PRELIMINARY DEVELOPMENT SPECIAL USE PERMIT

1200 NORTH HENRY STREET

CITY OF ALEXANDRIA, VIRGINIA

AREA TABULATIONS

TOTAL SITE AREA = 0.8017 AC 34,921 SF

TOTAL AREA OF TAX PARCELS = 0.8017 AC 34,921 SF

TOTAL EXISTING IMPERVIOUS AREA = 0.7604 AC 33,122 SF

TOTAL PROPOSED IMPERVIOUS AREA = 0.7517 AC 32,746 SF

TOTAL DISTURBED AREA = 1.28 AC 55,756 SF

ENVIRONMENTAL SITE ASSESSMENT

1. THERE ARE NO TIDAL WETLANDS, TIDAL SHORES, TRIBUTARY STREAMS, FLOODPLAINS, CONNECTED TIDAL WETLANDS, ISOLATED WETLANDS, OR BUFFER AREAS ASSOCIATED WITH SHORES, STREAMS OR WETLANDS LOCATED ON THIS SITE. FURTHER THERE ARE NO WETLANDS PERMITS REQUIRED FOR THIS DEVELOPMENT PROJECT. ADDITIONALLY, THERE ARE NO KNOWN UNDERGROUND STORAGE TANKS OR AREAS OF SOIL OR GROUNDWATER CONTAMINATION ON THE SITE.

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 TO PUBLIC SAFETY OR A RELEASE TO THE ENVIRONMENT, THE ALEXANDRIA FIRE DEPARTMENT MUST BE CONTACTED IMMEDIATELY BY CALLING 911. THE TANK OR CONTAINERS REMOVAL, ITS CONTENTS, ANY SOIL CONTAMINATION AND RELEASES TO THE ENVIRONMENT WILL BE HANDLED IN ACCORDANCE WITH FEDERAL, STATE AND CITY REGULATIONS.

3. ALL WELLS TO BE DEMOLISHED IN THIS PROJECT, INCLUDING MONITORING WELLS, MUST BE CLOSED IN ACCORDANCE WITH VIRGINIA STATE WATER CONTROL BOARD (VSWCB) REQUIREMENTS. CONTACT ENVIRONMENTAL HEALTH SPECIALIST AND COORDINATE WITH THE ALEXANDRIA HEALTH DEPARTMENT AT 703-838-4400 EXT 267/255.

4. ALL CONSTRUCTION ACTIVITIES MUST COMPLY WITH THE ALEXANDRIA NOISE CONTROL CODE TITLE 11, CHAPTER 5, WHICH PERMITS CONSTRUCTION ACTIVITIES TO OCCUR BETWEEN THE FOLLOWING HOURS:
   - MONDAY THROUGH FRIDAY FROM 7am TO 6pm AND
   - SATURDAYS FROM 9am TO 6pm
   - NO CONSTRUCTION ACTIVITIES ARE PERMITTED ON SUNDAYS

   PILE DRIVING IS FURTHER RESTRICTED TO THE FOLLOWING HOURS:
   - MONDAY THROUGH FRIDAY FROM 9am TO 6pm AND
   - SATURDAYS FROM 10am TO 4pm

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 WHICH DISTURB GREATER THAN 1 ACRE, THEREFORE A VPDES PERMIT IS REQUIRED.

ARCHAEOLOGY NOTES

THE APPLICANT/DEVELOPER SHALL 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 LOCATED IN A COMBINED SEWER AREA.
11. THIS SITE DOES NOT CONTAIN AREAS PREVIOUSLY MAPPED AS MARINE CLAYS.

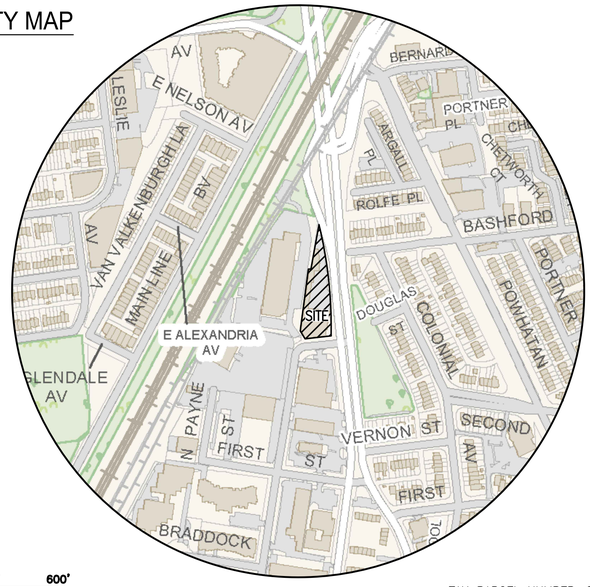
BUILDING CODE ANALYSIS:

USE:	MIXED USE (RES., GARAGE, RETAIL, DAYCARE)
USE GROUP:	R-2, S-2, M, A, B, E
TYPE OF CONSTRUCTION:	IIIA OVER IA
NUMBER OF STORIES:	7 STORIES
FLOOR AREA (GROSS):	139,635 SF
FLOOR AREA (NET):	123,493 SF
BUILDING FOOT PRINT AREA:	26,064 SF
BUILDING HEIGHT:	85.0 FT
FIRE SUPRESSION/DETECTION:	FULLY SPRINKLERED, NFPA 13

COMPLETE STREETS INFORMATION:

	NEW	UPGRADED
CROSSWALKS (NUMBER)	1	N/A
STANDARD	1	N/A
HIGH VISIBILITY	N/A	N/A
CURB RAMPS	2	3
SIDEWALKS (LF)	N/A	1,053
BICYCLE PARKING (NUMBER SPACES)	58	N/A
PUBLIC/VISITOR	14	N/A
PRIVATE/GARAGE	44	N/A
BICYCLE PATHS (LF)	N/A	N/A
PEDESTRIAN SIGNALS	N/A	N/A

VICINITY MAP



TAX PARCEL NUMBER: 044.03-05-01

PROJECT DESCRIPTION NARRATIVE

THE APPLICANT PROPOSES TO REDEVELOP THE SITE WITH A MIXED USE BUILDING THAT INCLUDES 115 DWELLING UNITS, 17,000 SQUARE FEET OF RETAIL, AND A 10,000 SQUARE FOOT DAY CARE CENTER.

REQUESTED APPLICATIONS AND MODIFICATIONS:

- MASTER PLAN AMENDMENT
- REZONING FROM OCM(50) TO CRMU-H
- DSUP FOR MULTIFAMILY RESIDENTIAL BUILDING WITH DAY CARE FACILITY AND GROUND FLOOR RETAIL
- MODIFICATION OF OPEN SPACE PURSUANT TO 11-416
- BONUS DENSITY AND HEIGHT FOR THE PROVISION OF AFFORDABLE HOUSING PURSUANT TO SECTION 7-700
- MODIFICATION OF HEIGHT TO SETBACK RATIO (SECTION 6-403) FOR NORTH FAYETTE STREET
- ENCROACHMENT OF CANOPY INTO THE RIGHT-OF-WAY

OWNER/DEVELOPER

OWNER:
1200 N HENRY, LLC
P. O. BOX 1924
ALEXANDRIA, VA 22313
INSTRUMENT #: 160015497

DEVELOPER:
AVANTI HOLDINGS GROUP, LLC
1605 KING STREET, SUITE 3
ALEXANDRIA, VA 22314
(202) 834-4355
CONTACT: TEDDY KIM

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

ATTORNEY:
WALSH, COLUCCI, LUBELEY & WALSH, PC.
2200 CLARENDON BLVD, SUITE 1300
ARLINGTON, VA 22201
(703) 528-4700 X5413
CONTACT: M. CATHARINE PUSKAR

ARCHITECT:
DAVIS, CARTER, SCOTT, LTD
8614 WESTWOOD CENTER DRIVE
SUITE 800
TYSONS, VA 22182
(703) 556-9275
CONTACT: JASNA BIJELIC

LANDSCAPE ARCHITECT:
PARKER RODRIGUEZ, INC.
101 N. UNION STREET
SUITE 320
ALEXANDRIA, VA 22314
(703) 548-5010
CONTACT: TRINI RODRIGUEZ

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PLANTING DETAILS	L1.04

ZONING TABULATIONS

*1. ZONE OF SITE: EXISTING: OCM(50) PROPOSED: CRMU-H

2. USE: EXISTING: INDUSTRIAL FLEX PROPOSED: MIXED USE RESIDENTIAL/RETAIL/DAY CARE

3. TOTAL SITE AREA: 34,921 SF OR 0.8017 AC MINIMUM LOT AREA: N/A

*4. OPEN SPACE REQUIRED: 40%

OPEN SPACE PROVIDED:
GROUND LEVEL: 5,825 SQ. FT. OR 16.6%
ABOVE GRADE: 5,780 SQ. FT. OR 16.5%

TOTAL OPEN SPACE PROVIDED: 11,605 SQ. FT. OR 33.2% *ALL OPEN SPACE IS USABLE SPACE

5. NUMBER OF DWELLING UNITS: ALLOWED: N/A PROPOSED: 115
MARKET RATE: 1 BEDROOM: 80 2 BEDROOM: 24
AFFORDABLE UNITS: 1 BEDROOM: 9 2 BEDROOM: 2

6. UNITS PER ACRE: ALLOWED: N/A PROPOSED: 143

7. FLOOR AREA: ALLOWED: N/A PROPOSED:

	GROSS	NET
RESIDENTIAL	111,568 SF	96,493 SF
RETAIL	17,685 SF	17,000 SF
TOTAL	129,253 SF	113,493 SF
GARAGE	59,000 SF	N/A
DAY CARE EXCLUSION - 10,000 SF PER SECTION 1-400(B)(3)(f)		

*8. FLOOR AREA RATIO:

PERMITTED	2.5 WITH SUP
BONUS	30% PER SECTION 7-700 FOR RESIDENTIAL
PROPOSED	113,493 / 34,921 = 3.25

9. AVERAGE FINISHED GRADE: 47.15

10. BUILDING HEIGHT: PERMITTED: 70 FT PROPOSED: 85.0 FT

11. YARDS: REQUIRED: N/A PROPOSED:

YARD	MINIMUM
NORTH	N/A
EAST	0.0'
SOUTH	2.5'
WEST	3.3

12. FRONTAGE: REQUIRED: N/A PROPOSED: 468 FT (N HENRY ST), 106 FT (N FAYETTE ST)

13. PARKING: **REQUIRED:** RESIDENTIAL (MARKET RATE)
NUMBER OF BEDROOMS: 128
PARKING RATIO: 0.68
0.8* - [0.8* X (0.10**+0.05***)]

*RATIO FOR BRADDOCK RD METRO WALKSHED (0.8 SPACES/BR)
**CREDIT FOR WALKSCORE OF 90-100 (10%)
***CREDIT FOR LOCATION ON 4 BUS ROUTES (5%)

0.68 SPACES/BR = 0.68 X 128: 88 SPACES

RESIDENTIAL (ADU)
NUMBER OF UNITS: 11
PARKING RATIO: 0.5625
0.75-[0.75 X (0.10*+0.10**+0.05***)]

*CREDIT FOR BRADDOCK RD METRO WALKSHED (10%)
**CREDIT FOR WALKSCORE OF 90-100 (10%)
***CREDIT FOR LOCATION ON 4 BUS ROUTES (5%)

0.5625 SPACES/UNIT = 0.5625 X 11: 7 SPACES

TOTAL RESIDENTIAL PARKING REQUIRED: 88 + 7: 95 SPACES

RETAIL AND DAY CARE
MIN. 0.25 SPACE/1,000 SF (27,000/1,000*0.25): 7 SPACES MINIMUM
MAX. 3 SPACE/1,000 SF (27,000/1,000*3): 81 SPACES MAXIMUM
TOTAL RETAIL PARKING REQUIRED: 7 SPACES TO 81 SPACES

TOTAL PARKING REQUIRED MINIMUM: 102 SPACES
TOTAL PARKING REQUIRED MAXIMUM: 176 SPACES

PROVIDED: RESIDENTIAL:
COMPACT (8'X16') 46 SPACES
STANDARD (9'X18.5') 47 SPACES
ACCESSIBLE 4 SPACES
TOTAL RESIDENTIAL PARKING PROVIDED: 97 SPACES

RETAIL/DAY CARE:
COMPACT (8'X16') 6 SPACES
STANDARD (9'X18.5') 18 SPACES
ACCESSIBLE 2 SPACES
TOTAL RETAIL/DAYCARE PARKING PROVIDED: 26 SPACES

FLEX PARKING:
COMPACT (8'X16') 6 SPACES
STANDARD (9'X18.5') 8 SPACES
TOTAL RETAIL/DAYCARE PARKING PROVIDED: 14 SPACES

TOTAL PARKING PROVIDED IN GARAGE: 137 SPACES

14. LOADING SPACES: REQUIRED: 1 PROPOSED: 1

15. TRIP GENERATION: EXISTING: 1,943 VPD PROPOSED: 3,043 VPD (PER ITE STANDARDS)

16. BICYCLE SPACES: REQUIRED: 48 PROPOSED: 58

* SEE REQUESTED APPLICATIONS/MODIFICATIONS FOR DETAILED INFORMATION (THIS SHEET)

RCF FIELDS & 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: MAY 2018 DRAWN: BD
REV:

COMMONWEALTH OF VIRGINIA
ANDREA SPRUCH
Lic. No. 047863
MAY 4, 2018
PROFESSIONAL ENGINEER

REVISION APPROVED BY

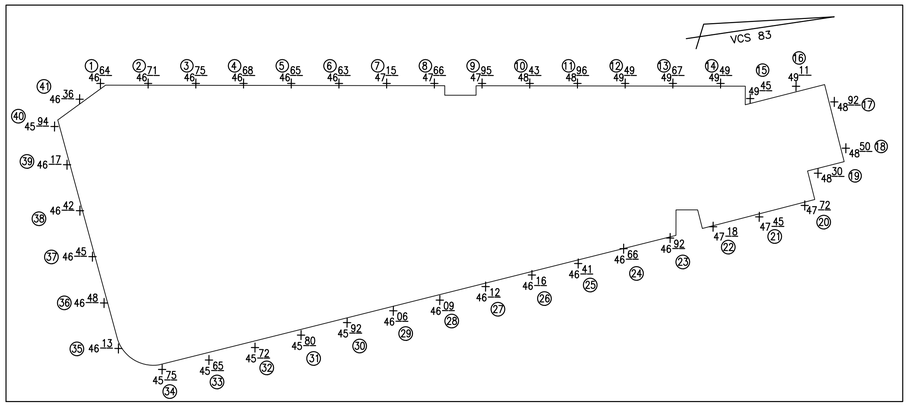
NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

PRELIMINARY DEVELOPMENT SPECIAL USE PERMIT
1200 NORTH HENRY STREET
CITY OF ALEXANDRIA, VIRGINIA

SHEET NAME: COVER SHEET

APPROVED
SPECIAL USE PERMIT NO. 2017-0020
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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AVERAGE FINISHED GRADE

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0' 30' 60'

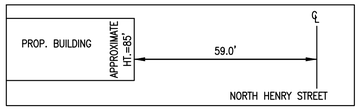
1200 NORTH HENRY STREET	
SPOT	ELEVATION
1	46.64
2	46.71
3	46.75
4	46.68
5	46.65
6	46.63
7	47.15
8	47.66
9	47.95
10	48.83
11	48.96
12	49.49
13	49.67
14	49.49
15	49.45
16	49.11
17	48.92
18	48.50
19	48.30
20	47.72
21	47.45
22	47.18
23	46.92
24	46.66
25	46.41
26	46.16
27	46.12
28	46.09
29	46.06
30	45.92
31	45.80
32	45.72
33	45.65
34	45.75
35	46.13
36	46.48
37	46.45
38	46.42
39	46.17
40	45.94
41	46.36
Average: 47.15	

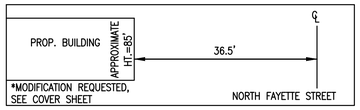
SECTION 6-403 COMPLIANCE NOTE:

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 DETAILS BELOW FOR SECTION SHOWING COMPLIANCE.

SECTION 6-403 DETAILS:

NOT TO SCALE

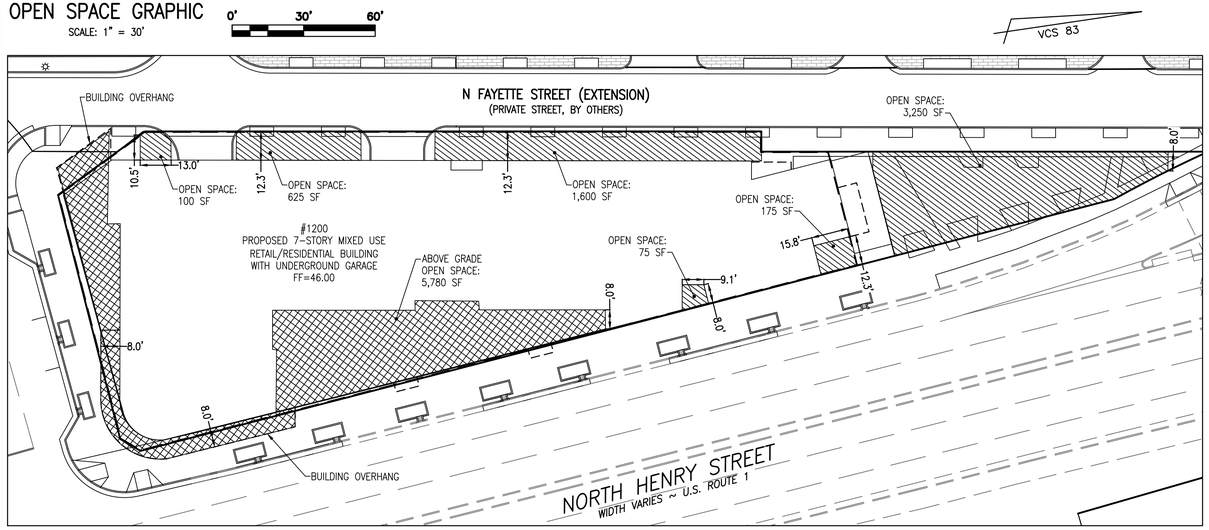




OPEN SPACE GRAPHIC

SCALE: 1" = 30'

0' 30' 60'



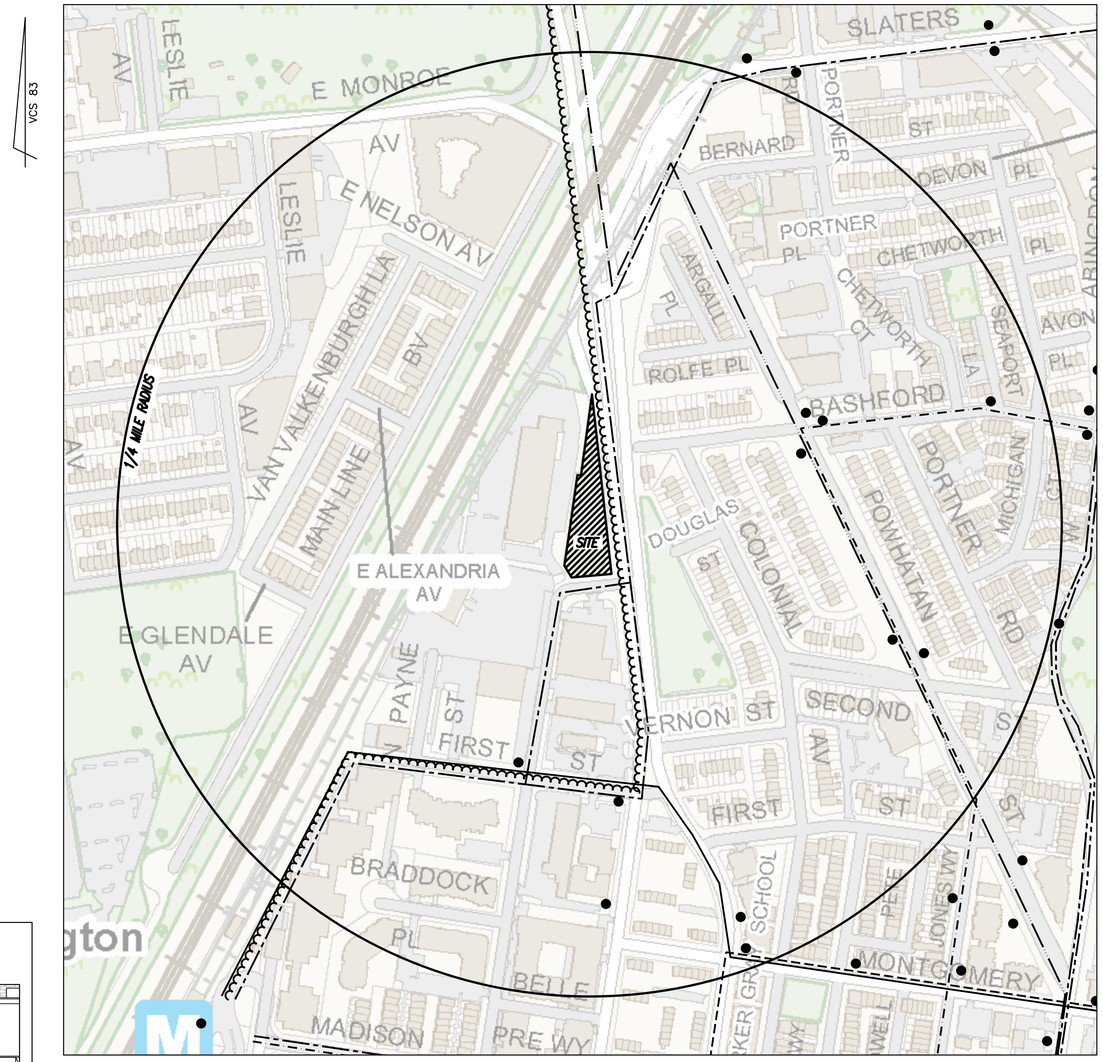
OPEN SPACE REQUIRED: 40% (13,968 SF)

GROUND LEVEL OPEN SPACE PROVIDED: 5,825 SF OR 16.6%
ABOVE GRADE OPEN SPACE PROVIDED: 5,780 SF OR 16.5%
TOTAL OPEN SPACE PROVIDED: 11,605 SF OR 33.2%

*ALL OPEN SPACE IS USABLE SPACE

GROUND LEVEL OPEN SPACE

ABOVE GRADE OPEN SPACE



CONTEXTUAL MAP

SCALE: 1" = 200'

GRAPHIC SCALE

200 0 100 200 400 800

(IN FEET)
1 inch = 200 ft.

LEGEND:

- BUS STOP
- DASH ROUTE AT2
- DASH ROUTE AT4
- DASH ROUTE AT5
- DASH ROUTE AT8
- WMATA ROUTE 10E
- WMATA ROUTE 11Y
- METROWAY

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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 SPECIFICATIONS OF THE CITY OF ALEXANDRIA.

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APPROVED
SPECIAL USE PERMIT NO. 2017-0020

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
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(703) 549-6422

COMMONWEALTH OF VIRGINIA
ANDREA SPRUCH
Lic. No. 047863
JUNE 21, 2018
PROFESSIONAL ENGINEER

PRELIMINARY DEVELOPMENT SPECIAL USE PERMIT

1200 NORTH HENRY STREET

CITY OF ALEXANDRIA, VIRGINIA

DATE	REVISION

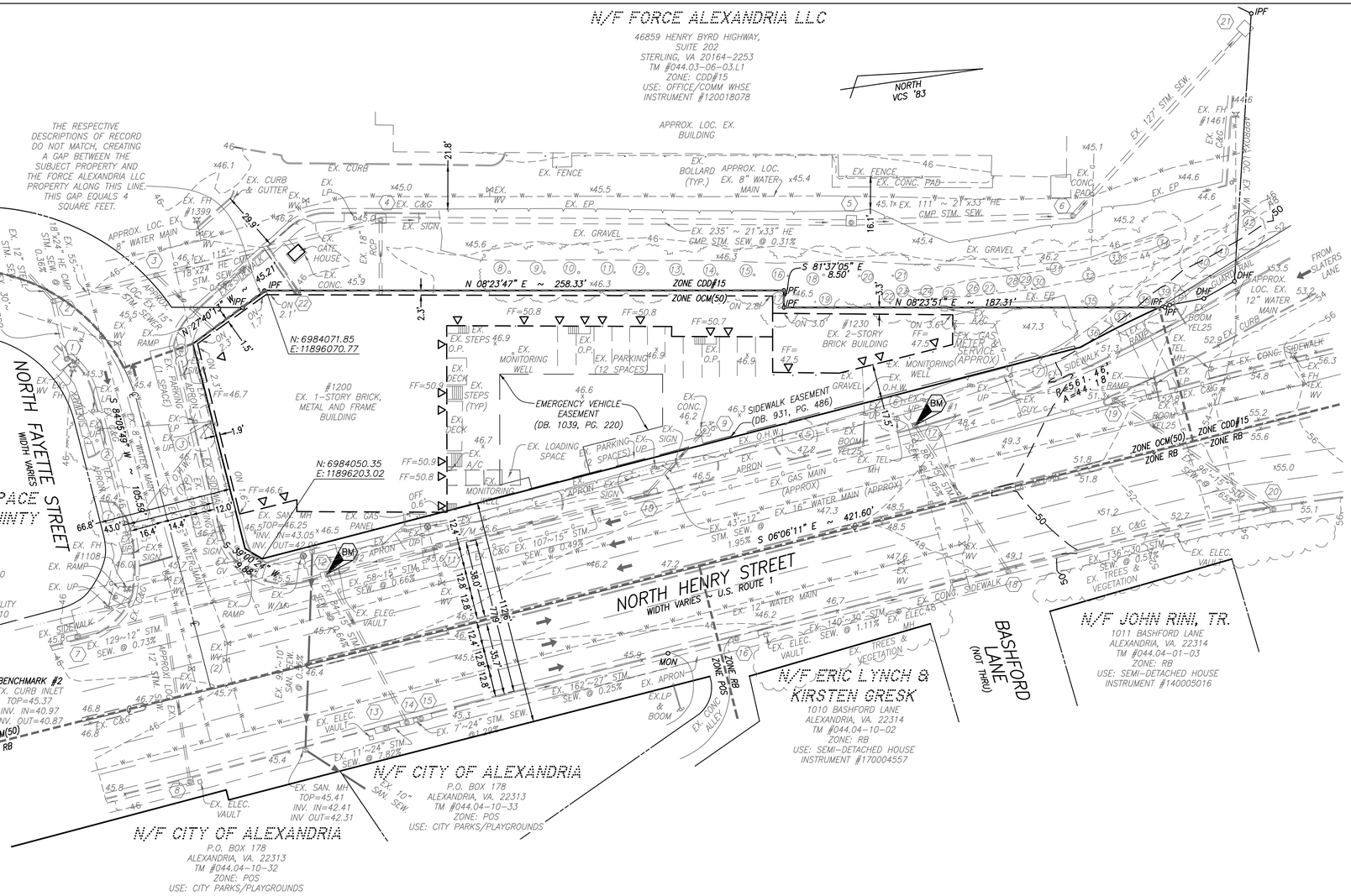
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DATE: MAY 2018

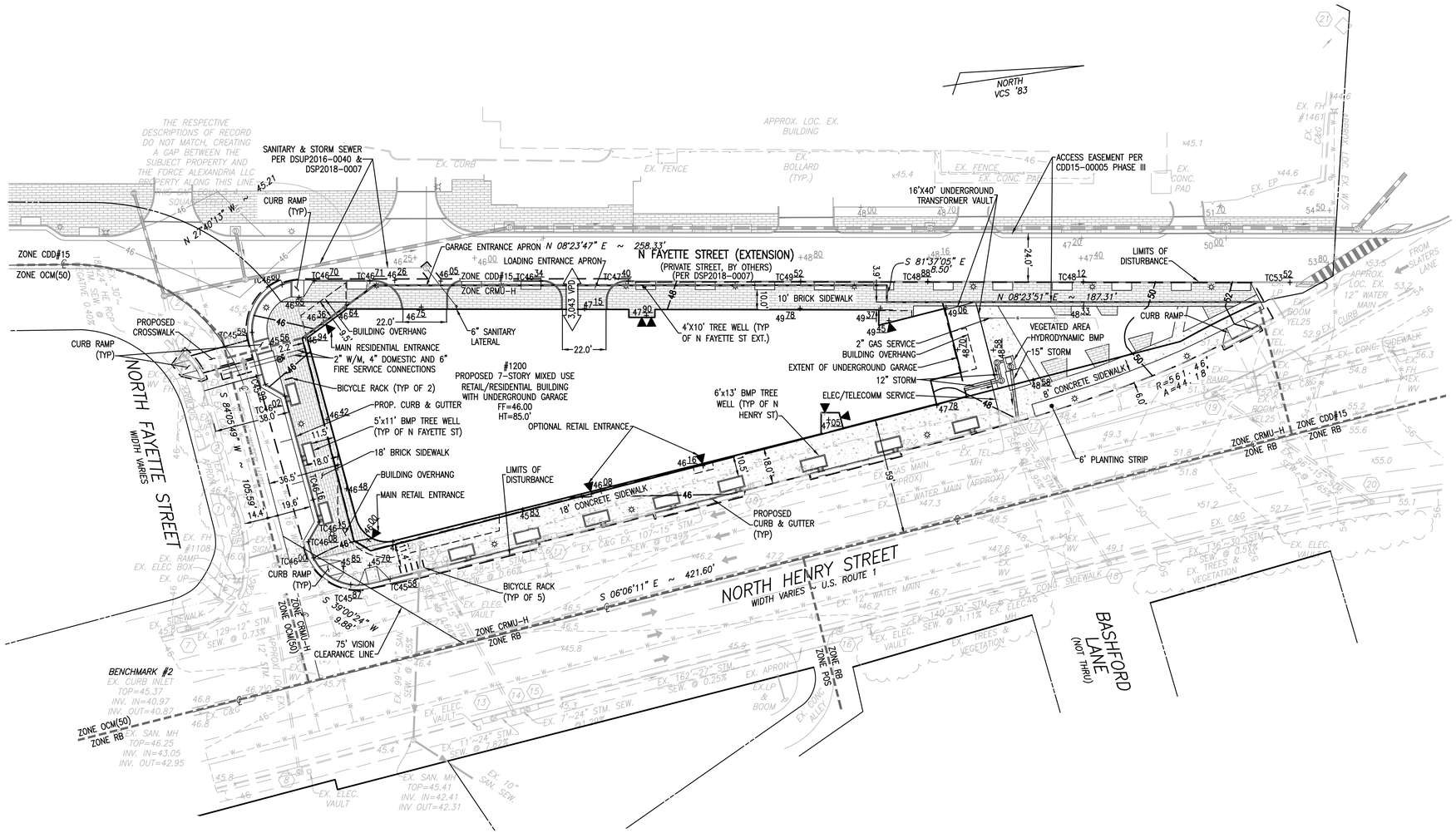
CONTEXTUAL PLAN

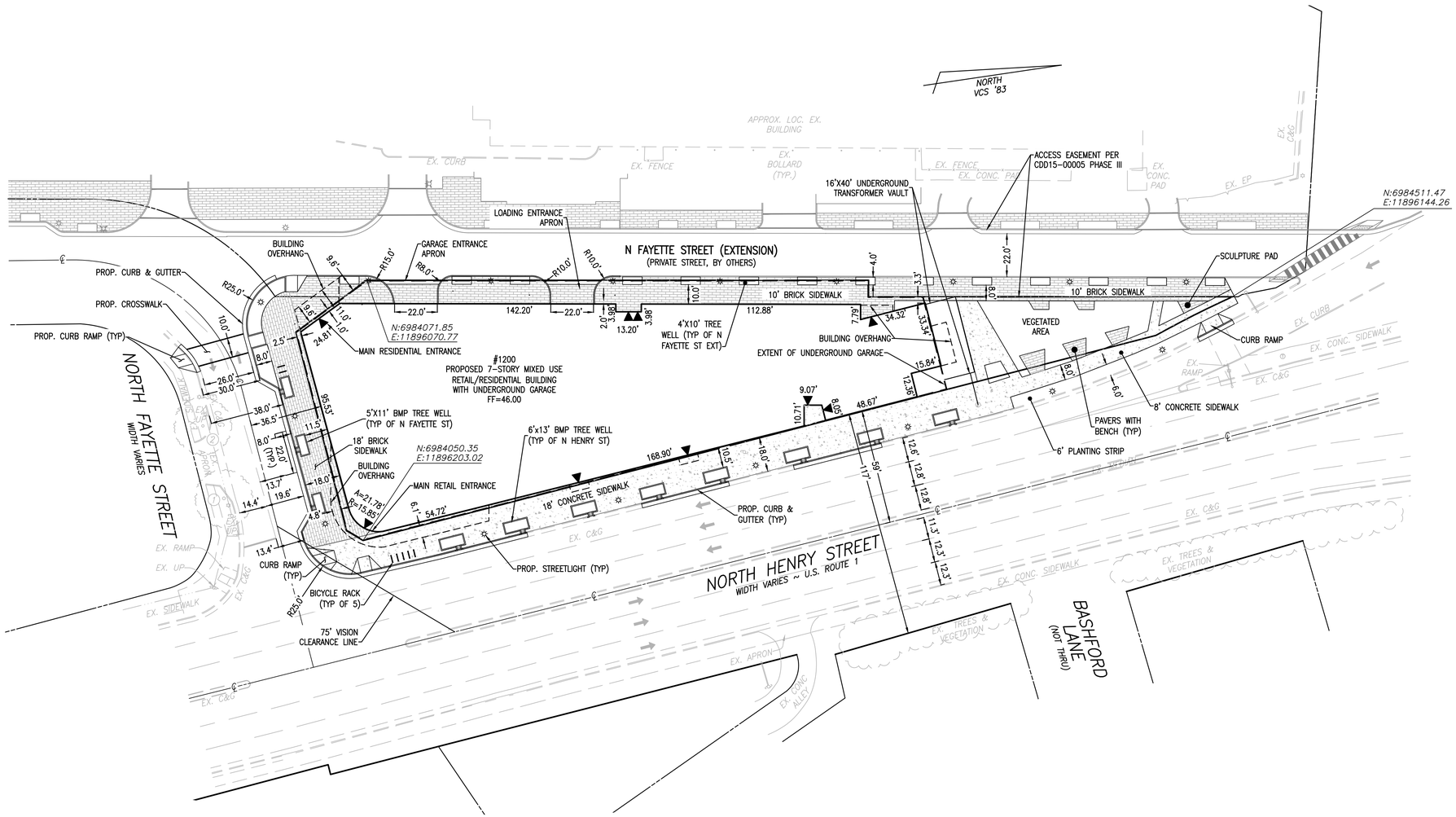
SHEET 2 OF 13

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Wed, Jun 20 2018 - 11:54pm


N/F FORCE ALEXANDRIA LLC
46859 HENRY BYRD HIGHWAY, SUITE 202
STERLING, VA 20164-2253
TM #044.03-06-03.L1
ZONE: CDD#15
USE: OFFICE/COMM WHSE
INSTRUMENT #120018078
NORTH VCS '83
APPROX. LOC. EX. BUILDING
THE RESPECTIVE DESCRIPTIONS OF RECORD DO NOT MATCH, CREATING A GAP BETWEEN THE SUBJECT PROPERTY AND THE FORCE ALEXANDRIA LLC PROPERTY ALONG THIS LINE. THIS GAP EQUALS 4 SQUARE FEET.
EX. CURB & GUTTER
EX. CURB
EX. FENCE
EX. BOLLARD (TYP.)
APPROX. LOC. EX. 8" WATER MAIN
EX. 8" WATER MAIN
EX. CONC. PAD
EX. 127 STM. SEW.
EX. FH #1461
EX. C&G
EX. 123' 30" STORM SEWER
EX. FH #1399
EX. 115' ~ 18"x24" HE CMP STM. SEW. @ 0.36%
EX. 111' ~ 21"x33" HE CMP STM. SEW.
EX. GATE HOUSE
EX. CONC. 45.9
EX. 18" RCP
EX. GRAVEL
EX. 235' ~ 21"x33" HE CMP STM. SEW. @ 0.31%
EX. 55' ~ 18"x24" HE CMP STM. SEW. @ 0.36%
EX. 30" ~ 18" HE RCP STM. SEW. @ 0.40%
EX. 12" STORM SEWER
APPROX. LOC. EX. 8" WATER MAIN
APPROX. LOC. EX. 15" STM. SEWER
EX. WV
EX. RAMP
EX. LP
EX. CURB INLET
EX. STEPS
EX. DECK
EX. O.P.
EX. MONITORING WELL
EX. PARKING (12 SPACES)
EX. LOADING SPACE
EX. PARKING (1 SPACE)
EX. SIGN
EX. A/C
EX. UP
EX. GAS PANEL
EX. SAN MH
EX. GAS MAIN (APPROX)
EX. 16" WATER MAIN (APPROX)
EX. 12" WATER MAIN
EX. 107'~15" STM. SEW. @ 0.49%
EX. 58'~15" STM. SEW. @ 0.66%
EX. 129'~12" STM. SEW. @ 0.73%
EX. 162'~22" STM. SEW. @ 0.25%
EX. 11'~24" STM. SEW. @ 7.82%
EX. 136'~30" STM. SEW. @ 0.51%
EX. 140'~30" STM. SEW. @ 1.11%
EX. 10" SAN. SEW.
EX. TREES & VEGETATION
EX. ELEC. VAULT
EX. ELEC.
EX. CONC. ALLEY
EX. CONC. SIDEWALK
EX. 2-STORY BRICK BUILDING
EX. GAS METER & SERVICE (APPROX)
EX. OVERHEAD UTILITY LINES
EX. GUY
EX. TEL. MH
EX. TEL. VAULT
EX. ELEC. MH
EX. ELEC. VAULT
EX. BOOM YEL25
EX. CONC. SIDEWALK
EX. CONC. CURB
EX. FH
EX. WV
EX. SIDEWALK
EX. RAMP
EX. UP
EX. SIGN
EX. W/M
EX. GV
EX. APRON
EX. C&G
EX. LP & BOOM
EX. APRON
EX. SAN. MH TOP=45.41 INV. IN=42.41 INV OUT=42.31
EX. 10" SAN. SEW.
EX. ELEC. VAULT
EX. TRAFFIC SIGNAL BOX
EX. TRAFFIC SIGNAL MH
EX. TRAFFIC SIGNAL VAULT
EX. TRAFFIC SIGNAL POLE
EX. TRAFFIC SIGNAL CONTROLLER


N FAYETTE STREET (EXTENSION)
(PRIVATE STREET, BY OTHERS)
(PER DSP2018-0007)
NORTH FAYETTE STREET
WIDTH VARIES
NORTH HENRY STREET
WIDTH VARIES
U.S. ROUTE 1
BASHFORD LANE
(NOT THRU)
#1200
PROPOSED 7-STORY MIXED USE
RETAIL/RESIDENTIAL BUILDING
WITH UNDERGROUND GARAGE
FF=46.00
HT=85.0'
SANITARY & STORM SEWER
PER DSUP2016-0040 &
DSP2018-0007
ACCESS EASEMENT PER
CDD15-00005 PHASE III
16'X40' UNDERGROUND
TRANSFORMER VAULT
LIMITS OF
DISTURBANCE
GARAGE ENTRANCE APRON
LOADING ENTRANCE APRON
10' BRICK SIDEWALK
8' CONCRETE SIDEWALK
18' CONCRETE SIDEWALK
4'X10' TREE WELL (TYP
OF N FAYETTE ST EXT.)
6'x13' BMP TREE
WELL (TYP OF N
HENRY ST)
5'x11' BMP TREE WELL
(TYP OF N FAYETTE ST)
VEGETATED AREA
HYDRODYNAMIC BMP
6' PLANTING STRIP
OPTIONAL RETAIL ENTRANCE
PROPOSED
CROSSWALK
CURB RAMP
(TYP)
BUILDING OVERHANG
MAIN RESIDENTIAL ENTRANCE
2" W/M, 4" DOMESTIC AND 6"
FIRE SERVICE CONNECTIONS
BICYCLE RACK (TYP OF 2)
PROP. CURB & GUTTER
6" SANITARY
LATERAL
MAIN RETAIL ENTRANCE
PROPOSED
CURB & GUTTER
(TYP)
BICYCLE RACK
(TYP OF 5)
75' VISION
CLEARANCE LINE
2" GAS SERVICE
15" STORM
EXTENT OF UNDERGROUND GARAGE
12" STORM
ELEC/TELECOMM SERVICE
ZONE CDD#15
ZONE OCM(50)
ZONE CRMU-H
ZONE RB
ZONE POS
N 21°10'15" W ~ 45.21'
S 84°05'49" W ~ 105.59'
S 06°06'11" E ~ 421.60'
S 39°00'54" W 9.85'
N 08°23'47" E ~ 258.33'
S 81°37'05" E 8.50'
N 08°23'51" E ~ 187.31'
R=561.16'
A=4°44'18"
BENCHMARK #2
EX. CURB INLET
TOP=45.37
INV. IN=40.97
INV. OUT=40.87
EX. SAN. MH
TOP=46.25
INV. IN=43.05
INV. OUT=42.95
EX. SAN. MH
TOP=45.41
INV. IN=42.41
INV OUT=42.31
EX. 10" SAN. SEW.
EX. ELEC. VAULT
EX. ELEC. BOX
EX. BOLLARD (TYP.)
EX. CONG. PAD
EX. FH #1468
EX. FH #1105
EX. FH #1251
EX. BOOM YEL25
EX. LP & BOOM
EX. TREES & VEGETATION
EX. CONG. SIDEWALK
EX. WATER MAIN (APPROX)
EX. GAS MAIN (APPROX)
EX. TEL MH
EX. ELEC MH
EX. ELEC VAULT
EX. ELEC. MH
EX. ELEC. VAULT
EX. 12" WATER MAIN
EX. 16"-12" STM. SEW. @ 0.73%
EX. 12"-21" STM. SEW. @ 0.25%
EX. 7"-24" STM. SEW.
EX. 140'-50" STM. SEW. @ 1.11%
EX. 136'-50" STM. SEW. @ 0.51%
EX. 162'-21" STM. SEW. @ 0.99%
EX. 129'-12" STM. SEW. @ 0.73%
EX. C&G
EX. CURB
EX. FENCE
EX. EP
EX. SIDEWALK
EX. RAMP
EX. UP
EX. SAN. MH
EX. SAN. SEW.
EX. WV
EX. W
EX. G
EX. T
EX. E
EX. X
EX. D
EX. S
EX. OHW
EX. LIGHT POLE
EX. SIGN
EX. BUILDING
EX. CONC. PAD
EX. CONC. SIDEWALK
EX. ELEC. VAULT
EX. ELEC. SEW.
EX. TREES & VEGETATION
EX. LP & BOOM
EX. BOOM YEL25



CIVIL LEGEND:

ITEM	EXISTING	PROPOSED
CURB & GUTTER		
SIDEWALK	WALK	WALK
FIRE HYDRANT		
STRUCTURES	D	D
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	E	E
SPOT ELEVATIONS	+ 124.5	+ 124.5
CONTOURS	124	124
BUILDING ENTRANCES		
UTILITY POLE		
LIGHT POLE		
LIMITS OF DISTURBANCE		

TEXT LEGEND:

°=DEGREES
'=MINUTES (OR FEET)
"=SECONDS (OR INCHES)
%=PERCENT
□=SQUARE FEET
#=NUMBER
@=AT
A=ARC
AC.=ACRE
A/C=AIR CONDITIONER
AD=AREA DRAIN
APPROX.=APPROXIMATE(LY)
B.C.=BACK OF CURB
BF=BASEMENT FLOOR
BLDG.=BUILDING
BOL.=BOLLARD
BW=BOTTOM OF WALL
CATV=CABLE TV UTILITY
CL=CLASS
C/L=CENTERLINE
CLR=CLEARANCE
COL=COLUMN
CMP=CORRUGATED METAL PIPE
C.I.=CURB INLET
C.O.=CLEAN OUT
C&G=CURB & GUTTER
DI=DROP INLET
D.S.=DOWNSPOUT
DU=DWELLING UNIT
E=EAST
EX.=EXISTING
FDC=FIRE DEPT. CONNECTION
FF=FINISHED FLOOR
FH=FIRE HYDRANT
FO=FIBER OPTIC
FT.=FEET
GL=GROUND LIGHT
G/V=GAS VALVE
G/M=GAS METER
H.C.=HEADER CURB
HDCP.=HANDICAP
HDPE=HIGH DENSITY POLYETHYLENE
HVAC=HEATING, VENTILATION, AIR CONDITIONING
IPF=IRON PIPE FOUND
IPS=IRON PIPE SET
INV.=INVERT
LOC.=LOCATION
LP=LIGHT POLE
MAX.=MAXIMUM
MH=MANHOLE
MIN.=MINIMUM
MISC.=MISCELLANEOUS
MPH=MILES PER HOUR
NAD=NORTH AMERICAN DATUM
NTS=NOT TO SCALE
N=NORTH
OHW=OVERHEAD WIRE
OPT.=OPTIONAL
PF=PLANTER BOX FILTER
PP=POWER POLE
PVC=POLYVINYL CHLORIDE
R=RADIUS
RCP=REINFORCED CONCRETE PIPE
REQ'D=REQUIRED
RET.=RETAINING
R/W=RIGHT-OF-WAY
S=SOUTH
SAN.=SANITARY
SQ.=SQUARE
SQ.FT.=SQUARE FEET
STM.=STORM
TBR=TO BE REMOVED
TBS=TO BE SAVED
TW=TOP OF WALL
TYP=TYPICAL
UP=UTILITY POLE
VCS=VIRGINIA COORDINATE SYSTEM
VERT=VERTICAL
W=WEST
W.S.E.=WATER SURFACE ELEVATION
WM=WATER MAIN
W/V=WATER VALVE
W/M=WATER METER
W.W.=WINDOW WELL

HATCH LEGEND

BRICK SIDEWALK

CONCRETE SIDEWALK

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
0' 15' 30' 60'
1" = 30'

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ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF ALEXANDRIA.

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APPROVED
SPECIAL USE PERMIT NO. 2017-0020

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
JUNE 21, 2018
PROFESSIONAL ENGINEER

PRELIMINARY DEVELOPMENT SPECIAL USE PERMIT

1200 NORTH HENRY STREET

CITY OF ALEXANDRIA, VIRGINIA

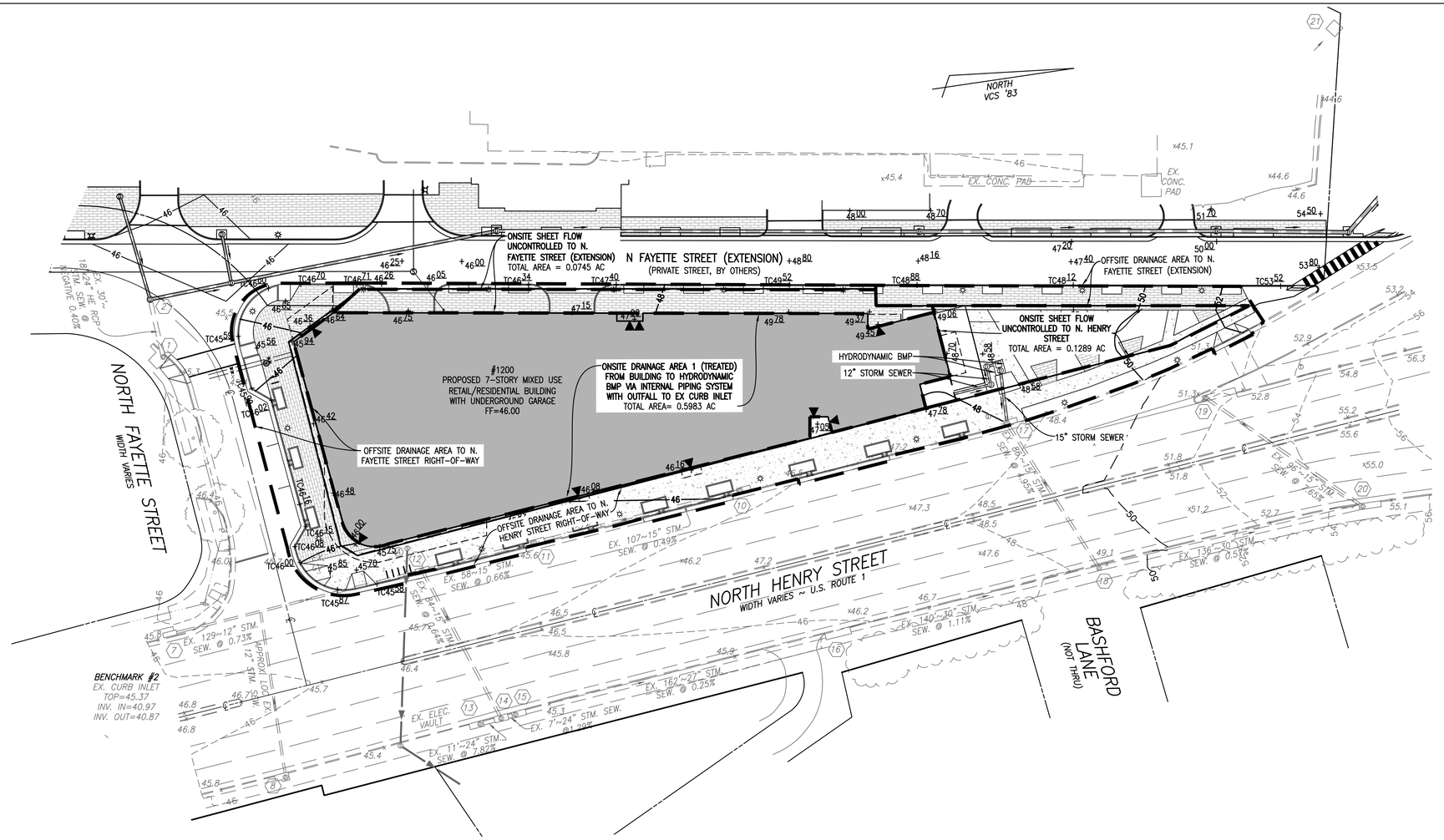
DATE	REVISION

DESIGN: ACS
DRAWN: BAD
SCALE: 1"=30'
DATE: MAY 2018

SITE DIMENSION PLAN

SHEET 5 OF 13
FILE: 17-181

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

PRE-DEVELOPMENT CONDITIONS:
THIS 0.8017 ACRE PARCEL IS LOCATED IN THE POTOMAC RIVER WATERSHED. IN EXISTING CONDITIONS, THE SITE IS UTILIZED AS A SHOPPING CENTER. THE MAJORITY OF SITE DRAINAGE IS DIRECTED IN AN EASTERLY DIRECTION TOWARDS THE N HENRY STREET RIGHT-OF-WAY WHERE IT IS COLLECTED BY CURB INLETS WITHIN THE RIGHT-OF-WAY AND CONVEYED IN A NORTHERLY DIRECTION BY THE CITY MAINTAINED STORM SEWER SYSTEM UNTIL IT OUTFALLS TO THE POTOMAC GREEN STORMWATER POND AND ULTIMATELY TO THE POTOMAC RIVER.

POST-DEVELOPMENT CONDITIONS:
THIS PROJECT PROPOSES THE CONSTRUCTION OF A 7 STORY RETAIL AND RESIDENTIAL MIXED USE BUILDING WITH UNDERGROUND PARKING AND IMPROVED STREETSCAPE/OPEN SPACE. IN PROPOSED CONDITIONS, RUNOFF ASSOCIATED WITH ALL BUILDING ROOF TOPS WILL BE DIRECTED BY AN INTERNAL STORMWATER CONVEYANCE SYSTEM TO AN ON-SITE HYDRODYNAMIC BMP WITH AN OUTFALL TO AN EXISTING CURB INLET WITHIN THE PUBLIC RIGHT-OF-WAY. ALL OTHER RUNOFF FROM THE SITE WILL BE DIRECTED VIA SHEET FLOW UNTIL BEING COLLECTED BY CURB INLETS LOCATED WITHIN EITHER THE N. HENRY STREET RIGHT-OF-WAY, N. FAYETTE STREET RIGHT-OF-WAY, OR N. FAYETTE STREET (EXTENSION).

CONCLUSION
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 FOR THE 10-YEAR 24-HOUR STORM EVENT (DUE TO ROUNDING THE CALCULATIONS SHOW NO CHANGE; SEE COMPUTATIONS PROVIDED ON THIS SHEET). 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.

SINCE THIS SYSTEM EXPERIENCES LOCALIZED FLOODING IN EXISTING CONDITIONS (SEE STORM SEWER AND HYDRAULIC GRADE LINE COMPUTATIONS ON SHEET 10) AND THE PEAK FLOW RATE IS BEING REDUCED WITH THE PROPOSED DEVELOPMENT (SEE CALCULATIONS PROVIDED ON THIS SHEET), THE FLOOD PROTECTION FOR THIS SITE IS IN COMPLIANCE WITH SECTION 13-109F(2)(b)(ii). DUE TO SITE DRAINAGE OUTFALLING TO AN EXISTING UNDERSIZED STORM SEWER SYSTEM, NO OFFSITE IMPROVEMENTS TO THE SYSTEM ARE REQUIRED.

PER SECTION 13-109F-2(d)(i), A DRAINAGE SHED BOUNDARY ANALYSIS OF THE SITE OUTFALL WITH REDUCED POST-DEVELOPMENT RUNOFF RATE FOR THE 10-YEAR, 24-HOUR STORM IS PROVIDED ON SHEET 10. THE PROJECT POST-DEVELOPMENT RUNOFF WILL NOT EXACERBATE ANY EXISTING DOWNSTREAM CAPACITY CONDITIONS WITHIN THE LIMITS OF ANALYSIS.

BASED ON THE ABOVE MENTIONED JUSTIFICATIONS AND COMPUTATIONS, THE STORMWATER MANAGEMENT CRITERIA FOR THE PROPOSED DEVELOPMENT COMPLIES WITH THE CHANNEL PROTECTION AND FLOOD PROTECTION REQUIREMENTS PER CITY CODE SECTION 13-109F.

STORMWATER RUNOFF COMPUTATIONS

I. PROJECT AREA = 34,921 SQ.FT. OR 0.8017 ACRES
EXISTING IMPERVIOUS AREA = 33,123 SQ.FT. OR 0.7604 ACRES
PROPOSED IMPERVIOUS AREA = 32,746 SQ.FT. OR 0.7517 ACRES

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

II. WEIGHTED CURVE NUMBER (CN) CALCULATIONS:
CN PRE-DEVELOPMENT = (0.7604 X 98 + 0.0413 X 80) ÷ 0.8017 = 97
CN POST-DEVELOPMENT = (0.7517 X 98 + 0.0500 X 80) ÷ 0.8017 = 97

III. PRE-DEVELOPMENT PEAK DISCHARGES: (Tc = 5 MINS.)
PEAK Q_2 PRE-DEVELOPMENT = 2.44 cfs
PEAK Q_{10} PRE-DEVELOPMENT = 4.03 cfs

IV. POST-DEVELOPMENT PEAK DISCHARGES (Tc = 5 MINS.)
PEAK Q_2 POST-DEVELOPMENT = 2.44 cfs
PEAK Q_{10} POST-DEVELOPMENT = 4.03 cfs

Q_2 INCREASE = 0.00 CFS
Q_{10} INCREASE = 0.00 CFS

NOTE: SINCE THE LIMITS OF ANALYSIS DO NOT INCLUDE A NATURAL STORMWATER CONVEYANCE CHANNEL, 1-YEAR STORMWATER COMPUTATIONS ARE NOT REQUIRED/PROVIDED.

PROJECT DESCRIPTION:

REDEVELOPMENT

	IMPERVIOUS	PERVIOUS	TOTAL
DRAINAGE AREA	0.7517	0.0500	0.8017
PROJECT AREA	0.5983	0.0000	0.5983
ON-SITE TREATED	0.0000	0.0000	0.0000
OFF-SITE TREATED	0.5983	0.0000	0.5983
TOTAL TREATED	N/A		
ON-SITE IMPERVIOUS AREAS DISCONNECTED BY A VEGETATIVE BUFFER			0.5983
TOTAL TREATED OR DISCONNECTED			

WATER QUALITY VOLUME DEFAULT:

PROPOSED IMPERVIOUS: 0.7517 AC
TREATMENT OF FIRST HALF INCH OF RUNOFF: 1,815 X 0.7146 = 1,364 CU. FT. WQV REQUIRED

WATER TREATMENT ON-SITE			
BMP TYPE	AREA TREATED BY BMP (ACRES)	IMPERVIOUS AREA TREATED BY BMP (ACRES)	BMP EFFICIENCY (%)
HYDRODYNAMIC BMP	0.5983	0.5983	25%

TOTAL WQV TREATED: NO
WATER QUALITY VOLUME REQUIRED = 1,364 CU. FT.
WATER QUALITY VOLUME TREATED = 1,815 X 0.5983 = 1,086 CU. FT.
PERCENT OF WATER QUALITY VOLUME TREATED = 79.6%
DETENTION ON SITE: NO
PROJECT IS WITHIN WHICH WATERSHED? POTOMAC RIVER
PROJECT DISCHARGES TO WHICH BODY OF WATER? POTOMAC RIVER

BMP COORDINATES: N6984378.26 & E11896163.95

GRAPHIC SCALE
0' 15' 30' 60'
1" = 30'

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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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Alexandria, Virginia 22314
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COMMONWEALTH OF VIRGINIA
ANDREA SPRUCH
Lic. No. 047863
JUNE 21, 2018
PROFESSIONAL ENGINEER

PRELIMINARY DEVELOPMENT SPECIAL USE PERMIT
1200 NORTH HENRY STREET
CITY OF ALEXANDRIA, VIRGINIA

DATE	REVISION

DESIGN: ACS
DRAWN: BAD
SCALE: 1"=30'
DATE: MAY 2018

STORMWATER MANAGEMENT PLAN

SHEET 6 OF 13
FILE: 17-181

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Wed, Jan 20 2018 - 1:16:22pm

Water Quality Design Report

Alexandria, VA

Project: **1200 N. Henry Street**

Engineer: **R.C. Fields & Associates**

Water Quality:

Calculation Method: 1 in. First Flush
Rainfall Data Area: Arlington, VA
Report Date: 5/7/2018

Project Data:

Total Area: 0.60 acres
Impervious Area: 0.60 acres
Pipe Size: 12 HDPE
Treatment Flow Limit: 5.55 cfs
WQ Flow: 0.89 cfs

CrystalStream Summary:

Model No: 646
This HLR: 16.61 gpm/sf
Max HLR: 31.00 gpm/sf

Special Note: All CrystalStream Technologies water quality devices offer no restrictions to storm water flow and are able to pass through all flows that are delivered to them.

Project Specific Data – Alexandria, VA

Water Quality Vault Specifications for 1200 N. Henry Street
CST-1 Model 646

This unit drains 0.60 acres, with a 25-year flow of 4.34 cfs. The target design flow for the Model 646 as configured is 6.00 cfs (for an internal vertical exit velocity of 1 fps). The resultant internal vertical exit velocity of a 4.34 cfs inflow is 0.72 fps, which is within the range of the speed needed to restrict sediment export during this studied storm. Maximum design flows can vary based on site hydrology and pollutant characteristics.

The internal velocity at the 1" water quality (first flush) storm peak flow of 0.89 cfs (see calculation below) is 0.15 fps. During this peak, the scour velocity of 0.15 fps (0.05 m/s) for 8 micron particles is not exceeded, and all lesser storms will have lower velocities. This unit meets local standards during this peak event, and will exceed them at other times. Regularly scheduled maintenance will assure low exposure to high peak flows.

Calculation for Peak Discharge of Water Quality Storm

1"- 24 hour peak flow (Modified SCS Method, after Pitt)

Assumptions: A = 0.60 acres of drainage area = 26,062 sf.
CN = 98, T_c = 5 min. = 0.08 hr.
I_a read from TR-55 Table 4-1 for 98 = 0.041
P = 1"
I_a / P = 0.041 (See SCS Type II Unit Peak Discharge, read
Q_u at 0.08 hr and I_a / P)
Q_u = 1000 csm

%I = 0.60 ac. Impervious / 0.60 ac. Total X (100) = 100%
R_v = .009 (I) +.05 = .009 (100) +.05 = 0.95
WQ_R = 1" * 0.95 = 0.950 in./ac.

WQ Flow Calculation:

A = 0.60 ac. / 640 ac. / sq. mi. = 0.00093 sq. mi.
$Q_p = Q_u$ * A* WQ_R = 1000 csm / in. * 0.00093 sq. mi. * 0.950 in / ac.
= 0.89 cfs.

HLR Design Criterion (Per Figure 1 Chart)

Model 646 - Target HLR = 26.00 This Project HLR = **16.61 OK**
[HLR = (0.89 cfs * 448.8 gpm/cfs)/24 sf = 16.61 gpm/sf **]**

General Specifications (See detail sheet)

The spill protection capacity, under normal conditions, where the ambient water level in the front portion of the vault can be replaced with spill material is 586 gallons. In an artificial or emergency situation where the downstream pipe is blocked, the maximum spill storage capacity, above the trapped ambient water, is 440 gallons. This volume does not include storage in the upstream piping system.

This unit is not subject to traffic loadings and is constructed with 5,000 psi, 6" reinforced concrete walls and floor.

The 0.50 ft. riser/lid combination above the unit is constructed in the same manner as the walls.

A 3' x 3' aluminum hatch and a 24" manhole in the reinforced concrete lid provide easy access for cleaning.

A separate oil chamber is provided with an adjustable weir. This weir will be set at the approximate 6 month, 30 minute storm intensity, so that oil should be pushed over the skimmer at least once during two clean out cycle periods. The weir will be adjusted based on actual field results.

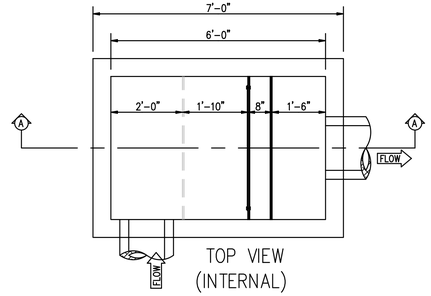
The exit pipe, when evaluated as a submerged circular orifice under inlet control will flow a maximum of 5.55 cfs with the water level in the vault at the top of the oil reservoir. This is sufficient to pass the 100+ year flow coming to the unit as configured.

Earl E. Duckett Jr.

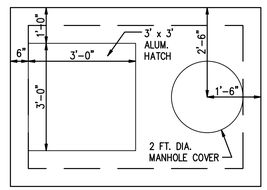
CrystalStream Technologies
Principal Engineer

Manufactured by: Practical Best Management – 1-800-748-6945 www.crystalstream.com

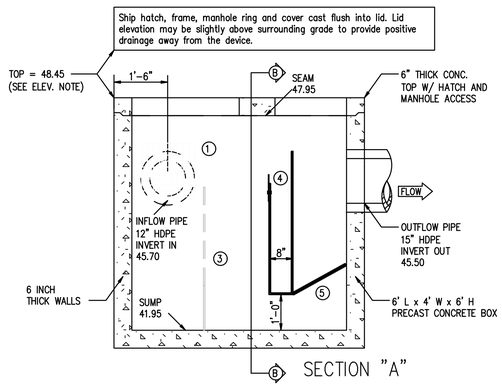
1. ALL PIPES SHALL BE CONSTRUCTED TO BE FLUSH WITH THE INSIDE WALLS.
2. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL PIPES AND STRUCTURES BETWEEN AND AROUND THE WATER QUALITY VAULTS.
3. ALL VAULT LIFTING CONNECTIONS SHALL BE LOCATED ON THE OUTSIDE OF THE VAULT WALLS.
4. CONCRETE VAULT PRE-CASTER IS RESPONSIBLE FOR THE STRUCTURAL INTEGRITY OF THE CONCRETE VAULTS. WALL AND SLAB THICKNESSES SHALL BE ALTERED ACCORDINGLY.



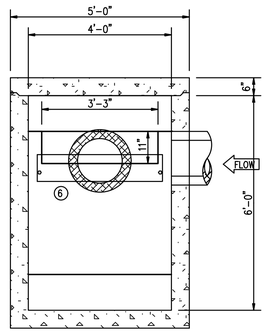
TOP VIEW (INTERNAL)



TOP VIEW (SLAB)



SECTION "A"



SECTION "B"

LEGEND

1. EXPANDED ALUMINUM BASKET W/ 1/4" MESH LINING, 1'-6" H x 1'-6" L x 4'-0" W, Upfit 3'-9" FROM SUMP
3. 2ND INTERNAL BAFFLE W/ 1" HOLES DRILLED AT 1 1/4" O.C., 4'-0" H.
4. SPILL PROTECTION RESERVOIR 4'-0" H. WITH A 0'-11" FRONT CUT.
5. 3/4"COCONUT FIBER FILTER IN ALUMINUM FRAME 1'-8" LONG.
6. 1/4"ALUMINUM PLATE, 9" H., 3'-6" WIDE.

CRYSTALSTREAM "CRYSTALCLEAN" WATER QUALITY VAULT MODEL "646 "

JURISDICTION: Alexandria, VA

Protected by U.S. Patent No's: 6,797,161; 6,936,163; 6,939,461; 6,951,607; 6,994,783; 7,011,743, 7,037,436

CrystalStream Technologies

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SPECIFICATIONS
1. TOTAL FLOW CAPACITY SHALL BE 6 CFS.
2. WATER QUALITY FLOW OF 0.89 CFS MUST BE TREATED WITH A HYDRAULIC LOADING RATE OF 17 GPM/SF OR LESS.
3. SPILL PROTECTION CAPACITY SHALL BE 586 GALLONS BEFORE OVERFLOW.
4. ANY CHANGES OR SUBSTITUTIONS MUST BE APPROVED BY THE ENGINEER AND THE REVIEWING AUTHORITY.

JOB NAME: 1200 N. Henry St.
Device No.: CST-1
VA0-002-050718
DESIGN FIRM: R.C. Fields & Associates
rcf-1200Nhenry 5/7/2018 p.o.d.s.

RC 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
JUNE 21, 2018
PROFESSIONAL ENGINEER

PRELIMINARY DEVELOPMENT SPECIAL USE PERMIT

1200 NORTH HENRY STREET

CITY OF ALEXANDRIA, VIRGINIA

DATE	REVISION

APPROVED
SPECIAL USE PERMIT NO. 2017-0020

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

DESIGN: ACS
DRAWN: BAD
SCALE: AS NOTED
DATE: MAY 2018

ON-SITE BMP DESIGN AND DETAILS

SHEET 7 OF 13
FILE: 17-181

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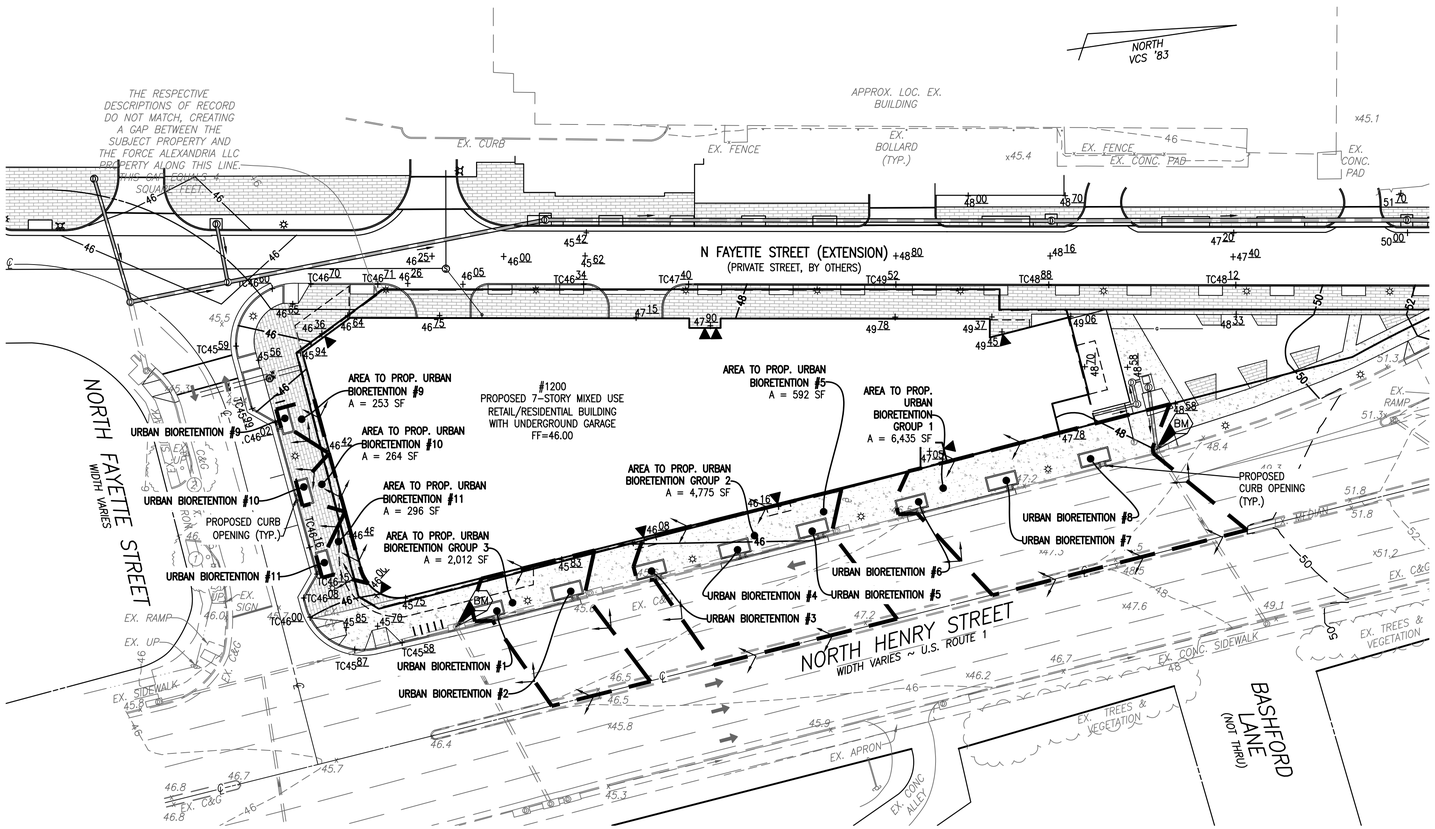
EXISTING UTILITIES SHOWN ON THIS PLAN TAKEN FROM AVAILABLE RECORDS AND/OR FROM FIELD OBSERVATIONS. FOR EXACT LOCATIONS OF EXISTING UNDERGROUND UTILITIES, NOTIFY "MISS UTILITY" AT 1-800-552-7001, 72 HOURS BEFORE THE START OF ANY EXCAVATION OR CONSTRUCTION.

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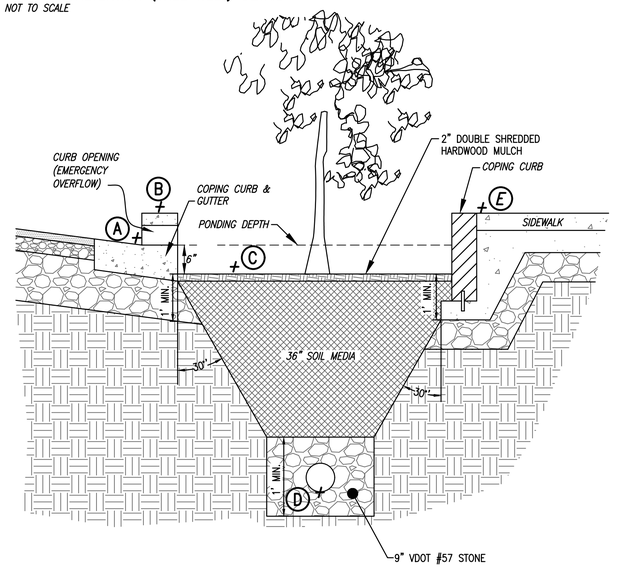
J:\2017\17181\DWG\DELIV\07 ON-SITE BMP DESIGN AND DETAILS.dwg
Wed, Jun 20 2018 - 11:27pm



AREA TO URBAN BIORETENTION (TREE WELL) DETAIL
SCALE: 1" = 30'

URBAN BIORETENTION (TREE WELL) DETAIL

NOT TO SCALE



URBAN BIORETENTION	SQ. FT. OF SURFACE AREA	ELEVATIONS					COORDINATES	
		A	B	C	D	E	NORTH	EAST
1	60	44.9	45.4	44.4	40.7	45.6	6984095.07	11896210.85
2	60	45.1	45.6	44.6	40.9	45.8	6984128.12	11896207.29
3	60	45.2	45.7	44.7	41	45.9	6984165.35	11896203.30
4	60	45.3	45.8	44.8	41.1	46	6984201.78	11896199.49
5	60	45.5	46	45	41.3	46.2	6984235.60	11896196.67
6	60	46	46.5	45.5	41.8	46.7	6984278.22	11896192.07
7	60	46.6	47.1	46.1	42.4	47.3	6984315.41	11896187.87
8	60	47	47.5	46.5	42.8	47.7	6984356.38	11896184.40
9	40	45.5	46	45	41.3	46.2	6984023.18	11896120.47
10	40	45.6	46.1	45.1	41.4	46.3	6984026.70	11896150.44
11	40	45.6	46.1	45.1	41.4	46.3	6984030.95	11896181.67

WATER QUALITY VOLUME CALCULATIONS FOR GROUP 1:

Contributing Drainage Area	
Roadway to be Treated	4,425 SF
Sidewalk to be Treated	2,030 SF
Contributing Drainage Area	6,455 SF
Treatment Volume Required	268.96 CF
Water Quality Sizing Computations	
Min. Surface Area (Gross)	537.92 SF
Infiltration Ponding	0.00 FT
Min. Surface Area (Net)	537.92 SF
Fill Time	1 HR
Infiltration	0.0000 FT/HR
Depth of Soil	3.00 FT
Ponding Depth	0.50 FT
Lanscape Sizing Computations	
Type of Practice	Tree Wells
Tree Spacing	40 FT
Number of Practices Proposed	3
Surface Area per Practice	179.31 SF
Width of Practice	5.00 FT
Min. Length of Practice	35.86 FT
Length of Practice	12.00 FT
Depth of Soil	2.50 FT
Soil Volume Provided	150.00 CF
Additional Soil Volume Required	300.00 CF

WATER QUALITY VOLUME CALCULATIONS FOR GROUP 2:

Contributing Drainage Area	
Roadway to be Treated	3,187 SF
Sidewalk to be Treated	1,588 SF
Contributing Drainage Area	4,775 SF
Treatment Volume Required	198.96 CF
Water Quality Sizing Computations	
Min. Surface Area (Gross)	397.92 SF
Infiltration Ponding	0.00 FT
Min. Surface Area (Net)	397.92 SF
Fill Time	1 HR
Infiltration	0.0000 FT/HR
Depth of Soil	3.00 FT
Ponding Depth	0.50 FT
Lanscape Sizing Computations	
Type of Practice	Tree Wells
Tree Spacing	35 FT
Number of Practices Proposed	3
Surface Area per Practice	132.64 SF
Width of Practice	5.00 FT
Min. Length of Practice	26.53 FT
Length of Practice	12.00 FT
Depth of Soil	3.00 FT
Soil Volume Provided	180.00 CF
Additional Soil Volume Required	270.00 CF

WATER QUALITY VOLUME CALCULATIONS FOR GROUP 3:

Contributing Drainage Area	
Roadway to be Treated	1,701 SF
Sidewalk to be Treated	870 SF
Contributing Drainage Area	2,571 SF
Treatment Volume Required	107.13 CF
Water Quality Sizing Computations	
Min. Surface Area (Gross)	214.25 SF
Infiltration Ponding	0.00 FT
Min. Surface Area (Net)	214.25 SF
Fill Time	1 HR
Infiltration	0.0000 FT/HR
Depth of Soil	3.00 FT
Ponding Depth	0.50 FT
Lanscape Sizing Computations	
Type of Practice	Tree Wells
Tree Spacing	35 FT
Number of Practices Proposed	2
Surface Area per Practice	107.13 SF
Width of Practice	5.00 FT
Min. Length of Practice	21.43 FT
Length of Practice	12.00 FT
Depth of Soil	3.00 FT
Soil Volume Provided	180.00 CF
Additional Soil Volume Required	270.00 CF

WATER QUALITY VOLUME CALCULATIONS FOR BOX 9:

Contributing Drainage Area	
Roadway to be Treated	0 SF
Sidewalk to be Treated	253 SF
Contributing Drainage Area	253 SF
Treatment Volume Required	10.54 CF
Water Quality Sizing Computations	
Min. Surface Area (Gross)	21.08 SF
Infiltration Ponding	0.00 FT
Min. Surface Area (Net)	21.08 SF
Fill Time	1 HR
Infiltration	0.0000 FT/HR
Depth of Soil	3.00 FT
Ponding Depth	0.50 FT
Lanscape Sizing Computations	
Type of Practice	Tree Wells
Tree Spacing	32 FT
Number of Practices Proposed	1
Surface Area per Practice	21.08 SF
Width of Practice	4.00 FT
Min. Length of Practice	5.27 FT
Length of Practice	10.00 FT
Depth of Soil	3.00 FT
Soil Volume Provided	120.00 CF
Additional Soil Volume Required	330.00 CF

WATER QUALITY VOLUME CALCULATIONS FOR BOX 10:

Contributing Drainage Area	
Roadway to be Treated	0 SF
Sidewalk to be Treated	264 SF
Contributing Drainage Area	264 SF
Treatment Volume Required	11.00 CF
Water Quality Sizing Computations	
Min. Surface Area (Gross)	22.00 SF
Infiltration Ponding	0.00 FT
Min. Surface Area (Net)	22.00 SF
Fill Time	1 HR
Infiltration	0.0000 FT/HR
Depth of Soil	3.00 FT
Ponding Depth	0.50 FT
Lanscape Sizing Computations	
Type of Practice	Tree Wells
Tree Spacing	32 FT
Number of Practices Proposed	1
Surface Area per Practice	22.00 SF
Width of Practice	4.00 FT
Min. Length of Practice	5.50 FT
Length of Practice	10.00 FT
Depth of Soil	3.00 FT
Soil Volume Provided	120.00 CF
Additional Soil Volume Required	330.00 CF

WATER QUALITY VOLUME CALCULATIONS FOR BOX 11:

Contributing Drainage Area	
Roadway to be Treated	0 SF
Sidewalk to be Treated	295 SF
Contributing Drainage Area	295 SF
Treatment Volume Required	12.29 CF
Water Quality Sizing Computations	
Min. Surface Area (Gross)	24.58 SF
Infiltration Ponding	0.00 FT
Min. Surface Area (Net)	24.58 SF
Fill Time	1 HR
Infiltration	0.0000 FT/HR
Depth of Soil	3.00 FT
Ponding Depth	0.50 FT
Lanscape Sizing Computations	
Type of Practice	Tree Wells
Tree Spacing	32 FT
Number of Practices Proposed	1
Surface Area per Practice	24.58 SF
Width of Practice	4.00 FT
Min. Length of Practice	6.15 FT
Length of Practice	10.00 FT
Depth of Soil	3.00 FT
Soil Volume Provided	120.00 CF
Additional Soil Volume Required	330.00 CF

GRAPHIC SCALE
0' 15' 30' 60'
1" = 30'

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APPROVED
SPECIAL USE PERMIT NO. 2017-0020
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. 047863
JUNE 21, 2018
PROFESSIONAL ENGINEER

PRELIMINARY DEVELOPMENT SPECIAL USE PERMIT
1200 NORTH HENRY STREET
CITY OF ALEXANDRIA, VIRGINIA

DATE	REVISION

DESIGN: ACS
DRAWN: BAD
SCALE: AS NOTED
DATE: MAY 2018

OFF-SITE BMP DESIGN AND DETAILS

SHEET 8 OF 13
FILE: 17-181

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Wed, Jan 20 2018 - 11:16:37pm

Project Name: 1200 North Henry Street
Date:
Linear Development Project? No

CLEAR ALL (Ctrl+Shift+R)

data input cells
constant values
calculation cells
final results

Site Information

Post-Development Project (Treatment Volume and Loads)

Enter Total Disturbed Area *(acres)* → 1.28

Maximum reduction required: 20%
The site's net increase in impervious cover (acres) is: 0
Post-Development TP Load Reduction for Site (lb/yr): 0.32

Check:
BMP Design Specifications List: 2013 Draft Stds & Specs
Linear project? No
Land cover areas entered correctly? ✔
Total disturbed area entered? ✔ *Total disturbed area > Post-Development area!*

Pre-ReDevelopment Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed forest/open space					0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be				0.04	0.04
Impervious Cover (acres)				0.76	0.76
					0.80

Post-Development Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed, protected forest/open space or reforested					0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be				0.05	0.05
Impervious Cover (acres)				0.75	0.75
Area Check	OK.	OK.	OK.	OK.	0.80

Constants

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

Runoff Coefficients (Rv)

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

LAND COVER SUMMARY -- PRE-REDEVELOPMENT

Land Cover Summary-Pre		
Pre-ReDevelopment	**Listed**	**Adjusted[1]**
Forest/Open Space Cover (acres)	0.00	0.00
Weighted Rv(forest)	0.00	0.00
% Forest	0%	0%
Managed Turf Cover (acres)	0.04	0.04
Weighted Rv(turf)	0.25	0.25
% Managed Turf	5%	5%
Impervious Cover (acres)	0.76	0.76
Rv(impervious)	0.95	0.95
% Impervious	95%	95%
Total Site Area (acres)	**0.80**	**0.80**
Site Rv	**0.91**	**0.91**

Treatment Volume and Nutrient Load

Pre-ReDevelopment Treatment Volume (acre-ft)	0.0611	0.0611
Pre-ReDevelopment Treatment Volume (cubic feet)	2,660	2,660
Pre-ReDevelopment TP Load (lb/yr)	**1.67**	**1.67**
Pre-ReDevelopment TP Load per acre (lb/acre/yr)	2.08	2.08
Baseline TP Load (lb/yr) (0.41 lbs/acre/yr applied to pre-redevelopment area excluding pervious land proposed for new impervious cover)		*0.33*

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

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

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

LAND COVER SUMMARY -- POST DEVELOPMENT

Land Cover Summary-Post (Final)	
Post ReDev. & New Impervious	
Forest/Open Space Cover (acres)	0.00
Weighted Rv(forest)	0.00
% Forest	0%
Managed Turf Cover (acres)	0.05
Weighted Rv (turf)	0.25
% Managed Turf	6%
Impervious Cover (acres)	0.75
Rv(impervious)	0.95
% Impervious	94%
Final Site Area (acres)	**0.80**
Final Post Dev Site Rv	**0.91**

Land Cover Summary-Post	
Post-ReDevelopment	
Forest/Open Space Cover (acres)	0.00
Weighted Rv(forest)	0.00
% Forest	0%
Managed Turf Cover (acres)	0.05
Weighted Rv (turf)	0.25
% Managed Turf	6%
ReDev. Impervious Cover (acres)	0.75
Rv(impervious)	0.95
% Impervious	94%
Total ReDev. Site Area (acres)	**0.80**
ReDev Site Rv	**0.91**

Land Cover Summary-Post	
Post-Development New Impervious	
New Impervious Cover (acres)	0.00
Rv(impervious)	--

Treatment Volume and Nutrient Load

Final Post-Development Treatment Volume (acre-ft)	0.0606	**Post-ReDevelopment Treatment Volume (acre-ft)**	0.0606	**Post-Development Treatment Volume (acre-ft)**	--
Final Post-Development Treatment Volume (cubic feet)	2,638	**Post-ReDevelopment Treatment Volume (cubic feet)**	2,638	**Post-Development Treatment Volume (cubic feet)**	--
Final Post-Development TP Load (lb/yr)	**1.66**	**Post-ReDevelopment Load (TP) (lb/yr)***	**1.66**	**Post-Development TP Load (lb/yr)**	--
Final Post-Development TP Load per acre (lb/acre/yr)	2.07	Post-ReDevelopment TP Load per acre (lb/acre/yr)	2.07		
		Max. Reduction Required (Below Pre-ReDevelopment Load)	**20%**		
		TP Load Reduction Required for Redeveloped Area (lb/yr)	**0.32**	**TP Load Reduction Required for New Impervious Area (lb/yr)**	**0**

Post-Development Requirement for Site Area

TP Load Reduction Required (lb/yr)	**0.32**

Nitrogen Loads (Informational Purposes Only)

Pre-ReDevelopment TN Load (lb/yr)	11.95	Final Post-Development TN Load (Post-ReDevelopment & New Impervious) (lb/yr)	11.86

Drainage Area A

Drainage Area A Land Cover (acres)

CLEAR BMP AREAS

	A Soils	B Soils	C Soils	D Soils	Totals	Land Cover Rv
Forest/Open Space (acres)					0.00	0.00
Managed Turf (acres)					0.00	0.00
Impervious Cover (acres)				0.60	0.60	0.95
				Total	0.60	

Total Phosphorus Available for Removal in D.A. A (lb/yr) 1.30
Post Development Treatment Volume in D.A. A (ft³) 2,063

Practice	Runoff Reduction Credit (%)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft³)	Runoff Reduction (ft³)	Remaining Runoff Volume (ft³)	Total BMP Treatment Volume (ft³)	Phosphorus Removal Efficiency (%)	Phosphorus Load from Upstream Practices (lb)	Untreated Phosphorus Load to Practice (lb)	Phosphorus Removed By Practice (lb)	Remaining Phosphorus Load (lb)	Downstream Practice to be Employed
14. Manufactured Treatment Devices (no RR)													
14.a. Manufactured Treatment Device-Hydrodynamic	0		0.60	0	0	2,063	2,063	25	0.00	1.29	0.32	0.97	

Site Results (Water Quality Compliance)

Area Checks	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	AREA CHECK
FOREST/OPEN SPACE (ac)	0.00	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER (ac)	0.60	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER TREATED (ac)	0.60	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA (ac)	0.00	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA TREATED (ac)	0.00	0.00	0.00	0.00	0.00	OK.
AREA CHECK	OK.	OK.	OK.	OK.	OK.	

Site Treatment Volume (ft³) 2,638

Runoff Reduction Volume and TP By Drainage Area

	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	TOTAL
RUNOFF REDUCTION VOLUME ACHIEVED (ft³)	0	0	0	0	0	0
TP LOAD AVAILABLE FOR REMOVAL (lb/yr)	1.30	0.00	0.00	0.00	0.00	1.30
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.32	0.00	0.00	0.00	0.00	0.32
TP LOAD REMAINING (lb/yr)	0.97	0.00	0.00	0.00	0.00	0.97
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	0.00	0.00	0.00	0.00	0.00	0.00

Total Phosphorus

FINAL POST-DEVELOPMENT TP LOAD (lb/yr)	1.66
TP LOAD REDUCTION REQUIRED (lb/yr)	0.32
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.32
TP LOAD REMAINING (lb/yr):	1.33
REMAINING TP LOAD REDUCTION REQUIRED (lb/yr):	0.00 **

**No further TP load reduction required

Total Nitrogen (For Information Purposes)

POST-DEVELOPMENT LOAD (lb/yr)	11.86
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	0.00
REMAINING POST-DEVELOPMENT NITROGEN LOAD (lb/yr)	11.86

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

THE PROPOSED REDEVELOPMENT (APPROXIMATELY 1.28 ACRES OF DISTURBANCE) GENERATES A NET DECREASE OF IMPERVIOUS AREA FROM PRE-DEVELOPMENT CONDITIONS. PER CITY CODE SECTION 13-109E-(5)(a), DEVELOPMENT OF PRIOR DEVELOPED LANDS RESULTING IN NO NET INCREASE IN IMPERVIOUS AREA AND DISTURBING GREATER THAN 1 ACRE MUST RESULT IN A 20% DECREASE IN PHOSPHORUS LOADING FROM 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. A MANUFACTURED TREATMENT DEVICE (HYDRODYNAMIC FACILITY) IS PROPOSED WITH THIS DEVELOPMENT TO TREAT THE MAJORITY OF RUNOFF FROM THE ROOF OF THE PROPOSED BUILDING. THE REQUIRED REDUCTION IN TOTAL PHOSPHOROUS IS 0.32 LB AND THE REDUCTION ACHIEVED (0.32 LB) MEETS THE REQUIRED 20% REDUCTION (SEE SPREADSHEET ON THIS SHEET). THEREFORE, THE WATER QUALITY MANAGEMENT PERFORMANCE REQUIREMENTS FOR THE PROPOSED DEVELOPMENT PER CITY CODE SECTION 13-109E-(5)(a) HAVE BEEN MET.

A CONTRIBUTION TO THE ALEXANDRIA WATER QUALITY IMPROVEMENT FUND WILL BE MADE FOR THAT PORTION OF THE WATER QUALITY VOLUME NOT TREATED IN COMPLIANCE WITH CITY CODE SECTION 13-109E-(9) AND SECTION 13-110.

RC FIELDS & ASSOCIATES, INC.
ENGINEERING • LAND SURVEYING • PLANNING
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(703) 549-6422

COMMONWEALTH OF VIRGINIA
ANDREA SPRUCH
Lic. No. 047863
JUNE 21, 2018
PROFESSIONAL ENGINEER

PRELIMINARY DEVELOPMENT SPECIAL USE PERMIT
1200 NORTH HENRY STREET
CITY OF ALEXANDRIA, VIRGINIA

DATE	REVISION

DESIGN: ACS
DRAWN: BAD
SCALE: AS NOTED
DATE: MAY 2018

STORMWATER QUALITY COMPUTATIONS

APPROVED
SPECIAL USE PERMIT NO. 2017-0020
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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SHEET 9 OF 13
FILE: 17-181

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Wed, Jun 20 2018 - 1:16:47pm

STORMWATER OUTFALL NARRATIVE:

PRE-DEVELOPMENT CONDITIONS:
THE 0.80 ACRE SITE IS LOCATED IN THE POTOMAC RIVER WATERSHED. IN EXISTING CONDITIONS, THE SITE CONSISTS OF A RETAIL CENTER WITH ASSOCIATED PARKING AND VERY LITTLE LANDSCAPED OPEN SPACE. THE PROJECT SITE HAS TWO OUTFALL POINTS.

OUTFALL #1: THE MAJORITY OF THE PROJECT SITE DRAINS TO THE EXISTING STORM SYSTEM IN THE NORTH HENRY STREET RIGHT-OF-WAY. RUNOFF FROM A PORTION OF THE BUILDING AND THE MAJORITY OF THE SURFACE PARKING IS COLLECTED IN AN UNDERGROUND STORM SEWER SYSTEM THAT CONNECTS TO THE CITY MAINTAINED STORM SEWER SYSTEM LOCATED IN THE NORTH HENRY STREET RIGHT-OF-WAY. DRAINAGE IS CONVEYED EAST INTO THE CITY STORM SEWER WHERE IT IS CONVEYED NORTH BY A 30" STORM SEWER, INTO A 48" STORM SEWER, AND EVENTUALLY OUTFALLS TO THE POTOMAC RIVER.

OUTFALL #2: THE REMAINDER OF THE RUNOFF FROM THE PROJECT SITE IS CONVEYED BY PIPED DOWNSPOUTS TO THE EXISTING CITY STORM SEWER IN NORTH FAYETTE STREET RIGHT-OF-WAY. ONCE WITHIN THE CITY STORM SEWER, IT IS CONVEYED NORTH TO A POINT WHERE IT JOINS WITH THE RUNOFF FROM OUTFALL #1. AT THIS POINT, THE TWO FLOW REGIMES COMBINE AND CONTINUE NORTH WITHIN A 48" STORM SEWER AND EVENTUALLY OUTFALL TO THE POTOMAC RIVER.

POST-DEVELOPMENT CONDITIONS:
THE REDEVELOPMENT OF THE PROJECT PROPOSES A MIXED USE BUILDING WITH IMPROVED STREETSCAPE/OPEN SPACE. OVERALL IMPERVIOUS AREA WILL DECREASE WITH THE PROPOSED CONSTRUCTION AND THERE WILL BE ONE OUTFALL POINT (OUTFALL #1).

AS IN EXISTING CONDITIONS, RUNOFF FROM THE PROPOSED BUILDING IS COLLECTED IN AN UNDERGROUND STORM SEWER SYSTEM THAT CONNECTS TO THE CITY MAINTAINED STORM SEWER SYSTEM LOCATED IN THE NORTH HENRY STREET RIGHT-OF-WAY. THE OPEN SPACE ON-SITE WILL SHEETFLOW TO THE NORTH HENRY STREET RIGHT-OF-WAY AND BE COLLECTED BY THE EXISTING STORM SYSTEM IN PLACE. DRAINAGE IS CONVEYED EAST AND NORTH WHERE IT IS CONVEYED WITHIN A 30" AND 48" STORM PIPES AND EVENTUALLY OUTFALL TO THE POTOMAC RIVER.

CONCLUSION:
THE POINT OF OUTFALL FOR OUTFALL #1 IS AN EXISTING CURB INLET (LABELED EXISTING STRUCTURE 1 ON THIS SHEET) LOCATED EAST OF THE PROPERTY WITHIN NORTH HENRY STREET. THE DRAINAGE AREA TO THE OUTFALL POINT IS 1.22 ACRES. THE POINT OF CONFLUENCE IS WHERE THIS RECEIVING PIPE IS JOINED BY ANOTHER WATERSHED THAT IS AT LEAST 90% OF THE FIRST DRAINAGE AREA AT THE OUTFALL POINT. FOR OUTFALL #1, THE POINT OF CONFLUENCE IS AN EXISTING MANHOLE (LABELED AS EXISTING STRUCTURE 2) WITH A DRAINAGE AREA OF 6.62 ACRES (543% OF THE FIRST DRAINAGE AREA). THE LIMITS OF ANALYSIS INCLUDES ANALYZING THE OUTFALL SYSTEM 150' DOWNSTREAM OF THE POINT OF CONFLUENCE (ENDING AT THE EXISTING INLET LABELED AS EXISTING 4 ON THIS SHEET).

COMPUTATIONS SHOWN ON THIS SHEET DEMONSTRATE THAT THE EXISTING SYSTEM EXPERIENCES LOCALIZED FLOODING IN EXISTING CONDITIONS. THE PEAK FLOW RATE IS BEING REDUCED WITH THE PROPOSED DEVELOPMENT AS SHOWN ON SHEET 6. THE FLOOD PROTECTION FOR THIS SITE IS THEREFORE IN COMPLIANCE WITH SECTION 13-109F(2)(b)(ii). DUE TO SITE DRAINAGE OUTFALLING TO AN EXISTING UNDERSIZED MANMADE STORM SEWER SYSTEM, NO OFFSITE IMPROVEMENTS TO THE SYSTEM ARE REQUIRED.

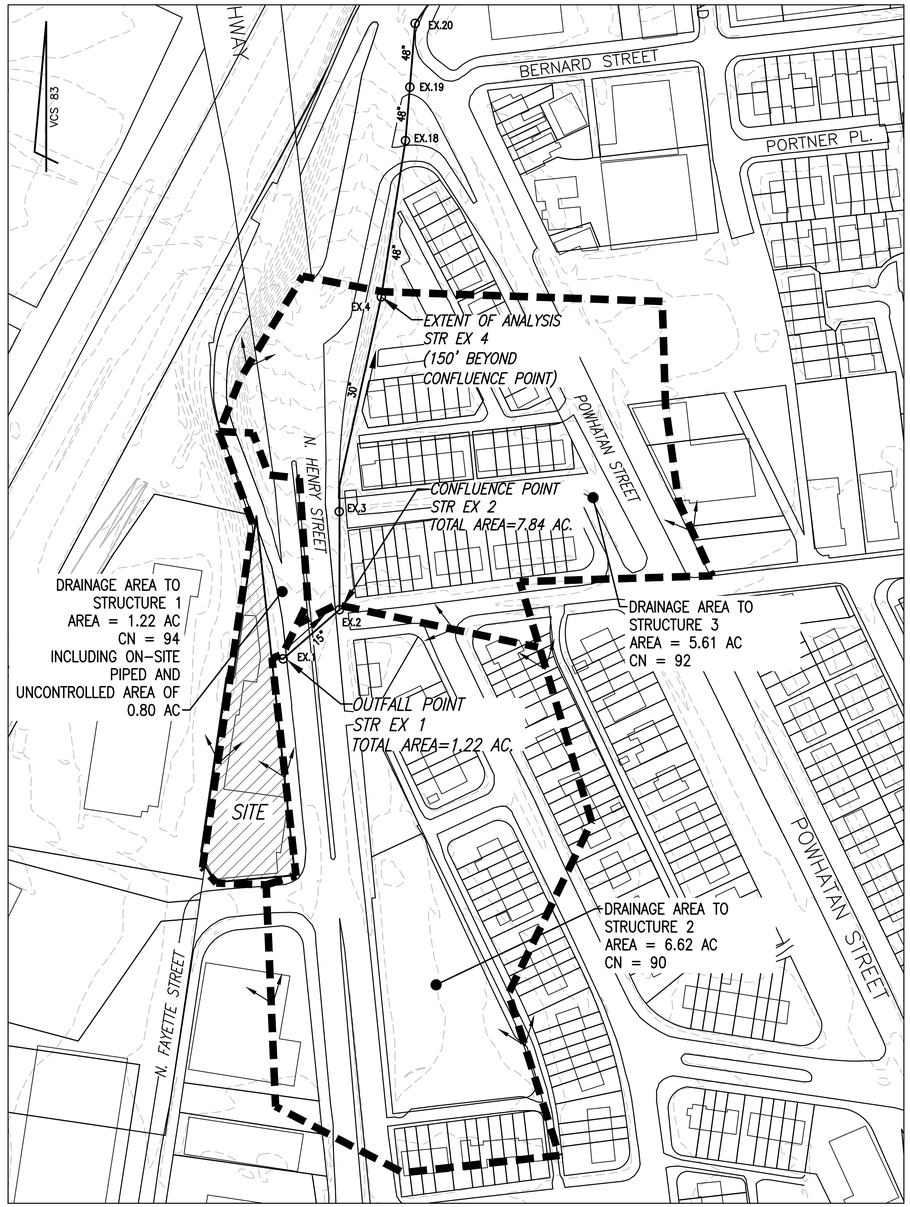
PER THE LIMITS OF ANALYSIS PER CITY CODE SECTION 13-109F-2(d)(i) AND REDUCED POST-DEVELOPMENT RUNOFF RATE FOR THE 10-YEAR, 24-HOUR STORM, THE PROJECT POST-DEVELOPMENT RUNOFF WILL NOT EXACERBATE ANY EXISTING DOWNSTREAM CAPACITY CONDITIONS.

STORM SEWER OUTFALL COMPUTATIONS

STRUCTURE FROM	STRUCTURE TO	INC. DRAINAGE AREA (AC)	ACCUM. DRAINAGE AREA (AC)	CURVE NUMBER (CN)	RAINFALL DEPTH (IN)	T_C (MINUTES)	INCREMENTAL "Q" (CFS)	ACCUMULATED "Q" (CFS)	PIPE DIAMETER (IN)	SLOPE (%)	"n"	MAXIMUM "Q" (CFS)	MAXIMUM VELOCITY (FPS)	LENGTH OF RUN (FT)	UPPER INVERT	LOWER INVERT	FALL (FT)
SITE	1	1.22	1.22	94	5.20	5	5.95	**5.95**	15	1.88%	0.013	**8.85**	7.23	96	45.00	43.20	1.80
1	2	6.62	7.84	90	5.20	5	30.45	**36.40**	15	3.28%	0.013	**11.70**	9.56	136	43.20	38.74	4.46
2	3	2.25	10.09	92	5.20	5	10.69	**47.09**	30	0.57%	0.013	**31.06**	6.35	136	37.49	36.71	0.78
3	4	3.36	13.45	92	5.20	5	15.96	**63.05**	30	0.76%	0.013	**35.79**	7.31	310	36.61	34.25	2.36

STORM SEWER OUTFALL HGL COMPUTATIONS

INLET ID	OUTLET WSE	D_O (in)	Q_O	L_o	S_{fo} %	H_f	JUNCTION LOSS Vo	H_O	Q_I	V_I	Q_I*V_I	$V_I^2/2g$	H_I	ANGLE	H_Δ	H_t	1.3 H_t	0.5 H_I	FINAL H	INLET WSE	RIM/ THROAT ELEV	FREE BOARD
4	36.25	30.00	63.05	310.00	0.148%	0.4591	7.30	0.207	47.09	6.33	298.08	0.62	0.22	0.00	0.000	0.42	-	0.21	0.67	36.92	56.00	19.08
3	38.71	30.00	47.09	136.00	0.083%	0.1124	6.33	0.156	36.40	9.56	347.98	1.42	0.50	0.00	0.000	0.65	-	0.33	0.44	39.15	54.71	15.56
2	39.74	15.00	36.40	136.00	1.988%	2.7039	9.56	0.355	5.95	7.24	43.08	0.81	0.28	45.00	0.250	0.64	-	0.32	3.02	42.76	48.94	6.18
1	44.20	15.00	5.95	96.00	0.046%	0.0442	7.24	0.203	5.95	7.24	43.08	0.81	0.28	45.00	0.250	0.74	-	0.37	0.41	44.61	47.50	2.89



OUTFALL MAP
SCALE: 1" = 100'

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

NOTE: STORM SEWER OUTFALL INFORMATION PROVIDED BY FIELD SURVEY AND CITY GIS DATA.

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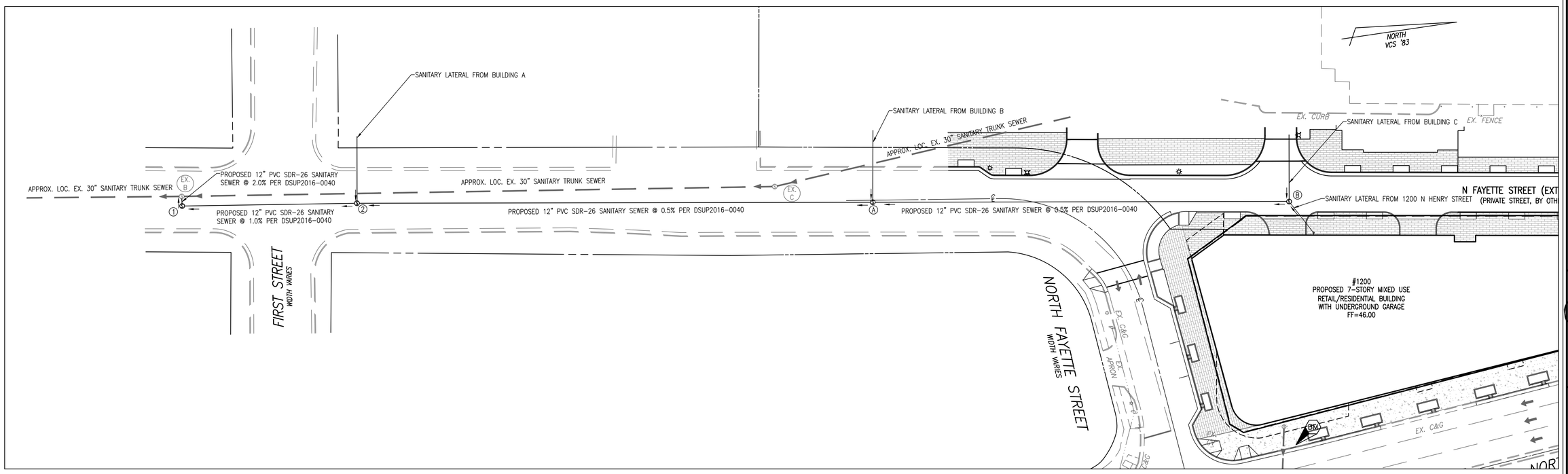
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STORMWATER OUTFALL ANALYSIS

SHEET 10 OF 13
FILE: 17-181

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GRAPHIC SCALE
0' 15' 30' 60'
1" = 30'

	EXISTING CONDITION							
BLD #	NAME	USE	DESIGN FLOW	UNIT	SIZE	GAL/DAY	CFS	PEAK CFS (X4)
C	BRADDOCK GATEWAY PHASE III	RETAIL	200	SF	8,242	1,648	0.003	0.010
C	BRADDOCK GATEWAY PHASE III	MULTI-FAMILY	300	UNIT	370	111,000	0.172	0.687
B	BRADDOCK GATEWAY PHASE II	RETAIL	200	SF	8,169	1,634	0.003	0.010
B	BRADDOCK GATEWAY PHASE II	MULTI-FAMILY	300	UNIT	258	77,400	0.120	0.479
A	BRADDOCK GATEWAY PHASE I	RETAIL	200	SF	1,500	300	0.000	0.002
A	BRADDOCK GATEWAY PHASE I	MULTI-FAMILY	300	UNIT	270	81,000	0.125	0.501
					TOTAL	272,982	0.422	1.690
	PROPOSED CONDITION							
1200	1200 N HENRY	RETAIL	200	SF	28,500	5,700	0.009	0.035
1200	1200 N HENRY	MULTI-FAMILY	300	unit	115	34,500	0.053	0.214
					TOTAL	40,200	0.062	0.249

ADEQUATE SANITARY OUTFALL COMPUTATIONS

STRUCTURE FROM	STRUCTURE TO	BUILDING FLOW INCLUDED	INCREMENTAL "Q" (CFS)	ACCUMULATED "Q" (CFS)	PIPE DIAMETER (IN)	SLOPE (%)	"n"	FULL FLOW "Q" (CFS)	FULL FLOW VELOCITY (FPS)	LENGTH OF RUN (FT)	UPPER INVERT	LOWER INVERT	FALL (FT)	ACTUAL VELOCITY (FPS)	ACTUAL DEPTH (FT)	GRAVITY FLOW
B	A	1200, BUILDING C	0.95	**0.95**	12	0.50%	0.010	3.41	4.17	255.45	30.80	29.53	1.27	3.600	0.360	YES
A	2	BUILDING B	0.49	**1.44**	12	0.50%	0.010	3.42	4.18	327.44	29.28	27.64	1.64	4.090	0.470	YES
2	1	BUILDING A	0.50	**1.94**	12	1.00%	0.010	4.84	5.92	110.88	27.39	26.28	1.11	5.780	0.470	YES
1	EX B	-	0.00	**1.94**	12	2.00%	0.010	6.84	8.36	6.00	26.03	25.91	0.12	7.480	0.390	YES

SANITARY HGL COMPUTATIONS

INLET ID	OUTLET WSE	D_O (in)	Q_O	L_o	S_{fo} %	H_f	JUNCTION LOSS												FINAL H	INLET WSE	RIM/ THROAT ELEV	FREE BOARD
							Vo	H_O	Q_i	V_i	Q_i*V_i	$V_i^2/2g$	H_i	ANGLE	H_Δ	H_i	1.3 H_i	0.5 H_i				
1	26.71	12	1.94	6.00	0.199%	0.0119	7.48	0.217	1.94	5.78	11.21	0.52	0.18	90.00	0.360	0.76	-	0.38	0.39	27.10	46.00	18.90
2	27.10	12	1.94	110.88	0.199%	0.2207	5.78	0.130	1.44	4.09	5.89	0.26	0.09	0.00	0.000	0.22	-	0.11	0.33	27.43	47.23	19.80
A	28.44	12	1.44	327.44	0.018%	0.0596	4.09	0.065	0.96	3.60	3.46	0.20	0.07	0.00	0.000	0.14	-	0.07	0.13	28.57	45.02	16.45
B	30.33	12	0.95	255.45	0.001%	0.0025	3.60	0.050	0.96	3.60	3.46	0.20	0.07	0.00	0.000	0.12	-	0.06	0.06	30.39	46.25	15.86

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 RETAIL AND MULTI-FAMILY. THE AVERAGE DAILY FLOW IS DESCRIBED BELOW:

RETAIL: 200 GPD/1000 SF = 200 GPD/1000 SF X 28,500 SF = 5,700 GPD
MULTI-FAMILY: 300 GPD/UNIT: 300 GPD/UNIT X 115 UNITS = 34,500 GPD

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

5,700 GPD X 4 = 22,800 GPD
34,500 CFS X 4 = 138,000 CFS
TOTAL PEAK FLOW = 160,800 GPD OR 0.25 CFS

SANITARY SEWER OUTFALL NOTE:

THIS PROJECT IS ANTICIPATED TO GENERATE AN INCREASE IN EXCESS OF 10,000 GPD IN SANITARY WASTE OUTFLOW. A FLOW OF APPROXIMATELY 40,200 GPD IS EXPECTED FOR THIS DEVELOPMENT RESULTING IN A PEAK FLOW OF 160,800 GPD. THEREFORE, THE PROJECT IS SUBJECT TO A SANITARY SEWER OUTFALL ANALYSIS. THIS SANITARY SEWER OUTFALL ANALYSIS SHOWS ADEQUACY OF SANITARY SEWER OUTFALL IN ACCORDANCE WITH MEMO TO INDUSTRY 06-14.

THIS PROJECT WILL CONNECT TO A CITY OF ALEXANDRA 12" SANITARY SEWER AT STRUCTURE B (PROPOSED PER DSUP2016-0040), ADJACENT TO THIS SITE WITHIN NORTH FAYETTE STREET EXTENSION (A PRIVATE STREET). SANITARY FLOW IS THEN CONVEYED SOUTH THROUGH A CITY OF ALEXANDRIA 12" SANITARY SEWER AND CONTINUE THROUGH STRUCTURES A, 2, AND 1 BEFORE ULTIMATELY CONNECTING INTO AN EXISTING 30" SANITARY TRUNK SEWER AT AN EXISTING SANITARY MANHOLE, EX B. PER MEMORANDUM TO INDUSTRY NO. 06-14, THE LIMITS OF ANALYSIS FOR THE SANITARY SEWER ADEQUATE OUTFALL IS AT A POINT WHERE THE DOWNSTREAM SEWER HAS A MINIMUM DIAMETER OF 24". THEREFORE, THE SANITARY SEWER ANALYSIS CONCLUDES AT STRUCTURE EX B. THE SANITARY SEWER FROM B TO EXISTING B WILL BE INSTALLED AS PART OF DSUP2016-0040 AND THE SIZES WITH INVERTS ARE BASED ON THE DESIGN PLANS ASSOCIATED WITH THAT PROJECT.

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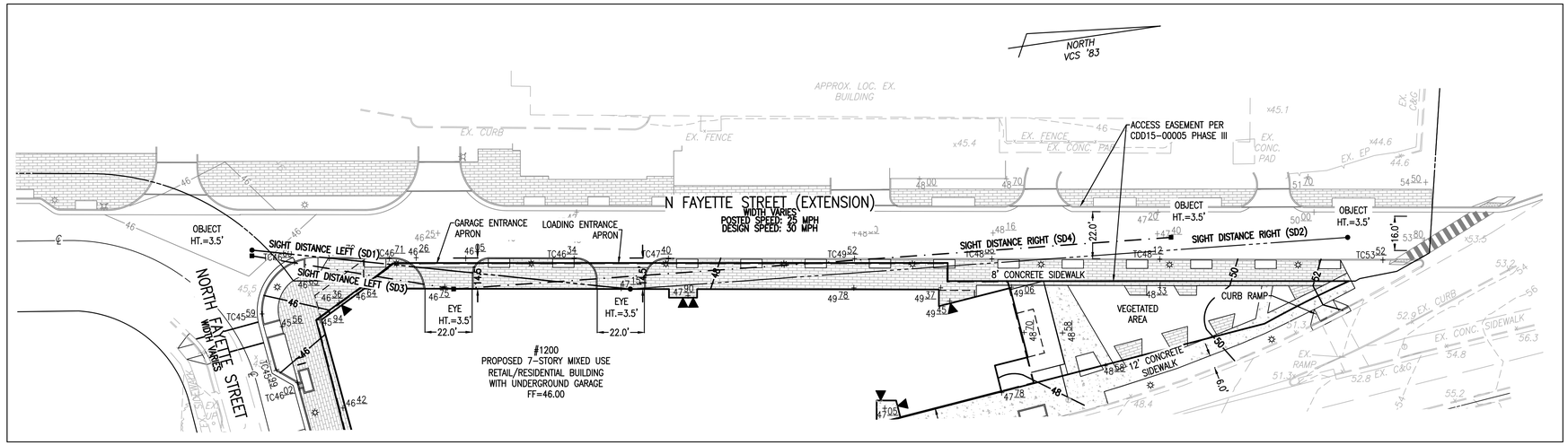
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SANITARY OUTFALL ANALYSIS

SHEET 11 OF 13
FILE: 17-181

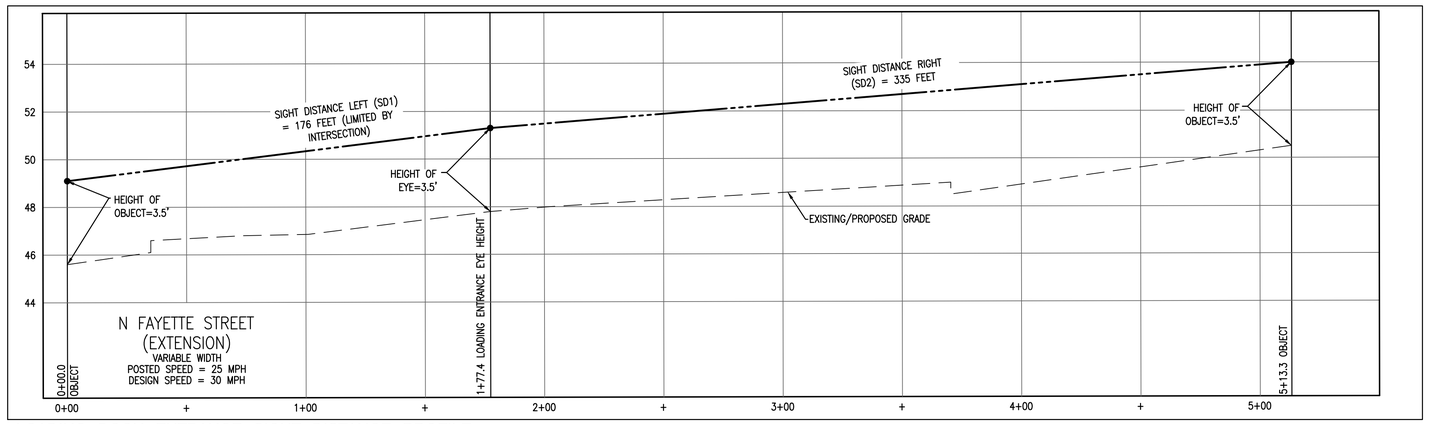
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NORTH FAYETTE STREET EXTENSION SIGHT DISTANCE PLAN

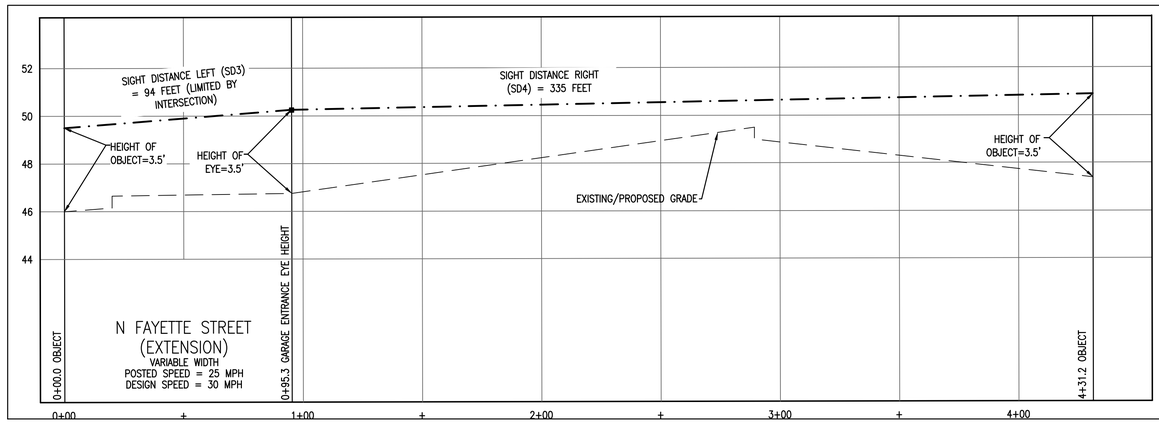
SCALE: 1"=30'

0' 30' 60'



LOADING DOCK ENTRANCE SIGHT DISTANCE PROFILE

SCALE – HORIZONTAL: 1"=30', VERTICAL 1"=3'



GARAGE ENTRANCE SIGHT DISTANCE PROFILE

SCALE – HORIZONTAL: 1"=30', VERTICAL 1"=3'

0' 3' 6'
VERTICAL

0' 30' 60'
HORIZONTAL

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NOTE:

GRADING OF NORTH FAYETTE STREET (EXTENSION) PROVIDED BY BRADDOCK GATEWAY PHASE III PLAN (DSUP2016-0040) DATED MARCH 7, 2018.

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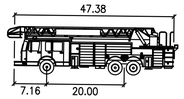
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SIGHT DISTANCE PLAN AND PROFILE

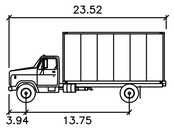
SHEET 12 OF 13

FILE: 17-181

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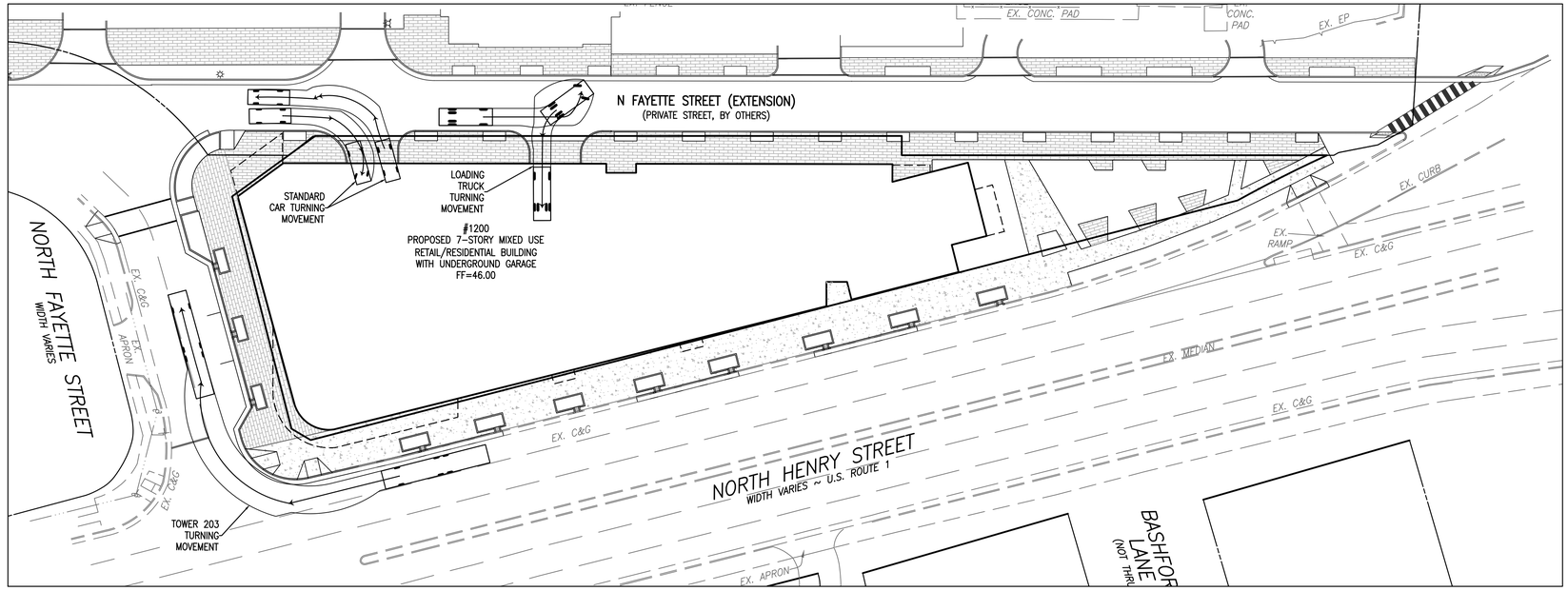


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Lock to Lock Time	: 6.0
Steering Angle	: 24.6



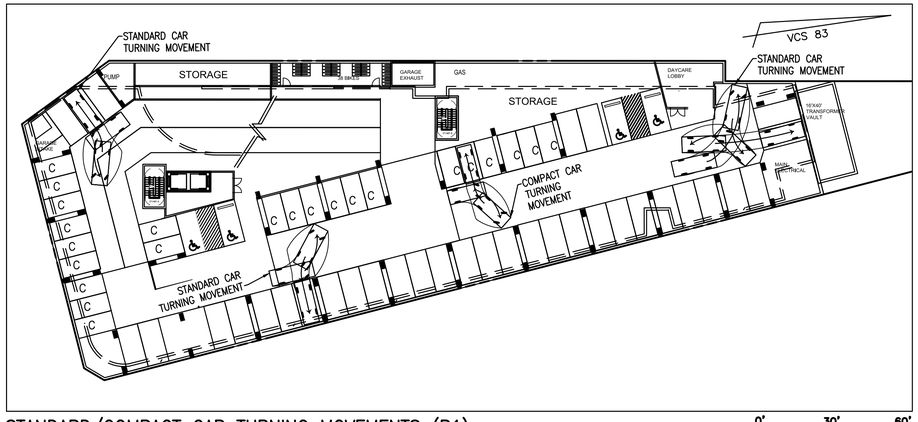
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	feet
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Lock to Lock Time	: 6.0
Steering Angle	: 43.2



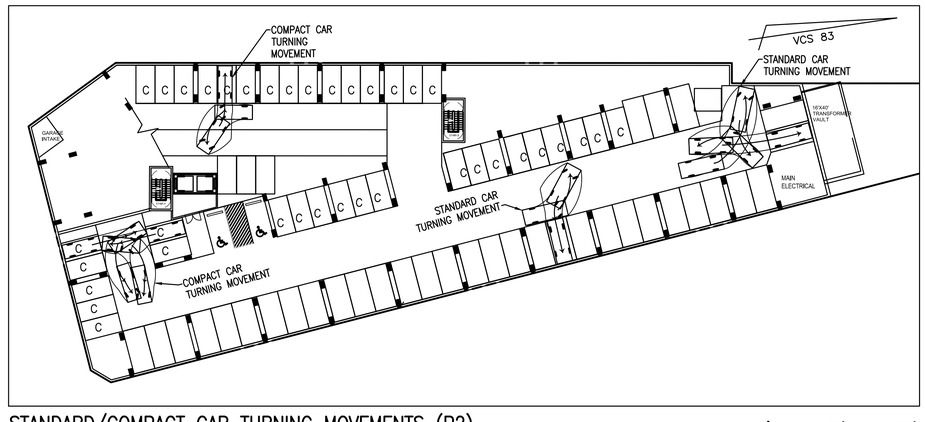
LOADING TRUCK AND EMERGENCY VEHICLE
SCALE: 1" = 30'

0' 30' 60'



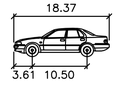
STANDARD/COMPACT CAR TURNING MOVEMENTS (P1)
SCALE: 1" = 30'

0' 30' 60'



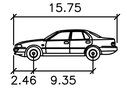
STANDARD/COMPACT CAR TURNING MOVEMENTS (P2)
SCALE: 1" = 30'

0' 30' 60'



STANDARD CAR

	feet
WIDTH:	6.56
TRACK:	6.56
LOCK TO LOCK TIME:	6.0
STEERING ANGLE:	36.2



COMPACT CAR

	feet
WIDTH:	5.91
TRACK:	5.91
LOCK TO LOCK TIME:	6.0
STEERING ANGLE:	31.7

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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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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 SPECIFICATIONS OF THE CITY OF ALEXANDRIA.

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ANDREA SPRUCH
Lic. No. 047863
JUNE 21, 2018
PROFESSIONAL ENGINEER

PRELIMINARY DEVELOPMENT SPECIAL USE PERMIT

1200 NORTH HENRY STREET

CITY OF ALEXANDRIA, VIRGINIA

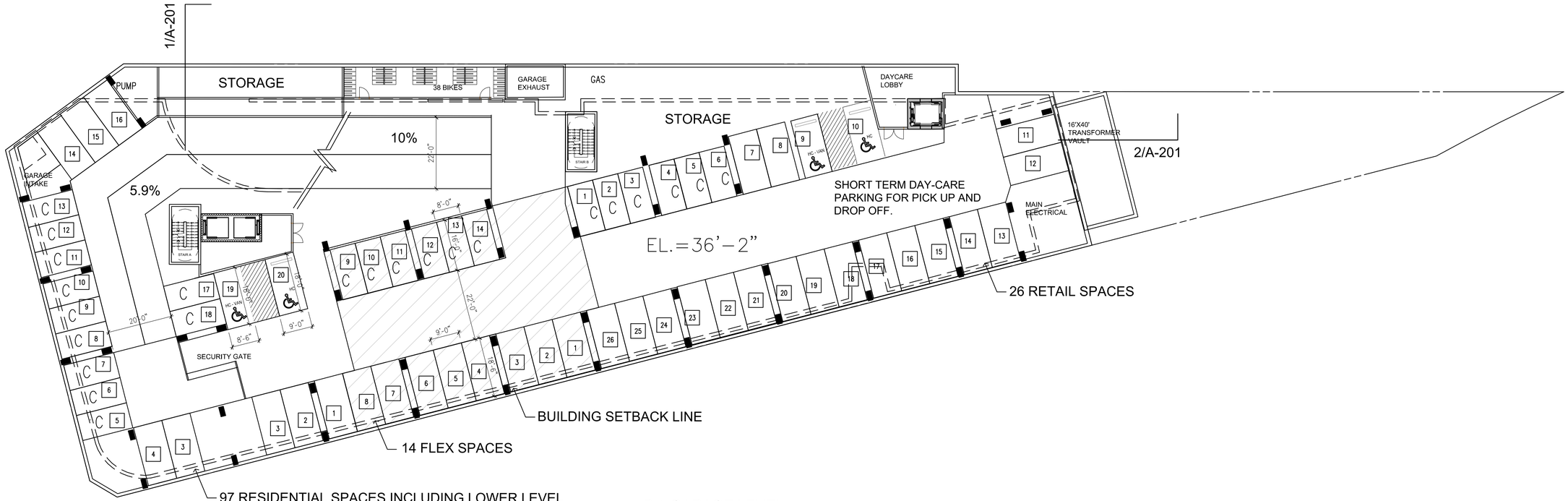
DATE	REVISION

DESIGN: ACS
DRAWN: BAD
SCALE: AS NOTED
DATE: MAY 2018

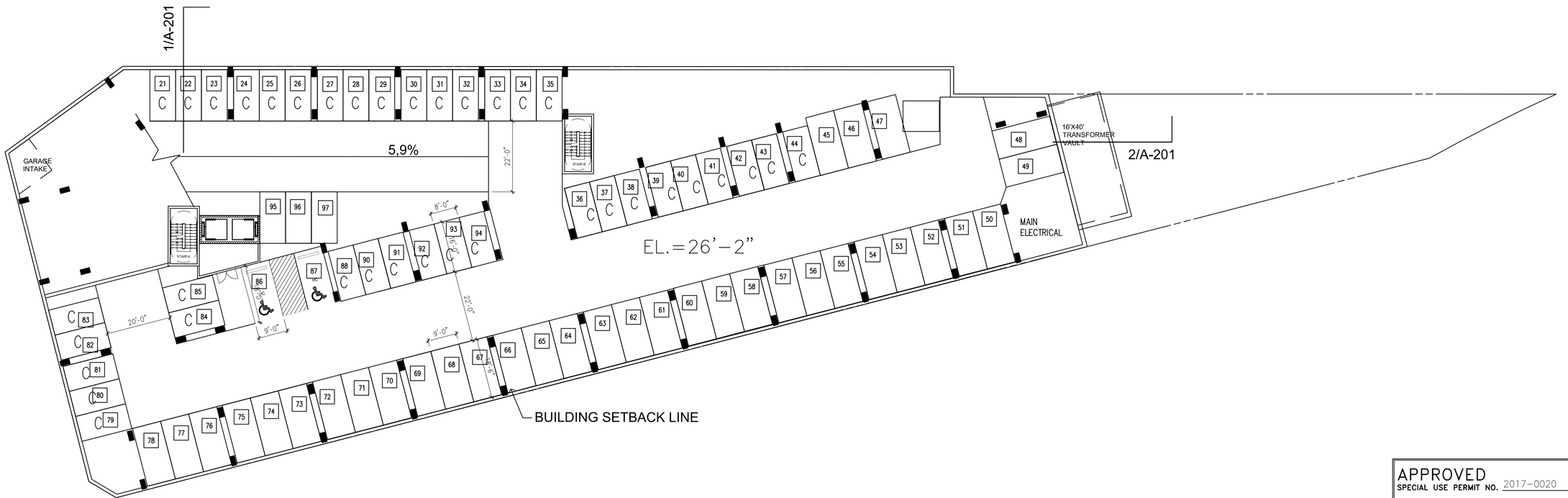
GARAGE TURNING MOVEMENTS

SHEET 13 OF 13
FILE: 17-181

J:\2017\17181\DWG\DELIA\13 TURNING AND GARAGE MOVEMENTS.dwg
Wed, Jun 20 2018 - 11:14pm



2 P-1 GARAGE LEVEL
1/16" = 1'-0"



1 P-2 GARAGE LEVEL
1/16" = 1'-0"

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DEPARTMENT OF PLANNING & ZONING

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PRELIMINARY COMPLETENESS	05/09/18
VERIFICATION SUBMISSION	06/21/18

REVISION DATE

PROJECT TITLE

PRELIMINARY DEVELOPMENT SPECIAL USE PERMIT

1200 NORTH HENRY STREET
ALEXANDRIA, VA

PROJECT NO. 317462

DRAWING TITLE

BUILDING PLANS

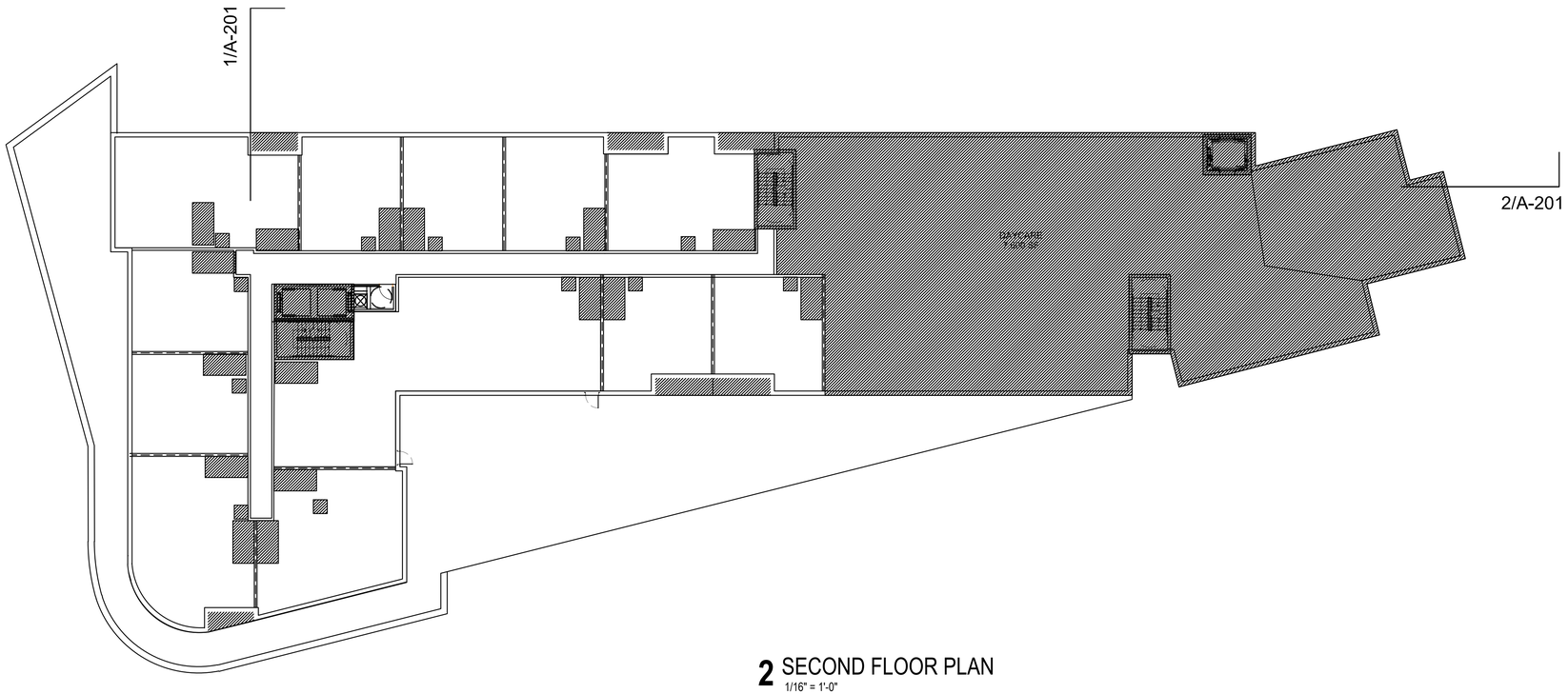
DRAWN BY JB, JG
QC CHECKED BY JS
CA REVIEWED BY

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A-101

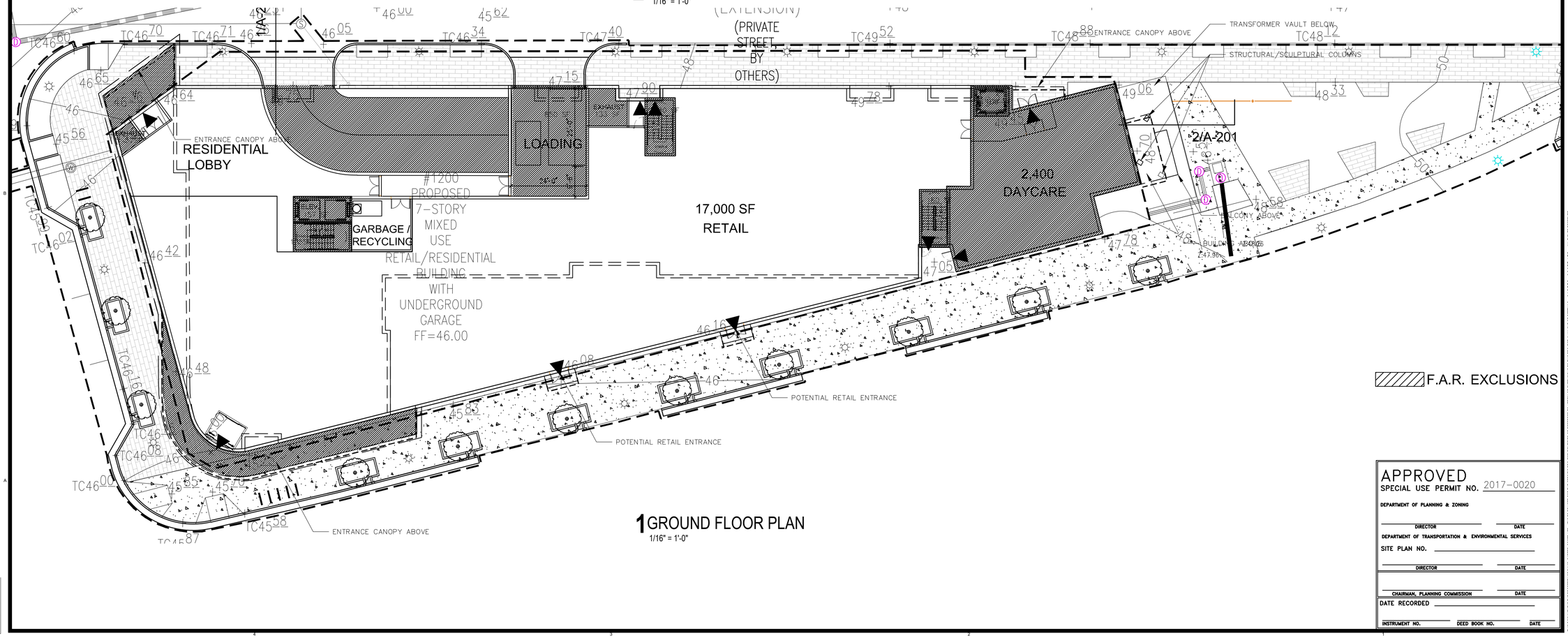
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2 SECOND FLOOR PLAN
1/16" = 1'-0"



1 GROUND FLOOR PLAN
1/16" = 1'-0"

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PRELIMINARY DEVELOPMENT SPECIAL USE PERMIT

1200 NORTH HENRY STREET
ALEXANDRIA, VA

PROJECT NO. 317462

DRAWING TITLE
BUILDING PLANS

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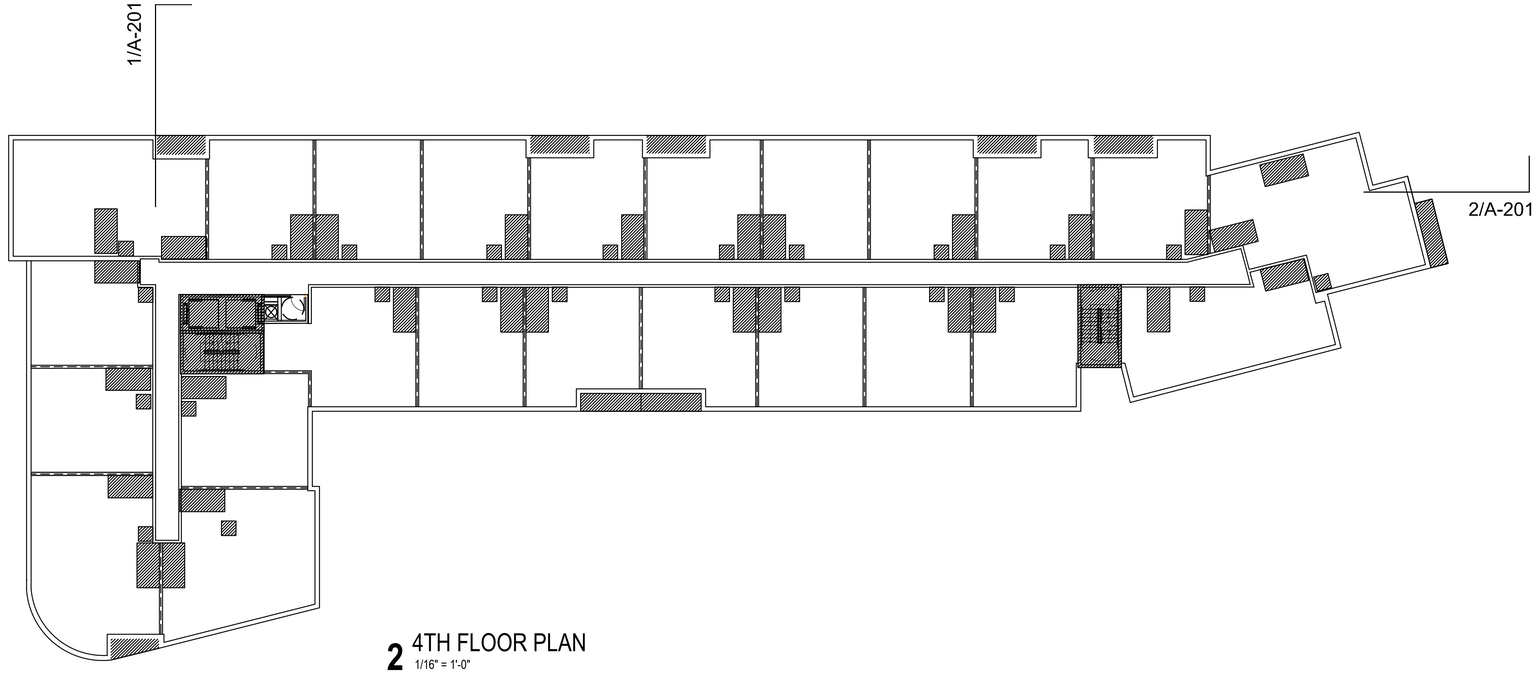
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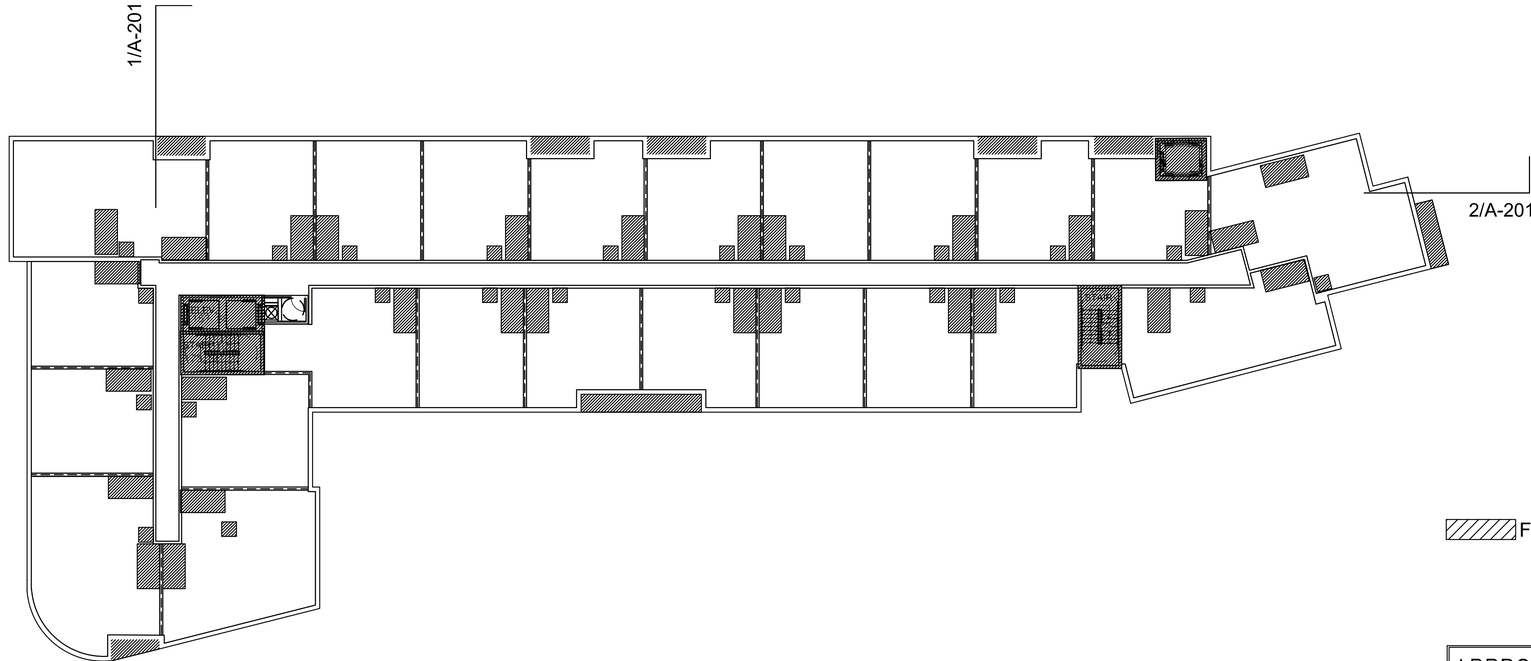
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2 4TH FLOOR PLAN
1/16" = 1'-0"



1 3RD FLOOR PLAN
1/16" = 1'-0"

F.A.R. EXCLUSIONS

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1200 NORTH HENRY STREET
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PROJECT NO. 317462

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BUILDING PLANS

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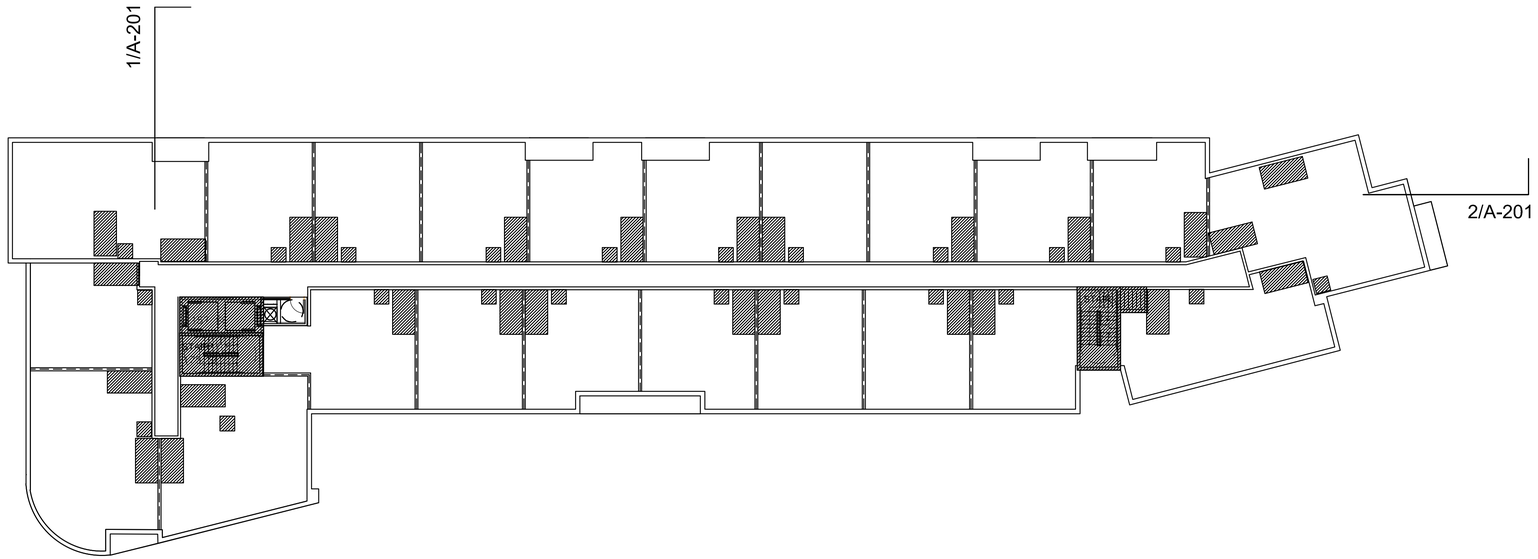
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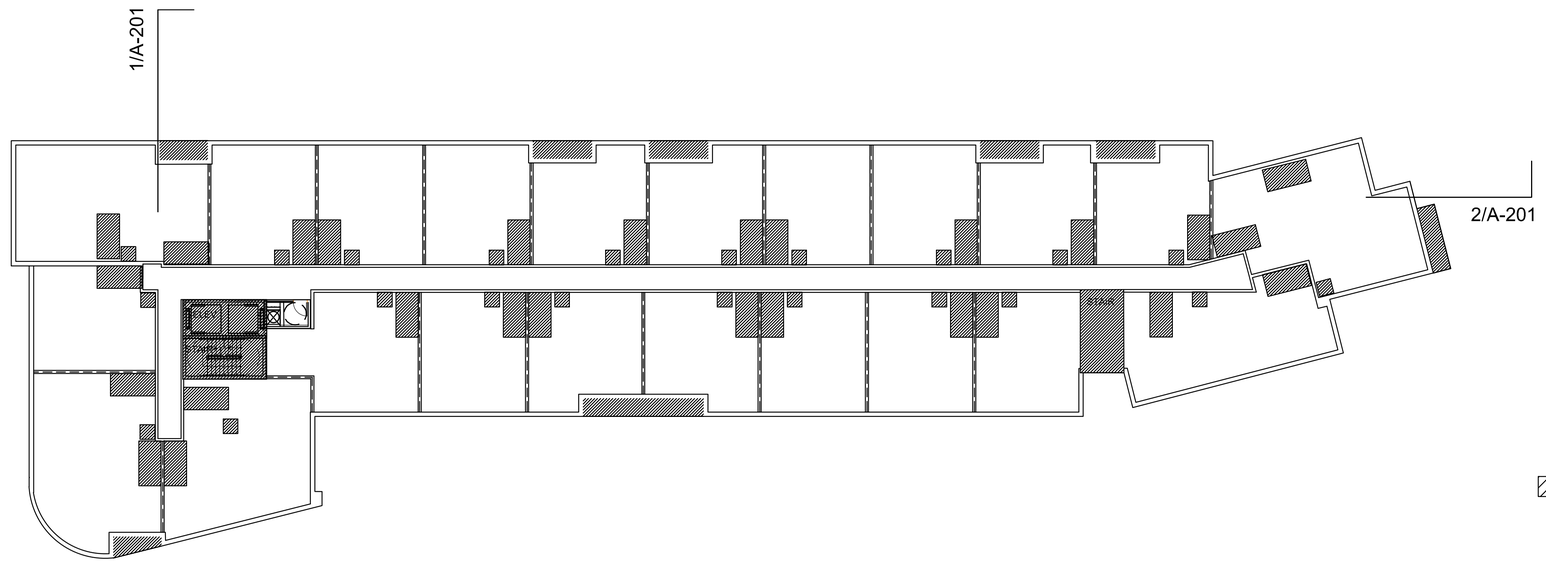
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1 6TH FLOOR PLAN
1/16" = 1'-0"



1 5TH FLOOR PLAN
1/16" = 1'-0"

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1200 NORTH HENRY STREET
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PROJECT NO. 317462

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BUILDING PLANS

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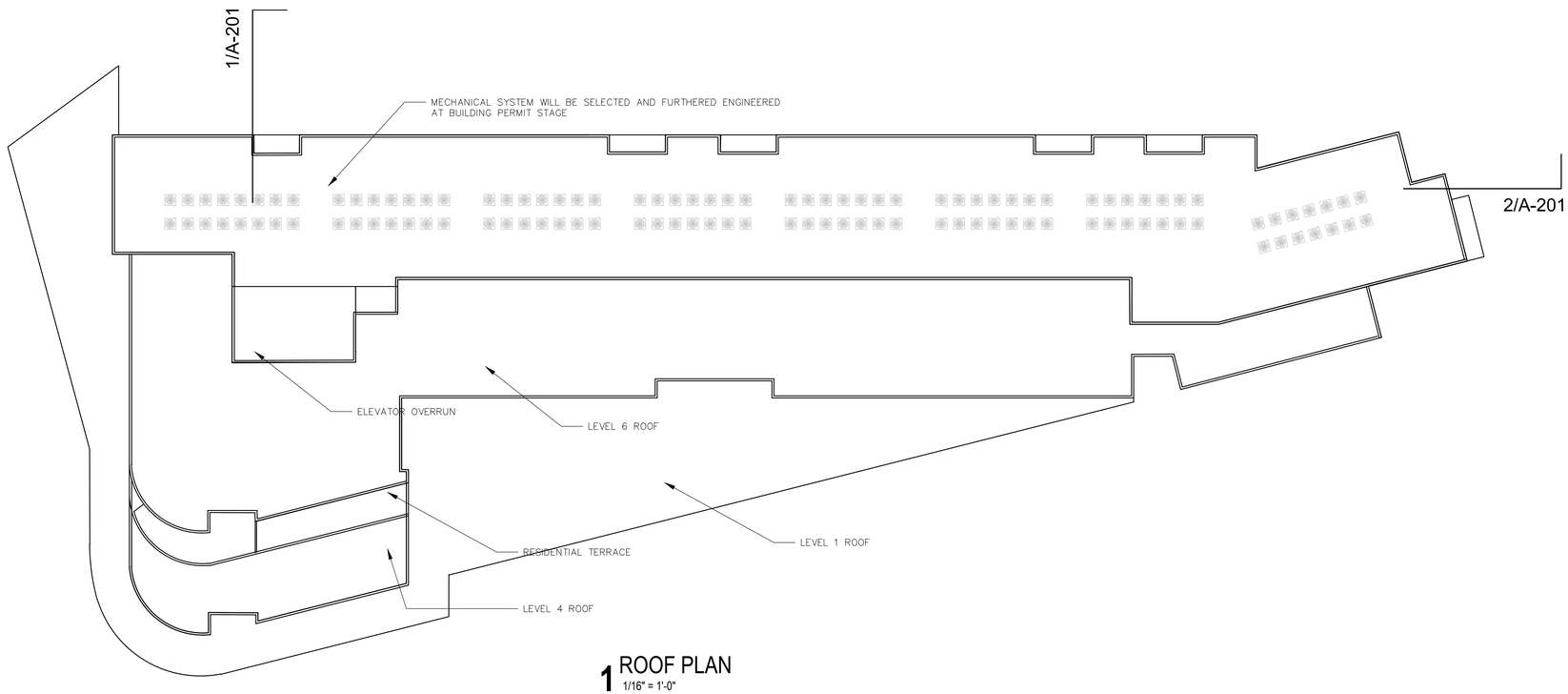
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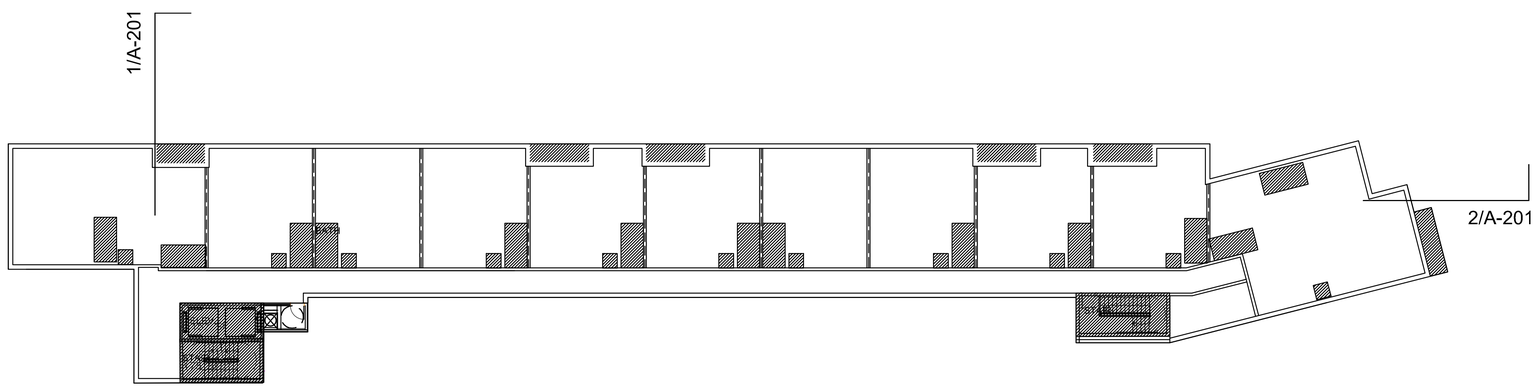
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1 ROOF PLAN
1/16" = 1'-0"



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1 7TH FLOOR PLAN
1/16" = 1'-0"

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1200 NORTH HENRY STREET
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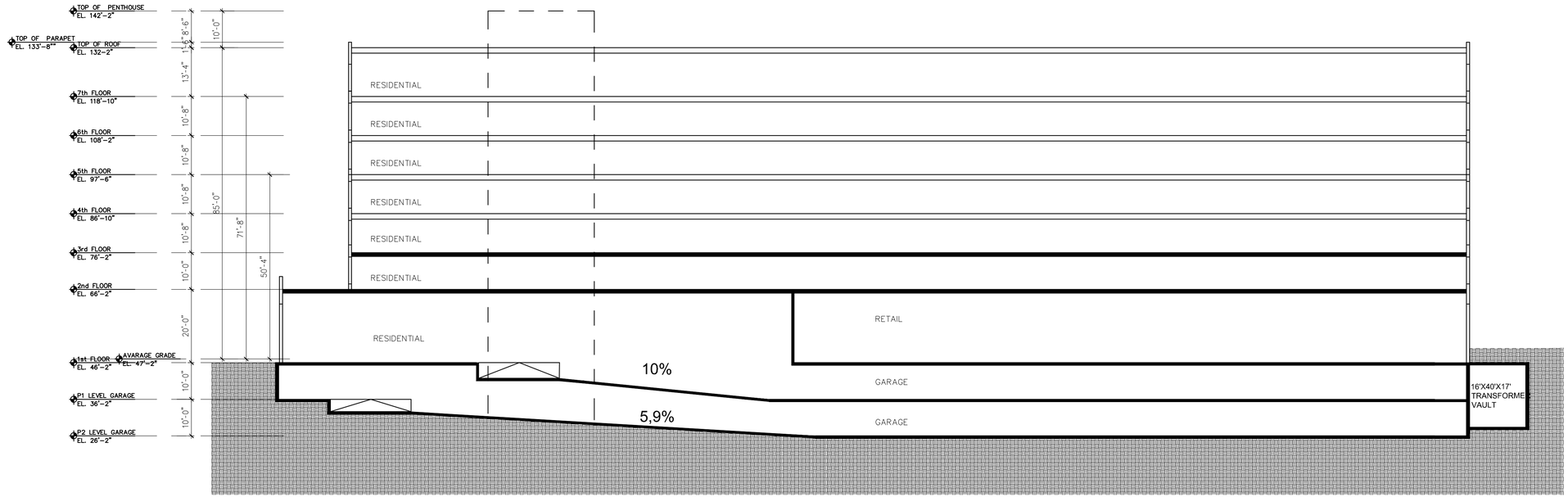
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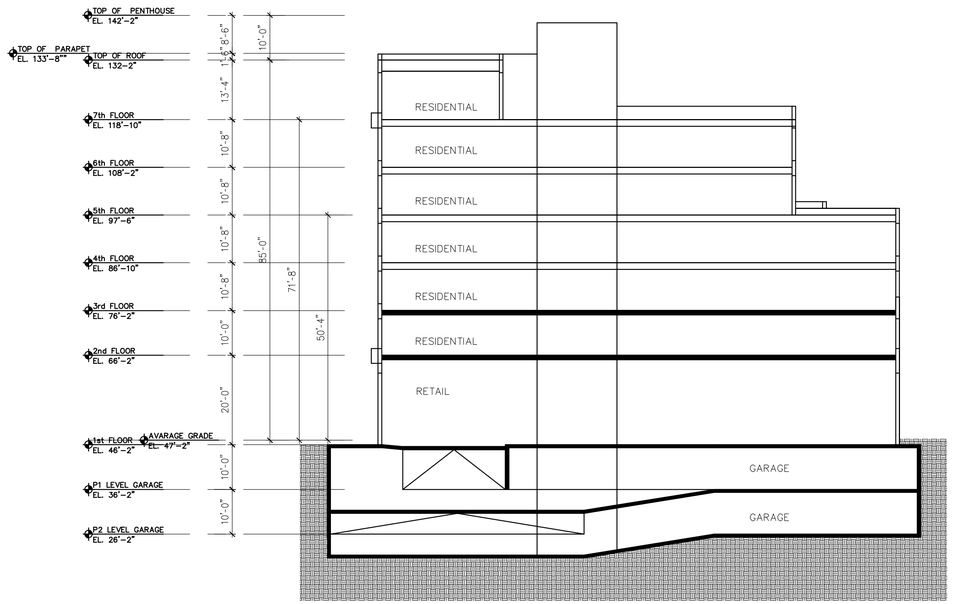
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2 LONGITUDINAL SECTION
1/16" = 1'-0"



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

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PROJECT TITLE

PRELIMINARY DEVELOPMENT SPECIAL USE PERMIT

1200 NORTH HENRY STREET
ALEXANDRIA, VA

PROJECT NO. 317462

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BUILDING SECTIONS

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2 EAST ELEVATION
1/16" = 1'-0"

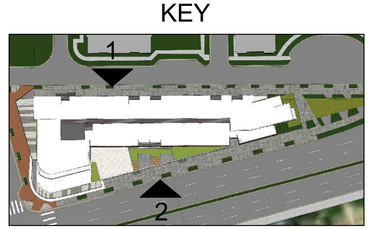


1 WEST ELEVATION
1/16" = 1'-0"

MATERIALS KEY

1	BRICK TYPE 1
2	BRICK TYPE 2
3	BRICK TYPE 3
4	PORCELAIN TILE TYPE 1
5	PORCELAIN TILE TYPE 2
6	FIBER CEMENT PANELS
7	PRECAST / CAST STONE
8	ALUMINUM / FIBERGLASS WINDOW - LOW "E" - CLEAR GLASS
9	ALUMINUM / FIBERGLASS WINDOW - SPANDREL GLASS
10	ARCHITECTURAL RAILING
11	SIGNAGE
12	METAL CANOPY
13	GARAGE DOOR - SECTIONAL DOOR W/ TRANSLUCENT PANELS
14	ARCHITECTURAL LOUVER
15	ALUMINUM STOREFRONT GLAZING SYSTEM
16	LIGHTWEIGHT INSULATED MASONRY CLADDING - NEWBRICK OR SIMILAR TYPE 1
17	LIGHTWEIGHT INSULATED MASONRY CLADDING - NEWBRICK OR SIMILAR TYPE 2
18	CONCRETE STRUCTURE - PAINTED
19	PERFORATED METAL MESH

KEY



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SPECIAL USE PERMIT NO. 2017-0020

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PRELIMINARY DEVELOPMENT SPECIAL USE PERMIT

1200 NORTH HENRY STREET
ALEXANDRIA, VA

PROJECT NO. 317462

DRAWING TITLE

BUILDING ELEVATIONS

DRAWN BY JB, JG
QC CHECKED BY JS
CA REVIEWED BY

DRAWING NUMBER

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1 NORTH ELEVATION
1/16" = 1'-0"



2 SOUTH ELEVATION
1/16" = 1'-0"

MATERIALS KEY

1	BRICK TYPE 1
2	BRICK TYPE 2
3	BRICK TYPE 3
4	PORCELAIN TILE TYPE 1
5	PORCELAIN TILE TYPE 2
6	FIBER CEMENT PANELS
7	PRECAST / CAST STONE
8	ALUMINUM / FIBERGLASS WINDOW - LOW "E" - CLEAR GLASS
9	ALUMINUM / FIBERGLASS WINDOW - SPANDREL GLASS
10	ARCHITECTURAL RAILING
11	SIGNAGE
12	METAL CANOPY
13	GARAGE DOOR - SECTIONAL DOOR W/ TRANSLUCENT PANELS
14	ARCHITECTURAL LOUVER
15	ALUMINUM STOREFRONT GLAZING SYSTEM
16	LIGHTWEIGHT INSULATED MASONRY CLADDING - NEWBRICK OR SIMILAR TYPE 1
17	LIGHTWEIGHT INSULATED MASONRY CLADDING - NEWBRICK OR SIMILAR TYPE 2
18	CONCRETE STRUCTURE - PAINTED
19	PERFORATED METAL MESH

KEY



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REVISION DATE

PROJECT TITLE
PRELIMINARY DEVELOPMENT SPECIAL USE PERMIT
1200 NORTH HENRY STREET
ALEXANDRIA, VA
PROJECT NO. 317462

DRAWING TITLE
BUILDING ELEVATIONS

DRAWN BY JB, JG
QC CHECKED BY JS
CA REVIEWED BY

DRAWING NUMBER
A-302
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1 NORTH EAST - AERIAL VIEW



2 SOUTH EAST - AERIAL VIEW

3 SOUTH WEST - AERIAL VIEW

4 NORTH WEST - AERIAL VIEW

KEY

APPROVED
SPECIAL USE PERMIT NO. 2017-0020

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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Interior Architecture
Land Planning
Sustainability

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Tysons, Virginia 22182

703.556.9275
www.dcsdesign.com

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JOSEPH STEVEN SAVILLE
Lic. No. 12654
6/21/18
ARCHITECT

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ISSUE DATE

CONCEPT PLAN I	09/22/17
CONCEPT PLAN II	02/16/18
PRELIMINARY COMPLETENESS	05/09/18
VERIFICATION SUBMISSION	06/21/18

REVISION DATE

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ALEXANDRIA, VA

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BUILDING MASSING

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1 NORTH EAST - AERIAL VIEW



2 SOUTH EAST - AERIAL VIEW



3 SOUTH WEST - AERIAL VIEW



4 NORTH WEST - AERIAL VIEW

KEY



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1 NORTH EAST - AERIAL VIEW

KEY



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1200 NORTH HENRY STREET

CITY OF ALEXANDRIA, VA

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

OWNER
1200 N HENRY, LLC
P.O. Box 1924
Alexandria, VA 22313

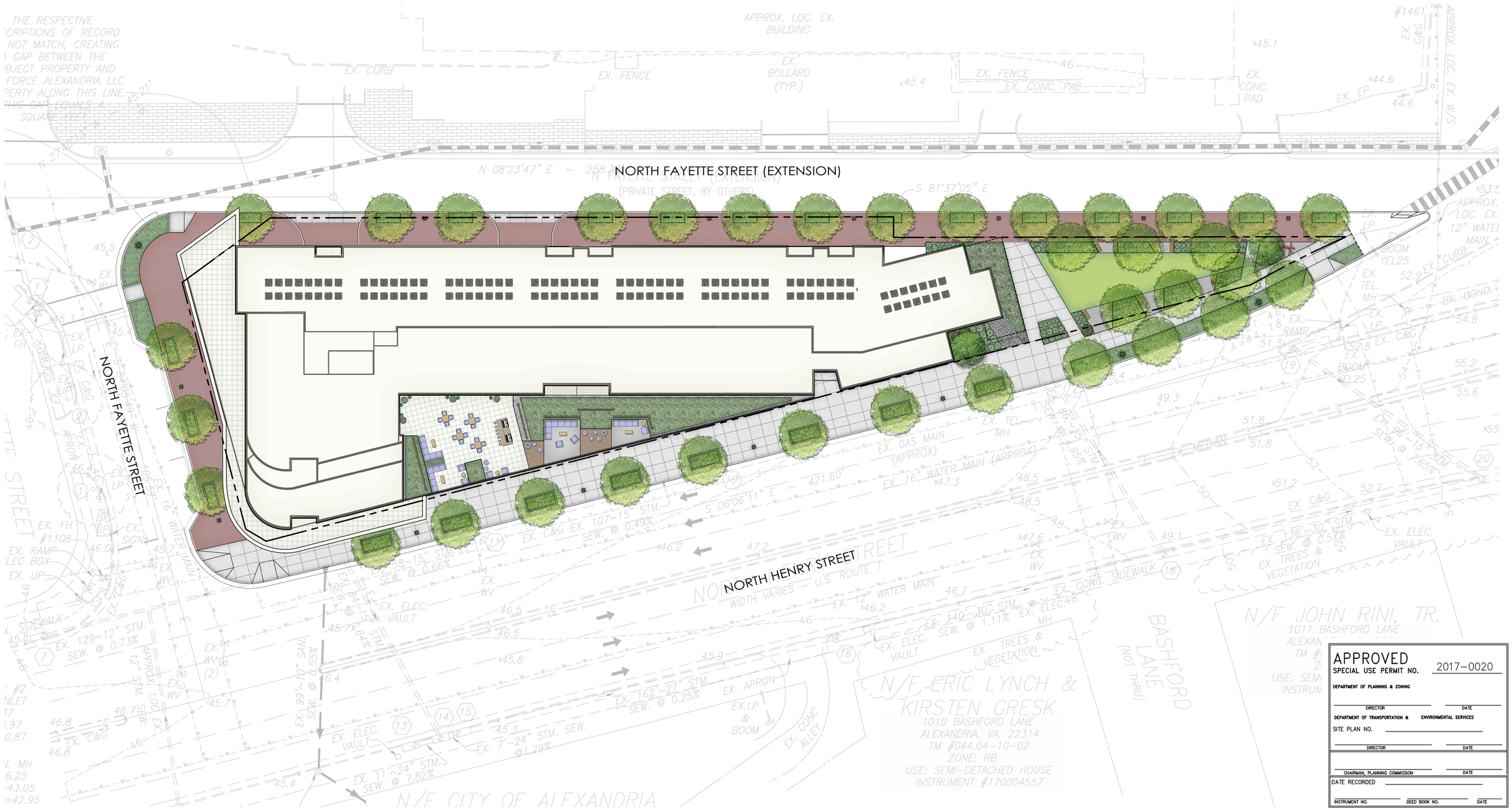
DEVELOPER
AVANTI HOLDINGS GROUP, LLC
1605 King Street
Suite 3
Alexandria, VA 22314
202.834.4355

CIVIL
R.C. FIELDS & ASSOCIATES, INC.
730 S. Washington Street
Alexandria, VA 22314
703.549-6422

ARCHITECT
DAVIS, CARTER, SCOTT, LTD
8614 Westwood Center Drive
Suite 800
Tysons, VA 22182
703.556.9275

LANDSCAPE ARCHITECTURE

L1.00	OVERALL LANDSCAPE PLAN ILLUSTRATIVE
L1.01	OVERALL LANDSCAPE PLAN
L1.02	SECOND FLOOR TERRACE LANDSCAPE PLAN
L1.03	HARDSCAPE DETAILS
L1.04	PLANTING DETAILS



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SPECIAL USE PERMIT NO. 2017–0020

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

COMMONWEALTH OF VIRGINIA
TRINI M. RODRIGUEZ
Cert. No. 1296
06/21/18
LANDSCAPE ARCHITECT

REVISIONS

PRELIMINARY DEVELOPMENT SPECIAL USE PERMIT	05.04.2018

OVERALL LANDSCAPE PLAN ILLUSTRATIVE

ORIGINAL ISSUE DATE
05/02/18

DESIGNED BY
TR

DRAWN BY
NM, SL

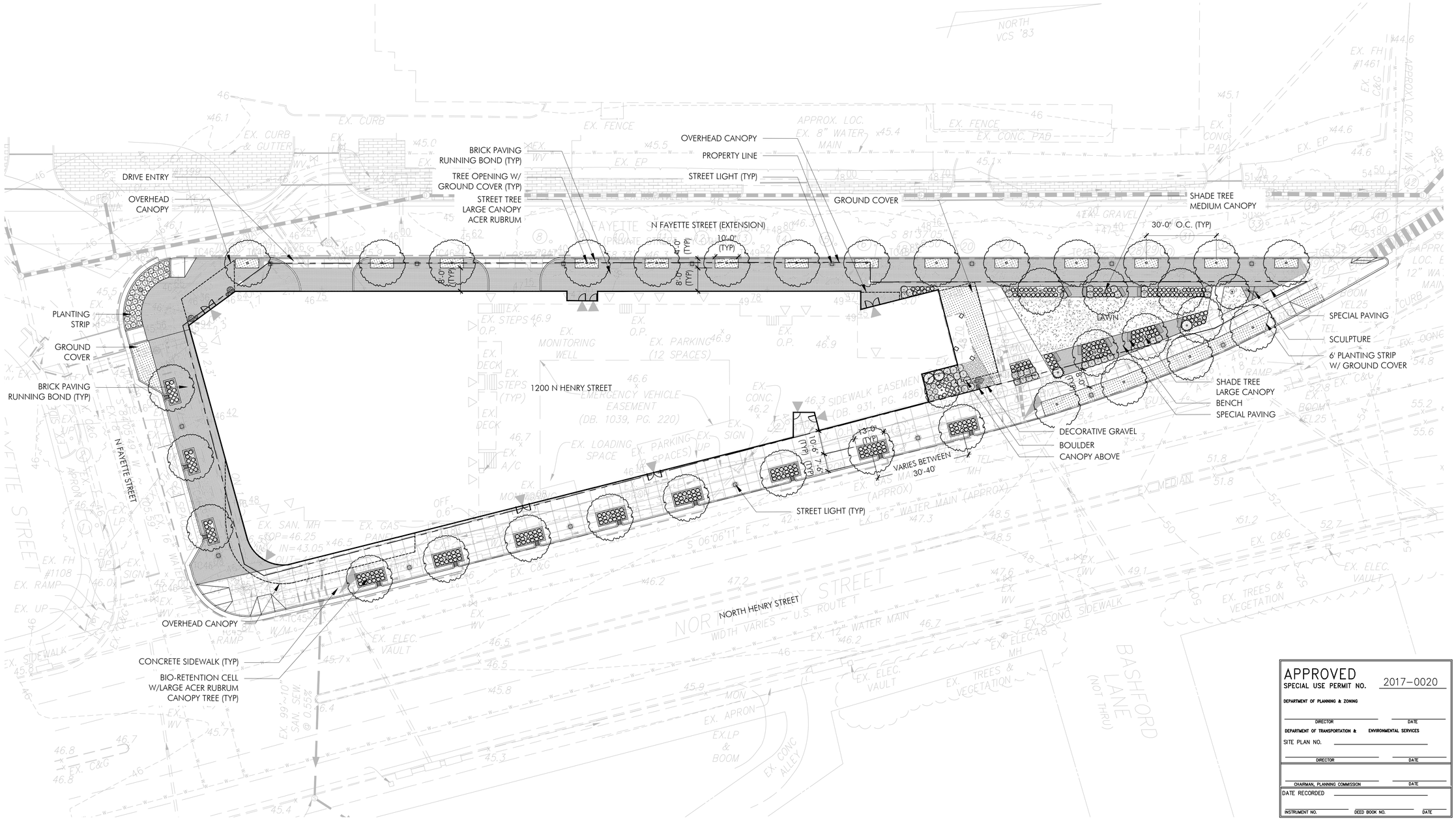
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NORTH

SCALE
1" = 20'-0"
0 10 20 40 FEET

L1.00

1200 NORTH HENRY STREET



CITY OF ALEXANDRIA, VA

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OVERALL LANDSCAPE PLAN

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05/02/18

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TR

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NM, SL

CHECKED BY
TR

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SCALE
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FEET

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DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

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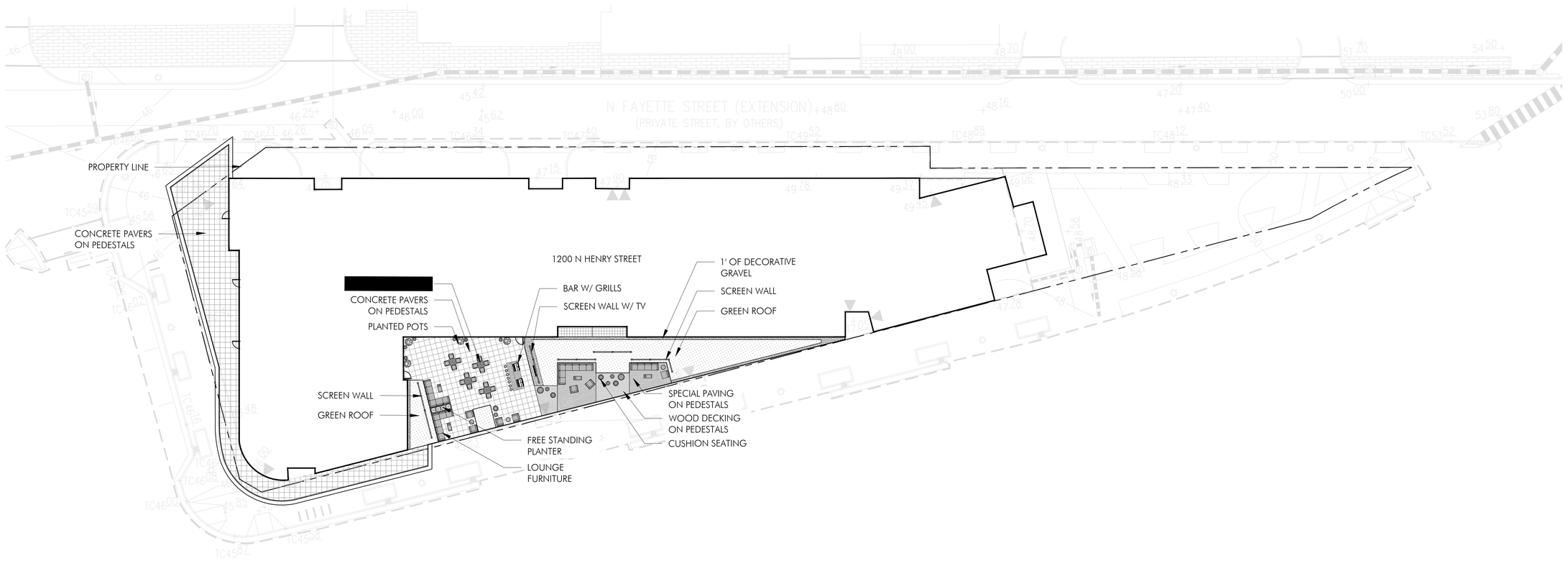
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1200 NORTH HENRY STREET

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LANDSCAPE ARCHITECT

REVISIONS

PRELIMINARY DEVELOPMENT
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SECOND FLOOR TERRACE LANDSCAPE PLAN

ORIGINAL ISSUE DATE
05/02/18

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0 10 20 40 FEET

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DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

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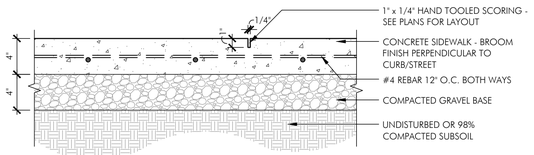
DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED

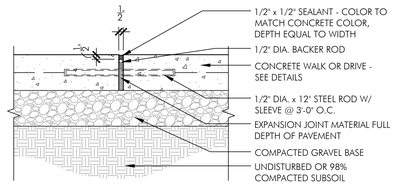
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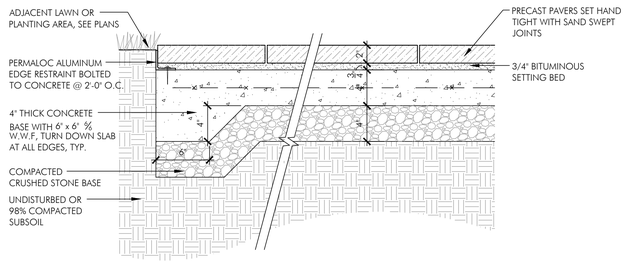
01 CONCRETE PAVING

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



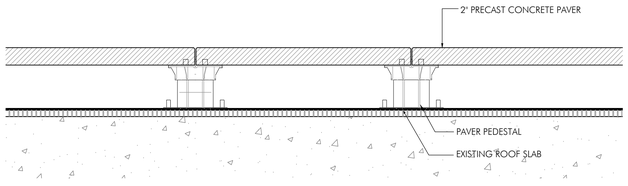
02 EXPANSION JOINT

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



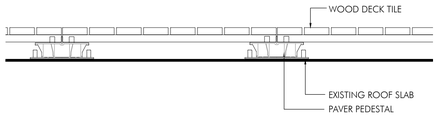
03 PAVERS ON GRADE

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



04 CONCRETE PAVERS ON PEDESTALS

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



05 WOOD DECKING ON PEDESTALS

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

STREETWORKS™

DESCRIPTION

The Lexington tastefully compliments communities, parks and residential roadways.

Catalog #	Type
Project	
Comments	Date
Prepared by	

SPECIFICATION FEATURES

A ... Top Hinged die-cast aluminum top with cupola cover.

B ... Socket Vertical: Base up standard on Type II, III and V. Horizontal: Available with Type II and III horizontal reflector. Mogul-base porcelain socket is field adjustable on horizontal only. 50-150W Metal Halide is medium-base socket standard.

C ... Screws Captive retaining screw.

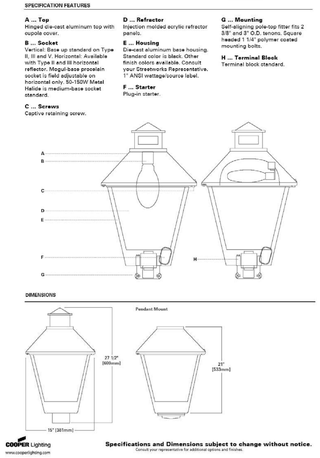
D ... Refractor Injection molded acrylic refractor panels.

E ... Housing Die-cast aluminum base housing. Standard color is black. Other finish colors available. Consult your Streetworks Representative. 1" ANSI wattage/source label.

F ... Starter Plug-in starter.

G ... Mounting Self-aligning pole-top fitter fits 2 3/8" and 3" O.D. tenons. Square headed 7 1/4" polymer coated mounting bolts.

H ... Terminal Block Terminal block standard.



DIMENSIONS



LXF
LEXINGTON

50-175W
High Pressure Sodium
Metal Halide
Mercury

DECORATIVE LUMINAIRE

EPA
Effective Projected Area: 1.7

SHIPPING DATA
Approximate Net Wt:
25 lbs. (11 kgs.)

ETL LISTED

COOPER Lighting
www.cooperlighting.com

Specifications and Dimensions subject to change without notice.
Consult your representative for additional options and finishes.

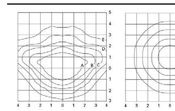
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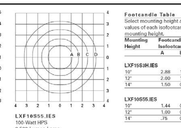
06 STREET LIGHT (TYP)

SCALE: NTS

LXF LEXINGTON

PHOTOMETRICS





Footcandle Table
Select mounting height and read across for footcandle values of each isofootcandle line. Distance in units of mounting height.

Mounting Height	Isofootcandle Values for Isofootcandle Lines				
	A	B	C	D	E
LXF155SH.IES					
16'	2.88	1.44	0.72	0.36	0.28
12'	2.00	1.00	0.50	0.25	0.10
14'	1.50	0.75	0.37	0.18	0.07
LXF195SK.IES					
19'	1.44	0.72	0.36	0.28	
12'	1.00	0.50	0.25	0.10	
14'	.75	0.37	0.18	0.07	

LXF155SH.IES
150 Watt HPS
16,000-Lumen Lamp
Type III Semi Cutoff

LXF195SS.IES
100 Watt HPS
9,500-Lumen Lamp
Type V

ORDERING INFORMATION

Sample Number: LXF195SS2G4

Product Family	Lamp Type *	Ballast Type *	Voltage *	Distribution Vertical Lens	Options
LXF Lexington	**M** Metal Halide●	**H** Horiz. HPS	**T** 120V	**2J** Type II	**1** Single Fuse, Internally Mounted (120, 277V)
Lamp Wattage	**S** High Pressure Sodium	**R** Horiz. MPF	**2** 208V	**3S** Type III●	**2** Double Fuse, Internally Mounted (208, 240, and 480V)
5S 50W	**V** Mercury	**I** Horiz. HPF	**4** 240V	**5S** Type V	**4** Mercury NEMA Photocontrol Receptacle
7P 70W		**K** Horiz. MHF	**5** 277V	**Horizontal Lens**	**WH** White
10P 100W		**V** CWA	**6** 480V	**4H** Type II	**BZ** Bronze
15P 150W			**7** Multi-Tap 120V	**5H** Type III●	**AP** Grey
17P 175W			**M** Multi-Tap wired 240V	**6H** Type IV	**P** Polycarbonate Lens. Clear
			N 240 w/PCR wired 120V		**S** 3/4" Pendant Mount Fitter
			W Multi-Tap wired 277V		**N** NEMA Slotted Bucket●
					S Snap Latches for Tooless Lamp Replacement
					U 11, 7, CSA Listed
					J Factory Installed Locator Feed

Notes: * Refer to the technical section for lamp/ballast voltage compatibility. ● Medium-base socket standard for 150-watt and below Metal Halide. ■ Requires use of coated lamp to achieve Type III distribution. ▲ Available in Texas HPF and MPF. For HI Reactance or CWA availability, consult your Streetworks representative.

COOPER Lighting
www.cooperlighting.com

Specifications and Dimensions subject to change without notice.
Streetworks • Customer First Center • 1121 Highway 74 South • Peachtree City, GA 30269 • TEL 770.486.4800 • FAX 770.486.4801

ADW0612345
06/19/2008 9:40:42 AM

Round Tapered Composite Tuff-Poles®

COMPOSITE TUFF-POLE

AA, AB, AC, AD, AG, AH, AO, and AS Series

Anchor Base

- Mounting heights to 42'
- Natural or smooth finish
- Eight standard colors - pigments integrated into the resin
- High-performance UV- and weather resistant pigmented polyurethane coating
- Tenon Top (Post Top) or Capped (except AS Series below 25' mounting height)
- EPA ratings are the same for Capped or Tenon Top poles
- Poles can be predrilled for bolt-on side mount fixture(s), arms, etc. (except AS Series below 25' mounting height)
- Composite shrouds (1- or 2-piece) optional. Optional bolt covers available for some styles
- Poles are individually ID tagged
- Wrapped individually for shipment

BA, BB, BC, BD, BG, BH, BO, BS and BX Series

Direct Burial Base

- Mounting heights to 40'
- Natural or smooth finish
- Eight standard colors - pigments integrated into the resin
- High-performance UV- and weather resistant pigmented polyurethane coating
- Tenon Top (Post Top) or Capped (except BS Series below 20' mounting height)
- EPA ratings are the same for Capped or Tenon Top poles
- Wiring access hole standard
- Poles can be predrilled for bolt-on slide mount fixture(s), arms, etc. (except BS Series below 20' mounting height)
- Poles are individually ID tagged
- Wrapped individually for shipment
- Direct Burial style for fast, easy installation and improved ground line appearance
- Anti-rotation flare structurally integrated into pole base during manufacture
- Shakespeare fiberglass won't rust, rot, or corrode in the ground, and insects won't eat it.
- No concrete foundations or anchor bolts

Anchor Base and Direct Burial

	Page
Tenon Top Poles	18
Capped or Tenon Top	20
Mast Arm Poles	24
Breakaway Poles	42
Breakaway Mast Arm Poles	46
Options and Accessories	64

Series:

AA	BA
AB	BB
AC	BC
AD	BD
AG	BG
AH	BH
AO	BO
AS	BS
	BX

- Standard handhole: 2½" x 5" oval. Optional 4" x 6" or 4" x 12" handholes, depending on pole dimensions. For other handhole options, contact factory. All handhole covers are polyurethane coated to match pole color.

Shakespeare calculates all EPA recommendations based on poles with handholes, and in accordance with the AASHTO standard, allowing for a 30% gust factor for all wind ratings, including 120mph.

For applications requiring extremely large loads and extra height, ask for information on Shakespeare Transmission and Distribution poles - up to 70' long and capable of large luminaires typical of sports stadiums and the like.

[Shakespeare Composite Structures™ ► Page 17]

APPROVED
SPECIAL USE PERMIT NO. 2017–0020

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1200 NORTH HENRY STREET

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COMMONWEALTH OF VIRGINIA
TRINI M. RODRIGUEZ
Cert. No. 1296
06/21/18
LANDSCAPE ARCHITECT

REVISIONS

PRELIMINARY DEVELOPMENT
SPECIAL USE PERMIT 05.04.2018

HARDSCAPE DETAILS

ORIGINAL ISSUE DATE
05/02/18

DESIGNED BY
TR

DRAWN BY
NM, SL

CHECKED BY
TR

NORTH

SCALE
AS SHOWN

0 FEET

L1.03

POTENTIAL PLANT SCHEDULE

KEY	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	COND.	COMMENTS
		CANOPY TREES				
AR		Acer rubrum 'October Glory'	October Glory Red Maple	3 1/2"- 4" cal.	B&B	single leader; full branching
GB		Ginko biloba	Ginkgo	2-2 1/2" cal.	B&B	single leader; full branching; males only
GT		Gleditsia triacanthos inermis 'Halka'	Halka Honeylocust	3 1/2"- 4" cal.	B&B	single leader; full branching
LS		Liquidambar styraciflua 'Happidaze'	Sweetgum	3 1/2"- 4" cal.	B&B	single leader; full branching
PA		Platanus x acerifolia 'Bloodgood	London Planetree	3 1/2"- 4" cal.	B&B	single leader; full branching
QP		Quercus phellos	Willow Oak	3 1/2"- 4" cal.	B&B	single leader; full branching
		ORNAMENTAL TREES				
AC		Amelanchier canadensis	Serviceberry	10-12' ht.	B&B	multistem - 3 stems min; full branching
CC		Cercis canadensis	Eastern Redbud	10-12' ht.	B&B	single stem; full branching
LI		Lagerstroemia x fauriei 'Muskogee'	Muskogee Crape Myrtle	6-8' ht.	B&B	specimen, 3-4 stems
MV		Magnolia virginiana	Sweetbay Magnolia	6-8' ht.	B&B	specimen
		EVERGREEN TREES				
IF		Ilex x attenuata 'Foster's Holly'	Foster's Holly	8-10' ht.	B&B	heavy; matched; symmetrical
		SHRUBS				
CA		Clethra alnifolia 'Hummingbird'	Summersweet	18" - 24" ht.	B&B	full branching;
CS		Cornus sericia	Red Twig Dogwood	18" - 24" ht.	Cont.	full branching;
DG		Deutzia gracillis 'Nikko'	Slender Deutzia	18" - 24" ht.	Cont.	full branching;
FG		Fothergilla gardenii	Dwarf Fothergilla	24" - 30" ht.	B&B	full branching;
HQ		Hydrangea quercifolia 'Alice'	Oakleaf Hydrangea	36" - 42" ht.	B&B	full branching;
IV		Ilex verticillata 'Sparkleberry' & 'Apollo'	Winterberry (female and male)	30 - 36" ht.	B&B	full branching;
IT		Itea virginica 'Henry's Garnet'	Virginia Sweetspire	24-30" ht.	Cont.	full branching;
MP		Myrica pensylvanica	Northern Bayberry	30 - 36" ht.	B&B	full branching;
ND		Nandina domestica 'Harbor Dwarf'	Harbor Dwarf Nandina	18" - 24" ht.	Cont.	full branching;
PL		Prunus laurocerasus 'Schipkaensis'	Schipkaensis Cherry Laurel	30 - 36" ht.	B&B	full branching;
RO		Rosa 'Knockout'	Knockout Rose	18"-24" ht.	Cont.	full branching; 24"o.c.
		ORNAMENTAL GRASSES AND HERBACEOUS PERENNIALS & GROUND COVERS				
ANP		Aster novae-angliae'Purple Dome'	Purple Dome New England Aster	1 gal.	Cont.	18" o.c.
CVM		Coreopsis verticillata 'Moonbeam'	Moonbeam Coreopsis	1 gal.	Cont.	24" o.c.
CAK		Calamagostis acutiflora 'Karl Foerster'	Karl Foerster Feather Reed Grass	1 gal.	Cont.	24" o.c.
DCG		Deshampsia caespitosa 'Goldtau'	Gold Dew Tufted Hair Grass	1 gal.	Cont.	24" o.c.
DCS		Deshampsia caespitosa 'Schottland'	Tufted Hair Grass	1 gal.	Cont.	24" o.c.
DFL		Deshampsia flexuaosa	Wavy Hair Grass	1 gal.	Cont.	24" o.c.
EPM		Echinacea purpurea 'Magnus'	Magnus Purple Coneflower	1 gal.	Cont.	24" o.c.
LMB		Liriope muscari 'Big Blue'	Big Blue Liriope	1 qt.	Cont.	12" o.c.
LSK		Liatris spicata	Gayfeather	1 gal.	Cont.	24" o.c.
MCA		Mulenbergia capillaris	Pink Muhly	1 gal.	Cont.	24" o.c.
MCE		Molinia caerulea	Purple Moor Grass	1 gal.	Cont.	24" o.c.
NTE		Nassella tenuissima	Mexican Feather Grass	1 gal.	Cont.	18" o.c.
NFW		Nepeta 'Walker's Low'	Walker's Low Catmint	1 gal.	Cont.	24" o.c.
PAH		Pennisetum alopecuroides 'Hameln'	Dwarf Fountain Grass	1 gal.	Cont.	24" o.c.
RFF		Rudbeckia fulgida 'Fulgida'	Fulgida Rudbeckia	1 gal.	Cont.	24" o.c.
SAJ		Sedum spectabile 'Autumn Joy'	Autumn Joy Sedum	1 gal.	Cont.	24" o.c.
		BULBS				
AGI		Allium giganteum	Ornamental Onion	bulbs		accent
NAR		Narcissus 'Single Campernelle', 'Tripartite', 'Pistachio'	Yellow Daffodils mixture	bulbs		accent
CRO		Crocus Autumn Blue	Autumn Blue Crocus: Fall	bulbs		accent

NOTE: All plant material layouts, selections, sizes and quantities are subject to revision and refinement after the submission of the Preliminary Site Plan and prior to the submission of the Final Site Plan.

CANOPY COVERAGE TABULATION ON GRADE

QTY.	CATEGORY	SIZE	COND.	COMMENTS	CANOPY COVERAGE CALCULATIONS sf coverage	# on grade	TOTAL
	CANOPY TREES						
6	Large Shade Tree	3 1/2"- 4" cal.	B&B	single leader; full branching	1250	6	7,500
1	Medium Shade Tree	3 1/2"- 4" cal.	B&B	single leader; full branching	750	1	750
						Total canopy tree coverage	*8,250*
	ORNAMENTAL TREES						
0	Small Ornimental	10'-12' ht.	B&B	multistem - 3 stems min; full branching	500	0	0
						Total ornamental tree coverage	*0*
	SHRUBS						
176	Shrubs	18" - 24" ht.	B&B	full branching;	2	152	304
						Total shrub coverage	*304*
						TOTAL CANOPY COVERAGE	*8,554*

CANOPY COVERAGE TABULATION ON STRUCTURE

QTY.	CATEGORY	SIZE	COND.	COMMENTS	CANOPY COVERAGE CALCULATIONS 50% coverage	# on-structure	TOTAL
	CANOPY TREES						
0	Large Shade Tree	3 1/2"- 4" cal.	B&B	single leader; full branching	625	0	0
1	Medium Shade Tree	3 1/2"- 4" cal.	B&B	single leader; full branching	375	1	375
						Total canopy tree coverage	*375*
	ORNAMENTAL TREES						
0	Small Ornimental	10'-12' ht.	B&B	multistem - 3 stems min; full branching	250	0	0
						Total ornamental tree coverage	*0*
	SHRUBS						
38	Shrubs	18" - 24" ht.	B&B	full branching;	1	38	38
						Total shrub coverage	*38*
						TOTAL CANOPY COVERAGE	*413*

CANOPY COVERAGE SUMMARY

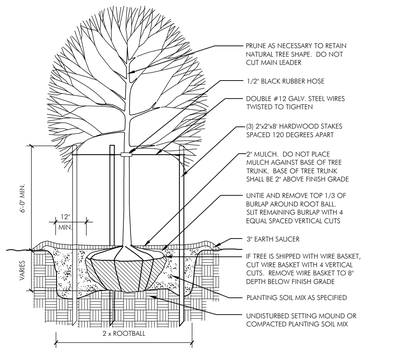
Site Area = 34,921 Sq. Ft.

Landscape Coverage Required (25% of Site Area) = 8,730 Sq. Ft.

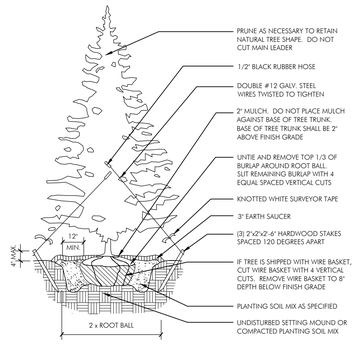
Total Area of Existing Trees to Remain = 0 Sq. Ft.

On-site Landscape Coverage Provided = 8,967 Sq. Ft.
Off-site Landscape Coverage Provided = 0 Sq. Ft.

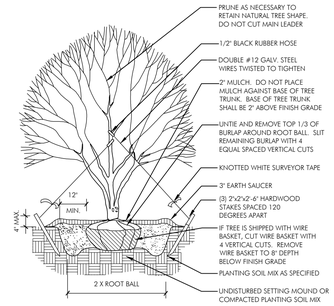
Total Landscape Coverage Provided = 8,967 Sq. Ft.



TYP. SHADE TREE ON GRADE



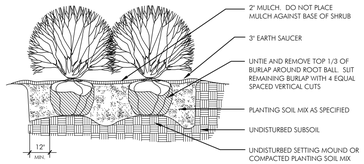
TYP. EVERGREEN TREE ON GRADE



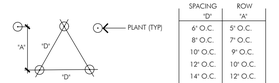
TYP. ORNAMENTAL TREE ON GRADE

NOTES:

1. SHRUB SHALL BEAR SAME RELATIONSHIP TO GRADE AS IT DID IN NURSERY.
2. PRUNE AS NEEDED TO RETAIN NATURAL SHRUB SHAPE.
3. FOR CONTAINER GROWN PLANTS, SPLIT THE ROOT BALL WITH 4 EQUAL SPACED VERTICAL CUTS AND BUTTERFLY THE ENTIRE ROOT BALL.

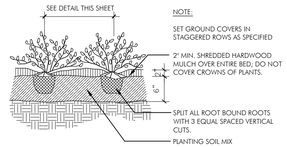


TYP. SHRUB ON GRADE



PLANT SPACING "D"	ROW "A"
6" O.C.	5" O.C.
8" O.C.	7" O.C.
10" O.C.	9" O.C.
12" O.C.	10" O.C.
14" O.C.	12" O.C.
15" O.C.	13" O.C.
16" O.C.	14" O.C.
18" O.C.	16" O.C.
24" O.C.	21" O.C.
30" O.C.	26" O.C.
36" O.C.	30" O.C.

NOTE:
GROUND COVERS AND PERENNIALS TO BE INSTALLED WITH TRIANGULAR SPACING



NOTE:
SET GROUND COVERS IN STAGGERED ROWS AS SPECIFIED

TYP. GROUNDCOVER ON GRADE

PLANTING NOTES

1. Contractor shall be responsible for becoming familiar with all underground utilities, pipes, and structures. Contractor shall take sole responsibility for any cost incurred due to damage of said utilities.

2. Procedures and specifications of work shall conform to the "Landscape Specifications Guideline for the Baltimore-Washington Metropolitan Area" (Latest Edition, published jointly by the Landscape Contractors Association of Metropolitan Washington and the American Society of Landscape Architects, Potomac Chapter.

3. Size and standards of plant materials shall conform to the latest edition of "USA Standards for Nursery Stock" by the American Association of Nurserymen, Inc. (AAN)

4. Final location of plant material shall be subject to the approval of the Landscape Architect. Contractor is to notify Landscape Architect for inspection after layout is complete and before installation.

5. No substitutions will be allowed without approval by the Landscape Architect.

6. All disturbed areas not planted with trees, shrubs or ground cover shall be sodded lawn unless otherwise noted.

7. All materials' specifications shall be in accordance with the industry standard for grading plant material- The American Standard for Nursery Stock (ANSI Z60.1) as produced by the American Association of Nurseryman; Washington, D.C.

8. 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 Colimbia and Virginia; Gaithersburg, Maryland; the American Society of Landscape Architects, the International Society of Arboriculture, and the American National Standards Institute.

9. Prior to commencement of landscape installation / planting operations, a pre-installation / construction meeting will be scheduled and held with the City's Arborist and Landscape Architects to review plant installation procedures and processes.

10. 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.

11. 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.

12. The applicant has made suitable arrangements 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 will 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 landscape plan shall be undertaken by the applicant. All remedial efforts shall, with prior approval by the city, be performed to the satisfaction of the Directors of Planning & Zoning, Recreation, Parks & Cultural Activities and Transportation & Environmental Services.

13. 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, Maryland.

14. Prior to commencement of landscape installation/planting operations, a pre-installation/construction meeting will be scheduled with the City's Arborist and Landscape Architects to review the scope of installation procedures and processes.

15. Maintenance for this project shall be performed in perpetuity, in compliance with City of Alexandria Landscape Guidelines and/or as conditioned by project approval.

16. 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 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.

17. As-built drawings for this landscape and/or irrigation/water management system will be provided in compliance with City of Alexandria Landscape Guidelines. As-built drawings shall include clear identification of all variation(s) and changes from approved drawings including location, quantity and specification of all project elements.

APPROVED
SPECIAL USE PERMIT NO. 2017–0020

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

1200 NORTH HENRY STREET

CITY OF ALEXANDRIA, VA

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

OWNER
1200 N HENRY, LLC
P.O. Box 1924
Alexandria, VA 22313

DEVELOPER
AVANTI HOLDINGS GROUP, LLC
1605 King Street
Suite 3
Alexandria, VA 22314
202.834.4355

CIVIL
R.C. FIELDS & ASSOCIATES, INC.
730 S. Washington Street
Alexandria, VA 22314
703.549-6422

ARCHITECT
DAVIS, CARTER, SCOTT, LTD
8614 Westwood Center Drive
Suite 800
Tysons, VA 22182
703.556.9275

COMMONWEALTH OF VIRGINIA
TRINI M. RODRIGUEZ
Cert. No. 1296
06/21/18
LANDSCAPE ARCHITECT

REVISIONS

PRELIMINARY DEVELOPMENT
SPECIAL USE PERMIT 05.04.2018

PLANTING DETAILS

ORIGINAL ISSUE DATE
05/02/18

DESIGNED BY
TR

DRAWN BY
NM, SL

CHECKED BY
TR

NORTH

SCALE
AS SHOWN

0 FEET

L1.04