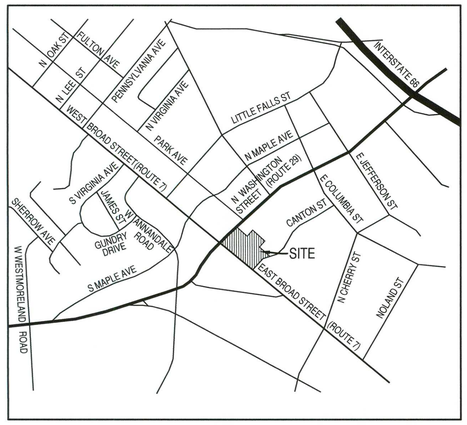
BROAD & WASHINGTON

CITY OF FALLS CHURCH, VIRGINIA

REZONING/SPECIAL EXCEPTION AND CONCEPTUAL DEVELOPMENT PLAN

MUNIS #2015-0764



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
C4.1	ALTERNATIVE CONCEPTUAL DEVELOPMENT PLAN
C5.0	PRELIMINARY GRADING AND UTILITY PLAN
C6.0	CONCEPTUAL LANDSCAPE PLAN
C7.0	CONCEPTUAL STREETSCAPE PLAN EAST BROAD STREET
C8.0	CONCEPTUAL STREETSCAPE PLAN LAWTON STREET AND N. WASHINGTON STREET
C9.0	STREET FURNISHING DETAILS
C10.0	ROADWAY FRONTAGE EXHIBIT
C11.0	CONCEPTUAL PARKING PLANS
C12.0	LANDSCAPE SCHEDULE, NOTES, DETAILS AND EXISTING TREE INVENTORY
C13.0	EXISTING VEGETATIVE MAP
C14.0	CONCEPTUAL SWM AND BMP PLAN AND DRAINAGE MAP
C15.0	CONCEPTUAL SWM AND BMP NOTES AND DETAILS
16	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.
14020 Thunderbolt Place,
Suite 300
Chantilly, Virginia 20151

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

COMMONWEALTH OF VIRGINIA
MATTHEW J. TAUSCHER
Lic. No. 000832
05-26-17
LANDSCAPE ARCHITECT

MAY 26, 2017
MARCH 20, 2017
DECEMBER 16, 2015
JUNE 30, 2015

SHEET C1.0

P:\8366 - Falls Church Assemblage\8366-02-001 (PLN) - Broad & Washington St\Planning\Rezoning\8366-D-RZ-001 COV.dwg, 5/25/2017 1:48:17 PM, KFaint

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	T-1 (TRANSITIONAL)

2. THE APPLICATION PROPERTY IS CURRENTLY ZONED B-2 (CENTRAL BUSINESS) AND T-1 (TRANSITIONAL) ZONING DISTRICT. THIS APPLICATION INCLUDES A REZONING OF THE T-1 DESIGNATED PARCEL TO A PROPOSED B-2 DESIGNATION, AND 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 "BUSINESS AND TRANSITIONAL" 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 FROM BUSINESS AND TRANSITIONAL USE TO MIXED-USE.

REZONING:

THE PURPOSE OF THIS REZONING IS TO REZONE THE PARCEL IDENTIFIED AS 53-104-050 FROM THE T-1(TRANSITIONAL) ZONING DISTRICT TO THE B-2(CENTRAL BUSINESS) ZONING DISTRICT.

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 10 FT)

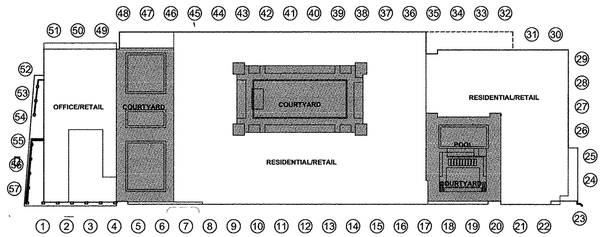
WAIVER / VARIANCE REQUESTS:

Z.O. SECTION 48-971(2)-PARKING
VARIANCE OF THE REQUIRED PARKING (733 SPACES) TO THOSE PROVIDED (600 SPACES) AS DEMONSTRATED IN THE PARKING STUDY, TRAFFIC REDUCTION PLAN AND TRAFFIC DEMAND MANAGEMENT PLAN AS SHOWN HEREIN.

Z.O. SECTION 48-1101: MINIMUM YARD SETBACK
VARIANCE TO REDUCE THE MINIMUM BUILDING SETBACK OF THE FOLLOWING:
-PROPOSED BUILDING ADJACENT TO LAWTON STREET FROM THE REQUIRED 14 FEET TO TEN (10) FEET AS SHOWN ON THE CDP.

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	329.65	329.12	329.12
2	329.97	329.34	329.34
3	330.14	329.58	329.58
4	330.32	329.79	329.79
5	330.04	329.97	329.97
6	330.13	330.14	330.13
7	330.39	330.30	330.30
8	330.78	330.18	330.18
9	331.74	330.07	330.07
10	333.00	329.72	329.72
11	332.89	329.55	329.55
12	332.04	329.10	329.10
13	331.05	329.00	329.00
14	330.06	328.80	328.80
15	329.66	328.30	328.30
16	329.02	328.07	328.07
17	328.53	327.80	327.80
18	329.19	327.37	327.37
19	330.73	327.14	327.14
20	332.29	327.24	327.24
21	332.61	327.35	327.35
22	330.36	327.48	327.48
23	331.90	327.85	327.85
24	332.54	331.86	331.86
25	333.61	333.40	333.40
26	334.03	335.25	334.03
27	335.38	336.57	335.38
28	336.94	337.82	336.94
29	338.20	338.78	338.20
30	338.59	340.38	338.59
31	338.49	340.50	338.49
32	339.49	341.00	339.49
33	339.49	341.00	339.49
34	339.45	341.00	339.45
35	339.77	341.00	339.77
36	339.97	341.00	339.97
37	340.82	341.00	340.82
38	340.55	340.55	340.55
39	341.55	341.55	341.55
40	341.70	341.70	341.70
41	341.80	341.80	341.80
42	341.90	341.90	341.90
43	341.46	341.46	341.46
44	341.46	341.46	341.46
45	341.01	341.01	341.01
46	340.31	340.31	340.31
47	339.46	339.46	339.46
48	337.97	337.97	337.97
49	336.95	336.95	336.95
50	336.96	336.96	336.96
51	337.05	337.05	337.05
52	335.71	335.89	335.71
53	333.99	334.77	333.99
54	332.99	333.72	332.99
55	331.97	331.00	331.00
56	330.95	330.31	330.31
57	330.52	329.73	329.73
AVERAGE=	**334.90**	**334.37**	**334.09**

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

SITE TABULATIONS:

Current Zoning:	B-2(Central Business) / T-1(Transitional)	
Proposed Zoning:	B-2 (Business)	
Total Site Area:	2.68 AC (per Field Survey)	
Proposed Use:	Mixed-Use (Residential/Retail/Office)	
FLOOR AREA		
Proposed GFA		
Retail	26,300 GFA	
Office (Includes Penthouse and Lobby)	66,700 GFA (6)	
Residential Area (Includes Residential Lobby Area)	294,800 GFA	
Total Gross Floor Area	387,800 GFA (1)(2)	
FLOOR AREA RATIO (F.A.R.)		
Minimum F.A.R.:	None	
Maximum F.A.R.:	None	
Proposed F.A.R.:	3.32 (2)(3)	
Density		
Total Proposed Dwelling Units:	289 D.U.	
Proposed Residential Density:	108 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)	±90.0 FT	
Open Space (Usable)(%):	**REQUIRED** N/A	**PROVIDED** ± 5 % (Private Common)

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 Property Line):	14 FT	10 FT
Minimum Side/Rear Yard Setback (To Property Line):	20 FT (Adjacent 'R' District) 0 FT (Adjacent B-2 District)	20 FT 0 FT

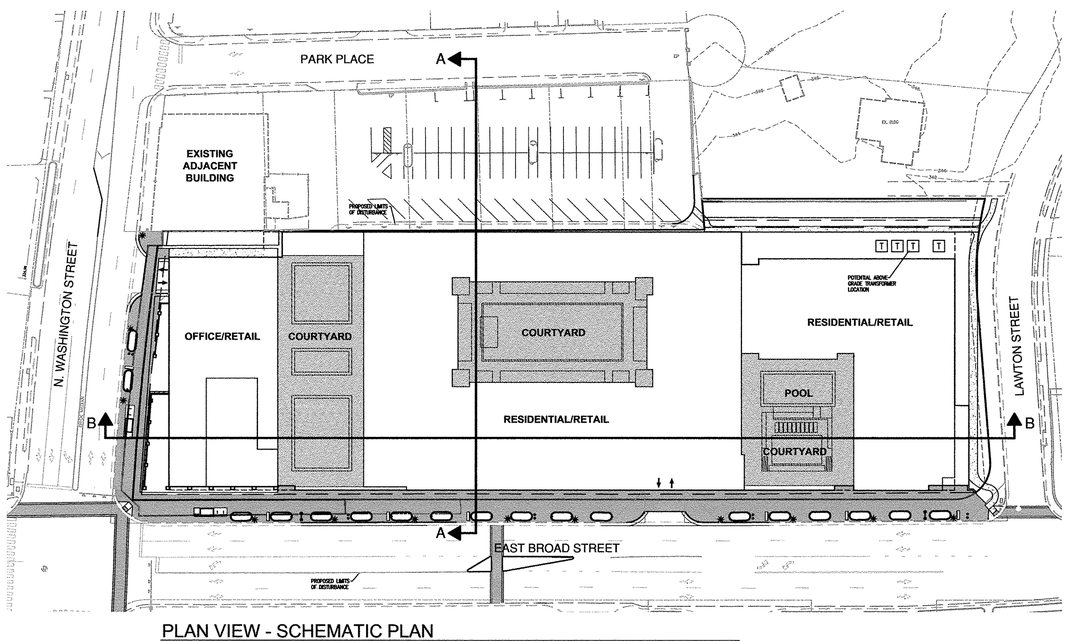
PARKING TABULATIONS:

	REQUIRED	PROVIDED
Parking - Trade (Retail):		
Trade/General Merchandise Retail (1 Space/250 SF @ 26,300 SF)	106 Spaces	105 Spaces
Parking - Office: (Business-General) (1 Space/450 SF @ 66,700 SF)	149 Spaces	136 Spaces
Parking - Residence (Multi-Family):		
Studio/Efficiency Unit (1 Space/ D.U. @ 32 DU) One Bedroom Unit (1.5 Space/ D.U. @ 136 DU) Two/Three Bedroom Unit (2 Space/ D.U. @ 121 DU)	478 Spaces	359 Spaces
TOTAL PARKING:	733 Spaces	600 Spaces (4)(5)

LOADING TABULATIONS:

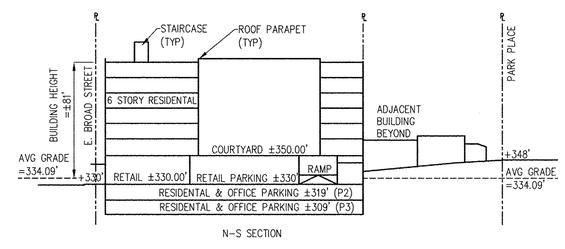
	REQUIRED	PROVIDED
General Retail-Merchandise	1 Space	1 Space
Office	1 Space	
Residential Multi-Family	0 Space	1 Space

(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 residential, retail, and office uses is subject to change with final dwelling unit count and mix, and final retail/office GFA 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 (Office and Residential uses) is to be located on parking levels P2-P3. Shared parking (Retail and Public access) is to be generally located on level P1, but may inlcude a portion of level P2.
6) Applicant reserves the right provide additional Office GFA by means of additonal building height, as may be approved/permitted by means of a CDPA/SEA application.



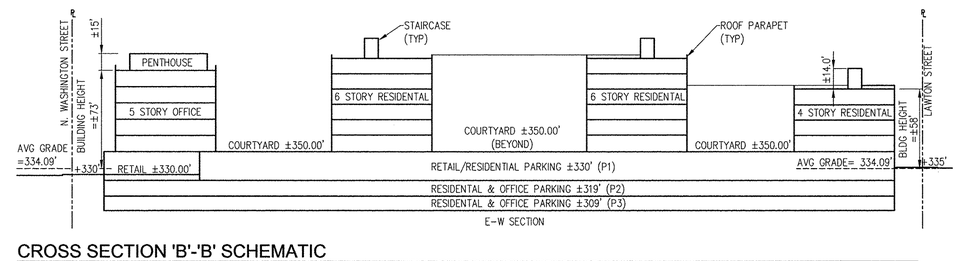
PLAN VIEW - SCHEMATIC PLAN

SCALE: 1" = 60'



CROSS SECTION 'A'-'A' SCHEMATIC

SCALE: 1" = 50'



CROSS SECTION 'B'-'B' SCHEMATIC

SCALE: 1" = 50'

Bowman CONSULTING

Bowman Consulting Group, Ltd.
14020 Thunderbolt Place
Suite 300
Chantilly, Virginia 20151

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
05-26-17
LANDSCAPE ARCHITECT

PLAN STATUS	
05/26/17	4th SUBMISSION
03/20/17	3rd SUBMISSION
12/16/15	2nd SUBMISSION
DATE	DESCRIPTION

MT	KF	MT
DESIGN	DRAWN	CHKD

SCALE H: N/A V:

JOB No. 8366-01-001

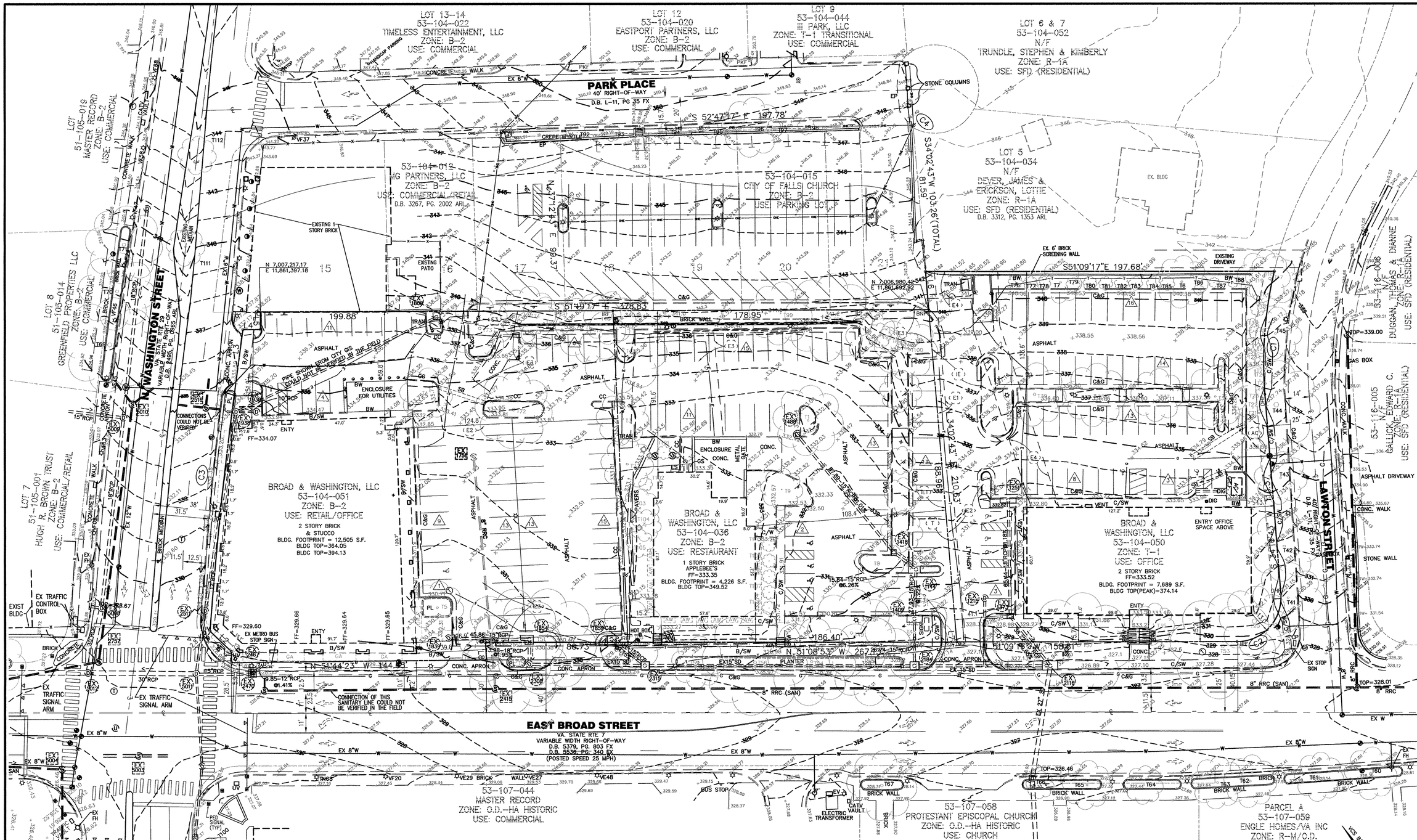
DATE : June 2015

FILE No. 8366-D-RZ-001

SHEET C2.0

P:\8366 - Falls Church Assemblage\8366-02-001 (PLN) - Broad & Washington St\Planning\Rezoning\8366-D-RZ-001 NOT.dwg, 5/25/2017 11:25:46 AM, KFant

P:\8366 - Falls Church Assemblage\8366-02-001 (PLN) - Broad & Washington St\Planning\Rezoning\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
STORM DRAIN IDENTIFIER
WATER METER
TREE/TREELINE
EASEMENT IDENTIFIER
PARKING COUNT
GAS VALVE
TELECOM MANHOLE
LIGHT POLE
FIRE HYDRANT
WATER VALVE
SANITARY CLEANOUT

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

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'

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

Bowman CONSULTING

Bowman Consulting Group, Ltd.
14020 Thunderbolt Place
Suite 300
Chantilly, Virginia 20151
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
05.26.17
LANDSCAPE ARCHITECT

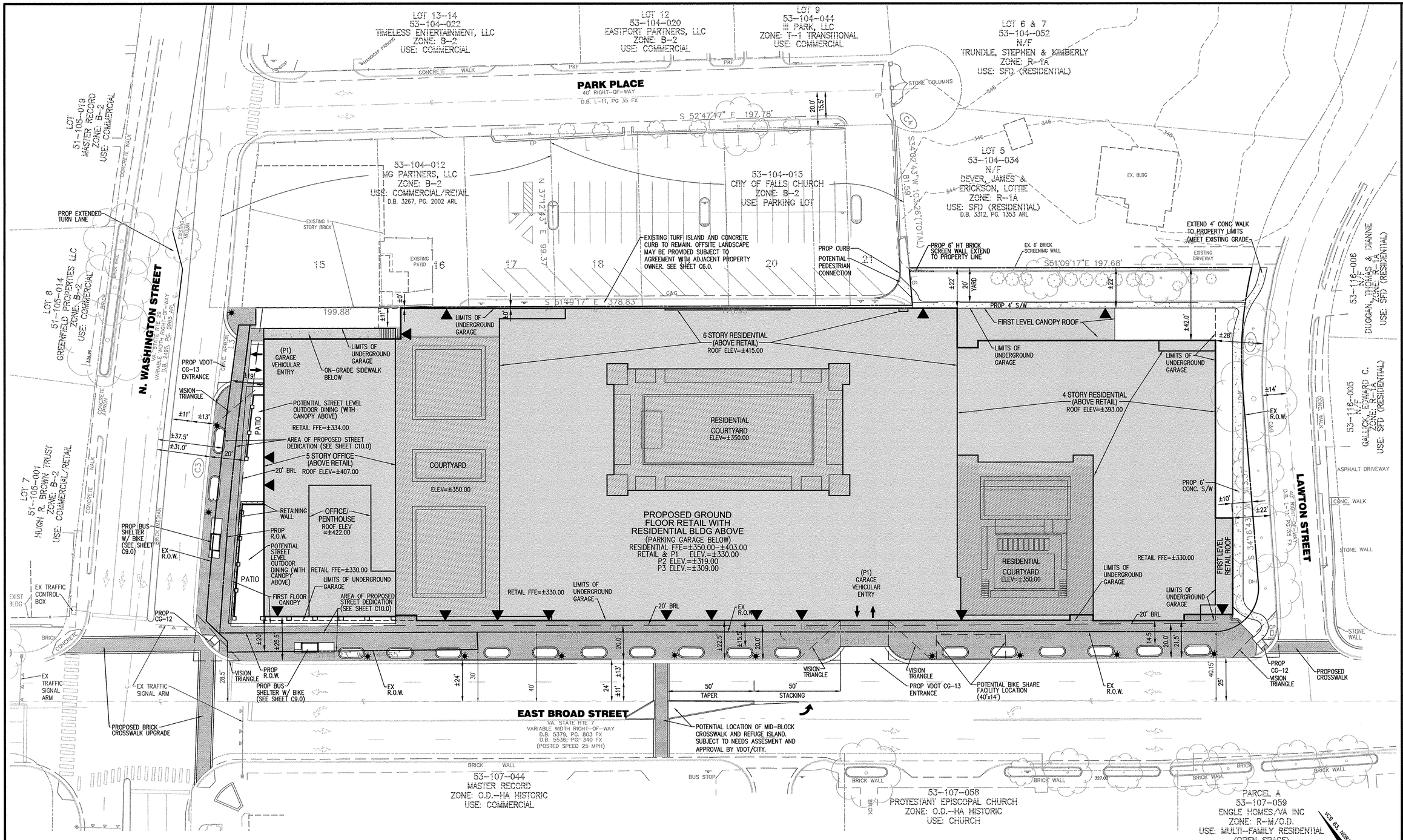
PLAN STATUS	
05/26/17	4th SUBMISSION
03/20/17	3rd SUBMISSION
12/16/15	2nd SUBMISSION
DATE	DESCRIPTION

MT	KF	MT
DESIGN	DRAWN	CHKD

SCALE H: 1" = 25' V:
JOB No. 8366-01-001
DATE : June 2015
FILE No. 8366-D-RZ-001
SHEET C3.0

P:\8366 - Falls Church Assemblage\8366-02-001 (PLN) - Broad & Washington St\Planning\Rezoning\8366-D-RZ-001 XCD.dwg, 5/25/2017 8:31:51 AM, KFaint

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



LEGEND

- ELEVATED COURTYARD/TERRACE
- AT GRADE ENTRY DOOR
- PROPOSED STREET LIGHT
- PROPOSED VEHICULAR ACCESS LOCATION

NOTE:

1. REFER TO SHEET C11.0 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.

GRAPHIC SCALE

25 0 12.5 25 50 100

(IN FEET)
1 inch = 25 ft.

Bowman CONSULTING

Bowman Consulting Group, Ltd.
14020 Thunderbolt Place
Suite 300
Chantilly, Virginia 20151
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
05-26-17
LANDSCAPE ARCHITECT

PLAN STATUS	
05/26/17	4th SUBMISSION
03/20/17	3rd SUBMISSION
12/16/15	2nd SUBMISSION
DATE	DESCRIPTION

MT	KF	MT
DESIGN	DRAWN	CHKD
SCALE	H: 1" = 25' V:	

JOB No. 8366-01-001

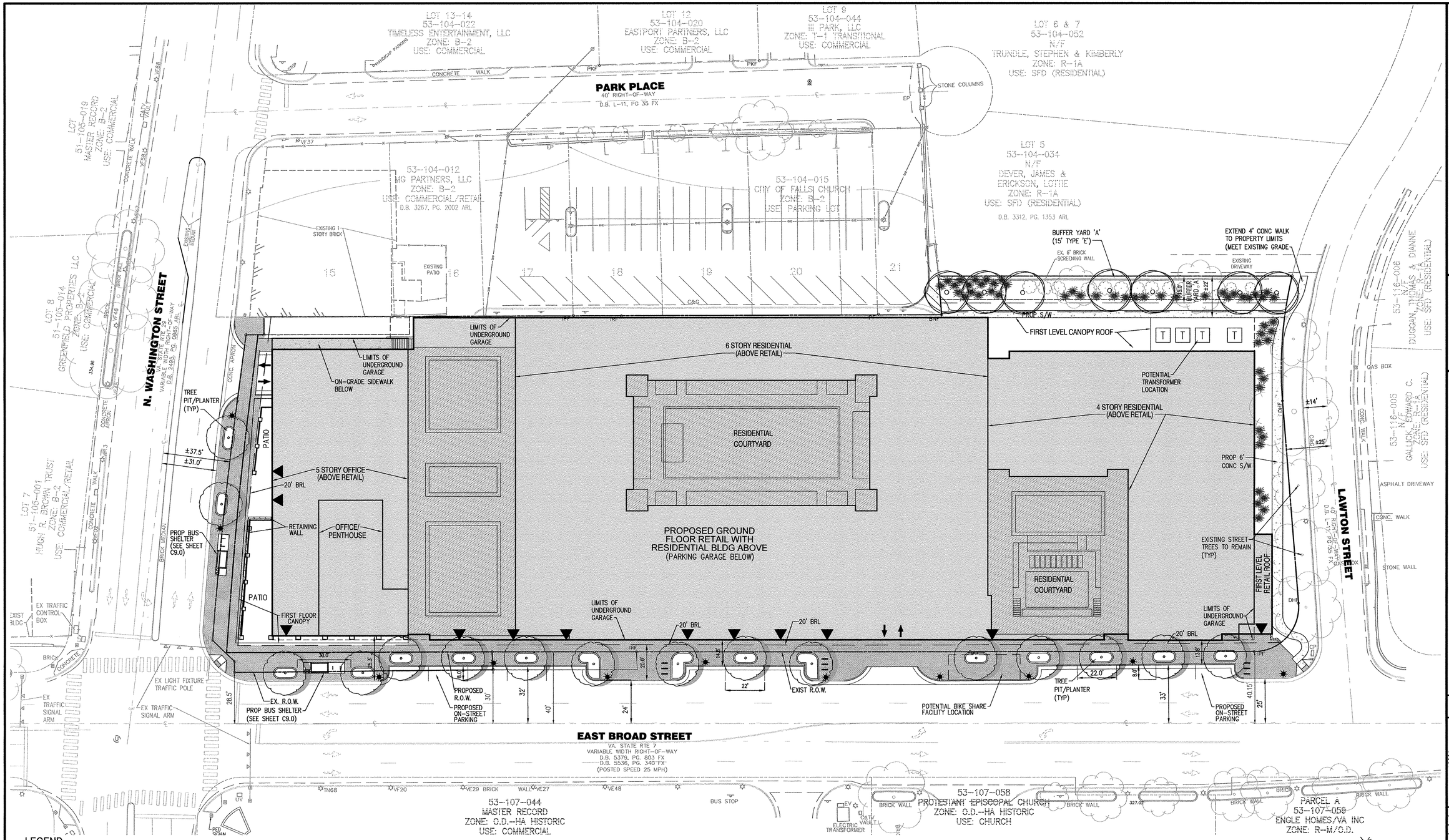
DATE : June 2015

FILE No. 8366-D-RZ-001

SHEET C4.0

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

P:\8366 - Falls Church Assemblage\8366-02-001 (PLN) - Broad & Washington St\Planning\Rezoning\8366-D-RZ-001 SIT.dwg, 5/25/2017 1:47:47 PM, KFaint



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 BUS SHELTER (FINAL LOCATION TO BE DETERMINED WITH SITE PLAN APPLICATION)
- APPROXIMATE LOCATION OF PROPOSED STREET LIGHT
- PROPOSED BIKE RACK

NOTE:
1. THIS ALTERNATIVE DEVELOPMENT PLAN DEMONSTRATES THE CONCEPTUAL LAYOUT OF THE POTENTIAL ON-STREET PARALLEL PARKING ALONG EAST BROAD STREET.
2. FINAL STREETSCAPE ELEMENTS INCLUDING FURNITURE, TRASH RECEPTACLES, PAVING MATERIALS, LIGHTING, IRRIGATION, LANDSCAPING ALONG BROAD STREET WILL BE DETERMINED WITH FINAL SITE PLAN ASSOCIATED WITH THIS ALTERNATIVE DEVELOPMENT PLAN.

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

Bowman CONSULTING

Bowman Consulting Group, Ltd.
14020 Thunderbolt Place
Suite 300
Chantilly, Virginia 20151
Phone: (703) 464-1000
Fax: (703) 481-9720
www.bowmanconsulting.com
© Bowman Consulting Group, Ltd.

ALTERNATIVE CONCEPTUAL DEVELOPMENT PLAN

BROAD & WASHINGTON

CITY OF FALLS CHURCH, VIRGINIA

COMMONWEALTH OF VIRGINIA
MATTHEW J. TAUSCHER
Lic. No. 000832
05-26-17
LANDSCAPE ARCHITECT

PLAN STATUS	
05/26/17	4th SUBMISSION
03/20/17	3rd SUBMISSION
12/16/15	2nd SUBMISSION
DATE	DESCRIPTION

MT	KF	MT
DESIGN	DRAWN	CHKD

SCALE H: 1" = 25' V:

JOB No. 8366-01-001

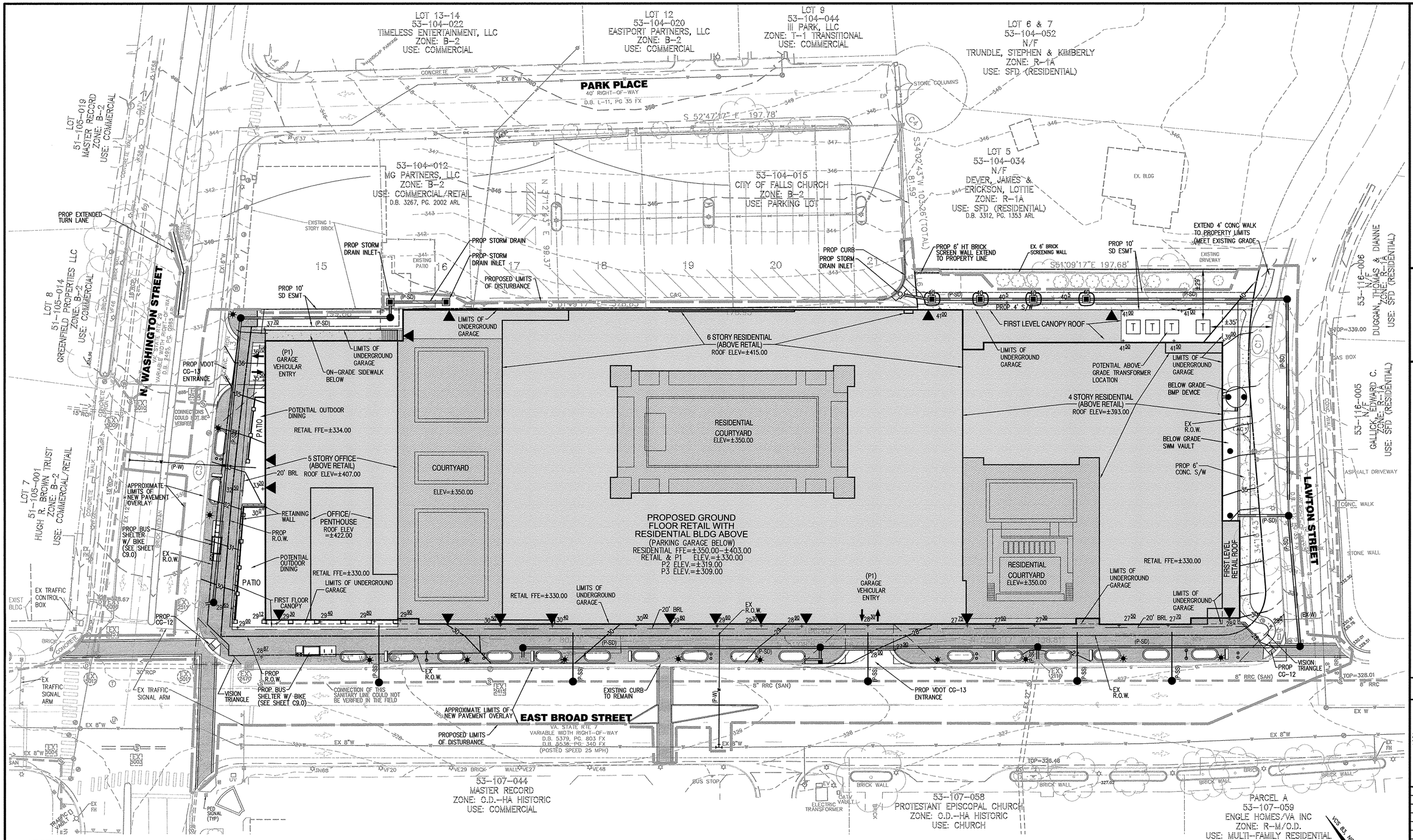
DATE : June 2015

FILE No. 8366-D-RZ-001

SHEET C4.1

P:\8366 - Falls Church Assemblage\8366-02-001 (PLN) - Broad & Washington St\Planning\Rezoning\8366-D-RZ-001 CDP ALT.dwg

P:\8366 - Falls Church Assemblage\8366-02-001 (PLN) - Broad & Washington St\Planning\Rezoning\8366-D-RZ-001 CDP ALT.dwg, 5/25/2017 10:03:57 AM, KFlatt



LEGEND

ELEVATED COURTYARD/TERRACE	
AT GRADE ENTRY DOOR	
PROPOSED STREET LIGHT	
PROPOSED VEHICULAR ACCESS LOCATION	
(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 AND APPROVAL BY CITY OF FALLS CHURCH.

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

Bowman CONSULTING

Bowman Consulting Group, Ltd.
14020 Thunderbolt Place
Suite 300
Chantilly, Virginia 20151
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
05-26-17
LANDSCAPE ARCHITECT

PLAN STATUS	
05/26/17	4th SUBMISSION
03/20/17	3rd SUBMISSION
12/16/15	2nd SUBMISSION
DATE	DESCRIPTION

MT	KF	MT
DESIGN	DRAWN	CHKD

SCALE H: 1" = 25' V:

JOB No. 8366-01-001

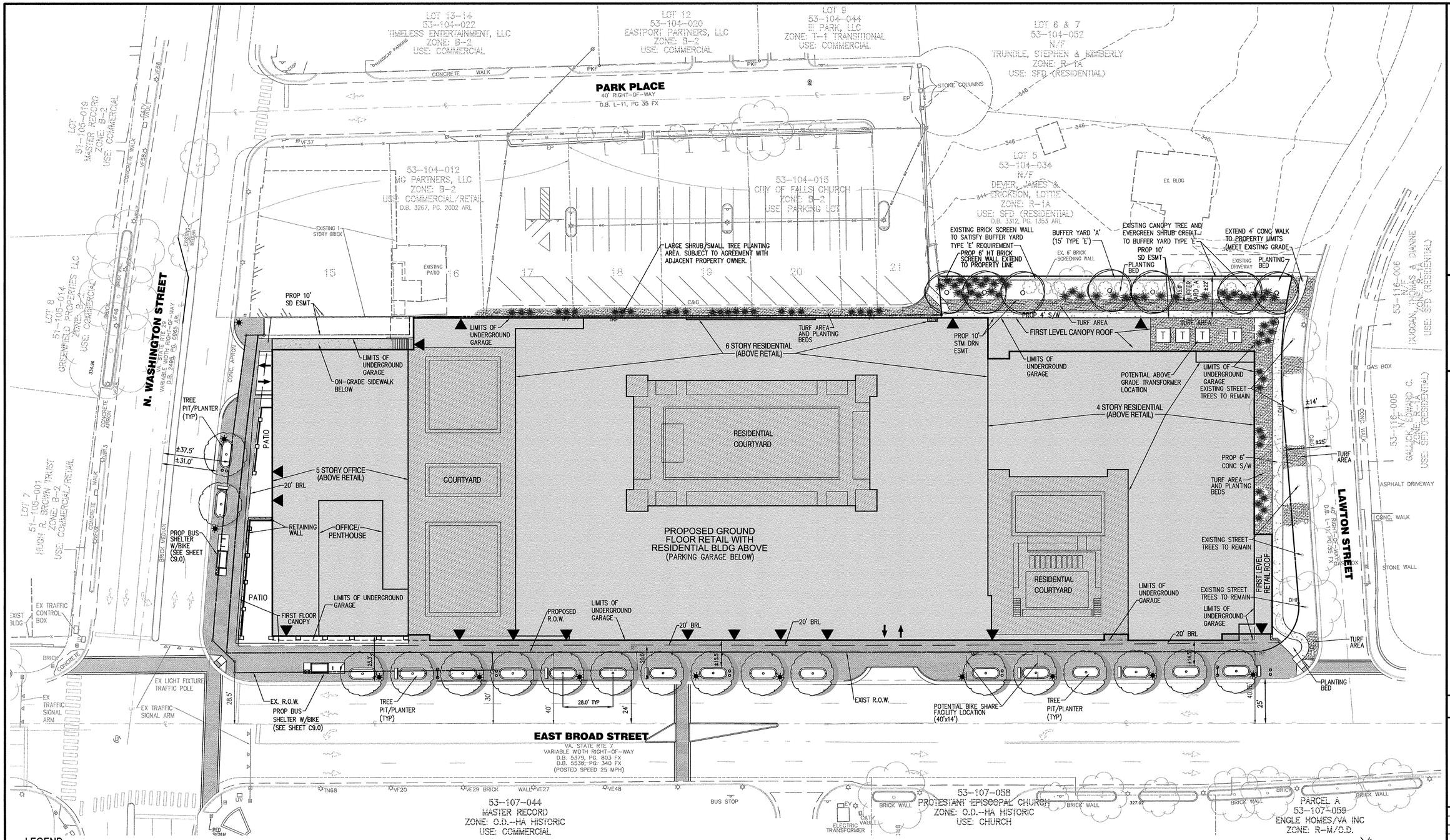
DATE : June 2015

FILE No. 8366-D-RZ-001

SHEET C5.0

P:\8366 - Falls Church Assemblage\8366-02-001 (PLN) - Broad & Washington St\Planning\Rezoning\8366-D-RZ-001 GRD.dwg, 5/25/2017 1:49:12 PM, KFaint

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



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 BUS SHELTER W/ BIKE (SEE DETAIL SHEET C9.0) (FINAL LOCATION TO BE DETERMINED WITH SITE PLAN APPLICATION)
- PROPOSED STREET LIGHT (SEE DETAIL SHEET C9.0) (FINAL LOCATION TO BE DETERMINED WITH SITE PLAN APPLICATION
- PROPOSED BIKE RACK (SEE DETAIL SHEET C9.0) (FINAL LOCATION TO BE DETERMINED WITH SITE PLAN APPLICATION)
- PROPOSED BENCH (SEE DETAIL SHEET C9.0) (FINAL LOCATION TO BE DETERMINED WITH SITE PLAN APPLICATION)
- PROPOSED TRASH/RECYCLE RECEPTACLE (SEE DETAIL SHEET C9.0) (FINAL LOCATION TO BE DETERMINED WITH SITE PLAN APPLICATION)
- APPROXIMATE TURF 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. FINAL SITE LANDSCAPING DESCRIPTIONS INCLUDING BUFFER YARDS AND PRIVATE COURTYARD AREAS WILL BE PROVIDED 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.

Bowman CONSULTING

Bowman Consulting Group, Ltd.
14020 Thunderbolt Place
Suite 300
Chantilly, Virginia 20151
Phone: (703) 464-1000
Fax: (703) 481-9720
www.bowmanconsulting.com
© Bowman Consulting Group, Ltd.

CONCEPTUAL LANDSCAPE PLAN
BROAD & WASHINGTON
CITY OF FALLS CHURCH, VIRGINIA

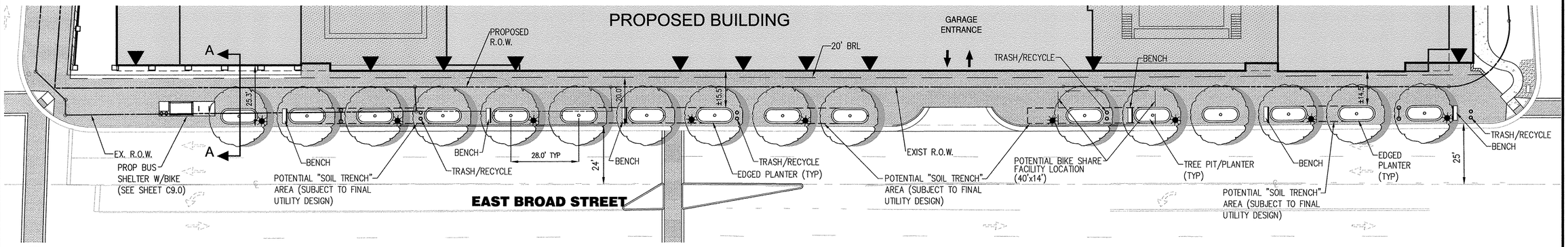
COMMONWEALTH OF VIRGINIA
MATTHEW J. TAUSCHER
Lic. No. 000832
05-26-17
LANDSCAPE ARCHITECT

PLAN STATUS	
05/26/17	4th SUBMISSION
03/20/17	3rd SUBMISSION
12/16/15	2nd SUBMISSION
DATE	DESCRIPTION

MT	KF	MT
DESIGN	DRAWN	CHKD
SCALE	H: 1" = 25' V:	
JOB No. 8366-01-001		
DATE : June 2015		
FILE No. 8366-D-RZ-001		
SHEET C6.0		

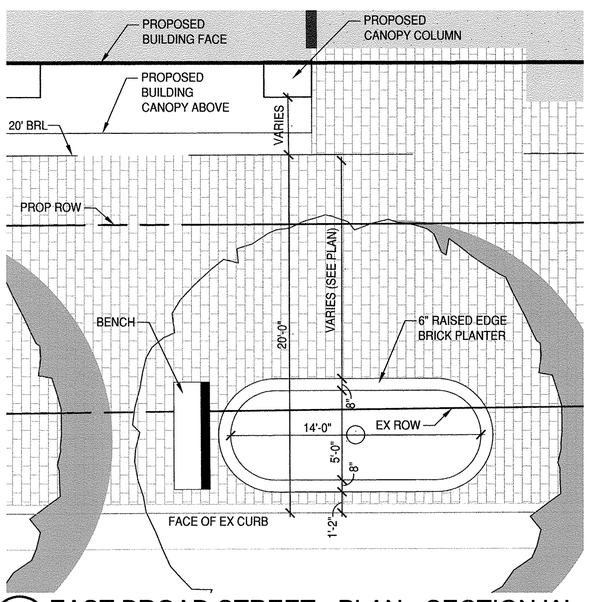
P:\8366 - Falls Church Assemblage\8366-02-001 (PLN) - Broad & Washington St\Planning\Rezoning\8366-D-RZ-001 LSC.dwg, 5/25/2017 1:52:04 PM, KFaint

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



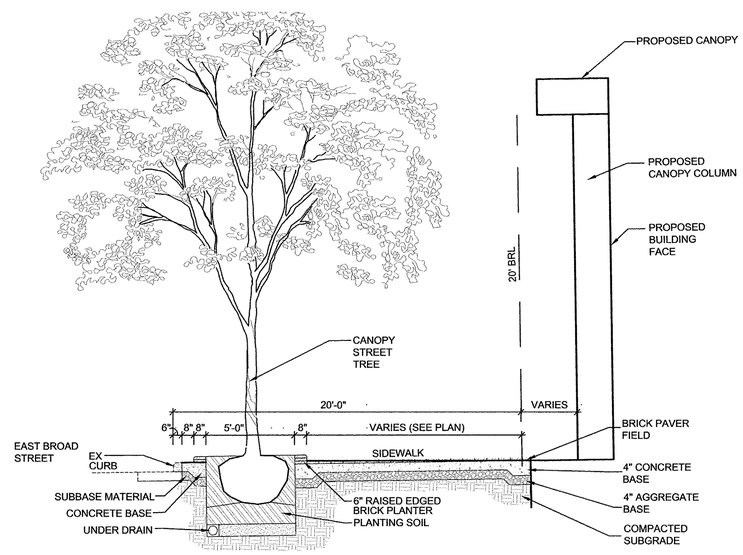
1 EAST BROAD STREET - PLAN

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"

VCS 83, NORTH ZONE

LEGEND

- PROPOSED DECIDUOUS CANOPY STREET TREE
- PROPOSED BUS SHELTER W/ BIKE (SEE DETAIL SHEET C9.0) (FINAL LOCATION TO BE DETERMINED WITH SITE PLAN APPLICATION)
- PROPOSED STREET LIGHT (SEE DETAIL SHEET C9.0) (FINAL LOCATION TO BE DETERMINED WITH SITE PLAN APPLICATION
- PROPOSED BIKE RACK (SEE DETAIL SHEET C9.0) (FINAL LOCATION TO BE DETERMINED WITH SITE PLAN APPLICATION)
- PROPOSED BENCH (SEE DETAIL SHEET C9.0) (FINAL LOCATION TO BE DETERMINED WITH SITE PLAN APPLICATION)
- PROPOSED TRASH/RECYCLE RECEPTACLE (SEE DETAIL SHEET C9.0) (FINAL LOCATION TO BE DETERMINED WITH SITE PLAN APPLICATION)

GRAPHIC SCALE

20 0 10 20 40 60

(IN FEET)
1 inch = 20 ft.

Bowman CONSULTING

Bowman Consulting Group, Ltd.
14020 Thunderbolt Place
Suite 300
Chantilly, Virginia 20151
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
05-26-17
LANDSCAPE ARCHITECT

PLAN STATUS	
05/26/17	4th SUBMISSION
03/20/17	3rd SUBMISSION
12/16/15	2nd SUBMISSION
DATE	DESCRIPTION

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

JOB No. 8366-01-001

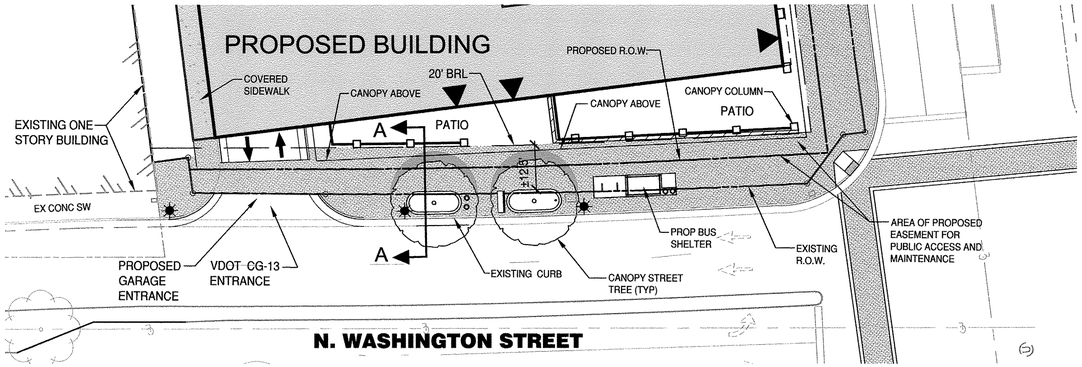
DATE : June 2015

FILE No. 8366-D-RZ-001

SHEET C7.0

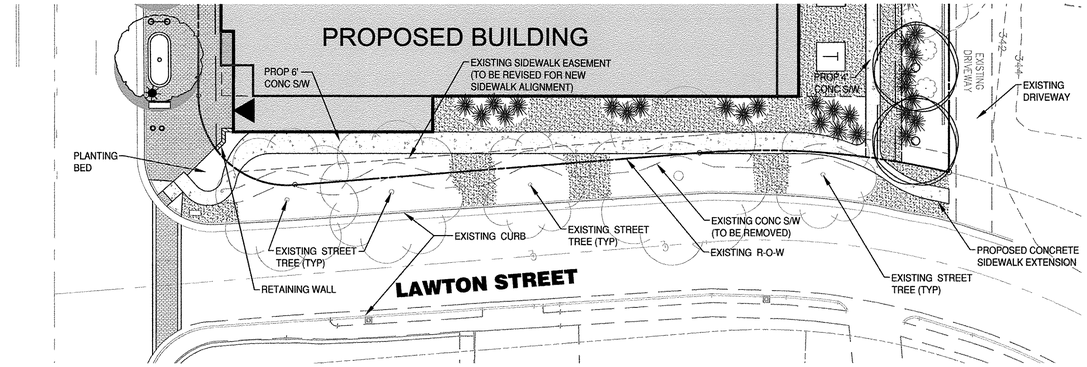
P:\8366 - Falls Church Assemblage\8366-02-001 (PLN) - Broad & Washington St\Planning\Rezoning\8366-D-RZ-001 LSC.dwg, 5/23/2017 11:25:51 AM, KFraint

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



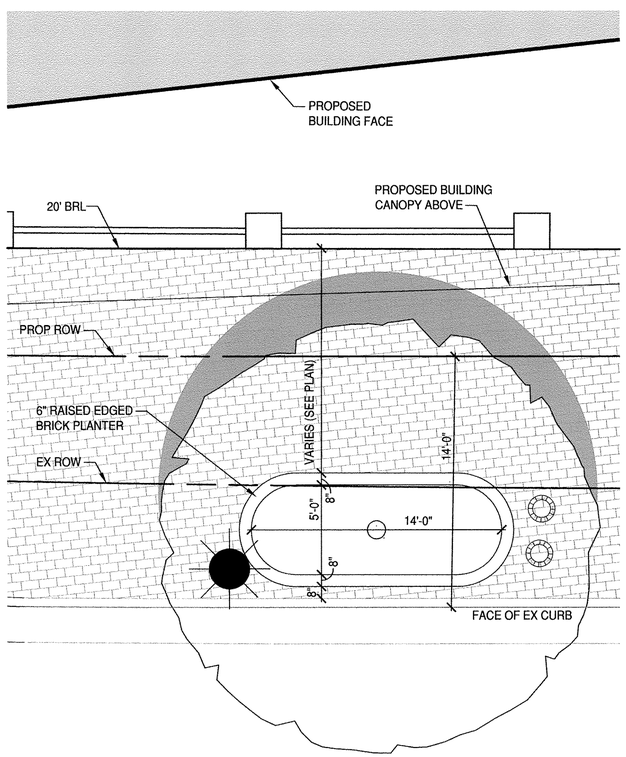
1 N. WASHINGTON STREET PLAN

Scale: 1"=20'



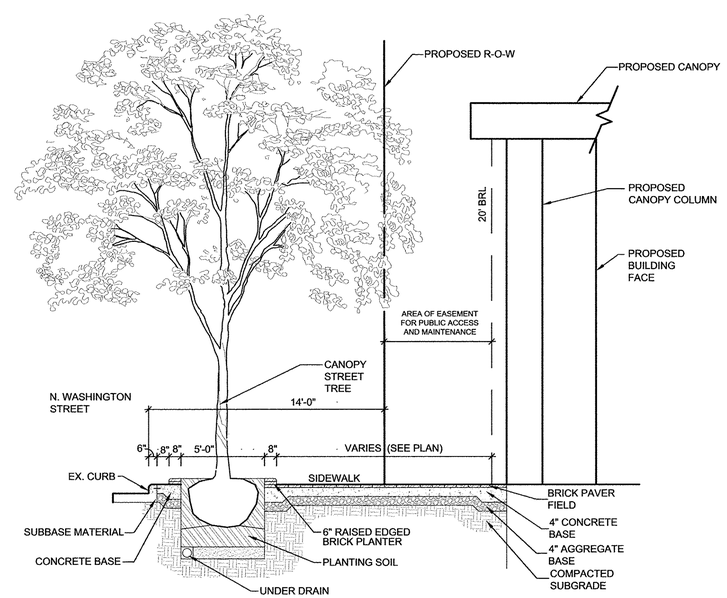
2 LAWTON STREET PLAN

Scale: 1"=20'



3 N. WASHINGTON STREET-PLAN ENLARGEMENT - SECTION A

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



4 N. WASHINGTON STREET-SECTION A

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

VCS 83, NORTH ZONE

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

LEGEND

- EXISTING TREES TO REMAIN
- PROPOSED DECIDUOUS CANOPY STREET TREE
- PROPOSED BUS SHELTER W/ BIKE (SEE DETAIL SHEET C9.0) (FINAL LOCATION TO BE DETERMINED WITH SITE PLAN APPLICATION)
- PROPOSED STREET LIGHT (SEE DETAIL SHEET C9.0) (FINAL LOCATION TO BE DETERMINED WITH SITE PLAN APPLICATION
- PROPOSED BIKE RACK (SEE DETAIL SHEET C9.0) (FINAL LOCATION TO BE DETERMINED WITH SITE PLAN APPLICATION)
- PROPOSED BENCH (SEE DETAIL SHEET C9.0) (FINAL LOCATION TO BE DETERMINED WITH SITE PLAN APPLICATION)
- PROPOSED TRASH/RECYCLE RECEPTACLE (SEE DETAIL SHEET C9.0) (FINAL LOCATION TO BE DETERMINED WITH SITE PLAN APPLICATION)

Bowman CONSULTING

Bowman Consulting Group, Ltd.
14020 Thunderbolt Place
Suite 300
Chantilly, Virginia 20151

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
05-26-17
LANDSCAPE ARCHITECT

PLAN STATUS	
05/26/17	4th SUBMISSION
03/20/17	3rd SUBMISSION
12/16/15	2nd SUBMISSION
DATE	DESCRIPTION

MT	KF	MT
DESIGN	DRAWN	CHKD

SCALE H: 1" = 20' V:

JOB No. 8366-01-001

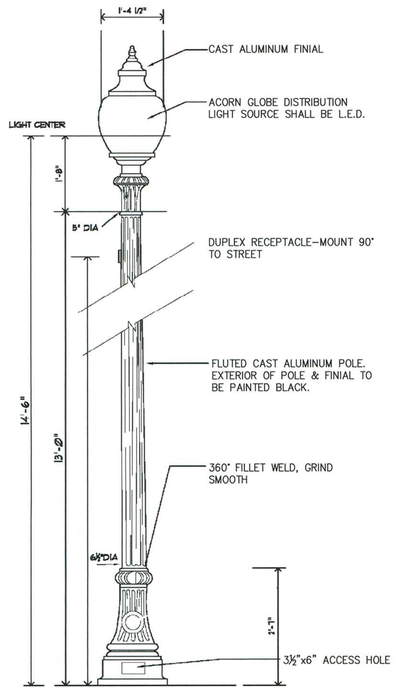
DATE : June 2015

FILE No. 8366-D-RZ-001

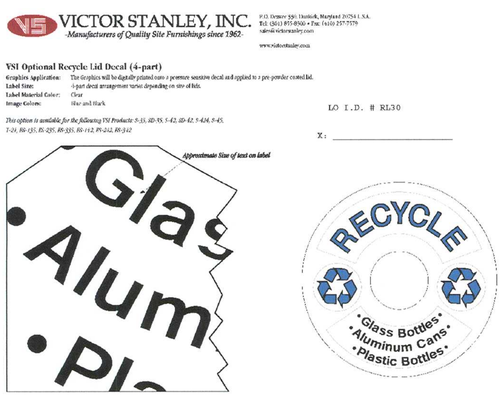
SHEET C8.0

P:\8366 - Falls Church Assemblage\8366-02-001 (PLN) - Broad & Washington St\Planning\Rezoning\8366-D-RZ-001 LSC.dwg, 5/25/2017 1:53:36 PM, KFaint

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

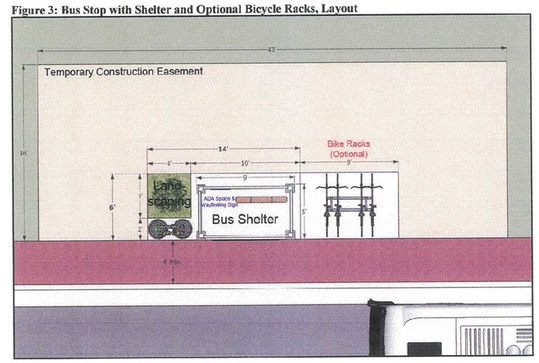


1 SINGLE LUMINAIRE ON POLE
OR APPROVED EQUAL
Scale: NTS

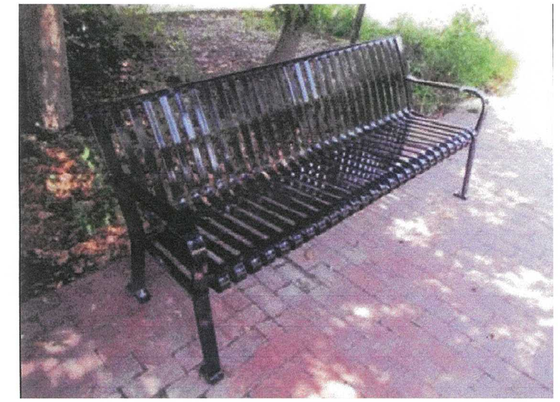


2 RECYCLING DECALS
Scale: NTS

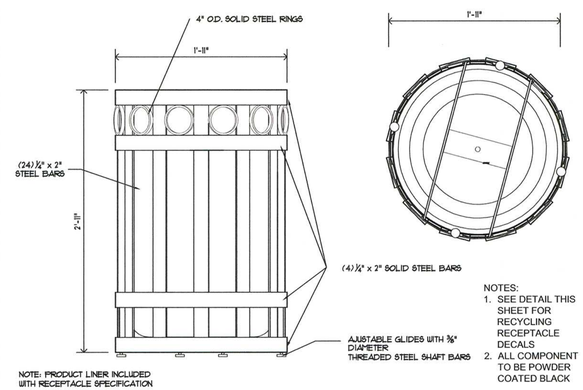
Figure 3: Bus Stop with Shelter and Optional Bicycle Racks, Layout



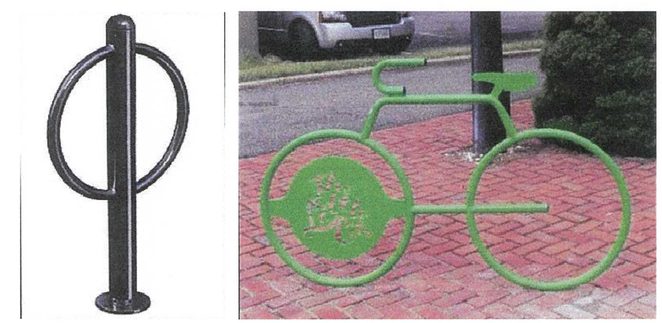
3 BUS STOP LAYOUT
Scale: NTS



5 CITY OF FALLS CHURCH - STD. BENCH
Scale: NTS



4 TYPICAL TRASH & RECYCLE RECEPTACLE
Scale: NTS



6 CITY OF FALLS CHURCH-TYPICAL BIKE RACKS
Scale: NTS

Bowman CONSULTING

Bowman Consulting Group, Ltd.
14020 Thunderbolt Place
Suite 300
Chantilly, Virginia 20151
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

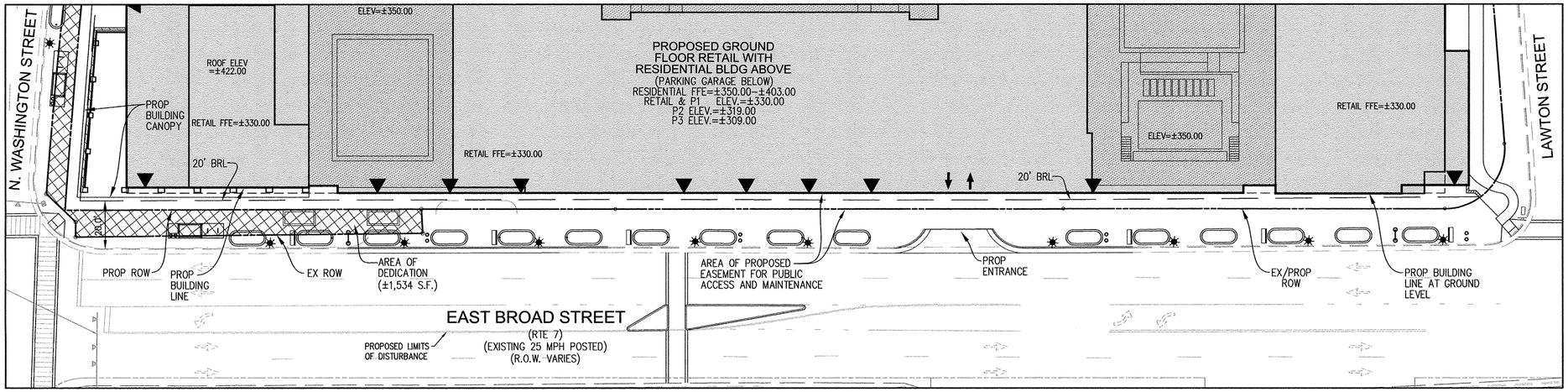
COMMONWEALTH OF VIRGINIA
MATTHEW J. TAUSCHER
Lic. No. 000832
05-26-17
LANDSCAPE ARCHITECT

PLAN STATUS	
05/26/17	4th SUBMISSION
03/20/17	3rd SUBMISSION
12/16/15	2nd SUBMISSION
DATE	DESCRIPTION

MT	KF	MT
DESIGN	DRAWN	CHKD
SCALE	H: AS SHOWN V:	

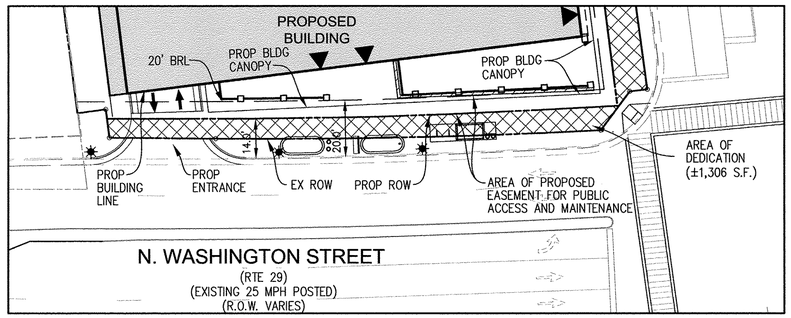
JOB No. 8366-01-001
DATE : June 2015
FILE No. 8366-D-RZ-001
SHEET C9.0

P:\8366 - Falls Church Assemblage\8366-02-001 (PLN) - Broad & Washington St\Planning\Rezoning\8366-D-RZ-001-DET.dwg, 5/25/2017 9:18:09 AM, KFaint



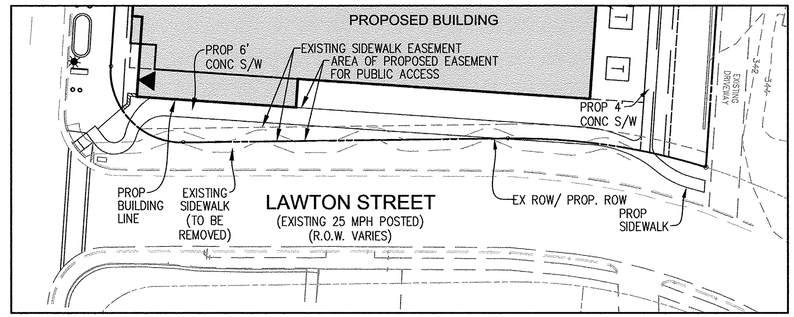
EAST BROAD STREET FRONTAGE EXHIBIT

SCALE: 1"=25'



N. WASHINGTON STREET FRONTAGE EXHIBIT

SCALE: 1"=25'



LAWTON STREET 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 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.
14020 Thunderbolt Place
Suite 300
Chantilly, Virginia 20151

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
05-26-17
LANDSCAPE ARCHITECT

PLAN STATUS	
05/26/17	4th SUBMISSION
03/20/17	3rd SUBMISSION
12/16/15	2nd SUBMISSION
DATE	DESCRIPTION

MT	KF	MT
DESIGN	DRAWN	CHKD

SCALE H: AS SHOWN V:

JOB No. 8366-01-001

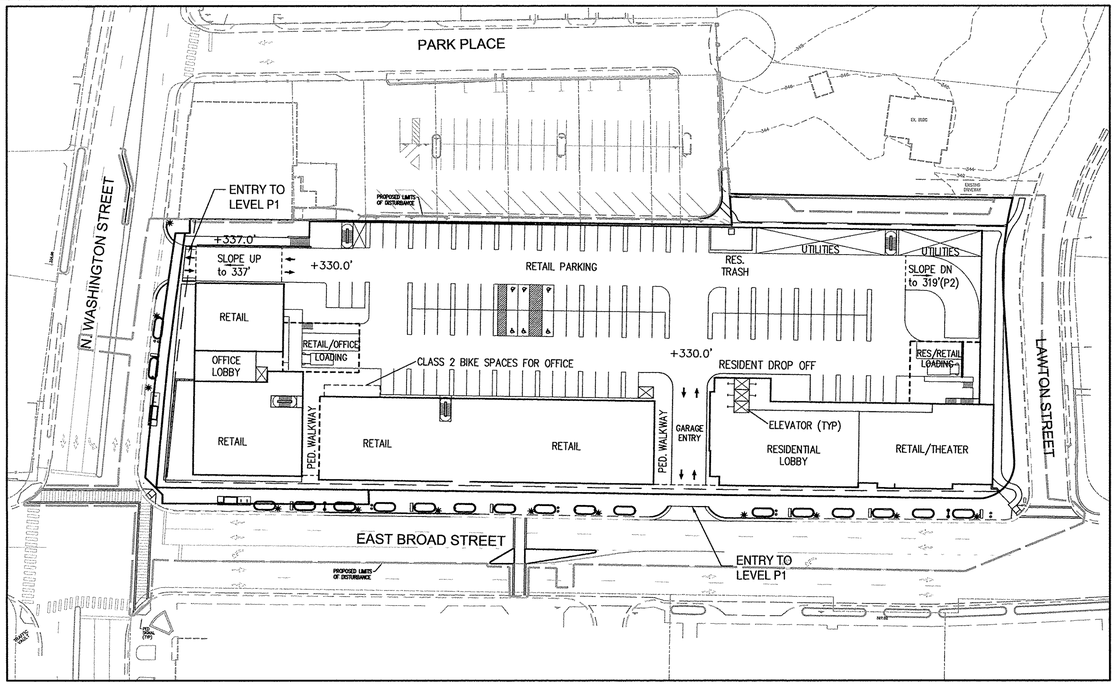
DATE : June 2015

FILE No. 8366-D-RZ-001

SHEET C10.0

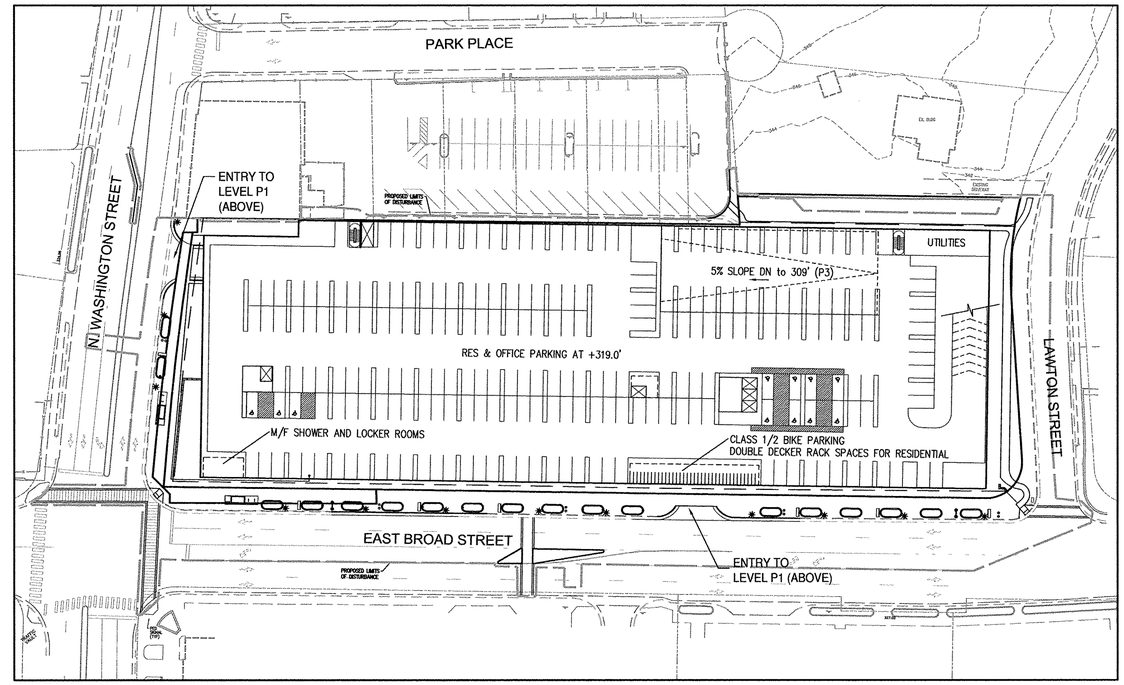
P:\8366 - Falls Church Assemblage\8366-02-001 (PLN) - Broad & Washington St\Planning\Rezoning\8366-D-RZ-001 RD_FRNTAGE.dwg, 5/25/2017 10:11:03 AM, KPaint

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



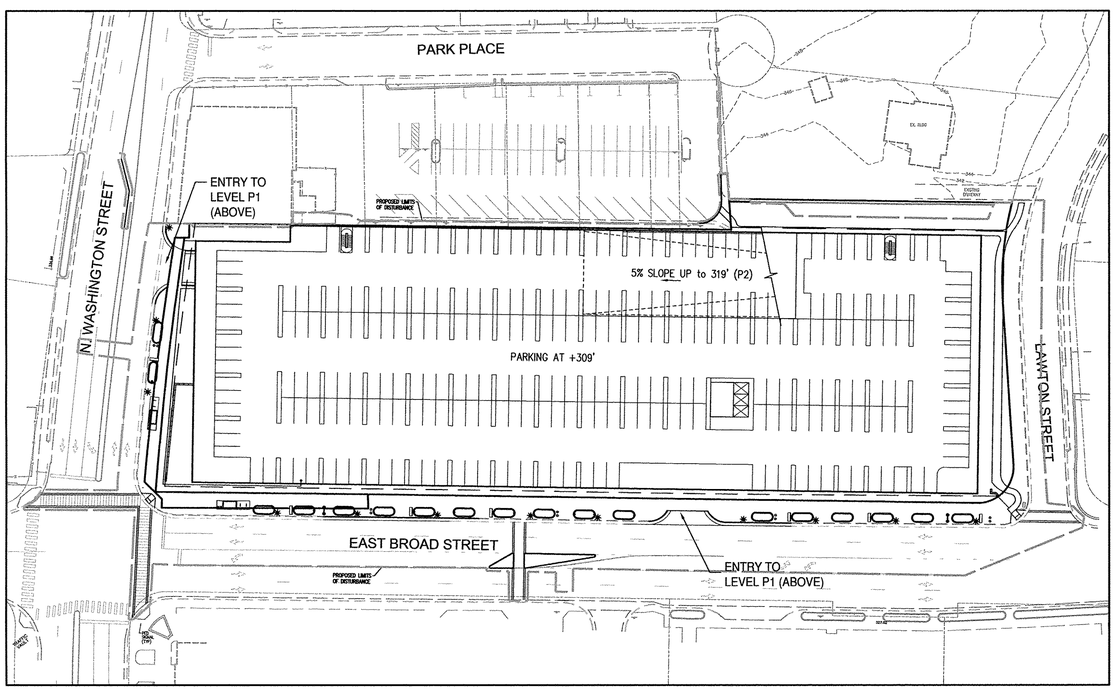
STREET LEVEL RETAIL & PARKING LEVEL P1 (ELEVATION 330.0)

SCALE: 1"=50'
(SUBJECT TO SHARED USE AND PUBLIC ACCESS WITH POTENTIAL CONTROLS)
RETAIL AND SHARED PARKING: ±105 SPACES
BIKE TOTAL: ±13 SPACES



PARKING LEVEL P2 (ELEVATION 319.0)

SCALE: 1"=50'
(TO INCLUDE RESTRICTED USE AND POTENTIAL PARTIAL SHARED USE AREA)
RESIDENTIAL AND OFFICE PARKING: ±249 SPACES
BIKE TOTAL: ±142 SPACES



PARKING LEVEL P3 (ELEVATION 309.0)

SCALE: 1"=50'
(TO INCLUDE RESTRICTED USE)
RESIDENTIAL AND OFFICE PARKING: ±246 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.

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

Bowman CONSULTING

Bowman Consulting Group, Ltd.
14020 Thunderbolt Place
Suite 300
Chantilly, Virginia 20151
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
05.26.17
LANDSCAPE ARCHITECT

PLAN STATUS	
05/26/17	4th SUBMISSION
03/20/17	3rd SUBMISSION
12/16/15	2nd SUBMISSION
DATE	DESCRIPTION

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

JOB No. 8366-01-001

DATE : June 2015

FILE No. 8366-D-RZ-001

SHEET C11.0

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

P:\8366 - Falls Church Assemblage\8366-02-001 (PLN) - Broad & Washington St\Planning\Rezoning\8366-D-RZ-001 SIT_PRKNG.dwg, 5/25/2017 11:38:55 AM, KFarlitt

TREE INVENTORY TABLE

Broad Street and Washington Street, Falls Church, VA
Date of site visit: January 20, 2015
Certified Arborist: Gregg D. Eberly MA-4616A

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				Off-Site
93	Amelanchier arborea	Downey Serviceberry	3				Off-Site
94	Amelanchier arborea	Downey Serviceberry	3				Off-Site
95	Amelanchier arborea	Downey Serviceberry	3				Off-Site
96	Tilia cordata	Littleleaf Linden	15				Off-Site
97	Amelanchier arborea	Downey Serviceberry	3				Off-Site
98	Amelanchier arborea	Downey Serviceberry	3				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:	9 TREES (2 EXISTING / 7 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/ PROPOSED 6 FOOT HIGH SOLID WOOD FENCE

SUGGESTED STREETSCAPE PLANT LIST

KEY	BOTANICAL NAME	COMMON NAME	HEIGHT/SIZE	CALIPER	CONDITION/ REMARKS
LARGE DECIDUOUS TREES					
QP	QUERCUS PHELLOS	WILLOW OAK		2.5" CAL. MIN.	B&B
SHRUBS					
IG	ILEX GLABRA	INKBERRY HOLLY	30" MIN.		CONT.
JH	JUNIPERUS HORIZONTALIS	CREEPING JUNIPER	6"-12" MIN.		CONT.
PL	PRUNUS LAUROCERASUS 'SCHIPKAENSIS'	CHERRY LAUREL	30" MIN.		CONT.
GROUNDCOVER					
HC	HYPERICUM CALYCINUM	ST. JOHN'S WORT	1 GAL.		CONT.
LM	LIROPE MUSCARI 'BIG BLUE'	LILYTURF	1 GAL.		CONT.

SUGGESTED BUFFER YARD PLANT LIST

KEY	BOTANICAL NAME	COMMON NAME	HEIGHT	CALIPER	CONDITION/ REMARKS
LARGE DECIDUOUS TREES					
AR	ACER RUBRUM	RED MAPLE		2" CAL. MIN.	B&B
GT	GLEDITSIA TRIACANTHOS	THORNLESS HONEY LOCUST		2" CAL. MIN.	B&B
PA	PLANTANUS X ACERIFOLIA	LONDON PLANETREE		2" CAL. MIN.	B&B
QP	QUERCUS PALUSTRIS	PIN OAK		2" CAL. MIN.	B&B
EVERGREEN TREES					
IO	ILEX OPACA	AMERICAN HOLLY	6' MIN.		B&B
JV	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	6' MIN.		B&B
SHRUBS					
CA	CLETHRA ALNIFOLIA	SWEET PEPPERBUSH	24"-30"		CONT.
IG	ILEX GLABRA	INKBERRY HOLLY	24"-30"		CONT.
IT	ITEA VIRGINICA	VIRGINIA SWEETSPIRE	24"-30"		CONT.
IV	ILEX VERTICILLATA	WINTERBERRY	24"-30"		CONT.
JS	JUNIPERUS CHINENSIS 'PFITZERIANA'	PFITZER JUNIPER	24"-30"		CONT.
KL	KALMIA LATIFOLIA	MOUNTAIN LAUREL	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).

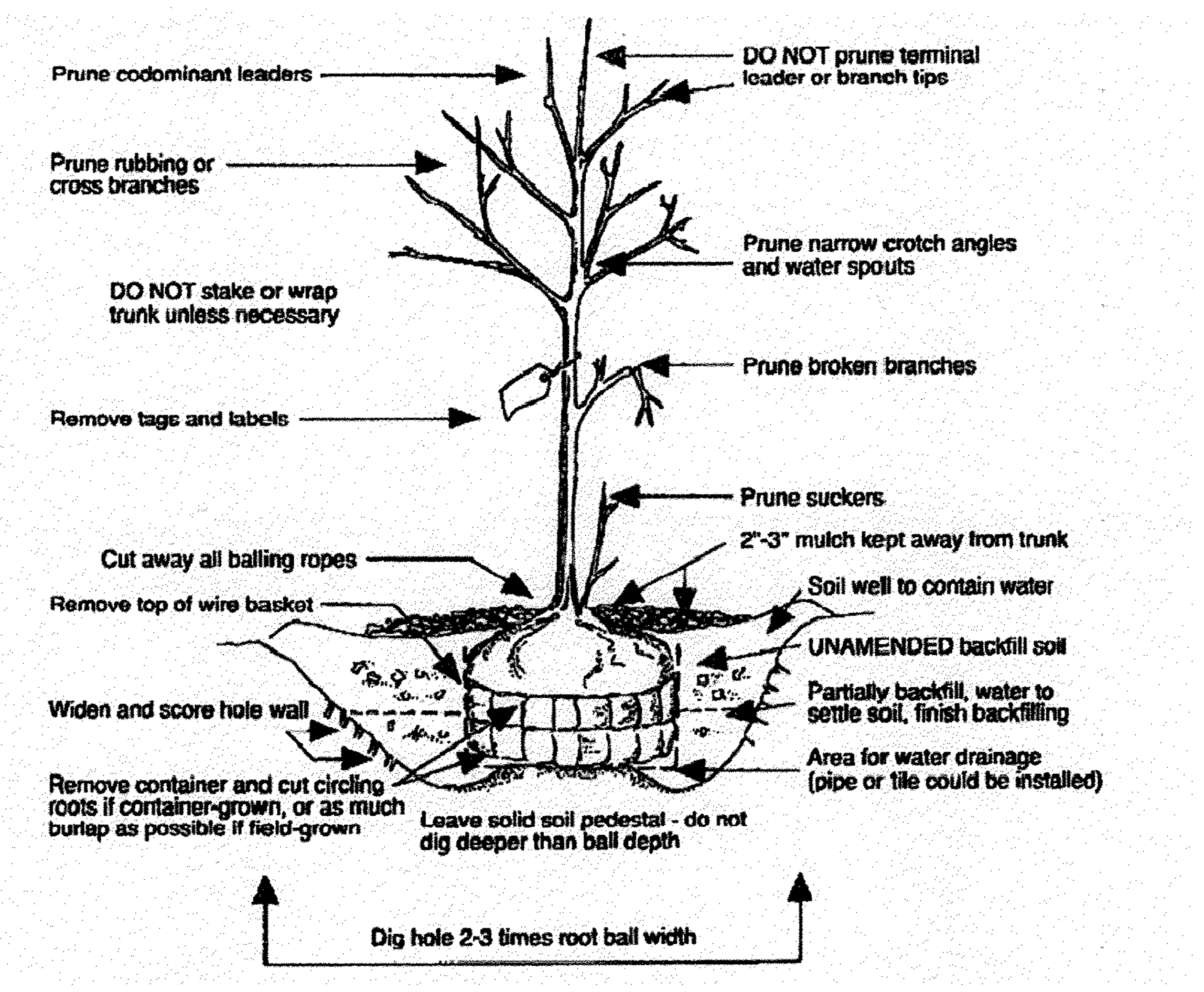
DELIVERY AND TEMPORARY STORAGE

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.

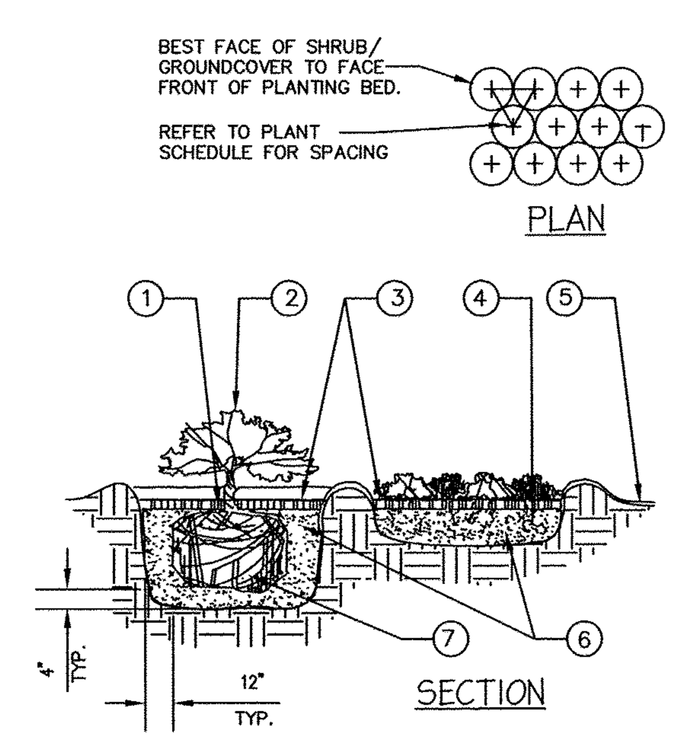
PLANTING OF NURSERY STOCK

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.
14020 Thunderbolt Place
Suite 300
Chantilly, Virginia 20151
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
05.26.17
LANDSCAPE ARCHITECT

PLAN STATUS	
05/26/17	4th SUBMISSION
03/20/17	3rd SUBMISSION
12/16/15	2nd SUBMISSION
DATE	DESCRIPTION

MT	KF	MT
DESIGN	DRAWN	CHKD

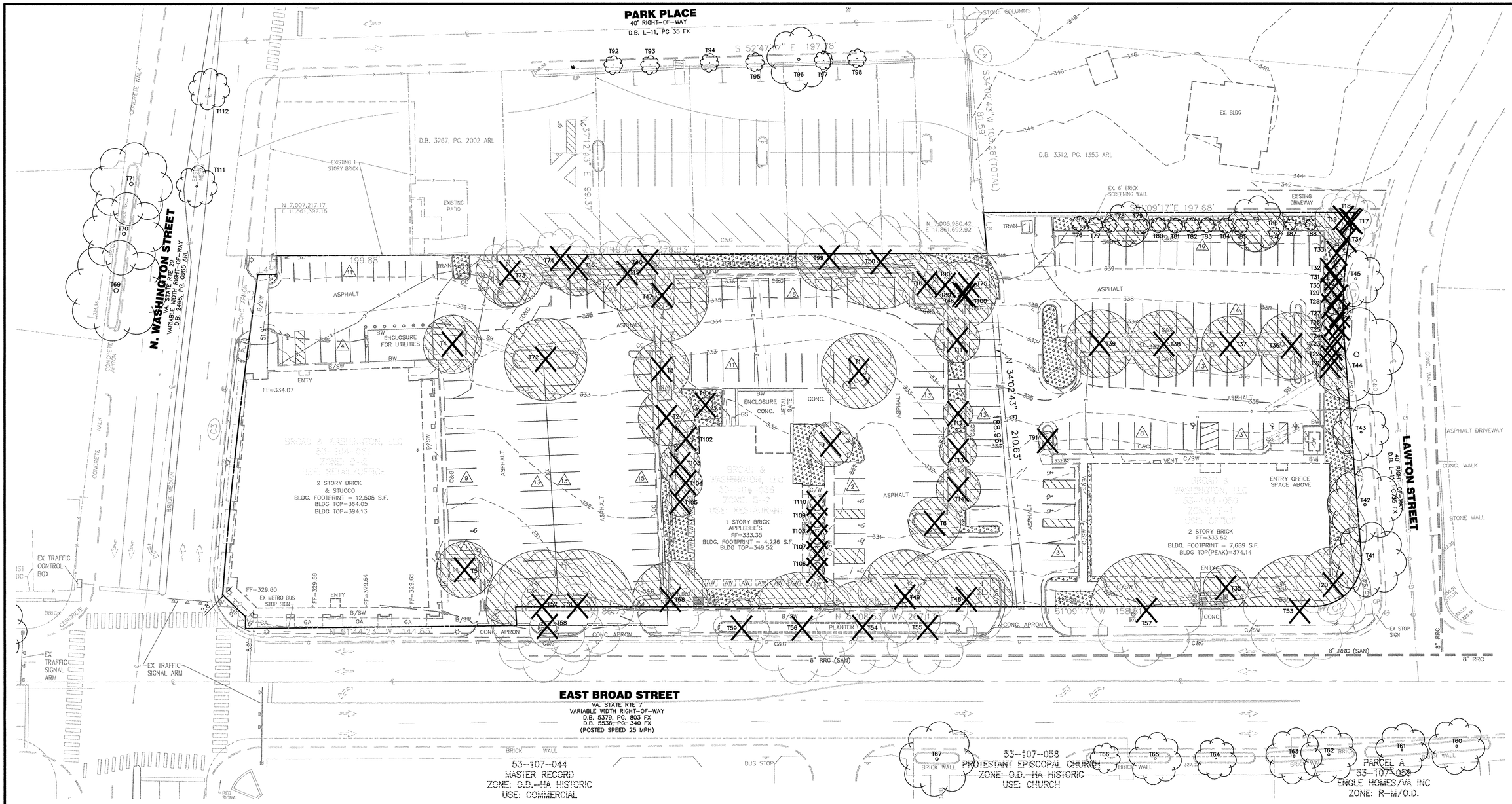
SCALE H: 1" = 20' V:

JOB No. 8366-01-001

DATE : June 2015

FILE No. 8366-D-RZ-001

SHEET C12.0



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

T112 — EXISTING INDIVIDUAL TREE TO BE REMOVED (SEE TREE INVENTORY TABLE C12.0)

T12 — EXISTING INDIVIDUAL TREE TO REMAIN (SEE TREE INVENTORY TABLE C12.0)

NGS 83, NORTH ZONE

GRAPHIC SCALE

25 0 12.5 25 50 100

(IN FEET)
1 inch = 25 ft.

Bowman CONSULTING

Bowman Consulting Group, Ltd.
14020 Thunderbolt Place
Suite 300
Chantilly, Virginia 20151

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
05-26-17
LANDSCAPE ARCHITECT

PLAN STATUS	
05/26/17	4th SUBMISSION
03/20/17	3rd SUBMISSION
12/16/15	2nd SUBMISSION
DATE	DESCRIPTION

MT	KF	MT
DESIGN	DRAWN	CHKD

SCALE H: 1" = 25' V:

JOB No. 8366-01-001

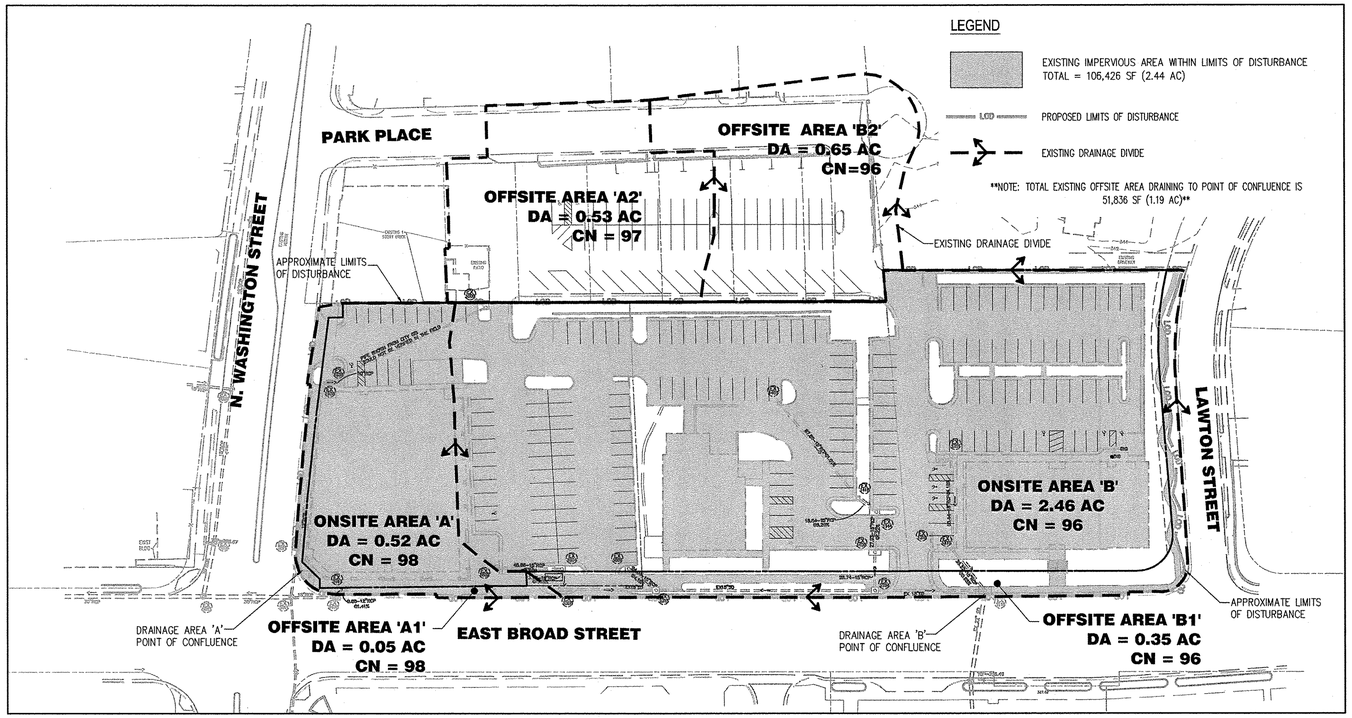
DATE : June 2015

FILE No. 8366-D-RZ-001

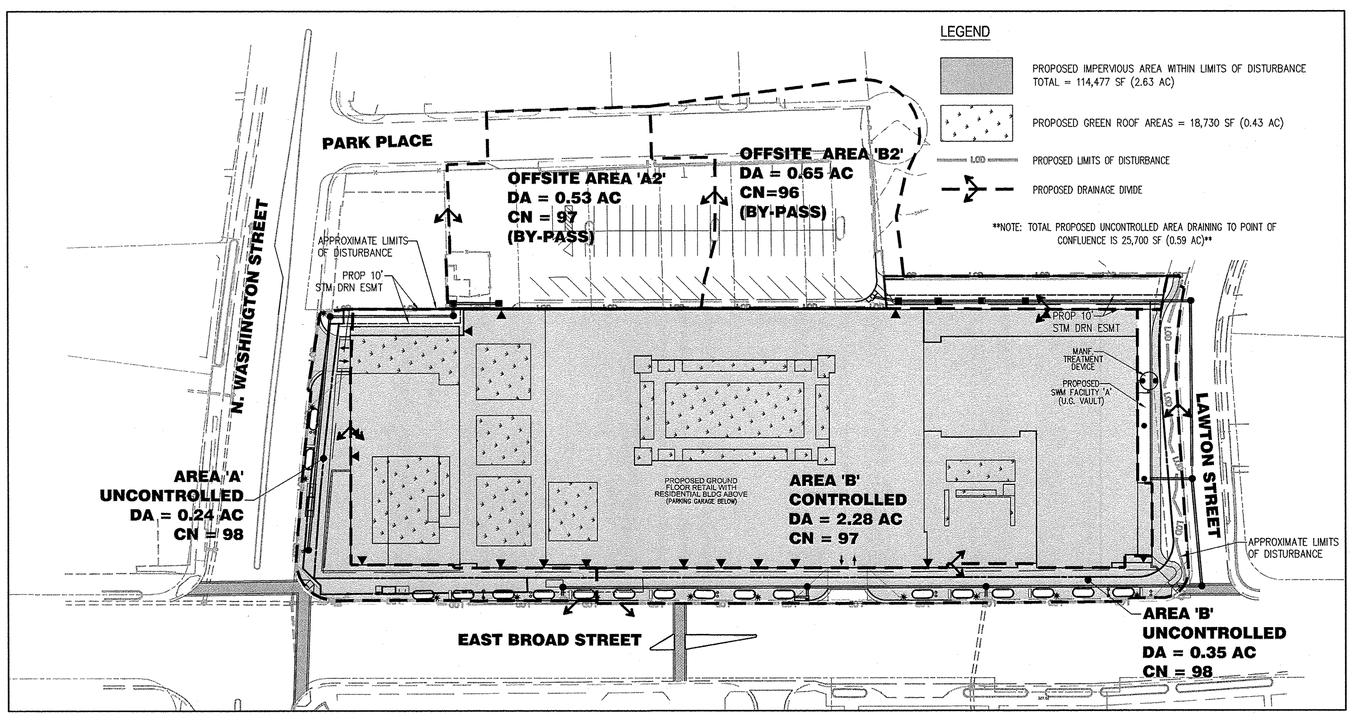
SHEET C13.0

P:\8366 - Falls Church Assemblage\8366-02-001 (PLN) - Broad & Washington St\Planning\Rezoning\8366-D-RZ-001 EVM.dwg, 5/25/2017 9:17:14 AM, KFaint

P:\8366 - Falls Church Assemblage\8366-02-001 (PLN) - Broad & Washington St\Planning\Rezoning\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 BROAD EAST BROAD STREET. IT IS GENERALLY BOUNDED BY NORTH WASHINGTON STREET TO THE NORTH, EXISTING PARKING LOT AND RESIDENTIAL USE TO THE EAST, LAWTON STREET TO THE SOUTH, AND EAST BROAD STREET TO THE WEST.

EXISTING CONDITIONS:

THE 2.68 ACRE SITE IS CURRENTLY DIVIDED INTO THREE 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.

THE EXISTING SITE GENERALLY DRAINS 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 2116) ALONG EAST BROAD STREET WITHIN THE RIGHT OF WAY ADJACENT TO THE EXISTING TWO STORY OFFICE BUILDING. DRAINAGE AREA 'B' IS APPROXIMATELY 85% IMPERVIOUS.

THE TOTAL EXISTING LIMITS OF LAND DISTURBANCE OF 2.95 ACRES CONTAIN APPROXIMATELY 2.44 IMPERVIOUS ACRES OF SURFACE AREA AND WITH 0.51 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 AN UNDERGROUND PARKING FACILITY BELOW AND RESIDENTIAL UNITS AND OFFICE 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 0.22 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 WITHIN DRAINAGE AREA '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 DESIGNED TO MEET THE CITY OF FALLS CHURCH STORMWATER DISCHARGE REQUIREMENTS. THE MAXIMUM ALLOWABLE RELEASE RATE, BASED ON THE EXISTING PEAK FLOW, SUBTRACTING THE UNCONTROLLED POST-DEVELOPMENT PEAK FLOW, IS 8.10 CFS FOR THE 2-YEAR STORM AND 12.76 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 3,926 CF AND A 10-YEAR DETENTION VOLUME OF 6,292 CF. SEE STORMWATER QUANTITY COMPUTATIONS ON THIS SHEET.

SITE RUNOFF WITHIN DRAINAGE AREA 'A' WILL DECREASE WITH RE-DEVELOPMENT AND THEREFORE REQUIRES NO DETENTION. SEE STORMWATER QUANTITY COMPUTATIONS ON THIS SHEET.

WATER QUALITY/BMP NARRATIVE:

WATER QUALITY FOR THIS SITE CAN BE ACHIEVED USING LEVEL 2 GREEN ROOF, 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 1.43 TP/YR. SEE SHEET C15.0 FOR A SUMMARY OF THE VIRGINIA RUNOFF REDUCTION SPREADSHEET COMPUTATIONS.

```
SH                    Falls Church Assemblage

                      Fairfax County, Virginia

                 Hydrograph Peak/Peak Time Table

 Sub-Area      Peak Flow and Peak Time (hr) by Rainfall Return Period
 or Reach      1-Yr      2-Yr      10-Yr
Identifier     (cfs)     (cfs)     (cfs)
               (hr)      (hr)      (hr)
-----------------------------------------------------------------------
SUBAREAS
Pre A          1.86      2.27      3.51
               11.93     11.93     11.93

Pre B          7.67      9.46     14.89
               11.93     11.93     11.92

Post A         0.76      0.94      1.47
               11.93     11.93     11.92

Post B c       7.38      8.95     13.95
               11.92     11.93     11.93

Post B u       0.95      1.22      2.01
               11.93     11.93     11.93

STRUCTS
```

SWM Water Quantity Energy Balance Worksheet RAINFALL DATA FROM NOAA ATLAS (VIENNA/TYSONS CORNER

DRAINAGE AREA (acre): 2.95

	2-year Storm		10-year Storm	
	PRE	POST (adjusted)	PRE	POST (adjusted)
P (rainfall depth, in)	3.17	3.17	4.87	4.87
CN	96.00	97.00	96.00	97.00
S=1000/CN-10	0.42	0.31	0.42	0.31
0.2S	0.08	0.06	0.08	0.06
RV=(P-0.2S)^2/(P-0.2S)+S	2.72	2.83	4.40	4.52

MANMADE CHANNEL CONTROL (Q_2)		FLOOD CONTROL (Q_{10})	
Qpre-development (cfs)	8.24	Qpre-development (cfs)	12.88
QPost Development (cfs)	8.95	QPost Development (cfs)	13.95
RVPost Development (with runoff reduction)	2.82	RVPost Development (with runoff reduction)	4.52
Qallowable (cfs)	8.24	Qallowable (cfs)	12.88

Qallowable/QPost Development	0.92	Qallowable/QPost Development	0.92
Vs/Vr	0.13	Vs/Vr	0.13
Vs	0.37	Vs	0.59
Storage required (cf)	3926	Storage required (cf)	6292

Bowman CONSULTING

Bowman Consulting Group, Ltd.
14020 Thunderbolt Place
Suite 300
Chantilly, Virginia 20151

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
05-26-17
LANDSCAPE ARCHITECT

PLAN STATUS	
05/26/17	4th SUBMISSION
03/20/17	3rd SUBMISSION
12/16/15	2nd SUBMISSION
DATE	DESCRIPTION

BG	KF	BG
DESIGN	DRAWN	CHKD

SCALE H: 1" =50' V:

JOB No. 8366-01-001

DATE : June 2015

FILE No. 8366-D-RZ-001

SHEET C14.0

P:\8366 - Falls Church Assemblage\8366-02-001 (PLN) - Broad & Washington St\Planning\Rezoning\8366-D-RZ-001 DDP.dwg

P:\8366 - Falls Church Assemblage\8366-02-001 (PLN) - Broad & Washington St\Planning\Rezoning\8366-D-RZ-001 DDP.dwg, 5/25/2017 11:42:58 AM, KFlerit

VIRGINIA RUNOFF REDUCTION METHOD:

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

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

Site Summary

Total Rainfall (in):	43
Total Disturbed Acreage:	2.95

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	0.51	0.51	17
Impervious Cover (acres)	0.00	0.00	0.00	2.44	2.44	83
					2.95	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	0.32	0.32	11
Impervious Cover (acres)	0.00	0.00	0.00	2.63	2.63	89
					2.95	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	0.87	0.87	0.95	0.87
Treatment Volume (ft^3)	9,360	8,705	655	8,705
TP Load (lb/yr)	5.88	5.47	0.41	5.47

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)
1.98	1.99	1.98

Total TP Load Reduction Required (lb/yr)	1.43	1.09	0.33

	Final Post-Development Load (Post-ReDevelopment & New Impervious)	Pre-ReDevelopment
TN Load (lb/yr)	42.07	39.90

Site Compliance Summary

Maximum % Reduction Required Below Pre-ReDevelopment Load	20%

Total Runoff Volume Reduction (ft^3)	890
Total TP Load Reduction Achieved (lb/yr)	1.43
Total TN Load Reduction Achieved (lb/yr)	3.99
Remaining Post Development TP Load (lb/yr)	4.45
Remaining TP Load Reduction (lb/yr) Required	0.00

** TARGET TP REDUCTION EXCEEDED BY 0.01 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)	0.00	0.00	0.00	0.00	0.00	0.00
Impervious Cover (acres)	2.28	0.00	0.00	0.00	0.00	2.28
Total Area (acres)	2.28	0.00	0.00	0.00	0.00	2.28

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)	1.43	0.00	0.00	0.00	0.00	1.43
TN Load Reduced (lb/yr)	3.99	0.00	0.00	0.00	0.00	3.99

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	0.00	0.00	0
Impervious Cover (acres)	0.00	0.00	0.00	2.28	2.28	100
					2.28	

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)		0.43	1,482.86		0.93	0.56	0.37	14.a. MTD - Hydrodynamic
14.a. Manufactured Treatment Device-Hydrodynamic		1.85	6,972.87	0.37	4.00	0.88	3.50	

Total Impervious Cover Treated (acres)	2.28
Total Turf Area Treated (acres)	0.00
Total TP Load Reduction Achieved in D.A. (lb/yr)	1.43
Total TN Load Reduction Achieved in D.A. (lb/yr)	3.99

Runoff Volume and CN Calculations

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

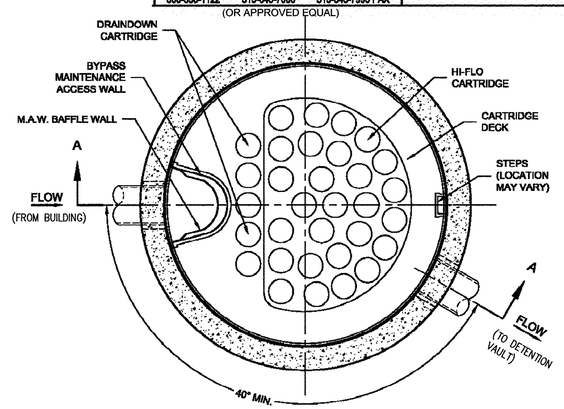
Drainage Areas	RV & CN	Drainage Area A	Drainage Area B	Drainage Area C	Drainage Area D	Drainage Area E
CN		98	0	C	0	0
RR (ft^3)		890	0	C	0	0
1-year return period	RV wo RR (wo-in)	2.39	3.30	0.00	3.00	0.00
	RV w RR (wo-in)	2.28	3.30	0.00	3.00	0.00
	CN adjusted	97	0	C	0	0
2-year return period	RV wo RR (wo-in)	2.94	3.30	0.00	3.00	0.00
	RV w RR (wo-in)	2.83	3.30	0.00	3.00	0.00
	CN adjusted	97	0	C	0	0
10-year return period	RV wo RR (wo-in)	4.63	3.30	0.00	3.00	0.00
	RV w RR (wo-in)	4.53	3.30	0.00	3.00	0.00
	CN adjusted	97	0	C	0	0

EXAMPLE-MANUFACTURED TREATMENT DEVICE (MTD):

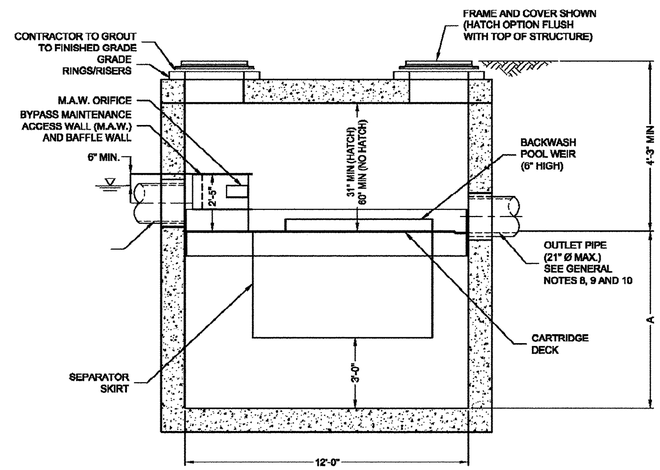
CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

JELLYFISH JF12
STANDARD DETAIL
ONLINE CONFIGURATION
(OR APPROVED EQUAL)

(OR APPROVED EQUAL)



PLAN VIEW



SECTION A-A

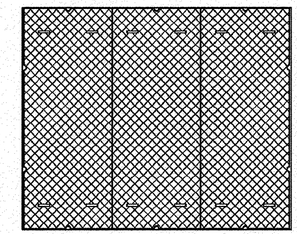
JELLYFISH DESIGN NOTES

JELLYFISH TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE SELECTION AND THE NUMBER OF CARTRIDGES. THE STANDARD MANHOLE STYLE IS SHOWN. Ø120" MANHOLE JELLYFISH PEAK TREATMENT CAPACITY IS 5.26 CFS, AND MAXIMUM BYPASS CAPACITY IS 8.00 CFS. IF THE SITE CONDITIONS EXCEED TOTAL CAPACITY, AN UPSTREAM BYPASS STRUCTURE IS REQUIRED.

CARTRIDGE SELECTION

CARTRIDGE DEPTH	54"	40"	27"	15"
OUTLET INVERT TO STRUCTURE INVERT (A)	7'-5"	6'-3"	5'-2"	4'-2"
FLOW RATE HIGH-FLO / DRAINDOWN (cfs) (per cart)	0.18 / 0.09	0.13 / 0.065	0.09 / 0.045	0.05 / 0.025
MAX. CARTS HIGH-FLO/DRAINDOWN	19 / 4			
MAX. BYPASS (cfs)	8.00			
MAX. TREATMENT (cfs)	5.26	3.95	2.63	1.45
MAX. TREATMENT AND BYPASS (cfs) (TOTAL CAPACITY)	13.26	11.95	10.63	9.45

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



HATCH
(84" x 102" CAST INTO SLAB)
N.T.S.
(OPTIONAL)

SITE SPECIFIC DATA REQUIREMENTS

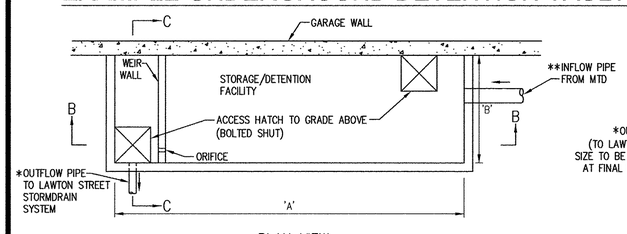
STRUCTURE ID					*
WATER QUALITY FLOW RATE (cfs)					*
BYPASS FLOW RATE (cfs)					*
PEAK FLOW RATE (cfs)					*
RETURN PERIOD OF PEAK FLOW (yrs)					*
# OF CARTRIDGES REQUIRED (HF / DD)					*/*
CARTRIDGE SIZE					*
PIPE DATA:	I.E.	MAT'L	DIA	SLOPE %	HGL
INLET #1	*	*	*	*	*
INLET #2	*	*	*	*	*
OUTLET	*	*	*	*	*
SEE GENERAL NOTES 6-10 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' - 3', 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-478 AND AASHTO LOAD FACTOR DESIGN METHOD.
6. INLET HGL NOT TO EXCEED 6" BELOW THE TOP OF THE M.A.W. DURING THE PEAK DESIGN STORM, OR 10-YEAR STORM (WHICHEVER IS GREATER).
7. INLET PIPE INVERT ELEVATION VARIES FROM 0" TO 6" MAXIMUM ABOVE THE OUTLET PIPE INVERT.
8. OUTLET PIPE INVERT IS EQUAL TO THE CARTRIDGE DECK ELEVATION.
9. THE OUTLET PIPE DIAMETER FOR NEW INSTALLATIONS IS TO BE ONE PIPE SIZE LARGER THAN THE INLET PIPE AT EQUAL OR GREATER SLOPE.
10. THE DIFFERENCE IN THE INLET AND OUTLET PIPE ELEVATIONS FOR RETROFIT INSTALLATIONS TO EXISTING STORM DRAIN PIPES SHALL BE EQUAL TO THE SLOPE OVER THE DIAMETER OF THE MANHOLE; NOT THE EXCEED 6" IN VERTICAL DIFFERENTIAL BETWEEN INLET AND OUTLET PIPES.
11. NO PRODUCT SUBSTITUTIONS SHALL BE ACCEPTED UNLESS SUBMITTED 10 DAYS PRIOR TO PROJECT BID DATE, OR AS DIRECTED BY THE ENGINEER OF RECORD.

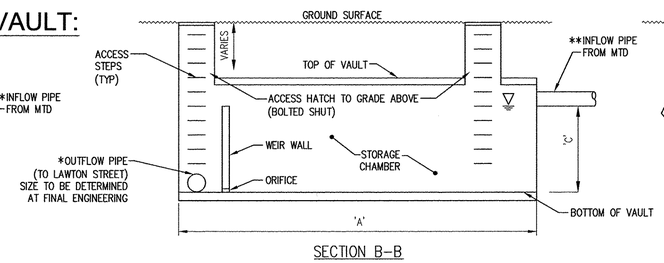
INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE (LIFTING CLUTCHES PROVIDED)
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. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF.
E. 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 AT (866) 740-3318.

Jellyfish® Filter
THIS PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING U.S. PATENT NO. 6,287,726, 6,221,618 & US 8,123,935; OTHER INTERNATIONAL PATENTS PENDING
(OR APPROVED EQUAL)

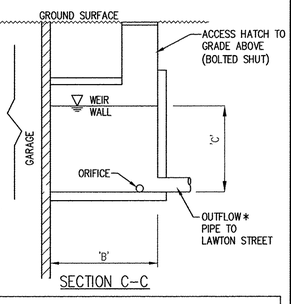
EXAMPLE-UNDERGROUND DETENTION VAULT:



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'	6292	63	10	10	6300

*OUTFALL MAY BE PUMPED TO THE GRAVITY SYSTEM WITHIN LAWTON STREET.

**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.
14020 Thunderbolt Place
Suite 300
Chantilly, Virginia 20151
Phone: (703) 464-1000
Fax: (703) 481-9720
www.bowmanconsulting.com
© Bowman Consulting Group, Ltd.

CONCEPTUAL SWM AND BMP NOTES AND DETAILS

BROAD & WASHINGTON
CITY OF FALLS CHURCH, VIRGINIA

COMMONWEALTH OF VIRGINIA
MATTHEW J. TAUSCHER
Lic. No. 000832
05.26.17
LANDSCAPE ARCHITECT

PLAN STATUS

DATE	DESCRIPTION
05/26/17	4th SUBMISSION
03/20/17	3rd SUBMISSION
12/16/15	2nd SUBMISSION

BG DESIGN	KF DRAWN	BG CHKD
SCALE	H: N/A V:	

JOB No. 8366-01-001

DATE : June 2015

FILE No. 8366-D-RZ-001

SHEET C15.0