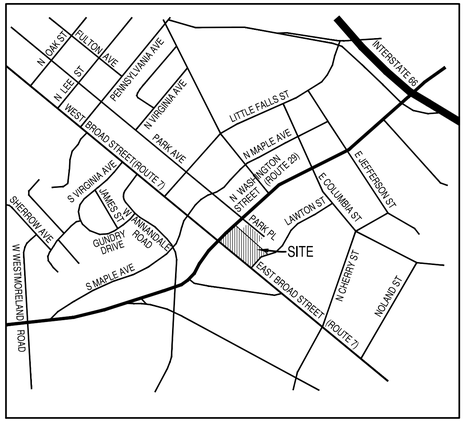
BROAD & WASHINGTON

CITY OF FALLS CHURCH, VIRGINIA

SPECIAL EXCEPTION AND CONCEPTUAL DEVELOPMENT PLAN

MUNIS #2019-



VICINITY MAP
1"=1000'

SHEET INDEX

C1.0 COVER SHEET
C2.0 NOTES AND SITE TABULATIONS
C3.0 EXISTING CONDITIONS SURVEY PLAN
C4.0 CONCEPTUAL DEVELOPMENT PLAN
C5.0 PRELIMINARY GRADING AND UTILITY PLAN
C6.0 CONCEPTUAL STREETSCAPE PLAN
C7.0 CONCEPTUAL STREETSCAPE PLAN EAST BROAD STREET
C8.0 CONCEPTUAL STREETSCAPE PLAN LAWTON STREET AND N. WASHINGTON STREET
C9.0 CONCEPTUAL STREETSCAPE PLAN PARK PLACE
C10.0 STREET FURNISHING DETAILS
C11.0 ROADWAY FRONTAGE EXHIBIT
C12.0 CONCEPTUAL PARKING PLANS
C13.0 LANDSCAPE SCHEDULE, NOTES, DETAILS AND EXISTING TREE INVENTORY
C14.0 EXISTING VEGETATIVE MAP
C15.0 CONCEPTUAL SWM AND BMP PLAN AND DRAINAGE MAP
C16.0 CONCEPTUAL SWM & BMP COMPUTATIONS AND DETAILS
C17.0 PRELIMINARY SANITARY SEWER ANALYSIS
C18.0 PRELIMINARY AUTO-TURN EXHIBIT
L1.00 PLAZA LANDSCAPE PLAN
L1.01 PASSAGE PARK LANDSCAPE PLAN
20 TOTAL SHEETS

OWNER/APPLICANT:
BROAD & WASHINGTON , LLC
4601 N. Fairfax Drive,
Suite 1150
Arlington, Virginia 22203

DEVELOPER:
Insight Property Group, LLC
4601 N. Fairfax Drive,
Suite 1150
Arlington, Virginia 22203

ARCHITECT:
MV&A Architects
1200 G Street N.W.,
Suite 250
Washington D.C. 20005

ATTORNEY / AGENT:
McGuire Woods, LLP
1750 Tyson Boulevard,
Suite 1800
McLean, Virginia 22102

CIVIL ENGINEER:
Bowman Consulting Group, LTD.
13461 Sunrise Valley Dr,
Suite 500
Herndon, Virginia 20171

TRAFFIC CONSULTANT:
Gorove Slade Associates
3914 Centreville Road,
Suite 330
Chantilly, Virginia 20151

LANDSCAPE ARCHITECT:
Parker Rodriguez, Inc.
101 N. Union Street,
Suite 320
Alexandria, Virginia 22314

COMMONWEALTH OF VIRGINIA
MATTHEW J. TAUSCHER
Lic. No. 000832
08/10/2020
LANDSCAPE ARCHITECT

AUGUST 10, 2020
APRIL 3, 2020
NOVEMBER 20, 2019

GENERAL NOTES:

1. THE SUBJECT PROPERTIES SHOWN HEREON ARE CURRENTLY LISTED WITHIN THE CITY OF FALLS CHURCH TAX ASSESSMENT RECORDS AS FOLLOWS:

PARCEL I.D.	ADDRESS	OWNER	DEED BOOK/PAGE	EXISTING ZONE:
53-104-051	100 N. WASHINGTON ST	BROAD & WASHINGTON, LLC	4816/936	B-2 (CENTRAL BUSINESS)
53-104-036	127 E. BROAD ST	BROAD & WASHINGTON, LLC.	4816/936	B-2 (CENTRAL BUSINESS)
53-104-050	131 E. BROAD ST	BROAD & WASHINGTON, LLC	4816/936	B-2 (CENTRAL BUSINESS)
53-104-015	PARK PL	CITY OF FALLS CHURCH	1261/0269	B-2 (CENTRAL BUSINESS)

2. THE APPLICATION PROPERTY IS CURRENTLY ZONED B-2 (CENTRAL BUSINESS) ZONING DISTRICT. THIS APPLICATION INCLUDES A SPECIAL EXCEPTION IN ORDER TO DEVELOP THE SUBJECT SITE AS A MIXED USE DEVELOPMENT.
3. THE SUBJECT PROPERTY LIES WITHIN AN AREA DESIGNATED AS "MIXED-USE AND BUSINESS" ON THE FUTURE LAND USE PLAN MAP OF THE CITY OF FALLS CHURCH COMPREHENSIVE PLAN.
4. THE SUBJECT PROPERTY IS CURRENTLY SERVED BY FAIRFAX WATER AND CITY OF FALLS CHURCH SANITARY SEWER AND STORM SEWER UTILITIES.
5. BOUNDARY INFORMATION AS SHOWN HEREON IS COMPILED FROM EXISTING LAND RECORDS OF ARLINGTON COUNTY, VIRGINIA AND FAIRFAX COUNTY, VIRGINIA AND A FIELD SURVEY PERFORMED BY BOWMAN CONSULTING GROUP, LTD. DATED SEPTEMBER 17, 2014.
6. THE HORIZONTAL AND VERTICAL DATUM'S AS REFERENCED HEREON WERE ESTABLISHED BY STATIC GPS CONTROL METHODS. THE HORIZONTAL DATUM IS REFERENCED TO VIRGINIA COORDINATE SYSTEM OF 1983 (VCS 83), NORTH ZONE AND IS REFERENCED IN U.S. SURVEY FEET AND THE VERTICAL DATUM IS REFERENCED TO NGVD 83 AND WAS ESTABLISHED BY GPS METHODS.
7. THE TOPOGRAPHICAL FEATURES AS SHOWN HEREON WERE COMPILED FROM CONVENTIONAL SURVEY METHODS.
8. UNDERGROUND UTILITIES SHOWN HEREON ON BASED ON VISUAL OBSERVATION AND HAVE NOT BEEN SPECIFICALLY CONFIRMED.
9. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO UTILITY EASEMENTS HAVING A WIDTH OF TWENTY-FIVE (25) OR GREATER LOCATED WITHIN THE SUBJECT PROPERTY.
10. THERE ARE NO AREAS OF SCENIC ASSETS OR NATURAL FEATURES DESERVING OF PROTECTION OR PRESERVATION ON THE SITE.
11. THERE IS NO FLOODPLAIN WITHIN THE SUBJECT PROPERTY AS DESIGNATED BY THE FEDERAL INSURANCE ADMINISTRATION AS SHOWN ON FEMA FLOOD INSURANCE RATE MAP FOR CITY OF FALLS CHURCH, VIRGINIA, COMMUNITY-PANEL NUMBER 5100540001C, EFFECTIVE DATE JULY 16, 2004. THERE ARE NO RESOURCE PROTECTION AREAS (RPA) OR ENVIRONMENTAL QUALITY CORRIDOR (EQC) WITHIN THE SUBJECT PROPERTY INDICATED ON CITY OF FALLS CHURCH GIS DATA.
12. STORMWATER MANAGEMENT (SWM) AND BEST MANAGEMENT PRACTICES (BMP) ARE PROPOSED WITH THIS APPLICATION AND CONCEPTUAL DESIGN COMPUTATIONS ARE DEMONSTRATED HEREIN. FINAL DESIGN OF SWM/BMP FACILITIES WILL BE PROVIDED AT THE TIE OF FINAL SITE PLAN APPLICATION.
13. THIS SITE SHALL BE DEVELOPED IN ONE PHASE SUBJECT TO REQUIRED PLAN APPROVALS AND PERMIT ISSUANCE.

REQUESTED LAND USE ACTIONS:

COMPREHENSIVE PLAN:

THE PURPOSE OF THIS COMPREHENSIVE PLAN AMENDMENT IS TO AMEND THE FUTURE LAND USE DESIGNATION ON THE CITY OWNED PROPERTY FROM BUSINESS USE TO MIXED-USE.

SPECIAL EXCEPTION:

Z.O. SECTION 48-90 (GENERAL REQUIREMENTS) & SECTION 48-488 (B-2 DISTRICT REQUIREMENTS)

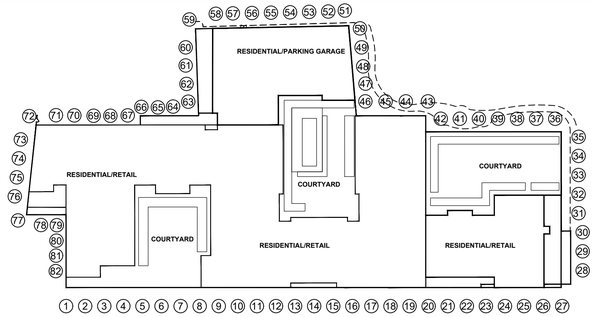
1. THE PURPOSE OF THIS SPECIAL EXCEPTION APPLICATION IS TO:
   A. ALLOW FOR RESIDENTIAL USE WITHIN A MIXED-USE REDEVELOPMENT WITHIN THE B-2 ZONING DISTRICT.
   B. ALLOW FOR ADDITIONAL BUILDING HEIGHT (OF APPROXIMATELY 11 FT)

WAIVER / VARIANCE REQUESTS:

Z.O. SECTION 48-971(2)-PARKING
WAIVER OF THE REQUIRED PARKING (947 SPACES) TO THOSE PROVIDED (686 SPACES) AS DEMONSTRATED IN THE PARKING STUDY, TRAFFIC REDUCTION PLAN AND TRAFFIC DEMAND MANAGEMENT PLAN SUBMITTED UNDER SEPARATE COVER.

Z.O. SECTION 48-1181: PERIMETER PARKING LOT LANDSCAPING
WAIVER TO ELIMINATE REQUIRED PERIMETER PARKING LOT LANDSCAPING, AS PROPOSED PARKING IS LOCATED WITHIN AN OFF-STREET PARKING GARAGE STRUCTURE.

Z.O. SECTION 48-1182: INTERIOR PARKING LOT LANDSCAPING
WAIVER TO ELIMINATE REQUIRED INTERIOR PARKING LOT LANDSCAPING, INCLUDING FIVE PERCENT (5%) CANOPY COVERAGE, AS PROPOSED PARKING IS LOCATED WITHIN AN OFF-STREET PARKING GARAGE STRUCTURE.



AVERAGE GRADE SPOT LOCATION

(SPOT ELEVATION CALCULATED AT PROPOSED BUILDING FACE)

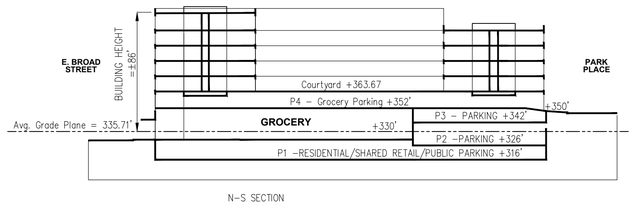
DEVELOPMENT NOTE:

1. OWNER/CONTRACT OWNER SHALL JOIN IN THE SITE PLAN APPROVAL AND AGREES TO BE BOUND BY ALL SITE PLAN REQUIREMENTS.

AVERAGE GRADE TABULATIONS

NUMBER	A EXISTING GRADE ELEVATION (1)	B PROPOSED GRADE ELEVATION (1)	BUILDING HEIGHT GRADE CALCULATION (1) (LOWER OF A OR B)
1	329.70	329.40	329.40
2	329.60	329.70	329.60
3	329.60	329.50	329.60
4	330.55	329.50	329.50
5	330.40	330.10	330.10
6	330.50	330.40	330.40
7	330.70	330.45	330.45
8	330.90	330.40	330.40
9	331.00	330.20	330.20
10	332.50	330.00	330.00
11	333.00	329.80	329.80
12	333.00	329.65	329.65
13	332.20	329.40	329.40
14	331.60	329.20	329.20
15	331.00	328.90	328.90
16	330.10	328.30	328.30
17	329.50	328.30	328.30
18	329.30	328.10	328.10
19	328.30	327.80	327.80
20	328.80	327.70	327.70
21	329.50	327.40	327.40
22	330.50	327.35	327.35
23	331.80	327.60	327.60
24	333.00	327.50	327.50
25	331.00	327.60	327.60
26	330.80	327.80	327.80
27	330.80	328.00	328.00
28	332.30	331.00	331.00
29	332.90	332.20	332.20
30	333.70	333.50	333.50
31	334.00	335.10	334.00
32	335.00	336.10	335.00
33	336.25	337.30	336.25
34	337.50	338.10	337.50
35	338.30	339.00	338.30
36	338.60	341.00	338.60
37	338.55	341.00	338.55
38	338.55	341.00	338.55
39	338.55	341.00	338.55
40	338.55	341.00	338.56
41	338.55	341.25	338.55
42	338.75	341.50	338.75
43	340.00	341.00	340.00
44	340.00	341.00	340.00
45	341.00	341.75	341.00
46	341.00	345.50	341.00
47	342.80	345.75	342.80
48	343.80	346.00	343.80
49	344.80	346.25	344.80
50	346.00	347.25	346.00
51	347.00	348.00	347.00
52	346.90	348.65	346.90
53	346.90	349.25	346.90
54	346.90	349.50	346.90
55	346.90	349.75	346.90
56	346.80	350.25	346.80
57	346.80	350.00	346.80
58	346.80	350.50	346.80
59	347.00	347.00	347.00
60	345.30	345.30	345.30
61	344.50	344.50	344.50
62	343.00	343.00	343.00
63	341.50	341.50	341.50
64	341.50	341.50	341.50
65	341.00	341.00	341.00
66	340.00	339.00	339.00
67	339.20	338.00	338.00
68	337.50	337.75	337.50
69	337.00	337.70	337.00
70	337.00	337.70	337.00
71	337.00	337.70	337.00
72	337.00	337.70	337.00
73	336.35	336.50	336.35
74	335.00	335.25	335.00
75	334.10	334.25	334.10
76	334.10	333.25	333.25
77	334.10	332.50	332.50
78	329.60	332.30	329.60
79	329.60	332.30	329.60
80	329.60	331.90	329.60
81	329.60	329.90	329.60
82	329.60	329.80	329.60
AVERAGE=	**336.39**	**336.57**	**335.71**

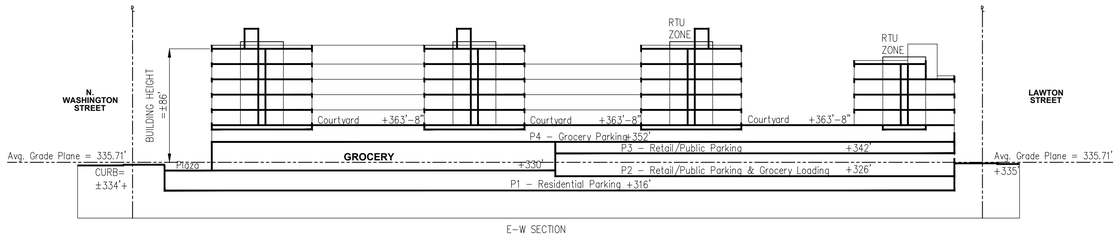
(1) Final elevation subject to change with final site plan design.



N-S SECTION

CROSS SECTION 'A'-'A' SCHEMATIC

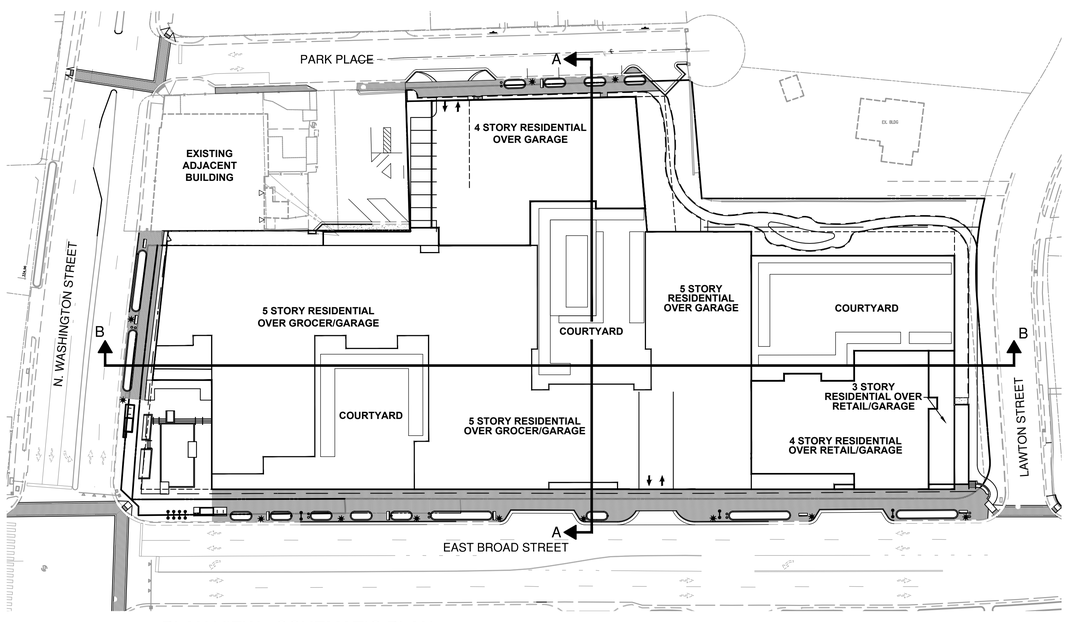
SCALE: 1" = 50'



E-W SECTION

CROSS SECTION 'B'-'B' SCHEMATIC

SCALE: 1" = 50'



PLAN VIEW - SCHEMATIC PLAN

SCALE: 1" = 60'

SITE TABULATIONS:

Current Zoning:	B-2 (Central Business)
Proposed Zoning:	B-2 (Central Business)
Total Site Area:	3.16 AC (per Field Survey)
Proposed Use:	Mixed-Use (Residential / Retail)
FLOOR AREA	
Proposed GFA	
Retail / Restaurant	6,500 GFA
Theatre	5,000 GFA
Grocery (Including Mezzanine)	56,600 GFA
Residential Area (Includes Residential Lobby Area)	350,502 GFA
Total Gross Floor Area	418,602 GFA (1)(2)
FLOOR AREA RATIO (F.A.R.)	
Minimum F.A.R.:	None
Maximum F.A.R.:	None
Proposed F.A.R.:	3.04 (2)(3)
Density	
Total Proposed Dwelling Units:	339 D.U.
Proposed Residential Density:	107 DU/AC
Maximum Building Height Allowed:	115 FT W/ Bonus
	(75 FT By-Right + 40 FT By S.E.)
Proposed Building Height: (measured from average grade)	±86 FT

Open Space (Usable)(%):	**REQUIRED**	**PROVIDED**
	N/A	± 12 % (Public Accessible)

YARD REQUIREMENTS:

	REQUIRED	PROVIDED
Minimum Front Yard Setback E. Broad Street (To Face of Curb):	20 FT	20 FT
Minimum Front Yard Setback N. Washington Street (To Face of Curb):	20 FT	20 FT
Minimum Front Yard Setback Lawton Street (To Face of Curb):	14 FT	20 FT
Minimum Front Yard Setback Park Place (To Face of Curb):	14 FT	14 FT
Minimum Side/Rear Yard Setback (To Property Line):	20 FT (Adjacent 'R' District) 0 FT (Adjacent B-2 District)	20 FT 0 FT

PARKING TABULATIONS:

	REQUIRED	PROVIDED
Trade - General Merchandise Retail / Restaurant:		
Retail (1 Space/250 SF @ 1,500 SF)	6 Spaces	6 Spaces
Restaurant (1 Space/100 'Customer' SF @ 3,750 SF)	38 Spaces	43 Spaces
Theatre		
(1 Space/4 Seats (Fixed)) (@ 100 Seats)	25 Spaces (6)	25 Spaces
Grocery:		
(1 Space/200 SF @ 56,600 SF)	283 Spaces	210 Spaces
Residence (Multi-Family):		
Studio/Efficiency Unit (1 Space/ D.U. @ 48 DU) One Bedroom Unit (1.5 Space/ D.U. @ 198 DU) Two/Three Bedroom Unit (2 Space/ D.U. @ 93 DU)	531 Spaces	338 Spaces
Public Parking	64 Spaces	64 Spaces
TOTAL AUTOMOBILE PARKING:	947 Spaces	686 Spaces (4)(5)
Bike Parking:		
Retail (On-Street)	18 Spaces	18 Spaces
Residential (Interior Building)	149 Spaces	149 Spaces
TOTAL BIKE PARKING:	167 Sapces	167 Spaces

LOADING TABULATIONS:

	REQUIRED	PROVIDED
Grocery	1 Space	2 Spaces
General Retail-Merchandise	1 Space	2 Spaces
Restaurant	1 Space	
Theatre	1 Space	
Residential Multi-Family	0 Space	
TOTAL LOADING:	4 Spaces	4 Spaces

(1) Gross Floor Area (GFA) reported per code definition.
(2) F.A.R / GFA does not include area of structured parking.
(3) F.A.R. is based on current site area prior to dedication/vacation of road frontage.
(4) Final provided parking quantity for the various uses is subject to change with final dwelling unit count and mix, and final retail GFA etc., as determined at final site plan and final parking reduction plan, by the City Planning Commission under Section 48-971(2) of the city code.
(5) Refer to conceptual parking plan herein, and parking reduction plan under separate cover, for layout and proposed distribution of parking spaces. Restricted parking (Residential uses) is to be located on parking levels **P1&P2**. Shared parking (Retail and Public access) is to be located on level **P2,P3,P4**. Final location of parking spaces may change subject to final parking plan and V.C.S.
(6) The number of seats within the Theatre is subject to change with final buildng design and permit.

Bowman CONSULTING

Bowman Consulting Group, Ltd.
13461 Sunrise Valley Drive
Suite 500
Herndon, Virginia 20171
Phone: (703) 464-1000
Fax: (703) 481-9720
www.bowmanconsulting.com

© Bowman Consulting Group, Ltd.

NOTES AND SITE TABULATIONS
BROAD & WASHINGTON
CITY OF FALLS CHURCH, VIRGINIA

COMMONWEALTH OF VIRGINIA
MATTHEW J. TAUSCHER
Lic. No. 000832
08/10/2020
LANDSCAPE ARCHITECT

PLAN STATUS	
08/10/20	3rd Submission
04/03/20	2nd Submission
11/20/19	1st Submission
DATE	DESCRIPTION

MT	KF	MT
DESIGN	DRAWN	CHKD

SCALE H: N/A V:

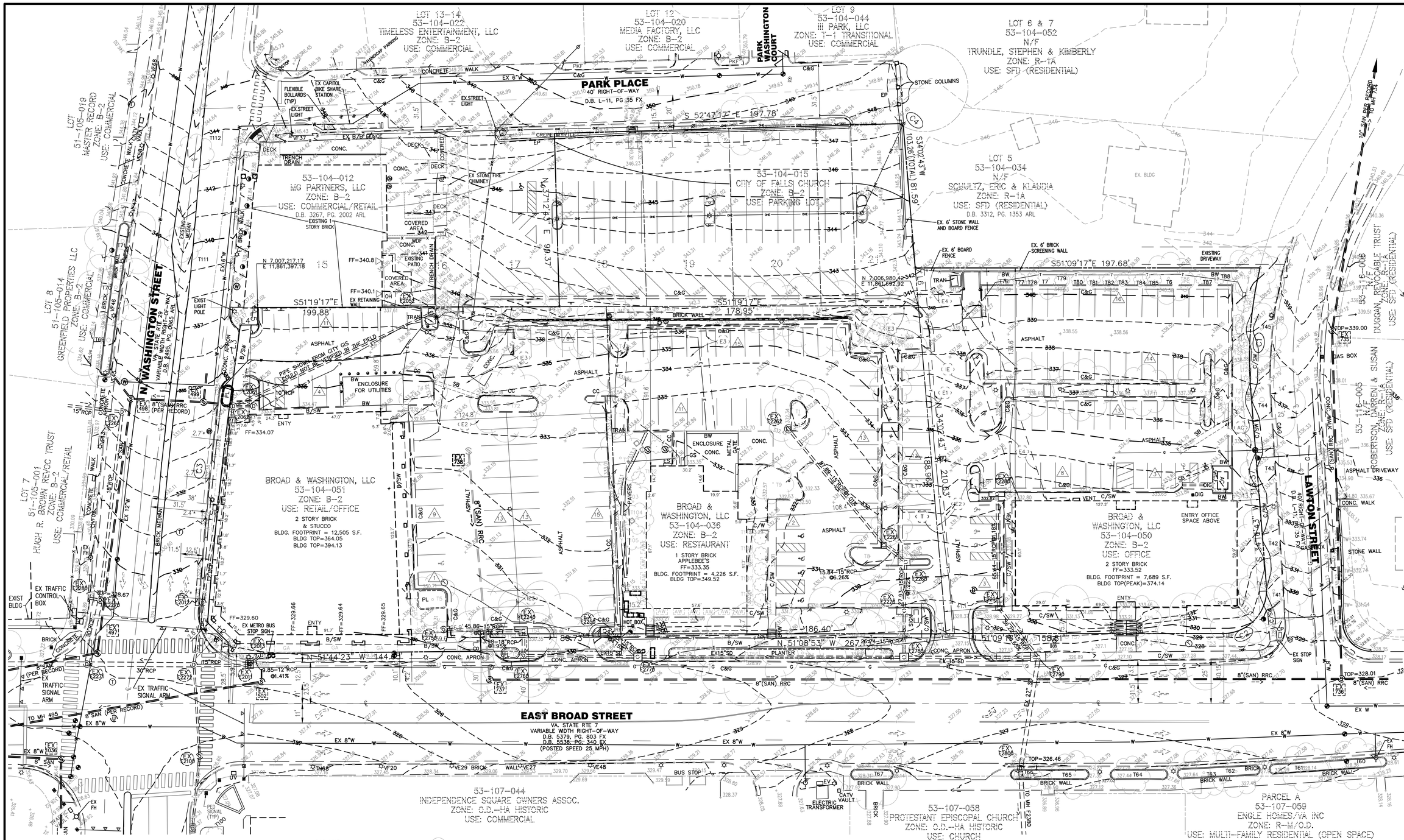
JOB No. 8366-01-001

DATE : NOVEMBER 2019

FILE No. 8366-D-RZ-001

SHEET C2.0

P:\8366 – Falls Church Assemblage\8366-02-001 (PLN) – Broad & Washington St\Planning\Special Exception 2019\8366-D-RZ-001 NOT.dwg



LEGEND
(EXISTING)

- INDEX CONTOUR
- INTERMEDIATE CONTOUR
- EDGE OF PAVEMENT
- CURB AND GUTTER
- PROPERTY LINE
- RIGHT-OF-WAY
- CENTERLINE
- FENCE LINE
- EASEMENT
- WATER LINE
- GAS LINE
- OVERHEAD UTILITY
- SANITARY SEWER
- STORM SEWER
- ELECTRIC SERVICE
- TELEPHONE SERVICE
- UTILITY POLE
- SANITARY SEWER IDENTIFIER (CITY RECORD)
- STORM DRAIN IDENTIFIER (CITY RECORD)
- WATER METER
- TREE/TREELINE
- EASEMENT IDENTIFIER
- PARKING COUNT
- GAS VALVE
- TELECOM MANHOLE
- LIGHT POLE
- FIRE HYDRANT
- WATER VALVE
- SANITARY CLEANOUT

LINE TABLE

LINE	BEARING	DISTANCE
L1	N 39°23'24" E	6.19'
L2	N 07°25'46" W	16.88'
L3	N 46°29'04" E	37.13'
L4	S 51°35'29" E	9.99'
L5	N 38°24'08" E	9.96'
L6	N 34°02'43" E	21.67'
L7	S 34°02'43" W	0.13'
L8	S 35°45'56" W	10.02'

CURVE TABLE

CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD	DELTA	TANGENT
C1	224.41'	70.25'	S 43°14'50" W	69.97'	17°56'14"	35.42'
C2	25.00'	41.26'	S 81°33'43" W	36.74'	94°34'00"	27.08'
C3	2252.83'	134.69'	N 44°45'46" E	134.67'	3°25'32"	67.37'
C4	25.00'	2.76'	S 19°05'05" E	2.76'	6°20'00"	1.38'

NOTE:
1. REFER TO SHEET C13.0 FOR EXISTING TREE INVENTORY LIST.
2. REFER TO SHEET C15.0 FOR EXISTING ON-SITE EASEMENTS DESCRIPTION.

GRAPHIC SCALE
25 0 12.5 25 50 100
(IN FEET)
1 inch = 25 ft.

P:\8366 – Falls Church Assemblage\8366-02-001 (PLN) – Broad & Washington St\Planning\Special Exception 2019\8366-D-RZ-001 XCD.dwg

Bowman CONSULTING

Bowman Consulting Group, Ltd.
13461 Sunrise Valley Drive
Suite 500
Herndon, Virginia 20171
Phone: (703) 464-1000
Fax: (703) 481-9720
www.bowmanconsulting.com
© Bowman Consulting Group, Ltd.

EXISTING CONDITIONS SURVEY PLAN
BROAD & WASHINGTON
CITY OF FALLS CHURCH, VIRGINIA

COMMONWEALTH OF VIRGINIA
MATTHEW J. TAUSCHER
Lic. No. 000832
08/10/2020
LANDSCAPE ARCHITECT

PLAN STATUS

DATE	DESCRIPTION
08/10/20	3rd Submission
04/03/20	2nd Submission
11/20/19	1st Submission

MT	KF	MT
DESIGN	DRAWN	CHKD

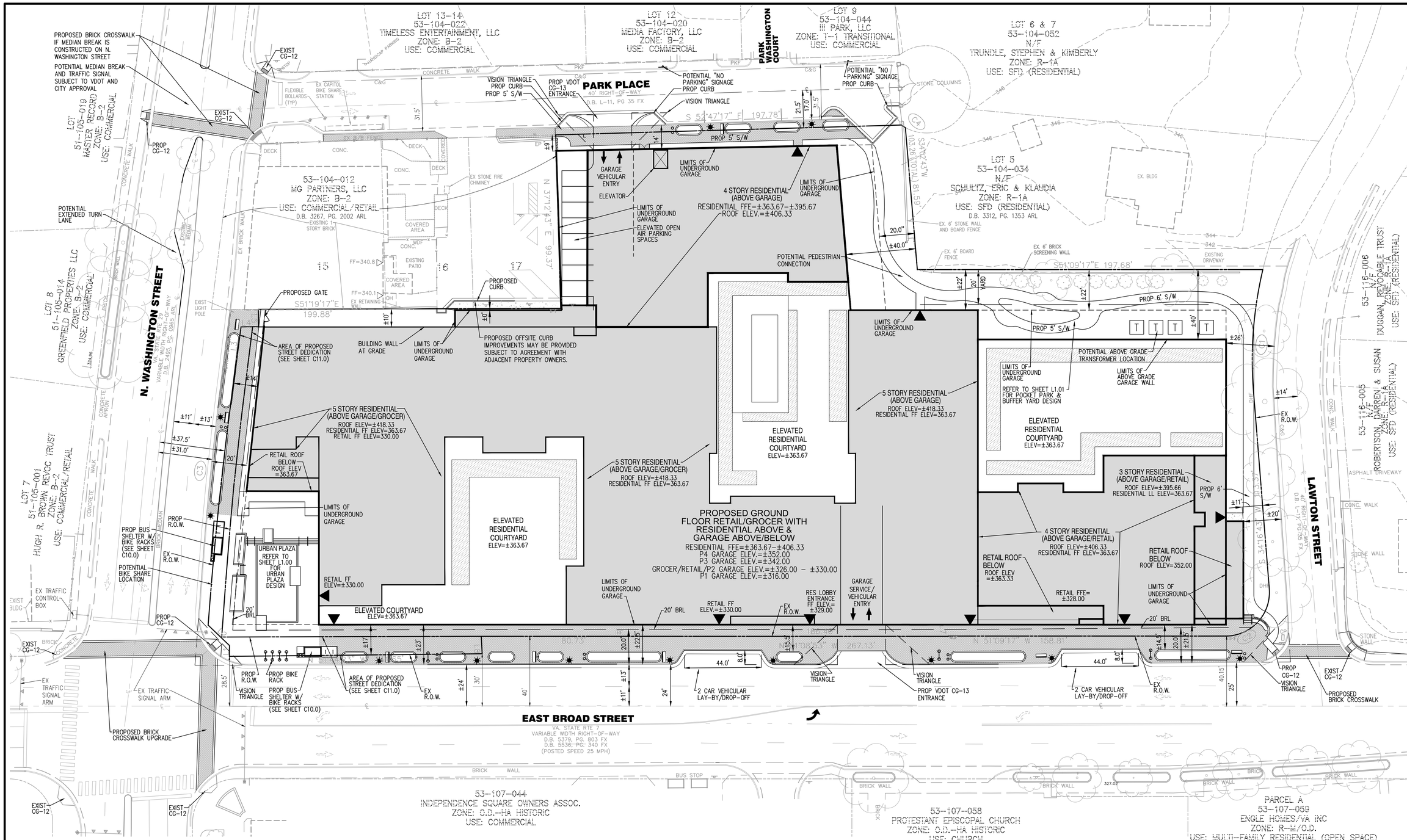
SCALE H: 1" = 25' V:

JOB No. 8366-01-001

DATE : NOVEMBER 2019

FILE No. 8366-D-RZ-001

SHEET C3.0



LEGEND

- ELEVATED COURTYARD/TERRACE
- AT GRADE ENTRY DOOR
- PROPOSED STREET LIGHT
- PROPOSED VEHICULAR ACCESS LOCATION
- LL = LOWER LEVEL
- FF = FIRST FLOOR
- PROPOSED PROPERTY LIMITS

NOTE:

1. REFER TO SHEET C12.0 FOR CONCEPTUAL PARKING GARAGE LAYOUT.
2. FINAL STREET LIGHT, BUS SHELTER AND POTENTIAL BIKE SHARE LOCATIONS ARE TO BE DETERMINED AT TIME OF FINAL SITE PLAN.
3. BUILDING ACCESS ELEMENT LOCATIONS INCLUDING DOORS, STAIRS, ELEVATORS, AND ESCALATORS ARE PRELIMINARY AND SUBJECT TO CHANGE WITH FINAL DESIGN.

VCS 83, NORTH ZONE

GRAPHIC SCALE

25 0 12.5 25 50 100

(IN FEET)
1 inch = 25 ft.

Bowman CONSULTING

Bowman Consulting Group, Ltd.
13461 Sunrise Valley Drive
Suite 500
Herndon, Virginia 20171
Phone: (703) 464-1000
Fax: (703) 481-9720
www.bowmanconsulting.com

© Bowman Consulting Group, Ltd.

CONCEPTUAL DEVELOPMENT PLAN

BROAD & WASHINGTON

CITY OF FALLS CHURCH, VIRGINIA

COMMONWEALTH OF VIRGINIA
MATTHEW J. TAUSCHER
Lic. No. 000832
08/10/2020
LANDSCAPE ARCHITECT

PLAN STATUS

DATE	DESCRIPTION
08/10/20	3rd Submission
04/03/20	2nd Submission
11/20/19	1st Submission

MT	KF	MT
DESIGN	DRAWN	CHKD

SCALE H: 1" = 25' V:

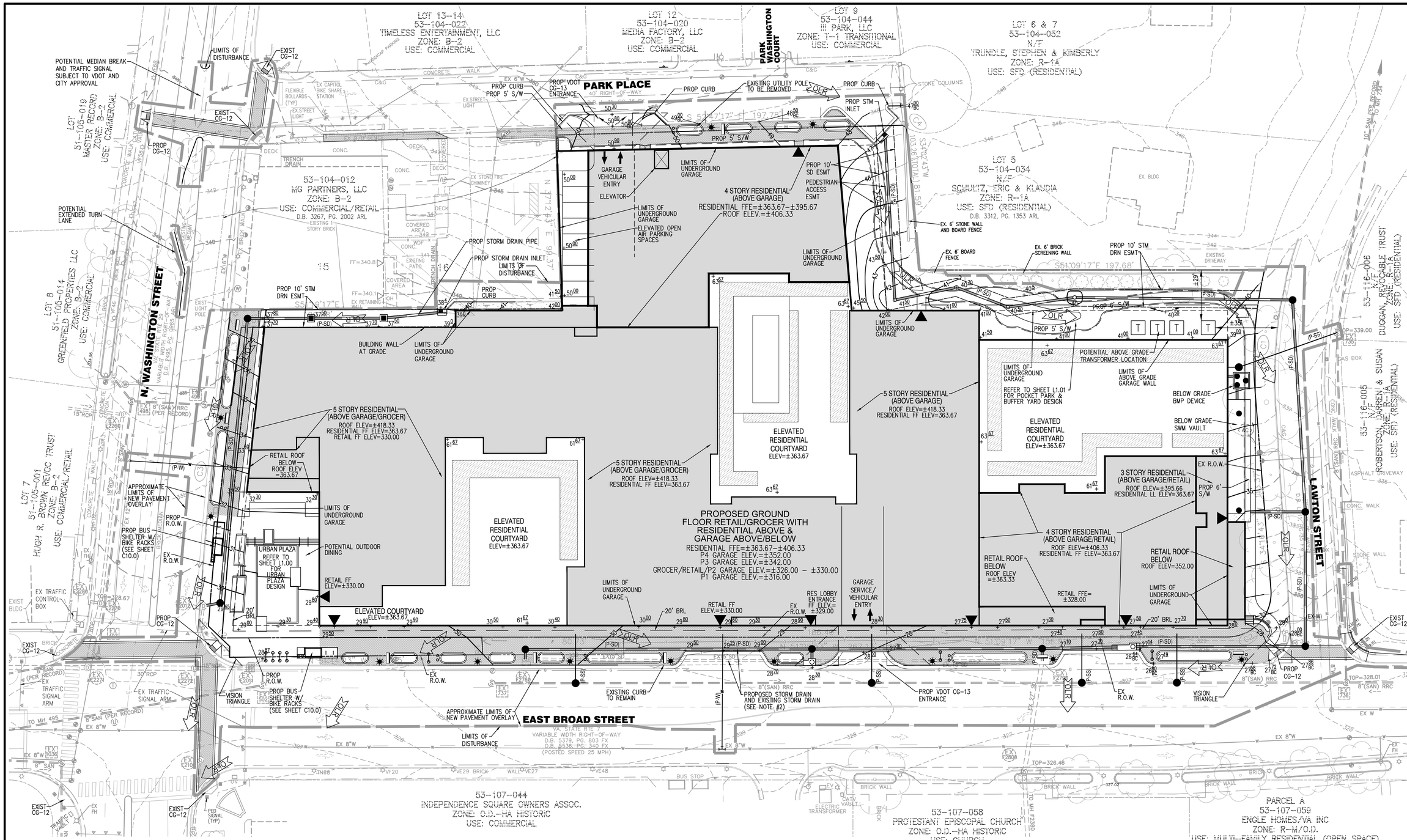
JOB No. 8366-01-001

DATE : NOVEMBER 2019

FILE No. 8366-D-RZ-001

SHEET C4.0

P:\8366 - Falls Church Assemblage\8366-02-001 (PLN) - Broad & Washington St\Planning\Special Exception 2019\8366-D-RZ-001 SIT.dwg



LEGEND

- ELEVATED COURTYARD/TERRACE LANDSCAPE PANEL
- AT GRADE ENTRY DOOR
- PROPOSED STREET LIGHT
- PROPOSED VEHICULAR ACCESS LOCATION
- OVERLAND RELIEF FLOW ARROW
- PROPOSED PROPERTY LIMITS
- (P-SD) PROPOSED STORM DRAIN
- (P-SS) PROPOSED SANITARY SEWER
- (P-W) PROPOSED WATER LINE
- 292 EXISTING CONTOUR
- 292 PROPOSED CONTOUR
- APPROXIMATE LOCATION LIMITS OF DISTURBANCE

NOTE:

1. PROPOSED GRADING ELEVATIONS, UTILITY ALIGNMENTS AND CONNECTIONS SHOWN HEREON ARE PRELIMINARY AND SUBJECT TO CHANGE WITH FINAL ENGINEERING DESIGN, APPROVAL BY CITY OF FALLS CHURCH, AND OFF SITE AGREEMENTS/EASEMENTS.
2. EXISTING STORM DRAIN MAY BE RETAINED AND UTILIZED IN-LIEU OF PROPOSED STORM DRAIN LINES INDICATED, IF THE ADJACENT PROPOSED IMPROVEMENTS DO NOT INTERFERE WITH OPERATION OF THE EXISTING STORM DRAIN LINES.

P:\8366 - Falls Church Assemblage\8366-02-001 (PLN) - Broad & Washington St\Planning\Special Exception 2019\8366-D-RZ-001 GRD.dwg

Bowman CONSULTING

Bowman Consulting Group, Ltd.
13461 Sunrise Valley Drive
Suite 500
Herndon, Virginia 20171
Phone: (703) 464-1000
Fax: (703) 481-9720
www.bowmanconsulting.com
© Bowman Consulting Group, Ltd.

PRELIMINARY GRADING AND UTILITY PLAN

BROAD & WASHINGTON

CITY OF FALLS CHURCH, VIRGINIA

COMMONWEALTH OF VIRGINIA
MATTHEW J. TAUSCHER
Lic. No. 000832
08/10/2020
LANDSCAPE ARCHITECT

PLAN STATUS

DATE	DESCRIPTION
08/10/20	3rd Submission
04/03/20	2nd Submission
11/20/19	1st Submission

MT	KF	MT
DESIGN	DRAWN	CHKD

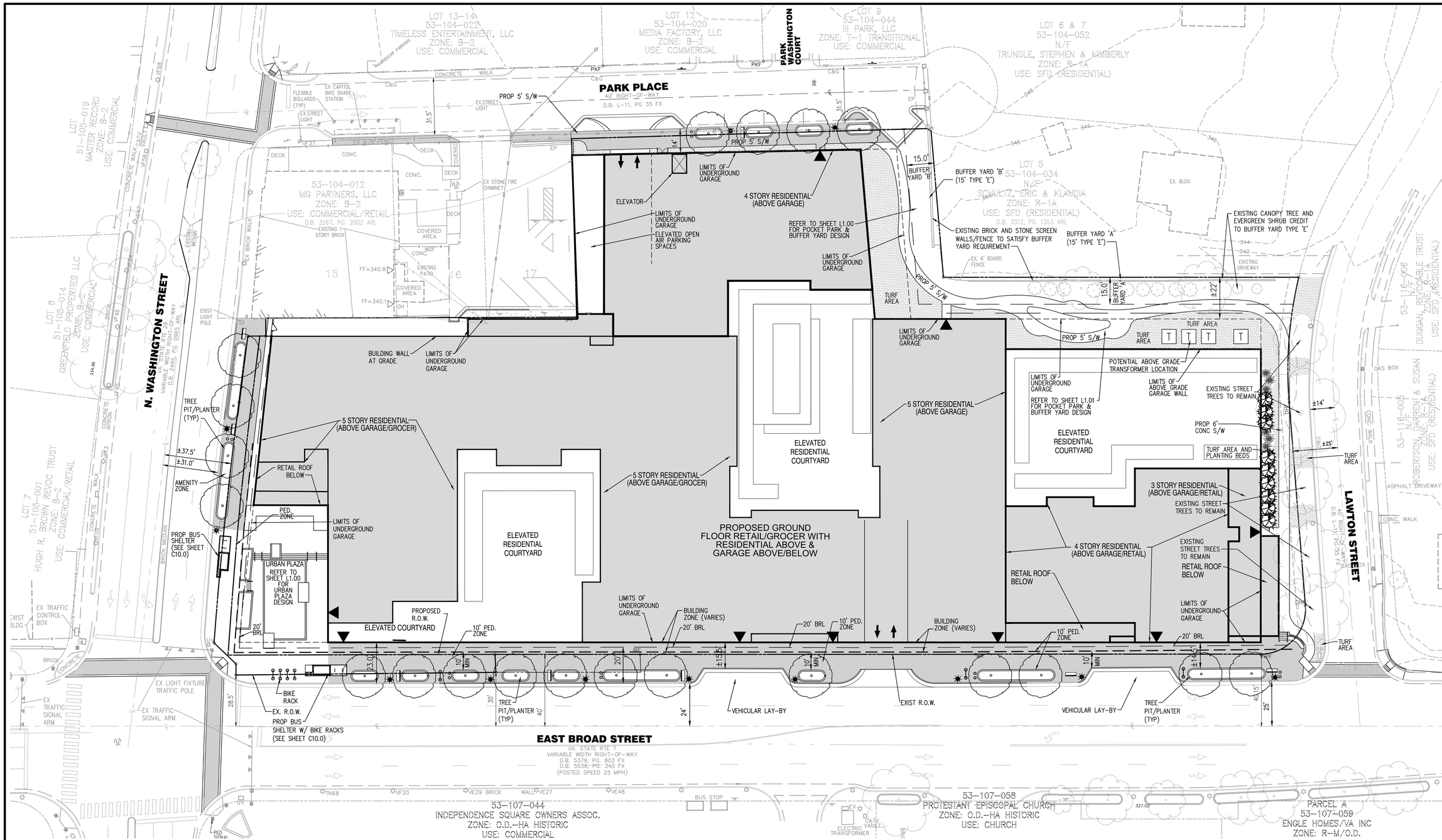
SCALE H: 1" = 25' V:

JOB No. 8366-01-001

DATE : NOVEMBER 2019

FILE No. 8366-D-RZ-001

SHEET C5.0



LEGEND

- EXISTING CANOPY TREE TO REMAIN
- EXISTING EVERGREEN TREE TO REMAIN
- PROPOSED DECIDUOUS CANOPY STREET TREE
- PROPOSED DECIDUOUS CANOPY BUFFER YARD TREE
- PROPOSED LARGE SHRUBS
- PROPOSED MEDIUM EVERGREEN TREE
- PROPOSED BUS SHELTER W/ BIKE RACKS (SEE DETAIL SHEET C10.0) (FINAL LOCATION TO BE DETERMINED WITH SITE PLAN APPLICATION)
- PROPOSED STREET LIGHT (SEE DETAIL SHEET C10.0) (FINAL LOCATION TO BE DETERMINED WITH SITE PLAN APPLICATION
- PROPOSED BIKE RACK (SEE DETAIL SHEET C10.0) (FINAL LOCATION TO BE DETERMINED WITH SITE PLAN APPLICATION)
- PROPOSED BENCH (SEE DETAIL SHEET C10.0) (FINAL LOCATION TO BE DETERMINED WITH SITE PLAN APPLICATION)
- PROPOSED TRASH/RECYCLE RECEPTACLE (SEE DETAIL SHEET C10.0) (FINAL LOCATION TO BE DETERMINED WITH SITE PLAN APPLICATION)
- APPROXIMATE/POTENTIAL TURF OR LANDSCAPE AREA

NOTE:

1. FINAL STREETSCAPE ELEMENTS INCLUDING FURNITURE, TRASH RECEPTACLES, PAVING MATERIALS, LIGHTING, IRRIGATION, LANDSCAPING WILL CONFORM TO THE ADOPTED STREETSCAPE STANDARDS, AND WILL BE PROVIDED WITH FINAL SITE PLAN APPLICATION. LOCATION OF ELEMENTS SHOWN HEREON IS SUBJECT TO CHANGE WITH FINAL SITE PLAN DESIGN.
2. SITE LANDSCAPING DESCRIPTIONS INCLUDING BUFFER YARDS, PRIVATE COURTYARD AREAS, GREENROOF AREAS, SHOWN HEREON ARE CONCEPTUAL AND SUBJECT TO CHANGE WITH FINAL SITE PLAN APPLICATION.
3. STREETSCAPE IRRIGATION PLAN WILL BE PROVIDED WITH SITE PLAN APPLICATION.

GRAPHIC SCALE

25 0 12.5 25 50 100

(IN FEET)
1 inch = 25 ft.

P:\8366 – Falls Church Assemblage\8366-02-001 (PLN) – Broad & Washington St\Planning\Special Exception 2019\8366-D-RZ-001 LSC.dwg

Bowman CONSULTING

Bowman Consulting Group, Ltd.
13461 Sunrise Valley Drive
Suite 500
Herndon, Virginia 20171
Phone: (703) 464-1000
Fax: (703) 481-9720
www.bowmanconsulting.com
© Bowman Consulting Group, Ltd.

CONCEPTUAL STREETSCAPE PLAN

BROAD & WASHINGTON

CITY OF FALLS CHURCH, VIRGINIA

COMMONWEALTH OF VIRGINIA
MATTHEW J. TAUSCHER
Lic. No. 000832
08/10/2020
LANDSCAPE ARCHITECT

PLAN STATUS	
08/10/20	3rd Submission
04/03/20	2nd Submission
11/20/19	1st Submission
DATE	DESCRIPTION

MT	KF	MT
DESIGN	DRAWN	CHKD

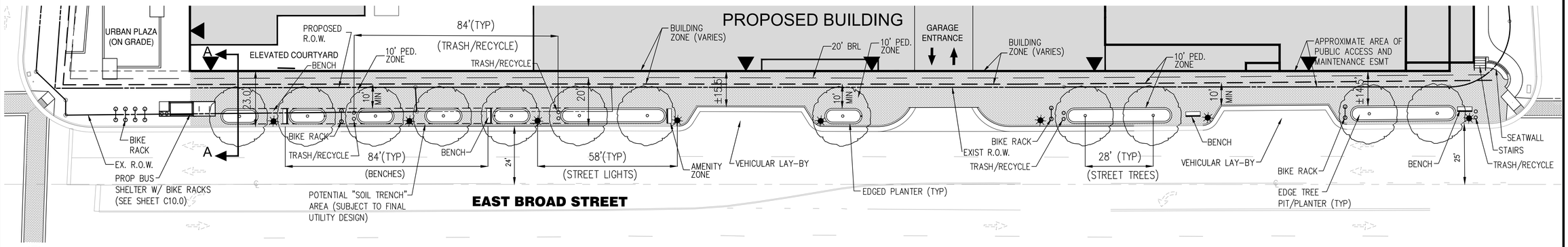
SCALE H: 1" = 25' V:

JOB No. 8366-01-001

DATE : NOVEMBER 2019

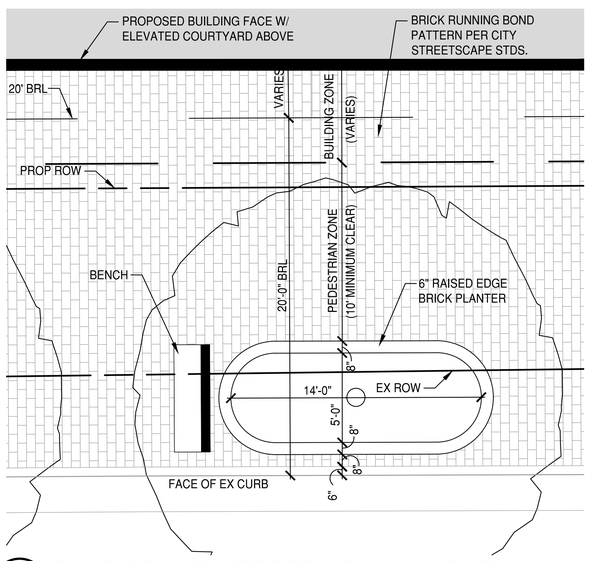
FILE No. 8366-D-RZ-001

SHEET C6.0



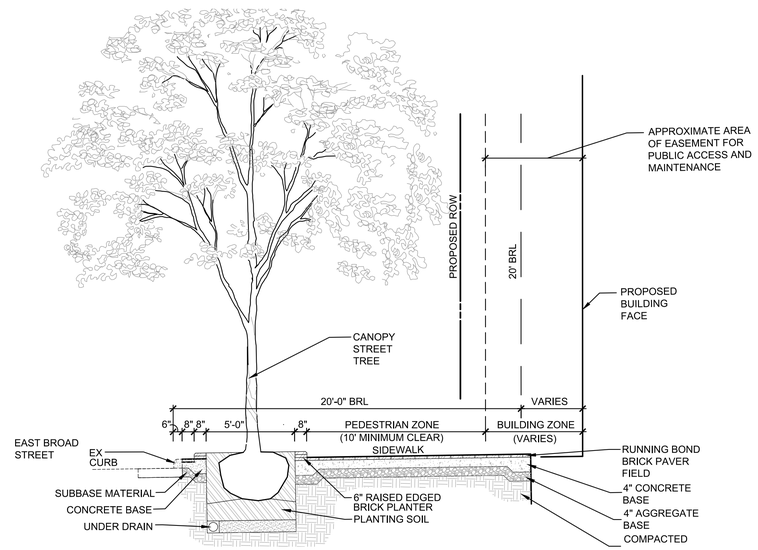
1 EAST BROAD STREET - PLAN

Scale: 1"=20'



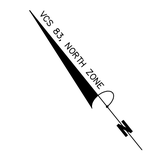
2 EAST BROAD STREET - PLAN - SECTION 'A'

Scale: 1/4" = 1'-0"



3 EAST BROAD STREET-SECTION-'A'

Scale: 1/4" = 1'-0"



LEGEND

- PROPOSED DECIDUOUS CANOPY STREET TREE
- PROPOSED BUS SHELTER W/ BIKE RACKS (SEE DETAIL SHEET C10.0) (FINAL LOCATION TO BE DETERMINED WITH SITE PLAN APPLICATION)
- PROPOSED STREET LIGHT (SEE DETAIL SHEET C10.0) (FINAL LOCATION TO BE DETERMINED WITH SITE PLAN APPLICATION
- PROPOSED BIKE RACK (SEE DETAIL SHEET C10.0) (FINAL LOCATION TO BE DETERMINED WITH SITE PLAN APPLICATION)
- PROPOSED BENCH (SEE DETAIL SHEET C10.0) (FINAL LOCATION TO BE DETERMINED WITH SITE PLAN APPLICATION)
- PROPOSED TRASH/RECYCLE RECEPTACLE (SEE DETAIL SHEET C10.0) (FINAL LOCATION TO BE DETERMINED WITH SITE PLAN APPLICATION)

Bowman CONSULTING

Bowman Consulting Group, Ltd.
13461 Sunrise Valley Drive
Suite 500
Herndon, Virginia 20171

Phone: (703) 464-1000
Fax: (703) 481-9720
www.bowmanconsulting.com
© Bowman Consulting Group, Ltd.

CONCEPTUAL STREETSCAPE PLAN
EAST BROAD STREET
BROAD & WASHINGTON
CITY OF FALLS CHURCH, VIRGINIA

COMMONWEALTH OF VIRGINIA
MATTHEW J. TAUSCHER
Lic. No. 000832
08/10/2020
LANDSCAPE ARCHITECT

PLAN STATUS

DATE	DESCRIPTION
08/10/20	3rd Submission
04/03/20	2nd Submission
11/20/19	1st Submission

MT	KF	MT
DESIGN	DRAWN	CHKD

SCALE H: 1" = 20' V:

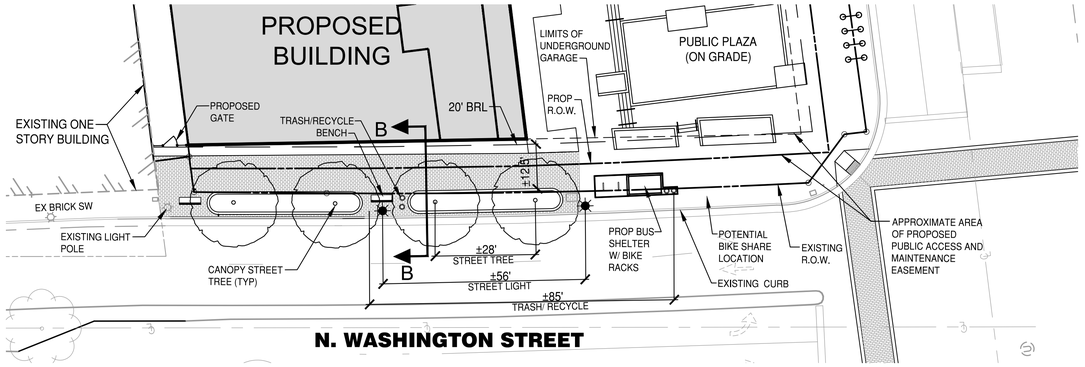
JOB No. 8366-01-001

DATE : NOVEMBER 2019

FILE No. 8366-D-RZ-001

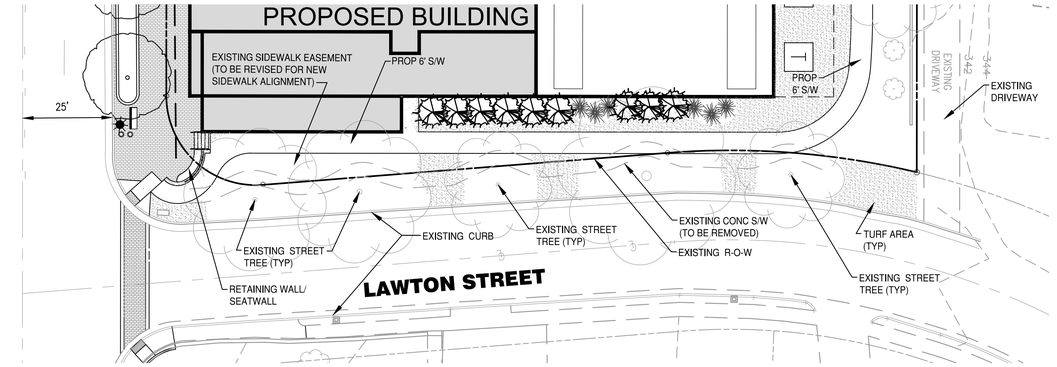
SHEET C7.0

P:\8366 - Falls Church Assemblage\8366-02-001 (PLN) - Broad & Washington St\Planning\Special Exception 2019\8366-D-RZ-001 LSC.dwg



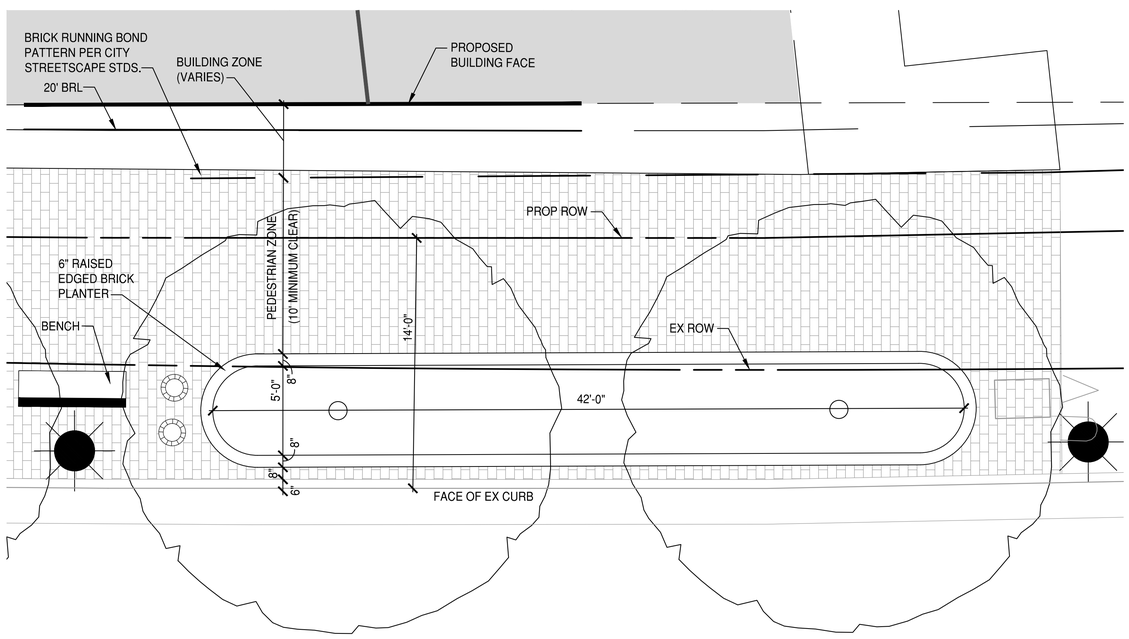
1 N. WASHINGTON STREET PLAN

Scale: 1"=20'



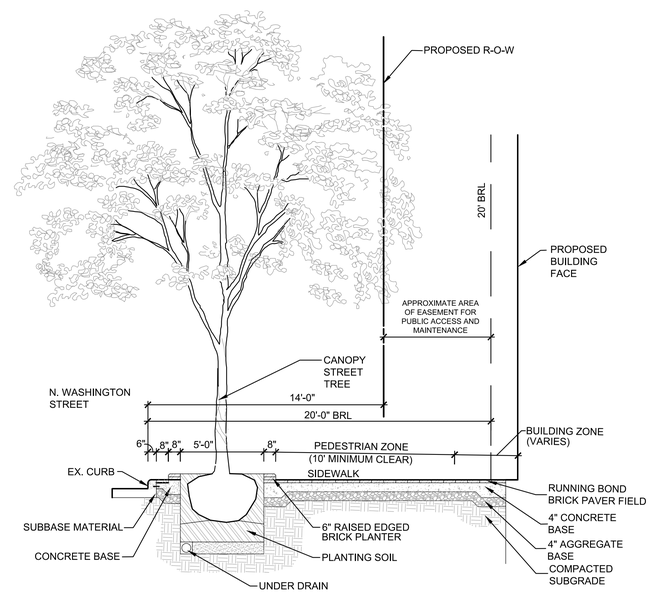
2 LAWTON STREET PLAN

Scale: 1"=20'



3 N. WASHINGTON STREET-PLAN ENLARGEMENT - SECTION B

Scale: 1/4" = 1'-0"



4 N. WASHINGTON STREET-SECTION B

Scale: 1/4" = 1'-0"

LEGEND

- EXISTING TREES TO REMAIN
- PROPOSED DECIDUOUS CANOPY STREET TREE
- PROPOSED BUS SHELTER W/ BIKE RACKS (SEE DETAIL SHEET C10.0) (FINAL LOCATION TO BE DETERMINED WITH SITE PLAN APPLICATION)
- PROPOSED STREET LIGHT (SEE DETAIL SHEET C10.0) (FINAL LOCATION TO BE DETERMINED WITH SITE PLAN APPLICATION
- PROPOSED BIKE RACK (SEE DETAIL SHEET C10.0) (FINAL LOCATION TO BE DETERMINED WITH SITE PLAN APPLICATION)
- PROPOSED BENCH (SEE DETAIL SHEET C10.0) (FINAL LOCATION TO BE DETERMINED WITH SITE PLAN APPLICATION)
- PROPOSED TRASH/RECYCLE RECEPTACLE (SEE DETAIL SHEET C10.0) (FINAL LOCATION TO BE DETERMINED WITH SITE PLAN APPLICATION)

Bowman CONSULTING

Bowman Consulting Group, Ltd.
13461 Sunrise Valley Drive
Suite 500
Herndon, Virginia 20171
Phone: (703) 464-1000
Fax: (703) 481-9720
www.bowmanconsulting.com
© Bowman Consulting Group, Ltd.

CONCEPTUAL STREETSCAPE PLAN
LAWTON STREET AND N. WASHINGTON STREET
BROAD & WASHINGTON
CITY OF FALLS CHURCH, VIRGINIA

COMMONWEALTH OF VIRGINIA
MATTHEW J. TAUSCHER
Lic. No. 000832
08/10/2020
LANDSCAPE ARCHITECT

PLAN STATUS	
08/10/20	3rd Submission
04/03/20	2nd Submission
11/20/19	1st Submission
DATE	DESCRIPTION

MT	KF	MT
DESIGN	DRAWN	CHKD

SCALE H: 1" = 20' V:

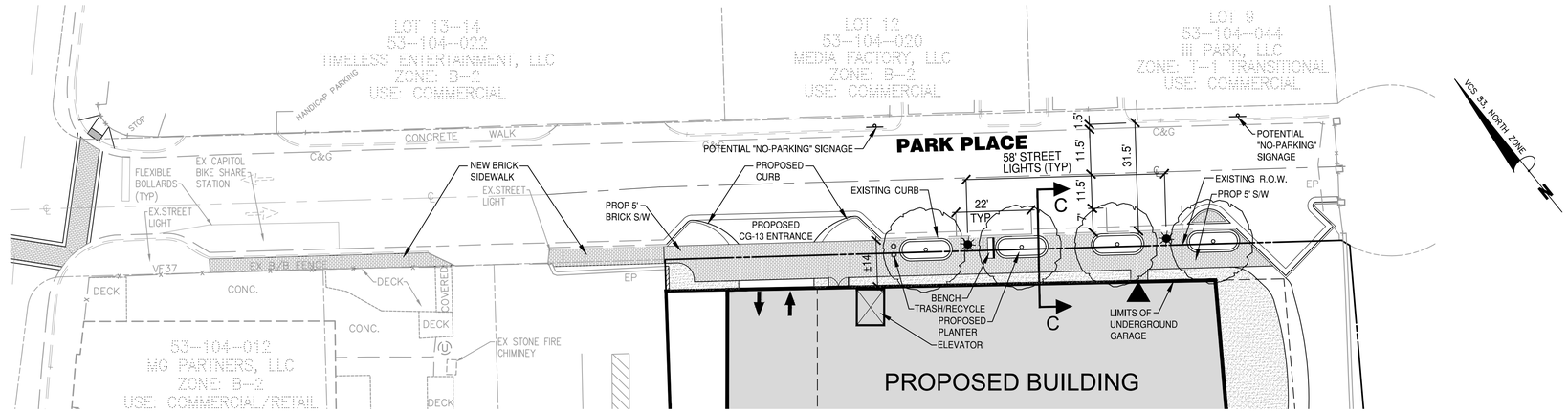
JOB No. 8366-01-001

DATE : NOVEMBER 2019

FILE No. 8366-D-RZ-001

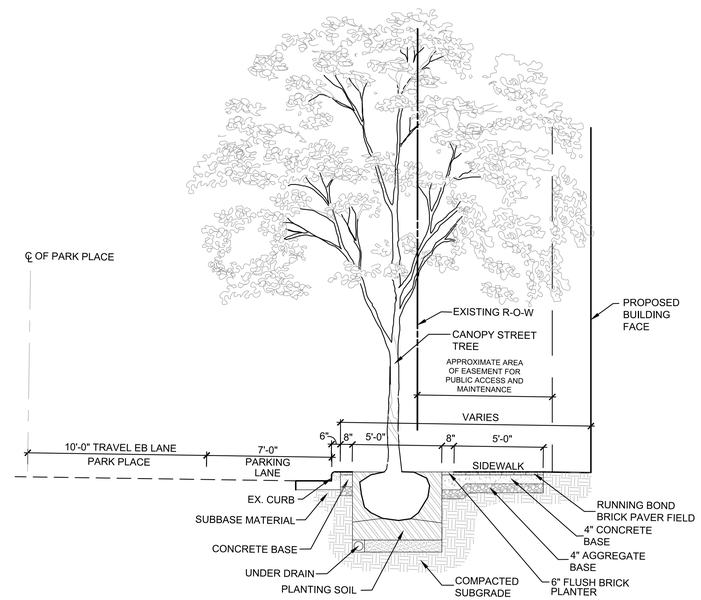
SHEET C8.0

P:\8366 – Falls Church Assemblage\8366-02-001 (PLN) – Broad & Washington St\Planning\Special Exception 2019\8366-D-RZ-001 LSC.dwg



1 PARK PLACE - PLAN

Scale: 1"=20'



2 PARK PLACE-SECTION C

Scale: 1/4" = 1'-0"

LEGEND

PROPOSED DECIDUOUS CANOPY STREET TREE

Bowman CONSULTING

Bowman Consulting Group, Ltd.
13461 Sunrise Valley Drive
Suite 500
Herndon, Virginia 20171

Phone: (703) 464-1000
Fax: (703) 481-9720
www.bowmanconsulting.com
© Bowman Consulting Group, Ltd.

CONCEPTUAL STREETSCAPE PLAN
PARK PLACE
BROAD & WASHINGTON
CITY OF FALLS CHURCH, VIRGINIA

COMMONWEALTH OF VIRGINIA
MATTHEW J. TAUSCHER
Lic. No. 000832
08/10/2020
LANDSCAPE ARCHITECT

PLAN STATUS	
08/10/20	3rd Submission
04/03/20	2nd Submission
11/20/19	1st Submission
DATE	DESCRIPTION

MT	KF	MT
DESIGN	DRAWN	CHKD

SCALE H: 1" = 20' V:

JOB No. 8366-01-001

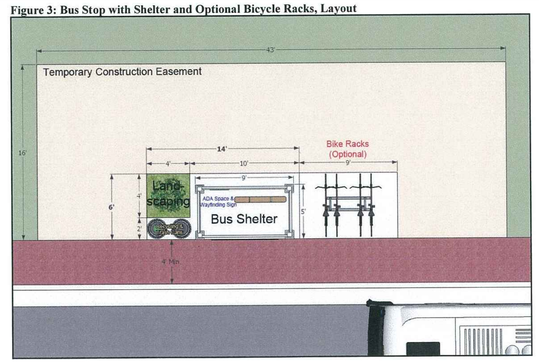
DATE : NOVEMBER 2019

FILE No. 8366-D-RZ-001

SHEET C9.0

P:\8366 – Falls Church Assemblage\8366-02-001 (PLN) – Broad & Washington St\Planning\Special Exception 2019\8366-D-RZ-001 LSC.dwg

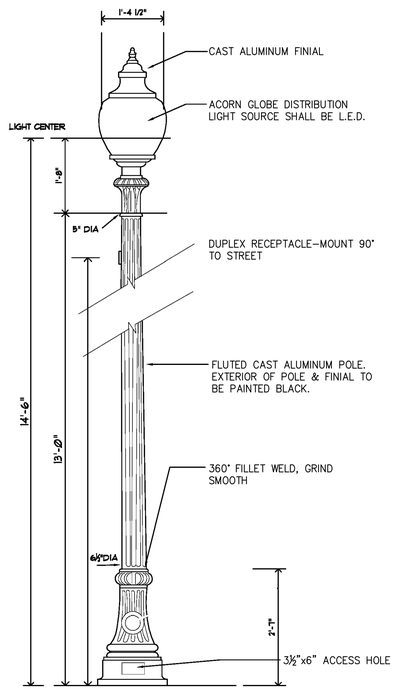
Figure 3: Bus Stop with Shelter and Optional Bicycle Racks, Layout



3 BUS STOP WITH SHELTER PLAN LAYOUT

(PER CITY BUS STOP AND SHELTER STDS DATED OCTOBER 28, 2013)

Scale: NTS

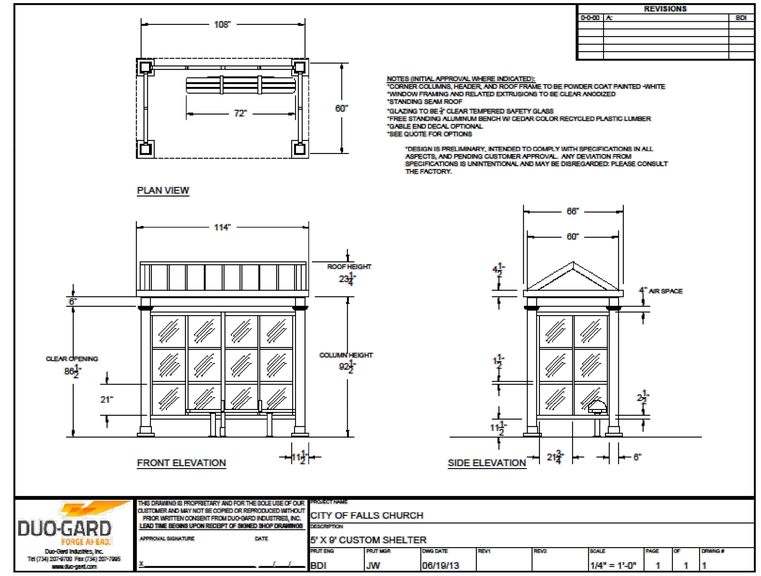


1 SINGLE LUMINAIRE ON POLE

OR APPROVED EQUAL

(PER CITY STREETSCAPE DESIGN STDS FOR COMMERCIAL STREETS DATED MARCH 13, 2017)

Scale: NTS



4 BUS SHELTER STRUCTURE

(PER CITY BUS STOP AND SHELTER STDS DATED OCTOBER 28, 2013)

Scale: NTS

5 CITY OF FALLS CHURCH - STD. BENCH

(PER CITY STREETSCAPE DESIGN STDS FOR COMMERCIAL STREETS DATED MARCH 13, 2017)

(BENCH SELECTION SHALL INCLUDE EITHER 4' OR 6' BENCH BASED ON SPACING NEEDS)

Scale: NTS

6 CITY OF FALLS CHURCH-TYPICAL BIKE RACKS

(PER CITY STREETSCAPE DESIGN STDS FOR COMMERCIAL STREETS DATED MARCH 13, 2017)

Scale: NTS

VICTOR STANLEY, INC.
-Manufacturers of Quality Site Furnishings since 1962-
P.O. Drawer 530, Dunkirk, Maryland 20754 U.S.A.
Tel: (301) 855-8300 • Fax: (410) 257-7579
sales@victorstanley.com
www.victorstanley.com

VSI Optional Recycle Lid Decal (4-part)

Graphics Application: The Graphics will be digitally printed onto a pressure sensitive decal and applied to a pre-powder coated lid.
Label Size: 4-part decal arrangement varies depending on size of lids.
Label Material Color: Clear
Image Colors: Blue and Black

This option is available for the following VSI Products: S-35, SD-35, S-42, SD-42, S-424, S-45, T-24, BS-135, BS-235, BS-535, BS-142, BS-242, BS-542

LO I.D. # RL30

X: _____

Approximate Size of text on label

VSI Standard Recycle Plaque

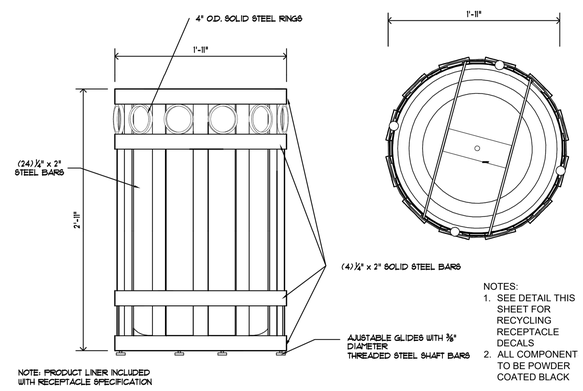
Graphics Application: The graphics will be digitally printed onto a pressure sensitive label and applied to a pre-powder coated steel plaque.
Plaque Size: Varies
Label Size: 14 1/2" x 4"
Label Material Color: Clear
Image Color: Intense Blue & Black

This option is available for the following VSI Products: S-35, SD-35, S-42, SD-42, S-424, S-45, T-24, T-32, BB-36, PBS-24, PBS-36, PBS-45, PC-12, BS-135, BS-235, BS-335, BS-142, BS-242, BS-342, A-24, A-36, NSDC-36, NSDC-24, RST-32

Specifications are subject to change at manufacturer's discretion to ensure proper fit and/or optimum output.

2 RECYCLING DECALS

Scale: NTS



7 TYPICAL TRASH & RECYCLE RECEPTACLE

(PER CITY STREETSCAPE DESIGN STDS FOR COMMERCIAL STREETS DATED MARCH 13, 2017)

Scale: NTS

Bowman CONSULTING

Bowman Consulting Group, Ltd.
13461 Sunrise Valley Drive
Suite 500
Herndon, Virginia 20171
Phone: (703) 464-1000
Fax: (703) 481-9720
www.bowmanconsulting.com

© Bowman Consulting Group, Ltd.

STREET FURNISHING DETAILS
BROAD & WASHINGTON
CITY OF FALLS CHURCH, VIRGINIA

COMMONWEALTH OF VIRGINIA
MATTHEW J. TAUSCHER
Lic. No. 000832
08/10/2020
LANDSCAPE ARCHITECT

PLAN STATUS

DATE	DESCRIPTION
08/10/20	3rd Submission
04/03/20	2nd Submission
11/20/19	1st Submission

MT	KF	MT
DESIGN	DRAWN	CHKD

SCALE H: V: AS SHOWN

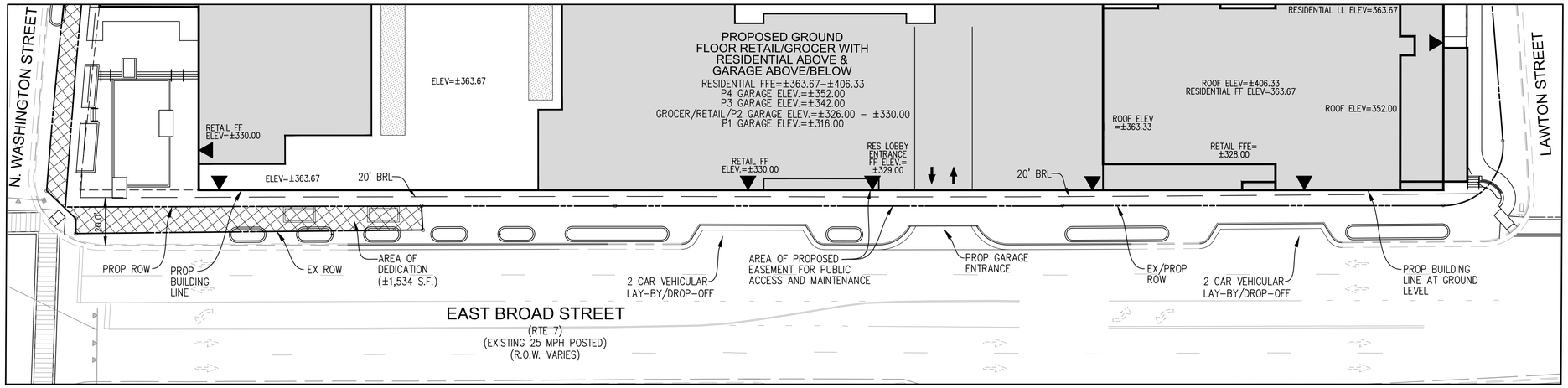
JOB No. 8366-01-001

DATE : NOVEMBER 2019

FILE No. 8366-D-RZ-001

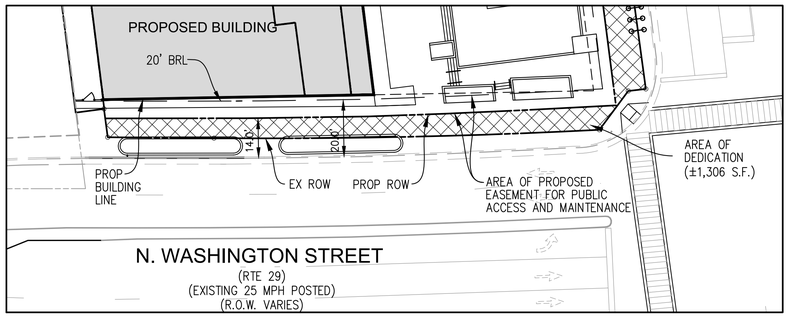
SHEET C10.0

Cad file name : P:\8366 - Falls Church Assemblage\8366-02-001 (PLN) - Broad & Washington St\Planning\Special Exception 2019\8366-D-RZ-001-DET.dwg



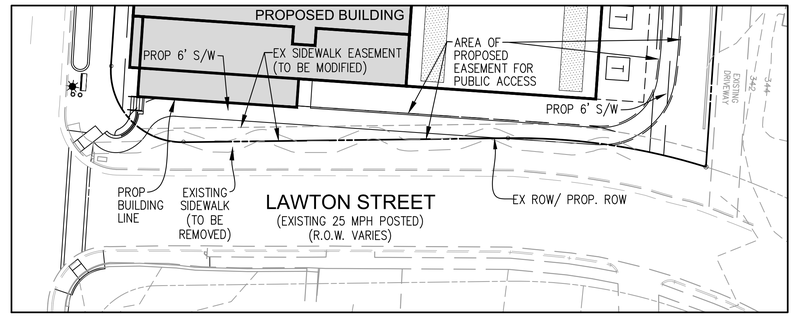
EAST BROAD STREET FRONTAGE EXHIBIT

SCALE: 1"=25'



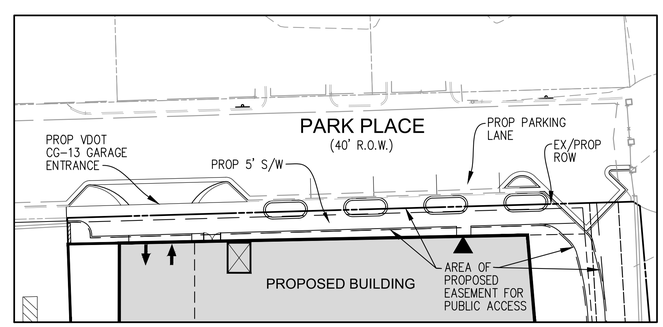
N. WASHINGTON STREET FRONTAGE EXHIBIT

SCALE: 1"=25'



LAWTON STREET FRONTAGE EXHIBIT

SCALE: 1"=25'



PARK PLACE FRONTAGE EXHIBIT

SCALE: 1"=25'

LEGEND:

PROPOSED ROW DEDICATION
(±1,534 S.F.) E. BROAD STREET
(±1,306 S.F.) N. WASHINGTON STREET

NOTE:
1. FINAL AREA OF DEDICATION AND PUBLIC ACCESS EASEMENTS ARE SUBJECT TO CHANGE WITH FINAL SITE PLAN APPROVAL.

GRAPHIC SCALE

25 0 12.5 25 50 100

(IN FEET)
1 inch = 25 ft.

VCS 83 NORTH ZONE

Bowman CONSULTING

Bowman Consulting Group, Ltd.
13461 Sunrise Valley Drive
Suite 500
Herndon, Virginia 20171

Phone: (703) 464-1000
Fax: (703) 481-9720
www.bowmanconsulting.com

© Bowman Consulting Group, Ltd.

ROADWAY FRONTAGE EXHIBIT

BROAD & WASHINGTON

CITY OF FALLS CHURCH, VIRGINIA

COMMONWEALTH OF VIRGINIA
MATTHEW J. TAUSCHER
Lic. No. 000832
08/10/2020
LANDSCAPE ARCHITECT

PLAN STATUS	
08/10/20	3rd Submission
04/03/20	2nd Submission
11/20/19	1st Submission
DATE	DESCRIPTION

MT	KF	MT
DESIGN	DRAWN	CHKD

SCALE H: AS SHOWN V:

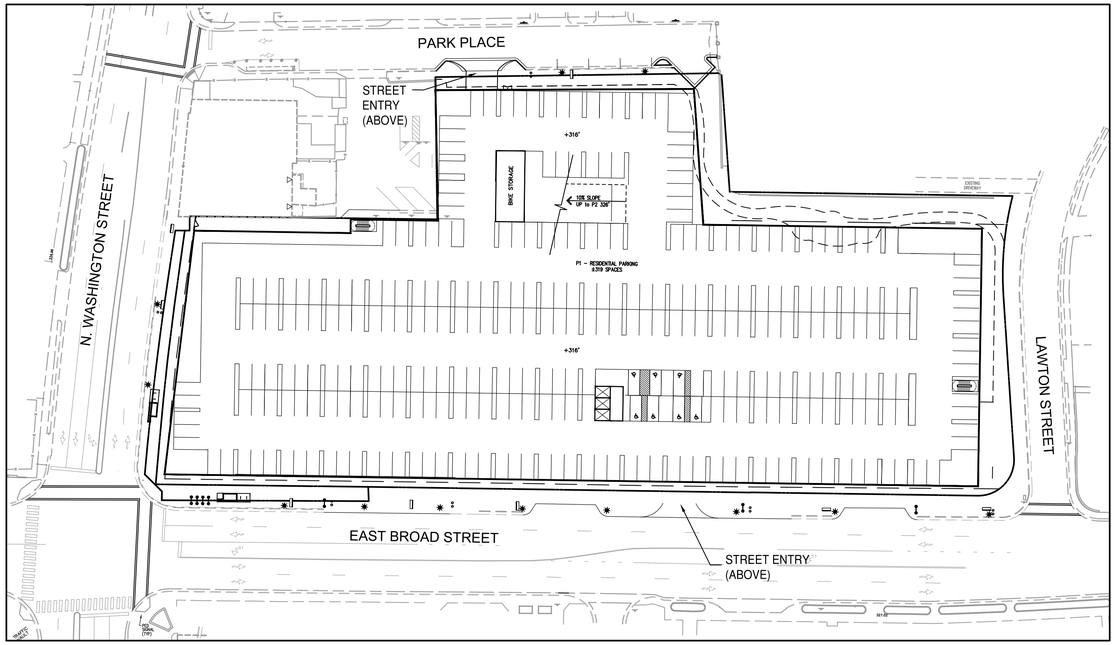
JOB No. 8366-01-001

DATE : NOVEMBER 2019

FILE No. 8366-D-RZ-001

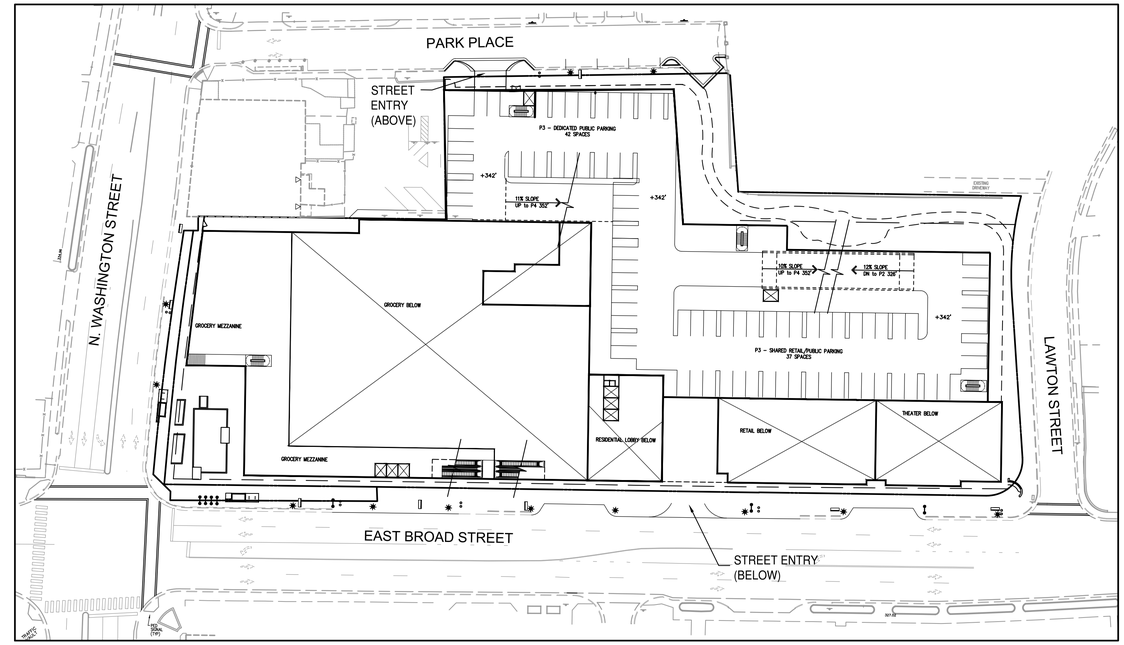
SHEET C11.0

P:\8366 - Falls Church Assemblage\8366-02-001 (PLN) - Broad & Washington St\Planning\Special Exception 2019\8366-D-RZ-001 RD_FRNTAGE.dwg



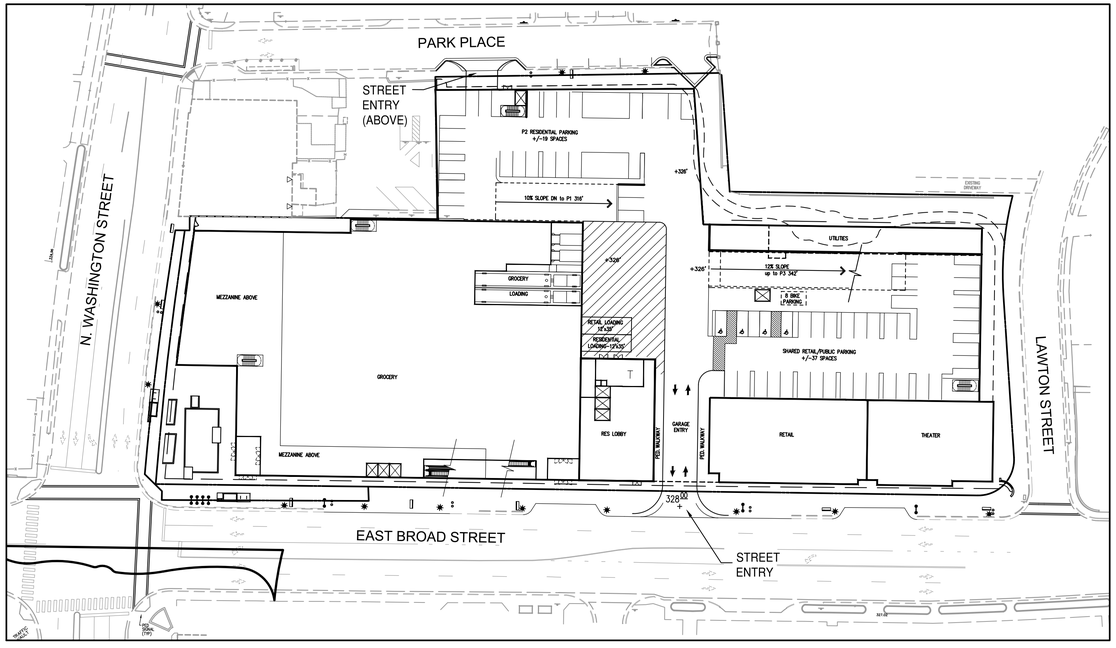
PARKING LEVEL P1

SCALE: 1"=50'
(TO INCLUDE RESTRICTED USE)
RESIDENTIAL PARKING: ±319 SPACES
BIKE PARKING: ±141 SPACES



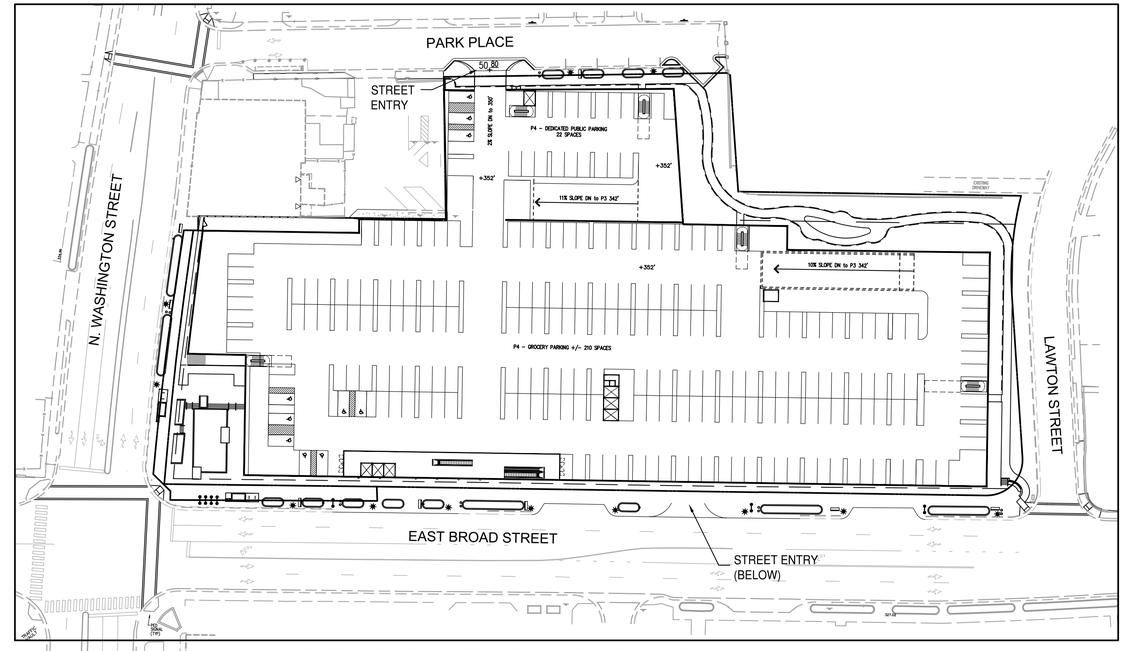
PARKING LEVEL P3

SCALE: 1"=50'
(TO INCLUDE RESTRICTED USE AND POTENTIAL PARTIAL SHARED USE AREA)
RETAIL AND PUBLIC PARKING: ±79 SPACES



PARKING LEVEL P2–BROAD STREET ENTRANCE

SCALE: 1"=50'
(SUBJECT TO SHARED USE AND PUBLIC ACCESS WITH POTENTIAL CONTROLS)
RESIDENTIAL PARKING ±19 SPACES
RETAIL AND PUBLIC PARKING: ±41 SPACES
BIKE PARKING: ±18 SPACES (ON-STREET)
±8 SPACES (GARAGE)



PARKING LEVEL P4–PARK PLACE ENTRANCE

SCALE: 1"=50'

PUBLIC PARKING: ±22 SPACES
GROCERY PARKING: ±210 SPACES

NOTES:

1. GARAGE DIAGRAMS, PARKING NUMBERS AND PEDESTRIAN ACCESS LOCATIONS ARE FOR INFORMATION AND ILLUSTRATION PURPOSES ONLY AND ARE SUBJECT TO CHANGE WITH FINAL DESIGN.
2. AREAS WITHIN LEVELS OF SHARED USE, PUBLICLY ACCESSIBLE SPACES AND RESTRICTIONS AND/OR PARKING CONTROLS ARE SUBJECT TO FINAL AGREEMENTS WITH THE OWNER AND TENANT USERS.
3. REFER TO ARCHITECTURAL PLANS WITHIN THE SPECIAL EXCEPTION PACKAGE DOCUMENTS FOR ADDITIONAL INFORMATION REGARDING PEDESTRIAN ACCESS AND OTHER SITE FEATURES.

GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.

Bowman CONSULTING

Bowman Consulting Group, Ltd.
13461 Sunrise Valley Drive
Suite 500
Herndon, Virginia 20171
Phone: (703) 464-1000
Fax: (703) 481-9720
www.bowmanconsulting.com
© Bowman Consulting Group, Ltd.

CONCEPTUAL PARKING PLANS
BROAD & WASHINGTON
CITY OF FALLS CHURCH, VIRGINIA

COMMONWEALTH OF VIRGINIA
MATTHEW J. TAUSCHER
Lic. No. 000832
08/10/2020
LANDSCAPE ARCHITECT

PLAN STATUS	
08/10/20	3rd Submission
04/03/20	2nd Submission
11/20/19	1st Submission
DATE	DESCRIPTION

MT	KF	MT
DESIGN	DRAWN	CHKD
SCALE	H: 1"=50' V:	

JOB No. 8366-01-001
DATE : NOVEMBER 2019
FILE No. 8366-D-RZ-001
SHEET C12.0

P:\8366 – Falls Church Assemblage\8366-02-001 (PLN) – Broad & Washington St\Planning\Special Exception 2019\8366-D-RZ-001 SIT_PRKNG.dwg

TREE INVENTORY TABLE

Broad Street and Washington Street, Falls Church, VA
Date of site visit: January 20, 2015
Certified Arborist: Gregg D. Eberly MA-461GA

Plan Label	Botanic Name	Common Name	Caliper (DBH)	Condition Rating	Species Rating	Preserve/ Remove	Tree Location
1	Betula nigra	River Birch	12	60	70	Remove	-
2	Betula nigra	River Birch	14	80	70	Remove	-
3	Betula nigra	River Birch	12	80	70	Remove	-
4	Prunus serrulata 'Kwanzan'	Kwanzan Cherry	10	70	50	Remove	-
5	Prunus serrulata 'Kwanzan'	Kwanzan Cherry	14	70	50	Remove	-
6	Quercus phellos	Willow Oak	14	80	70	Preserve	-
7	Quercus phellos	Willow Oak	11	80	70	Preserve	-
8	Tilia cordata	Littleleaf Linden	8	80	70	Remove	-
9	Acer saccharum	Sugar Maple	7	80	70	Remove	-
10	Tilia cordata	Littleleaf Linden	12	80	70	Remove	-
11	Tilia cordata	Littleleaf Linden	8	80	70	Remove	-
12	Tilia cordata	Littleleaf Linden	7	80	70	Remove	-
13	Tilia cordata	Littleleaf Linden	8	80	70	Remove	-
14	Tilia cordata	Littleleaf Linden	9	80	70	Remove	-
15	Gymnocladus dioicus	Kentucky Coffee Tree	19	40	70	Remove	-
16	Pyrus calleryana	Bradford Pear	10	30	30	Remove	-
17	Lonicera japonica	Japanese Honeysuckle	28 (Multi)	40	20	Remove	-
18	Lonicera japonica	Japanese Honeysuckle	14 (Multi)	40	20	Remove	-
19	Lonicera japonica	Japanese Honeysuckle	18 (Multi)	40	20	Remove	-
20	Ilex opaca	American Holly	30 (Multi)	80	70	Remove	-
21	Ilex attenuata 'Fosteri'	Foster's Holly	7 (Multi)	60	70	Remove	-
22	Ilex attenuata 'Fosteri'	Foster's Holly	4 (Multi)	70	70	Remove	-
23	Ilex attenuata 'Fosteri'	Foster's Holly	7 (Multi)	70	70	Remove	-
24	Ilex attenuata 'Fosteri'	Foster's Holly	4 (Multi)	70	70	Remove	-
25	Ilex attenuata 'Fosteri'	Foster's Holly	8 (Multi)	70	70	Remove	-
26	Ilex attenuata 'Fosteri'	Foster's Holly	7 (Multi)	60	70	Remove	-
27	Ilex attenuata 'Fosteri'	Foster's Holly	12 (Multi)	70	70	Remove	-
28	Ilex attenuata 'Fosteri'	Foster's Holly	9 (Multi)	60	70	Remove	-
29	Ilex attenuata 'Fosteri'	Foster's Holly	9 (Multi)	60	70	Remove	-
30	Ilex attenuata 'Fosteri'	Foster's Holly	18 (Multi)	60	70	Remove	-
31	Ilex attenuata 'Fosteri'	Foster's Holly	15 (Multi)	60	70	Remove	-
32	Ilex attenuata 'Fosteri'	Foster's Holly	18 (Multi)	60	70	Remove	-
33	Ilex attenuata 'Fosteri'	Foster's Holly	24 (Multi)	70	70	Remove	-
34	Ilex attenuata 'Fosteri'	Foster's Holly	12 (Multi)	50	70	Remove	-
35	Ilex cornuta 'Burfordii'	Burford Holly	15 (Multi)	80	70	Remove	-
36	Gleditsia triacanthos	Honey Locust	12	70	60	Remove	-
37	Gleditsia triacanthos	Honey Locust	10	70	60	Remove	-
38	Gleditsia triacanthos	Honey Locust	11	70	60	Remove	-
39	Gleditsia triacanthos	Honey Locust	16	70	60	Remove	-
40	Acer platanoides	Norway Maple	18	50	40	Remove	-
41	Liquidambar styraciflua	Sweetgum	12	70	60	Preserve	Public ROW
42	Liquidambar styraciflua	Sweetgum	14	70	60	Preserve	Public ROW
43	Liquidambar styraciflua	Sweetgum	12	70	60	Preserve	Public ROW
44	Acer rubrum	Red Maple	36	70	70	Preserve	Public ROW
45	Liquidambar styraciflua	Sweetgum	12	70	60	Preserve	Public ROW
46	Morus alba	White Mulberry	12	50	40	Remove	-
47	Quercus phellos	Willow Oak	14	80	70	Remove	-
48	Quercus phellos	Willow Oak	20	80	70	Remove	-
49	Quercus phellos	Willow Oak	18	60	70	Remove	-
50	Quercus palustris	Pin Oak	20	40	70	Remove	-
51	Quercus phellos	Willow Oak	24	80	70	Remove	-
52	Quercus phellos	Willow Oak	22	80	70	Remove	-
53	Quercus rubra	Red Oak	22	80	70	Remove	Public ROW
54	Quercus phellos	Willow Oak	16	80	70	Remove	Public ROW
55	Quercus phellos	Willow Oak	16	80	70	Remove	Public ROW
56	Quercus phellos	Willow Oak	20	80	70	Remove	Public ROW
57	Quercus phellos	Willow Oak	22	80	70	Remove	Public ROW
58	Quercus phellos	Willow Oak	28	80	70	Remove	Public ROW
59	Quercus phellos	Willow Oak	16	80	70	Remove	Public ROW
60	Quercus phellos	Willow Oak	14				Off-Site
61	Quercus phellos	Willow Oak	12				Off-Site
62	Quercus phellos	Willow Oak	14				Off-Site
63	Quercus phellos	Willow Oak	14				Off-Site
64	Quercus phellos	Willow Oak	8				Off-Site
65	Quercus phellos	Willow Oak	13				Off-Site
66	Quercus phellos	Willow Oak	5				Off-Site
67	Quercus phellos	Willow Oak	19				Off-Site
68	Quercus phellos	Willow Oak	24	80	70	Remove	-
69	Quercus phellos	Willow Oak	28				Off-Site
70	Quercus phellos	Willow Oak	21				Off-Site
71	Quercus phellos	Willow Oak	23				Off-Site
72	Quercus phellos	Willow Oak	20	80	70	Remove	-
73	Juglans nigra	Black Walnut	18	50	70	Remove	-
74	Juglans nigra	Black Walnut	13	60	70	Remove	-
75	Ilex opaca	American Holly	4	70	70	Remove	-
76	Ilex cornuta 'Burfordii'	Burford Holly	8	60	70	Preserve	-
77	Ilex attenuata 'Fosteri'	Foster's Holly	4	60	70	Preserve	-
78	Ilex attenuata 'Fosteri'	Foster's Holly	3	70	70	Preserve	-
79	Ilex attenuata 'Fosteri'	Foster's Holly	4 (Multi)	80	70	Preserve	-
80	Ilex attenuata 'Fosteri'	Foster's Holly	5 (Multi)	80	70	Preserve	-
81	Ilex attenuata 'Fosteri'	Foster's Holly	4	80	70	Preserve	-
82	Ilex attenuata 'Fosteri'	Foster's Holly	6 (Multi)	80	70	Preserve	-
83	Ilex attenuata 'Fosteri'	Foster's Holly	7 (Multi)	80	70	Preserve	-
84	Ilex attenuata 'Fosteri'	Foster's Holly	3	80	70	Preserve	-
85	Ilex attenuata 'Fosteri'	Foster's Holly	5 (Multi)	80	70	Preserve	-
86	Ilex attenuata 'Fosteri'	Foster's Holly	4	80	70	Preserve	-
87	Ilex attenuata 'Fosteri'	Foster's Holly	4	80	70	Preserve	-
88	Ilex attenuata 'Fosteri'	Foster's Holly	4	80	70	Preserve	-
89	Morus alba	White Mulberry	4	50	40	Remove	-
90	Morus alba	White Mulberry	4	60	40	Remove	-
91	Amelanchier arborea	Downey Serviceberry	2	80	80	Remove	-
92	Amelanchier arborea	Downey Serviceberry	3			Remove	Off-Site
93	Amelanchier arborea	Downey Serviceberry	3			Remove	Off-Site
94	Amelanchier arborea	Downey Serviceberry	3			Remove	Off-Site
95	Amelanchier arborea	Downey Serviceberry	3			Remove	Off-Site
96	Tilia cordata	Littleleaf Linden	15			Remove	Off-Site
97	Amelanchier arborea	Downey Serviceberry	3			Remove	Off-Site
98	Amelanchier arborea	Downey Serviceberry	3			Remove	Off-Site
99	Quercus rubra	Red Oak	20	80	70	Remove	-
100	Pinus strobus	White Pine	16	60	50	Remove	-
101	Cercis canadensis	Redbud	4	80	70	Remove	-
102	Ilex opaca	American Holly	4	80	70	Remove	-
103	Cercis canadensis	Redbud	11	60	70	Remove	-
104	Cercis canadensis	Redbud	9	60	70	Remove	-
105	Cercis canadensis	Redbud	8	70	70	Remove	-
106	Thuja occidentalis	Arborvitae	6	80	60	Remove	-
107	Thuja occidentalis	Arborvitae	6	80	60	Remove	-
108	Thuja occidentalis	Arborvitae	4	80	60	Remove	-
109	Thuja occidentalis	Arborvitae	4	80	60	Remove	-
110	Thuja occidentalis	Arborvitae	4	80	60	Remove	-
111	Quercus phellos	Willow Oak	10	70	70	Preserve	Public ROW
112	Quercus phellos	Willow Oak	10	70	70	Preserve	Public ROW

Notes:
1. Condition Rating based on formula provided by the Guide for Plant Appraisal published by the ISA. Condition Rating: 90-100 Excellent, 70-89 Good, 50-69 Fair, 25-49 Poor, 05-24 Very Poor
2. Species Rating based on formula provided by the Guide for Plant Appraisal published by the ISA.
3. Off site trees included in this inventory had critical root zones located in or on subject property.
4. All trees with a minimum 2" D.B.H. were rated.
5. * The locations of trees 100-110 are approximate based on adjacent surveyed tree locations and have not been surveyed.

PLANTING TABULATIONS

BUFFER YARD (PER Z.O. SECTION 48-1183)

BUFFER YARD 'A' TO R-1A ZONING DISTRICT

LINEAR FEET OF BUFFER YARD:	198'
TYPE OF BUFFER YARD REQUIRED:	TYPE 'D' OR TYPE 'E'
BUFFER YARD PROVIDED:	TYPE E – 15' WIDTH
CANOPY TREES REQUIRED:	8 TREES (4 PER 100 L.F.)
CANOPY TREES PROVIDED:	8 TREES (2 EXISTING / 6 PROPOSED)
LARGE SHRUBS REQUIRED:	50 SHRUBS (25 PER 100 L.F.)
LARGE SHRUBS PROVIDED:	50 SHRUBS (12 EXISTING / 38 PROPOSED)
SCREENING ELEMENT REQUIRED:	6 FOOT HIGH SOLID WOOD FENCE
SCREENING ELEMENT PROVIDED:	EXISTING 6 FOOT HIGH BRICK SCREEN WALL AND SOLID WOOD FENCE

BUFFER YARD 'B' TO R-1A ZONING DISTRICT

LINEAR FEET OF BUFFER YARD:	82'
TYPE OF BUFFER YARD REQUIRED:	TYPE 'D' OR TYPE 'E'
BUFFER YARD PROVIDED:	TYPE E – 15' WIDTH
CANOPY TREES REQUIRED:	4 TREES (4 PER 100 L.F.)
CANOPY TREES PROVIDED:	4 TREES
LARGE SHRUBS REQUIRED:	21 SHRUBS (25 PER 100 L.F.)
LARGE SHRUBS PROVIDED:	21 SHRUBS
SCREENING ELEMENT REQUIRED:	6 FOOT HIGH SOLID WOOD FENCE
SCREENING ELEMENT PROVIDED:	EXISTING 6 FOOT HIGH STONE WALL AND SOLID WOOD FENCE

SUGGESTED STREETSCAPE PLANT LIST

KEY	BOTANICAL NAME	COMMON NAME	HEIGHT/SIZE	CALIPER	CONDITION/ REMARKS
LARGE DECIDUOUS TREES					
PA	PLATANUS X ACERIFOLIA	LONDON PLANE TREE		2.5" CAL. MIN.	B&B
QP	QUERCUS PHELLOS	WILLOW OAK		2.5" CAL. MIN.	B&B
SHRUBS (GROUND OR POT PLANTERS)					
IG	ILEX GLABRA	INKBERRY HOLLY	30" MIN.		CONT.
JH	JUNIPERUS CONFERTA	SHORE JUNIPER	6"-12" MIN.		CONT.
PL	PRUNUS LAUROCERASUS 'OTTO LUYKENS'	CHERRY LAUREL	30" MIN.		CONT.
RR	ROSA RADRAZZ	ROSE	30" MIN.		CONT.
GROUNDCOVER (GROUND OR POT PLANTERS)					
HC	HYPERICUM CALYCINUM	ST. JOHN'S WORT	1 GAL.		CONT.
LM	LIROPE MUSCARI 'ROYAL PURPLE'	LILYTURF	1 GAL.		CONT.

SUGGESTED BUFFER YARD PLANT LIST

KEY	BOTANICAL NAME	COMMON NAME	HEIGHT	CALIPER	CONDITION/ REMARKS
LARGE DECIDUOUS TREES					
BN	BETULA NIGRA	RIVER BIRCH	12'-14' HT		B&B
GT	GLEDITSIA TRIACANTHOS	SKYLINE HONEYLOCUST		2" CAL. MIN.	B&B
QP	QUERCUS PHELLOS	WILLOW OAK		2" CAL. MIN.	B&B
QB	QUERCUS BICOLOR	SWAMP WHITE OAK		2" CAL. MIN.	B&B
EVERGREEN TREE					
IO	ILEX OPACA	AMERICAN HOLLY	6' MIN		B&B
JV	JUMIPERUS VIRGINIANA	EASTERN RED CEDAR	6' MIN		B&B
SHRUBS					
IG	ILEX GLABRA	INKBERRY HOLLY	24"-30"		CONT.
IT	ITEA VIRGINICA	VIRGINIA SWEETSPIRE	24"-30"		CONT.
IV	ILEX VERTICILLATA	WINTERBERRY	24"-30"		CONT.
JG	JUNIPERUS VIRGINIANA 'GREY OWL'	JUNIPER	24"-30"		CONT.
MP	MYRICA PENNSYLVANICA	NORTHERN BAYBERRY	24"-30"		CONT.
PL	PRUNUS LAUROCERASUS 'SCHIPKAENSIS'	CHERRY LAUREL	24"-30"		CONT.
RR	ROSA 'RADRAZZ'	KNOCKOUT ROSE	24"-30"		CONT.
VP	VIBURNUM X PRAGENSE	PRAGUE VIBURNUM	24"-30"		CONT.

GENERAL LANDSCAPE NOTES

MATERIALS

1. THE TREES AND SHRUBS THAT ARE PLANTED SHALL BE OF THE SPECIES AND SIZE SPECIFIED ON THE APPROVED PLANS UNLESS SUBSTITUTIONS ARE APPROVED BY THE CITY.
2. ALL TREE AND SHRUB SIZES SHALL MEET THE STANDARDS SPECIFIED IN THE LATEST EDITION OF THE AMERICAN ASSOCIATION OF NURSERYMEN'S AMERICAN STANDARD FOR NURSERY STOCK, (ANSI Z60.1).

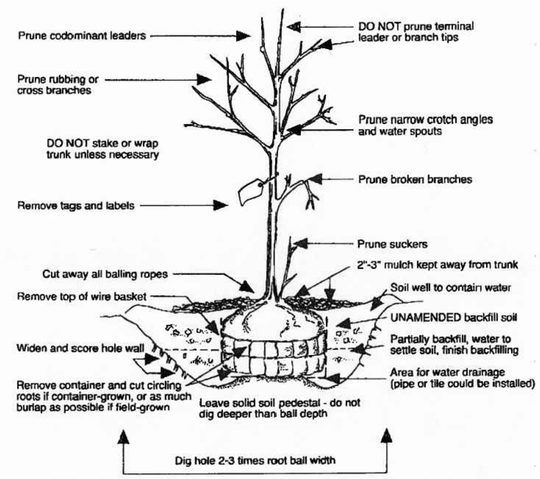
DELIVERY AND TEMPORARY STORAGE

1. PLANTS SHALL BE PROTECTED DURING DELIVERY TO PREVENT DESICCATION OF LEAVES.
2. TREES AND SHRUBS SHOULD BE PLANTED ON DAY OF DELIVERY. IF THIS IS NOT POSSIBLE, THE CONTRACTOR SHALL PROTECT UNPLANTED PLANTS BY KEEPING THEM IN SHADE, WATERED AND PROTECTED WITH SOIL, MULCH OR OTHER ACCEPTABLE MATERIAL.
3. TREES AND SHRUBS SHALL NOT REMAIN UNPLANTED FOR MORE THAN TWO WEEKS.

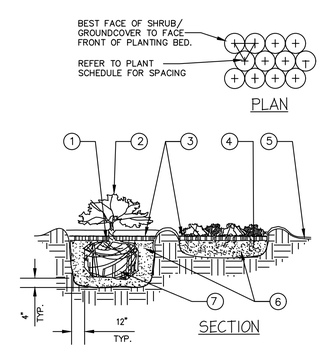
PLANTING OF NURSERY STOCK

1. ALL TREES AND SHRUBS SHALL BE PLANTED AS SPECIFIED IN THE LATEST EDITION OF THE "TREE AND SHRUB PLANTING GUIDELINES" PREPARED BY THE VIRGINIA COOPERATIVE EXTENSION, VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY.
2. IF PLANTING IN AREAS THAT HAVE BEEN PREVIOUSLY COMPACTED, THE SOIL SHALL BE PROPERLY PREPARED (TILLED AND AMENDED AS NEEDED BASED ON SOIL SAMPLES) TO A DEPTH OF 1 FOOT (0.3 METERS), PRIOR TO INSTALLATION OF LANDSCAPE MATERIAL. SOIL WITHIN INDIVIDUAL PLANTING HOLES SHALL NOT BE AMENDED.
3. THE STAKING AND GUYING OF TREES IS NOT REQUIRED EXCEPT WHERE SITE CONDITIONS WARRANT THEIR USE. EXAMPLES OF CONDITIONS WHERE THESE METHODS MAY BE NECESSARY INCLUDE: PLANTING IN WINDY LOCATIONS, ON STEEP SLOPES, OR WHERE VANDALISM MAY BE A CONCERN. ALL STAKES AND GUYS MUST BE REMOVED WITHIN ONE YEAR OF PLANT INSTALLATION.
4. ALL TREES AND SHRUBS SHALL BE MULCHED AFTER PLANTING, TO A MINIMUM DEPTH OF 2 INCHES (5.1 CENTIMETERS), BUT NO MORE THAN 3 INCHES (7.6 CENTIMETERS), WITH AN APPROPRIATE MULCH MATERIAL SUCH AS PINE BARK, PINE NEEDLES, WOOD CHIPS OR SHREDDED BARK. MULCH SHALL COVER THE ENTIRE ROOT AREA AND SAUCER; HOWEVER, MULCH SHALL NOT BE PLACED WITHIN 6 INCHES (15.3 CENTIMETERS) OF THE TRUNK.

TREE PLANTING



SHRUB/GROUNDCOVER PLANTING



1. TOP OF SHRUB ROOTBALLS TO BE PLANTED 1" – 2" HIGH WITH SOIL MOUNDING UP TO THE TOP OF ROOTBALL.
2. WHEN USED IN MASSES– PRUNE ALL SHRUBS TO ACHIEVE A UNIFORM MASS/HEIGHT
3. 4" MINIMUM OF HARDWOOD BARK MULCH COMPACTED OR AS SPECIFIED.
4. EXCAVATE ENTIRE BED SPECIFIED FOR GROUNDCOVER BED.
5. 4" MINIMUM OF TOPSOIL TO BRING TO FINISHED GRADE (SEE GRADING PLAN).
6. PREPARED PLANTING SOIL AS SPECIFIED. NOTE: WHEN GROUND–COVERS AND SHRUBS USED IN MASSES ENTIRE BED TO BE AMENDED WITH PLANTING SOIL MIX AS SPECIFIED.
7. SCARIFY ROOTBALL SIDES AND BOTTOM.

Bowman CONSULTING

Bowman Consulting Group, Ltd.
13461 Sunrise Valley Drive
Suite 500
Herndon, Virginia 20171
Phone: (703) 464-1000
Fax: (703) 481-9720
www.bowmanconsulting.com

© Bowman Consulting Group, Ltd.

LANDSCAPE SCHEDULE, NOTES, DETAILS AND EXISTING TREE INVENTORY
BROAD & WASHINGTON
CITY OF FALLS CHURCH, VIRGINIA

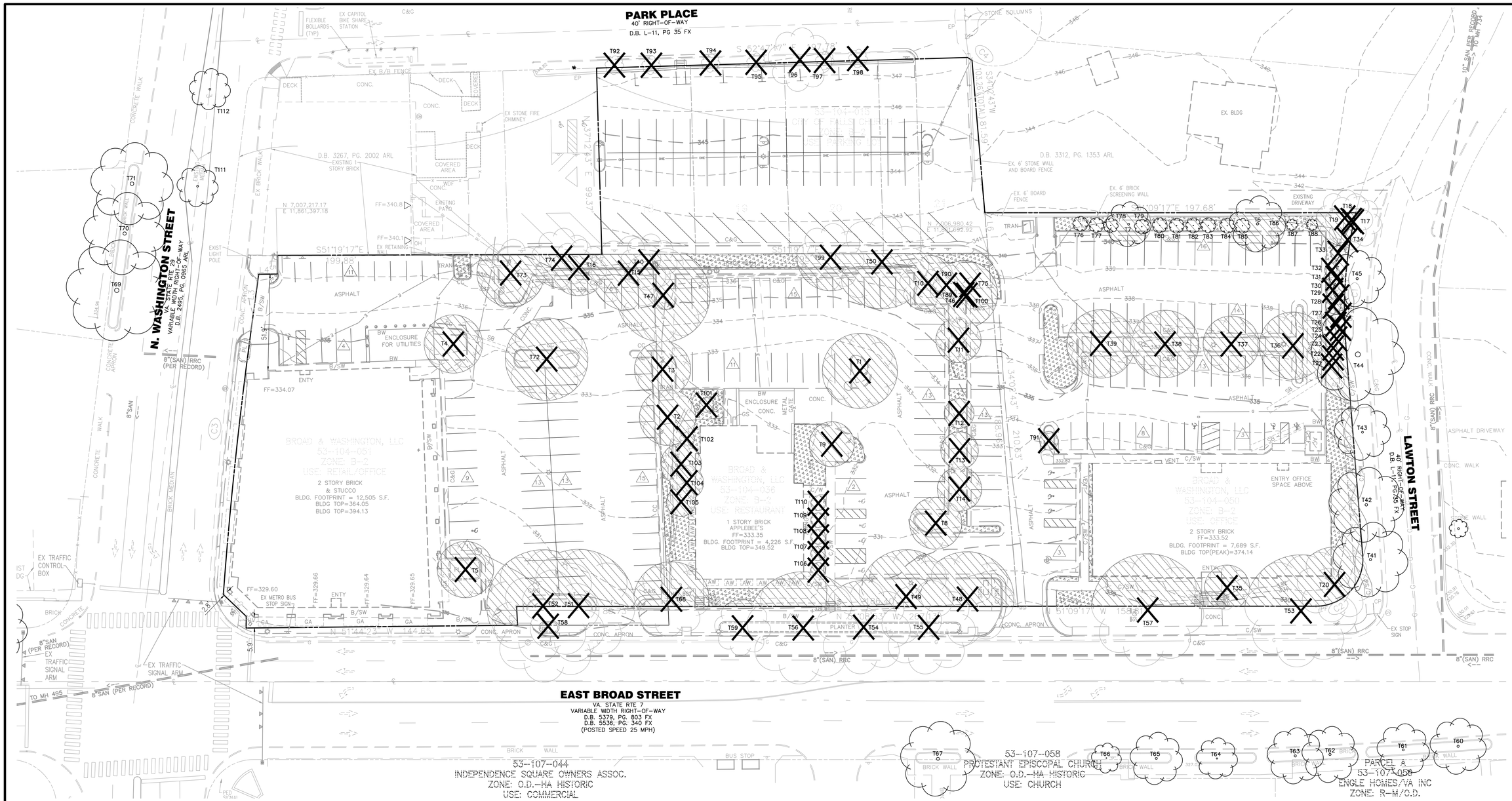
COMMONWEALTH OF VIRGINIA
MATTHEW J. TAUSCHER
Lic. No. 000832
08/10/2020
LANDSCAPE ARCHITECT

PLAN STATUS	
08/10/20	3rd Submission
04/03/20	2nd Submission
11/20/19	1st Submission
DATE	DESCRIPTION

MT	KF	MT
DESIGN	DRAWN	CHKD
SCALE	H: 1" = 20' V:	

JOB No. 8366-01-001
DATE : NOVEMBER 2019
FILE No. 8366-D-RZ-001
SHEET C13.0

P:\8366 – Falls Church Assemblage\8366-02-001 (PLN) – Broad & Washington St\Planning\Special Exception 2019\8366-D-RZ-001 LSC.dwg



COVER TYPE

KEY	COVER TYPE	COMMON SPECIES TYPE	SUCCESSION STAGE	CONDITION	TOTAL AREA
	DEVELOPED LAND	N/A	N/A	N/A	1.85 AC.
	LANDSCAPE TREE CANOPY	SEE TREE INVENTORY	VARIES	FAIR/ GOOD	0.74 AC.
	MISC. (SHRUB AND GROUND COVER)	N/A	N/A	FAIR/ GOOD	0.09 AC.

TOTAL SITE AREA: 2.68 AC.

LEGEND

EXISTING INDIVIDUAL TREE TO BE REMOVED (SEE TREE INVENTORY TABLE C13.0)

EXISTING INDIVIDUAL TREE TO REMAIN (SEE TREE INVENTORY TABLE C13.0)

GRAPHIC SCALE

25 0 12.5 25 50 100

(IN FEET)
1 inch = 25 ft.

Bowman CONSULTING

Bowman Consulting Group, Ltd.
13461 Sunrise Valley Drive
Suite 500
Herndon, Virginia 20171

Phone: (703) 464-1000
Fax: (703) 481-9720
www.bowmanconsulting.com
© Bowman Consulting Group, Ltd.

EXISTING VEGETATIVE MAP

BROAD & WASHINGTON

CITY OF FALLS CHURCH, VIRGINIA

COMMONWEALTH OF VIRGINIA
MATTHEW J. TAUSCHER
Lic. No. 000832
08/10/2020
LANDSCAPE ARCHITECT

PLAN STATUS	
08/10/20	3rd Submission
04/03/20	2nd Submission
11/20/19	1st Submission
DATE	DESCRIPTION

MT	KF	MT
DESIGN	DRAWN	CHKD

SCALE H: 1" = 25' V:

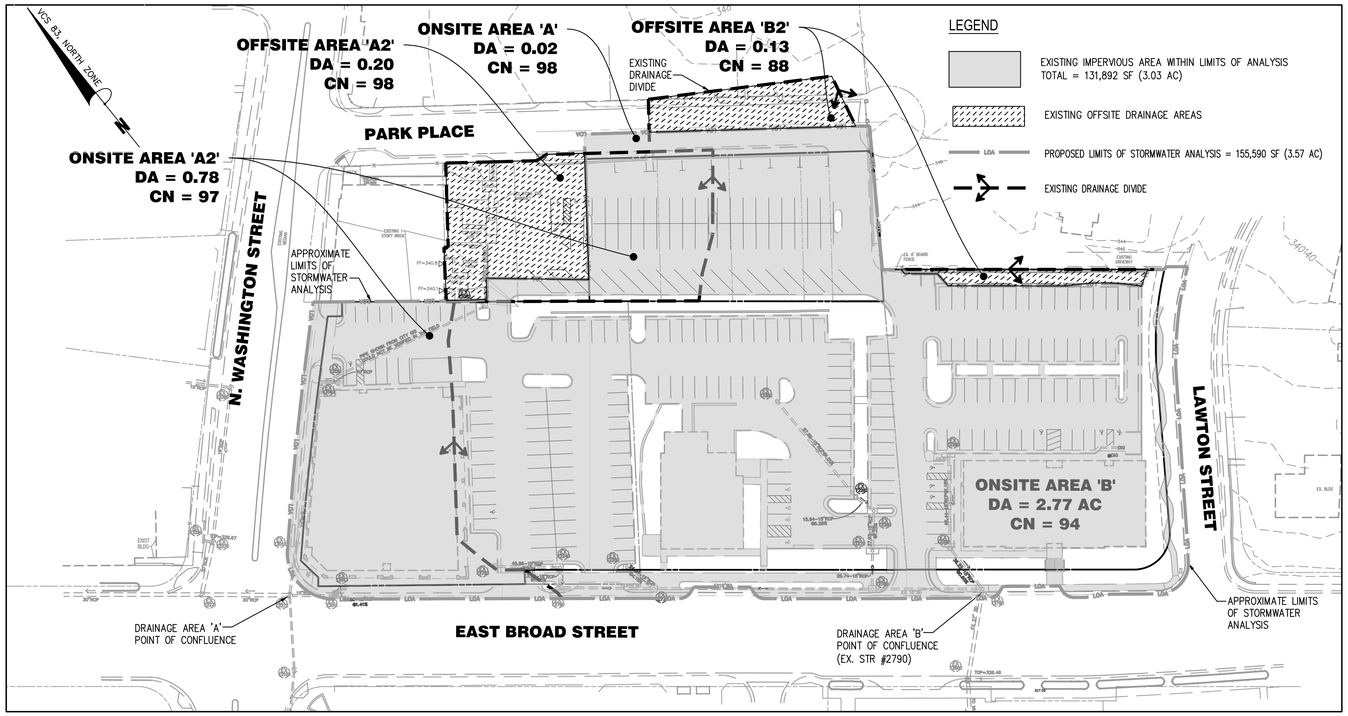
JOB No. 8366-01-001

DATE : NOVEMBER 2019

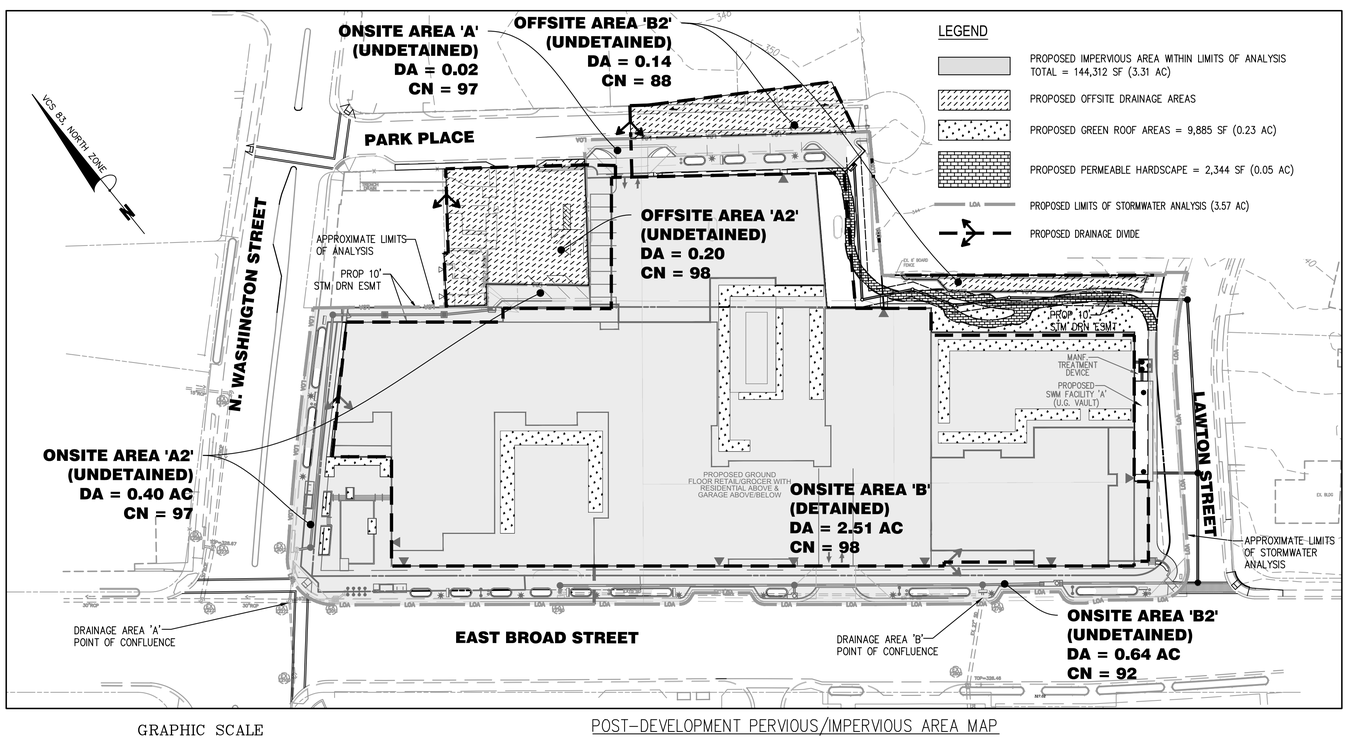
FILE No. 8366-D-RZ-001

SHEET C14.0

P:\8366 – Falls Church Assemblage\8366-02-001 (PLN) – Broad & Washington St\Planning\Special Exception 2019\8366-D-RZ-001 EVM.dwg



PRE-DEVELOPMENT PERVIOUS/IMPERVIOUS AREA MAP



POST-DEVELOPMENT PERVIOUS/IMPERVIOUS AREA MAP

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

STORMWATER MANAGEMENT/BMP NARRATIVE:

SITE LOCATION:

THE SITE IS LOCATED IN THE CITY OF FALLS CHURCH, VIRGINIA, ALONG THE NORTH SIDE OF EAST BROAD STREET. IT IS GENERALLY BOUNDED BY NORTH WASHINGTON STREET TO THE WEST, EXISTING PARKING LOT AND RESIDENTIAL USE TO THE NORTH, LAWTON STREET TO THE EAST, AND EAST BROAD STREET TO THE SOUTH.

EXISTING CONDITIONS:

THE 3.16 ACRE SITE IS CURRENTLY DIVIDED INTO FOUR PARCELS. THE COLLECTIVE PARCELS CONTAIN A TWO-STORY BRICK RETAIL/OFFICE BUILDING, A ONE-STORY APPLEBEE'S RESTAURANT, A TWO-STORY BRICK OFFICE BUILDING, AND THEIR RESPECTIVE SURFACE PARKING LOTS, AND THE CITY PARKING LOT.

THE EXISTING SITE DRAINS UNCONTROLLED TOWARDS EAST BROAD STREET WHERE RUNOFF IS CAPTURED AND CONVEYED INTO THE PUBLIC STORM DRAIN NETWORK. THERE IS A HIGH POINT ALONG EAST BROAD STREET THAT DIVERTS RUNOFF INTO TWO SEPARATE PUBLIC STORM SYSTEMS. FOR COMPUTATIONAL PURPOSES, THE DRAINAGE AREAS TO THESE TWO POINTS OF CONFLUENCE HAVE BEEN CALLED DRAINAGE AREAS 'A' AND 'B'.

DRAINAGE AREA 'A' IS ALMOST ENTIRELY IMPERVIOUS. IT FLOWS TOWARDS NORTH WASHINGTON STREET, WHERE RUNOFF IS CARRIED DOWNSTREAM TO EAST BROAD STREET. FROM THERE, CAPTURED STORMWATER IS CONVEYED NORTHWEST ALONG EAST BROAD STREET AND AWAY FROM THE SITE. DRAINAGE AREA 'B' ENCOMPASSES THE MAJORITY OF THE SITE WITH SOME OFFSITE RUNOFF FLOWING THROUGH THE SITE FROM THE NORTHEAST. IT CONVERGES AT A SAG INLET (EX STRUCTURE 2790) ALONG EAST BROAD STREET WITHIN THE RIGHT OF WAY ADJACENT TO THE EXISTING TWO STORY OFFICE BUILDING. DRAINAGE AREA 'B' IS APPROXIMATELY 93% IMPERVIOUS.

IN THE EXISTING CONDITION, THE TOTAL LIMITS OF ANALYSIS OF 3.57 ACRES CONTAINS APPROXIMATELY 2.945 IMPERVIOUS ACRES OF SURFACE AREA AND WITH 0.625 EXISTING ACRES OF URBAN OPEN SPACE WITH VERY LITTLE GRASS COVER. DETAILED INFORMATION ON THE PIPE CAPACITY CURRENTLY IN THE CLOSED CONDUIT SYSTEM WITHIN N. WASHINGTON AND E. BROAD STREETS WAS NOT AVAILABLE AT THIS TIME. THE EXISTING PIPES ARE ASSUMED TO BE FLOWING AT 80% CAPACITY.

RE-DEVELOPMENT CONDITIONS:

THE EXISTING PARKING LOT AND BUILDINGS WILL BE DEMOLISHED AND THE SITE RE-DEVELOPED AS A GROUND FLOOR RETAIL BUILDING WITH A STRUCTURED PARKING FACILITY BELOW AND ABOVE, RESIDENTIAL UNITS ABOVE, GARAGE ENTRANCES, FRONTAGE IMPROVEMENTS ALONG EAST BROAD STREET AND NORTH WASHINGTON STREET.

THE IMPERVIOUS AREA WITHIN THE LIMITS OF LAND DISTURBANCE WILL INCREASE BY APPROXIMATELY 0.38 ACRES AS A RESULT OF THE RE-DEVELOPMENT. EXISTING OFF-SITE DRAINAGE DIVIDES HAVE BEEN HONORED TO THE MAXIMUM EXTENT POSSIBLE, PRESERVING THE SAME POINTS OF CONFLUENCE FOR DRAINAGE AREAS 'A' AND 'B'.

THE MAJORITY OF THE SITE WILL BE CAPTURED AND TREATED BY MANUFACTURED BEST MANAGEMENT PRACTICES (BMPS) TO BE LOCATED IN PROXIMITY TO THE PROPOSED UNDERGROUND SWM VAULT FACILITY LOCATED ADJACENT TO THE EAST SIDE OF THE BUILDING STRUCTURE. THIS AREA IS NOTED AS "CONTROLLED" AREA WITHIN THE POST-DEVELOPMENT PERVIOUS/IMPERVIOUS AREA MAP ON THIS SHEET.

WATER QUANTITY:

SITE RUNOFF TO POINT OF CONFLUENCE 'B' WILL INCREASE WITH RE-DEVELOPMENT. IT WILL BE DETAINED WITHIN AN UNDERGROUND DETENTION FACILITY, (I.E. MAXCHAMBER OR APPROVED EQUIVALENT), WHICH WILL RELEASE STORMWATER THROUGH A CONTROL STRUCTURE AT A FLOW RATE EQUAL TO OR LESS THAN 80% OF PRE-DEVELOPMENT PEAK FLOW RATE (A 20% REDUCTION IN PEAK FLOW RATE). THE MAXIMUM ALLOWABLE RELEASE RATES FOR DRAINAGE AREA 'B', BASED ON 80% OF THE EXISTING PEAK FLOW, IS 8.18 CFS FOR THE 2-YEAR STORM AND 13.22 CFS FOR THE 10-YEAR STORM. THE PROPOSED UNDERGROUND DETENTION FACILITY ON-SITE WILL BE DESIGNED TO MITIGATE STORMWATER GENERATED BY THE RE-DEVELOPMENT IN EXCESS OF THE ALLOWABLE DISCHARGE. THE PROPOSED DESIGN WILL INCLUDE A 2-YEAR DETENTION VOLUME OF 7,066 CF AND A 10-YEAR DETENTION VOLUME OF 10,987 CF. SEE STORMWATER QUANTITY COMPUTATIONS ON THIS SHEET.

SITE RUNOFF TO POINT OF CONFLUENCE 'A' WILL DECREASE BY APPROXIMATELY 50% WITH THE PROPOSED RE-DEVELOPMENT, THEREFORE REQUIRING NO DETENTION. SEE STORMWATER QUANTITY COMPUTATIONS ON THIS SHEET. THE DEVELOPER RESERVES THE RIGHT TO MAKE CHANGES TO THE STORMWATER MANAGEMENT PLAN DURING DESIGN INCLUDING BY REDUCING THE AMOUNT OF AREA BEING REDIRECTED FROM DRAINAGE AREA 'A' TO DRAINAGE AREA 'B' AS LONG AS THE REQUIREMENT TO REDUCE PEAK FLOWS BY 20% FROM THE EXISTING CONDITION IS MET AT EACH OUTFALL. NONETHELESS, THE OWNER AGREES TO DESIGN, INSTALL, AND MAINTAIN THE STORMWATER MANAGEMENT PRACTICES THAT WILL RESULT IN A DECREASE IN 20% OF THE EXISTING FLOW RATES.

DETENTION VAULT EMERGENCY OVERFLOW NARRATIVE:

ALL STORMWATER RUNOFF ROUTED THROUGH THE DETENTION VAULT WILL FIRST BE TREATED BY THE JELLYFISH MANUFACTURED TREATMENT DEVICE THEN GRAVITY FLOW INTO THE VAULT AT ELEVATION 328.5. A PUMP SYSTEM IS PROPOSED FOR DRAWING DOWN THE PORTION OF THE DETENTION VAULT THAT SITS LOWER THAN THE OUTLET PIPE WHICH WILL HAVE A MAXIMUM INVERT ELEVATION OF 328. IF A SCENARIO WERE TO ARISE WHEN THE PUMP SYSTEM FOR THE DETENTION VAULT FAILS THE VAULT WILL ONLY FILL UP TO ELEVATION 328. ANY ADDITIONAL FLOW INTO THE FACILITY WILL GRAVITY FLOW OUT OF THE VAULT OUTLET PIPE INTO THE PIPE SYSTEM IN LAWTON STREET. A PUMP FAILURE WOULD NOT RESULT IN ANY RISK OF BACKING UP WATER INTO THE MANUFACTURED TREATMENT DEVICE OR THE BUILDING.

WATER QUALITY/BMP NARRATIVE:

WATER QUALITY FOR THIS SITE CAN BE ACHIEVED USING LEVEL 2 GREEN ROOF, LEVEL 1 PERMEABLE PAVEMENT, AS WELL AS A MANUFACTURED TREATMENT DEVICE LOCATED WITHIN PROXIMITY TO THE UNDERGROUND DETENTION STRUCTURE. THE SIZE, TYPE AND LOCATION OF BMPS ARE SUBJECT TO CHANGE AND WILL BE DESIGNED AND PROVIDED WITH THE FINAL ENGINEERING SITE PLAN APPLICATION. THESE STORMWATER PRACTICES WILL BE DESIGNED TO REMOVE THE REQUIRED 1.98 TP/YR. SEE SHEET C16.0 FOR A SUMMARY OF THE VIRGINIA RUNOFF REDUCTION SPREADSHEET COMPUTATIONS. SEE SHEET C16.0 FOR THE STORMWATER DETENTION ACHIEVED.

JP — Falls Church Assembleage
Fairfax County, Virginia
Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 2-Yr (cfs)	10-Yr (cfs)
SUBAREAS		
Pre A/A2	3.16	4.93
Pre B	10.23	16.52
Post A/A2	1.67	2.60
Post B/B2	12.45	19.42
REACHES		
OUTLET	27.51	43.47

NOTE: PEAK FLOW VALUES REPRESENT ONSITE AREA ONLY (WITHIN THE LOA).

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Pre A/A2		Outlet	0.8	97	0.100
Pre B		Outlet	2.77	94	0.100
Post A/A2		Outlet	0.42	97	0.100
Post B/B2		Outlet	3.15	97	0.100

Total area: 7.14 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

1-Yr (in)	2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)
2.62	3.17	4.04	4.87	6.05	7.13	8.35

	Pre-Development	Post-Development
Onsite Drainage Area 'A' & 'A2' (acre)	0.8	0.42

	2-year		10-year	
	PRE	POST (adjusted)	PRE	POST (adjusted)
P	3.17	3.17	4.87	4.87
CN	97	97	97	97
S=1000/CN-10	0.31	0.31	0.31	0.31
0.2S	0.06	0.06	0.06	0.06
$RV=(P-0.2S)^2/(P-0.2S)+S$	2.83	2.83	4.52	4.52

2 YEAR STORM		
Qpre-development	3.16	From TR55
QPost Development	1.67	From TR55
Percent Reduction of Q	47%	

10 YEAR STORM	
Qpre-development	4.93
QPost Development	2.60
Percent Reduction of Q	47%

NOTE: THIS ENERGY BALANCE SITE AREA IS BASED ON THE ONSITE DRAINAGE AREAS B AND B2.

	Pre-Development	Post-Development
Onsite Drainage Area 'B' & 'B2' (acre)	2.77	3.15

	2-year		10-year	
	PRE	POST (adjusted)	PRE	POST (adjusted)
P	3.17	3.17	4.87	4.87
CN	94	96	94	97
S=1000/CN-10	0.64	0.42	0.64	0.31
0.2S	0.13	0.08	0.13	0.06
$RV=(P-0.2S)^2/(P-0.2S)+S$	2.51	2.72	4.18	4.52

2 YEAR STORM		
Qpre-development	10.23	From TR55
QPost Development	12.45	From TR55
RVPost Development (with runoff reduction)	2.78	From RRM
Qallowable = 0.8*Qpre-development	8.18	

10 YEAR STORM	
Qpre-development	16.52
QPost Development	19.42
RVPost Development (with runoff reduction)	4.47
Qallowable = 0.8*Qpre-development	13.22

Qallowable/QPost Development	0.66	Fig 11.7 of DEQ Manual	Qallowable/QPost Development	0.68
Vs/Vr	0.22		Vs/Vr	0.21
Vs	0.62		Vs	0.96
Storage required (cf)	7066		Storage required (cf)	10987

Bowman CONSULTING

Bowman Consulting Group, Ltd.
13461 Sunrise Valley Drive
Suite 500
Herndon, Virginia 20171

Phone: (703) 464-1000
Fax: (703) 481-9720
www.bowmanconsulting.com

© Bowman Consulting Group, Ltd.

CONCEPTUAL SWM AND BMP PLAN AND DRAINAGE MAP
BROAD & WASHINGTON
CITY OF FALLS CHURCH, VIRGINIA

COMMONWEALTH OF VIRGINIA
MATTHEW J. TAUSCHER
Lic. No. 000832
08/10/2020
LANDSCAPE ARCHITECT

PLAN STATUS

DATE	DESCRIPTION
08/10/20	3rd Submission
04/03/20	2nd Submission
11/20/19	1st Submission

SH	KF	BG
DESIGN	DRAWN	CHKD

SCALE H: 1" =50' V:

JOB No. 8366-01-001

DATE : NOVEMBER 2019

FILE No. 8366-D-RZ-001

SHEET C15.0

P:\8366 - Falls Church Assembleage\8366-02-001 (PLN) - Broad & Washington St\Planning\Special Exception 2019\8366-D-RZ-001 DDP.dwg

VIRGINIA RUNOFF REDUCTION METHOD:

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

BMP Design Specifications List: **2013 Draft Stds & Specs**

Update Summary Sheet

Print Preview | Print

Site Summary

Project Title: BROAD AND WASHINGTON
Date: 43871

Total Rainfall (in):	43
Total Disturbed Acreage:	3.57

Site Land Cover Summary

Pre-ReDevelopment Land Cover (acres)

	A soils	B Soils	C Soils	D Soils	Totals	% of Total
Forest/Open (acres)	0.00	0.00	0.00	0.00	0.00	0
Managed Turf (acres)	0.00	0.00	0.00	0.54	0.54	15
Impervious Cover (acres)	0.00	0.00	0.00	3.03	3.03	85
					3.57	100

Post-ReDevelopment Land Cover (acres)

	A soils	B Soils	C Soils	D Soils	Totals	% of Total
Forest/Open (acres)	0.00	0.00	0.00	0.00	0.00	0
Managed Turf (acres)	0.00	0.00	0.00	0.26	0.26	7
Impervious Cover (acres)	0.00	0.00	0.00	3.31	3.31	93
					3.57	100

Site Tv and Land Cover Nutrient Loads

	Final Post-Development (Post-ReDevelopment & New Impervious)	Post-ReDevelopment	Post-Development (New Impervious)	Adjusted Pre-ReDevelopment
Site Rv	0.90	0.90	0.95	0.90
Treatment Volume (ft^3)	11,658	10,675	983	10,675
TP Load (lb/yr)	7.32	6.71	0.62	6.71

Pre-ReDevelopment TP Load per acre (lb/acre/yr)	Final Post-Development TP Load per acre (lb/acre/yr)	Post-ReDevelopment TP Load per acre (lb/acre/yr)
2.04	2.05	2.04

Total TP Load Reduction Required (lb/yr)	1.84	1.34	0.50

	Final Post-Development Load (Post-ReDevelopment & New Impervious)	Pre-ReDevelopment
TN Load (lb/yr)	52.40	49.14

Site Compliance Summary

Maximum % Reduction Required Below Pre-ReDevelopment Load	20%

Total Runoff Volume Reduction (ft^3)	553
Total TP Load Reduction Achieved (lb/yr)	2.02
Total TN Load Reduction Achieved (lb/yr)	2.60
Remaining Post Development TP Load (lb/yr)	5.31
Remaining TP Load Reduction (lb/yr) Required	0.00

** TARGET TP REDUCTION EXCEEDED BY 0.18 LB/YEAR **

Drainage Area Summary

	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	Total
Forest/Open (acres)	0.00	0.00	0.00	0.00	0.00	0.00
Managed Turf (acres)	0.03	0.23	0.00	0.00	0.00	0.26
Impervious Cover (acres)	0.40	2.92	0.00	0.00	0.00	3.31
Total Area (acres)	0.42	3.15	0.00	0.00	0.00	3.57

Drainage Area Compliance Summary

	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	Total
TP Load Reduced (lb/yr)	0.02	2.00	0.00	0.00	0.00	2.02
TN Load Reduced (lb/yr)	0.14	2.46	0.00	0.00	0.00	2.60

Drainage Area A Summary

Land Cover Summary

	A Soils	B Soils	C Soils	D Soils	Total	% of Total
Forest/Open (acres)	0.00	0.00	0.00	0.00	0.00	0
Managed Turf (acres)	0.00	0.00	0.00	0.03	0.03	7
Impervious Cover (acres)	0.00	0.00	0.00	0.40	0.40	93
					0.42	

BMP Selections

Practice	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	BMP Treatment Volume (ft^3)	TP Load from Upstream Practices (lbs)	Untreated TP Load to Practice (lbs)	TP Removed (lb/yr)	TP Remaining (lb/yr)	Downstream Treatment to be Employed
1.b. Vegetated Roof #2 (Spec #5)		0.01489899	51.38		0.03	0.02	0.01	

Total Impervious Cover Treated (acres)	0.01
Total Turf Area Treated (acres)	0.00
Total TP Load Reduction Achieved in D.A. (lb/yr)	0.02
Total TN Load Reduction Achieved in D.A. (lb/yr)	0.14

Drainage Area B Summary

Land Cover Summary

	A Soils	B Soils	C Soils	D Soils	Total	% of Total
Forest/Open (acres)	0.00	0.00	0.00	0.00	0.00	0
Managed Turf (acres)	0.00	0.00	0.00	0.23	0.23	7
Impervious Cover (acres)	0.00	0.00	0.00	2.92	2.92	93
					3.15	

BMP Selections

Practice	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	BMP Treatment Volume (ft^3)	TP Load from Upstream Practices (lbs)	Untreated TP Load to Practice (lbs)	TP Removed (lb/yr)	TP Remaining (lb/yr)	Downstream Treatment to be Employed
1.b. Vegetated Roof #2 (Spec #5)		0.212029385	731.18		0.46	0.28	0.18	
3.a. Permeable Pavement #1 (Spec #7)		0.053810836	185.57	0.00	0.12	0.07	0.05	
14.b. Manufactured Treatment Device-Filtering		1.53	5,276.21	0.00	3.31	1.66	1.66	

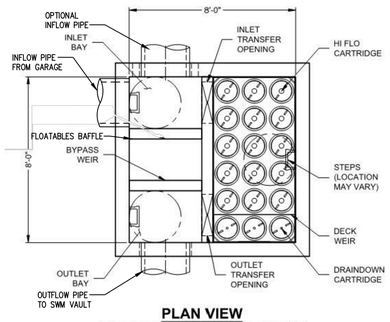
Total Impervious Cover Treated (acres)	1.80
Total Turf Area Treated (acres)	0.00
Total TP Load Reduction Achieved in D.A. (lb/yr)	2.00
Total TN Load Reduction Achieved in D.A. (lb/yr)	2.46

Runoff Volume and CN Calculations

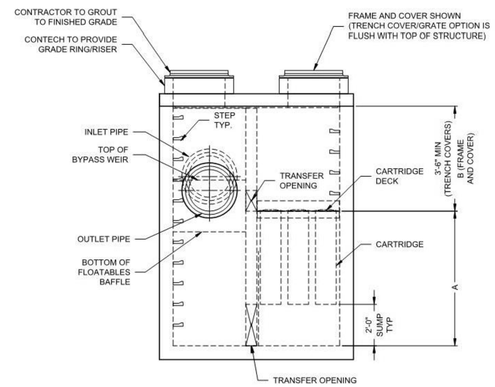
	1-year storm	2-year storm	10-year storm
Target Rainfall Event (in)	2.62	3.17	4.87

Drainage Areas	RV & CN	Drainage Area A	Drainage Area B	Drainage Area C	Drainage Area D	Drainage Area E
CN		97	97	0	0	0
RR (ft^3)		31	522	0	0	0
1-year return period	RV wo RR (wo-in)	2.28	2.28	0.00	0.00	0.00
	RV w RR (wo-in)	2.26	2.24	0.00	0.00	0.00
	CN adjusted	97	96	0	0	0
2-year return period	RV wo RR (wo-in)	2.83	2.83	0.00	0.00	0.00
	RV w RR (wo-in)	2.81	2.78	0.00	0.00	0.00
	CN adjusted	97	96	0	0	0
10-year return period	RV wo RR (wo-in)	4.52	4.52	0.00	0.00	0.00
	RV w RR (wo-in)	4.50	4.47	0.00	0.00	0.00
	CN adjusted	97	97	0	0	0

EXAMPLE-MANUFACTURED TREATMENT DEVICE (MTD):



PLAN VIEW
(TOP SLAB NOT SHOWN FOR CLARITY)



ELEVATION VIEW

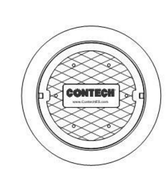
Jellyfish Filter
THIS PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING: U.S. PATENT NO. 8,287,726; 8,221,618; US 8,123,935; OTHER INTERNATIONAL PATENTS PENDING

JELLYFISH DESIGN NOTES

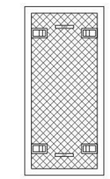
JELLYFISH TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE LENGTH AND THE NUMBER OF CARTRIDGES. THE STANDARD PEAK DIVERSION STYLE WITH PRECAST TOP SLAB IS SHOWN. ALTERNATE OFFLINE VAULT AND/OR SHALLOW ORIENTATIONS ARE AVAILABLE. PEAK CONVEYANCE CAPACITY TO BE DETERMINED BY ENGINEER OF RECORD

CARTRIDGE SELECTION

CARTRIDGE LENGTH	54"	40"	27"	15"
OUTLET INVERT TO STRUCTURE INVERT (A)	6'-6"	5'-4"	4'-3"	3'-3"
FLOW RATE HI-FLO / DRAINDOWN (CFS) (PER CART)	0.178 / 0.089	0.133 / 0.067	0.089 / 0.045	0.049 / 0.025
MAX. TREATMENT (CFS)	2.94	2.21	1.47	0.81
DECK TO INSIDE TOP (MIN) (B)	5.00	4.00	4.00	4.00



FRAME AND COVER
(DIAMETER VARIES)
N.T.S.



24" TRENCH COVER
(LENGTH VARIES)
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID	*
WATER QUALITY FLOW RATE (cfs)	*
PEAK FLOW RATE (cfs)	*
RETURN PERIOD OF PEAK FLOW (yrs)	*
# OF CARTRIDGES REQUIRED (HF / DD)	*
CARTRIDGE LENGTH	*

PIPE DATA:	I.E.	MAT'L	DIA	SLOPE %	HGL
INLET #1	*	*	*	*	*
INLET #2	*	*	*	*	*
OUTLET	*	*	*	*	*

SEE GENERAL NOTES 6-7 FOR INLET AND OUTLET HYDRAULIC AND SIZING REQUIREMENTS.

RIM ELEVATION	*

ANTI-FLOTATION BALLAST	WIDTH	HEIGHT
	*	*

NOTES/SPECIAL REQUIREMENTS:

* PER ENGINEER OF RECORD

GENERAL NOTES:
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS REPRESENTATIVE. www.ContechES.com
3. JELLYFISH WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. STRUCTURE SHALL MEET AASHTO HS-20 OR PER APPROVING JURISDICTION REQUIREMENTS, WHICHEVER IS MORE STRINGENT, ASSUMING EARTH COVER OF 0' - 10', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 LOAD RATING AND BE CAST WITH THE CONTECH LOGO.
5. STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-857, ASTM C-918, AND AASHTO LOAD FACTOR DESIGN METHOD.
6. OUTLET PIPE INVERT IS EQUAL TO THE CARTRIDGE DECK ELEVATION.
7. THE OUTLET PIPE DIAMETER FOR NEW INSTALLATIONS IS RECOMMENDED TO BE ONE PIPE SIZE LARGER THAN THE INLET PIPE AT EQUAL OR GREATER SLOPE.
8. NO PRODUCT SUBSTITUTIONS SHALL BE ACCEPTED UNLESS SUBMITTED 10 DAYS PRIOR TO PROJECT BID DATE, OR AS DIRECTED BY THE ENGINEER OF RECORD.

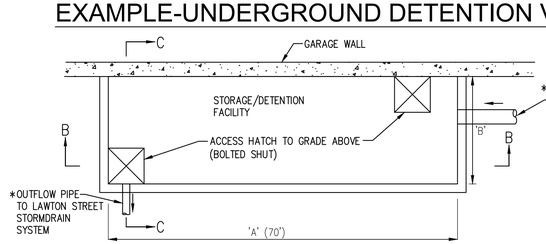
INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE.
C. CONTRACTOR WILL INSTALL AND LEVEL THE STRUCTURE, SEALING THE JOINTS, LINE ENTRY AND EXIT POINTS (NON-SHRINK GROUT WITH APPROVED WATERSTOP OR FLEXIBLE BOOT).
D. CARTRIDGE INSTALLATION, BY CONTECH, SHALL OCCUR ONLY AFTER SITE HAS BEEN STABILIZED AND THE JELLYFISH UNIT IS CLEAN AND FREE OF DEBRIS. CONTACT CONTECH TO COORDINATE CARTRIDGE INSTALLATION WITH SITE STABILIZATION.

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

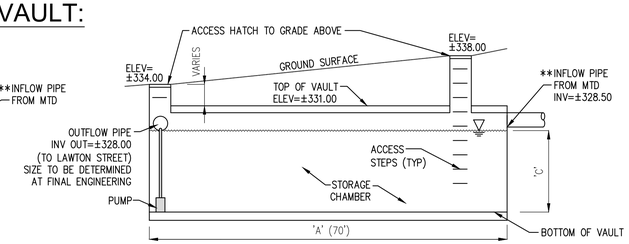
JELLYFISH JFPD0808
STANDARD DETAIL
PEAK DIVERSION CONFIGURATION

I:\COMMON\CAD\TREATMENT\13 JELLYFISH FILTER\40 STANDARD DRAWINGS\JFPD\JFVOLJFPD0808-DTL.NEW DWG 1/29/2018 10:50 AM

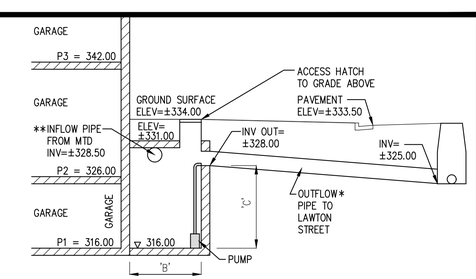
EXAMPLE-UNDERGROUND DETENTION VAULT:



PLAN VIEW



SECTION B–B



SECTION C–C

NOTES:
1) FINAL NUMBER, SHAPE, SIZE, LOCATION, AND DESIGN OF SWM VAULTS ARE SUBJECT TO CHANGE AT THE TIME OF FINAL ENGINEERING.
2) STRUCTURAL DESIGN AND REINFORCING FOR VAULTS IS TO BE DEMONSTRATED ON STRUCTURAL ENGINEERING PLANS.
3) PUMPS (IF NECESSARY) SHALL BE INTEGRATED INTO VAULTS AT THE TIME OF FINAL ENGINEERING ON A CASE BY CASE BASIS.
4) APPLICANT RESERVES THE RIGHT, AT FINAL SITE PLAN, TO UTILIZE MULTIPLE FACILITIES PER SITE IF NEEDED.

SWM CONTROL SUMMARY

VAULT ID NAME	REQUIRED VOLUME (CF)	LENGTH (FT) A	WIDTH (FT) B	STORAGE DEPTH (FT) C	VOLUME PROVIDED (CF)
FACILITY 'A'	10,987	70	13	12	10,920

* A PUMP IS PROPOSED TO DRAW DOWN THE TREATMENT VOLUME BETWEEN STORMS AND WILL BE CONNECTED TO A BACKUP GENERATOR. THE OUTLET PIPE FROM THE VAULT IS SET AT A LOWER ELEVATION THAN ANY INLET PIPES SO THAT ANY POTENTIAL PUMP FAILURE WOULD NOT RESULT IN THE BACKING UP OF WATER INTO THE BUILDING. ALSO, THE ACCESS LATCH THAT IS LOWER IN ELEVATION WILL BE A GRATE TO ALLOW FOR EMERGENCY OVERFLOW IN THE CASE THAT THE OUTFALL PIPE BECOMES CLOGGED.
** FINAL NUMBER AND LOCATION OF INFLOW PIPES TO BE DETERMINED BY BUILDING AND PLUMBING DESIGN.

NOTE:
1. THIS PLAN IS INTENDED FOR INFORMATION ONLY TO DEMONSTRATE POTENTIAL METHODS OF RAINWATER COLLECTION FOR STORM WATER MANAGEMENT. FINAL METHODS, MEANS, LOCATIONS, SIZES AND SPECIFIC FACILITIES WILL VARY WITH FINAL ENGINEERING DESIGN, AS ALLOWED BY THE REQUIREMENTS OF THE CITY OF FALLS CHURCH.

Bowman CONSULTING

Bowman Consulting Group, Ltd.
13461 Sunrise Valley Drive
Suite 500
Herndon, Virginia 20171
Phone: (703) 464-1000
Fax: (703) 481-9720
www.bowmanconsulting.com
© Bowman Consulting Group, Ltd.

CONCEPTUAL SWM & BMP COMPUTATIONS AND DETAILS
BROAD & WASHINGTON
CITY OF FALLS CHURCH, VIRGINIA

COMMONWEALTH OF VIRGINIA
MATTHEW J. TAUSCHER
Lic. No. 000832
08/10/2020
LANDSCAPE ARCHITECT

PLAN STATUS

DATE	DESCRIPTION
08/10/20	3rd Submission
04/03/20	2nd Submission
11/20/19	1st Submission

SH	KF	BG
DESIGN	DRAWN	CHKD

SCALE H: N/A V:

JOB No. 8366-01-001

DATE : NOVEMBER 2019

FILE No. 8366-D-RZ-001

SHEET C16.0

PROPOSED SANITARY FLOWS

CITTY OF FALLS CHURCH AVERAGE DESIGN FLOWS FOR DEVELOPMENT TYPES

Type of Development	Design Flow GPD
Residential:	
general	100 /person
single family	370 /residence
townhouse unit	300 /unit
apartment unit	300 /unit
Commercial:	
general	2000 /acre
motel	130 /unit
office	30 /employee
Retail	0.3 /net ft^2
Grocery (no food service)	0.2 /net ft^2
Industrial:	
general	10,000 /acre
warehouse	600 /acre
varies with type of industry	

Parcel	Address	Property Name	Land Area (ac.)	GFA	Net SF	Units	Land Use Code (Table 10.1)	Design Flow per Table 10.1 (GPD)	Analysis Location	Receiving Manhole	Status	Notes
53-104-051	101 E Broad St	Broad & Washington, LLC - Retail	0.997	12,505	11,255	-	Commercial: Office	3,376	Broad and Washington Site	738	Existing	
53-104-036	127 E Broad St	Broad & Washington, LLC - Applebees	0.789	4,226	3,803	-	Commercial: Office	1,141	Broad and Washington Site	737	Existing	
53-104-050	131 E Broad St	Broad & Washington, LLC - Office	0.899	7,689	6,920	-	Commercial: Office	2,076	Broad and Washington Site	736	Existing	
53-117-033	303 E Broad St	Brinkerhoff/Porter House	0.265		0	-	Residential - Single Family	370	Downstream	740	Existing	
53-117-006	301 E Broad St	301 E Broad St	0.261		0	-	Residential - Single Family	370	Downstream	740	Existing	
53-116-047	225 E Broad St	Falls Church Presbyterian Church	2.258	20,005	18,004	-	Comercial: Office (Church)	5,401	Downstream	739	Existing	
53-116-041	209 E Broad St	Ives House - Owned by Church	0.357		0	-	Residential - Single Family	370	Downstream	739	Existing	
53-116-004	205 E Broad St	205 E Broad St	0.318		0	-	Residential - Single Family	370	Downstream	739	Existing	
53-116-005	201 E Broad St	201 E Broad St	0.357		0	-	Residential - Single Family	370	Downstream	739	Existing	
		Broad & Washington, LLC - Retail		13,400	12,060	-	Retail	3,618	Broad and Washington Site	737	Proposed	
		Broad & Washington, LLC - Grocery		56,600	50,940	-	Grocery (no food service)	15,282	Broad and Washington Site	737	Proposed	
		Broad & Washington, LLC - Residential		422,800	380,520	350	Residential - Apartment	105,000	Broad and Washington Site	737	Proposed	

PRELIMINARY CAPACITY ANALYSIS

PRELIMINARY SANITARY SEWER DESIGN CALCULATIONS

SURV STRUCTURE NO. FROM	SURV STRUCTURE NO. TO	CITY STRUCTURE NO. FROM	CITY STRUCTURE NO. TO	GALLONS/DAY INCR. (GPD)	GALLONS/DAY TOTAL (GPD)	DESIGN FLOW (MGD) A.D.F. Incr. (MGD)	A.D.F. Accum (MGD)	P.F.F.	TOTAL PEAK FLOW (MGD)	TOTAL PEAK FLOW (CFS)	LENGTH (FEET)	PIPE DIA. (IN)	PIPE MAT.	SLOPE (%)	FLOWING FULL n	Capacity (CFS)	Capacity (MGD)	q/Q	d/D	PEAK FLOW DEPTH (FT) OF FLOW IN PIPE	VEL. (FPS) FULL FLOW	VEL. (FPS) ACTUAL FLOW	ELEVATION OF INVERTS UPPER END	LOWER END	Location	COMMENTS
Existing Conditions:																										
1751	2415	738	737	3,376	3,376	0.003	0.003	4.0	0.014	0.021	132	8	RCC	0.36	0.013	0.73	0.47	0.029	0.00	0.00	2.09	1.00	322.79	322.31	Site	Flow from Existing Retail Building
2415	7706	737	736	1,141	4,517	0.001	0.005	4.0	0.018	0.028	488	8	RCC	0.44	0.013	0.81	0.52	0.035	0.00	0.00	2.31	1.10	322.20	320.03	Site	Add flow from Existing Applebee's
7706	7626	736	735	2,076	13,845	0.002	0.014	4.0	0.055	0.086	200	8	RCC	0.31	0.013	0.67	0.44	0.127	0.15	0.10	1.93	1.40	320.04	319.42	Downstream	Add flow from Existing Office Building & Str 739
-	-	740	739	740	740	0.001	0.001	4.0	0.003	0.005	355	8	RCC	3.45	0.013	2.25	1.45	0.002	0.00	0.00	6.43	3.20	337.27	325.02	Downstream	Existing flow from Homes
-	7706	739	736	6,511	7,251	0.007	0.007	4.0	0.029	0.045	300	8	RCC	1.44	0.013	1.45	0.94	0.031	0.00	0.00	4.15	2.10	325.01	320.70	Downstream	Existing flow from Church and Homes
Proposed Conditions:																										
1751	2415	738	737	0	0	0.000	0.000	4.0	0.000	0.000	132	8	RCC	0.36	0.013	0.73	0.47	0.000	#N/A	#N/A	2.09	#N/A	322.79	322.31	Upstream	This line will be demolished in the proposed condition
2415	7706	737	736	123,900	123,900	0.124	0.124	4.0	0.496	0.767	488	8	RCC	0.44	0.013	0.81	0.52	0.949	0.75	0.50	2.31	2.60	322.20	320.03	Site	Entire Proposed Site
7706	7626	736	735	0	131,151	0.000	0.131	4.0	0.525	0.812	200	8	RCC	0.36	0.013	0.73	0.47	1.117	0.90	0.60	2.08	2.00	320.04	319.32	Downstream	Add flow from Str 739 - upsizing to 10" would provide adequate capacity for proposed flows.
-	-	735	734	0	131,151	0.000	0.131	4.0	0.525	0.812	274	10	RCC	0.30	0.013	1.20	0.78	0.676	0.60	0.50	2.20	2.30	320.23	319.41	Downstream	Entire Proposed Site
-	-	740	739	740	740	0.001	0.001	4.0	0.003	0.005	355	8	RCC	3.45	0.013	2.25	1.45	0.002	0.00	0.00	6.43	3.20	337.27	325.02	Upstream	Existing flow from Homes
-	7706	739	736	6,511	7,251	0.007	0.007	4.0	0.029	0.045	300	8	RCC	1.44	0.013	1.45	0.94	0.031	0.00	0.00	4.15	2.10	325.01	320.70	Upstream	Existing flow from Church and Homes

SANITARY CAPACITY NARRATIVE:

ALL PRELIMINARY PROPOSED FLOWS WERE ADDED TO EXISTING MANHOLE #737 FOR THIS ANALYSIS AS THE FURTHEST UPSTREAM POINT WHERE FLOWS FROM THIS DEVELOPMENT COULD BE ADDED TO THE SYSTEM. IN THIS SCENARIO AND BASED ON THESE ESTIMATED FLOWS BEING ADDED AT MANHOLE #737, ONE SEGMENT OF PIPE WOULD BE UNDERSIZED BASED ON PROPOSED FLOWS AND THE PIPE RUN BETWEEN MANHOLES #736 AND #735 WOULD REQUIRE UPSIZING FROM 8" TO 10" DIAMETER TO ADEQUATELY CONVEY THE PROPOSED FLOWS. THIS CONSERVATIVE ANALYSIS WILL BE MODIFIED WITH FINAL SITE PLAN BASED ON FINAL BUILDING PLUMBING DESIGN AND LOCATION OF FINAL SANITARY LATERAL CONNECTIONS. REPLACEMENT OF EXISTING SANITARY PIPE SYSTEM WILL BE VERIFIED AT THAT TIME.

NOTE:

1. PRELIMINARY FLOWS ARE SUBJECT TO CHANGE BASED ON FINAL DWELLING UNIT COUNT, GROSS FLOOR AREA OF RETAIL/COMMERCIAL AND FIXTURE UNIT COUNTS.
2. SANITARY LATERAL LOCATIONS ARE PRELIMINARY AND SUBJECT TO CHANGE BASED ON PLUMBING DESIGN. ALL SANITARY FLOWS WILL BE DISCHARGED TO THE ARLINGTON COUNTY DRAINAGE SHED THAT INCLUDES EXISTING STRUCTURE 735.

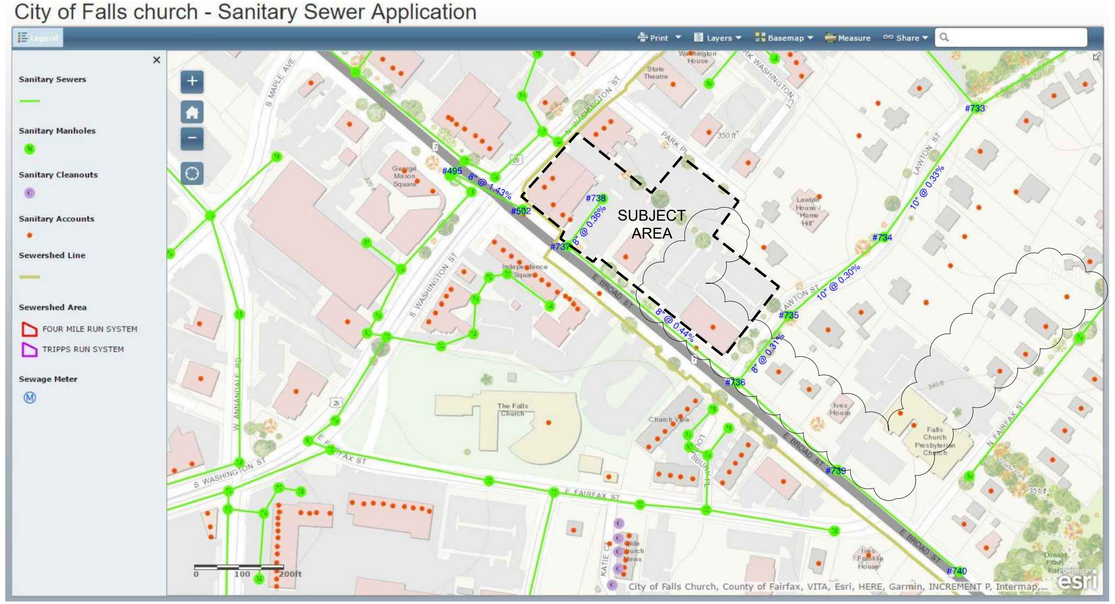
LEGEND

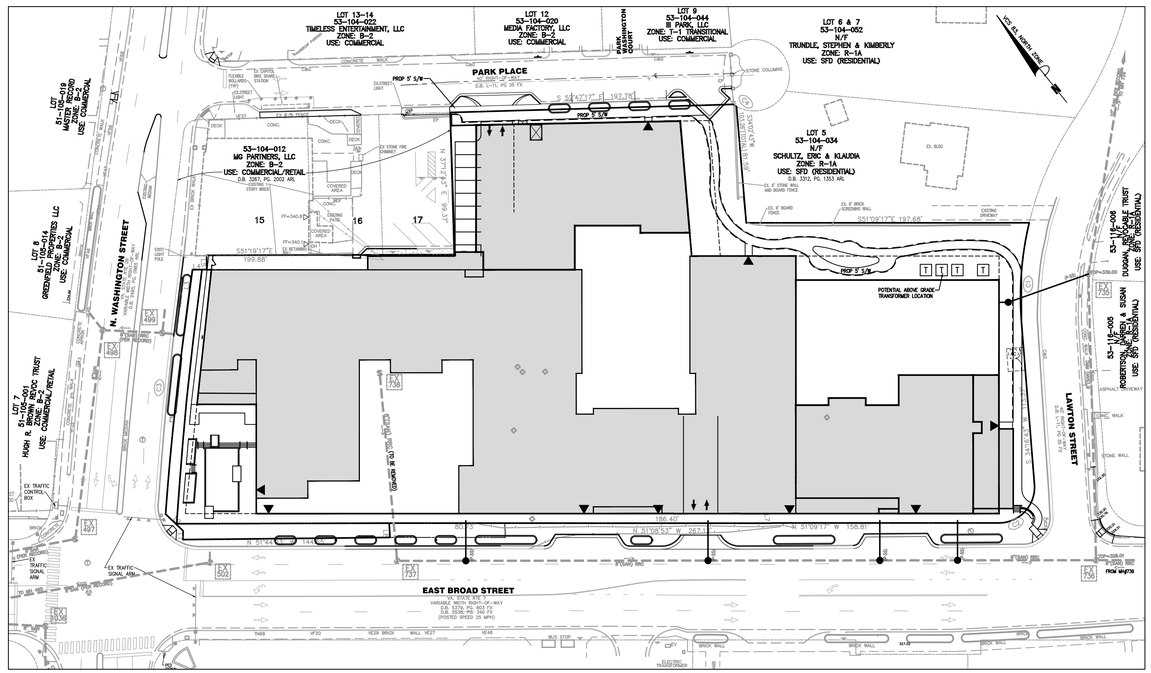
8" SAN — EXISTING SANITARY SEWER LINE

(P-SS) — PROPOSED SANITARY SEWER

SANITARY SEWER MAP

City of Falls church - Sanitary Sewer Application





GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

Bowman CONSULTING

Bowman Consulting Group, Ltd.
13461 Sunrise Valley Drive
Suite 500
Herndon, Virginia 20171
Phone: (703) 464-1000
Fax: (703) 481-9720
www.bowmanconsulting.com

© Bowman Consulting Group, Ltd.

PRELIMINARY SANITARY SEWER ANALYSIS

BROAD & WASHINGTON

CITY OF FALLS CHURCH, VIRGINIA

COMMONWEALTH OF VIRGINIA
MATTHEW J. TAUSCHER
Lic. No. 0008832
08/10/2020
LANDSCAPE ARCHITECT

PLAN STATUS

DATE	DESCRIPTION
08/10/20	3rd Submission
04/03/20	2nd Submission
11/20/19	1st Submission

MT	KF	MT
DESIGN	DRAWN	CHKD

SCALE H: 1" = 50' V:

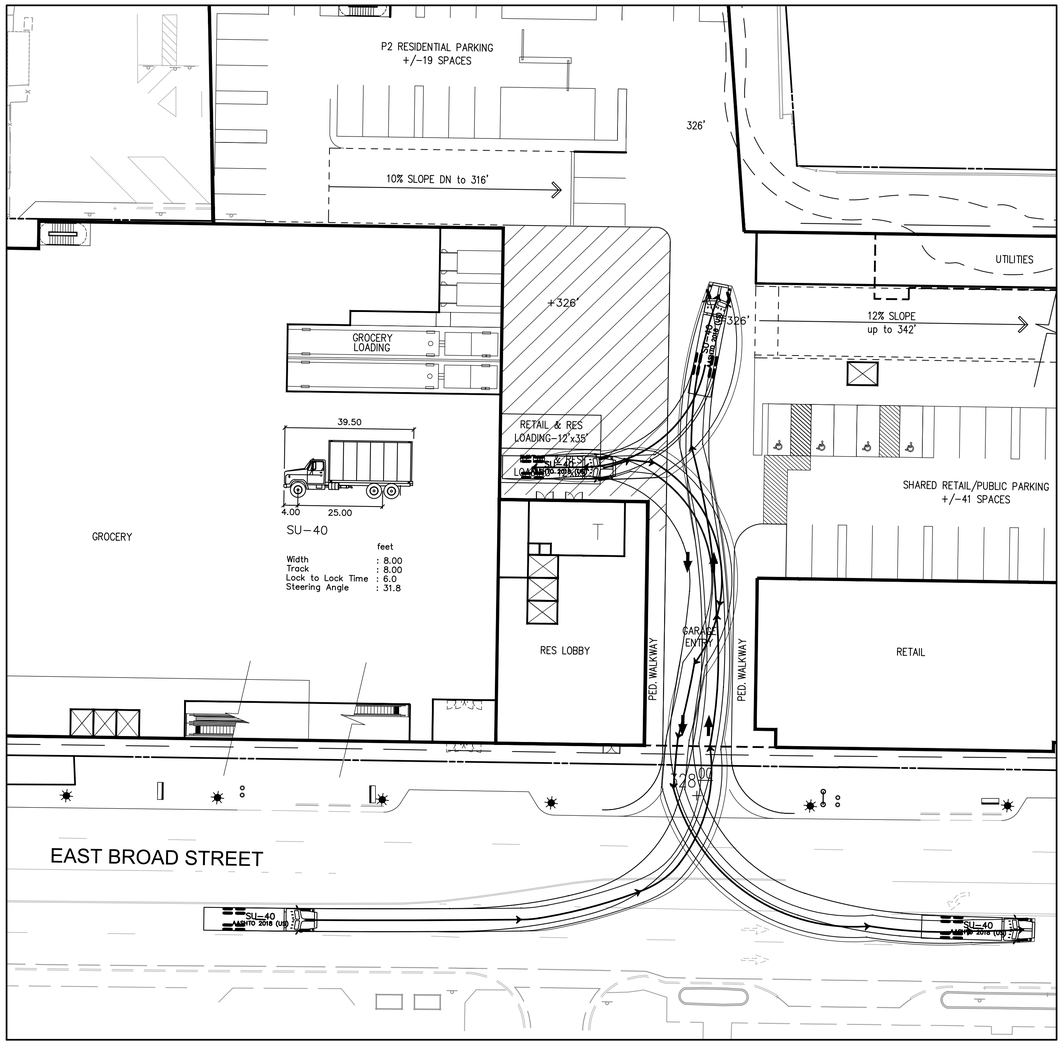
JOB No. 8366-01-001

DATE : NOVEMBER 2019

FILE No. 8366-D-RZ-001

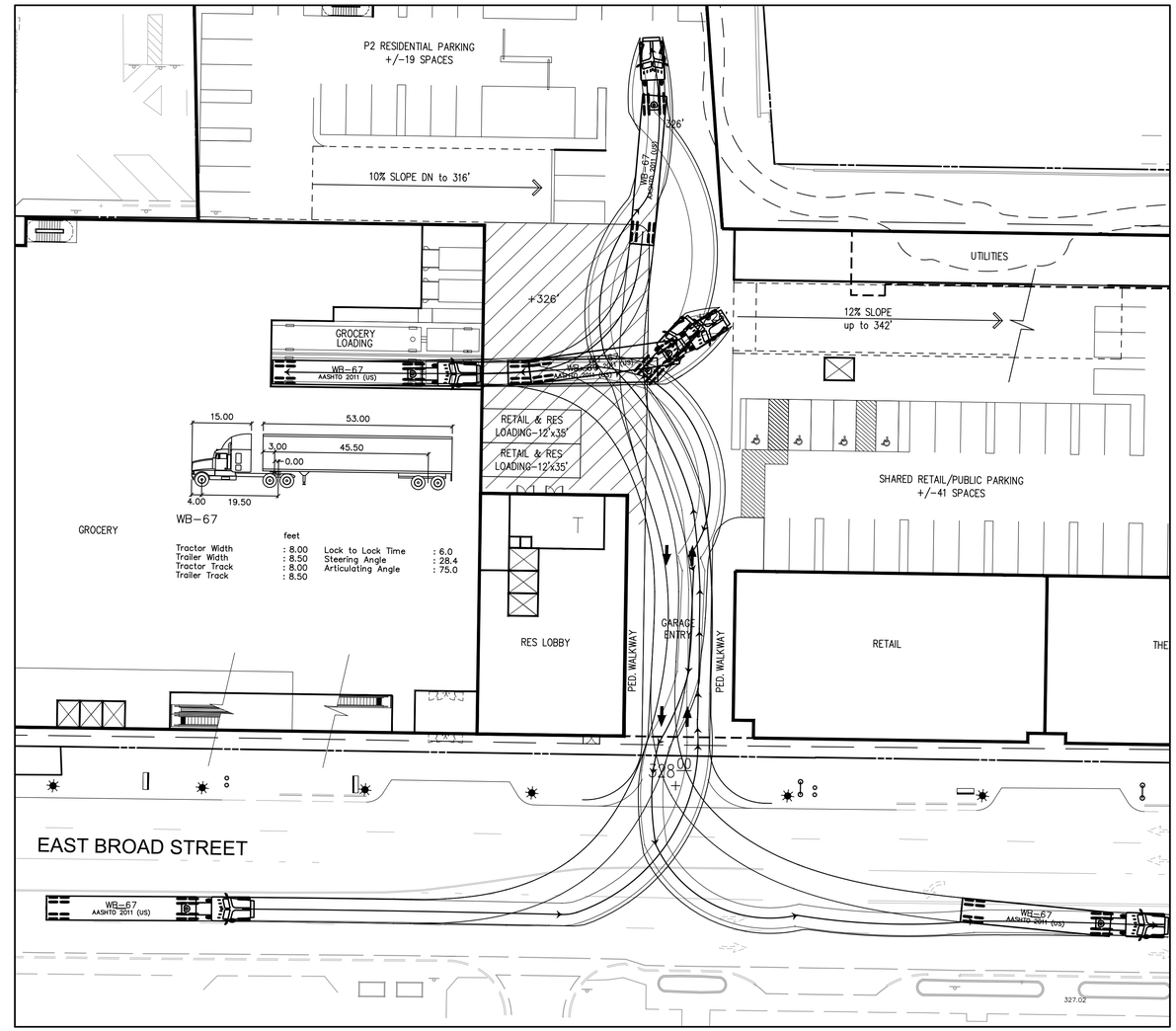
SHEET C17.0

P:\8366 - Falls Church Assemblage\8366-02-001 (PLN) - Broad & Washington St\Planning\Special Exception 2019\8366-D-RZ-001 SSA.dwg



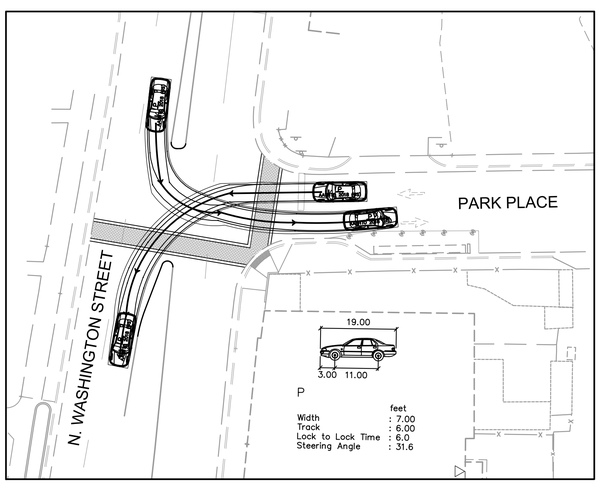
PARKING LEVEL P2-BROAD STREET ENTRANCE AUTO-TURN SU-40

SCALE: 1"=25'



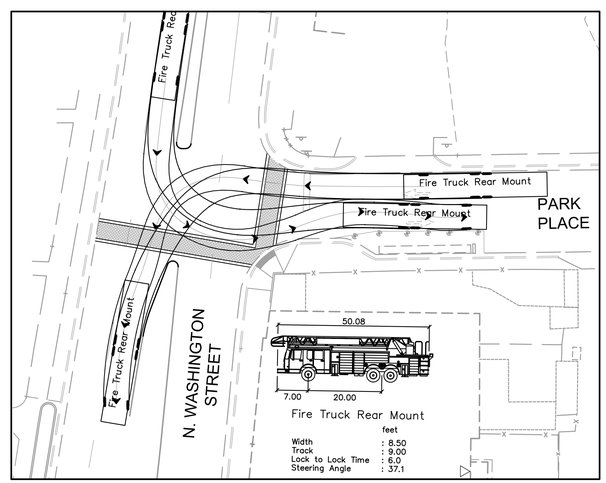
PARKING LEVEL P2-BROAD STREET ENTRANCE AUTO-TURN WB-67

SCALE: 1"=25'



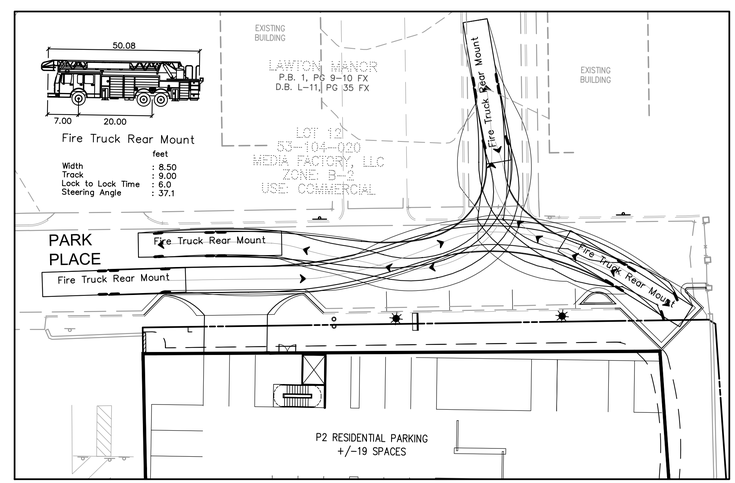
PARK PLACE AUTO-TURN PASSENGER CAR

SCALE: 1"=25'



PARK PLACE AUTO-TURN FIRE TRUCK

SCALE: 1"=25'



PARK PLACE AUTO-TURN FIRE TRUCK

SCALE: 1"=25'

Bowman CONSULTING

Bowman Consulting Group, Ltd.
13461 Sunrise Valley Drive
Suite 500
Herndon, Virginia 20171
Phone: (703) 464-1000
Fax: (703) 481-9720
www.bowmanconsulting.com
© Bowman Consulting Group, Ltd.

PRELIMINARY AUTO-TURN EXHIBIT

BROAD & WASHINGTON

CITY OF FALLS CHURCH, VIRGINIA

COMMONWEALTH OF VIRGINIA
MATTHEW J. TAUSCHER
Lic. No. 000832
08/10/2020
LANDSCAPE ARCHITECT

PLAN STATUS

DATE	DESCRIPTION
08/10/20	3rd Submission
04/03/20	2nd Submission
11/20/19	1st Submission

MT	KF	MT
DESIGN	DRAWN	CHKD

SCALE H: 1"=25' V:

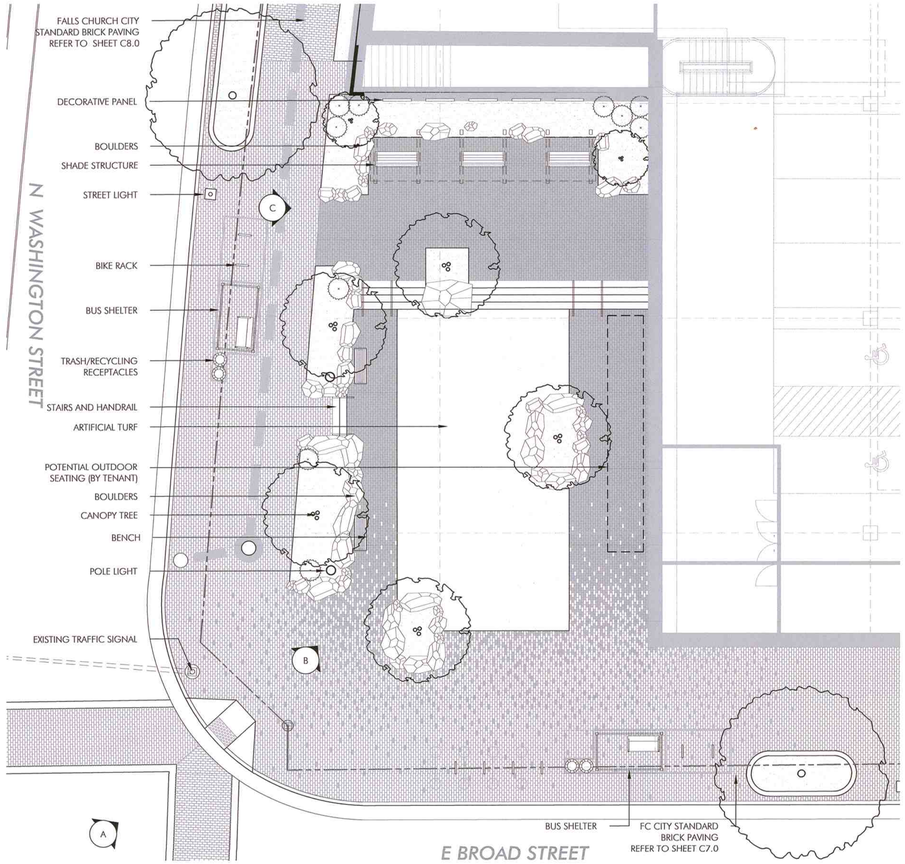
JOB No. 8366-01-001

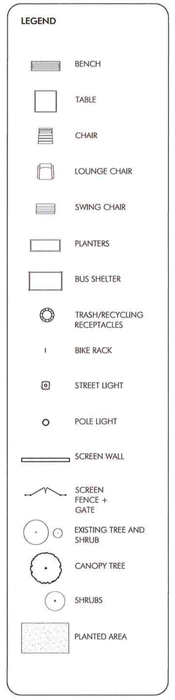
DATE : NOVEMBER 2019

FILE No. 8366-D-RZ-001

SHEET C18.0

P:\8366 - Falls Church Assemblage\8366-02-001 (PLN) - Broad & Washington St\Planning\Special Exception 2019\8366-D-RZ-001 SIT_PRKNG.dwg





01 PLAZA LANDSCAPE PLAN

1"=10'-0"

VIEW C

VIEW A

VIEW B

BROAD& WASHINGTON

City of Falls Church, VA

PARKER RODRIGUEZ, INC
PLANNING · URBAN DESIGN · LANDSCAPE ARCHITECTURE
101 North Union St. #320
Alexandria VA 22314
703.548.5010

PLAZA LANDSCAPE PLAN

1st SUBMISSION	11.20.2019
2nd SUBMISSION	04.03.2020
3rd SUBMISSION	08.07.2020

COMMONWEALTH OF VIRGINIA
MATTHEW J. TAUSCHER
Lic. No. 000832
08/10/2020
LANDSCAPE ARCHITECT

ORIGINAL ISSUE DATE

DESIGNED BY

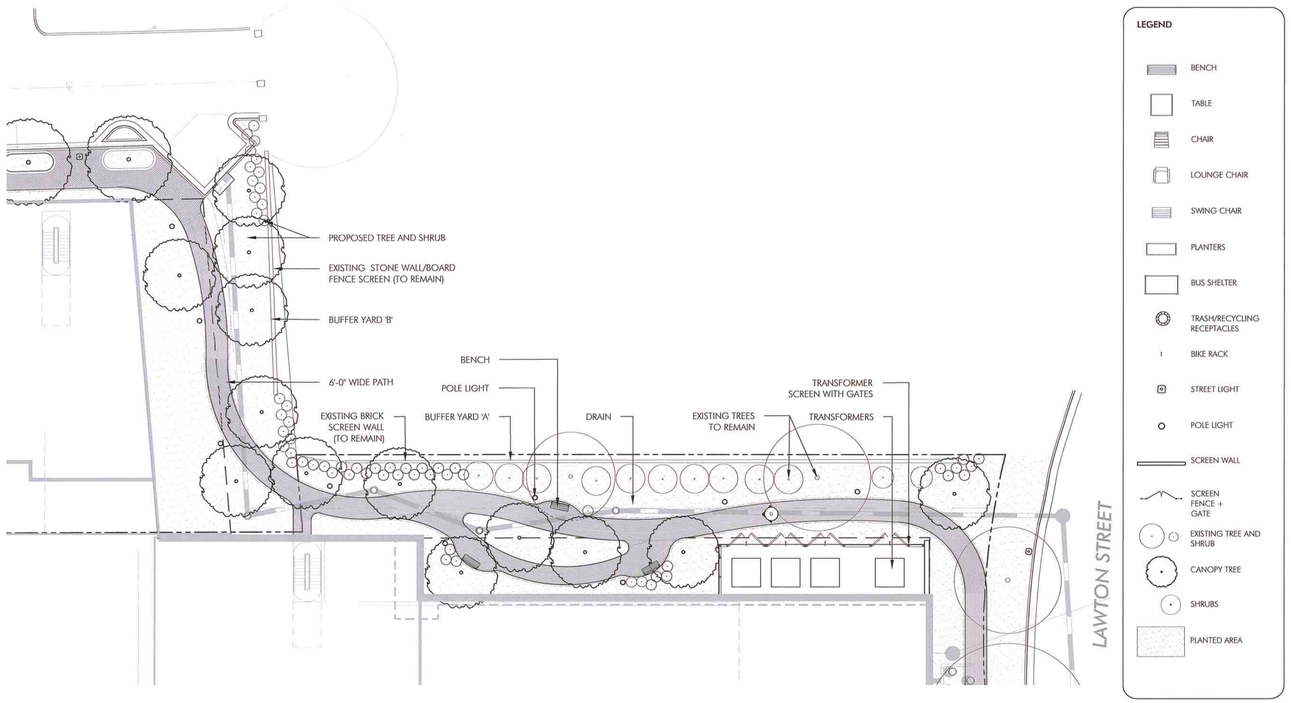
DRAWN BY

CHECKED BY

NORTH

SCALE

L1.00

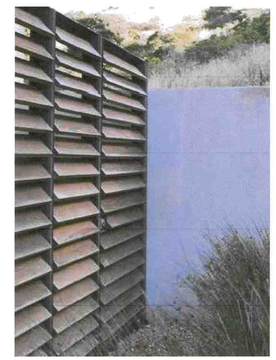


01 PASSAGE PARK LANDSCAPE PLAN

1"=10'-0"

LASER CUT METAL

VERTICAL METAL+GLASS SLATS



WOOD LOUVERS

HORIZONTAL WOOD SLAT

02 TRANSFORMER SCREENING OPTIONS

VIEW D

BROAD& WASHINGTON

City of Falls Church, VA

PARKER RODRIGUEZ, INC
PLANNING · URBAN DESIGN · LANDSCAPE ARCHITECTURE
101 North Union St. #320
Alexandria VA 22314
703.548.5010

PASSAGE PARK LANDSCAPE PLAN

1st SUBMISSION	11.20.2019
2nd SUBMISSION	04.03.2020
3rd SUBMISSION	08.07.2020

COMMONWEALTH OF VIRGINIA
MATTHEW J. TAUSCHER
Lic. No. 000832
08/10/2020
LANDSCAPE ARCHITECT

ORIGINAL ISSUE DATE

DESIGNED BY

DRAWN BY

CHECKED BY

NORTH

SCALE

L1.01