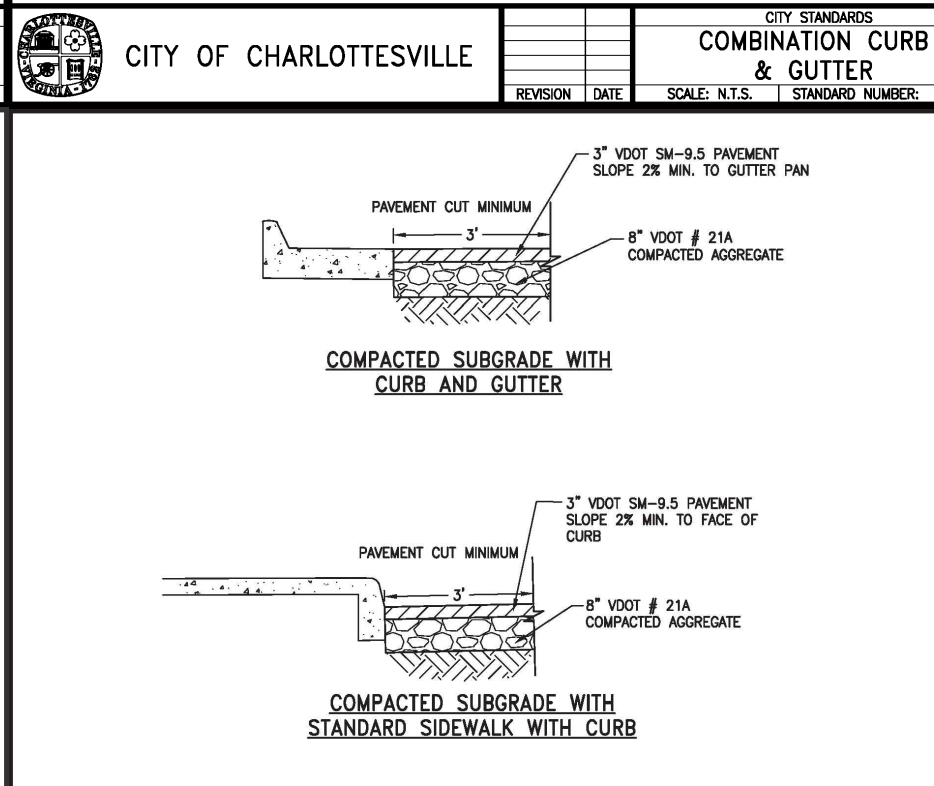
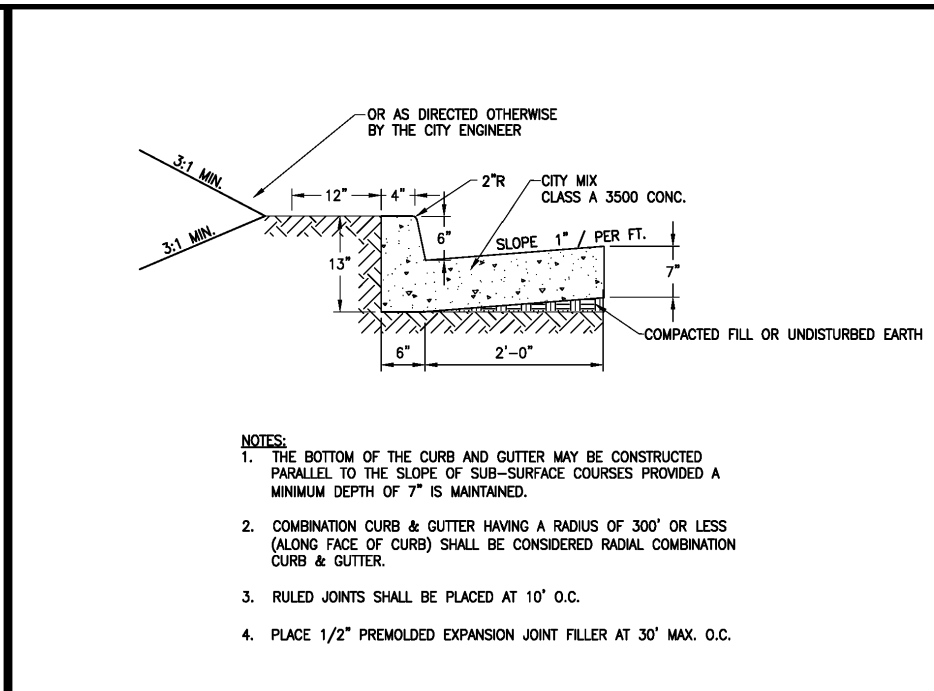
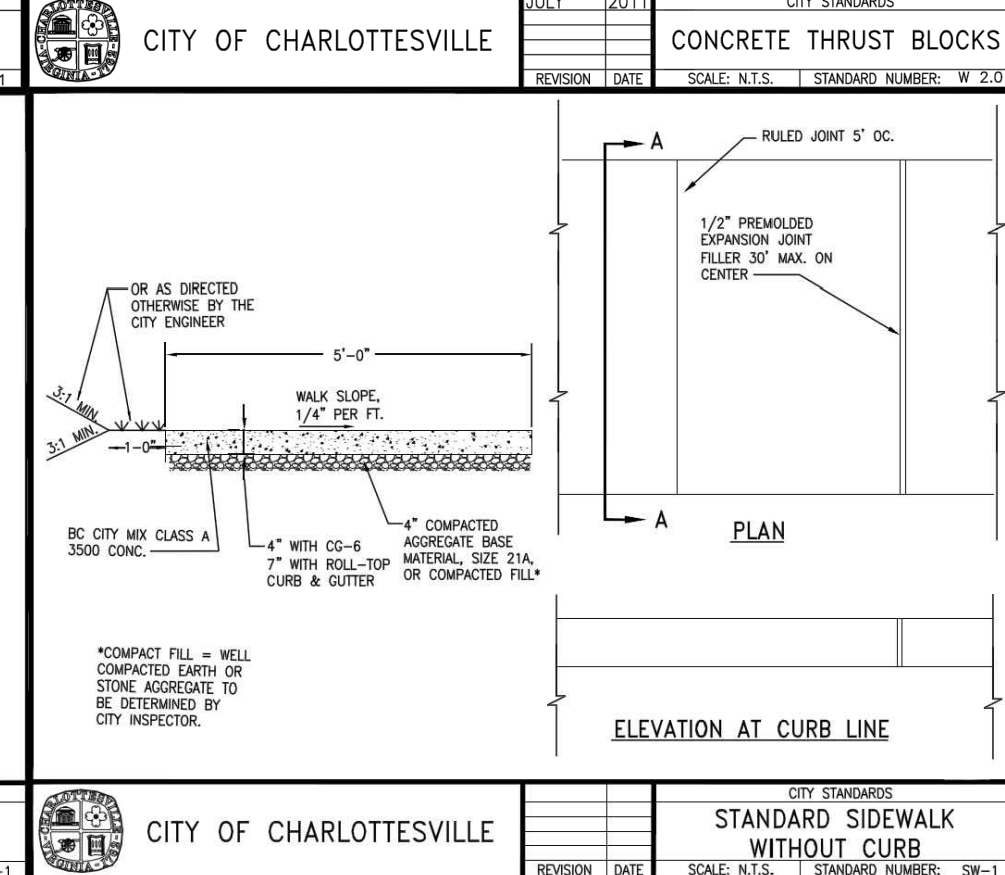
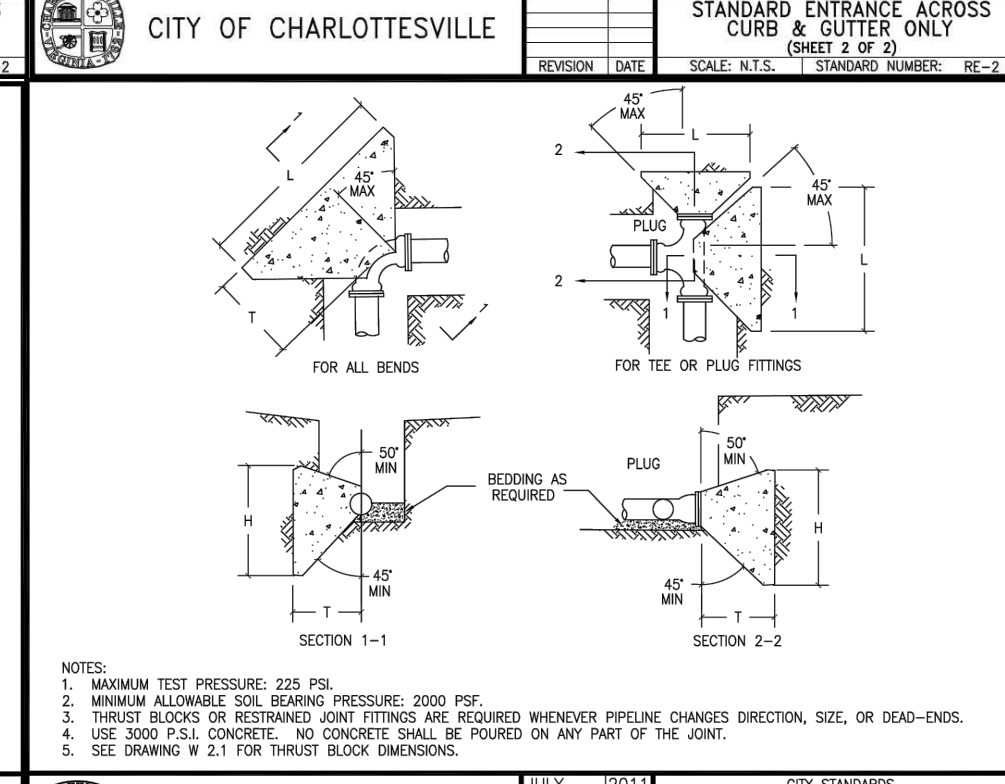
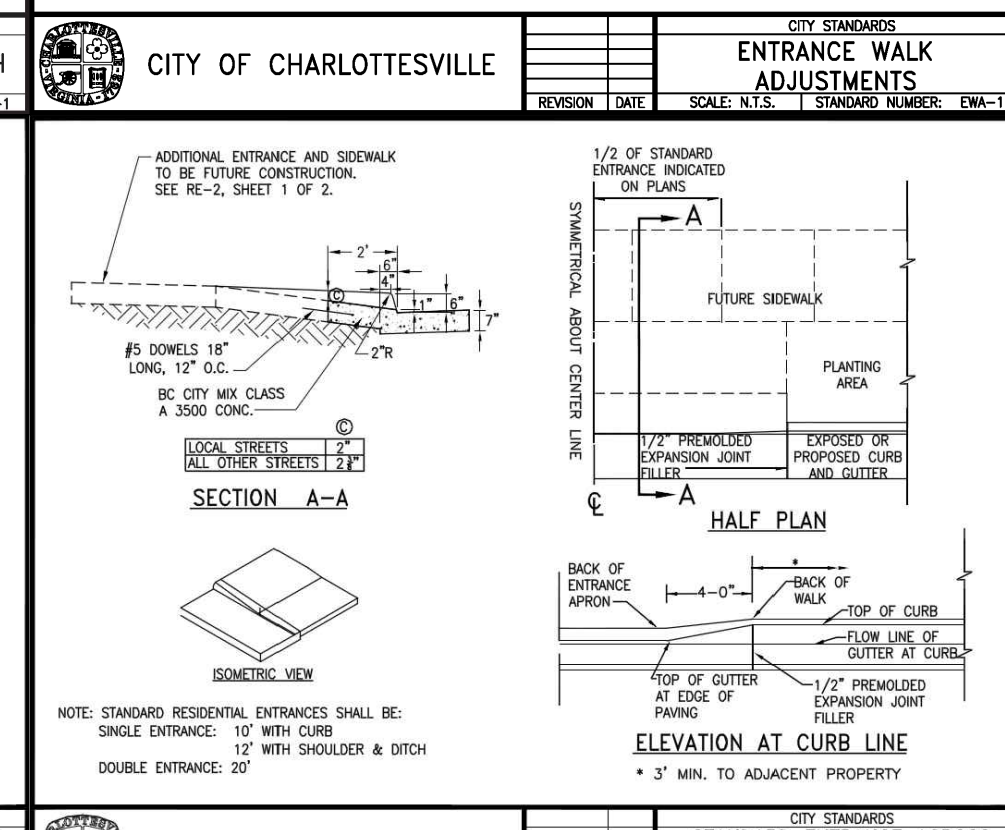
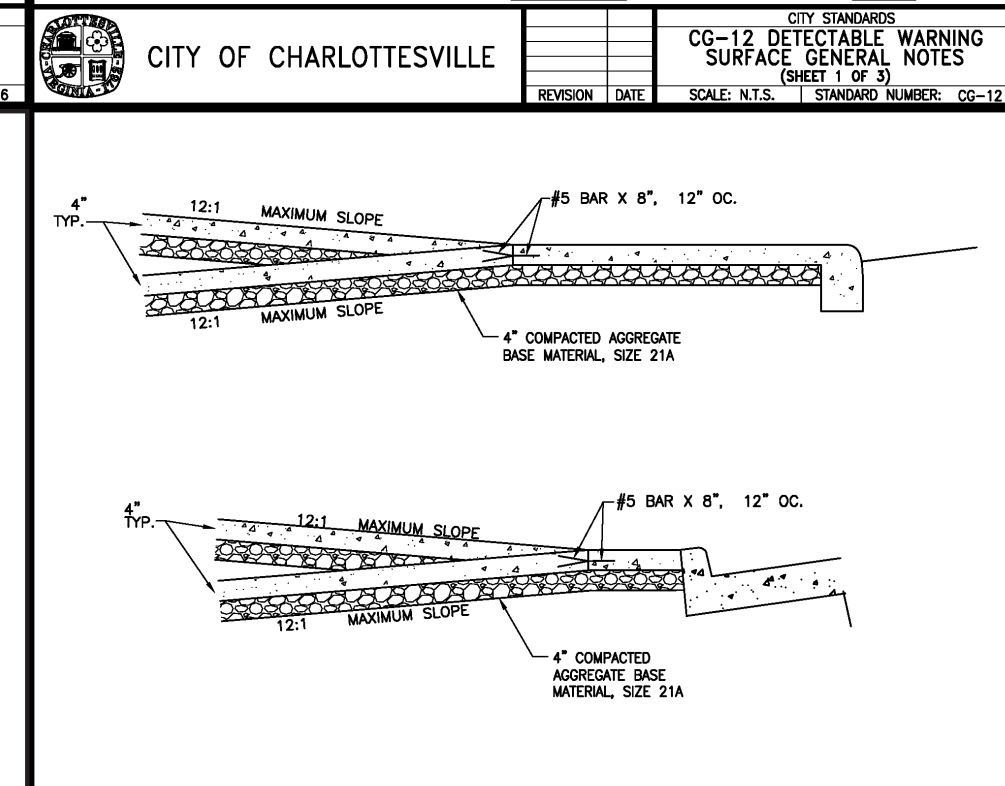
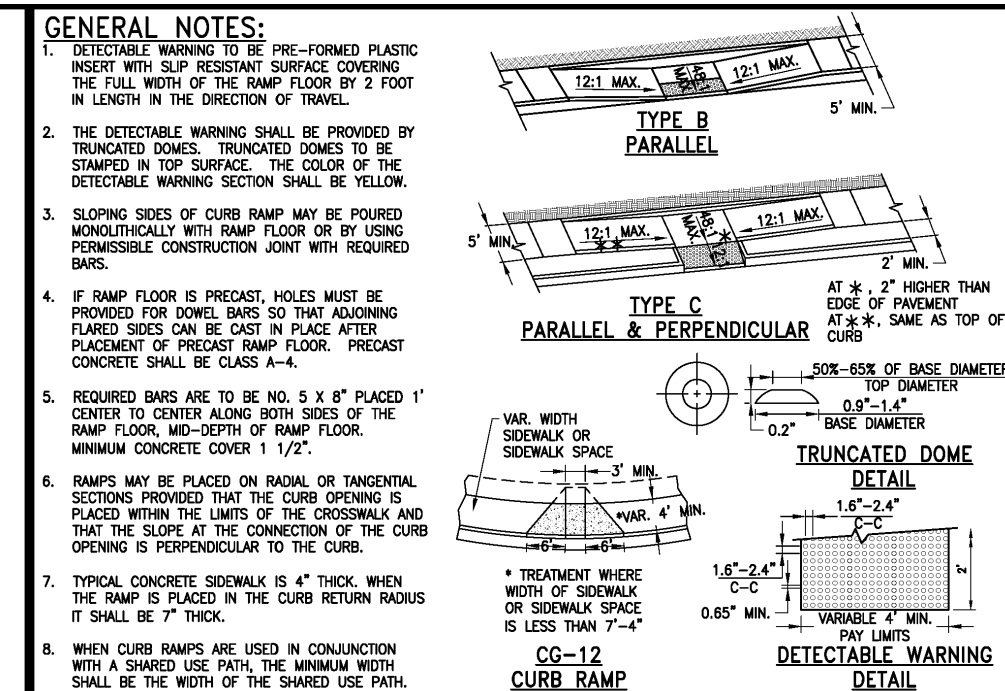
Table with 2 columns: DATE, REVISION DESCRIPTION. Includes entries for 1/25/19, 2/8/19, and 2/25/19.

COLLINS ENGINEERING

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

PROJECT: 1st STREET SOUTH APARTMENTS - PHASE I FINAL SITE PLAN NOTES & DETAILS

JOB NO. 182158, SCALE N/A, SHEET NO. 7



GENERAL NOTES: 1. ANY DAMAGE TO EXISTING UTILITIES CAUSED BY CONTRACTOR OR ITS SUBCONTRACTORS SHALL BE CONTRACTOR'S SOLE RESPONSIBILITY AND REPAIRED AT CONTRACTOR'S EXPENSE. 2. THE CONTRACT DOCUMENTS DO NOT GUARANTEE THE EXISTENCE, NON-EXISTENCE OR LOCATION OF UTILITIES. CONTRACTOR SHALL VERIFY THE EXISTENCE AND LOCATION OF 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. 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. NO BUILDING OR WALL FOUNDATION SHALL BE CONSTRUCTED WITHIN 10 FEET OF ANY STORM, SANITARY, WATER, OR GAS LINE. ANY COST INCURRED FOR REMOVING, RELOCATIONS 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. 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 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 EQUIVALENT 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. CONTRACTOR SHALL COORDINATE WITH THE CITY TO LOCATE SIGNAL LOOP DETECTORS AND CONDUITS IN ORDER TO AVOID DAMAGE TO THEM. CONTRACTOR SHALL REIMBURSE THE CITY FOR REPAIRING ANY DAMAGE TO SIGNAL LOOP DETECTORS AND CONDUITS CAUSED BY CONTRACTOR'S FAILURE TO SO COORDINATE. 6. ALL RECTANGULAR WATER METER BOXES LOCATED IN SIDEWALKS SHALL BE REPLACED WITH ROUND ONES. THESE WILL BE FURNISHED BY THE CITY UPON FULL NOTIFICATION. WATER VALVE BOXES, GAS VALVE BOXES AND WATER METER BOXES SHALL BE THE RESPONSIBILITY OF CONTRACTOR. COSTS ARE TO BE INCLUDED UNDER THE VARIOUS UNIT BID ITEMS. NO SEPARATE PAYMENT WILL BE MADE. 7. 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. 8. ALL WATER METER, VALVES AND FIRE HYDRANT ADJUSTMENTS/RELOCATIONS SHALL BE PERFORMED BY THE CONTRACTOR. 9. ALL FORMS SHALL BE INSPECTED BY THE ENGINEER BEFORE ANY CONCRETE IS PLACED. THE ENGINEER MAY REQUIRE CONTRACTOR AT NO ADDITIONAL COST, TO REMOVE AND REPLACE CONCRETE PLACED PRIOR TO OR WITHOUT SUCH INSPECTION. 10. 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. 11. CONCRETE SHALL NOT BE PLACED UNLESS THE AIR TEMPERATURE IS AT LEAST 40 DEGREES FAHRENHEIT (F) IN THE SHADE AND RISING. 12. CONCRETE SHALL NOT BE PLACED UNTIL STEEL DECKING HAS BEEN INSTALLED IN EXISTING CONCRETE IN ACCORDANCE WITH CITY STANDARDS. 13. 1/2" PREMIXED EXPANSION JOINT MATERIAL SHALL BE PLACED AT A MAXIMUM OF 30' INTERVALS ON NEW CONCRETE IN CONCRETE AND ASPHALT. 14. ALL EXISTING CURBS, CURB & GUTTER, SIDEWALK AND STEPS TO BE REMOVED SHALL BE TAKEN OUT TO THE NEAREST JOINT. DEMOLITION AND DISPOSAL COSTS TO BE INCLUDED IN OTHER UNIT BID ITEMS. NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK. 15. ALL EXISTING GRANITE CURB SHALL REMAIN THE PROPERTY OF THE CITY OF CHARLOTTESVILLE. IT SHALL BE REMOVED AND DELIVERED BY THE CONTRACTOR TO THE CITY'S PUBLIC WORKS COMPLEX. COSTS TO BE INCLUDED UNDER THE VARIOUS UNIT BID ITEMS. NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK. 16. STREET PAVEMENT STRUCTURE AND PATCHING SHALL BE EXTENDED FROM THE FRONT OF NEW CONCRETE TO THE EXISTING PROJECTION OF THE SOUND STREET EDGE AS DIRECTED BY THE ENGINEER. 17. DRIVEWAY ADJUSTMENTS ARE TO BE DONE IN CENTRE 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. 18. EXISTING ASPHALT CONCRETE 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. 19. DISPOSAL OF ALL EXCESS MATERIAL IS THE RESPONSIBILITY OF CONTRACTOR. 20. 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. 21. CONTRACTOR SHALL MAINTAIN EXISTING STRUCTURES, DITCHES, CULVERTS AND FLOODS AT ALL TIMES DURING THE CONSTRUCTION. CONTRACTOR SHALL PAY FOR ALL PERSONAL INJURY AND PROPERTY DAMAGE WHICH MAY OCCUR AS A RESULT OF FAILING TO MAINTAIN ADEQUATE DRAINAGE. 22. ALL PIPES, DITS AND OTHER STRUCTURES SHALL BE INSPECTED BY THE ENGINEER BEFORE BEING BACKFILLED OR BURIED. THE ENGINEER MAY REQUIRE CONTRACTOR, AT NO ADDITIONAL COST, TO UNCOVER AND RE-COVER SUCH STRUCTURES IF THEY HAVE BEEN BACKFILLED OR BURIED WITHOUT SUCH INSPECTION. 23. ALL CATCH BASINS ENCOMPASSED WITHIN NEW CONSTRUCTION SHALL BE CONVERTED TO DROP INLETS. 24. CLASS 1 RIP RAP MODIFICATIONS ALLOWS FOR A REDUCTION IN STONE DEPTH FROM 2.0' TO A MINIMUM OF 1.0' IF APPROVED BY THE CITY ENGINEER. 25. REMOVED PIPE SHALL BE THE PROPERTY OF CONTRACTOR AND IF NOT SALVAGED FOR RE-USE, SHALL BE DISPOSED OF LAWFULLY. 26. ALL STORM SEWER PIPE AND DROP INLETS SHALL BE CLEARED OF DEBRIS AND ERODED MATERIAL PRIOR TO FINAL ACCEPTANCE. 27. ALL STORM SEWER PIPE JOINTS SHALL BE SEALED AND SEALED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS. 28. ALL EXISTING ROOF DRAINS AND OTHER DRAINAGE CONDUIT TIED INTO EXISTING PIPE TO BE REMOVED SHALL BE RECONNECTED INTO NEW PIPE, WHERE APPLICABLE.

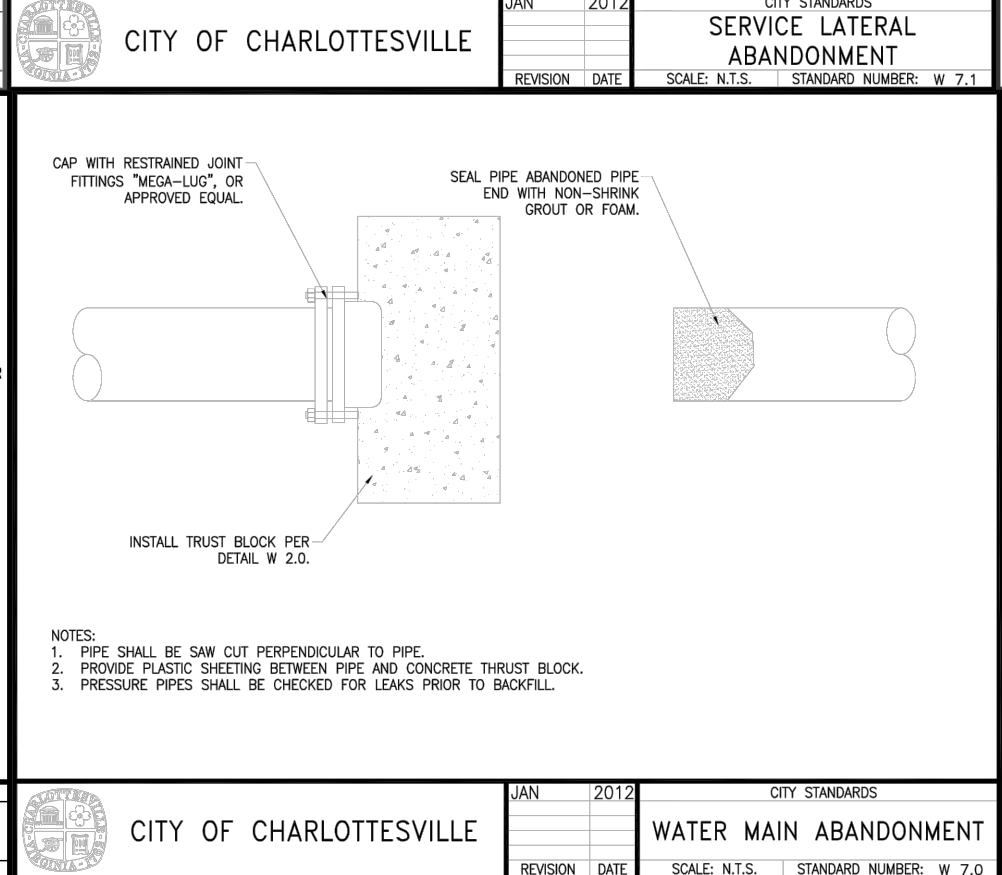
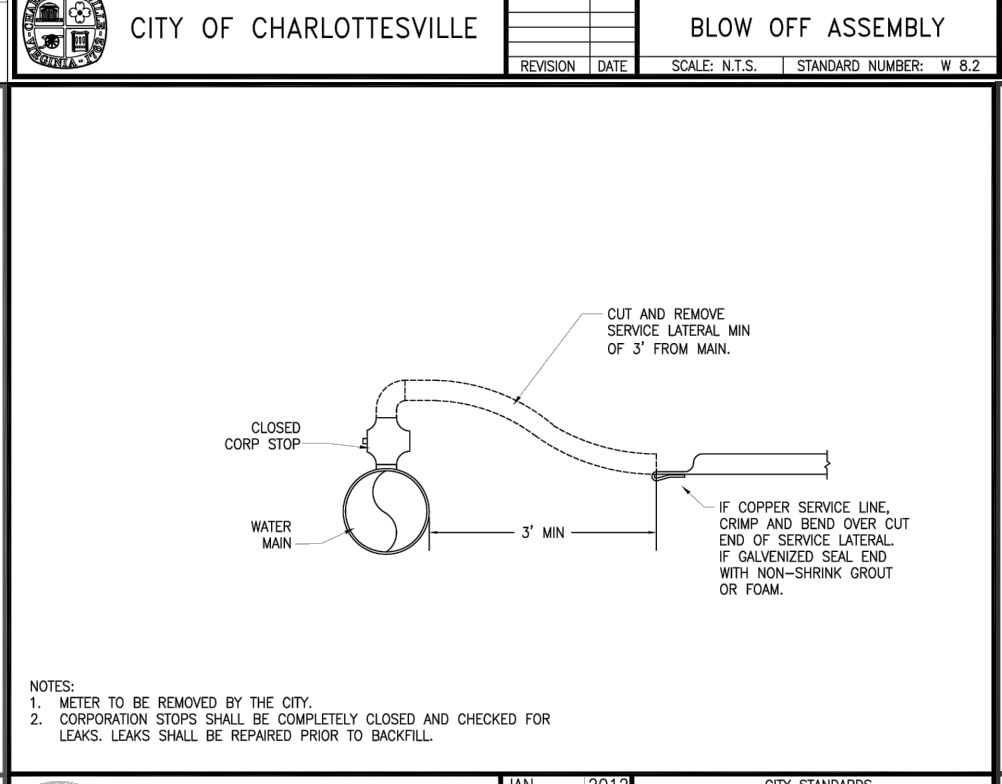
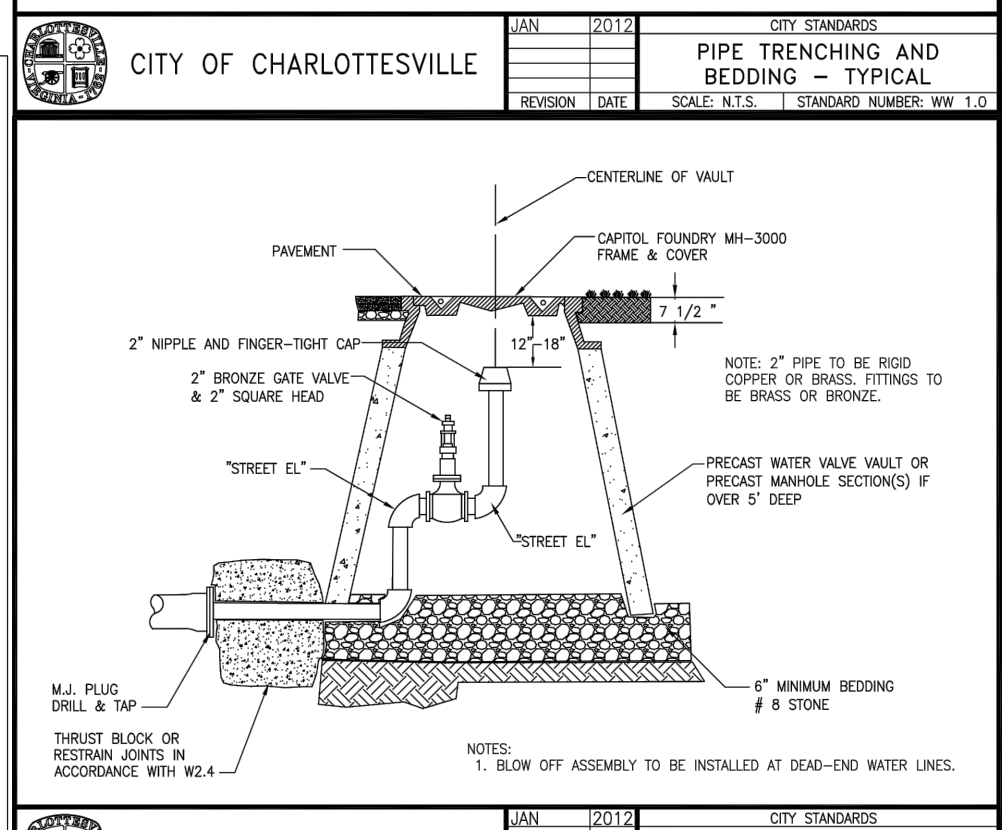
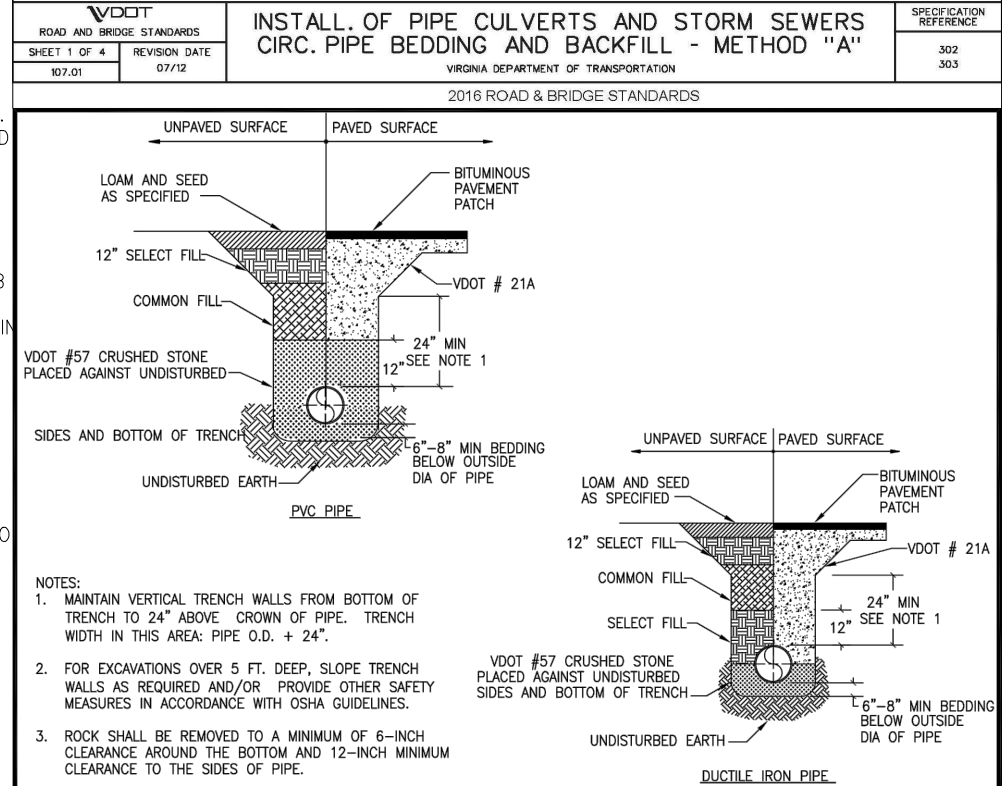
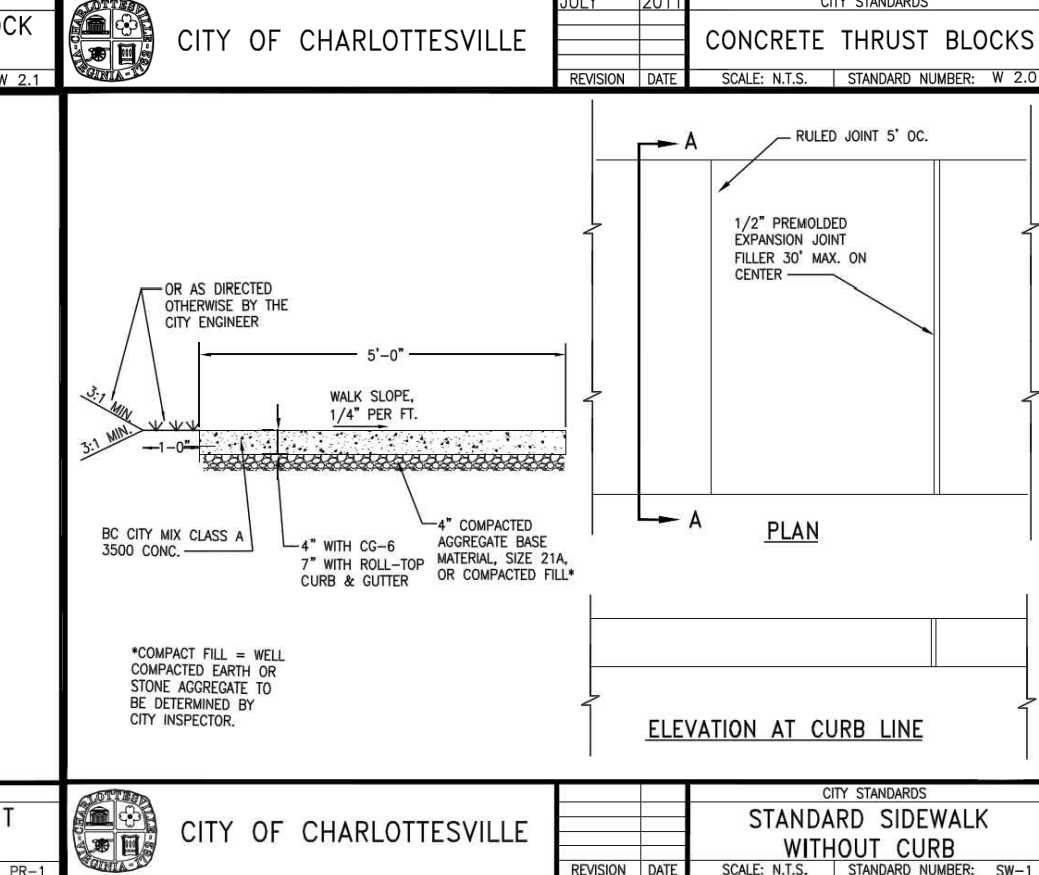
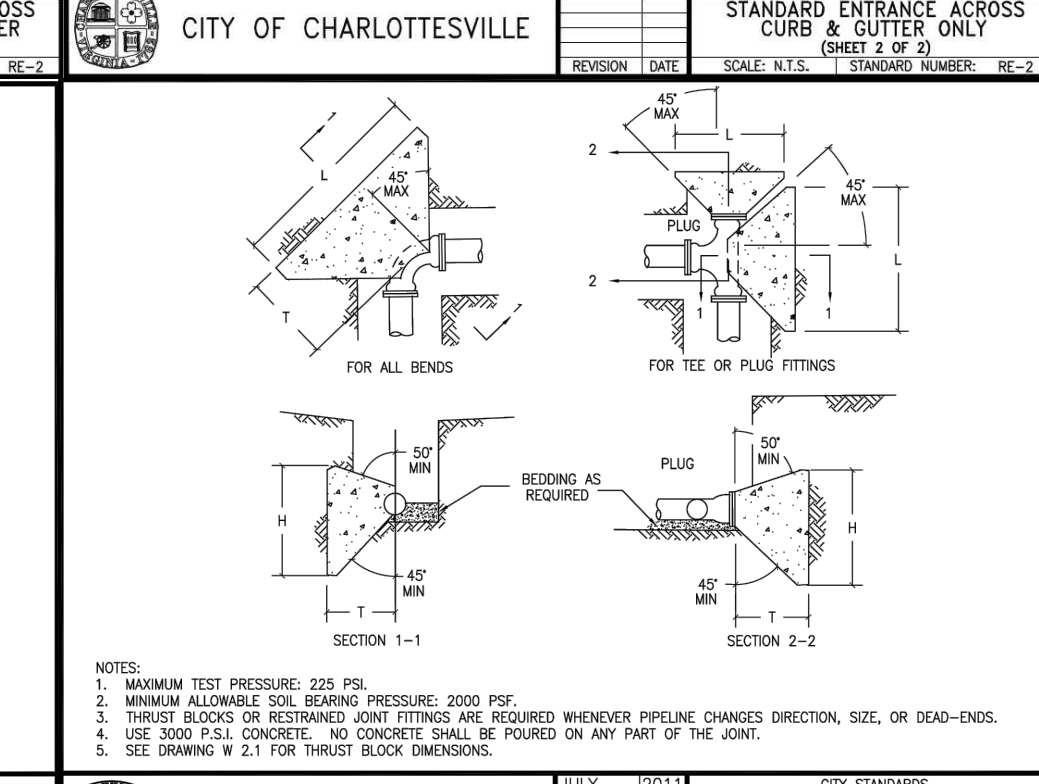
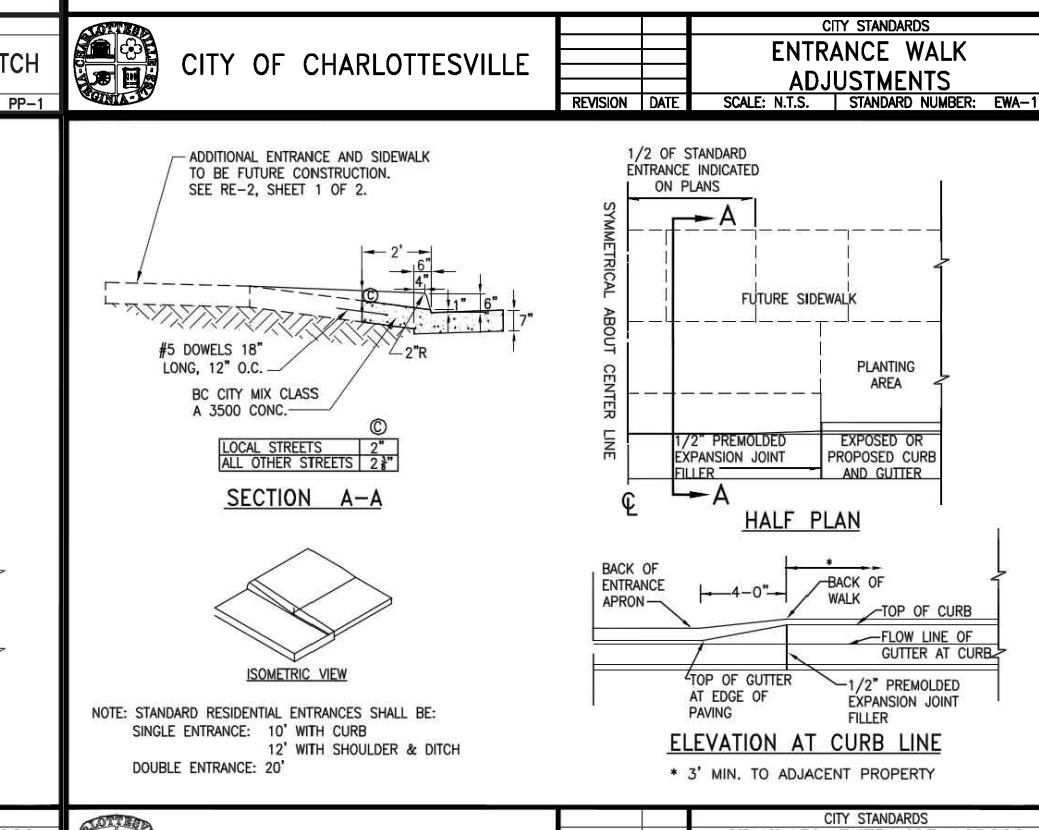
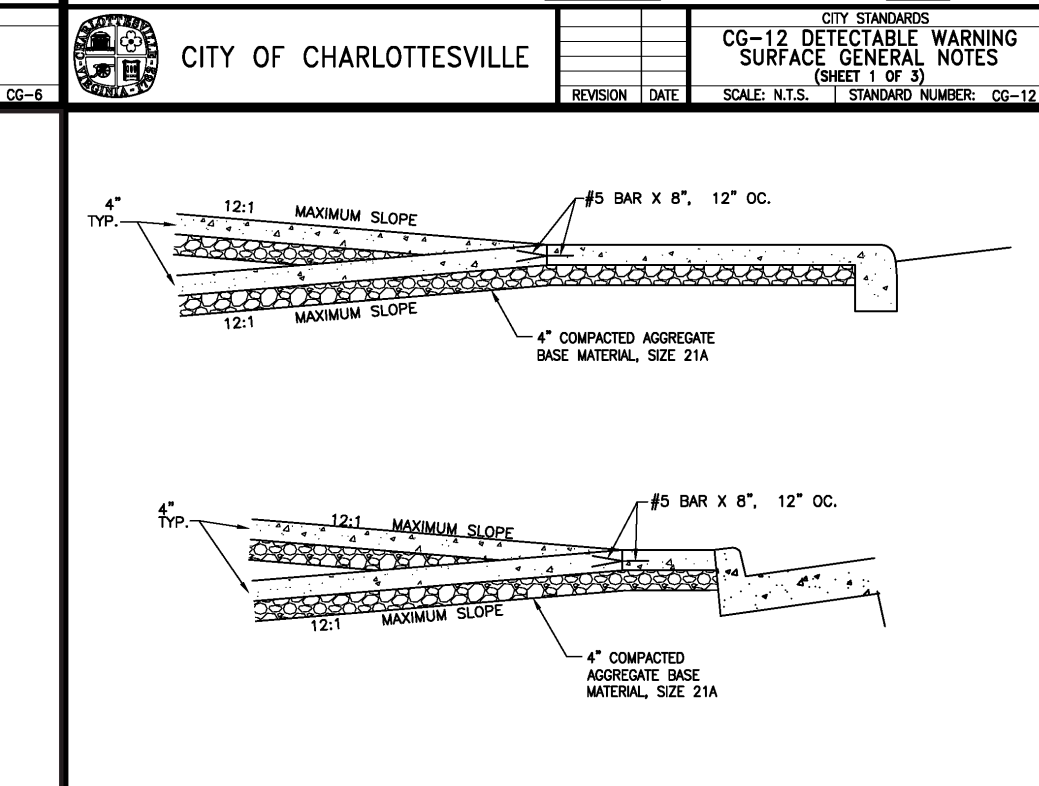
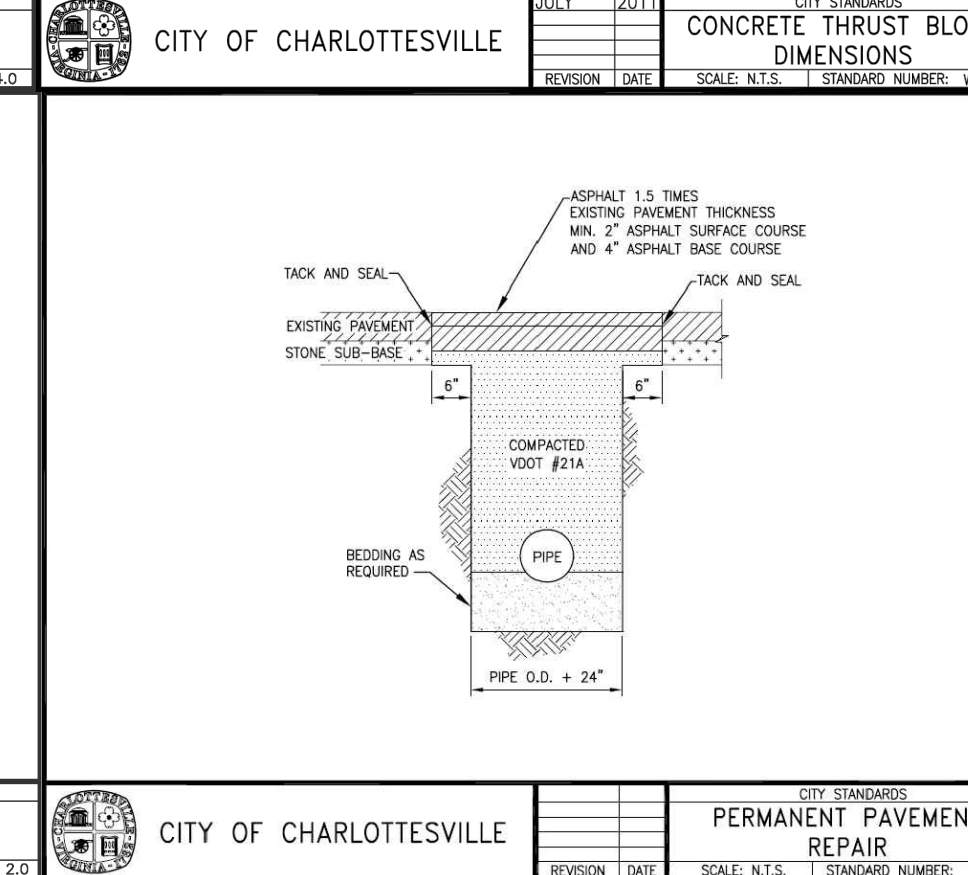
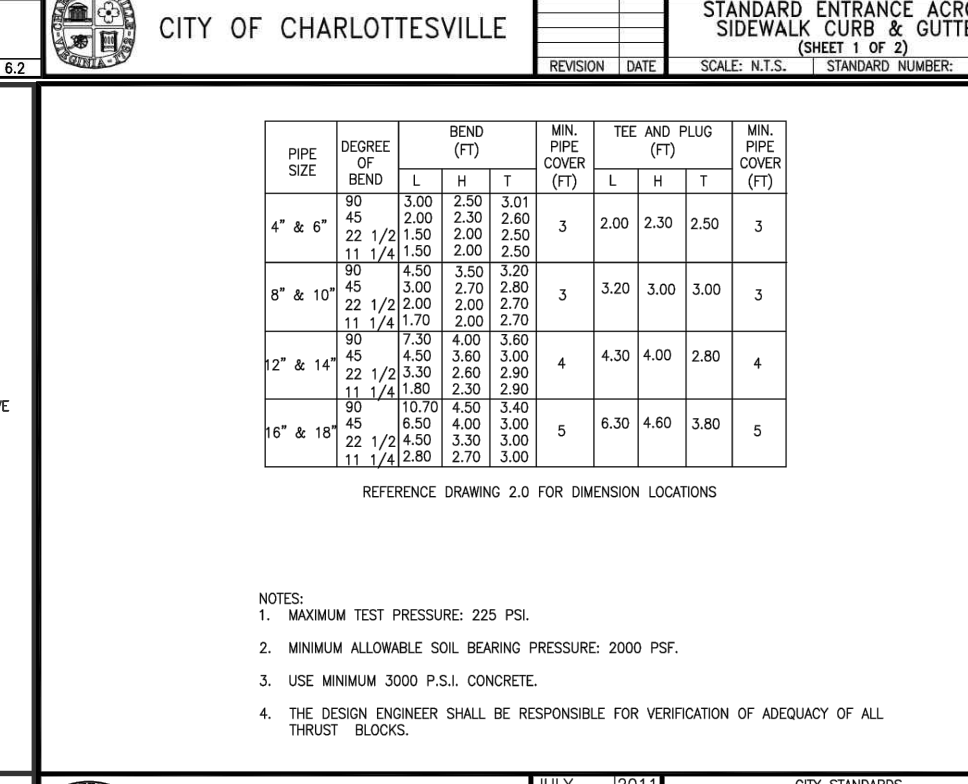
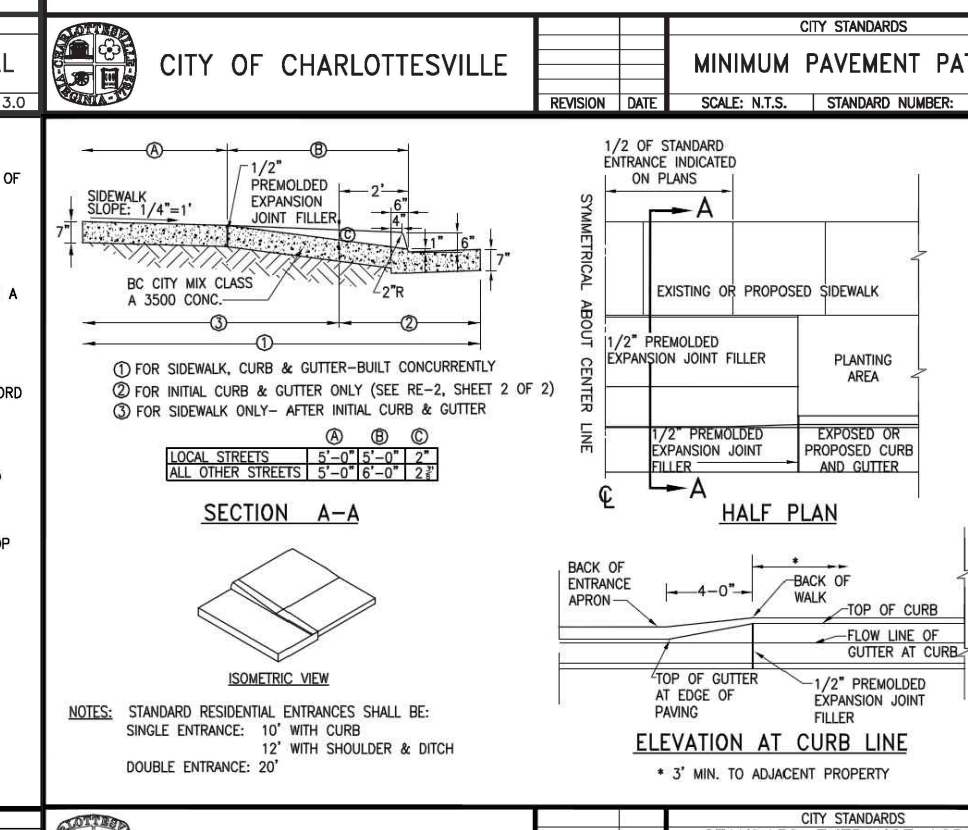
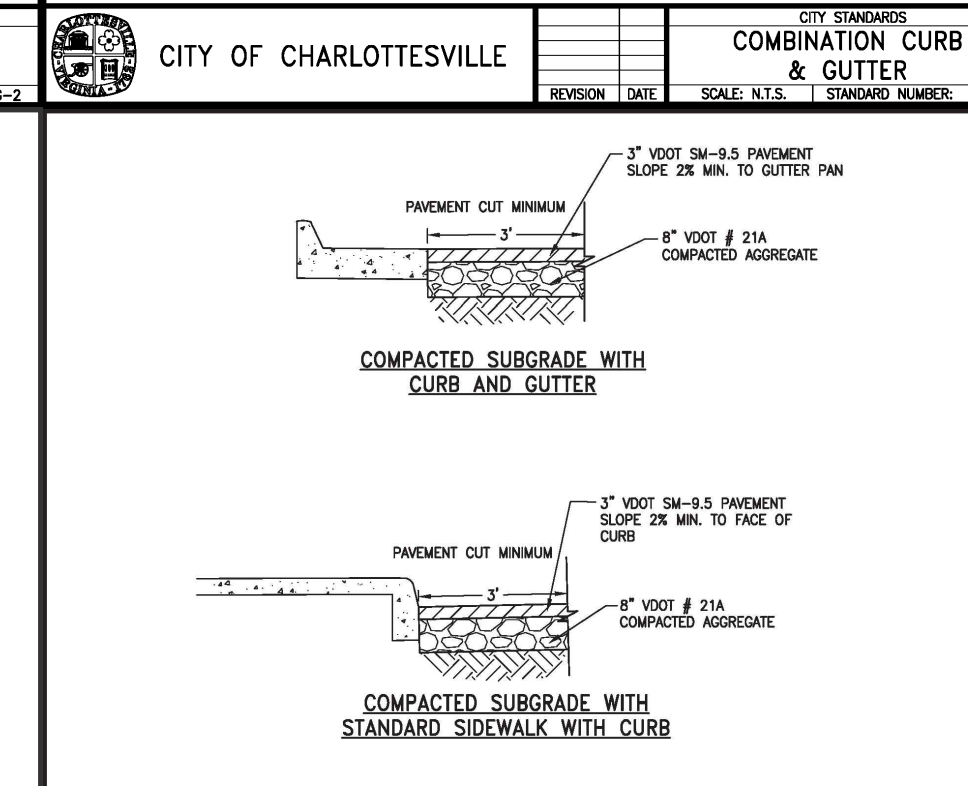
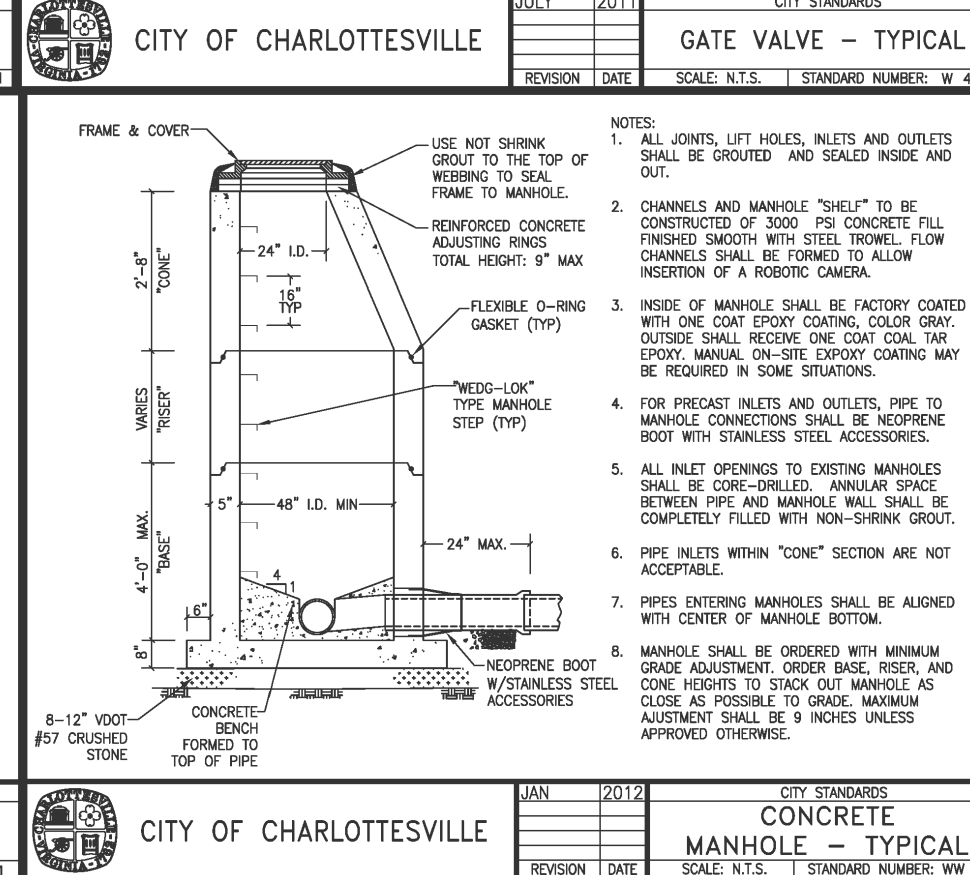
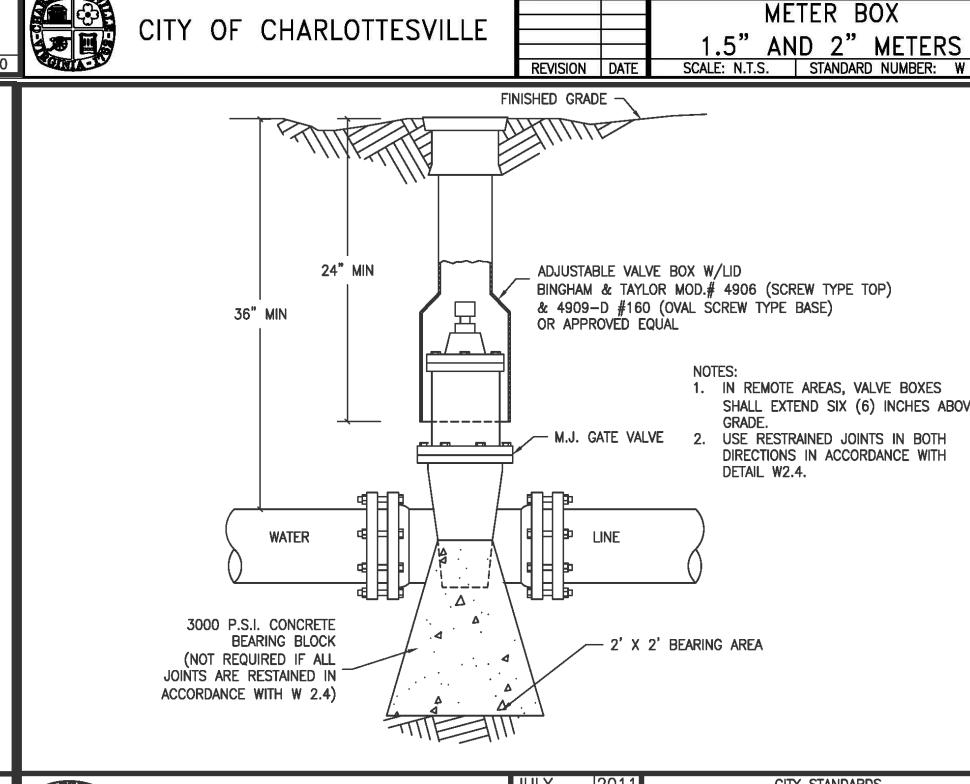
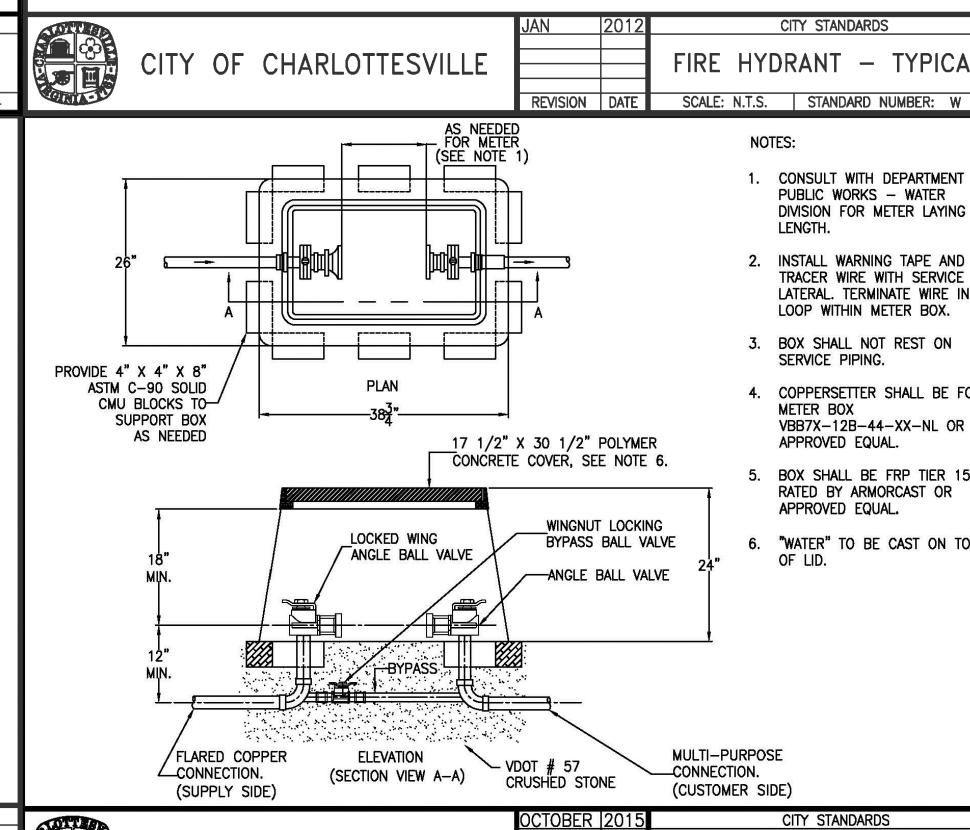
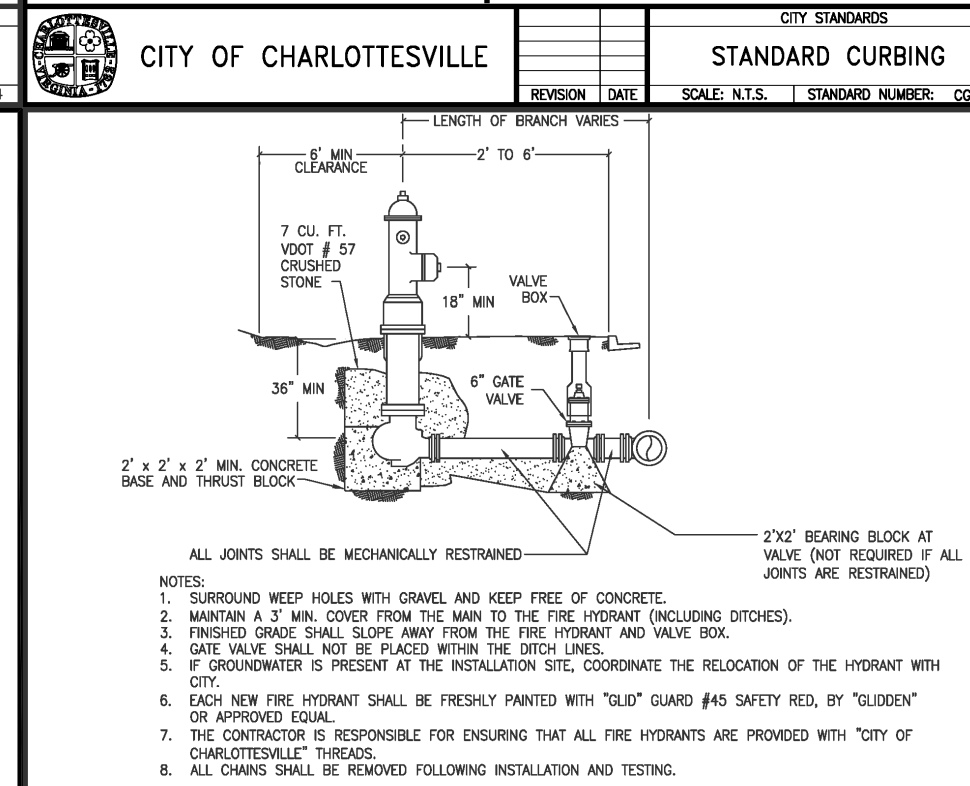
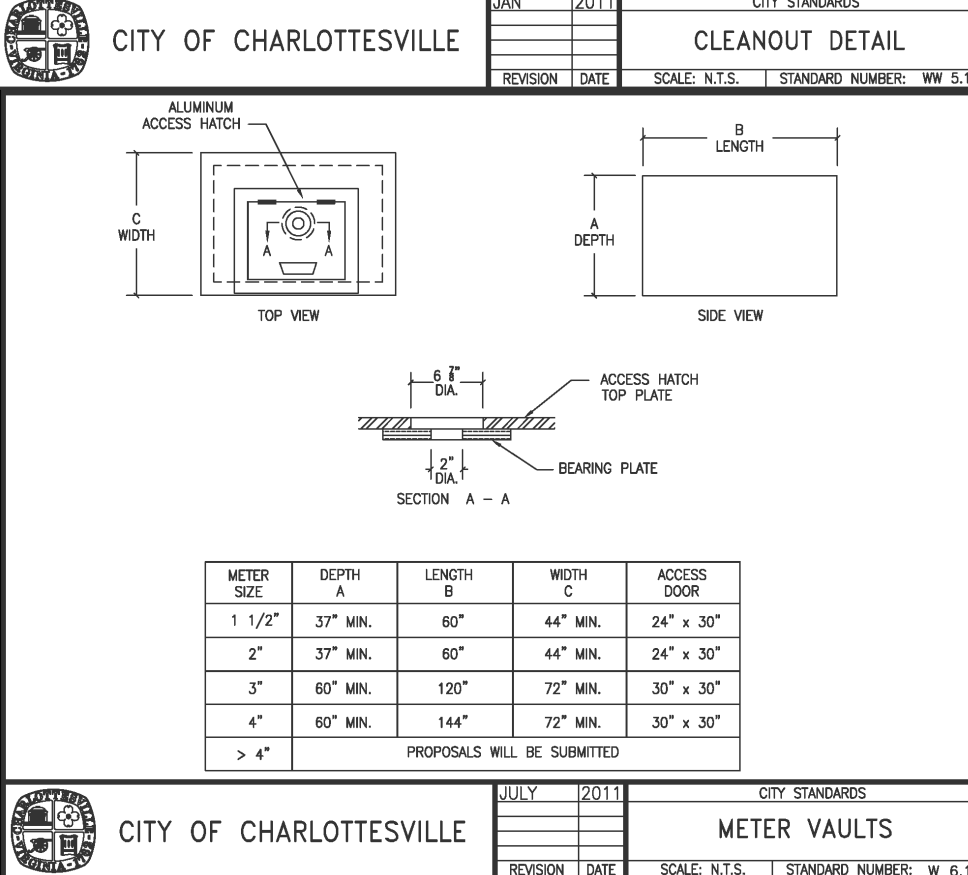
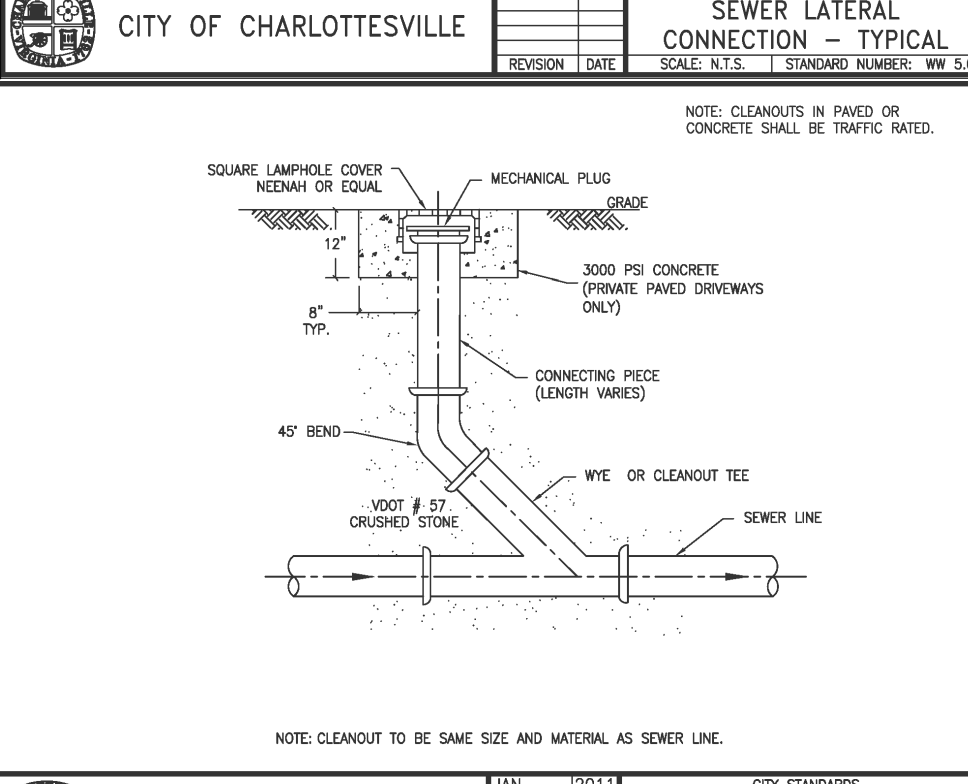
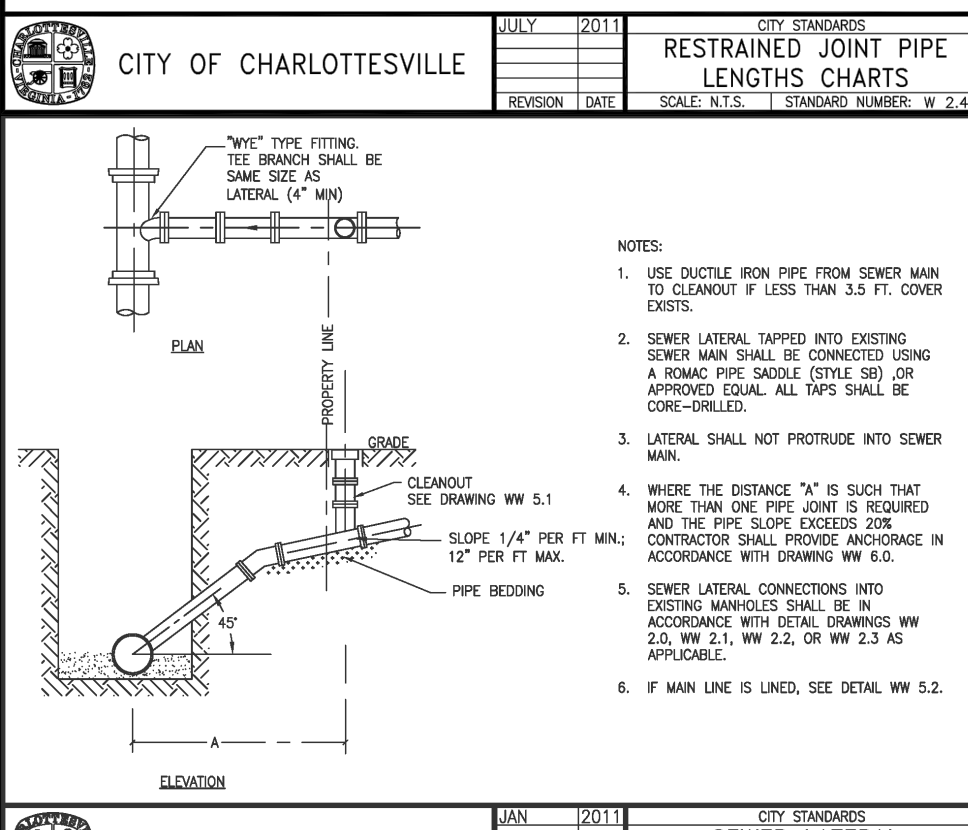
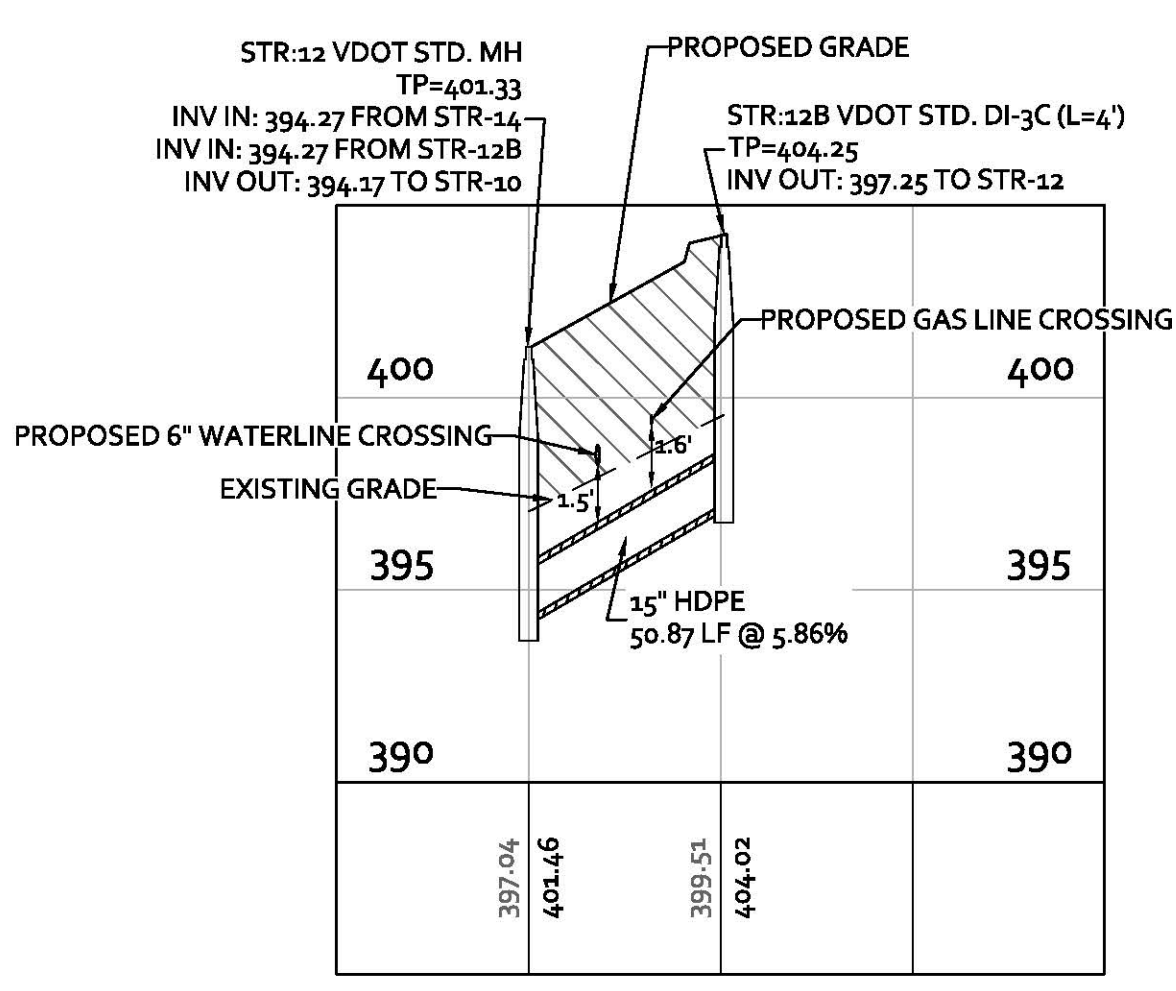


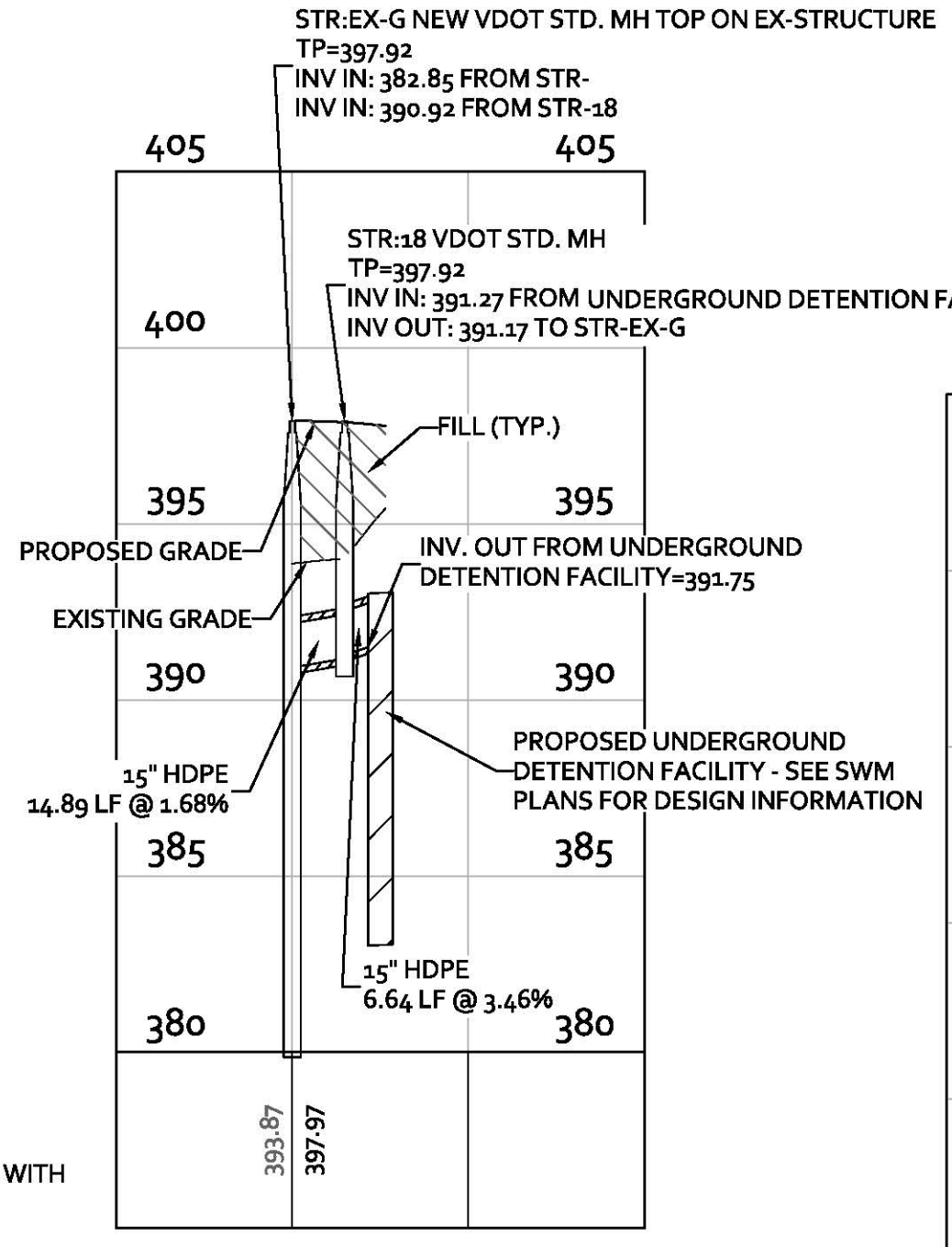
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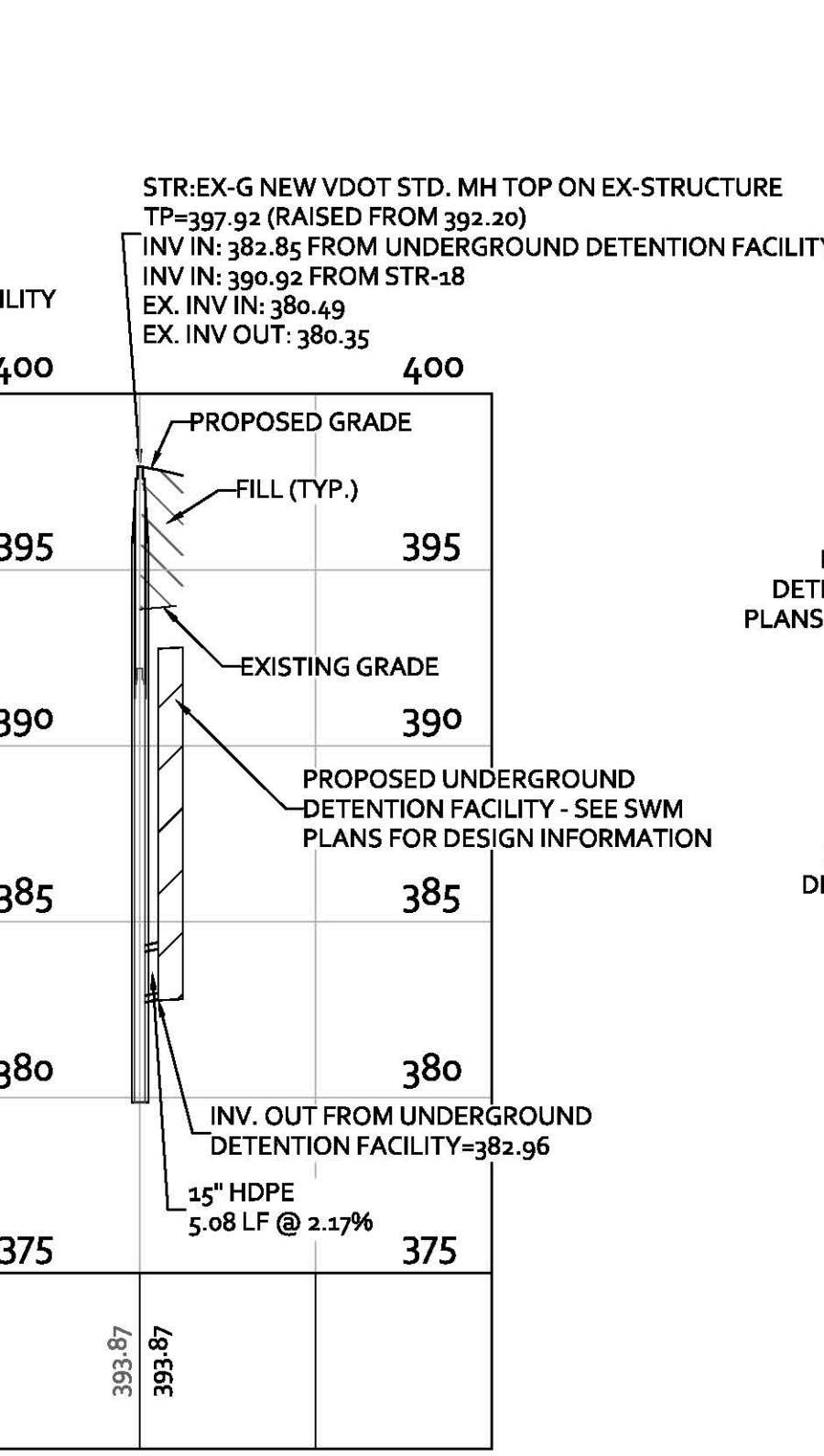




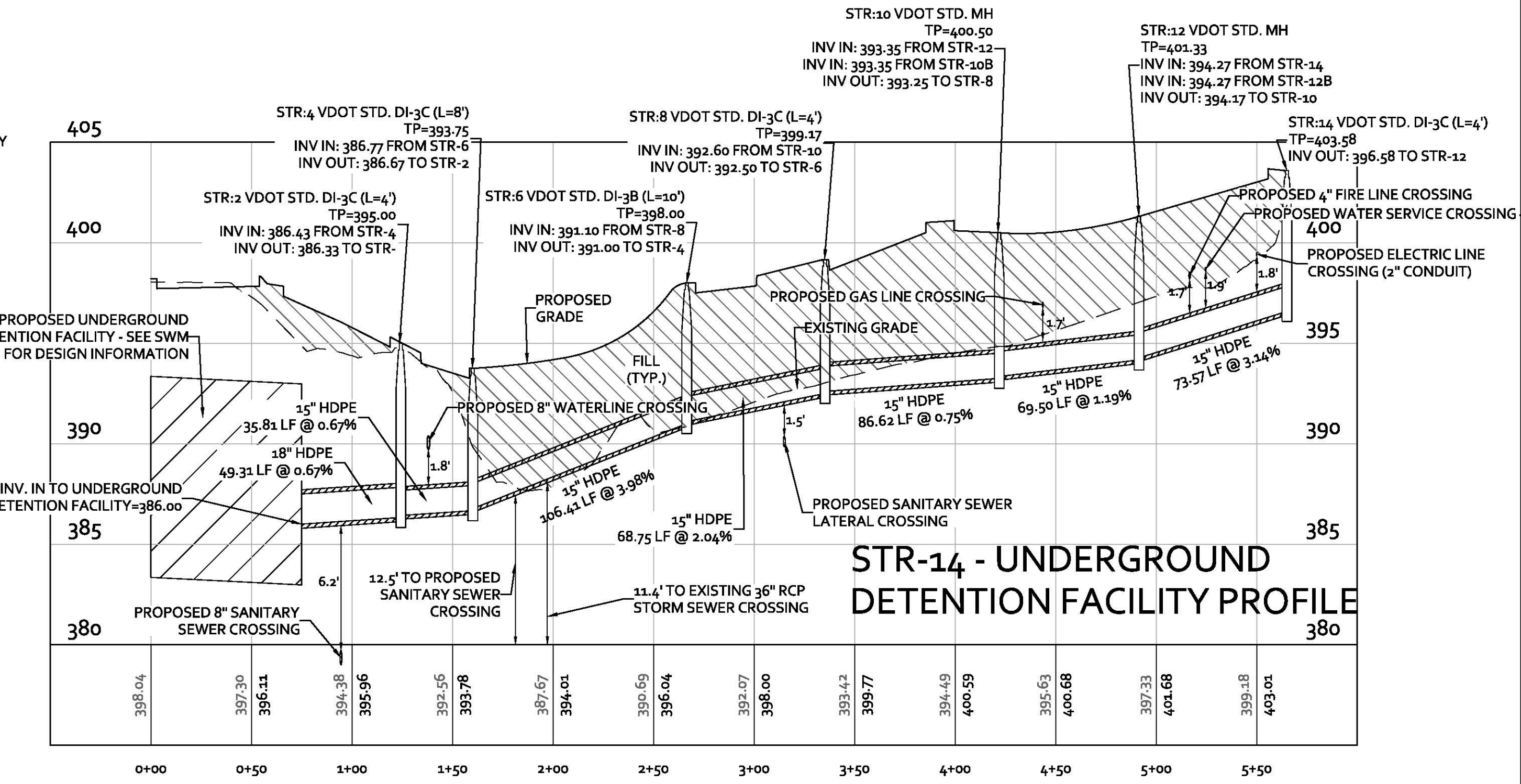
STR-12B - STR-12 PROFILE



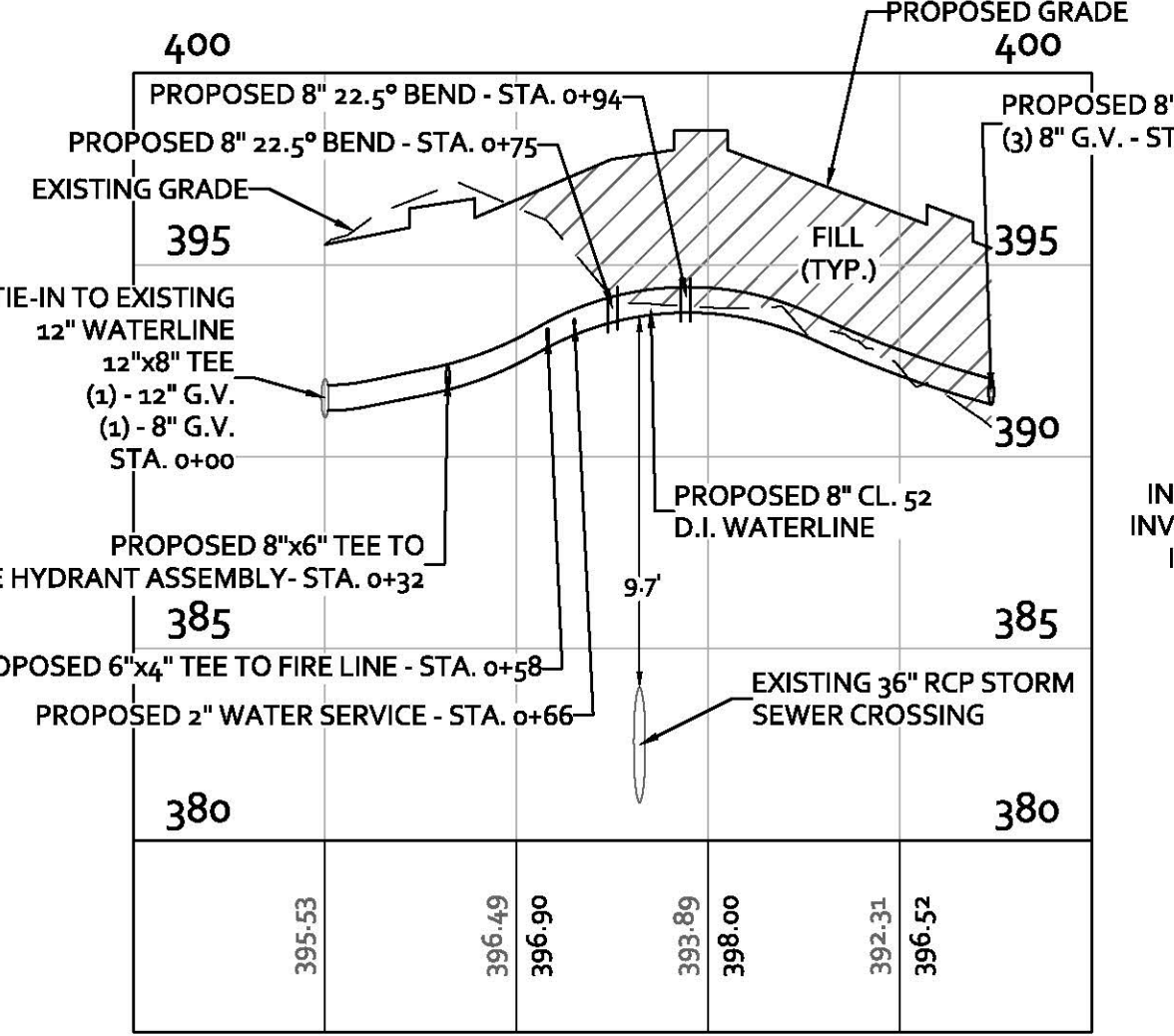
UGD BYPASS - STR-16 PROFILE



UGD OUTLET - STR-EX-G PROFILE

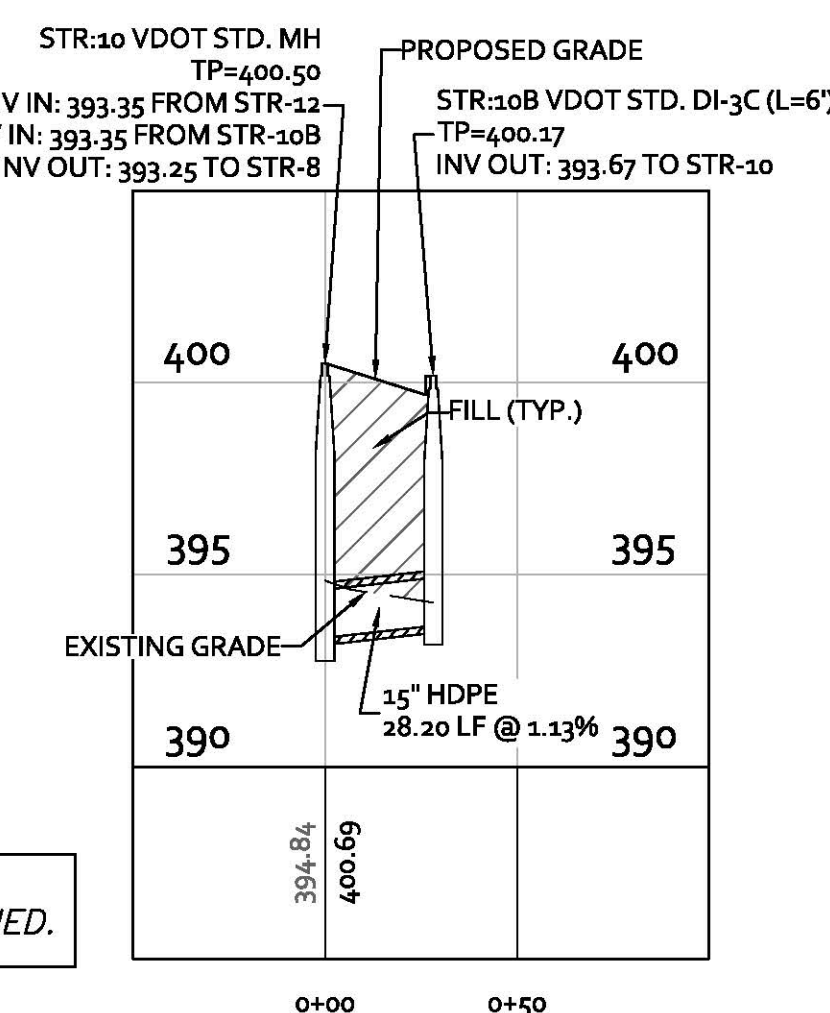


STR-14 - UNDERGROUND DETENTION FACILITY PROFILE

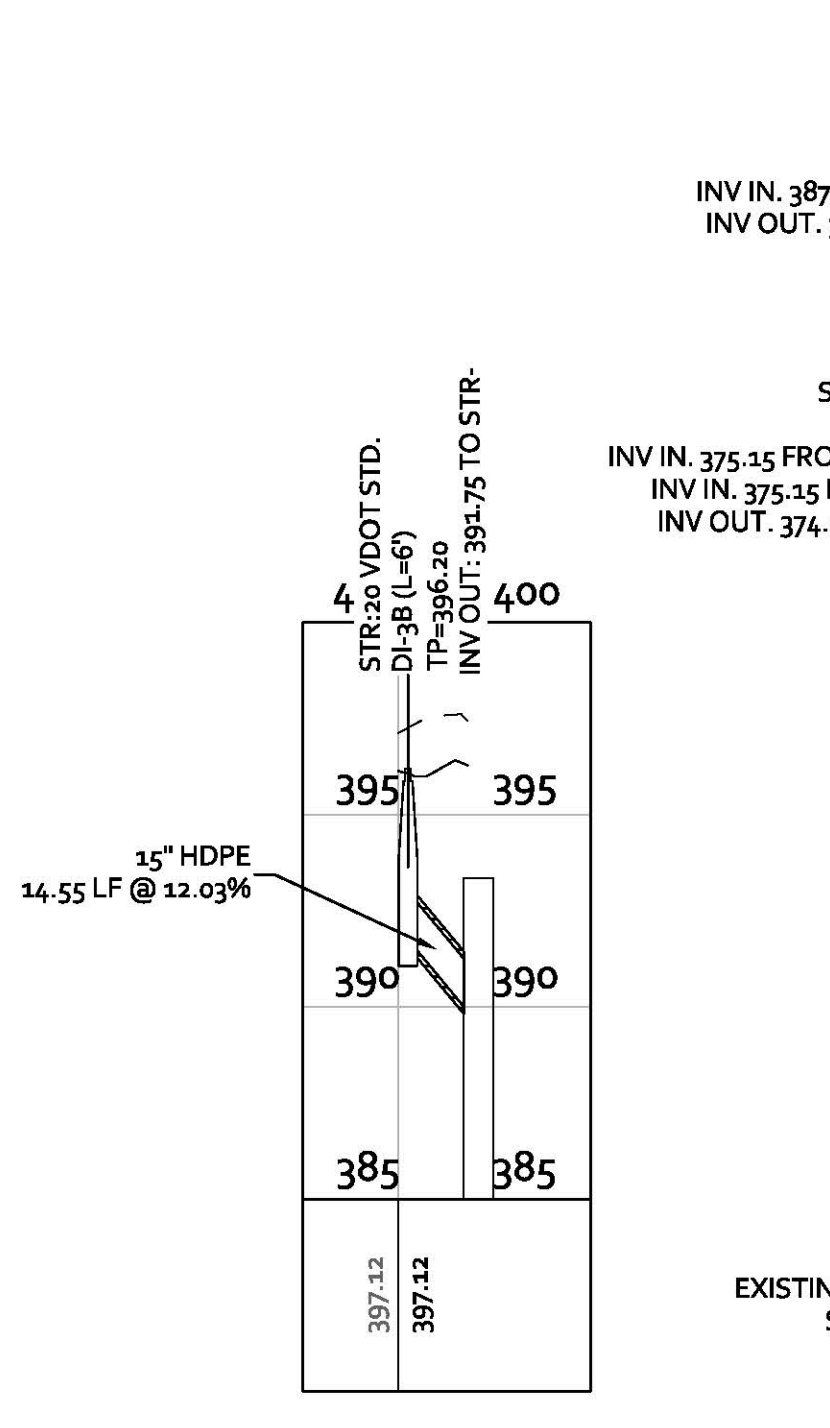


8-INCH WATERLINE PROFILE

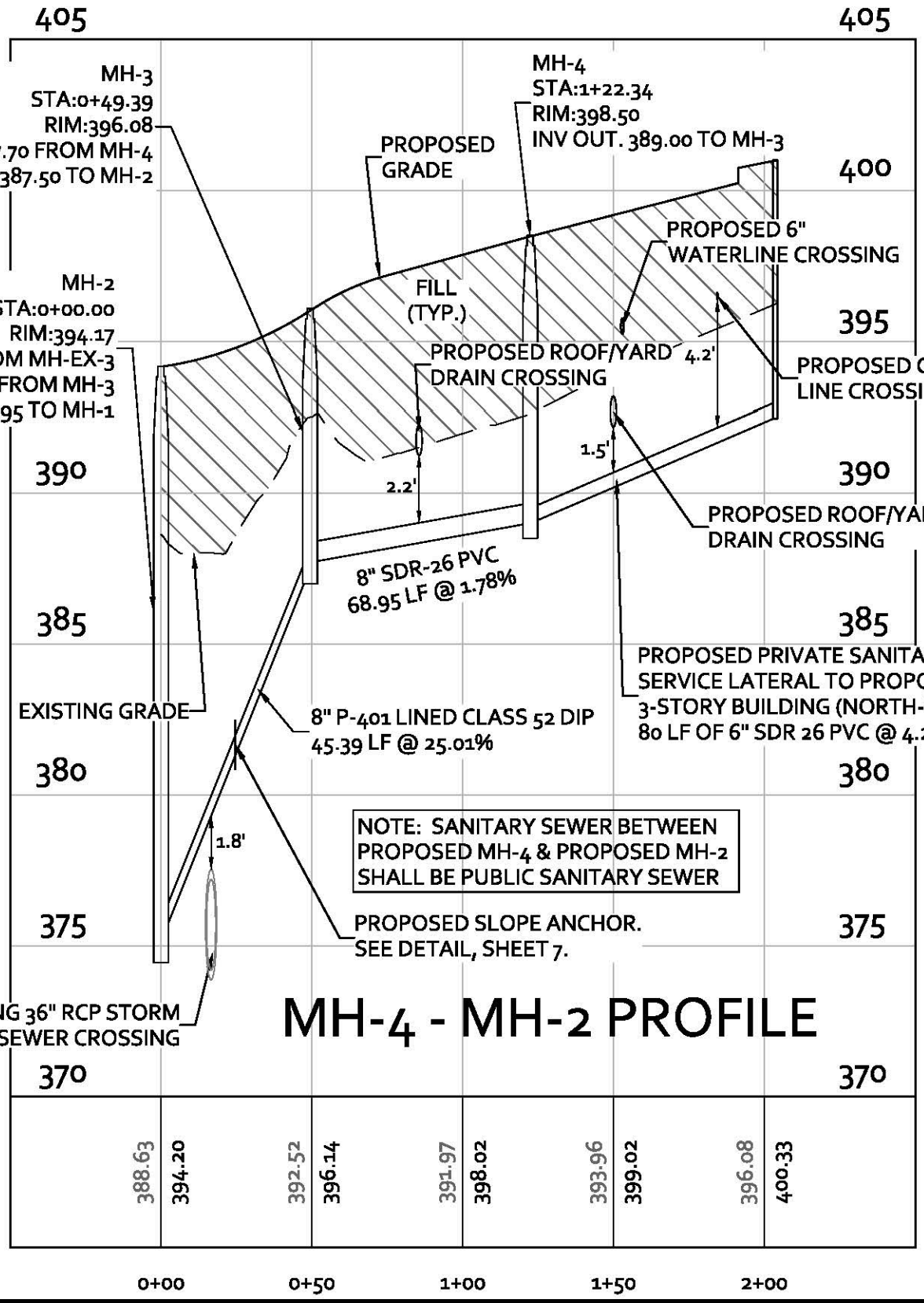
NOTE: ALL WATERLINES SHALL BE FULLY RESTRAINED.



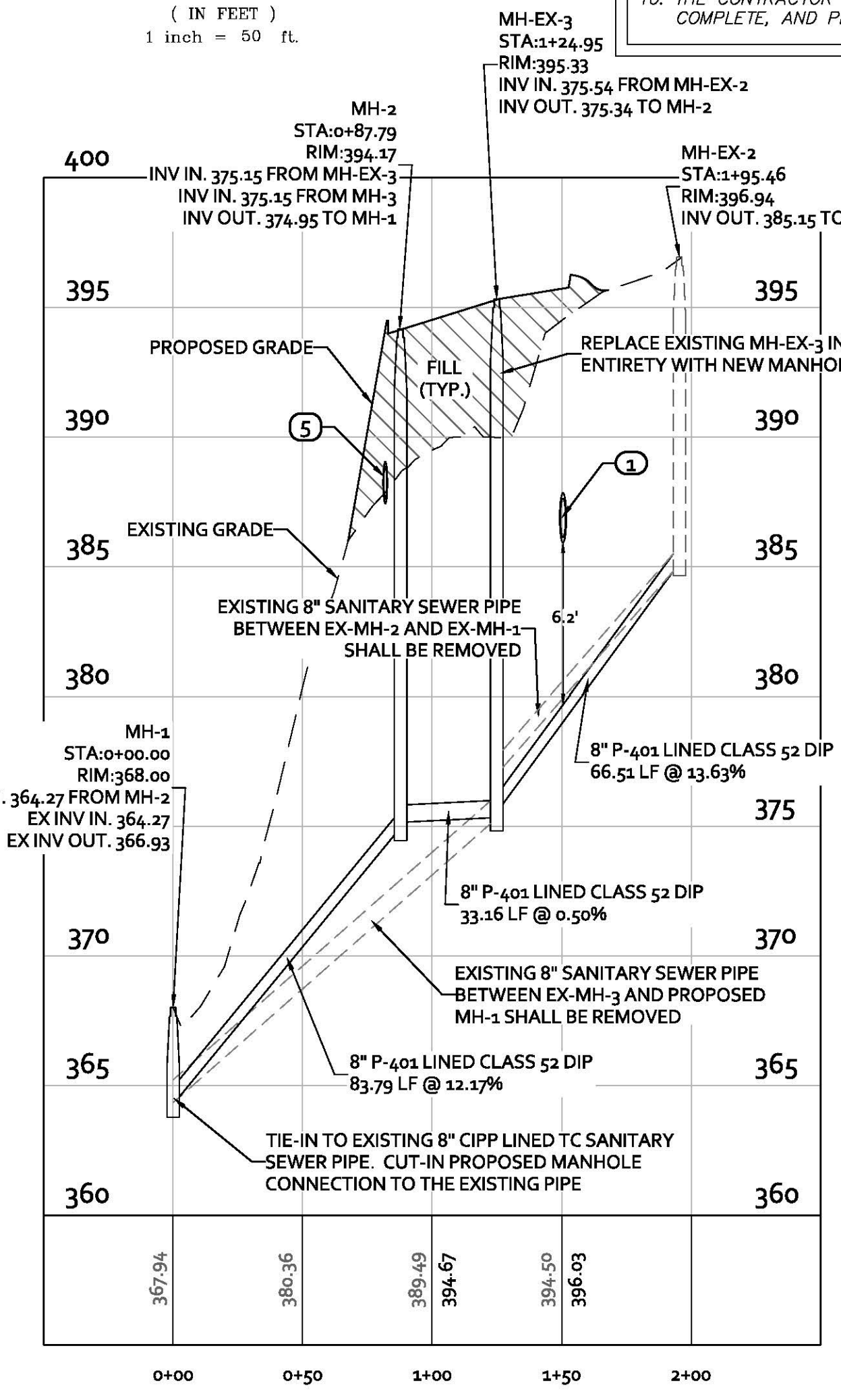
STR-10B - STR-10 PROFILE



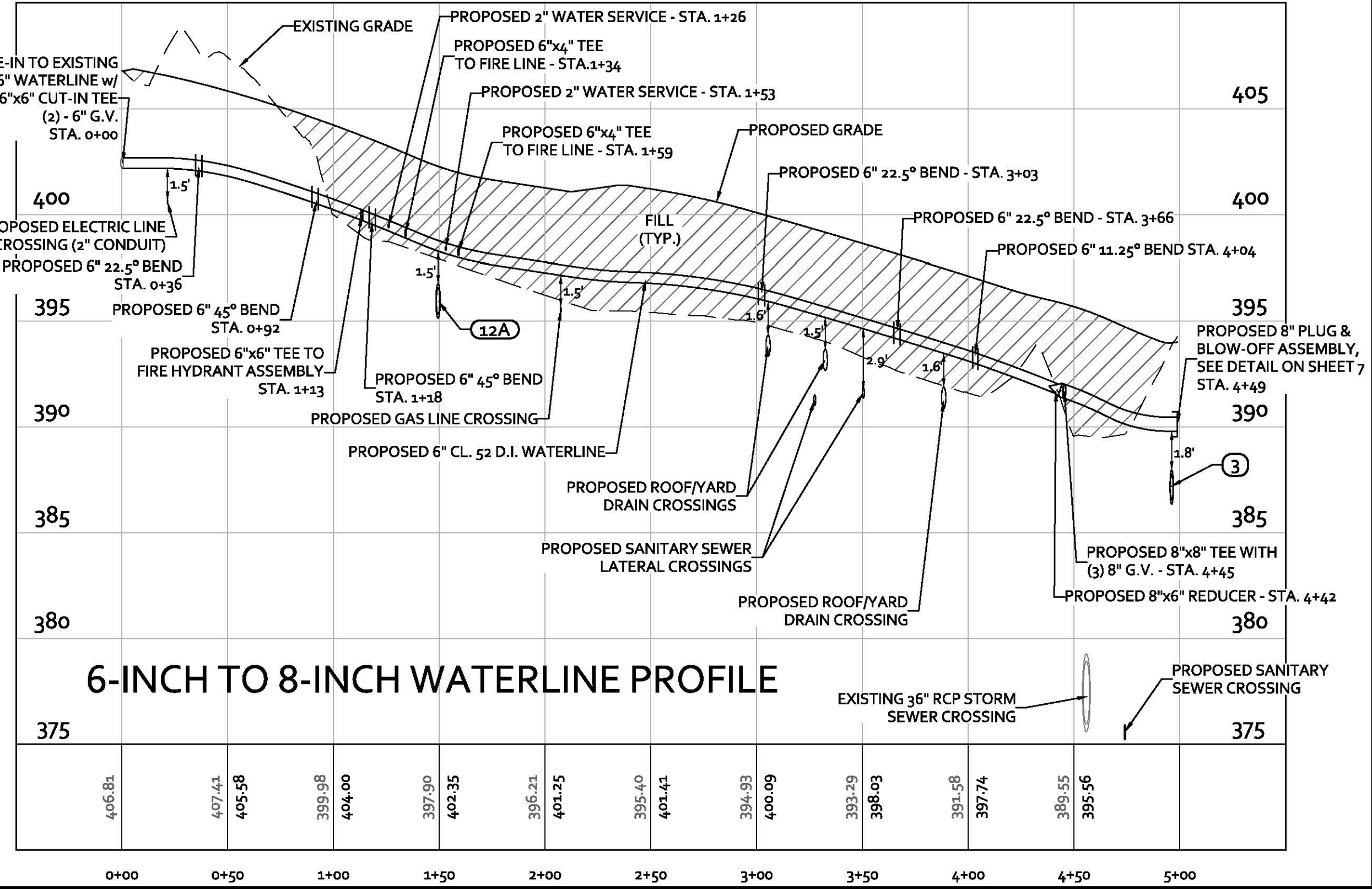
STR 20 - UGD PROFILE



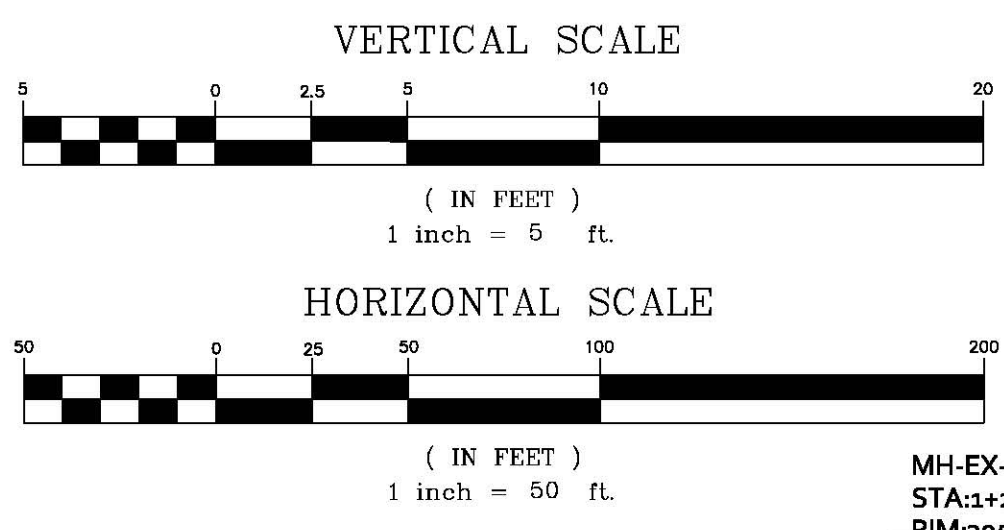
MH-4 - MH-2 PROFILE



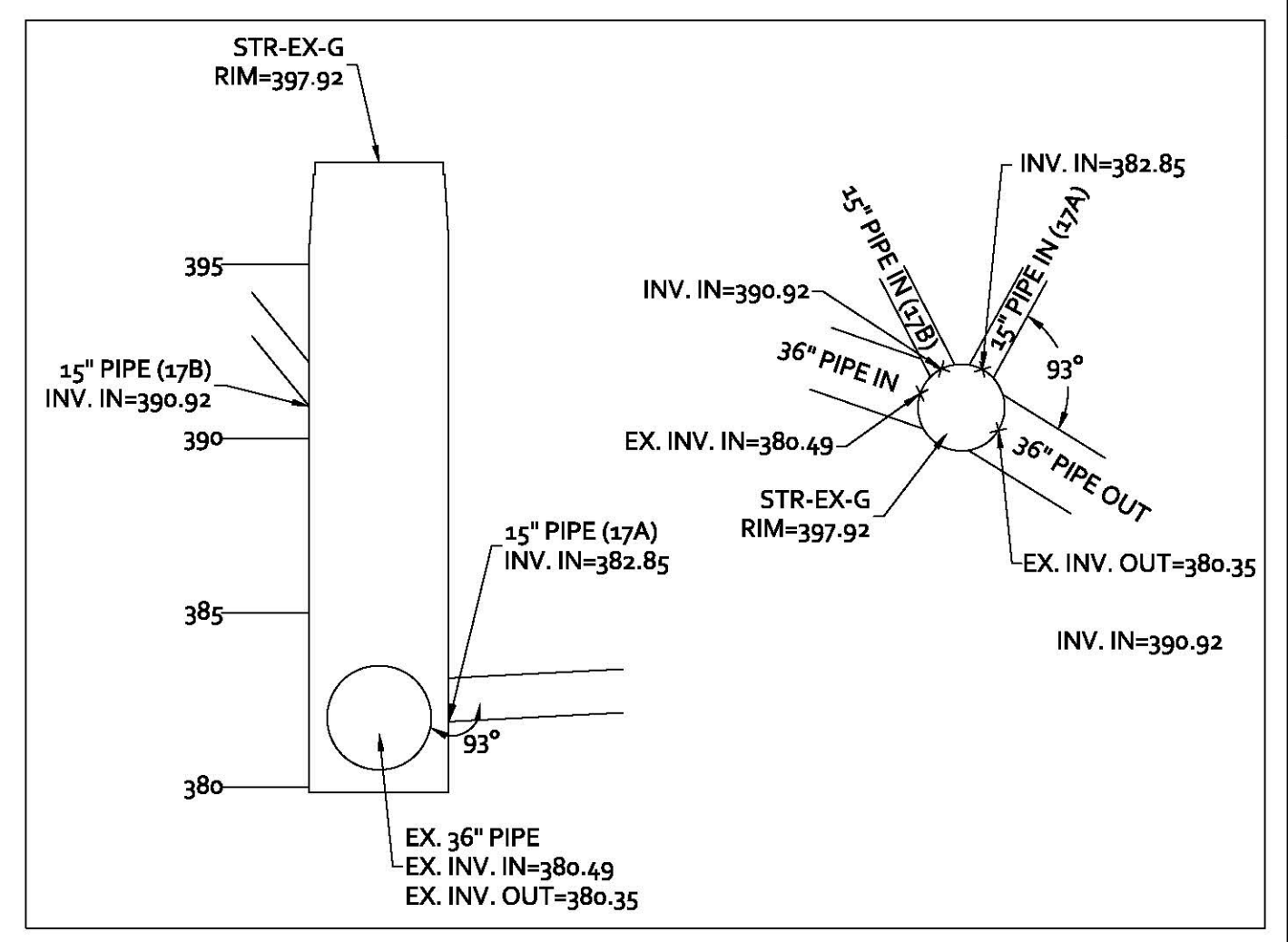
EX-MH-2 - MH-1 PROFILE



6-INCH TO 8-INCH WATERLINE PROFILE



- NOTES:
- ALL ROADWAY EMBANKMENT MATERIAL SHALL CONSIST PREDOMINANTLY OF SOIL AND BE PLACED IN SUCCESSIVE UNIFORM LAYERS NOT MORE THAN 8 INCHES IN THICKNESS BEFORE COMPACTION OVER THE ENTIRE ROADBED AREA IN ACCORDANCE WITH VDOT 2016 ROAD AND BRIDGE SPECIFICATION 303.04.
  - ALL FILL MUST MEET 95% COMPACTION.
  - MINIMUM 3.5' OF COVER MUST BE MAINTAINED OVER SANITARY SEWER MAINS.
  - MINIMUM 3.5' OF COVER MUST BE MAINTAINED OVER W/L MAINS.
  - MINIMUM 1.5' OF VERTICAL SEPARATION FROM STORM SEWER & W/L AND 1.5' OF SEPARATION BETWEEN W/L & SANITARY SEWER MUST BE PROVIDED.
  - VDOT STD. IS-1 INLET SHAPING REQUIRED ON ALL STORM STRUCTURES.
  - VDOT STD. SL-1 SAFETY SLAB REQUIRED WHERE DROP GREATER THAN 12" (NO SL-1 ON SANITARY MHS).
  - THE DUCTILE IRON WATERLINES SHALL BE WRAPPED IN POLYETHYLENE ENCASEMENT IF NEEDED BASED ON SOIL CONDITIONS, WHICH WILL BE TESTED AND INSPECTED DURING THE CONSTRUCTION PROCESS.
  - HDPE PIPE SHALL BE INSTALLED AND BACKFILLED IN ACCORDANCE WITH VDOT STANDARDS AND REQUIREMENTS, PER DETAIL ON THIS SHEET. CONTRACTOR SHALL USE STONE BACKFILL MATERIAL AS REQUIRED AND SHALL INSTALL AND BACKFILL THE PIPES TO ENSURE PROPER COMPACTION AROUND THE PIPES AND PREVENT CRUSHING OR DEFORMING THE STORM PIPES DURING CONSTRUCTION.
  - THE CONTRACTOR SHALL CLEAN AND VIDEO CAMERA ALL PIPES AFTER CONSTRUCTION IS COMPLETE, AND PROVIDE THESE VIDEOS TO THE OWNER AND ENGINEER FOR CERTIFICATION.



REVISIONS

REVISION DESCRIPTION	DATE
INITIAL SUBMITTAL	1/25/19
REVISED PLANS PER COMMENTS DATED 2/1/19	2/8/19
REVISED PLANS PER COMMENTS DATED 2/21/19	2/25/19

COLLINS ENGINEERING

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

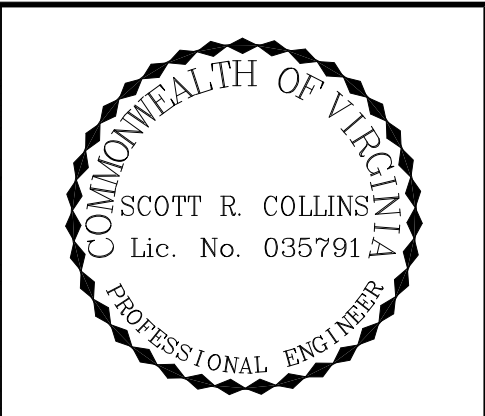
1st STREET SOUTH APARTMENTS - PHASE I FINAL SITE PLAN

DRAINAGE & UTILITY PROFILES

JOB NO.	182158
SCALE	1"=50'
SHEET NO.	8

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DATE	REVISION DESCRIPTION
1/25/19	INITIAL SUBMITTAL
2/8/19	REVISED PLANS PER COMMENTS DATED 2/1/19
2/25/19	REVISED PLANS PER COMMENTS DATED 2/21/19

**COLLINS ENGINEERING**  
 200 GARRETT STREET, SUITE K - CHARLOTTESVILLE, VA 22902 - 434-293-3719

**1st STREET SOUTH APARTMENTS - PHASE I FINAL SITE PLAN**  
 DRAINAGE MAP & CALCULATIONS

PROJECT: 182158  
 SCALE: 1"=50'  
 SHEET NO. 9

STR. NO.	PIPE INFORMATION					INLET INFORMATION				COMMENTS	
	DIA. (in.)	LENGTH (ft.)	SLOPE (%)	INVERT IN	INVERT OUT	MATERIAL	INLET TYPE	Curb Type	SLOT LENGTH		RIM ELEVATION
14							DI-3C	CG-2	4	403.58	
13	15	73.57	3.14%	396.58	394.27	HDPE					
12							MH	CG-2	N/A	401.33	
11	15	69.50	1.19%	394.17	393.35	HDPE					
10							MH	CG-2	N/A	400.50	
9	15	86.62	0.75%	393.25	392.60	HDPE					
8							DI-3C	CG-2	4	399.17	VDOT STD. IS-1 REQ'D
7	15	68.75	2.04%	392.50	391.10	HDPE					
6							DI-3B	CG-2	10	398.00	VDOT STD. IS-1 REQ'D
5	15	106.41	3.98%	391.00	386.77	HDPE					
4							DI-3C	CG-2	8	393.75	VDOT STD. IS-1 REQ'D
3	15	35.81	0.67%	386.67	386.43	HDPE					
2							DI-3C	CG-2	4	395.00	VDOT STD. IS-1 REQ'D
1	18	49.31	0.67%	386.33	386.00	HDPE					
10B							DI-3C	CG-2	6	400.17	
10A	15	28.20	1.13%	393.67	393.35	HDPE					
12B							DI-3C	CG-2	4	404.25	
12A	15	50.87	5.86%	397.25	394.27	HDPE					
UGD-OUTLET 17A	15	5.08	2.17%	382.96	382.85	HDPE				397.67	
UGD-BYPASS 19	15	6.64	3.46%	391.75	391.27	HDPE				397.92	
18							MH	CG-2	N/A	397.92	
17B	15	14.89	1.68%	391.17	390.92	HDPE				397.92	
20							DI-3B	CG-2	6	396.20	
20A	15	14.55	12.03%	391.75	390.00	HDPE				396.20	

INLETS ON GRADE, DESIGN (CURB SPREAD AND INLET CAPTURE)											
Intensity <u>6.50</u> (Intensity is 4 in/hr for spread, and 6.5 in/hr for capacity and depth)											
Mannings Coefficient, n is 0.013											
Plan Label	VDOT DI type	L, throat length (ft)	A, Drainage area (acres)	C, rational coeff.	CA	Q, flow inc. (cfs)	Qb, carry-over (cfs)	Qt, total flow	S, gutter longitudinal slope (ft/ft)	Sx, lane cross slope (ft/ft)	W, gutter width (ft)
20	3B	6.0	0.11	0.90	0.099	0.64	0.00	0.64	0.0050	0.0200	2.0
6	3B	10.0	0.08	0.84	0.067	0.44	0.00	0.44	0.0482	0.0200	2.0

INLETS ON GRADE, DESIGN (CURB SPREAD AND INLET CAPTURE)											
Intensity <u>4.00</u> (Intensity is 4 in/hr for spread, and 6.5 in/hr for capacity and depth)											
Mannings Coefficient, n is 0.013											
Plan Label	VDOT DI type	L, throat length (ft)	A, Drainage area (acres)	C, rational coeff.	CA	Q, flow inc. (cfs)	Qb, carry-over (cfs)	Qt, total flow	S, gutter longitudinal slope (ft/ft)	Sx, lane cross slope (ft/ft)	W, gutter width (ft)
20	3B	6.0	0.11	0.90	0.099	0.40	0.00	0.40	0.0050	0.0200	2.0
6	3B	10.0	0.08	0.84	0.067	0.27	0.00	0.27	0.0482	0.0200	2.0

INLETS IN SUMP, DESIGN (CURB SPREAD AND INLET SPREAD AND DEPTH)											
Intensity <u>6.50</u> (Intensity is 4 in/hr for spread, and 6.5 in/hr for capacity and depth)											
Mannings Coefficient, n is 0.013											
Plan Label	VDOT DI type	L, throat length (ft)	A, Drainage area (acres)	C, rational coeff.	CA	Q, flow inc. (cfs)	Qb, carry-over (cfs)	Qt, total flow	S, gutter longitudinal slope (ft/ft)	Sx, lane cross slope (ft/ft)	W, gutter width (ft)
2	3C	4.0	0.05	0.77	0.039	0.25	0.00	0.25	0.0010	0.0200	2.0
4	3C	8.0	0.14	0.83	0.116	0.76	0.00	0.76	0.0010	0.0200	2.0
8	3C	4.0	0.07	0.77	0.054	0.35	0.00	0.35	0.0010	0.0200	2.0
10B	3C	6.0	0.18	0.85	0.153	0.99	0.00	0.99	0.0010	0.0200	2.0
12B	3C	4.0	0.04	0.84	0.034	0.22	0.00	0.22	0.0010	0.0200	2.0
14	3C	4.0	0.09	0.72	0.065	0.42	0.00	0.42	0.0010	0.0200	2.0
EX-F	3C	8.0	0.12	0.80	0.096	0.62	0.00	0.62	0.0010	0.0200	2.0

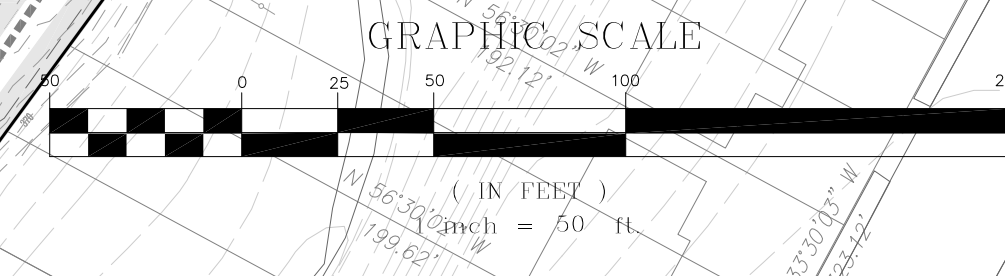
- gutter longitudinal slope of 0.001 should be used in a sump condition  
 - grate inlets (DI-7) in open pavement areas will not have a curb spread, but will have inlet spread and depth  
 - for inlets draining to stormwater management facilities, the 6.5in/hr check storm will suffice for the 10yr conveyance to the facilities  
 NOTE: Inlet size for structures determined by overland flow. Pipes have been sized to include overland flow as well as yard inlet and roof drain drainage areas.

INLETS IN SUMP, DESIGN (CURB SPREAD AND INLET SPREAD AND DEPTH)											
Intensity <u>4.00</u> (Intensity is 4 in/hr for spread, and 6.5 in/hr for capacity and depth)											
Mannings Coefficient, n is 0.013											
Plan Label	VDOT DI type	L, throat length (ft)	A, Drainage area (acres)	C, rational coeff.	CA	Q, flow inc. (cfs)	Qb, carry-over (cfs)	Qt, total flow	S, gutter longitudinal slope (ft/ft)	Sx, lane cross slope (ft/ft)	W, gutter width (ft)
2	3C	4.0	0.05	0.77	0.039	0.15	0.00	0.15	0.0010	0.0200	2.0
4	3C	8.0	0.14	0.83	0.116	0.46	0.00	0.46	0.0010	0.0200	2.0
8	3C	4.0	0.07	0.77	0.054	0.22	0.00	0.22	0.0010	0.0200	2.0
10B	3C	6.0	0.18	0.85	0.153	0.61	0.00	0.61	0.0010	0.0200	2.0
12B	3C	4.0	0.04	0.84	0.034	0.13	0.00	0.13	0.0010	0.0200	2.0
14	3C	4.0	0.09	0.72	0.065	0.26	0.00	0.26	0.0010	0.0200	2.0
EX-F	3C	8.0	0.12	0.80	0.096	0.38	0.00	0.38	0.0010	0.0200	2.0

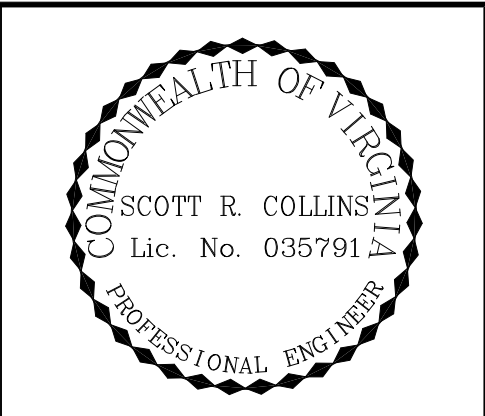
- gutter longitudinal slope of 0.001 should be used in a sump condition  
 - grate inlets (DI-7) in open pavement areas will not have a curb spread, but will have inlet spread and depth  
 - for inlets draining to stormwater management facilities, the 6.5in/hr check storm will suffice for the 10yr conveyance to the facilities  
 NOTE: Inlet size for structures determined by overland flow. Pipes have been sized to include overland flow as well as yard inlet and roof drain drainage areas.



Structure	Area (Acres)	Cw	t <sub>c</sub> (Min.)
2	0.19	0.77	5.0
4	0.18	0.83	5.0
6	0.08	0.84	5.0
8	0.09	0.77	5.0
10B	0.26	0.85	5.0
12B	0.06	0.84	5.0
14	0.10	0.72	5.0
EX-G	22.31	0.44	13.0
EX-F	0.62	0.80	6.0
ROOF-6	0.15	0.90	5.0
YARD-6	0.12	0.40	5.0
ROOF-8	0.24	0.90	5.0
YARD-8	0.01	0.50	5.0
ROOF-10B	0.19	0.90	5.0
YARD-10B	0.01	0.45	5.0
ROOF-12B	0.06	0.90	5.0
YARD-12B	0.18	0.37	5.0
20	0.11	0.90	5.0







Design Storm Year = 100. Table with columns: INLET STATION, OUTLET WATER SURFACE ELEV, L0, D0, Q0, SW, HR, V0, H0, QNS, VNS, Q\*V, W^2g, H, ANGLE, Hs, Ht, 1.3Ht, .5Ht, H, H, INLET WATER SURFACE ELEV, RIM ELEV. Includes data for junction loss calculations and flow characteristics at various points.

Table with columns: POINT, DOWNSTREAM STRUCTURE, DRAIN AREA ACRIS, RUNOFF COEFF. C, INCR, CA ACCUM, INLET TIME MIN, RAIN FALL MIN, RUNOFF Q C.F.S., INVERT ELEVATIONS UPPER LOWER FEET, LENGTH FT./FT., SLOPE INCHES, DIA CITY C.F.S., VEL F.P.S., FLOW TIME SEC. Lists parameters for various points and structures.

Table with columns: INLET, STRUCTURE TYPE, AREA (FT^2), PERIMETER (FT), DRAINAGE A (ACRES), C, I (IN/HR), Q (CFS), D (IN), FLOW TYPE. Lists details for various inlets and structures like YARD-6, YARD-8, YARD-10B, etc.

Design Storm Year = 10. Table with columns: INLET STATION, OUTLET WATER SURFACE ELEV, L0, D0, Q0, SW, HR, V0, H0, QNS, VNS, Q\*V, W^2g, H, ANGLE, Hs, Ht, 1.3Ht, .5Ht, H, H, INLET WATER SURFACE ELEV, RIM ELEV. Similar to the first table but for a 10-year storm year.

PIPE DESIGN table with columns: Pipe, Hydrology (Drainage area, C, CA increment, CA sum accumulated, Tc, time of conc., I, rainfall intensity, Q, flow rate, Q, total flow), Pipe (Invert in (ft), Invert out (ft), L, reach length (ft), n, Manning's coeff, S, slope, D, Diameter (in), Full Flow Capacity (cfs), V, Velocity (fpm), Flow Time (min), Remarks). Includes data for pipe runs like STR-14, STR-10, STR-12B, etc.

REVISIONS table with columns: REVISION DESCRIPTION, DATE, INITIAL SUBMITTAL, REVISED PLANS PER COMMENTS DATED. Lists various revision dates and descriptions.

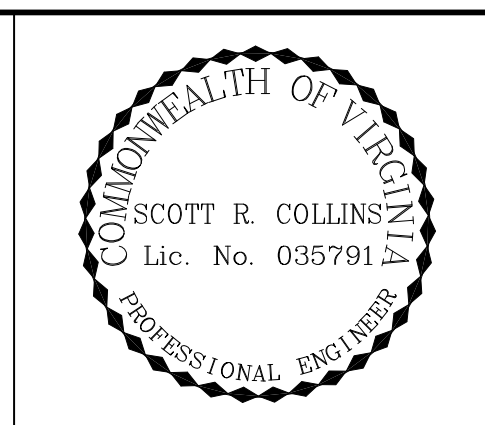
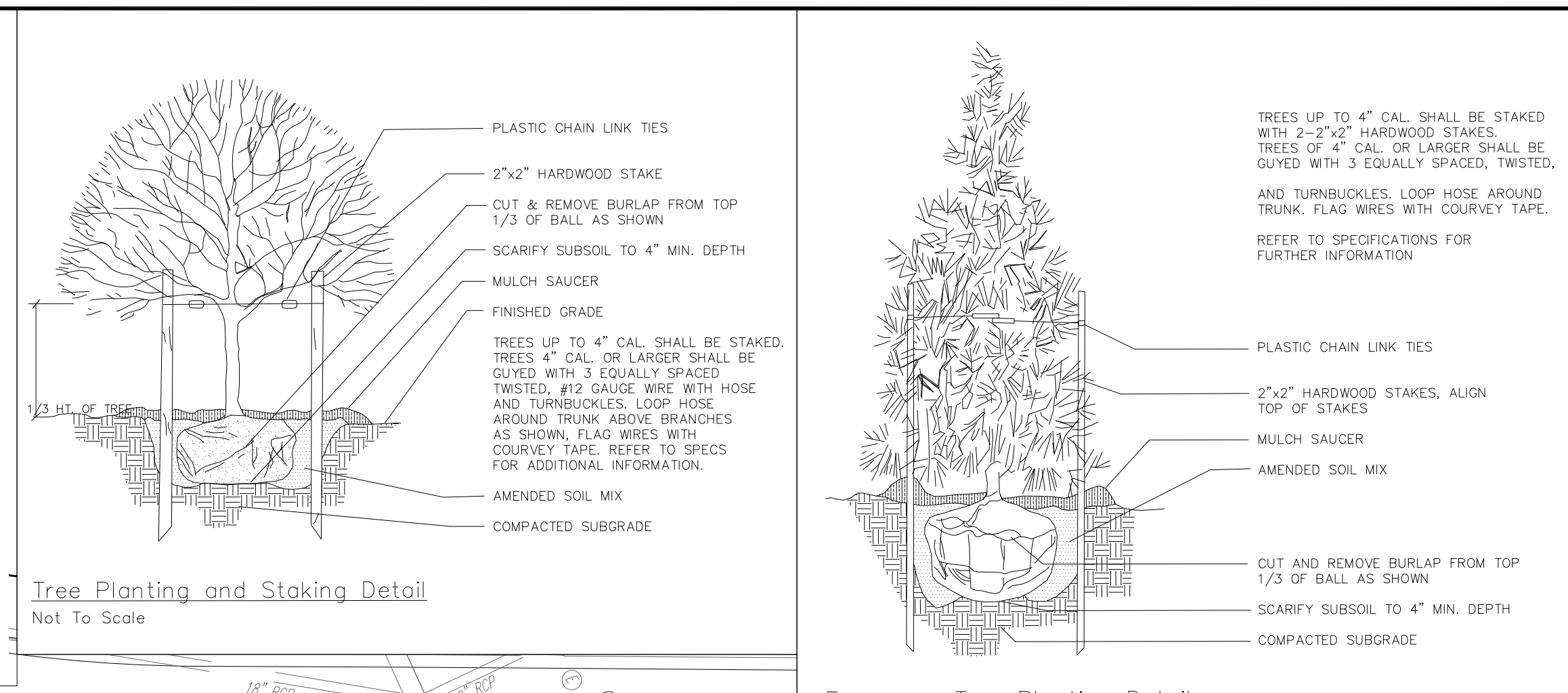
Collins Engineering logo and contact information: 200 GARRETT STREET, SUITE K - CHARLOTTESVILLE, VA 22902 - 434-293-3719. Project title: 1st STREET SOUTH APARTMENTS - PHASE I FINAL SITE PLAN DRAINAGE CALCULATIONS. Job No. 182158. Scale 1"=50'. Sheet No. 10.

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PLANT SCHEDULE						
SYM	BOTANICAL	COMMON NAME	SIZE	CANOPY (sf)	QUANTITY	CANOPY COVERAGE (sf)
<b>TREES</b>						
AR	ACER RUBRUM	RED MAPLE	2 1/2" cal	397	7	2,779
PA	PLATANUS x ACERIFOLIA	LONDON PLANETREE	2 1/2" cal	368	8	2,944
QR	QUERCUS RUBRA	NORTHERN RED OAK	2 1/2" cal	424	2	848
QP	QUERCUS PHELLOS	WILLOW OAK	2 1/2" cal	370	12	4,440
AG	AMELANCHIER x GRANDIFLORA	SERVICEBERRY	6-7' ht.	130	2	260
CC	CERCIS CANADENSIS	EASTERN REDBUD	6-7' ht.	128	12	1,536
CF	CORNUS FLORIDA	DOGWOOD	6-7' ht.	124	12	1,488
<b>SHRUBS</b>						
FG	FOTHERGILLA GARDENII	DWARF FOTHERGILLA	18"-24 ht. min	14	23	322
IH	ITEA VIRGINICA 'HENRY'S GARNET'	SWEETSPICE	24 ht. min	16	33	528
IG	ILEX GLABRA	DWARF INKBERRY HOLLY	18"-24 ht. min	30	27	810
<b>EVERGREEN TREES</b>						
MG	MAGNOLIA GRANDIFLORA 'ALTA'	SOUTHERN MAGNOLIA	6-8' ht.	54	5	270
IN	ILEX 'NELLIE R STEVENS'	NELLIE R STEVENS HOLLY	5-7' ht.	44	7	308
<b>TOTAL CANOPY</b>						16,533

**LANDSCAPING CALCULATIONS:**  
A. REQUIRED SITE COVERAGE: 10% x 130,700 SF = 13,070 SF (16,533 SF PROVIDED)  
B. REQUIRED STREETScape TREES ALONG RIGHT-OF-WAY (EXCLUSIVE OF THE AREA ADJACENT TO THE PARKING LOT)  
TOTAL STREETScape: 300 LF (1 LARGE TREE PER 40 LF)  
REQUIRED: 8 LARGE TREES  
PROVIDED: 9 LARGE TREES  
C. REQUIRED STREETScape TREE BUFFER ADJACENT TO THE PARKING LOT AREAS  
TOTAL S-3 TYPE A SCREENING BUFFER (AT PARKING LOTS) = 150 LF x 10' = 1,500  
REQUIRED: 2 LARGE TREES, 2 MEDIUM TREES, 3 UNDERSTORY, 3 EVERGREEN, & 15 SHRUBS  
PROVIDED: 2 LARGE TREES, 2 MEDIUM TREES, 3 UNDERSTORY, 3 EVERGREEN, & 33 SHRUBS  
REQUIRED BUFFER ALONG ADJACENT PROPERTIES:  
1. SOUTHERN BUFFER: 5' MIN. S-2 SCREENING BUFFER (TYPE B): 160'x5' = 800 SF  
REQUIRED: 2 LARGE TREES, 1 MEDIUM TREE, 2 UNDERSTORY, 2 EVERGREEN, & 8 SHRUBS  
PROVIDED: 2 LARGE TREES, 1 MEDIUM TREE, 2 UNDERSTORY, 4 EVERGREEN, & 9 SHRUBS  
2. NORTHERN BUFFER: 5' MIN. S-2 SCREENING BUFFER (TYPE B): 172'x5' = 860 SF  
REQUIRED: 2 LARGE TREES, 1 MEDIUM TREE, 2 UNDERSTORY, 2 EVERGREEN, & 9 SHRUBS  
PROVIDED: 2 LARGE TREES, 1 MEDIUM TREE, 2 UNDERSTORY, 2 EVERGREEN, & 10 SHRUBS  
REQUIRED INTERIOR PARKING LOT: 5% x 27,385 SF = 1,370 SF (2,979 SF PROVIDED)  
REQUIRED LANDSCAPING: (1) TREE & (3) SHRUBS PER 8 SPACES (86 TOTAL SPACES) = (11) TREES & (33) SHRUBS  
PROVIDED LANDSCAPING: (11) TREES MEETING THE INTERIOR LANDSCAPING REQUIREMENT & (34) SHRUBS  
(NOTE: ADDITIONAL (4) TREES PROVIDED THAT DO NOT MEET COUNT TOWARD THE INTERIOR LANDSCAPING REQUIREMENTS)  
INTERIOR TREES ARE DENOTED WITH A SOLID SHADE & INTERIOR SHRUBS ARE DENOTED WITH A STRIPED HATCHING  
RECREATIONAL LANDSCAPED AREAS:  
UPLAND RECREATIONAL AREAS = 5,400 SF (25% REQUIRED = 1,350 SF)  
TOTAL PROVIDED LANDSCAPING IN RECREATIONAL AREAS = 1,417 SF (26%)  
LOWER RECREATIONAL AREA (80% LANDSCAPED WITH EXISTING TREES TO REMAIN)  
NOTE: PROPOSED LANDSCAPING SHALL CONFORM TO THE REQUIREMENTS OF CHAPTER 34, ARTICLE VII, DIVISION 2 OF THE CITY OF CHARLOTTESVILLE CODE OF DEVELOPMENT.

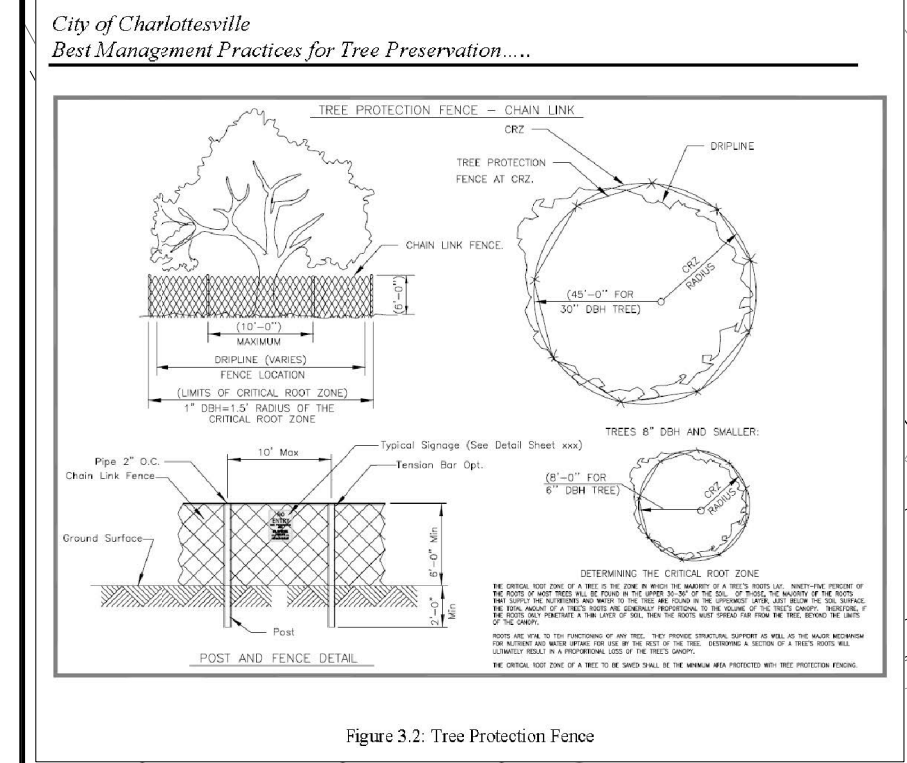


REVISIONS	
DATE	REVISION DESCRIPTION
1/25/19	INITIAL SUBMITTAL
2/8/19	REVISED PLANS PER COMMENTS DATED 2/1/19
2/25/19	REVISED PLANS PER COMMENTS DATED 2/21/19

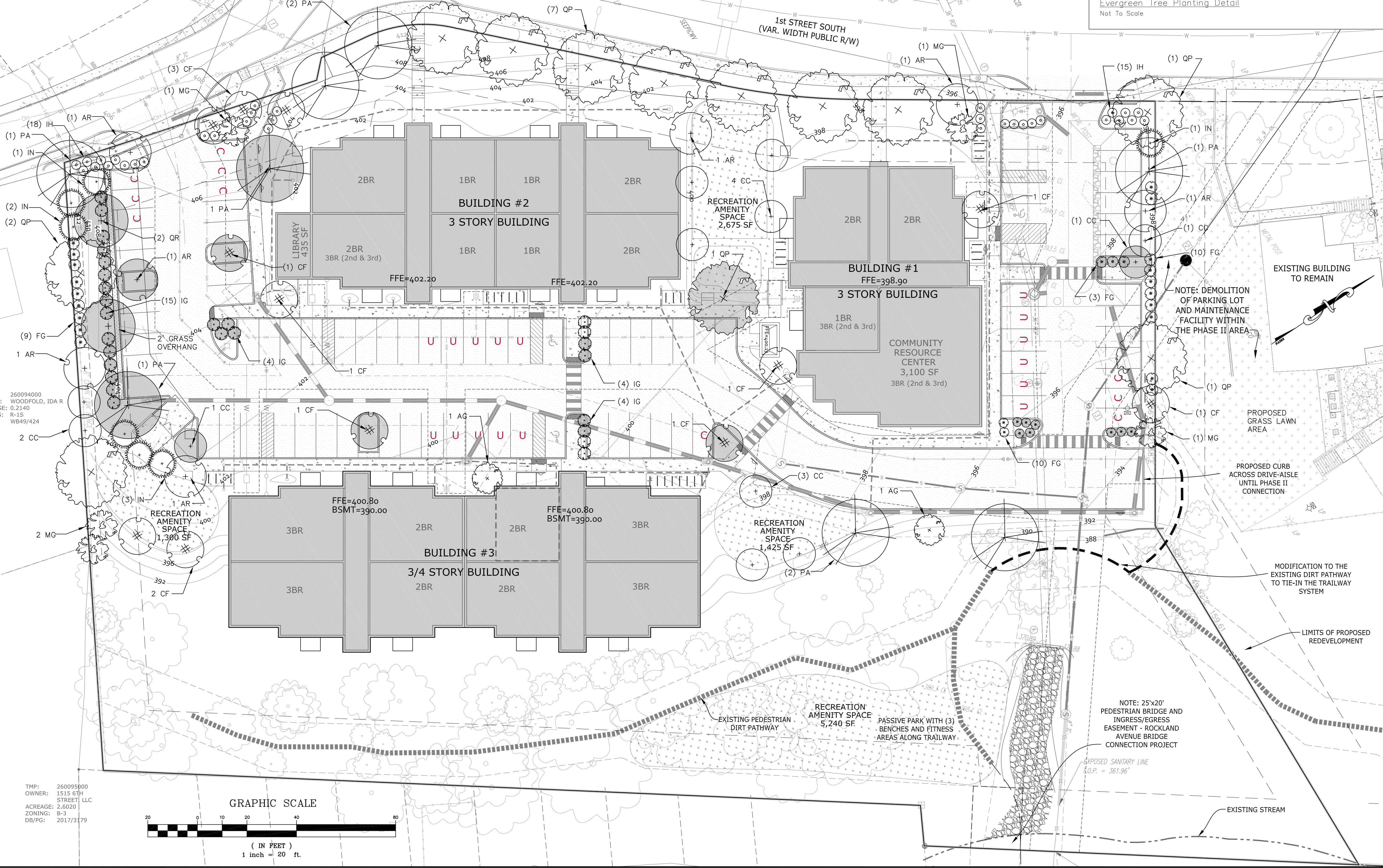
**COLLINS ENGINEERING**  
200 GARRETT STREET, SUITE K - CHARLOTTESVILLE, VA 22902 - 434.293.3719

**1st STREET SOUTH APARTMENTS - PHASE I FINAL SITE PLAN**  
LANDSCAPING PLAN

PROJECT: 182158  
SCALE: 1"=20'  
SHEET NO.: 11



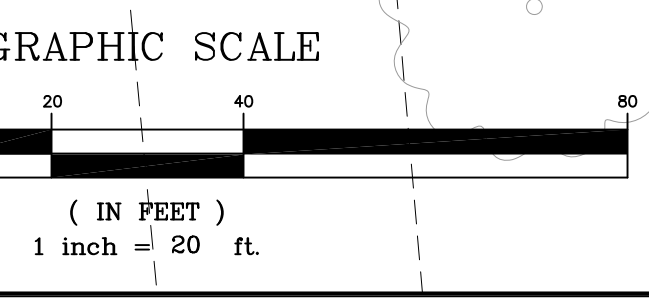
NOTE: ALL PROPOSED ON-SITE GRASS AREAS SHALL BE PLANTED WITH SOD FOR INSTANT STABILIZATION MEASURES TO PROTECT THE CRITICAL SLOPES ALONG THE STREAMS. PLANTING AND SODDING SHALL OCCUR IMMEDIATELY AFTER CONSTRUCTION ACTIVITY HAS BEEN COMPLETED AND PRIOR TO REMOVAL OF THE EROSION CONTROL MEASURES.



**LANDSCAPING NOTES:**  
1. ALL DUMPSTERS SHALL BE SCREENED WITH AN ENCLOSURE AT A MINIMUM HEIGHT OF ONE (1) FOOT ABOVE THE HEIGHT OF THE DUMPSTER AND WITH A MINIMUM INSIDE CLEARANCE AT THE OPENING OF TWELVE (12) FEET.  
2. ALL PLANTINGS SHALL HAVE A MINIMUM HEIGHT OF EIGHTEEN (18) INCHES WHEN PLANTED. PLANTINGS SHALL BE EVENLY SPACED IN A ROW, AT INTERVALS SUFFICIENT TO ALLOW FOR THEIR HEALTHY GROWTH AND DEVELOPMENT.  
3. TOTAL ROAD FRONTAGE (1ST STREET AND HARTMANS MILL ROAD) = 460'.  
TOTAL STREET TREES REQUIRED: 12  
STREET TREES PROVIDED: (12) PROPOSED STREET TREES  
NOTE: NO TREES TO BE MAINTAINED BY THE CITY OF CHARLOTTESVILLE  
4. LARGE STREET TREES SHALL BE PLANTED WITHIN A PLANTING STRIP WITH A MINIMUM OF 8' WIDE, AND SOIL VOLUME OF 900 CF PER TREE, WITH A SPACING OF 30' MIN.  
5. FIRE HYDRANTS, FIRE PUMP TEST HEADERS, FIRE DEPARTMENT CONNECTIONS AND FIRE SUPPRESSION SYSTEM CONTROL VALVES SHALL REMAIN CLEAR & UNOBSTRUCTED BY LANDSCAPING, PARKING AND OTHER OBJECTS. LANDSCAPING IN THESE VICINITIES SHALL NOT ENCROACH WITHIN A FIVE (5) FOOT RADIUS ON MATURITY.  
6. CONTRACTOR TO MONITOR TREES FOR STRESS AND/OR DAMAGE AND ADVISE LA AND TREE ARBORIST IF ANY OCCUR.  
7. CONTRACTOR TO NOTIFY LANDSCAPE ARCHITECT AND/OR TREE ARBORIST 48-HOURS IN ADVANCE OF ANY CONSTRUCTION ACTIVITY NEEDED WITHIN ANY TREE PROTECTION MEASURE. ALL TREE PROTECTION MEASURES SHALL BE REPLACED IN ORIGINAL LOCATION ONCE WORK HAS BEEN COMPLETED. NO WORK SHALL BE DONE WITHIN DRIPLINE OF EXISTING TREES UNLESS APPROVED BY TREE ARBORIST OR LANDSCAPE ARCHITECT PRIOR TO WORK.  
8. ALL WORK TO BE PERFORMED BY THE CONTRACTOR WITHIN THE DRIPLINE OF ANY EXISTING TREE OR TREE PROTECTION AREA SHALL BE DONE IN A MANNER SENSITIVE TO ENSURING NO DAMAGE WILL BE DONE TO THE EXISTING TREES. THE PREFERRED METHOD FOR GRADING SMALL AREAS WITHIN THE DRIPLINE SHALL BE DONE BY HAND. LARGER AREAS TO BE GRADED MAY BE DONE WITH SMALL BOBCAT/TRACT-HOE. CONTRACTOR TO DISCUSS METHODS OF GRADING WORK WITH LANDSCAPE ARCHITECT AND TREE ARBORIST PRIOR TO COMMENCING ANY SUCH WORK WITHIN DESIGNATED TREE PROTECTION AREAS OR WITHIN EXISTING DRIPLINES.  
9. ALL PLANTS HAVING A QUANTITY GREATER THAN ONE(1) SHALL BE MATCHED AND SUPPLIED FROM THE SAME SOURCE (PER SPECIES).  
10. CONTACT LANDSCAPE ARCHITECT AT THE TIME OF PLANT MATERIAL DELIVERY. BEFORE ANY SUBSTITUTIONS OR CHANGES. IF SCHEDULED TYPES ARE UNAVAILABLE, AND FOLLOWING INSTALLATION, ALL PLANT SUBSTITUTIONS SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO PLACEMENT OF ORDERS.  
11. LANDSCAPE ARCHITECT SHALL INSPECT AND APPROVE ALL PLANT MATERIAL AT TIME OF DELIVERY AS WELL AS AFTER INITIAL PLACEMENT PRIOR TO PLANTING. CONTRACTOR TO NOTIFY LANDSCAPE ARCHITECT 48-HOURS PRIOR TO DELIVERY.  
12. PLANT LOCATIONS TO BE REEVALUATED AND REVISED, IF NECESSARY, AFTER FINISHED GRADING.  
13. MULCH IN PLANTERS AND PLANTING BEDS TO BE CLEAN AND FREE FROM PEST AND DISEASES. MULCH SHALL BE APPLIED TO A 2-INCH DEPTH. MULCH RINGS 24-INCHES MIN. IN DIAMETER ARE TO BE PLACED AROUND ALL TREES NOT LOCATED IN PLANTING BEDS. MULCH TO BE DOUBLE-SHREDDED HARDWOOD.  
14. CONTRACTOR TO VERIFY ALL QUANTITIES BETWEEN PLAN AND PLANT LIST AND REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT IMMEDIATELY PRIOR TO ORDERING.  
15. ALL STREET TREES WITHIN THE PUBLIC RIGHT OF WAY SHALL BE MAINTAINED BY THE HOMEOWNERS ASSOCIATION.

TMP: 260094000  
OWNER: WOODFOLD, IDA R  
ACREAGE: 0.2140  
ZONING: R-15  
DB/PG: WB49/424

TMP: 260095000  
OWNER: 1515 6TH STREET LLC  
ACREAGE: 2.6020  
ZONING: B-3  
DB/PG: 2017/3179







REVISIONS	
REVISION DESCRIPTION	DATE
INITIAL SUBMITTAL	1/25/19
REVISED PLANS PER COMMENTS DATED 2/1/19	2/8/19
REVISED PLANS PER COMMENTS DATED 2/21/19	2/25/19

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

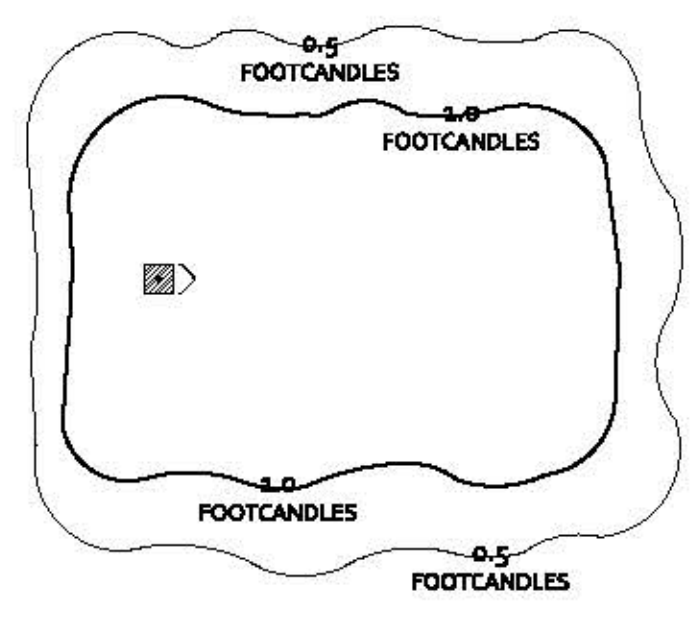
**1st STREET SOUTH APARTMENTS - PHASE I FINAL SITE PLAN**  
 LIGHTING PLAN

PROJECT: 182158  
 JOB NO: 182158  
 SCALE: 1"=20'  
 SHEET NO: 12

Luminaire Schedule							
Symbol	Qty	Label	Arrangement	Ht.	Total Lamp Lumens	LLF	Description
▶	12	LBELL-MH150	SINGLE	15'	13000	1.000	DL-LBELL-MH150

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Calculation	Illuminance	Fc	1.49	10.0	0.0	N.A.	N.A.

**STANDARD LIGHTING DETAIL:**



**Poles & Landscaping**  
**LBELL**  
 Dark Sky Hookarm

**STANDARD PRODUCT SPECIFICATIONS**

**Materials:**  
Cast Aluminum

**Finish:**  
Powder Coated

**Lens:**  
Clear Polycarbonate

**Lamps:**  
Lamps are Included

**Listing:**  
Wet Listed

**Ballast Info:**  
120 Volt Class P, 60 Hz. Electronic, Options Shown Below.

**Installation:**  
Hardware is Included. Install by a Qualified Electrician.

**Warranty:**  
1 Year Limited From Date of Shipment

**Additional Info:**  
All Light Emitted Below Horizontal Plane of the Head



**EXAMPLE: DL-LBELL-BL-100M-4-H**

MODEL	FINISH	WATTAGE	VOLTAGE	BALLAST	OPTIONS
LBELL	BL Black	90W 100W 150W 180W	1 Single Tap 4 Multi Tap	H RFP Ballast Manufacturer Requests Accepted at Additional Charge	
	SLM	50W/MEI 70W/MEI 100W/MEI 150W/MEI			

PH: 936-494-3900 • FX: 936-494-3910



**Poles & Landscaping**  
**POLE-RSP**

**STANDARD PRODUCT SPECIFICATIONS**

**Materials:**  
Mild Steel

**Anchor Bolt:**  
1/2" X 21" Black Iron Bolts (4) Supplied with 2 Nuts and 2 Washers For Each

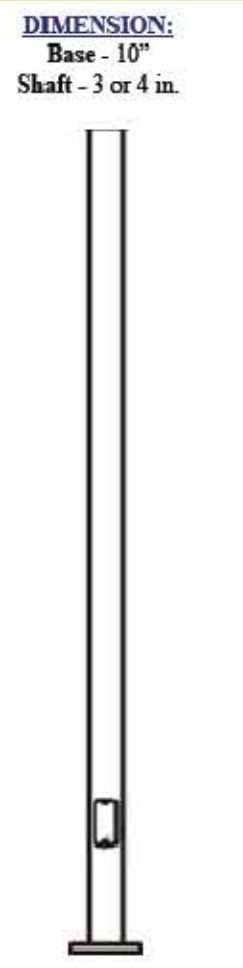
**Template:**  
Provided

**Hand Hole:**  
Standard on Poles 15' and Taller

**Base Cover:**  
Standard on all Poles

**Installation:**  
Hardware is Not Included. Install by a Qualified Electrician.

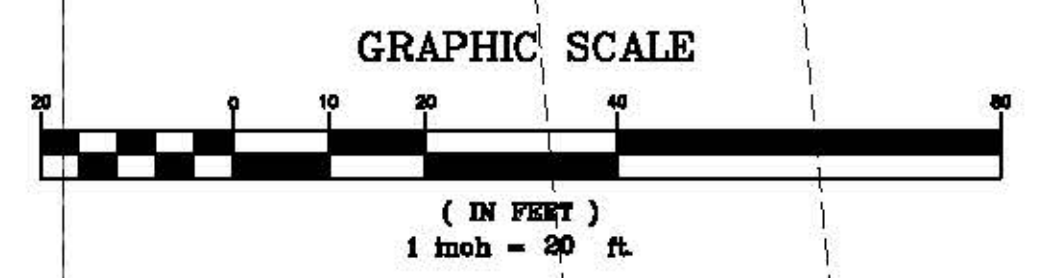
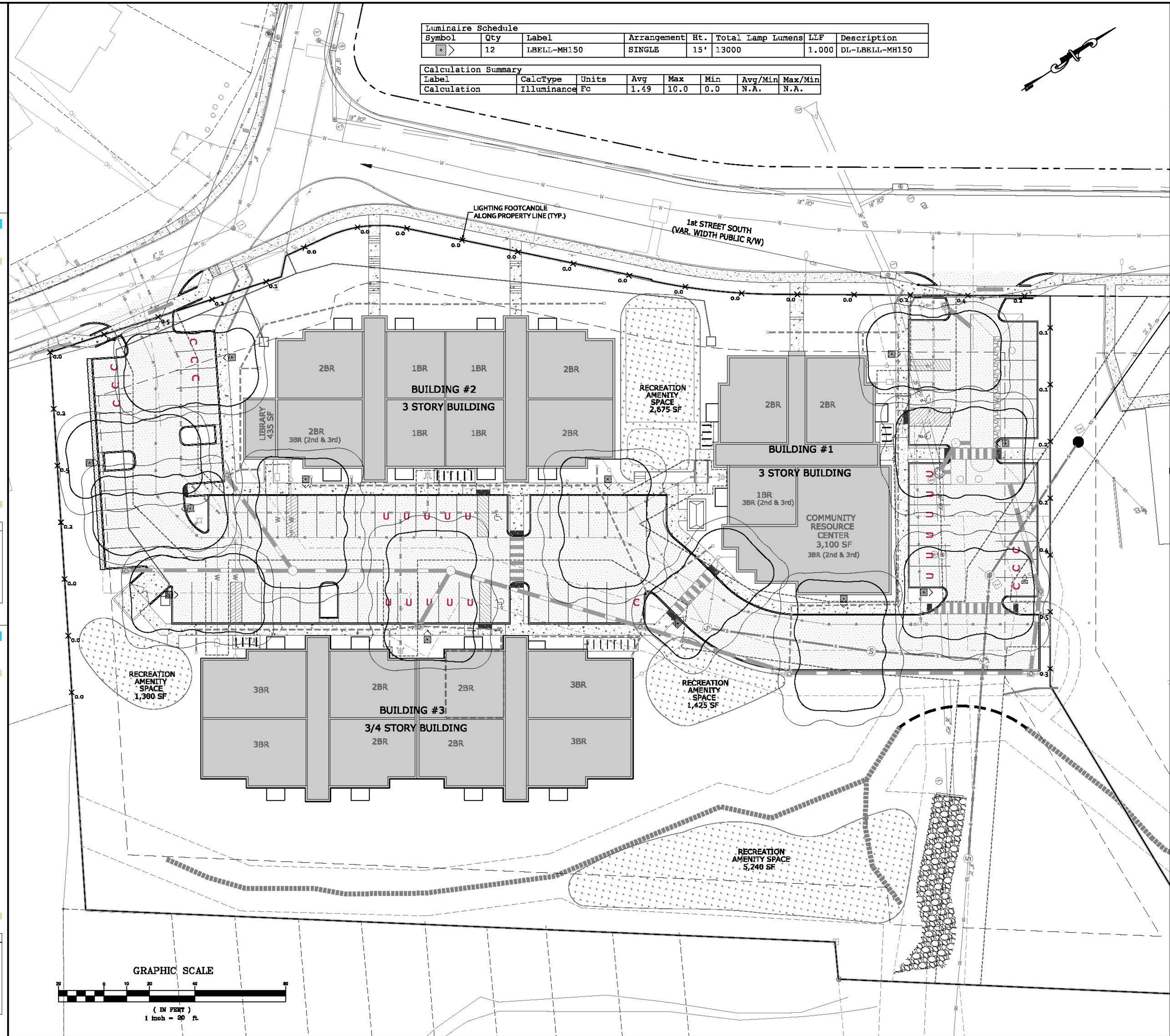
**Warranty:**  
1 Year Limited From Date of Shipment



**EXAMPLE: POLE-RSP-4-40-12-BL-PC**

MODEL	SIZE	SCHEDULE	HEIGHT	COLOR	OPTIONS
POLE-RSP	4 4' OD	40	18 18 20 Feet CL Custom Length	BL Black BK Bronze CC Custom Color	PC Powder Coating TM Zinc Metal HH Hand Hole

PH: 936-494-3900 • FX: 936-494-3910





**EROSION CONTROL** \* VIRGINIA EROSION & SEDIMENT CONTROL HANDBOOK SPECIFICATION NUMBER

SAF	SAFETY FENCE	3.01
CE	CONSTRUCTION ENTRANCE	3.02
CRS	CONSTRUCTION ROAD STABILIZATION	3.03
SF	SILT FENCE	3.05
IP	STORM DRAIN INLET PROTECTION	3.07
DD	TEMPORARY DIVERSION DIKE	3.09
RHW	TEMPORARY RIGHT-OF-WAY DIVERSION	3.11
ST	SEDIMENT TRAP	3.13
SD	TEMPORARY SLOPE DRAIN	3.15
TS	OUTLET PROTECTION	3.18
TS	LEVEL SPREADER	3.21
TS	TEMPORARY SEEDING	3.31
PS	PERMANENT SEEDING	3.32
SO	SODDING	3.33
BM	BLANKET MATTING	3.36
TP	TREE PROTECTION	3.38
DC	DUST CONTROL	3.39

**EROSION & SEDIMENT CONTROL MEASURES:**

STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK. STRUCTURAL PRACTICES USED IN THIS SECTION CONSIST OF THE FOLLOWING:

- 3.01 SAFETY FENCE:** A PROTECTIVE BARRIER INSTALLED TO PREVENT ACCESS TO AN EROSION CONTROL MEASURE. TO PROHIBIT THE UNDESIRABLE USE OF AN EROSION CONTROL MEASURE BY THE PUBLIC. APPLICABLE TO ANY CONTROL MEASURE OR SERIES OF MEASURES WHICH CAN BE CONSIDERED UNSAFE BY VIRTUE OF POTENTIAL ACCESS BY THE PUBLIC.
- 3.02 CONSTRUCTION ENTRANCE:** A STABILIZED ENTRANCE LOCATED AT POINTS OF VEHICULAR INGRESS AND EGRESS ON A CONSTRUCTION SITE. TO REDUCE THE AMOUNT OF MUD TRANSPORTED ONTO PAVED PUBLIC ROADS BY MOTOR VEHICLES OR RUNOFF. CONSTRUCTION ENTRANCES SHALL BE INSTALLED AS SHOWN ON THE PLANS TO REDUCE THE AMOUNT OF MUD TRANSPORTED ONTO PUBLIC ROADWAYS.
- 3.03 CONSTRUCTION ROAD STABILIZATION:** THE TEMPORARY STABILIZATION OF ACCESS ROADS, SUBSCRIPTION ROADS, PARKING AREAS, AND OTHER SITE VEHICLE TRANSPORTATION ROUTES WITH STONE IMMEDIATELY AFTER GRADING. TO REDUCE EROSION OF TEMPORARY ROADWAYS BY CONSTRUCTION TRAFFIC DURING WET WEATHER AND TO REDUCE EROSION AND SUBSEQUENT ROAD DAMAGE TO PERMANENT ROADWAYS BETWEEN THE TIME OF INITIAL GRADING AND FINAL STABILIZATION. USE WHEREVER STONE-BASE ROADS OR PARKING AREAS ARE CONSTRUCTED, WHETHER PERMANENT OR TEMPORARY, FOR USE BY CONSTRUCTION TRAFFIC.
- 3.05 SILT FENCE:** A TEMPORARY SEDIMENT BARRIER CONSISTING OF A SYNTHETIC FILTER FABRIC STRETCHED ACROSS AND ATTACHED TO STAKES OR DRIVEN TO INTERCEPT AND OBTAIN SMALL AMOUNTS OF SEDIMENT FROM DISTURBED AREAS DURING CONSTRUCTION OPERATIONS IN ORDER TO PREVENT SEDIMENT FROM LEAVING THE SITE, AND TO DECREASE THE VELOCITY OF SHEET FLOWS AND LOW-TO-MODERATE LEVEL CHANNEL FLOWS. SILT FENCE BARRIERS SHALL BE INSTALLED DOWN SLOPE OF AREAS WITH MINIMAL GRADES TO FILTER SEDIMENT LADEN RUNOFF FROM SHEET FLOW AS INDICATED. THEY SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND MAINTAINED IN ACCORDANCE WITH THE VIRGINIA EROSION & SEDIMENT CONTROL HANDBOOK (VESCH).
- 3.07 STORM DRAIN INLET PROTECTION:** A PERMANENT FILTER OR AN EXCAVATED IMPOUNDING AREA AROUND A STORM DRAIN DROP INLET OR CURB INLET. TO PREVENT SEDIMENT FROM ENTERING STORM DRAINAGE SYSTEMS PRIOR TO PERMANENT STABILIZATION OF THE DISTURBED AREA. INLET PROTECTION APPLICABLE WHERE STORM DRAIN INLETS ARE TO BE MADE OPERATIONAL BEFORE PERMANENT STABILIZATION OF THE CORRESPONDING DISTURBED DRAINAGE AREA.
- 3.09 TEMPORARY DIVERSION DIKE:** A TEMPORARY RIDGE OF COMPACTED SOIL CONSTRUCTED AT THE TOP OR BASE OF A SLOPING DISTURBED AREA TO DIVERT STORM RUNOFF FROM UPSLOPE DRAINAGE AREAS AWAY FROM UNPROTECTED DISTURBED AREAS AND TO STABILIZE OUTLET TO DIVERT SEDIMENT-LADEN RUNOFF FROM A DISTURBED AREA TO A SEDIMENT-TRAPPING FACILITY SUCH AS A SEDIMENT TRAP OR SEDIMENT BASIN. USE WHEREVER STORMWATER RUNOFF MUST BE TEMPORARILY DIVERTED TO PROTECT DISTURBED AREAS OR TO RETAIN RUNOFF ON SITE DURING CONSTRUCTION. THESE STRUCTURES GENERALLY HAVE A LIFE EXPECTANCY OF 18 MONTHS OR LESS, WHICH CAN BE PROTECTED WITH PROPER MAINTENANCE.
- 3.11 TEMPORARY RIGHT-OF-WAY DIVERSION:** A RIDGE OF COMPACTED SOIL OR LOOSE ROCK OR GRAVEL CONSTRUCTED ACROSS DISTURBED RIGHTS-OF-WAY AND SIMILAR SLOPING AREAS TO SHORTEN THE FLOW LENGTH WITHIN A SLOPING RIGHT-OF-WAY, THEREBY REDUCING THE EROSION POTENTIAL BY DIVERTING STORM RUNOFF TO A STABILIZED OUTLET. GENERALLY, EARTHEN DIVERSIONS ARE APPLICABLE WHERE THERE IS LITTLE OR NO CONSTRUCTION TRAFFIC WITHIN THE RIGHT-OF-WAY. GRAVEL STRUCTURES ARE MORE APPLICABLE TO ROADS AND OTHER RIGHTS-OF-WAY WHICH ACCOMMODATE VEHICULAR TRAFFIC.
- 3.14 TEMPORARY SEDIMENT BASIN:** A TEMPORARY BARRIER OR DAM WITH A CONTROLLED STORMWATER RELEASE STRUCTURE FORMED BY CONSTRUCTING AN EMBANKMENT OF COMPACTED SOIL ACROSS A DRAINAGEWAY TO DETAIL SEDIMENT-LADEN RUNOFF FROM DISTURBED AREAS. "NET" AND "DRY" STORAGE LONG ENOUGH FOR THE MAJORITY OF THE SEDIMENT TO SETTLE OUT. APPLIES BELOW DISTURBED AREAS WHERE THE TOTAL CONTRIBUTING DRAINAGE AREA IS EQUAL TO OR GREATER THAN THREE ACRES. THERE MUST BE SUFFICIENT SPACE AND APPROPRIATE TOPOGRAPHY FOR THE CONSTRUCTION OF A TEMPORARY IMPOUNDMENT.
- 3.15 TEMPORARY SLOPE DRAIN:** A TEMPORARY 24" HEAVY DUTY, FLEXIBLE PIPE USED TO CONVEY RUNOFF FROM THE ENTIRE DRAINAGE AREA ABOVE A SLOPE TO THE BASE OF THE SLOPE WITHOUT EROSION. DRAINAGE PIPE SHALL BE SECURED TO THE SLOPE IN 10-FOOT INTERVALS. THE ENTRANCE TO THE SLOPE DRAIN SHALL CONSIST OF A STANDARD VDOT FLARED END-SECTION FOR METAL PIPE CULVERTS WITH INLET PROTECTION.
- 3.18 OUTLET PROTECTION:** A RIPRAP LINED FLOW TRANSITION STRUCTURE OR APRON DESIGNED TO PREVENT SCOUR AT STORMWATER OUTLETS BY ABSORBING THE INITIAL IMPACT OF THE FLOW AND REDUCING THE FLOW VELOCITY TO A LEVEL WHICH WILL NOT ERODE THE RECEIVING CHANNEL OR AREA. THE APRON IS APPLIED TO THE IMMEDIATE AREA BELOW THE PIPE OR CHANNEL OUTLET, EXTENDING ACROSS THE CHANNEL BOTTOM AND UP THE CHANNEL BANKS TO AN ELEVATION ONE FOOT ABOVE THE MAXIMUM TAILWATER DEPTH OR TO THE TOP OF THE BANK.
- 3.21 LEVEL SPREADER:** A RIPRAP LINED FLOW TRANSITION STRUCTURE OR APRON DESIGNED TO PREVENT SCOUR AT STORMWATER OUTLETS BY ABSORBING THE INITIAL IMPACT OF THE FLOW AND REDUCING THE FLOW VELOCITY TO A LEVEL WHICH WILL NOT ERODE THE RECEIVING CHANNEL OR AREA. THE APRON IS APPLIED TO THE IMMEDIATE AREA BELOW THE PIPE OR CHANNEL OUTLET, EXTENDING ACROSS THE CHANNEL BOTTOM AND UP THE CHANNEL BANKS TO AN ELEVATION ONE FOOT ABOVE THE MAXIMUM TAILWATER DEPTH OR TO THE TOP OF THE BANK.
- 3.21 LEVEL SPREADER:** AN OUTLET CONSISTING OF AN EXCAVATED DEPRESSION CONSTRUCTED AT ZERO GRADE ACROSS A SLOPE TO CONVERT CONCENTRATED RUNOFF TO SHEET FLOW AND RELEASE IT UNIFORMLY ONTO AREAS STABILIZED BY EXISTING VEGETATION.
- 3.31 SODDING:** THE ESTABLISHMENT OF A TEMPORARY VEGETATIVE COVER ON DISTURBED AREAS BY SEEDING WITH APPROPRIATE RAPIDLY GROWING ANNUAL PLANTS. TO REDUCE EROSION AND SEDIMENTATION BY STABILIZING DISTURBED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE FOR A PERIOD OF MORE THAN 14 DAYS. TO REDUCE DAMAGE FROM SEEDING AND TO CONSTRUCT AND PROTECT SITE AREAS, AND TO PROVIDE PROTECTION TO BARE SOILS EXPOSED DURING CONSTRUCTION UNTIL PERMANENT VEGETATION OR OTHER EROSION CONTROL MEASURES CAN BE ESTABLISHED.
- 3.32 PERMANENT SEEDING:** THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER ON DISTURBED AREAS BY PLANTING SEED. TO REDUCE EROSION AND DECREASE SEDIMENT YIELD FROM DISTURBED AREAS TO PERMANENTLY STABILIZE DISTURBED AREAS IN A MANNER THAT IS ECONOMICALLY ADAPTABLE TO SITE CONDITIONS, AND ALLOWS SELECTION OF THE MOST APPROPRIATE PLANT MATERIALS. TO IMPROVE WILDLIFE HABITAT. TO ENHANCE NATURAL BEAUTY. UPON COMPLETION OF CONSTRUCTION ACTIVITIES, ALL AREAS WILL RECEIVE A PERMANENT VEGETATIVE COVER.
- 3.33 SODDING:** THE ESTABLISHMENT OF A PERMANENT GRASS STAND FOR STABILIZATION OF FINE-GRADED DISTURBED AREAS.
- 3.36 BLANKET MATTING:** INSTALLATION OF A PROTECTIVE COVERING OR A SOIL STABILIZATION MAT ON A PREPARED PLANTING AREA OF A STEEP SLOPE OR CHANNEL TO AID IN THE CONTROLLING EROSION ON CRITICAL AREAS.
- 3.38 TREE PRESERVATION AND PROTECTION:** PROTECTION OF DESIRABLE TREES FROM MECHANICAL OR OTHER INJURY DURING LAND DISTURBING AND CONSTRUCTION ACTIVITIES. TO ENSURE THE SURVIVAL OF DESIRABLE TREES WHERE THEY WILL BE EFFECTIVE FOR EROSION AND SEDIMENT CONTROL, WATERSHED PROTECTION, LANDSCAPE BEAUTIFICATION, DUST AND POLLUTION CONTROL, NOISE REDUCTION, SHADE AND OTHER ENVIRONMENTAL BENEFITS WHILE THE LAND IS BEING CONVERTED FROM FOREST TO URBAN-TYPE USES. APPLIES IN TREE-INHABITED AREAS SUBJECT TO LAND DISTURBING ACTIVITIES.
- 3.39 DUST CONTROL:** REDUCING SURFACE AND AIR MOVEMENT OF DUST DURING LAND DISTURBING, DEMOLITION AND CONSTRUCTION ACTIVITIES. TO PREVENT SURFACE AND AIR MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES AND REDUCE THE PRESENCE OF DUSTS WHICH MAY PRESENT HEALTH, SAFETY, VISIBILITY HAZARDS, TRAFFIC SAFETY PROBLEMS OR HARM ANIMAL OR PLANT LIFE. DUST CONTROL MEASURES SHALL BE EMPLOYED TO PREVENT SURFACE AND AIR MOVEMENT OF DUST DURING CONSTRUCTION. MEASURES EMPLOYED SHALL BE IN ACCORDANCE WITH THE VESCH.

**EROSION CONTROL NOTES**

- THE PLAN APPROVING AUTHORITY MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.
- ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND VIRGINIA REGULATIONS 9VAC25-840 EROSION AND SEDIMENT CONTROL REGULATIONS.
- ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING. THE PLAN APPROVING AUTHORITY SHALL REVIEW AND APPROVE A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO, OFF-SITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY.
- THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE PLAN APPROVING AUTHORITY.
- ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.
- DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE.
- THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.
- ALL FILL MATERIAL TO BE TAKEN FROM AN APPROVED, DESIGNATED BORROW AREA.
- ALL WASTE MATERIALS SHALL BE TAKEN TO AN APPROVED WASTE AREA. EARTH FILL SHALL BE INERT MATERIALS ONLY, FREE OF ROOTS, STUMPS, WOOD, RUBBISH, AND OTHER DEBRIS.
- BORROW OR WASTE AREAS ARE TO BE RECLAIMED WITHIN 7 DAYS OF COMPLETION PER ZONING ORDINANCE SECTION 10.2.
- ALL INERT MATERIALS SHALL BE TRANSPORTED IN COMPLIANCE WITH CITY CODE AND STATE REGULATIONS.
- BORROW FILL OR WASTE ACTIVITY INVOLVING INDUSTRIAL-TYPE POWER EQUIPMENT SHALL BE LIMITED TO THE HOURS OF 7:00 AM TO 9:00 PM.
- BORROW, FILL OR WASTE ACTIVITY SHALL BE CONDUCTED IN A SAFE MANNER THAT MAINTAINS LANE GRASS, SILT FENCE AND DIVERSION DYKES WHICH ARE APPLICABLE TO THE PHYSICAL DAMAGE TO ADJACENT LAND AND IMPROVEMENTS, AND DAMAGE TO ANY PUBLIC STREET BECAUSE OF SLIDES, SINKING, OR COLLAPSE.
- THE DEVELOPER SHALL RESERVE THE RIGHT TO INSTALL, MAINTAIN, REMOVE OR CONVERT TO PERMANENT USE ANY EROSION CONTROL MEASURES WHERE APPLICABLE. ALL EROSION CONTROL MEASURES REQUIRED BY THIS PLAN REGARDLESS OF THE SALE OF ANY LOT, UNIT, BUILDING OR OTHER PORTION OF THE PROPERTY.
- TEMPORARY STABILIZATION SHALL BE TEMPORARY SEEDING AND MULCHING. SEEDING IS TO BE AT 75 LBS/Acre AND MULCHING IS TO BE AT 2 FEET OF FERTILIZER. MULCHING SHALL CONSIST OF A 50/50 MIX OF ANNUAL RYEGRASS AND CEREAL WINTER RYE, OR IN MARCH AND APRIL TO CONSIST OF ANNUAL RYE, OR MAY THROUGH AUGUST TO CONSIST OF GERMAN MILLET. STRAW MULCH IS TO BE APPLIED AT 80LBS/100SF. ALTERNATIVES ARE SUBJECT TO APPROVAL BY THE EROSION CONTROL INSPECTOR.
- PERMANENT STABILIZATION SHALL BE PERMANENT SEEDING AND MULCHING. SEEDING IS TO BE AT 75 LBS/Acre AND MULCHING IS TO BE AT 2 FEET OF FERTILIZER. MULCHING SHALL CONSIST OF A 50/50 MIX OF ANNUAL RYEGRASS AND CEREAL WINTER RYE, OR IN MARCH AND APRIL TO CONSIST OF ANNUAL RYE, OR MAY THROUGH AUGUST TO CONSIST OF GERMAN MILLET. STRAW MULCH IS TO BE APPLIED AT 80LBS/100SF. ALTERNATIVES ARE SUBJECT TO APPROVAL BY THE EROSION CONTROL INSPECTOR.
- MAINTENANCE: ALL MEASURES ARE TO BE INSPECTED WEEKLY AND AFTER EACH RAINFALL. ANY DAMAGE OR CLOGGING TO STRUCTURAL MEASURES IS TO BE REPAIRED IMMEDIATELY. SILT TRAPS ARE TO BE CLEANED WHEN 50% OF THE NET STORAGE VOLUME IS FILLED WITH SEDIMENT. ALL SEEDED AREAS ARE TO BE RESEED WHEN NECESSARY TO ACHIEVE A GOOD STAND OF GRASS. SILT FENCE AND DIVERSION DYKES WHICH ARE SUBJECT TO SEDIMENT TO HALF THEIR HEIGHT MUST BE CLEANED AND REPAIRED IMMEDIATELY.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE REMOVED WITHIN 30 DAYS OF FINAL SITE STABILIZATION, WHEN MEASURES ARE NO LONGER NEEDED, SUBJECT TO APPROVAL BY THE EROSION CONTROL INSPECTOR.
- THE E&S INSPECTOR HAS THE AUTHORITY TO ADD OR DELETE E&S CONTROLS AS NECESSARY IN THE FIELD AS SITE CONDITIONS CHANGE. IN ADDITION, NO SEDIMENT BASIN OR TRAP CAN BE REMOVED WITHOUT WRITTEN AUTHORIZATION.

**SOIL DESCRIPTION**

- 121C - CULPEPER - URBAN LAND COMPLEX-7% TO 15% SLOPES. SOIL IS TYPICALLY WELL DRAINED, WITH MORE THAN 80 INCHES TO THE WATER TABLE IN MOST CASES. SOIL'S PARENT MATERIAL IS RESIDUUM WEATHERED FROM META-ARKOSIC SANDSTONE AND QUARTZITE. THIS SOIL HAS CONVEX DOWN-SLOPE AND CONVEX ACROSS-SLOPE SHAPE. THE SOIL HAS A MEDIUM RUNOFF CLASS WITHOUT A FREQUENCY OF PONING OR FLOODING. THE KSAT VALUE IS GENERALLY VERY LOW TO HIGH.
- 77 - RIVERVIEW-CHEWALOA COMPLEX - SOIL IS TYPICALLY WELL DRAINED, WITH 36-60 INCHES TO THE WATER TABLE IN MOST CASES. SOIL'S PARENT MATERIAL IS ALUMINUM DERIVED FROM IGNEOUS ROCK. THIS SOIL HAS A LINEAR DOWN-SLOPE AND LINEAR ACROSS-SLOPE SHAPE. THE SOIL HAS A LOW RUNOFF CLASS WITHOUT A FREQUENCY OF PONING OR FLOODING. THE KSAT VALUE IS GENERALLY MODERATELY HIGH TO HIGH.

OVERALL, THE ONSITE SOILS CONSIST MOSTLY OF SILTY OR CLAYEY SOILS NEAR THE SURFACE, UNDERLAIN BY SANDY SILTS AND SILTY SANDS. THESE SOILS ARE PRIMARILY GROUP B SOILS, WITH MODERATE INFILTRATION RATE THROUGHOUTLY WET, AND THE SOILS HAVE A MODERATE RATE OF WATER TRANSMISSION.

NOTE: CONTRACTOR TO ENSURE LIME AND FERTILIZER RATIOS AND APPLICATION RATES ASSOCIATED WITH FINAL STABILIZATION ARE APPROPRIATE FOR THE SOIL CONDITIONS.

REFERENCE: WEB SOIL SURVEY ONLINE DATABASE, FOUND AT <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>

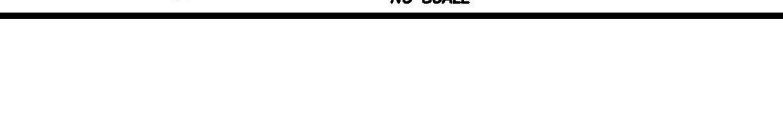
GENERAL SOILS (3:1 OR LESS)	PER ACRE
KENTUCKY 31 FESCUE	128 LBS.
RED TOP GRASS	2 LBS.
SEASONAL NURSE CROP	20 LBS.
SEASONAL NURSE CROP	150 LBS.

MONTH	ANNUAL RYE	FORKAL MILLET	ANNUAL RYE	WINTER RYE
FEBRUARY 16 THROUGH APRIL 15	ANNUAL RYE	FORKAL MILLET	ANNUAL RYE	WINTER RYE
MAY 1 THROUGH AUGUST 15	ANNUAL RYE	FORKAL MILLET	ANNUAL RYE	WINTER RYE
AUGUST 16 THROUGH OCTOBER 15	ANNUAL RYE	FORKAL MILLET	ANNUAL RYE	WINTER RYE
NOVEMBER THROUGH FEBRUARY 15	ANNUAL RYE	FORKAL MILLET	ANNUAL RYE	WINTER RYE

**PERMANENT SEEDING SCHEDULE**

(NO SCALE)  
(STD. & SPEC. 3.32 OF VIRGINIA EROSION & SEDIMENT CONTROL HANDBOOK, 3RD ED.)

- SET POSTS AND EXCAVATE A 4"x4" TRENCH UPSLOPE ALONG THE LINE OF POSTS.
- STAPLE WIRE FENCING TO THE POSTS.
- ATTACH THE FILTER FABRIC TO THE WIRE FENCE AND EXTEND IT INTO THE TRENCH.
- BACKFILL AND COMPACT THE EXCAVATED SOIL.



**DESCRIPTION OF EROSION & SEDIMENT CONTROL MEASURES:**

**EROSION AND SEDIMENT CONTROL MEASURES:**  
IT IS ANTICIPATED TO USE A CONSTRUCTION ENTRANCE, DIVERSIONS, A SEDIMENT TRAP AND SILT FENCES TO CONTROL SURFACE DRAINAGE. TEMPORARY SEEDING WILL BE USED IMMEDIATELY FOLLOWING ALL LAND DISTURBANCE ACTIVITIES. TEMPORARY STOCKPILE AREAS MAY NOT BE REQUIRED WITH THIS PROPOSED DESIGN. SHOULD FIELD ADJUSTMENTS NECESSITATE A SMALL STOCKPILE AREA THOUGH, IT SHALL BE DISCUSSED WITH THE E&S INSPECTOR AHEAD OF TIME. THE STOCKPILE WILL NEED TO BE MAINTAINED AND STORED FOR LATER SPREADING. STOCKPILE LOCATIONS SHALL BE ON SITE AND SHALL BE STABILIZED WITH A TEMPORARY VEGETATIVE COVER. PERMANENT SEEDING WILL BE PERFORMED FOR ALL AREAS WHICH WILL NO LONGER BE EXCAVATED AND WHERE CONSTRUCTION ACTIVITIES HAVE CEASED. PERMANENT SEEDING SHALL ALSO BE PERFORMED FOR ALL DENuded AREAS WHICH WILL BE LEFT DORMANT FOR A YEAR OR MORE. SELECTION OF SEED MIXTURE WILL DEPEND ON THE TIME OF YEAR APPLIED. TEMPORARY SEEDING WILL BE PERFORMED FOR ALL DENuded AREAS WHICH WILL BE LEFT DORMANT FOR MORE THAN SEVEN DAYS. THESE AREAS SHALL BE SEED WITH FAST GERMINATING VEGETATION IMMEDIATELY FOLLOWING GRADING OF THOSE AREAS. SELECTION OF SEED MIXTURE WILL DEPEND ON THE TIME OF YEAR APPLIED. ALL FINAL SEEDING SHALL BE STABILIZED WITH SODDING. TEMPORARY STABILIZATION ALONG ANY DISTURBED SLOPES SHALL BE ACHIEVED WITH BLANKET MATTING. SLOPE DRAINS AND A LEVEL SPREADER SHALL BE USED TO DIVERT THE RUNOFF SAFELY DOWN THE CRITICAL SLOPES, PREVENTING ADDITIONAL EROSION ALONG THESE SLOPES.

**3.01 SAFETY FENCE - TO DISCOURAGE ACCESS TO A PARTICULAR AREA.**  
3.02 CONSTRUCTION ENTRANCE - TO REDUCE THE AMOUNT OF MUD TRANSPORTED ONTO PAVED PUBLIC ROADS BY MOTOR VEHICLES OR RUNOFF.  
3.03 CONSTRUCTION ROAD STABILIZATION - TO REDUCE THE EROSION OF TEMPORARY ROADWAYS BY CONSTRUCTION TRAFFIC AND TO REDUCE THE EROSION AND SUBSEQUENT ROAD DAMAGE TO PERMANENT ROADWAYS BETWEEN THE TIME OF INITIAL GRADING AND FINAL STABILIZATION. CONSTRUCTION ROAD STABILIZATION WILL BE APPLIED TO THE CONTRACTOR PARKING & STAGING AREAS AS NEEDED.  
3.05 SILT FENCE - TO PREVENT PROPER FUNCTIONING, WHERE SHOWN ON THE PLANS.  
3.07 STORM DRAIN INLET PROTECTION - INLET PROTECTION IS PROPOSED ON INLETS, WHERE SHOWN ON THE PLANS.  
3.09 DIVERSION - PERIMETER DIVERSIONS ARE PROPOSED WHERE SHOWN ON THE PLANS TO DIRECT RUNOFF INTO A SEDIMENT TRAPPING DEVICE.  
3.13 SEDIMENT TRAP - A SEDIMENT TRAP IS PROPOSED WHERE SHOWN ON THE PLANS.  
3.32 PERMANENT SEEDING - PERMANENT SEEDING IS REQUIRED AND PROPOSED WITH THIS PLAN.  
3.38 TREE PRESERVATION AND PROTECTION - TREE PROTECTION IS PROPOSED WITH THIS PLAN. SEE THE E&S PLAN FOR THE REQUIRED LOCATIONS.  
3.39 DUST CONTROL - DUST CONTROL IS REQUIRED AND PROPOSED WITH THIS PLAN. NOTE: SEE THIS SHEET UNDER EROSION & SEDIMENT CONTROL MEASURES FOR ADDITIONAL DESCRIPTIONS OF ALL PROPOSED EROSION AND SEDIMENT CONTROL ITEMS.

**MAINTENANCE:**  
IN GENERAL, DURING CONSTRUCTION THE RLD OR CONTRACTOR ON-SITE WILL CHECK ALL EROSION AND SEDIMENT CONTROL MEASURES DAILY AND AFTER EACH SIGNIFICANT RAINFALL. MONITORING REPORTS WILL BE REQUIRED FROM THE RLD IF NEEDED. SPECIFIC ATTENTION WILL BE GIVEN TO THE FOLLOWING:  
a. SEDIMENT TRAPS WILL BE CLEANED AND MAINTAINED IN ACCORDANCE WITH THE VIRGINIA EROSION & SEDIMENT CONTROL HANDBOOK.  
b. ALL GRAVEL OUTLETS AND LEVEL SPREADERS WILL BE CHECKED REGULARLY FOR SEDIMENT BUILDUP THAT WILL PREVENT PROPER DRAINAGE. IF THE GRAVEL OR LEVEL SPREADER IS CLOGGED BY SEDIMENT, THE GRAVEL WILL BE REMOVED AND CLEANED, OR IT WILL BE REPLACED. SLOPE DRAIN SHALL BE CHECKED REGULARLY AS WELL FOR SEDIMENT BUILDUP OR CLOGGING THAT WILL PREVENT PROPER FUNCTIONING.  
c. ALL SILT FENCE BARRIERS WILL BE CHECKED REGULARLY FOR UNDERMINING OR DETERIORATION OF THE FABRIC AND REPAIRED AS REQUIRED. SEDIMENT SHALL BE REMOVED WHEN THE LEVEL OF SEDIMENT DEPOSITION REACHED HALF WAY TO THE TOP OF THE BARRIER.  
d. ALL DIVERSION DYKES SHALL BE CHECKED REGULARLY TO ENSURE POSITIVE FLOW THROUGH THE DIVERSIONS AND THAT THERE ARE NO SEDIMENT BUILDUPS OR DIVERSION BERM FAILURES.  
e. ALL SEEDED AREAS WILL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED AND AREAS SHOULD BE FERTILIZED AND RESEED AS NEEDED. BLANKET MATTING WILL BE REINSTALLED IN AREAS WHERE PERMANENT STANDS OF GRASS HAVE NOT YET BEEN ESTABLISHED. SOD SHALL BE USED TO STABILIZE ALL FINE-GRADED DISTURBED AREA FOR PERMANENT STABILIZATION.  
IN CASE OF EMERGENCY, THE PRIMARY CONTACT FOR THE PROJECT WILL BE THE RLD OR CONTRACTOR ON-SITE. IN ADDITION THE OWNER MAY BE CONTACTED. UPON COMPLETION OF THE PROJECT, THE OWNER WILL BE RESPONSIBLE FOR SITE MAINTENANCE.

**EROSION CONTROL NOTES**

- ES-1- UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND VIRGINIA REGULATIONS 9VAC25-840 EROSION AND SEDIMENT CONTROL REGULATIONS.
- ES-2- THE PLAN APPROVING AUTHORITY MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.
- ES-3- ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING.
- ES-4- A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- ES-5- PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO, OFF-SITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY.
- ES-6- THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE PLAN APPROVING AUTHORITY.
- ES-7- ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.
- ES-8- DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED WATER FILTERING DEVICE.
- ES-9- THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.

**CRITICAL SLOPE WAIVER CONDITIONS AND REQUIREMENTS:**

- THE CONTRACTOR SHALL INSTALL EROSION AND SEDIMENT CONTROL MEASURES EXCEEDING THE MINIMUM REQUIREMENTS. THESE INCLUDE INSTALLING SILT FENCE WITH WIRE REINFORCEMENT AND (6) FEET STAKE SPACING, INSTALLING SEDIMENT TRAPS WHICH EXCEED THE MINIMUM WET AND DRY VOLUMES BY 1.5 TIMES THE STATE REQUIREMENTS, AND SODDING THE UPLAND DISTURBED AREAS FOR PERMANENT STABILIZATION.
- THE CRITICAL SLOPE AREA OUTSIDE OF THE APPROVED ENCROACHMENT BOUNDARIES SHALL BE CLEARLY MARKED IN THE FIELD, AND THE APPROVED STORMWATER MANAGEMENT PLAN AND CONSTRUCTION PLAN SHALL INCLUDE A NOTE REQUIRING SUCH LIMITS OF DISTURBED AREA TO BE MAINTAINED THROUGHOUT CONSTRUCTION AND DISTURBED AREAS.
- FINAL STABILIZATION OF THE AREAS OF THE CRITICAL SLOPES DISTURBED SHALL INCLUDE REPLANTING OF NATIVE TREE AND SHRUB SPECIES TO RE-STABILIZE THE CRITICAL SLOPES AND POTENTIAL WILDLIFE HABITAT.
- IMMOVABLE TREE PROTECTION FENCING SHALL BE INSTALLED ALONG THE LIMITS OF DISTURBANCE TO PROTECT THE CRITICAL SLOPES AND AREAS TO REMAIN.
- PERMANENT STABILIZATION MEASURES, SUCH AS SODDING, WILL BE INSTALLED AFTER THE CONSTRUCTION OF BUILDINGS #1 AND #2 TO ACHIEVE UPLAND STABILIZATION ON THE SITE PRIOR TO THE REMOVAL OF THE (2) SEDIMENT TRAPS AND CONSTRUCTION OF BUILDING #3. ALL CURBING AND DRAINAGE STRUCTURE SHALL BE OPERATIONAL TO DIVERT RUN-OFF AWAY FROM THE CRITICAL SLOPES DURING THE CONSTRUCTION OF BUILDING #3.

TABLE 3.39-A  
ADHESIVES USED FOR DUST CONTROL

Adhesive	Water Dilution (Adhesive:Water)	Type of Nozzle	Application Rate Gallons/Acre
Anionic Asphalt Emulsion	7:1	Coarse Spray	1,200
Latex Emulsion	12.5:1	Fine Spray	235
Resin in Water	4:1	Fine Spray	300
Acrylic Emulsion (Non-Traffic)	7:1	Coarse Spray	450
Acrylic Emulsion (Traffic)	3.5:1	Coarse Spray	350

NOTE: ENSURE THAN ANY DUST SUPPRESSION TECHNIQUES OR ADHESIVES EMPLOYED DO NOT HAVE AN ADVERSE EFFECT ON WATERWAYS TO WHICH THE SITE DRAINS.

**EROSION CONTROL NOTES & NARRATIVE**

**PROJECT DESCRIPTION:**  
THE PURPOSE OF THIS LAND DISTURBANCE ACTIVITY IS TO CONSTRUCT APARTMENT BUILDINGS AND THEIR CORRESPONDING INFRASTRUCTURE. THIS PROJECT PROPOSES TO DISTURB 2.45 ACRES OF LAND. THE PROJECT WILL BEGIN ITS CONSTRUCTION WITH THE PROPOSED ESC MEASURES IMMEDIATELY FOLLOWING PLAN APPROVAL, WHICH IS ANTICIPATED TO BE IN THE SPRING/SUMMER OF 2019. THE WORK IS ANTICIPATED TO BE COMPLETED WITHIN 12-18 MONTHS AND TO CONCLUDE IN THE WINTER OF 2020. ALL LAND DISTURBANCE ACTIVITIES, TEMPORARY STOCKPILE AREAS, AND THE DISTURBED AREA ARE 1.14 AC.

**EXISTING SITE CONDITIONS:**  
THE AREA OF THE PROPOSED DEVELOPMENT CONSISTS LARGELY OF OPEN SPACES. THE OPEN SPACES ARE CURRENTLY BE USED FOR A PLAYGROUND, ATHLETIC FIELDS, A BASKET BALL COURT AND GARDENS. BELOW THE AREA OF THE PROPOSED DEVELOPMENT, LOCATED TO THE SOUTHWEST, ARE EXISTING WOODS WITH LIGHT UNDERGROWTH. THESE AREAS WILL BE PRESERVED WITH THE PROPOSED DEVELOPMENT AND PROTECTED WITH THE PROPOSED SIM FOREST & OPEN SPACE PRESERVATION EASEMENTS. THE SITE GENERALLY SLOPES FROM 1st STREET SOUTH AND HARTMANS MILL ROAD TO THE SOUTHEASTERN PROPERTY LINE. THE SITE CONTAINS MODERATE SLOPES FOR THE MOST PART AND IS WELL DRAINED. THE SITE IS BORDERED BY ELIOT AVENUE, SILT FENCE WITH WIRE BACKING, DIVERSIONS, TWO 6" DIAMETER TRAPS, INLET CONTROLS AND VARIOUS OTHER ESC MEASURES ARE PROPOSED TO LIMIT THE POTENTIAL FOR CONTAMINATION OF THESE ADJACENT PROPERTIES AND WATERWAYS.

**ADJACENT AREAS:**  
THIS SITE IS BORDERED ON THE WEST BY HARTMANS MILL ROAD AND BY 1st STREET SOUTH ON THE NORTH. ROSA TERRACE, ROCKLAND AVENUE AND THEIR SINGLE FAMILY DETACHED HOMES BORDER THE SITE TO THE EAST. TO THE NORTH, THE SITE IS BORDERED BY ELIOT AVENUE, SILT FENCE WITH WIRE BACKING, DIVERSIONS, TWO 6" DIAMETER TRAPS, INLET CONTROLS AND VARIOUS OTHER ESC MEASURES ARE PROPOSED TO LIMIT THE POTENTIAL FOR CONTAMINATION OF THESE ADJACENT PROPERTIES AND WATERWAYS.

**OFFSITE LAND DISTURBANCE:**  
OFFSITE LAND DISTURBANCE IS NOT PROPOSED WITH THIS PLAN. ALL DISTURBANCES WILL BE LOCATED WITHIN THE APARTMENT COMPLEX'S PROPERTY, OR WITHIN PUBLIC RIGHT-OF-WAY. NO OFFSITE BORROW PITS ARE REQUIRED FOR THIS DEVELOPMENT.

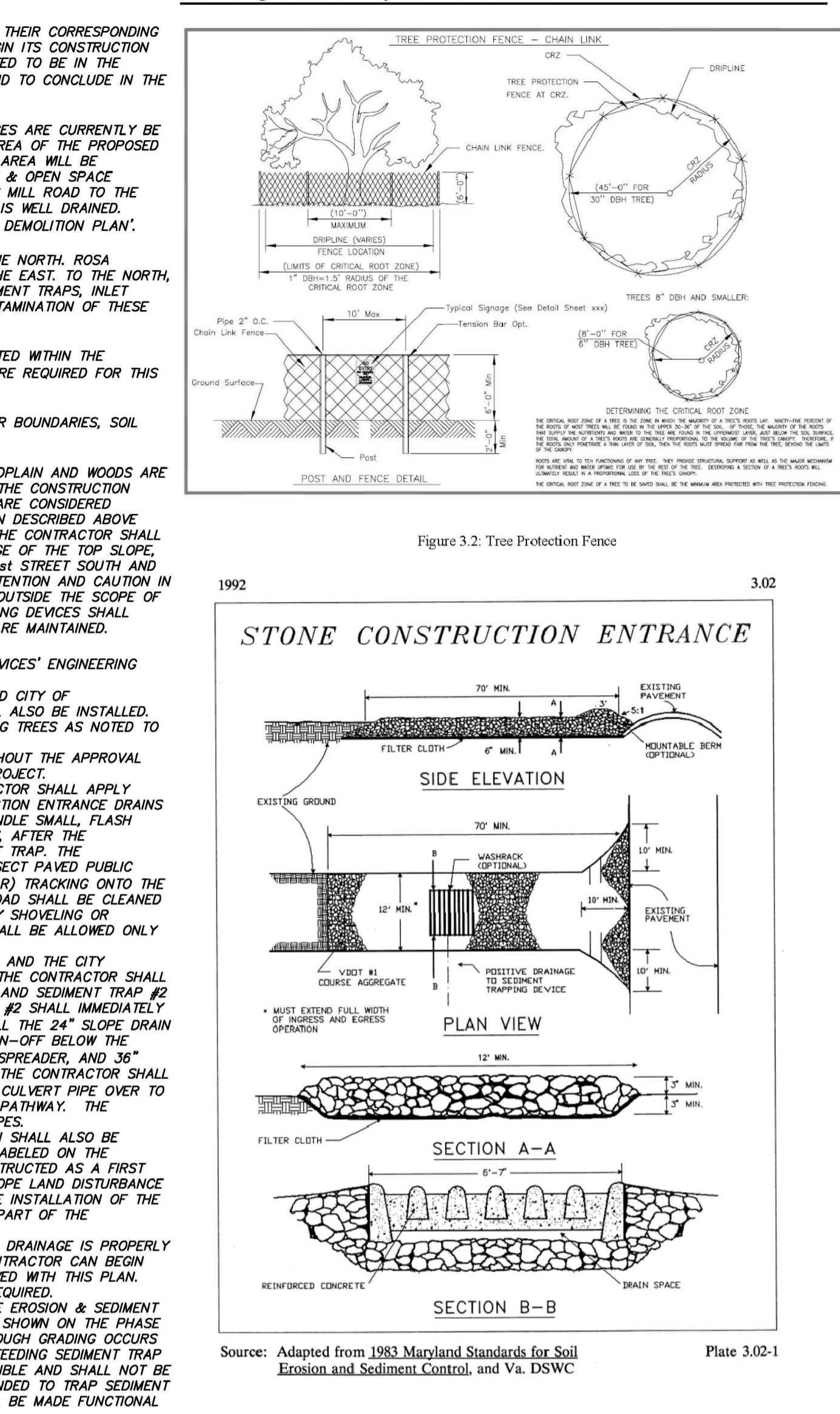
**SOILS:**  
SEE SOIL DESCRIPTIONS ON THIS PAGE AND THE PHASE I EROSION & SEDIMENT CONTROL PLAN FOR BOUNDARIES, SOIL TYPES AND SOIL DESCRIPTIONS.

**CRITICAL AREAS:**  
THERE ARE FLOODPLAIN LIMITS LOCATED WITHIN THE EXISTING WOODS BEING PRESERVED. THE FLOODPLAIN AND WOODS ARE CRITICAL AREAS. THESE AREAS ARE LOCATED TO THE SOUTHWEST AND ARE LOCATED OUTSIDE OF THE CONSTRUCTION ACTIVITIES. ADDITIONALLY, THERE ARE CRITICAL SLOPES LOCATED ON THE PROPERTY AND THESE ARE CONSIDERED CRITICAL AREAS. THE NATURALLY OCCURRING CRITICAL SLOPES WITHIN THE WOODS AND FLOODPLAIN DESCRIBED ABOVE SHALL BE PROTECTED WITH THE EROSION CONTROL MEASURES AS SHOWN ON THE PLAN SHEETS. THE CONTRACTOR SHALL TAKE EXTREME PRECAUTION WHEN IMPACTING THE AREAS OF THESE CRITICAL SLOPES ALONG THE EDGE OF THE TOP GULL AS SHOWN ON THE PLAN SHEETS. THE CRITICAL SLOPES CREATED FROM THE CONSTRUCTION OF 1st STREET SOUTH AND HARTMANS MILL ROAD ARE PROPOSED TO BE DISTURBED. THE CONTRACTOR SHALL GIVE EXTRA ATTENTION AND CAUTION IN AREAS OF CRITICAL SLOPES. SILT FENCING, SLOPE DRAINAGE, DIVERSIONS AND SEDIMENT TRAPPING DEVICES SHALL ALSO BE INSTALLED AS A FIRST STEP IN LAND DISTURBANCE TO ENSURE THESE CRITICAL AREAS ARE MAINTAINED.

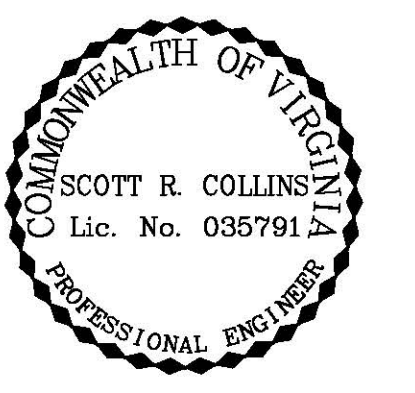
**SEQUENCE OF CONSTRUCTION:**

- CONTRACTOR SHALL NOTIFY THE CHARLOTTESVILLE CITY NEIGHBORHOOD DEVELOPMENT SERVICES' ENGINEERING DEPARTMENT TO SCHEDULE A PRE-CONSTRUCTION MEETING.
- PRIOR TO DISTURBANCES, THE LIMITS OF DISTURBANCE SHALL BE FLAGGED AND THE APPROVED CITY OF CHARLOTTESVILLE TREE PROTECTION FENCING AND THE SILT FENCE ALONG THESE LIMITS SHALL ALSO BE INSTALLED. SEE THE E&S PLAN FOR THE REQUIRED LOCATIONS.
- NO EROSION CONTROL MEASURES MAY BE REMOVED DURING THE CONSTRUCTION PROCESS WITHOUT THE APPROVAL FROM THE CITY OF CHARLOTTESVILLE EROSION AND SEDIMENT CONTROL INSPECTOR ON THE PROJECT.
- INSTALLATION OF THE PROPOSED CONSTRUCTION PERIODS. ULTIMATELY, AFTER THE CONTRACTOR SHALL APPLY CONSTRUCTION ROAD STABILIZATION AS NEEDED. CONTRACTOR SHALL ENSURE THE CONSTRUCTION ENTRANCE DRAINS TO AN ADEQUATE E&S MEASURE. A NEARBY SEDIMENT TRAPPING DEVICE IS PROPOSED TO HANDLE SMALL, FLASH RUNOFF FROM CONSTRUCTION VEHICLES DURING CONSTRUCTION PERIODS. ULTIMATELY, AFTER THE CONTRACTOR SHALL INSTALL SILT FENCE TO BE MOVED TO THE OUTLET AREAS VIA A SMALL EXCAVATOR. THE CONTRACTOR SHALL INSTALL THE INSTALLATION OF SEDIMENT TRAP #1, THE WASHOFF WILL DRAIN TO THE DOWNSTREAM SEDIMENT TRAP. THE CONSTRUCTION ENTRANCE SHALL BE INSTALLED WHERE CONSTRUCTION VEHICLE ROUTES INTERSECT PAVED PUBLIC ROADS. PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY (VEHICULAR) TRACKING ONTO THE EXISTING CRITICAL SLOPES. SEDIMENT IS TRANSPORTED ONTO A PUBLIC ROAD SURFACE. THE ROAD SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTING TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED FROM THE ROAD SURFACE.
- ONCE THE ABOVE MENTIONED PERIMETER EROSION CONTROL MEASURES HAVE BEEN INSTALLED, AND THE CITY INSPECTOR HAS APPROVED THESE MEASURES, THE CONTRACTOR CAN BEGIN LIME CLEARING. THE CONTRACTOR SHALL BEGIN BY CLEARING THE AREAS REQUIRED TO ACCESS THE LOCATIONS OF SEDIMENT TRAP #1 AND SEDIMENT TRAP #2 AND THE CRITICAL SLOPES. PERIMETER SEEDING AND DUST CONTROL SHALL BE IMPLEMENTED AS REQUIRED. FOLLOW THE SELECTIVE CLEARING, FOLLOWED BY THE INSTALLATION OF ITS DIVERSIONS. INSTALL THE 24" SLOPE DRAIN OUTFALLS AND PROPOSED LEVEL SPREADER BELOW THE SEDIMENT TRAPS TO OUTFALL THE RUN-OFF BELOW THE CRITICAL SLOPES. INSTALL THE OUTLET PROTECTION FOR THESE SLOPE DRAINS, LEVEL SPREADER, AND 36" DIAMETER RIPRAP. RIPRAP SHALL BE MOVED TO THE OUTLET AREAS VIA A SMALL EXCAVATOR. THE CONTRACTOR SHALL USE WHEEL BARROWS TO MOVE ANY RIPRAP MATERIAL FROM THE OUTFALL AREA AT THE 36" CULVERT PIPE OVER TO THE LEVEL SPREADER AND OUTFALL FOR SEDIMENT TRAP #1 USING THE EXISTING PEDESTRIAN PATHWAY. THE CONTRACTOR SHALL USE BLANKET MATTING TO STABILIZE THE SEDIMENT TRAPS AND SEDIMENT TRAP #2 SHALL BE CONSTRUCTED AT THIS TIME, INCLUSIVE OF BLOCKING THE EXISTING TWO INLETS SHOWN AND LABELED ON THE EROSION CONTROL PLAN. PERIMETER SEEDING INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP WITH ANY LAND DISTURBANCE ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPLAND STABILIZATION TAKES PLACE. ALL EARTHEN DAMS AND EARTHEN STRUCTURES SHALL BE STABILIZED WITH THE INSTALLATION OF THE EROSION AND SEDIMENT CONTROL STRUCTURE. STABILIZATION OF THESE FEATURES SHALL BE PART OF THE INSTALLATION OF THE PERIMETER MEASURES.
- ONCE ALL THE PHASE I EROSION CONTROL ITEMS HAVE BEEN INSTALLED & ARE OPERATIONAL, DRAINAGE IS PROPERLY CONVEYED TO THESE MEASURES, AND THE E&S INSPECTOR HAS GRANTED APPROVAL, THE CONTRACTOR CAN BEGIN CLEARING THE REMAINDER OF THE SITE AND DEMOLISHING THE ITEMS PROPOSED TO BE REMOVED WITH THIS PLAN. TEMPORARY SEEDING, PERMANENT SEEDING AND DUST CONTROL SHALL BE IMPLEMENTED AS REQUIRED.
- AFTER CLEARING THE PROPOSED AREAS, THE CONTRACTOR CAN PROCEED TO PHASE II OF THE EROSION & SEDIMENT CONTROL PLAN. THE CONTRACTOR SHALL BEGAIN ROUGH GRADING THE SITE TO THE CONTOURS SHOWN ON THE PHASE II EROSION & SEDIMENT CONTROL PLAN AND CONSTRUCTION BUILDINGS #1 AND #2. AS THE ROUGH GRADING OCCURS, THE CONTRACTOR SHALL MAINTAIN, AND MODIFY AS NECESSARY, THE PERIMETER DIVERSIONS FEEDING SEDIMENT TRAP #1 AND SEDIMENT TRAP #2. THESE DIVERSIONS SHALL REMAIN FUNCTIONAL AS LONG AS POSSIBLE AND SHALL NOT BE MODIFIED OR REMOVED WITHOUT PRIOR APPROVAL FROM THE E&S INSPECTOR. MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP WITH ANY LAND DISTURBANCE ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.
- REMOVAL OF THE SEDIMENT TRAPS SHALL INCLUDE DEWATERING TRAPS WITH A SEDIMENT FILTER BAG OR OTHER APPROVED METHOD, AND SHALL BE FILLED & COMPACTED WITH STRUCTURAL FILL. THE TRAP SHALL BE GRADED WITH POSITIVE SLOPE AWAY FROM THE BUILDING AND PARKING LOT. AT THE TIME OF SEDIMENT TRAP #2'S REMOVAL, THE YARD DRAIN INLETS AND STORM SEWER INLETS SHALL BE MADE OPERATIONAL AND THEIR INLET PROTECTIONS SHALL BE REMOVED. AFTER THE TRAP'S REMOVAL, THE CONTRACTOR CAN REMOVE ANY REMAINING EROSION & SEDIMENT CONTROL MEASURES. NO ITEM SHALL BE REMOVED, THROUGHOUT ALL PHASES OF CONSTRUCTION, UNLESS THE UPSLOPE AREAS ARE STABILIZED AND THE INSPECTOR GIVES PERMISSION. CONTRACTOR SHALL STABILIZE REMAINING AREAS OF THE SITE IN ACCORDANCE WITH EROSION AND SEDIMENT CONTROL REQUIREMENTS.
- THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES AS SPECIFIED IN THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, REMOVING ONLY WHEN APPROVED BY THE LOCAL PROGRAM ADMINISTRATOR IN ACCORDANCE WITH THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE AUTHORIZED BY THE LOCAL PROGRAM ADMINISTRATOR. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.

**STONE CONSTRUCTION ENTRANCE**





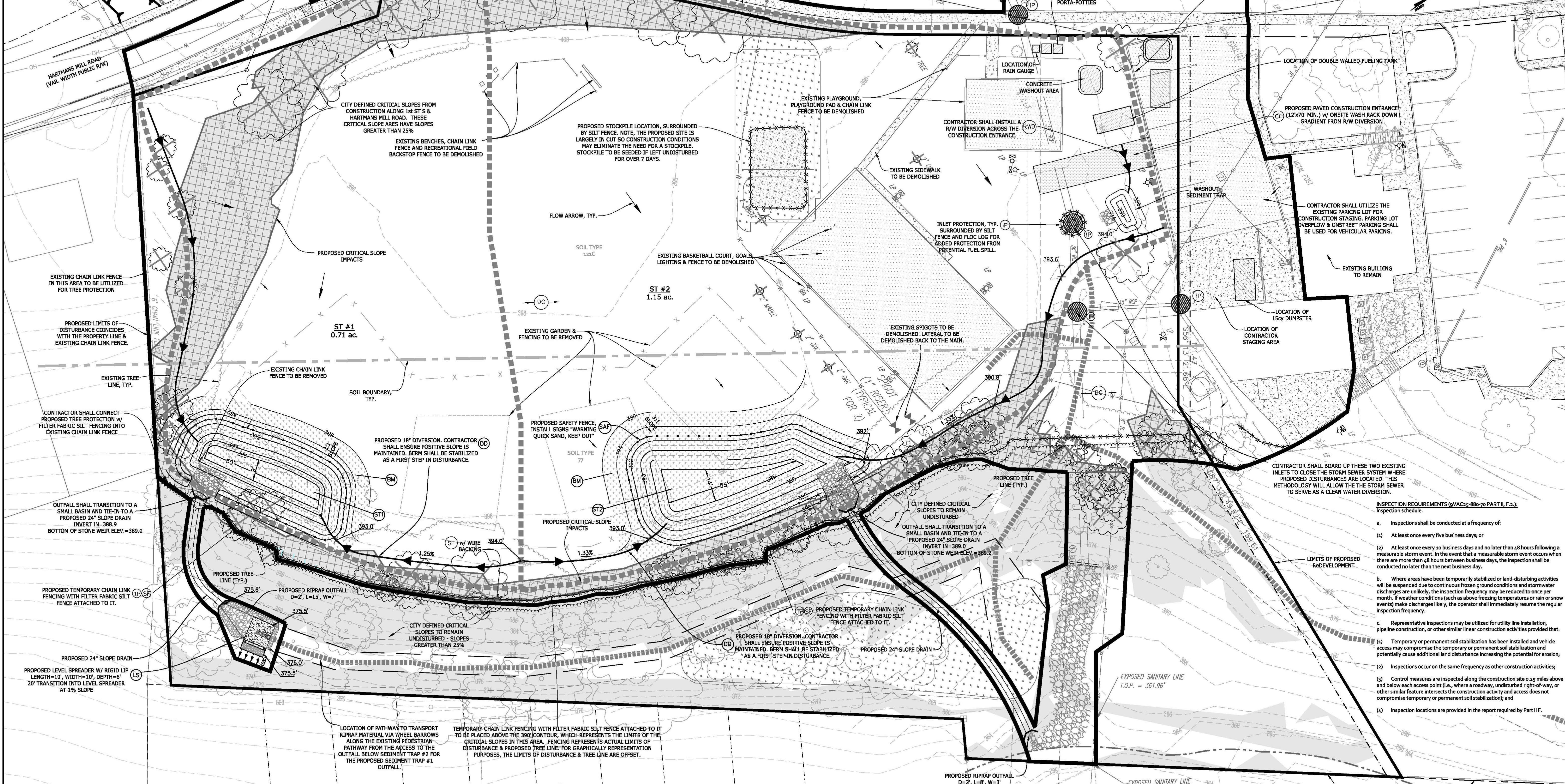


**NOTES:**

1. THE EXISTING RAINWATER HARVESTING SYSTEM ADJACENT TO THE EXISTING MAINTENANCE BUILDINGS SHALL BE DISASSEMBLED AND REMOVED FROM THE PROPERTY PRIOR TO CONSTRUCTION.
2. CONTRACTOR SHALL CHECK SILT FENCE EVERY 5 DAYS OR AFTER A MAJOR RAIN EVENT TO ENSURE NO EROSION OR SEDIMENT HAS CONTAMINATED ADJACENT SITES.
3. THE FUELING TANK SHALL BE PLACED IN AN IMPERVIOUS OPEN-TOP DUMPSTER. THE DUMPSTER SHALL CONTAIN FUEL IN THE EVENT OF A SPILL. CONTRACTOR SHALL ENSURE VOLUME CAPACITY IS 10% LARGER THAN THE MAXIMUM VOLUME OF STORED FUEL. SHOULD THE CONTRACTOR OPT TO NOT STORE THE FUEL IN A DUMPSTER, THE STORED FUEL SHALL BE COMPLETELY SURROUNDED BY A 2' DEEP, 2' WIDE EARTHEN BERM WITH A HEAVY MIL POLYETHYLENE LINING.

**EROSION CONTROL NOTES - PHASE I**

1. TREE PROTECTION FENCING SHALL BE IMMOVABLE CHAIN-LINK FENCING PER THE TREE PROTECTION DETAIL ON SHEET 13. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING TREES AND CRITICAL SLOPE AREAS TO REMAIN UNDISTURBED.
2. ALL SILT FENCE SHALL BE WIRE REINFORCED AND INSTALLED WITH (6) FEET STAKE SPACING.
3. SEDIMENT TRAPS SHALL BE DESIGNED TO CONTAIN A MINIMUM WET AND DRY VOLUME OF 1.5 TIMES GREATER THAN THE MINIMUM STATE REQUIREMENTS. THESE TRAPS HAVE BEEN DESIGNED FOR THIS REQUIREMENT, SEE THIS SHEET FOR DESIGN SPECIFICATIONS.



**REVISIONS**

DATE	REVISION DESCRIPTION
1/25/19	INITIAL SUBMITTAL
2/8/19	REVISED PLANS PER COMMENTS DATED 2/1/19
2/25/19	REVISED PLANS PER COMMENTS DATED 2/21/19

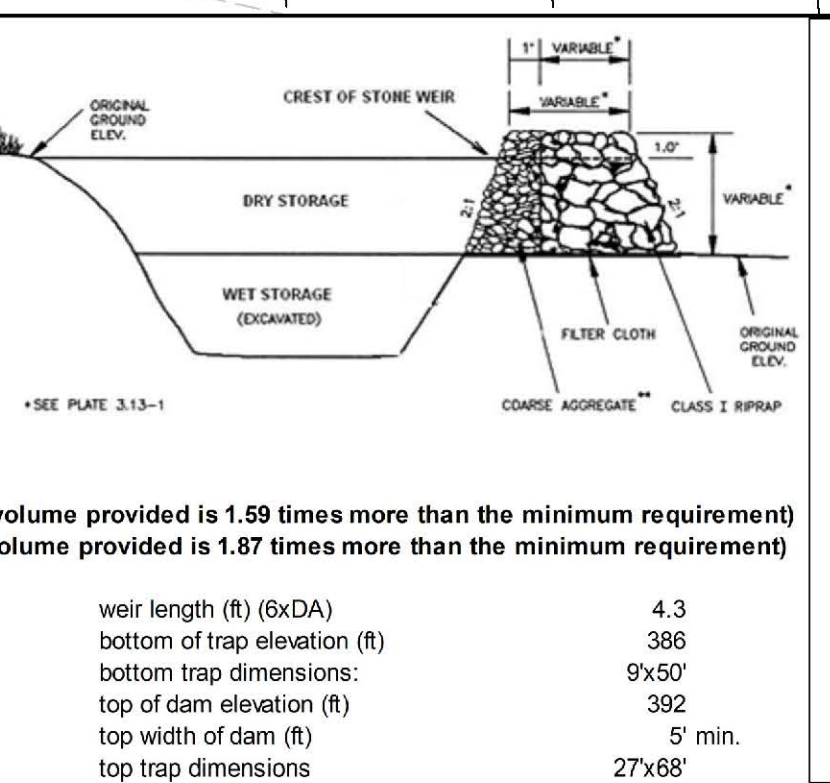
**COLLINS ENGINEERING**  
 200 GARRETT STREET, SUITE K - CHARLOTTESVILLE, VA 22902 - 434.293.3719

**1st STREET SOUTH APARTMENTS - PHASE I FINAL SITE PLAN**  
 CONCEPTUAL PHASE I EROSION & SEDIMENT CONTROL PLAN

PROJECT	182158
JOB NO.	182158
SCALE	1"=20'
SHEET NO.	14

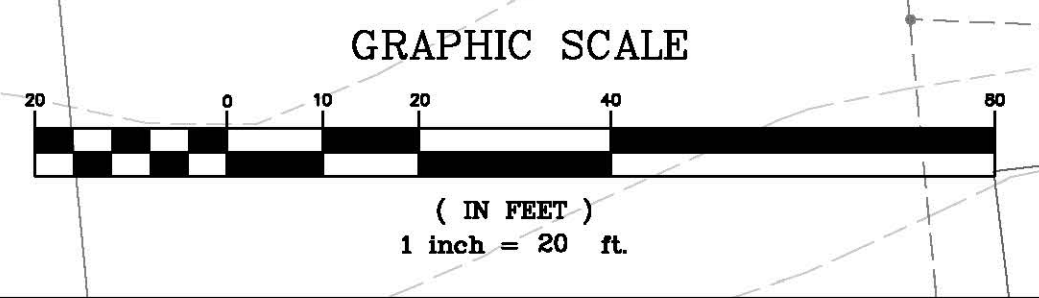
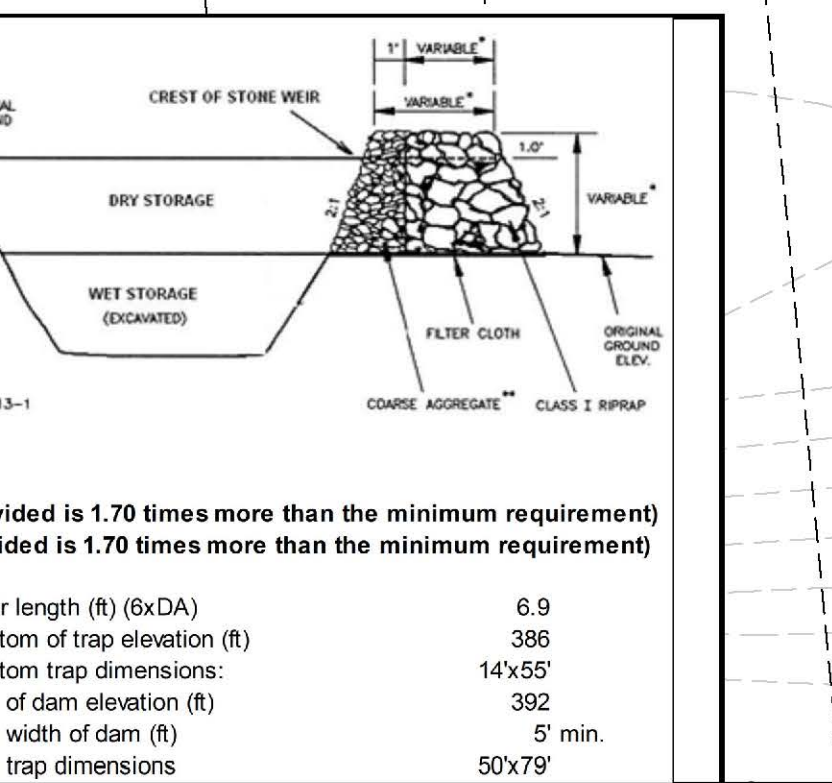
**Sediment Trap #1 Design**

drainage area (acres) (<3)	0.71		
trap volumes:			
elevation (ft)	area (sf)	volume(cf)	volume(cy)
386	480	0	0.0
387	610	544	20.1
388	750	1,222	45.3
389	890	2,042	75.6
390	1200	3,083	114.2
391	1530	4,444	164.6
392	1890	6,151	227.8
wet storage:			
wet storage required (cy) (67"DA)	47.6		
bottom of stone weir (ft)	389.0	<b>(Wet volume provided is 1.59 times more than the minimum requirement)</b>	
wet storage provided at this elevation (cy)	75.6	<b>(Dry volume provided is 1.87 times more than the minimum requirement)</b>	
slope of wet storage sides	1:1		
weir length (ft) (6xDA)	4.3		
bottom of trap elevation (ft)	386		
bottom trap dimensions:	9'x50'		
crest of stone weir	392		
dry storage provided at this elevation (cy)	89.0		
slope of dry storage sides	2:1		



**Sediment Trap #2 Design**

drainage area (acres) (<3)	1.15		
trap volumes:			
elevation (ft)	area (sf)	volume(cf)	volume(cy)
386	600	0	0.0
387	890	740	27.4
388	1215	1,789	66.2
389	1575	3,190	117.8
390	1970	4,948	183.3
391	2380	7,120	263.7
392	2780	9,675	353.3
wet storage:			
wet storage required (cy) (67"DA)	77.1		
bottom of stone weir (ft)	389.2	<b>(Wet volume provided is 1.70 times more than the minimum requirement)</b>	
wet storage provided at this elevation (cy)	132.0	<b>(Dry volume provided is 1.70 times more than the minimum requirement)</b>	
slope of wet storage sides	2:1		
weir length (ft) (6xDA)	6.9		
bottom of trap elevation (ft)	386		
bottom trap dimensions:	14'x55'		
crest of stone weir	392		
dry storage provided at this elevation (cy)	131.7		
slope of dry storage sides	2:1		

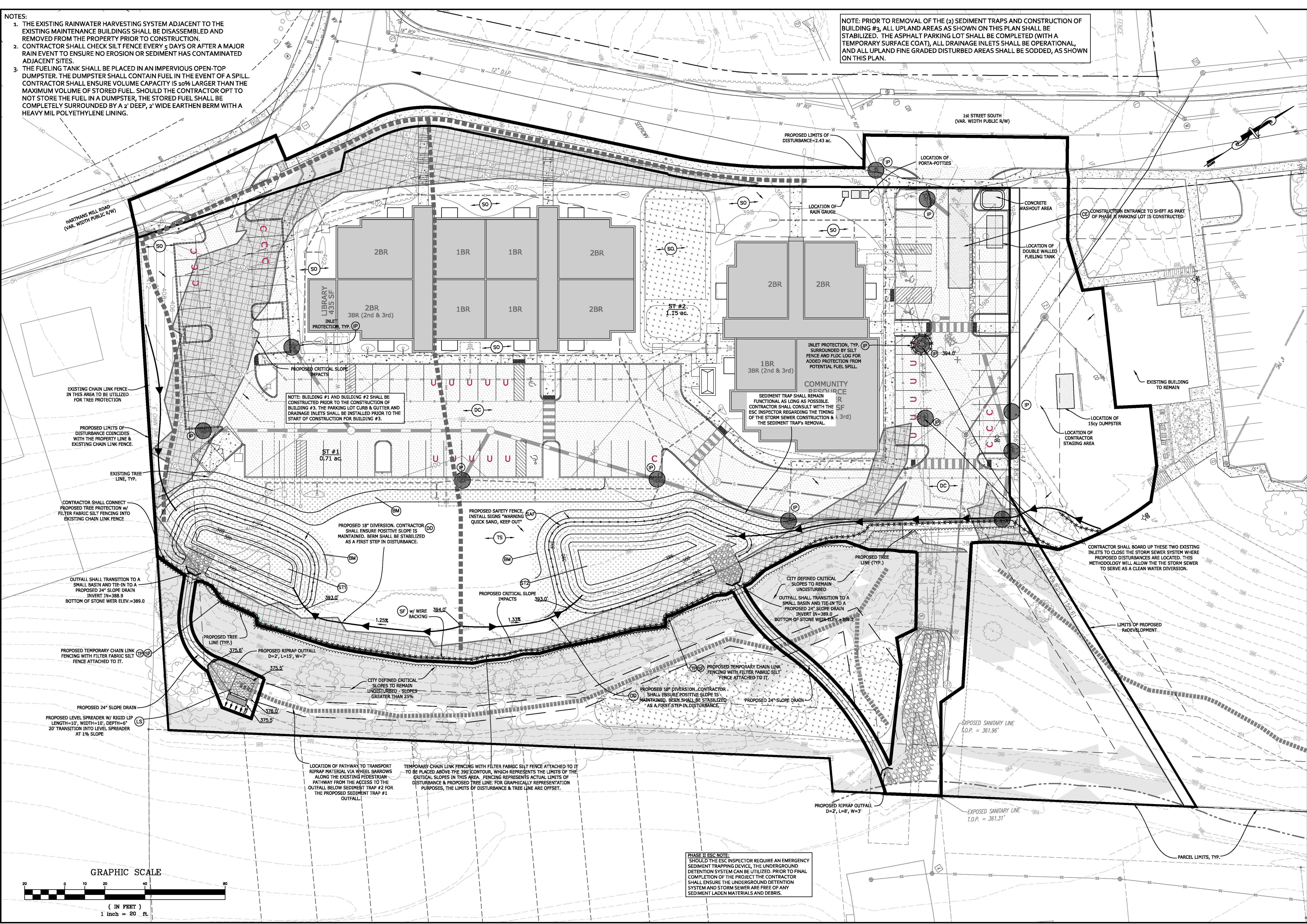
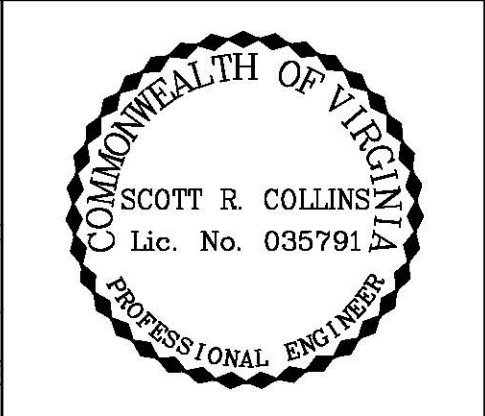


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- NOTES:**
1. THE EXISTING RAINWATER HARVESTING SYSTEM BE ADJACENT TO THE EXISTING MAINTENANCE BUILDINGS SHALL BE DISASSEMBLED AND REMOVED FROM THE PROPERTY PRIOR TO CONSTRUCTION.
  2. CONTRACTOR SHALL CHECK SILT FENCE EVERY 5 DAYS OR AFTER A MAJOR RAIN EVENT TO ENSURE NO EROSION OR SEDIMENT HAS CONTAMINATED ADJACENT SITES.
  3. THE FUELING TANK SHALL BE PLACED IN AN IMPERVIOUS OPEN-TOP DUMPSTER. THE DUMPSTER SHALL CONTAIN FUEL IN THE EVENT OF A SPILL. CONTRACTOR SHALL ENSURE VOLUME CAPACITY IS 10% LARGER THAN THE MAXIMUM VOLUME OF STORED FUEL. SHOULD THE CONTRACTOR OPT TO NOT STORE THE FUEL IN A DUMPSTER, THE STORED FUEL SHALL BE COMPLETELY SURROUNDED BY A 2' DEEP, 2' WIDE EARTHEN BERM WITH A HEAVY MIL POLYETHYLENE LINING.

NOTE: PRIOR TO REMOVAL OF THE (2) SEDIMENT TRAPS AND CONSTRUCTION OF BUILDING #3, ALL UPLAND AREAS AS SHOWN ON THIS PLAN SHALL BE STABILIZED. THE ASPHALT PARKING LOT SHALL BE COMPLETED (WITH A TEMPORARY SURFACE COAT), ALL DRAINAGE INLETS SHALL BE OPERATIONAL, AND ALL UPLAND FINE GRADED DISTURBED AREAS SHALL BE SODDED, AS SHOWN ON THIS PLAN.



**REVISIONS**

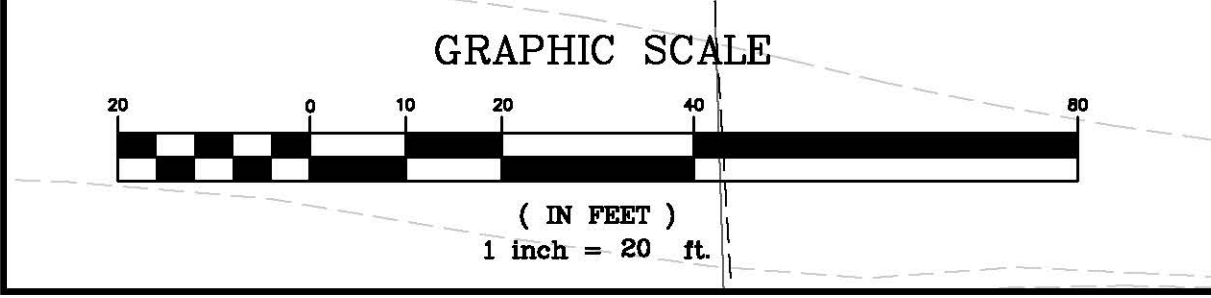
DATE	REVISION DESCRIPTION
1/25/19	INITIAL SUBMITTAL
2/8/19	REVISED PLANS PER COMMENTS DATED 2/1/19
2/25/19	REVISED PLANS PER COMMENTS DATED 2/21/19

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

**1st STREET SOUTH APARTMENTS - PHASE I FINAL SITE PLAN**  
 CONCEPTUAL PHASE II EROSION & SEDIMENT CONTROL PLAN

**CE**

PROJECT	182158
JOB NO.	182158
SCALE	1"=20'
SHEET NO.	15A

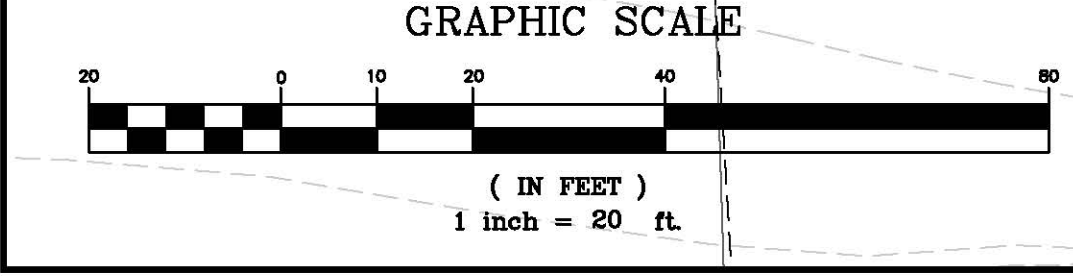


**PHASE II ESC NOTE:**  
 SHOULD THE ESC INSPECTOR REQUIRE AN EMERGENCY SEDIMENT TRAPPING DEVICE, THE UNDERGROUND DETENTION SYSTEM CAN BE UTILIZED. PRIOR TO FINAL COMPLETION OF THE PROJECT THE CONTRACTOR SHALL ENSURE THE UNDERGROUND DETENTION SYSTEM AND STORM SEWER ARE FREE OF ANY SEDIMENT LADEN MATERIALS AND DEBRIS.

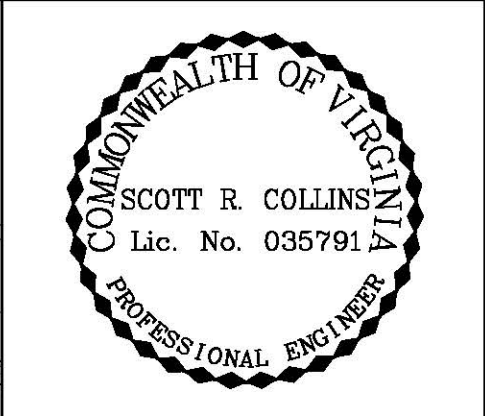
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  2. CONTRACTOR SHALL CHECK SILT FENCE EVERY 5 DAYS OR AFTER A MAJOR RAIN EVENT TO ENSURE NO EROSION OR SEDIMENT HAS CONTAMINATED ADJACENT SITES.
  3. THE FUELING TANK SHALL BE PLACED IN AN IMPERVIOUS OPEN-TOP DUMPSTER. THE DUMPSTER SHALL CONTAIN FUEL IN THE EVENT OF A SPILL. CONTRACTOR SHALL ENSURE VOLUME CAPACITY IS 10% LARGER THAN THE MAXIMUM VOLUME OF STORED FUEL. SHOULD THE CONTRACTOR OPT TO NOT STORE THE FUEL IN A DUMPSTER, THE STORED FUEL SHALL BE COMPLETELY SURROUNDED BY A 2' DEEP, 2' WIDE EARTHEN BERM WITH A HEAVY MIL POLYETHYLENE LINING.



PHASE III ESC NOTE:  
SILT FENCE INSTALLED 6' FROM BUILDING CORNERS IN THESE (a) LOCATIONS FOR THE CONSTRUCTION OF THIS BUILDING. THE CRITICAL SLOPE IMPACT ANALYSIS INCLUDED THIS PROPOSED DISTURBANCE ALONG WITH SOME IMPACTS ALONG THE TOP OF THE SLOPES.



DATE	REVISION DESCRIPTION
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2/25/19	REVISED PLANS PER COMMENTS DATED 2/21/19

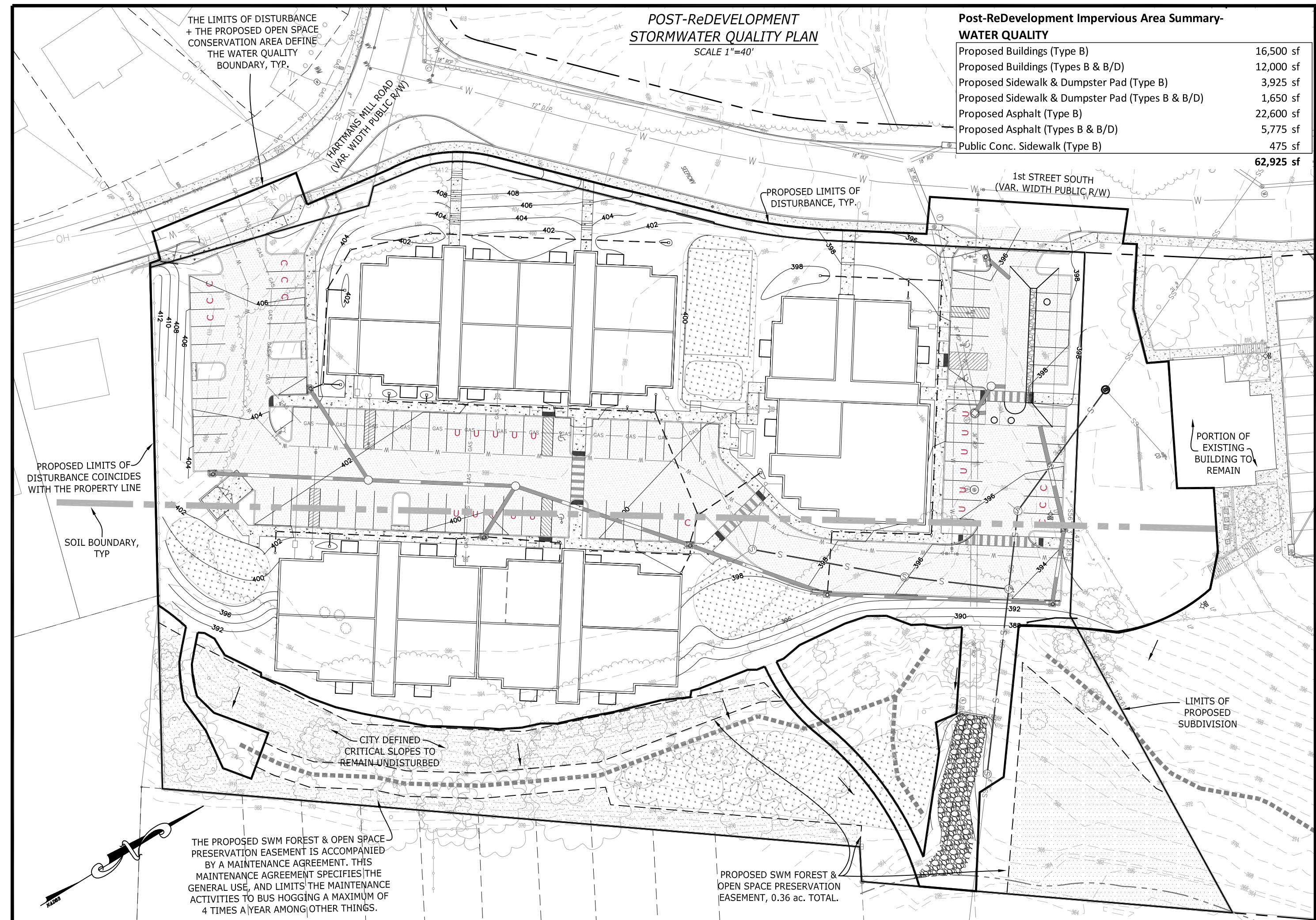
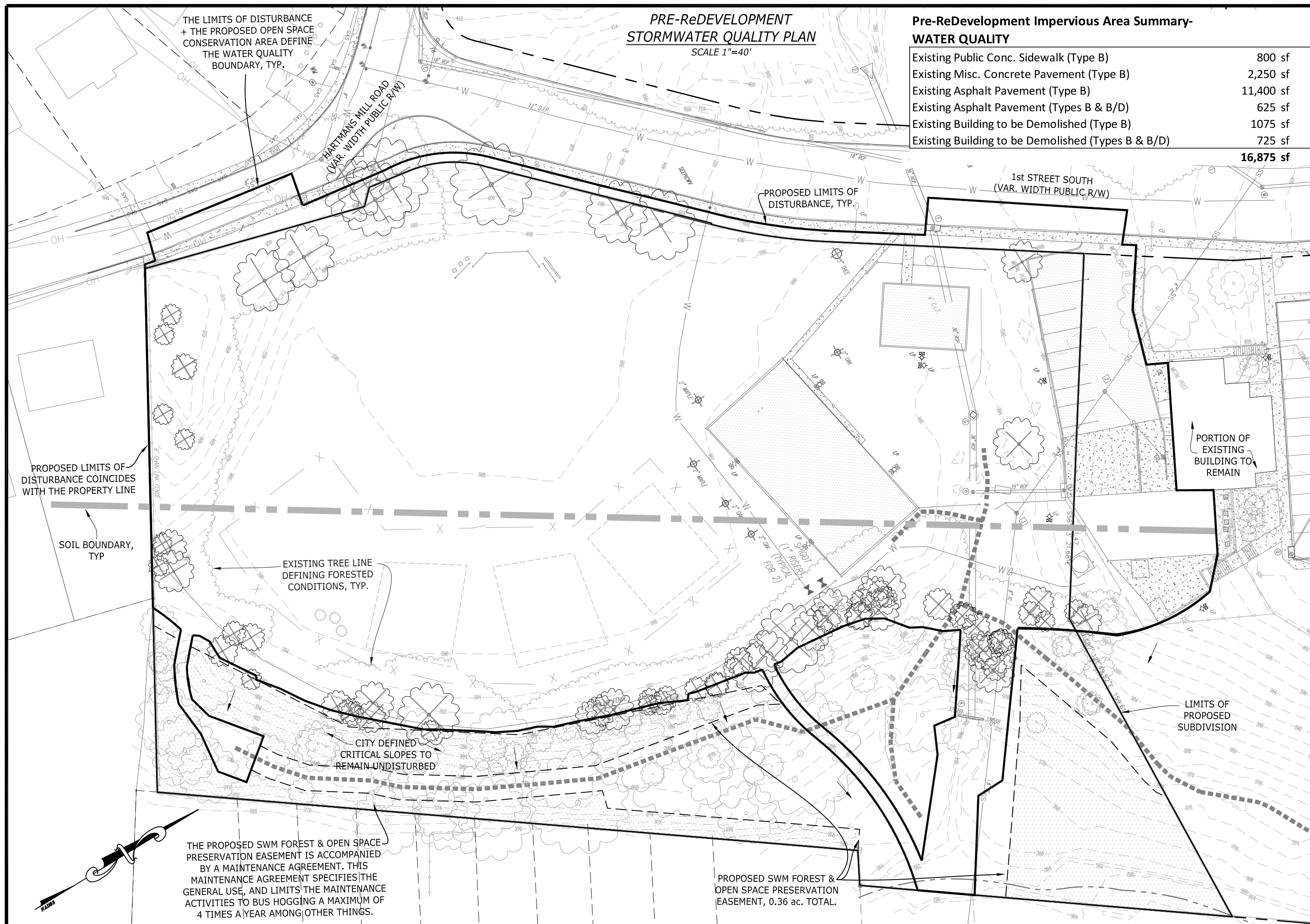
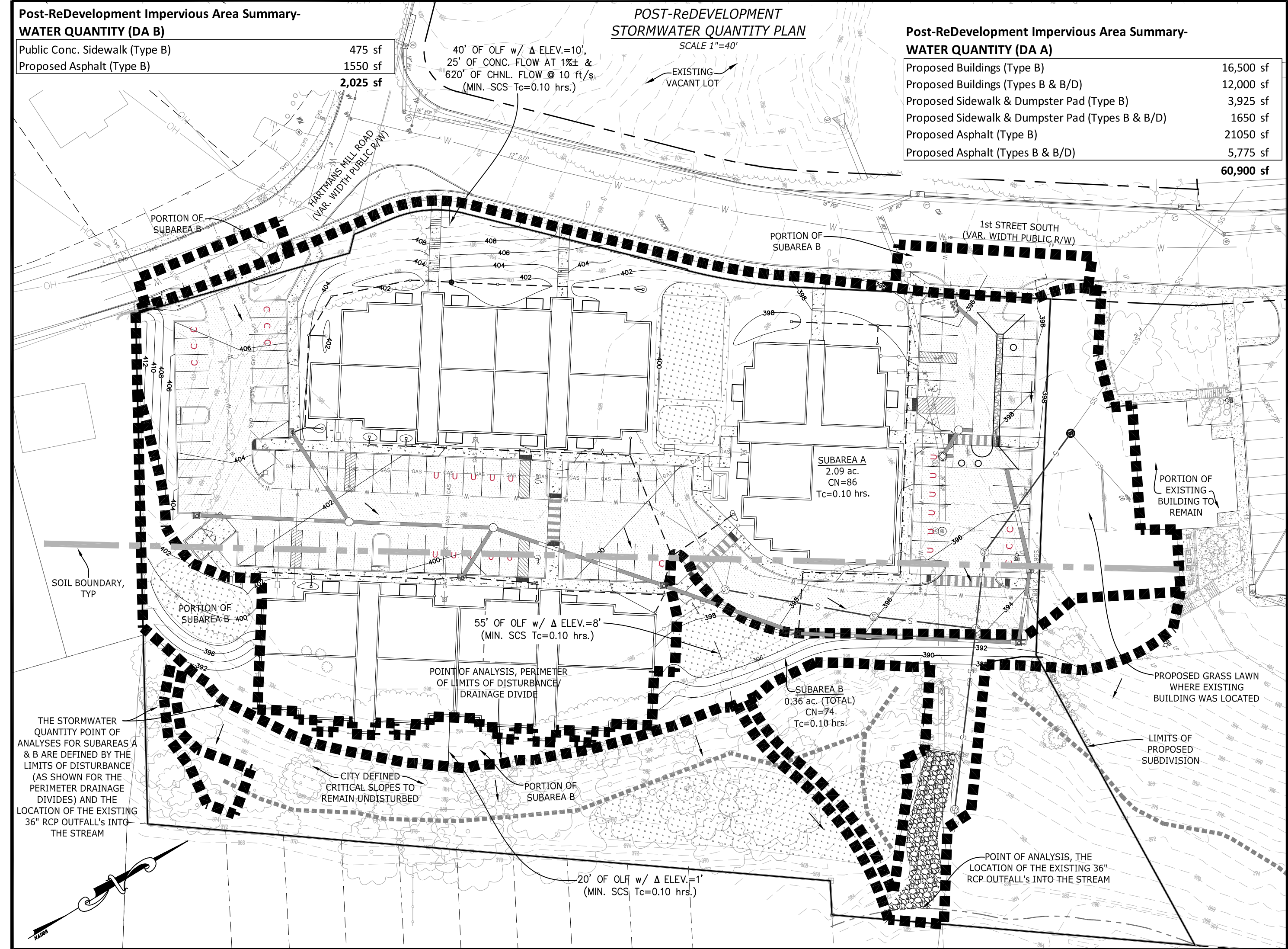
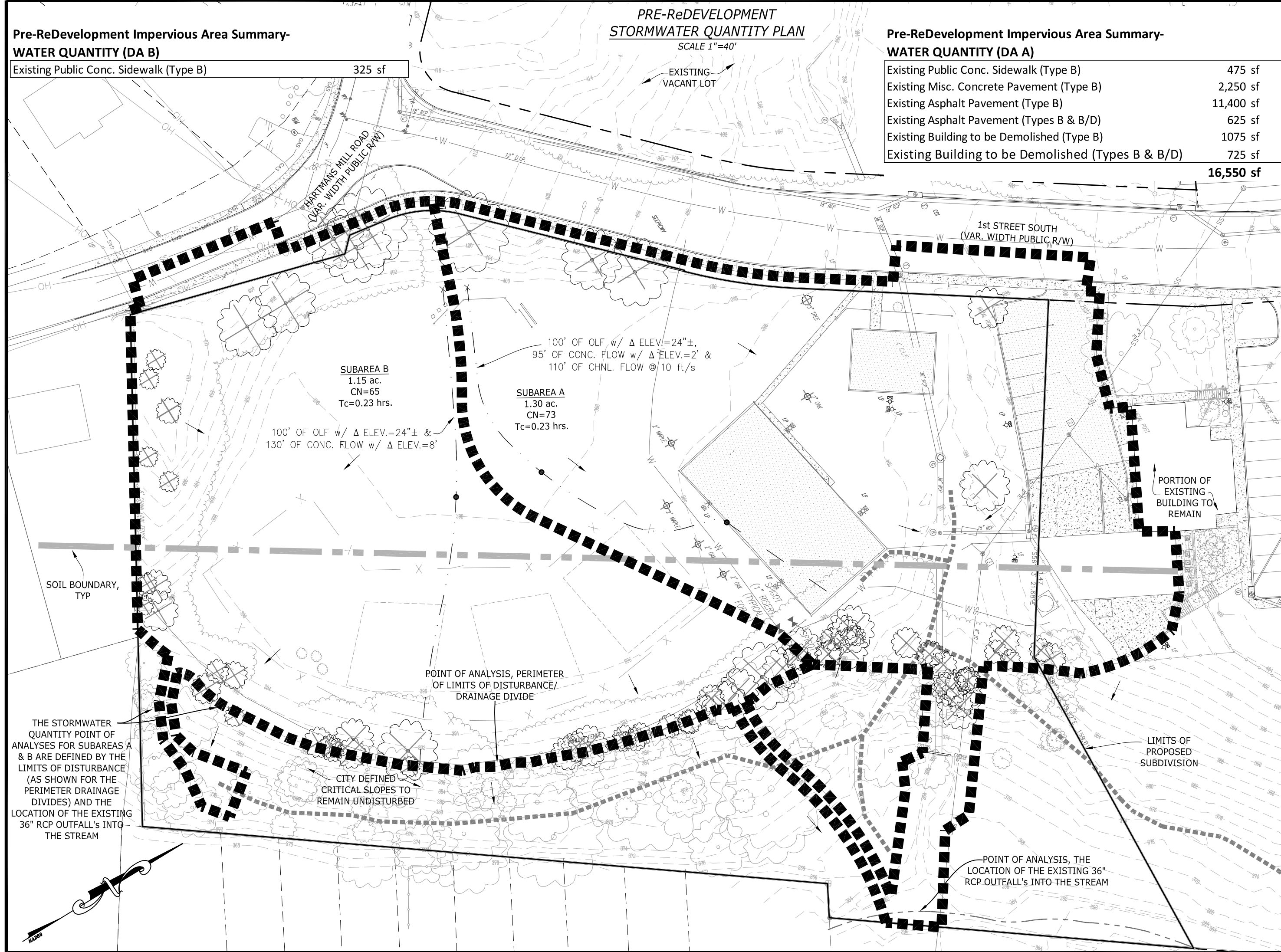
**COLLINS ENGINEERING**  
 200 GARRETT STREET, SUITE K - CHARLOTTESVILLE, VA 22902 - 434.293.3719

**1st STREET SOUTH APARTMENTS - PHASE I FINAL SITE PLAN**  
 CONCEPTUAL PHASE III EROSION & SEDIMENT CONTROL PLAN

PROJECT: 182158  
 JOB NO.: 182158  
 SCALE: 1"=20'  
 SHEET NO.: 15B

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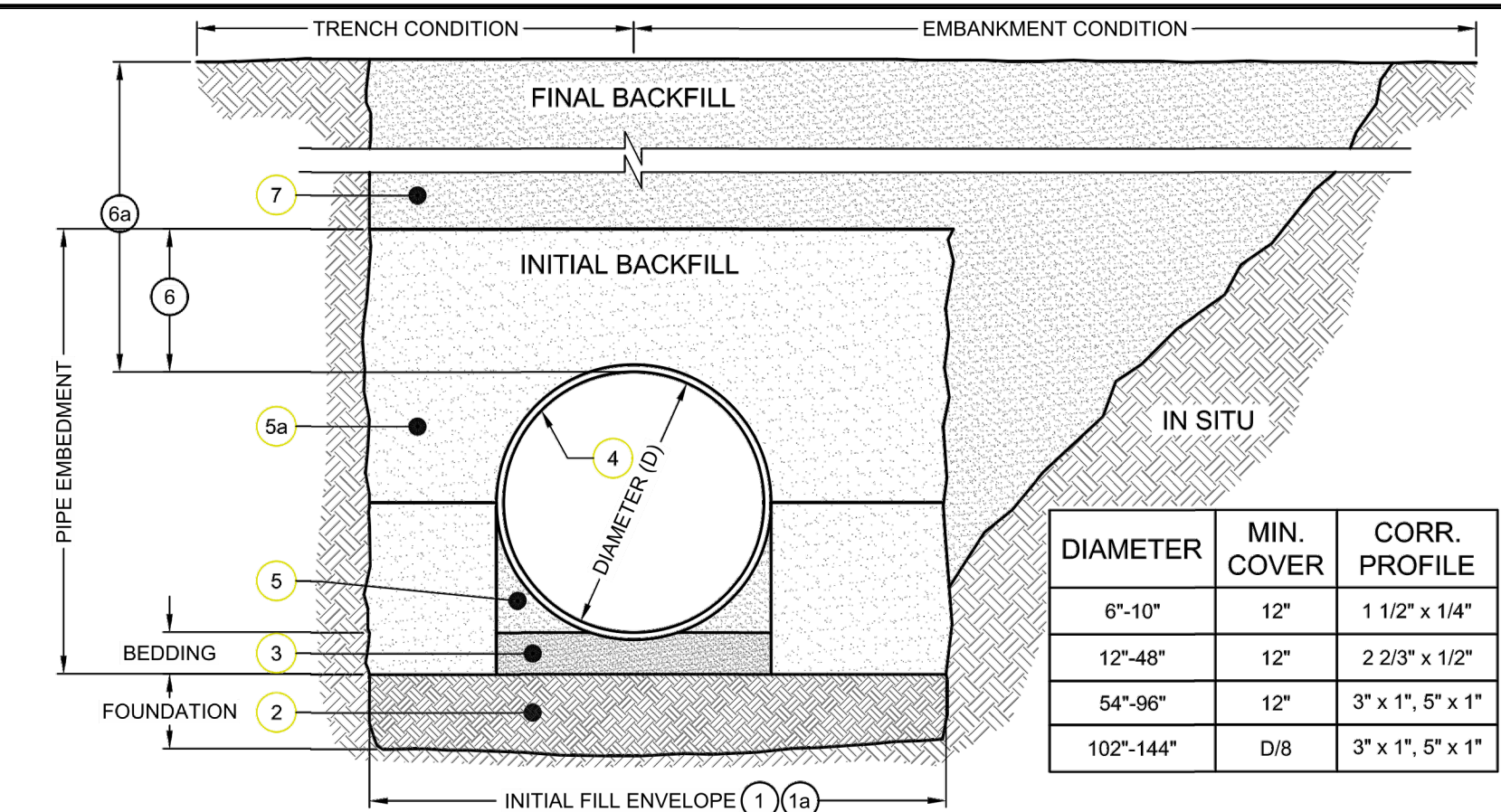
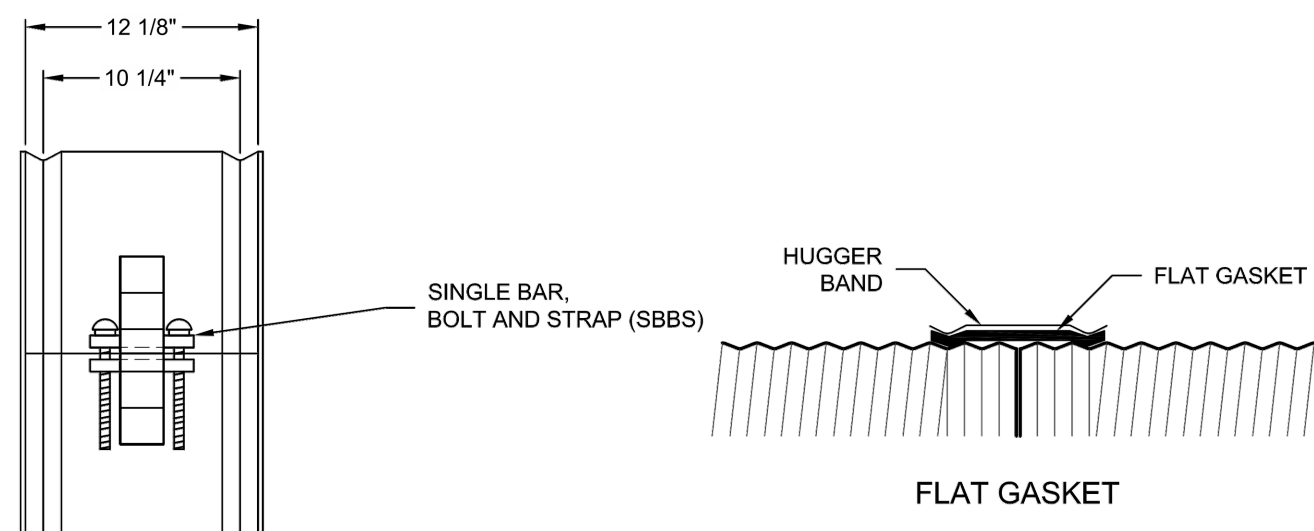
DATE	REVISION DESCRIPTION
1/25/19	INITIAL SUBMITTAL
2/6/19	REVISED PLANS PER COMMENTS DATED 2/1/19
2/25/19	REVISED PLANS PER COMMENTS DATED 2/21/19

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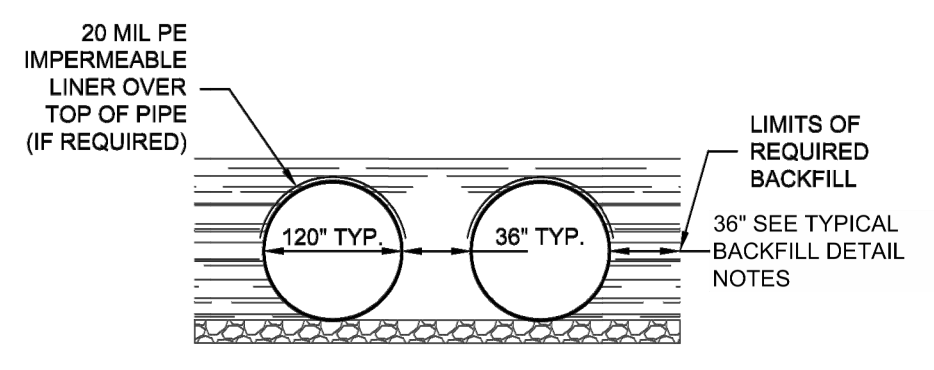
**1st STREET SOUTH APARTMENTS - PHASE I FINAL SITE PLAN**  
PHASE I STORMWATER MANAGEMENT PLAN

PROJECT: 182158  
SCALE: AS SHOWN  
SHEET NO.: 16





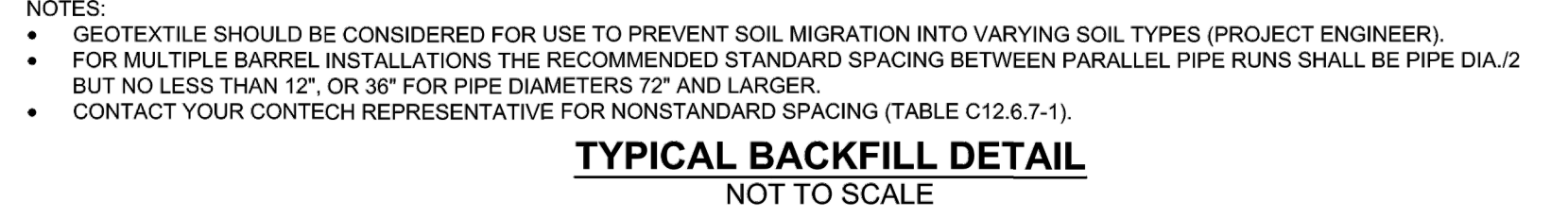
DIAMETER	MIN. COVER	CORR. PROFILE
6"-10"	12"	1 1/2" x 1/4"
12"-48"	12"	2 2/3" x 1/2"
54"-96"	12"	3" x 1", 5" x 1"
102"-144"	D/B	3" x 1", 5" x 1"



NOTE: IF SALTING AGENTS FOR SNOW AND ICE REMOVAL ARE USED ON OR NEAR THE PROJECT, A GEOMEMBRANE BARRIER IS RECOMMENDED WITH THE SYSTEM. THE GEOMEMBRANE LINER IS INTENDED TO HELP PROTECT THE SYSTEM FROM THE POTENTIAL ADVERSE EFFECTS THAT MAY RESULT FROM A CHANGE IN THE SURROUNDING ENVIRONMENT OVER A PERIOD OF TIME. PLEASE REFER TO THE CORRUGATED METAL PIPE DETENTION DESIGN GUIDE FOR ADDITIONAL INFORMATION.

- GENERAL NOTES:**
- JOINT IS TO BE ASSEMBLED PER AASHTO BRIDGE CONSTRUCTION SPECIFICATION SEC 26.4.2.4.
  - BAND MATERIALS AND/OR COATING CAN VARY BY LOCATION. CONTACT YOUR CONTECH REPRESENTATIVE FOR AVAILABILITY.
  - BANDS ARE SHAPED TO MATCH THE PIPE-ARCH WHEN APPLICABLE.
  - BANDS ARE NORMALLY FURNISHED AS FOLLOWS:
    - 12" THRU 48" 1-PIECE
    - 54" THRU 96" 2-PIECES
    - 102" THRU 144" 3-PIECES
  - BAND FASTENERS ARE ATTACHED WITH SPOT WELDS, RIVETS OR HAND WELDS.
  - ALL CMP IS REROLLED TO HAVE ANNULAR END CORRUGATIONS OF 2 2/3"x1/2"
  - DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
  - ORDER SHALL DESIGNATE GASKET OPTION, IF REQUIRED (SEE DETAILS ABOVE).
- H-12 HUGGER BAND DETAIL**  
NOT TO SCALE

- BACKFILL REQUIREMENTS FOLLOW THE GUIDELINES OF AASHTO LRFD BRIDGE DESIGN (SEC 12) AND CONSTRUCTION (SEC 26)**
- MINIMUM TRENCH WIDTH MUST ALLOW ROOM FOR PROPER COMPACTION OF HAUNCH MATERIALS UNDER THE PIPE. THE MINIMUM TRENCH WIDTH (12.6.6.1):  
PIPE ≤ 12": D + 16"  
PIPE > 12": 1.5D + 12"
  - MINIMUM EMBANKMENT WIDTH (IN FEET) FOR INITIAL FILL ENVELOPE (12.6.6.2):  
PIPE < 24": 3.0D  
PIPE 24" - 144": D + 4"  
PIPE > 144": D + 10"
  - THE FOUNDATION UNDER THE PIPE AND SIDE BACKFILL SHALL BE ADEQUATE TO SUPPORT THE LOADS ACTING UPON IT (26.5.2).
  - BEDDING MATERIAL SHALL BE A RELATIVELY LOOSE MATERIAL THAT IS ROUGHLY SHAPED TO FIT THE BOTTOM OF THE PIPE, AND A MINIMUM OF TWICE THE CORRUGATION DEPTH IN THICKNESS, WITH THE MAXIMUM PARTICLE SIZE OF ONE-HALF OF THE CORRUGATION DEPTH (26.5.1, 26.5.3).
  - CORRUGATED STEEL PIPE (CSP / HEL-COR).
  - HAUNCH ZONE MATERIAL SHALL BE HAND SHOVELED OR SHOVEL SLICED INTO PLACE TO ALLOW FOR PROPER COMPACTION (26.5.4).
  - INITIAL BACKFILL FOR PIPE EMBEDMENT TO MEET AASHTO A-1, A-2 OR A-3 CLASSIFICATION, OR APPROVED EQUAL, COMPACTED TO 90% STANDARD PROCTOR (1.99). MAXIMUM PARTICLE SIZE NOT TO EXCEED 3" (12.4.1.2). ALL LIFTS PLACED IN A CONTROLLED MANNER. IT IS RECOMMENDED THAT LIFTS NOT EXCEED AN 8" UNCOMPACTED LIFT HEIGHT TO PREVENT UNEVEN LOADING, AND THE LESSER OF 1/3 THE DIAMETER OR 24" AS THE MAXIMUM DIFFERENTIAL SIDE-TO-SIDE (26.5.4).
  - INITIAL BACKFILL ABOVE PIPE MAY INCLUDE ROAD BASE MATERIAL (AND RIGID PAVEMENT IF APPLICABLE). SEE TABLE ABOVE.
  - TOTAL HEIGHT OF COMPACTED COVER FOR CONVENTIONAL HIGHWAY LOADS IS MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TOP OF RIGID PAVEMENT (12.6.6.3).
  - FINAL BACKFILL MATERIAL SELECTION AND COMPACTION REQUIREMENTS SHALL FOLLOW THE PROJECT PLANS AND SPECIFICATIONS PER THE ENGINEER OF RECORD (26.5.4.1).



- General Construction notes for Stormwater Management Plans**
- All dams and constructed fill to be within 95% of maximum dry density and 2% of optimum moisture content. All fill material to be approved by a geotechnical engineer. A geotechnical engineer is to be present during construction of dams.
  - Pipe and riser joints are to be watertight within stormwater management facilities.
  - For temporary sediment traps or basins which are to be converted to permanent stormwater management facilities; conversion is not to take place until the site is stabilized, and permission has been obtained from the erosion control inspector.

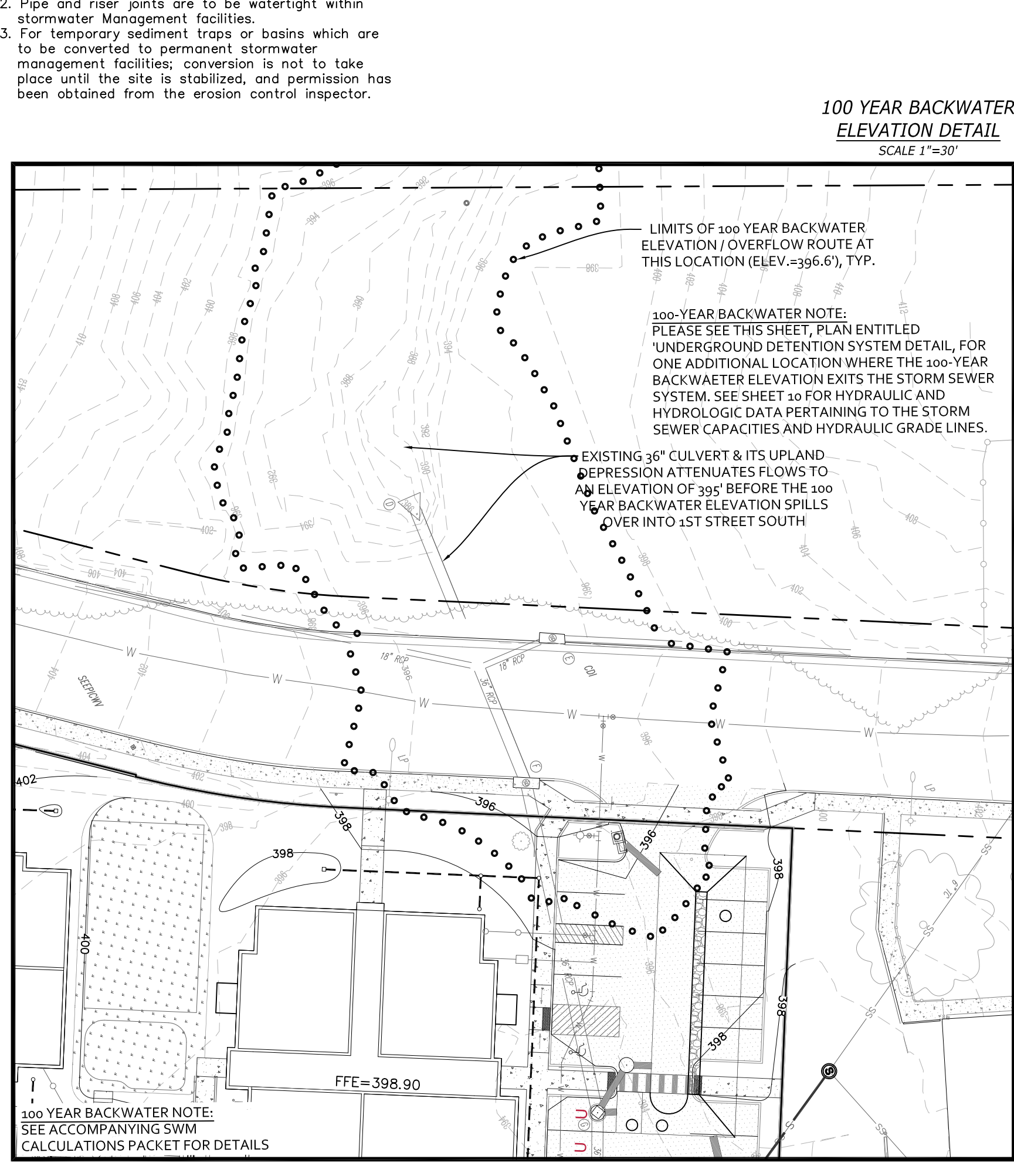
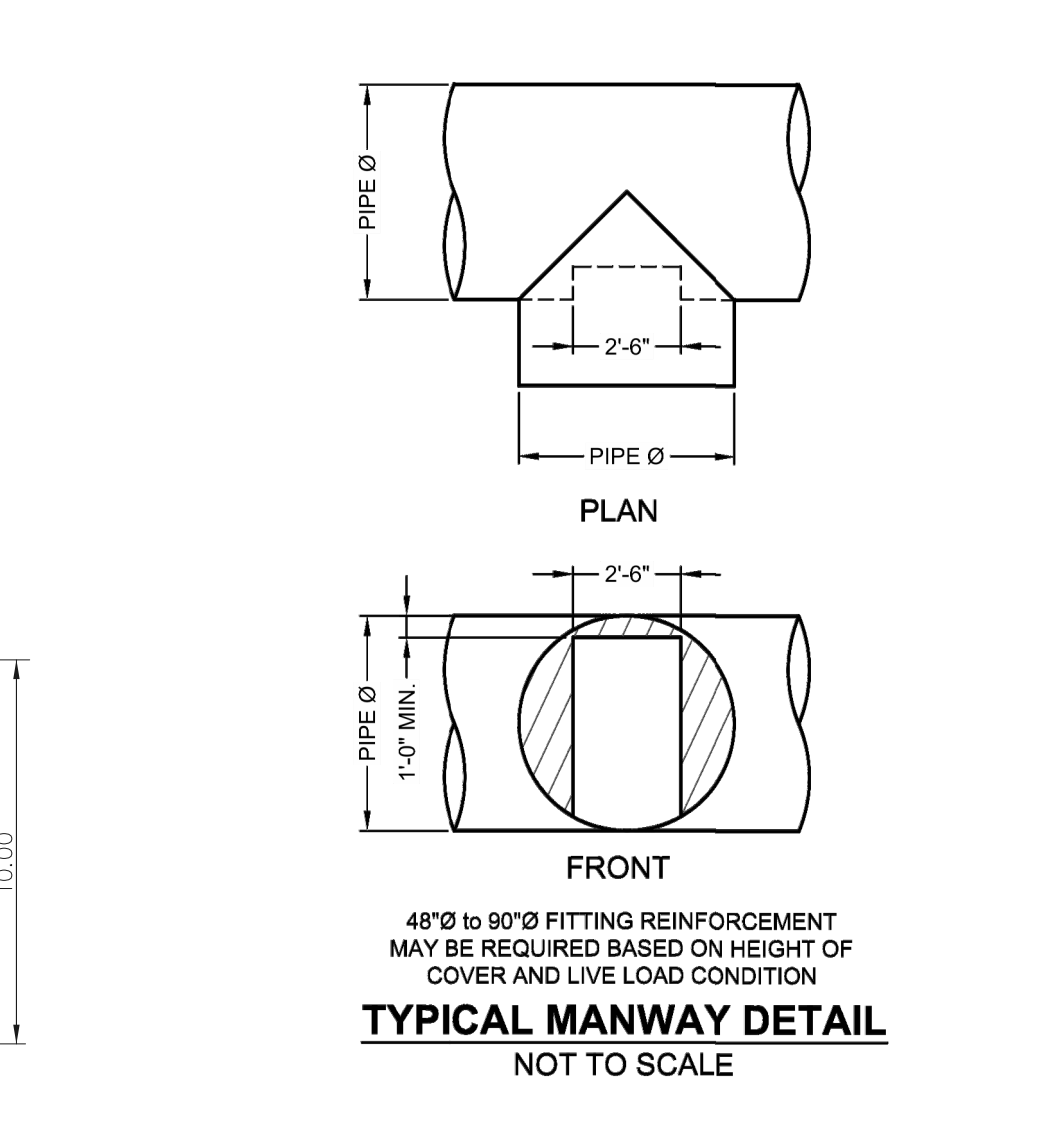
**REQUIREMENTS FOR FILTER FABRIC USED WITH RIPRAP**

Physical Property	Test Method	Requirements
Equivalent Opening Size	Corps of Engineers CWO 2215-77	Equal or greater than U.S. No. 50 sieve
Tensile Strength* @ 20% (maximum)	VTM-52	30 lbs./linear in. (minimum)
Puncture Strength	ASTM D751*	80 lbs. (minimum)

\* Tension testing machine with ring clamp, steel ball replaced with 5/16 diameter solid steel cylinder with hemispherical tip centered within the ring clamp.

Seams shall be equal in strength to basic material.

Additional fabric material or non-corrosive steel wire may be incorporated into the fabric to increase overall strength.

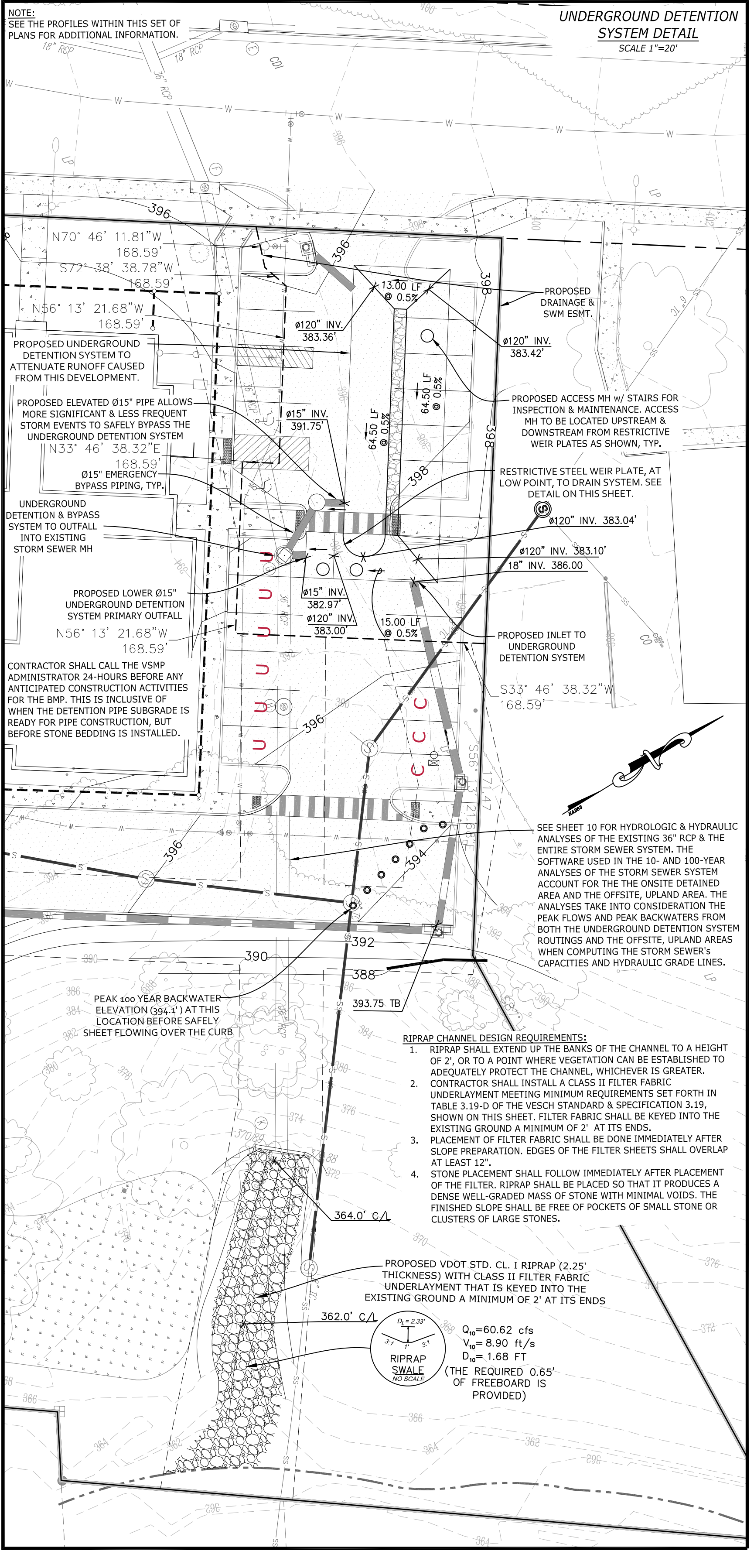


**PHASE I WATERSHED SUMMARY**

	CN	Area, ac.	Pre-ReDevelopment		
			1-year Flow, cfs	2-year Flow, cfs	10-year Flow, cfs
DA A (Pre-ReDev.)	73	1.30	1.24	1.90	4.11
DA B (Pre-ReDev.)	65	1.15	0.62	1.14	2.94
	69	2.45	1.86	3.04	7.05

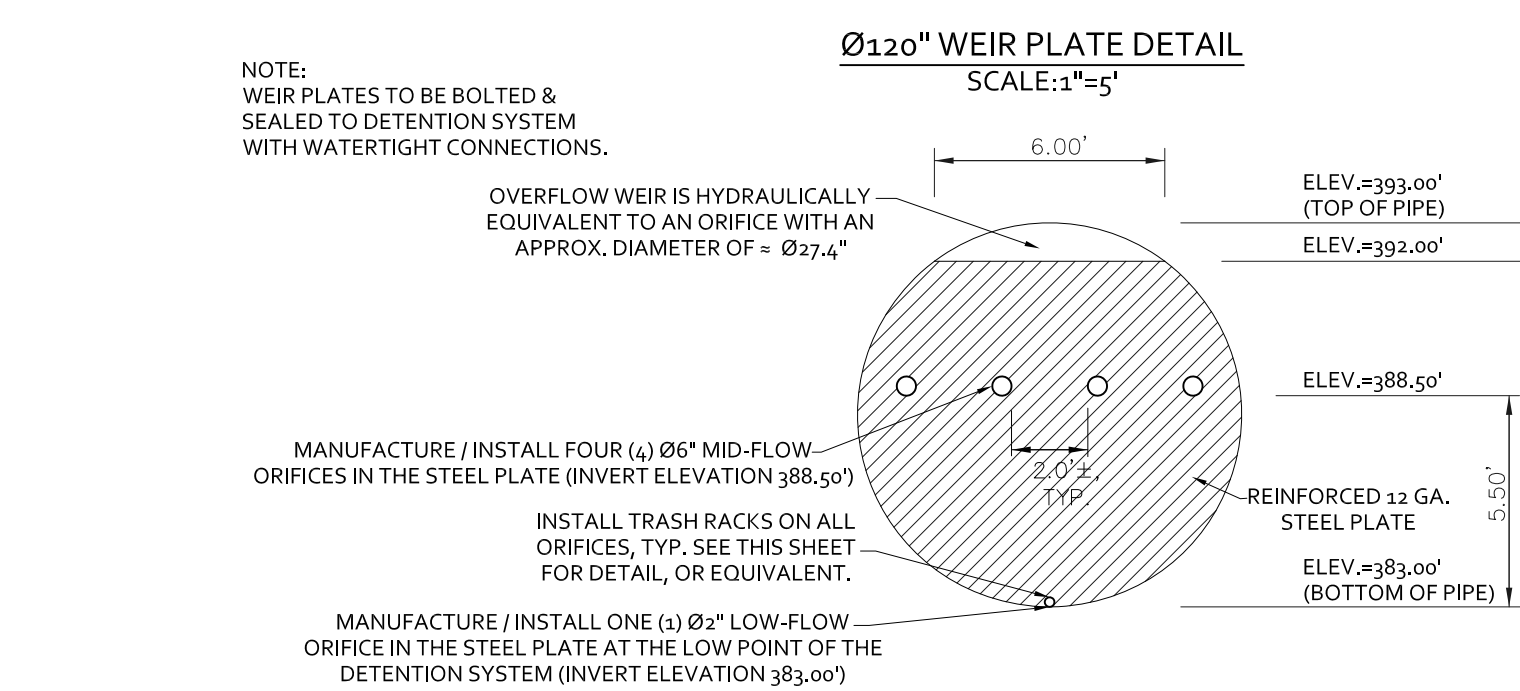
  

	CN	Area, ac.	Post-ReDevelopment		
			1-year Flow, cfs	2-year Flow, cfs	10-year Flow, cfs
DA A (Post-ReDev.)	86	2.09	0.20	2.25	5.72
DA B (Post-ReDev.)	74	0.36	0.44	0.64	1.33
	84	2.45	0.64	2.89	7.05



- UNDERGROUND DETENTION SYSTEM NOTES:**
- TRASHRACKS SHALL BE INSTALLED ON ALL ORIFICES, INCLUDING THOSE LOCATED ALONG THE WEIR PLATE WITHIN THE UNDERGROUND DETENTION SYSTEM.
  - DETENTION SYSTEM'S WEIR PLATE TO BE PRE-MANUFACTURED AND DELIVERED TO THE SITE. WEIR PLATE SHALL BE BOLTED TO THE UNDERGROUND DETENTION SYSTEM, OR SIMILARLY FASTENED TO ENSURE IT HAS A SECURE & WATER TIGHT CONNECTION.
  - ANY RETAINING WALLS AND FOUNDATIONS CONSTRUCTED IN THE VICINITY OF THE UNDERGROUND DETENTION SYSTEM SHALL BE REVIEWED AND APPROVED BY THE STRUCTURAL ENGINEER AND A GEOTECHNICAL ENGINEER.
  - THE PROPOSED PARKING LOTS WILL SERVE AS ACCESS TO THE UNDERGROUND DETENTION SYSTEM.
  - CONTACT COLLINS ENGINEERING (434.293.3719) REGARDING ANY QUESTIONS CONCERNING THE UNDERGROUND DETENTION SYSTEM.
  - ALL FILL EMBANKMENT MATERIAL SHALL CONSIST PREDOMINANTLY OF SOIL AND BE PLACED IN SUCCESSIVE UNIFORM LAYERS NOT MORE THAN 8 INCHES IN THICKNESS BEFORE COMPACTION OVER THE ENTIRE AREA IN ACCORDANCE WITH THE CURRENT VDOT ROAD AND BRIDGE SPECIFICATIONS.
  - VDOT STD. IS-1 & ST-1 ARE REQUIRED ON THE UNDERGROUND DETENTION SYSTEM STRUCTURES, INCLUSIVE OF THE BYPASS STRUCTURES.
  - ALL FILL SHALL BE PLACED AT 95% COMPACTION AND TESTED BY A GEOTECHNICAL ENGINEER TO ENSURE COMPACTION IS REACHED AND MAINTAINED.
  - PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL TEST-DIG AT THE EXISTING INLETS & OUTFALLS TO CONFIRM THE INVERTS AND TO ENSURE THE PROPOSED GRADES CAN BE ACHIEVED. CONTRACTOR SHALL CONTACT COLLINS ENGINEERING OF ANY DISCREPANCIES IN THE HORIZONTAL OR VERTICAL ALIGNMENT PRIOR TO ORDERING AND CONSTRUCTION.
  - ALL EXCAVATION FOR UNDERGROUND PIPE INSTALLATION MUST COMPLY WITH OSHA STANDARDS FOR CONSTRUCTION INDUSTRY (29 CFR PART 1926).
  - CONTRACTOR SHALL PROVIDE ADEQUATE STONE BACKFILL FOR THE UNDERGROUND DETENTION SYSTEM PIPES IN ACCORDANCE WITH VDOT AND THE MANUFACTURER'S REQUIREMENTS.
  - THE PROPOSED UNDERGROUND DETENTION SYSTEM IS LOCATED AT LATITUDE 38.019883, LONGITUDE -78.487279.

- PROPOSED PHASE I STORMWATER MANAGEMENT NARRATIVE:**
- SUMMARY:**  
THE PROPOSED STORMWATER MANAGEMENT PLAN COMPLIES WITH PART II REQUIREMENTS. THE STORMWATER RUNOFF RATES, VOLUMES, AND VELOCITIES RESULTING FROM THIS DEVELOPMENT WILL BE IMPROVED PRIOR TO ENTERING THE CITY'S STORM SEWER SYSTEM. PLEASE SEE THE ATTACHED STORMWATER MANAGEMENT CALCULATIONS PACKET FOR EVIDENCE OF THIS. SUMMARIES OF THIS COMPLIANCE CAN BE VIEWED ON THIS SHEET AND THE PREVIOUS SHEETS AS WELL.
- STORMWATER QUANTITY:**  
THE LIMITS OF THE STORMWATER QUANTITY ANALYSIS FOR SUBAREAS A & B IS DEFINED BY THE LIMITS OF DISTURBANCE & THE EXISTING STORM SEWER. CURRENTLY ALL OF THE EXISTING IMPERVIOUS AND PERVIOUS AREAS WITHIN THE LIMITS OF THIS PROJECT EXIT THE PROPERTY UNTREATED. THE PROPOSED PLAN WILL CHANGE THIS AND WILL CAPTURE THE MAJORITY OF THE IMPERVIOUS AREAS AND IMPROVEMENTS. THE CAPTURE AND DETENTION OF THESE IMPROVEMENTS IS REPRESENTED BY POST-REDEVELOPMENT SUBAREA A. SUBAREA A RECEIVES ATTENUATION IN THE UNDERGROUND DETENTION SYSTEM AND GREATLY RESTRICTS THE POST-REDEVELOPMENT OUTFLOWS.
- THE MINOR REMAINING AREAS THAT ARE OUTSIDE OF SUBAREA A, BUT ARE LOCATED WITHIN THE LIMITS OF DISTURBANCE, ARE REPRESENTED BY SUBAREA B. THESE POST-REDEVELOPMENT DISCONNECTED AREAS ARE RELEASED VIA SHEET FLOW WITH RATES LESS THAN PRE-REDEVELOPMENT CONDITIONS.
- THE PHASE I WATERSHED SUMMARY ASSUMES THE POST-REDEVELOPMENT OUTFLOWS FROM SUBAREAS A & B OCCUR SIMULTANEOUSLY. IN OTHER WORDS, THE POST-REDEVELOPMENT SUBAREA A FLOWS WERE ADDED TO THE POST-REDEVELOPMENT SUBAREA B FLOWS AND WERE COMPARED TO THE PRE-REDEVELOPMENT FLOWS.
- ENERGY BALANCE CALCULATIONS HAVE BEEN PROVIDED FOR THE ENTIRE SITE, TAKING INTO CONSIDERATION BOTH SUBAREAS A & B. THE AFOREMENTIONED SUMMED POST-REDEVELOPMENT PEAK OUTFLOWS WERE COMPARED TO THE MAXIMUM ALLOWED FLOW IN THE ENERGY BALANCE CALCULATIONS. THE ENERGY BALANCE CALCULATIONS TOOK INTO CONSIDERATION BOTH SUBAREAS A & B IN THE PRE-REDEVELOPMENT STATE BY USING THE TOTAL ACREAGE, TOTAL FLOW AND A WEIGHTED CN VALUE. THE ENERGY BALANCE CALCULATIONS TOOK INTO CONSIDERATION BOTH SUBAREAS A & B IN THE POST-REDEVELOPMENT STATE BY USING THE TOTAL ACREAGE, TOTAL (SUMMED) FLOW AND A WEIGHTED CN VALUE. THE RESULT WAS A PEAK 1-YEAR SCS TR-55 24-HOUR POST-REDEVELOPMENT DESIGN FLOW THAT WAS LEVEL LESS THAN OR EQUAL TO THE MAXIMUM ALLOWED PER 9 VAC 35-879-66. CHANNEL AND FLOOD PROTECTION CALCULATIONS SHOWING THIS COMPLIANCE FOR SUBAREAS A & B HAVE BEEN PROVIDED.
- PLEASE SEE THE ATTACHED STORMWATER MANAGEMENT CALCULATIONS PACKET FOR ADDITIONAL DETAILS.
- PLEASE NOTE, SHOULD ADDITIONAL AREAS NOT ACCOUNTED FOR IN THIS PHASE I DESIGN BE DIRECTED TO PHASE II IN THE FUTURE, AS A RESULT OF FUTURE DEVELOPMENT PHASES, THE PHASE I DESIGN WILL NEED TO BE EVALUATED FOR COMPLIANCE AT THE TIME OF THE FUTURE PHASE'S FINAL SITE PLAN REVIEW. FOR EXAMPLE, IF PHASE II PROPOSES A PEDESTRIAN CONNECTION THAT IMPACTS PHASE I'S DESIGN THEN THE DESIGN WILL NEED TO BE EVALUATED TO ENSURE COMPLIANCE IS NOT COMPROMISED. THIS COULD POTENTIALLY BE ADDRESSED BY THE INSTALLATION OF YARD DRAINS AND INLETS TO REDUCE PHASE I'S OVERALL WATERSHED IN ANOTHER LOCATION TO OFFSET THE MINOR IMPACTS FROM A PEDESTRIAN CONNECTION.
- STORMWATER QUALITY:**  
STORMWATER QUALITY COMPLIANCE IS MET FOR THIS DEVELOPMENT THROUGH TWO BEST MANAGEMENT PRACTICES. THE BEST MANAGEMENT PRACTICE OF PRESERVING OPEN SPACES IS IMPLEMENTED ON SITE. AFTER THE APPLICATION OF THIS BMP, THE BEST MANAGEMENT PRACTICE OF PURCHASING NUTRIENT CREDITS IS USED TO FULFILL THE REMAINING BALANCE. A TOTAL REQUIRED PHOSPHORUS REMOVAL RATE PURCHASE OF 2.12 lbs/yr IS REQUIRED FOR THIS PROJECT. PLEASE NOTE, ALL ON SITE NUTRIENT REDUCTION PRACTICES HAVE BEEN EVALUATED AND DUE TO VARIOUS RESTRAINTS THE STORMWATER QUALITY PLAN PROPOSED IS BEST SUITED FOR THIS PHASE AND IS COMPLIANT WITH MINIMUM VIRGINIA DEQ REQUIREMENTS.



**REVISIONS**

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**COLLINS ENGINEERING**

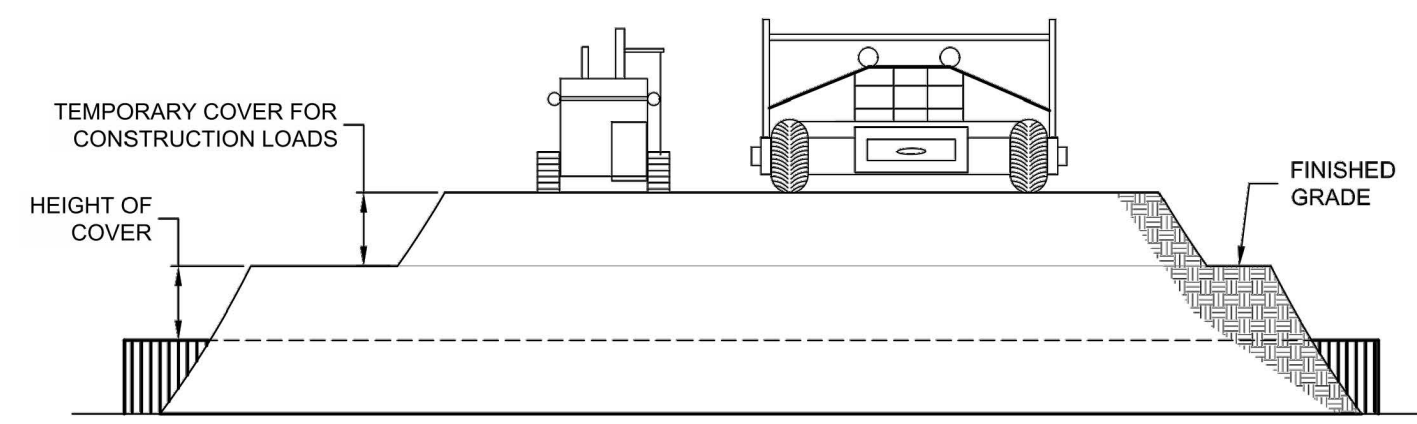
200 GARRETT STREET, SUITE K - CHARLOTTESVILLE, VA 22902 - 434-293.3719

**1st STREET SOUTH APARTMENTS - PHASE I FINAL SITE PLAN**

PHASE I STORMWATER MANAGEMENT PLAN & DETAILS

PROJECT: 182158  
SCALE: AS SHOWN  
SHEET NO.: 17





**CONSTRUCTION LOADS**

FOR TEMPORARY CONSTRUCTION VEHICLE LOADS, AN EXTRA AMOUNT OF COMPACTED COVER MAY BE REQUIRED OVER THE TOP OF THE PIPE. THE HEIGHT-OF-COVER SHALL MEET THE MINIMUM REQUIREMENTS SHOWN IN THE TABLE BELOW. THE USE OF HEAVY CONSTRUCTION EQUIPMENT NECESSITATES GREATER PROTECTION FOR THE PIPE THAN FINISHED GRADE COVER MINIMUMS FOR NORMAL HIGHWAY TRAFFIC.

PIPE SPAN, INCHES	AXLE LOADS (kips)			
	18-50	50-75	75-110	110-150
	MINIMUM COVER (FT)			
12-42	2.0	2.5	3.0	3.0
48-72	3.0	3.0	3.5	4.0
78-120	3.0	3.5	4.0	4.0
126-144	3.5	4.0	4.5	4.5

\*MINIMUM COVER MAY VARY, DEPENDING ON LOCAL CONDITIONS. THE CONTRACTOR MUST PROVIDE THE ADDITIONAL COVER REQUIRED TO AVOID DAMAGE TO THE PIPE. MINIMUM COVER IS MEASURED FROM THE TOP OF THE PIPE TO THE TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE.

**CONSTRUCTION LOADING DIAGRAM**  
NOT TO SCALE

**SPECIFICATION FOR CORRUGATED STEEL PIPE-ALUMINIZED TYPE 2 STEEL**

**SCOPE**

THIS SPECIFICATION COVERS THE MANUFACTURE AND INSTALLATION OF THE CORRUGATED STEEL PIPE (CSP) DETAILED IN THE PROJECT PLANS.

**MATERIAL**

THE ALUMINIZED TYPE 2 STEEL COILS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M36 OR ASTM A760.

**PIPE**

THE CSP SHALL BE MANUFACTURED IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF AASHTO M36 OR ASTM A760. THE PIPE SIZES, GAGES AND CORRUGATIONS SHALL BE AS SHOWN ON THE PROJECT PLANS.

ALL FABRICATION OF THE PRODUCT SHALL OCCUR WITHIN THE UNITED STATES.

**HANDLING AND ASSEMBLY**

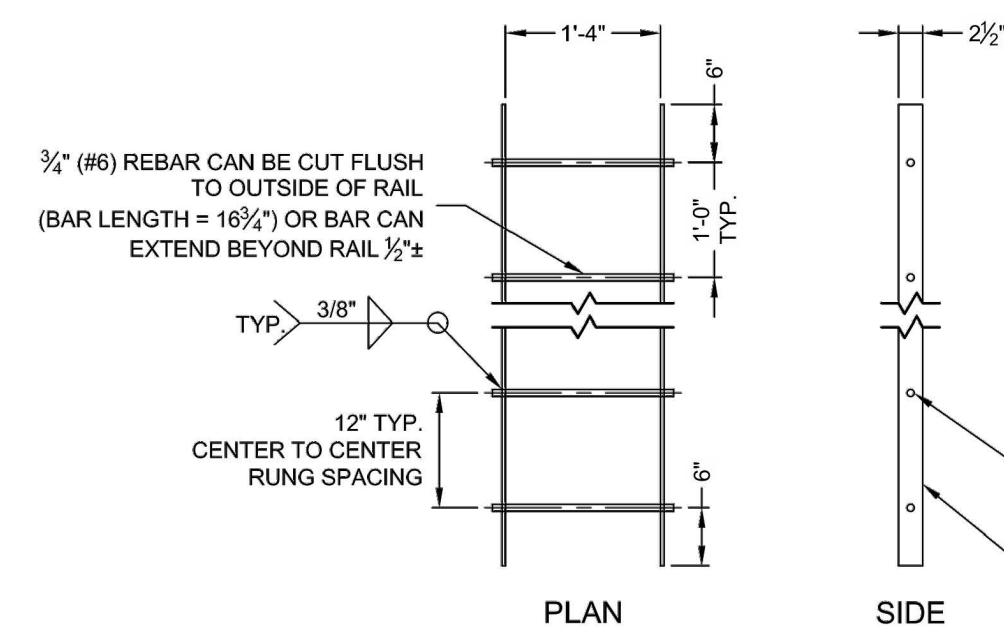
SHALL BE IN ACCORDANCE WITH RECOMMENDATIONS OF THE NATIONAL CORRUGATED STEEL PIPE ASSOCIATION (NCSIPA)

**INSTALLATION**

SHALL BE IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SECTION 26, DIVISION II OR ASTM A798 AND IN CONFORMANCE WITH THE PROJECT PLANS AND SPECIFICATIONS. IF THERE ARE ANY INCONSISTENCIES OR CONFLICTS THE CONTRACTOR SHOULD DISCUSS AND RESOLVE WITH THE SITE ENGINEER.

IT IS ALWAYS THE RESPONSIBILITY OF THE CONTRACTOR TO FOLLOW OSHA GUIDELINES FOR SAFE PRACTICES.

**MATERIAL SPECIFICATION**  
NOT TO SCALE



- NOTES:  
1. LADDERS CAN BE MADE IN 20'-0" STANDARD LENGTHS AND CUT TO FIT  
2. ALL MATERIAL TO MEET ASTM A36  
3. LADDER TO BE HOT DIPPED GALVANIZED PER ASTM A-123 AFTER FABRICATION IS COMPLETE

**STANDARD LADDER DETAIL**  
NOT TO SCALE  
PART NO. HALAGVL16

PROVIDE MINIMUM OF 4 ATTACHMENT ANGLES (2 ON EITHER SIDE OF LADDER RAIL) TO CONNECT LADDER TO RISER EXTENSION

RISER w/ LADDER AND STEPS IF EXTENSION IS REQUIRED

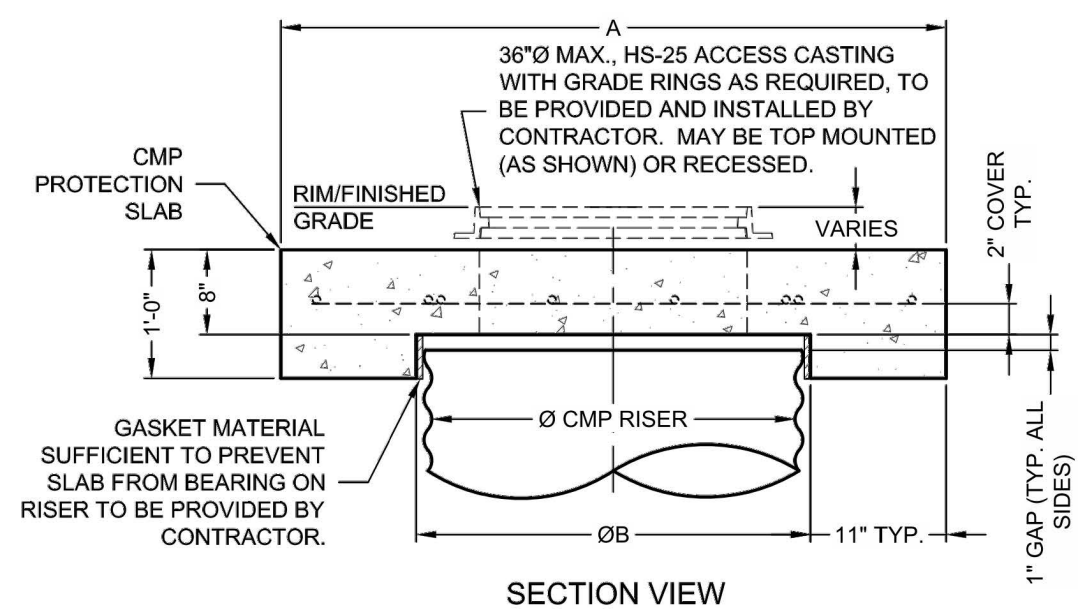
RISER w/ LADDER AND STEPS

MAINLINE CMP  
2 1/2 x 1/2, 5 x 1, 3 x 1, ETC.

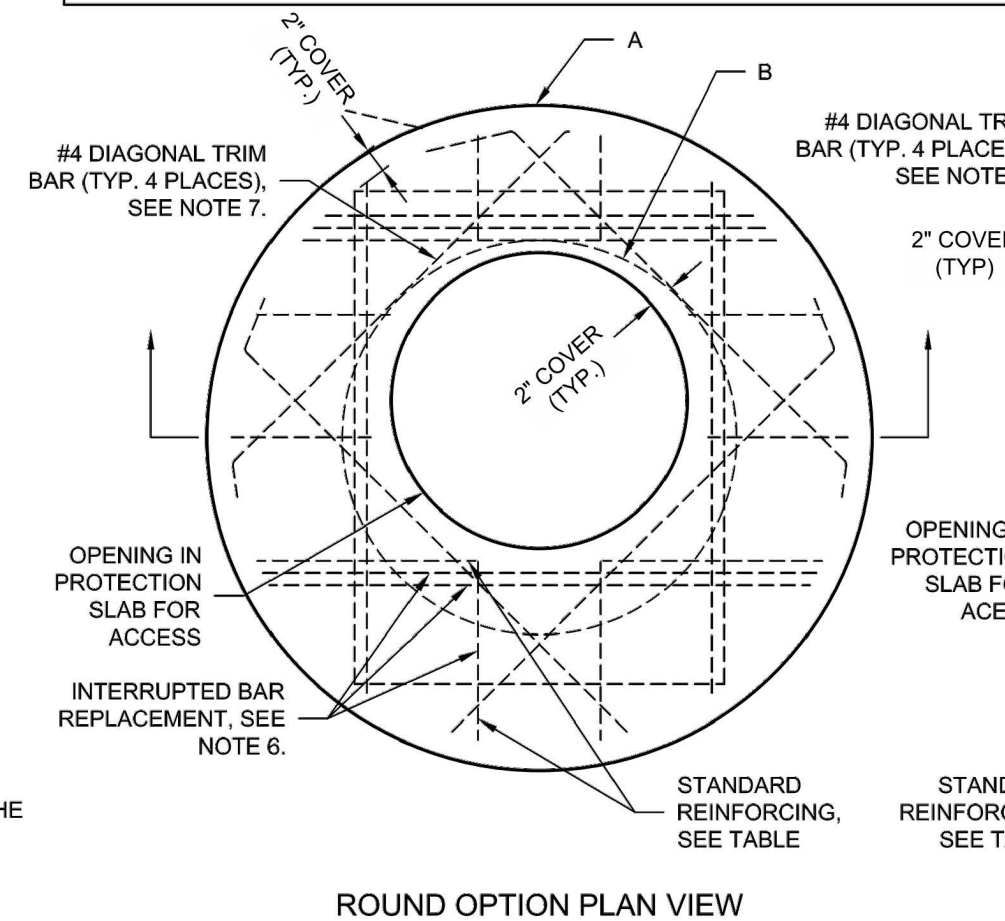
1'-6" MAX. CL PIPE

5/8" x 3" x 1/2" x 16" LONG AT 1'-0" SPACING. LONG LEG TO PROJECT OUT. WELD TOP AND BOTTOM OF 3" LEG TO EACH CORRUGATION CREST (THESE ANGLES SHOULD BE USED FOR LARGER DIAMETER MAINLINES WHERE ADDITIONAL STEPS ARE NEEDED)

NOTE:  
THIS DRAWING IS INTENDED TO APPLY TO LADDERS INSTALLED IN RISERS HAVING A DIAMETER OF 30" OR LARGER. DUE TO SPACE CONSTRAINTS AND LIMITED ACCESSIBILITY, THE PRACTICALITY AND SUITABILITY OF UTILIZING RISERS SMALLER THAN 30" DIAMETER AND/OR INCORPORATING LADDERS IN THESE SMALLER DIAMETER RISERS SHOULD BE ADDRESSED BY THE OWNER AND PROJECT ENGINEER



**ACCESS CASTING NOT SUPPLIED BY CONTECH**



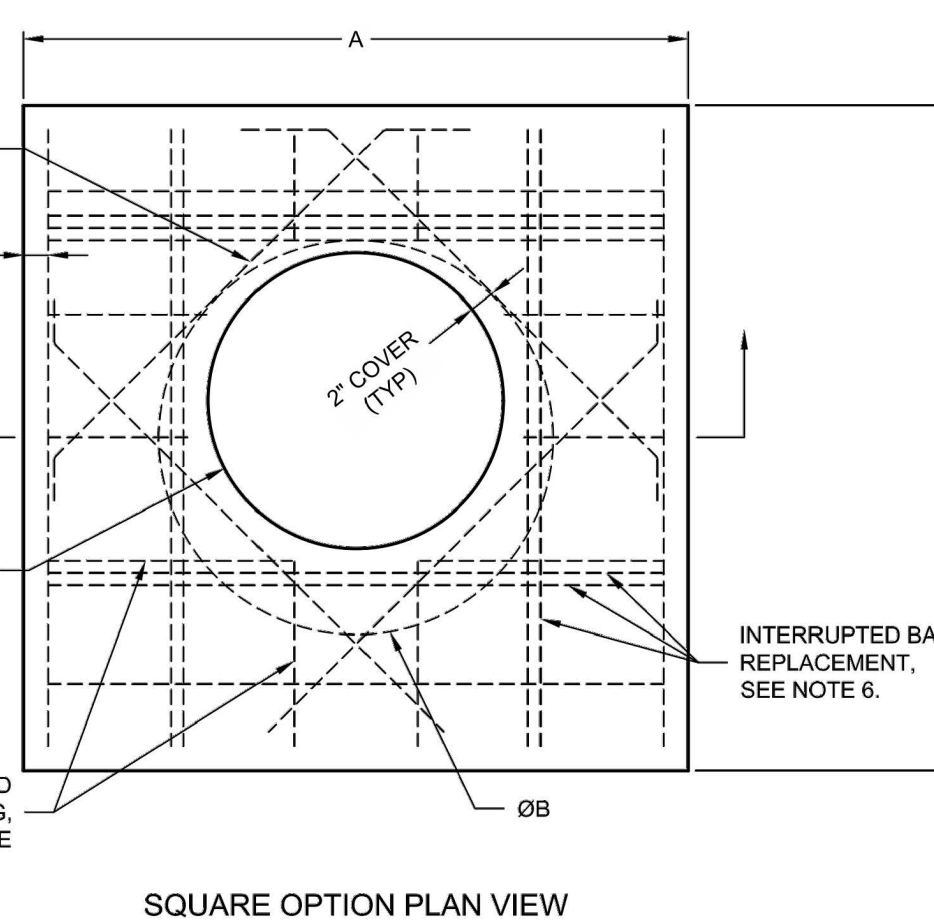
**ROUND OPTION PLAN VIEW**

- NOTES:  
1. DESIGN IN ACCORDANCE WITH AASHTO, 17th EDITION AND ACI 350.  
2. DESIGN LOAD HS25.  
3. EARTH COVER = 1' MAX.  
4. CONCRETE STRENGTH = 4,000 psi  
5. REINFORCING STEEL = ASTM A615, GRADE 60.  
6. PROVIDE ADDITIONAL REINFORCING AROUND OPENINGS EQUAL TO THE BARS INTERRUPTED, HALF EACH SIDE. ADDITIONAL BARS TO BE IN THE SAME PLANE.

**REINFORCING TABLE**

Ø CMP RISER	A	B Ø	REINFORCING	**BEARING PRESSURE (PSF)
24"	4'0" 4'4"	26"	#5 @ 10" OCEW #5 @ 10" OCEW	2,540 1,900
30"	4'-6"Ø 4'-6" x 4'-6"	32"	#5 @ 10" OCEW #5 @ 9" OCEW	2,280 1,670
36"	5'0" 5' x 5'	38"	#5 @ 9" OCEW #5 @ 8" OCEW	2,060 1,500
42"	5'-6"Ø 5'-6" x 5'-6"	44"	#5 @ 8" OCEW #5 @ 8" OCEW	1,490 1,370
48"	6'0" 6' x 6'	50"	#5 @ 7" OCEW #5 @ 7" OCEW	1,210 1,270

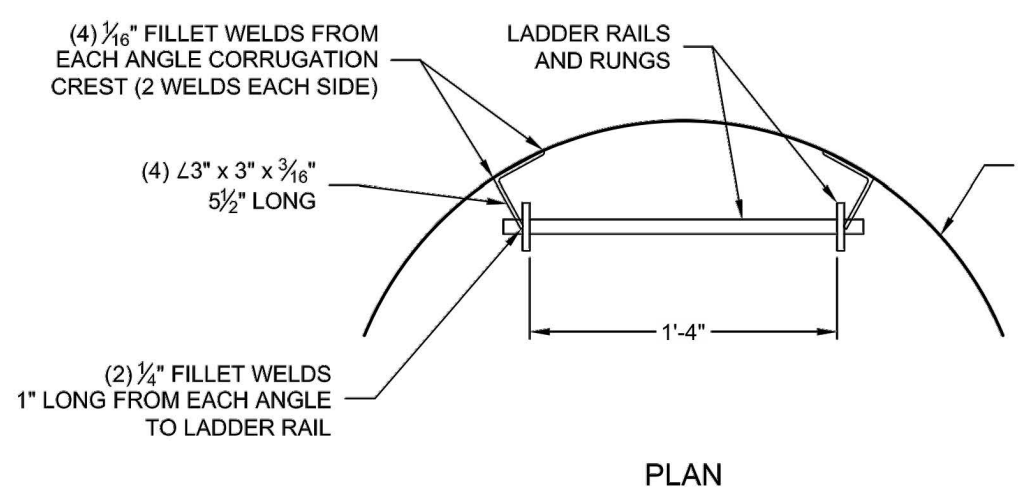
\*\* ASSUMED SOIL BEARING CAPACITY



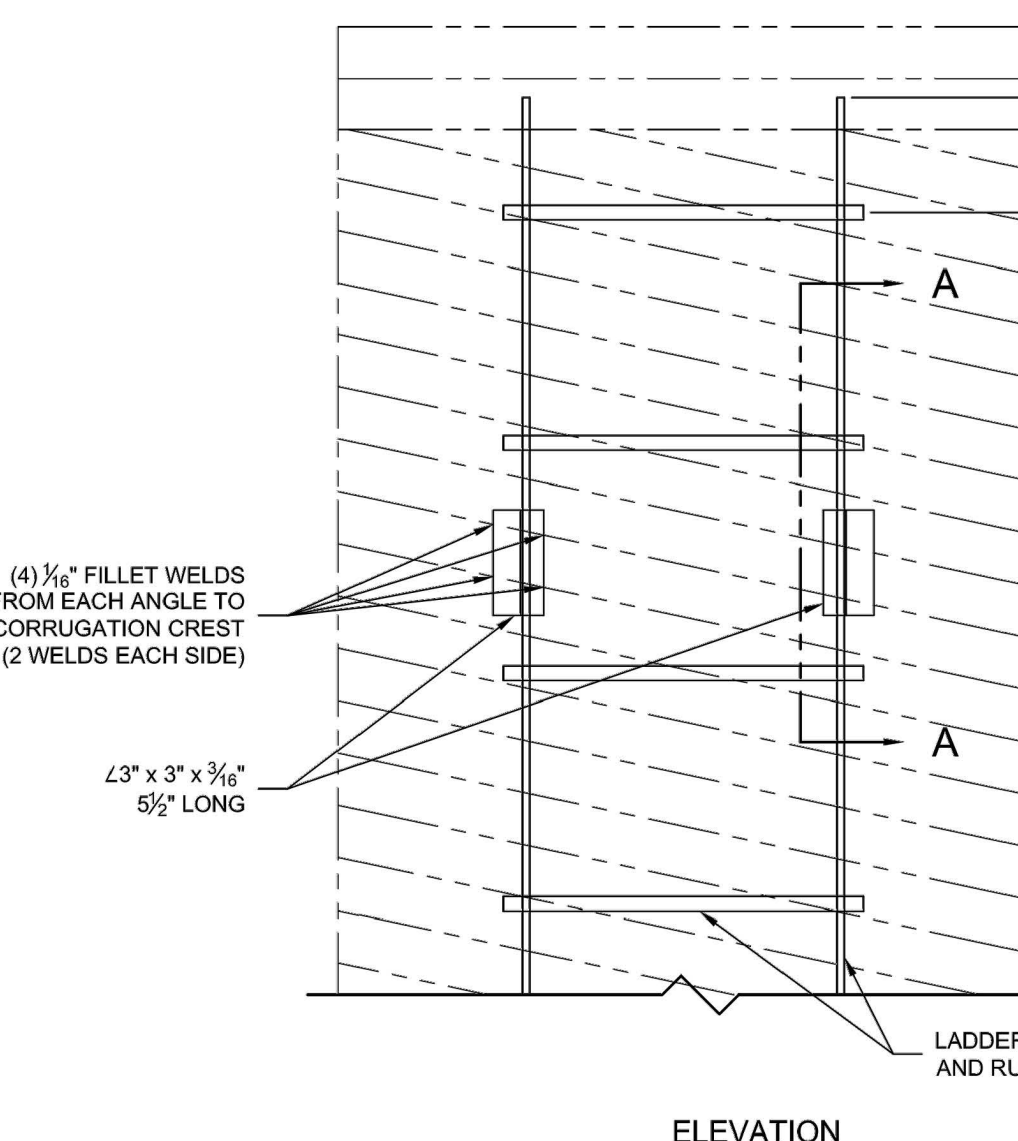
**SQUARE OPTION PLAN VIEW**

7. TRIM OPENING WITH DIAGONAL #4 BARS, EXTEND BARS A MINIMUM OF 12" BEYOND OPENING, BEND BARS AS REQUIRED TO MAINTAIN BAR COVER.  
8. PROTECTION SLAB AND ALL MATERIALS TO BE PROVIDED AND INSTALLED BY CONTRACTOR.  
9. DETAIL DESIGN BY DELTA ENGINEERS, ARCHITECTS AND LAND SURVEYORS, ENDWELL, NY.

**MANHOLE CAP DETAIL**  
NOT TO SCALE

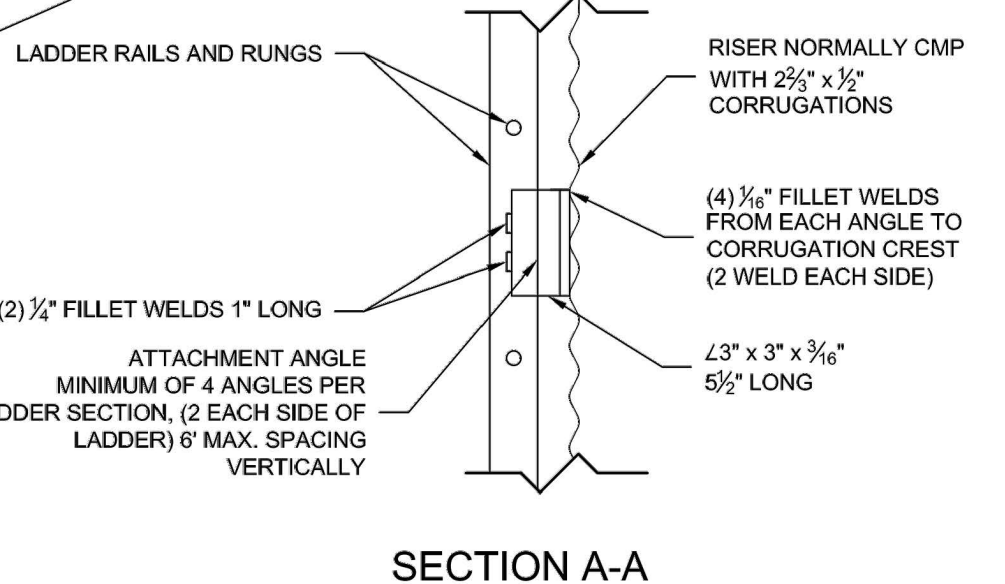


**PLAN**



**ELEVATION**

**RISER LADDER DETAIL**  
NOT TO SCALE



**REVISIONS**

DATE	REVISION DESCRIPTION
1/25/19	INITIAL SUBMITTAL
2/8/19	REVISED PLANS PER COMMENTS DATED 2/1/19
2/25/19	REVISED PLANS PER COMMENTS DATED 2/21/19

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200 GARRETT STREET, SUITE K. - CHARLOTTESVILLE, VA 22902 - 434-293.3719

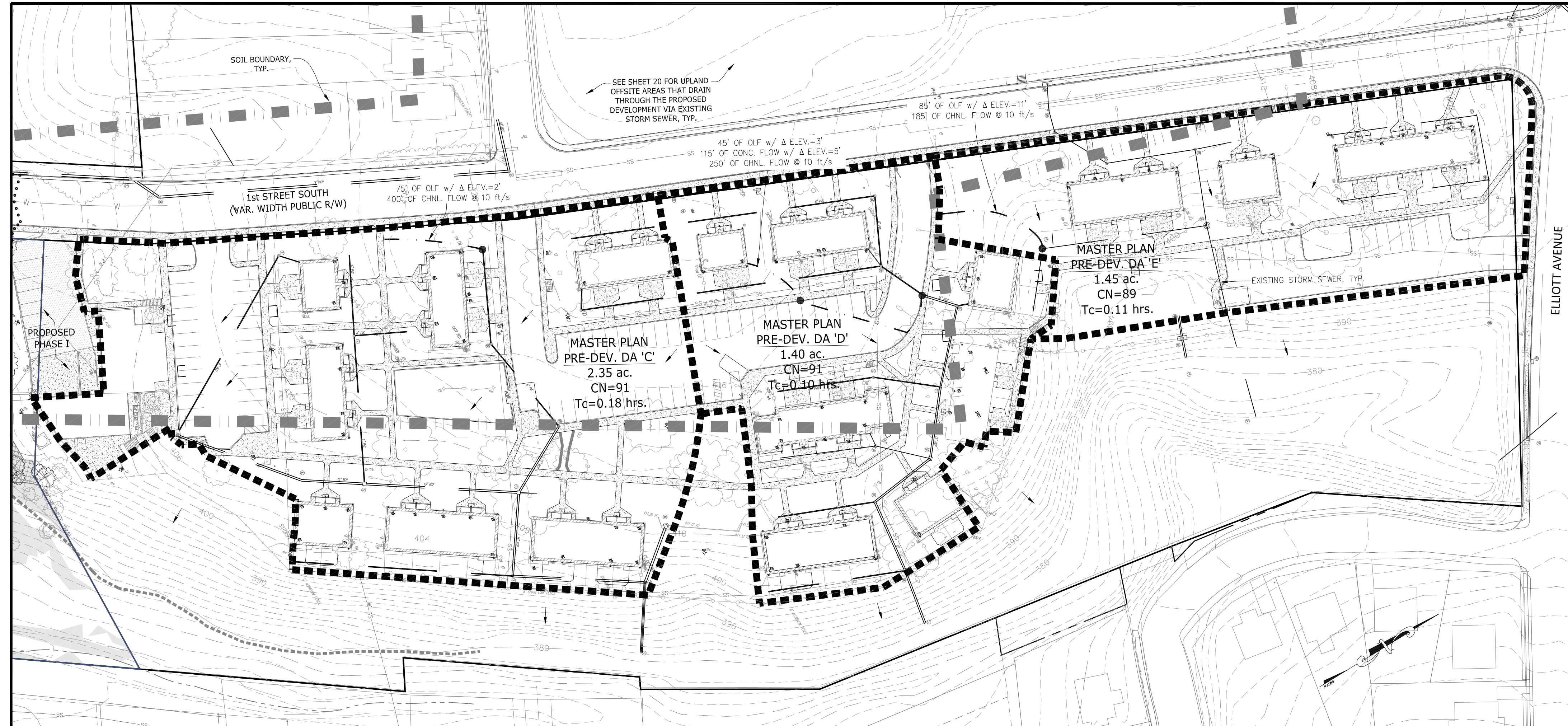
**PHASE I STORMWATER MANAGEMENT DETAILS**

**1st STREET SOUTH APARTMENTS - PHASE I FINAL SITE PLAN**

PROJECT: 182158  
JOB NO.: 182158  
SCALE: AS SHOWN  
SHEET NO.: 18



PRE-ReDEVELOPMENT SWM MASTER PLAN FOR PHASES II, III & IV  
SCALE 1"=50'



**MASTER PLAN DRAINAGE AREAS**

Area, acres	CN	Tc	
Pre-Development 'C'	2.35	91	0.18
Pre-Development 'D'	1.40	91	0.10
Pre-Development 'E'	1.45	89	0.11
	5.20	90	

**FUTURE PHASES II, III & IV STORMWATER MANAGEMENT NARRATIVE:**

**SUMMARY:**  
THE FUTURE STORMWATER MANAGEMENT PLANS FOR PHASES II, III AND IV WILL COMPLY WITH PART IIB REQUIREMENTS. THE FUTURE PLANS WILL REQUIRE SEPARATE STORMWATER MANAGEMENT PLAN REVIEWS AND APPROVALS AND ARE SUBJECT TO CHANGE. THE STORMWATER RUNOFF RATES, VOLUMES, AND VELOCITIES RESULTING FROM THIS DEVELOPMENT WILL BE IMPROVED PRIOR TO ENTERING THE CITY'S STORM SEWER SYSTEM. PLEASE SEE THE ATTACHED STORMWATER MANAGEMENT CALCULATIONS PACKET FOR PRELIMINARY COMPUTATIONS.

**STORMWATER QUANTITY:**  
CURRENTLY ALL OF THE EXISTING IMPERVIOUS AND PERVIOUS AREAS WITHIN PHASES II, III AND IV EXIT THE PROPERTY UNTREATED. THE PROPOSED PLAN WILL CHANGE THIS AND WILL CAPTURE THE MAJORITY OF THE IMPERVIOUS AREAS AND IMPROVEMENTS. SHOULD THESE FUTURE PHASES DIRECT RUNOFF TO PREVIOUSLY APPROVED PHASES, THE PREVIOUSLY APPROVED PHASES WILL BE REQUIRED TO BE EVALUATED AGAIN FOR COMPLIANCE.

THE CAPTURE AND DETENTION OF THE FUTURE IMPROVEMENTS IS REPRESENTED BY POST-DEVELOPMENT MASTER PLAN DA 'C', DA 'D' AND DA 'E'. MASTER PLANNED SUBAREA 'C' AND 'D' RUNOFF IS ENVISIONED TO RECEIVE ATTENUATION FROM A DRY DETENTION BASIN. MASTER PLANNED DA 'E' RUNOFF IS ENVISIONED TO RECEIVE ATTENUATION FROM AN UNDERGROUND DETENTION SYSTEM. A DETAILED STORMWATER MANAGEMENT PLAN APPROVAL IS REQUIRED WITH EACH PHASE OF THE DEVELOPMENT. THIS PLAN PROVIDES A GUIDE FOR POSSIBLE STORMWATER MANAGEMENT COMPLIANCE, CHANNEL AND FLOOD PROTECTION REQUIREMENTS SET FORTH IN VAC 25-870-66 WILL BE REQUIRED FOR EACH OF PHASES II, III & IV. PLEASE SEE THE ATTACHED SCS CALCULATIONS SHOWING PRE- AND POST-REDEVELOPMENT FLOWS & PRELIMINARY CHANNEL & FLOOD PROTECTION CALCULATIONS FOR ADDITIONAL DETAILS.

PLEASE NOTE, IN ACCORDANCE WITH CITY ENGINEERING DIRECTION, IT WAS RECOMMENDED THAT MASTER PLANNED SUBAREAS BE LISTED WITH GENERALIZED LAND COVERS CONSISTENT WITH TABLE 2-2A OF THE SCS TR-55 MANUAL. AS A RESULT, THE CN VALUES SHOWN IN THIS MASTER PLAN AND ITS ACCOMPANYING CALCULATIONS UTILIZE THE CN VALUES LISTED IN THIS TABLE. PLEASE ALSO NOTE, BECAUSE THE FUTURE CONSTRUCTION FOOTPRINT IS RELATIVELY THE SAME AS THE EXISTING CONSTRUCTED FOOTPRINT THE PRE-REDEVELOPMENT SUBAREAS ARE RELATIVELY THE SAME AS THE POST-REDEVELOPMENT SUBAREAS. THIS HAS BECOME A CITY STANDARD FOR REDEVELOPMENTS WHEN ANALYZING AREAS. ALSO WORTH NOTING, BECAUSE THE OVERALL DRAINAGE AREAS FOR PHASES II, III & IV ARE THE SAME IN PRE- AND POST-REDEVELOPMENT SCENARIOS AND THE LAND COVER USE REMAINS THE SAME (MULTI-FAMILY BUILDINGS) THE RECOMMENDED TABLE 2-2A CN VALUES DO NOT VARY. IN SUMMARY, THE POST-REDEVELOPMENT WATERSHEDS WILL BE SIMILAR TO THE PRE-REDEVELOPMENT WATERSHEDS WHEN APPLYING THE INSTRUCTED TABLE 2-2A. REGARDLESS OF THIS OUTCOME, A FINAL STORMWATER MANAGEMENT PLAN IS STILL REQUIRED FOR REVIEW AND APPROVAL FOR EACH OF THE PHASES. EACH PHASE IS REQUIRED TO MEET MINIMUM STORMWATER MANAGEMENT REQUIREMENTS SET FORTH IN VAC 25-870-66.

PLEASE SEE THE ATTACHED STORMWATER MANAGEMENT CALCULATIONS PACKET FOR ADDITIONAL DETAILS.

PLEASE ALSO NOTE, THE 100-YEAR BACKWATER ELEVATIONS AND ROUTES SHOWN ON FUTURE PHASES II, III AND IV TAKE INTO CONSIDERATION THE OVERTOPPING OF CURBS, INLETS AND PROPOSED DETENTION BASINS AND ASSUME WEIR FLOW CONDITIONS THROUGH THE SLOPED PARKING LOTS. THESE 100-YEAR BACKWATER ELEVATIONS/OVERFLOW ROUTES WILL NOT ENCROACH INTO THE PROPOSED BUILDINGS. CITY STAFF RESERVES THE RIGHT TO REQUIRE A MORE DETAILED ANALYSIS OF THE 100-YEAR BACKWATER ELEVATION AND FLOW PATHS AT THE TIME OF PHASES II, III & IV'S FINAL SITE PLAN REVIEW, AS IS STANDARD PRACTICE.

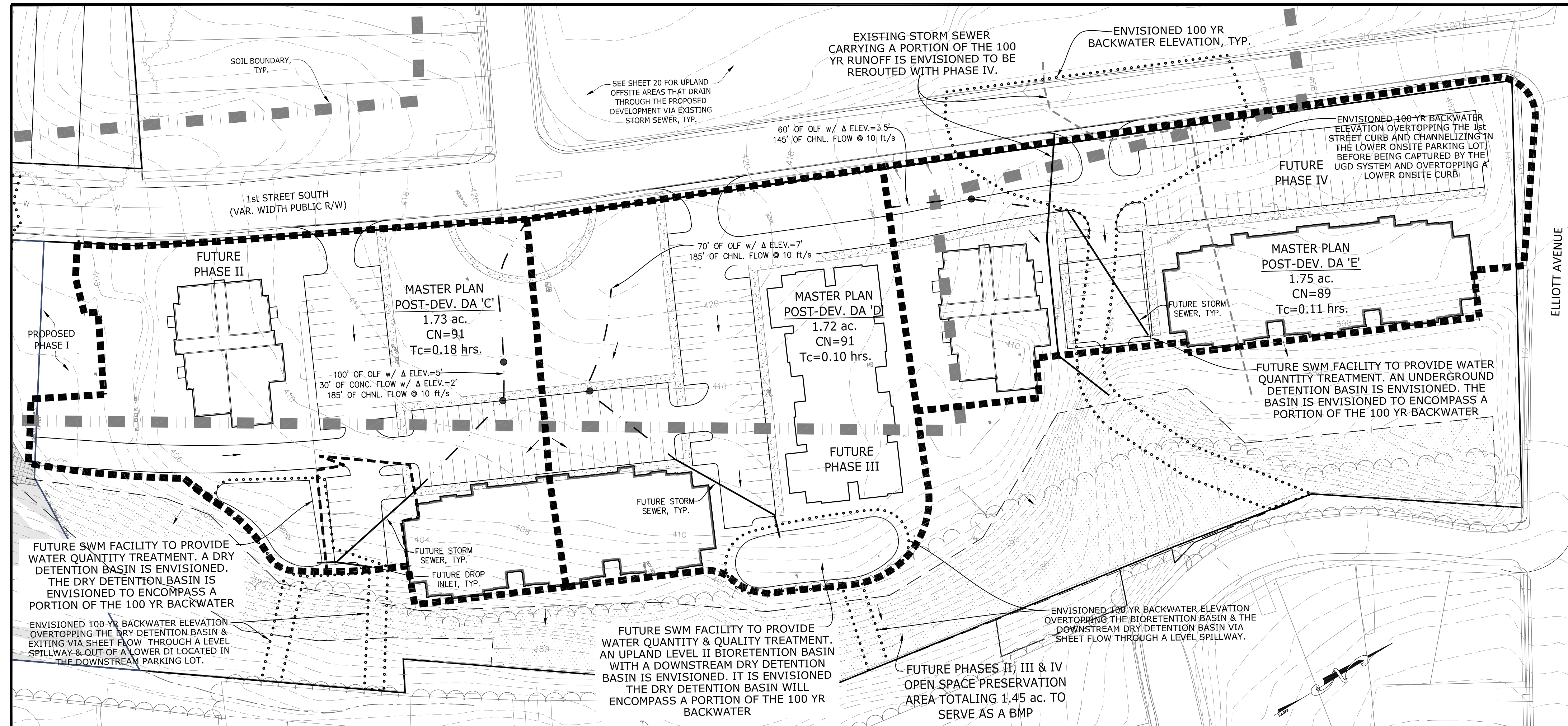
**STORMWATER QUALITY:**  
THE CONVERSION OF THE EXISTING MULTI-FAMILY BUILDINGS TO THE FUTURE PHASES II, III & IV MULTI-FAMILY BUILDINGS IS ENVISIONED TO PROMPT A 1.68 lbs/yr PHOSPHOROUS REMOVAL RATE REQUIREMENT. IT IS ENVISIONED THAT STORMWATER QUALITY COMPLIANCE FOR PHASES II, III & IV WILL BE MET THROUGH THE USE OF TWO BEST MANAGEMENT PRACTICES. THE BEST MANAGEMENT PRACTICE OF PRESERVING ONSITE OPEN SPACES AND THE INSTALLATION OF A LEVEL BIoretention BASIN ARE MASTER PLANNED. AFTER THE APPLICATION OF THESE BMPs, A PHOSPHOROUS REMOVAL RATE OF 2.48 lbs/yr. CAN BE ACHIEVED. THIS RESULTS IN AN OVERAGE OF 0.79 lbs/yr., WHICH MAY BE APPLIED TO PHASE V. THE FINAL DETAILS, DESIGNS AND COMPUTATIONS ASSOCIATED WITH PHASES II, III, IV & V REQUIRE FINAL STORMWATER MANAGEMENT PLAN REVIEWS & APPROVALS AND THE MASTER PLAN SHOWN WITH THIS SET IS SUBJECT TO CHANGE.

PLEASE NOTE, ALL ONSITE NUTRIENT REDUCTION PRACTICES HAVE BEEN EVALUATED AND DUE TO VARIOUS RESTRAINTS THE STORMWATER QUALITY PLAN PROPOSED IS BEST SUITED FOR THESE PHASES AND IS COMPLIANT WITH MINIMUM VIRGINIA DEQ REQUIREMENTS. PLEASE SEE THE ACCOMPANYING VRRM WATER QUALITY COMPUTATIONS FOR REDEVELOPMENTS FOR ADDITIONAL DETAILS.

**MASTER PLAN DRAINAGE AREAS**

Area, acres	CN	Tc	
Post-Development 'C'	1.73	91	0.18
Post-Development 'D'	1.72	91	0.10
Post-Development 'E'	1.75	89	0.11
	5.20	90	

POST-ReDEVELOPMENT SWM MASTER PLAN FOR PHASES II, III & IV  
SCALE 1"=50'



**REVISIONS**

DATE	REVISION DESCRIPTION
1/25/19	INITIAL SUBMITTAL
2/18/19	REVISED PLANS PER COMMENTS DATED 2/1/19
2/25/19	REVISED PLANS PER COMMENTS DATED 2/21/19

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**1st STREET SOUTH APARTMENTS - PHASE I FINAL SITE PLAN**  
PHASES II, III & IV STORMWATER MANAGEMENT MASTER PLAN

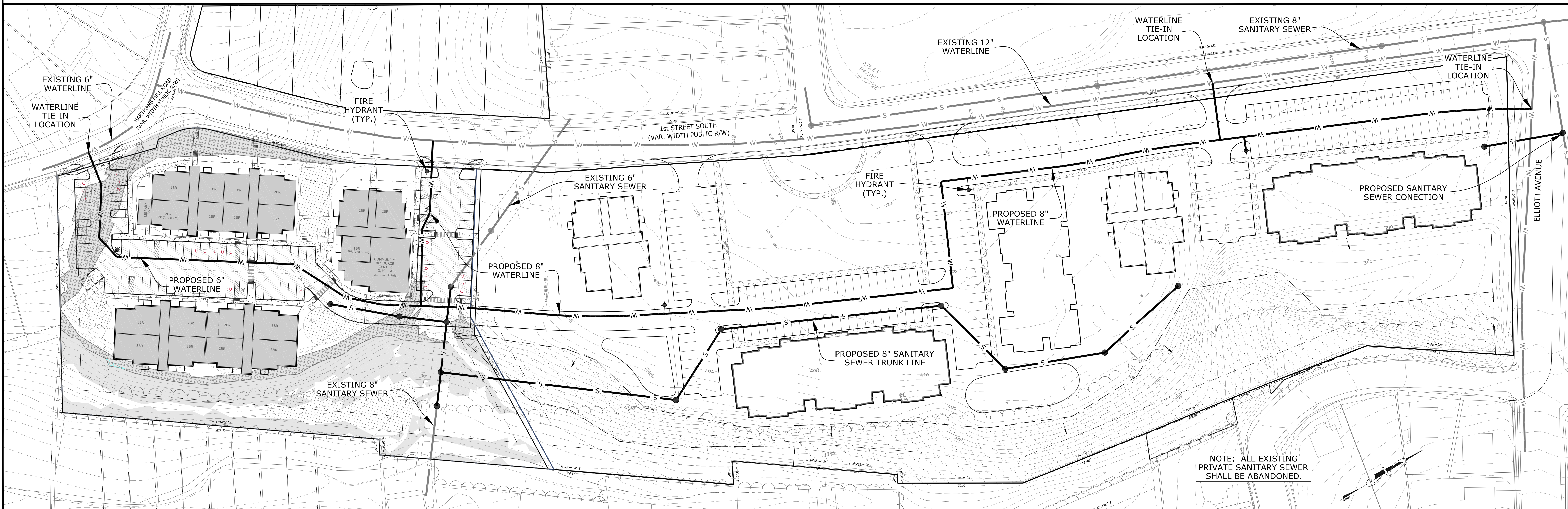
PROJECT: 182158  
JOB NO.: 182158  
SCALE: 1"=50'  
SHEET NO.: 19

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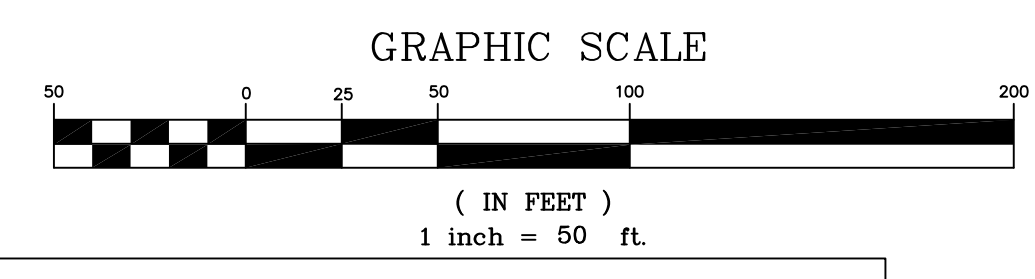




**REVISIONS**

DATE	REVISION DESCRIPTION
1/25/19	INITIAL SUBMITTAL
2/8/19	REVISED PLANS PER COMMENTS DATED 2/1/19
2/25/19	REVISED PLANS PER COMMENTS DATED 2/21/19

NOTE: ALL EXISTING PRIVATE SANITARY SEWER SHALL BE ABANDONED.

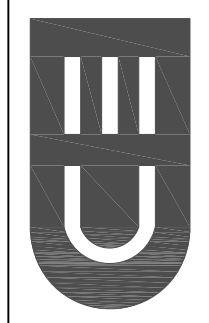


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**1st STREET SOUTH APARTMENTS - PHASE I FINAL SITE PLAN**

**OVERALL UTILITY MASTER PLAN**



JOB NO. 182158  
SCALE 1"=50'  
SHEET NO. 21

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**Project Name: First Street South - Phase 1 Apartments**  
**1 1/2" Meter Required**  
**Building #1 (5 Bedroom Unit)**

# of Units	Fixture	Occupancy	Supply Control	Load Values, in Water Supply Fixture Units (wsfu)		
				Cold	Hot	Total
0	Bathroom Group *	Private	Flush Tank	2.7	1.5	3.6
0	Bathroom Group *	Private	Flush Valve	6	3	8
0	Bathroom	Private	Faucet	1	1	1.4
0	Bathroom	Public	Faucet	3	3	4
0	Bidet	Private	Faucet	1.5	1.5	2
0	Combination Fixer	Private	Faucet	2.25	2.25	3
28	Dishwashing Machine	Private	Automatic	1.4	1.4	39.2
0	Drinking Fountain	Public/Private	3/8" Valve	0.25	0	0.25
0	Hose Bib	Public/Private	Faucet	2	2	4
28	Kitchen Sink	Private	Faucet	1	1	1.4
0	Kitchen Sink	Public	Faucet	3	3	4
0	Laundry trays (1 to 3)	Private	Faucet	1	1	1.4
0	Lavatory	Private	Faucet	0.5	0.5	0.7
0	Lavatory	Public	Faucet	1.5	1.5	2
0	Service Sink	Public	Faucet	2.25	2.25	3
0	Shower Head	Public	Mixing Valve	3	3	4
0	Shower Head	Private	Mixing Valve	1	1	1.4
0	Urinal	Public	1" Flush Valve	10	10	0
0	Urinal	Public	3/4" Flush Valve	5	5	0
0	Urinal	Public	Flush Tank	3	3	0
28	Washing Machine (8lbs)	Private	Automatic	1	1	1.4
0	Washing Machine (8lbs)	Public	Automatic	2.25	2.25	3
0	Washing Machine (8lbs)	Public	Automatic	3	3	4
0	Water Closet	Private	Flush Valve	6	6	0
0	Water Closet	Private	Flush Tank	2.2	2.2	0
0	Water Closet	Public	Flush Valve	10	10	0
0	Water Closet	Public	Flush Tank	5	5	0
0	Water Closet	Public/Private	Flushometer Tank	2	2	0

\* WC, SH & LAV  
319.6 Total wsfu  
90 Demand (gpm)  
0 Irrigation (gpm)  
**90 TOTAL (gpm)**

**Project Name: First Street South - Phase 1 Apartments**  
**1 1/2" Meter Required**  
**Building #2 (4 Bedroom unit)**

# of Units	Fixture	Occupancy	Supply Control	Load Values, in Water Supply Fixture Units (wsfu)		
				Cold	Hot	Total
18	Bathroom Group *	Private	Flush Tank	2.7	1.5	3.6
0	Bathroom Group *	Private	Flush Valve	6	3	8
0	Bathroom	Private	Faucet	1	1	1.4
0	Bathroom	Public	Faucet	3	3	4
0	Bidet	Private	Faucet	1.5	1.5	2
0	Combination Fixer	Private	Faucet	2.25	2.25	3
24	Dishwashing Machine	Private	Automatic	1.4	1.4	33.6
0	Drinking Fountain	Public/Private	3/8" Valve	0.25	0	0.25
0	Hose Bib	Public/Private	Faucet	2	2	4
24	Kitchen Sink	Private	Faucet	1	1	1.4
0	Kitchen Sink	Public	Faucet	3	3	4
0	Laundry trays (1 to 3)	Private	Faucet	1	1	1.4
0	Lavatory	Private	Faucet	0.5	0.5	0.7
0	Lavatory	Public	Faucet	1.5	1.5	2
0	Service Sink	Public	Faucet	2.25	2.25	3
0	Shower Head	Public	Mixing Valve	3	3	4
0	Shower Head	Private	Mixing Valve	1	1	1.4
0	Urinal	Public	1" Flush Valve	10	10	0
0	Urinal	Public	3/4" Flush Valve	5	5	0
0	Urinal	Public	Flush Tank	3	3	0
24	Washing Machine (8lbs)	Private	Automatic	1	1	1.4
0	Washing Machine (8lbs)	Public	Automatic	2.25	2.25	3
0	Washing Machine (8lbs)	Public	Automatic	3	3	4
0	Water Closet	Private	Flush Valve	6	6	0
0	Water Closet	Private	Flush Tank	2.2	2.2	0
0	Water Closet	Public	Flush Valve	10	10	0
0	Water Closet	Public	Flush Tank	5	5	0
0	Water Closet	Public/Private	Flushometer Tank	2	2	0

\* WC, SH & LAV  
277.8 Total wsfu  
88 Demand (gpm)  
0 Irrigation (gpm)  
**88 TOTAL (gpm)**

**Project Name: First Street South - Phase 1 Apartments**  
**1 1/2" Meter Required**  
**Building #3 (11 Units)**

# of Units	Fixture	Occupancy	Supply Control	Load Values, in Water Supply Fixture Units (wsfu)		
				Cold	Hot	Total
15	Bathroom Group *	Private	Flush Tank	2.7	1.5	3.6
0	Bathroom Group *	Private	Flush Valve	6	3	8
0	Bathroom	Private	Faucet	1	1	1.4
0	Bathroom	Public	Faucet	3	3	4
0	Bidet	Private	Faucet	1.5	1.5	2
0	Combination Fixer	Private	Faucet	2.25	2.25	3
11	Dishwashing Machine	Private	Automatic	1.4	1.4	15.4
0	Drinking Fountain	Public/Private	3/8" Valve	0.25	0	0.25
0	Hose Bib	Public/Private	Faucet	2	2	4
11	Kitchen Sink	Private	Faucet	1	1	1.4
0	Kitchen Sink	Public	Faucet	3	3	4
0	Laundry trays (1 to 3)	Private	Faucet	1	1	1.4
4	Lavatory	Private	Faucet	0.5	0.5	0.7
0	Lavatory	Public	Faucet	1.5	1.5	2
0	Service Sink	Public	Faucet	2.25	2.25	3
0	Shower Head	Public	Mixing Valve	3	3	4
0	Shower Head	Private	Mixing Valve	1	1	1.4
0	Urinal	Public	1" Flush Valve	10	10	0
0	Urinal	Public	3/4" Flush Valve	5	5	0
0	Urinal	Public	Flush Tank	3	3	0
11	Washing Machine (8lbs)	Private	Automatic	1	1	1.4
0	Washing Machine (8lbs)	Public	Automatic	2.25	2.25	3
0	Washing Machine (8lbs)	Public	Automatic	3	3	4
2	Water Closet	Private	Flush Valve	6	6	12
0	Water Closet	Private	Flush Tank	2.2	2.2	0
0	Water Closet	Public	Flush Valve	10	10	0
0	Water Closet	Public	Flush Tank	5	5	0
0	Water Closet	Public/Private	Flushometer Tank	2	2	0

\* WC, SH & LAV  
119 Total wsfu  
48 Demand (gpm)  
0 Irrigation (gpm)  
**48 TOTAL (gpm)**



## Chapter 29 - SUBDIVISION OF LAND

## ARTICLE I. - GENERAL PROVISIONS

## Sec. 29-1. - Short title.

This chapter shall be known, and may be referred to and cited as the City of Charlottesville's "Subdivision Ordinance."

(4-21-08(1))

## Sec. 29-2. - Purpose.

The purposes of this chapter are to:

- (1) Improve the public health, safety, convenience and welfare of the citizens of the city, by assuring the orderly division of land and its development;
- (2) Implement the comprehensive plan and the policies stated in section 34-3 of the zoning ordinance through the standards and procedures established herein;
- (3) Assure that the development of the city is consonant with efficient and economical use of public funds;
- (4) Assure that improvements required by this chapter will be designed, constructed and maintained so as not to become an undue burden on the community; and
- (5) Integrate the subdivision approval process with the city's local stormwater management and erosion and sediment control programs, in order to make the submission and approval of plans, issuance of permits, payment of fees and coordination of inspection and enforcement activities more efficient.

(4-21-08(1); 5-19-14, § 1, eff. 7-1-14)

## Sec. 29-3. - Definitions.

*Agent* means (i) the director of neighborhood development services, or their designee. The director of neighborhood development services or designee shall have the authority to sign any final plat on behalf of the city.

*Alley* means a form of vehicular travel way providing access to the rear or side lot line of abutting properties that front along streets. Unless dedicated to and accepted by the city, an alley is privately owned and maintained, is intended to be used primarily by the owners and occupants of the abutting properties and persons and vehicles providing services to those properties (including emergency vehicles) and is not intended for through traffic.

*Boundary line adjustment* means a type of subdivision in which one (1) or more lot lines are relocated or altered so that the land exchanged is added to and becomes part of an existing lot and no additional lot is created.

*Commission* means the planning commission for the City of Charlottesville, created by the city in accordance with Va. Code § 15.2-2210 and charged with promoting the orderly development of the city and its environs. The chairperson of the commission or their designee shall have the authority to sign any final plat on behalf of the city.

*Common area* means an area shown on a plat that is not a platted lot for sale but is either owned or will be owned in common by the lot owners within the subdivision or, if not owned in common, is available for the common use of the lot owners within the subdivision.

*Control point* is a known latitude/longitude (or X/Y) geographic location obtained in the field using either a global positioning system or other location-determining equipment, acquired in a manner that will yield an X, Y position that can be demonstrated to have sub-centimeter accuracy, and whose position coordinates are expressed relative to the North American Datum of 1983 (NAD 83).

*Critical slope* refers to the portion of a lot that has a grade in excess of twenty-five (25) percent.

*Developer* means the person who owns, or who controls, a tract of land developed or to be developed as a unit, which is to be used for any business or industrial purpose or is to contain three (3) or more residential dwelling units. In context, the term shall be construed to include a subdivider.

*Development* means a tract of land developed or to be developed as a unit under single ownership or unified control which is to be used for any business or industrial purpose or is to contain three (3) or more residential dwelling units. The term "development" shall not be construed to include any property which will be principally devoted to agricultural production.

*Drainage control* means the removal, collection or conveyance of stormwater runoff from or on property through structural facilities or other measures.

*Drainage district* means a drainage project established pursuant to § 21-292 et seq., Code of Virginia (1950).

*Driveway* means a form of private vehicular access from a street or alley to the interior of a lot.

*Easement* means a right possessed by the owner of one (1) parcel of land to use the land of another for a special purpose not inconsistent with the general property rights of that owner.

*Easement, private* means a reservation or grant by a property owner to specific individuals or entities for their use of land for a specific purpose or purposes, other than a license revocable by the unilateral act of the grantor.

*Frontage* means the continuous uninterrupted distance along which a parcel abuts an adjacent street.

*Improvement* means all utilities and facilities required by this chapter, including, without limitation: streets, turnarounds, traffic signalization and controls, sanitary sewers, potable water, gas utilities, stormwater management and erosion control facilities, drainage control facilities, curbs and gutters, and sidewalks, regardless of whether such utilities and facilities are publicly or privately owned and/or maintained.

*Lot* means a parcel of land, occupied or intended for occupancy, appearing on an officially approved and recorded subdivision plat and having its principal frontage on a street or one which a subdivider has been contractually obligated to install as a condition of subdivision approval and for which an adequate financial guaranty has been furnished to the city.

*Lot, corner* means a lot abutting upon two (2) or more street rights-of-way at their intersection.

*Lot, depth of.* The term "depth of lot" means the mean horizontal distance between the front and rear lot line.

*Lot, double frontage* means a lot having a frontage on two (2) nonintersecting street rights-of-way as distinguished from a corner lot.

*Lot, width of.* The term "width of lot" means the mean horizontal distance between the side lot lines.

*Natural stream* means a nontidal waterway that is part of the natural topography, which typically will maintain a continuous, seasonal or intermittent flow during the year, and which is characterized as being irregular in cross-section with a meandering course. A constructed channel, such as a drainage ditch or swale, is not a natural stream.

*Open space* means an area containing water or land, or a combination thereof, that is unoccupied by building lots, streets or other improvements, and which may be vegetated, or left in an undisturbed state.

*Person* means a natural person, corporation, partnership, sole proprietorship, trust, trustee, joint venture, and any other legal entity.

*Phased subdivision* means a subdivision for which a preliminary plat is approved for the entire property, and for which two (2) or more final plats, individually pertaining to less than the entire property, are submitted sequentially for review and approval.

*Plat* means and refers to the schematic representation of land divided or to be divided.

*Plat, final* means a plat upon which the plan for a subdivision is presented for approval pursuant to this chapter, whether or not preceded by an approved preliminary plat, which is in final form suitable for recording in the land records of the City of Charlottesville, as contemplated by Va. Code § 15.2-2254 and the city's subdivision ordinance, and which has been signed by the city's agent.

*Plat, preliminary* means a plat upon which the plan for a subdivision is presented for preliminary approval pursuant to this chapter, and which is not in final form for recording in the city's land records.

*Plat reviewers* refers to those individuals designated by the director of neighborhood development services whose input may, in the opinion of the director, be of assistance in reviewing a proposed subdivision plat.

*Property* means one (1) or more lots collected together for the purpose of subdividing.

*Resubdivision* means the division of land by subdivision, where the land being subdivided is the subject of a previously-approved and recorded subdivision plat.

*Shared driveway* means a private vehicular access to only two (2) lots which have frontage on a street and which are authorized by this chapter and by the city's zoning ordinance.

*Sidewalk* means a paved pedestrian way designed to meet city standards.

*Staff* means employees of the city.

*Standards and Design Manual.* The City of Charlottesville has adopted the Standards and Design Manual to regulate new street and alley construction, stormwater management, erosion and sediment control, potable water, gas utilities, traffic and transportation, bridges, retaining walls and other related structures, and potable water and sanitary sewer systems and related facilities.

*Street, private* means any street or other way or means of vehicular access that is not designed, constructed, bonded or approved to be maintained by the city as part of its urban highway system regardless of ownership. Private streets are prohibited except pursuant to townhouse developments under City Code section 34-388(b).

*Street, public* means an area that is encompassed by a right-of-way dedicated to public use for vehicular travel and accepted for maintenance by the city as part of the city's public street system. Any requirement of this chapter that refers to an existing public street shall mean a public street currently maintained by the City of Charlottesville.

*Street right-of-way* means the total width of the strip of land dedicated to the city in fee simple for public use or reserved for travel, including without limitation the paved street surface, curbs, drainage improvements and gutters, shoulders, ditches, public sidewalks, bicycle paths, and, where necessary, utility easements.

*Streetscape trees* means trees planted adjacent to existing or proposed public streets, as required by City Code section 34-870.

*Subdivide* means the process of dividing land to establish a subdivision.

*Subdivider* means one (1) or more persons who own property to be subdivided, and such person's agent(s) and successor(s) in interest, including, without limitation, the person who develops such property (see also the definition of developer).

*Subdivider* means one (1) or more persons who own property to be subdivided, and such persons' agent and successors in interest.

*Subdivision* means (i) the division or consolidation of a parcel or parcels of land into two (2) or more lots or parcels for the purpose of transfer of ownership or building development, including, without limitation, establishment of a condominium regime; and (ii) a boundary line adjustment. The term includes resubdivision and, when appropriate to the context, shall relate to the process of subdividing or to the land subdivided. References to a subdivision in this chapter include, in the appropriate context, a proposed subdivision.

*Subdivision, major* means any subdivision which involves six (6) or more lots, or which involves the creation of new streets and/or extension of public utilities or facilities regardless of the number of lots.

*Subdivision, minor* means any subdivision involving five (5) or fewer lots, all of which front on an existing dedicated and accepted city street and which does not require the creation of new streets and/or extension of public utilities or facilities.

*Townhouse* refers to any one (1) of a series of single-family attached dwellings, under single or multiple ownership, separated from one another by continuous vertical walls without openings from basement floor to roof. "Series" refers to a row of three (3) or more townhouse dwellings.

*Water protection ordinance* means the provisions set forth within Chapter 10 of the Code of the City of Charlottesville (1990), as amended.

*Zoning ordinance* means the provisions set forth within Chapter 34 of the Code of the City of Charlottesville (1990), as amended.

(4-21-08(1); 5-19-14, § 1, eff. 7-1-14)

#### Sec. 29-4. - Applicability.

This chapter shall apply to all divisions, re-divisions and consolidations of land, the vacation of recorded subdivision plats or parts thereof, and the relocation of boundary lines. This chapter does not apply to divisions of land resulting from an order entered by a court of equity requiring that land be partitioned, or from the exercise of the power of eminent domain by any public agency.

(4-21-08(1))

#### Sec. 29-5. - Acts prohibited; enforcement; penalties.

- (a) Unless this chapter and the requirements of Article 6, Chapter 22 of Title 15.2 of the Code of Virginia are complied with:
- (1) No person shall subdivide land (including, without limitation, adjustment of any boundary) or vacate any subdivision plat;
  - (2) No subdivision plat shall be recorded in the city's land records, unless and until it has been approved and signed by the city's agent. If a portion of the property that is the subject of a subdivision plat lies within the boundaries of the county of Albemarle, then no such plat shall be recorded unless and until it has also been submitted to and approved by the county;
  - (3) No person shall sell or transfer any land of a division of land to which this chapter applies before a plat has been approved and recorded as provided within this chapter, unless the division was lawfully created prior to

the adoption of a subdivision ordinance applicable thereto. Nothing in this paragraph shall prevent the recordation of the instrument by which the land is transferred or by which title passes between the parties to the instrument; and

- (4) The clerk of the Charlottesville Circuit Court shall not file or record a plat of a division of land to which this chapter applies until the plat has been approved as provided in this chapter.
- (b) Any person, whether as principal, agent, employee or otherwise, who violates any provision of this chapter shall be subject to a fine of not more than five hundred dollars (\$500.00) for each lot so divided, transferred or sold. The description of a lot by metes and bounds in the instrument of transfer or other document used in the process of selling or transferring title shall not exempt the transaction from the penalties or remedies herein provided.
- (c) The city's director of neighborhood development services or their designee is hereby authorized to institute any appropriate action or proceeding, at law or in equity, to prevent a violation or attempted violation, to restrain, correct or abate a violation or attempted violation, or to prevent any act which would constitute a violation of this chapter.
- (d) No permit or approval shall be issued or granted by any city employee, officer or agent for the construction of any building, structure or improvement upon any land for which an approval pursuant to this chapter is required, unless and until the person seeking the permit complies with the requirements of this chapter.
- (e) Nothing in this section shall affect the power of a court of equity to order that property be partitioned.

(4-21-08(1))

#### Sec. 29-6. - Relation of chapter to other laws and private contracts.

The requirements of this chapter are:

- (1) Separate from, but supplementary to, all other applicable requirements of the City Code. Compliance with the requirements of this chapter shall not be deemed compliance with other applicable ordinances or regulations;
- (2) Separate from, but supplementary to, all other applicable requirements of state or federal law. If the requirements of this chapter are in direct conflict with mandatory state or federal requirements, then the state or federal requirements shall apply;
- (3) Separate from the requirements, terms or conditions of any private easement, covenant, agreement or restriction. Neither the city nor any of its officers, employees or agents shall have any duty to enforce a private easement, covenant, agreement or restriction. When an applicable requirement of this chapter is more restrictive than a similar applicable requirement of a private easement, covenant, agreement or restriction, the requirements of this chapter shall apply.

(4-21-08(1))

#### Sec. 29-7. - Rules of construction.

This chapter protects public interests and shall be liberally construed to effectuate its several purposes. The following rules shall apply in the construction of this chapter, unless the application of such rules would effect a result that is contrary to the purposes of this chapter or the context clearly indicates otherwise:

- (1) All references to any statute, regulation, guideline, manual or standard shall be to that statute, regulation, guideline, manual or standard as it exists on the date of adoption of this chapter, and includes any amendment thereafter and any subsequently-issued edition.
- (2) All references to "days" shall be to calendar days, unless otherwise specifically indicated.
- (3) All distances and areas refer to measurements in a horizontal plane.

- (4) The word "street", when not preceded by either "public" or "private" means either a public street or a private street.
- (5) The phrase "agent or commission" means either the agent or the commission as the case may require, pursuant to applicable provisions of this chapter.

(4-21-08(1))

Sec. 29-8. - Filing of chapter.

A certified copy of this chapter and all amendments hereto shall be filed in the office of the clerk of the city council, the department of neighborhood development services, and in the office of the clerk of the Circuit Court for the City of Charlottesville.

(4-21-08(1))

Sec. 29-9. - Fees.

The city council will, from time to time, approve a schedule of the fees and charges associated with the various applications, inspections, permits and approvals required by this chapter. At the time an application or other request for any permit or approval is submitted, it shall be accompanied by the required fee(s) and charge(s) as designated in the most recent fee schedule adopted by city council.

(4-21-08(1))

Sec. 29-10. - Verification of current tax status.

Prior to final approval of a subdivision plat, the city's agent shall require the subdivider to produce satisfactory evidence that any delinquent real estate taxes, liens and charges owed to the city have been paid.

(4-21-08(1))

Sec. 29-11. - City not obligated to maintain or construct improvements.

Nothing herein shall be construed as creating an obligation on the City to construct or pay for any improvements required by this chapter.

(4-21-08(1))

Sec. 29-12—29-35. - Reserved.

ARTICLE II. - ADMINISTRATION

DIVISION 1. - GENERALLY

Sec. 29-36. - Variations; exceptions.

- (a) Whenever this chapter contains provisions for variation or exception to a requirement, the agent or commission in considering a request for a variation or exception, shall consider whether, because of unusual size, topography, shape of the property, location of the property or other unusual conditions (excluding the proprietary interests of the subdivider) the requirement that is proposed to be varied or excepted would result in substantial injustice or hardship and would not forward the purposes of this chapter or serve the public interest.

- (1) In approving any such request, the agent or commission shall find that adherence to the requirements would



result in substantial injustice or hardship, and that granting the waiver would not be detrimental to the public health, safety or welfare or to the orderly development of the area.

- (2) Prior to varying or granting an exception to a provision of this chapter, the agent or commission shall obtain a written opinion of the city's fire code official as to whether the requested waiver can be accommodated within the applicable requirements of the Virginia Statewide Fire Prevention Code (VSFPC).
  - (3) Prior to varying or granting an exception to a provision of this chapter involving utilities, the agent or commission shall obtain a written opinion of the city's director of public works as to whether the requested waiver can be accommodated within applicable regulations, specifications and ordinances governing utilities.
  - (4) A subdivider may appeal the agent's decision to deny a variation or exception request to the commission. In reviewing the request, the commission may approve or disapprove the request based on the applicable findings set forth in this section.
- (b) A request for a variation or exception pursuant to subsection (a) above may be made either prior to or contemporaneous with submittal of a plat.

(4-21-08(1))

Sec. 29-37. - Period of validity.

- (a) *Preliminary plat.* Once a preliminary subdivision plat is approved, it shall be valid for a period of five (5) years, as specified within Va. Code § 15.2-2260(F), and subject to the provisions thereof.
- (b) *Final plat.* Once a final subdivision plat is approved and the subdivider has recorded the plat, it shall be valid for not less than five (5) years, as specified within Va. Code § 15.2-2261, and subject to the provisions thereof. Unless a plat is recorded within the city's land records within six (6) months after final approval, such approval shall be deemed withdrawn and the plat shall be marked void and returned to the agent; however, if construction of any facilities to be dedicated for public use has commenced pursuant to an approved plan or permit with surety approved by the city, the time for plat recordation shall be extended to one (1) year after final approval, or the time limit specified in the approved surety agreement, whichever is greater.
- (c) *Extensions.* By application of the subdivider filed prior to expiration of a final recorded plat, the agent or commission, whichever approved the recorded plat may grant one (1) or more extensions of its approval for additional periods as the authority may, at the time the extension is granted, determine to be reasonable in accordance with the provisions of Va. Code § 15.2-2261.
- (d) *Changes, revisions.* By application of the subdivider, during the period of validity of a recorded plat the agent may approve minor modifications to such plat, including, without limitation, any modification that eliminates, relocates or otherwise alters one (1) or more lot lines; provided, however, that the proposed modification shall not involve the relocation or alteration of any streets, alleys, easements for public passage or other public areas, and provided further that no utility easements or rights-of-way shall be relocated or altered. An application for any such modification made during the period of validity of the plat shall not constitute a waiver of any rights of the subdivider existing on the date of approval of the final plat, and the approval of any such modification shall not extend the period of validity of the original final plat. A modified final plat shall be signed by the owner(s) of all land that is the subject of such plat. Nothing in this paragraph limits the right of an owner to apply to vacate a subdivision plat or any part thereof, or to apply for a boundary line adjustment as authorized by this chapter.

(4-21-08(1))

Sec. 29-38. - Vacation of plat.

- (a) A recorded plat or any part thereof may be vacated pursuant to Va. Code §§ 15.2-2271 through 15.2-2274. The clerk of the circuit court in whose office any vacated plat has been recorded shall write in plain legible letters across such

plat, or the part thereof so vacated, the word "vacated," and shall also make a reference on the vacated plat to the volume and page in which the instrument of vacation is recorded.

- (b) Where no lot has been sold within a subdivision, the recorded plat, or part thereof, may be vacated according to either of the following methods:
- (1) Administratively, with the consent of both the director of public works and the director of neighborhood development services. Any such vacation shall be accomplished only by a written instrument, declaring the plat, or part thereof, to be vacated, and such written instrument shall be approved and signed by the city attorney. Recordation of such written instrument shall operate to destroy the force and effect of the recording of the plat so vacated, and to divest all public rights in, and to reinvest the owners, proprietors and trustees, if any, with the title to the streets, alleys, easements for public passage and other public areas laid out or described in the plat.
  - (2) By ordinance of city council, provided that no facilities for which bonding is required pursuant to Va. Code §§ 15.2-2241 through 2245 have been constructed on the property and no facilities have been constructed on any related section of the property located in the subdivision within five (5) years of the date on which the plat was first recorded.
- (c) In cases where any lot has been sold within a subdivision, the recorded plat, or part thereof may be vacated in accordance with Va. Code § 15.2-2272. Any written instrument or ordinance vacating a plat pursuant to Va. Code § 15.2-2272 shall operate to destroy the force and effect of the recording of the plat or part thereof so vacated, as set forth within Va. Code § 15.2-2274.

(4-21-08(1))

Secs. 29-39—29-55. - Reserved.

## DIVISION 2. - MINOR SUBDIVISIONS; BOUNDARY LINE ADJUSTMENTS

Sec. 29-56. - Applicability.

- (a) This division shall apply to minor subdivisions and boundary line adjustments. The director of neighborhood development services or designee shall be the city's agent for the purposes of review and approval of minor subdivisions and boundary line adjustments.

(4-21-08(1))

Sec. 29-57. - Submission of final plat.

- (a) The subdivider shall submit a reproducible original between eight and one-half (8.5) inches by eleven (11) inches and eighteen (18) inches by twenty-four (24) inches in size, or eight and one-half (8.5) inches by fourteen (14) inches, the maximum size accepted by the Charlottesville Circuit Court Clerk's Office, and ten (10) copies of the final plat to the agent for administrative review and approval.
- (b) The final plat shall contain the applicable information required by sections 29-110 and 29-111, unless specifically noted otherwise.
- (c) The plat shall be prepared in compliance with sections 29-110 and 29-111.

(4-21-08(1))

Sec. 29-58. - Minor subdivisions; generally.

- (a) The agent shall act on any proposed plat within sixty (60) days after it has been officially submitted for approval, by



either approving or disapproving the plat in writing, and by giving with any disapproval the specific reasons therefor. The agent shall thoroughly review the plat and shall make a good faith effort to identify all deficiencies, if any, with the initial submission. Specific reasons for disapproval shall be contained either in a separate document or on the plat itself. Any reasons given for disapproval shall identify deficiencies in the plat, with reference to specific ordinances or regulations and shall identify modifications or corrections as will permit approval of the plat.

- (b) The agent shall act on any proposed plat that has been previously disapproved, within forty-five (45) days after the plat has been modified, corrected and resubmitted for approval.
- (c) If the agent fails to approve or disapprove the plat: (i) within sixty (60) days after it has been officially submitted for approval, (ii) within forty-five (45) days after it has been officially resubmitted after a previous disapproval, or (ii) within thirty-five (35) days after receipt of all required state agency approvals, as set forth in subparagraph (d), below, then the subdivider, after ten (10) days' written notice to the agent, may petition the city's circuit court for relief in accordance with Va. Code § 15.2-2259(C). If the agent disapproves a plat and the subdivider contends that the disapproval was not properly based on an ordinance or regulation applicable thereto, or was arbitrary or capricious, he may appeal to the city circuit court in accordance with Va. Code § 15.2-2259(D).
- (d) If approval of a feature of a plat by a state agency is necessary, the agent shall forward the plat to the state agency within ten (10) business days of receipt of such plat. The agent shall approve or disapprove the plat within thirty-five (35) days of receipt of approvals from all state agencies; however, (i) in no event shall the agent be required to act on a subdivision plat in fewer than sixty (60) days from the date of its official submission, and (ii) all actions on subdivision plats shall be completed by the agent and, if necessary by state agencies, within a total of ninety (90) days of the official submission date.

(4-21-08(1))

Sec. 29-59. - Review and approval.

- (a) No application seeking approval of a subdivision, preliminary or final, that would divide any parcel(s) of land into six (6) or more lots, or involving a new street, shall be accepted for review, unless and until the applicant has participated in a pre-application conference and has held a community meeting in accordance with guidelines established by the director of neighborhood development services in accordance with section 34-41(c)(2). Any application that fails to demonstrate compliance with these requirements shall be rejected as incomplete. The director may waive the requirement for a community meeting, if a community meeting was previously held for the same development as part of city council's consideration of an application for approval of a special use permit or a petition for approval of a zoning map amendment. Within fourteen (14) days of receipt of an applicant's official submission of a complete application for approval of a subdivision, the agent shall forward copies to the affected city departments for their review and comments.
- (b) Upon completion of this review, the agent shall notify the subdivider in writing of the plat's approval or disapproval and the reasons for disapproval or the conditions necessary for approval.
  - (1) In the event of approval, the director of neighborhood development services or their designee acting ex officio as secretary of the planning commission and the chairperson of the planning commission or their designee shall sign the reproducible original of the plat. The subdivider shall provide the agent with ten (10) copies of the signed final plat for city use.
  - (2) In the event of disapproval, the subdivider in its sole discretion may appeal to the commission at its next regularly scheduled meeting.
- (c) The agent, in its sole discretion, may submit a plat to the commission for review in place of the agent's review.

(4-21-08(1); 10-19-15(3))

Sec. 29-60. - Boundary line adjustments; specifically.

- (a) The boundary lines of any lot or parcel of land may be vacated, relocated or otherwise altered by recordation of a deed or boundary line adjustment plat, without vacation of a recorded plat, provided that no easements or utility rights-of-way located along any lot lines to be vacated may be extinguished or altered without the express consent of all persons holding any interest therein, and such consent shall be evidenced by the signatures of such persons on the deed. The action shall not involve the relocation or alteration of streets, alleys, easements for public passage, or other public areas. The deed reflecting the boundary line adjustment shall reference the recorded plat by which the applicable lot lines were originally created, and the deed must be approved in writing, on its face, by the city attorney.
- (b) The lots affected by a boundary line adjustment must have been: (i) part of an otherwise valid and properly recorded subdivision plat approved pursuant to this chapter or a prior subdivision ordinance of the city; or (ii) part of a properly recorded deed prior to the adoption of the first subdivision ordinance of the city that required an approved subdivision plat under the applicable circumstances.

(4-21-08(1))

Secs. 29-61—29-75. - Reserved.

### DIVISION 3. - MAJOR SUBDIVISIONS

Sec. 29-76. - Approval of preliminary and final subdivision plats, generally.

- (a) *Review and approval.* The commission shall review and approve preliminary plats for major subdivisions pursuant to section 29-80(a) below. The agent shall review and approve final plats pursuant to section 29-82(a), except when one (1) or more of the circumstances described in section 29-82(b)(1) are met, in which case the commission shall review and approve final plats.
- (b) *Submission of preliminary plat; when required.* Submission of a preliminary plat is mandatory except where the commission has given final site plan approval for the same development. Where such final site plan approval has been given, a preliminary plat is not required, but a final plat must be submitted in accordance with the provisions of this chapter.
- (c) *Notice.* At least five (5) days prior to the date upon which action is to be taken on the plat, public notice shall be posted that the matter is to be reviewed by the commission.
- (d) *Disapproval of plats posing danger to public health, safety or welfare.* The commission is not required by any provision of this chapter to approve any final plat, or feature thereof, which it finds to constitute a danger to the public health, safety or welfare.
- (e) *Period of validity.* The period of validity shall be as referenced in section 29-37.
- (e) *Period of validity.* The period of validity shall be as referenced in section 29-37.
- (f) *Environmental contamination.* Disclosure and remediation of contamination and other adverse environmental conditions of the property is a condition of final plat approval.
- (g) *Stormwater management and erosion and sediment control plans.* Approval of a final stormwater management plan, and approval of a final erosion and sediment control plan, as may be applicable, is a condition of final plat approval. The agent shall not sign any final plat, unless and until final plans and approvals required by Chapter 10 have been obtained.

(4-21-08(1); 5-19-14, § 1, eff. 7-1-14)

Sec. 29-77. - Preliminary and final subdivision plats; time periods and appeals.



- (a) Time periods and appeals for preliminary plats are as follows:
- (1) The commission shall act on any preliminary plat within sixty (60) days after it has been officially submitted for approval, by either approving or disapproving the plat in writing, and by giving with any disapproval the specific reasons therefor.
  - (2) The commission shall thoroughly review the preliminary plat and shall make a good faith effort to identify all deficiencies, if any, with the initial submission. Specific reasons for disapproval shall be contained either in a separate document or on the plat itself. Any reasons given for disapproval shall identify deficiencies in the plat, with reference to specific ordinances or regulations and shall identify modifications or corrections as will permit approval of the plat.
  - (3) The commission shall act on any preliminary plat that has been previously disapproved, within forty-five (45) days after the plat has been modified, corrected and resubmitted for approval.
  - (4) If approval of a feature of a preliminary plat by a state agency is necessary, the commission shall forward the plat to the state agency within ten (10) business days of receipt of such plat, and the commission shall approve or disapprove the preliminary plat within forty-five (45) days of receipt of approvals from all state agencies; however, (i) in no event shall the commission be required to act on a preliminary plat in fewer than sixty (60) days from the date of its official submission, and (ii) all actions on preliminary subdivision plats shall be completed by the commission and, if necessary by state agencies, within a total of ninety (90) days of the official submission date.
  - (5) Once a preliminary plat is approved, it shall be valid for a period of five (5) years, as specified in Va. Code § 15.2-2260(F) and subject to the provisions thereof.
  - (6) If the commission fails to approve or disapprove the preliminary plat within ninety (90) days after it has been officially submitted for approval, the subdivider after ten (10) days' written notice to the commission, may petition the city circuit court in accordance with Va. Code § 15.2-2260(D). If the commission disapproves a preliminary plat, and the subdivider contends that the disapproval was not properly based on an ordinance or regulation applicable thereto, or was arbitrary or capricious, the subdivider may appeal to the city circuit court in accordance with Va. Code § 15.2-2260(E).
- (b) Time periods and appeals for final plats are as follows:
- (1) The agent or commission shall act on any final plat within sixty (60) days after it has been officially submitted for approval, by either approving or disapproving the plat in writing, and by giving with any disapproval the specific reasons therefor.
  - (2) The agent or commission shall thoroughly review the final plat and shall make a good faith effort to identify all deficiencies, if any, with the initial submission. Specific reasons for disapproval shall be contained either in a separate document or on the plat itself. Any reasons given for disapproval shall identify deficiencies in the plat, with reference to specific ordinances or regulations and shall identify modifications or corrections as will permit approval of the plat.
  - (3) The agent or commission shall act on any final plat that has been previously disapproved, within forty-five (45) days after the plat has been modified, corrected and resubmitted for approval.
  - (4) If approval of a feature of a final plat by a state agency is necessary, the agent or commission shall forward the plat to the state agency within ten (10) business days of receipt of such plat, and the agent or commission shall approve or disapprove the final plat within thirty-five (35) days of receipt of approvals from all state agencies.
  - (5) If the agent or commission fails to approve or disapprove the final plat within sixty (60) days after it has been officially submitted for approval, or within forty-five (45) days after it has been officially resubmitted after a previous disapproval or within thirty-five (35) days of receipt of any state agency response, the subdivider, after ten (10) days' written notice to the commission or agent, may petition the city circuit court in accordance

with Va. Code § 15.2-2259(C). If the commission or agent disapproves a final plat, and the subdivider contends that the disapproval was not properly based on an ordinance or regulation applicable thereto, or was arbitrary or capricious, the subdivider may appeal to the city circuit court in accordance with Va. Code § 15.2-2259(D).

(4-21-08(1))

Sec. 29-78. - Preapplication conference.

- (a) Each subdivider may participate in a preapplication conference with city staff designated by the agent, prior to submittal of a major preliminary plat to the commission for review. The purpose of the conference shall be to allow the subdivider to inform staff of the nature of the subdivision so that staff and the subdivider can develop an informal program that will guide the review and approval of the preliminary plat, or parts thereof. At this preapplication conference the subdivider may present a preliminary schematic plat that shows:
- (1) The boundary lines of the property;
  - (2) Existing land conditions, existing topography at a maximum of twenty-foot contour intervals, and established or approximated one hundred (100) year flood plain limits as shown on the official flood insurance maps for the city;
  - (3) The general lay-out and design of what is proposed for the subdivision, on a scale of not smaller than one (1) inch equals one hundred (100) feet;
  - (4) Building setback lines;
  - (5) The applicable zoning of the property, including all applicable proffers, special use permit conditions and variances; and
  - (6) The applicable zoning of all abutting properties.
- (b) Statements made by city staff and the subdivider during the pre-application conference shall not be binding on the city or the subdivider.

(4-21-08(1))

Sec. 29-79. - Submission of preliminary plat.

- (a) Each preliminary plat shall be submitted to the agent with ten (10) copies, along with all required fees and supporting documentation.
- (b) A preliminary plat shall be deemed officially submitted on the date of the next application deadline established by the agent after the official submittal of the preliminary plat.
- (c) A preliminary plat omitting any information required by sections 29-110 and 29-111, as applicable, shall be deemed to be incomplete and shall be disapproved by the agent. This review and determination shall be made within ten (10) days after the application deadline.
- (1) The agent shall inform the subdivider in writing of the reasons for the disapproval, with citation to the applicable section of this chapter or other law, and what corrections or modifications will permit acceptance of the plat. The agent shall notify the subdivider or his or her agent of the disapproval in writing by first class mail, delivery, or, if consented to by the subdivider in writing, by fax or email.
  - (2) Within sixty (60) days after the date the notice of disapproval was mailed or delivered by the agent, the subdivider may resubmit the preliminary plat together with payment of the fee for the reinstatement of review. The date of the next application deadline after the resubmittal of the preliminary plat shall be deemed to be the date upon which the plat was officially submitted. In the event the subdivider fails to timely resubmit the preliminary subdivision plat, the preliminary plat shall be deemed to be disapproved and a new application and fee shall be required for submittal of the preliminary plat.



- (d) When the agent determines that a preliminary plat is officially submitted, he shall:
- (1) Circulate the plat for review and comment by plat reviewers, together with notice of the date on which the plat has been scheduled for a preapplication conference, if applicable. All resulting requirements and recommendations shall be forwarded to the director of neighborhood development services by the plat reviewers prior to a date set by the director. For purposes of this article, the term "requirements" shall be deemed to mean regulatory provisions of this chapter, and any duly adopted rules and regulations of a reviewing department, and "recommendations" shall be deemed to include suggestions for design changes deemed to be in the public interest by a reviewing official in the area of their expertise. The purpose of circulating the plat to plat reviewers is to collect information to be included in a staff report given to the commission prior to their review of the preliminary plat.
  - (2) Schedule a preapplication conference, in accordance with section 29-78 above, if requested by the subdivider.

(4-21-08(1))

Sec. 29-80. - Preliminary plat—Review; approval.

- (a) *Review by planning commission.*
- (1) The planning commission shall review all preliminary plats for major subdivisions.
  - (2) In conducting review of a preliminary plat, the commission shall review the plat for compliance with the requirements of this chapter. The commission shall consider any written statement(s) submitted by the subdivider and the agent's and other staff's comments and recommendations. The commission also may consider any other evidence pertaining to the compliance of the preliminary plat with the requirements of this chapter as it deems necessary for a proper review.
  - (3) If the commission determines that the preliminary plat complies with the requirements of this chapter, it shall approve the preliminary plat and promptly issue a letter to the subdivider stating the conditions that must be satisfied prior to submittal of the final plat. If the commission determines that the preliminary plat does not comply with the requirements of this chapter, it shall disapprove the preliminary plat and promptly inform the subdivider of the disapproval as provided in paragraph (4), below.
  - (4) A notice of disapproval shall state the reasons for disapproval by identifying the plat's deficiencies and citing the applicable sections of this chapter or other law, and what corrections or modifications will permit approval of the preliminary plat. The commission shall either mail a written notice of disapproval by first class mail, or deliver it, to the subdivider. Within sixty (60) days after the date the notice of disapproval was mailed or delivered, the subdivider may resubmit the preliminary plat. If the subdivider fails to timely resubmit the preliminary plat, the preliminary plat shall be deemed to be disapproved and a new application shall be required for submittal of the preliminary plat.
  - (5) At the time that it acts to approve a preliminary plat, the commission may elect to be the reviewing authority for the final plat.
- (b) *Effect of approval of preliminary plat.* Approval of a preliminary plat does not guarantee approval of the final plat, does not constitute approval or acceptance of the subdivision, and does not constitute authorization to proceed with the construction of the improvements within the subdivision.

(4-21-08(1))

Sec. 29-81. - Submission of final plat.

- (a) Except as otherwise provided, a subdivider shall submit a final plat, with ten (10) copies and in digital format acceptable to the city, for approval within one (1) year of the date of approval of the preliminary plat; if a final plat is not officially submitted within the required time frame, the preliminary approval shall expire. For purposes of this

section, a final plat shall be deemed officially submitted on the date it is submitted and satisfies the requirements of paragraphs (b) and (c), below.

- (b) Prior to submitting a final plat, a subdivider shall satisfy all conditions of the approval of the preliminary plat. A final plat shall be disapproved by the agent if the subdivider has not satisfied all of the conditions.
- (c) A proposed final plat that omits any information required by sections 29-110 and 29-111, as applicable, shall be deemed incomplete and shall be disapproved. A determination of completeness shall be made by the agent within ten (10) days after the application deadline. The agent shall inform the subdivider in writing of the reasons for the disapproval, with citation to the applicable section of this chapter or other law, and what corrections or modifications will permit acceptance of the plat. The notice of disapproval shall either be mailed to the subdivider by first class mail, or personally delivered to the subdivider.
- (d) Within sixty (60) days after the date the notice of disapproval was mailed or delivered by the agent, the subdivider may resubmit the final plat together with payment of a fee for the reinstatement of review. In the event the subdivider fails to timely resubmit the final plat, the final plat shall be deemed to be disapproved and a new application and fee shall be required for submittal of the final plat.

(4-21-08(1))

Sec. 29-82. - Final plat—Review; approval.

(a) *Review by agent.*

- (1) The agent shall review the final plat for compliance with the requirements of this chapter in effect at the time of preliminary plat approval, except as authorized by Va. Code § 15.2-2261(C). The agent shall make a good faith effort to identify all deficiencies, if any, during the review of the first final plat submittal. The agent shall consider the recommendations and determinations made by the plat reviewers.
- (2) If the agent determines that the final plat complies with the requirements of this chapter and that all conditions of approval of the preliminary plat have been satisfied, the agent shall sign the final plat. If the agent determines that the final plat does not comply with all requirements of this chapter or that all conditions of approval of the preliminary plat have not been satisfied, the final plat shall be disapproved and the agent shall promptly inform the subdivider of the disapproval by issuing a notice of disapproval to the subdivider which complies with the notice requirements stated in section 29-80(a)(4).

(b) *Review by planning commission.*

- (1) The commission shall review a final plat if: (i) the agent determines there is a substantial change from a preliminary plat previously approved by the commission; (ii) the commission elected to be the reviewing authority for the final plat, at the time of preliminary plat approval; (iii) the subdivider requests review by the commission; (iv) no preliminary plat was submitted as permitted by section 29-76(b), or (iv) the subdivider obtained approval of an exception or variation and, in the opinion of the agent, the final plat is not in substantial accord with the information and plans considered with the original request for a variation or exception.
- (2) The commission shall review the final plat for compliance with the requirements of this chapter in effect at the time of preliminary plat approval, except as authorized by Va. Code § 15.2-2261(C). The commission shall consider the agent's comments and recommendations. The commission also may consider any other evidence pertaining to the compliance of the final plat with the requirements of this chapter that it deems necessary for a proper review.
- (3) If the commission determines that the final plat complies with the requirements of this chapter, and if a preliminary plat was submitted and approved, that all conditions of approval of the preliminary plat have been satisfied, then the commission shall approve the final plat and direct the agent to sign it. If the commission determines that the final plat does not comply with all requirements of this chapter or that all conditions of



approval of the preliminary plat have not been satisfied, it shall disapprove the final plat. If the commission disapproves the final plat, it shall direct the agent to issue a notice of disapproval to the subdivider that complies with the requirements stated in section 29-80(a)(4).

- (4) In reviewing and acting upon a final plat, the commission shall have all of the same power or authority expressly granted herein to the agent applicable to review and action upon such plat.

(4-21-08(1))

Secs. 29-83—29-109. - Reserved.

### ARTICLE III. - PLAT REQUIREMENTS

Sec. 29-110. - Form and style of preliminary and final plats.

(a) *Plat details.* All plats shall comply with the following requirements:

- (1) *State standards.* Every plat shall meet the standard for plats promulgated by the Virginia Library Board pursuant to Va. Code § 42.1-82 of the Virginia Public Records Act, as such standards are set forth within the Virginia Administrative Code. A copy of these standards shall be kept on file within the department of neighborhood development services. Document size shall be between eight and one-half (8.5) inches by eleven (11) inches and eighteen (18) inches by twenty-four (24) inches, or eight and one-half inches by fourteen (14) inches, the maximum size accepted by the Charlottesville Circuit Court Clerk's Office.
- (2) *State professional standards.* Every plat shall meet the minimum standards and procedures for land boundary surveying practice, including minimum field procedures and office procedures, as set forth within the Virginia Administrative Code. A copy of such standards and procedures shall be kept on file within the department of neighborhood development services.
- (3) *Name of plat preparer.* Every plat shall contain the name and signature of the person who prepared the plat, who must be either a certified professional engineer or land surveyor.
- (4) *General information.* Every plat shall contain the following information: the date of drawing, including the date of the last revision; the number of sheets; the north point; signature panels for the secretary and chair of the commission (if applicable) and the scale. If true north is used, the method of determination shall be shown.
- (5) *Name of subdivision.* Every plat shall contain the name or title under which the subdivision is proposed to be recorded in the city's land records. The title shall not duplicate or be a homonym of an existing or reserved subdivision name within the city or the county of Albemarle, except if the subdivision is an extension of an existing subdivision.
- (6) *Instrument creating property proposed for subdivision.* The engineer or land surveyor who prepared the plat shall endorse upon the plat a certificate signed by him setting forth the source of title of the owner of the land subdivided and the place of record of the last instrument in the chain of title. When the plat is of land acquired from more than one (1) source of title, the outlines of the several tracts shall be indicated upon the plat. The plat shall also identify the deed book and page number of any previously recorded subdivision plat applicable to the subject property, or any portion thereof.
- (7) *Identification of all owners and certain interest holders; statement of consent.* Each plat shall contain the names and addresses of each owner of record of any land that is the subject of the proposed plat, and of the holders of any easements affecting the land that is the subject of the plat. Every plat, or deed of dedication to which a plat is attached, shall contain a statement as follows: "The platting or dedication of the following

- described land [insert a correct description of the land subdivided] is with the free consent and in accordance with the desire of the undersigned owners, proprietors, and trustees, if any." The statement shall be signed and duly acknowledged before an officer authorized to take acknowledgment of deeds.
- (8) *Vicinity map.* Each plat shall contain a vicinity map showing the property and its relationship with adjoining land and streets, its relationship with landmarks in the area and, if the subdivision is a phased subdivision, all other phases of the subdivision for which a final plat has been approved, in detail adequate to describe the location of the property without field review.
  - (9) *Existing or platted streets.* Each plat shall specifically identify the location, width, grades and drainage of all existing streets and the location and widths of previously-platted rights-of-way.
  - (10) *Alleys, shared driveways, and private streets.* Each plat shall identify the location and dimensions of all easements for alleys, shared driveways and private streets. Easements shown for private streets, alleys and shared driveways shall be labeled as "private street easement," "alley easement" or "shared driveway easement," as may be applicable. Private streets are prohibited except pursuant to townhouse developments under City Code section 34-388(b).
  - (11) *Land to be dedicated in fee or reserved.* Each plat shall identify the location, acreage, and current owner(s) of all land intended to be dedicated for public use, and the location, acreage and current owner(s) of all land to be reserved in a deed for the common use of lot owners in the subdivision. All land intended to be dedicated for public use shall be identified and set forth on the plat as required by article III of this chapter.
  - (12) *Public easements.* Each plat shall identify the specific location and dimensions of all existing and proposed public easements and improvements situated outside of a public street right-of-way, including, without limitation, easements for water, sewer and gas lines and related improvements, sidewalk and other pedestrian easements; sight distance easements; and easements for drainage and stormwater management facilities. All previously recorded easements shall be labeled with the deed book and page number of the recorded instrument by which such easements were created. Proposed dedications of public easements shall be labeled as to the type of easement, and shall be identified and set forth on the plat as required by article III of this chapter.
  - (13) *Proposed private easements and facilities.* Each plat shall identify the specific location and dimensions of existing and proposed non-public easements, including, without limitation: stormwater management facilities and related improvements; drainage easements; privately owned and maintained sidewalks; common or shared easements to public service corporations furnishing cable television, gas utilities, telephone and electric service to the proposed subdivision and to franchised cable television operators furnishing cable television services; and other private easements. Where easements are not parallel to lot lines, bearing and distance measurements are required. An existing easement shall be labeled with the deed book and page number of the recorded instrument by which such easement was created. Proposed easements shall be labeled as to the nature and type of easement. All final plats containing any proposed common or shared easements shall expressly reference a declaration of the terms and conditions of such easements recorded with the subdivision plat in the city's land records.
  - (14) *Existing and departing lot lines.* Each plat proposing a subdivision of more than one (1) existing lot shall show existing lots and their outlines, which shall be indicated by dashed lines, and the location of departing lot lines of abutting lots.
  - (15) *Proposed lots.* Each plat shall show the number, approximate dimensions, and area of each proposed lot.
  - (16) *Building sites on proposed lots.* Each plat shall show the location, area and dimensions of a building site on each proposed lot, complying with the requirements of this chapter as well as the regulations of the zoning district in which such lot is situated. The plat shall also contain the preparer's certification that "Each parcel



[letter or number] created by this subdivision plat contain a building site that complies with the requirements of the City of Charlottesville's Zoning, Water Protection and Subdivision Ordinances."

- (17) *Floodplain and floodway limits.* Each plat shall provide floodplain limits, elevations, and flood plain profiles and cross-sections, and shall provide the same information for the floodway.
- (18) *Drainage district.* When any part of the land proposed for subdivision lies within a drainage district such fact shall be set forth on the plat.
- (19) *Places of burial.* When any grave, object or structure marking a place of burial is located on the land proposed for subdivision, such grave, object or structure shall be identified on the plat.
- (20) *Control points.* At least four (4) control points, evenly distributed across the property and located at survey property corners, shall be shown on each sheet depicting the property. These points shall be sub-centimeter accurate and meet the definition of control point. One (1) of the four (4) points shall be a bench mark showing elevation and horizontal coordinates related to the city's GPS base station. The point shall be located in the field in concrete with a brass disk provided by the engineering department.
- (21) *Public areas, facilities or uses.* The location of all areas shown in the comprehensive plan as proposed sites for public areas, facilities or uses, as described in Va. Code § 15.2-2232, which are located wholly or in part within the boundaries of the property that is the subject of the proposed plat.
- (22) *Zoning classification.* The zoning classification of the property, including all applicable zoning overlay districts, proffers, special use permits and variances.
- (23) *Tax map and parcel number; street address.* The current city tax map and parcel number of the property, and the street address.
- (24) *Stream buffers.* The location of stream buffers required by the city's water protection ordinance, with the following note: "The stream buffer(s) shown hereon shall be maintained in accordance with Chapter 10 of the City Code, the City of Charlottesville's Water Protection Ordinance."
- (25) *Boundary lines.* The exterior boundary lines of the property shall be shown with bearings in degrees, minutes and seconds.
- (26) *Monuments.* The location and material of all permanent reference monuments shall be identified. Acceptable material for monuments is specified in the Standards and Design Manual. Monuments found or installed prior to plat recordation may be referred to if they are permanent and undisturbed. If any monument required by this chapter will be installed after recordation of the final plat, the certification of the professional engineer or land surveyor shall so note.
- (27) *Bearing and distance ties.* A definite bearing and distance tie between not less than two (2) permanent monuments on the exterior boundary of the property and further tie to existing street intersection or nearby benchmark, at the discretion of the agent.
- (28) *Identification of sections, blocks and lots.* Sections (phases) shall be identified by numbers; blocks shall be identified by letters; lots shall be identified by numbers, assigned in numerical or alphabetical order, as appropriate.
- (29) *Acreage and square footage of lots.* The total acreage and square footage of each existing lot and each proposed lot.
- (30) *Ownership of common areas.* The intended ownership of all common areas with reference to a declaration of the rights and responsibilities of such owner with respect to the common areas, to be recorded along with the final plat.
- (31) *Street names.* The name of each proposed street.
- (32) *Temporary turnarounds.* The location of temporary turnarounds, if needed, with the following accompanying note: "The area on this plat designated as a temporary turnaround will be constructed and used as other

streets in the subdivision until (street name) is/are extended to (street name), at which time the land in the temporary turnaround area will be abandoned for street purposes and will revert to adjoining property owners in accordance with specific provisions in their respective deeds."

- (33) *Statement pertaining to private alleys, driveways and streets.* If alleys or shared driveways are shown, a note shall be added to the plat stating that maintenance shall be by the owners of the lots benefited by the alley or shared driveway, not by the city. If the townhouse subdivision will contain one or more private streets pursuant to City Code section 34-388(b), the following statement is required: "The streets in this subdivision are not accepted into the city's street system and will not be maintained by the City of Charlottesville." Grantors of any subdivision lots to which this statement applies must include the statement on each deed of conveyance.
- (34) *Restrictions.* Restrictions imposed in conjunction with the approval of the preliminary plat, and their period of existence, shall be noted on the plat, including, without limitation: sidewalk maintenance agreements; stormwater/BMP facilities maintenance agreements, affordable dwelling unit obligations arising under section 34-12(a) or 34-12(d)(1), etc. If the length of the wording necessary to describe a particular restriction makes its inclusion on the final plat impractical, and if the nature of the restriction does not necessitate the preparation of a separate instrument for recordation with the plat, then a summary reference shall be made to the restriction on the final plat.
- (35) *Terms of public easements.* All plats containing easements dedicated to the public shall expressly reference a declaration of the terms and conditions of such public easements to be recorded with the subdivision plat in the city's land records.
- (36) *Topography.* A topographic map derived from aerial topographic surveys or, where required by the director of public works, from actual field surveys, with a contour interval of five (5) feet referred to city data, showing the boundary lines of the tract to be subdivided.
- (37) *Building setback lines.* Building setback lines shall be referenced on the plat.
- (38) *Critical slopes.* Critical slopes as defined under City Code section 34-1120 shall be referenced on the plat.

(4-21-08(1); 11-18-13)

Sec. 29-111. - Required documents and information.

- (a) *Preliminary plat requirements.* The following documents and information shall be submitted along with each preliminary plat, or, if none, with each final plat:
- (1) *Request for critical slopes waiver.* If the need for a waiver is known at the time of submission, the subdivider shall submit a written request and justification for any requested waiver under section 34-1120 of the zoning ordinance, authorizing the disturbance of critical slopes. The applicant shall provide information, drawings and narrative details, addressing how the layout and location of proposed streets, utilities, stormwater management facilities, etc. will minimize the disturbance of critical slopes and natural drainage areas.
  - (2) *Stormwater management information.* Topographic information submitted with a preliminary plat shall be in the form of a topographic survey, which shall identify areas of critical slopes, as defined in section 29-3, natural streams, natural drainage areas, and other topographic features of the site. The applicant shall provide a stormwater management concept detailing how the applicant will achieve adequate drainage post-development, including a description of the specific design concept the applicant plans to apply. References to specific types of stormwater management facilities, specific treatments, BMPs, LID techniques, etc. shall be provided. The stormwater management concept shall be prepared by a professional engineer or landscape architect, as those terms are defined in Code of Virginia § 54.1-400, and shall describe the manner in which



stormwater runoff from the subdivision will be controlled in order to minimize the damage to neighboring properties and receiving streams, and prevent the discharge of pollutants into surface waters, in accordance with the requirements of City Code Chapter 10.

- (3) *Mitigation plan.* If applicable, a mitigation plan as provided in the water protection ordinance.
- (b) *Final plat requirements.* In addition to any information required by paragraph (a), above, the following documents or information shall be submitted with each final plat, unless included in the site plan previously approved or under review:
- (1) Infrastructure plans and computations in accordance with the Standards and Design Manual. Detailed plans, computations and necessary supporting documents for physical improvements including, but not limited to, traffic studies, street plans and cross sections, soil testing results, gas utilities, sewer and water plans and computations, landscape plans, parking calculations and other requirements of applicable zoning regulations, flooding computations and plans (if applicable), and any other plans, calculations and details deemed necessary by the city engineer in consultation with the director of public works, in order to determine compliance with the development standards set forth within Article IV of this chapter. section 29-36. Information, details, calculations, construction plans and other documents or data required by Chapter 10 for a final stormwater management plan and a final erosion and sediment control plan shall be included.
  - (2) *Construction plans, public facilities.* Construction plans shall be submitted to and approved by the city engineer in consultation with the director of public works for all proposed streets, and for all water, gas, storm and sanitary sewer and other city-owned public utilities or facilities.
  - (3) *Construction plans, utility fixtures and systems.* If the owner of any subdivision desires to construct in, on or under any public streets or alleys located in the subdivision, any gas, electric, cable or other non-city-owned utility works, pipes, wires, fixtures or systems, the owner shall present plans and specifications to the city engineer for approval in consultation with the director of public works.
  - (4) *Location of existing buildings.* A survey showing the location of all existing buildings within fifty (50) feet of a proposed lot line or a proposed street.
  - (5) *Building envelope.* A depiction of the building envelope for each lot, in accordance with the requirements of applicable zoning district regulations.
  - (6) *Interests to be vacated in city property.* A plan which shows all rights and interests of the city that would be terminated and extinguished by recordation of the final plat, with reference to the deed book and page number at which the instrument(s) creating such interest(s) are recorded.
  - (7) *Instrument evidencing maintenance of certain improvements.* If the subdivision will contain one (1) or more improvements or facilities serving more than one (1) lot within the subdivision, and that are not to be maintained by the city or any other governmental authority or other public agency, the subdivider shall submit with the final plat an instrument assuring the perpetual maintenance of the improvement or facilities, as such instrument will be recorded with the final plat. For each such improvement or facility, the plat shall contain the following notation: "No public agency, including the City of Charlottesville, Virginia, will be responsible for maintaining this improvement [or facility]."
  - (8) *Required bonds and surety.*
  - (9) *Environmental disclosures.* Subdividers shall disclose and remediate contamination and other adverse environmental conditions of the property prior to final plat approval. Along with a final subdivision plat, the subdivider shall submit a Phase I environmental site assessment based on the anticipated use of the property proposed for the subdivision or development, and if the agent deems it to be reasonably necessary, based on findings in the Phase I assessment, and in accordance with EPA regulations and American Society for Testing and Materials (ASTM) standards, the subdivider shall submit a Phase II environmental site assessment. Required assessments shall meet generally accepted national standards, such as those established by ASTM.

The subdivider shall also submit a written plan for remediation of any contamination or conditions noted in the required assessments, and confirmation that such plan has been submitted to state or federal authorities for review and approval. The agent, in its sole discretion, may waive this requirement for minor subdivisions, but this waiver does not exempt the subdivider from any applicable state and federal law requirements.

(10) *Instruments evidencing affordable housing requirements.* If the subdivision includes land that is subject to an affordable housing obligation arising under section 34-12(a) or 34-12(d)(1), the subdivider shall submit with the final plat the instrument(s) assuring the reservation of land for such obligation, in such format as may be required by the regulations enacted pursuant to section 34-12(g).

(c) Subject to the provisions of section 29-36, the agent may grant variations or exceptions to particular submission requirements articulated within this section, or within section 29-110, for a boundary line adjustment or minor subdivision; provided, however, that the agent may not grant variations or exceptions to (i) any requirements of Chapter 10, or any requirements or standards set forth within this chapter relating to drainage or flood control, or (ii) any requirements applicable to the layout, design and construction of public streets or other public facilities.

(4-21-08(1); 11-18-13; 5-19-14, § 1, eff. 7-1-14)

Secs. 29-112—29-139. - Reserved.

#### ARTICLE IV. - DESIGN AND IMPROVEMENTS

##### DIVISION 1. - GENERALLY

Sec. 29-140. - Conformity to applicable requirements.

All subdivision plats and supporting materials shall be in accordance with the following, as applicable:

- (1) The provisions of the Code of Virginia, title 15.2, chapter 22, article 6 (Va. Code §§ 15.2-2240—15.2-2279).
- (2) Chapter 10 of the Code of the City of Charlottesville (Water Protection).
- (3) Chapter 12 of the Code of the City of Charlottesville, Article III (Fire Prevention Code)
- (4) Chapter 31 of the Code of the City of Charlottesville (Utilities).
- (5) Chapter 34 of the Code of the City of Charlottesville (Zoning ordinance).
- (6) The City of Charlottesville's Standards and Design Manual.
- (7) Other applicable laws, ordinances, policies and requirements, including, without limitation, the other standards set forth within this article.

(4-21-08(1))

Sec. 29-141. - Standards and Design Manual.

The agent and the city engineer developed and city council approved design requirements for new street and alley construction, stormwater management, erosion and sediment control, gas utilities, traffic and transportation, bridges, retaining walls and other related structures, and potable water and sanitary sewer systems and related facilities. The design requirements are developed in consultation with the city's department of public works, the city's fire official, the city's building official, and other city departments or personnel who have any responsibilities or authority with respect to the types of improvements that are the subject of the Standards and Design Manual. To the extent that there is a conflict between the Standards and Design Manual and any other ordinance or law, the ordinance or law shall take precedence.



(4-21-08(1))

Secs. 29-142—29-159. - Reserved.

## DIVISION 2. - BOUNDARIES, LOTS AND BLOCKS

## Sec. 29-160. - Monuments.

- (a) All boundaries, both exterior and interior, of the original survey for the subdivision shall have monuments in accordance with the Standards and Design Manual.
- (b) No monuments other than those required by paragraph (a) shall be required to be set before recordation of the final plat or the conveyance of land by reference to plat if the professional engineer or land surveyor includes in his certification on the plat that any additional monuments required by this chapter shall be set on or before a specified later date.
- (c) The setting of any monument at any time after recordation of the final plat shall be established both at law and in equity, at prorated positions as determined from direct re-measurements between the established monuments of record rather than as precisely stated or shown on the recorded plat.
- (d) The subdivider shall be responsible for resetting any monument on the property that is damaged, disturbed or destroyed during construction of any improvements required by this chapter.

(4-21-08(1))

## Sec. 29-161. - Lots.

- (a) Each lot within a subdivision shall satisfy applicable lot size, buildable area and other requirements of the city's zoning ordinance, and of this chapter, and shall have frontage either:
  - (1) On a street dedicated to the public which, once constructed and improved by the subdivider will qualify for acceptance into the city's street system, or
  - (2) On a private street in a townhouse development, pursuant to City Code section 34-388(b).
- (b) The foregoing requirements of this section do not apply if:
  - (1) The lot is to be conveyed to the city for open space, recreation or conservation purposes only, and the plat contains a notation that no building permit shall be issued for the lot unless it is combined with another parcel so that it gains frontage and satisfies minimum lot requirements and the building permit is consistent with open space, recreational or conservation uses, or
  - (2) The lot is part of an approved planned unit development or cluster development, is created for open space, recreational or conservation purposes only, is accessible by a public access easement, and the plat contains a notation that no building permits shall be issued for the lot unless the permit is consistent with open space, recreational or conservation uses and it is combined with another parcel so that it gains frontage.
- (c) No lot shall contain peculiarly shaped elongations designed solely to provide the required square footage of area or frontage on a street.
- (d) Remnants shall not be created by the subdivision of land. All pre-existing remnants shall be eliminated when land subdivided or re-subdivided.
- (e) Side lot lines of each lot shall be approximately at right angles or radial to the street line, except turnaround terminal points. The agent or commission may vary or grant exceptions to this requirement, pursuant to section 29-36 above.
- (f) Minimum street frontage. All lots containing any residential dwelling unit shall have a minimum frontage of fifty (50)

feet at the street right-of-way, except:

- (1) Lots fronting on the turnaround portion of a cul-de-sac shall have a minimum of twenty (20) feet of frontage, and an average width of at least fifty (50) feet;
- (2) Lots containing single-family attached dwelling units shall have a minimum frontage of twenty (20) feet;
- (3) Lots containing a townhouse shall have a minimum frontage of sixteen (16) feet; and
- (4) Corner lots shall have such additional frontage as is required by the agent or commission to accommodate the side yard requirements set forth within the applicable zoning district regulations.

(g) Sanitary sewer and water supply.

- (1) All buildings constructed on lots resulting from subdivision of a larger tract that abuts or adjoins a public water or sewer system or main shall be connected to that public water or sewer system or main subject to the provisions of Va. Code § 15.2-2121 and this chapter.
- (2) Lots served by public sanitary sewers and public water supply shall have an area no less than the minimum lot size contained in applicable zoning district regulations.
- (3) If subsection (1) above does not apply, then the subdivision shall be served by individual private wells and septic systems having conventional drainfields and shall meet all requirements of the health department and applicable health official, and any applicable zoning regulations. The subdivider shall submit to the agent or commission satisfactory proof that such lots meet the requirements of the health department, as determined by tests or inspections of soil conditions conducted by an officer of the health department.

(4-21-08(1); 5-19-14, § 1, eff. 7-1-14)

Sec. 29-162. - Streetscape trees.

Sufficient areas shall be set aside on each lot for the planting of streetscape trees along the frontage of all existing or proposed public streets, in accordance with City Code section 34-870, as that section may be amended from time to time. Trees shall be planted according to the standards outlined in the master tree list, referenced in the zoning ordinance.

(4-21-08(1))

Sec. 29-163. - Blocks.

- (a) Each block within a subdivision shall be wide enough to allow two (2) tiers of lots of the minimum depth allowed by applicable zoning ordinance regulations, fronting on all streets. The agent or commission may vary or grant exceptions to this requirement, pursuant to section 29-36 above.
- (b) Where any block adjoins an arterial street, the greatest dimension of the block should be parallel to such street. Such block shall not be more than one thousand (1,000) feet in length; however, the agent or commission may vary or grant exceptions to this requirement, pursuant to section 29-36 above.
- (c) No residential block shall be longer than one thousand (1,000) feet.

[DIAGRAM]

(4-21-08(1))

Secs. 29-164—29-179. - Reserved.

DIVISION 3. - STREETS

Sec. 29-180. - Streets; generally.



- (a) *Private streets.* Private streets are prohibited except pursuant to townhouse developments under City Code section 34-388(b).

(4-21-08(1))

Sec. 29-181. - Coordination and extension of streets.

- (a) *Coordination.* All streets within and contiguous to a subdivision shall be coordinated with other existing or planned streets, and such streets shall also be coordinated with existing or planned streets in existing or future adjacent or contiguous to adjacent subdivisions, as to location, widths, grades and drainage.
- (1) *Street names.* Where a street is planned as a continuation of an existing street, it shall bear the same name as the existing street. Street names must be approved by the agent. New street names shall be different from existing street names within the city or in Albemarle County, but an exception may be made for culs-de-sac which have the same name as the road from which they originate (example: "Rugby Circle" which originates from "Rugby Road").
- (2) *Street signs.* The subdivider shall purchase and install, in accordance with the Federal Highway Administration Manual of Uniform Traffic Control Devices, all applicable street signs.
- (b) *Extension.* All streets within a subdivision shall be extended and constructed to the abutting property lines, except in the case of culs-de-sac, to provide vehicular, bike and pedestrian interconnections to future development on adjoining lands in accordance with the Standards and Design Manual. The arrangement of the streets shall provide adequate access to adjoining lands within the subdivision where necessary to provide for the orderly development of the city, including, but not limited to, reserving temporary construction easements of sufficient area to accommodate the future completion of the street when the adjoining lands are developed.
- (c) *Exceptions.* The agent or commission may vary or grant exceptions to the requirements of subsection (a).
- (1) The agent or commission reviewing a proposed variance or exception shall consider, in addition to the matters set forth in section 29-36: (i) the engineering requirements for coordination and connection; (ii) whether the need for coordination and connection outweighs the impacts on environmental resources such as streams, stream buffers, steep slopes, and floodplain; (iii) whether there is an alternative street connection from another location in the subdivision that is preferable because of design, traffic flow, or the promotion of the goals of the comprehensive plan, including the applicable neighborhood plan.
- (2) If the agent or commission grants a variance or exception: (i) the street shall be constructed past the point at which the primary structures on the lots abutting the street would rely on the finished grade for landscaping and other improvements, but in no case less than thirty (30) feet beyond the curb line or ditch line on those lots; (ii) the subdivider shall dedicate the required right-of-way to the abutting property line, along with all easements required to allow the street connection to be constructed in the future; (iii) the required easements shall prohibit any improvements being established therein; (iv) the subdivider shall provide a surety guarantee or an escrow of funds for its share of the cost to complete the extension if determined by the agent to be necessary; the type of surety guarantee or the escrow shall be acceptable to the city engineer and be approved by the city attorney; and (v) the agent may require that the subdivider install and maintain a sign at the end of the constructed portion of the street stating that the street is a future through street, and that the sign shall be maintained until the city grants final approval of an extension of the street to the abutting property.

(4-21-08(1))

Sec. 29-182. - Standards for streets and alleys.

The following standards shall apply to all streets and alleys within a subdivision:

- (a) *Layout.* Each street shall be configured, to the extent practicable, to conform to the natural topography, to minimize disturbance of critical slopes and natural drainage areas, and to provide vehicular, bicycle and pedestrian interconnectivity between the subdivision and existing or future development on adjoining lands. Streets that do not align with existing streets shall be offset by a minimum of one hundred fifty (150) feet between centerlines, unless otherwise approved by the traffic engineer.
- (b) *Intersections.* No more than two (2) streets shall intersect at any one (1) point; however, the traffic engineer may vary or grant exceptions to this requirement pursuant to section 29-36 above. Intersections shall be laid out so as to intersect as nearly as possible at right angles.
- (c) *Grades.* The maximum allowable street grade shall be eight (8) percent. The traffic engineer may vary or grant exceptions to this requirement, pursuant to section 29-36 above, to no more than ten (10) percent.
- (d) *Surface.* Any newly constructed street shall be surfaced to the width specified in the Standards and Design Manual, measured from the face of the curb line or edge of pavement. The subdivider is required to complete the construction of any new street, including installing the final surface.
- (e) *Temporary turnarounds.* Streets that terminate temporarily, and that are located more than three hundred (300) feet in length from an intersection, or are proposed to serve more than four (4) dwelling units, shall be provided with a temporary turnaround. The temporary turnaround shall be extended to the abutting property line; however the agent or commission may vary or grant an exception to this requirement pursuant to section 29-36 above. The temporary turnaround shall exist until the street extension is accepted into the city's street system.
- (f) *Alleys.* Alleys with a width of not less than twelve (12) feet may be provided in the rear or side of any commercial, industrial, or residential lots; however, no dead-end alleys shall be permitted. However, when the alley is the principal means of emergency access or access for service vehicles, they shall be no less than twenty (20) feet in width.
- (g) *Reserved strips.* Reserved strips restricting access from adjoining lands to an existing or future street or alley shall not be permitted; provided that nothing herein shall prohibit areas for plantings and landscaping where adequate access to the adjoining lands is otherwise available.
- (h) *Access.* The principal means of access to a subdivision shall be either a public street or, for townhouse developments pursuant to City Code section 34-388(b), a private street is permissible.
  - (1) If a subdivision fronts on a dedicated, but unaccepted right-of-way, then the subdivider shall construct and improve such street in accordance with the requirements specified within this division.
  - (2) Throughout the length of a street, including any distance between the boundary of the subdivision and any existing street, the principal means of access shall conform to standards articulated in the Standards and Design Manual.
- (i) *Drainage.* All drainage improvements shall be in accordance with the Standards and Design Manual.
- (j) *Related improvements.*
  - (1) Streets shall be constructed in accordance with the Standards and Design Manual with public facilities and infrastructure within the dedicated right-of-way where required.
  - (2) Sidewalks shall be constructed to approved city standards on both sides of every new street, and the dedicated right-of-way for a public street shall be sufficient to permit installation of the sidewalk within the right-of-way on both sides of such street.
  - (3) Where land being subdivided or developed fronts on an existing street, and adjacent property on either side has an existing sidewalk, the subdivider shall construct a sidewalk, and shall dedicate land to the public for such sidewalk, to connect to the existing sidewalk. On a residential lot or a lot containing at



least one (1) residential unit, the subdivider or developer thereof may, in the alternative, choose to contribute to a sidewalk fund, maintained and administered by the city, an amount equivalent to the cost of the dedication of land for and the construction of a sidewalk on the property.

- (4) Each sidewalk proposed to be accepted for maintenance by the city shall be marked on a plat as being "dedicated to the city for public use," and where practicable shall be located within the dedicated right-of-way for a public street. Each sidewalk proposed to be privately maintained shall be conveyed to a homeowners association or other private individual or entity, for ownership and perpetual maintenance, and shall be located outside the dedicated right-of-way for a public street. The agent or commission may require that a sidewalk proposed by the subdivider be privately maintained instead of being dedicated to the public, if the agent or commission determines there is not a need for the sidewalks to be publicly owned and maintained.
- (5) The agent or commission may vary or approve exceptions to the sidewalk requirements or other design standards that are the subject of this subparagraph. A request for a variance or exception may be made prior to or with submittal of a preliminary plat. If such a request is made, it shall include: a written statement of the justification for the request. In reviewing a request, the agent or commission shall consider, in addition to the factors set forth within section 29-36, and as may be applicable to the particular request: (i) whether a surface other than concrete is more appropriate for the subdivision because of the character of the proposed subdivision and the surrounding neighborhood; (ii) whether sidewalks on only one (1) side of the street may be appropriate due to environmental constraints such as streams, stream buffers, critical slopes, floodplain, tree cover, or wetlands, or because lots are provided on only one (1) side of the street; (iii) whether the sidewalks reasonably can connect into an existing or future pedestrian system in the area; (iv) whether the length of the street is so short and the density of the development is so low that it is unlikely that the sidewalk would be used to an extent that it would provide a public benefit; (v) whether an alternate pedestrian system including an alternative pavement could provide more appropriate access throughout the subdivision and to adjoining lands, based on a proposed alternative profile submitted by the subdivider; (vi) whether the sidewalks would be publicly or privately maintained; (vii) whether the waiver promotes the goals of the comprehensive plan, including the applicable neighborhood plan; and (viii) whether waiving the requirement would enable a different principle of the neighborhood plan to be more fully achieved.

(4-21-08(1); 5-20-13(3), §§ 1, 2, eff. 7-1-13)

Sec. 29-183. - Improvement of existing on-site public streets, sidewalks and right-of-way.

- (a) Prior to approval of a preliminary plat, the agent or commission shall consider whether existing public streets that will serve the subdivision are adequate to accommodate the increase in traffic that may be reasonably expected to result from the development of the subdivision. If the agent or commission determines that the existing streets and/or sidewalks will be inadequate, as detailed in the Standards and Design Manual, it may require that the streets be improved so as to accommodate traffic resulting from the development of the subdivision.
  - (1) For purposes of this section, the term "street that will serve the subdivision" shall mean a public street that will provide immediate vehicular access to any lot of the subdivision.
  - (2) For purposes of this section, the term "improved to accommodate traffic" shall mean, for any street that will serve the subdivision, improvements on that part of a public street that abuts either the subdivision or that provides access to the subdivision, if the need for the improvements are substantially generated by the development of the subdivision.
- (b) Contributions for off-site street improvements are governed by section 29-230(2).

(4-21-08(1))

Secs. 29-184—29-199. - Reserved.

#### DIVISION 4. - WATER, SEWER, DRAINAGE AND OTHER UTILITIES

Sec. 29-200. - Water and sewer service.

- (a) A subdivision within the city served by public water and/or sewerage shall comply with the following requirements:
- (1) Public water and/or sewerage service shall be provided to each lot within the subdivision, consistent with the requirements of Chapter 31 of the City Code and the standards and design manual. Such systems shall be constructed by the subdivider to the point(s) at which they will join public service lines at a property line; however, the agent may grant exceptions to this requirement pursuant to section 29-36 above. In reviewing a waiver request, the agent shall consider the matters set forth within section 29-36 and shall (i) obtain the opinion of the city engineer as to the merits of the waiver request; and (ii) determine whether construction to the boundary lines would unnecessarily disturb significant environmental resources.
  - (2) Water and sewer lines, and extensions of water and sewer mains, shall be installed in accordance with the requirements of City Code sections 31-114 and 34-115, and with the standards and design manual and requirements of Chapter 31 of the City Code.
- (b) Public water and sanitary sewer mains shall be located within dedicated public street right-of-way, unless topography renders that impractical. When any such mains must be located on private property, public easements shall be dedicated to allow for the placement of the mains and related facilities, and perpetual access thereto by the city and its authorized agents. Unless otherwise determined to be necessary by the director of public works, such easements shall be no less than twenty (20) feet in width.

(4-21-08(1))

Sec. 29-201. - Natural gas.

Installation of gas mains shall be governed by the applicable provisions of Chapter 31 of the City Code and the Standards and Design Manual. Where any city-owned gas main or related facilities must be located on private property, a public easement shall be dedicated to allow for the placement of the mains and related facilities and perpetual access thereto by the city and its authorized agents.

(4-21-08(1))

Sec. 29-202. - Stormwater management and drainage facilities.

- (a) Every development shall be designed so that construction of buildings, structures, public facilities and other site-related improvements will minimize disturbance of natural drainage areas and critical slopes. Structures necessary to ensure stability of critical slopes shall be provided.
- (b) Every development will be designed to achieve state and local requirements for post-development stormwater management, including measures addressing both the quantity and quality of stormwater, as set forth within Chapter 10 of the City Code and the Standards and Design Manual.

(4-21-08(1); 5-19-14, § 1, eff. 7-1-14)

Sec. 29-203. - Water for fire protection.



No final plat shall be approved by the agent without verification from the city's fire code official that adequate capability exists to provide adequate fire protection to serve the subdivision, including required fire flows. Fire hydrants and distribution systems shall be installed and constructed by the subdivider in accordance with applicable requirements of the USBC and the USFPC; additionally, hydrant locations and fire flow requirements shall be as prescribed by Insurance Service Offices (ISO) standards, subject to approval by the fire department.

(4-21-08(1))

Sec. 29-204. - Utilities.

All utilities, including but not limited to wires, cables, pipes, conduits and appurtenant equipment for electricity, gas, water, sewer, telephone or similar service, shall be located within a subdivision as follows:

- (1) Each utility shall be located, to the extent practicable, in a manner that conforms to the natural topography, minimizes the disturbance of critical slopes and natural drainage areas, and allows vehicular and pedestrian interconnections within the subdivision and existing or future development on adjoining lands.
- (2) All new utilities shall be located underground except the following, which may be located above-ground: (i) equipment, including electric distribution transformers, switch gear, meter pedestals, telephone pedestals, outdoor lighting poles or standards, radio antennae and associated equipment, which is, under accepted utility practices, normally installed aboveground; (ii) meters, service connections, and similar equipment normally attached to the outside wall of a utility customer's premises; and (iii) satellite dishes. The agent or commission may grant variances or exceptions to the undergrounding requirements of this paragraph pursuant to section 29-36 above. In addition to the factors set forth within section 29-36 the agent or commission in reviewing any such request shall consider whether the requirement would unreasonably impact the existing above-ground utility network to an extent that extensive off-site improvements would be necessary.
- (3) No utility easements or facilities, other than those of city-owned and operated utilities, shall be located within the right-of-way for any public street, except upon the approval by city council of a franchise ordinance, or the city manager acting as its agent, in accordance with Va. Code § 15.2-2100 et seq. If the owner of any subdivision desires to construct in, on, under, or adjacent to any public streets located in the subdivision any gas, water, sewer or electric light or power works, pipes, wires, fixtures or systems, they shall present plans or specifications to the city engineer for approval. The city council, or the city manager acting as its agent, shall have forty-five (45) days in which to approve or disapprove the plans. In the event of the failure of city council, or the city manager acting as its agent, to act within such period, the plans and specifications may be submitted, after ten (10) days' notice to the agent, to the city's circuit court for its approval or disapproval.
- (4) Installation of utilities in or adjacent to the right-of-way shall be performed in a manner that will not preclude the installation of street trees or required landscaping.
- (5) Where appropriate, a subdivider shall convey common or shared easements to: (i) franchised cable television operators furnishing cable television, and (ii) public service corporations furnishing cable television, gas, telephone and electric service to the proposed subdivision. Such easements (the location of which shall be adequate for use by public service corporations and franchised cable television operators which may be expected to occupy them) shall be conveyed by reference on the final plat to a declaration of the terms and conditions of such common or shared easements recorded in the city's land records. All such easements shall be located outside of the public street right-of-way, except as otherwise specifically approved by city council in accordance with Va. Code § 15.2-2100 et seq.

(4-21-08(1))

Secs. 29-205—29-229. - Reserved.

#### ARTICLE V. - CONTRIBUTIONS, DEDICATIONS, RESERVATIONS AND TRANSFERS

Sec. 29-230. - Contributions for off-site improvements.

Each plat may be approved on the condition that the subdivider contributes a pro rata share of the cost of the following off-site improvements:

- (1) Each subdivider shall pay to the city his pro rata share of the cost of providing reasonable and necessary sewer, water and drainage improvements not located on the property, if such improvements are necessitated or required, at least in part, by the construction or improvement of the subdivision, provided that: (i) no payment shall be required until the city establishes a general sewer, water and drainage improvement program for an area having related and common sewer, water and drainage conditions and within which the property is located or the city council has committed itself by ordinance to the establishment of such a program; and (ii) the program complies with the requirements of Va. Code § 15.2-2243.
- (2) Each subdivider may voluntarily contribute, and the city council may accept, funds for reasonable and necessary off-site street improvements, the need for which is substantially generated and reasonably required by the construction or improvement of the subdivision. The determination of whether the need for an improvement is substantially generated and reasonably required by the subdivision shall be made by city council. In determining whether the need for an improvement is substantially generated by the subdivision, the city council shall consider whether: (i) the impact of the subdivision would create a threat to the public health, safety or welfare if not addressed by the improvement; (ii) the street improvement is identified in the city's capital improvement program; (iii) the street improvement is identified in the comprehensive plan as a needed or desired improvement; and (iv) the need generated is more than an incremental effect that would otherwise result, as determined by annual population growth, vehicular traffic or other relevant criteria.

(4-21-08(1))

Sec. 29-231. - Dedication of streets, curb and gutter, water and sewer facilities, etc. for public use.

- (a) The agent or commission shall require a subdivider to dedicate to the city for public use every easement and right-of-way located within the subdivision or section thereof, which has constructed or proposed to be constructed therein any public street, curb, gutter, sidewalk, bicycle trail, drainage or sewerage system, waterline as part of a public system, or other improvement dedicated for public use and to be maintained by the city or another public agency, as follows:
  - (1) The city council shall not be required to compensate the subdivider for any such dedicated land or improvements.
  - (2) The land and improvements to be dedicated shall be set apart on the final plat and shall be identified by a note on the plat stating that the land is dedicated for public use.
  - (3) When a subdivision abuts one (1) side of an existing or platted street, the subdivider shall dedicate at least one-half (½) of the right-of-way necessary to make the street comply with the minimum width required for the street as designated in the Standards and Design Manual.
- (b) The agent or commission shall require each subdivider to dedicate to the city for public use all water and sewerage facilities designed, constructed and approved to be dedicated as public water and sewerage systems, and shall require each subdivider to establish an easement on the land appurtenant to such facilities, extending to any

abutting property owned by the subdivider, if the facilities are required by this chapter, as follows:

- (1) The city council shall not be required to compensate the subdivider for the dedicated facilities or the establishment of any easement.
  - (2) The facilities to be dedicated and any easement to be established shall be specifically identified and set apart on the final plat and shall be identified by a note on the plat stating that the facilities are dedicated to, and the easement is established for, the City of Charlottesville.
  - (3) All final plats containing proposed public easements shall expressly reference a declaration of the terms and conditions of such public easements recorded with the subdivision plat in the city's land records.
- (c) The agent or commission shall require each subdivider to establish easements for facilities for stormwater management and drainage control, as follows:
- (1) An easement for all stormwater management facilities and drainage control improvements located on the property shall be established whenever the improvement is designed and/or constructed beyond a street right-of-way or access easement and shall extend from all drainage outfalls to an adequate channel that satisfies minimum standards established by the Virginia Department of Environmental Quality or the State Water Control Board, to the boundary of the property.
  - (2) An easement shall be established along every natural stream, natural drainage area to be preserved, and every manmade waterway located on the property.
  - (3) The area of each required easement shall be sufficient, as determined by the city engineer, to: (i) accommodate the facilities and the drainage characteristics from each drainage outfall from a drainage control, (ii) allow access to a natural stream or manmade waterway to allow widening, deepening, relocating, improving, or protecting the natural stream or manmade waterway for drainage purposes, and (iii) to meet applicable standards and requirements set forth within Chapter 10 and the Design and Standards Manual.
  - (4) Each required easement shall include a right of ingress and egress for installation, maintenance, operation, repair and reconstruction of any improvement within the easement. The agent or commission may require that an easement be provided through abutting land under the same ownership as the property.
  - (5) The city council shall not be required to compensate the subdivider for any easement or any improvements thereon.
  - (6) All final plats containing proposed public easements shall expressly reference a declaration of the terms and conditions of such public easements recorded with the subdivision plat in the city's land records.
  - (7) No easement shall be considered part of any required street width.

(4-21-08(1); 5-19-14, § 1, eff. 7-1-14)

#### Sec. 29-232. - Dedication of land for public use.

A subdivider may dedicate to the city any land within the subdivision that is suitable for parks, open space, stormwater management facilities and other public facilities, utilities and other public or semipublic uses, as follows:

- (1) The city council shall not be required to compensate the subdivider for the land dedicated if the dedication is a gift, required by a proffer as part of a conditional rezoning, required as a condition of a special use permit, variance or other approval, or if the need for the land is substantially generated by the subdivision. The determination of whether the need for land is substantially generated by the subdivision shall be made in the manner prescribed by section 29-230(2).
- (2) Land dedicated under this section shall be set apart on the final plat and shall be identified by a note on the plat stating that the land is dedicated for public use. The proposed dedication shall be subject to review as to consistency with the City's Comprehensive Plan, as required by Code of Virginia § 15.2-2232.



- (3) A subdivider's proposed dedication of a stormwater management facility shall be reviewed and governed by the Code section 10-56. No such dedication shall be accepted unless and until the city receives a financial guarantee, bond or like surety, in an amount sufficient for and conditioned upon the construction of such stormwater management facility, in accordance with the standards and requirements set forth within Chapter 10 and the Design and Standards Manual.

(4-21-08(1); 5-19-14, § 1, eff. 7-1-14)

Sec. 29-233. - Reservations of land.

A subdivider may reserve for future dedication to the city a part of the property suitable for parks, schools, open space and other public facilities, utilities and other public or semipublic uses, as follows:

- (1) The city council shall not be required to compensate the subdivider for the reservation of land if the dedication is a gift, required by a proffer as part of a conditional rezoning, required as a condition of a special use permit, variance, or other approval, or if the need for the land is substantially generated by the subdivision. The determination of whether the need for the land is substantially generated by the subdivision shall be made in the manner prescribed by section 29-230(2).
- (2) Land reserved under this section shall be set apart on the final plat and shall be identified by a note on the plat stating that the land is reserved for future dedication for public use.
- (3) The subdivider may petition the city council to release a reservation if the land is not used for a public purpose, using the procedure set forth within section 29-38 for vacation of a plat.
- (4) Nothing in this section precludes land being reserved for a public use which is not included in the comprehensive plan, provided the land is acceptable to the city for reservation.

(4-21-08(1))

Sec. 29-234. - Effect of recordation of plat on dedications and certain easements.

The recording of a final plat shall transfer dedicated land and improvements and shall establish certain easements, as follows:

- (1) Recordation shall operate to transfer, in fee simple, to the city that portion of the land set apart on the plat and dedicated for public use.
- (2) Recordation shall operate to transfer to the city any easement set apart on the plat and dedicated to public use to create a public right of passage over the property.
- (3) Recordation shall operate to transfer to the city, in fee simple, the water and sewer facilities, and related easements, set apart on the plat and dedicated for public use.
- (4) Recordation shall operate to terminate and extinguish all rights-of-way, easements or other interests of the city in the property not shown on the plat, except that an interest acquired by the city by eminent domain, by purchase for valuable consideration and evidenced by a separate instrument of record, or streets, alleys or easements for public passage subject to the provisions of Va. Code §§ 15.2-2271 or 2272.
- (5) Recordation shall not constitute acceptance of any improvement by the city. Acceptance shall occur pursuant to Article VI, section 29-260, subsection (e) below.

(4-21-08(1))

Secs. 29-235—29-259. - Reserved.

ARTICLE VI. - COMPLETION OF ON-SITE IMPROVEMENTS AND SURETY

Sec. 29-260. - Satisfactory completion of site-related improvements required.

- (a) A developer shall either (i) complete all site-related improvements required by this chapter prior to issuance of the first certificate of occupancy for any building within a development, or (ii) execute a written agreement with the city to complete the construction of all such site-related improvements within a period of time set forth within such agreement, relative to a specified plan for phasing of the proposed development. In either case: prior to issuance of any building permit, and prior to issuance of any permit authorizing any land disturbing activity within the development, the developer shall provide a financial performance guarantee for completion of the site-related improvements, as set forth within paragraph (c), below. For the purposes of this section, the term "site-related improvements" means the following facilities: every public street, curb, gutter sidewalk, bicycle trail, drainage or sewerage system, waterline as part of a public system, or other improvement dedicated for public use and proposed to be maintained by the city or another public agency; and other improvements required by this chapter, and to be financed in whole or in part by private funds, for: vehicular ingress and egress, including traffic signalization and control, for public access streets, for structures necessary to ensure stability of critical slopes, and for stormwater management facilities.
- (b) Upon completion of required site-related improvements, a developer shall submit to the agent a certificate of completion prepared by a professional engineer or a land surveyor, and the developer shall also submit his or her own certification to the agent that all of the construction costs for the improvements, including those for materials and labor, have been paid to the person(s) constructing the improvements.
- (c) Every final plat approval shall be conditioned upon compliance with all of the requirements of this section. Prior to such final approval, and prior to the agent's signature of the final plat, the agent shall obtain the subdivider's written acknowledgement of the obligation and applicable time period for completing construction of the site-related improvements. The obligation to complete construction of all site-related improvements in accordance with city requirements, standards and specifications, and within the applicable time period, shall be backed by an adequate performance guarantee, established as follows:
  - (1) A developer shall furnish to the agent a financial guarantee, which shall be one (1) of the following: (i) a certified check or cash escrow; (ii) a personal, corporate or property bond, with surety satisfactory to the city; (iii) a contract for the construction of such facilities and the construction contractor's bond, with like surety; or (iii) a bank or savings institution's letter of credit on certain designated funds satisfactory to the city as to the bank or savings institution, the amount and the form. Each financial guarantee shall be in an amount equal to the estimated cost of construction of the site-related facilities, based on unit prices for new public or private sector construction within the city, plus a reasonable allowance for estimated administrative costs, inflation, and potential damage to existing roads or utilities, which shall not exceed 25% percent of the estimated construction costs. Every financial guarantee shall be conditioned upon completion of construction of the site-related improvements in accordance with city ordinances, regulations and standards, within the time period applicable under paragraph (a) of this section.
  - (2) If a subdivider records a final plat which may be a section of a subdivision as shown on an approved preliminary plat, and furnishes to the governing body at the same time a certified check, cash escrow, bond, or letter of credit, in such amount and conditioned as specified within paragraph (c)(1), above, to ensure completion of construction of site-related facilities be dedicated for public use within that section, then the subdivider shall have the right to record the remaining sections shown on the preliminary subdivision plat for a period of five (5) years from the recordation date of the first section, or for such longer period as the agent may, at the time of approval of the plat for the first section, determine to be reasonable, taking into consideration the size and phasing of the proposed development, subject to the terms and conditions of this subsection and subject further to engineering and construction standards and zoning requirements in effect

- at the time that each remaining section is recorded. The amount of the financial guarantee for site-related improvements in each subsequent section shall be established, and such financial guarantee shall be provided by the developer to the agent, prior to issuance of any building permit or any other permit authorizing land disturbing activity within that section.
- (d) The city shall provide periodic partial release, and final complete release, of any bond, escrow, letter of credit, or other performance guarantee required by the city under this article, within thirty (30) days after receipt of written notice by the subdivider of completion of part or all of any public facilities required to be constructed hereunder, unless the director of neighborhood development services notifies the subdivider in writing, prior to the expiration of the thirty-day period, of any grounds preventing the city's approval or acceptance of the facilities and of any specified defects or deficiencies in construction and suggested corrective measures.
- (1) Requests for partial or final release(s) of performance guarantees shall be in writing and accompanied by as-built drawings, certified by a professional engineer licensed by the Commonwealth of Virginia, certifying that construction of the improvements and facilities that are the subject(s) of such performance guarantees is in substantial conformity with the approved final subdivision plat and applicable city standards. An engineer's certification pertaining to construction of street improvements shall also certify that on-site typical pavement sections are consistent with the approved design specifications and that standard pavement construction practices were followed.
  - (2) Requests for partial or final release(s) of performance guarantees shall be processed by the city in accordance with the requirements of Va. Code § 15.2-2245.
  - (3) If the agent fails to take written action within the thirty-day period on a request for partial release, the request shall be deemed approved and a partial release shall be granted. No final release shall be granted until after expiration of the thirty-day period and an additional request in writing is sent by certified mail return receipt to the city manager. The agent shall act within ten (10) working days of receipt by the city manager of any such request; if the agent fails to act, then the request shall be deemed approved and final release shall be granted to the subdivider.
- (e) For the purposes of this chapter, a public improvement shall be deemed to be accepted when it is formally accepted by city council and taken over for operation and maintenance by the city, as evidenced by a resolution of city council. Nothing in this chapter, including the approval of a final plat, shall obligate the city to accept and take over for operation and maintenance any improvements completed by a subdivider as required by this chapter. Acceptance or approval of an improvement shall be made only if the improvement satisfies all applicable statutes, regulations, ordinances, guidelines, design and construction standards for acceptance or approval of the improvement, upon completion of inspections by the city.
- (f) All site-related improvements required by this chapter shall be completed at the expense of the subdivider, except where the subdivider and the city enter into a cost-sharing or reimbursement agreement prior to final plat approval. The city shall not be obligated to maintain, repair, replace or reconstruct any improvement required by this chapter. Nothing in this chapter obligates the city to pay any costs arising from any improvement, unless the city has a recorded ownership interest in the improvement, evident from an inspection of the city's land records, or has otherwise agreed in writing to maintain, repair, replace or reconstruct the improvement.

(4-21-08(1); 5-19-14, § 1, eff. 7-1-14)

Sec. 29-261. - Inspections; right of entry.

- (a) Submittal of a preliminary or final plat by a subdivider shall constitute consent by the subdivider to all officers and employees of the city, and any state department or agency, to enter upon the property at all reasonable times for the purpose of making periodic inspections related to the review of the preliminary and final plat for compliance with this chapter and applicable state laws and regulations.



- (b) The subdivider shall provide at least five (5) days' prior notice to the city engineer when each stage of construction and improvement of the subdivision is ready for inspection.
- (c) Any inspection of public improvements shall be conducted solely to determine compliance with the requirements and specifications provided by law and the approved plat.

(4-21-08(1))

#### DIVISION 7. - LOTS AND PARCELS-DEVELOPMENT; GENERAL REGULATIONS

##### Sec. 34-1120. - Lot regulations, general.

- (a) *Frontage requirement.* Every lot shall have its principal frontage on a street or place (i) that has been accepted by the city for maintenance, or (ii) that a subdivider or developer has been contractually obligated to install as a condition of subdivision or site plan approval and for which an adequate financial guaranty has been furnished to the city. Except for flag lots, stem lots, and cul-de-sac lots, or other circumstances described within the city's subdivision ordinance, no lot shall be used, in whole or in part, for any residential purpose unless such lot abuts a street right-of-way for at least the minimum distance required by such subdivision ordinance for a residential lot.
- (b) *Critical slopes.*
  - (1) *Purpose and intent.* The provisions of this subsection (hereinafter, "critical slopes provisions") are intended to protect topographical features that have a slope in excess of the grade established and other characteristics in the following ordinance for the following reasons and whose disturbance could cause one (1) or more of the following negative impacts:
    - a. Erosion affecting the structural integrity of those features.
    - b. Stormwater and erosion-related impacts on adjacent properties.
    - c. Stormwater and erosion-related impacts to environmentally sensitive areas such as streams and wetlands.
    - d. Increased stormwater velocity due to loss of vegetation.
    - e. Decreased groundwater recharge due to changes in site hydrology.
    - f. Loss of natural or topographic features that contribute substantially to the natural beauty and visual quality of the community such as loss of tree canopy, forested areas and wildlife habitat.

These provisions are intended to direct building locations to terrain more suitable to development and to discourage development on critical slopes for the reasons listed above, and to supplement other regulations and policies regarding encroachment of development into stream buffers and floodplains and protection of public water supplies.

- (2) *Definition of critical slope.* A critical slope is any slope whose grade is 25% or greater and:
  - a. A portion of the slope has a horizontal run of greater than twenty (20) feet and its total area is six thousand (6,000) square feet or greater; and
  - b. A portion of the slope is within two hundred (200) feet of any waterway as identified on the most current city topographical maps maintained by the department of neighborhood development services.

Parcels containing critical slopes are shown on the map entitled "Properties Impacted by Critical Slopes" maintained by the department of neighborhood development services. These critical slopes provisions shall apply to all critical slopes as defined herein, notwithstanding any subdivision, lot line adjustment, or other action affecting parcel boundaries made subsequent to the date of enactment of this section.
- (3) *Building site required.* Every newly created lot shall contain at least one (1) building site. For purposes of this

section, the term building site refers to a contiguous area of land in slopes of less than 25%, as determined by reference to the most current city topographical maps maintained by the department of neighborhood development services or a source determined by the city engineer to be of superior accuracy, exclusive of such areas as may be located in the flood hazard overlay district or under water.

- (4) *Building site area and dimensions.* Each building site in a residential development shall have adequate area for all dwelling unit(s) outside of all required yard areas for the applicable zoning district and all parking areas. Within all other developments subject to the requirement of a site plan, each building site shall have adequate area for all buildings and structures, parking and loading areas, storage yards and other improvements, and all earth disturbing activity related to the improvements.
- (5) *Location of structures and improvements.* The following shall apply to the location of any building or structure for which a permit is required under the Uniform Statewide Building Code and to any improvement shown on a site plan pursuant to Article VII of this chapter:
- a. No building, structure or improvement shall be located on any lot or parcel within any area other than a building site.
  - b. No building, structure or improvement, nor any earth disturbing activity to establish such building, structure or improvement shall be located on a critical slope, except as may be permitted by a modification or waiver.
- (6) *Modification or waiver.*
- a. Any person who is the owner, owner's agent, or contract purchaser (with the owner's written consent) of property may request a modification or waiver of the requirements of these critical slopes provisions. Any such request shall be presented in writing and shall address how the proposed modification or waiver will satisfy the purpose and intent of these provisions.
  - b. The director of neighborhood development services shall post on the city website notice of the date, time and place that a request for a modification or waiver of the requirements of these critical slopes provisions will be reviewed and cause written notice to be sent to the applicant or his agent and the owner or agent for the owner of each property located within five hundred (500) feet of the property subject to the waiver. Notice sent by first class mail to the last known address of such owner or agent as shown on the current real estate tax assessment books, postmarked not less than five (5) days before the meeting, shall be deemed adequate. A representative of the department of neighborhood development services shall make affidavit that such mailing has been made and file the affidavit with the papers related to the site plan application.
  - c. All modification or waiver requests shall be submitted to the department of neighborhood development services, to be reviewed by the planning commission. In considering a requested modification or waiver the planning commission shall consider the recommendation of the director of neighborhood development services or their designee. The director, in formulating his recommendation, shall consult with the city engineer, the city's environmental manager, and other appropriate officials. The director shall provide the planning commission with an evaluation of the proposed modification or waiver that considers the potential for soil erosion, sedimentation and water pollution in accordance with current provisions of the Commonwealth of Virginia Erosion and Sediment Control Handbook and the Virginia State Water Control Board best management practices, and, where applicable, the provisions of Chapter 10 of the City Code. The director may also consider other negative impacts of disturbance as defined in these critical slope provisions.
  - d. The planning commission shall make a recommendation to city council in accordance with the criteria set forth in this section, and city council may thereafter grant a modification or waiver upon making a finding that:

- (i) The public benefits of allowing disturbance of a critical slope outweigh the public benefits of the undisturbed benefits include, but are not limited to, stormwater and erosion control that maintains the stability of the quality of adjacent or environmentally sensitive areas; groundwater recharge; reduced stormwater velocity on impervious surfaces; and stabilization of otherwise unstable slopes); or
- (ii) Due to unusual size, topography, shape, location, or other unusual physical conditions, or existing development of a property, one (1) or more of these critical slopes provisions would effectively prohibit or unreasonably restrict the use, reuse or redevelopment of such property or would result in significant degradation of the site or adjacent properties.

No modification or waiver granted shall be detrimental to the public health, safety or welfare, detrimental to the orderly development of the area or adjacent properties, or contrary to sound engineering practices.

- e. In granting a modification or waiver, city council may allow the disturbance of a portion of the slope, but may determine that there are some features or areas that cannot be disturbed. These include, but are not limited to:
  - (i) Large stands of trees;
  - (ii) Rock outcroppings;
  - (iii) Slopes greater than 60%.

City council shall consider the potential negative impacts of the disturbance and regrading of critical slopes, and of resulting new slopes and/or retaining walls. City council may impose conditions as it deems necessary to protect the public health, safety or welfare and to insure that development will be consistent with the purpose and intent of these critical slopes provisions. Conditions shall clearly specify the negative impacts that they will mitigate. Conditions may include, but are not limited to:

- (i) Compliance with the "Low Impact Development Standards" found in the City Standards and Design Manual.
- (ii) A limitation on retaining wall height, length, or use;
- (iii) Replacement of trees removed at up to three-to-one ratio;
- (iv) Habitat redevelopment;
- (v) An increase in storm water detention of up to 10% greater than that required by city development standards;
- (vi) Detailed site engineering plans to achieve increased slope stability, ground water recharge, and/or decrease in stormwater surface flow velocity;
- (vii) Limitation of the period of construction disturbance to a specific number of consecutive days;
- (viii) Requirement that reseeded occur in less days than otherwise required by City Code.

- (7) *Exemptions.* A lot, structure or improvement may be exempt from the requirements of these critical slopes provisions, as follows:
  - a. Any structure which was lawfully in existence prior to the effective date of these critical slopes provisions, and which is nonconforming solely on the basis of the requirements of these provisions, may be expanded, enlarged, extended, modified and/or reconstructed as though such structure were a conforming structure. For the purposes of this section, the term "lawfully in existence" shall also apply to any structure for which a site plan was approved or a building permit was issued prior to the effective date of these provisions, provided such plan or permit has not expired.
  - b. Any lot or parcel of record which was lawfully a lot of record on the effective date of this chapter shall be exempt from the requirements of these critical slopes provisions for the establishment of the first single-

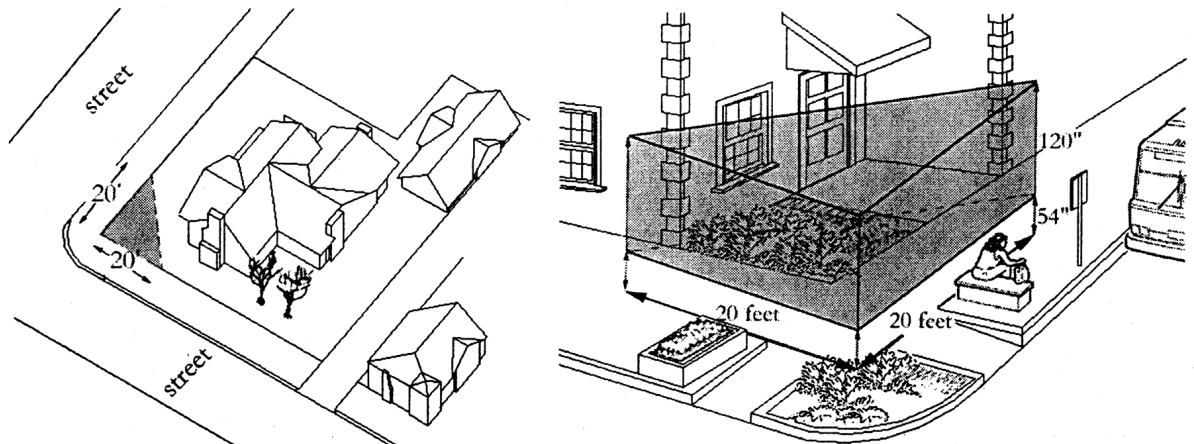


family dwelling unit on such lot or parcel; however, subparagraph (5)(b) above, shall apply to such lot or parcel if it contains adequate land area in slopes of less than 25% for the location of such structure.

- c. Driveways, public utility lines and appurtenances, stormwater management facilities and any other public facilities necessary to allow the use of the parcel shall not be required to be located within a building site and shall not be subject to the building site area and dimension requirements set forth above within these critical slopes provisions, provided that the applicant demonstrates that no reasonable alternative location or alignment exists. The city engineer shall require that protective and restorative measures be installed and maintained as deemed necessary to insure that the development will be consistent with the purpose and intent of these critical slopes provisions.

(9-15-03(3); 11-21-05; 1-17-06(7); 1-17-12; 7-16-12)

Sec. 34-1121. - Sight distance—Required sight triangle.



**Sight Distance**

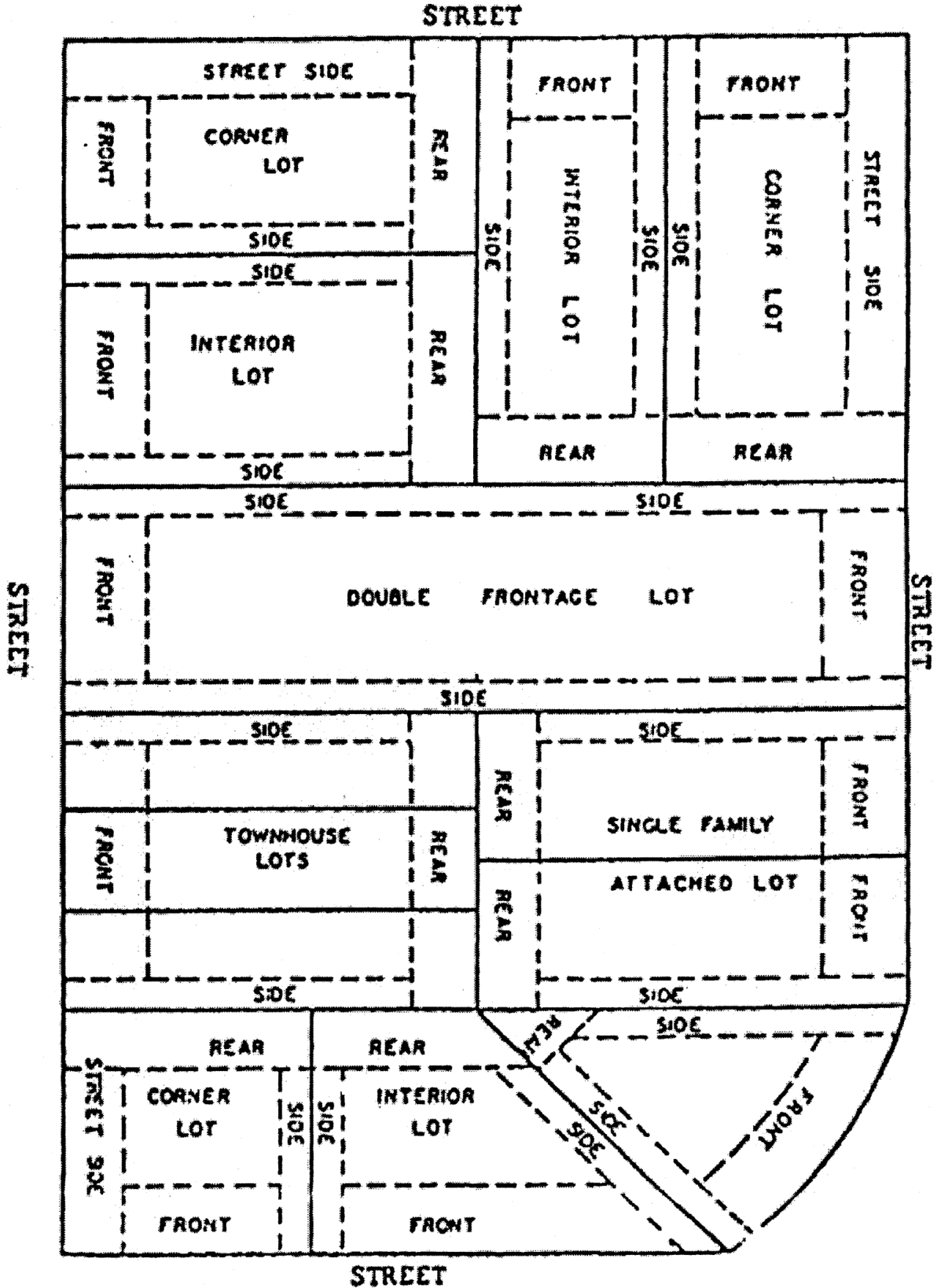
- (a) For purposes of this section, the term "sight triangle" shall mean:
- (1) The triangular area formed at a corner intersection of public right-of-way and a driveway, at a corner intersection of an alley public right-of-way and a street right-of-way, or at a corner intersection of two (2) public rights-of-way, where
  - (2) The two (2) equal sides are twenty (20) feet long, measured along
    - a. The right-of-way line of the street and the edge of the driveway, or
    - b. The lines of each of the two (2) intersecting public rights-of-way; and where
  - (3) The third side of the triangle is a line connecting the two (2) equal sides.
- (b) Where a driveway intersects a public right-of-way, or where property abuts the intersection of two (2) public rights-of-way, no person shall place or maintain any structures, fences, landscaping or any other objects within any sight triangle area, where any such object(s) obstruct or obscure sight distance visibility by more than twenty-five (25) percent of the total view in the vertical plane above the sight triangle area between a height of fifty-four (54) inches and one hundred twenty (120) inches above the roadway surface, except for the following:
- (1) Landscaping, structures or fences that protrude no more than fifty-four (54) inches above the adjacent roadway surface may be permitted within the sight triangle area; and
  - (2) Trees may be planted and maintained within the sight triangle area, if all branches are trimmed to maintain a clear vision for a vertical height of one hundred twenty (120) inches above the roadway surface and the location of the trees planted (based on the tree species' expected mature height and size) does not obstruct sight visibility by more than twenty-five (25) percent of the sight triangle area.



- (3) United States mail boxes, police and fire alarm boxes, public utility poles, street name markers, official traffic sign devices, fire hydrants, and trees having no visual obstruction (other than the tree trunk) up to the height of ten (10) established street grade.

(9-15-03(3); 11-21-05)

Sec. 34-1122. - Interpretation of lot and yard designations.



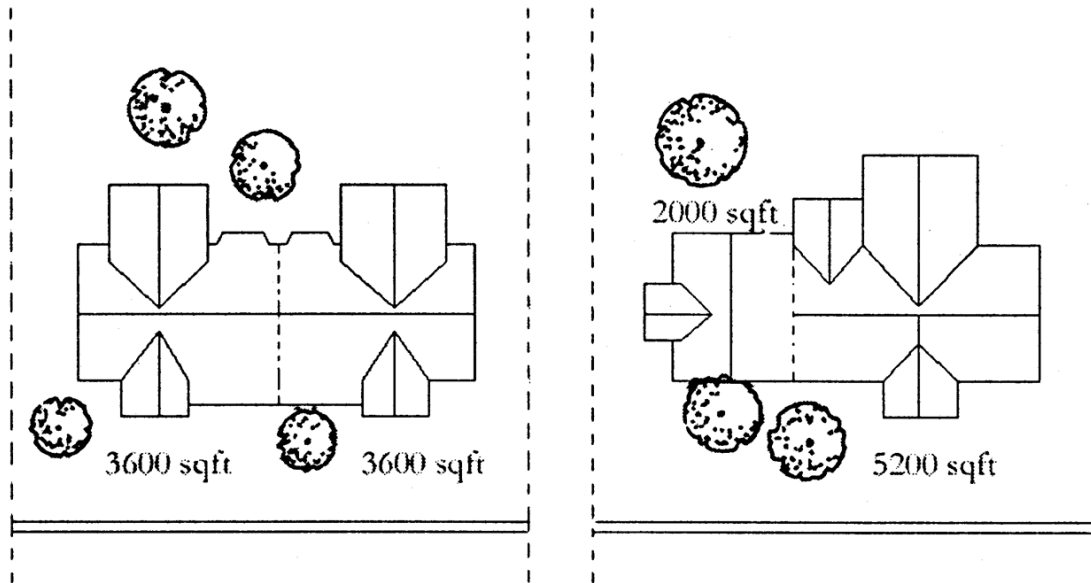


Interpretation of Lot and Yard Designations

(9-15-03(3))

Sec. 34-1123. - Lot area requirements—Certain residential uses.

When located on a lot containing fewer than three (3) total dwelling units, and where permitted within the applicable zoning district, the following residential uses shall be subject to the specified minimum (min.) and average (avg.) lot area requirements, according to the zoning district in which such uses are located:



Lot Area Requirements—Residential Uses

	Single-Family Detached (SFD)	Single-Family Attached (SFA)	Two-Family (TFD)	Townhouse (TH)
R-1	8,125 SF min.	NA	NA	NA
R-1S	6,000 SF min.	NA	NA	NA
R-1U	8,125 SF min.	NA	NA	NA
R-1US	6,000 SF min.	NA	NA	NA
R-2, R-2U, and McIntire/5th St. Res. Corridor	6,000 SF min.	Per dwelling unit: 2,000 SF, min., 3,600 SF, avg.	7,200 SF, min.; 6,000 SF, min. for lots of record prior to 08/03/64	2,000 SF, min.



All other districts	6,000 SF min.	Per dwelling unit: 2,000 SF, min., 3,600 SF, avg.	7,200 SF, min.; 6,000 SF, min. for lots of record prior to 08/03/64	2,000 SF, min.
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(9-15-03(3); 6-6-05(2))

Sec. 34-1124. - Vacant lot construction—Required sidewalks, curbs and gutters.

- (a) The planning commission shall, from time to time, promulgate criteria by which the utility and necessity (i.e., high-priority versus low-priority, taking into account public necessity versus cost to the property owner) of community sidewalks may be assessed ("sidewalk criteria"). These criteria shall guide the city's expenditure of funds within the sidewalk improvement fund referred to in paragraph (b), below. A copy of these sidewalk criteria shall be maintained within the department of neighborhood development services.
- (b) For the protection of pedestrians and to control drainage problems, when not more than two (2) dwelling units are to be constructed upon a previously unimproved lot or parcel, or when any single-family detached dwelling is converted to a two-family dwelling, sidewalk, curb and gutter (collectively, "sidewalk improvements") shall be constructed within public right-of-way dedicated along the adjacent public street frontage for that purpose. No certificate of occupancy shall be issued for the dwelling(s) until the sidewalk improvements have been accepted by the city for maintenance, or an adequate financial guaranty has been furnished to the city conditioned upon completion of the sidewalk improvements within a specific period of time. The requirements of this paragraph shall not apply, if (i) the owner of the lot or parcel obtains a waiver of the required sidewalk improvements from city council, or (ii) the owner of the lot or parcel, at the owner's sole option, elects to contribute funds to a sidewalk improvement fund in an amount equivalent to the cost of dedication of land for and construction of the required sidewalk, curb and gutter.
- (c) Sidewalks, curbs and gutters required by this section shall be constructed in accordance with the standards set forth within the city's subdivision ordinance.
- (d) Nothing within this section shall in any way affect the city's authority to require sidewalks, curb and gutter to be bonded and constructed by a developer on any newly constructed public street. The provisions of paragraph (b), above, shall not apply to any lot or parcel of land within a "development," as that term is defined within section 34-1200.

(9-15-03(3); 7-16-12; 6-15-15(1))

Sec. 34-1125. - Required plans and approvals—Residential dwellings.

Except in the case of construction in developments pursuant to an approved site plan, along with each application for a building permit for constructing, enlarging, altering, or demolishing a single- or two-family dwelling, an applicant shall provide the following information and materials, to enable the zoning administrator to review the application to determine compliance with the requirements of this article:

- (1) Construction or reconstruction of a residential dwelling, on a vacant lot:
  - a. A survey plat, showing (without limitation) the boundaries of the lot, and the area of the lot (indicated in square feet and/or acreage)
  - b. Construction plans, showing the location of the proposed building in relation to lot lines, required yards,



required sidewalk, curb and gutter, etc.

- c. A drawing identifying trees to be removed during the construction process, and specifying the diameter, location and condition of those trees.
- (2) Proposed additions/modifications of an existing building:
- a. A construction plan, showing the location and footprint of each proposed addition, in relation to lot lines, required yards, sidewalks, etc.
  - b. A plan indicating the number, location, and materials to be used in construction of additional off-street parking spaces required in connection with, or as a result of, the proposed addition/modification;
  - c. A drawing identifying trees to be removed during the construction process, and specifying the diameter, location and condition of those trees.
  - d. A written certification indicating the existing use(s) of the building which is the subject of the application, and of all other buildings located on the same lot.

(9-15-03(3))

Sec. 34-1126. - Mixed-use development.

- (a) With respect to any mixed-use development residential density may be calculated using the area of the entire development site, even if one (1) or more residential components is or will be situated on an individual lot not subject to ownership in common with other lots comprising the development site. For the purpose of this section, the term "development site" shall mean and refer to all the lots or parcels of land containing, or proposed to contain, any component(s) of a mixed use development, where all such lots or parcels have been included within and are subject to the requirements of a single (1) site plan.
- (b) Notations shall be included on all subdivision plats, site plans, building permits and certificates of occupancy for a mixed use development, identifying the component uses and density limitations applicable to the mixed use development.

(9-15-03(3))

Secs. 34-1127—34-1139. - Reserved.