# DEVELOPMENT CONCEPT PLAN II 2525 MOUNT VERNON AVENUE

CITY OF ALEXANDRIA, VIRGINIA

# AREA TABULATIONS

TOTAL SITE AREA =  $\frac{0.8497}{}$  AC  $\frac{37,012}{}$  SF TOTAL AREA OF TAX PARCELS = 0.8497 AC 37,012 SF TOTAL EXISTING IMPERVIOUS AREA = 0.7157 AC 31,174 SF TOTAL PROPOSED IMPERVIOUS AREA = 0.6703 AC 29197 SF TOTAL DISTURBED AREA = \_\_\_\_\_1.0400 \_\_\_AC \_\_\_\_\_45,300 \_\_\_ SF

## **ENVIRONMENTAL SITE ASSESSMENT**

- 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 CURRENTLY NO KNOWN CONTAMINATED AREAS, CONTAMINATED SOILS OR ENVIRONMENTAL ISSUES ASSOCIATED WITH THIS SITE AT THIS TIME.
- THE CITY OF ALEXANDRIA DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES, OFFICE OF ENVIRONMENTAL QUALITY MUST BE NOTIFIED 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.
- CONTROL BOARD (VSWCB) REQUIREMENTS. CONTACT ENVIRONMENTAL HEALTH SPECIALIST AND COORDINATE WITH THE ALEXANDRIA HEALTH DEPARTMENT AT 703-746-4996. 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

ALL WELLS TO BE DEMOLISHED ON THIS PROJECT, INCLUDING MONITORING WELLS, MUST BE CLOSED IN ACCORDANCE WITH VIRGINIA STATE WATER

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 GREATER THAN 1 ACRE, THEREFORE A VPDES PERMIT IS

## **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.

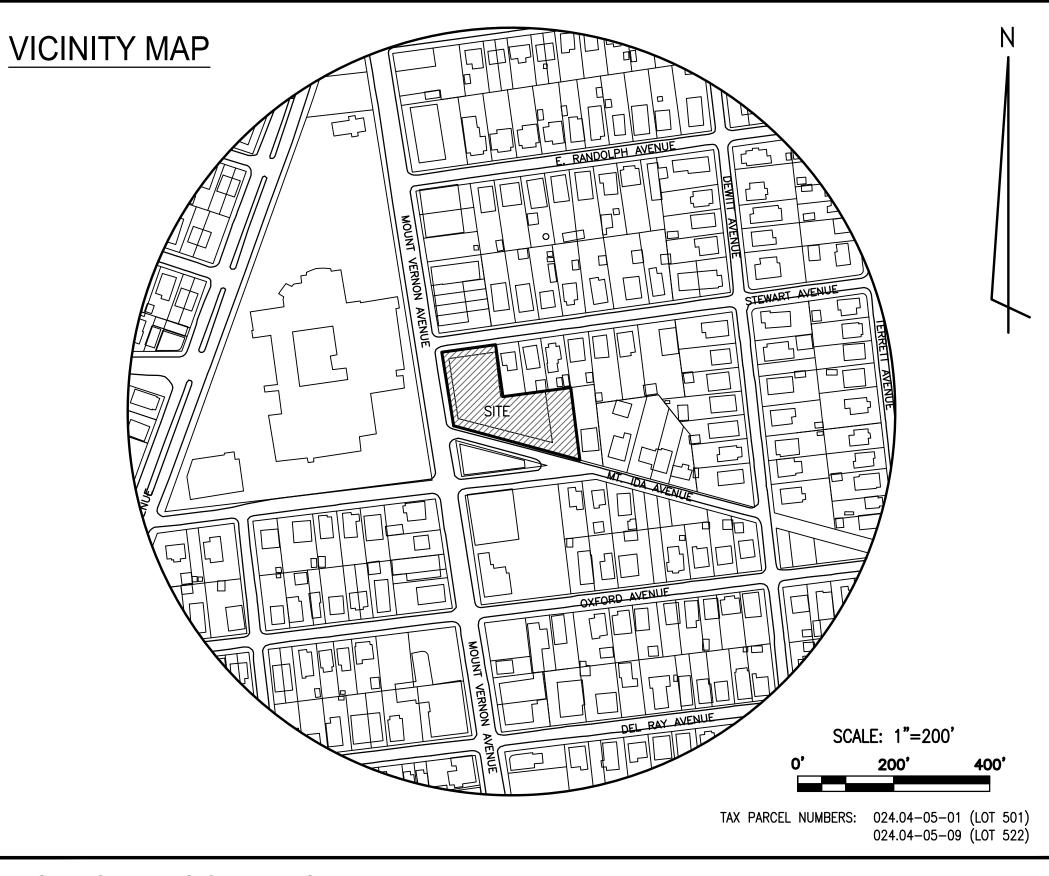
THE APPLICANT SHALL NOT ALLOW ANY METAL DETECTION AND/OR ARTIFACT COLLECTION TO BE CONDUCTED ON THE PROPERTY, UNLESS AUTHORIZED BY ALEXANDRIA ARCHAEOLOGY.

# **GENERAL NOTES**

- 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).
- 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.
- 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.
- 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.

#### ENGINEER'S/SURVEYOR'S CERTIFICATE:

THIS TOPOGRAPHIC SURVEY WAS COMPLETED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF WIM DE SUTTER, LS FROM AN ACTUAL GROUND SURVEY MADE UNDER MY SUPERVISION; THE IMAGERY AND/OR ORIGINAL DATA WAS OBTAINED ON SEPTEMBER 13, 2019; AND THIS PLAT, MAP OR DIGITAL GEOSPATIAL DATA INCLUDIN METADATA MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED.



# PROJECT DESCRIPTION NARRATIVE

THE APPLICANT REQUESTS A DEVELOPMENT SPECIAL USE PERMIT (DSUP) WITH SITE PLAN TO PERMIT THE REDEVELOPMENT OF THE EXISTING COMMERCIAL OFFICE BUILDING (DEPARTMENT OF COMMUNITY AND HUMAN SERVICES) AND EXISTING SURFACE PARKING ON THE PROPERTY INTO A NEW MIXED USE BUILDING, INCLUDING 73 MULTIFAMILY RESIDENTIAL UNITS WITH GROUND FLOOR RETAIL AND ASSOCIATED SITE IMPROVEMENTS. PARKING FOR THE PROPOSED BUILDING WILL BE PROVIDED IN THE LOWER LEVEL OF THE EXISTING PARKING GARAGE DIRECTLY ACROSS MOUNT IDA AVENUE FROM THE MAIN BUILDING.

# APPLICATIONS AND MODIFICATIONS

THIS DEVELOPMENT IS REQUESTING A:

- FORM BASED SUP TO WAIVE CL ZONE REQUIREMENTS PURSUANT TO THE MT VERNON OVERLAY DISTRICT
- DSUP FOR MULTIFAMILY RESIDENTIAL BUILDING WITH RETAIL/RESTAURANT USE
- MODIFICATION TO PARKING REQUIREMENT FOR A REDUCTION OF LOADING SPACE MODIFICATION TO PROVIDE PARKING OFF—SITE IN ADJACENT PARKING STRUCTURE
- MODIFICATION TO REAR YARD SETBACK

#### **BUILDING CODE ANALYSIS:**

<u>,                                      </u>	
USE GROUP(S):	RESIDENTIAL, BUSINESS
TYPE OF CONSTRUCTION:	TYPE VA, NFPA 13 SYSTEM
NUMBER OF STORIES:	4 STORIES
FLOOR AREA (GROSS):	72,000 SF
BUILDING HEIGHT:	44.5'
FIRE SUPRESSION/DETECTION:	NFPA 13 SYSTEM

#### COMPLETE STREETS INFORMATION:

	NEW	UPGRADED
CROSSWALKS (NUMBER)	N/A	2
STANDARD	N/A	2
HIGH VISIBILITY	N/A	N/A
CURB RAMPS	1	4
SIDEWALKS (LF)	N/A	550
BICYCLE PARKING (NUMBER SPACES)	14	N/A
PUBLIC/VISITOR	6	N/A
PRIVATE/GARAGE	8	N/A
BICYCLE PATHS (LF)	N/A	N/A
PEDESTRIAN SIGNALS	N/A	N/A

# OWNER/DEVELOPER

BONAVENTURE 104 HUME AVENUE ALEXANDRIA, VA 22301 (703) 567-4490

**DEVELOPER:** 

**BONAVENTURE** 

104 HUME AVENUE

(703) 567-4490

ALEXANDRIA, VA 22301

BONAVENTURE 105 WEST KANSAS STREET LIBERTY, MO 64068 (816) 792-5991

CONTACT: VINCE MCHALE

CIVIL ENGINEER: R.C. FIELDS & ASSOCIATES, INC. 700 S. WASHINGTON STREET, SUITE 220 ALEXANDRIA, VA 22314 (703) 549-6422

LANDSCAPE: LORAX DESIGN GROUP 8021 SANTA FE DRIVE - SUITE 200 OVERLAND PARK, KS 66204 (913) 972-7244

ARLINGTON, VIRGINIA 22201

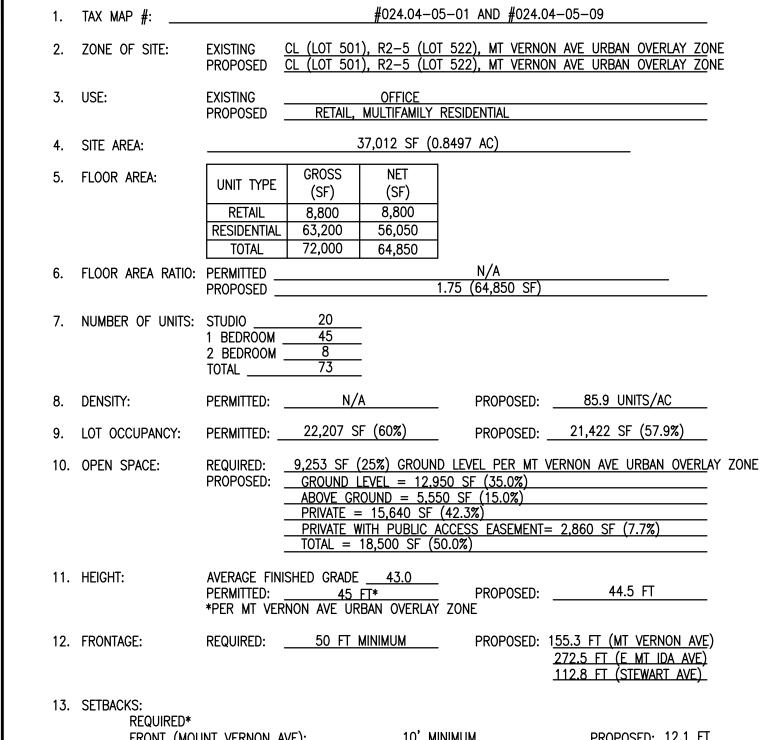
(703) 528-4700

WALSH, COLUCCI, LUBELEY & WALSH, P.C.

2200 CLARENDON BLVD, SUITE 1300

CONTACT: M. CATHARINE PUSKAR

# **ZONING TABULATIONS**



1110111 (1110111 1112)		11101 00 <u>2</u> D1 <u></u>
SIDE (MOUNT IDA AVE): SIDE (STEWART AVE): SIDE (NORTH):	N/A N/A N/A	PROPOSED: 10.7 FT PROPOSED: 10.0 FT PROPOSED: 10.0 F
REAR (EAST): REAR (EAST): *PER MT VERNON AVE URBAN	28° ANGLE PLANE STARTING 5'ABOVE REAR PROPERTY LINE OVERLAY ZONE	PROPOSED: SEE SHE PROPOSED: A2-1

14. PARKING TABULATION:

REQUIRED: RESIDENTIAL (MULTIFAMILY) NUMBER OF BEDROOMS: 65 + (8x2) PARKING RATIO:  $1.0 - [1.0 \times (0.10* + 0.05** + 0.05*** + 0.05****)] = 0.75$ 

> RATIO FOR OUTSIDE METRO HALF-MILE WALKSHED (1.0 SPACES/BEDROOM) \*WITHIN BUS RAPID TRANSIT HALFMILE WALKSHED (10%) \*\*CREDIT FOR WALKSCORE OF 80-89 (5%) \*\*\*CREDIT FOR LOCATION ON 4 BUS ROUTES (5%) \*\*\*\*CREDIT FOR GREATER THAN 20% STUDIO UNITS (5%)

0.75 SPACES/BEDROOM = 0.75 X 81:

RETAIL/RESTAURANT\* FLOOR AREA

TOTAL OFFSITE SPACES AVAILABLE

= 8,800 SF MINIMUM - 1.0 SPACES/1,000 SQ FT = (1.0/1,000)\*8,800: 9 SPACES MAXIMUM - 3 SPACES/1,000 SQ FT = (3/1,000)\*8,800: 27 SPACES 70 SPACES MINIMUM TOTAL PARKING REQUIRED: 61 + 9 =

MAXIMUM TOTAL PARKING REQUIRED: 61 + 27 = 88 SPACES \*FOR PURPOSES OF PARKING ANALYSIS, THE MORE RESTRICTIVE REQUIREMENT FOR RESTAURANTS HAS BEEN USED 70 SPACES AVAILABLE IN THE 2400

NOTE: THE EXISTING LEASE FOR THE SUBJECT PROPERTY (2525 MOUNT VERNON AVENUE) PERMITS THE EXCLUSIVE USE OF 110 PARKING SPACES LOCATED IN THE 2400 BLOCK OF MOUNT VERNON AVENUE. A NEW PARKING AGREEMENT WILL BE EXECUTED TO PROVIDE THE REQUIRED PARKING (70 SPACES) FOR THE PROPOSED DEVELOPMENT.

15.	LOADING SPACES:	REQUIRED:	1	PROPOSED:	0	(ON-STREET)
16.	TRIP GENERATION:	EXISTING AM PEAK EXISTING PM PEAK EXISTING VPD		PROPOSED AM PROPOSED PM PROPOSED VDF	PEAK_	36 ADT 44 ADT 460 ADT R ITE STANDARDS

1.04 ACRES

# SHEET INDEX:

17. LIMITS OF DISTURBANCE:

COVER SHEET CONTEXTUAL PLAN EXISTING CONDITIONS PROPOSED CONDITIONS STORMWATER MANAGEMENT PLAN STORMWATER QUALITY COMPUTATION	1 2 3 4 5 6
LANDSCAPE PLANLANDSCAPE DETAILSTREE & VEGETATION PROTECTION PLAN	L101 L102 L103

FAR CALCULATIONS FIRST FLOOR PLAN SECOND FLOOR PLAN THIRD FLOOR PLAN FOURTH FLOOR PLAN ROOF PLAN BUILDING ELEVATIONS AND SECTIONS CONCEPTUAL RENDERINGS

BLOCK OF MOUNT VERNON AVE

PROPOSED: 12.1 FT

61 SPACES

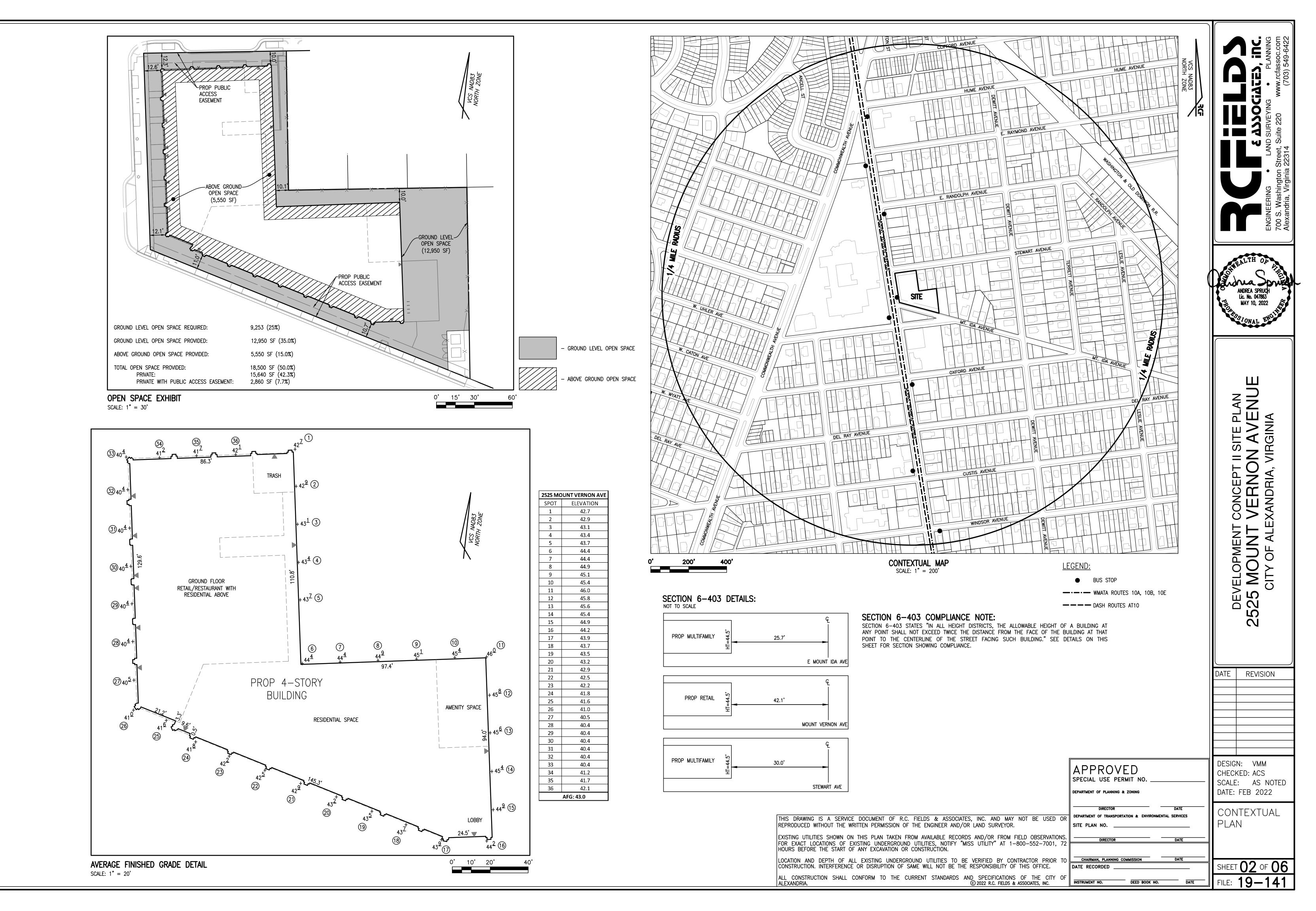
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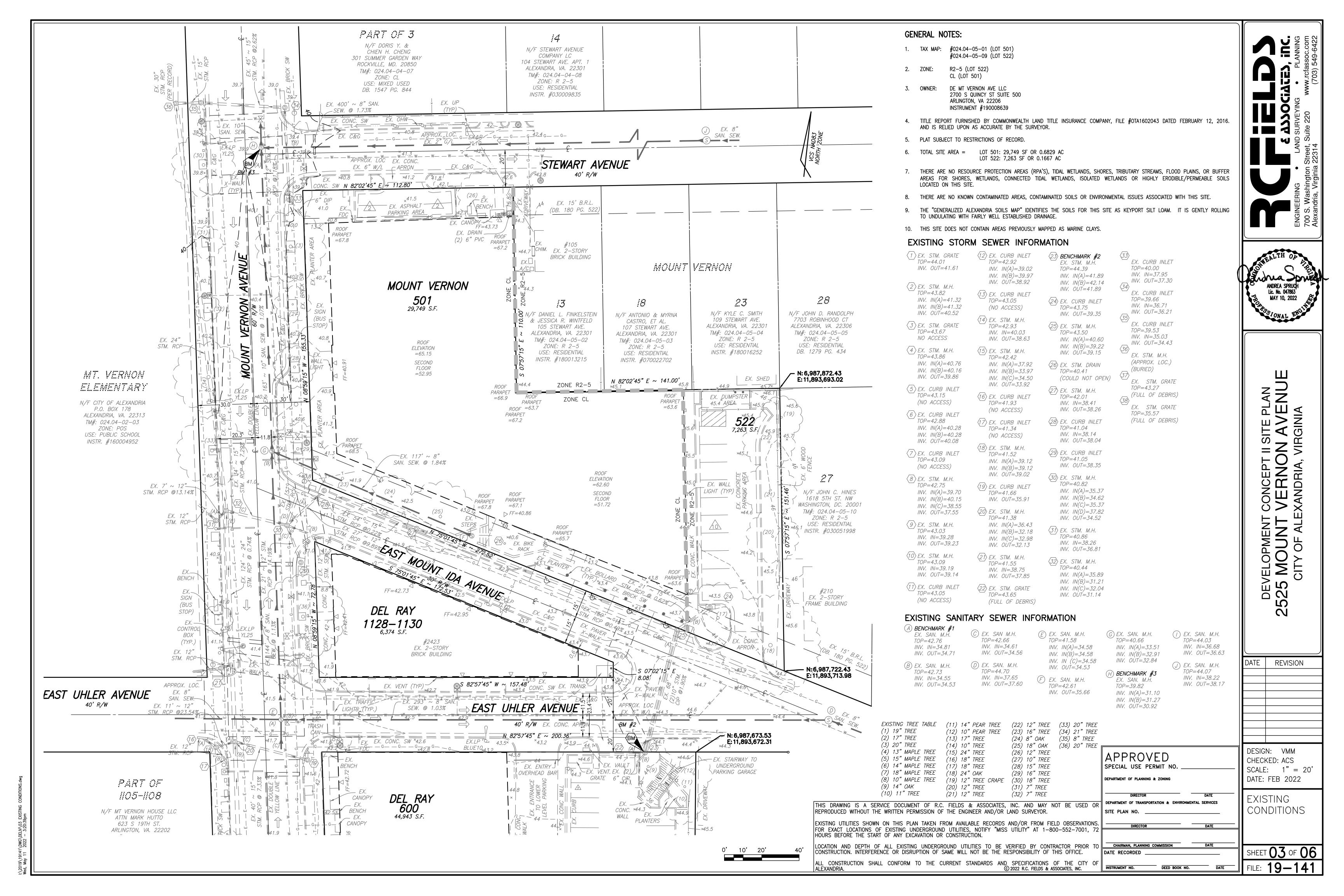
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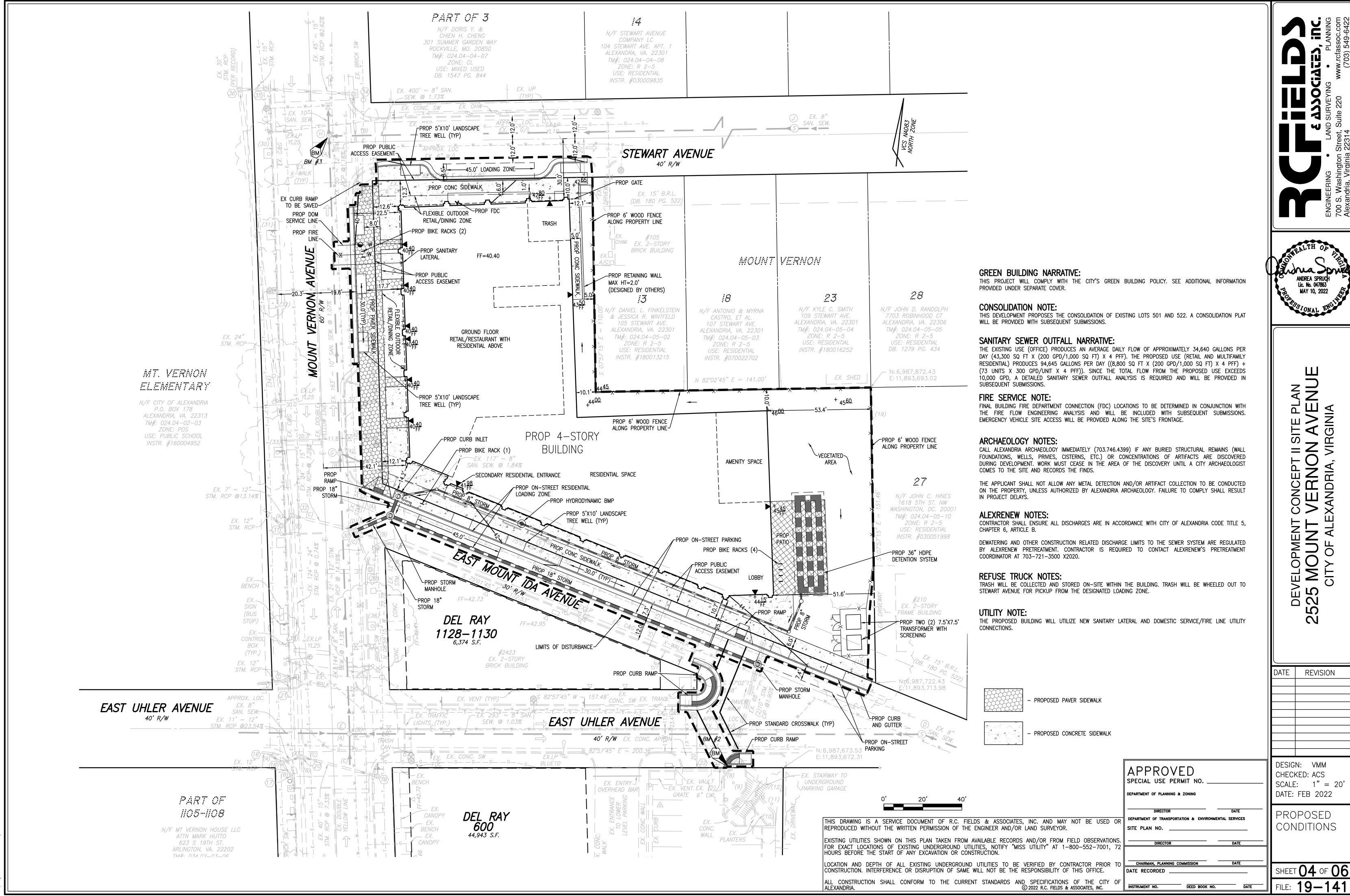
APPROVED SPECIAL USE PERMIT NO. DEPARTMENT OF PLANNING & ZONING DATE RECORDED DEED BOOK NO. DATE

RCF FILE: 19-141



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#### WATER QUALITY/QUANTITY COMPLIANCE NARRATIVE:

THE 0.85 ACRE SITE IS LOCATED IN THE FOUR MILE RUN (EAST) WATERSHED. IN EXISTING CONDITIONS, THE SITE CONSISTS OF AN OFFICE BUILDING WITH SURFACE PARKING AND VARIOUS FRONTAGE IMPROVEMENTS. THE REDEVELOPMENT OF THE PROJECT PROPOSES A NEW RETAIL AND MULTIFAMILY RESIDENTIAL BUILDING WITH ASSOCIATED STREETSCAPE AND OPEN SPACE IMPROVEMENTS. OVERALL IMPERVIOUS AREA WILL BE DECREASED WITH THE PROPOSED DEVELOPMENT (SEE STORMWATER RUNOFF COMPUTATIONS ON THIS SHEET) WHICH GENERATES A DECREASE IN RUNOFF. DETENTION WILL BE PROVIDED THROUGH ONSITE FACILITIES TO FURTHER REDUCE THE GENERATED RUNOFF AND REACH A 20% REDUCTION IN RUNOFF FROM EXISTING CONDITIONS.

TWO BEST MANAGEMENT PRACTICE (BMP) FACILITIES ARE PROPOSED TO TREAT THE MAJORITY OF RUNOFF FROM PROPOSED IMPERVIOUS AREAS ON THE SITE (A HYDRODYNAMIC BMP AND VEGETATED ROOF). THESE BMP FACILITIES PROVIDE ADEQUATE WATER QUALITY TREATMENT FOR THIS SITE. COMPLIANCE NARRATIVES AND COMPUTATIONS PER CITY CODE SECTION 13-109E ARE PROVIDED ON THIS SHEET AND SHEET 06.

### **OUTFALL NARRATIVE:**

#### PRE-DEVELOPMENT CONDITIONS:

THE 0.85 ACRE SITE IS LOCATED IN THE FOUR MILE RUN (EAST) WATERSHED. IN EXISTING CONDITIONS, THE SITE CONSISTS OF AN OFFICE BUILDING WITH SURFACE PARKING AND VARIOUS FRONTAGE IMPROVEMENTS. THE MAJORITY OF THE SITE IS COLLECTED BY ROOF DRAINS ON THE EXISTING BUILDING AND DISCHARGED TO THE EXISTING STORM SEWER LOCATED ALONG THE EAST MOUNT IDA AVENUE AND MOUNT VERNON AVENUE FRONTAGES. THE AREA EAST OF THE EXISTING BUILDING SHEETFLOWS IN A SOUTHERLY DIRECTION UNTIL ENTERING AN EXISTING ONSITE CURB INLET (STR 24). THE PIPED FLOW CONTINUES IN A SOUTHERLY DIRECTION AND ENTERS THE EXISTING STORM SEWER SYSTEM IN THE EAST MOUNT IDA AVENUE RIGHT-OF-WAY. THE REMAINING SITE AREA DRAINS AWAY FROM THE EXISTING BUILDING INTO THE ADJACENT EAST MOUNT IDA AVENUE, MOUNT VERNON AVENUE AND STEWART AVENUE RIGHT-OF-WAYS. RUNOFF IN EAST MOUNT IDA AVENUE FLOWS IN A WESTERLY DIRECTION UNTIL ENTERING THE EXISTING STORM SEWER SYSTEM THROUGH AN EXISTING CURB INLET (STR 28) AT THE CORNER OF EAST MOUNT IDA AVENUE AND MOUNT VERNON AVENUE. THE PIPED FLOW CROSSES MOUNT VERNON AVENUE BEFORE CONTINUING IN A NORTHERLY DIRECTION. RUNOFF IN MOUNT VERNON AVENUE FLOWS IN A NORTHERLY DIRECTION UNTIL ENTERING THE EXISTING STORM SEWER SYSTEM THROUGH AN EXISTING CURB INLET (STR 33) AT THE CORNER OF MOUNT VERNON AVENUE AND STEWART AVENUE. RUNOFF FROM STEWART AVENUE FLOWS IN A WESTERLY DIRECTION UNTIL ENTERING THE EXISTING STORM SEWER SYSTEM THROUGH THE SAME EXISTING CURB INLET (STR 33). THE PIPED FLOW CROSSES STEWART AVENUE AND THEN CROSSES MOUNT VERNON AVENUE BEFORE JOINING THE PREVIOUSLY DESCRIBED FLOW REGIMES. THE RUNOFF CONTINUES IN A NORTHERLY DIRECTION UNTIL IT EVENTUALLY OUTFALLS TO FOUR MILE RUN.

#### **POST-DEVELOPMENT CONDITIONS:**

THE REDEVELOPMENT OF THE PROJECT PROPOSES A NEW RETAIL AND MULTIFAMILY RESIDENTIAL BUILDING WITH ASSOCIATED STREETSCAPE AND OPEN SPACE IMPROVEMENTS. IN PROPOSED CONDITIONS, THE MAJORITY OF THE SITE WILL BE COLLECTED ONSITE AND PIPE TO THE EXISTING AND PROPOSED STORM SEWER SYSTEM IN MOUNT VERNON AVENUE. THE REMAINING SITE AREA WILL DRAIN AWAY FROM THE PROPOSED BUILDING INTO THE ADJACENT EAST MOUNT IDA, MOUNT VERNON AVENUE AND STEWART AVENUE RIGHT-OF-WAYS. THE RUNOFF FROM EAST MOUNT IDA AVENUE IS COLLECTED BY A PROPOSED CURB INLET AT THE CORNER OF MOUNT VERNON AVENUE AND EAST MOUNT IDA AVENUE. THE PIPED FLOW CROSS MOUNT VERNON AVENUE BEFORE CONTINUING IN A NORTHERLY DIRECTION. RUNOFF IN MOUNT VERNON AVENUE FLOWS IN A NORTHERLY DIRECTION UNTIL ENTERING AN THE EXISTING STORM SEWER SYSTEM THROUGH AN EXISTING CURB INLET (STR 33) AT THE CORNER OF MOUNT VERNON AVENUE AND STEWART AVENUE. RUNOFF FROM STEWART AVENUE FLOWS IN A WESTERLY DIRECTION UNTIL ENTERING THE EXISTING STORM SEWER SYSTEM THROUGH THE SAME EXISTING CURB INLET (STR 33). THE PIPED FLOW CROSSES STEWART AVENUE AND THEN CROSSES MOUNT VERNON AVENUE BEFORE JOINING THE PREVIOUSLY DESCRIBED FLOW REGIMES. THE RUNOFF CONTINUES IN A NORTHERLY DIRECTION UNTIL IT EVENTUALLY OUTFALLS TO FOUR MILE RUN.

DUE TO AN OVERALL DECREASE OF SITE IMPERVIOUS AREA IN PROPOSED CONDITIONS, THE POST-DEVELOPMENT PEAK RATE FOR THE 2 AND 10-YEAR 24-HOUR STORM EVENTS IS LESS THAN THE PRE-DEVELOPMENT PEAK FLOW RATES (SEE COMPUTATIONS PROVIDED ON THIS SHEET). HOWEVER, A DETENTION SYSTEM IS PROPOSED TO FURTHER REDUCE THE GENERATED RUNOFF UNTIL A 20% REDUCTION IN PEAK RUNOFF FROM PRE-DEVELOPMENT CONDITIONS IS REACHED. VEGETATED ROOF AREA AND A HYDRODYNAMIC BMP ARE ALSO PROPOSED WITH THIS PLAN TO PROVIDE WATER QUALITY TREATMENT AND ADDITIONAL RUNOFF REDUCTION. THERE IS NO RUNOFF VOLUME INCREASE IN THE FORM OF SHEET FLOW RESULTING FROM PERVIOUS AREAS, DISCONNECTED IMPERVIOUS AREAS OR FROM PHYSICAL SPREADING OF CONCENTRATED FLOW ASSOCIATED WITH THE REDEVELOPMENT OF THIS SITE. THEREFORE, THE SMALL PORTION OF THE RUNOFF THAT EXITS THE SITE IN THE FORM OF SHEET FLOW WILL HAVE NO ADVERSE IMPACTS ON DOWN GRADIENT PROPERTIES.

PER SECTION 13-109F-2(d)(i), A DRAINAGE SHED BOUNDARY ANALYSIS OF THE SITE OUTFALL WILL BE PROVIDED WITH THE SUBSEQUENT SUBMISSION. THIS WILL CONSTITUTE THE LIMITS OF ANALYSIS FOR THE PROJECT.

BASED ON THE ABOVE MENTIONED JUSTIFICATIONS AND COMPUTATIONS, THE STORMWATER MANAGEMENT CRITERIA FOR THE PROPOSED DEVELOPMENT COMPLIES WITH THE CHANNEL PROTECTION AND

#### 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, 100 YR, 24-HR DEPTH=7.70).

I. PARCEL AREA (ONSITE AREA) = 37,012 SQ. FT. OR 0.8497 ACRES

EXISTING IMPERVIOUS AREA = 31,174 SQ. FT. OR 0.7157 ACRES PROPOSED IMPERVIOUS AREA = 29,197 SQ. FT. OR 0.6703 ACRES

#### II. WEIGHTED "CN" FACTOR CALCULATION

PRE-DEVELOPMENT "CN" = <u>(80 X 0.1340 + 98 X 0.7157)</u> = **95** 

POST-DEVELOPMENT "CN" =  $(80 \times 0.1794 + 98 \times 0.6703) = 94$ 

POST-DEVELOPMENT "CN" = 93 (CONTROLLED, VRRM ADJUSTED)

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

 $Q_2$  PRE = **2.49** CFS  $Q_{10}$  PRE = **4.20 CFS** 

POST-DEVELOPMENT (VRRM ADJUSTED)

 $Q_2 \text{ POST} = 2.37 \text{ CFS}$  $Q_{10}$  POST = **4.10 CFS** 

 $Q_{10}$  POST WITH DETENTION = 3.36 CFS

#### IV. POST-DEVELOPMENT DECREASES

 $Q_2$  DECREASE = **0.12** CFS  $Q_{10}$  DECREASE = **0.10 CFS** 

 $Q_{10}$  Decrease with Detention = **0.84 CFS** (20% reduction from Pre-Development)

## V. DETENTION VOLUME

THE POST DEVELOPMENT RUNOFF IS LESS THAN THE PREDEVELOPMENT RUNOFF. DETENTION WILL BE PROVIDED TO FURTHER REDUCE THE POST-DEVELOPMENT RUNOFF TO MEET A 20% REDUCTION FROM THE PRE-DEVELOPMENT 10-YEAR 24-HOUR PEAK RATE.

## DETENTION DETAILS WILL BE PROVIDED WITH SUBSEQUENT SUBMISSIONS.

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



VEGETATED ROOF AREA

DRAINAGE AREA TO DETENTION SYSTEM AND HYDRODYNAMIC BMP



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

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, HOURS BEFORE THE START OF ANY EXCAVATION OR CONSTRUCTION.

LOCATION AND DEPTH OF ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED BY CONTRACTOR PRIOR 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 © 2022 R.C. FIELDS & ASSOCIATES, INC.

#### PROJECT DESCRIPTION:

REDEVELOPMENT

DRAINAGE AREA	IMPERVIOUS	PERVIOUS	TOTAL
PROJECT AREA	0.6703	0.1794	0.8497
ON-SITE TREATED	0.4882	0.0000	0.4882
OFF-SITE TREATED	0.0000	0.0000	0.0000
TOTAL TREATED	0.4882	0.0000	0.4882
ON-SITE IMPERVIOUS AREAS DISCONNECTED BY A VEGETATIVE BUFFER	N/A		
DISCONNECTED BY A VEGETATIVE BOTTEN			
TOTAL TREATED OR DISCONNECTED			0.2686

#### WATER QUALITY VOLUME DEFAULT:

PROPOSED IMPERVIOUS: 0.67 AC TREATMENT OF FIRST HALF INCH OF RUNOFF: 1.815 X 0.67 = 1.216 CU. FT. WQV REQUIRED

WATER TREATMENT ON-SITE						
BMP TYPE	AREA TREATED BY BMP (ACRES)	IMPERVIOUS AREA TREATED BY BMP (ACRES)	BMP EFFICIENCY (%)			
HYDRODYNAMIC	0.32	0.32	20%			
VEGETATED ROOF	0.17	0.17	0%			

APPROVED

SITE PLAN NO.

SPECIAL USE PERMIT NO.

DEED BOOK NO.

TOTAL WQV TREATED: NO WATER QUALITY VOLUME REQUIRED = 1,216 CU. FT. WATER QUALITY VOLUME TREATED = 1,815 X 0.49 = 889 CU. FT. PERCENT OF WATER QUALITY VOLUME TREATED = 73% DETENTION ON SITE: YES PROJECT IS WITHIN WHICH WATERSHED? FOUR MILE RUN PROJECT DISCHARGES TO WHICH BODY OF WATER? POTOMAC RIVER

DATE | REVISION

ANDREA SPRUCH

Lic. No. 047863 MAY 10, 2022

Z

 $\Box$   $\Box$ 

DESIGN: VMM CHECKED: ACS

SCALE: 1" = 20'DATE: FEB 2022 STORMWATER

MANAGEMENT

SHEET  $05\,$  of  $06\,$ 

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data input cells constant values calculation cells final results

Land cover areas entered correctly?

LAND COVER SUMMARY -- POST DEVELOPMENT

Land Cover Summary-Post

Post-Re Development

0.00

0%

0.18

0.25

0.95

0.85

0.80

Forest/Open Space

Cover (acres)

Weighted Rv(forest)

% Forest

Managed Turf Cover

(acres)

Weighted Rv (turf)

% Managed Turf

ReDev. Impervious

Rv(impervious)

% Impervious Total ReDev. Site Area

ReDev Site Rv

#### Site Information

## Post-Development Project (Treatment Volume and Loads)

Enter Total Disturbed Area (acres) $  o $	1.04
Maximum reduction required:	20%
The site's net increase in impervious cover (acres) is:	0

BMP Design Specifications List: 2013 Draft Stds & Specs Linear project? No

√ Total disturbed area > Post-Development area!

Land Cover Summary-Post Post-Development New Impervious

New Impervious Cover

Rv(impervious)

The site's net increase in impervious cover (acres) is:	0
Post-Development TP Load Reduction for Site (lb/yr):	0.25

Pre-ReDevelopment Land Cover (acres)					
	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) undisturbed					0.00
forest/open space					0.00
Managed Turf (acres) disturbed, graded					0.13
for yards or other turf to be				0.13	0.15

# Impervious Cover (acres)

Post-Development Land Cover (acres)					
	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) undisturbed,					0.00
protected forest/open space or reforested					0.00
Managed Turf (acres) disturbed, graded					0.18
for yards or other turf to be				0.18	0.18
Impervious Cover (acres)				0.67	0.67
Area Check	OK.	ок.	OK.	OK.	0.85

## Constants

Impervious Cover (acres)

Rv(impervious)

% Impervious

Total Site Area (acres)

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
Forest/Open Space	0.02	0.03	0.04
N4	0.15	0.30	0.22

Land Cover Summary-Post (Final)

Post ReDev. & New Impervious

Forest/Open Space

Cover (acres)

Veighted Rv(forest)

% Forest

Managed Turf Cover

(acres)

Weighted Rv (turf)

% Managed Turf

Impervious Cover

Rv(impervious)

Final Site Area (acres)

Final Post Dev Site Rv

0.95

0%

0.95

Land Cover Sum	nmary-Pre	
Pre-Re Development	Listed	Adjusted <sup>1</sup>
Forest/Open Space Cover (acres)	0.00	0.00
Weighted Rv(forest)	0.00	0.00
% Forest	0%	0%
Managed Turf Cover (acres)	0.13	0.13
Weighted Rv(turf)	0.25	0.25
% Managed Turf	16%	16%
<u> </u>		

0.72

0.95

84%

0.85

0.95

0.85

0.84

Treatment	Volume	and	<b>Nutrient</b>	Load

Pre-Re Development Treatment Volume (acre-ft)	0.0595	0.0595
Pre-Re Development Treatment Volume (cubic feet)	2,590	2,590
Pre-ReDevelopment TP Load (lb/yr)	1.63	1.63
-	1.63	1.63

<sup>1</sup> 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).

(acre-ft)	
Final Post- Development Treatment Volume (cubic feet)	2,474
Final Post- Development TP Load (lb/yr)	1.55

TP Load per acre (lb/acre/yr)

	Treatment Volume (acre-ft)	
	Post-ReDevelopment Treatment Volume (cubic feet)	
	Post-Re Development Load (TP) (lb/yr)*	
	Post-ReDevel opment TP Load per acre (lb/acre/yr)	

Treatn	nent Volume and	d Nutrient Lo	pad		
	Post-ReDevelopment Treatment Volume (acre-ft)	0.0568		Post-Development Treatment Volume (acre-ft)	
	Post-Re Development Treatment Volume (cubic feet)	2,474		Post-Development Treatment Volume (cubic feet)	
	Post-ReDevelopment Load (TP) (lb/yr)*	1.55		Post-Development TP Load (lb/yr)	
	Post-ReDevel opment TP Load per acre (lb/acre/yr)	1.83			

TP Load Reduction Required for Redeveloped Area (lb/yr)	0.25	
--	------	--

TP Load Reduction	
Required for New Impervious Area	0
(lb/yr)	

# **Post-Development Requirement for Site Area**

TP Load Reduction Required (lb/yr)	0.25

#### Nitrogen Loads (Informational Purposes Only)

Pre-ReDevelopment TN Load (Ib/yr)	11.64
--------------------------------------	-------

Final Post-Development IN Load	
(Post-ReDevelopment & New	11.12
Impervious) (lb/yr)	

## **Stormwater Best Management Practices (RR = Runoff Reduction)**

Practice	Runoff Reduction Credit (%)	Managed Turf Credit Area (acres)		Volume from Upstream Practice (ft <sup>3</sup> )	Runoff Reduction (ft <sup>3</sup> )	Remaining Runoff Volume (ft <sup>3</sup> )	Total BMP Treatment Volume (ft <sup>3</sup> )	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
1. Vegetated Roof (RR)													
1.a. Vegetated Roof #1 (Spec #5)	45		0.17		267	327	594	0		0.37	0.17	0.20	14.a. MTD - Hydrodynamic
14. Manufactured Treatment Devices (	no RR)												
14.a. Manufactured Treatment Device- Hydrodynamic	0		0.32	327	0	1,430	1,430	20	0.20	0.69	0.18	0.72	

## Site Results (Water Quality Compliance)

Area Checks	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	AREA CHECK
FOREST/OPEN SPACE (ac)	0.00	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER (ac)	0.67	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER TREATED (ac)	0.49	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA (ac)	0.18	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA TREATED (ac)	0.00	0.00	0.00	0.00	0.00	OK.
AREA CHECK	OK.	OK.	OK.	OK.	OK.	

#### 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 <sup>3</sup> )	267	0	0	0	0	267
TP LOAD AVAILABLE FOR REMOVAL (lb/yr)	1.55	0.00	0.00	0.00	0.00	1.55
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.35	0.00	0.00	0.00	0.00	0.35
TP LOAD REMAINING (lb/yr)	1.21	0.00	0.00	0.00	0.00	1.21
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	1.20	0.00	0.00	0.00	0.00	1.20

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EXISTING UTILITIES SHOWN ON THIS PLAN TAKEN FROM AVAILABLE RECORDS AND/OR FROM FIELD OBSERVATIONS. FOR EXACT LOCATIONS OF EXISTING UNDERGROUND UTILITIES, NOTIFY "MISS UTÍLITY" AT 1-800-552-7001, 72

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

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HOURS BEFORE THE START OF ANY EXCAVATION OR CONSTRUCTION.

FINAL POST-DEVELOPMENT TP LOAD (lb/yr)	1.55
TP LOAD REDUCTION REQUIRED (lb/yr)	
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.35
TP LOAD REMAINING (lb/yr):	1.21

\*\* TARGET TP REDUCTION EXCEEDED BY 0.09 LB/YEAR \*\*

#### Total Nitrogen (For Information Purposes)

Total Nitrogen (For information Furposes)	
POST-DEVELOPMENT LOAD (lb/yr)	11.12
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	1.20
DEMAINING DOST-DEVELORMENT NITROGEN LOAD (Ib/vr)	9.92

Area Checks	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	AREA CHECK
FOREST/OPEN SPACE (ac)	0.00	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER (ac)	0.67	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER TREATED (ac)	0.49	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA (ac)	0.18	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA TREATED (ac)	0.00	0.00	0.00	0.00	0.00	OK.
AREA CHECK	OK.	OK.	OK.	OK.	OK.	
•						

Site Treatment Volume (ft<sup>3</sup>) 2,474

	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	TOTAL
RUNOFF REDUCTION VOLUME ACHIEVED (ft <sup>3</sup> )	267	0	0	0	0	267
TP LOAD AVAILABLE FOR REMOVAL (lb/yr)	1.55	0.00	0.00	0.00	0.00	1.55
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.35	0.00	0.00	0.00	0.00	0.35
TP LOAD REMAINING (lb/yr)	1.21	0.00	0.00	0.00	0.00	1.21

#### **Total Phosphorus**

FINAL POST-DEVELOPMENT TP LOAD (lb/yr)	
TP LOAD REDUCTION REQUIRED (lb/yr)	0.25
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.35
TP LOAD REMAINING (lb/yr):	1.21
REMAINING TP LOAD REDUCTION REQUIRED (lb/yr):	0.00

POST-DEVELOPMENT LOAD (lb/yr)	11.12	
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	1.20	
NING POST-DEVELOPMENT NITROGEN LOAD (lb/yr)	9.92	

--Select from dropdown lists-

DESIGN: VMM CHECKED: ACS SCALE: NO SCALE DATE: FEB 2022

DATE | REVISION

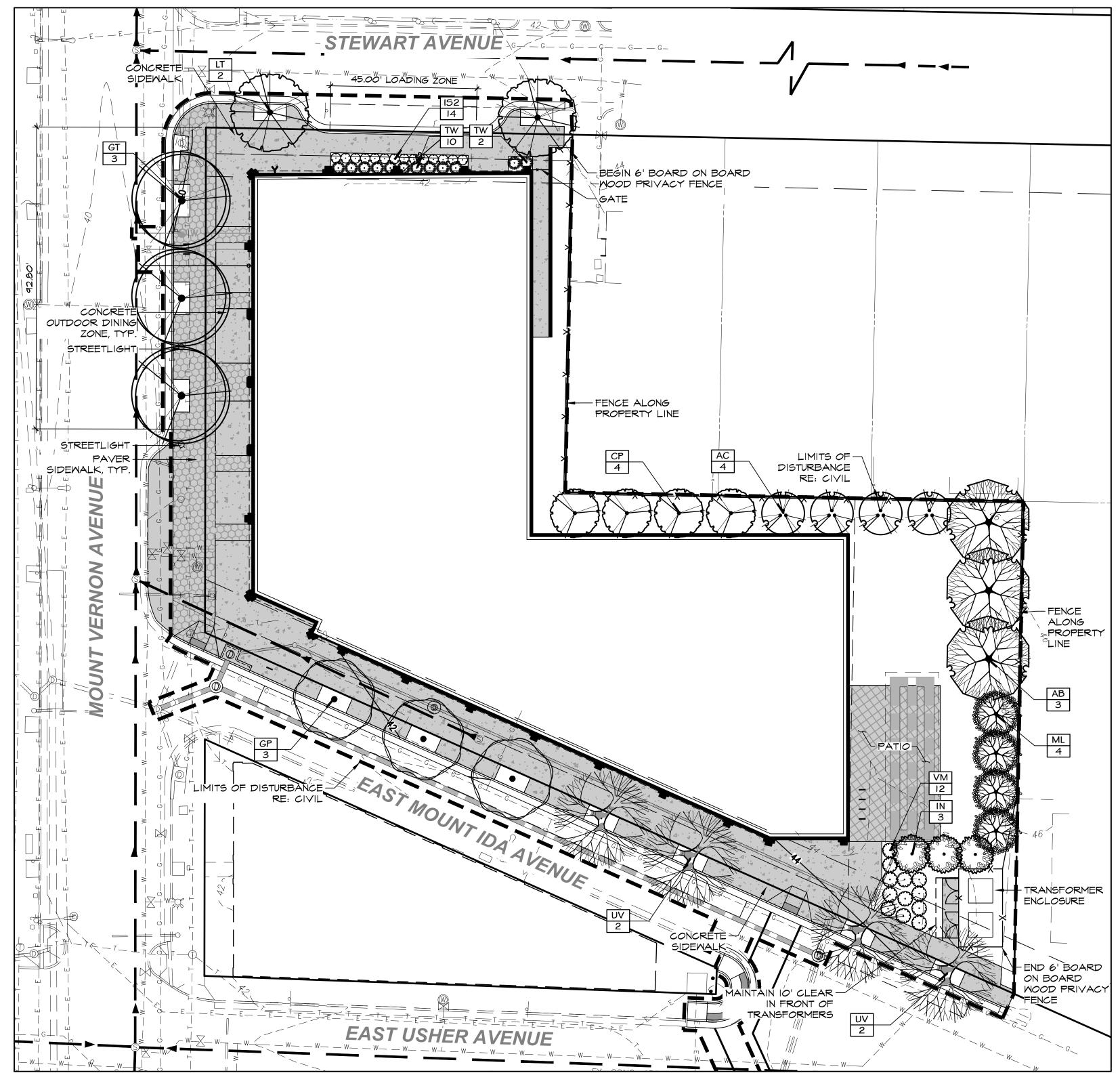
STORMWATER QUALITY COMPUTATIONS

APPROVED

DEPARTMENT OF PLANNING & ZONING

SITE PLAN NO. \_\_\_\_

SPECIAL USE PERMIT NO.



NORTH

## PLANT SCHEDULE

- 1								
	TREES	CODE	BOTANICAL NAME	COMMON NAME	<u>SIZE</u>	CONTAINER	<u>aty</u>	REMARKS
		AB	Acer saccharum 'Bailsta' TM	Fall Fiesta Sugar Maple	2" Cal.	B¢B	3	1250 CCA
	To and the second	AC	Amelanchier canadensis	Canadian Serviceberry	8' Ht., 3-Cane Min.	B≰B	4	500 CCA
		CP	Carpinus caroliniana 'CCSQU' TM	Palisade American Hornbeam	2" Cal.	B≰B	4	500 CCA
	$(\cdot)$	GP	Ginkgo biloba 'Autumn Gold'	Autumn Gold Ginkgo	2" Cal.	B≰B	3	
		<b>G</b> T	Gleditsia triacanthos var. inermis	Honey Locust	2" Cal.	B≰B	3	
		IN	llex x 'Nellie R. Stevens'	Nellie R. Stevens Holly	8' Ht.	B≰B	3	125 CCA
		LT	Liriodendron tulipifera	Tuliptree	2" Cal.	B≰B	2	
		ML	Magnolia grandiflora 'Little Gem'	Little Gem Dwarf Southern Magnolia	7'-8' ht.	B≰B	4	250 CCA
		UY	Ulmus americana 'Valley Forge'	American Elm	2" Cal.	B∉B	4	
	SHRUBS	CODE	BOTANICAL NAME	COMMON NAME	<u>SIZE</u>	CONTAINER	<u> QTY</u>	<u>REMARKS</u>
	$\odot$	152	ltea virginica 'Sprich' TM	Little Henry Sweetspire	18" Ht. Min.	#3	14	10 CCA
	MANUAL SERVICES	TM	Taxus x media 'Wardii'	Mardii Yew	18" Ht. Min.	#3	12	
	$\odot$	VM	Viburnum dentatum 'Blue Muffin'	Blue Muffin Arrowwood Viburnum	18" Ht. Min.	#5	12	25 CCA

# LANDSCAPE PLAN NOTES - CITY OF ALEXANDRIA

- 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.
- 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.

# LANDSCAPE PLAN

SCALE: 1"=20' SCALE: 1" = 20'

ALEXANDRIA LANDSCAPE REQUIREMENTS						
CODE REQUIREMENT		NCE SECTION 7-2507 FOR ALL CONSTRUCTION THAT 'ED TO PROVIDE A MINIMUM OF 25 PERCENT CANOPY	REQUIRES A GRADING PLAN, TREES MUST BE PLANTED OR EXISTING Y COVER OVER THE SITE.			
REQUIREMENT AREA	CALCULATION	PLANTING REQUIRED	PLANTING PROVIDED			
25% OF 37,012 SF SITE AREA	37,012 × 0.25 = 9,253 SF	9,253 SF CROWN COVERAGE REQUIRED (STREET TREES SHALL NOT BE CREDITED TOWARD CROWN COVERAGE). SHRUB PLANTINGS MAY NOT EXCEED 25% (2,313 SF) OF CROWN COVERAGE REQUIREMENT.	9,125 TREE CCA 440 SHRUB 9,565 TOTAL CCA PROVIDED			
CODE REQUIREMENT	PER THE MOUNT	VERNON AVENUE BUSINESS AREA PLAN, NEWLY PLAN	NTED TREES SHOULD NOT EXCEED 30 TO 40 FEET IN SPACING			
REQUIREMENT AREA	CALCULATION	PLANTING REQUIRED	PLANTING PROVIDED			
68 LF N STEWART AVENUE FRONTAGE (EXCLUDES 45' LOADING ZONE)	- 68 LF / 40 = 1.70	- 2 TREES REQUIRED ALONG N STEWART AVE.	- 2 TREES PROVIDED ALONG N STEWART AVE.			
-93 LF MOUNT VERNON AVENUE FRONTAGE	- 93 LF / 40 = 2.32	- 3 TREES REQUIRED ALONG MOUNT VERNON AVE.				
(EXCLUDES CITY BUS STOP)	-272 LF / 40 = 6.80	- 7 TREES REQUIRED ALONG MOUNT IDA AVE.	- 7 TREES PROVIDED ALONG MOUNT IDA AVE.			

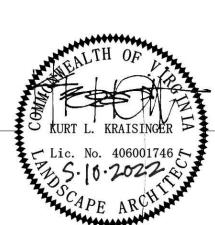
ALEXANDRIA PLANT SIZE REQUIREMENTS				
LANDSCAPE MATERIAL	SIZE REQUIREMENT (AT TIME OF PLANTING)			
CATEGORY   &    TREE	1.5"-1.75" CAL; 6'-10' HT.			
MULTI-STEM TREE	6' HT.			
EVERGREEN TREE	6' HT.			
CATEGORY III & IV TREE	2"-3" CALIPER, I2'-I4' HT.			
SHRUBS	18" HT. AT TIME OF INSTALLATION			
ORNAMENTAL GRASSES	I QT. MIN.			

PPROVED ECIAL USE PERMIT NO				
ARTMENT OF PLANNING & ZONING				
DIRECTOR	DATE			
ARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES				
E PLAN NO.				
DIRECTOR	DATE			
CHAIRMAN, PLANNING COMMISSION	DATE			
	DAIL			
E RECORDED				
TRUMENT NO. DEED BOOK NO.	DATE			



**DESIGN GROUP** 

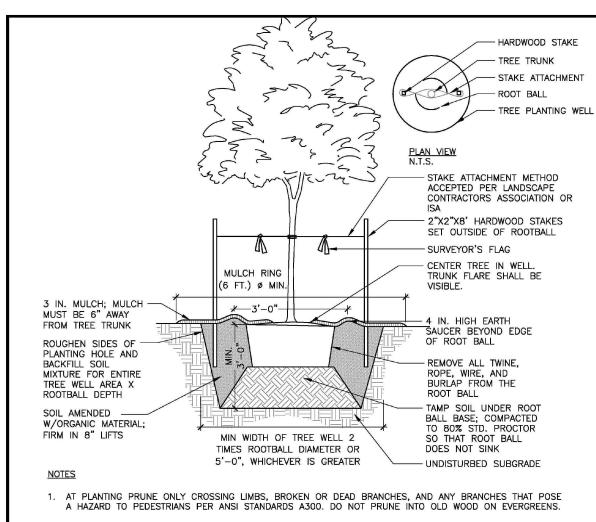
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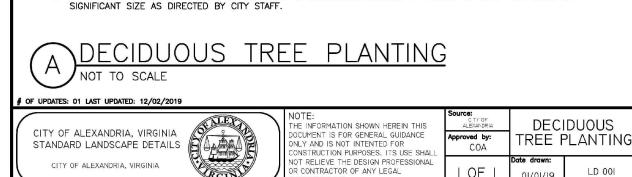
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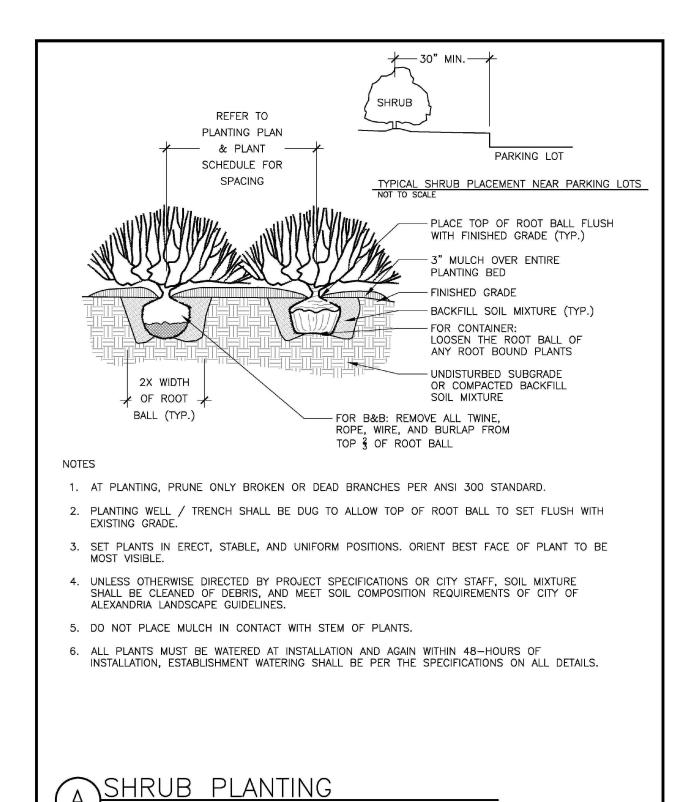
MAY 10, 2022

LANDSCAPE PLAN



- 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.





CUMENT IS FOR GENERAL GUIDANCE
LY AND IS NOT INTENTED FOR
NSTRUCTION PURPOSES. ITS USE SHALL

Approved by:
COA

RELIEVE THE DESIGN PROFI

RACTOR OF ANY LEGAL

SHRUB

PLANTING

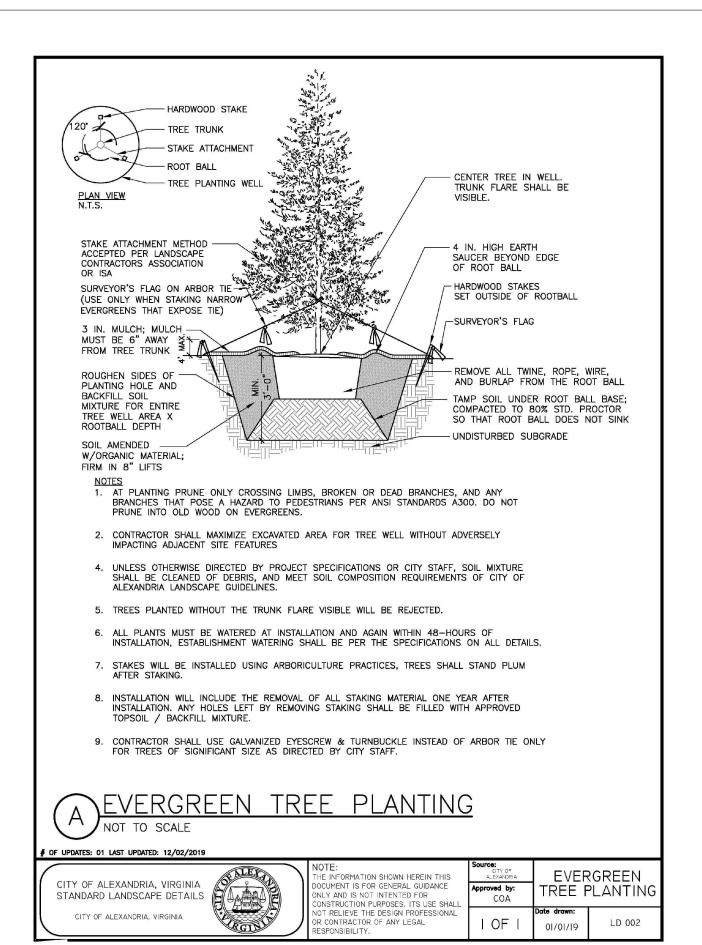
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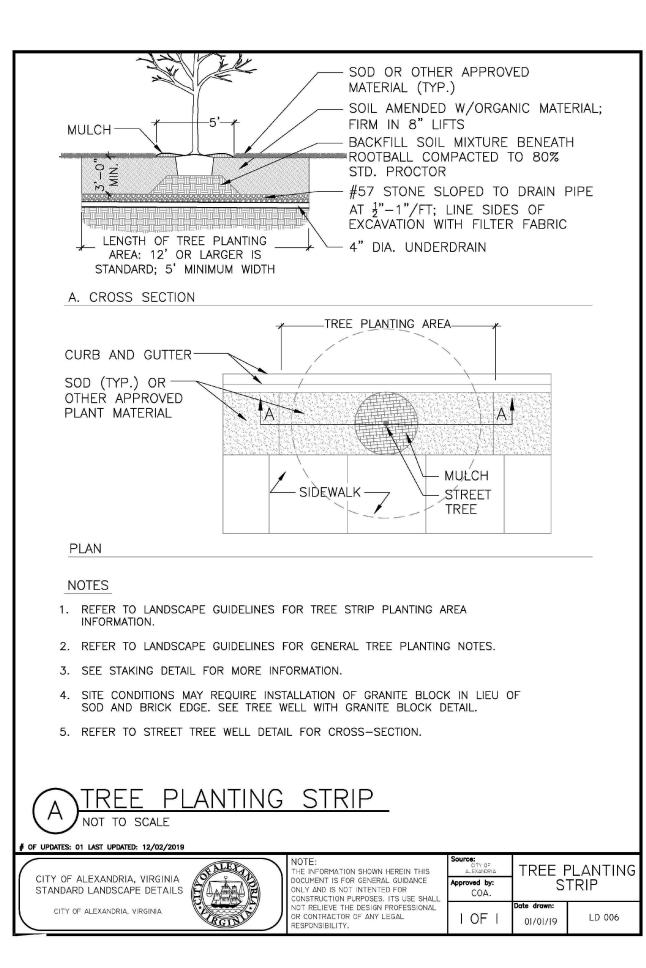
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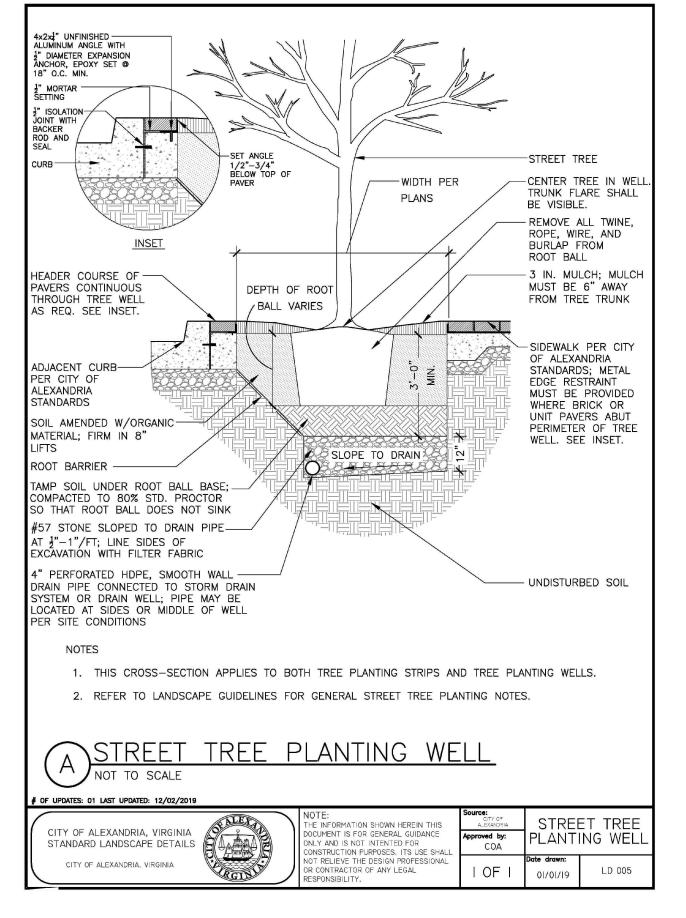
CITY OF ALEXANDRIA, VIRGINIA

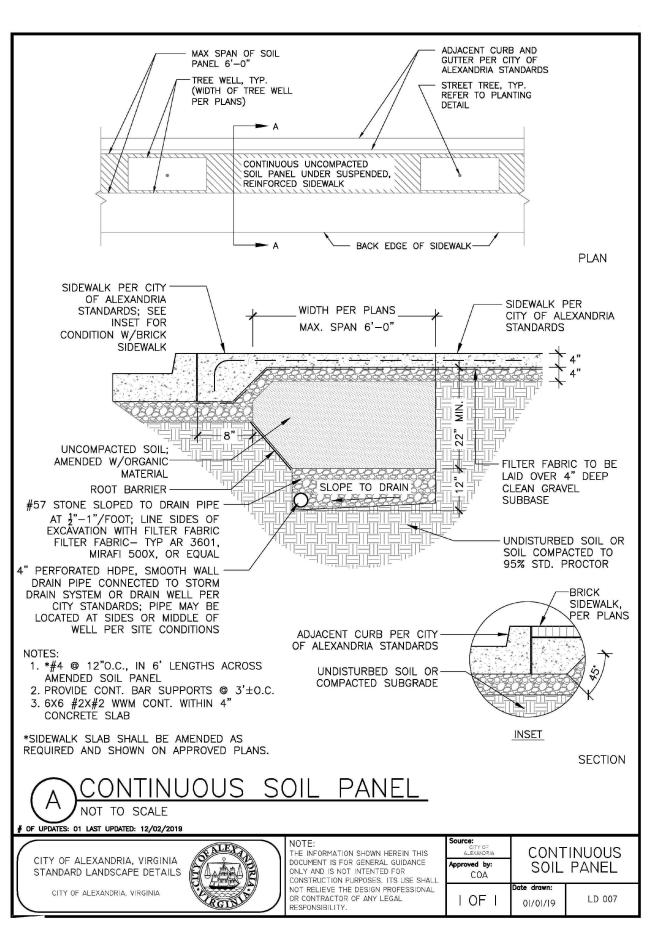
CITY OF ALEXANDRIA, VIRGINIA

STANDARD LANDSCAPE DETAILS













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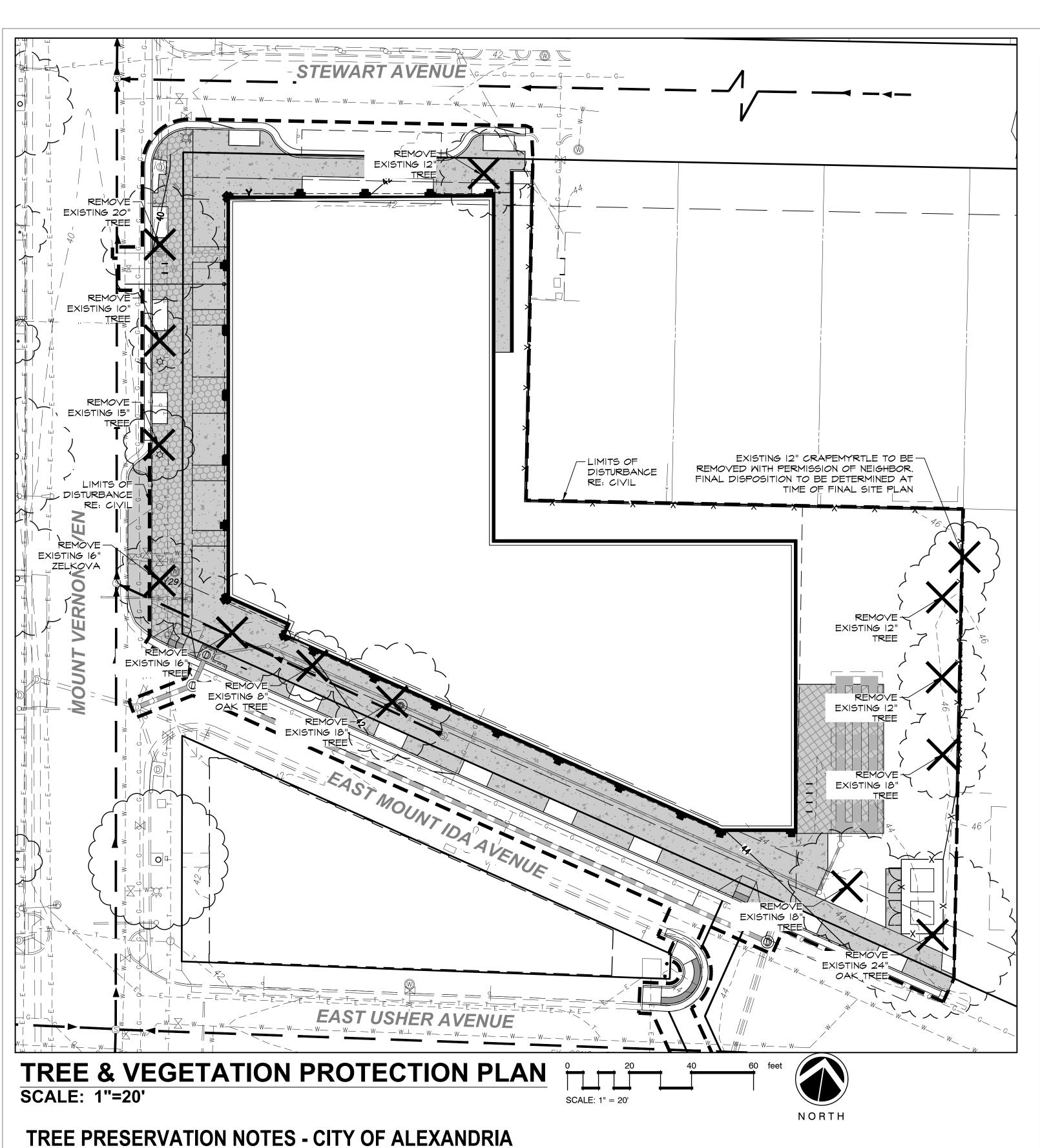
**REVISION:** 

MAY 9, 2022

LANDSCAPE DETAILS

APPROVED SPECIAL USE PERMIT NO	
EPARTMENT OF PLANNING & ZONING	
DIRECTOR	DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENT	NTAL SERVICES
SITE PLAN NO.	
DIRECTOR	DATE
CHAIRMAN, PLANNING COMMISSION	DATE
ATE RECORDED	_

INSTRUMENT NO. DEED BOOK NO. DATE



VEGETATION DESIGNATED FOR PROTECTION AND/OR PRESERVATION SHALL CONTINUOUSLY RECEIVE AN ENHANCED

• MAINTENANCE OPERATIONS SHALL AGGRESSIVELY MONITOR THE HEALTH, GROWTH AND VIGOR OF VEGETATION

· WHEN PRESERVED VEGETATION IS LOCATED ON CITY PROPERTY, MAINTENANCE SHALL BE PERFORMED TO THE

AREAS DESIGNATED FOR PROTECTION AND/OR PRESERVATION OF VEGETATION SHALL NOT BE ENTERED OR UTILIZED (APPROVED MAINTENANCE PROCEDURES AND WATERING EXCEPTED) THROUGHOUT THE ENTIRE CONSTRUCTION PERIOD.

MODIFYING SITE TOPOGRAPHY IN A MANNER THAT DIRECTLY OR INDIRECTLY ALTERS EXISTING SITE DRAINAGE

MITHIN PROTECTION ZONE INCLUDING TRENCHING OR GRADING OPERATIONS AND PLACING, STORING OR

• FELLING AND STORING VEGETATION. III. INCINERATING MATERIALS WITHIN OR IN CLOSE PROXIMITY.

• TEMPORARY OR PERMANENT UTILITY CONSTRUCTION, PAVING OR IMPERVIOUS SURFACE INSTALLATION. • DISPOSAL OF DEBRIS OR CHEMICALS, VII. TEMPORARY FACILITIES OR OCCUPATION BY WORK FORCE.

• OPERATING MACHINERY OR EQUIPMENT, INCLUDING VEHICLE/EQUIPMENT PARKING OR STORAGE.

AND PRESCRIBE SELECTIVE PRUNING, REMOVAL OF VOLUNTEER AND/OR INVASIVE SPECIES, WATERING,

LEVEL OF MAINTENANCE THROUGHOUT THE ENTIRE CONSTRUCTION PERIOD.

FERTILIZATION AND INSTALLATION OF MULCH/TOPDRESSING.

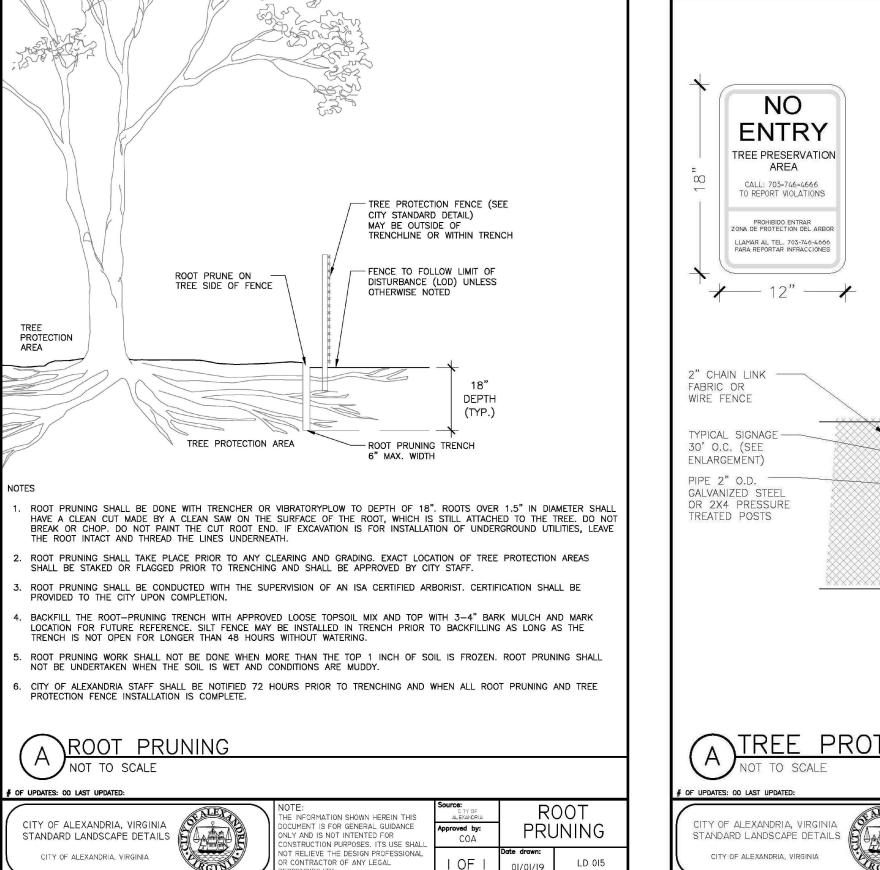
PROHIBITED ITEMS/ACTIVITIES INCLUDE, BUT ARE NOT LIMITED TO:

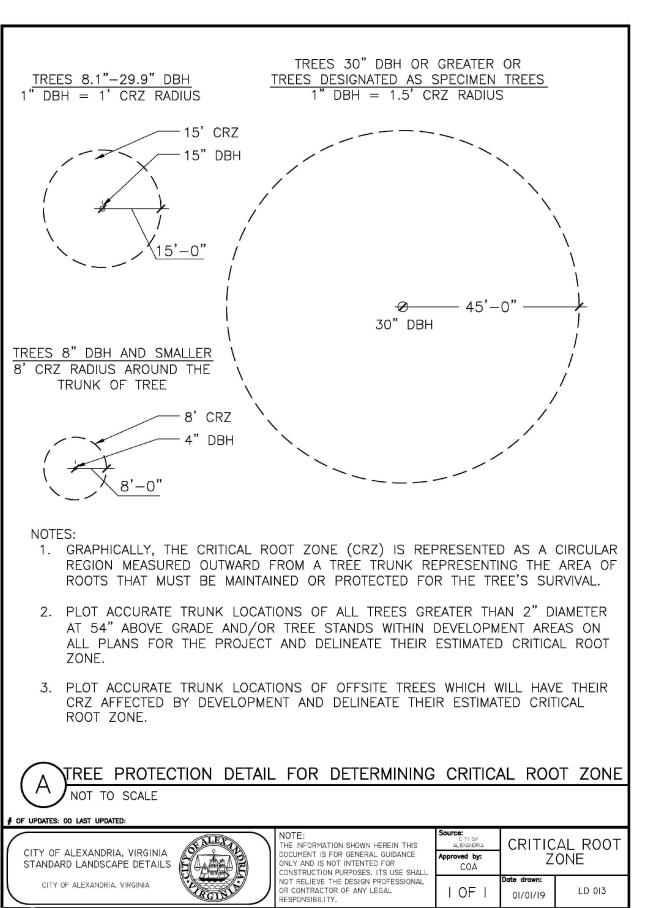
STOCKPILING SOIL OR CONSTRUCTION RELATED SUPPLIES.

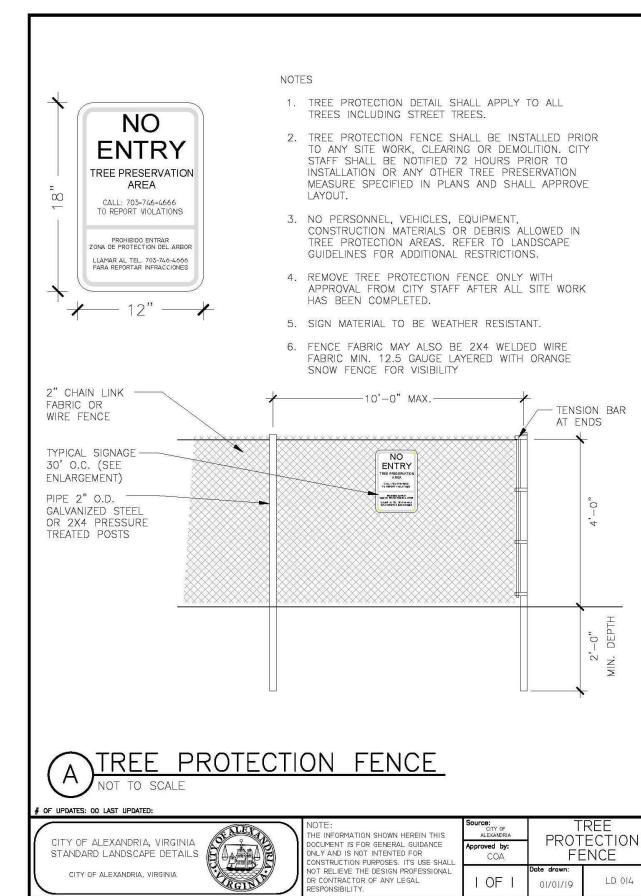
• STORAGE OF CONSTRUCTION MATERIALS OR WASTE.

• MAINTENANCE SHALL BE PRO-ACTIVE.

SATISFACTION OF THE CITY.









APPROVED SPECIAL USE PERMIT NO	
DEPARTMENT OF PLANNING & ZONING	
DIRECTOR  DEPARTMENT OF TRANSPORTATION & ENVIRONMEN  SITE PLAN NO	
DIRECTOR	DATE
CHAIRMAN, PLANNING COMMISSION	DATE
DATE RECORDED	
INSTRUMENT NO. DEED BOOK NO.	DATE

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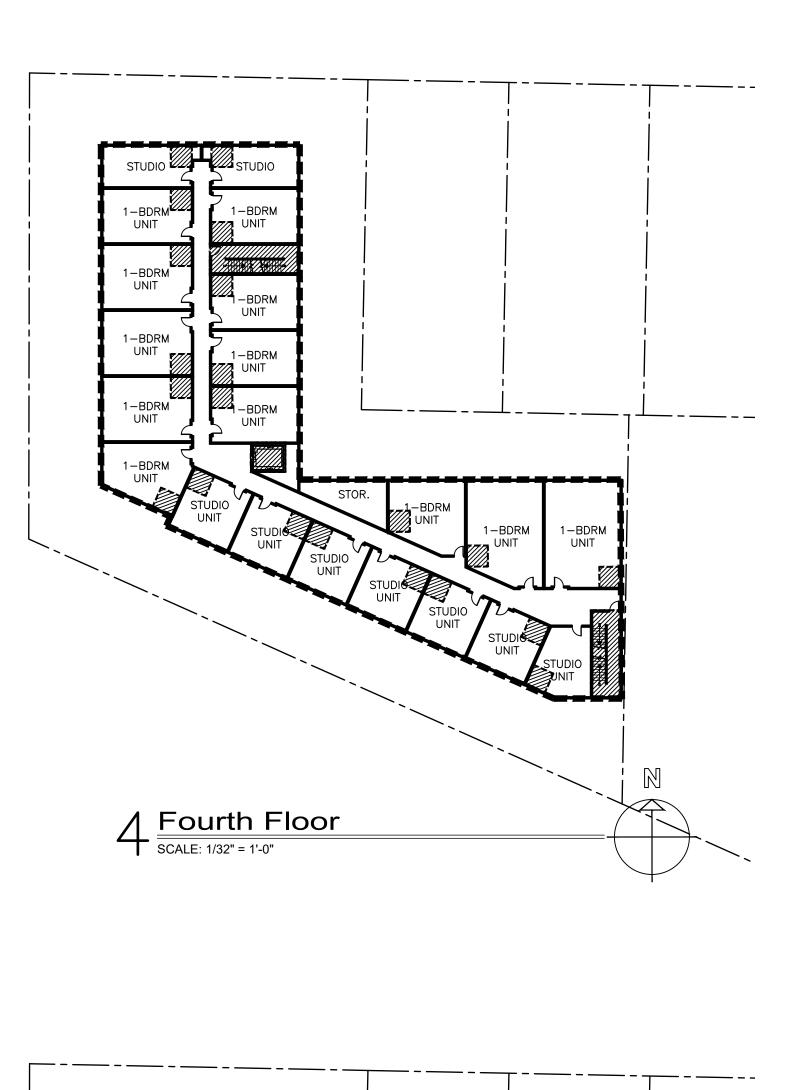
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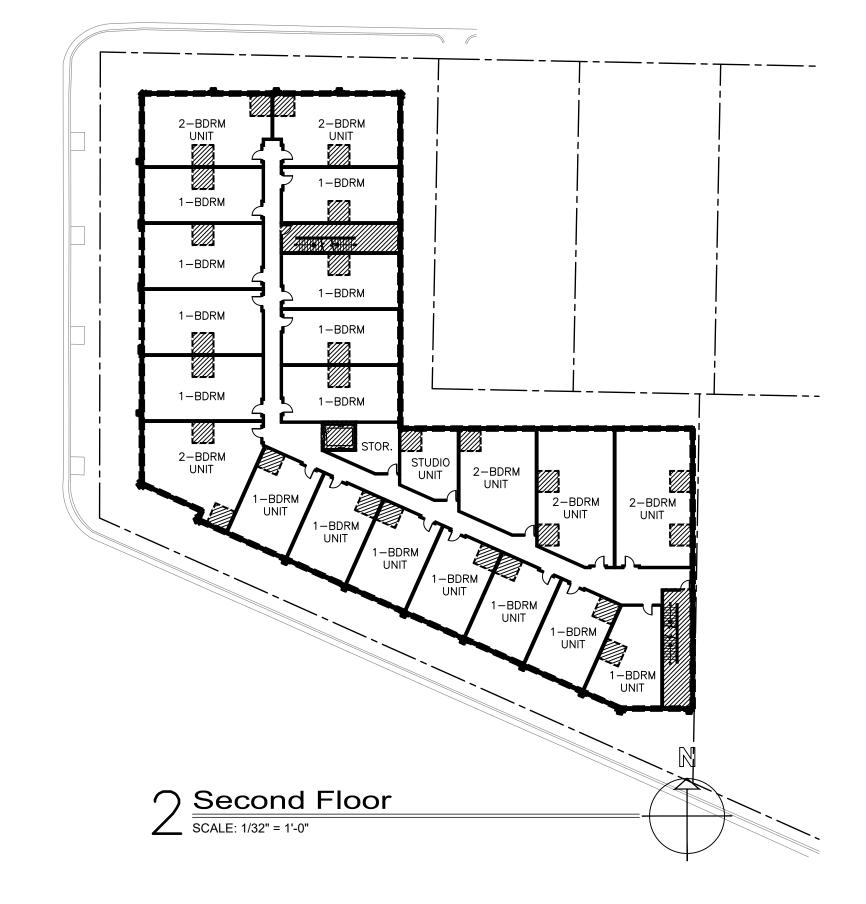


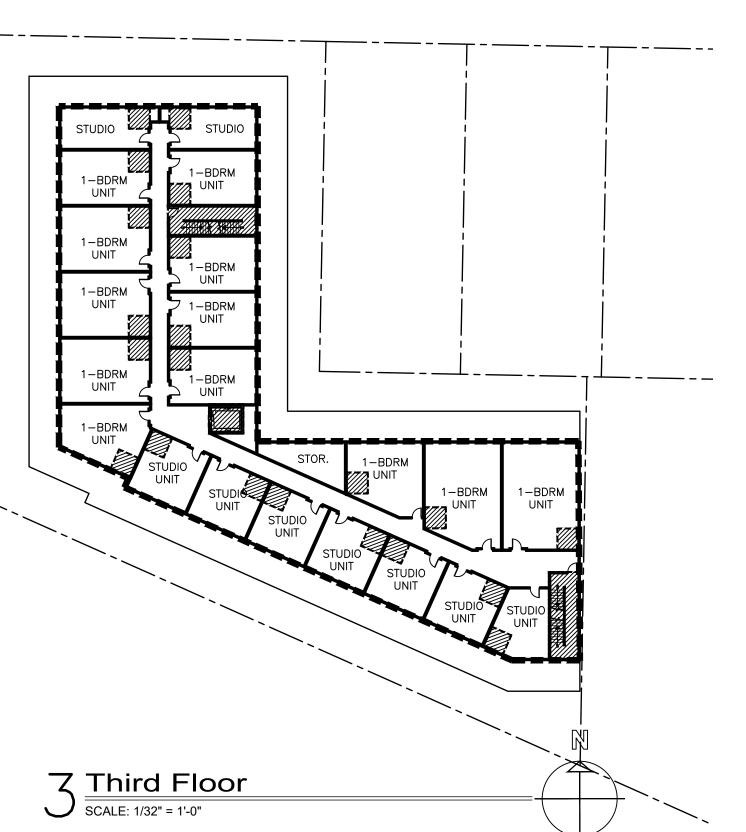
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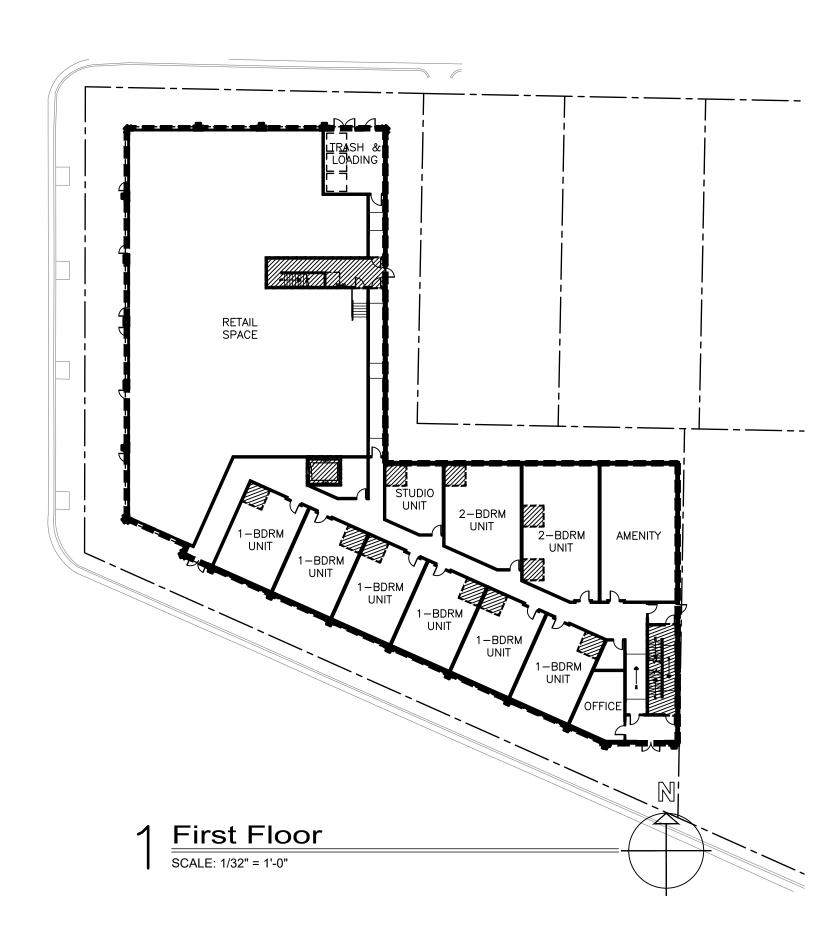
MAY 9, 2022

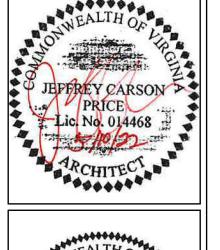
TREE & VEGETATION PROTECTION PLAN





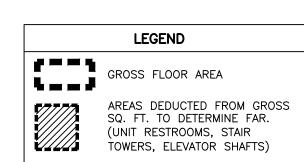








ALL SUBCONTRACTORS SHALL BE RESPONSIBLE FOR REVIEWING ALL DRAWINGS IN THE SET PRIOR TO PLACING BID.



FLOOR	GROSS SF	RESIDENTIAL NET SF	RETAIL NET SF	DEDUCTED SF FOR LAV.	DEDUCTED SF FOR STAIR, ELEVATOR &
1	21,000	10,900	8,800	480	820
2	21,000	18,750	0	1,320	930
3	15,000	13,200	0	1,100	700
4	15,000	13,200	0	1,100	700
T	72,000	56,050	8,800	4,000	3,150

PROPERTY AREA	37,012
FAR	1.75%
GENERAL NOTES:	

MEASURED TO THE OUTSIDE FACE OF ALL EXTERIOR WALLS.

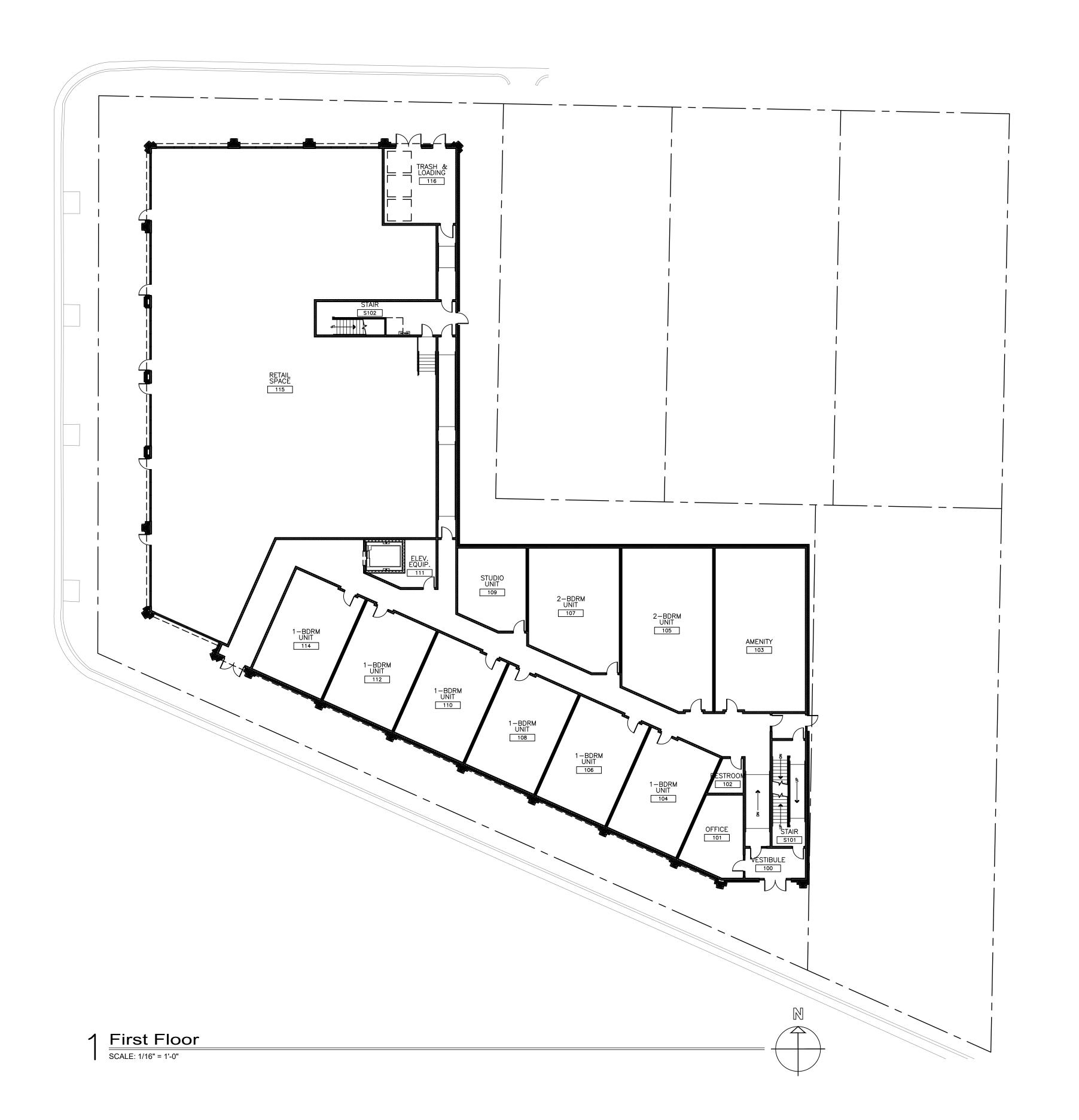
2. DEDUCTIONS INCLUDE ELEVATOR AND STAIR STRUCTURES, UTILITY AREAS NOT SUSCEPTIBLE TO STORAGE OR OCCUPANCY, LAVATORIES MAXIMUM 50 SF PER LAVATORY, SPACE UNDER OPEN BALCONIES AND SIMILAR STRUCTURES UP TO 8'-0" IN DEPTH. PER ALEVANDRIA ZONING OPPINANCE

APPROVED		
SPECIAL USE PERMIT NO		
DEPARTMENT OF PLANNING & ZONING		
DIRECTOR	DATE	
DEPARTMENT OF TRANSPORTATION & ENVIRON	NMENTAL SERVICES	
SITE PLAN NO.		
DIRECTOR	DATE	
	DATE	
CHAIRMAN, PLANNING COMMISSION		

REVISIONS:

PRELIMINARY

FAR CALCULATIONS	DJECT:         DATE:           -070         April 29, 2022	EET NUMBER:	A0.1







NOTE:
ALL SUBCONTRACTORS
SHALL BE RESPONSIBLE
FOR REVIEWING ALL
DRAWINGS IN THE SET
PRIOR TO PLACING BID.



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NOT

DESIGN

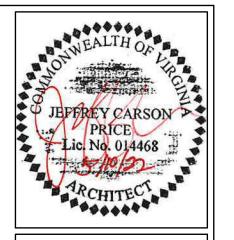
**PRELIMINARY** 

REVISIONS:

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INSTRUMENT NO. DEED BOOK NO. DATE







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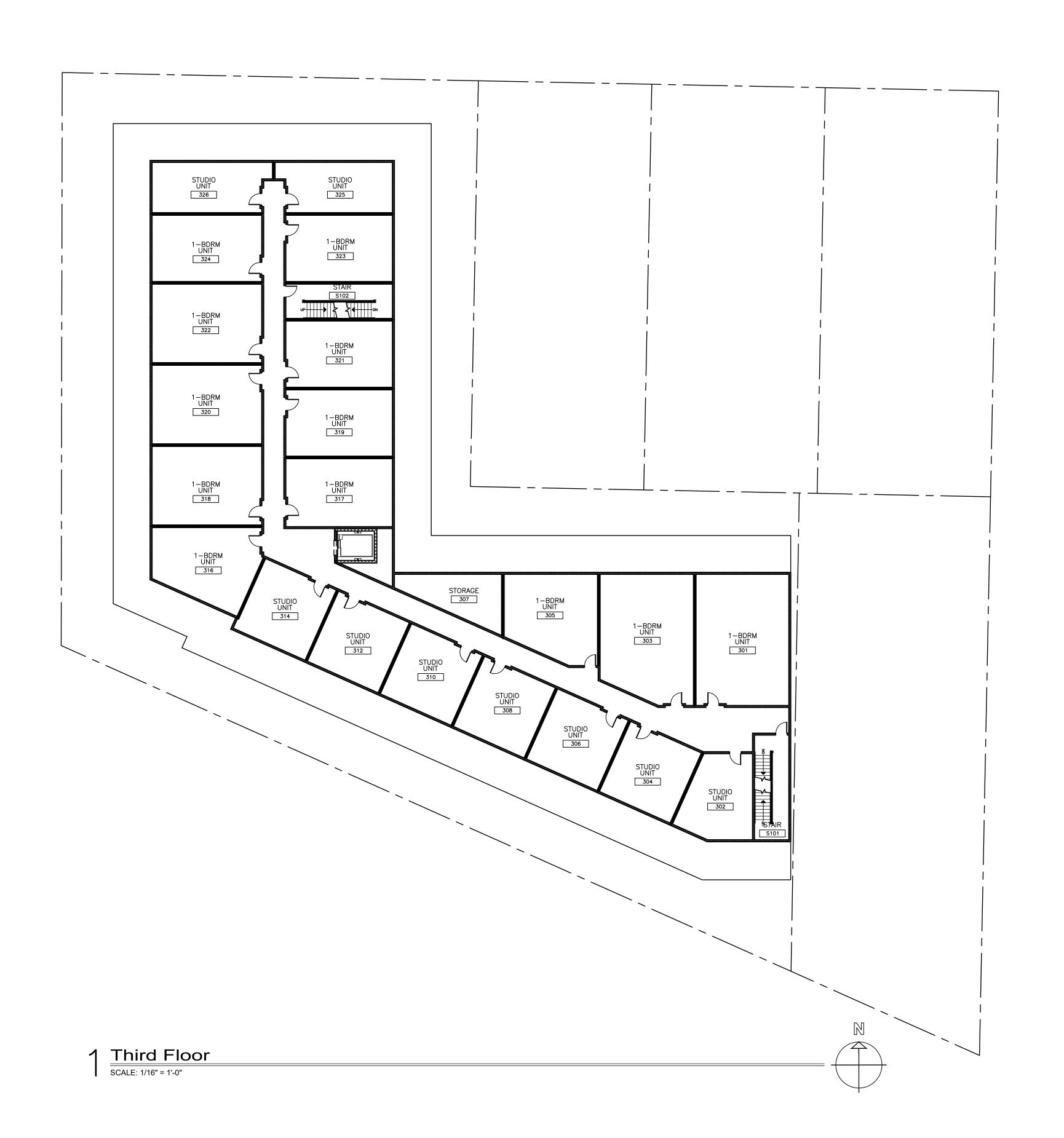
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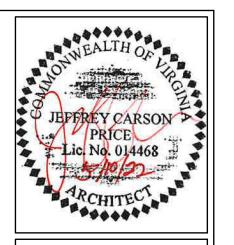
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**PRELIMINARY** REVISIONS:

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NOTE: ALL SUBCONTRACTORS SHALL BE RESPONSIBLE FOR REVIEWING ALL DRAWINGS IN THE SET PRIOR TO PLACING BID.

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DESIGN

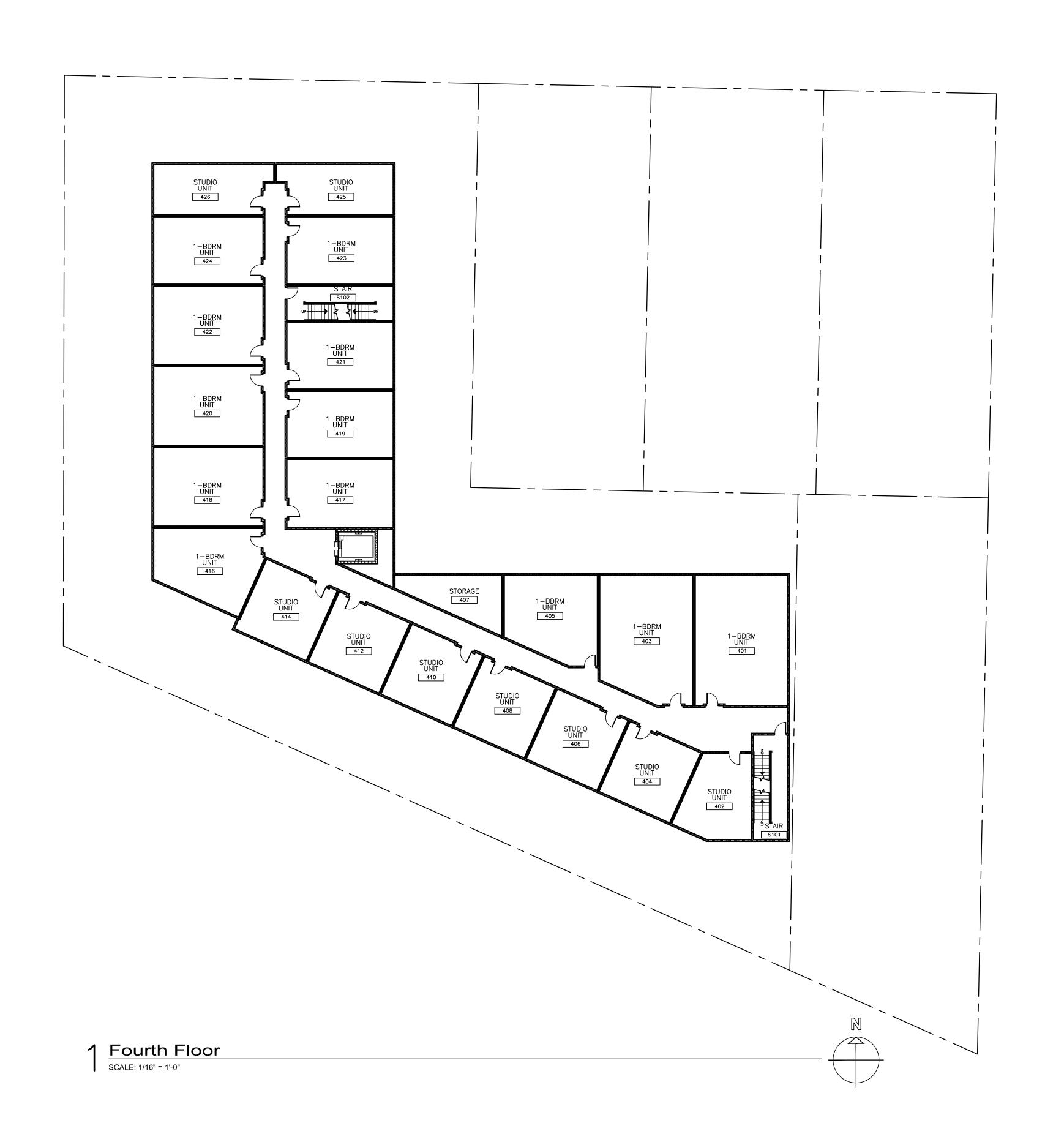
**PRELIMINARY** 

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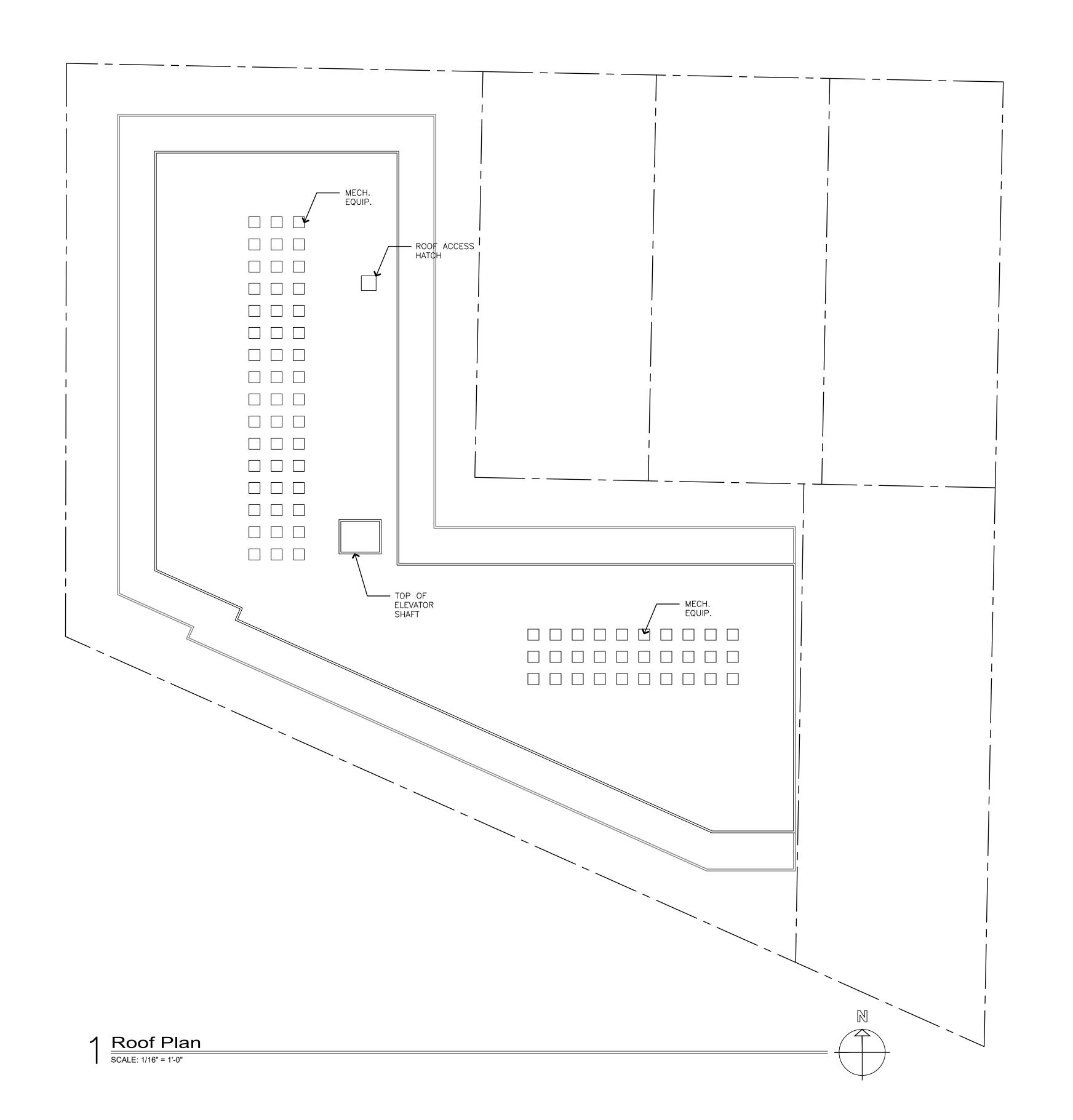
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Aerial of corner of Mt. Vernon & Mt. Ida



Corner of Mt. Vernon & Stewart

Conceptual Renderings



Corner of Mt. Vernon & Mt. Ida



Facade Along Mt. Ida

