DEVELOPMENT PRELIMINARY SITE PLAN
ALEXANDRIA PRESBYTERIAN CHURCH
1300 WEST BRADDOCK ROAD
CITY OF ALEXANDRIA, VIRGINIA

AREA TABULATIONS

TOTAL SITE AREA = 1.8675 AC 81,348 SF
TOTAL AREA OF TAX PARCELS = 1.8675 AC 81,348 SF
TOTAL EXISTING IMPERVIOUS AREA = 0.4526 AC 19,714 SF
TOTAL PROPOSED IMPERVIOUS AREA = 1.2649 AC 55,100 SF
TOTAL DISTURBED AREA = 2.1092 AC 91,878 SF

ENVIRONMENTAL SITE ASSESSMENT

1. THERE ARE NO TIDAL WETLANDS, TIDAL SHORES, TRIBUTARY STREAMS, FLOODPLAINS, CONNECTED TIDAL WETLANDS, HIGHLY ERODIBLE/PERMEABLE SOILS OR BUFFER AREAS ASSOCIATED WITH SHORES, STREAMS, OR WETLANDS LOCATED ON THE SITE. FURTHER, THERE ARE NO WETLAND PERMITS REQUIRED FOR THIS DEVELOPMENT PROJECT. ADDITIONALLY, THERE ARE NO KNOWN UNDERGROUND STORAGE TANKS ON THE SITE. THERE ARE KNOWN CONTAMINATED AREAS, CONTAMINATED SOILS OR ENVIRONMENTAL ISSUES ASSOCIATED WITH THIS SITE. THE SITE IS ENROLLED IN THE CITY OF ALEXANDRIA'S REMEDIAL ACTION PLAN (RAP) AND VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ) VOLUNTARY REMEDIATION (VRP) #VRP00548.
2. THE CITY OF ALEXANDRIA DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES, OFFICE OF ENVIRONMENTAL QUALITY MUST BE NOTIFIED IF UNUSUAL OR UNANTICIPATED CONTAMINATION OR UNDERGROUND STORAGE TANKS, DRUMS AND CONTAINERS ARE ENCOUNTERED AT THE SITE. IF THERE IS ANY DOUBT ABOUT PUBLIC SAFETY OR A RELEASE TO THE ENVIRONMENT, THE ALEXANDRIA FIRE DEPARTMENT MUST BE CONTACTED IMMEDIATELY BY CALLING 911. THE TANK OR CONTAINER'S REMOVAL, ITS CONTENTS, ANY SOIL CONTAMINATION AND RELEASES TO THE ENVIRONMENT WILL BE HANDLED IN ACCORDANCE WITH FEDERAL, STATE, AND CITY REGULATIONS.
3. ALL WELLS TO BE DEMOLISHED ON THIS PROJECT, INCLUDING MONITORING WELLS, MUST BE CLOSED IN ACCORDANCE WITH VIRGINIA STATE WATER CONTROL BOARD (VSWCB) REQUIREMENTS. CONTACT ENVIRONMENTAL HEALTH SPECIALIST AND COORDINATE WITH THE ALEXANDRIA HEALTH DEPARTMENT AT 703-746-4996.
4. THERE ARE NO KNOWN CONTAMINATED AREAS, CONTAMINATED SOILS OR ENVIRONMENTAL ISSUES ASSOCIATED WITH THIS SITE.
5. 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 AND HOLIDAYS.

   PILE DRIVING IS FURTHER RESTRICTED TO THE FOLLOWING HOURS:
   MONDAY THROUGH FRIDAY FROM 9am TO 6pm AND SATURDAYS FROM 10am TO 4pm; NO PILE DRIVING ACTIVITIES ARE PERMITTED ON SUNDAYS AND HOLIDAYS.

   RIGHT OF WAY EXCAVATION IS FURTHER RESTRICTED TO THE FOLLOWING HOURS:
   MONDAY THROUGH SATURDAY 7am TO 5pm; NO RIGHT OF WAY EXCAVATION IS PERMITTED ON SUNDAYS.

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 AN AREA MORE 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 APPLICATION. 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. ELECTRICAL WIRING METHODS AND OTHER ELECTRICAL REQUIREMENTS MUST COMPLY WITH NFPA 70, 2008.
8. THIS PROJECT IS NOT LOCATED IN A COMBINED SEWER AREA.
9. THIS SITE DOES NOT CONTAIN ANY AREAS PREVIOUSLY MAPPED AS MARINE CLAYS.

VICINITY MAP

TAX PARCEL NUMBERS: 032.02-05-(06-14)

PROJECT DESCRIPTION NARRATIVE

THE APPLICANT REQUESTS A DEVELOPMENT SITE PLAN (DSP) TO PERMIT THE REDEVELOPMENT OF THE EXISTING CHURCH AND PARSONAGE (ZONE R-8) ON THE PROPERTY INTO A NEW CHURCH WITH ASSOCIATED PARKING AND SITE IMPROVEMENTS. SITE ACCESS WILL BE PROVIDED VIA PROPOSED ENTRANCES OFF OF W. BRADDOCK ROAD AND SCROGGINS ROAD.

BUILDING CODE ANALYSIS:

USE GROUP(S):	R-8 (SINGLE FAMILY)
TYPE OF CONSTRUCTION:	IIB
NUMBER OF STORIES:	2 W/ BASEMENT
FLOOR AREA (GROSS):	40,948 SQ. FT. (INCLUDES BASEMENT)
BUILDING HEIGHT:	34.1'
FIRE SUPRESSION/DETECTION:	SPRINKLERED

COMPLETE STREETS INFORMATION:

	NEW	UPGRADED
CROSSWALKS (NUMBER)	1	N/A
STANDARD	1	N/A
HIGH VISIBILITY	N/A	N/A
CURB RAMPS	2	2
SIDEWALKS (LF)	731	80
BICYCLE PARKING (NUMBER SPACES)	N/A	N/A
PUBLIC/VISITOR	N/A	N/A
PRIVATE/GARAGE	4	N/A
BICYCLE PATHS (LF)	N/A	N/A
PEDESTRIAN SIGNALS	N/A	N/A

OWNER/DEVELOPER

OWNER:
ALEXANDRIA PRESBYTERIAN CHURCH
2405 RUSSELL ROAD
ALEXANDRIA, VA 22301
INSTRUMENT #150007917

DEVELOPER:
ALEXANDRIA PRESBYTERIAN CHURCH
1300 WEST BRADDOCK ROAD
ALEXANDRIA, VA 22301
(703) 683-3348
CONTACT: BOB METHENY

ARCHITECT:
LEMAY, ERICKSON, WILLCOX ARCHITECTS
11250 ROGER BACON DRIVE
RESTON, VA 20190
(703) 956-5600
CONTACT: NEAL ROSEBERRY

PLAN PREPARED BY:
R.C. FIELDS & ASSOCIATES, INC.
700 S. WASHINGTON STREET, SUITE 220
ALEXANDRIA, VA 22314
(703) 549-6422
CONTACT: VINCE MCHALE

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

ZONING TABULATIONS

1. TAX MAP #: #032.02-05- (LOTS 06-14)
2. ZONE OF SITE: R-8 (SINGLE FAMILY)
3. USE: EXISTING CHURCH/RELIGIOUS PROPOSED CHURCH/RELIGIOUS
4. TOTAL LOT AREA: 81,348 SF (1.8675 AC.) MINIMUM LOT AREA: 9,000 SF (CORNER LOT)
5. NUMBER OF DWELLINGS: N/A
6. UNITS PER ACRE: PERMITTED 8 DU/AC. PROPOSED N/A
7. FLOOR AREA: GROSS 40,948 SQ. FT. (INCLUDES 16,168 SQ. FT. OF BASEMENT)
   NET 22,794 SQ. FT.
8. FLOOR AREA RATIO: PERMITTED 0.35 (28,472 SQ.FT.)
   EXISTING 0.12 (9,759 SQ.FT.)
   PROPOSED 0.28 (22,794 SQ.FT.)
9. OPEN SPACE: REQUIRED: N/A
   PROPOSED: 28,000 SF OR 34% (AT GRADE)
10. AVERAGE FINISHED GRADE: 97.81
11. HEIGHT: ALLOWED: 40 FT
    PROPOSED: 34.1 FT (TO MIDPOINT OF GABLE)
12. YARDS: REQUIRED FRONT 30 FT SIDE 1:1 HEIGHT, 25 FT MIN REAR 1:1 HEIGHT, 25 FT MIN
    PROVIDED FRONT(NORTH) 30.0 FT FRONT(EAST) 30.0 FT FRONT(SOUTH) 101.0 FT SIDE(WEST) 133.0 FT
13. FRONTAGE: REQUIRED 40 FT
    PROVIDED 841 FT
14. TRIP GENERATION:
    WEEKDAY:
    EXISTING 68 VPD PROPOSED 285 VPD
    EXISTING AM PEAK 3 ADT PROPOSED AM PEAK 14 ADT
    EXISTING PM PEAK 5 ADT PROPOSED PM PEAK 20 ADT
    (PER ITE STANDARDS) (PER ITE STANDARDS)
    SATURDAY:
    EXISTING PEAK 27 ADT PROPOSED PEAK 114 ADT
    (PER ITE STANDARDS) (PER ITE STANDARDS)
    SUNDAY:
    EXISTING PEAK 124 ADT PROPOSED PEAK 265 ADT
    (PER ITE STANDARDS) (PER ITE STANDARDS)
15. PARKING TABULATION:

    REQUIRED:
    AUDITORIUM SPACES: 1 X 490 SEAT/5= 98 SPACES ← REQUIRED NUMBER OF SPACES
    CLASSROOM SPACES: 1 X 686 SEAT/10= 69 SPACES

    PROVIDED (AT GRADE):
    STANDARD PARKING SPACES (9'X18.5'): 37 SPACES
    COMPACT PARKING SPACES (8'X16'): 57 SPACES
    ACCESSIBLE PARKING SPACES: 4 SPACES
    TOTAL PARKING PROVIDED: 98 SPACES
16. LOADING SPACES: REQUIRED N/A PROPOSED N/A
17. PARKING IN REQUIRED YARD: REQUIRED LESS THAN 50%
    ALLOWED (NORTH) 8,062 x 0.5 = 4,031 SF PROPOSED (NORTH) 971 SF (12.0%)
    ALLOWED (EAST) 8,382 x 0.5 = 4,191 SF PROPOSED (EAST) 486 SF (5.8%)
    ALLOWED (SOUTH) 8,950 x 0.5 = 4,475 SF PROPOSED (SOUTH) 4,264 SF (47.6%)
    ALLOWED (WEST) 7,101 x 0.5 = 3,551 SF PROPOSED (WEST) 3,487 SF (49.1%)

SHEET INDEX:

RC FIELDS & ASSOCIATES, INC.
ENGINEERING • LAND SURVEYING • PLANNING
700 S. Washington Street, Suite 220
Alexandria, Virginia 22314
www.rcfassoc.com
(703) 549-6422
PROJ. MANAGER: VINCE MCHALE
EMAIL: VMCHALE@RCFASSOC.COM

DATE: AUGUST 23 2019 DRAWN: VMM
REV:
SCALE: AS NOTED

COMMONWEALTH OF VIRGINIA
ANDREA SPRUCH
Lic. No. 047863
AUGUST 22, 2019
PROFESSIONAL ENGINEER

REVISION APPROVED BY:

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

DEVELOPMENT PRELIMINARY SITE PLAN
ALEXANDRIA PRESBYTERIAN CHURCH
1300 WEST BRADDOCK ROAD
CITY OF ALEXANDRIA, VIRGINIA

SHEET NAME: COVER SHEET

APPROVED
SPECIAL USE PERMIT NO. _____
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. 2018-0021
DIRECTOR DATE
CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED
INSTRUMENT NO. DEED BOOK NO. DATE

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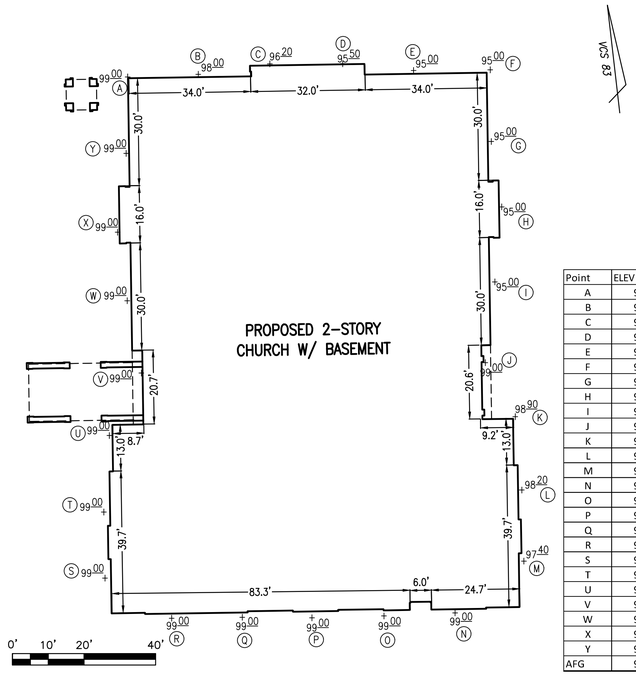
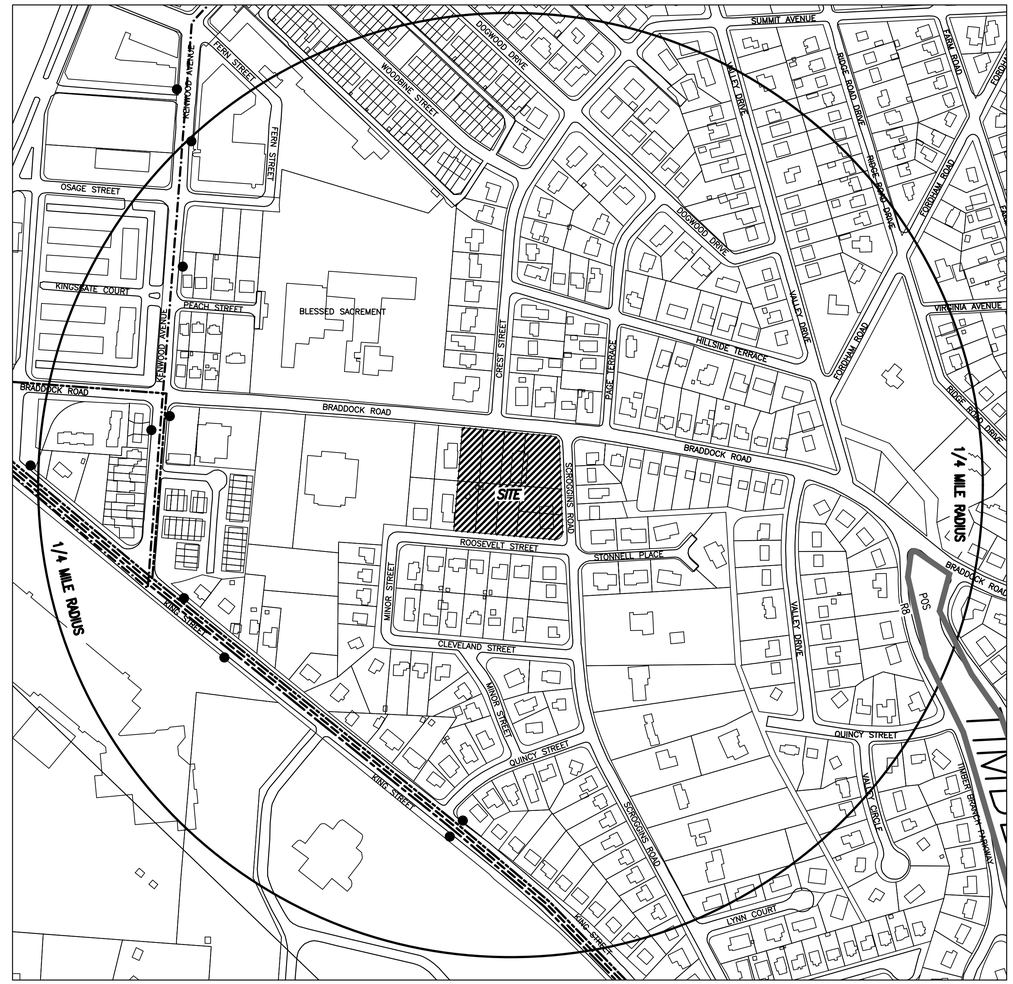


Point	ELEV
A	99.00
B	98.00
C	96.20
D	95.50
E	95.00
F	95.00
G	95.00
H	95.00
I	95.00
J	99.00
K	98.90
L	98.20
M	97.40
N	99.00
O	99.00
P	99.00
Q	99.00
R	99.00
S	99.00
T	99.00
U	99.00
V	99.00
W	99.00
X	99.00
Y	99.00
AFG	97.81

AVERAGE FINISHED GRADE AND BUILDING DIMENSION DETAIL

SCALE: 1" = 20'



CONTEXTUAL MAP

SCALE: 1" = 200'

LEGEND:

- BUS STOP
- DASH ROUTE ATC5
- DASH ROUTE ATC6
- DASH ROUTE ATC9
- WMATA MAJOR ROUTE 28A

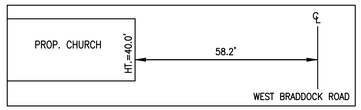
0' 100' 200' 400'

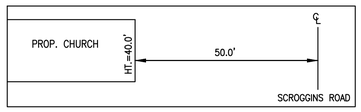
SECTION 6-403 COMPLIANCE NOTE:

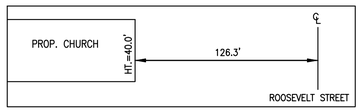
SECTION 6-403 STATES "IN ALL HEIGHT DISTRICTS, THE ALLOWABLE HEIGHT OF A BUILDING AT ANY POINT SHALL NOT EXCEED TWICE THE DISTANCE FROM THE FACE OF THE BUILDING AT THAT POINT TO THE CENTERLINE OF THE STREET FACING SUCH BUILDING." SEE DETAILS BELOW FOR SECTION SHOWING COMPLIANCE.

SECTION 6-403 DETAILS:

NOT TO SCALE







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.

APPROVED

SPECIAL USE PERMIT NO. _____

DEPARTMENT OF PLANNING & ZONING

DIRECTOR _____ DATE _____

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

SITE PLAN NO. 2018-0021

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. 047663
AUGUST 22, 2019
PROFESSIONAL ENGINEER

DEVELOPMENT PRELIMINARY SITE PLAN
ALEXANDRIA PRESBYTERIAN CHURCH
1300 WEST BRADDOCK ROAD
CITY OF ALEXANDRIA, VIRGINIA

DATE	REVISION

DESIGN: VMM
CHECKED: VMM
SCALE: AS NOTED
DATE: AUG. 19, 2019

CONTEXTUAL PLAN

SHEET 2 OF 13

FILE: 18-193

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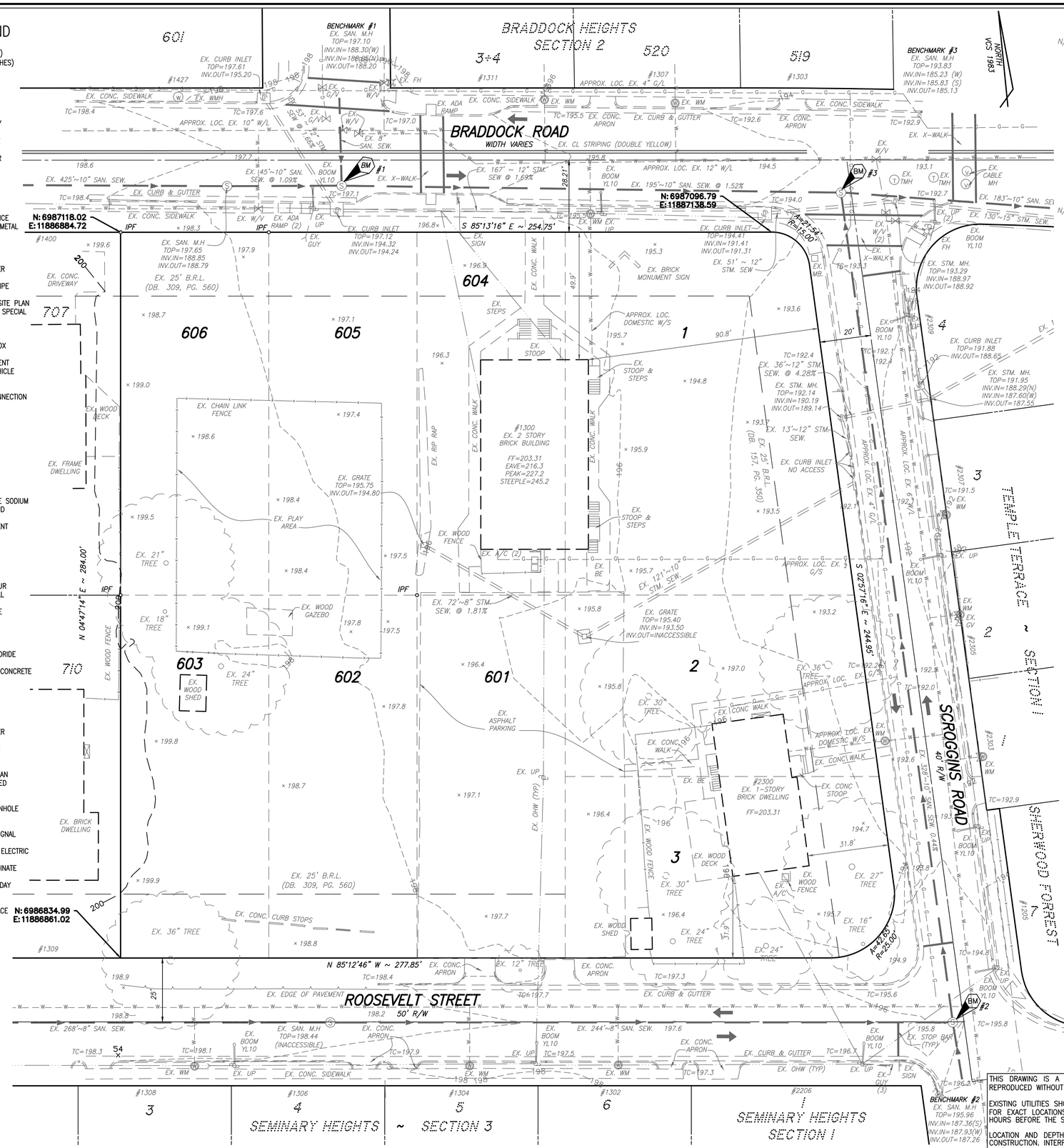

TEXT LEGEND

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

GENERAL NOTES:

1. TAX MAP: #032.02-05-06,07,08,09,10,11,12,13,14
2. ZONE: R-8
3. OWNER: ALEXANDRIA PRESBYTERIAN CHURCH
   2405 RUSSELL ROAD
   ALEXANDRIA, VA 22301
   INSTRUMENT #150007917
3. PLAT SUBJECT TO RESTRICTIONS OF RECORD.
4. TOTAL SITE AREA = 81,348 SF OR 1.8675 AC.
5. TOPOGRAPHIC SURVEY FIELD RUN BY THIS FIRM. VERTICAL DATUM = NAVD '88 PER CITY OF ALEXANDRIA MONUMENT 620, ELEVATION =171.30 FEET, AND MONUMENT 619, ELEVATION=175.19 FEET
6. TITLE REPORT FURNISHED BY WALKER TITLE, LLC., CASE NO. A1800826 DATED AUGUST 20, 2018 AND IS RELIED UPON AS ACCURATE BY THE SURVEYOR.
7. THERE ARE NO RESOURCE PROTECTION AREAS (RPA'S), TIDAL WETLANDS, SHORES, TRIBUTARY STREAMS, FLOOD PLAINS, OR BUFFER AREAS FOR SHORES, WETLANDS, CONNECTED TIDAL WETLANDS, ISOLATED WETLANDS OR HIGHLY ERODIBLE/PERMEABLE SOILS LOCATED ON THIS SITE.
8. THERE ARE NO KNOWN CONTAMINATED AREAS, CONTAMINATED SOILS OR ENVIRONMENTAL ISSUES ASSOCIATED WITH THIS SITE.
9. THE "GENERALIZED ALEXANDRIA SOILS MAP" IDENTIFIES THE SOILS FOR THIS SITE AS LEONARDTOWN SILT LOAM. LEONARDTOWN SILT LOAM OCCUPIES THE HIGHEST AREAS OF THE CITY FROM SHUTERS HILL EXTENDING NORTHWEST.
10. THIS SITE DOESN'T CONTAIN AREAS PREVIOUSLY MAPPED AS MARINE CLAYS.

TOPOGRAPHIC NOTE:

THIS TOPOGRAPHIC SURVEY WAS COMPLETED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF ROBERTO TORRES, LS FROM AN ACTUAL GROUND SURVEY MADE UNDER MY SUPERVISION; THE IMAGERY AND/OR ORIGINAL DATA WAS OBTAINED ON SEPTEMBER 19, 2018; AND THIS PLAT, MAP OR DIGITAL GEOSPATIAL DATA INCLUDING METADATA MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED.

EXISTING CONDITIONS SURVEY NOTES:

11. UTILITY INFORMATION, AS SHOWN ON THIS PLAN, IS TAKEN FROM THE RECORDS AND/OR FIELD SURVEY COMPLETED AND CANNOT BE GUARANTEED. FOR EXACT LOCATIONS OF EXISTING UNDERGROUND UTILITIES, NOTIFY "MISS UTILITY" AT 1-800-552-7001, 72 HOURS BEFORE THE START OF ANY EXCAVATION OR CONSTRUCTION.
12. LOCATION AND DEPTH OF ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR/ENGINEER SHOULD DIG TEST PITS BY HAND AT ALL UTILITY CROSSINGS TO VERIFY EXACT LOCATION.

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		

UTILITY OWNERSHIP NOTE:

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

#1308
N/F JONATHAN DAVID & JULIE ANN GURLEY KOLLER
1308 ROOSEVELT STREET
ALEXANDRIA, VA 22302
TAX MAP #032.02-06-03
ZONE: R-8
USE: RESIDENTIAL
INSTRUMENT #1300131180

#1306
N/F MOHAMED H. ADEN & ANNE D. JILLSON
1306 ROOSEVELT STREET
ALEXANDRIA, VA 22302
TAX MAP #032.02-06-04
ZONE: R-8
USE: RESIDENTIAL
DEED BOOK 863, PAGE 321

#1304
N/F HENRY M. JR. & ELIZABETH H. CLARK
1304 ROOSEVELT STREET
ALEXANDRIA, VA 22302
TAX MAP #032.02-06-05
ZONE: R-8
USE: RESIDENTIAL
DEED BOOK 218, PAGE 472

#1302
N/F BRIAN M. & SUSAN G MCLAUGHLIN
1302 ROOSEVELT STREET
ALEXANDRIA, VA 22302
TAX MAP #032.02-06-06
ZONE: R-8
USE: RESIDENTIAL
INSTRUMENT #080008608

#2206
N/F KEVIN & KIMBERLY MCDERMOTT
2206 SCROGGINS ROAD
ALEXANDRIA, VA 22302
TAX MAP #032.02-06-07
ZONE: R-8
USE: RESIDENTIAL
INSTRUMENT #110015067

#1205
N/F JILL A & SEAN M MILLIKEN, TRS.
1205 STONNELL PLACE
ALEXANDRIA, VA 22302
TAX MAP #032.02-07-20
ZONE: R-8
USE: RESIDENTIAL
INSTRUMENT #180003216

#2303
N/F CARA A. DUCKWORTH & RICHARD WEIBLINGER
2303 SCROGGINS ROAD
ALEXANDRIA, VA 22302
TAX MAP #032.02-07-04
ZONE: R-8
USE: RESIDENTIAL
INSTRUMENT #110008293

#2305
N/F DEBRA J. ROG
2305 SCROGGINS ROAD
ALEXANDRIA, VA 22302
TAX MAP #032.02-07-03
ZONE: R-8
USE: RESIDENTIAL
INSTRUMENT #090008720

#2307
N/F IN SOOK LEE & JONG WON LEE & ELIZABETH CALHOUN
2307 SCROGGINS ROAD
ALEXANDRIA, VA 22302
TAX MAP #032.02-07-02
ZONE: R-8
USE: RESIDENTIAL
INSTRUMENT #130012831

#2309
N/F KATHLEEN T. SMITH
2309 SCROGGINS ROAD
ALEXANDRIA, VA 22302
TAX MAP #032.02-07-01
ZONE: R-8
USE: RESIDENTIAL
INSTRUMENT #020015864

#1303
N/F KATHLEEN STRADAR
1303 W. BRADDOCK ROAD
ALEXANDRIA, VA 22302
TAX MAP #032.02-03-22
ZONE: R-8
USE: RESIDENTIAL
INSTRUMENT #080016183

#1307
N/F KAREN ELIZABETH & RAYMOND LEIBFRIED
1307 W. BRADDOCK ROAD
ALEXANDRIA, VA 22302
TAX MAP #032.02-03-31
ZONE: R-8
USE: RESIDENTIAL
INSTRUMENT #100011588

#1311
N/F BARBARA RACHKO
1311 W. BRADDOCK ROAD
ALEXANDRIA, VA 22302
TAX MAP #032.02-03-32
ZONE: R-8
USE: RESIDENTIAL
DEED BOOK 1001, PAGE 391

#1427
N/F PAUL S. LOVERDE BISHOP OF ARLINGTON
1427 W. BRADDOCK ROAD
ALEXANDRIA, VA 22302
TAX MAP #032.02-02-10
ZONE: R-8
USE: RESIDENTIAL
INSTRUMENT #020012784

#1400
N/F ALEXANDER M. & NANCY G. VON GUGGENBERG
1400 W. BRADDOCK ROAD
ALEXANDRIA, VA 22302
TAX MAP #032.02-05-50
ZONE: R-8
USE: RESIDENTIAL
DEED BOOK 1333, PAGE 766

#1309
N/F GIANCARIO PELLEGRINI & ELLEN M. CRISHAM
1309 ROOSEVELT ST.
ALEXANDRIA, VA 22302
TAX MAP #032.02-05-52
ZONE: R-8
USE: RESIDENTIAL
INSTRUMENT #180006521

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APPROVED
SPECIAL USE PERMIT NO. _____
DEPARTMENT OF PLANNING & ZONING
DIRECTOR — DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. 2018-0021
DIRECTOR — DATE
CHAIRMAN, PLANNING COMMISSION — DATE
DATE RECORDED _____
INSTRUMENT NO. — DEED BOOK NO. — DATE

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(703) 549-6422

COMMONWEALTH OF VIRGINIA
ANDREA SPRUCH
Lic. No. 047693
AUGUST 22, 2019
PROFESSIONAL ENGINEER

DEVELOPMENT PRELIMINARY SITE PLAN
ALEXANDRIA PRESBYTERIAN CHURCH
1300 WEST BRADDOCK ROAD
CITY OF ALEXANDRIA, VIRGINIA

DATE	REVISION

DESIGN: VMM
CHECKED: VMM
SCALE: 1" = 20'
DATE: AUG. 19, 2019

EXISTING CONDITIONS

SHEET 3 OF 13
FILE: 18-193

J:\2018\18193\DWG\VELUV\Preliminary\03 - EXISTING CONDITIONS.dwg
Wed, Aug 21 2019 - 3:09:57pm

TEXT LEGEND

°= DEGREES
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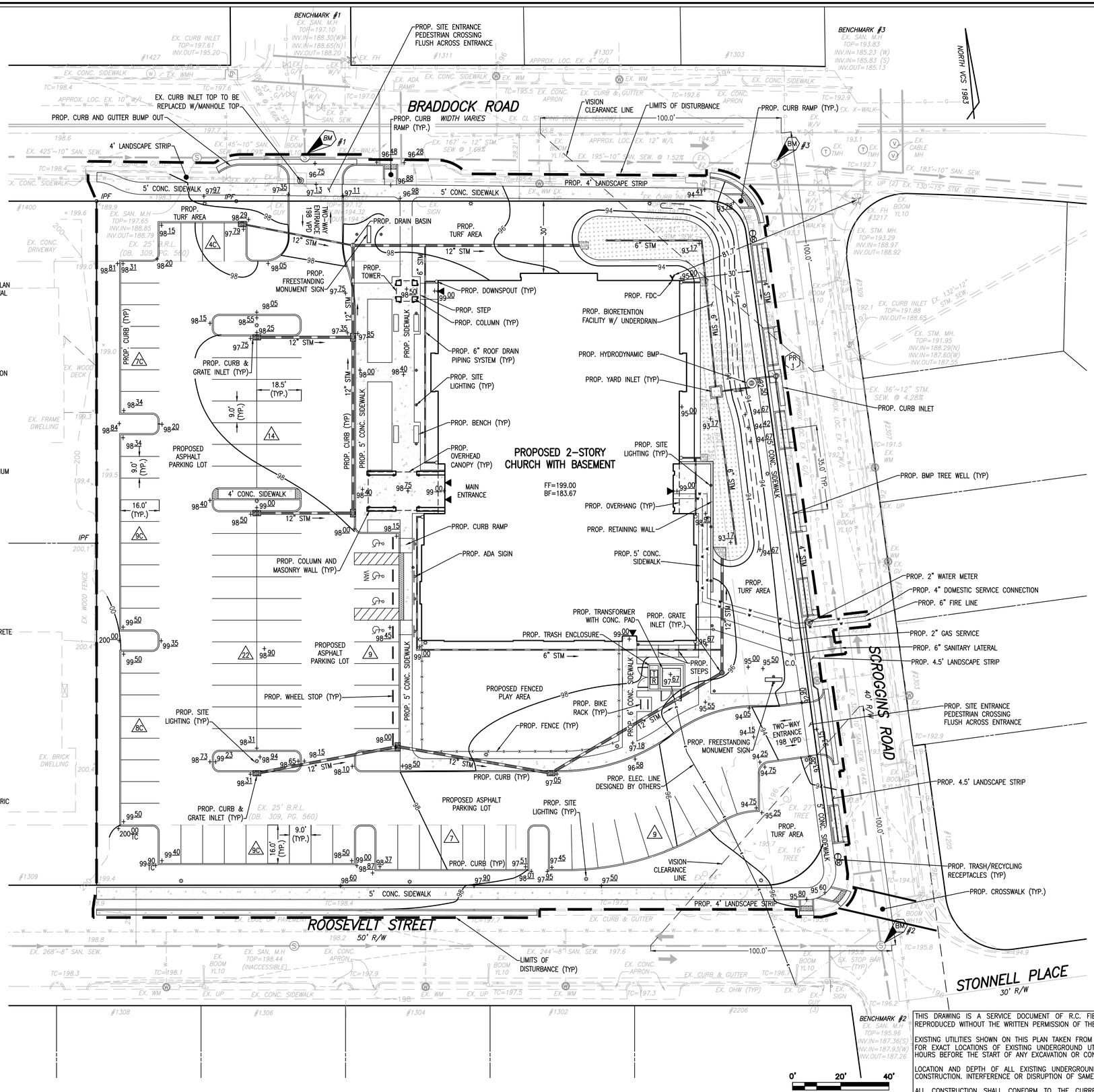
VPD= VEHICLES PER DAY
W= WATT
W= WEST
W.S.E.= WATER SURFACE ELEVATION
WV= WATER VALVE
WM= WATER METER
W.W.= WINDOW WELL



GENERAL NOTES:

1. TAX MAP: #032.02-05-06,07,08,09,10,11,12,13,14
2. ZONE: R-8
3. OWNER: ALEXANDRIA PRESBYTERIAN CHURCH
   2405 RUSSELL ROAD
   ALEXANDRIA, VA 22301
   INSTRUMENT #150007917
3. PLAT SUBJECT TO RESTRICTIONS OF RECORD.
4. TOTAL SITE AREA = 81,348 SF OR 1.8675 AC.
5. TOPOGRAPHIC SURVEY FIELD RUN BY THIS FIRM. VERTICAL DATUM = NAVD '88 PER CITY OF ALEXANDRIA MONUMENT 620, ELEVATION =171.30 FEET, AND MONUMENT 619, ELEVATION=175.19 FEET
6. TITLE REPORT FURNISHED BY WALKER TITLE, LLC., CASE NO. A1800826 DATED AUGUST 20, 2018 AND IS RELIED UPON AS ACCURATE BY THE SURVEYOR.
7. THERE ARE NO RESOURCE PROTECTION AREAS (RPA'S), TIDAL WETLANDS, SHORES, TRIBUTARY STREAMS, FLOOD PLAINS, OR BUFFER AREAS FOR SHORES, WETLANDS, CONNECTED TIDAL WETLANDS, ISOLATED WETLANDS OR HIGHLY ERODIBLE/PERMEABLE SOILS LOCATED ON THIS SITE.
8. THERE ARE NO KNOWN CONTAMINATED AREAS, CONTAMINATED SOILS OR ENVIRONMENTAL ISSUES ASSOCIATED WITH THIS SITE.
9. THE "GENERALIZED ALEXANDRIA SOILS MAP" IDENTIFIES THE SOILS FOR THIS SITE AS LEONARDTOWN SILT LOAM. LEONARDTOWN SILT LOAM OCCUPIES THE HIGHEST AREAS OF THE CITY FROM SHUTERS HILL EXTENDING NORTHWEST.

SANITARY SEWER OUTFALL NARRATIVE:

THE EXISTING USE (CHURCH/RELIGIOUS) PRODUCES AN AVERAGE DAILY FLOW OF APPROXIMATELY 2,760 GALLONS PER DAY (3 GPD/SEAT X 230 SEATS X 4.0 PEAK FLOW FACTOR). THE PROPOSED USE (CHURCH/RELIGIOUS) PRODUCES 5,880 GALLONS PER DAY (3 GPD/SEAT X 490 SEATS X 4.0 PEAK FLOW FACTOR). SINCE THE TOTAL FLOW FROM THE THE PROPOSED USE DOES NOT EXCEED 10,000 GPD, A DETAILED SANITARY SEWER OUTFALL ANALYSIS IS NOT REQUIRED.

REFUSE TRUCK NOTE:

TRASH WILL BE WHEELED OUT TO THE CURB ALONG THE PARKING LOT TRAVEL LANE ACCESSED OFF OF SCROGGINS ROAD FOR WEEKLY PICKUP. SEE TURNING MOVEMENTS ON SHEET 11.

UTILITIES NOTE:

THE PROPOSED BUILDING WILL UTILIZE A NEW SANITARY LATERAL, A NEW DOMESTIC SERVICE LINE, AND A NEW FIRE SERVICE. ALL PROPOSED SERVICES SHALL CONNECT TO THE EXISTING MAINS LOCATED IN THE SCROGGINS ROAD RIGHT-OF-WAY.

FIRE SERVICE NOTE:

FIRE TRUCK ACCESS WILL BE PROVIDED VIA THE SITE FRONTAGE ALONG THE BRADDOCK ROAD AND SCROGGINS ROAD RIGHT-OF-WAYS. A FIRE SAFETY PLAN WILL BE INCLUDED WITH SUBSEQUENT SUBMISSIONS. ALL EXISTING FIRE HYDRANTS SHALL REMAIN IN SERVICE AND UNOBSTRUCTED DURING CONSTRUCTION.

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.

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

ARENEW NOTES:

A. ENSURE ALL DISCHARGES ARE IN ACCORDANCE WITH CITY OF ALEXANDRIA CODE TITLE 5, CHAPTER 6, ARTICLE B.
B. DEWATERING AND OTHER CONSTRUCTION RELATED DISCHARGE LIMITS TO THE SEWER SYSTEM ARE REGULATED BY ALEXRENEW PRETREATMENT. ENGINEER/OWNER IS REQUIRED TO CONTACT ALEXRENEW'S PRETREATMENT COORDINATOR AT 703-549-3381 EXT. 2020

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		

FIRE HYDRANT FLOW INFORMATION:

(PROVIDED BY VIRGINIA AMERICAN WATER)
HYDRANT NUMBER: 3217 (W BRADDOCK STREET AND SCROGGINS ROAD)

STATIC = 45 PSI
RESIDUAL = 39 PSI
FLOW = 1,771 GPM
Q20 = 3,828 GPM

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DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. 2018-0021
DIRECTOR — DATE
CHAIRMAN, PLANNING COMMISSION — DATE
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COMMONWEALTH OF VIRGINIA
ANDREA SPRUCH
Lic. No. 047863
AUGUST 22, 2019
PROFESSIONAL ENGINEER

DEVELOPMENT PRELIMINARY SITE PLAN
ALEXANDRIA PRESBYTERIAN CHURCH
1300 WEST BRADDOCK ROAD
CITY OF ALEXANDRIA, VIRGINIA

DATE	REVISION

DESIGN: VMM
CHECKED: VMM
SCALE: 1" = 20'
DATE: AUG. 19, 2019

PRELIMINARY PLAN

SHEET 4 OF 13
FILE: 18-193

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Wed, Aug 21 - 2019 - 3:10:02pm

TEXT LEGEND

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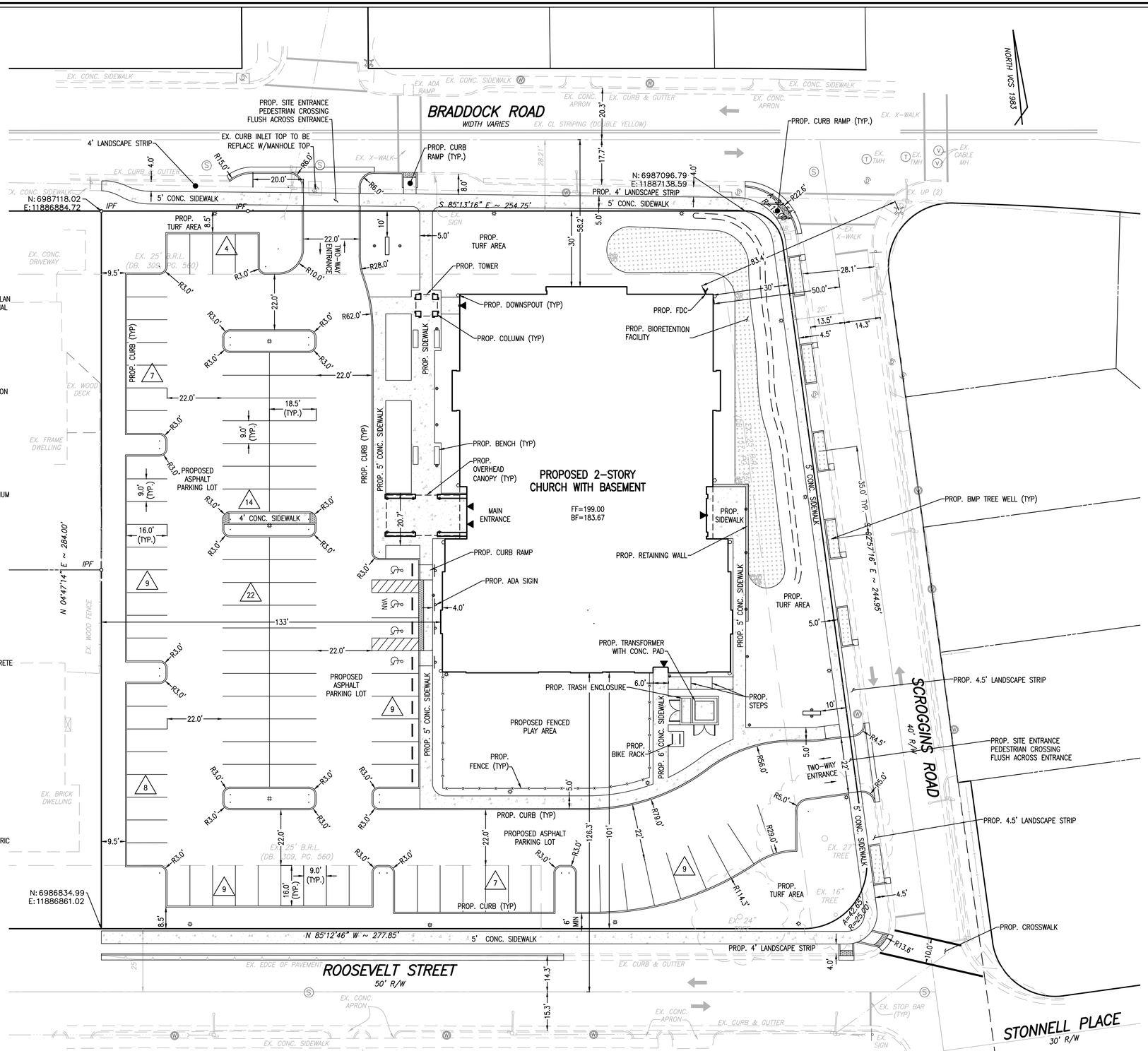

ARCHAEOLOGY NOTES:

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CIVIL LEGEND

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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		
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DESIGN: VMM
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SITE DIMENSION PLAN

SHEET 5 OF 13
FILE: 18-193

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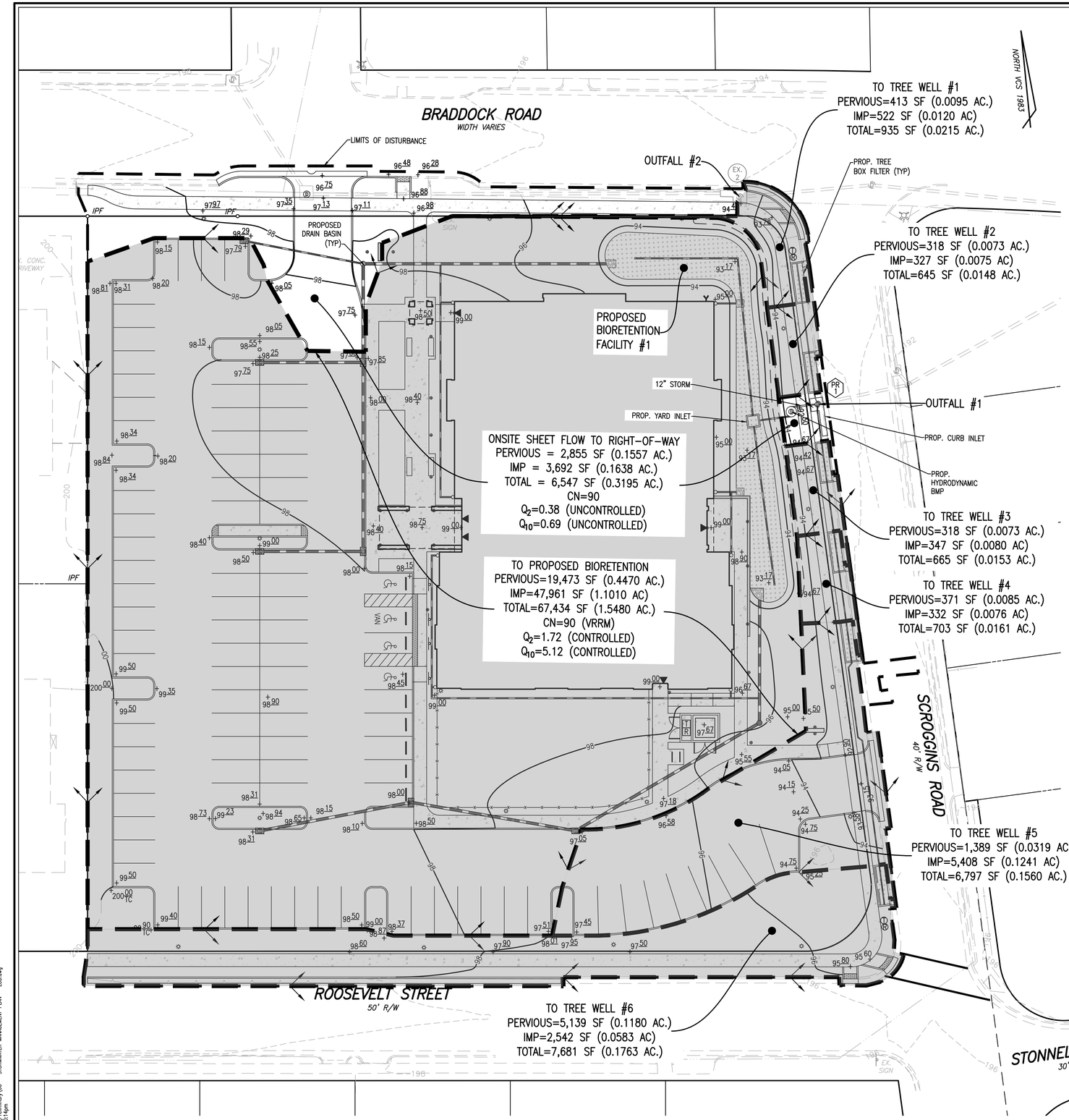
Wed, Aug 21, 2019 - 3:10:08pm



STORMWATER RUNOFF COMPUTATIONS:

VIRGINIA RUNOFF REDUCTION METHOD
(PER TR-20, TYPE II, 24-HOUR STORM COMPUTER USING HYDROCAD SOFTWARE)
(2-YR, 24-HR DEPTH=3.20 IN, 10-YR, 24-HR DEPTH=5.20 IN)

I. PARCEL AREA = 81,348 SQ. FT. OR 1.8675 ACRES

ONSITE EXISTING IMPERVIOUS AREA = 19,714 SQ. FT. OR 0.4526 ACRES
ONSITE PROPOSED IMPERVIOUS AREA = 55,100 SQ. FT. OR 1.2649 ACRES

II. WEIGHTED "CN" FACTOR CALCULATION

ONSITE DISTURBED AREA:
PRE-DEVELOPMENT "CN" = $\frac{(80 \times 1.4149 + 98 \times 0.4526)}{1.8675}$ = **84**

ONSITE DISTURBED AREA:
POST-DEVELOPMENT "CN" (UNCONTROLLED) = $\frac{(80 \times 0.1557 + 98 \times 0.1639)}{0.3195}$ = **89**

POST-DEVELOPMENT "CN" (TO BIO #1) = $\frac{(80 \times 0.4470 + 98 \times 1.1010)}{1.5480}$ = **93**

POST-DEVELOPMENT "CN" = **90** (TO BIO #1, VRRM ADJUSTED)

III. PEAK DISCHARGE FOR DESIGN STORMS (Tc = 5 MIN)

PRE-DEVELOPMENT
Q_2 PRE = **3.80 CFS**
Q_{10} PRE = **7.60 CFS**

POST-DEVELOPMENT
Q_2 POST (UNCONTROLLED) = 0.79 CFS
Q_2 POST (TO BIO #1) = 1.72 CFS
Q_2 POST (TOTAL) = **2.51 CFS**

Q_{10} POST (UNCONTROLLED) = 1.45 CFS
Q_{10} POST (TO BIO #1) = 5.12 CFS
Q_{10} POST (TOTAL) = **6.52 CFS**

IV. POST-DEVELOPMENT DECREASES

Q_2 DECREASE = **1.29 CFS**
Q_{10} DECREASE = **1.08 CFS**

V. DETENTION VOLUME
THE BIORETENTION FACILITY PROVIDES ADEQUATE DETENTION TO ACHIEVE AN OVERALL DECREASE IN ONSITE RUNOFF, THEREFORE NO FURTHER DETENTION IS REQUIRED.

WATER QUALITY/QUANTITY COMPLIANCE NARRATIVE:

THE 1.87 ACRE SITE IS LOCATED IN THE HOOFFS RUN WATERSHED. IN EXISTING CONDITIONS, THE SITE CONSISTS OF A CHURCH WITH ASSOCIATED PARKING AND OPEN SPACE. THE MAJORITY OF THE SITE DRAINS EAST AND IS COLLECTED IN AN EXISTING UNDERGROUND STORM SEWER SYSTEM VIA ONSITE GRATE INLETS AND AN EXISTING CURB INLET (EX1) WITHIN THE SCROGGINS ROAD RIGHT-OF-WAY. A SMALL PORTION OF THE SITE DRAINS NORTH AND IS COLLECTED IN AN EXISTING CURB INLET (EX2) WITHIN THE WEST BRADDOCK STREET RIGHT-OF-WAY.

THE REDEVELOPMENT OF THE PROJECT PROPOSES A NEW CHURCH, PROPOSED PARKING, AND IMPROVED STREETSCAPE/OPEN SPACE. IN PROPOSED CONDITIONS, THE MAJORITY OF THE SITE WILL CONTINUE TO SHEET FLOW EAST WHERE IT IS COLLECTED IN AN ON-SITE BIORETENTION FACILITY AND PROPOSED CURB INLET (PR1) LOCATED ALONG THE SCROGGINS ROAD RIGHT-OF-WAY. A SMALL PORTION OF THE SITE WILL CONTINUE TO DRAIN NORTH AND IS COLLECTED IN AN EXISTING CURB INLET (EX2) WITHIN THE WEST BRADDOCK STREET RIGHT-OF-WAY.

OVERALL IMPERVIOUS AREA WILL INCREASE WITH THE PROPOSED DEVELOPMENT (SEE STORMWATER RUNOFF COMPUTATIONS ON THIS SHEET) WHICH GENERATES AN INCREASE IN RUNOFF. HOWEVER, THE BIORETENTION FACILITY WILL PROVIDE ADEQUATE DETENTION TO CREATE A NET DECREASE IN ON-SITE RUNOFF.

MULTIPLE BEST MANAGEMENT PRACTICE (BMP) FACILITIES ARE PROPOSED TO TREAT THE MAJORITY OF RUNOFF FROM PROPOSED IMPERVIOUS AREAS OF THE SITE (INCLUDING A BIORETENTION FACILITY AND A HYDRODYNAMIC BMP). THESE BMP FACILITIES PROVIDE ADEQUATE TREATMENT TO SUFFICE THE WATER QUALITY AND QUANTITY REQUIREMENTS FOR THIS SITE.

PROJECT DESCRIPTION:

REDEVELOPMENT

DRAINAGE AREA	IMPERVIOUS	PERVIOUS	TOTAL
PROJECT AREA	1.2649	0.6026	1.8675
ON-SITE TREATED	1.1010	0.4470	1.5480
OFF-SITE TREATED	0.0000	0.0000	0.0000
TOTAL TREATED	1.1010	0.4470	1.5480
ON-SITE IMPERVIOUS AREAS DISCONNECTED BY A VEGETATIVE BUFFER	N/A		
TOTAL TREATED OR DISCONNECTED			1.5480

WATER QUALITY VOLUME DEFAULT:

PROPOSED IMPERVIOUS: 1.2649 AC
TREATMENT OF FIRST HALF INCH OF RUNOFF:
1,815 X 1.2649 = 2,296 CU. FT. WQV REQUIRED

WATER TREATMENT ON-SITE

BMP TYPE	AREA TREATED BY BMP (ACRES)	IMPERVIOUS AREA TREATED BY BMP (ACRES)	BMP EFFICIENCY (%)
BIORETENTION	1.5480	1.1010	25%
HYDRODYNAMIC BMP	1.5480	1.1010	20%

TOTAL WQV TREATED: NO
WATER QUALITY VOLUME REQUIRED = 2,296 CU. FT.
WATER QUALITY VOLUME TREATED = 1,815 X 1.1010 = 1,998 CU. FT.
PERCENT OF WATER QUALITY VOLUME TREATED = 87%
DETENTION ON SITE: YES
PROJECT IS WITHIN WHICH WATERSHED? HOOFFS RUN
PROJECT DISCHARGES TO WHICH BODY OF WATER? TIMBER BRANCH

BMP FACILITY		AREA TREATED (ACRES)	IMPERVIOUS AREA TREATED (ACRES)	PERVIOUS AREA TREATED (ACRES)	TP REMOVAL EFFICIENCY	PHOSPHORUS REMOVED (LBS)	GEOGRAPHIC COORDINATES NORTHING	EASTING
BIORETENTION		1.5480	1.1010	0.4470	25%	1.45	6987069.58	11887122.01
HYDRODYNAMIC BMP		1.5480	1.1010	0.4470	20%	0.24	6987066.62	11887119.01
TREE WELLS	1	0.2231	0.1203	0.1028	25%	0.18	6987069.42	11887156.90
	2						6987034.18	11887158.40
	3						6986999.55	11887160.29
	4						6986969.53	11887161.88
	5						6986929.66	11887164.16
	6						6986834.67	11887168.87

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.

APPROVED
SPECIAL USE PERMIT NO. _____
DEPARTMENT OF PLANNING & ZONING
DIRECTOR _____ DATE _____
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. 2018-0021
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
AUGUST 22, 2019
PROFESSIONAL ENGINEER

DEVELOPMENT PRELIMINARY SITE PLAN
ALEXANDRIA PRESBYTERIAN CHURCH
1300 WEST BRADDOCK ROAD
CITY OF ALEXANDRIA, VIRGINIA

DATE	REVISION

DESIGN: VMM
CHECKED: VMM
SCALE: 1" = 20'
DATE: AUG. 19, 2019

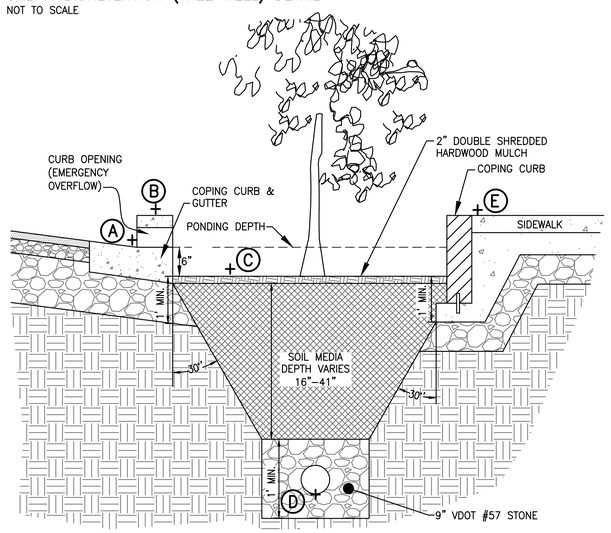
STORMWATER MANAGEMENT PLAN

SHEET 6 OF 13
FILE: 18-193

J:\2018\18193\DWG\DEV\Preliminary\06 - STORMWATER MANAGEMENT PLAN - LOD.dwg
Wed, Aug 21 - 2019 - 3:10:14pm

URBAN BIORETENTION (TREE WELL) DETAIL

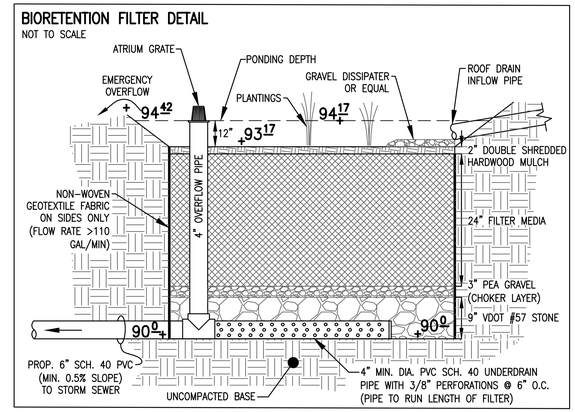
NOT TO SCALE



URBAN BIORETENTION	SQ.FT. OF SURFACE AREA	ELEVATIONS					SOILS MEDIA DEPTH	NORTHINGS	EASTINGS
		A	B	C	D	E			
1	60.0	92.7	93.2	92.2	89.3	93.7	28"	6987069.42	11887156.90
2	60.0	92.0	92.5	91.5	89.2	92.8	21"	6987034.18	11887158.40
3	60.0	91.6	92.1	91.1	89.2	92.6	16"	6986999.55	11887160.29
4	60.0	91.8	92.3	91.3	89.3	93.0	17"	6986969.53	11887161.88
5	60.0	92.0	92.5	91.5	89.4	93.2	18"	6986929.66	11887164.16
6	60.0	94.2	94.7	93.7	89.7	94.3	41"	6986834.67	11887168.87

BIORETENTION FILTER DETAIL

NOT TO SCALE



WATER QUALITY VOLUME CALCULATIONS:

TOTAL AREA TO BMP = 67,434 SQ.FT.
IMPERVIOUS AREA TO BMP = 47,961 SQ.FT. ("R_v" = 0.95)
PERVIOUS AREA TO BMP = 19,473 SQ.FT. ("R_v" = 0.25)

WATER QUALITY VOLUME REQUIRED:

$T_V = (RV)(A)/12$

WHERE:

A = AREA TO FACILITY (67,434 SF)
R_V = COMPOSITE RUNOFF COEFFICIENT
$R_V = \frac{[(0.25*19,473)+(0.95*47,961)]}{67,434} = 0.75$

$T_V = (0.75)(67,434)/12 =$ **4,214.6 FT³**

WATER QUALITY VOLUME PROVIDED:

$V = SA[D_p+(D_m)(N_m)+(D_g)(N_g)]$

WHERE:

V = VOLUME
SA = SURFACE AREA (2,225 SQ. FT.)
D_p = PONDING DEPTH (12")
D_m = DEPTH OF FILTER MEDIA (24")
N_m = VOID RATIO OF FILTER MEDIA (0.25)
D_g = DEPTH OF GRAVEL BED (12")
N_g = VOID RATIO OF GRAVEL BED (0.40)

$V = 2,225[1.0'+(2.0')(0.25)+(1.0')(0.40)] =$ **4,227.5 FT³**

REQUIRED: **4,215 CU.FT.**
PROVIDED: **4,228 CU.FT.**

BMP FACILITY		AREA TREATED (ACRES)	IMPERVIOUS AREA TREATED (ACRES)	PERVIOUS AREA TREATED (ACRES)	TP REMOVAL EFFICIENCY	PHOSPHORUS REMOVED (LBS)	GEOGRAPHIC COORDINATES	
							NORTHING	EASTING
BIORETENTION		1.5480	1.1010	0.4470	25%	1.45	6987069.58	11887122.01
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TREE WELLS	1	0.2231	0.1203	0.1028	25%	0.18	6987069.42	11887156.90
	2						6987034.18	11887158.40
	3						6986999.55	11887160.29
	4						6986969.53	11887161.88
	5						6986929.66	11887164.16
	6						6986834.67	11887168.87

TREE WELL 1:

Contributing Drainage Area	
Roadway to be Treated	45 SF
Sidewalk to be Treated	890 SF
Contributing Drainage Area	935 SF
Treatment Volume Required	38.96 CF
Water Quality Sizing Computations	
Min. Surface Area (Gross)	77.92 SF
Infiltration Ponding	0.00 FT
Min. Surface Area (Net)	77.92 SF
Fill Time	1 HR
Infiltration	0.0000 FT/HR
Depth of Soil	2.33 FT
Ponding Depth	0.50 FT
Lanscape Sizing Computations	
Type of Practice	Tree Wells
Tree Spacing	35 FT
Number of Practices Proposed	1
Surface Area per Practice	77.92 SF
Width of Practice	4.00 FT
Min. Length of Practice	19.48 FT
Length of Practice	15.00 FT
Depth of Soil	2.33 FT
Soil Volume Provided	140.00 CF
Additional Soil Volume Required	310.00 CF

* FIRST ½" INCLUDED IN VRRM

TREE WELL 2:

Contributing Drainage Area	
Roadway to be Treated	33 SF
Sidewalk to be Treated	612 SF
Contributing Drainage Area	645 SF
Treatment Volume Required	26.88 CF
Water Quality Sizing Computations	
Min. Surface Area (Gross)	53.75 SF
Infiltration Ponding	0.00 FT
Min. Surface Area (Net)	53.75 SF
Fill Time	1 HR
Infiltration	0.0000 FT/HR
Depth of Soil	1.75 FT
Ponding Depth	0.50 FT
Lanscape Sizing Computations	
Type of Practice	Tree Wells
Tree Spacing	35 FT
Number of Practices Proposed	1
Surface Area per Practice	53.75 SF
Width of Practice	4.00 FT
Min. Length of Practice	13.44 FT
Length of Practice	15.00 FT
Depth of Soil	1.75 FT
Soil Volume Provided	105.00 CF
Additional Soil Volume Required	345.00 CF

* FIRST 1" INCLUDED IN VRRM

TREE WELL 3:

Contributing Drainage Area	
Roadway to be Treated	26 SF
Sidewalk to be Treated	639 SF
Contributing Drainage Area	665 SF
Treatment Volume Required	27.71 CF
Water Quality Sizing Computations	
Min. Surface Area (Gross)	55.42 SF
Infiltration Ponding	0.00 FT
Min. Surface Area (Net)	55.42 SF
Fill Time	1 HR
Infiltration	0.0000 FT/HR
Depth of Soil	1.33 FT
Ponding Depth	0.50 FT
Lanscape Sizing Computations	
Type of Practice	Tree Wells
Tree Spacing	35 FT
Number of Practices Proposed	1
Surface Area per Practice	55.42 SF
Width of Practice	4.00 FT
Min. Length of Practice	13.85 FT
Length of Practice	15.00 FT
Depth of Soil	1.33 FT
Soil Volume Provided	80.00 CF
Additional Soil Volume Required	370.00 CF

* FIRST 1" INCLUDED IN VRRM

TREE WELL 4:

Contributing Drainage Area	
Roadway to be Treated	18 SF
Sidewalk to be Treated	685 SF
Contributing Drainage Area	703 SF
Treatment Volume Required	29.29 CF
Water Quality Sizing Computations	
Min. Surface Area (Gross)	58.58 SF
Infiltration Ponding	0.00 FT
Min. Surface Area (Net)	58.58 SF
Fill Time	1 HR
Infiltration	0.0000 FT/HR
Depth of Soil	1.42 FT
Ponding Depth	0.50 FT
Lanscape Sizing Computations	
Type of Practice	Tree Wells
Tree Spacing	35 FT
Number of Practices Proposed	1
Surface Area per Practice	58.58 SF
Width of Practice	4.00 FT
Min. Length of Practice	14.65 FT
Length of Practice	15.00 FT
Depth of Soil	1.42 FT
Soil Volume Provided	85.00 CF
Additional Soil Volume Required	365.00 CF

* FIRST 1" INCLUDED IN VRRM

TREE WELL 5:

Contributing Drainage Area	
Roadway to be Treated	32 SF
Sidewalk to be Treated	6,765 SF
Contributing Drainage Area	6,797 SF
Treatment Volume Required	283.21 CF
Water Quality Sizing Computations	
Min. Surface Area (Gross)	566.42 SF
Infiltration Ponding	0.00 FT
Min. Surface Area (Net)	566.42 SF
Fill Time	1 HR
Infiltration	0.0000 FT/HR
Depth of Soil	1.50 FT
Ponding Depth	0.50 FT
Lanscape Sizing Computations	
Type of Practice	Tree Wells
Tree Spacing	35 FT
Number of Practices Proposed	1
Surface Area per Practice	566.42 SF
Width of Practice	4.00 FT
Min. Length of Practice	141.60 FT
Length of Practice	15.00 FT
Depth of Soil	1.50 FT
Soil Volume Provided	90.00 CF
Additional Soil Volume Required	360.00 CF

* FIRST ½" INCLUDED IN VRRM

TREE WELL 6:

Contributing Drainage Area	
Roadway to be Treated	101 SF
Sidewalk to be Treated	2,441 SF
Contributing Drainage Area	2,542 SF
Treatment Volume Required	105.92 CF
Water Quality Sizing Computations	
Min. Surface Area (Gross)	211.83 SF
Infiltration Ponding	0.00 FT
Min. Surface Area (Net)	211.83 SF
Fill Time	1 HR
Infiltration	0.0000 FT/HR
Depth of Soil	3.42 FT
Ponding Depth	0.50 FT
Lanscape Sizing Computations	
Type of Practice	Tree Wells
Tree Spacing	35 FT
Number of Practices Proposed	1
Surface Area per Practice	211.83 SF
Width of Practice	4.00 FT
Min. Length of Practice	52.96 FT
Length of Practice	15.00 FT
Depth of Soil	3.42 FT
Soil Volume Provided	205.00 CF
Additional Soil Volume Required	245.00 CF

* FIRST ½" INCLUDED IN VRRM

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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APPROVED
SPECIAL USE PERMIT NO. _____
DEPARTMENT OF PLANNING & ZONING
DIRECTOR — DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. 2018–0021
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
AUGUST 22, 2019
PROFESSIONAL ENGINEER

DEVELOPMENT PRELIMINARY SITE PLAN
ALEXANDRIA PRESBYTERIAN CHURCH
1300 WEST BRADDOCK ROAD
CITY OF ALEXANDRIA, VIRGINIA

DATE	REVISION

DESIGN: VMM
CHECKED: VMM
SCALE: 1" = 20'
DATE: AUG. 19, 2019

OFFSITE BMP DETAILS

SHEET 7 OF 13
FILE: 18–193

J:\2018\18193\DWG\DEVA\Preliminary\06 – STORMWATER MANAGEMENT PLAN – LOD.dwg
Wed, Aug 21 2019 – 3:10:19pm

ProjecA4:M67t Name:	Alexandria Presbyterian Chruch
Date:	7/10/2019
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)* → 2.10

Maximum reduction required:	*20%*
The site's net increase in impervious cover (acres) is:	*0.8639*
Post-Development TP Load Reduction for Site (lb/yr):	*1.83*

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

Pre-ReDevelopment Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed, protected forest/open space or reforested					0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be				1.56	1.56
Impervious Cover (acres)				0.55	0.55
					2.10

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				0.69	0.69
Impervious Cover (acres)				1.41	1.41
Area Check	OK.	OK.	OK.	OK.	2.10

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)	1.56	0.69
Weighted Rv(turf)	0.25	0.25
% Managed Turf	74%	56%
Impervious Cover (acres)	0.55	0.55
Rv(impervious)	0.95	0.95
% Impervious	26%	44%
Total Site Area (acres)	**2.10**	**1.24**
Site Rv	**0.43**	**0.56**

Treatment Volume and Nutrient Load

Pre-ReDevelopment Treatment Volume (acre-ft)	0.0756	0.0576
Pre-ReDevelopment Treatment Volume (cubic feet)	3,295	2,511
Pre-ReDevelopment TP Load (lb/yr)	**2.07**	**1.58**
Pre-ReDevelopment TP load per acre (lb/acre/yr)	0.98	1.27
Baseline TP Load (lb/yr) (**0.41 lbs/acre/yr** applied to pre-redevelopment area excluding pervious land proposed for new impervious cover)		*0.51*

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)	0.69
Weighted Rv (turf)	0.25
% Managed Turf	33%
Impervious Cover (acres)	1.41
Rv(impervious)	0.95
% Impervious	67%
Final Site Area (acres)	**2.10**
Final Post Dev Site Rv	**0.72**

Land Cover Summary-Post

Post-ReDevelopment	
Forest/Open Space Cover (acres)	0.00
Weighted Rv(forest)	0.00
% Forest	0%
Managed Turf Cover (acres)	0.69
Weighted Rv (turf)	0.25
% Managed Turf	56%
ReDev. Impervious Cover (acres)	0.55
Rv(impervious)	0.95
% Impervious	44%
Total ReDev. Site Area (acres)	**1.24**
ReDev Site Rv	**0.56**

Land Cover Summary-Post

Post-Development New Impervious	
New Impervious Cover (acres)	0.86
Rv(impervious)	0.95

Treatment Volume and Nutrient Load

Final Post-Development Treatment Volume (acre-ft)	0.1260	Post-ReDevelopment Treatment Volume (acre-ft)	0.0576	Post-Development Treatment Volume (acre-ft)	0.0684
Final Post-Development Treatment Volume (cubic feet)	5,490	Post-ReDevelopment Treatment Volume (cubic feet)	2,511	Post-Development Treatment Volume (cubic feet)	2,979
Final Post-Development TP Load (lb/yr)	**3.45**	**Post-ReDevelopment Load (TP) (lb/yr)***	**1.58**	**Post-Development TP Load (lb/yr)**	**1.87**
Final Post-Development TP Load per acre (lb/acre/yr)	1.64	Post-ReDevelopment TP Load per acre (lb/acre/yr)	1.27		
		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)**	**1.52**

[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 requriement for new impervious cover (based on new development load limit, 0.41 lbs/acre/year).

Post-Development Requirement for Site Area

TP Load Reduction Required (lb/yr)	**1.83**

Nitrogen Loads (Informational Purposes Only)

Pre-ReDevelopment TN Load (lb/yr)	14.81	Final Post-Development TN Load (Post-ReDevelopment & New Impervious) (lb/yr)	24.68

Drainage Area A

CLEAR BMP AREAS

Drainage Area A Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals	Land Cover Rv
Forest/Open Space (acres)					0.00	0.00
Managed Turf (acres)				0.45	0.45	0.25
Impervious Cover (acres)				1.10	1.10	0.95
				Total	1.55	

Total Phosphorus Available for Removal in D.A. A (lb/yr): 2.64
Post Development Treatment Volume in D.A. A (ft^3): 4,202

Practice	Runoff Reduction Credit (%)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft^3)	Runoff Reduction (ft^3)	Remaining Runoff Volume (ft^3)	Total BMP Treatment Volume (ft^3)	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
6. Bioretention (RR)													
6.a. Bioretention #1 or Micro-Bioretention #1 or Urban Bioretention (Spec #9)	40	0.45	1.10	0	1,681	2,521	4,202	25	0.00	2.64	1.45	1.19	14.a. MTD - Hydrodynamic
14. Manufactured Treatment Devices (no RR)													
14.a. Manufactured Treatment Device-Hydrodynamic	0			2,521	0	2,521	2,521	20	1.19	0.00	0.24	0.95	

Drainage Area B

CLEAR BMP AREAS

Drainage Area A Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals	Land Cover Rv
Forest/Open Space (acres)					0.00	0.00
Managed Turf (acres)				0.10	0.10	0.25
Impervious Cover (acres)				0.12	0.12	0.95
				Total	0.22	

Total Phosphorus Available for Removal in D.A. B (lb/yr): 0.32
Post Development Treatment Volume in D.A. B (ft^3): 508

Practice	Runoff Reduction Credit (%)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft^3)	Runoff Reduction (ft^3)	Remaining Runoff Volume (ft^3)	Total BMP Treatment Volume (ft^3)	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
6. Bioretention (RR)													
6.a. Bioretention #1 or Micro-Bioretention #1 or Urban Bioretention (Spec #9)	40	0.10	0.12	0	203	305	508	25	0.00	0.32	0.18	0.14	

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)	1.10	0.12	0.00	0.00	0.00	OK.
IMPERVIOUS COVER TREATED (ac)	1.10	0.12	0.00	0.00	0.00	OK.
MANAGED TURF AREA (ac)	0.45	0.10	0.00	0.00	0.00	OK.
MANAGED TURF AREA TREATED (ac)	0.45	0.10	0.00	0.00	0.00	OK.
AREA CHECK	OK.	OK.	OK.	OK.	OK.	

Site Treatment Volume (ft^3): 5,490

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 (ft^3)	1,681	203	0	0	0	1,884
TP LOAD AVAILABLE FOR REMOVAL (lb/yr)	2.64	0.32	0.00	0.00	0.00	2.96
TP LOAD REDUCTION ACHIEVED (lb/yr)	1.69	0.18	0.00	0.00	0.00	1.86
TP LOAD REMAINING (lb/yr)	0.95	0.14	0.00	0.00	0.00	1.10
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	12.08	1.46	0.00	0.00	0.00	13.54

Total Phosphorus

FINAL POST-DEVELOPMENT TP LOAD (lb/yr)	3.45
TP LOAD REDUCTION REQUIRED (lb/yr)	1.83
TP LOAD REDUCTION ACHIEVED (lb/yr)	1.86
TP LOAD REMAINING (lb/yr):	1.59
REMAINING TP LOAD REDUCTION REQUIRED (lb/yr):	0.00 **

** TARGET TP REDUCTION EXCEEDED BY 0.03 LB/YEAR **

Total Nitrogen (For Information Purposes)

POST-DEVELOPMENT LOAD (lb/yr)	24.68
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	13.54
REMAINING POST-DEVELOPMENT NITROGEN LOAD (lb/yr)	11.14

Enter design storm rainfall depths (in):

1-year storm	2-year storm	10-year storm
2.70	3.20	5.20

Drainage Area A		A Soils	B Soils	C Soils	D Soils
Forest/Open Space -- undisturbed, protected forest/open space or reforested land	Area (acres)	0.00	0.00	0.00	0.00
	CN	30	55	70	77
Managed Turf -- disturbed, graded for yards or other turf to be mowed/managed	Area (acres)	0.00	0.00	0.00	0.45
	CN	39	61	74	80
Impervious Cover	Area (acres)	0.00	0.00	0.00	1.10
	CN	98	98	98	98

Total Area (acres): 1.55
Runoff Reduction Volume (ft^3): 1,681

$CN_{(D.A. A)}$: 93

	1-year storm	2-year storm	10-year storm
$RV_{Developed}$ *(watershed-inch)* with no Runoff Reduction*	1.97	2.45	4.39
$RV_{Developed}$ *(watershed-inch)* with Runoff Reduction*	1.67	2.15	4.10
Adjusted CN*	89	90	90

Drainage Area B		A Soils	B Soils	C Soils	D Soils
Forest/Open Space -- undisturbed, protected forest/open space or reforested land	Area (acres)	0.00	0.00	0.00	0.00
	CN	30	55	70	77
Managed Turf -- disturbed, graded for yards or other turf to be mowed/managed	Area (acres)	0.00	0.00	0.00	0.10
	CN	39	61	74	80
Impervious Cover	Area (acres)	0.00	0.00	0.00	0.12
	CN	98	98	98	98

Total Area (acres): 0.22
Runoff Reduction Volume (ft^3): 203

$CN_{(D.A. B)}$: 90

	1-year storm	2-year storm	10-year storm
$RV_{Developed}$ *(watershed-inch)* with no Runoff Reduction*	1.71	2.17	4.07
$RV_{Developed}$ *(watershed-inch)* with Runoff Reduction*	1.46	1.92	3.82
Adjusted CN*	87	87	88

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

THE PROPOSED REDEVELOPMENT (1.87 ACRES OF DISTURBANCE ONSITE) GENERATES A NET INCREASE OF IMPERVIOUS AREA FROM PRE-DEVELOPMENT CONDITIONS. PER CITY CODE SECTION 13-109E-(5)(c) & (d), DEVELOPMENT OF PRIOR DEVELOPED LANDS DISTURBING GREATER THAN 1 ACRE AND RESULTING IN A NET INCREASE IN IMPERVIOUS AREA 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. COMPUTATIONS PROVIDED ON THIS SHEET DEMONSTRATE A NET INCREASE OF IMPERVIOUS AREA. MULTIPLE BMP FACILITIES ARE PROPOSED WITH THIS DEVELOPMENT. THIS WILL RESULT IN A 23.2% ([1-(1.59/2.07)]*100% = 23.2%) REDUCTION OF PHOSPHOROUS LOAD FROM THE SITE WHICH IS GREATER THAN THE MINIMUM REQUIREMENT OF 20% (SEE SPREADSHEET ON THIS SHEET). THEREFORE, THE WATER QUALITY PERFORMANCE REQUIREMENTS FOR THE PROPOSED DEVELOPMENT PER CITY CODE SECTION 13-109E-(5)(d) HAVE BEEN MET.

IN ADDITION, A MAJORITY OF ON-SITE IMPERVIOUS AREA IS PROPOSED TO BE TREATED WITH THIS DEVELOPMENT, WHICH MEETS THE WATER QUALITY DEFAULT VOLUME TREATMENT STANDARDS IN SECTION 13-110 OF THE ZONING ORDINANCE. A CONTRIBUTION TO THE ALEXANDRIA WATER QUALITY IMPROVEMENT FUND WILL BE MADE FOR THE REMAINING PORTION OF THE WATER QUALITY VOLUME NOT TREATED IN COMPLIANCE WITH CITY CODE SECTION 13-109E-(5) AND SECTION 13-110.

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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DEPARTMENT OF PLANNING & ZONING
DIRECTOR — DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. 2018-0021
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. 047883
AUGUST 22, 2019
PROFESSIONAL ENGINEER

DEVELOPMENT PRELIMINARY SITE PLAN
ALEXANDRIA PRESBYTERIAN CHURCH
1300 WEST BRADDOCK ROAD
CITY OF ALEXANDRIA, VIRGINIA

DATE	REVISION

DESIGN: VMM
CHECKED: VMM
SCALE: NO SCALE
DATE: AUG. 19, 2019

STORMWATER QUALITY COMPUTATIONS

SHEET 8 OF 13
FILE: 18-193

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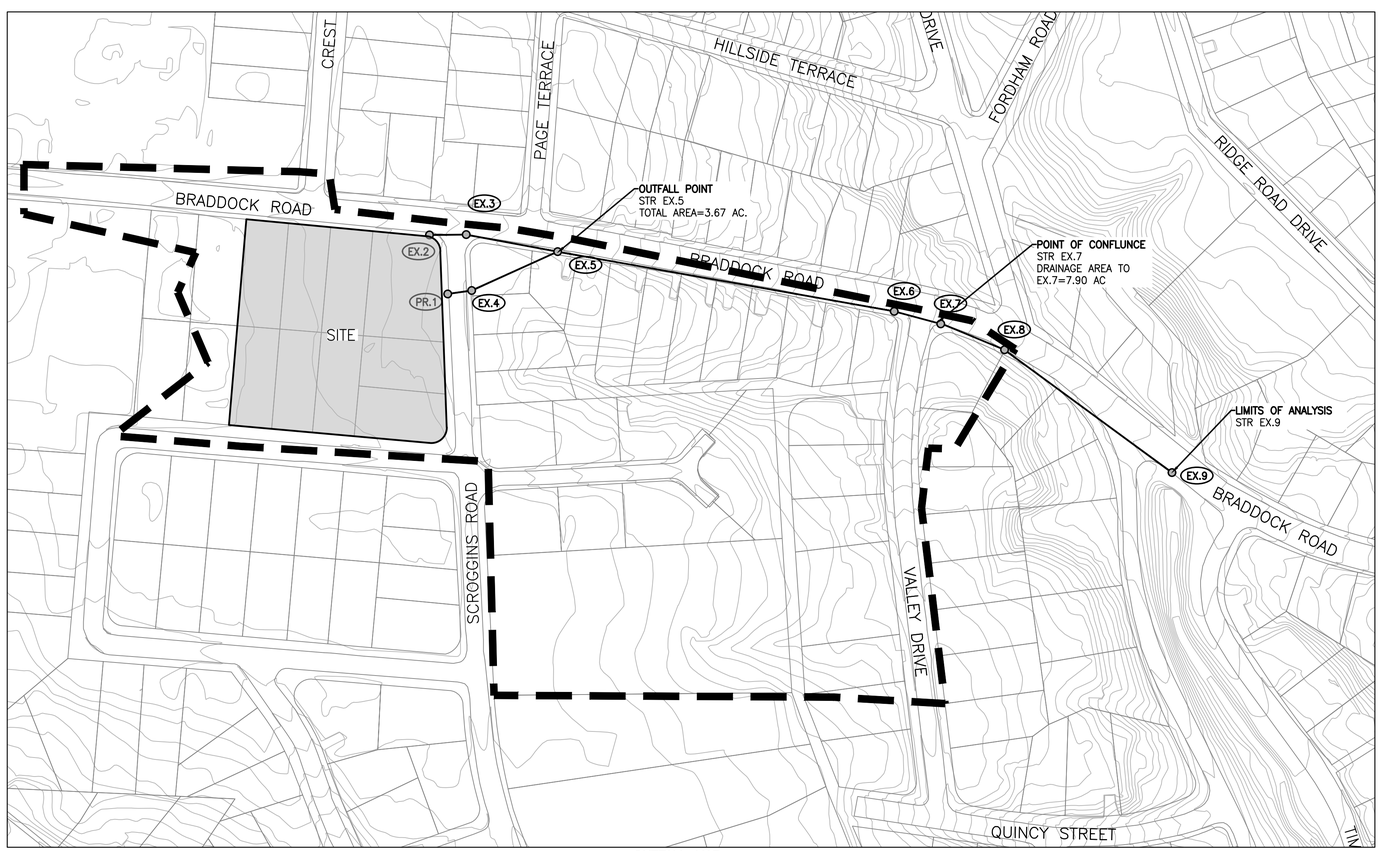
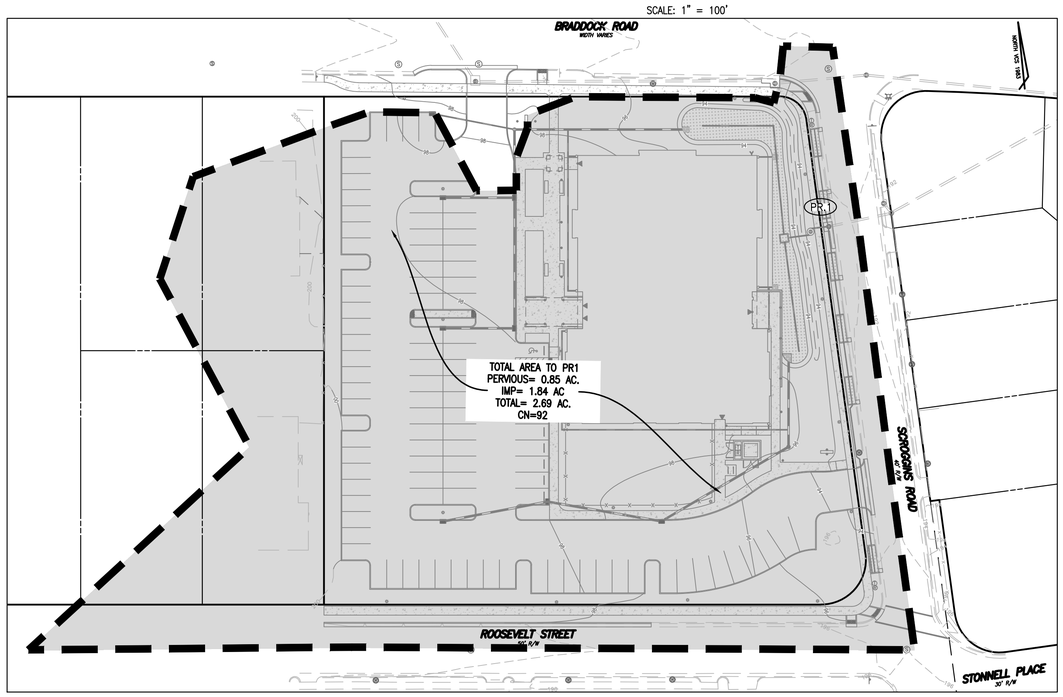
Wed, Aug 21 2019 - 3:10:27pm



OUTFALL MAP
SCALE: 1" = 100'



AREA TO PR1 MAP
SCALE: 1" = 40'

STORMWATER OUTFALL NARRATIVE:

PRE-DEVELOPMENT CONDITIONS:
THE 1.87 ACRE SITE IS LOCATED IN THE HOOFFS RUN WATERSHED. IN EXISTING CONDITIONS, THE SITE CONSISTS OF A CHURCH WITH ASSOCIATED PARKING, HOUSE, AND PLAYGROUND. THE SITE HAS ONE OUTFALL POINT.

OUTFALL #1: THE SITE DRAINS TO THE EXISTING STORM SYSTEM IN THE BRADDOCK ROAD AND SCROGGINS ROAD RIGHT-OF-WAYS. RUNOFF FROM 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 SCOGGINS ROAD RIGHT-OF-WAY. DRAINAGE IS CONVEYED WEST WHERE IT IS JOINED BY THE RUNOFF THAT ENTERS THE BRADDOCK ROAD RIGHT-OF-WAY AND EVENTUALLY OUTFALLS TO HOOFFS RUN.

POST-DEVELOPMENT CONDITIONS:
THE REDEVELOPMENT OF THE PROJECT PROPOSES A NEW 2-STORY CHURCH, ASSOCIATED PARKING AND IMPROVED STREETSCAPE/OPEN SPACE. OVERALL IMPERVIOUS AREA WILL INCREASED WITH THE PROPOSED CONSTRUCTION. THE SITE WILL MAINTAIN ONE OUTFALL POINT AS IN PRE-DEVELOPMENT CONDITIONS.

OUTFALL #1: RUNOFF FROM THE MAJORITY OF THE SITE IS COLLECTED IN AN ONSITE BIORETENTION FACILITY THAT CONNECTS TO THE CITY MAINTAINED STORM SEWER SYSTEM (PR.1) LOCATED IN THE SCROGGINS ROAD RIGHT-OF-WAY. THE REMAINDER OF THE RUNOFF ENTERS THE BRADDOCK ROAD & SCROGGINS ROAD RIGHT-OF-WAYS VIA SHEET SLOW. AS IN EXISTING CONDITIONS, RUNOFF CONVERGES IN A CITY MAINTAINED STORM SEWER AND IS CONVEYED EAST UNTIL IT ENTERS EXISTING STRUCTURE EX.7. AT THIS POINT, THE FLOW CONVERGES WITH AN AREA AT LEAST 90% (7.90 AC) OF THE AREA OF THE OUTFALL POINT (EX.5). THE ANALYSIS THEN EXTENDS ANOTHER 150' TO EXISTING STRUCTURE EX.9.

CONCLUSION:
COMPUTATIONS SHOWN ON THIS SHEET DEMONSTRATE THAT THE EXISTING SYSTEM EXPERIENCES LOCALIZED FLOODING IN EXISTING CONDITIONS AND COMPUTATIONS SHOWN ON SHEET 6 DEMONSTRATE THAT THE PEAK FLOW RATE IS BEING REDUCED WITH THE PROPOSED DEVELOPMENT. 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.

STRUCTURE																		
FROM	TO	INC. DRAINAGE AREA (AC)	ACCUM. DRAINAGE AREA (AC)	CURVE NUMBER	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)
PR.1	EX.4	2.37	2.37	85	5.20	5	9.86	**9.86**	12	4.28%	0.015	6.66	8.15	36	189.14	187.60	1.54
EX.4	EX.5	0.14	2.51	85	5.20	5	0.57	**10.43**	12	1.55%	0.015	4.01	4.90	132	187.55	185.51	2.04
EX.2	EX.3	1.01	1.01	85	5.20	5	4.18	**4.18**	12	4.59%	0.015	6.90	8.44	51	191.31	188.97	2.34
EX.3	EX.5	0.05	1.06	85	5.20	5	0.21	**4.40**	15	3.18%	0.015	10.41	8.15	130	188.92	184.79	4.13
EX.5	EX.6	0.10	3.67	85	5.20	5	0.42	**15.24**	18	6.10%	0.015	23.46	12.76	478	184.74	155.59	29.15
EX.6	EX.7	0.61	4.28	85	5.20	5	2.51	**17.76**	18	6.10%	0.015	23.46	12.76	67	155.59	151.49	4.10
EX.7	EX.8	7.90	12.18	85	5.20	5	32.71	**50.46**	18	6.10%	0.015	23.46	12.76	96	151.49	145.63	5.85
EX.8	EX.9	0.31	12.49	85	5.20	5	1.30	**51.76**	18	6.10%	0.015	23.46	12.76	291	145.63	127.89	17.74

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DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
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CHAIRMAN, PLANNING COMMISSION — DATE
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COMMONWEALTH OF VIRGINIA
ANDREA SPRUCH
Lic. No. 047693
AUGUST 22, 2019
PROFESSIONAL ENGINEER

DEVELOPMENT PRELIMINARY SITE PLAN
ALEXANDRIA PRESBYTERIAN CHURCH
1300 WEST BRADDOCK ROAD
CITY OF ALEXANDRIA, VIRGINIA

DATE	REVISION

DESIGN: VMM
CHECKED: VMM
SCALE: AS SHOWN
DATE: AUG. 19, 2019

OUTFALL ANALYSIS

SHEET 9 OF 13
FILE: 18-193

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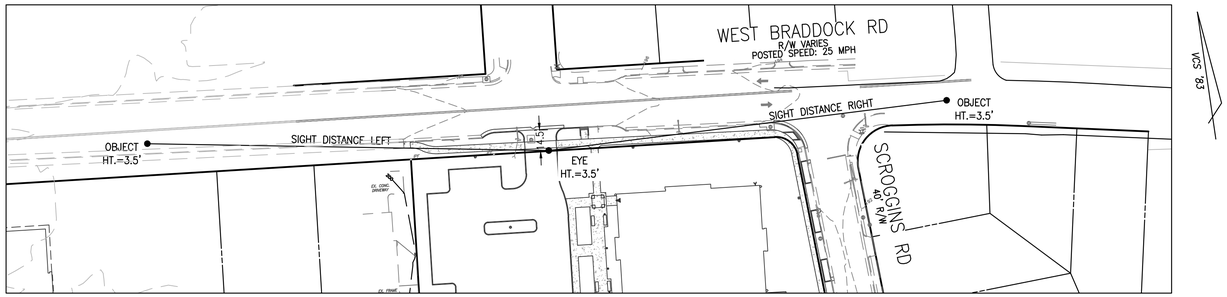
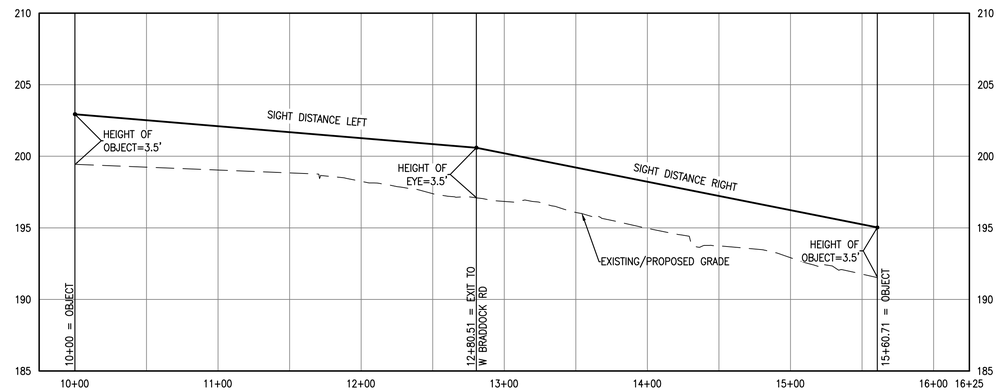
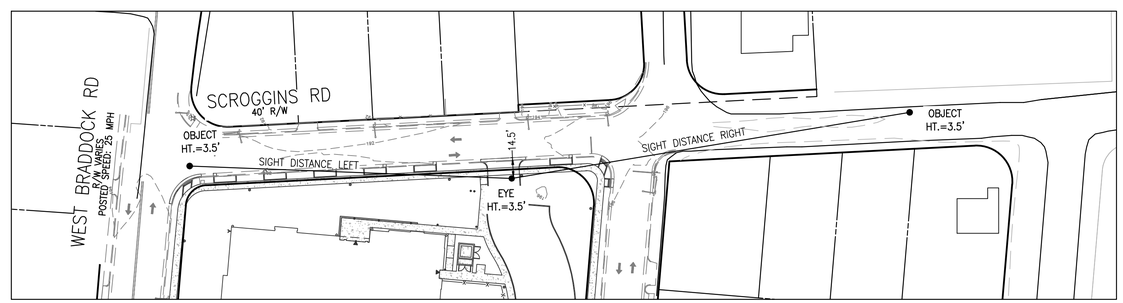
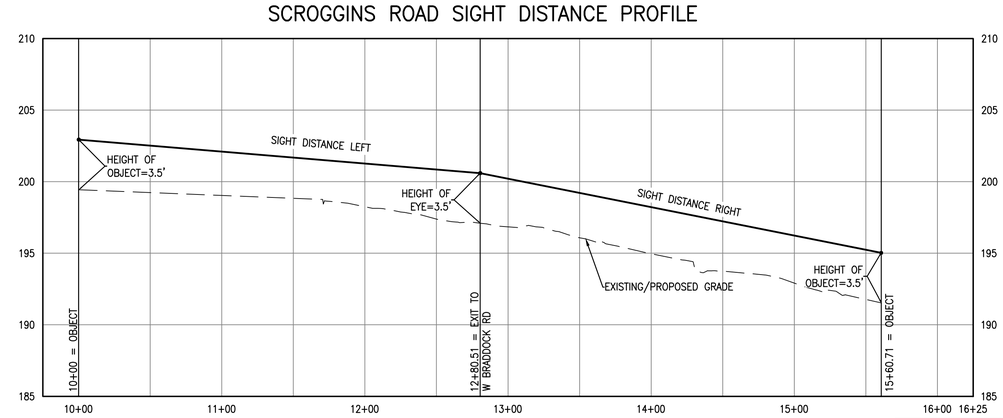


BRADDOCK ROAD SIGHT DISTANCE PROFILE





SCROGGINS ROAD SIGHT DISTANCE PROFILE



PLAN VIEW SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

HORIZ. PROFILE SCALE

50 0 25 50

(IN FEET)
1 inch = 50 ft.

VERT. PROFILE SCALE

5 0 2.5 5

(IN FEET)
1 inch = 5 ft.

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COMMONWEALTH OF VIRGINIA
ANDREA SPRUCH
Lic. No. 047863
AUGUST 22, 2019
PROFESSIONAL ENGINEER

DEVELOPMENT PRELIMINARY SITE PLAN
ALEXANDRIA PRESBYTERIAN CHURCH
1300 WEST BRADDOCK ROAD
CITY OF ALEXANDRIA, VIRGINIA

DATE	REVISION

DESIGN: VMM
CHECKED: VMM
SCALE: AS NOTED
DATE: AUG. 19, 2019

SIGHT DISTANCE PLAN & PROFILE

SHEET 10 OF 13
FILE: 18-193

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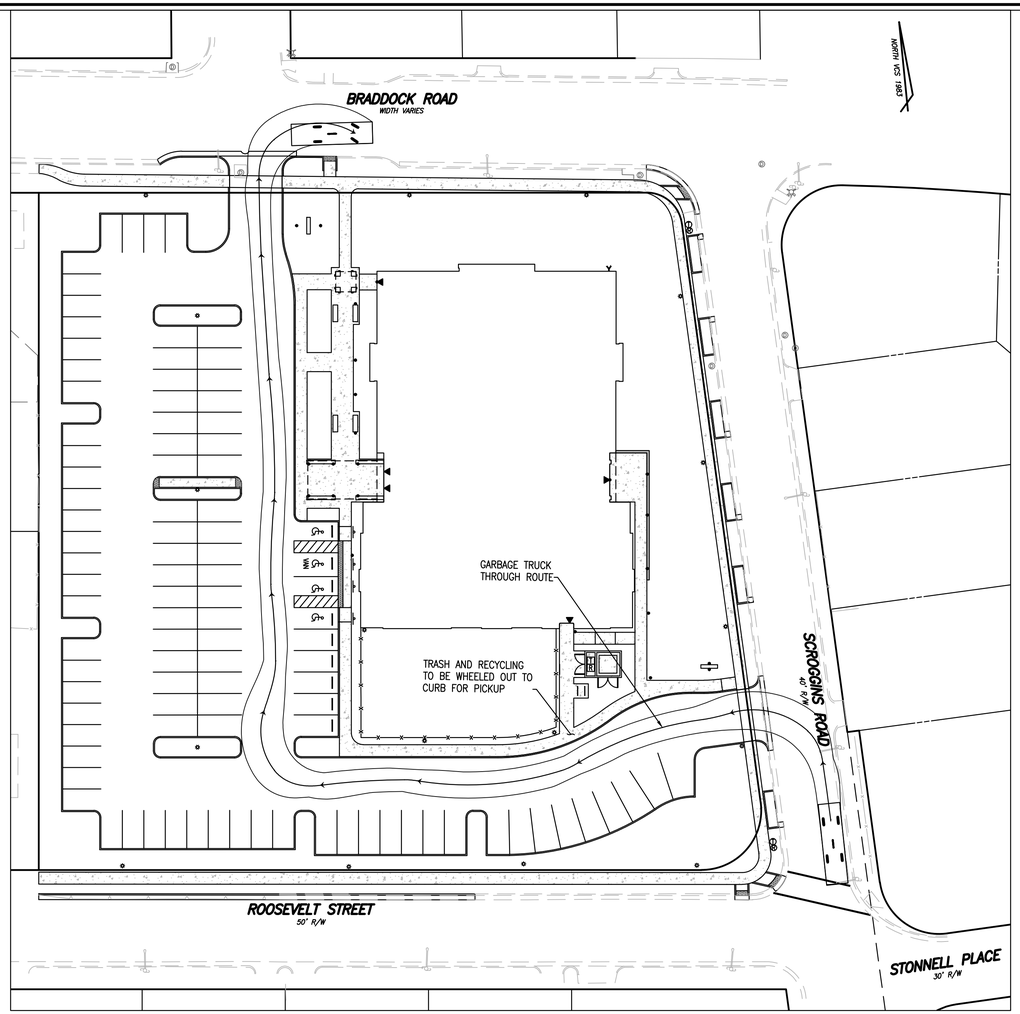
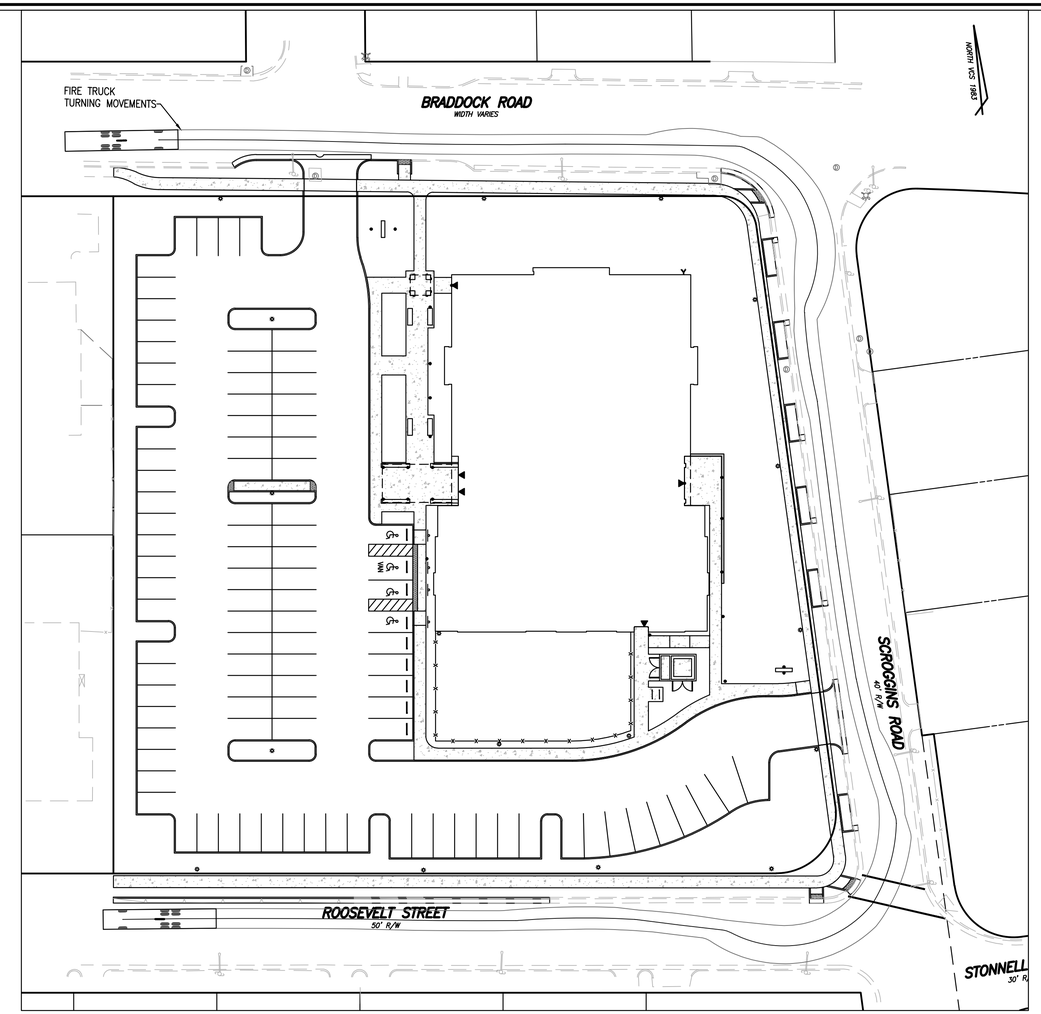


TURNING MOVEMENTS
SCALE: 1"=30'



TURNING MOVEMENTS
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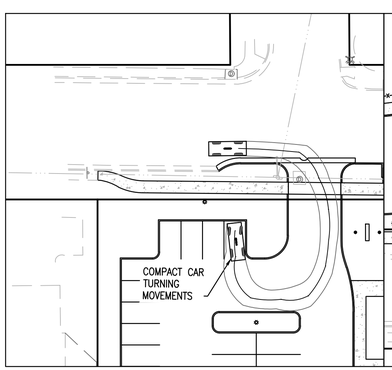
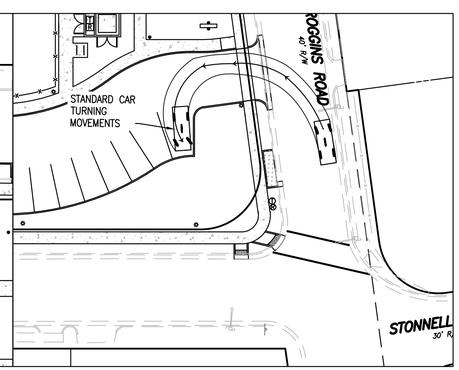
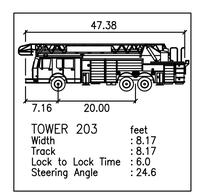


TURNING MOVEMENTS
SCALE: 1"=30'

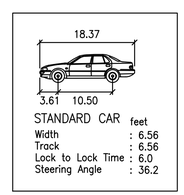


TURNING MOVEMENTS
SCALE: 1"=30'



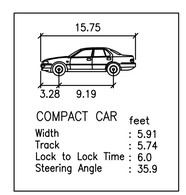
TOWER 203 feet
Width : 8.17
Track : 8.17
Lock to Lock Time : 6.0
Steering Angle : 24.6

FIRE TRUCK DETAIL
(NTS)



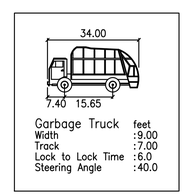
STANDARD CAR feet
Width : 6.56
Track : 6.56
Lock to Lock Time : 6.0
Steering Angle : 36.2

STANDARD CAR DETAIL
(NTS)



COMPACT CAR feet
Width : 5.91
Track : 5.74
Lock to Lock Time : 6.0
Steering Angle : 35.9

COMPACT CAR DETAIL
(NTS)



Garbage Truck feet
Width :9.00
Track :7.00
Lock to Lock Time :6.0
Steering Angle :40.0

GARBAGE TRUCK DETAIL
(NTS)

0' 15' 30' 60'

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APPROVED
SPECIAL USE PERMIT NO. _____
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. 2018-0021
DIRECTOR DATE
CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED
INSTRUMENT NO. DEED BOOK NO. DATE

R.C. FIELDS & ASSOCIATES, INC.
ENGINEERING • LAND SURVEYING • PLANNING
700 S. Washington Street, Suite 220
Alexandria, Virginia 22314
www.rcfassoc.com
(703) 549-6422

COMMONWEALTH OF VIRGINIA
ANDREA SPRUCH
Lic. No. 047693
AUGUST 22, 2019
PROFESSIONAL ENGINEER

DEVELOPMENT PRELIMINARY SITE PLAN
ALEXANDRIA PRESBYTERIAN CHURCH
1300 WEST BRADDOCK ROAD
CITY OF ALEXANDRIA, VIRGINIA

DATE	REVISION

DESIGN: VMM
CHECKED: VMM
SCALE: 1" = 30'
DATE: AUG. 19, 2019

TURNING MOVEMENTS (1 OF 2)

SHEET 11 OF 13
FILE: 18-193

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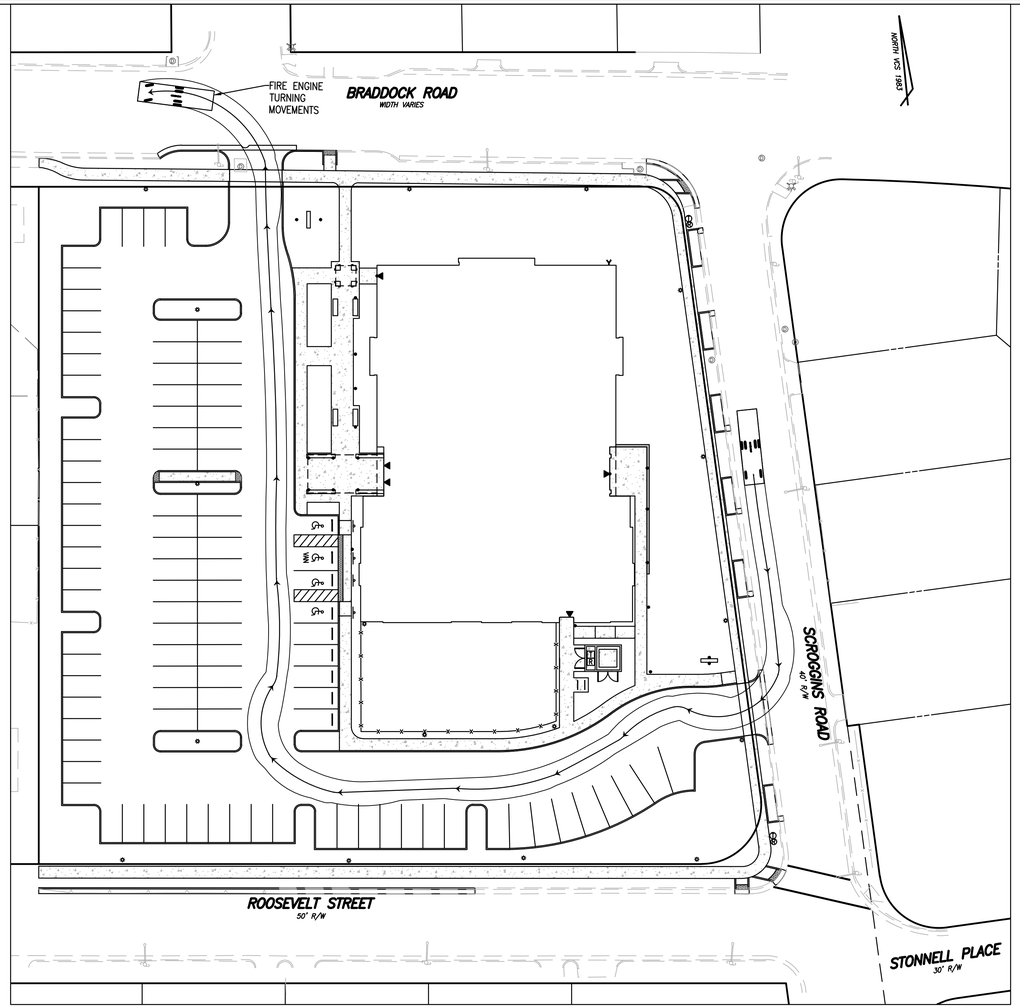
Wed, Aug 21 2019 - 3:10:53pm



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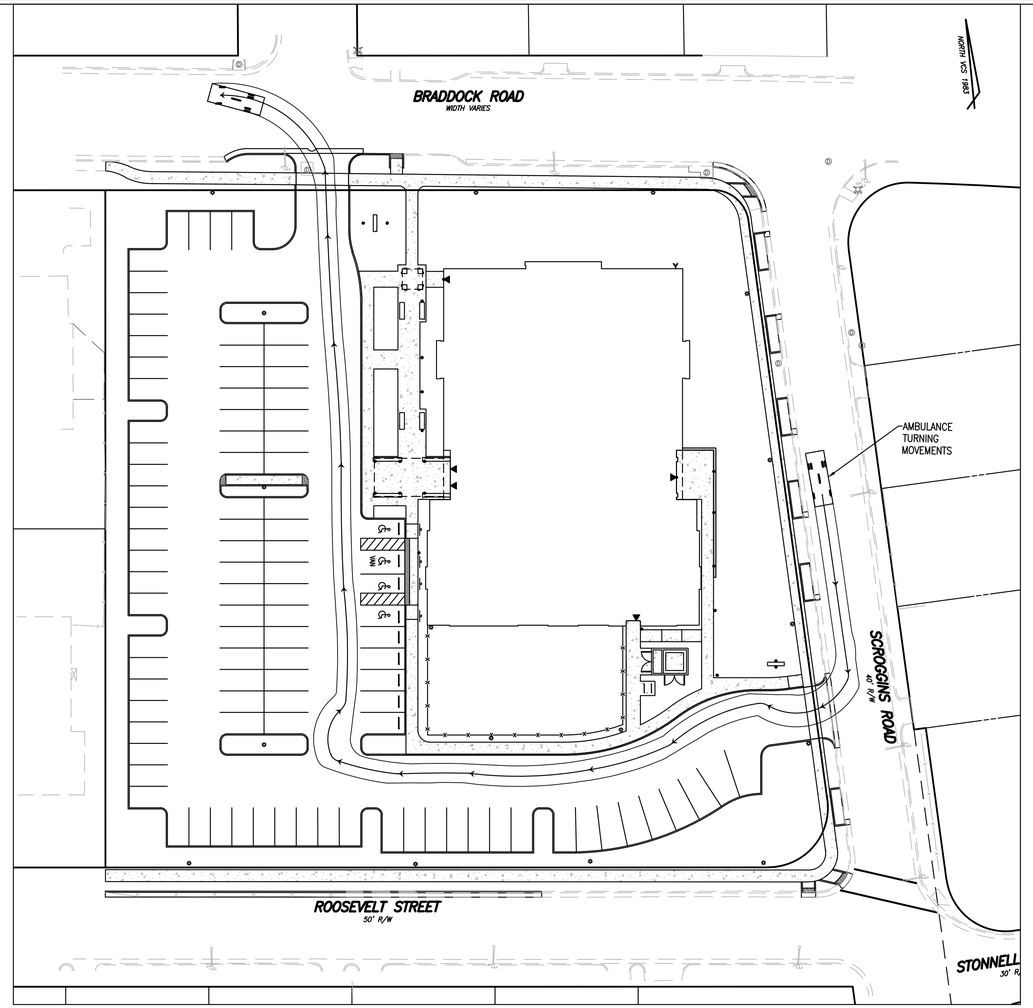
SCALE: 1"=30'



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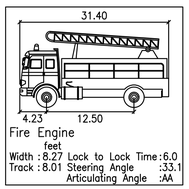
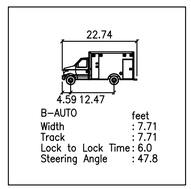
SCALE: 1"=30'



FIRE ENGINE DETAIL
(NTS)



AMBULANCE DETAIL
(NTS)

0' 15' 30' 60'

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Lic. No. 047693
AUGUST 22, 2019
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ALEXANDRIA PRESBYTERIAN CHURCH
1300 WEST BRADDOCK ROAD
CITY OF ALEXANDRIA, VIRGINIA

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DATE: AUG. 19, 2019

TURNING MOVEMENTS (2 OF 2)

SHEET 12 OF 13
FILE: 18-193

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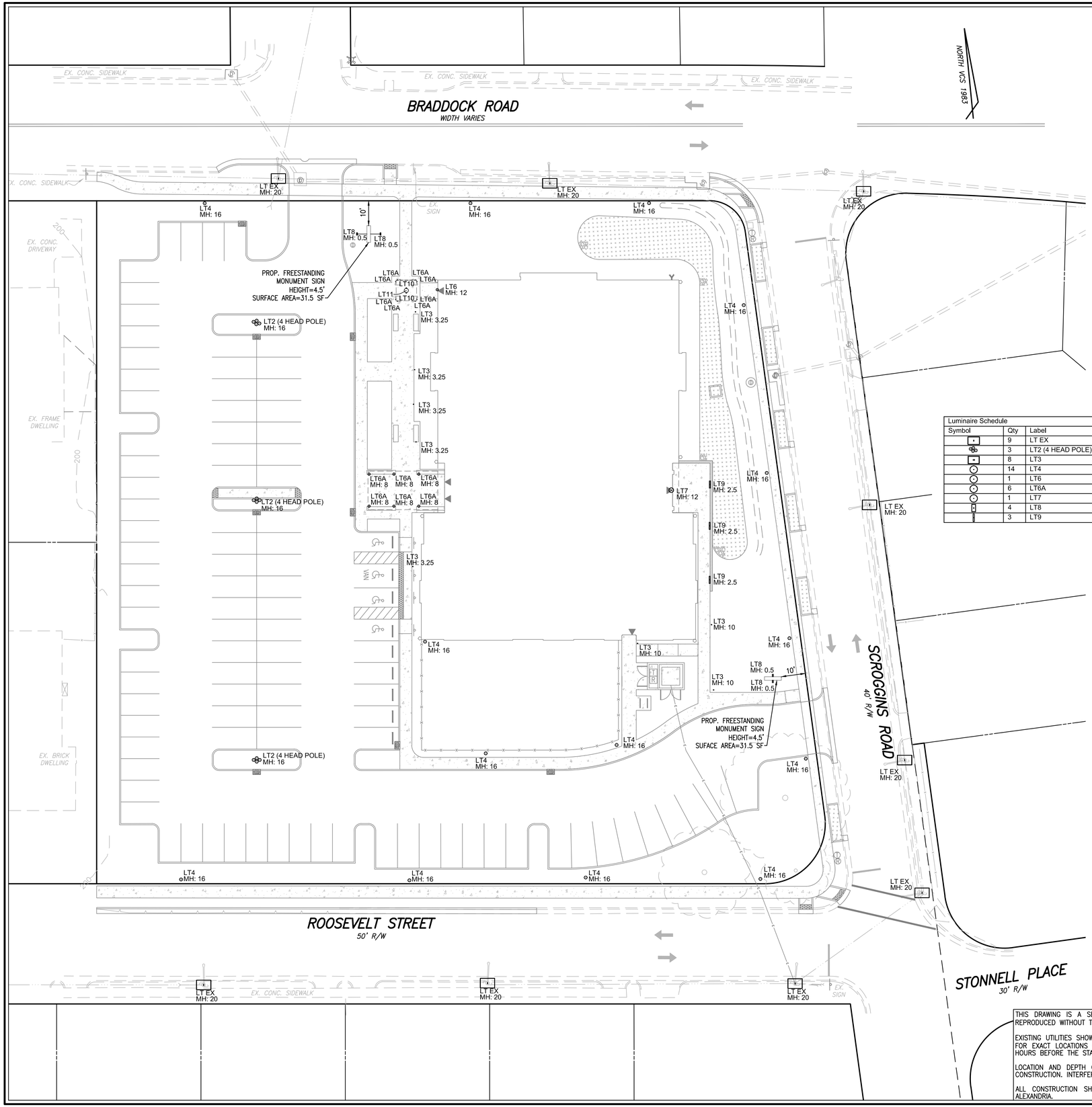

Luminaire Schedule						
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	LLF	Description
	9	LT EX	SINGLE	50000	0.850	EXISTING COBRA HEAD 115 40S R3 DG
	3	LT2 (4 HEAD POLE)	GROUP	N.A.	0.900	UR20-68L-80-3K7-3-HDL-PT (4)
	8	LT3	SINGLE	N.A.	0.900	
	14	LT4	SINGLE	N.A.	0.900	UR20-68L-80-3K7-3-HDL-PT
	1	LT6	SINGLE	N.A.	0.850	3000K, 726 LMS, LUMIERE, 9002-W1-[RW, RI]-LED3090-W-BK-L1-UNV
	6	LT6A	SINGLE	N.A.	0.850	3000K, 1581 LMS, LUMIERE, 9002-W2-[RW, RI]-LED3090-F-BK-L1-UNV
	1	LT7	SINGLE	N.A.	0.612	3000K, 800 LMS, PORTFOLIO, LDA2B108030D010 EU2B10WFL558030 2LBALD1H
	4	LT8	SINGLE	N.A.	0.850	3000K, 894 LMS, KIM LIGHTING, EL218WF3-8L3K
	3	LT9	SINGLE	N.A.	0.850	3000K, 489 LMS, BEGA, 24064

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FOR INFORMATION ONLY
COMMONWEALTH OF VIRGINIA
ANDREA SPRUCH
Lic. No. 047863
AUGUST 22, 2019
PROFESSIONAL ENGINEER
DESIGN BY OTHERS

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1300 WEST BRADDOCK ROAD
CITY OF ALEXANDRIA, VIRGINIA

DATE	REVISION

DESIGN: VMM
CHECKED: VMM
SCALE: 1" = 20'
DATE: AUG. 19, 2019

LIGHTING PLAN – EXTERIOR LIGHTING LAYOUT

SHEET LP01 OF 13
FILE: 18-193

J:\2018\18193\DWG\SITE\Preliminary\LP - LIGHTING PLAN.dwg
Wed, Aug 21 - 2019 - 3:11:05pm

PLANT TYPE	QUANTITY	NATIVE TYPE	MARCH 2, 2019 – JANUARY 1, 2020 REQUIRED %	PROVIDED QTY.	PROVIDED %
Urban Trees	28	Regional/Local	10%	21	75.0%
		Total Natives	25%	23	82.1%
Standard Trees	27	Regional/Local	15%	14	51.9%
		Total Natives	40%	14	51.9%
Evergreen Shrubs	77	Regional/Local	5%	32	41.6%
		Total Natives	20%	32	41.6%
Deciduous Shrubs	123	Regional/Local	10%	46	37.4%
		Total Natives	40%	97	78.9%
Groundcovers		Regional/Local	5%		
		Total Natives	10%		
Perennials, Ferns, Ornamental Grasses		Regional/Local	10%		
		Total Natives	25%		
Vines		Total Natives	80%		
TOTALS					
TOTAL PLANTS SPECIFIED		TOTAL SUM OF REGIONAL/LOCAL NATIVE PLANTS			
255		35			
		13.7%			

4 NATIVE PLANT TABULATIONS

N/A

CROWN COVER TABULATIONS	
TOTAL SITE AREA (SF)	81,418
25% CROWN COVER REQUIRED (SF)	20,355
EXISTING CROWN COVER (SF)	21921
REMOVED CROWN COVER (SF)	18623
PRESERVED CROWN COVER (SF)	
Crown Cover from Preserved Trees	3298
Crown Cover from Preserved Shrubs	0
PROPOSED CROWN COVER (SF)	
Crown Cover from Proposed Trees	39,750
Crown Cover from Proposed Shrubs	3,245
TOTAL CROWN COVER PROVIDED (%)	56.9%
TOTAL CROWN COVER PROVIDED (SF)	46,293

NOTE:

The crown coverage includes the area of the existing trees to be preserved, however it may not be possible to preserve these trees due to grading requirements. The project will still exceed the required canopy coverage without the preserved trees.

3 CROWN COVERAGE CALCULATIONS

N/A

TREES (URBAN AND STANDARD)
TOTAL NUMBER OF TREES PROPOSED: 49

GENUS	QTY.	PERCENT OF TOTAL PROPOSED	MAXIMUM PERCENT ALLOWED	SPECIES	QTY.	PERCENT OF TOTAL PROPOSED	MAXIMUM PERCENT ALLOWED
Acer	3	7.3%	33%	negundo	3	5.5%	10%
Acer	1		33%	rubrum	1	1.8%	10%
Amelanchier	3	14.5%	33%	laevis	3	5.5%	10%
Amelanchier	5		33%	x grandiflora	5	9.1%	10%
Carpinus	2	3.6%	33%	caroliniana	2	3.6%	10%
Celtis	2	3.6%	33%	occidentalis	2	3.6%	10%
Cercis	5	9.1%	33%	canadensis	5	9.1%	10%
Cledrastis	2	3.6%	33%	kentuckea	2	3.6%	10%
Gleditsia	3	5.5%	33%	triacanthos	3	5.5%	10%
Juniperus	1	1.8%	33%	virginiana	1	1.8%	10%
Lagerstroenmia	13	23.6%	33%	indica	13	23.6%	10%
Platanus	5	9.1%	33%	X acerifolia	5	9.1%	10%
Quercus	4	12.7%	33%	phellos	4	7.3%	10%
Quercus	3		33%	shumardii	3	5.5%	10%
Tilia	3	5%	33%	americana	3	5.5%	10%
	55				55		

SHRUBS
TOTAL NUMBER OF SHRUBS PROPOSED: 166

GENUS	QTY.	PERCENT OF TOTAL PROPOSED	MAXIMUM PERCENT ALLOWED	SPECIES	QTY.	PERCENT OF TOTAL PROPOSED	MAXIMUM PERCENT ALLOWED
Abelia	45	22.5%	33%	grandiflora	45	22.5%	10%
Ilex	32	16.0%	33%	glabra	32	16.0%	10%
Diervilla	24	12.0%	33%	lonicera	24	12.0%	10%
Hydrangea	51	25.5%	33%	quercifolia	51	25.5%	10%
Itea	22	11.0%	33%	virginiana	22	11.0%	10%
Spirea	26	13.0%	33%	x bumalda	26	13.0%	10%
	200				200		

NOTE

This project will include additional shrub plantings of greater diversity as funding becomes available which will alter the total percentages shown above.

2 BIODIVERSITY TABULATIONS

N/A

GENERAL NOTES

1. The property owner and/or applicant, specifier, contractor and installer of plant material are responsible for understanding and adhering to the standards set forth in the most recent version of the City of Alexandria Landscape Guidelines and applicable conditions of approval. All questions regarding application of, or adherence to, the standards and/or conditions of approval shall be directed to the City prior to commencement of demolition, construction, or any land disturbing activity.
2. The City-approved landscape plan submission, including plant schedule, notes and details shall be the document used for installation purposes and all procedures set forth in the Landscape Guidelines must be followed.
3. The contractor shall not interfere with any tree protection measures or impact any existing vegetation identified to be preserved per the approved Tree and Vegetation Protection Plan.
4. Any changes, alterations or modifications to the site conditions that affect vegetation protection zones will require an amendment to the approved Tree and Vegetation Protection Plan and/or details.
5. Installation of plant material may only occur during the Planting Seasons identified in the Landscape Guidelines.
6. 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.
7. Substitutions to the approved plant material shall not occur until written approval is provided by the City.
8. Maintenance for this project shall be performed by the owner, applicant, successor(s) and/or assign(s) in perpetuity and in compliance with City of Alexandria Landscape Guidelines and as conditioned by project approval, as applicable.
9. The approved method(s) of protection must be in place for all vegetation to be preserved on-site and adjacent to the project site pursuant to the approved Tree and Vegetation Protection Plan and details prior to commencement of demolition, construction, or any land disturbance. The applicant shall notify the Planning & Zoning (P&Z) project manager once the tree protection methods are in place. No demolition, construction, or land disturbance may occur until an inspection is performed by the City and written confirmation is provided by the City which verifies correct installation of the tree protection measures.
10. The applicant must contact the P&Z project manager prior to commencement of landscape installation/planting operation to schedule a pre-installation meeting. The meeting should be held between the applicant's general contractor, landscape contractor, landscape architect, the P&Z project manager and the City Arborist (as applicable) to review the scope of installation procedures and processes during and after installation.
11. The following information shall be provided to the P&Z project manager at least five (5) business days prior to the landscape pre-installation meeting: 1) A letter that certifies that the project landscape architect performed pre-selection tagging for all trees proposed within the public right of way and on public land prior to installation. This letter must be signed and sealed by the project landscape architect, and 2) A copy of the soil bulk density test report verifying that maximum compression rates are met.
12. As-built drawings for this landscape and/or irrigation/water management system will be provided in compliance with City of Alexandria Landscape Guidelines, the City Code of Ordinances, and all applicable plan preparation checklists. 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.

PLAN KEY	QUANTITY	PLAN LOCATION	PROJECTED 20 YR. CANOPY* (PER TREE)	IMPERVIOUS AREA UNDER CANOPY (PER TREE)	IMPERVIOUS AREA GREATER THAN 50% OF PROJECTED 20 YR. CANOPY? (Y/N)
TAN	3	STREET TREE / PARKING LOT	1,250	750	Y
TAR	1	STREET TREE / PARKING LOT	1,250	750	Y
TAA	5	STREET TREE	500	250	N
TAL	3	STREET TREE	750	450	Y
TCA	2	PARKING LOT	500	300	Y
TCO	2	PARKING LOT	1,250	750	Y
TCC	5	STREET TREE / PARKING LOT	500	250	N
TCK	2	STREET TREE / PARKING LOT	750	450	Y
TGT	3	STREET TREE / PARKING LOT	750	450	Y
TJV	1	PARKING LOT	250	63	N
TLI	13	COURTYARD	250	100	N
TPA	5	STREET TREE	1,250	750	Y
TQP	4	PARKING LOT	1,250	750	Y
TQS	3	PLAYGROUND	1,250	500	N
TTA	3	PARKING LOT	1,250	750	Y
TOTAL URBAN TREES					
28					

1 URBAN TREE TABULATIONS

N/A

SHEET INDEX

TREE PRESERVATION LEGEND

EXISTING TREE TO BE REMOVED

EXISTING TREE TO BE PRESERVED

TREE PROTECTION FENCING

TREE ID NOTE. REFER TO DETAIL #4, SHEET L-200 FOR PRESERVATION OR REMOVAL STATUS

PLANT LEGEND

LARGE CANOPY TREE

SMALL FLOWERING TREE

EVERGREEN TREE

SHRUBS

PERENNIALS / GRASSES

GROUNDCOVER

SEEDED TURF GRASS

PLANT QUANTITY

PLANT SYMBOL, REFER TO PLANT SCHEDULE

BOUNDARY LINES

PROPERTY LINE

LIMIT OF CLEARING / GRADING

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CHAIRMAN, PLANNING COMMISSION DATE
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COMMONWEALTH OF VIRGINIA
KEVIN FISHER
Lic. No. 0406001938
LANDSCAPE ARCHITECT
8/22/19

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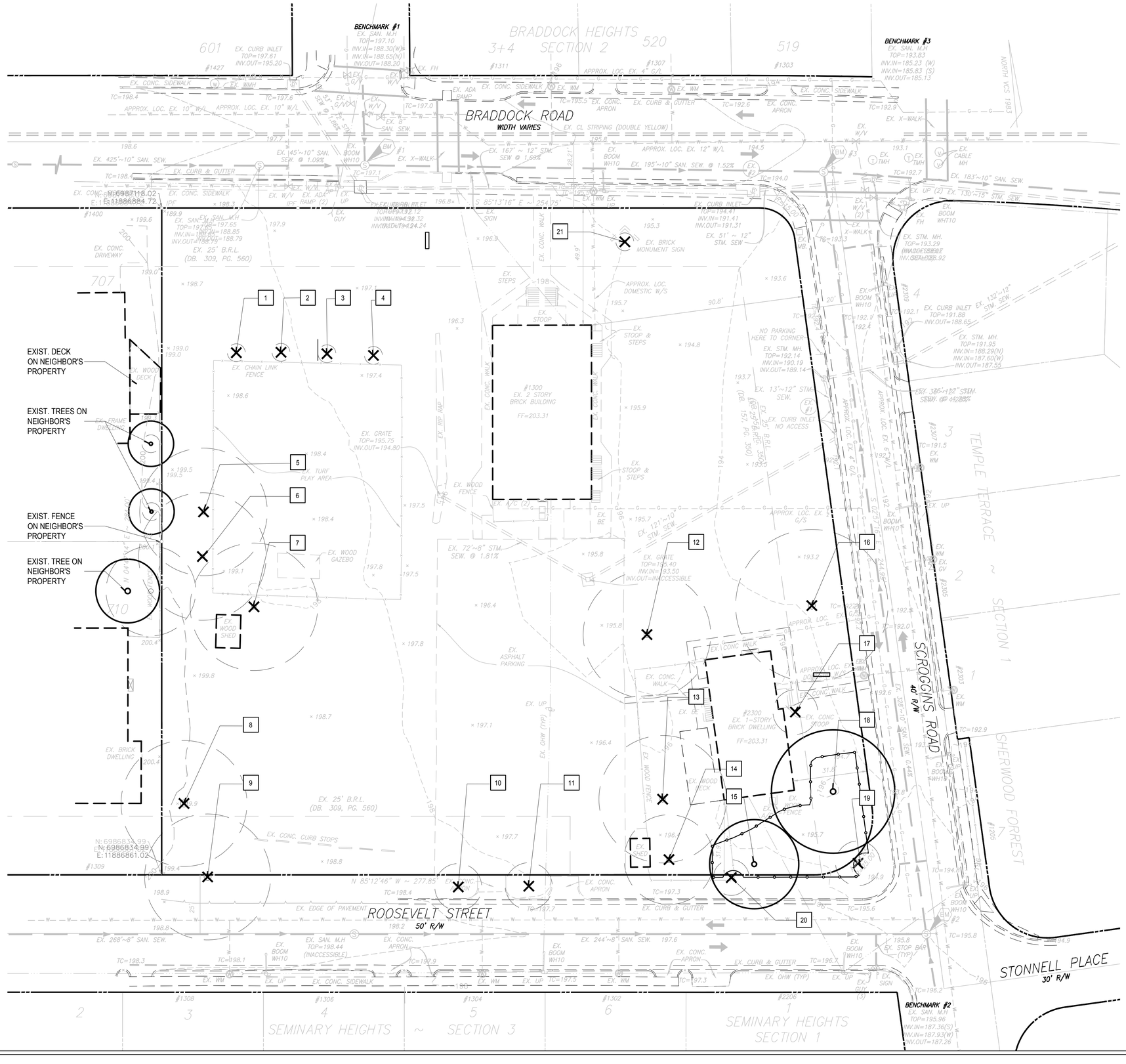
ALEXANDRIA PRESBYTERIAN CHURCH
1300 WEST BRADDOCK ROAD
CITY OF ALEXANDRIA, VIRGINIA

DATE	REVISION

DESIGN: KF
CHECKED: KF
SCALE:
DATE: August 22 2019

DRAWING TITLE:
NOTES, LEGENDS, & TABULATIONS

SHEET TITLE:
L-001



BOUNDARY LINES

PROPERTY LINE

LIMIT OF CLEARING / GRADING

TREE PRESERVATION LEGEND

EXISTING TREE TO BE REMOVED

EXISTING TREE TO BE PRESERVED

TREE PROTECTION FENCING

TREE ID NOTE. REFER TO DETAIL #4, SHEET L-200 FOR PRESERVATION OR REMOVAL STATUS

NORTH

0' 10' 20' 40'

Scale: 1"=20'

APPROVED

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DATE: August 22 2019

DRAWING TITLE:
TREE PRESERVATION/ DEMOLITION PLAN

SHEET TITLE:
L-100

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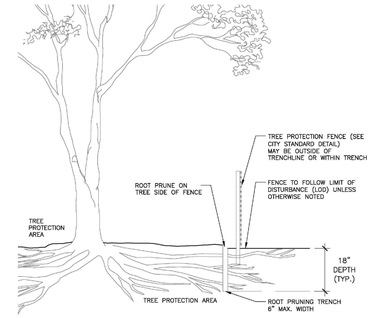
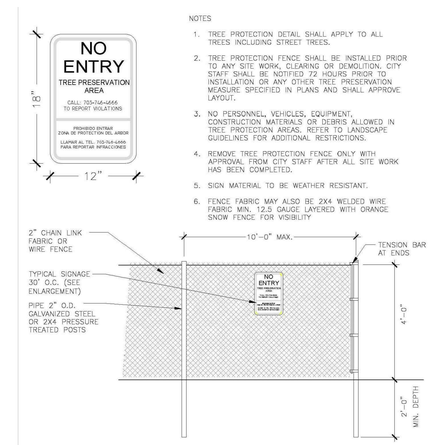
Wed, Aug 21 2019 - 3:45:08pm



NOTES

1. ROOT PRUNING SHALL BE DONE WITH TRENCHER OR VIBRATORYPLOW TO DEPTH OF 18". ROOTS OVER 1.5" IN DIAMETER SHALL HAVE A CLEAN CUT MADE BY A CLEAN SAW ON THE SURFACE OF THE ROOT, WHICH IS STILL ATTACHED TO THE TREE. DO NOT BREAK OR CHOP. DO NOT PAINT THE CUT ROOT END. IF EXCAVATION IS FOR INSTALLATION OF UNDERGROUND UTILITES, LEAVE THE ROOT INTACT AND THREAD THE LINES UNDERNEATH.
2. ROOT PRUNING SHALL TAKE PLACE PRIOR TO ANY CLEARING AND GRADING. EXACT LOCATION OF TREE PROTECTION AREAS SHALL BE STAKED OR FLAGGED PRIOR TO TRENCHING AND SHALL BE APPROVED BY CITY STAFF.
3. ROOT PRUNING SHALL BE CONDUCTED WITH THE SUPERVSION OF AN ISA CERTIFIED ARBORIST. CERTIFICATION SHALL BE PROVIDED TO THE CITY UPON COMPLETION.
4. BACKFILL THE ROOT-PRUNING TRENCH WITH APPROVED LOOSE TOPSOIL MIX AND TOP WITH 3-4" BARK MULCH AND MARK LOCATION FOR FUTURE REFERENCE. SILT FENCE MAY BE INSTALLED IN TRENCH PRIOR TO BACKFILLING AS LONG AS THE TRENCH IS NOT OPEN FOR LONGER THAN 48 HOURS WITHOUT WATERING.
5. ROOT PRUNING WORK SHALL NOT BE DONE WHEN MORE THAN THE TOP 1 INCH OF SOIL IS FROZEN. ROOT PRUNING SHALL NOT BE UNDERTAKEN WHEN THE SOIL IS WET AND CONDITIONS ARE MUDDY.
6. CITY OF ALEXANDRIA STAFF SHALL BE NOTIFIED 72 HOURS PRIOR TO TRENCHING AND WHEN ALL ROOT PRUNING AND TREE PROTECTION FENCE INSTALLATION IS COMPLETE.

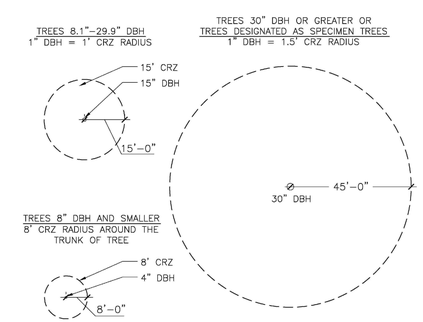
3 CITY OF ALEXANDRIA STD. ROOT PRUNING
NTS



2 CITY OF ALEXANDRIA STD. TREE PROTECTION FENCING
NTS

TREE ID#	GENUS & SPECIES	COMMON NAME	TREE CALIPER	HEIGHT	REMOVE/PRESERVE
1	*Lagerstroemia Indica*	Crepe Myrtle	6"	8'	Remove
2	*Lagerstroemia Indica*	Crepe Myrtle	6"	8'	Remove
3	*Lagerstroemia Indica*	Crepe Myrtle	6"	8'	Remove
4	*Lagerstroemia Indica*	Crepe Myrtle	6"	8'	Remove
5	*Quercus phellos*	Willow Oak	21"	60'	Remove
6	*Quercus phellos*	Willow Oak	18"	50'	Remove
7	*Quercus phellos*	Willow Oak	24"	60'	Remove
8	*Tilia tomentosa*	Linden	36"	40'	Remove
9	~	Mulberry	36"	30'	Remove
10	*Lagerstroemia Indica*	Crepe Myrtle	12"	14'	Remove
11	*Lagerstroemia Indica*	Crepe Myrtle	12"	14'	Remove
12	*Acer rubrum*	Red Maple	30"	40'	Remove
13	*Acer Saccharinum*	Silver Maple	30"	40'	Remove
14	*Acer Saccharinum*	Silver Maple	24"	30'	Remove
15	*Acer Saccharinum*	Silver Maple	24"	30'	Preserve
16	*Acer Saccharinum*	Silver Maple	36"	40'	Remove
17	*Lagerstroemia Indica*	Crepe Myrtle	12"	15'	Remove
18	*Acer Saccharinum*	Silver Maple	27"	40'	Preserve
19	*Acer Saccharinum*	Silver Maple	16"	20'	Remove
20	*Lagerstroemia Indica*	Crepe Myrtle	9"	15'	Remove
21	Ilex verticillata	Holly	6"	8'	Remove

4 TREE PRESERVATION TABLE



NOTES:
1. GRAPHICALLY, THE CRITICAL ROOT ZONE (CRZ) IS REPRESENTED AS A CIRCULAR REGION MEASURED OUTWARD FROM A TREE TRUNK REPRESENTING THE AREA OF ROOTS THAT MUST BE MAINTAINED OR PROTECTED FOR THE TREE'S SURVIVAL.
2. PLOT ACCURATE TRUNK LOCATIONS OF ALL TREES GREATER THAN 2" DIAMETER AT 54" ABOVE GRADE AND/OR TREE STANDS WITHIN DEVELOPMENT AREAS ON ALL PLANS FOR THE PROJECT AND DELINEATE THEIR ESTIMATED CRITICAL ROOT ZONE.
3. PLOT ACCURATE TRUNK LOCATIONS OF OFFSITE TREES WHICH WILL HAVE THEIR CRZ AFFECTED BY DEVELOPMENT AND DELINEATE THEIR ESTIMATED CRITICAL ROOT ZONE.

1 CITY OF ALEXANDRIA STD. DETERMINING CRITICAL ROOT ZONE
NTS

APPROVED
SPECIAL USE PERMIT NO. _____
DEPARTMENT OF PLANNING & ZONING
DIRECTOR — DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. 2018-0021
DIRECTOR — DATE
CHAIRMAN, PLANNING COMMISSION — DATE
DATE RECORDED _____
INSTRUMENT NO. — DEED BOOK NO. — DATE

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Alexandria, VA 22314
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COMMONWEALTH OF VIRGINIA
KEVIN FISHER
Lic. No. 0406001938
LANDSCAPE ARCHITECT
8/22/19

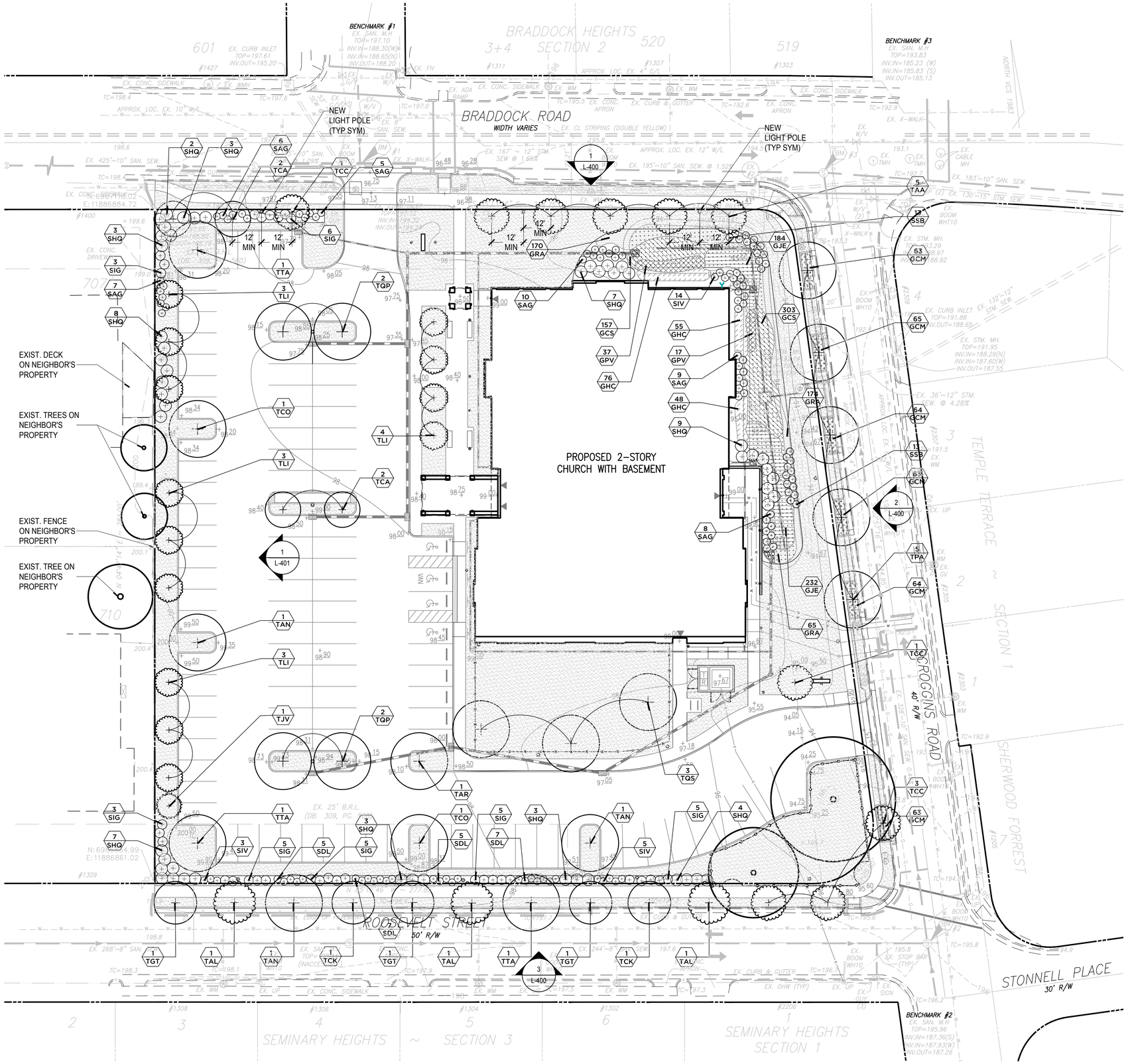
DEVELOPMENT PRELIMINARY SITE PLAN
ALEXANDRIA PRESBYTERIAN CHURCH
1300 WEST BRADDOCK ROAD
CITY OF ALEXANDRIA, VIRGINIA

DATE	REVISION

DESIGN: KF
CHECKED: KF
SCALE:
DATE: August 22 2019

DRAWING TITLE:
TREE PRESERVATION DETAILS

SHEET TITLE:
L-200



BOUNDARY LINES

PROPERTY LINE

LIMIT OF CLEARING / GRADING

PLANT LEGEND

LARGE CANOPY TREE

SMALL FLOWERING TREE

EVERGREEN TREE

SHRUBS

PERENNIALS / GRASSES

GROUNDCOVER

SEEDED TURF GRASS

REFERENCE SYMBOLS

10 PHO — PLANT QUANTITY / PLANT SYMBOL, REFER TO PLANT SCHEDULE

NORTH

0' 10' 20' 40'

Scale: 1"=20'

APPROVED

SPECIAL USE PERMIT NO. _____

DEPARTMENT OF PLANNING & ZONING

DIRECTOR — DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

SITE PLAN NO. 2018-0021

DIRECTOR — DATE

CHAIRMAN, PLANNING COMMISSION — DATE

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DEVELOPMENT PRELIMINARY SITE PLAN

ALEXANDRIA PRESBYTERIAN CHURCH

1300 WEST BRADDOCK ROAD
CITY OF ALEXANDRIA, VIRGINIA

DATE	REVISION

DESIGN: KF
CHECKED: KF
SCALE:
DATE: August 22 2019

DRAWING TITLE:
LANDSCAPE PLAN

SHEET TITLE:
L-300

P:\Alexandria Presbyterian Worship Center 5043117 CADXL 300.dwg
Wed, Aug 21, 2019 - 4:07:58pm

1 LANDSCAPE ELEVATION - LOOKING SOUTH FROM BRADDOCK ROAD
1/16" = 1' - 0"

0' 5' 10' 15' 20'
Scale: 3/32"=1'

2 LANDSCAPE ELEVATION - LOOKING WEST FROM WEST SCROGGINS ROAD
1/16" = 1' - 0"

0' 5' 10' 15' 20'
Scale: 3/32"=1'

3 LANDSCAPE ELEVATION - LOOKING NORTH FROM WEST ROOSEVELT STREET
1/16" = 1' - 0"

0' 5' 10' 15' 20'
Scale: 3/32"=1'

APPROVED
SPECIAL USE PERMIT NO. _____

DEPARTMENT OF PLANNING & ZONING

DIRECTOR _____ DATE _____

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. 2018-0021

DIRECTOR _____ DATE _____

CHAIRMAN, PLANNING COMMISSION _____ DATE _____

DATE RECORDED _____

INSTRUMENT NO. _____ DEED BOOK NO. _____ DATE _____

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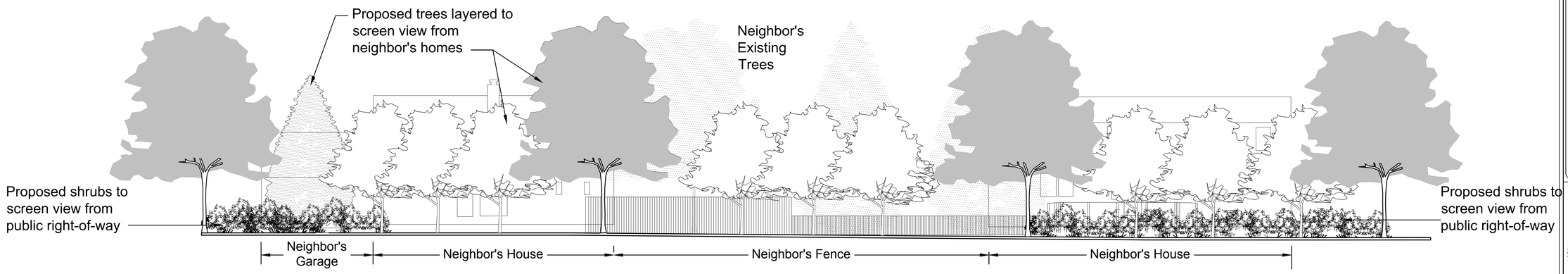
DEVELOPMENT PRELIMINARY SITE PLAN
ALEXANDRIA PRESBYTERIAN CHURCH
1300 WEST BRADDOCK ROAD
CITY OF ALEXANDRIA, VIRGINIA

DATE	REVISION

DESIGN: KF
CHECKED: KF
SCALE:
DATE: August 22 2019

DRAWING TITLE:
LANDSCAPE ELEVATIONS

SHEET TITLE:
L-400



1 LANDSCAPE ELEVATION - LOOKING WEST FROM WORSHIP CENTER PARKING LOT
3/32" = 1' - 0"

0' 5' 10' 15' 20'
Scale: 3/32"=1'

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KEVIN FISHER
Lic. No. 0406001938
LANDSCAPE ARCHITECT
8/22/19

DEVELOPMENT PRELIMINARY SITE PLAN
ALEXANDRIA PRESBYTERIAN CHURCH
1300 WEST BRADDOCK ROAD
CITY OF ALEXANDRIA, VIRGINIA

DATE	REVISION

APPROVED
SPECIAL USE PERMIT NO. _____
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SITE PLAN NO. 2018-0021
DIRECTOR DATE
CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
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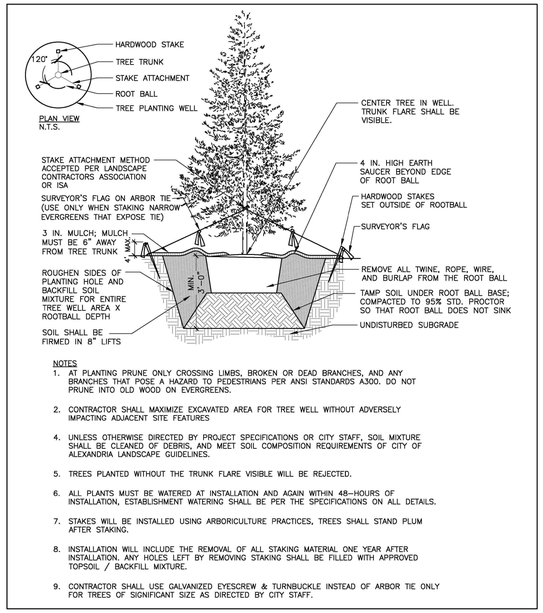
DESIGN: KF
CHECKED: KF
SCALE:
DATE: August 22 2019

DRAWING TITLE:
LANDSCAPE ELEVATIONS

SHEET TITLE:
L-401

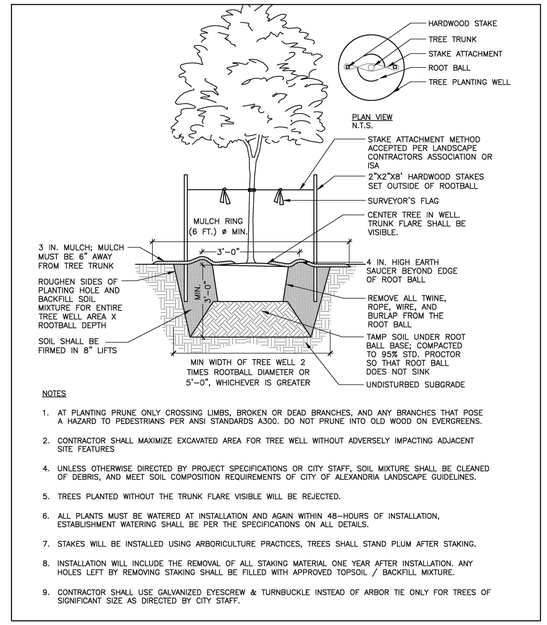
P:\Alexandria Presbyterian Worship Center 504317 CADD\L-401.dwg
Wed, Aug 21, 2019 - 3:46:00pm



NOTES

1. AT PLANTING PRUNE ONLY CROSSING LIMBS, BROKEN OR DEAD BRANCHES, AND ANY BRANCHES THAT POSE A HAZARD TO PEDESTRIANS PER ANSI STANDARDS A300. DO NOT PRUNE INTO OLD WOOD ON EVERGREENS.
2. CONTRACTOR SHALL MAXIMIZE EXCAVATED AREA FOR TREE WELL WITHOUT ADVERSELY IMPACTING ADJACENT SITE FEATURES
4. UNLESS OTHERWISE DIRECTED BY PROJECT SPECIFICATIONS OR CITY STAFF, SOIL MIXTURE SHALL BE CLEANED OF DEBRIS, AND MEET SOIL COMPOSITION REQUIREMENTS OF CITY OF ALEXANDRIA LANDSCAPE GUIDELINES.
5. TREES PLANTED WITHOUT THE TRUNK FLARE VISIBLE WILL BE REJECTED.
6. ALL PLANTS MUST BE WATERED AT INSTALLATION AND AGAIN WITHIN 48–HOURS OF INSTALLATION, ESTABLISHMENT WATERING SHALL BE PER THE SPECIFICATIONS ON ALL DETAILS.
7. STAKES WILL BE INSTALLED USING ARBORICULTURE PRACTICES, TREES SHALL STAND PLUM AFTER STAKING.
8. INSTALLATION WILL INCLUDE THE REMOVAL OF ALL STAKING MATERIAL ONE YEAR AFTER INSTALLATION. ANY HOLES LEFT BY REMOVING STAKING SHALL BE FILLED WITH APPROVED TOPSOIL / BACKFILL MIXTURE.
9. CONTRACTOR SHALL USE GALVANIZED EYESCREW & TURNBUCKLE INSTEAD OF ARBOR TIE ONLY FOR TREES OF SIGNIFICANT SIZE AS DIRECTED BY CITY STAFF.

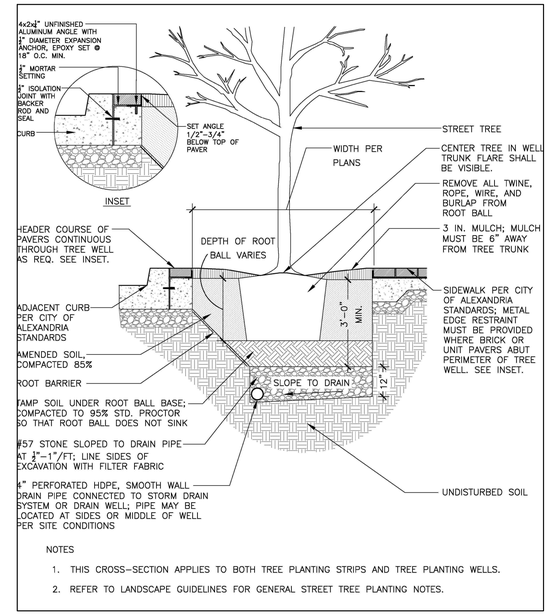
7 EVERGREEN TREE PLANTING
NTS



NOTES

1. AT PLANTING PRUNE ONLY CROSSING LIMBS, BROKEN OR DEAD BRANCHES, AND ANY BRANCHES THAT POSE A HAZARD TO PEDESTRIANS PER ANSI STANDARDS A300. DO NOT PRUNE INTO OLD WOOD ON EVERGREENS.
2. CONTRACTOR SHALL MAXIMIZE EXCAVATED AREA FOR TREE WELL WITHOUT ADVERSELY IMPACTING ADJACENT SITE FEATURES
4. UNLESS OTHERWISE DIRECTED BY PROJECT SPECIFICATIONS OR CITY STAFF, SOIL MIXTURE SHALL BE CLEANED OF DEBRIS, AND MEET SOIL COMPOSITION REQUIREMENTS OF CITY OF ALEXANDRIA LANDSCAPE GUIDELINES.
5. TREES PLANTED WITHOUT THE TRUNK FLARE VISIBLE WILL BE REJECTED.
6. ALL PLANTS MUST BE WATERED AT INSTALLATION AND AGAIN WITHIN 48–HOURS OF INSTALLATION, ESTABLISHMENT WATERING SHALL BE PER THE SPECIFICATIONS ON ALL DETAILS.
7. STAKES WILL BE INSTALLED USING ARBORICULTURE PRACTICES, TREES SHALL STAND PLUM AFTER STAKING.
8. INSTALLATION WILL INCLUDE THE REMOVAL OF ALL STAKING MATERIAL ONE YEAR AFTER INSTALLATION. ANY HOLES LEFT BY REMOVING STAKING SHALL BE FILLED WITH APPROVED TOPSOIL / BACKFILL MIXTURE.
9. CONTRACTOR SHALL USE GALVANIZED EYESCREW & TURNBUCKLE INSTEAD OF ARBOR TIE ONLY FOR TREES OF SIGNIFICANT SIZE AS DIRECTED BY CITY STAFF.

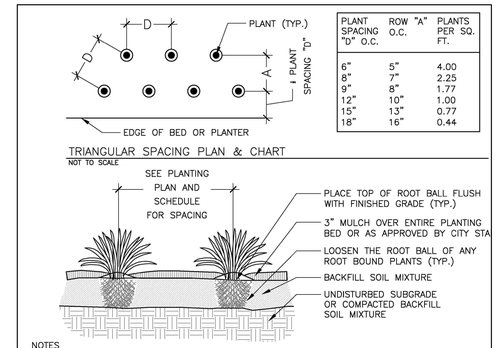
6 DECIDUOUS TREE PLANTING
NTS



NOTES

1. THIS CROSS–SECTION APPLIES TO BOTH TREE PLANTING STRIPS AND TREE PLANTING WELLS.
2. REFER TO LANDSCAPE GUIDELINES FOR GENERAL STREET TREE PLANTING NOTES.

4 STREET TREE PLANTING WELL
NTS



PLANT SPACING "D" O.C.	ROW "A" O.C.	PLANTS PER SQ. FT.
6"	5"	4.00
8"	7"	2.25
9"	8"	1.77
12"	10"	1.00
15"	13"	0.77
18"	16"	0.44

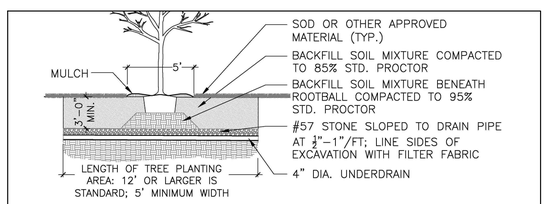
NOTES

1. PLANTING WELL / TRENCH SHALL BE DUG TO ALLOW TOP OF ROOT BALL TO SET FLUSH WITH EXISTING GRADE.
2. SET PLANTS IN ERECT, STABLE, AND UNIFORM POSITIONS. ORIENT BEST FACE OF PLANT TO BE MOST VISIBLE.
3. GROUND COVERS AND PERENNIALS SHALL BE INSTALLED WITH TRIANGULAR SPACING. REFER TO CHART.
4. UNLESS OTHERWISE DIRECTED BY PROJECT SPECIFICATIONS OR CITY STAFF, SOIL MIXTURE SHALL BE CLEANED OF DEBRIS, AND MEET SOIL COMPOSITION REQUIREMENTS OF CITY OF ALEXANDRIA LANDSCAPE GUIDELINES.
5. DO NOT PLACE MULCH IN CONTACT WITH STEM OR CROWN OF PLANTS.
6. ALL PLANTS MUST BE WATERED AT INSTALLATION AND AGAIN WITHIN 48–HOURS OF INSTALLATION, PER THE SPECIFICATIONS.

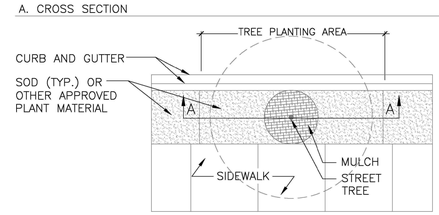
2 GROUNDCOVER AND PERENNIAL PLANTING
NTS

PLANT TYPE	PLAN INFORMATION			BOTANIC/COMMON NAME				SIZE	NOTES
	PLAN KEY	QUANTITY AS SITE TREES	QUANTITY AS STREET TREES	GENUS	SPECIES	VAR./CULTIVAR/HYBRID	COMMON NAME	CALIPER/HEIGHT	
URBAN TREES	TAN	2	1	Acer	negundo	'Sensation'	Boxelder	2"-3" cal./12-14 ft. ht.	B&B; symmetrical, single leader
	TAR	1		Acer	rubrum	'October Glory'	Red Maple	2"-3" cal./12-14 ft. ht.	B&B; symmetrical, single leader
	TAL		3	Amelanchier	laevis	'Cumulus'	Smooth Serviceberry	2"-3" cal./12-14 ft. ht.	B&B; symmetrical, single leader
	TCA	2		Carpinus	caroliniana		American Hornbeam	1.5"- 1.75" cal./8'-10 ft. ht.	B&B; symmetrical, single leader
	TCO	2		Celtis	occidentalis	'Native Flame'	Common Hackberry	2"-3" cal./12-14 ft. ht.	B&B; symmetrical, single leader
	TCK		2	Cledrastis	kentuckea	'Sweetshade'	American Yellowood	2"-3" cal./12-14 ft. ht.	B&B; symmetrical, single leader
	TGT		3	Gleditsia	triacanthos	var. inermis (Thornless)	Honey Locust	2"-3" cal./12-14 ft. ht.	B&B; symmetrical, single leader
	TPA		5	Platanus	x acerifolia	Bloodgood'	London Plane Tree	2"-3" cal./12-14 ft. ht.	B&B; symmetrical, single leader
	TQP	4		Quercus	phellos	'Hightower'	Willow Oak	2"-3" cal./12-14 ft. ht.	B&B; symmetrical, single leader
	TTA	2	1	Tilia	americana	Dakota'	American Basswood	2"-3" cal./12-14 ft. ht.	B&B; symmetrical, single leader
	TOTALS	13	15						
STANDARD TREES	PLAN KEY	QUANTITY AS SITE TREES	QUANTITY AS STREET TREES	GENUS	SPECIES	VAR./CULTIVAR/HYBRID	COMMON NAME	CALIPER/HEIGHT	
	TAA		5	Amelanchier	x grandiflora	'Autumn Brilliance'	Autumn Brilliance Serviceberry	1.5"- 1.75" cal./8'-10 ft. ht.	B&B; symmetrical, single leader
	TCC	1	4	Cercis	canadensis	'Forest Pansey'	Eastern Redbud	1.5"- 1.75" cal./8'-10 ft. ht.	B&B; symmetrical, single leader
	TJV	4		Juniperus	virginiana	'Emerald Sentinel'	Eastern Red Cedar	6 ft. ht.	B&B; symmetrical, single leader
	TLI	4		Lagerstroenmia	indica	Natchez White'	Crepe Myrtle	1.5"- 1.75" cal./8'-10 ft. ht.	B&B; symmetrical, single leader
	TQS	3		Quercus	shumardii		Shumard Oak	2"-3" cal./12-14 ft. ht.	B&B; symmetrical, single leader
	TOTALS	12	4						
EVERGREEN SHRUBS	PLAN KEY	QUANTITY		GENUS	SPECIES	VAR./CULTIVAR/HYBRID	COMMON NAME	HEIGHT	
	SAG	39		Abelia	grandiflora	'Edward Goucher'	Dwarf Abelia	3 gal /18" ht.	
	SIG	26		Ilex	glabra	'Nigra'	Inkberry	5 gal /24" ht.	
	TOTALS								
DECIDUOUS SHRUBS	PLAN KEY	QUANTITY		GENUS	SPECIES	VAR./CULTIVAR/HYBRID	COMMON NAME	HEIGHT	
	SDL	19		Diervilla	lonicera		Bush Honeysuckle	3 gal /18" ht.	
	SHQ	35		Hydrangea	quercifolia		Oakleaf Hydrangea	5 gal /24" ht.	
	SIV	22		Itea	virginiana	'Henry's Garnet'	Virginia Sweetspire	3 gal /18" ht.	
	SSB	26		Spirea	x bumalda	'Anthony Waterer'	Meadowsweet	3 gal /18" ht.	
	TOTALS		167						
GROUNDCOVERS	PLAN KEY	QUANTITY		GENUS	SPECIES	VAR./CULTIVAR/HYBRID	COMMON NAME	SIZE/SPACING.	
	GRA	418		Rhus	aromatica	'Gro Lo'	Gro Lo Sumac	1 qt. container/ 16" o.c.	
	GHC	194		Hypericum	prolificum		St. John's Wort	1 qt. container / 16" o.c.	
	TOTALS		612						
PERENNIALS, FERNS, ORNAMENTAL GRASSES	PLAN KEY	QUANTITY		GENUS	SPECIES	VAR./CULTIVAR/HYBRID	COMMON NAME	SIZE/SPACING.	
	GCS	488		Carex	stricta		Tussock Sedge	1 qt. container / 16" o.c.	
	GCM	421		Carex	morrowii	'Ice Dance'	Variegated Japanese Sedge	1 qt. container / 12" o.c.	
	GJE	445		Juncus	effusus		Soft Rush	1 qt. container / 16" o.c.	
	GPV	57		Panicum	virgatum	'Shenandoah'	Switch Grass	1 qt. container / 24" o.c.	
	TOTALS		1411						

5 PLANT SCHEDULE
N/A



A. CROSS SECTION

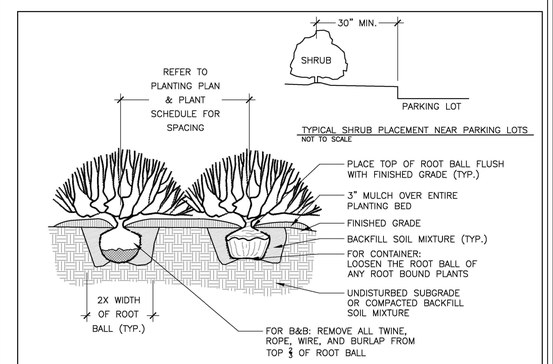


PLAN

NOTES

1. REFER TO LANDSCAPE GUIDELINES FOR TREE STRIP PLANTING AREA INFORMATION.
2. REFER TO LANDSCAPE GUIDELINES FOR GENERAL TREE PLANTING NOTES.
3. SEE STAKING DETAIL FOR MORE INFORMATION.
4. SITE CONDITIONS MAY REQUIRE INSTALLATION OF GRANITE BLOCK IN LIEU OF SOD AND BRICK EDGE. SEE TREE WELL WITH GRANITE BLOCK DETAIL.
5. REFER TO STREET TREE WELL DETAIL FOR CROSS–SECTION.

3 TREE PLANTING STRIP
NTS



NOTES

1. AT PLANTING, PRUNE ONLY BROKEN OR DEAD BRANCHES PER ANSI 300 STANDARD.
2. PLANTING WELL / TRENCH SHALL BE DUG TO ALLOW TOP OF ROOT BALL TO SET FLUSH WITH EXISTING GRADE.
3. SET PLANTS IN ERECT, STABLE, AND UNIFORM POSITIONS. ORIENT BEST FACE OF PLANT TO BE MOST VISIBLE.
4. UNLESS OTHERWISE DIRECTED BY PROJECT SPECIFICATIONS OR CITY STAFF, SOIL MIXTURE SHALL BE CLEANED OF DEBRIS, AND MEET SOIL COMPOSITION REQUIREMENTS OF CITY OF ALEXANDRIA LANDSCAPE GUIDELINES.
5. DO NOT PLACE MULCH IN CONTACT WITH STEM OF PLANTS.
6. ALL PLANTS MUST BE WATERED AT INSTALLATION AND AGAIN WITHIN 48–HOURS OF INSTALLATION, ESTABLISHMENT WATERING SHALL BE PER THE SPECIFICATIONS ON ALL DETAILS.

1 SHRUB PLANTING
NTS

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LANDSCAPE ARCHITECT
8/22/19

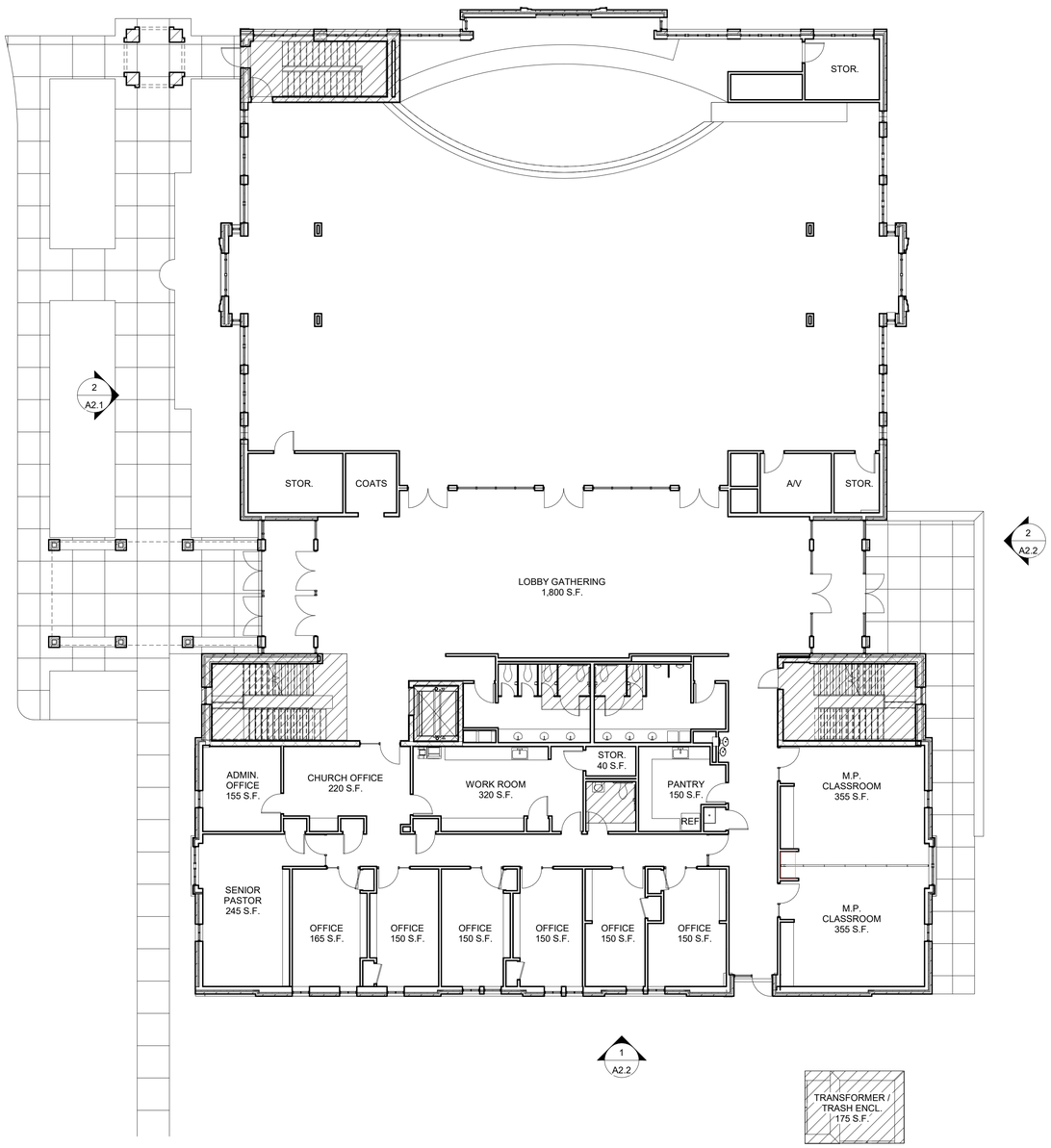
DEVELOPMENT PRELIMINARY SITE PLAN
ALEXANDRIA PRESBYTERIAN CHURCH
1300 WEST BRADDOCK ROAD
CITY OF ALEXANDRIA, VIRGINIA

DATE	REVISION

DESIGN: KF
CHECKED: KF
SCALE:
DATE: August 22 2019

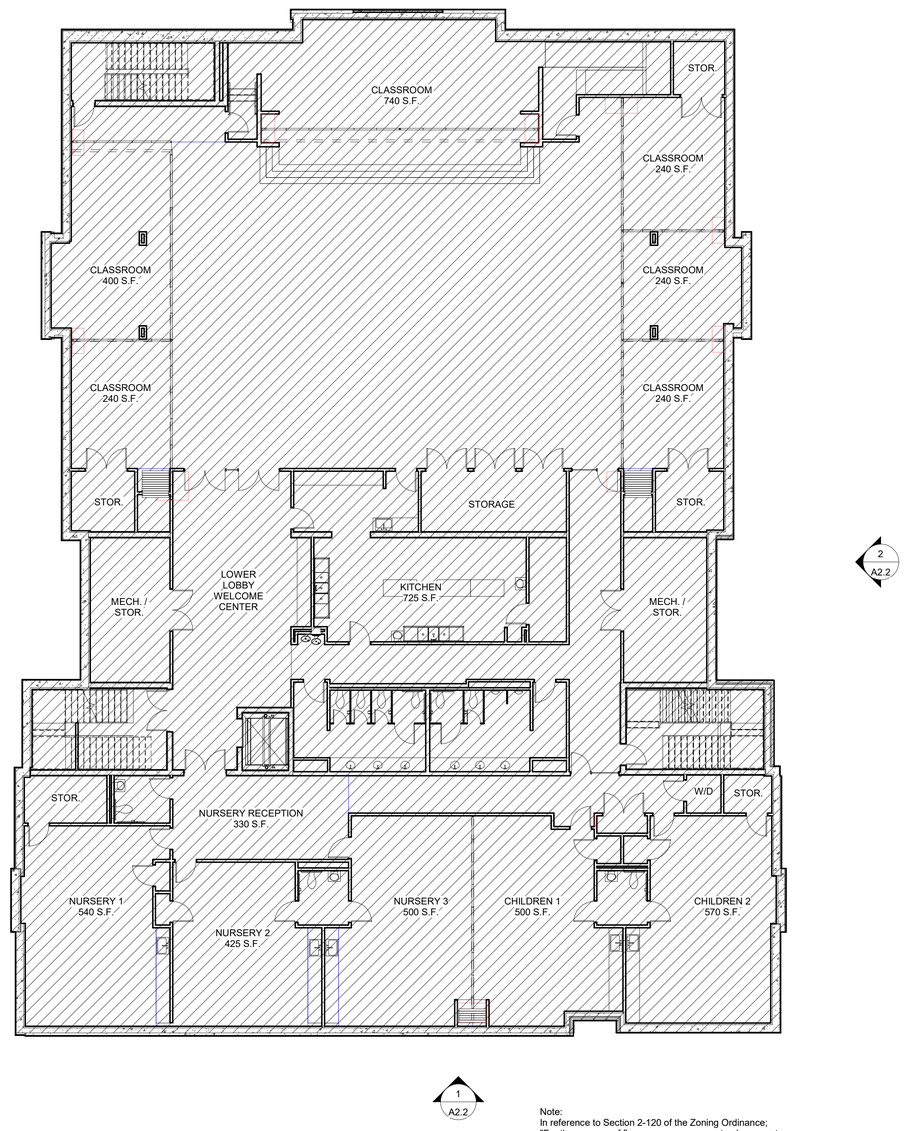
DRAWING TITLE:
PLANT SCHEDULE & DETAILS

SHEET TITLE:
L-500



1 A1.1 FIRST FLOOR PLAN

3/32" = 1'-0"



Note:
In reference to Section 2-120 of the Zoning Ordinance;
"For the purpose of floor area measurement, a basement shall be counted as floor area where the average finished grade is four feet or more below the bottom of first floor construction."
The average finished grade is 97.81 ft. and the bottom of the first floor construction is 97 ft., therefore the basement is fully excluded from floor area calculations

2 A1.1 BASEMENT PLAN

3/32" = 1'-0"

F.A.R. EXCLUSIONS

APPROVED
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DATE RECORDED
INSTRUMENT NO. DEED BOOK NO. DATE

LEMAY
ERICKSON
WILLCOX
ARCHITECTS

ALEXANDRIA PRESBYTERIAN CHURCH

1300 WEST BRADDOCK RD,
ALEXANDRIA, VA 22302

LeMay Erickson Willcox Architects • 11250 Roger Bacon Drive, Ste. 16 • Reston, Virginia 20190 • Ph. (703) 956-5600 • Fax (703) 956-5601 www.lewarchitects.com

COMMONWEALTH OF VIRGINIA
WILLIAM N. ROSEBERRY
Lic No. 008498
8-22-19

SEAL

DATE OF RECORD

08/22/19	

FLOOR PLANS

A1.1

PROJECT NO.LEWA-21708

LEMAY
ERICKSON
WILLCOX
ARCHITECTS

F.A.R. EXCLUSION CALCULATIONS

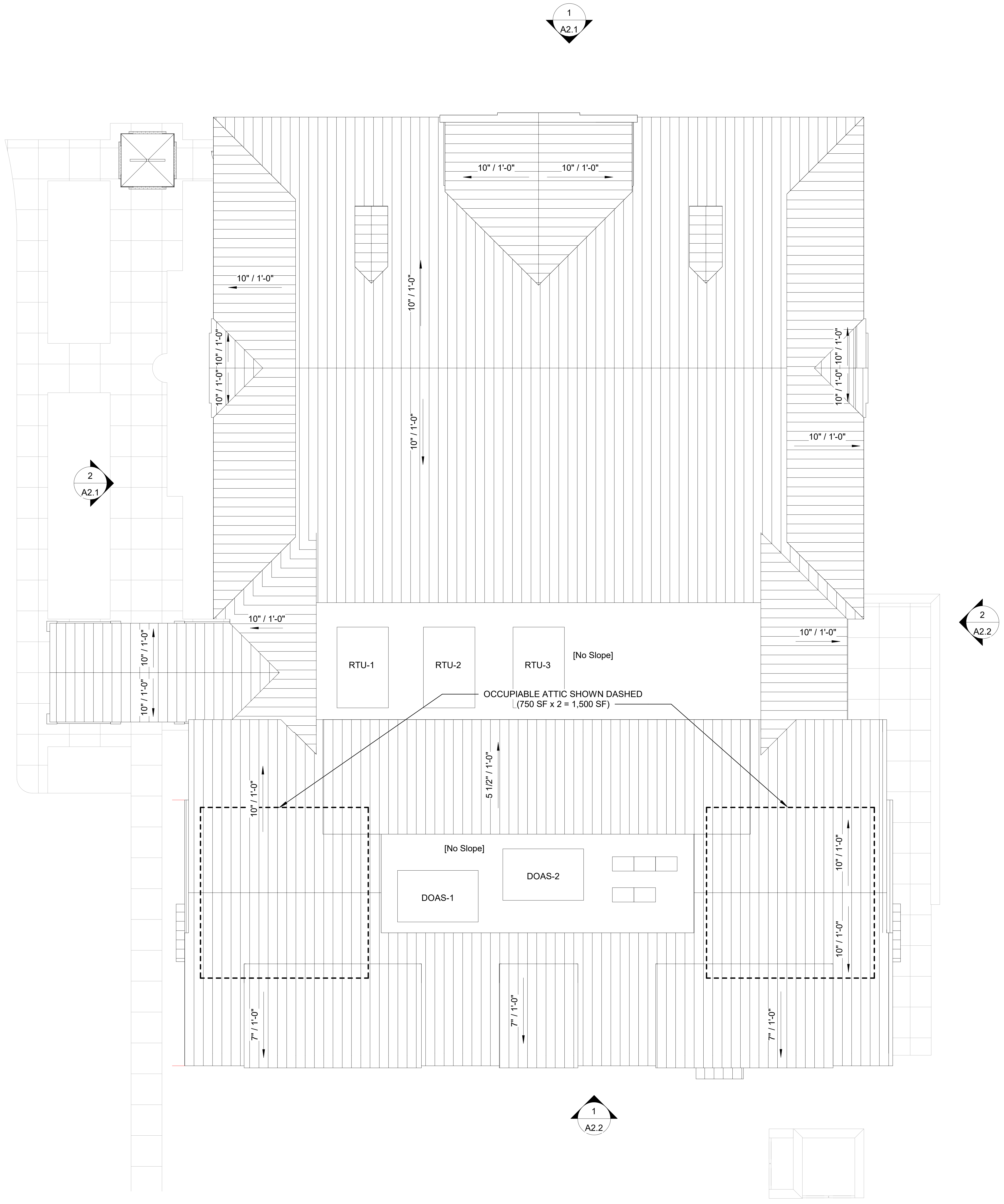
BASEMENT (GSF) = 16,168 SF
EXCLUSIONS = 16,168 SF
NET FLOOR AREA = 0 SF

FIRST FL LEVEL (GSF) = 16,916 SF (INCLUDES TOWER & CANOPY)
EXCEPTION = 1,222 SF
NET FLOOR AREA = 15,694 SF

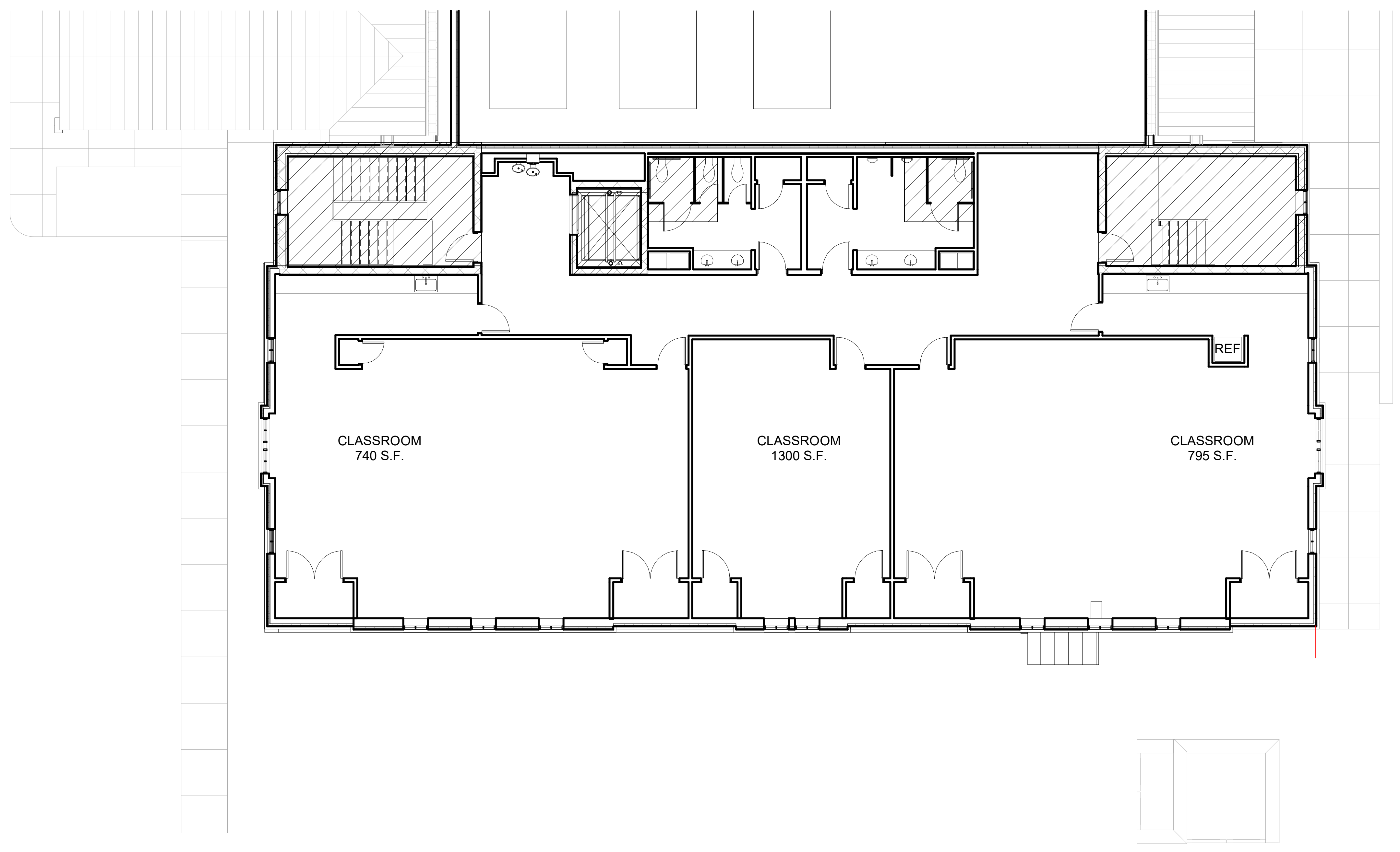
SECOND FL LEVEL (GSF) = 6,364 SF
EXCEPTION = 764 SF
NET FLOOR AREA = 5,600 SF

ATTIC (GSF) = 1,500 SF
EXCEPTION = 0 SF
NET FLOOR AREA = 1,500 SF

TOTAL (GSF) = 40,948 SF
TOTAL EXCLUSIONS = 18,154 SF
TOTAL NET FLOOR AREA = 22,794 SF



2
A1.2
ROOF PLAN
3/32" = 1'-0"



1
A1.2
SECOND FLOOR PLAN
3/32" = 1'-0"

▨ F.A.R. EXCLUSIONS

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ROSEBERRY
Lic No. 008498
WN Roseberry
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FLOOR PLANS

A1.2

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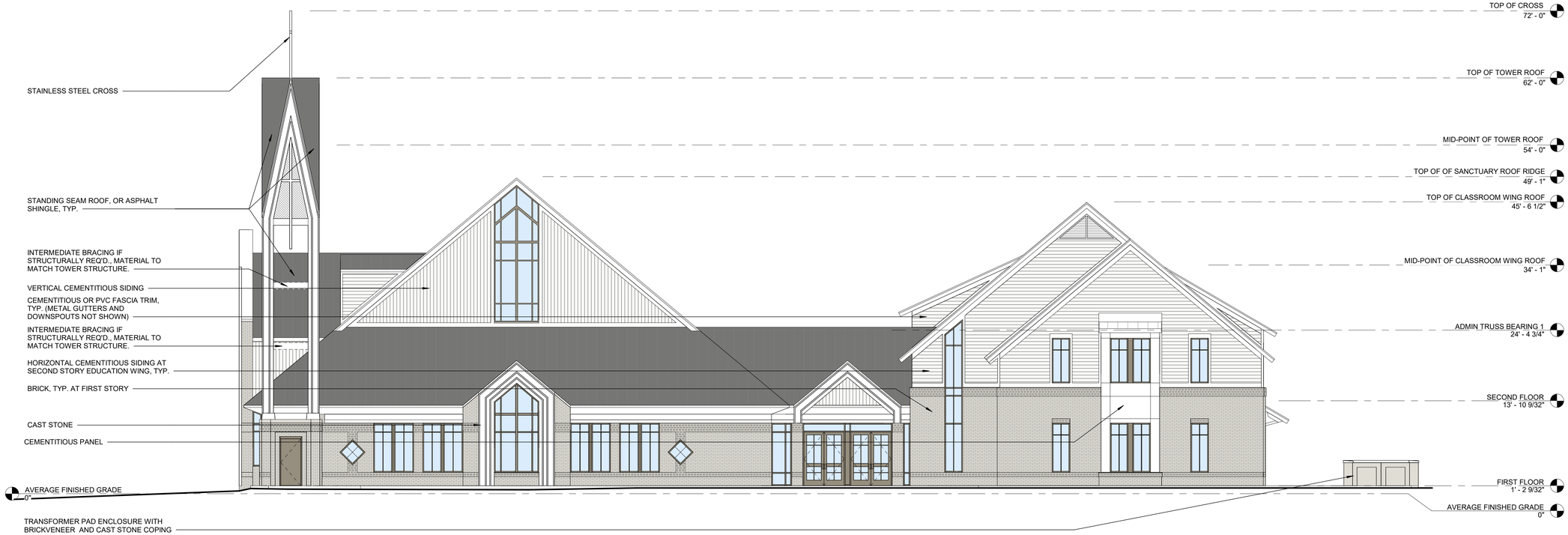
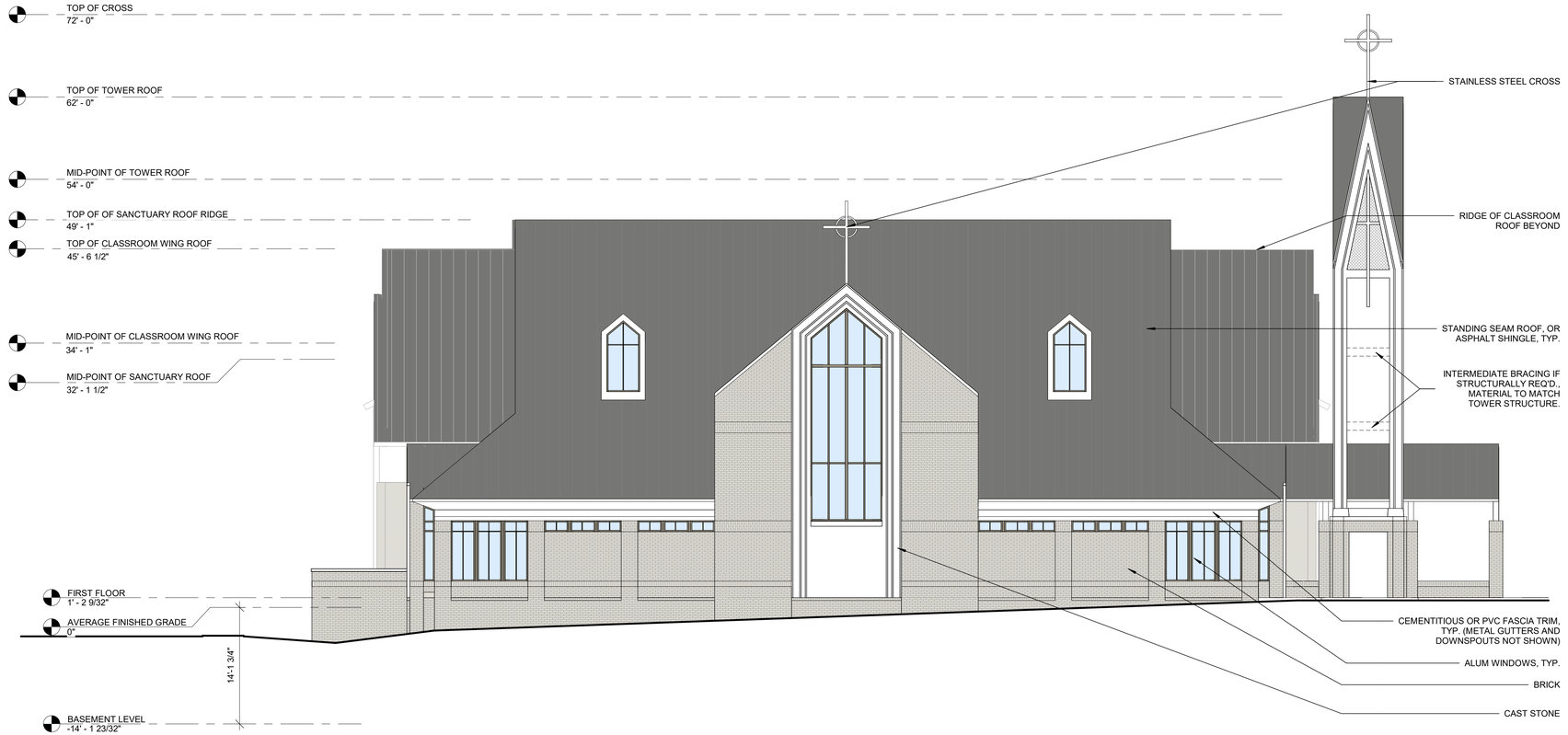


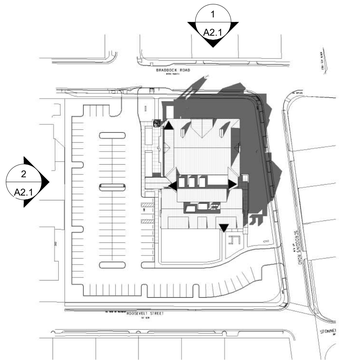
2 A2.1 **WEST ELEVATION**

1/8" = 1'-0"



1 A2.1 **NORTH ELEVATION**

1/8" = 1'-0"



KEY PLAN

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EXTERIOR ELEVATIONS

A2.1

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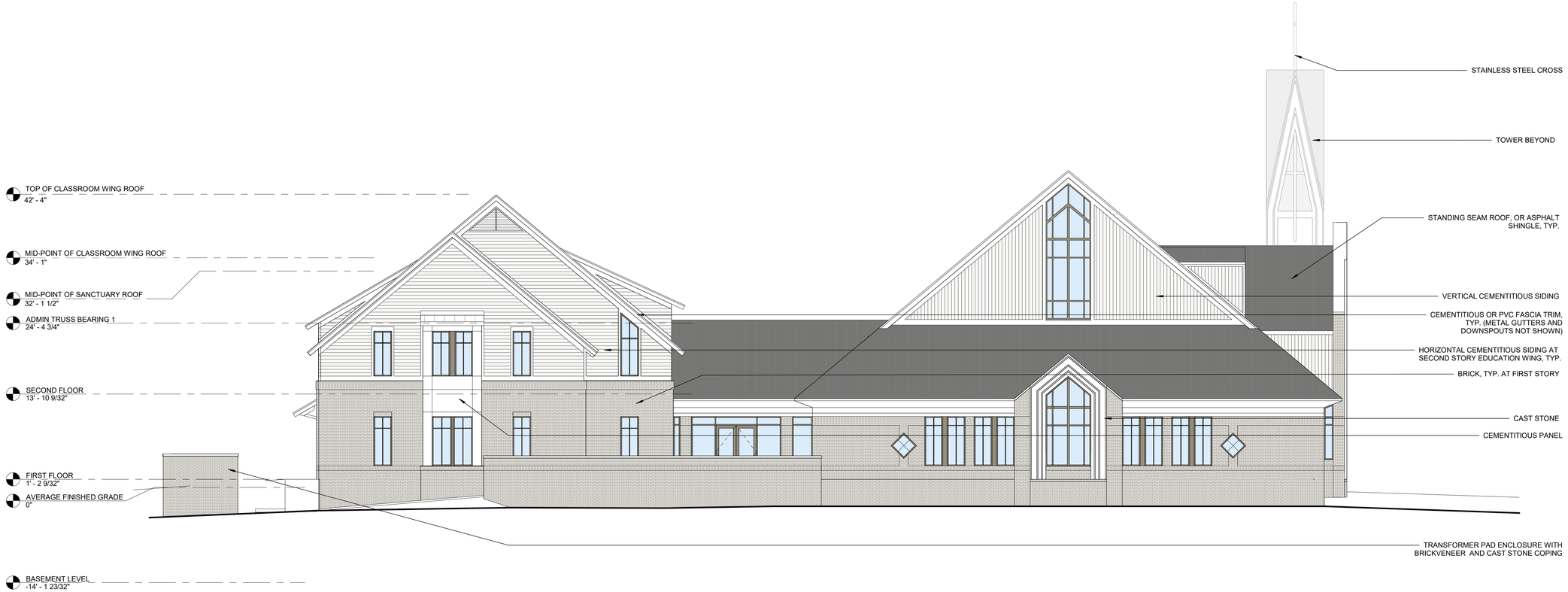
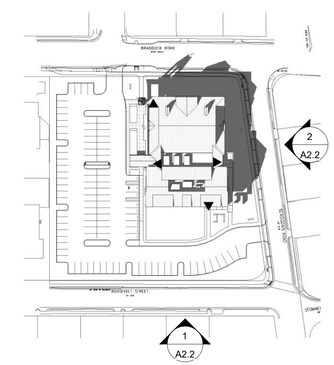


2 A2.2 EAST ELEVATION

1/8" = 1'-0"

1 A2.2 SOUTH ELEVATION

1/8" = 1'-0"



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EXTERIOR ELEVATIONS

A2.2

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PERSPECTIVE VIEWS

A4.1

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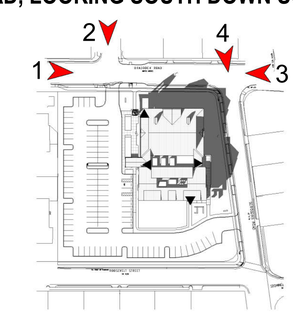
1 - VIEW FROM WEST BRADDOCK ROAD, LOOKING EAST

2 - VIEW FROM CREST STREET, LOOKING SOUTH

3 - VIEW FROM WEST BRADDOCK ROAD, LOOKING WEST

4 - VIEW FROM WEST BRADDOCK ROAD, LOOKING SOUTH DOWN SCROGGINS ROAD



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PERSPECTIVE VIEWS

A4.2

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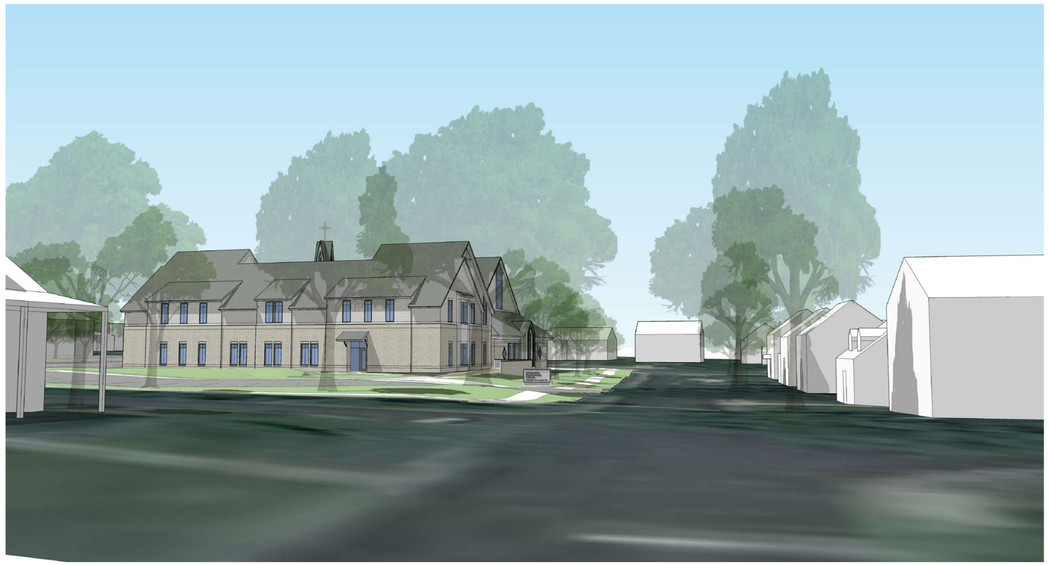
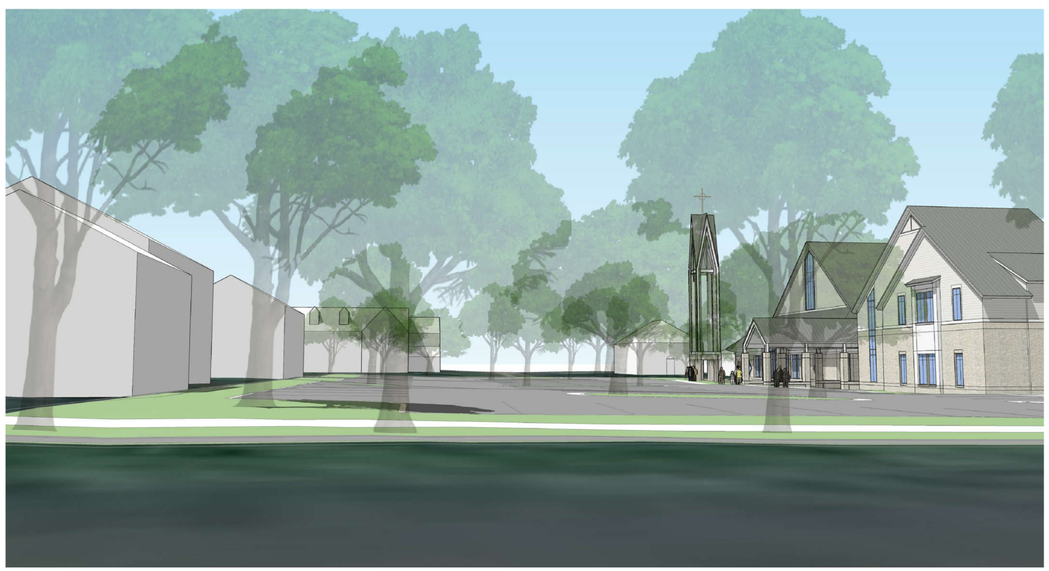
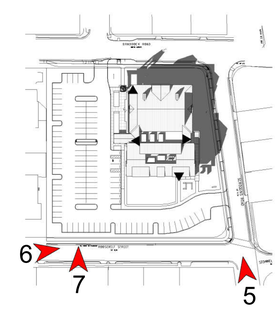


5 - VIEW FROM SCROGGINS ROAD, LOOKING NORTH

6 - VIEW FROM ROOSEVELT STREET, LOOKING EAST



7 - VIEW FROM ROOSEVELT STREET, LOOKING NORTH



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PERSPECTIVE VIEWS

A4.3

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