PRELIMINARY DEVELOPMENT SPECIAL USE PERMIT

1800 MOUNT VERNON AVENUE

CITY OF ALEXANDRIA, VIRGINIA

AREA TABULATIONS

TOTAL SITE AREA = 0.6151 AC 26,793 SF

TOTAL AREA OF TAX PARCELS = 0.6151 AC 26,793 SF

TOTAL EXISTING IMPERVIOUS AREA = 0.5971 AC 26,010 SF

TOTAL PROPOSED IMPERVIOUS AREA = 0.5240 AC 22,825 SF

TOTAL DISTURBED AREA = 0.7250 AC 31,583 SF

ENVIRONMENTAL SITE ASSESSMENT

1. THERE ARE NO RESOURCE PROTECTION AREAS (RPA'S), TIDAL WETLANDS, SHORES, TRIBUTARY STREAMS, FLOOD PLAINS, OR BUFFER AREAS FOR SHORES, WETLANDS, CONNECTED TIDAL WETLANDS, ISOLATED WETLANDS OR HIGHLY ERODIBLE/PERMEABLE SOILS LOCATED ON THIS SITE. THERE ARE NO WETLAND PERMITS REQUIRED FOR THE DEVELOPMENT ON THIS PROPERTY.
2. THE CITY OF ALEXANDRIA DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES, DIVISION OF ENVIRONMENTAL QUALITY MUST BE NOTIFIED IF UNUSUAL OR UNANTICIPATED CONTAMINATION OR UNDERGROUND STORAGE TANKS, DRUMS AND CONTAINERS ARE ENCOUNTERED AT THE SITE. IF THERE IS ANY DOUBT ABOUT PUBLIC SAFETY OR A RELEASE TO THE ENVIRONMENT, THE ALEXANDRIA FIRE DEPARTMENT MUST BE CONTACTED IMMEDIATELY BY CALLING 911. THE TANK OR CONTAINER'S REMOVAL, ITS CONTENTS, ANY SOIL CONTAMINATION AND RELEASE TO THE ENVIRONMENT WILL BE HANDLED IN ACCORDANCE WITH FEDERAL, STATE, AND CITY REGULATIONS.
3. ALL WELLS TO BE DEMOLISHED ON THIS PROJECT, INCLUDING MONITORING WELLS, MUST BE CLOSED IN ACCORDANCE WITH STATE WELL REGULATION. CONTACT THE ALEXANDRIA HEALTH DEPARTMENT AT 703-746-4866.
4. THERE ARE NO KNOWN CONTAMINATED AREAS, CONTAMINATED SOILS OR ENVIRONMENTAL ISSUES ASSOCIATED WITH THIS SITE.

ENVIRONMENTAL PERMITS NOTES

ALL REQUIRED PERMITS FROM VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY, ENVIRONMENTAL PROTECTION AGENCY, ARMY CORPS OF ENGINEERS, VIRGINIA MARINE RESOURCES MUST BE IN PLACE FOR ALL PROJECT CONSTRUCTION AND MITIGATION WORK PRIOR TO RELEASE OF THE FINAL SITE PLAN.

THIS PROJECT PROPOSES CONSTRUCTION ACTIVITIES THAT DISTURB AN AREA LESS THAN 1 ACRE, THEREFORE A VPDES PERMIT IS NOT REQUIRED.

ARCHAEOLOGY NOTES

CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703-746-4399) IF ANY BURIED STRUCTURAL REMAINS (WALL FOUNDATIONS, WELLS, PRIVIES, CISTERNS, ETC.) OR CONCENTRATIONS OF ARTIFACTS ARE DISCOVERED DURING DEVELOPMENT. WORK MUST CEASE IN THE AREA OF THE DISCOVERY UNTIL A CITY ARCHAEOLOGIST COMES TO THE SITE AND RECORDS THE FINDS.

THE APPLICANT SHALL NOT ALLOW ANY METAL DETECTION AND/OR ARTIFACT COLLECTION TO BE CONDUCTED ON THE PROPERTY, UNLESS AUTHORIZED BY ALEXANDRIA ARCHAEOLOGY. FAILURE TO COMPLY SHALL RESULT IN PROJECT DELAYS.

ALL REQUIRED ARCHAEOLOGICAL PRESERVATION MEASURES SHALL BE COMPLETED IN COMPLIANCE WITH SECTION 11-411 OF THE ZONING ORDINANCE.

GENERAL NOTES

1. PRIOR TO THE APPLICATION FOR NEW CERTIFICATE OF OCCUPANCY, THE APPLICANT SHALL SUBMIT A BUILDING PERMIT FOR A CHANGE OF USE. DRAWINGS PREPARED BY A LICENSED ARCHITECT OR PROFESSIONAL ENGINEER SHALL ACCOMPANY THE PERMIT APPLICATION. THE PLANS SHALL SHOW PROPOSED CONDITIONS AND PROVIDE DATA BY THE DESIGN PROFESSIONAL WHICH DETAILS HOW THE PROPOSED USE WILL COMPLY WITH THE CURRENT EDITION OF THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE FOR THE NEW USE IN THE AREA OF STRUCTURAL STRENGTH, MEANS OF EGRESS, PASSIVE AND ACTIVE FIRE PROTECTION, HEATING AND VENTILATING SYSTEMS, HANDICAPPED ACCESSIBILITY AND PLUMBING FACILITIES.
2. NEW CONSTRUCTION MUST COMPLY WITH THE CURRENT EDITION OF THE UNIFORM STATEWIDE BUILDING CODE (USBC).
3. BEFORE A BUILDING PERMIT CAN BE ISSUED ON ANY PROPOSED FUTURE ALTERATIONS, A CERTIFICATION IS REQUIRED FROM THE OWNER OR OWNER'S AGENT THAT THE BUILDING HAS BEEN INSPECTED BY A LICENSED ASBESTOS INSPECTOR FOR THE PRESENCE OF ASBESTOS.
4. A CERTIFICATE OF OCCUPANCY SHALL BE OBTAINED PRIOR TO ANY OCCUPANCY OF THE BUILDING OR PORTION THEREOF.
5. REQUIRED EXITS, PARKING, AND ACCESSIBILITY WITHIN THE BUILDING FOR PERSONS WITH DISABILITIES MUST COMPLY WITH USBC CHAPTER 11. HANDICAPPED ACCESSIBLE BATHROOMS SHALL ALSO BE PROVIDED.
6. TOILET FACILITIES FOR PERSONS WITH DISABILITIES: LARGER, DETAILED, DIMENSIONED DRAWINGS ARE REQUIRED TO CLARIFY SPACE LAYOUT AND MOUNTING HEIGHTS OF AFFECTED ACCESSORIES. INFORMATION ON DOOR HARDWARE FOR THE TOILET STALL IS REQUIRED (USBC 1109.2.2).
7. IF APPLICABLE, ENCLOSED PARKING GARAGES MUST BE VENTILATED IN ACCORDANCE WITH USBC 406.4.2. THE REQUIRED MECHANICAL VENTILATION RATE FOR AIR IS 0.75 CFM PER SQUARE FOOT OF THE FLOOR AREA (USBC 2801.1). IN AREAS WHERE MOTOR VEHICLES OPERATE FOR A PERIOD OF TIME EXCEEDING 10 SECONDS, THE VENTILATION RETURN AIR MUST BE EXHAUSTED. AN EXHAUST SYSTEM MUST BE PROVIDED TO CONNECT DIRECTLY TO THE MOTOR VEHICLE EXHAUST (USBC 2801.1).
8. ELECTRICAL WIRING METHODS AND OTHER ELECTRICAL REQUIREMENTS MUST COMPLY WITH NFPA 70, 2008.
9. IF APPLICABLE, THE PUBLIC PARKING GARAGE FLOOR MUST COMPLY WITH USBC 406.2.6 AND DRAIN THROUGH OIL SEPARATORS OR TRAPS TO AVOID ACCUMULATION OF EXPLOSIVE VAPORS IN BUILDING DRAINS OR SEWERS AS PROVIDED FOR IN THE PLUMBING CODE (USBC 2901). THIS PARKING GARAGE IS CLASSIFIED AS AN S-2, GROUP 2, PUBLIC GARAGE.
10. THIS PROJECT IS NOT LOCATED IN A COMBINED SEWER AREA.
11. THIS SITE DOES NOT CONTAIN ANY AREAS PREVIOUSLY MAPPED AS MARINE CLAYS.

COMPLETE STREETS INFORMATION:

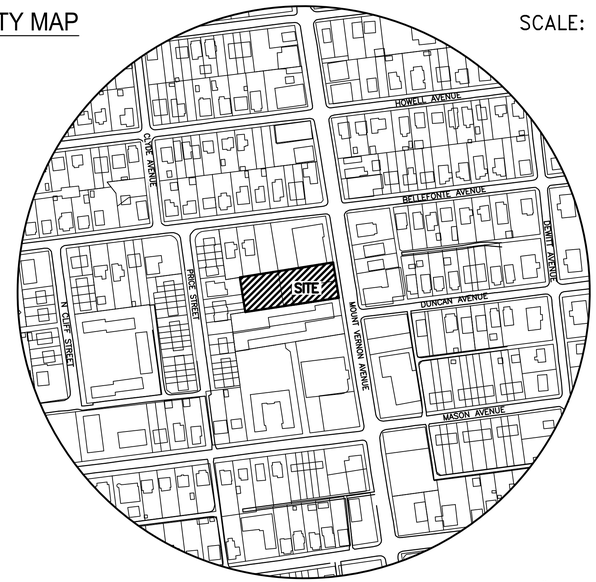
	NEW	UPGRADED
CROSSWALKS (NUMBER)	N/A	N/A
STANDARD	N/A	N/A
HIGH VISIBILITY	N/A	N/A
CURB RAMPS	N/A	N/A
SIDEWALKS (LF)	N/A	100
BICYCLE PARKING (NUMBER SPACES)	15	N/A
PUBLIC/VISITOR	N/A	N/A
PRIVATE/GARAGE	15	N/A
BICYCLE PATHS (LF)	N/A	N/A
PEDESTRIAN SIGNALS	N/A	N/A

BUILDING CODE ANALYSIS:

USE:	MIXED USE (PARKING GARAGE, MERCANTILE, RESIDENTIAL)
USE GROUP:	M, S-2, R-2
TYPE OF CONSTRUCTION:	VB OVER IA
NUMBER OF STORIES:	4
FLOOR AREA (GROSS):	54,476 SF
FLOOR AREA (NET):	51,072 SF
BUILDING FOOT PRINT AREA:	17,870 SF
BUILDING HEIGHT:	45 FT
FIRE SUPRESSION/DETECTION:	FULLY SPRINKLERED, NFPA 13

VICINITY MAP

SCALE: 1"=200'



TAX PARCEL NUMBERS: #034.04-14-10 (#1800)
#034.04-14-18 (#1800R)

PROJECT DESCRIPTION NARRATIVE

THIS PROJECT PROPOSES THE REDEVELOPMENT OF THE SUBJECT SITE CURRENTLY OCCUPIED BY A 1-STORY COMMERCIAL BUILDING AND SURFACE PARKING LOT. THE PROPOSED DEVELOPMENT INCLUDES A 4-STORY, MIXED-USE RETAIL/RESIDENTIAL BUILDING AND 1-LEVEL UNDERGROUND PARKING GARAGE. THIS PROJECT IS LOCATED IN THE MOUNT VERNON AVENUE URBAN OVERLAY ZONE AND WILL CONFORM TO THE MOUNT VERNON AVENUE DESIGN GUIDELINES AND MOUNT VERNON AVENUE BUSINESS AREA PLAN.

SPECIAL USE PERMITS/ZONING MODIFICATIONS:

DEVELOPMENT SPECIAL USE PERMIT (DSUP) REQUESTS:

- A FORM-BASED SUP TO WAIVE CL ZONE RULES PER SECTION 6-606(A)
- A PARKING REDUCTION PER 8-200B FROM 70 TO 55 SPACES
- A WAIVER OF LOADING SPACE REQUIREMENTS FOR THE RETAIL USE
- A MODIFICATION FOR THE ZONE TRANSITION LINE SETBACK FOR A PORTION OF THE NORTH PROPERTY LINE
- A TIER 1 TRANSPORTATION MANAGEMENT PLAN SPECIAL USE PERMIT

MOUNT VERNON AVENUE OVERLAY DISTRICT DEVIATION REQUESTS:

- AN INCREASE IN LOT OCCUPANCY FROM 60% TO 67%

ZONING MODIFICATION REQUESTS:

- A REDUCTION OF THE REQUIRED FRONT YARD SETBACK FROM 10.0' TO 8.7' (PER SECT 7-1006(A))

SHEET INDEX:

COVER SHEET 1
CONTEXTUAL PLAN 2
EXISTING CONDITIONS 3
PRELIMINARY SITE PLAN 4
SITE DIMENSIONS PLAN 5
GARAGE PLAN 6
STORMWATER MANAGEMENT PLAN 7
OUTFALL ANALYSIS 8
SANITARY SEWER OUTFALL ANALYSIS 9, 9A, 9B
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GENERAL NOTES L0.01
HARDSCAPE PLAN L1.01
ROOF TOP HARDSCAPE PLAN L1.02
LANDSCAPE NOTES AND DETAILS L1.03
HARDSCAPE DETAILS L1.04
HARDSCAPE DETAILS L1.05

CONTEXT PLAN A100
ARCH SITE PLAN A101
STREETSCAPE AND BUILDING MASSING A102
PERSPECTIVES AND BUILDING MASSING A103
PERSPECTIVES AND HISTORIC DETAILS A104
NET AREA PLANS A105
FLOOR PLANS A200
FLOOR PLANS A201
BUILDING ELEVATIONS A400
BUILDING ELEVATIONS A401
BUILDING SECTIONS A700
BUILDING SECTIONS A701

ZONING TABULATIONS

(PER THE MOUNT VERNON AVENUE URBAN OVERLAY ZONE)

1. ZONE OF SITE: #1800 CL/COMMERCIAL LOW ZONE (MOUNT VERNON AVENUE URBAN OVERLAY ZONE)
#1800R CL/COMMERCIAL LOW ZONE
2. USE: EXISTING COMMERCIAL PROPOSED MIXED USE RETAIL/RESIDENTIAL
3. LOT AREA: 26,793 SF OR 0.6151 AC MINIMUM LOT AREA: N/A
4. NUMBER OF DWELLING UNITS: 2-BEDROOM 11; 1-BEDROOM 38; TOTAL 49
5. UNITS PER ACRE: ALLOWED: N/A PROPOSED: 80
6. FLOOR AREA:

GROSS FLOOR AREA		NET FLOOR AREA	
RESIDENTIAL	52,009 SQ. FT.	RESIDENTIAL	48,803 SQ. FT.
RETAIL	2,467 SQ. FT.	RETAIL	2,269 SQ. FT.
TOTAL	54,476 SQ. FT.	TOTAL	51,072 SQ. FT.
GARAGE	21,384 SQ. FT.	GARAGE	20,036 SQ. FT.

7. FLOOR AREA RATIO: PERMITTED N/A; PROPOSED 1.91 (51,072 SQ.FT.)

*8. LOT OCCUPANCY: ALLOWED 60% (16,075 SF BUILDING FOOTPRINT); PROPOSED 67% (17,870 SF BUILDING FOOTPRINT)

9. OPEN SPACE (SEE DETAIL ON SHEET 2):
REQUIRED 6,698.25 SQ. FT. (25.0%)
PROPOSED 8,350 SQ. FT. (31.2%, GROUND LEVEL)
6,100 SQ. FT. (22.8%, ABOVE GRADE)
TOTAL: 14,450 SQ. FT. (53.9%)
10. AVERAGE FINISHED GRADE: 45.68

*11. HEIGHT: PERMITTED: 40.0'; PROVIDED: 45.0' (SEE SHEETS A400 & A401)

*12. YARDS (SEE SHEETS 5, A700, & A701):

REQUIRED		PROVIDED	
FRONT	10' (PER SECTION 7-1006(A))	FRONT	8.7'
SIDE (NORTH)	1:1 HEIGHT RATIO (45.0')(PER SECT 7-902(A))	SIDE (NORTH)	15.0'
SIDE (SOUTH)	N/A	SIDE (SOUTH)	0.0'
REAR	1:1 HEIGHT RATIO (45.0')(PER SECT 7-902(A))	REAR	41.0'

13. FRONTAGE: REQUIRED 50' PROPOSED 100'
14. TRIP GENERATION: EXISTING 317 VPD PROPOSED 588 VPD (PER ITE STANDARDS); PEAK AM 31 AVG VEH TRIP ENDS; PEAK PM 47 AVG VEH TRIP ENDS

*15. PARKING TABULATION (SEE SHEET 6):

PARKING REQUIRED: RESIDENTIAL
1 SPACE / 1BR UNIT = 1 x 38 = 38
2 SPACES / 2BR UNIT = 2 x 11 = 22
5% REDUCTION FOR FOUR OR MORE BUS STOPS WITHIN 1/4 MILE OF ENTRANCE= -3
TOTAL RESIDENTIAL PARKING REQUIRED = 57

RETAIL
RETAIL SPACES, DISTRICT 2
1.1 SPACES/210 SQ.FT. FLOOR AREA = 12.9 OR 13

TOTAL REQUIRED PARKING SPACES = 70

PARKING PROVIDED: RETAIL (ABOVE GRADE):
STANDARD SPACES 1
COMPACT SPACES 0
ACCESSIBLE SPACES 1
RESIDENTIAL (BELOW GRADE):
STANDARD SPACES 11
COMPACT SPACES 41
ACCESSIBLE SPACES 1
TOTAL 55

*16. LOADING SPACES: REQUIRED 1 PROPOSED 0

17. MOUNT VERNON AVENUE DESIGN GUIDELINES COMPLIANCE REFERENCES:
-UPPER FLOORS FOR RESIDENTIAL USE: SHEETS A200, A201
-GROUND FLOOR RETAIL USE: SHEET A200
-"STEPPING" DOWN OF BUILDING HEIGHT FROM ADJACENT RESIDENTIAL PROPERTIES: SHEETS A700, A701
-BUFFERS FOR ADJOINING RESIDENCES: SHEET L1.01
-PROTECTION OF ADJACENT RESIDENTIAL NEIGHBORHOODS: SHEET L1.01
-ENHANCED STREETSCAPE AND PEDESTRIAN AMENITIES: SHEETS 5, L1.01
-PROTECTION AND ENHANCEMENT OF MVA UNIQUE CHARACTER: SHEETS L1.01, A104

* SEE SPECIAL USE PERMITS/ZONING MODIFICATIONS NOTE FOR DETAILED INFORMATION.

OWNER/DEVELOPER

OWNER:
BREVIC DEVELOPMENT LLC
1800 AND 1800R MT VERNON AVE
ALEXANDRIA, VA 22301
INSTRUMENT #140000076

DEVELOPER:
BREVIC DEVELOPMENT LLC
6007 MAYFAIR LANE
ALEXANDRIA, VA 22310
(571) 233-8585
CONTACT: VICTOR BONOMI

PLAN PREPARED BY:
R.C. FIELDS & ASSOCIATES, INC.
730 S. WASHINGTON STREET
ALEXANDRIA, VA 22314
(703) 549-6422
CONTACT: ANDREA SPRUCH

ATTORNEY:
LAND CARROLL AND BLAIR, P.C.
524 KING STREET
ALEXANDRIA, VA 22314
(703) 836-1000
CONTACT: DUNCAN BLAIR

ARCHITECT:
HEFFNER ARCHITECTS, PC
604 MONTGOMERY STREET
ALEXANDRIA, VA 22314
(703) 549-7766
CONTACT: SHAWN GLERUM

RCFIELDS & ASSOCIATES, INC.
ENGINEERING • LAND SURVEYING • PLANNING
730 S. Washington Street
Alexandria, Virginia 22314
www.rcfassoc.com
(703) 549-6422
PROJ. MANAGER: ANDREA SPRUCH
EMAIL: ASPRUCH@RCFASSOC.COM

SCALE: AS NOTED DATE: JUNE 2015 DRAWN: ACS
REV:

COMMONWEALTH OF VIRGINIA
Andrea Spruch
ANDREA SPRUCH
Lic. No. 047863
August 18, 2015
PROFESSIONAL ENGINEER

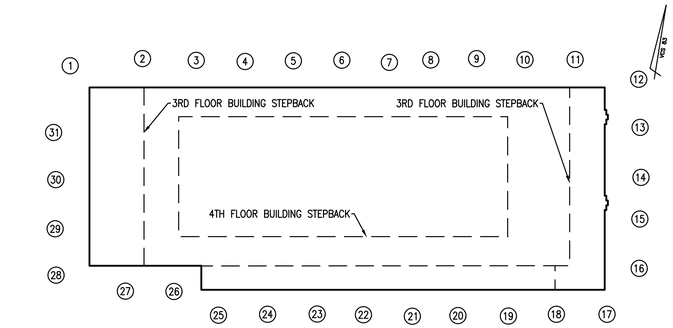
REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

PRELIMINARY DEVELOPMENT SPECIAL USE PERMIT
1800 MOUNT VERNON AVENUE
CITY OF ALEXANDRIA, VIRGINIA

SHEET NAME: COVER SHEET

APPROVED
SPECIAL USE PERMIT NO. 2014-0019
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO.
DIRECTOR DATE
CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED
INSTRUMENT NO. DEED BOOK NO. DATE

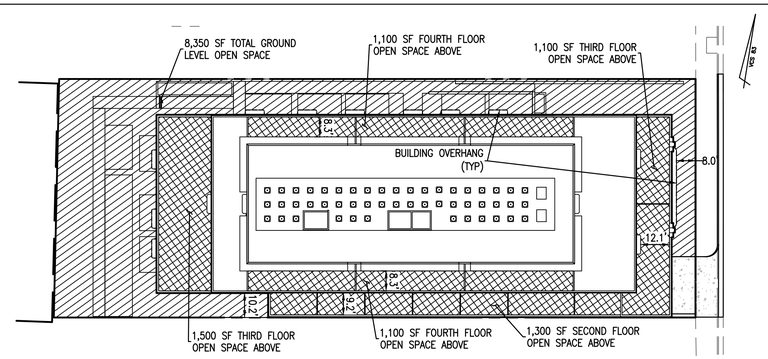


SPOT	ELEV
1	45.5
2	46.0
3	46.6
4	46.6
5	46.6
6	46.6
7	46.6
8	46.6
9	44.3
10	44.3
11	44.3
12	44.8
13	44.3
14	44.3
15	44.3
16	44.3
17	44.6
18	45.0
19	45.4
20	45.6
21	45.9
22	46.3
23	46.5
24	46.4
25	46.3
26	46.4
27	46.0
28	45.8
29	46.6
30	46.6
31	46.6
SUBTOTAL:	1416.0
AVERAGE:	**45.68**

AVERAGE FINISHED GRADE AND BUILDING STEPBACK DETAIL

SCALE: 1" = 30'

0' 30' 60'



GROUND LEVEL OPEN SPACE*

ABOVE GRADE OPEN SPACE

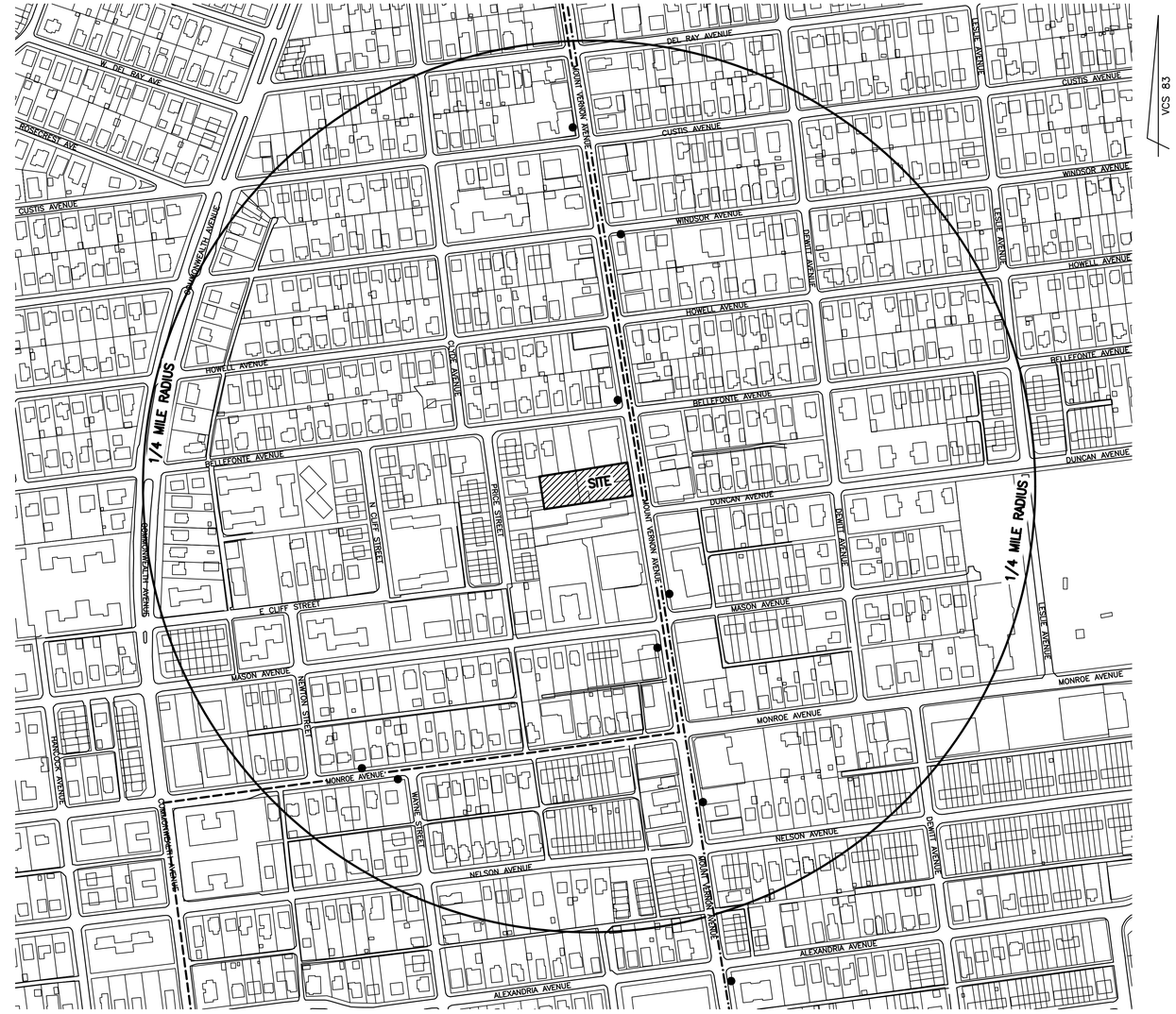
GROUND LEVEL OPEN SPACE REQUIRED:	6,698 SF (25.0%)
ABOVE GRADE OPEN SPACE REQUIRED:	0 SF
GROUND LEVEL OPEN SPACE PROVIDED:	8,350 SF (31.2%)
ABOVE GRADE OPEN SPACE PROVIDED:	6,100 SF (22.8%)
TOTAL OPEN SPACE PROVIDED:	14,450 SF (53.9%)

*ALL GROUND LEVEL OPEN SPACE IS USEABLE OPEN SPACE

0' 30' 60'

OPEN SPACE GRAPHIC

SCALE: 1" = 30'



CONTEXTUAL MAP

SCALE: 1" = 200'

LEGEND:

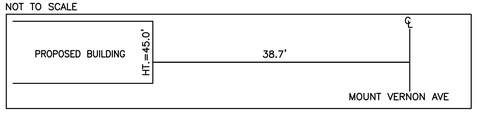
- BUS STOP
- WMATA ROUTES 10A, 10B, 10E
- DASH ROUTE AT10

SECTION 6–403 COMPLIANCE NOTE:

SECTION 6–403 STATES "IN ALL HEIGHT DISTRICTS, THE ALLOWABLE HEIGHT OF A BUILDING AT ANY POINT SHALL NOT EXCEED TWICE THE DISTANCE FROM THE FACE OF THE BUILDING AT THAT POINT TO THE CENTERLINE OF THE STREET FACING SUCH BUILDING." SEE DETAIL BELOW FOR SECTION SHOWING COMPLIANCE.

SECTION 6–403 DETAIL:

NOT TO SCALE



GRAPHIC SCALE

200 0 100 200 400 800

(IN FEET)
1 inch = 200 ft.

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EXISTING UTILITIES SHOWN ON THIS PLAN TAKEN FROM AVAILABLE RECORDS AND/OR FROM FIELD OBSERVATIONS. FOR EXACT LOCATIONS OF EXISTING UNDERGROUND UTILITIES, NOTIFY "MISS UTILITY" AT 1–800–552–7001, 72 HOURS BEFORE THE START OF ANY EXCAVATION OR CONSTRUCTION.

LOCATION AND DEPTH OF ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION. INTERFERENCE OR DISRUPTION OF SAME WILL NOT BE THE RESPONSIBILITY OF THIS OFFICE.

ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATION OF THE CITY OF ALEXANDRIA, VIRGINIA.

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APPROVED
SPECIAL USE PERMIT NO. 2014–0019

DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

SITE PLAN NO.

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED

INSTRUMENT NO. DEED BOOK NO. DATE

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ENGINEERING • LAND SURVEYING • PLANNING
730 S. Washington Street
Alexandria, Virginia 22314
www.rcfassoc.com
(703) 549-6422

COMMONWEALTH OF VIRGINIA
ANDREA SPRUCH
Lic. No. 047083
AUGUST 18, 2015
PROFESSIONAL ENGINEER

PRELIMINARY DEVELOPMENT SPECIAL USE PERMIT
ON THE PROPERTY LOCATED AT
1800 MOUNT VERNON AVENUE
CITY OF ALEXANDRIA, VIRGINIA

DATE	REVISION

CONTEXTUAL PLAN

DESIGN: ACS
DRAWN: VMG

SCALE: AS SHOWN

DATE: JUNE 25, 2015

SHEET 2 OF 11

FILE: 13–88

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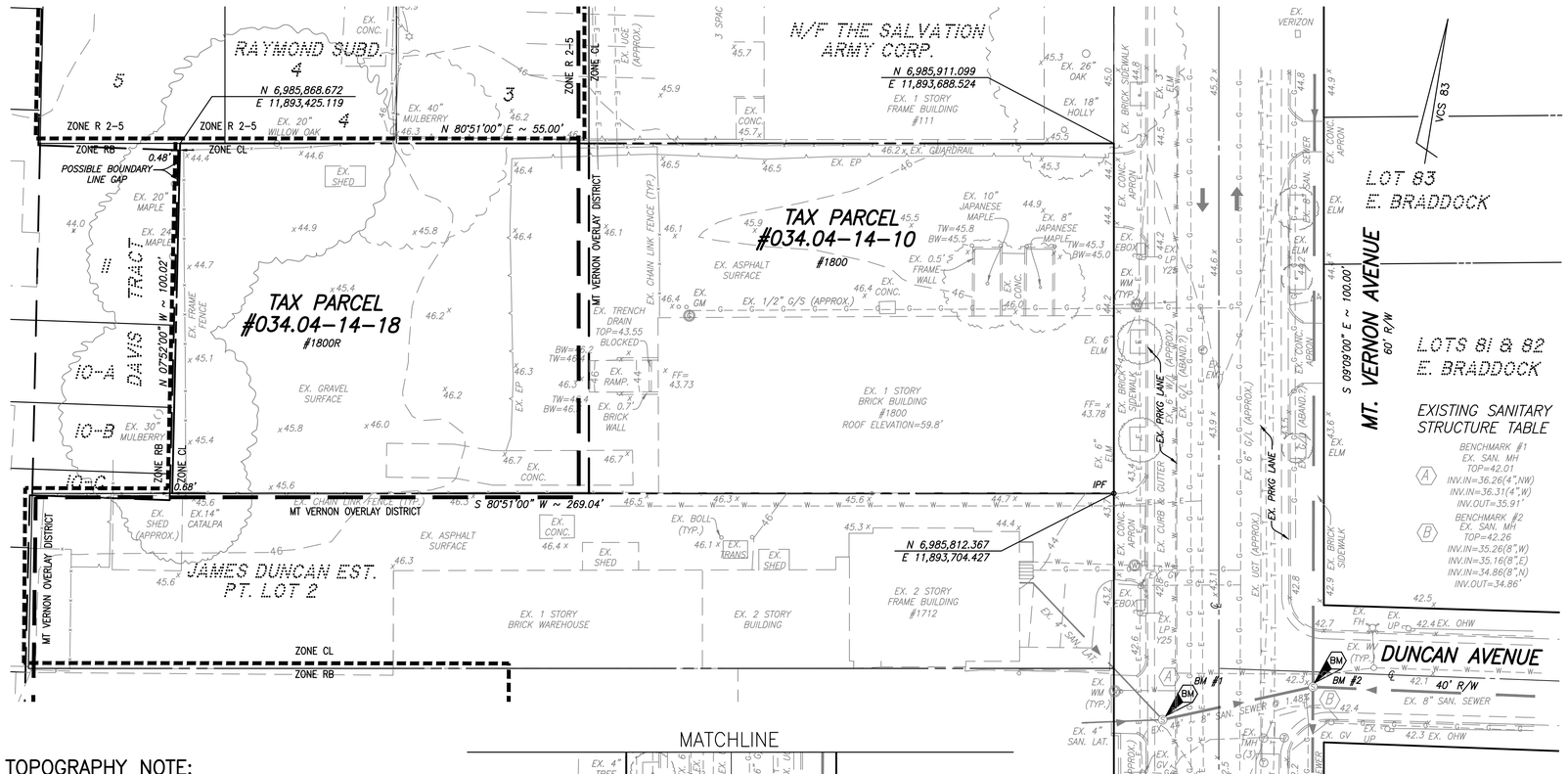
Tue, Aug 18 2015 – 8:33:41am

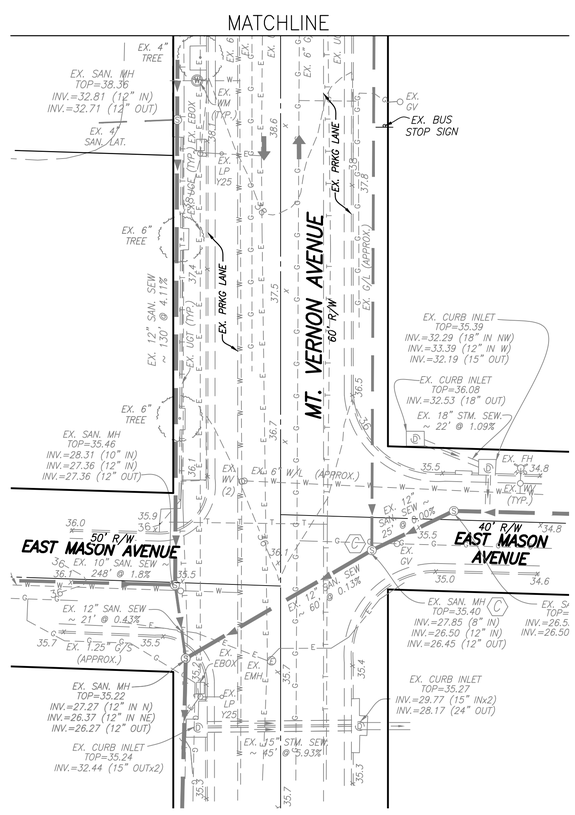
ABBREVIATIONS:

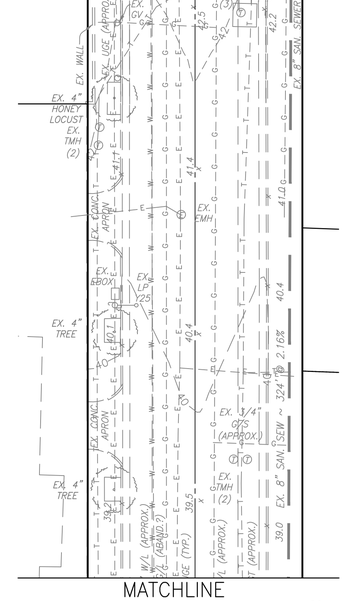
°= DEGREES
'= MINUTES (OR FEET)
"= SECONDS (OR INCHES)
%= PERCENT
#= NUMBER
@= AT
lbs.= POUNDS
A= ARC
AC.= ACRE
ADA = AMERICANS W/ DISABILITIES ACT
APPROX=APPROXIMATE
BC=BOTTOM OF CURB
BF= BASEMENT FLOOR
BLDG.= BUILDING
BM= BENCHMARK
BOL.= BOLLARD
CATV= CABLE UTILITY
CL= CLASS
CLEAR= CLEARANCE
CLF= CHAIN LINK FENCE
CMP = CORRUGATED METAL PIPE
C.I.= CURB INLET
C.O.= CLEAN OUT
CONC.= CONCRETE
C&G= CURB & GUTTER
DB= DEED BOOK
DIP= DUCTILE IRON PIPE
DOM= DOMESTIC
DSP= DEVELOPMENT SITE PLAN
DSUP= DEVELOPMENT SPECIAL USE PERMIT
DU= DWELLING UNIT
E= EAST
EBOX= ELECTRICAL BOX
ESMT.= EASEMENT
EP= EDGE OF PAVEMENT
EX=EXISTING
FDC= FIRE DEPT. CONNECTION
FF= FINISH FLOOR
FH= FIRE HYDRANT
FT.= FEET
GL = GROUND LIGHT
G/V= GAS VALVE
G/M= GAS METER
G.I.= GRATE INLET
H.C.= HEADER CURB
HDCP.= HANDICAP
HDPE= HIGH DENSITY POLYETHYLENE
HPS= HIGH PRESSURE SODIUM
IPF= IRON PIPE FOUND
INV.= INVERT
INSTR.= INSTRUMENT
L= LUMENS
LOC.= LOCATION
LP= LIGHT POLE
MAX.= MAXIMUM
MH= MANHOLE
MIN.= MINIMUM
MPH= MILES PER HOUR
MW= MONITORING WELL
N= NORTH
OHW= OVERHEAD WIRE
PN = PANEL
PG= PAGE
PP= POWER POLE
PROP= PROPOSED
PVC= POLYVINYL CHLORIDE
R= RADIUS
RCP= RE-ENFORCED CONCRETE PIPE
RELOC. = RELOCATED
RET.= RETAINING
RESID.= RESIDENTIAL
R/W= RIGHT-OF-WAY
S= SOUTH
SAN.= SANITARY SEWER
S.F.= SQUARE FEET
SQ.FT.= SQUARE FEET
STM.= STORM SEWER
STR.= STRUCTURE
SUB= SUBDIVISION PLAN
TBR = TO BE REMOVED
TBS = TO BE SAVED
T.M.= TAX MAP
TMH= TELEPHONE MANHOLE
TC= TOP OF CURB
TOW = TOP OF WALL
TRAF.SIG.= TRAFFIC SIGNAL
TYP= TYPICAL
UGE= UNDERGROUND ELECTRIC
UP= UTILITY POLE
VCS= VIRGINIA COORDINATE SYSTEM
VPD= VEHICLES PER DAY
W= WATT
W= WEST
W.S.E.= WATER SURFACE ELEVATION
WV= WATER VALVE
WM= WATER METER
W.W.= WINDOW WELL

CIVIL LEGEND

ITEM	EXISTING	PROPOSED
CURB & GUTTER		
CONC. WALK	WALK	WALK
FIRE HYDRANT		
STRUCTURES		
WATER MAINS	W	W
GAS MAINS	G	G
TELEPHONE LINES	T	T
STORM SEWER	D	D
SANITARY SEWER	S	S
PAVING		
FENCES	X	X
POWER LINES		
SPOT ELEVATIONS	+124.5	+ 124.5
CONTOURS	124	124
BUILDING ENTRANCES		
UTILITY POLE		
LIGHT POLE		
LIMITS OF DISTURBANCE		







TOPOGRAPHY NOTE:

THIS TOPOGRAPHIC SURVEY WAS COMPLETED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF R.J. KELLER, LS FROM AN ACTUAL ■ GROUND □ AIRBORNE SURVEY MADE UNDER MY SUPERVISION; THE IMAGERY AND/OR ORIGINAL DATA WAS OBTAINED ON AUGUST 8, 2013; AND THIS PLAT, MAP OR DIGITAL GEOSPATIAL DATA INCLUDING METADATA MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED.

EXISTING CONDITIONS SURVEY NOTES:

1. UTILITY INFORMATION, AS SHOWN ON THIS PLAN, IS TAKEN FROM THE RECORDS AND/OR FIELD SURVEY COMPLETED AND CANNOT BE GUARANTEED. FOR EXACT LOCATIONS OF EXISTING UNDERGROUND UTILITIES, NOTIFY "MISS UTILITY" AT 1-800-552-7001, 72 HOURS BEFORE THE START OF ANY EXCAVATION OR CONSTRUCTION.

2. LOCATION AND DEPTH OF ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR/ENGINEER SHOULD DIG TEST PITS BY HAND AT ALL UTILITY CROSSINGS TO VERIFY EXACT LOCATION.

- - - - - - - - ZONING DISTRICT BOUNDARY LINE

——— ——— EXISTING MT. VERNON OVERLAY DISTRICT BOUNDARY LINE

GENERAL NOTES:

1. TAX MAP: #034.04-14-10 (#1800), #034.04-10-18 (#1800R)
2. ZONE: CL
3. OWNER: BREVIC DEVELOPMENT LLC
   1800 AND 1800R MT VERNON AVE
   ALEXANDRIA, VA 22301
   INSTRUMENT #: 140000076
4. TOPOGRAPHIC SURVEY WAS RUN BY THIS FIRM. VERTICAL DATUM USED = NAVD '88 PER CITY OF ALEXANDRIA MONUMENT #GPS 551. ELEVATION = 44.65' HORIZONTAL COORDINATES AND BEARINGS REFERENCED TO VCS '83 DATUM PER CITY OF ALEXANDRIA MONUMENT #GPS 551. N6,986,581.62 E11,893,630.43
   COMBINED SCALE FACTOR: 0.999952764
   CITY OF ALEXANDRIA MONUMENT #GPS 552. N6,984,170.11 E11,893,975.88
   COMBINED SCALE FACTOR: 0.999952350
5. TITLE REPORT FURNISHED BY EXPRESS RECORDING & TITLE, DATED 7/1/2013 AND IS RELIED UPON AS ACCURATE BY THE SURVEYOR.
6. PLAT SUBJECT TO RESTRICTIONS OF RECORD.
7. TOTAL SITE AREA = 26,793 S.F. OR 0.6151 AC.
8. THIS SITE DOES NOT CONTAIN ANY AREAS PREVIOUSLY MAPPED AS MARINE CLAYS.
9. THERE ARE NO KNOWN CONTAMINATED AREAS, CONTAMINATED SOILS OR ENVIRONMENTAL ISSUES ASSOCIATED WITH THIS SITE.

ADJOINING PROPERTY INFORMATION:

RAYMOND SUBD. 5
N/F THE SALVATION ARMY
1804 MT. VERNON AVENUE
ALEXANDRIA, VA 22301
ZONE: R 2-5 USE: CHARITABLE
TM #034.04-14-06
DB. 1121, PG. 1897

DAVIS TRACT 11
N/F THOMAS S. & JAQUELINE A.T. CAMERLINCK
1725 PRICE ST., ALEXANDRIA, VA 22301
ZONE: RB USE: DETACHED HOUSE
TM #034.04-14-17; INSTR. #110005287

DAVIS TRACT 10-A
N/F EUGENE N. OR MOLLEE B.L. HANSEN
1723 PRICE ST.,
ALEXANDRIA, VA 22301
ZONE: RB USE: SEMI DETACHED HOUSE
TM #034.04-14-16; INSTR. #060006329

DAVIS TRACT 10-B
N/F ROBERT OR SHARON DRINKARD
1721 PRICE ST., ALEXANDRIA, VA 22301
ZONE: RB USE: ROW (TOWNHOUSE)
TM #034.04-14-15; INSTR. #020011451

DAVIS TRACT 10-C
N/F LORINDA IVY LARYEA &
BENJAMIN ROSS WINOGRAD
1719 PRICE ST., ALEXANDRIA, VA 22301
ZONE: RB USE: SEMI DETACHED HOUSE
TM #034.04-14-14; INSTR. #120013190

JAMES DUNCAN EST. PT. LOT 2
N/F MARY ELLIS FANNON
1712 MT. VERNON AVENUE
ALEXANDRIA, VA 22301
ZONE: CL USE: GENERAL COMMERCIAL
TM #034.04-14-11
F000451

RAYMOND SUBD. 4
N/F THE SALVATION ARMY
1804 MT. VERNON AVENUE
ALEXANDRIA, VA 22301
ZONE: R 2-5 USE: CHARITABLE
TM #034.04-14-07
DB. 693, PG. 425

RAYMOND SUBD. 3
N/F SALVATION ARMY CORP.
1804 MT. VERNON AVENUE
ALEXANDRIA, VA 22301
ZONE: R 2-5 USE: CHARITABLE
TM #034.04-14-08
DB. 619, PG. 50

N/F THE SALVATION ARMY CORP
1804 MT. VERNON AVENUE
ALEXANDRIA, VA 22301
ZONE: CL USE: CHARITABLE
TM #034.04-14-09
DB. 649, PG. 218

LOTS 81 & 82 E. BRADDOCK
FOUR MILE RUN ASSOCIATES
1707 MT VERNON AVE
ALEXANDRIA, VA 22301
ZONE: CL USE: AUTO DEALERSHIP
TM #034.04-13-19; INSTR. #13350000

LOT 83 E. BRADDOCK
N/F SALVATION ARMY CORP.
1804 MT. VERNON AVENUE
ALEXANDRIA, VA 22301
ZONE: CL USE: CHARITABLE
TM #034.04-13-20; INSTR #13340000

UTILITY OWNERSHIP NOTE:

– GAS: ALL GAS LINES SHOWN ON THIS PLAN ARE OWNED AND MAINTAINED BY WASHINGTON GAS COMPANY. CONTACT: KEN McCONKEY 703-750-4756; ADDRESS: WASHINGTON GAS, 6801 INDUSTRIAL ROAD, SPRINGFIELD, VA 22151.
– ELECTRIC: ALL ELECTRIC UTILITIES SHOWN ON THIS PLAN ARE OWNED AND MAINTAINED BY DOMINION VIRGINIA POWER. ANY RELOCATION OF EXISTING POLES AND LINES WILL BE COORDINATED WITH DOMINION VIRGINIA POWER. CONTACT: 1-866-366-4357; ADDRESS: DOMINION POWER, P.O. BOX 26666, RICHMOND, VA 23261.
– WATER: ALL EXISTING WATER LINES AND FIRE HYDRANTS SHOWN ON THIS PLAN ARE OWNED AND MAINTAINED BY VIRGINIA AMERICAN WATER COMPANY (V.A.W.C.). EXISTING WATER SERVICES FROM METERS TO THE EXISTING BUILDINGS ARE OWNED AND MAINTAINED BY THE PROPERTY OWNER. PROPOSED WATER SERVICES FROM METERS TO THE PROPOSED BUILDINGS ARE OWNED AND MAINTAINED BY THE PROPERTY OWNER. CONTACT: NETWORK SUPERVISOR FOR THE SOUTHEAST REGION HAO (STEVEN) CHEN 703-706-3889; ADDRESS: VIRGINIA AMERICAN WATER COMPANY, 2223 DUKE STREET, ALEXANDRIA, VA 22314.
– SANITARY SEWER: ALL EXISTING SANITARY SEWER LINES SHOWN ON THIS PLAN ARE OWNED AND MAINTAINED BY THE CITY OF ALEXANDRIA. THE PROPOSED SANITARY LATERAL WILL BE OWNED AND MAINTAINED BY THE PROPERTY OWNER. CONTACT: PUBLIC WORKS SERVICES, 2900 BUSINESS CENTER DRIVE, ALEXANDRIA, VA. TELEPHONE: 703-746-4357.
– STORM SEWER: ALL EXISTING AND PROPOSED STORM SEWER LOCATED IN THE PUBLIC RIGHT-OF-WAY SHOWN ON THIS PLAN IS OWNED AND MAINTAINED BY THE CITY OF ALEXANDRIA. ANY PROPOSED ON-SITE STORM SEWER WILL BE MAINTAINED BY THE PROPERTY OWNER. CONTACT: PUBLIC WORKS SERVICES, 2900 BUSINESS CENTER DRIVE, ALEXANDRIA, VA. TELEPHONE: 703-746-4357.
– TELEPHONE: ALL TELEPHONE LINES ARE OWNED BY VERIZON. CONTACT: SECTION MANAGER MIKE TYSINGER 804-772-6625; ADDRESS: VERIZON VIRGINIA, INC., 3011 HUNGARY SPRING ROAD, 2ND FLOOR, RICHMOND, VA 23228.

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

THIS DRAWING IS A SERVICE DOCUMENT OF R.C. FIELDS & ASSOCIATES, INC. AND MAY NOT BE USED OR REPRODUCED WITHOUT THE WRITTEN PERMISSION OF THE ENGINEER AND/OR LAND SURVEYOR.

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ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATION OF THE CITY OF ALEXANDRIA, VIRGINIA.

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APPROVED
SPECIAL USE PERMIT NO. 2014-0019

DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

SITE PLAN NO.

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED

INSTRUMENT NO. DEED BOOK NO. DATE

R.C. FIELDS & ASSOCIATES, INC.
ENGINEERING • LAND SURVEYING • PLANNING
730 S. Washington Street
Alexandria, Virginia 22314
www.rcfassoc.com
(703) 549-6422

COMMONWEALTH OF VIRGINIA
ANDREA SPRUCH
Lic. No. 047863
AUGUST 18, 2015
PROFESSIONAL ENGINEER

PRELIMINARY DEVELOPMENT SPECIAL USE PERMIT
ON THE PROPERTY LOCATED AT
1800 MOUNT VERNON AVENUE
CITY OF ALEXANDRIA, VIRGINIA

DATE	REVISION

DESIGN: ACS
DRAWN: VMG
SCALE: 1" = 20'
DATE: JUNE 25, 2015
SHEET 3 OF 11
FILE: 13-88

EXISTING CONDITIONS

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Tue, Aug 18 2015 - 8:33:49am

ABBREVIATIONS:

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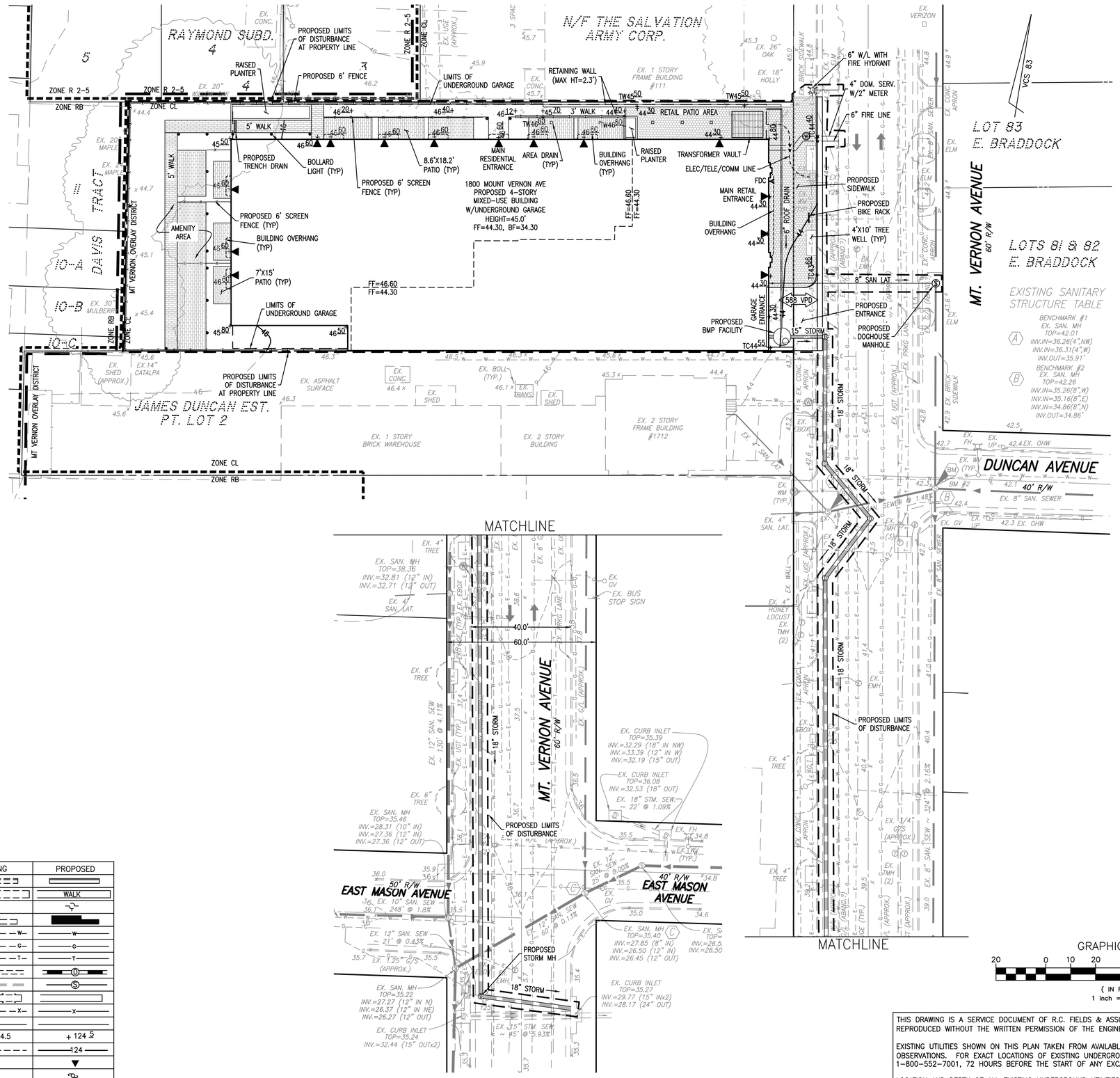
W.W.= WINDOW WELL

CIVIL LEGEND

ITEM	EXISTING	PROPOSED
CURB & GUTTER		
CONC. WALK	WALK	WALK
FIRE HYDRANT		
STRUCTURES		
WATER MAINS	W	W
GAS MAINS	G	G
TELEPHONE LINES	T	T
STORM SEWER	D	D
SANITARY SEWER	S	S
PAVING		
FENCES	X	X
POWER LINES		
SPOT ELEVATIONS	+124.5	+124.5
CONTOURS	124	124
BUILDING ENTRANCES		
UTILITY POLE		
LIGHT POLE		
LIMITS OF DISTURBANCE		



GENERAL NOTES:

1. TAX MAP: #034.04-14-10 (#1800) #034.04-10-18 (#1800R)
2. ZONE: CL
3. OWNER: BREVIC DEVELOPMENT LLC
   1800 & 1800R MOUNT VERNON AVE
   ALEXANDRIA, VA 22301
   INSTRUMENT #: 140000076
4. TOPOGRAPHIC SURVEY WAS RUN BY THIS FIRM. VERTICAL DATUM USED = NAVD '88 PER CITY OF ALEXANDRIA MONUMENT #GPS 551. ELEVATION = 44.65'
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6. PLAT SUBJECT TO RESTRICTIONS OF RECORD.
7. TOTAL SITE AREA = 26,793 S.F. OR 0.6151 AC.
8. THIS SITE DOES NOT CONTAIN ANY AREAS PREVIOUSLY MAPPED AS MARINE CLAYS.
9. THERE ARE NO KNOWN CONTAMINATED AREAS, CONTAMINATED SOILS OR ENVIRONMENTAL ISSUES ASSOCIATED WITH THIS SITE.
10. THIS PROJECT IS NOT LOCATED IN A COMBINED SEWER AREA.

ARCHAEOLOGY NOTES:

CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703-746-4399) IF ANY BURIED STRUCTURAL REMAINS (WALL FOUNDATIONS, WELLS, PRIVIES, CISTERNS, ETC.) OR CONCENTRATIONS OF ARTIFACTS ARE DISCOVERED DURING DEVELOPMENT. WORK MUST CEASE IN THE AREA OF THE DISCOVERY UNTIL A CITY ARCHAEOLOGIST COMES TO THE SITE AND RECORDS THE FINDS.

THE APPLICANT SHALL NOT ALLOW ANY METAL DETECTION AND/OR ARTIFACT COLLECTION TO BE CONDUCTED ON THE PROPERTY, UNLESS AUTHORIZED BY ALEXANDRIA ARCHAEOLOGY. FAILURE TO COMPLY SHALL RESULT IN PROJECT DELAYS.

ALL REQUIRED ARCHAEOLOGICAL PRESERVATION MEASURES SHALL BE COMPLETED IN COMPLIANCE WITH SECTION 11-411 OF THE ZONING ORDINANCE.

SANITARY SEWER OUTFALL NARRATIVE:

THE TOTAL SANITARY FLOWS FOR THIS SITE WERE CALCULATED PER THE MEMORANDUM TO INDUSTRY NUMBER 06-14. THE EXISTING USE (COMMERCIAL) PRODUCES AN AVERAGE DAILY FLOW OF APPROXIMATELY 5,232 GALLONS PER DAY (200 GAL. X 6,540/1,000 SF X 4.0 PEAK FACTOR). THE PROPOSED DEVELOPMENT (MIXED-USE) PRODUCES 60,774 GALLONS PER DAY ([300 GPD X 49 UNITS X 4.0 PEAK FACTOR] + [200 GPD X 2,467/1,000 SF OF RETAIL SPACE X 4.0 PEAK FACTOR]). THE TOTAL FLOW FROM THE THE PROPOSED USE EXCEEDS 10,000 GPD. THEREFORE, A DETAILED SANITARY SEWER OUTFALL ANALYSIS IS PROVIDED ON SHEET 9. THE SANITARY DISCHARGE WILL BE TREATED AT A PUBLICLY OWNED TREATMENT FACILITY PER CITY OF ALEXANDRIA CODE 4035.

AREA PLAN NOTE:

THIS SITE IS LOCATED ALONG MOUNT VERNON AVENUE AND WITHIN THE MOUNT VERNON URBAN OVERLAY ZONE. THIS DESIGN WILL THEREFORE MEET THE MOUNT VERNON AVENUE DESIGN GUIDELINES AS WELL AS CONFORM TO THE MOUNT VERNON URBAN OVERLAY ZONE BUSINESS AREA PLAN.

GREEN BUILDING NARRATIVE:

THIS BUILDING IS BEING DESIGNED USING LEED STANDARDS OR EQUIVALENT THIRD PARTY VERIFIED ENERGY EVALUATION CERTIFICATION PROGRAM. THE PROJECT COMPONENTS WILL STRIVE TO UTILIZE SUSTAINABLE MATERIALS, RECOGNIZED ENERGY CONSERVATION SYSTEMS, AND GREEN TECHNOLOGY WHERE PRUDENT. MANY OF THE APPLIANCES WILL BE ENERGY STAR AND LIGHTING SELECTIONS WILL BE MADE TO CONSERVE ENERGY CONSUMPTION. SPECIFICS OF SYSTEMS WILL BE OUTLINED IN THE CERTIFIED/RATED PROGRAM USED.

VEHICLE TURNING MOVEMENT NOTE:

THERE IS NO TRASH VEHICLE ACCESS PROVIDED ON THE SITE. INTERIOR TRASH RECEPTACLES WILL BE WHEELED OUTSIDE TO THE MOUNT VERNON AVENUE RIGHT-OF-WAY FOR COLLECTION. SEE SHEET 6 FOR GARAGE TURNING MOVEMENTS.

PAVEMENT MATERIAL NOTE:

SEE L-SERIES SHEETS FOR SIDEWALK AND PAVEMENT MATERIAL DETAILS AND SPECIFICATIONS.

FIRE HYDRANT FLOW INFORMATION

(PROVIDED BY VIRGINIA AMERICAN WATER)
HYDRANT NUMBER: 2058 (MOUNT VERNON AND DUNCAN AVE)

STATIC	=	46 PSI
RESIDUAL	=	36 PSI
FLOW	=	1,052 GPM
Q_{20}	=	1,763 GPM

ZONING DISTRICT BOUNDARY LINE
PROPOSED MT. VERNON OVERLAY DISTRICT BOUNDARY LINE

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

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APPROVED
SPECIAL USE PERMIT NO. 2014-0019
DEPARTMENT OF PLANNING & ZONING
DIRECTOR — DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO.
DIRECTOR — DATE
CHAIRMAN, PLANNING COMMISSION — DATE
DATE RECORDED
INSTRUMENT NO. — DEED BOOK NO. — DATE

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COMMONWEALTH OF VIRGINIA
ANDREA SPRUCH
Lic. No. 047083
AUGUST 18, 2015
PROFESSIONAL ENGINEER

PRELIMINARY DEVELOPMENT SPECIAL USE PERMIT
ON THE PROPERTY LOCATED AT
1800 MOUNT VERNON AVENUE
CITY OF ALEXANDRIA, VIRGINIA

DATE	REVISION

DESIGN: ACS
DRAWN: VMG
SCALE: 1" = 20'
DATE: JUNE 25, 2015
SHEET 4 OF 11
FILE: 13-88

PRELIMINARY SITE PLAN

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Tue, Aug 18 2015 - 8:33:54am

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GAS MAINS	G	G
TELEPHONE LINES	T	T
STORM SEWER	D	D
SANITARY SEWER	S	S
PAVING		
FENCES	X	X
POWER LINES		
SPOT ELEVATIONS	+124.5	+124.5
CONTOURS	124	124
BUILDING ENTRANCES		
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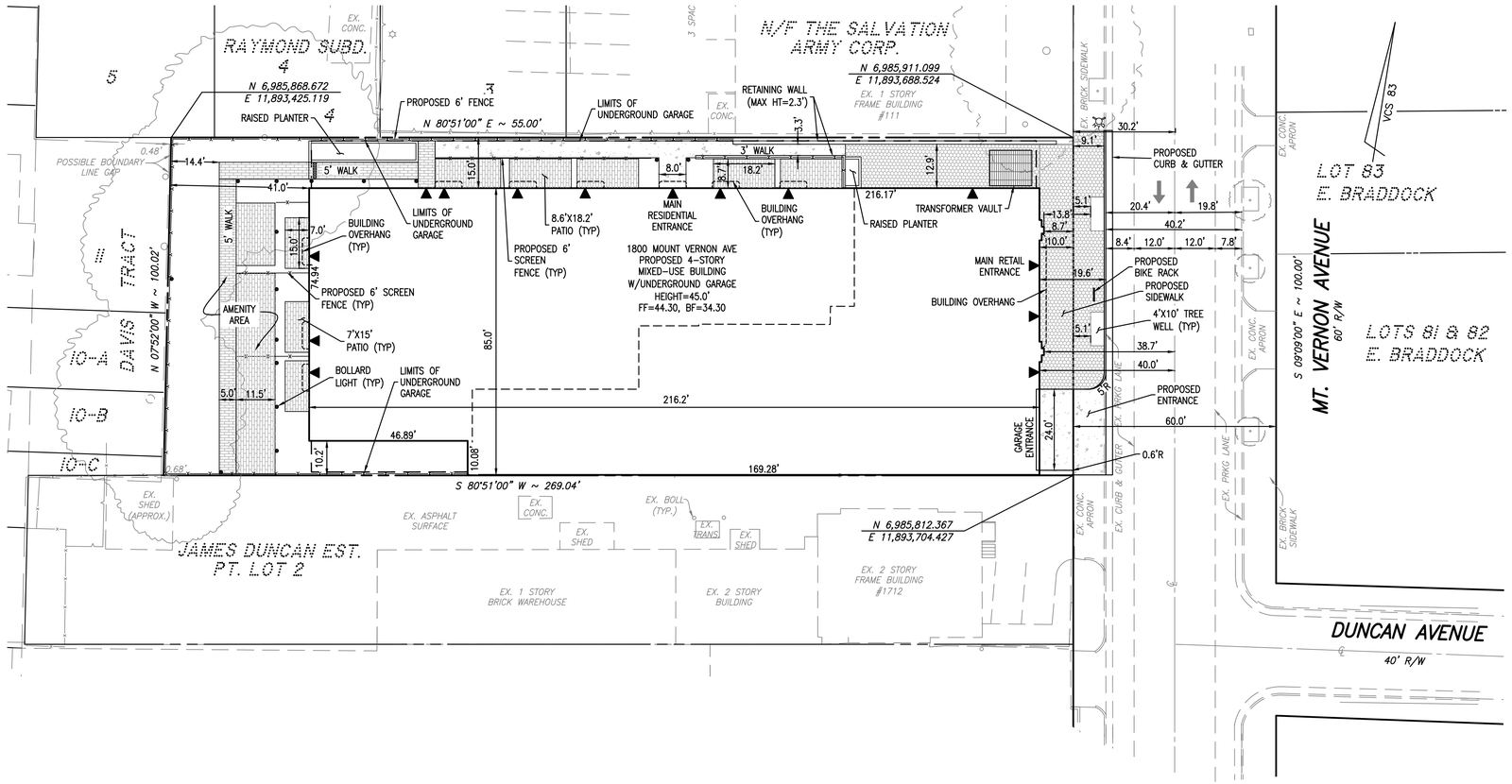
LIMITS OF DISTURBANCE		



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4. TOPOGRAPHIC SURVEY WAS RUN BY THIS FIRM. VERTICAL DATUM USED = NAVD '88
   PER CITY OF ALEXANDRIA MONUMENT #GPS 551. ELEVATION = 44.65'
   HORIZONTAL COORDINATES AND BEARINGS REFERENCED TO VCS '83 DATUM PER CITY OF ALEXANDRIA MONUMENT #GPS 551. N6,986,581.62 E11,893,630.43
   COMBINED SCALE FACTOR: 0.999952764
   CITY OF ALEXANDRIA MONUMENT #GPS 552. N6,984,170.11 E11,893,975.88
   COMBINED SCALE FACTOR: 0.999952350
5. TITLE REPORT FURNISHED BY EXPRESS RECORDING & TITLE, DATED 7/1/2013 AND IS RELIED UPON AS ACCURATE BY THE SURVEYOR.
6. PLAT SUBJECT TO RESTRICTIONS OF RECORD.
7. TOTAL SITE AREA = 26,793 S.F. OR 0.6151 AC.
8. THIS SITE DOES NOT CONTAIN ANY AREAS PREVIOUSLY MAPPED AS MARINE CLAYS.
9. THERE ARE NO KNOWN CONTAMINATED AREAS, CONTAMINATED SOILS OR ENVIRONMENTAL ISSUES ASSOCIATED WITH THIS SITE.
10. THIS PROJECT IS NOT LOCATED IN A COMBINED SEWER AREA.

ARCHAEOLOGY NOTES:

CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703-746-4399) IF ANY BURIED STRUCTURAL REMAINS (WALL FOUNDATIONS, WELLS, PRIVIES, CISTERNS, ETC.) OR CONCENTRATIONS OF ARTIFACTS ARE DISCOVERED DURING DEVELOPMENT. WORK MUST CEASE IN THE AREA OF THE DISCOVERY UNTIL A CITY ARCHAEOLOGIST COMES TO THE SITE AND RECORDS THE FINDS.

THE APPLICANT SHALL NOT ALLOW ANY METAL DETECTION AND/OR ARTIFACT COLLECTION TO BE CONDUCTED ON THE PROPERTY, UNLESS AUTHORIZED BY ALEXANDRIA ARCHAEOLOGY. FAILURE TO COMPLY SHALL RESULT IN PROJECT DELAYS.

ALL REQUIRED ARCHAEOLOGICAL PRESERVATION MEASURES SHALL BE COMPLETED IN COMPLIANCE WITH SECTION 11-411 OF THE ZONING ORDINANCE.

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

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LOCATION AND DEPTH OF ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION. INTERFERENCE OR DISRUPTION OF SAME WILL NOT BE THE RESPONSIBILITY OF THIS OFFICE.

ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATION OF THE CITY OF ALEXANDRIA, VIRGINIA.

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APPROVED
SPECIAL USE PERMIT NO. 2014-0019
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO.
DIRECTOR DATE
CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED
INSTRUMENT NO. DEED BOOK NO. DATE

R.C. FIELDS & ASSOCIATES, INC.
ENGINEERING • LAND SURVEYING • PLANNING
730 S. Washington Street
Alexandria, Virginia 22314
www.rcfassoc.com
(703) 549-6422

COMMONWEALTH OF VIRGINIA
ANDREA SPRUCH
Lic. No. 047083
AUGUST 18, 2015
PROFESSIONAL ENGINEER

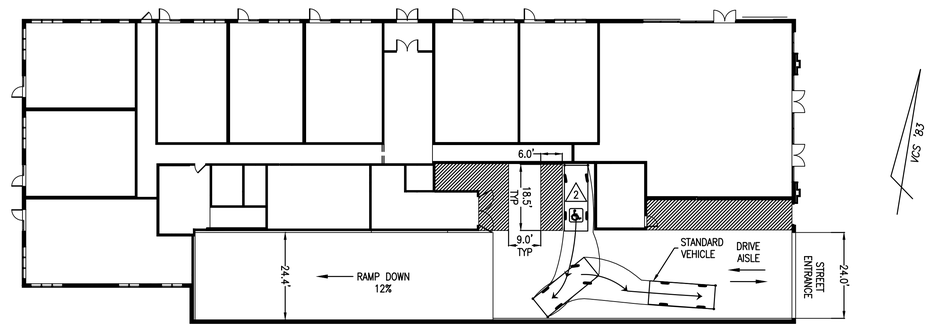
PRELIMINARY DEVELOPMENT SPECIAL USE PERMIT
ON THE PROPERTY LOCATED AT
1800 MOUNT VERNON AVENUE
CITY OF ALEXANDRIA, VIRGINIA

DATE	REVISION

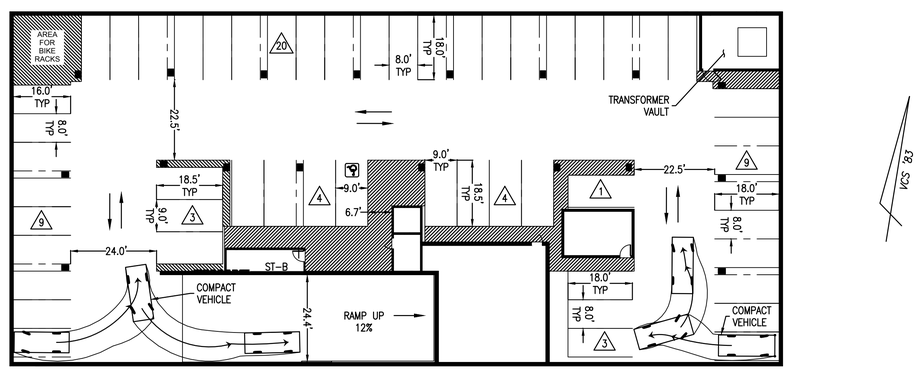
DESIGN: ACS
DRAWN: VMG
SCALE: 1" = 20'
DATE: JUNE 25, 2015
SHEET 5 OF 11
FILE: 13-88

SITE DIMENSIONS PLAN

J:\2013\13088\DWG\DEIA\Preliminary Plan\05 SITE DIMENSIONS PLAN.dwg
Tue, Aug 18 2015 - 8:33:58am



FIRST FLOOR PARKING PLAN (RETAIL PARKING)



BASEMENT FLOOR PARKING PLAN (RESIDENTIAL PARKING)

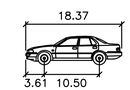
PARKING LEGEND

X — NUMBER OF SPACES IN ROW

ACCESSIBLE PARKING SPACE

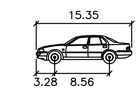
PARKING TABULATION:

RETAIL:	
STANDARD SPACES	1
COMPACT SPACES	0
ACCESSIBLE SPACES	1
RESIDENTIAL:	
STANDARD SPACES	11
COMPACT SPACES	41
ACCESSIBLE SPACES	1
TOTAL	**55**



	feet
Width	: 6.56
Track	: 6.56
Lock to Lock Time	: 6.0
Steering Angle	: 36.2

STANDARD VEHICLE
NOT TO SCALE



	feet
Width	: 5.74
Track	: 5.74
Lock to Lock Time	: 6.0
Steering Angle	: 22.8

COMPACT VEHICLE
NOT TO SCALE

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

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DIRECTOR — DATE

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AUGUST 18, 2015
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PRELIMINARY DEVELOPMENT SPECIAL USE PERMIT
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1800 MOUNT VERNON AVENUE
CITY OF ALEXANDRIA, VIRGINIA

DATE	REVISION

DESIGN: ACS
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DATE: JUNE 25, 2015
SHEET 6 OF 11
FILE: 13-88

GARAGE PLAN

J:\2013\1388\DWG\DEVLP\Preliminary Plan\06 GARAGE PLAN.dwg
Tue, Aug 18 2015 - 8:34:05am

Virginia Runoff Reduction Method ReDevelopment Worksheet - v2.8 - June 2014
To be used w/ DRAFT 2013 BMP Standards and Specifications
Site Data

Project Name: 1800 Mount Vernon Avenue
Date: June 2015

	data input cells
	calculation cells
	constant values

Post-ReDevelopment Project & Land Cover Information

Total Disturbed Acreage 0.73

Constants

Annual Rainfall (inches)	43
Target Rainfall Event (inches)	1.00
Phosphorus EMC (mg/L)	0.26
Target Phosphorus Target Load (lb/acre/yr)	0.41
Pj	0.90

Nitrogen EMC (mg/L) 1.86

Pre-ReDevelopment Land Cover (acres)

	A soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed, protected forest/open space or reforested land	0.00	0.00	0.00	0.00	0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be mowed/managed	0.00	0.00	0.00	0.02	0.02
Impervious Cover (acres)	0.00	0.00	0.00	0.60	0.60
				Total	0.62

Post-ReDevelopment Land Cover (acres)

	A soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed, protected forest/open space or reforested land	0.00	0.00	0.00	0.00	0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be mowed/managed	0.00	0.00	0.00	0.09	0.09
Impervious Cover (acres)	0.00	0.00	0.00	0.52	0.52
				Total	0.62
Area Check	Okay	Okay	Okay	Okay	

Rv Coefficients

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

Land Cover Summary Pre-ReDevelopment

	Listed	Adjusted[1]
Forest/Open Space Cover (acres)	0.00	0.00
Composite Rv(forest)	0.00	0.00
% Forest	0%	0%
Managed Turf Cover (acres)	0.02	0.02
Composite Rv(turf)	0.25	0.25
% Managed Turf	3%	3%
Impervious Cover (acres)	0.60	0.60
Rv(impervious)	0.95	0.95
% Impervious	97%	97%
Total Site Area (acres)	0.62	0.62
Site Rv	0.93	0.93
Pre-Development Treatment Volume (acre-ft)	0.0476	0.0476
Pre-Development Treatment Volume (cubic feet)	2,075	2,075
Pre-Development Load (TP) (lb/yr)	1.30	1.30
Pre-Development Load (TN) (lb/yr)	9.33	

[1] *Adjusted* **Land Cover Summary** reflects the pre redevelopment land cover minus the pervious land cover (forest/open space or managed turf) acreage proposed for new impervious cover. The adjusted total acreage is consistent with the Post Redevelopment acreage (minus the acreage of new impervious cover). The load reduction requriement for the new impervious cover to meet the new development load limit is computed in **Column I**.

Land Cover Summary Post-ReDevelopment

Forest/Open Space Cover	0.00
Composite Rv(forest)	0.00
% Forest	0%
Managed Turf Cover (acres)	0.09
Composite Rv(turf)	0.25
% Managed Turf	15%
ReDev. Impervious Cover (acres)	0.52
Rv(impervious)	0.95
% Impervious	85%
Total ReDev. Site Area (acres)	0.62
ReDev. Site Rv	0.85
Post-ReDevelopment Treatment Volume (acre-ft)	0.0434
Post-ReDevelopment Treatment Volume (cubic feet)	1,890
Post-ReDevelopment Load (TP) (lb/yr)	1.19
Post-Development Load (TN) (lb/yr)	8.49

Land Cover Summary Post-ReDevelopment New Impervious

New Impervious Cover (acres)	0.00
Rv(impervious)	0.95
% Impervious	Check Area
Total New Dev. Site Area (acres)	0.00
New Dev. Site Rv	0.95
Post-Development Treatment Volume (acre-ft)	0.0000
Post-Development Treatment Volume (cubic feet)	0
Post-Development Load (TP) (lb/yr)	0.00

Maximum % Reduction Required Below Pre-ReDevelopment Load	10%
TP Load Reduction Required for Redeveloped Area (lb/yr)	0.01
TP Load Reduction Required for New Impervious Area (lb/yr)	0.00
Total Load Reduction Required (lb/yr)	**0.01**

Drainage Area A

Drainage Area A Land Cover (acres)

	A soils	B Soils	C Soils	D Soils	Totals	Land Cover Rv
Forest/Open Space (acres) -- undisturbed, protected forest/open space or reforested land	0.00	0.00	0.00	0.00	0.00	0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be mowed/managed	0.00	0.00	0.00	0.03	0.03	0.25
Impervious Cover (acres)	0.00	0.00	0.00	0.46	0.46	0.95
				Total	0.49	

Post Development Treatment Volume (cf) 1609

Apply Practices that Remove Pollutants but Do Not Reduce Runoff Volume

Practice	Unit	Description of Credit	Credit	Area (excluding areas treated by upstream practices)	Runoff from Upstream RR Practices (cf)	Runoff Reduction (cf)	Remaining Runoff Volume (cf)	Phosphorus Efficiency (%)	Phosphorus Load from Upstream RR Practices (lbs)	Untreated Phosphorus Load to Practice (lbs.)	Phosphorus Removed By Practice (lbs.)	Remaining Phosphorus Load (lbs.)
14. Manufactured BMP												
14. Hydro-dynamic BMP Facility	impervious acres draining to device	0% runoff volume reduction	0.00	0.46	0.00	0	1586	20	0.00	1.00	0.20	0.80
	turf acres draining to device	0% runoff volume reduction	0.00	0.03	0.00	0	86	20	0.00	0.01	0.00	0.01

Phosphorous

TOTAL PHOSPHOROUS LOAD REDUCTION REQUIRED (LB/YEAR)	0.01
RUNOFF REDUCTION (cf)	0
PHOSPHOROUS LOAD REDUCTION ACHIEVED (LB/YR)	0.20
ADJUSTED POST-DEVELOPMENT PHOSPHOROUS LOAD (TP) (lb/yr)	0.99
REMAINING PHOSPHOROUS LOAD REDUCTION (LB/YR) NEEDED	CONGRATULATIONS!! YOU EXCEEDED THE TARGET REDUCTION BY 0.2 LB/YEAR

BMP SIZING CHART

CONTECH ENGINEERED SOLUTIONS CDS Flow-Based Sizing per VADEQ Regulations

Project Name:	1800 Mount Vernon	**Date:**	7/30/15
County or Independent City:	Alexandria	**Design Engineer:**	NAB
State:	VA		

Annual Rainfall (inches)	43
Target Rainfall Event, P (inches)	1.00

Volume from Upstream Runoff Reduction Practice to BMP:

	Remaining Volume from Upstream RR Practice (cf)	Runoff Coefficient (R_v)	Effective Area (ac)
Managed Turf	0	0	0.00
Impervious Cover	0	0.95	0.00

Volume from Additional Credit Area to BMP:

	Treatment Volume from Untreated Credit Area (cf)	Runoff Coefficient (R_v)	Effective Area (ac)
Managed Turf	27	0.25	0.03
Impervious Cover	1586	0.95	0.46

Total Volume to be Treated	1614	cf
Total Effective Area to be Treated	0.49	ac
Composite Rv	0.91	
Time of Concentration (Tc)	5.00	min
Unit Peak Discharge (qu)	1000	cfs/mi2/in
Treatment Volume Peak Discharge	0.69	cfs
Model Name	2015-4	

STORM WATER QUALITY NARRATIVE: (CITY CODE SECTION 13-109E COMPLIANCE)

THE PROPOSED REDEVELOPMENT (APPROXIMATELY 0.73 ACRES OF DISTURBANCE) GENERATES A NET DECREASE OF IMPERVIOUS AREA FROM PRE-DEVELOPMENT CONDITIONS. PER CITY CODE SECTION 13-109E-(4)(a), DEVELOPMENT OF PRIOR DEVELOPED LANDS DISTURBING LESS THAN 1 ACRE AND RESULTING IN NO NET INCREASE IN IMPERVIOUS AREA MUST RESULT IN A 10% DECREASE IN PHOSPHORUS LOADING BELOW THE PRE-DEVELOPMENT TOTAL PHOSPHORUS LOAD.

THE VIRGINIA RUNOFF REDUCTION METHOD WAS UTILIZED TO DETERMINE THE STORM WATER QUALITY MANAGEMENT PERFORMANCE REQUIREMENTS FOR THIS PROJECT. COMPUTATIONS PROVIDED ON THIS SHEET DEMONSTRATE A NET DECREASE OF IMPERVIOUS AREA. THIS WILL RESULT IN A 7.7% ([(1.30-1.19)/1.30]*100=8.5%) REDUCTION OF PHOSPHOROUS LOAD FROM THE SITE. FURTHERMORE, A HYDRODYNAMIC BMP IS PROPOSED FOR THIS SITE, RESULTING IN AN ADDITIONAL PHOSPHOROUS LOAD REDUCTION. THE PROJECT WILL RESULT IN AN OVERALL PHOSPHOROUS LOAD REDUCTION OF 23.1% ([1-(0.99/1.30)]*100% = 23.8%). THIS TREATMENT AMOUNT IS GREATER THAN THE REQUIRED 10% REMOVAL (SEE SPREADSHEET ON THIS SHEET). THEREFORE, THE WATER QUALITY MANAGEMENT PERFORMANCE REQUIREMENTS FOR THE PROPOSED DEVELOPMENT PER CITY CODE SECTION 13-109E-(4)(a) HAVE BEEN MET.

STORMWATER RUNOFF COMPUTATIONS:

VIRGINIA RUNOFF REDUCTION METHOD (PER TR-20, TYPE II, 24-HOUR STORM):

I. PROJECT AREA = 26,793 SQ.FT. OR 0.6151 ACRES

EXISTING IMPERVIOUS AREA = 26,010 SQ.FT. OR 0.5971 ACRES
PROPOSED IMPERVIOUS AREA = 22,825 SQ.FT. OR 0.5240 ACRES

II. WEIGHTED CURVE NUMBER (CN) CALCULATIONS:

CN PRE-DEVELOPMENT = [(0.5971*98)+(0.0180*80)]/0.6151 = 97
CN POST-DEVELOPMENT = [(0.5240*98)+(0.0911*80)]/0.6151 = 95

III. PRE-DEVELOPMENT PEAK DISCHARGES: (Tc = 5 MINS.)

PEAK Q2 PRE-DEVELOPMENT = 2.77 cfs
PEAK Q10 PRE-DEVELOPMENT = 4.58 cfs

IV. POST-DEVELOPMENT PEAK DISCHARGES (Tc = 5 MINS.)

PEAK Q2 POST-DEVELOPMENT = 2.67 cfs
PEAK Q10 POST-DEVELOPMENT = 4.50 cfs

V. POST-DEVELOPMENT DECREASES

Q2 = 0.10 cfs
Q10 = 0.08 cfs

PROJECT DESCRIPTION
REDEVELOPMENT - MIXED USE RETAIL/RESIDENTIAL

DRAINAGE AREA	IMPERVIOUS	PERVIOUS	TOTAL
PROJECT AREA	0.5240	0.0911	0.6151
ON-SITE TREATED	0.4600	0.0250	0.4850
OFF-SITE TREATED	0.0000	0.0000	0.0000
TOTAL TREATED	0.4600	0.0250	0.4850
ON-SITE IMPERVIOUS AREAS DISCONNECTED BY A VEGETATIVE BUFFER	N/A		
TOTAL TREATED OR DISCONNECTED			0.4850

WATER QUALITY VOLUME DEFAULT:
PROPOSED IMPERVIOUS: 0.5240 AC
TREATMENT OF FIRST HALF INCH OF RUNOFF: 1,815 X 0.5240 = 951 CU. FT. WQV REQUIRED

WATER TREATMENT ON-SITE

BMP TYPE	AREA TREATED BY BMP (ACRES)	IMPERVIOUS AREA TREATED BY BMP (ACRES)	BMP EFFICIENCY (%)
HYDRO-DYNAMIC	0.4850	0.4600	20%

TOTAL WQV TREATED: NO
WATER QUALITY VOLUME REQUIRED = 951 CU. FT.
WATER QUALITY VOLUME TREATED = 1,609 CU. FT.
PERCENT OF WATER QUALITY VOLUME TREATED = 169%
DETENTION ON SITE: NO (PROPOSED DECREASE IN IMPERVIOUS AREA)
PROJECT IS WITHIN WHICH WATERSHED? TIMBER BRANCH
PROJECT DISCHARGES TO WHICH BODY OF WATER? HOOFFS RUN

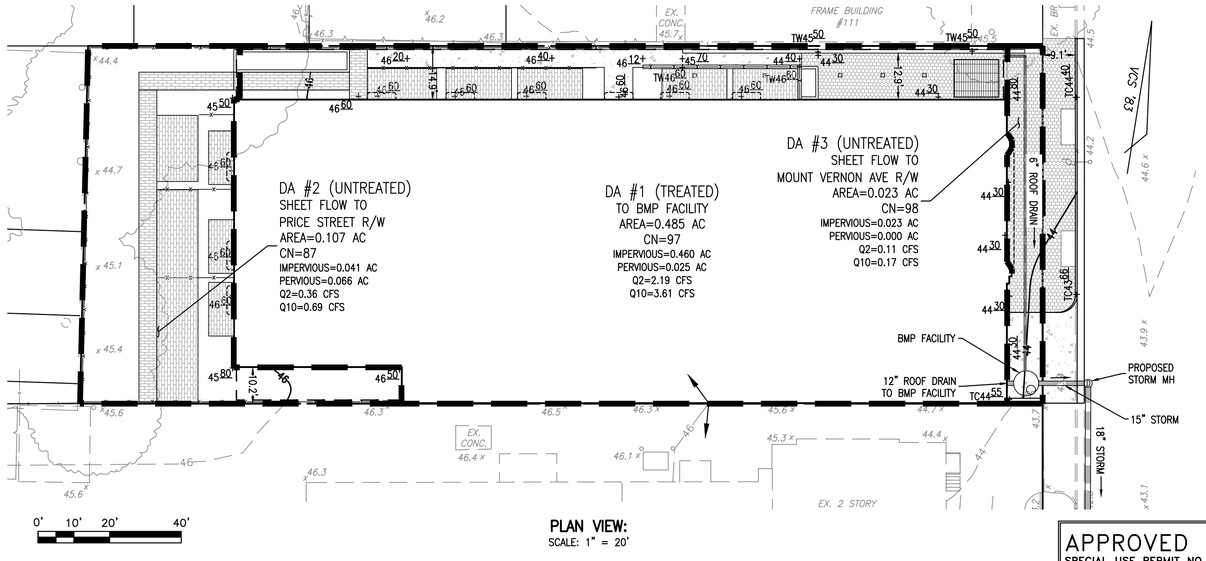
WATER QUALITY/QUANTITY COMPLIANCE NARRATIVE

THE 0.62 ACRE SITE IS LOCATED IN THE POTOMAC RIVER WATERSHED. IN EXISTING CONDITIONS, THE SITE CONSISTS OF A RETAIL BUILDING AND ASPHALT/GRAVEL PARKING AREAS. THERE IS NO VEGETATED OPEN SPACE. THE REDEVELOPMENT OF THE PROJECT SITE PROPOSES THE CONSTRUCTION OF A 4-STORY MIXED-USE BUILDING WITH RETAIL SPACE AND 49 DWELLING UNITS. OVERALL IMPERVIOUS AREA WILL DECREASE WITH THE PROPOSED DEVELOPMENT.

RUNOFF FROM THE PROPOSED BUILDING AND AREAS NORTH OF THE BUILDING WILL BE COLLECTED AND PIPED TO A PROPOSED HYDRO-DYNAMIC BEST MANAGEMENT PRACTICE (BMP). THE TREATED RUNOFF WILL OUTFALL TO THE PROPOSED STORM SEWER SYSTEM WITHIN THE MOUNT VERNON AVENUE RIGHT-OF-WAY. THE REMAINDER OF THE SITE WILL SURFACE FLOW NORTHWEST TO THE PRICE STREET RIGHT-OF-WAY.

POST-DEVELOPMENT CONDITIONS REDUCE THE OVERALL IMPERVIOUS AREA WITHIN THE PROJECT SITE (SEE STORMWATER RUNOFF COMPUTATIONS THIS SHEET) WHICH GENERATES AN OVERALL DECREASE OF RUNOFF. GIVEN THE REDUCTION OF SITE RUNOFF AS A RESULT OF THE PROPOSED SITE IMPROVEMENTS, ONSITE STORMWATER DETENTION IS NOT REQUIRED.

A HYDRO-DYNAMIC BMP IS PROPOSED TO TREAT THE MAJORITY OF RUNOFF FROM PROPOSED IMPERVIOUS AREA OF THE SITE. A CONTRIBUTION TO THE ALEXANDRIA WATER QUALITY IMPROVEMENT FUND WILL BE MADE FOR THE PORTION OF THE WATER QUALITY VOLUME THAT IS NOT TREATED BY THE PROPOSED BMP. COMPUTATIONS DEMONSTRATING COMPLIANCE WITH THE STORM WATER QUALITY MANAGEMENT PERFORMANCE REQUIREMENTS PER CITY CODE SECTION 13-109E ARE PROVIDED ON THIS SHEET.



PLAN VIEW:
SCALE: 1" = 20'

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STORMWATER MANAGEMENT PLAN

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Tue, Aug 18 2015 - 8:34:08am

OUTFALL NARRATIVE:

PRE-DEVELOPMENT CONDITIONS:
THE 0.62 ACRE SITE IS LOCATED IN THE POTOMAC RIVER WATERSHED. IN EXISTING CONDITIONS, THE SITE CONSISTS OF A RETAIL BUILDING AND ASPHALT/GRAVEL PARKING AREAS. THERE IS NO VEGETATED OPEN SPACE.

APPROXIMATELY TWO-THIRDS OF THE PROJECT SITE DRAINS TO THE MOUNT VERNON AVENUE RIGHT-OF-WAY. RUNOFF DRAINS SOUTH VIA THE MOUNT VERNON AVENUE CURB AND GUTTER THEN ENTERS A CURB INLET APPROXIMATELY 425' SOUTH OF THE SITE AT THE SOUTHWEST CORNER OF THE INTERSECTION OF EAST MASON AVENUE AND MOUNT VERNON AVENUE. DRAINAGE IS THEN CONVEYED SOUTH VIA THE CITY MAINTAINED STORM SEWER SYSTEM, EVENTUALLY OUTFALLING TO HOOFF'S RUN. THE REMAINDER OF THE PROJECT SITES SHEET FLOWS NORTHWEST TOWARDS PRICE STREET. RUNOFF THEN ENTERS A CURB INLET AT THE INTERSECTION OF PRICE STREET AND BELLEFONTE AVENUE WHERE IT IS CONVEYED WEST, THEN SOUTH VIA THE CITY MAINTAINED STORM SYSTEM. THIS SYSTEM EVENTUALLY OUTFALLS TO HOOFF'S RUN.

POST-DEVELOPMENT CONDITIONS:
THE REDEVELOPMENT OF THE PROJECT SITE PROPOSES THE CONSTRUCTION OF A 4-STORY MIXED-USE BUILDING WITH RETAIL SPACE AND 49 DWELLING UNITS. OVERALL IMPERVIOUS AREA WILL DECREASE WITH THE PROPOSED CONSTRUCTION.

RUNOFF FROM THE PROPOSED BUILDING AND THE MAJORITY OF THE PATIO PAVEMENT AREAS WILL BE COLLECTED AND PIPED TO A PROPOSED STORM SEWER SYSTEM IN MOUNT VERNON AVENUE. THE PROPOSED SYSTEM WILL TIE INTO THE EXISTING CITY MAINTAINED STORM SEWER AT THE CURB INLET AT THE SOUTHEAST CORNER OF THE INTERSECTION OF MOUNT VERNON AVENUE AND EAST MASON AVENUE. DRAINAGE IS THEN CONVEYED SOUTH VIA THE CITY MAINTAINED STORM SEWER SYSTEM, EVENTUALLY OUTFALLING TO HOOFF'S RUN AS IN PRE-DEVELOPMENT CONDITIONS. A SMALL PORTION OF SITE RUNOFF WILL CONTINUE TO SHEET FLOW NORTHWEST TO THE CURB INLET ON THE CORNER OF PRICE STREET AND BELLEFONTE AVENUE. ONCE WITHIN THE CITY MAINTAINED STORM SEWER SYSTEM, THIS RUNOFF WILL BE CONVEYED SOUTH, OUTFALLING TO HOOFF'S RUN AS IN PRE-DEVELOPMENT CONDITIONS.

CONCLUSION
POST-DEVELOPMENT CONDITIONS REDUCE THE OVERALL IMPERVIOUS AREA WITHIN THE PROJECT SITE (SEE STORMWATER RUNOFF COMPUTATIONS, SHEET 7). THE REDUCED IMPERVIOUS AREA WILL NOT CAUSE THE PRE-DEVELOPMENT PEAK RUNOFF RATE FROM THE 10-YEAR, 24-HOUR STORM TO INCREASE (OUTFALL AND HYDRAULIC GRADE LINE COMPUTATIONS TO BE PROVIDED WITH SUBSEQUENT SUBMISSIONS). THEREFORE, THE PROPOSED DEVELOPMENT WILL NOT ADVERSELY IMPACT THE EXISTING DOWNSTREAM STORM SEWER SYSTEM AND COMPLIES WITH VIRGINIA EROSION AND SEDIMENT CONTROL REGULATION 4 VAC 50-30-40.19(C)(3).

DETAILED LIMITS OF ANALYSIS AND OUTFALL COMPUTATIONS PER CITY CODE SECTION 13-109F WILL BE PROVIDED WITH SUBSEQUENT SUBMISSIONS. HOWEVER, DUE TO THE REDUCED POST-DEVELOPMENT RUNOFF RATE FOR THE 10-YEAR, 24-HOUR STORM, THE PROJECT POST-DEVELOPMENT RUNOFF WILL NOT EXACERBATE ANY EXISTING DOWNSTREAM CAPACITY CONDITIONS AND NO OFFSITE IMPROVEMENTS TO THE SYSTEM ARE REQUIRED.

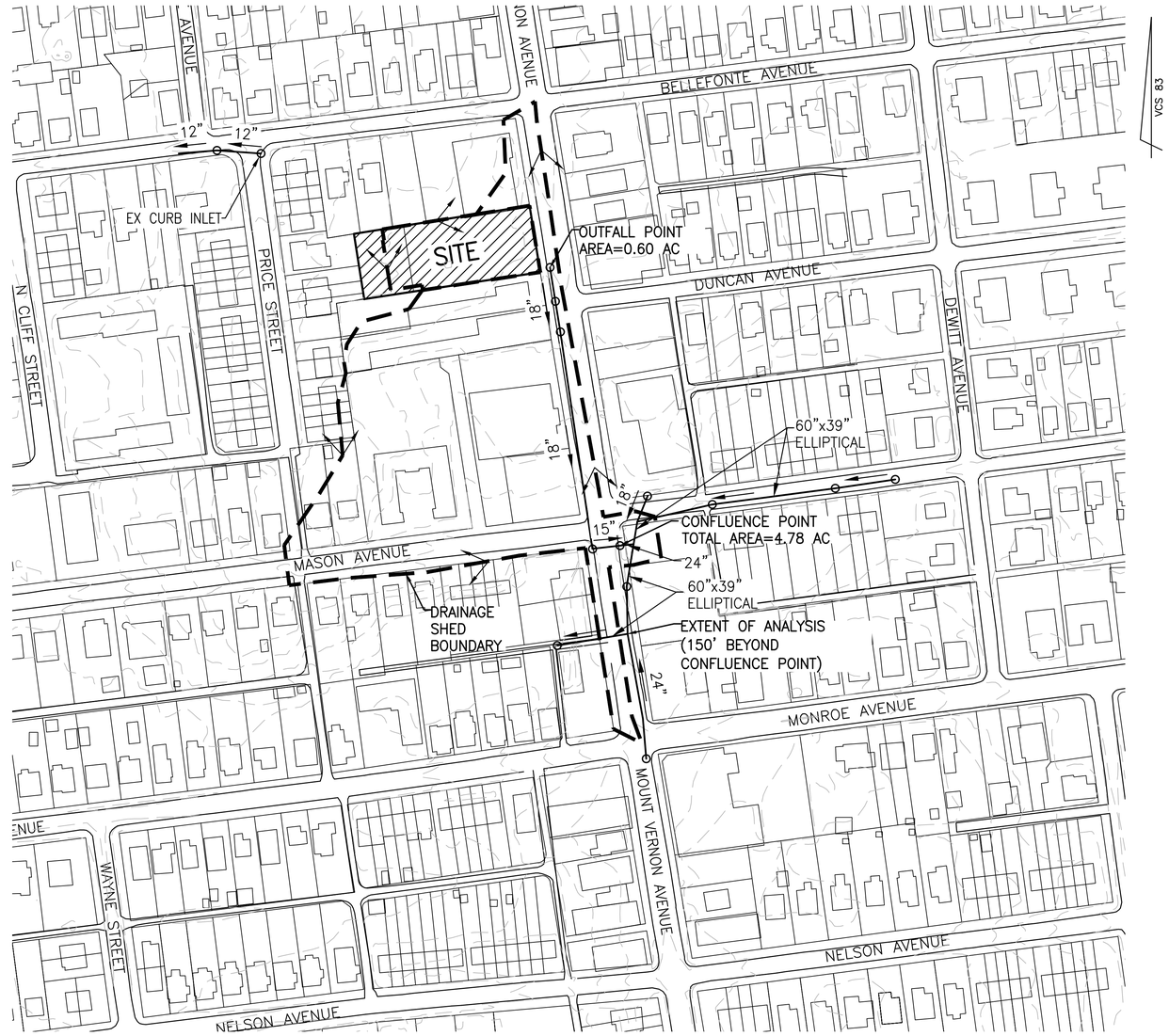
STORMWATER MANAGEMENT NARRATIVE: (CITY CODE SECTION 13-109F COMPLIANCE)

THIS PROJECT PROPOSES AN OVERALL DECREASE OF SITE IMPERVIOUS AREA. SITE RUNOFF IS COLLECTED IN A SERIES OF ROOF DRAIN PIPES AND AREA DRAINS THAT OUTFALL TO A PROPOSED STORM SEWER SYSTEM LOCATED IN MOUNT VERNON AVENUE. THIS PROPOSED SYSTEM CONNECTS TO AN EXISTING UNDERGROUND STORM SEWER SYSTEM LOCATED APPROXIMATELY 425' SOUTH OF THE SITE. THERE ARE NO CHANNEL CONVEYANCE SYSTEMS LOCATED WITHIN THE LIMITS OF ANALYSIS FOR THE DEVELOPMENT. PER CITY CODE SECTION 13-109F-2, COMPUTATIONS FOR THE EXISTING SYSTEM (TO BE PROVIDED WITH THE FINAL SITE PLAN SUBMISSION) DEMONSTRATE THAT THE EXISTING UNDERGROUND STORM SEWER SYSTEM DOES NOT CONTAIN THE PRE-DEVELOPMENT PEAK FLOW RATE FOR THE 10-YEAR, 24-HOUR STORM PER NRCS TR-20 HYDRAULIC METHODOLOGY (SEE PEAK FLOW RATE CALCULATIONS PROVIDED ON THIS SHEET). THEREFORE, STORMWATER REQUIREMENTS FOR THIS SITE FALL UNDER CITY CODE SECTION 13-109F-2(b) CRITERIA DUE TO SITE DRAINAGE OUTFALLING TO A STORMWATER CONVEYANCE SYSTEM THAT CURRENTLY EXPERIENCES LOCALIZED FLOODING DURING THE 10-YEAR 24-HOUR STORM EVENT.

DUE TO AN OVERALL DECREASE OF SITE IMPERVIOUS AREA, THE SITE RELEASES A POST-DEVELOPMENT PEAK RATE FOR THE 10-YEAR 24-HOUR STORM EVENT THAT IS LESS THAN THE PRE-DEVELOPMENT PEAK FLOW RATE FROM THE 10-YEAR 24-HOUR STORM EVENT (PER CITY CODE SECTION 13-109F-2(b)(ii), SEE COMPUTATIONS PROVIDED ON SHEET 7). THERE IS NO RUNOFF VOLUME INCREASE IN THE FORM OF SHEET FLOW RESULTING FROM PERVIOUS AREAS, DISCONNECTED IMPERVIOUS AREAS OR FROM PHYSICAL SPREADING OF CONCENTRATED FLOW ASSOCIATED WITH THE REDEVELOPMENT OF THIS SITE. THEREFORE, THE SMALL PORTION OF THE RUNOFF THAT EXITS THE SITE IN THE FORM OF SHEET FLOW WILL HAVE NO ADVERSE IMPACTS ON DOWN-GRADIENT PROPERTIES OR RESOURCES. ALL PERVIOUS AREAS ON THE SITE WERE ASSUMED TO BE IN GOOD HYDROLOGIC CONDITION FOR PURPOSES OF COMPUTING PRE-DEVELOPMENT RUNOFF.

PER SECTION 13-109F-2(d)(i), A DRAINAGE SHED BOUNDARY ANALYSIS OF THE SITE OUTFALL HAS BEEN PROVIDED TO A POINT THAT IS 150' DOWNSTREAM OF A POINT WHERE THE RECEIVING PIPE IS JOINED BY ANOTHER THAT HAS A DRAINAGE AREA THAT IS AT LEAST 90 PERCENT OF THE SIZE OF THE FIRST DRAINAGE AREA AT THE POINT OF CONFLUENCE (SEE OUTFALL MAP ON THIS SHEET). THIS WILL CONSTITUTE THE LIMITS OF ANALYSIS FOR THE PROJECT. OUTFALL COMPUTATIONS FOR THE EXISTING UNDERGROUND STORM SEWER SYSTEM WILL BE PROVIDED WITH THE FINAL SITE PLAN SUBMISSION.

BASED ON THE ABOVE MENTIONED JUSTIFICATIONS, THE STORMWATER MANAGEMENT CRITERIA FOR THE PROPOSED DEVELOPMENT COMPLIES WITH THE CHANNEL PROTECTION (NOT APPLICABLE TO THIS APPLICATION) AND FLOOD PROTECTION REQUIREMENTS PER CITY CODE SECTION 13-109F.



OUTFALL MAP
SCALE: 1" = 100'

GRAPHIC SCALE
100 0 50 100 200 400
(IN FEET)
1 inch = 200 ft.

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EXISTING UTILITIES SHOWN ON THIS PLAN TAKEN FROM AVAILABLE RECORDS AND/OR FROM FIELD OBSERVATIONS. FOR EXACT LOCATIONS OF EXISTING UNDERGROUND UTILITIES, NOTIFY "MISS UTILITY" AT 1-800-552-7001, 72 HOURS BEFORE THE START OF ANY EXCAVATION OR CONSTRUCTION.

LOCATION AND DEPTH OF ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION. INTERFERENCE OR DISRUPTION OF SAME WILL NOT BE THE RESPONSIBILITY OF THIS OFFICE.

ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATION OF THE CITY OF ALEXANDRIA, VIRGINIA.

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APPROVED
SPECIAL USE PERMIT NO. 2014-0019

DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO.
DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED
INSTRUMENT NO. DEED BOOK NO. DATE

R.C. FIELDS & ASSOCIATES, INC.
ENGINEERING • LAND SURVEYING • PLANNING
730 S. Washington Street
Alexandria, Virginia 22314
www.rcfassoc.com
(703) 549-6422

COMMONWEALTH OF VIRGINIA
ANDREA SPRUCH
Lic. No. 047863
AUGUST 18, 2015
PROFESSIONAL ENGINEER

PRELIMINARY DEVELOPMENT SPECIAL USE PERMIT
ON THE PROPERTY LOCATED AT
1800 MOUNT VERNON AVENUE
CITY OF ALEXANDRIA, VIRGINIA

DATE	REVISION

DESIGN: ACS
DRAWN: VMG
SCALE: 1" = 100'
DATE: JUNE 25, 2015
SHEET 8 OF 11
FILE: 13-88

OUTFALL ANALYSIS

J:\2013\1388\DWG\DELA\Preliminary Plan\08 OUTFALL ANALYSIS.dwg
Tue, Aug 18 2015 - 8:34:18am

SANITARY SEWER FLOW COMPUTATIONS

BLD #	USE	DESIGN FLOW	UNIT	SIZE	GAL/DAY	GAL/HR	CFS	PEAK CFS (x4)	FLOWS TO
SITE	Multi-family	300	unit	49	14,700	613	0.0227	0.0910	S1
SITE	Retail	200	1000 SF	2,467	493	21	0.0008	0.0031	S1
1	Multi-family	300	unit	5	1,500	63	0.0023	0.0093	S1
2	Multi-family	300	unit	2	600	25	0.0009	0.0037	S1
3	Office/Retail	200	1000 SF	7,010	1,402	58	0.0022	0.0087	B
4	Single Family	350	unit	1	350	15	0.0005	0.0022	B
5	Single Family	351	unit	1	351	15	0.0005	0.0022	B
6	Office/Retail	200	1000 SF	13,582	2,716	113	0.0042	0.0168	B
7	Single Family	350	unit	1	350	15	0.0005	0.0022	B
8	Office/Retail	200	1000 SF	9,870	1,974	82	0.0031	0.0122	C
9-19	Single Family/Townhouse	350	unit	11	3,850	160	0.0060	0.0238	C
20-29	Multi-family	300	unit	68	20,400	850	0.0316	0.1262	C
30-55	Townhouse	350	unit	26	9,100	379	0.0141	0.0563	C
56-75	Townhouse	350	unit	20	7,000	292	0.0108	0.0433	C
76-79	Single Family	350	unit	4	1,400	58	0.0022	0.0087	C
80-85	Single Family	350	unit	6	2,100	88	0.0032	0.0130	C
86-89	Single Family	350	unit	4	1,400	58	0.0022	0.0087	C
90-95	Single Family	350	unit	6	2,100	88	0.0032	0.0130	C
96	Office/Retail	200	1000 SF	33,429	6,686	279	0.0103	0.0414	C
98	Office/Retail	200	1000 SF	15,380	3,076	128	0.0048	0.0190	D
99	Multi-family	300	unit	38	11,400	475	0.0176	0.0705	D
97	Office/Retail	200	1000 SF	9,190	1,838	77	0.0028	0.0114	E
106-114	Single Family/Townhouse	350	unit	9	3,150	131	0.0049	0.0195	F
100-105	Single Family	350	unit	6	2,100	88	0.0032	0.0130	G
115-120	Single Family	350	unit	6	2,100	88	0.0032	0.0130	G
121-125	Single Family	350	unit	7	2,450	102	0.0038	0.0152	K
204-208	Single Family/Townhouse	350	unit	5	1,750	73	0.0027	0.0108	Q
126-128	Single Family	350	unit	3	1,050	44	0.0016	0.0065	T
129-135	Single Family	350	unit	7	2,450	102	0.0038	0.0152	T
136	Multi-family	300	unit	12	3,600	150	0.0056	0.0223	T
137-139	Multi-family	300	unit	44	13,200	550	0.0204	0.0817	T
140-150	Single Family/Townhouse	350	unit	11	3,850	160	0.0060	0.0238	T
151-180	Townhouse	350	unit	30	10,500	438	0.0162	0.0650	T
181	Multi-family	300	unit	9	2,700	113	0.0042	0.0167	T
182	Multi-family	300	unit	12	3,600	150	0.0056	0.0223	T
183	Multi-family	300	unit	25	7,500	313	0.0116	0.0464	T
184	Multi-family	300	unit	21	6,300	263	0.0097	0.0390	T
185-200	Townhouse	350	unit	16	5,600	233	0.0087	0.0347	T
201	Multi-family	300	unit	100	30,000	1,250	0.0464	0.1857	T
202	Office/Retail	200	1000 SF	700	140	6	0.0002	0.0009	T
203	Multi-family	300	unit	21	6,300	263	0.0097	0.0390	T
	TOTAL				**203,127**	**8464**	**0.3143**	**1.257**	

SANITARY SEWER OUTFALL COMPUTATIONS

STRUCTURE FROM	STRUCTURE TO	FACILITY ID FROM	FACILITY ID TO	INCREMENTAL "Q" (CFS)	ACCUMULATED "Q" (CFS)	PIPE DIAMETER (IN)	SLOPE (%)	MATERIAL	"n"	MAXIMUM "Q" (CFS)	MAXIMUM VELOCITY (FPS)	LENGTH OF RUN (FT)	UPPER INVERT	LOWER INVERT	FALL (FT)	NORMAL VELOCITY (FPS)	NORMAL DEPTH (FT)	FLOW AREA (SF)	WETTED PERIMETER (FT)	HYDRAULIC RADIUS (FT)
S1	B		007282SSMH	0.1070	**0.107**	8	1.00%	RCP	0.015	1.09	3.01	78.45	35.64	34.86	0.78	1.93	0.14	0.0500	0.6400	0.0781
B	C	007282SSMH	007348SSMH	0.0320	**0.139**	8	2.15%	RCP	0.015	1.60	4.42	325.44	34.86	27.85	7.01	2.79	0.14	0.0500	0.6300	0.0794
C	D	007348SSMH	007270SSMH	0.3466	**0.486**	12	0.14%	RCP	0.015	1.21	1.48	56.40	26.45	26.37	0.08	1.40	0.44	0.3400	1.4600	0.2329
D	E	007270SSMH	007195SSMH	0.0896	**0.575**	12	0.08%	VCP	0.013	1.08	1.32	130.35	26.27	26.16	0.11	1.28	0.50	0.3900	1.5700	0.2484
E	F	007195SSMH	007194SSMH	0.0114	**0.587**	12	0.22%	RCP	0.015	1.52	1.85	90.33	26.10	25.90	0.20	1.67	0.40	0.3000	1.3800	0.2174
F	G	007194SSMH	007266SSMH	0.0195	**0.606**	10	0.15%	CIPP- RCP	0.011	1.05	1.86	342.03	25.89	25.37	0.52	1.47	0.53	0.3600	1.5300	0.2353
G	H	007266SSMH	006779SSMH	0.0260	**0.632**	10	0.17%	CIPP- RCP	0.011	1.11	1.95	292.08	25.36	24.87	0.49	1.56	0.52	0.3500	1.5100	0.2318
H	I	006779SSMH	006778SSMH	0.0000	**0.632**	10	0.14%	RCP	0.015	0.73	1.29	21.85	24.84	24.81	0.03	1.44	0.55	0.3800	1.5800	0.2405
I	J	006778SSMH	006777SSMH	0.0000	**0.632**	10	0.13%	RCP	0.015	0.71	1.25	23.49	24.78	24.75	0.03	1.40	0.56	0.3900	1.6100	0.2422
J	K	006777SSMH	007232SSMH	0.0000	**0.632**	10	0.11%	CIPP- RCP	0.011	0.89	1.57	18.33	24.75	24.73	0.02	1.30	0.60	0.4200	1.6900	0.2485
K	L	007232SSMH	006776SSMH	0.0152	**0.647**	10	0.10%	RCP	0.015	0.64	1.12	96.43	24.65	24.55	0.10	1.25	0.64	0.4500	1.7800	0.2528
L	M	006776SSMH	006775SSMH	0.0000	**0.647**	10	0.14%	RCP	0.015	0.75	1.32	41.66	24.51	24.45	0.06	1.45	0.56	0.3900	1.5900	0.2453
M	N	006775SSMH	006774SSMH	0.0000	**0.647**	10	0.01%	RCP	0.015	0.21	0.37	44.30	24.44	24.43	0.00	0.39	0.78	0.5300	2.2000	0.2409
N	O	006774SSMH	006773SSMH	0.0000	**0.647**	10	0.07%	RCP	0.015	0.53	0.93	55.78	24.39	24.35	0.04	1.02	0.78	0.5300	2.2000	0.2409
O	P	006773SSMH	006772SSMH	0.0000	**0.647**	10	0.01%	RCP	0.015	0.22	0.38	41.28	24.31	24.31	0.00	0.39	0.78	0.5300	2.2000	0.2409
P	Q	006772SSMH	006770SSMH	0.0000	**0.647**	10	0.38%	RCP	0.015	1.23	2.16	70.60	24.30	24.03	0.27	2.15	0.41	0.2700	1.3000	0.2077
Q	R	006770SSMH	006769SSMH	0.0108	**0.658**	10	0.36%	RCP	0.015	1.19	2.10	30.27	24.13	24.02	0.11	2.10	0.42	0.2700	1.3100	0.2061
R	S	006769SSMH	006768SSMH	0.0000	**0.658**	10	0.24%	RCP	0.015	0.98	1.72	53.57	24.08	23.95	0.13	1.80	0.48	0.3200	1.4300	0.2238
S	T	006768SSMH	006766SSMH	0.0000	**0.658**	10	0.01%	RCP	0.015	-	-	26.97	23.90	23.90	0.00	0.39	0.78	0.5300	2.2000	0.2409
T	U	006766SSMH	006765SSMH	0.5990	**1.257**	12	0.26%	RCP	0.015	1.64	2.00	11.60	23.51	23.48	0.03	2.18	0.62	0.5100	1.8200	0.2802
U	V	006765SSMH	006767SSMH	0.0000	**1.257**	12	0.40%	CIPP- RCP	0.011	2.79	3.41	67.04	23.48	23.21	0.27	2.58	0.54	0.4300	1.6500	0.2606
V	W	006767SSMH	006739SSMH	0.0000	**1.257**	12	0.33%	CIPP- RCP	0.011	2.53	3.09	72.64	23.25	23.01	0.24	2.39	0.58	0.4700	1.7200	0.2733
W	X	006739SSMH	006738SSMH	--	**1.326**	12	0.13%	VCP	0.013	1.33	1.63	31.15	22.98	22.94	0.04	1.87	0.85	0.7100	2.3400	0.3034
X	Y	006738SSMH	006737SSMH	--	**1.480**	12	1.04%	RCP	0.015	3.29	4.02	6.73	22.89	22.82	0.07	3.96	0.48	0.3700	1.5300	0.2418
Y	Z	006737SSMH	007217SSMH	--	**1.507**	12	0.03%	RCP	0.015	0.58	0.71	62.08	22.72	22.70	0.02	0.75	0.94	0.7600	2.6400	0.2879
Z	AA	007217SSMH	007216SSMH	--	**1.534**	12	0.14%	RCP	0.015	1.22	1.49	84.14	22.70	22.58	0.12	1.63	0.94	0.7600	2.6400	0.2879
AA	BB	007216SSMH	007219SSMH	--	**1.614**	12	0.23%	RCP	0.015	1.53	1.88	212.08	22.55	22.07	0.48	2.09	0.94	0.7600	2.6400	0.2879
BB	CC	007219SSMH	007240SSMH	--	**1.614**	12	0.15%	RCP	0.015	1.27	1.55	148.99	22.02	21.79	0.23	1.69	0.94	0.7600	2.6400	0.2879
CC	DD	007240SSMH	007242SSMH	--	**1.641**	15	0.43%	RCP	0.015	3.84	3.01	25.48	21.75	21.64	0.11	2.91	0.58	0.5600	1.8800	0.2979
DD	EE	007242SSMH	007243SSMH	--	**1.641**	15	0.16%	RCP	0.015	2.31	1.81	6.41	21.62	21.61	0.01	2.00	0.79	0.8200	2.3000	0.3565
EE	FF	007243SSMH	007244SSMH	--	**1.645**	15	0.10%	RCP	0.015	1.89	1.48	57.16	21.60	21.54	0.06	0.51	1.17	1.2000	3.3000	0.3636
FF	GG	007244SSMH	007245SSMH	--	**1.647**	15	0.51%	CIPP- RCP	0.011	5.68	4.45	51.17	21.50	21.24	0.26	3.11	0.56	0.5300	1.8300	0.2896
GG	HH	007245SSMH	007259SSMH	--	**1.674**	15	0.25%	CIPP- RCP	0.011	4.02	3.15	121.85	21.19	20.88	0.31	2.39	0.70	0.7000	2.1000	0.3333
HH	II	007259SSMH	007260SSMH	--	**1.685**	15	0.24%	RCP	0.015	2.89	2.26	28.65	20.91	20.84	0.07	2.35	0.71	0.7200	2.1300	0.3380
II	JJ	007260SSMH	007262SSMH	--	**1.696**	15	0.20%	RCP	0.015	2.63	2.06	157.84	20.83	20.51	0.32	2.20	0.75	0.7700	2.2200	0.3468
JJ	KK	007262SSMH	007287SSMH	--	**1.790**	15	0.22%	RCP	0.015	2.72	2.13	174.90	20.48	20.10	0.38	2.31	0.76	0.7800	2.2300	0.3498
KK	LL	007287SSMH	007288SSMH	--	**1.821**	15	0.20%	RCP	0.015	2.60	2.04	145.90	20.09	19.80	0.29	2.23	0.79	0.8200	2.3000	0.3565
LL	MM	007288SSMH	007289SSMH	--	**1.848**	15	0.18%	RCP	0.015	2.45	1.92	159.62	19.65	19.37	0.28	2.14	0.83	0.8600	2.3700	0.3629
MM	NN	007289SSMH	006927SSMH	--	**1.875**	15	0.30%	CIPP- RCP	0.011	4.35	3.41	177.70	19.42	18.89	0.53	2.63	0.71	0.7100	2.1200	0.3349
NN	OO	006927SSMH	006931SSMH	--	**2.507**	18	0.28%	RCP	0.015	4.99	2.71	94.36	18.86	18.60	0.26	2.76	0.77	0.9100	2.3900	0.3808
OO	PP	006931SSMH	006969SSMH	--	**2.552**	18	0.39%	RCP	0.015	5.90	3.21	272.41	18.55	17.50	1.05	3.14	0.70	0.8100	2.2600	0.3584

PEAK FLOW NOTE: PEAK FLOWS FROM STRUCTURES W TO PP PROVIDED BY THE CITY OF ALEXANDRIA'S T&ES/STORMWATER AND SANITARY INFRASTRUCTURE DEPARTMENT. THE ABOVE SANITARY SEWER OUTFALL COMPUTATIONS DO NOT INCLUDE THE PEAK FLOW FROM THE EXISTING ONSITE COMMERCIAL BUILDING. SEE SANITARY SEWER OUTFALL NARRATIVE ON THIS SHEET FOR EXISTING BUILDING FLOW CALCULATIONS.

SURVEY NOTE: STRUCTURE INFORMATION FOR STRUCTURES A TO X AND BB TO HH OBTAINED FROM FIELD SURVEY. ALL OTHER STRUCTURE INFORMATION OBTAIN FROM ALEXANDRIA GIS.

SANITARY SEWER HYDRAULIC GRADE LINE COMPUTATIONS

INLET ID	OUTLET WSE	D_O (in)	Q_b	L_O	S_{fb}	H_f	JUNCTION LOSS V_O	H_O	Q_i	V_i	Q_i*V_i	H_i	ANGLE	H_A	H_t	1.3 H_t	0.5 H_t	FINAL H (FT)	INLET WSE	PIPE CROWN	SURCHARGE OVER PIPE CROWN	RIM ELEV	FREE BOARD (FT)
OO	18.20	18	2.552	272.41	0.0040	1.08	3.14	0.038	2.552	3.14	8.01	0.054	22	0.046	0.138	--	0.07	1.15	19.35	20.05	--	29.13	9.78
NN	19.35	18	2.507	94.36	0.0028	0.26	2.76	0.030	2.507	2.76	6.92	0.041	36	0.051	0.122	--	0.06	0.33	19.68	20.36	--	29.30	9.62
MM	19.68	15	1.875	177.70	0.0016	0.29	2.63	0.027	1.875	2.63	4.93	0.038	--	0.000	0.064	--	0.03	0.32	20.00	20.67	--	30.07	10.07
LL	20.00	15	1.848	159.62	0.0018	0.29	2.14	0.018	1.848	2.14	3.95	0.025	--	0.000	0.043	--	0.02	0.31	20.31	20.90	--	29.12	8.81
KK	20.31	15	1.821	145.90	0.0020	0.29	2.23	0.019	1.821	2.23	4.06	0.027	--	0.000	0.046	--	0.02	0.31	20.63	21.34	--	29.73	9.10
JJ	20.63	15	1.790	174.90	0.0022	0.38	2.31	0.021	1.790	2.31	4.13	0.029	--	0.000	0.050	--	0.02	0.41	21.03	21.73	--	29.25	8.22
II	21.03	15	1.696	157.84	0.0020	0.32	2.20	0.019	1.696	2.20	3.73	0.026	--	0.000	0.045	--	0.02	0.34	21.37	22.08	--	30.80	9.43
HH	21.37	15	1.685	28.65	0.0024	0.07	2.35	0.021	1.685	2.35	3.96	0.030	--	0.000	0.051	--	0.03	0.09	21.47	22.16	--	30.73	9.26
GG	21.47	15	1.674	121.85	0.0014	0.17	2.39	0.022	1.674	2.39	4.00	0.031	64	0.054	0.107	--	0.05	0.22	21.69	22.44	--	31.59	9.90
FF	21.69	15	1.647	51.17	0.0028	0.14	3.11	0.038	1.647	3.11	5.12	0.053	26	0.053	0.143	--	0.07	0.21	21.90	22.75	--	31.14	9.24
EE	21.90	15	1.645	57.16	0.0007	0.04	0.51	0.001	1.645	0.51	0.84	0.001	--	0.000	0.002	--	0.00	0.04	21.94	22.85	--	30.67	8.73
DD	21.94	15	1.641	6.41	0.0016	0.01	2.00	0.016	1.641	2.00	3.28	0.022	--	0.000	0.037	--	0.02	0.03	21.97	22.87	--	30.64	8.67
CC	21.97	15	1.641	25.48	0.0044	0.11	2.91	0.033	1.641	2.91	4.77	0.046	--	0.000	0.079	--	0.04	0.15	22.12	23.00	--	30.49	8.37
BB	22.12	12	1.614	148.99	0.0024	0.36	1.69	0.011	1.614	1.69	2.73	0.016	--	0.000	0.027	--	0.01	0.37	22.50	23.02	--	32.32	9.82
AA	22.50	12	1.614	212.08	0.0024	0.51	2.09	0.017	1.614	2.09	3.37	0.024	51	0.034	0.075	--	0.04	0.55	23.05	23.55	--	32.86	9.81
Z	23.05	12	1.534	84.14	0.0022	0.18	1.63	0.010	1.534	1.63	2.50	0.014	38	0.018	0.042	--	0.02	0.20	23.25	23.70	--	32.34	9.09
Y	23.25	12	1.507	62.08	0.0021	0.13	0.75	0.002	1.507	0.75	1.13	0.003	22	0.003	0.008	--	0.00	0.13	23.39	23.72	--	30.22	6.83
X	23.39	12	1.480	6.73	0.0108	0.07	3.96	0.061	1.480	3.96	5.86	0.085	--	0.000	0.146	--	0.07	0.15	23.53	23.89	--	30.30	6.77
W	23.53	12	1.326	31.15	0.0013	0.04	1.87	0.014	1.326	1.87	2.48	0.019	21	0.016	0.049	--	0.02	0.07	23.60	23.98	--	30.25	6.65
V	23.60	12	1.257	72.64	0.0022	0.16	2.39	0.022	1.257	2.39	3.00	0.031	--	0.000	0.053	--	0.03	0.19	23.79	24.25	--	31.15	7.36
U	23.79	12	1.257	67.04	0.0028	0.19	2.58	0.026	1.257	2.58	3.24	0.036	--	0.000	0.062	--	0.03	0.22	24.01	24.48	--	31.29	7.28
T	24.01	12	1.257	11.60	0.0034	0.04	2.18	0.018	1.257	2.18	2.74	0.026	67	0.045	0.089	--	0.04	0.08	24.09	24.51	--	31.02	6.93
S	24.09	10	0.658	26.97	0.0010	0.03	0.39	0.001	0.658	0.39	0.26	0.001	25	0.001	0.002	--	0.00	0.03	24.12	24.73	--	29.88	5.76
R	24.12	10	0.658	53.57	0.0032	0.17	1.80	0.013	0.658	1.80	1.18	0.018	--	0.000	0.030	--	0.02	0.19	24.30	24.91	--	29.33	5.03
Q	24.30	10	0.658	30.27	0.0050	0.15	2.10	0.017	0.658	2.10	1.38	0.024	--	0.000	0.041	--	0.02	0.17	24.48	24.96	--	29.64	5.16
P	24.48	10	0.647	70.60	0.0048	0.34	2.15	0.018	0.647	2.15	1.39	0.025	--	0.000	0.043	--	0.02	0.36	24.83	25.13	--	29.86	5.03
O	24.83	10	0.647	41.28	0.0010	0.04	0.39	0.001	0.647	0.39	0.25	0.001	--	0.000	0.001	--	0.00	0.04	24.88	25.14	--	29.54	4.66
N	24.88	10	0.647	55.78	0.0010	0.06	1.02	0.004	0.647	1.02	0.66	0.006	--	0.000	0.010	--	0.00	0.06	24.94	25.22	--	29.39	4.45
M	24.94	10	0.647	44.30	0.0010	0.04	0.39	0.001	0.647	0.39	0.25	0.001	--	0.000	0.001	--	0.00	0.05	24.98	25.27	--	29.44	4.46
L	24.98	10	0.647	41.66	0.0018	0.08	1.45	0.008	0.647	1.45	0.94	0.011	--	0.000	0.020	--	0.01	0.09	25.07	25.34	--	29.49	4.42
K	25.07	10	0.647	96.43	0.0013	0.13	1.25	0.006	0.647	1.25	0.81	0.008	--	0.000	0.015	--	0.01	0.13	25.20	25.48	--	29.90	4.70
J	25.20	10	0.632	18.33	0.0008	0.01	1.30	0.007	0.632	1.30	0.82	0.009	--	0.000	0.016	--	0.01	0.02	25.23	25.58	--	29.90	4.67
I	25.23	10	0.632	23.49	0.0018	0.04	1.40	0.008	0.632	1.40	0.88	0.011	--	0.000	0.018	--	0.01	0.05	25.28	25.61	--	30.12	4.84
H	25.28	10	0.632	21.85	0.0019	0.04	1.44	0.008	0.632	1.44	0.91	0.011	--	0.000	0.019	--	0.01	0.05	25.33	25.67	--	30.16	4.83
G	25.33	10	0.632	292.08	0.0013	0.37	1.56	0.009	0.632	1.56	0.99	0.013	--	0.000	0.023	--	0.01	0.38	25.70	26.19	--	32.48	6.78
F	25.70	10	0.606	342.03	0.0011	0.37	1.47	0.008	0.606	1.47	0.89	0.012	--	0.000	0.020	--	0.01	0.38	26.08	26.72	--	30.39	4.31
E	26.08	12	0.587	90.33	0.0030	0.27	1.67	0.011	0.587	1.67	0.98	0.015	90	0.030	0.056	--	0.03	0.30	26.38	27.10	--	36.41	10.03
D	26.38	12	0.575	130.35	0.0011	0.14	1.28	0.006	0.575	1.28	0.74	0.009	40	0.011	0.026	--	0.01	0.15	26.53	27.27	--	35.22	8.69
C	26.53	12	0.486	56.40	0.0015	0.08	1.40	0.008	0.486	1.40	0.68	0.011	60	0.017	0.035	--	0.02	0.10	26.63	27.45	--	35.40	8.77
B	27.99	8	0.139	325.44	0.0231	7.52	2.79	0.030	0.139	2.79	0.39	0.042	--	0.000	0.073	--	0.04	7.55	35.54	35.53	0.01	42.26	6.72
S1	35.54	8	0.107	78.45	0.0140	1.10	1.93	0.014	0.107	1.93	0.21	0.020	--	0.000	0.035	--	0.02	1.11	36.66	36.31	0.35	43.50	6.84

NOTE: PER DIRECTION FROM CITY STAFF, HYDRAULIC GRADE LINE ANALYSIS UTILIZES 0.01% PIPE SLOPES FOR SEGMENTS M TO N, O TO P, AND S TO T. SEE PROFILE FOR ACTUAL SLOPES.

SANITARY SEWER OUTFALL CALCULATIONS:

THE AVERAGE DAY AND PEAK HOUR WASTEWATER DISCHARGE FLOW CALCULATIONS WERE COMPUTED USING THE METHOD PROVIDED BY THE CITY OF ALEXANDRIA IN MEMORANDUM TO INDUSTRY NO. 06–14. THE PROPOSED USE FOR THIS PROJECT WILL BE 49 MULT–FAMILY UNITS AND 2,467 SF OF RETAIL SPACE. THE AVERAGE DAILY FLOW IS DESCRIBED BELOW:

MULTI–FAMILY $\frac{300\ GPD}{UNIT}$ X 49 UNITS = 14,700 GPD OR 0.0227 CFS

RETAIL: $\frac{200\ GPD}{1{,}000\ SF}$ X 2,467 SF = 493 GPD OR 0.0008 CFS

TOTAL AVERAGE DAILY FLOW = 15,193 GPD OR 0.0235 CFS

TO ACCOUNT FOR THE DAILY PEAK PERIOD, THE ABOVE FLOW IS MULTIPLIED BY A FACTOR OF 4:

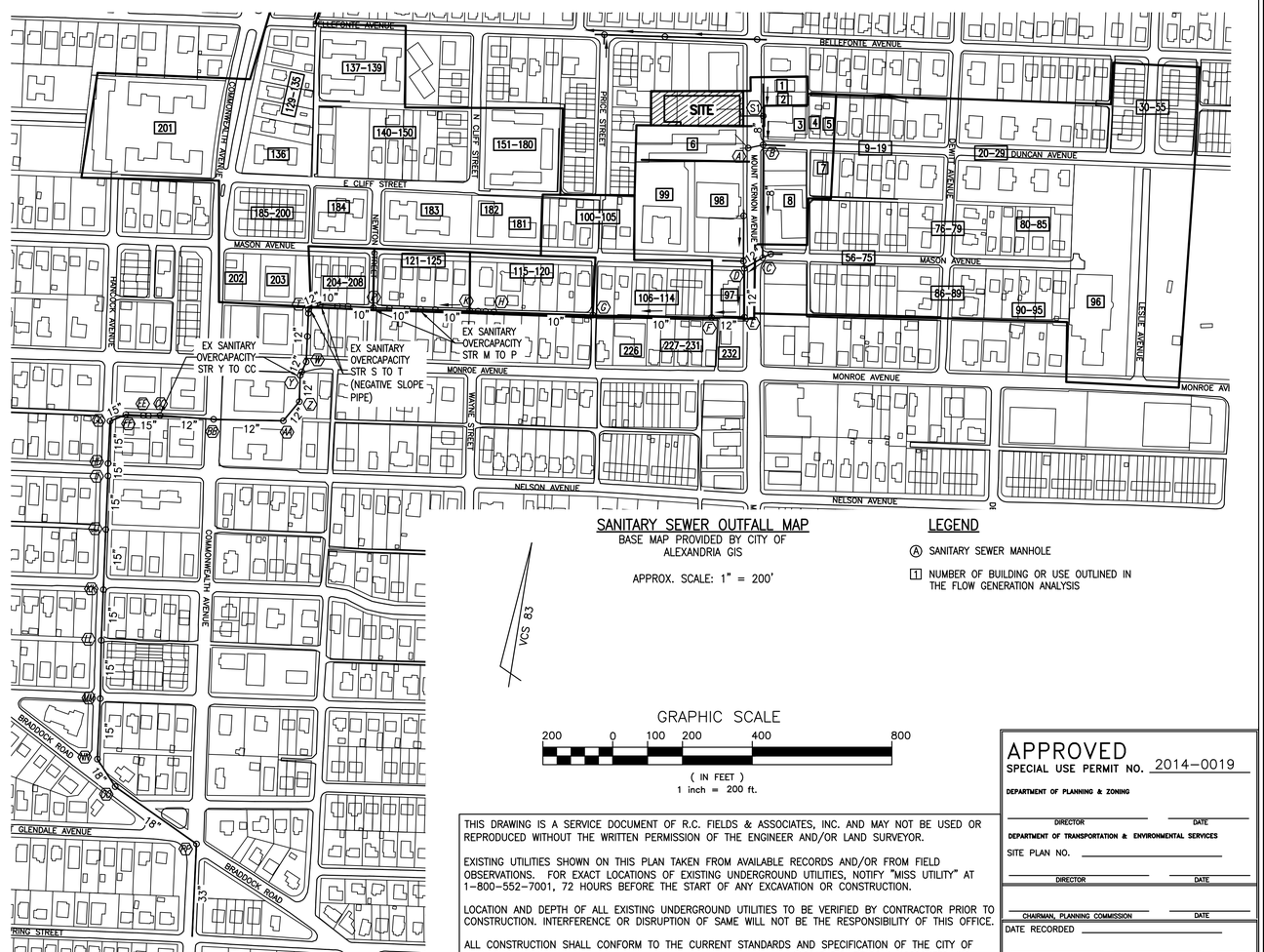
15,193 GPD X 4 = 60,774 GPD
0.0232 CFS X 4 = 0.0940 CFS

TOTAL PEAK FLOW = 60,774 GPD OR 0.0940 CFS

SANITARY SEWER OUTFALL NARRATIVE:

THE TOTAL SANITARY FLOWS FOR THIS SITE WERE CALCULATED PER THE MEMORANDUM TO INDUSTRY NUMBER 06–14. THE EXISTING USE (COMMERCIAL) PRODUCES AN AVERAGE DAILY FLOW OF APPROXIMATELY 5,232 GALLONS PER DAY (200 GAL. X 6,540/1,000 SF X 4.0 PEAK FACTOR). THE PROPOSED DEVELOPMENT (MIXED–USE) PRODUCES 60,774 GALLONS PER DAY ([300 GPD X 49 UNITS X 4.0 PEAK FACTOR] + [200 GPD X 2,467/1,000 SF OF RETAIL SPACE X 4.0 PEAK FACTOR]). THE TOTAL FLOW FROM THE THE PROPOSED USE EXCEEDS 10,000 GPD. THEREFORE, A DETAILED SANITARY SEWER OUTFALL ANALYSIS IS PROVIDED ON THIS SHEET. THE SANITARY DISCHARGE WILL BE TREATED AT A PUBLICLY OWNED TREATMENT FACILITY PER CITY OF ALEXANDRIA CODE 4035.

THIS PROJECT SHALL CONNECT TO THE 8" SANITARY SEWER IN MOUNT VERNON AVENUE. THIS SEWER IS A CITY OF ALEXANDRIA MAINTAINED SANITARY SEWER. THE SANITARY SEWER FLOWS SOUTHWEST TOWARDS BRADDOCK ROAD FOR APPROXIMATELY 3000' WHERE IT JOINS A 33" SANITARY TRUNK SEWER LOCATED IN COMMONWEALTH AVENUE.



SANITARY SEWER OUTFALL MAP
BASE MAP PROVIDED BY CITY OF ALEXANDRIA GIS

APPROX. SCALE: 1" = 200'

LEGEND

Ⓐ SANITARY SEWER MANHOLE

1 NUMBER OF BUILDING OR USE OUTLINED IN THE FLOW GENERATION ANALYSIS

GRAPHIC SCALE
200 0 100 200 400 800
(IN FEET)
1 inch = 200 ft.

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L

SANITARY SEWER HYDRAULIC GRADE LINE COMPUTATIONS:

THE HYDRAULIC GRADE LINES WERE COMPUTED USING THE PROCEDURE PROVIDED BY VDOT:

OUTLET WATER SURFACE ELEVATION (WSE) = NORMAL DEPTH + LOWER INVERT

INLET WSE = FINAL H + OUTLET WSE

D_o = DIAMETER OF OUTFLOW PIPE (INCHES)

Q_o = DISCHARGE FOR THE OUTFLOW PIPE (CFS)

L_o = LENGTH OF THE OUTFLOW PIPE (FT)

FRICTION SLOPE (S_{fo}) = 0.453 * (MANNING'S n^2 * Q_o^2) / (FLOW AREA^2 * HYDRAULIC RADIUS $(R)^{4/3}$)

$H_f = S_{fo} * L_o$

V_o = VELOCITY OF THE FLOW FROM THE OUTLET PIPE (BASED UPON PIPE FLOWING PARTIALLY FULL OR FULL)

CONTRACTION LOSS (H_o) = $0.25 * V_o^2 / 64.4$

Q_i = DESIGN DISCHARGE FOR EACH PIPE (CFS)

V_i = VELOCITY OF FLOW FOR EACH PIPE FLOWING INTO THE JUNCTION (FPS)

$QV_i = Q_i * V_i$

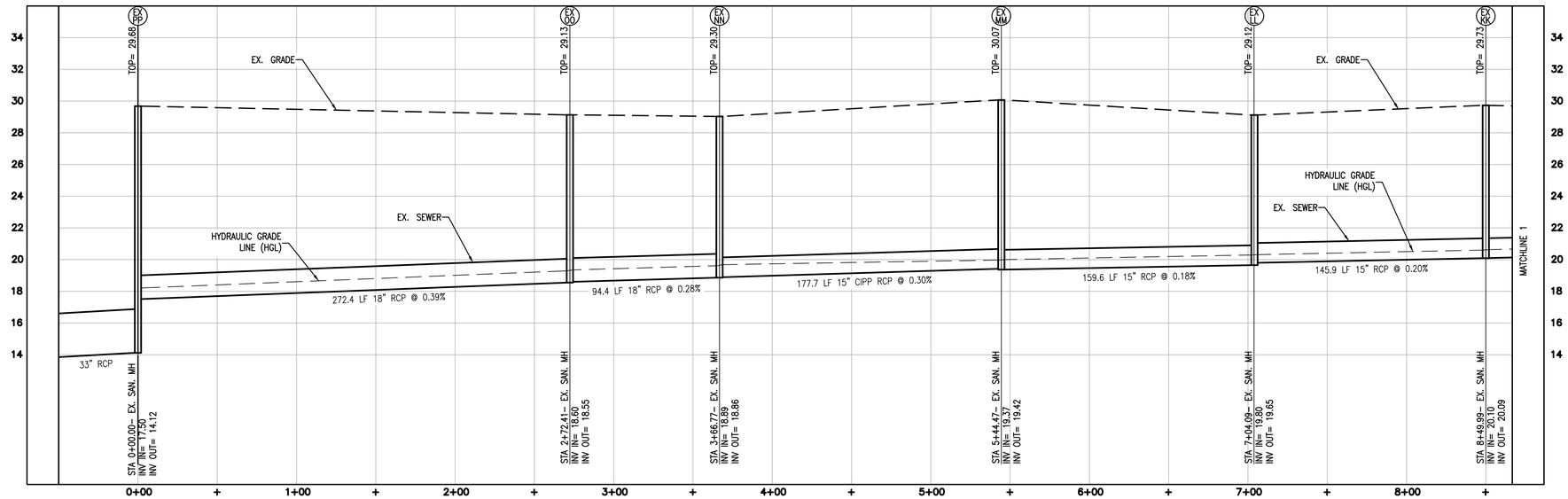
$H_i = 0.35 * V_i^2 / 64.4$

ANGLE = SKEW ANGLE OF EACH INFLOWING PIPE TO THE OUTFLOWING PIPE

BEND LOSS $H_a = K * V_i^2 / 64.4$

TOTAL JUNCTION LOSS (H_t) = $H_o + H_i + H_a$

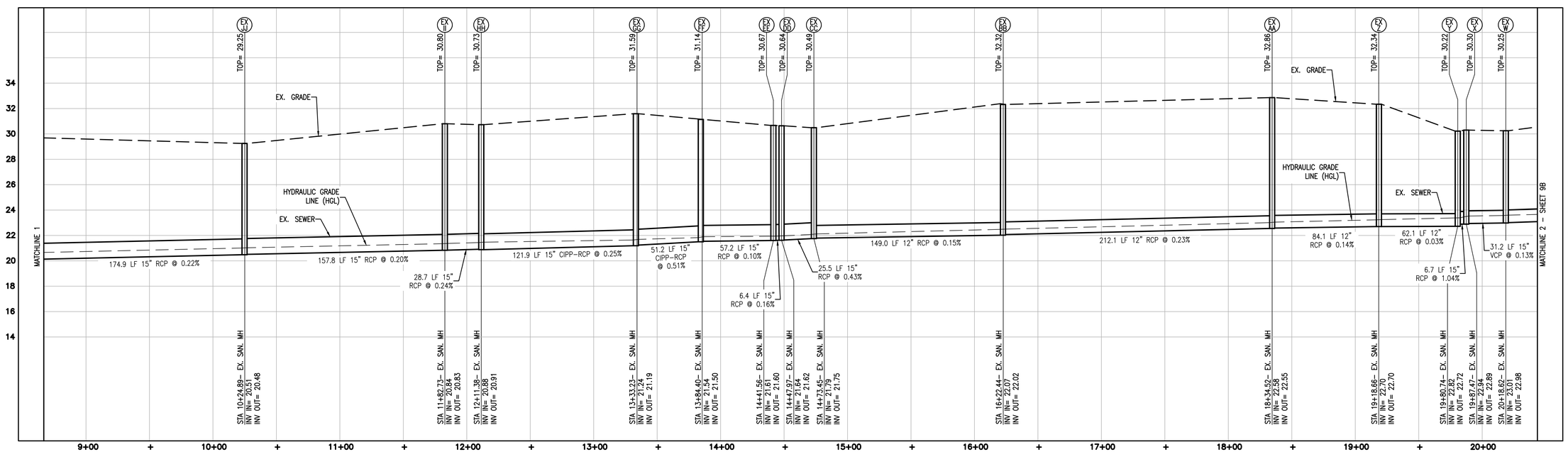
FINAL H = $H_f + H_t$ (FT)



SANITARY PROFILE FROM EX PP TO EX KK

HORIZ. PROFILE SCALE 40 0 20 40 (IN FEET) 1 inch = 40 ft.

VERT. PROFILE SCALE 4 0 2 4 (IN FEET) 1 inch = 4 ft.



SANITARY PROFILE FROM EX JJ TO EX W

HORIZ. PROFILE SCALE 40 0 20 40 (IN FEET) 1 inch = 40 ft.

VERT. PROFILE SCALE 4 0 2 4 (IN FEET) 1 inch = 4 ft.

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APPROVED
SPECIAL USE PERMIT NO. 2014–0019

DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO.
DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED
INSTRUMENT NO. DEED BOOK NO. DATE

R.C. FIELDS & ASSOCIATES, INC.
ENGINEERING • LAND SURVEYING • PLANNING
730 S. Washington Street
Alexandria, Virginia 22314
www.rcfassoc.com
(703) 549-6422

COMMONWEALTH OF VIRGINIA
ANDREA SPRUCH
Lic. No. 047083
AUGUST 18, 2015
PROFESSIONAL ENGINEER

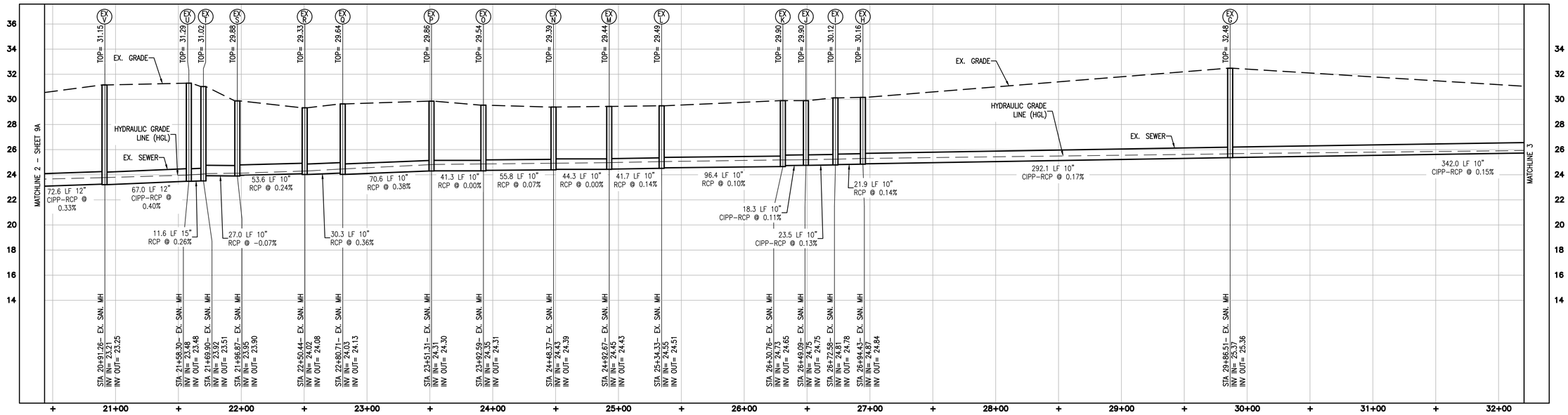
PRELIMINARY DEVELOPMENT SPECIAL USE PERMIT
ON THE PROPERTY LOCATED AT
1800 MOUNT VERNON AVENUE
CITY OF ALEXANDRIA, VIRGINIA

DATE	REVISION

DESIGN: ACS
DRAWN: VMG
SCALE: AS NOTED
DATE: JUNE 25, 2015
SHEET 9A OF 11
FILE: 13–88

SANITARY SEWER OUTFALL ANALYSIS

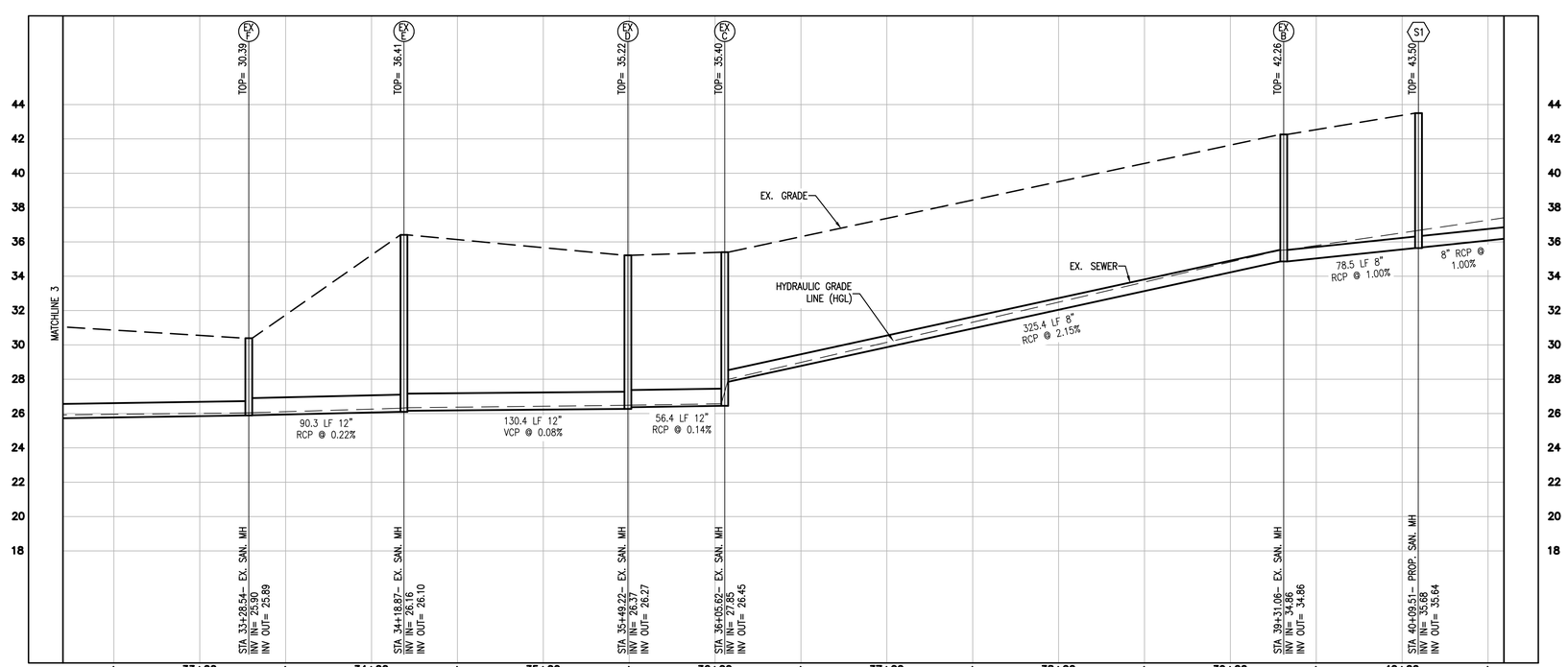
I:\2013\13088\DWG\DEV\Preliminary Plan\09 SANITARY OUTFALL.dwg
Tue, Aug 18 2015 – 8:34:31am



SANITARY PROFILE FROM EX V TO EX G

HORIZ. PROFILE SCALE
40 0 20 40
(IN FEET)
1 inch = 40 ft.

VERT. PROFILE SCALE
4 0 2 4
(IN FEET)
1 inch = 4 ft.



SANITARY PROFILE FROM EX F TO EX S1

HORIZ. PROFILE SCALE
40 0 20 40
(IN FEET)
1 inch = 40 ft.

VERT. PROFILE SCALE
4 0 2 4
(IN FEET)
1 inch = 4 ft.

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AUGUST 18, 2015
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ON THE PROPERTY LOCATED AT
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DESIGN: ACS
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SCALE: AS NOTED
DATE: JUNE 25, 2015
SHEET 9B OF 11
FILE: 13-88

SANITARY SEWER OUTFALL ANALYSIS

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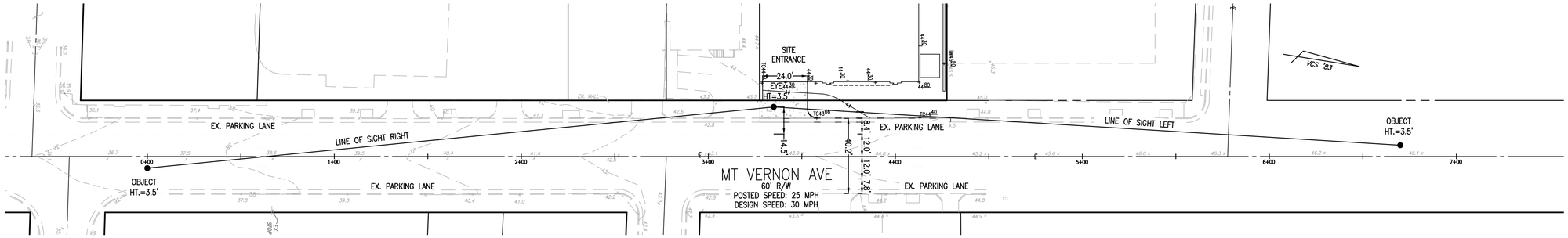
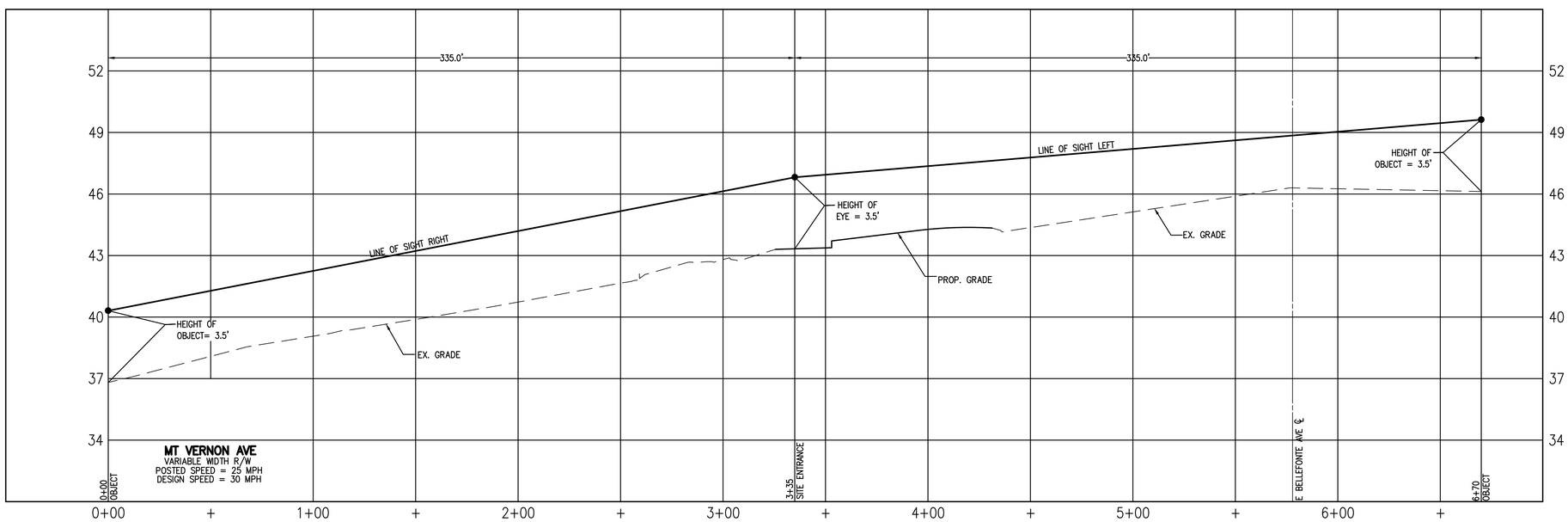


SIGHT DISTANCE PLAN
SCALE: 1" = 30'

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.



SIGHT DISTANCE PROFILE
SCALE: HORIZ.: 1" = 30'
VERT.: 1" = 3'

HORIZ. PROFILE SCALE
30 0 15 30
(IN FEET)
1 inch = 30 ft.

VERT. PROFILE SCALE
3 0 1.5 3
(IN FEET)
1 inch = 3 ft.

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SHEET 10 OF 11
FILE: 13-88

SIGHT DISTANCE PLAN AND PROFILE

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Tue, Aug 18 2015 - 8:34:44am

GENERAL NOTES

1. TAX MAP: #034.04–14–10 (#1800) #034.04–10–18 (#1800R)
2. ZONE: CL
3. OWNER: BREVIC DEVELOPMENT, LLC.
   1800 & 1800R MT. VERNON AVE.
   ALEXANDRIA, VA 22301
   INSTRUMENT #: 140000076
4. HORIZONTAL COORDINATES AND BEARINGS REFERENCED TO VCS '83 DATUM PER CITY OF ALEXANDRIA MONUMENT #GPS 551. N6,986,581.62 E11,893,630.43
   COMBINED SCALE FACTOR: 0.999952764

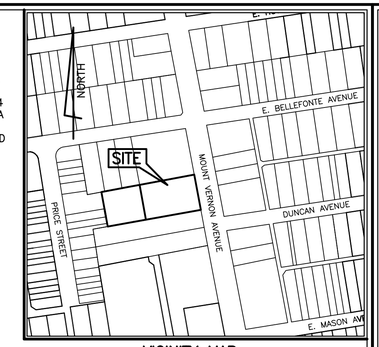
   CITY OF ALEXANDRIA MONUMENT #GPS 552. N6,984,170.11 E11,893,975.88
   COMBINED SCALE FACTOR: 0.999952350
5. TITLE REPORT FURNISHED BY EXPRESS RECORDING & TITLE, DATED 7/1/2013 AND IS RELIED UPON AS ACCURATE BY THE SURVEYOR.
6. PLAT SUBJECT TO RESTRICTIONS OF RECORD.
7. TOTAL SITE AREA = 26,793 S.F. OR 0.6151 AC. (COMPUTED)
8. THERE ARE NO FLOODPLAINS OR RESOURCE PROTECTION AREAS ON THIS PROPERTY.

COMMONWEALTH OF VIRGINIA
DRAFT
RONALD J. KELLER
Lic. No. 1457-B
AUGUST 18, 2015
LAND SURVEYOR

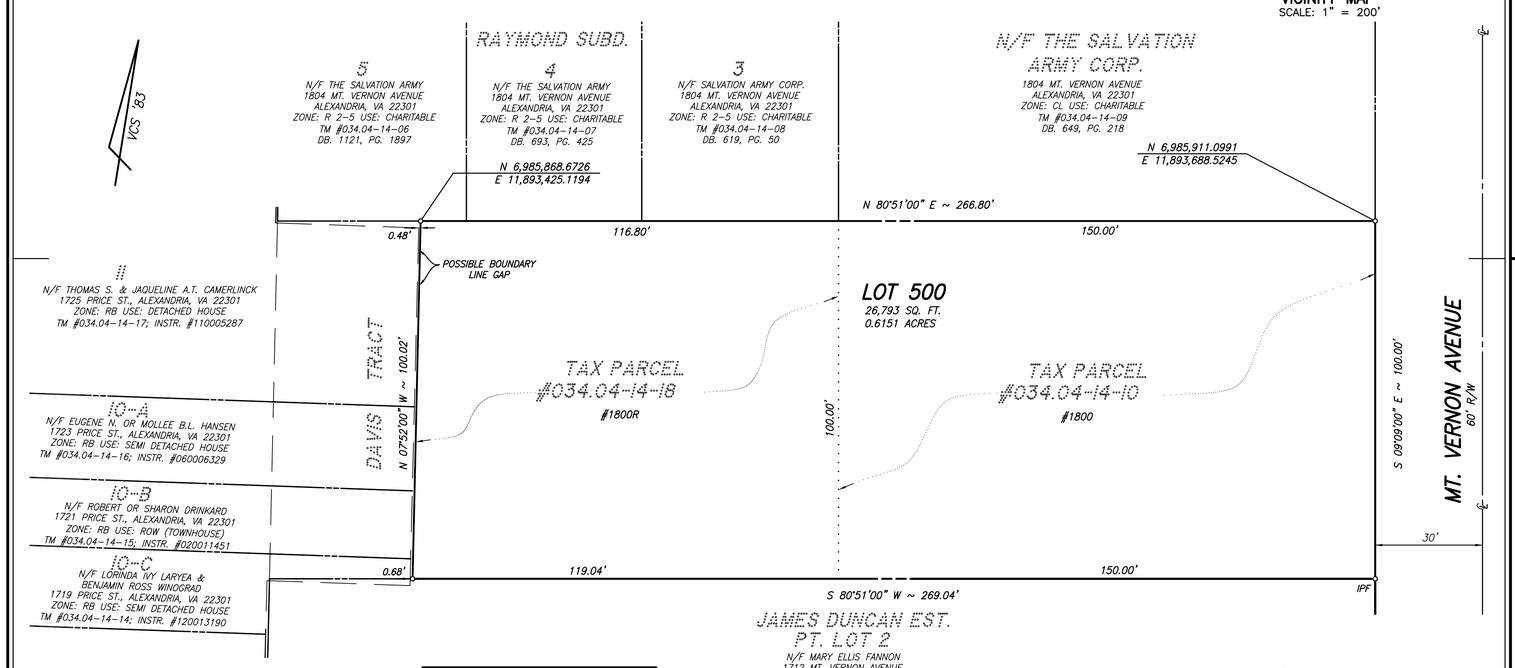
SURVEYOR'S CERTIFICATE

I, TIMOTHY GREENWOOD, HEREBY CERTIFY THAT I HAVE CAREFULLY SURVEYED THE PROPERTY DELINEATED BY THIS PLAT, AND THAT IT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF; THAT THIS IS A CONSOLIDATION OF ALL THE LAND CONVEYED TO BREVIC DEVELOPMENT, LLC. BY JOHN P. & MARY C. BRESNAHAN, TRS., DATED 3 JANUARY 2014 AND RECORDED AMONG THE LAND RECORDS OF THE CITY OF ALEXANDRIA IN INSTRUMENT #140000076 AND IS WITHIN THOSE BOUNDARIES; AND THAT ALL REQUIRED MONUMENTS HAVE BEEN INSTALLED WHERE INDICATED EXCEPT THOSE THAT WILL BE INSTALLED AT A LATER DATE BUT BEFORE THE COMPLETION OF THE PROJECT.

IRON PIPES MARKED THUS —o— WILL BE SET AS INDICATED.
GIVEN UNDER MY HAND THIS 25TH DAY OF JUNE, 2015.



VICINITY MAP
SCALE: 1" = 200'



APPROVED	
CITY PLANNING COMMISSION ALEXANDRIA, VA	
	CHAIRMAN
DATE	DIRECTOR OF PLANNING
PUBLIC IMPROVEMENT BOND(S) APPROVED	
DATE	DIRECTOR T.&E.S.

PLAT

SHOWING LOT 500, BEING A CONSOLIDATION OF
TAX PARCELS #034.04–14–10 & #034.04–14–18
ON THE PROPERTY OF

BREVIC DEVELOPMENT, LLC.

SAID PROPERTY BEING LOCATED AT
#1800 & 1800R MT. VERNON AVENUE
(INSTRUMENT#140000076)

CITY OF ALEXANDRIA, VIRGINIA

SCALE: 1" = 20' DATE: JUNE 25, 2015

RCF FIELDS & ASSOCIATES, INC.
ENGINEERING • LAND SURVEYING • PLANNING
730 S. Washington Street Alexandria, Virginia 22314 (703) 549–6422

COMP.	WDS
DRAWN	WDS
CHECKED	TG

FILE NO. 13–88
SHEET 1 OF 1

PRELIMINARY ONLY. NOT FOR RECORDATION !!

COMMON ABBREVIATIONS

A	A/C	AIR CONDITIONING
	AASHTO	AMERICAN ASSOCIATION OF STATE HWY & TRANSPORTATION. OFFICIALS
	AB	ANCHOR BOLT
	ABRSV	ABRASIVE
	ABV	ABOVE
	AC	ACRE
	ACD	ACCESS DOOR
	AD	AREA DRAIN
	ADA	AMERICAN WITH DISABILITIES ACT
	ADEN	ADDENDA, ADDENDUM
	ADD	ADDITIONAL
	ADH	ADHESIVE
	ADJ	ADJACENT
	ADJT	ADJUSTABLE
	A-E	ARCHITECT-ENGINEER
	AFF	ABOVE FINISH FLOOR
	AFG	ABOVE FINISH GRADE
	AGGR	AGGREGATE
	ALUM	ALUMINUM
	ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
	APPROX	APPROXIMATE
	APT	APARTMENT
	ASPH	ASPHALT
	ASTM	AMERICAN SOCIETY FOR TESTING & MATERIALS
	AVE	AVENUE
B	B&B	BALL AND BURLAP
	BC	BOTTOM OF CURB, BOTTOM OF COLUMN
	BE	BEAM
	BITUM	BITUMINOUS
	BL	BASELINE
	BLDG	BUILDING
	BLK	BLOCK
	BLVD	BOULEVARD
	BM	BENCHMARK
	BMP	BEST MANAGEMENT PRACTICES
	BOC	BACK OF CURB
	BP	BREAK POINT
	BRK	BRICK
	BRKT	BRACKET
	BRL	BUILDING RESTRICTION LINE
	BS	BOTTOM OF STEP
	BSMT	BASEMENT
	BTWN	BETWEEN
	BW	BOTTOM OF WALL
	BEV	BEVEL
C	CB	CATCH BASIN
	CC	CENTER TO CENTER
	CEM	CEMENT
	CI	CAST IRON
	CIP	CAST IRON PIPE
	CIPC	CAST-IN-PLACE CONCRETE
	CJ	CONTROL JOINT
	CL	CENTER LINE
	CLO	CLOSET
	CLR	CLEAR
	CMU	CONCRETE MASONRY UNIT
	COL	COLUMN
	CONC	CONCRETE
	CONN	CONNECTION
	CONST	CONSTRUCTION
	CONT	CONTINUOUS
	COORD	COORDINATE
D	DF	DRINKING FOUNTAIN
	DIA	DIAMETER
	DIM	DIMENSION
	DIST	DISTANCE
	DR	DRIVE
	DRN	DRAIN
	DWG	DRAWING
	DEMO	DEMOLITION
	DET	DETAIL
	DI	DROP INLET
	DN	DOWN
	DS	DOWNSPOUT
	DT	DRAIN TILE
	DWL	DOWEL
E	E	EAST
	EA	EACH
	ELEC	ELECTRICAL
	ELEC P	ELECTRICAL PANEL
	ELEV	ELEVATION
	ENCL	ENCLOSURE
	ENTR	ENTRANCE
	EP	EDGE OF PAVEMENT
	EQ	EQUAL
	EQL SP	EQUALLY SPACED
	EQUIP	EQUIPMENT
	ESMT	EASEMENT
	ETD	EXISTING TO BE DEMOLISHED
	ETR	EXISTING TO REMAIN
	ETRL	EXISTING TO BE RELOCATED
	ETRP	EXISTING TO BE REPLACED
	EW	EACH WAY
	EX	EXISTING
	EXP	EXPANSION
	EXT	EXTERIOR
F	FAR	FLOOR AREA RATIO
	FBD	FIBER BOARD
	FD	FLOOR DRAIN
	FDN	FOUNDATION
	FFE	FINISHED FLOOR ELEVATION
	FIN	FINISH
	FIN FL	FINISH FLOOR
	FIN GR	FINISH GRADE
	FN	FENCE
	FOC	FRONT OF CURB
	FT	FOOT/FEET
	FTG	FOOTING
	FUT	FUTURE
	FXTR	FIXTURE
G	GA	GAUGE
	GAB	GRADED AGGREGATE BASE
	GALV	GALVANIZED
	GC	GENERAL CONTRACTOR
	GDR	GUARD RAIL
	GFA	GROSS FLOOR AREA
	GIP	GALVANIZED IRON PIPE
	GL	GLASS
	GP	GUTTER PAN
	GVL	GRAVEL
H	HB	HOSE BIBB
	HC	HANDICAP PARKING SPACE
	HDPE	HIGH DENSITY POLYETHYLENE PIPE
	HDWD	HARDWOOD
	HDWE	HARDWARE
	HT	HEIGHT
	HNDRL	HANDRAIL
	HORZ	HORIZONTAL
	HP	HIGH POINT
	HS	HARDSCAPE
I	ID	INSIDE DIAMETER
	INSTL	INSTALLATION
	INV	INVERT
	IP	IRON PIPE
J	JST	JOIST
	JT	JOINT
L	LAM	LAMINATED
	LB	POUND
	LBR	LUMBER
	LH	LEFT HAND
	LOD	LIMITS OF DISTURBANCE
	LOS	LINE OF SIGHT
	LOW	LIMITS OF WORK
	LTP	LIGHT POLE
	LP	LOW POINT
	LS	LANDSCAPE
	LT	LIGHT
	LTG	LIGHTING
	LVL	LEVEL
M	MAS	MASONRY
	MATL	MATERIAL
	MAX	MAXIMUM
	MECH	MECHANICAL
	MED	MEDIUM
	MET	METAL
	METB	METAL BASE
	MFG	MANUFACTURING
	MH	MANHOLE
	MIN	MINIMUM
	MISC	MISCELLANEOUS
	MLDG	MOLDING
	MTG	MOUNTING
	MULL	MULLION
	MUTCD	MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES
N	N	NORTH
	N/A	NOT APPLICABLE
	NIC	NOT IN CONTRACT
	NO	NUMBER
	NOM	NOMINAL
	NTS	NOT TO SCALE
O	OA	OVERALL
	OC	ON CENTER
	OD	OUTSIDE DIAMETER
	OPNG	OPENING
	OPT	OPTIONAL
	ORIG	ORIGINAL
P	PAR	PARALLEL
	PERP	PERPENDICULAR
	PI	POINT OF INTERSECTION
	PIE	PUBLIC IMPROVEMENT EASEMENT
	PKWY	PARKWAY
	PL	PROPERTY LINE
	PLBG	PLUMBING
	PLYWD	PLYWOOD
	PNL	PANEL
	PNT	PAINT
	POB	POINT OF BEGINNING
	PR	PAIR
	PRCST	PRECAST
	PRELIM	PRELIMINARY
	PRKG	PARKING
	PROP	PROPOSED
	PSF	POUNDS PER SQUARE FOOT
	PSI	POUNDS PER SQUARE INCH
	PT	PRESSURE TREATED
	PTD	PAINTED
	PUE	PUBLIC UTILITY EASEMENT
	PVMT	PAVEMENT
R	R	RISER, RADIUS
	RC	REINFORCED CONCRETE
	RD	ROAD
	RDWY	ROADWAY
	REC	RECESSED
	REF	REFERENCE
	REQD	REQUIRED
	RFD	ROOF DRAIN
	RH	RIGHT HAND
	RIM	DRAIN INLET RIM ELEVATION
	RLG	RAILING
	RM	ROOM
	RND	ROUND
	ROW	RIGHT OF WAY
	RP	RADIUS POINT
	RPA	RESOURCE PROTECTION AREA
	RTE	ROUTE
S	S	SOUTH
	SD	SURFACE DRAIN
	SECT	SECTION
	SGL	SINGLE
	SJ	SCORED JOINT
	SLP	SLOPE
	SM	SMOOTH
	SPEC	SPECIFICATION
	SQ FT	SQUARE FOOT
	SQ IN	SQUARE INCH
	SST	STAINLESS STEEL
	ST	STREET
	STA	STATION POINT
	STD	STANDARD
	STL	STEEL
	STM	STORM DRAIN
	SW	SIDEWALK
	SWM	STORM WATER MANAGEMENT
T	T&G	TONGUE AND GROOVE
	TC	TOP OF CURB, TOP OF COLUMN
	TD	TRENCH DRAIN
	TEMP	TEMPORARY
	TS	TOP OF STEP
	TW	TOP OF WALL
	TXT	TEXT
	TYP	TYPICAL
U	UNFIN	UNFINISHED
V	VERT	VERTICAL
W	W	WEST
	WD	WOOD
	WI	WROUGHT IRON
	WLD	WELDED
	WP	WATER PROOFING
	WR	WATER RESISTANT
	WWM	WELDED WIRE MESH
	WWR	WELDED WIRE REINFORCEMENT
Y	YD	YARD DRAIN

PROFESSIONAL TITLES

ARCH	ARCHITECT
CIVIL	CIVIL ENGINEER
ENGR	ENGINEER
GC	GENERAL CONTRACTOR
ID	INTERIOR DESIGNER
MEP	MECHANICAL/ELECTRICAL/PLUMBING
LA	LANDSCAPE ARCHITECT
LC	LANDSCAPE CONTRACTOR
STR	STRUCTURAL ENGINEER

MATERIAL GRAPHICS

CONCRETE
COMPACTED AGGREGATE SUB-BASE
SAND
MORTAR
MORTAR NEXT TO SAND SETTING BED
BRICK / PAVER
DRAINAGE GRAVEL
SOIL / COMPACTED SOIL / UNDISTURBED SUBGRADE
STRUCTURAL / PLANTING / LIGHTWEIGHT SOIL
EXPANSION JOINT W/ BACKER ROD
REBAR
STONE
ASPHALT CONCRETE W/ NEOPRENE TACK COAT
FABRIC SEPARATOR
STEEL / IRON
ALUMINUM
BRASS / BRONZE / COPPER
WOOD
MULCH
PLASTIC
ARCHITECTURAL PRECAST
WELDED WIRE REINFORCEMENT
CMU
RIGID INSULATION W/ OPEN JOINTS FOR DRAINAGE
BRICK / CONCRETE PAVER RUNNING BOND
BRICK / CONCRETE PAVER HERRINGBONE

LEGEND

9 — EXISTING INTERMEDIATE CONTOUR
10 — EXISTING INDEX CONTOUR
9 — PROPOSED INTERMEDIATE CONTOUR
10 — PROPOSED INDEX CONTOUR
00.00 — EXISTING SPOT GRADE
00.00 — PROPOSED SPOT GRADE
ELEV.00.00 — ELEVATION
STA 0+00.00 OFFSET 0'-0" — STATION POINT
EASEMENT (PUE, PIE, ETC.)
CENTER LINE
PROPERTY LINE
RIGHT OF WAY
LOT LINE
CENTER LINE OF SWALE
EXPANSION JOINT
STEP
EXISTING LIGHT
PROPOSED POLE LIGHT
PROPOSED PEDESTRIAN LIGHT
PROPOSED WALL LIGHT
PROPOSED BOLLARD
PROPOSED FOUNTAIN LIGHT
PROPOSED FLOODLIGHT
PROPOSED UPLIGHT
PROPOSED STEP LIGHT
SD SD — SLAB DRAIN
SURFACE DRAIN / YARD DRAIN
TRENCH DRAIN
KEY — PLANT CALLOUT
DETAIL NAME # SHEET — MATERIAL OR DETAIL CALLOUT
SHEET — ELEVATION CALLOUT
SHEET — SECTION CALLOUT

GENERAL NOTES

GENERAL LAYOUT NOTES:

1. BASE TOPOGRAPHICAL AND EXISTING CONDITIONS TAKEN FROM DRAWING FURNISHED BY R.C. FIELDS AND ASSOCIATES, INC.
2. UTILITY WORK IS NOT INDICATED ON THIS DRAWING. REFER TO CIVIL DRAWINGS FOR WORK RELATED TO UTILITIES.
3. DO NOT SCALE THESE DRAWINGS.
4. DIMENSIONS ARE FROM BACK OF CURB, TO FACE OF WALL, TO OUTSIDE EDGE OF PAVEMENTS; FROM COLUMN CENTERLINES TO HARDSCAPE CENTERLINES, TO CENTERLINE OF PAVEMENTS, TO OUTSIDE EDGE OF PAVEMENTS, TO CENTERLINES OF STAIRS; FROM EDGE OF PAVEMENT TO FACE OF WALL UNLESS OTHERWISE SPECIFIED.
5. ALL CURVES TO BE TRUE RADII WITHOUT STRAIGHT SEGMENTS.
6. ALL ANGLES ARE 90° UNLESS OTHERWISE NOTED.
7. CHANGES IN LAYOUT MAY BE MADE AT THIS TIME TO ACCOMMODATE DESIGN INTENT OR FIELD CONDITIONS. NO ADDITIONAL PAYMENT WILL BE MADE TO THE CONTRACTOR FOR THIS WORK.
8. CONTRACTOR TO NOTIFY LANDSCAPE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES FOUND IN PLANS AND ANY CONFLICTS ENCOUNTERED IN FIELD.
9. QUANTITIES REFERENCED IN PLANS ARE SHOWN AS A COURTESY ONLY. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES.
10. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
11. ALL WALLS, SIDEWALKS, PATHWAYS, FENCES, AND STAIRWAYS SHALL BE COMPLETELY LAID OUT AND STAKED WITH VISIBLE MARKERS. THE STAKES SHALL BE APPROVED IN THE FIELD BY LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT 48 HOURS PRIOR TO SITE VISIT.
12. CONTRACTOR IS RESPONSIBLE FOR ALL WIRING, CONDUIT, FOOTINGS, PERMITS, ETC. NECESSARY TO COMPLETE SITE LIGHTING INSTALLATION. CONTRACTOR TO COORDINATE POWER CONNECTIONS WITH ELECTRICAL ENGINEER AND OWNER.
13. BENCH AND LITTER RECEPTACLE LAYOUT SHOWN IS APPROXIMATE. LAYOUT TO BE APPROVED IN THE FIELD BY LANDSCAPE ARCHITECT.

APPROVED
SPECIAL USE PERMIT NO. 2014-0019
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO.
DIRECTOR DATE
CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED
INSTRUMENT NO. DEED BOOK NO. DATE

STUDIO39
Landscape Architecture, P.C.
6416 Grovedale Drive, Suite 100-A
Alexandria, Virginia 22310
Tel: 703.719.6500 Fax: 703.719.6503
Email: frontdesk@studio39.com

1800 MOUNT VERNON AVENUE
CITY OF ALEXANDRIA, VA

BREVIC DEVELOPMENT LLC

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COMMONWEALTH OF VIRGINIA
JOSEPH J. PLUMPE
Lic.No.000802
08.18.15
LANDSCAPE ARCHITECT

REVISIONS:

GENERAL NOTES

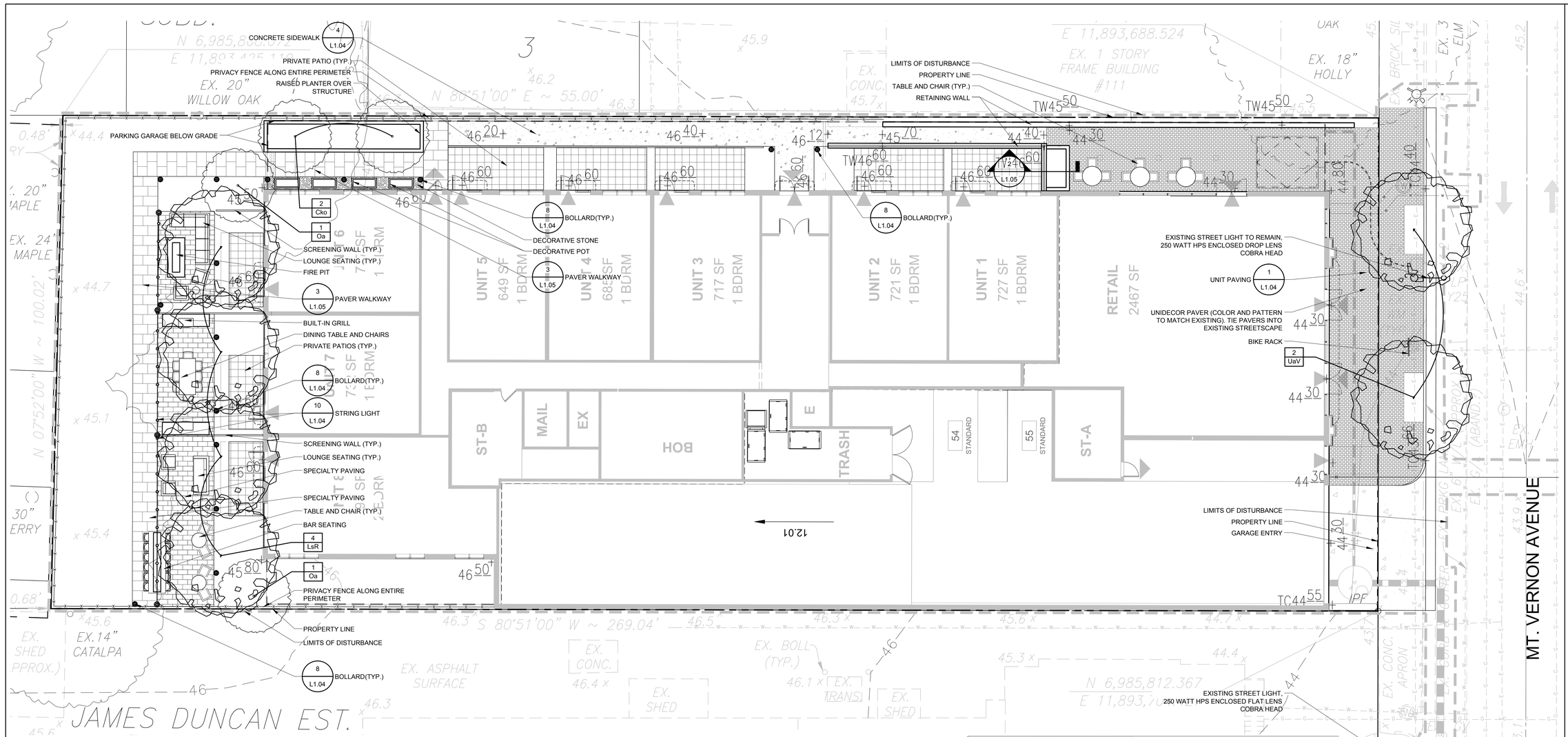
NORTH

DESIGN:	DD
DRAWN:	TF
CHECKED:	DD
SCALE:	N/A
PROJECT NO:	15030
DATE:	08.18.15

L0.01

DSUP

P:\2015\15030 1800 MT Vernon\5.0 CAD Files\CURRENT PHASE\L0.01 GENERAL NOTES.dwg



LANDSCAPE NOTES:

1. ALL PROTECTION AND PRESERVATION MEASURES FOR EXISTING VEGETATION, INCLUDING MAINTENANCE SHALL BE APPROVED BY THE CITY ARBORIST IN-FIELD PRIOR TO COMMENCEMENT OF ANY SITE DISTURBING ACTIVITY.

2. SPECIFICATION FOR ALL PLANTINGS SHALL BE IN ACCORDANCE WITH THE CURRENT AND MOST UP TO DATE EDITION OF ANSI-Z60.1, THE AMERICAN STANDARD FOR NURSERY STOCK AS PRODUCED BY THE AMERICAN ASSOCIATION OF NURSERYMEN; WASHINGTON, DC.

3. THE APPLICANT HAS MADE SUITABLE ARRANGEMETS FOR PRE-SELECTION TAGGING, PRE-CONTRACT GROWING, OR IS UNDERTAKING SPECIALIZED PLANTING STOCK DEVELOPMENT WITH A NURSERY OR GROWER THAT IS CONVENIENTLY LOCATED TO THE PROJECT SITE. OTHER PROCEDURES THAT ENSURE AVAILABILITY OF SPECIFIED MATERIALS. IN THE EVENT THAT SHORTAGES AND/OR INABILITY TO OBTAIN SPECIFIED PLANTINGS OCCURS, REMEDIAL EFFORTS INCLUDING SPECIES CHANGES, ADDITIONAL PLANTINGS AND MODIFICATION TO THE LNADSCAPE PLAN SHALL BE UNDERTAKEN BY THE APPLICANT. ALL REMEDIAL EFFORTS SHALL, WITH PRIOR APPOROVAL BY THE CITY, BE PERFORMED TO THE SATISFACTION OF THE DIRECTORS OF PLANNING & ZONING, RECREATION, PARKS & CULTURAL ACTIVITES AND TRANSPORTATION & ENVIRONMENTAL SERVICES.

4. IN LIEU OF MORE STRENUOUS SPECIFICATIONS, ALL LANDSCAPE RELATED WORK SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE CURRENT AND MOST UP TO DATE EDITION (AT TIME OF CONSTRUCTION) OF LANDSCAPE SPECIFICATION GUIDELINES AS PRODUCED BY THE LANDSCAPE CONTRACTORS ASSOCIATION OF MARYLAND, DISTRICT OF COLUMBIA AND VIRGINIA; GAITHERSBURG, MD.

5. PRIOR TO COMMENCEMENT OF LANDSCAPE INSTALLATION/ PLANTING OPERATIONS, A PRE INSTALLATION/ CONSTRUCTION MEETING WILL BE SCHEDULED WITH THE CITY'S ARBORIST AND PLANNING AND ZONING LANDSCAPE ARCHITECTS TO REVIEW THE SCOPE OF INSTALLATION PROCEDURES AND PROCESSES.

6. MAINTENANCE OF ALL TREES AND LANDSCAPE MATERIALS SHALL CONFORM TO ACCEPTED INDUSTRY STANDARDS SET FORTH BY THE LANDSCAPE CONTRACTORS ASSOCIATION, AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS, THE INTERNATIONAL SOCIETY OF ARBORICULTURE, AND THE AMERICAN NATIONAL STANDARDS INSTITUTE.

7. A CERTIFICATION LETTER FOR TREE WELLS, TREE TRENCHES AND PLANTINGS ABOVE STRUCTURE SHALL BE PROVIDED BY THE PROJECT'S LANDSCAPE ARCHITECT. THE LETTER SHALL CERTIFY THAT ALL BELOW GRADE CONSTRUCTION IS IN COMPLIANCE WITH THE APPROVED DRAWINGS AND SPECIFICATIONS. THE LETTER SHALL BE SUBMITTED TO THE CITY ARBORIST AND APPROVED PRIOR TO APPROVAL OF THE LAST AND FINAL CERTIFICATE OF OCCUPANCY FOR THE PROJECT. THE LETTER SHALL BE SUBMITTED BY THE OWNER/APPLICANT/SUCCESSOR AND SEALED AND DATED AS APPROVED BY THE PROJECT'S LANDSCAPE ARCHITECT.

8. AS-BUILT DRAWINGS FOR THIS LANDSCAPE AND/OR IRRIGATION/WATER MANAGEMENT SYSTEM WILL BE PROVIDED IN COMPLIANCE WITH CITY OF ALEXANDRIA LANDSCAPE GUIDELINES. AS-BUILDT DRAWINGS SHALL INCLUDE CLEAR IDENTIFICATION OF ALL VARIATION(S) AND CHANGES FROM APPROVED DRAWINGS INCLUDING LOCATION, QUIANTITY AND SPECIFICATION OF ALL PROJECT ELEMENTS.

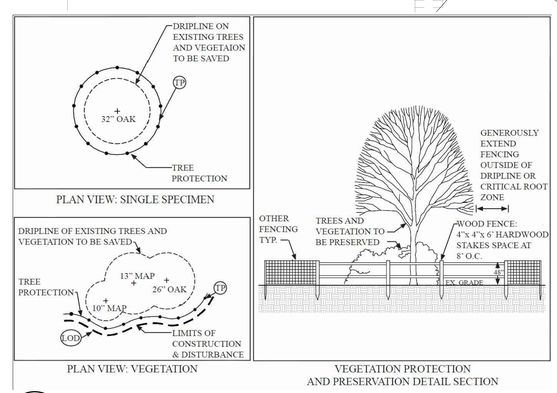
9. THE WORK TO BE PERFORMED UNDER THE CANOPY OF THE 18" TREE ALONG THE EAST PROPERTY LINE IS TO BE PERFORMED BY HAND. WORK INCLUDES, PAVEMENT REMOVAL AS WELL AS CURB, FENCE POST AND PAVER INSTALLATION. TREE PRESERVATION MEASURES SHALL BE PERFORMED PER CITY GUIDELINES. THE NEED FOR ROOT PRUNING SHALL BE DETERMINED IN THE FIELD.

ARCHAEOLOGY NOTES

1. CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703-746-4399) IF ANY BURIED STRUCTURAL REMAINS (FOUNDATIONS, WELLS, PRIVIES, CISTERNS, ETC.) OR CONCENTRATIONS OF ARTIFACTS ARE DISCOVERED DURING DEVELOPMENT. WORK MUST CEASE IN THE AREA OF THE DISCOVERY UNTIL A CITY ARCHAEOLOGIST COMES TO THE SITE AN RECORDS THE FINDS.

2. THE APPLICANT SHALL NOT ALLOW ANY METAL DETECTION AND/OR ARTIFACT COLLECTION TO BE CONDUCTED ON THE PROPERTY UNLESS AUTHORIZED BY ALEXANDRIA ARCHAEOLOGY. FAILURE TO COMPLY SHALL RESULT IN PROJECT DELAYS.

3. ALL REQUIRED ARCHAEOLOGICAL PRESERVATION MEASURES SHALL BE COMPLETED IN COMPLIANCE WITH SECTION 11-411 OF THE ZONING ORDINANCE.



1 L1.01 VEGETATION PROTECTION AND PRESERVATION
Scale: NTS

PLANT LIST

TREES

QTY	KEY	GENUS	SPECIES	VARIETY	COMMON NAME	HEIGHT	CALIPER	REMARKS	CANOPY (S.F.) EACH (S.F.)	CANOPY (S.F.) SUBTOTAL
2	UaV	Ulmus	americana	'Valley Forge'	American Elm	14 - 16'	3 - 3 1/2"	B&B, full uniform crown, symmetrical branching, full specimen	1,250	---
4	LsR	Liquidambar	styraciflua	'Rotundiloba'	Round-Lobed Sweet Gum	14 - 16'	3 - 3 1/2"	B&B, full uniform crown, symmetrical branching, full specimen	1,250	5,000
2	Oa	Oxydendrum	arboreum		Sourwood Tree	8-10'	2 1/2" min.	B&B, full uniform crown, symmetrical branching, full specimen	750	1,500
2	Cko	Cornus	kousa		Kousa Dogwood	8-10'	2 1/2" min.	B&B, full uniform crown, symmetrical branching, full specimen	125*	250

*CCA CREDIT SHALL BE FIFTY (50) PERCENT OF THE DESIGNATED ALLOWANCE FOR ANY PLANTINGS ABOVE STRUCTURE.

CANOPY COVER ANALYSIS

	SUBTOTAL (S.F.)
TOTAL SITE AREA	26,793 (.6151 acres)
TREE COVER REQUIRED (25%)	6,698
TREE COVER PROVIDED	6,750
TOTAL COVER PROVIDED	6,750 (25.2%)
STREET TREE CANOPY (NOT INCLUDED)	2,500

APPROVED
SPECIAL USE PERMIT NO. 2014-0019
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO.
DIRECTOR DATE
CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED
INSTRUMENT NO. DEED BOOK NO. DATE

STUDIO39
Landscape Architecture, P.C.
6416 Grovedale Drive, Suite 100-A
Alexandria, Virginia 22310
Tel: 703.719.6500 Fax: 703.719.6503
Email: frontdesk@studio39.com

1800 MOUNT VERNON AVENUE
CITY OF ALEXANDRIA, VA

BREVIC DEVELOPMENT LLC

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COMMONWEALTH OF VIRGINIA
JOSEPH J. PLUMPE
Lic.No.000802
08.18.15
LANDSCAPE ARCHITECT

REVISIONS:

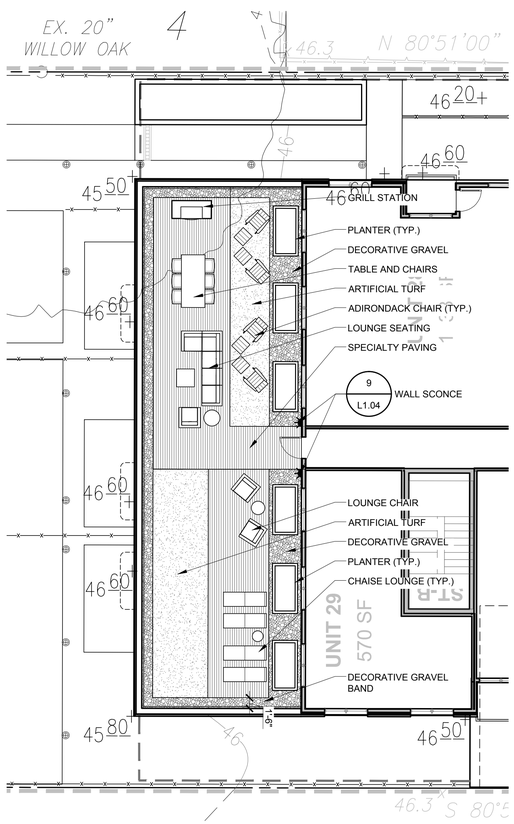
HARDSCAPE PLAN

NORTH
DESIGN: DD
DRAWN: TF
CHECKED: DD
SCALE: 1" = 10'-0"
0 5 10 20
PROJECT NO: 15030
DATE: 08.18.15

L1.01

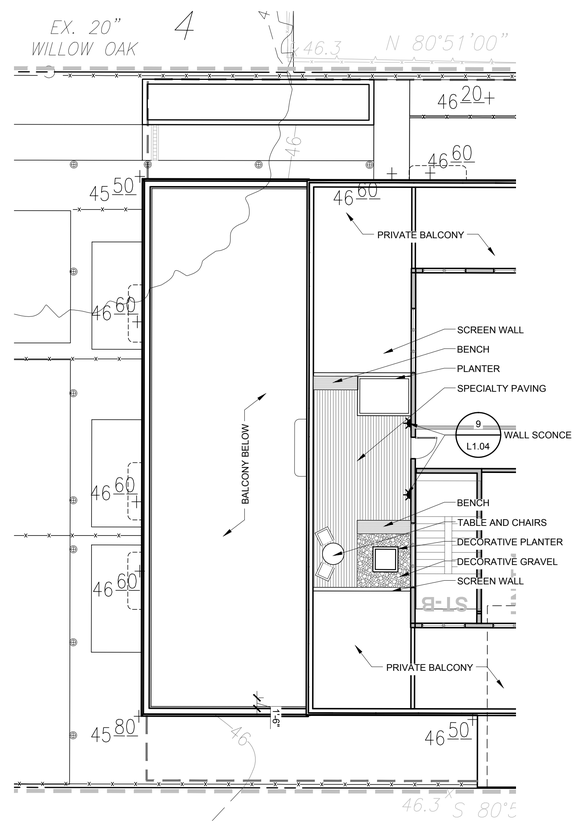
DSUP

P:\2015\15030_1800 MT Vernon\6.0 CAD Files\CURRENT PHASE\L1.01 HARDSCAPE PLAN.dwg



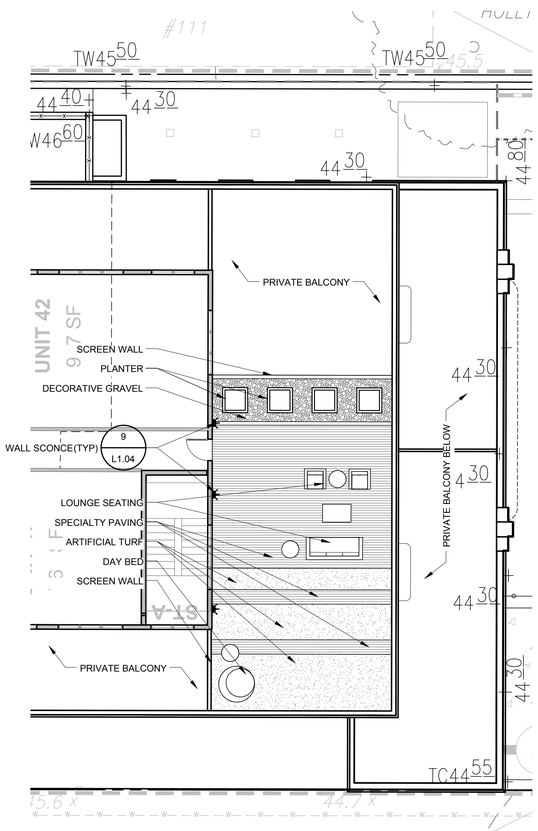
1 L1.02 THIRD FLOOR BALCONY PLAN

Scale: 1" = 10'-0"



2 L1.02 FOURTH FLOOR BALCONY WEST PLAN

Scale: 1" = 10'-0"



3 L1.02 FOURTH FLOOR BALCONY EAST PLAN

Scale: 1" = 10'-0"

APPROVED
SPECIAL USE PERMIT NO. 2014-0019

DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

SITE PLAN NO.

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED

INSTRUMENT NO. DEED BOOK NO. DATE

STUDIO39
Landscape Architecture, P.C.
6416 Grovedale Drive, Suite 100-A
Alexandria, Virginia 22310
Tel: 703.719.6500 Fax: 703.719.6503
Email: frontdesk@studio39.com

1800 MOUNT VERNON AVENUE

CITY OF ALEXANDRIA, VA

BREVIC DEVELOPMENT LLC

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COMMONWEALTH OF VIRGINIA
JOSEPH J. PLUMPE
Lic.No.000802
08.18.15
LANDSCAPE ARCHITECT

REVISIONS:

ROOF TOP HARDSCAPE PLAN

NORTH

DESIGN: DD
DRAWN: TF
CHECKED: DD

SCALE: 1" = 10'-0"

0 5 10 20

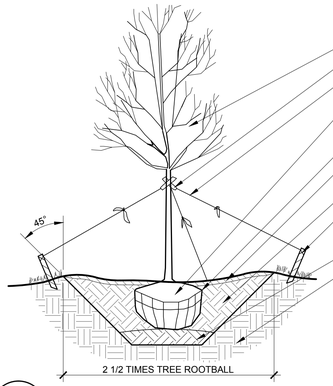
PROJECT NO: 15030

DATE: 08.18.15

L1.02

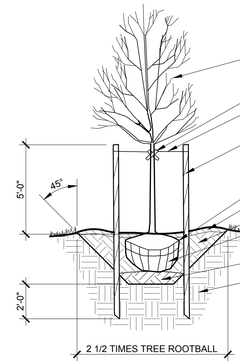
DSUP

P:\2015\15030 1800 MT Vernon\5.0 CAD Files\CURRENT PHASE\L1.02 ROOF TOP HARDSCAPE PLAN.dwg



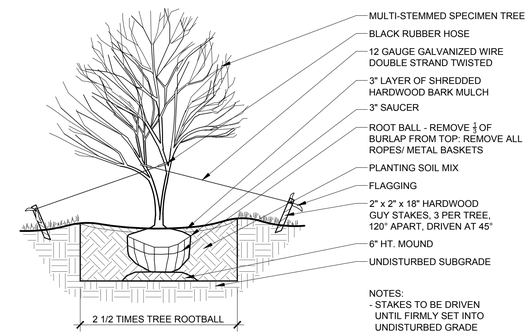
NOTES:
- STAKES TO BE DRIVEN UNTIL FIRMLY SET INTO UNDISTURBED GRADE
- CONTRACTOR TO REGRADE, SOD OR HYDROSEED & STRAW MULCH ALL AREAS DISTURBED

1 L1.03 TREE GUYING PLANTING - SPECIMEN TREE SECTION
Scale: 1/4" = 1'-0"



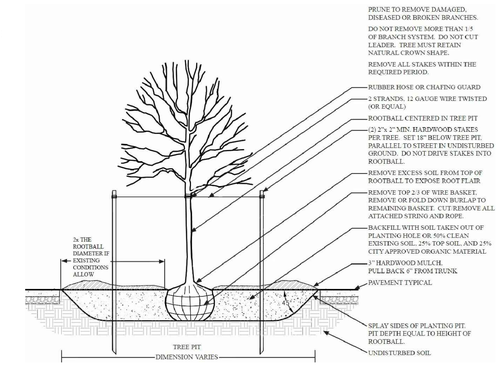
NOTES:
- STAKES TO BE PLACED FIRMLY INTO SOIL
- CONTRACTOR TO REGRADE, SOD OR HYDROSEED & STRAW MULCH ALL AREAS DISTURBED

2 L1.03 TREE PLANTING SECTION
Scale: 1/4" = 1'-0"

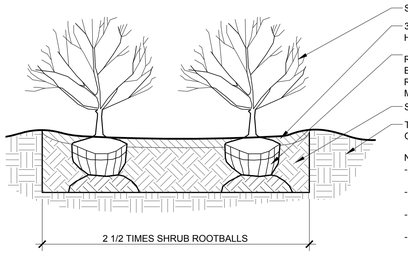


NOTES:
- STAKES TO BE DRIVEN UNTIL FIRMLY SET INTO UNDISTURBED GRADE

3 L1.03 TREE GUYING PLANTING - MULTI-STEMMED SECTION
Scale: 1/4" = 1'-0"

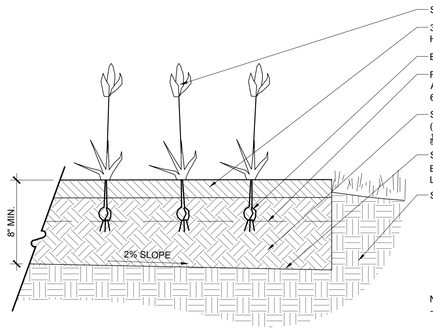


4 L1.03 STREET TREE PLANTING SECTION
Scale: NTS



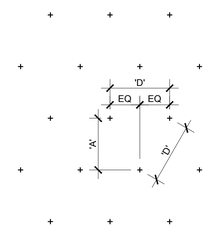
NOTES:
- SCARIFY ROOTS OF ROOT BOUND PLANTS
- PLANT SPACING VARIES (SEE PLANS)
- PRUNE ALL BROKEN, DISEASED & WEAK BRANCHES
- ALL SHRUB BEDS TO BE COMPLETELY EXCAVATED OF ALL EXISTING SOIL TO DEPTH REQUIRED FOR SOIL MIX BACK FILL
- REMOVE ALL STRINGS, RIBBONS & TAGS FROM PLANTS

5 L1.03 SHRUB PLANTING SECTION
Scale: 1/2" = 1'-0"



NOTES:
- MIX IN BONE MEAL AT BOTTOM OF BULBS WHEN PLANTED

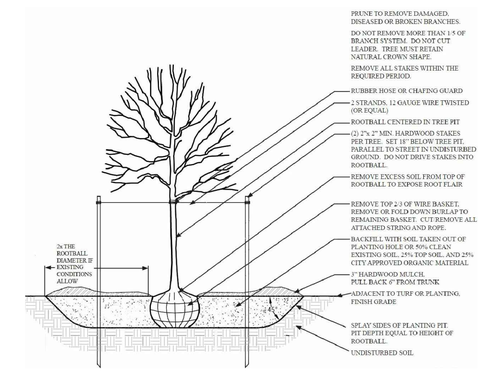
6 L1.03 ANNUAL & PERENNIAL PLANTING SECTION
Scale: 1" = 1'-0"



PLANT SPACING CHART
AS SPECIFIED ON PLANT LIST

SPACING 'D'	ROW 'A'	NUMBER OF PLANTS PER SQUARE FOOT
6" o.c.	5 1/4" o.c.	4.62
8" o.c.	6 7/8" o.c.	2.60
10" o.c.	8 5/8" o.c.	1.66
12" o.c.	10 3/8" o.c.	1.15
15" o.c.	13" o.c.	0.74
18" o.c.	15 5/8" o.c.	0.51
24" o.c.	20 3/4" o.c.	0.29
30" o.c.	26" o.c.	0.18
36" o.c.	31 1/8" o.c.	0.13
42" o.c.	36 3/8" o.c.	0.09
48" o.c.	41 5/8" o.c.	0.07

7 L1.03 TRIANGULAR SPACING FOR SHRUBS - GROUND COVERS - BULBS AND PERENNIALS
Scale: 1" = 1'-0"



8 L1.03 TREE PLANTING DETAIL SECTION
Scale: NTS

PLANTING NOTES:

1. PLANT MATERIAL SHALL BE FURNISHED AND INSTALLED AS INDICATED, INCLUDING ALL LABOR, MATERIALS, PLANTS, EQUIPMENT, INCIDENTALS, AND CLEAN-UP.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PLANTING AT CORRECT GRADES AND ALIGNMENT. LAYOUT TO BE APPROVED BY OWNERS' REPRESENTATIVE PRIOR TO INSTALLATION.
3. PLANTS SHALL BE TYPICAL OF THEIR SPECIES AND VARIETY; HAVE NORMAL GROWTH HABITS, WELL-DEVELOPED DENSELY FOLIATED BRANCHES, AND VIGOROUS ROOT SYSTEMS; AND BE FREE FROM DEFECTS AND INJURIES.
4. CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO GROWTH OF PLANT MATERIAL.
5. ALL PLANT MATERIAL SHALL BE GUARANTEED BY THE CONTRACTOR TO BE IN VIGOROUS GROWING CONDITION. PROVISION SHALL BE MADE FOR A GROWTH GUARANTEE OF AT LEAST ONE YEAR FROM THE DATE OF ACCEPTANCE FOR TREES, SHRUBS, GROUNDCOVER AND PERENNIALS. REPLACEMENTS SHALL BE MADE AT THE BEGINNING OF THE FIRST SUCCEEDING PLANTING SEASON. ALL REPLACEMENTS SHALL HAVE A GUARANTEE EQUAL TO THAT STATED ABOVE.
6. PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY IF/WHEN PRACTICAL. IN THE EVENT THAT THIS IS NOT POSSIBLE, THE CONTRACTOR SHALL PROTECT STOCK NOT PLANTED. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE-DAY PERIOD AFTER DELIVERY. ANY PLANTS NOT INSTALLED DURING THIS PERIOD SHALL BE REJECTED, UNLESS OWNER AND CONTRACTOR PROVIDE OTHERWISE BY WRITTEN AGREEMENT.
7. QUALITY AND SIZE OF PLANTS, SPREAD OF ROOTS, AND SIZE OF ROOT BALL SHALL BE IN ACCORDANCE WITH THE MOST RECENT VERSION OF ANSI Z60 "AMERICAN STANDARD FOR NURSERY STOCK" PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC.
8. ALL PLANTS SHALL BE PLANTED IN AMENDED TOP SOIL THAT IS THOROUGHLY WATERED AND TAMPED AS BACK-FILLING PROCESSES. PLANTING MIX TO BE AS SHOWN ON PLANTING DETAILS. LARGE PLANTING AREAS TO INCORPORATE FERTILIZER AND SOIL CONDITIONERS AS STATED IN PLANTING SPECIFICATIONS.
9. PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES. PLANTS SHALL BE HANDLED FORM THE BOTTOM OF THE BALL ONLY.
10. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE. PLANTS SHALL NOT BE INSTALLED IN TOP SOIL THAT IS IN A MUDDY OR FROZEN CONDITION. ALL PLANT MATERIAL SHALL BE SPRAYED WITH "WILT-PRUF" OR EQUAL AS PER MANUFACTURER'S INSTRUCTIONS.
11. NO PLANT, EXCEPT GROUND COVERS, SHALL BE PLANTED LESS THAN TWO FEET FROM EXISTING STRUCTURES AND SIDEWALKS.
12. SET ALL PLANTS PLUMB AND STRAIGHT. SET AT SUCH LEVEL THAT A NORMAL OR NATURAL RELATIONSHIP TO THE GROUND IF THE PLANT WITH THE GROUND SURFACE WILL BE ESTABLISHED. LOCATE THE PLANT IN THE CENTER OF THE PIT.
13. ALL INJURED ROOTS SHALL BE PRUNED TO MAKE CLEAN ENDS BEFORE PLANTING UTILIZING CLEAN, SHARP TOOLS. IT IS ADVISABLE TO PRUNE APPROXIMATELY 1/3 OF THE GROWTH OF LARGE TREES (2" CALIPER AND GREATER) BY THE REMOVAL OF SUPERFLUOUS BRANCHES, THOSE WHICH CROSS, THOSE WHICH RUN PARALLEL, ETC. MAIN LEADER OF TREES SHALL NOT BE CUT BACK. LONG SIDES BRANCHES SHALL BE SHORTENED.
14. EACH TREE AND SHRUB SHALL BE PRUNED IN ACCORDANCE WITH STANDARD HORTICULTURAL PRACTICE TO PRESERVE THE NATURAL CHARACTER OF PLANT. PRUNING SHALL BE DONE WITH CLEAN, SHARP TOOLS.
15. TREES SHALL BE SUPPORTED IMMEDIATELY AFTER PLANTING. ALL TREES 6" AND GREATER IN CALIPER SHALL BE GUYED. SMALLER TREES SHALL BE STAKED. GUYING WIRES AND STAKES SHALL BE INSTALLED AS INDICATED. THE LANDSCAPE CONTRACTOR SHALL REMOVE STAKING, GUYING AND TREE WRAP AT THE END OF ONE YEAR MAINTENANCE AND GUARANTEE PERIOD.
16. ALL PLANTING BEDS SHALL BE MULCHED WITH 3" LAYER OF MULCH.
17. NEW PLANTING AREAS AND SOD SHALL BE ADEQUATELY WATERED TO ESTABLISH THE PROPOSED PLANTS AND LAWN.
18. ALL PLANTS SHOWN ON THE APPROVED LANDSCAPE PLAN SHALL BE INSTALLED, INSPECTED AND APPROVED BY THE LANDSCAPE ARCHITECT OR HIS REPRESENTATIVE. THE LANDSCAPE ARCHITECT SHALL TAKE INTO ACCOUNT SEASONAL CONSIDERATIONS IN THIS REGARD. TREES, SHRUBS, VINES AND GROUNDCOVER AS REQUIRED BY OR ASSOCIATED WITH A SUBDIVISION OR SITE PLAN APPROVED BY THE PLANNING AUTHORITIES SHALL BE INSTALLED DURING THE FOLLOWING PLANTING SEASONS: LAWNS: 03/15 TO 06/15 AND 09/15 TO 12/01. THE FOLLOWING TREE VARIETIES SHALL NOT BE PLANTED DURING THE FALL PLANTING SEASON DUE TO THE HAZARDS ASSOCIATED WITH PLANTING THESE TREES IN THIS SEASON: ACER RUBRUM POPULUS SPP.; BETULA SPP. PRUNUS SPP.; CARPINUS SPP. PYRUS SPP.; CRATECUS SPP. QUERCUS SPP.; KOELREUTERIA PANICULATA SALIX SPP.; LIQUIDAMBAR STYRACIFLUA TILIA TOMENTOSA; LIRIODENDRON TULIPIFERA ZELKOVA; PLATANUS ACERIFOLIA; ANY PLANTING INSTALLED IN CONFLICT WITH THIS REQUIREMENT MUST RECEIVE WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO PLANTING. FAILURE TO COMPLY WITH THESE REQUIREMENTS WILL REQUIRE THE REMOVAL OF THE PLANTING IN QUESTION. THIS REQUIREMENT DOES NOT APPLY TO SEEDING OR SODDING OR PLANTINGS SPECIFICALLY FOR SOIL STABILIZATION PURPOSES. PLANTINGS ASSOCIATED WITH ANY LOT GIVEN A CERTIFICATE OF OCCUPANCY OUTSIDE THESE PERIODS SHALL BE PROVIDED DURING THE PREVIOUS OR NEXT APPROPRIATE SEASON.
19. ALL DISTURBED AREAS SHALL BE TREATED WITH 4" TOP SOIL SODDED OR SEEDED AS NOTED IN ACCORDANCE WITH PERMANENT STABILIZATION METHODS INDICATED ON SOIL EROSION AND SEDIMENT CONTROL SHEET.
20. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL PLANT MAINTENANCE; INCLUDING SHRUBS AND GROUNDCOVER, AND SHALL MAINTAIN AREA IN A WEED AND DEBRIS FREE CONDITION THROUGHOUT THE ONE-YEAR GUARANTEE PERIOD, UNLESS OTHERWISE SPECIFIED.
21. CONTRACTOR SHALL LAYOUT AND CLEARLY STAKE ALL PROPOSED IMPROVEMENTS INCLUDED ON THIS PLAN.
22. CONTRACTOR TO VERIFY PLANT LIST TOTALS WITH QUANTITIES SHOWN ON PLAN. LANDSCAPE ARCHITECT SHALL BE ALERTED BY CONTRACTOR OF ANY DISCREPANCIES PRIOR TO FINAL BID NEGOTIATION. UNIT PRICES FOR ALL MATERIAL SHALL BE SUPPLIED TO THE OWNER AT BIDDING TIME.
23. ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE LANDSCAPE ARCHITECT. OWNER SHALL RECEIVE TAG FROM EACH PLANT SPECIES AND A LIST OF PLANT SUPPLIERS. WHERE ANY REQUIREMENTS ARE OMITTED FROM THE PLANT LIST, THE PLANTS FURNISHED SHALL MEET THE NORMAL REQUIREMENTS FOR THE VARIETY PER THE AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN (AAN). PLANTS SHALL BE PRUNED PRIOR TO DELIVERY ONLY UPON THE APPROVAL OF THE LANDSCAPE ARCHITECT.
24. SIZES SPECIFIED IN THE PLANT LIST ARE MINIMUM SIZES TO WHICH THE PLANTS ARE TO BE JUDGED. FAILURE TO MEET MINIMUM SIZE ON ANY PLANT WILL RESULT IN REJECTION OF THAT PLANT.
25. ALL PLANTS SHALL BE FRESHLY DUG, SOUND, HEALTHY, VIGOROUS, WELL BRANCHED, FREE OF DISEASE, INSECT EGGS, AND LARVAE, AND SHALL HAVE ADEQUATE ROOT SYSTEMS.
26. ALL CONTAINER GROWN MATERIAL SHALL BE HEALTHY, VIGOROUS, WELL-ROOTED PLANTS AND ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE TOPS WHICH ARE GOOD QUALITY AND ARE IN A HEALTHY GROWING CONDITION.
27. GROUPS OF SHRUBS SHALL BE PLACED IN A CONTINUOUS MULCH BED WITH SMOOTH CONTINUOUS LINES. ALL MULCHED BED EDGES SHALL BE CURVILINEAR IN SHAPE FOLLOWING THE CONTOUR OF THE PLANT MASS. TREES LOCATED WITHIN FOUR FEET OF SHRUB BEDS SHALL SHARE SAME MULCH BED.
28. TREES SHALL BE LOCATED A MINIMUM OF 3' - 4' FROM WALLS AND WALKS WITHIN THE PROJECT. IF CONFLICTS ARISE BETWEEN ACTUAL SIZE OF AREA AND PLANS, CONTRACTOR SHALL CONTACT LANDSCAPE ARCHITECT FOR RESOLUTION. FAILURE TO MAKE SUCH CONFLICTS KNOWN TO THE OWNER OR LANDSCAPE ARCHITECT WILL RESULT IN CONTRACTOR'S LIABILITY TO RELOCATE MATERIALS.
29. TREE STAKING AND GUYING SHALL BE DONE PER DETAILS. CONTRACTOR SHALL ENSURE THAT TREES REMAIN VERTICAL AND UPRIGHT FOR THE DURATION OF THE GUARANTEE PERIOD.
30. CROWN OF ROOT BALL SHALL BE HIGHER (AFTER SETTLING) THAN ADJACENT SOIL.
31. TAGS AND TWINE ARE TO BE REMOVED AND BURLAP IS TO BE ROLLED BACK ONE-THIRD ON ALL B&B PLANT MATERIAL. REMOVE BURLAP IF IT IS NON-BIODEGRADABLE. FOR STREET TREES TAGS, TWINE, CORD, BURLAP AND WIRE BASKET TO BE CUT 12" DOWN SIDE OF ROOT BALL AND REMOVED FROM PROJECT SITE.
32. SHRUBS AND GROUND COVERS SHALL BE TRIANGULARLY SPACED AT SPACING SHOWN ON PLANTING PLANS.
33. SHADE TREES: HEIGHT SHALL BE MEASURED FROM THE CROWN OF THE ROOT BALL TO THE TOP OF MATURE GROWTH. SPREAD SHALL BE MEASURED TO THE END OF BRANCHING EQUALLY AROUND THE CROWN FROM THE CENTER OF THE TRUNK. MEASUREMENTS ARE NOT TO INCLUDE ANY TERMINAL GROWTH. SINGLE TRUNK TREES SHALL BE FREE OF "V" CROTCHES THAT COULD BE POINTS OF WEAK LIMB STRUCTURE OR DISEASE INFESTATION. SHRUBS: HEIGHT SHALL BE MEASURED FROM THE GROUND TO THE AVERAGE HEIGHT OF THE TOP OF THE PLANT. SPREAD SHALL BE MEASURED TO THE END OF BRANCHING EQUALLY AROUND THE SHRUB MASS. MEASUREMENTS ARE NOT TO INCLUDE ANY TERMINAL GROWTH.
34. ALL SUBSTITUTIONS OF PLANT MATERIAL ARE TO BE REQUESTED IN WRITING TO THE LANDSCAPE ARCHITECT AND APPROVED BY THE OWNER. IF CONTRACTOR FAILS TO SUBMIT A WRITTEN REQUEST, IT WILL RESULT IN LIABILITY TO THE CONTRACTOR.
35. ALL CONTRACTORS SHALL BE REQUIRED TO COMPLETELY REMOVE ALL TRASH, DEBRIS AND EXCESS MATERIALS FROM THE WORK AREA AND THE PROPERTY, ESPECIALLY AT ALL CURB, GUTTERS AND SIDEWALKS DAILY DURING INSTALLATION.
36. DEAD PLANTS ARE TO BE REMOVED FROM THE JOB BY THE CONTRACTOR WEEKLY. CONTRACTOR SHALL MAINTAIN AN UPDATED, COMPREHENSIVE LIST OF ALL DEAD MATERIALS REMOVED FROM THE JOB SITE. A COPY OF THE LIST IS TO BE SUBMITTED TO THE OWNER AT THE END OF EVERY MONTH DURING THE CONTRACT PERIOD.
37. TOPSOIL REQUIRED FOR SOIL MIXES AND SPECIAL SEEDING AREAS SHALL BE PROVIDED BY LANDSCAPE CONTRACTOR. CONTRACTOR MUST LOAD, HAUL, MIX, AND SPREAD ALL TOPSOIL AND OTHER SOIL ADDITIVES ARE REQUIRED.
38. CONTRACTOR SHALL GUARANTEE ALL LANDSCAPE IMPROVEMENTS, INCLUDING SEEDING, FOR ONE FULL YEAR AS REQUIRED BY THE SPECIFICATIONS. CONTRACTOR MUST CONTACT THE OWNER AT LEAST TEN WORKING DAYS IN ADVANCE TO SCHEDULE ACCEPTANCE INSPECTION(S). CONTRACTOR MUST REPLACE ALL DEAD OR UNACCEPTABLE PLANTS DURING THE FOLLOWING RECOMMENDED PLANTING SEASON.
39. THE SPECIFICATIONS FOR ALL WORK INCLUDED IN THIS CONTRACT SHALL BE LANDSCAPE SPECIFICATIONS GUIDELINES FOR BALTIMORE-WASHINGTON METROPOLITAN AREA, CURRENT EDITION, UNLESS OTHERWISE NOTED ON THESE PLANS.

PLANTING MIX NOTES:

1. THE RECOMMENDED PLANTING MEDIUM SHOULD CONTAIN GOOD TOP SOIL THAT WILL SUSTAIN PLANT GROWTH.
2. THE TOP SOIL SHALL NOT BE LACKING IN POTASSIUM, PHOSPHORUS, MAGNESIUM OR CALCIUM. THE TOP SOIL SHALL NOT CONTAIN ANY MATERIALS TOXIC TO PLANT GROWTH.
3. THE TOP SOIL SHALL BE A SANDY CLAY LOAM OR A SILTY CLAY LOAM WITH WELL AGGREGATED CLAYS AND A MINIMUM OF 4% (FOUR PERCENT) ORGANIC MATTER.
4. THE SOILS PH RANGE SHOULD BE WITHIN 5.5 TO 7.0 AND ADJUSTED AS NECESSARY FOR INDIVIDUAL PLANT SPECIES REQUIREMENTS.
5. A SOIL TEST SHALL BE PERFORMED BY A FULL-SERVICE TESTING COMPANY AND THE RESULTS SHALL BE PROVIDED TO THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION OF PLANTING MEDIUM.
6. IF A LOCAL, REPUTABLE TESTING COMPANY CANNOT BE EMPLOYED, A&L LABS IS AVAILABLE TO CONDUCT THE TESTING. CONTACT THEM AT:
   A&L ANALYTICAL LABORATORIES, INC.
   2790 WHITTEN ROAD
   MEMPHIS, TN 38133
   1-800-264-4522
7. THE LAB SHALL PERFORM AN S1A TEST AND SUBMIT THE RESULTS TO STUDIO 39 LANDSCAPE ARCHITECTURE, PC.

APPROVED
SPECIAL USE PERMIT NO. 2014-0019
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO.
DIRECTOR DATE
CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED
INSTRUMENT NO. DEED BOOK NO. DATE

STUDIO39
Landscape Architecture, P.C.
6416 Grovedale Drive, Suite 100-A
Alexandria, Virginia 22310
Tel: 703.719.6500 Fax: 703.719.6503
Email: frontdesk@studio39.com

1800 MOUNT VERNON AVENUE
CITY OF ALEXANDRIA, VA

BREVIC DEVELOPMENT LLC

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COMMONWEALTH OF VIRGINIA
JOSEPH J. PLUMPE
Lic.No.000802
08.18.15
LANDSCAPE ARCHITECT

REVISIONS:

LANDSCAPE NOTES AND DETAILS

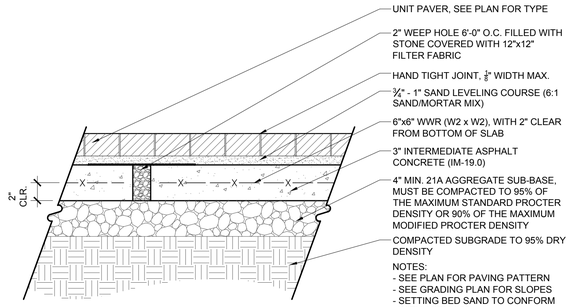
DESIGN: DD
DRAWN: TF
CHECKED: DD
NORTH
SCALE: AS SHOWN

PROJECT NO: 15030
DATE: 08.18.15

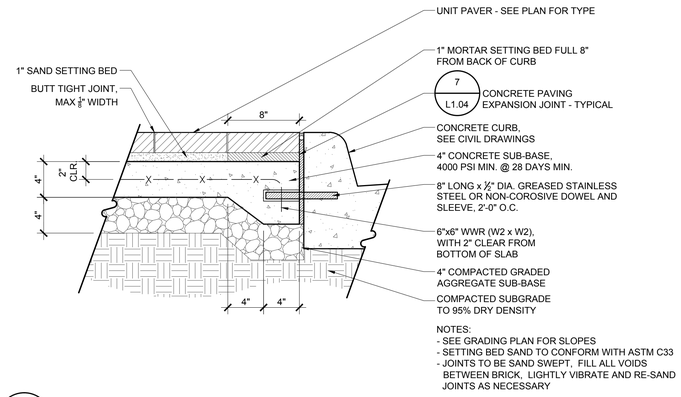
L1.03

DSUP

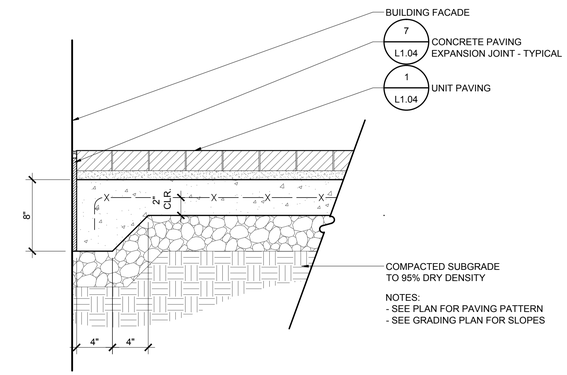
P:\2015\15030 1800 MT Vernon\6.0 CAD Files\CURRENT PHASE\L1.03 LANDSCAPE NOTES AND DETAILS.dwg



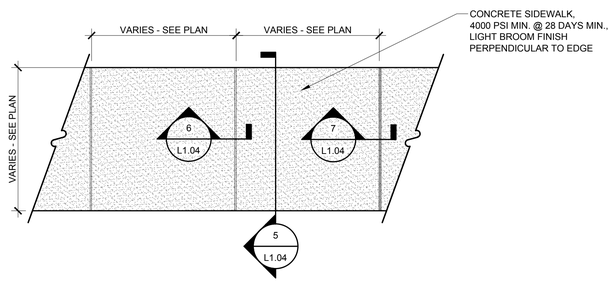
1 / L1.04 **UNIT PAVING** SECTION
Scale: 1 1/2" = 1'-0"



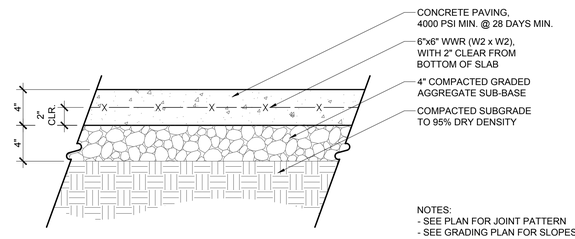
2 / L1.04 **UNIT PAVING AT CURB** SECTION
Scale: 1 1/2" = 1'-0"



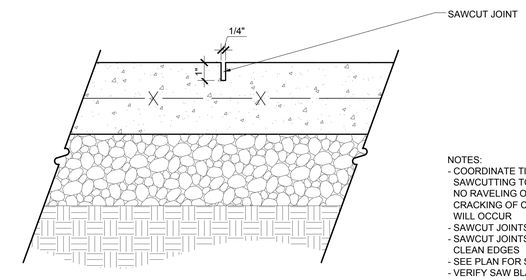
3 / L1.04 **UNIT PAVING EDGE TREATMENT AT BUILDING FACADE** SECTION
Scale: 1 1/2" = 1'-0"



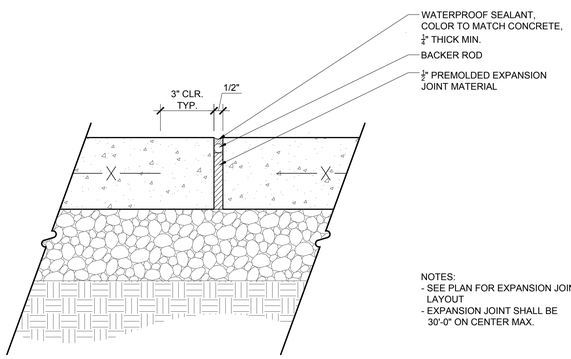
4 / L1.04 **CONCRETE SIDEWALK** PLAN
Scale: 1/2" = 1'-0"



5 / L1.04 **CONCRETE PAVING - PEDESTRIAN RATED** SECTION
Scale: 1 1/2" = 1'-0"



6 / L1.04 **SAWCUT CONTROL JOINT** SECTION
Scale: 3" = 1'-0"



7 / L1.04 **CONCRETE PAVING EXPANSION JOINT - TYPICAL** SECTION
Scale: 3" = 1'-0"

MODEL:	RF6 LED BOLLARD
COLOR:	BLACK
QUANTITY:	PER PLAN
COMPANY:	HADCO 100 CRAFTWAY LITTLESTOWN, PA 17340 (P) 703.530.9255
CONTACT:	DAVE DEPORTER dave@ddallc.com 703.530.9255
NOTES:	1) INSTALL PER MANUF. INSTRUCTIONS 2) SEE PLAN FOR LOCATIONS AND QUANTITY 3) LEVEL W/ LEVELING SCREWS TO BE PLUMB 4) OR APPROVED EQUAL

8 / L1.04 **BOLLARD** PROD. INFO.
Scale: NTS

MODEL:	OLYMPUS SERIES SOLID STATE BKSSL
MANUFACTURER:	B-K LIGHTING MADERA, CA 93636 WWW.BKLIGHTING.COM
CONTACT:	TIM GUNTHER tim@lightingenvironments.com 410.712.0239
QUANTITY:	PER PLAN
COLOR:	TBD
NOTE:	CONTRACTOR TO VERIFY QUANTITIES. INSTALL PER MANUFACTURER'S RECOMMENDATION AND GOVERNING MUNICIPAL REQUIREMENTS. OR APPROVED EQUAL.

9 / L1.04 **WALL SCONCE** PROD. INFO.
Scale: NTS

MODEL:	LITESPHERE LED: LSL-B-12-WW-C-12
MANUFACTURER:	TIVOLI, LLC TUSTIN, CA 92780 WWW.TIVOLILIGHTING.NET
CONTACT:	MICHAEL DEVLIN mdevlin@alliancelighting.com 866.624.3738
QUANTITY:	PER PLAN
COLOR:	BLACK WIRE & CLEAR GLOBE
NOTE:	CONTRACTOR TO VERIFY QUANTITIES. INSTALL PER MANUFACTURER'S RECOMMENDATION AND GOVERNING MUNICIPAL REQUIREMENTS. OR APPROVED EQUAL.

10 / L1.04 **STRING LIGHT** PROD. INFO.
Scale: NTS

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INSTRUMENT NO. DEED BOOK NO. DATE

STUDIO39
Landscape Architecture, P.C.
6416 Grovedale Drive, Suite 100-A
Alexandria, Virginia 22310
Tel: 703.719.6500 Fax: 703.719.6503
Email: frontdesk@studio39.com

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CITY OF ALEXANDRIA, VA

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COMMONWEALTH OF VIRGINIA
JOSEPH J. PLUMPE
Lic.No.000802
08.18.15
LANDSCAPE ARCHITECT

REVISIONS:

HARDSCAPE DETAILS

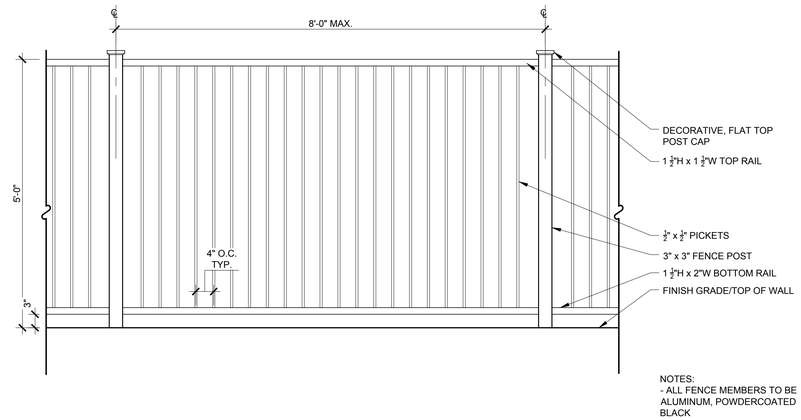
DESIGN: DD
DRAWN: TF
CHECKED: DD
NORTH
SCALE: AS SHOWN

PROJECT NO: 15030
DATE: 08.18.15

L1.04

DSUP

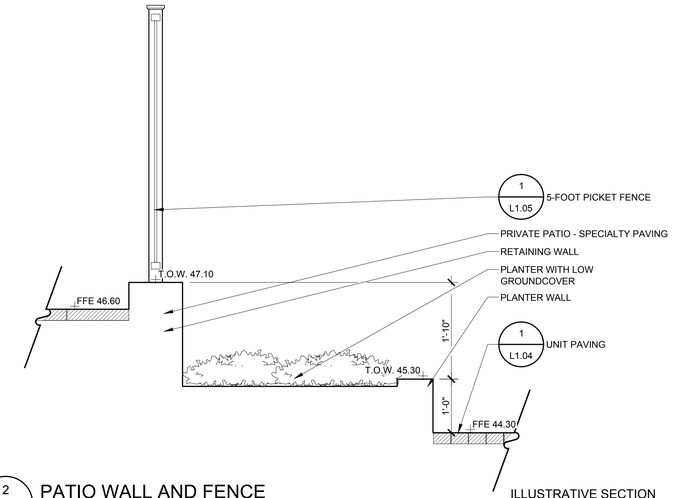
P:\2015\15030 1800 MT Vernon\6.0 CAD Files\CURRENT PHASE\L1.04 HARDSCAPE DETAILS.dwg



NOTES:
- ALL FENCE MEMBERS TO BE ALUMINUM, POWDERCOATED BLACK

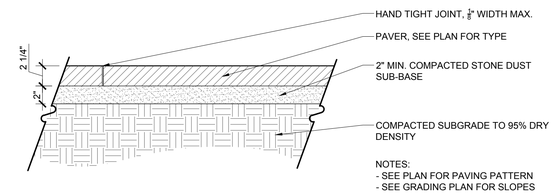
1 / L1.05 **5-FOOT PICKET FENCE** ELEVATION

Scale: 3/4" = 1'-0"



2 / L1.05 **PATIO WALL AND FENCE** ILLUSTRATIVE SECTION

Scale: 3/4" = 1'-0"



NOTES:
- SEE PLAN FOR PAVING PATTERN
- SEE GRADING PLAN FOR SLOPES

3 / L1.05 **PAVER WALKWAY** SECTION

Scale: 1 1/2" = 1'-0"

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Email: frontdesk@studio39.com

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Lic.No.000802
08.18.15
LANDSCAPE ARCHITECT

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HARDSCAPE DETAILS

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DRAWN: TF
CHECKED: DD

SCALE: AS SHOWN

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L1.05

DSUP

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1 CONTEXT PLAN
1" = 100'-0"

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SHEET NUMBER
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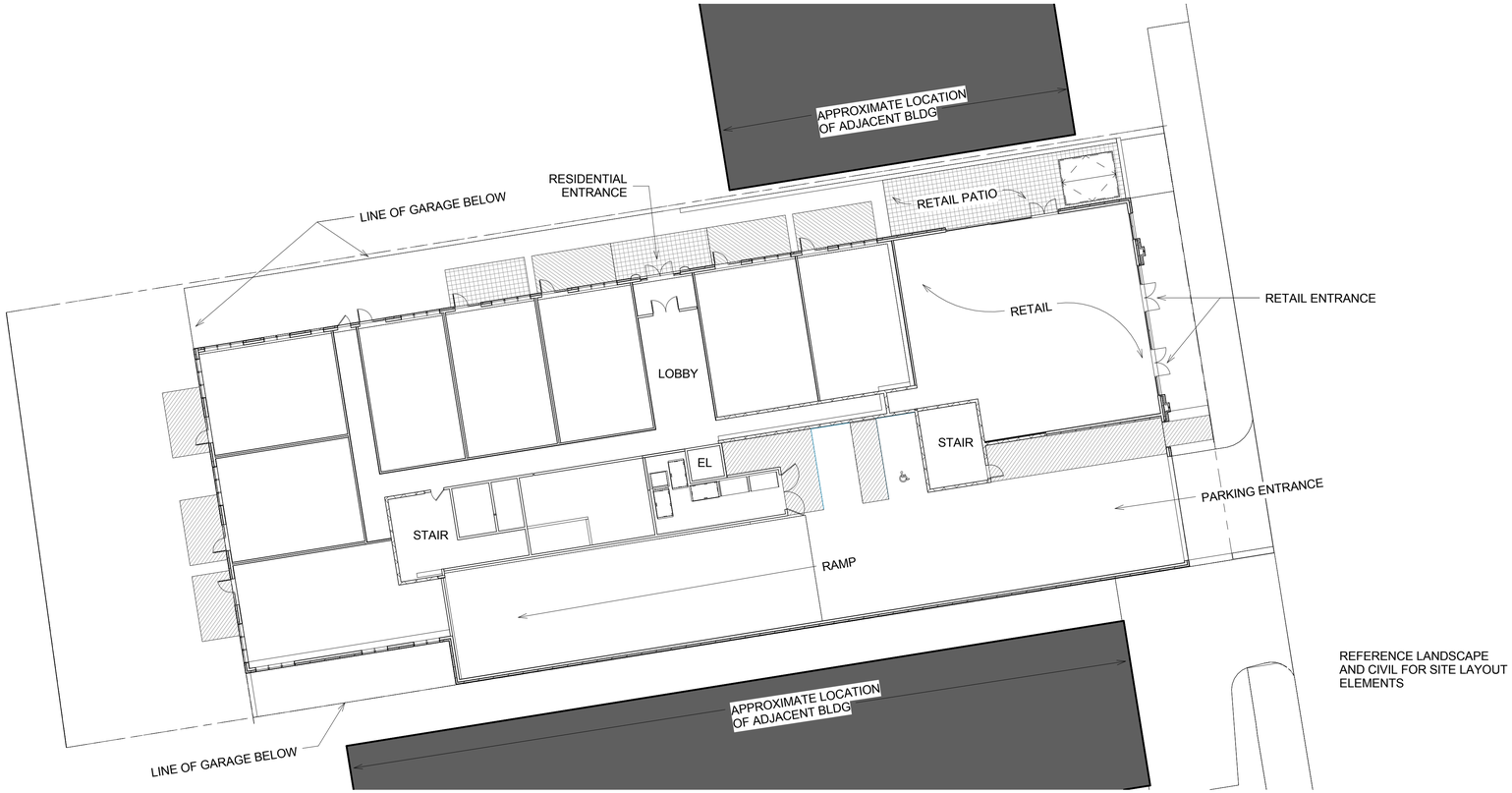

1 ARCHITECTURAL SITE PLAN

1/16" = 1'-0"

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ARCH SITE PLAN

SHEET NUMBER

A101

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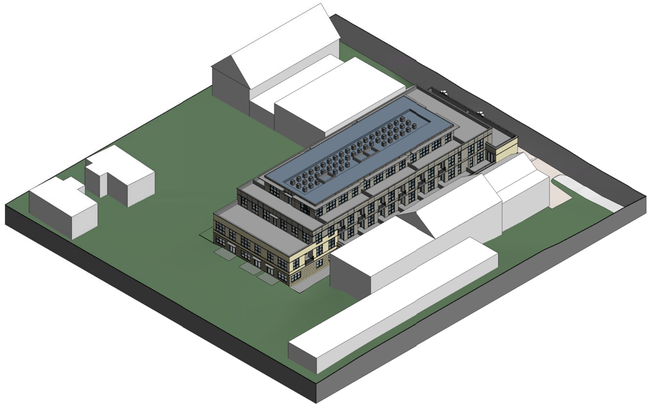
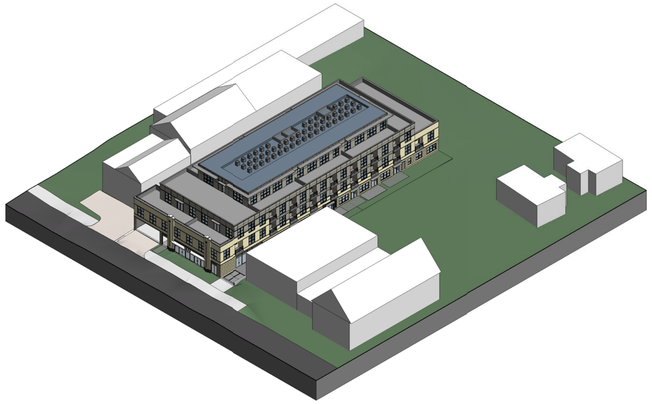
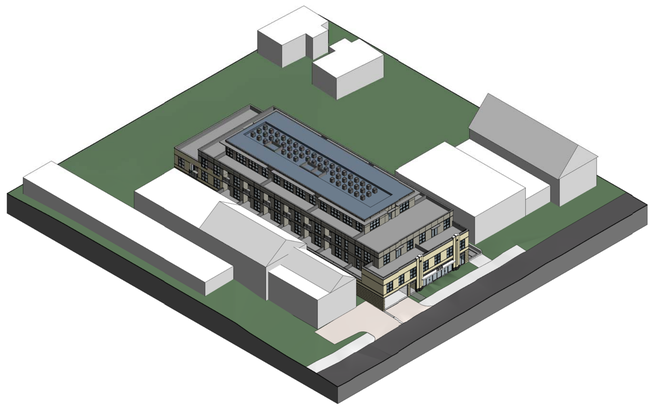


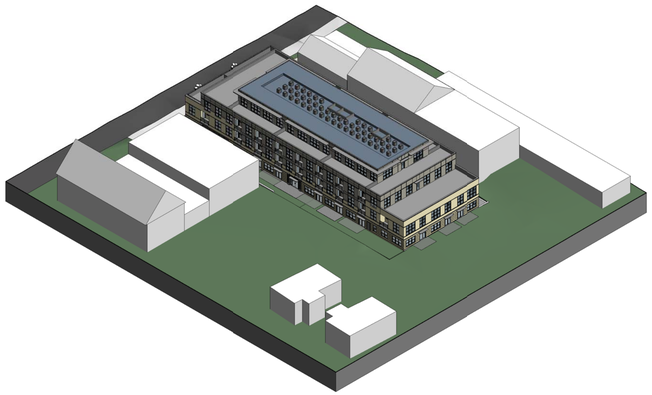
4 MASSING STUDY - SOUTHWEST



2 MASSING STUDY - NORTHEAST



5 MASSING STUDY - SOUTHEAST



3 MASSING STUDY - NORTHWEST

1 MOUNT VERNON AVENUE STREETSCAPE

1/16" = 1'-0"

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STREETSCAPE AND BUILDING MASSING

SHEET NUMBER

A102

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VIEW 2

VIEW 3

VIEW 1

NOTE:
1. REFERENCE LANDSCAPE AND CIVIL FOR ALL SITE LAYOUT ELEMENTS.
2. REFERENCE LANDSCAPE FOR FENCE DESIGN.

VIEW 5

VIEW 4

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PERSPECTIVES AND BUILDING MASSING

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A103

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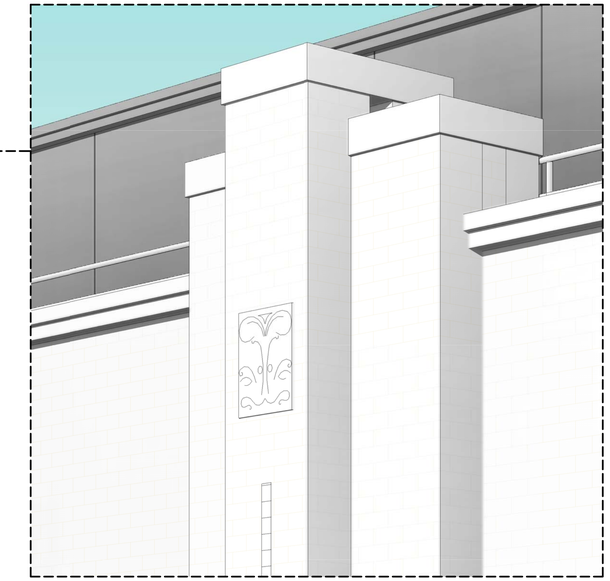
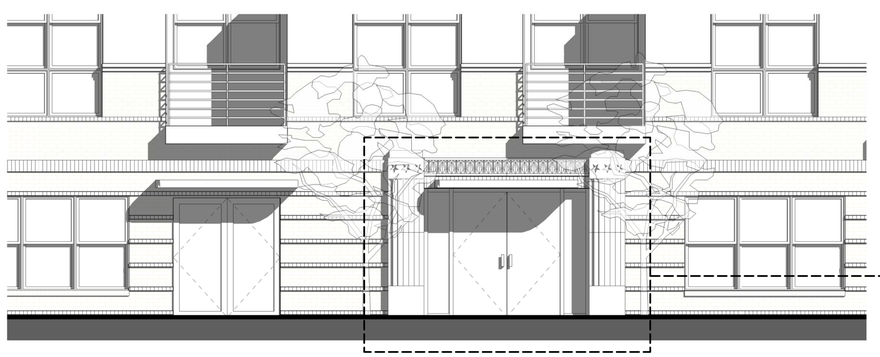
IMAGE FROM EXISTING BUILDING

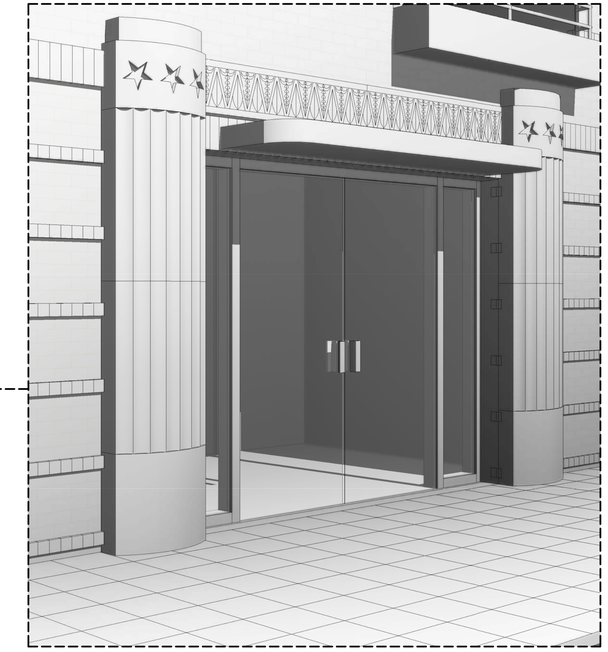
1A FRONT ELEVATION
3/32" = 1'-0"



1B INLAY DETAIL



2A RIGHT SIDE ELEVATION
1/4" = 1'-0"



2B RESIDENTIAL ENTRY DETAIL

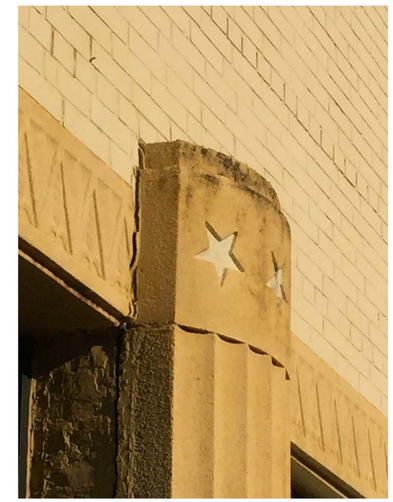


IMAGE FROM EXISTING BUILDING

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PERSPECTIVES AND HISTORIC DETAILS

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A104

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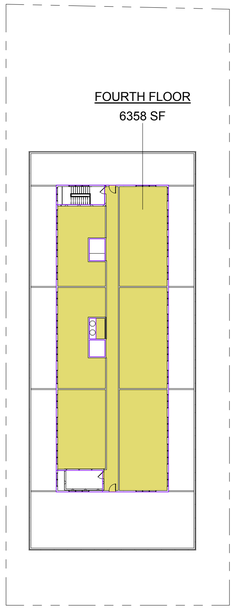
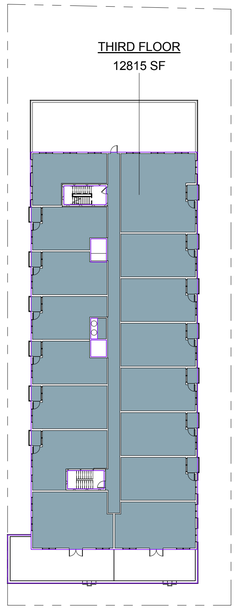
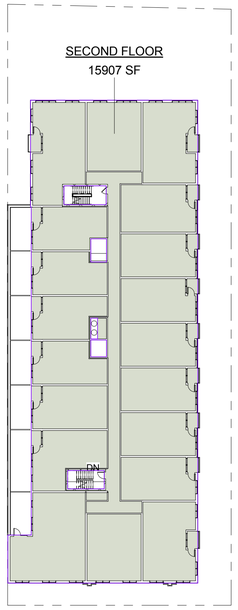


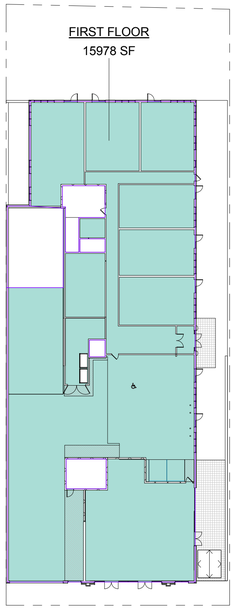
5 FOURTH FLOOR
1/32" = 1'-0"



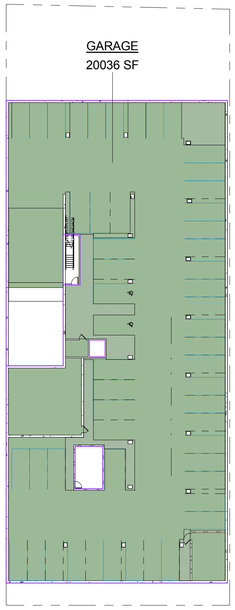
4 THIRD FLOOR
1/32" = 1'-0"



3 SECOND FLOOR
1/32" = 1'-0"



2 FIRST FLOOR
1/32" = 1'-0"



1 GARAGE
1/32" = 1'-0"

NOTE: SHADED AREAS ARE INCLUDED IN FAR CALCULATIONS

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NET AREA PLANS

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A105

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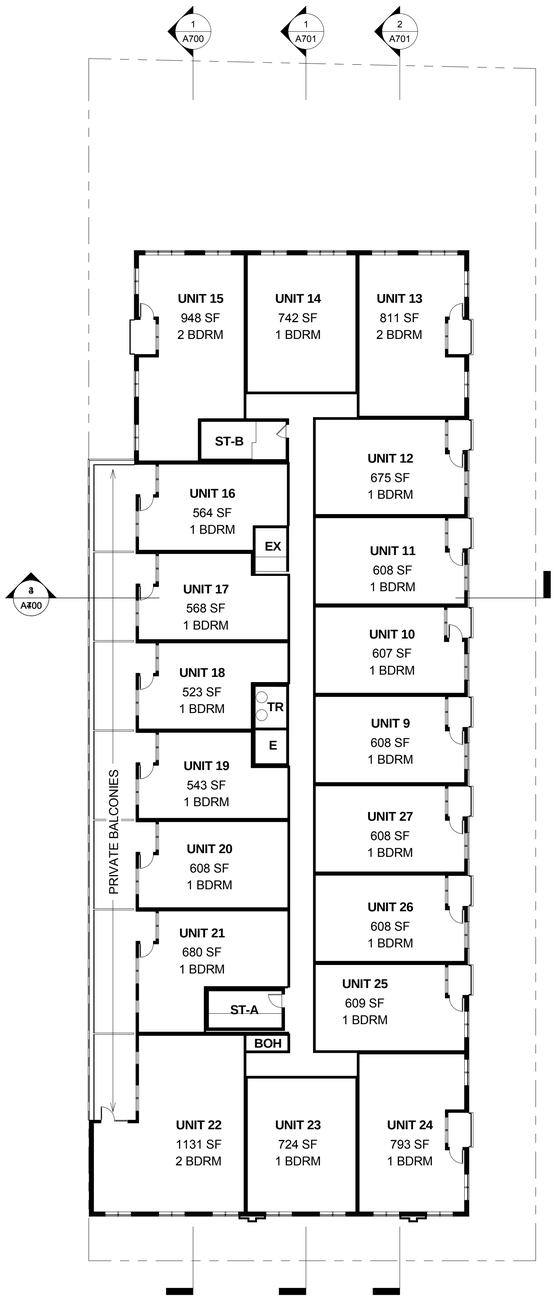
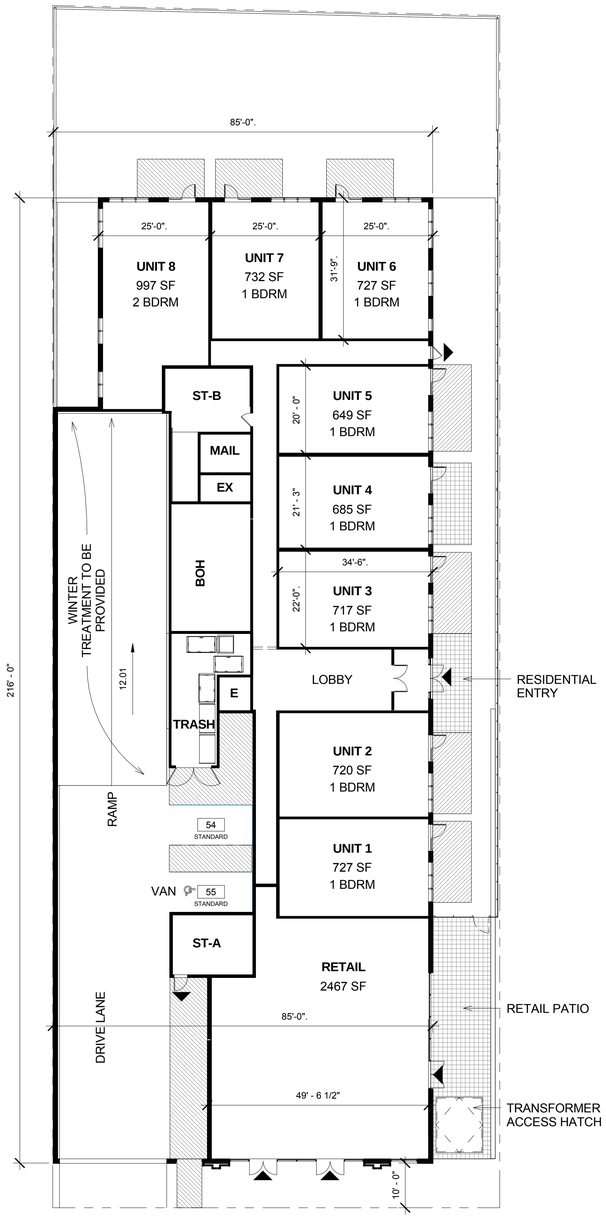


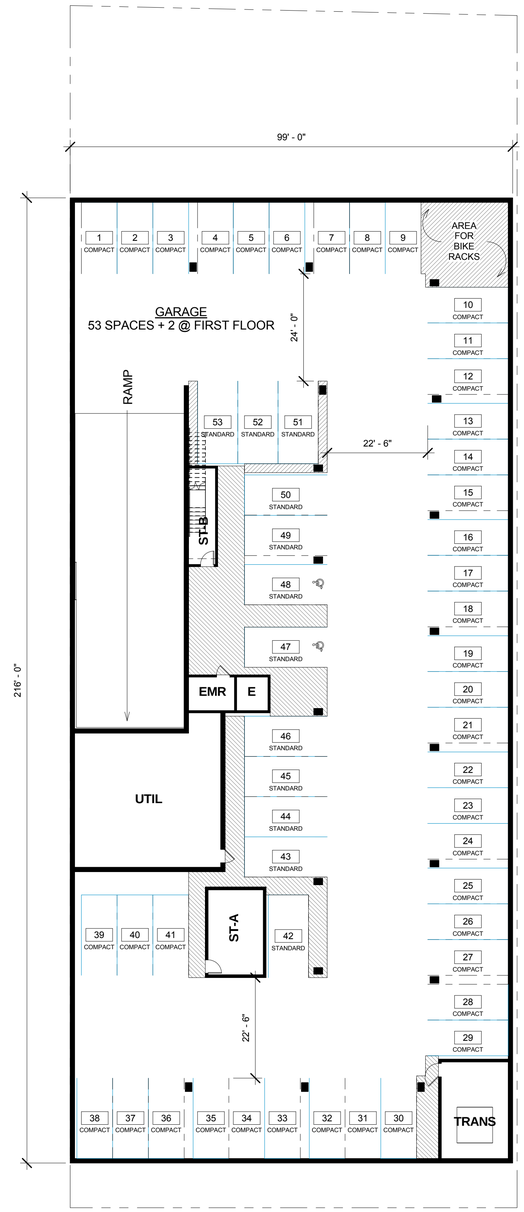
3 SECOND FLOOR
1/16" = 1'-0"



REFERENCE LANDSCAPE AND CIVIL FOR SITE LAYOUT ELEMENTS

2 FIRST FLOOR
1/16" = 1'-0"

DENOTES EXTERIOR, GROUND FLOOR ENTRANCE/EXIT



1 GARAGE
1/16" = 1'-0"

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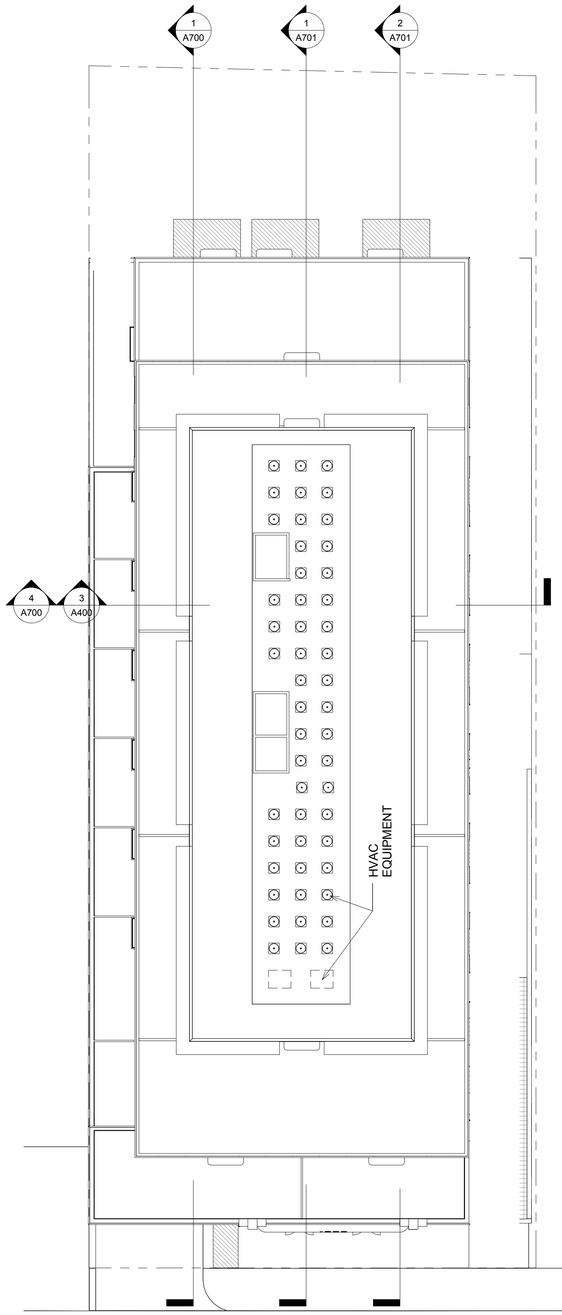
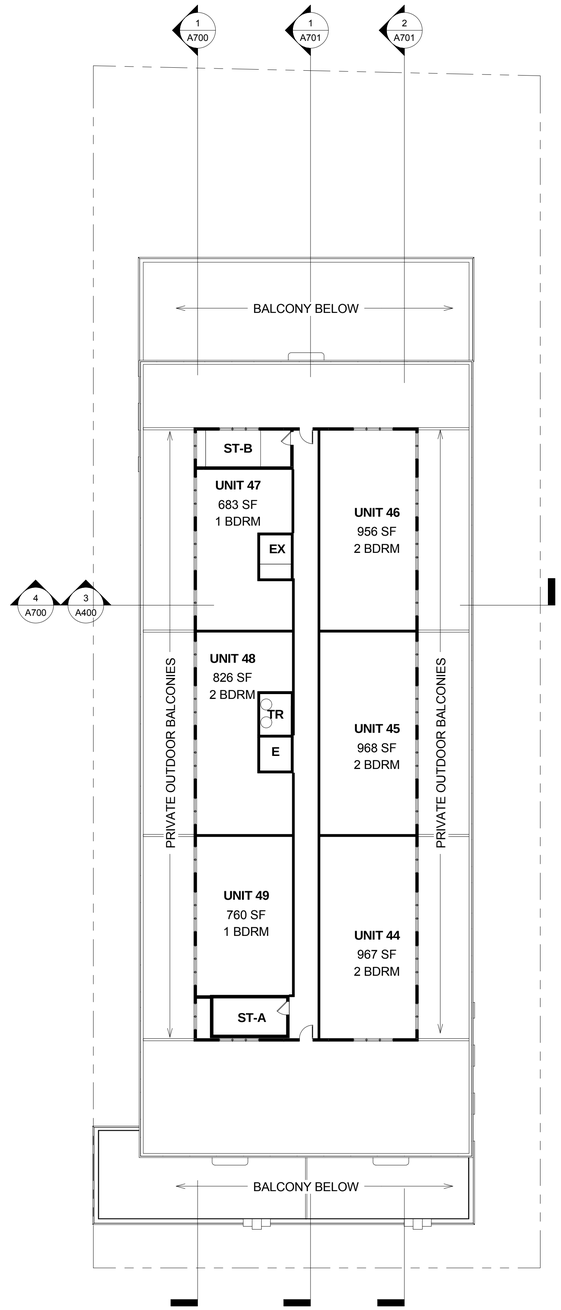
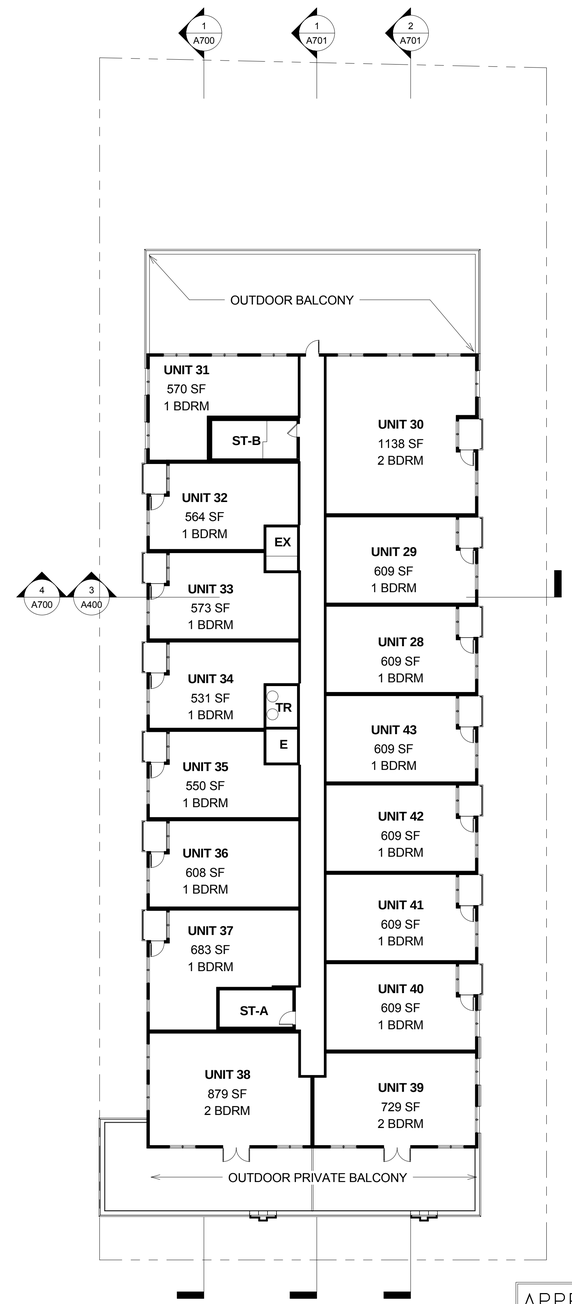


3 ROOF
1/16" = 1'-0"



2 FOURTH FLOOR
1/16" = 1'-0"



1 THIRD FLOOR
1/16" = 1'-0"

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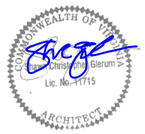

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FLOOR PLANS

SHEET NUMBER

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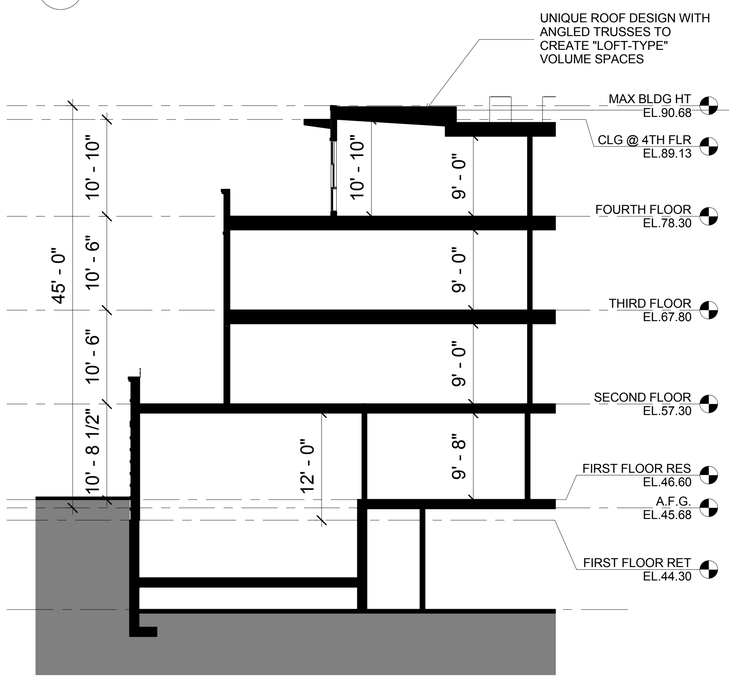
2 RIGHT SIDE ELEVATION (NORTH)

1/8" = 1'-0"

NOTE:
1. REFERENCE LANDSCAPE AND CIVIL FOR ALL SITE LAYOUT ELEMENTS.
2. REFERENCE LANDSCAPE FOR FENCE DESIGN.



3 BUILDING SECTION

1/8" = 1'-0"

1 FRONT ELEVATION (EAST)

1/8" = 1'-0"

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2 LEFT ELEVATION (SOUTH)
1/8" = 1'-0"

NOTE:
1. REFERENCE LANDSCAPE AND CIVIL FOR ALL SITE LAYOUT ELEMENTS.
2. REFERENCE LANDSCAPE FOR FENCE DESIGN.

1 REAR ELEVATION (WEST)
1/8" = 1'-0"

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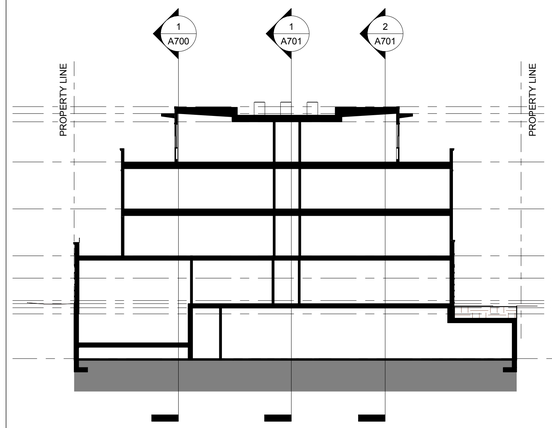

4 BUILDING SECTION
1/16" = 1'-0"

1 BUILDING SECTION
1/16" = 1'-0"

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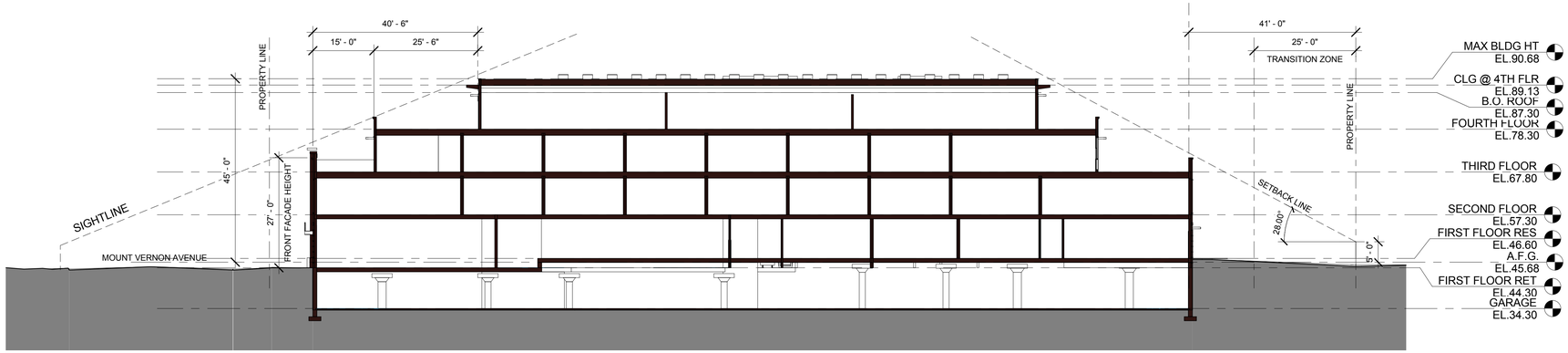
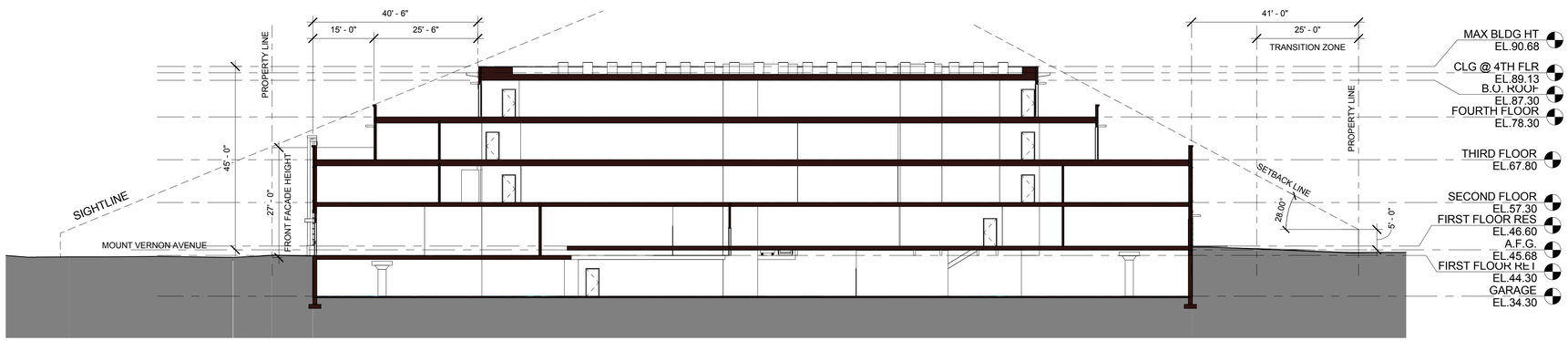


2 BUILDING SECTION

1/16" = 1'-0"



1 BUILDING SECTION

1/16" = 1'-0"

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