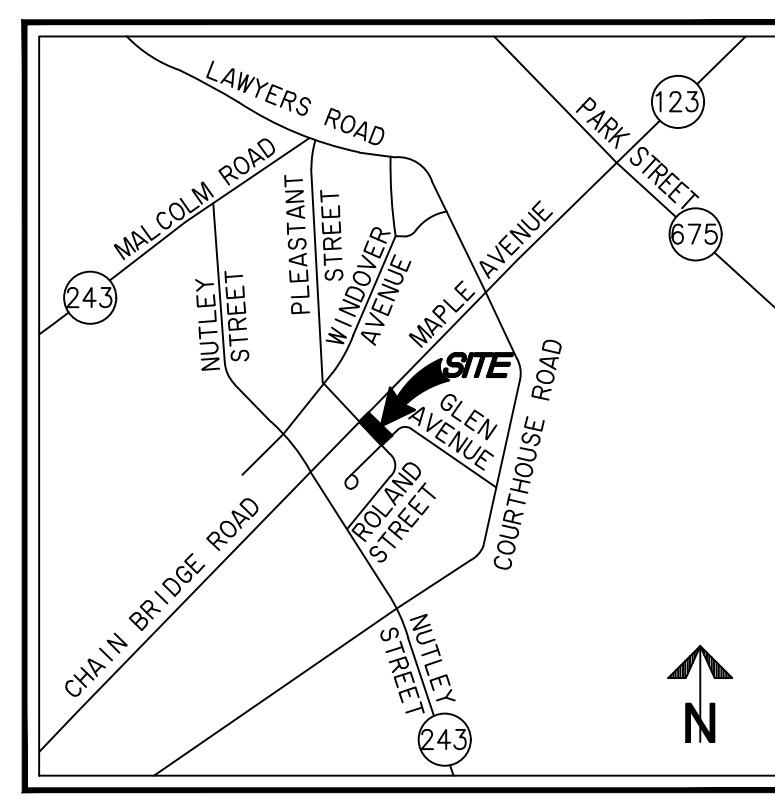


# SUNRISE OF VIENNA

374 - 380 MAPLE AVENUE WEST

MAPLE AVENUE COMMERCIAL (MAC) AMENDMENT - CONDITIONAL USE PERMIT

INITIAL SUBMISSION - NOVEMBER 1, 2019



VICINITY MAP SCALE: 1" = 2000'

## DEVELOPMENT TEAM

**OWNER**  
RED INVESTMENT LLC  
PO BOX 1208  
VIENNA, VA 22183

**APPLICANT**  
SUNRISE DEVELOPMENT, INC.  
7902 WESTPARK DR  
MCLEAN, VA 22102  
703-774-1873  
CONTACT: JERRY LIANG

**ATTORNEY**  
WOMBLE BOND DICKINSON (US) LLP  
8065 LEESBURG PIKE, 4TH FLOOR  
TYSONS CORNER, VA 22182-2738  
703-394-2261  
CONTACT: SARA MARISKA

**ARCHITECT**  
RUST | ORLING ARCHITECTURE  
1215 CAMERON STREET  
ALEXANDRIA, VA 22314  
703-836-3205  
CONTACT: SCOTT FLEMING

**CIVIL ENGINEER/LANDSCAPE ARCHITECT**  
WALTER L. PHILLIPS, INC.  
207 PARK AVENUE  
FALLS CHURCH, VA 22046  
703.532.6163  
CONTACT: TRAVIS P. BROWN, P.E.

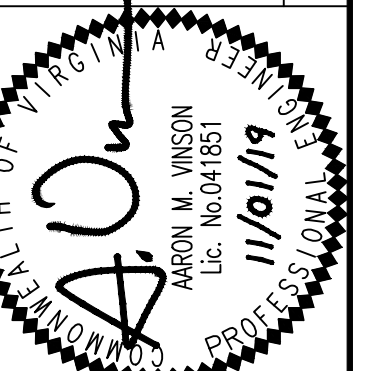
## SHEET INDEX

- P-0101 COVER SHEET
- P-0102 NOTES AND TABULATIONS
- P-0201 CONTEXT PLAN
- P-0202 EXISTING CONDITIONS PLAN
- P-0301 CONCEPT PLAN
- P-0302 VEHICLE TURNING MOVEMENTS
- P-0302A VEHICLE TURNING MOVEMENTS - AMBULANCE
- P-0303 OPEN SPACE AND IMPERVIOUS AREA ANALYSIS
- P-0401 CONCEPTUAL LANDSCAPE PLAN
- P-0402 CONCEPTUAL LANDSCAPE NOTES AND DETAILS
- P-0501 CONCEPTUAL STORMWATER MANAGEMENT NARRATIVE AND DETAILS
- P-0502 STORMWATER OUTFALL MAP AND NARRATIVE
- P-0503 VRRM SPREADSHEET
- A1.1 FLOOR PLANS
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- A2.1 EXTERIOR ELEVATIONS
- A2.2 EXTERIOR ELEVATIONS
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- A4.1 COMPARISONS WITH PREVIOUS PROJECT
- E-001 PHOTOMETRICS PLAN

COVER SHEET

**SUNRISE OF VIENNA**  
MAC AMENDMENT PLAN  
374 - 380 MAPLE AVENUE WEST  
TOWN OF VIENNA, VIRGINIA 22180

NO.	DESCRIPTION	DATE	REV. BY	APPROVED BY	DATE



**WALTER L. PHILLIPS**  
INCORPORATED  
ESTABLISHED 1945  
DATE: 11/01/2019  
DRAWN: TPB  
CHECKED: AV

Engineers • Surveyors • Planners  
Landscape Architects • Arborists  
207 PARK AVENUE  
FALLS CHURCH, VIRGINIA 22046  
(703) 532-6163 Fax (703) 533-1301  
www.WLPINC.com



**TREE INVENTORY**

Town of Vienna		Tree Inventory						
Tree #	Botanical Name	Common Name	Size DBH (in)	Critical Root Zone (CRZ) Radius (ft)	Species Rating (%)	Condition (%)	Notes	
Tree Survey Information Completed by Walter Phillips, Inc - Arborist Ben Schitter- ISA # MA-5385A # (19-098) 10/25/2019								
101	Robinia pseudoacacia	Black locust	12"	18'	55%	68%		
102	Acer rubrum	Red maple	40"	60'	70%	69%		
103	Robinia pseudoacacia	Black locust	14"	21'	55%	59%		
104	Robinia pseudoacacia	Black locust	11"	17'	55%	59%		
105	Robinia pseudoacacia	Black locust	13"	20'	55%	50%		
106	Robinia pseudoacacia	Black locust	11"	17'	55%	50%		
107	Robinia pseudoacacia	Black locust	8"	8'	55%	50%		
108	Catalpa speciosa	Northern catalpa	15"	23'	60%	63%		
109	Robinia pseudoacacia	Black locust	6"	8'	55%	33%		
110	Dead	Dead	5"	0'	0%	0%		
111	Robinia pseudoacacia	Black locust	5"	8'	55%	33%		
112	Robinia pseudoacacia	Black locust	6"	8'	55%	41%		
113	Robinia pseudoacacia	Black locust	6"	8'	55%	50%		
114	Robinia pseudoacacia	Black locust	9"	14'	55%	50%		
115	Robinia pseudoacacia	Black locust	9"	14'	55%	41%		
116	Robinia pseudoacacia	Black locust	10"	15'	55%	41%		
117	Robinia pseudoacacia	Black locust	12"	18'	55%	41%		
118	Prunus serotina	Black cherry	12"	18'	55%	59%		
119	Robinia pseudoacacia	Black locust	10"	15'	55%	50%		
120	Robinia pseudoacacia	Black locust	13"	20'	55%	50%		
121	Robinia pseudoacacia	Black locust	6"	8'	55%	50%		
122	Robinia pseudoacacia	Black locust	7"	8'	55%	50%		
123	Robinia pseudoacacia	Black locust	8"	8'	55%	50%		
124	Robinia pseudoacacia	Black locust	8"	8'	55%	41%		
125	Lonicera japonica	Japanese honeysuckle	6"	8'	0%	63%		
126	Robinia pseudoacacia	Black locust	8"	8'	55%	41%		
127	Robinia pseudoacacia	Black locust	8"	8'	55%	41%		
128	Robinia pseudoacacia	Black locust	8"	8'	55%	41%		
129	Robinia pseudoacacia	Black locust	10"	15'	55%	66%		
130	Robinia pseudoacacia	Black locust	12"	18'	55%	63%		
131	Cupressocyparis leylandii	Leyland cypress	6"	8'	60%	69%		
132	Cupressocyparis leylandii	Leyland cypress	6"	8'	60%	69%		
133	Cupressocyparis leylandii	Leyland cypress	6"	8'	60%	69%		
134	Lagerstroemia indica	Crape Myrtle	5"	8'	78%	69%		
135	Morus alba	White mulberry	12"	18'	30%	66%		
136	Picea abies	Norway spruce	20"	30'	55%	63%		
137	Picea abies	Norway spruce	15"	23'	55%	59%		
138	Juniperus virginiana	Eastern redcedar	14"	21'	75%	66%		
139	Pinus strobus	Eastern white pine	33"	50'	55%	63%		

DBH = Diameter at Breast Height (measured 4.5 feet above ground)  
 CRZ = Critical Root Zone = 1 foot radius per inch of tree diameter, trees over 30" DBH= 1.5 foot radius per inch of tree diameter  
 CRZ values for trees with multiple stems were calculated based on methods outlined in the 9th edition of the Guide for Plant Appraisal, published by the International Society of Arboriculture  
 Condition Ratings provided as percentages based on methods outlined in the 9th edition of the Guide for Plant Appraisal, published by the International Society of Arboriculture

NOTE: SEE SHEET P-0202 FOR EXISTING TREE LOCATIONS.

**NOTES**

- THE PROPERTY DELINEATED ON THIS PLAT IS DESIGNATED BY FAIRFAX COUNTY AS TAX MAP REFERENCE NUMBER 0383-02-0147 AND IS ZONED MAC.
- THE PROPERTY IS NOW IN THE NAME OF RED INVESTMENT LLC AS RECORDED IN DEED BOOK 23221 AT PAGE 1929, AMONG THE LAND RECORDS OF FAIRFAX COUNTY, VIRGINIA.
- TOTAL AREA OF THE PROPERTY IS 36,842 OR 0.8458 (RECORD).
- THERE ARE NO ENVIRONMENTALLY SENSITIVE OR HISTORICAL FEATURES KNOWN TO EXIST ON THIS SITE.
- THIS PLAN IS IN CONFORMANCE WITH THE MAC CODE IN PLACE AT THE TIME OF THE ORIGINAL REZONING APPLICATION SUBMISSION AND IS AN AMENDMENT TO THE MAC PLAN THAT WAS APPROVED FOR THE PROPERTY ON 06/17/2019.

**REQUESTED MODIFICATIONS SUMMARY**

- REQUEST TO REDUCE LOADING WIDTH REQUIREMENT FROM 15 FT/50 FT BUILDING WIDTH TO 15 FT.

**INCENTIVE FEATURES SUMMARY**

- INCREASE MAXIMUM IMPERVIOUS AREA FOR THE SITE FROM 80% TO 90% VIA INCENTIVE BONUSES (SEE INCENTIVE INFORMATION ON THIS SHEET).

**ZONING TABULATION**

EXISTING/PROPOSED ZONE: MAPLE AVENUE COMMERCIAL (MAC)

AREA TABULATIONS	SQ. FT.	ACRES
TOTAL SITE AREA	36842	0.8458
PROPOSED ROW DEDICATION	0	0.0000
TOTAL POST-DEDICATION SITE AREA	36842	0.8458

ZONING TABULATIONS	MAC ZONING REQUIREMENTS	PROVIDED
LOT WIDTH	NONE	143.08
BUILDING WIDTH	NONE	124 FT (MAPLE AVE)
BUILDING HEIGHT	4 STORIES, 54 FT	4 STORIES, 54 FT
AVERAGE FRONT GRADE*	NONE	397.75
YARD REQUIREMENTS		
FRONT - MAPLE AVENUE WEST	20 FT	20.0 FT
FRONT - WADE HAMPTON DR. SW	15 FT	15.0 FT
FRONT - GLEN AVENUE SW	15 FT	26.6 FT
SIDE (EAST PROPERTY LINE)	8 FT	8.2 FT
LOADING SPACE DEPTH	25 FT	30 FT
LOADING SPACE WIDTH	15 FT/50 FT BLDG WIDTH**	15 FT
LOADING SPACE HEIGHT	15 FT	15 FT
IMPERVIOUS AREA (MAXIMUM)	80% + 10% INCENTIVE BONUS = 90%	86.07%
OPEN SPACE	15% OF LOT AREA (5,526 SF)	25.42%

\*\*MODIFICATION REQUESTED FOR LOADING WIDTH REDUCTION TO 15 FT

INCENTIVES FEATURES	REQ.
10% INCREASE TO MAXIMUM IMPERVIOUS AREA	AA, BBB

INCENTIVE BONUSES PROPOSED	BONUS
Underground parking to accommodate 51% or more of spaces	AA
Inclusion of shower and dressing facilities for employees	B
Construction of Principle Structure to earn the Design for Energy Star certification	BB

**PARKING TABULATIONS**

PARKING TABULATION		
<b>PARKING REQUIRED</b>		
ASSISTED LIVING*	1 SP/ 3 BEDS X 120 BEDS =	40
	1 SP/EMPLOYEE X 35 EMP. =	35
COMMERCIAL**	1 SP/4 SEATS X 20 SEATS =	5
<b>TOTAL</b>		<b>80</b>
GARAGE PARKING PROVIDED		80
<b>TOTAL PARKING PROVIDED</b>		<b>80</b>
<b>PARKING PROVIDED W/ 1.25 MULTIPLIER</b>		<b>100</b>

\*ASSISTED LIVING USES ARE NOT ASSIGNED A PARKING REQUIREMENT IN THE TOWN OF VIENNA ZONING ORDINANCE. THEREFORE, PARKING REQUIREMENTS FOR FAIRFAX COUNTY HAVE BEEN USED FOR THIS APPLICATION.

\*\*POTENTIAL RESTAURANT

**DEVELOPMENT TABULATIONS**

EXISTING/PROPOSED ZONE: MAPLE AVENUE COMMERCIAL (MAC)

DEVELOPMENT TABULATIONS	
UNITS/BEDS	85/120
GARAGE GROSS FLOOR AREA (BELOW GRADE) (SF)	29538
GARAGE GROSS FLOOR AREA (ABOVE GRADE) (SF)	16493
ASSISTED LIVING GFA (ABOVE GRADE) (SF)	78990
COMMERCIAL (POTENTIAL RESTAURANT) (SF)	950
TOTAL GSF =	125,971 SQ. FT.

**BIKE PARKING TABULATIONS**

BIKE PARKING REQUIRED (18-95.10.F):	
RETAIL/RESTAURANT =	1 SP/5000 SF X 950 SF = 1 SPACE
	1 SP/25,000 SF (EMPLOYEES) X 950 SF = 1 SPACE
ASSISTED LIVING =	1 SP/5,000 SF X = 78,990 SF = 16 SPACES
	1 SP/25,000 SF (EMPLOYEES) X 78,990 SF = 4 SPACES
<b>TOTAL PARKING REQUIRED =</b>	<b>22 SPACES</b>

BIKE PARKING PROVIDED:	
SURFACE/STREETSCAPE =	8 SPACES
GARAGE =	14 SPACES
<b>TOTAL BIKE PARKING PROVIDED =</b>	<b>22 SPACES</b>

NOTES AND TABULATIONS

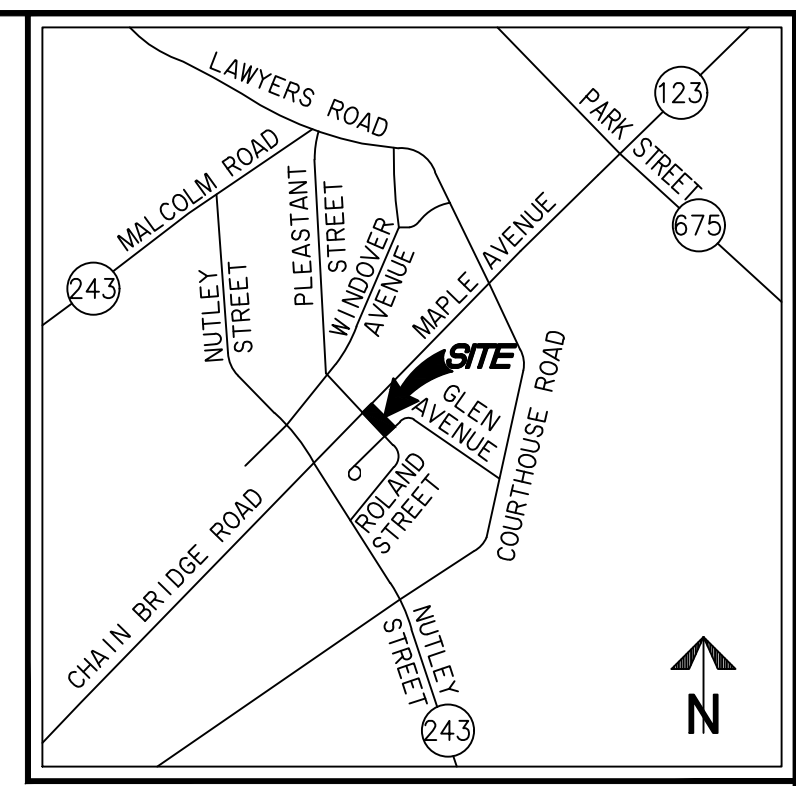
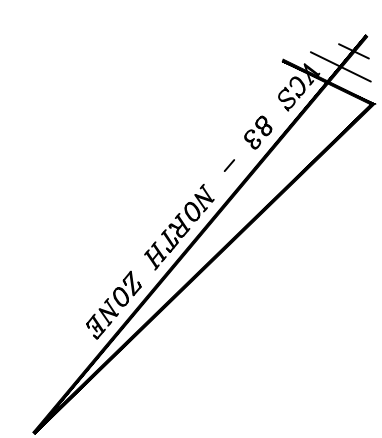
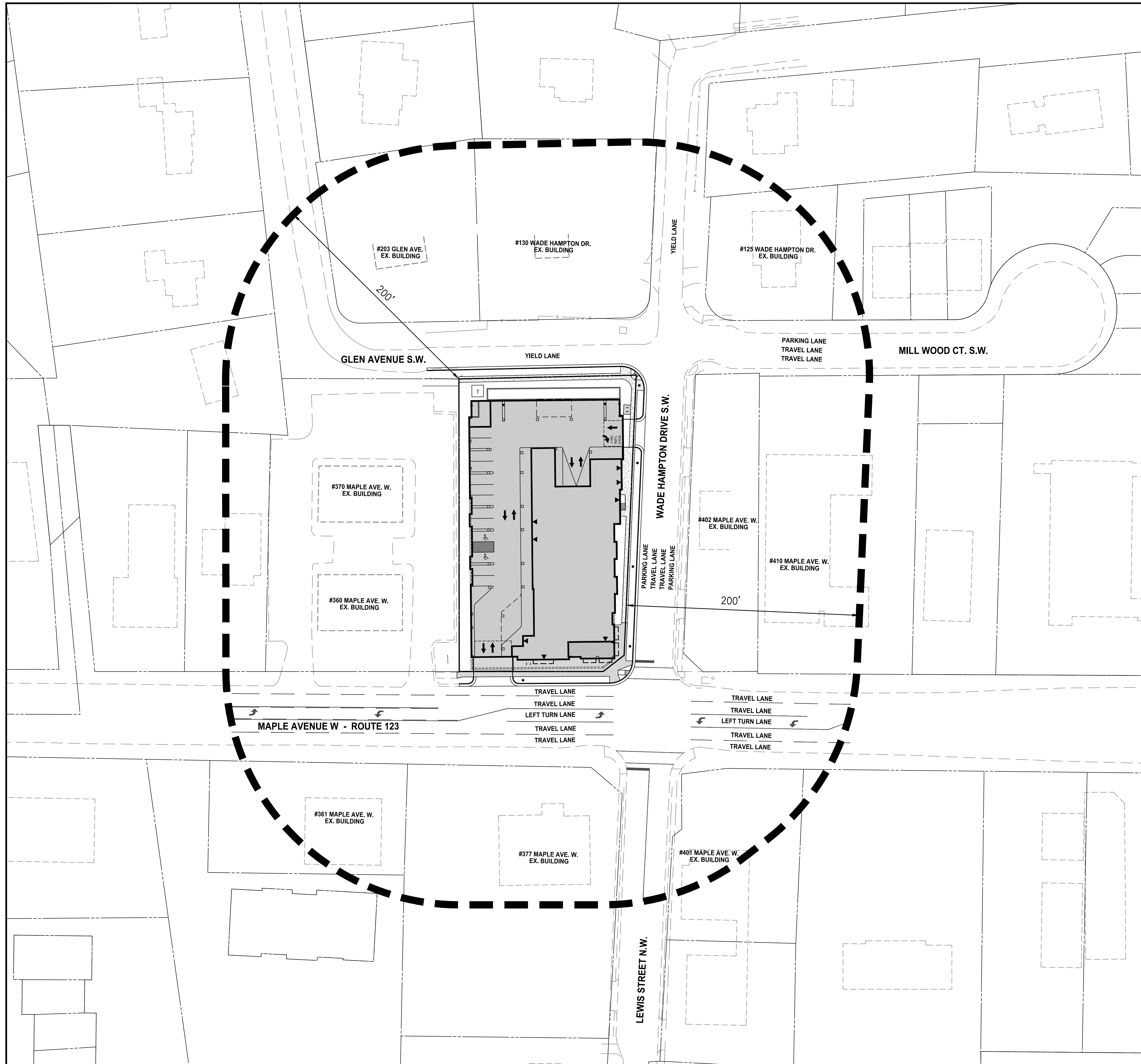
**SUNRISE OF VIENNA**  
 MAC AMENDMENT PLAN  
 374 - 380 MAPLE AVENUE WEST  
 TOWN OF VIENNA, VIRGINIA 22180



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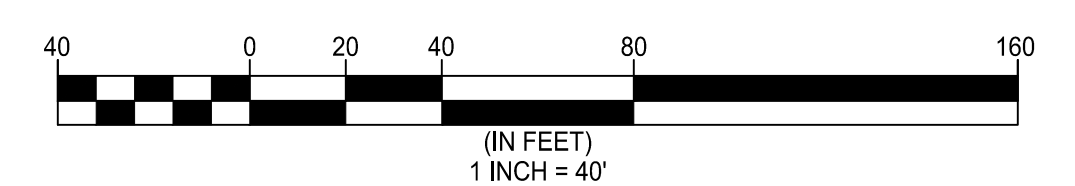
NO.	DESCRIPTION	DATE	REV. BY	APPROVED





VICINITY MAP SCALE: 1"=2000'

NOTE: SEE EXISTING CONDITIONS PLAN FOR ADJACENT OWNERSHIP INFORMATION.



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**WALTER L. PHILLIPS**  
INCORPORATED ESTABLISHED 1945

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207 PARK AVENUE  
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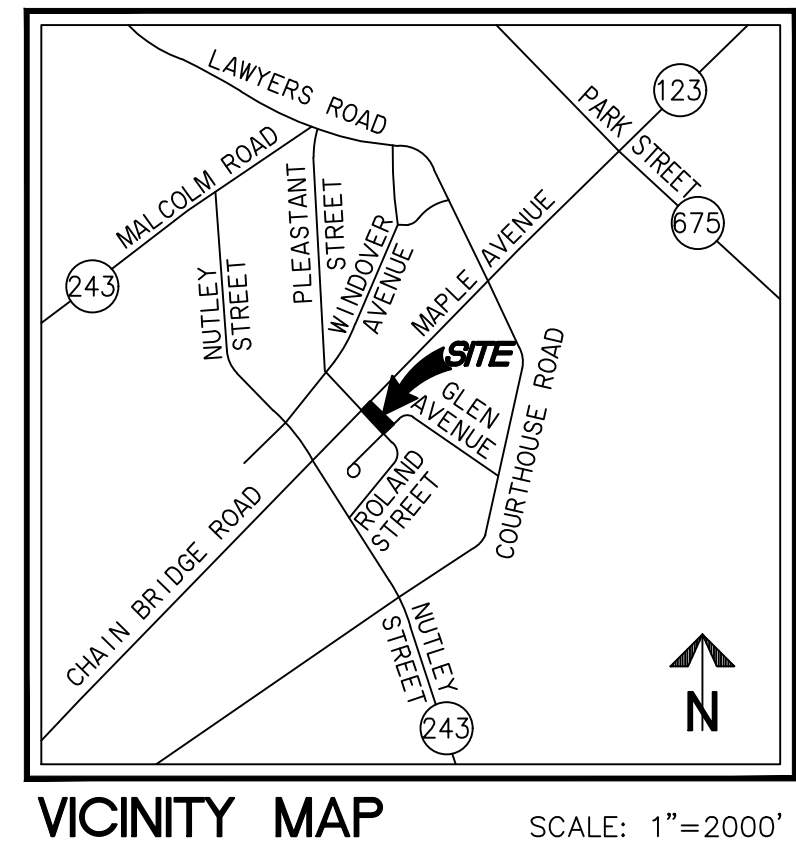
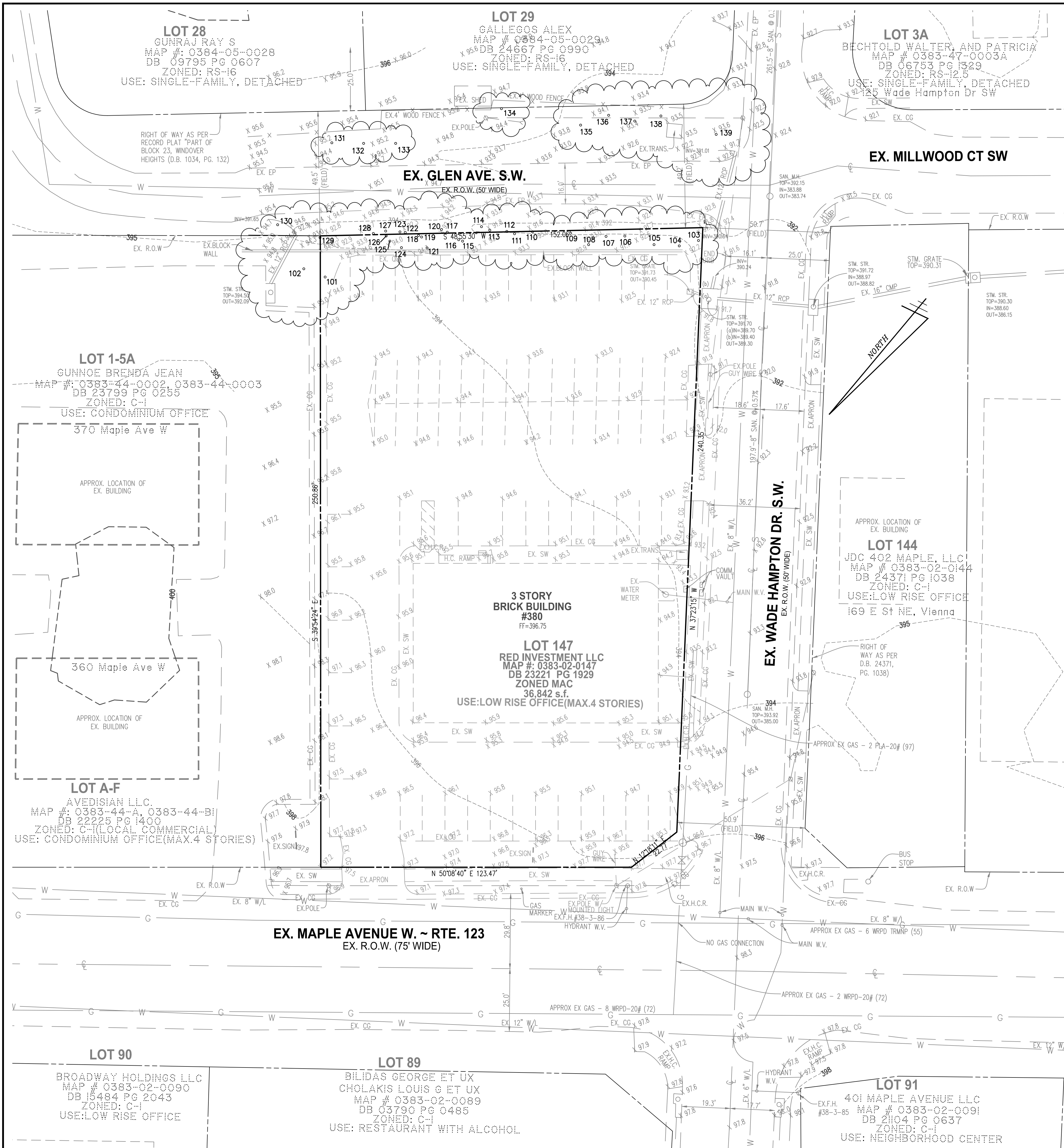
DATE: 11/01/19  
11/01/19  
ARON M. WINSON  
Lic. No. 041851

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

**CONTEXT PLAN**

**SUNRISE OF VIENNA**  
MAC AMENDMENT PLAN  
374 - 380 MAPLE AVENUE WEST  
TOWN OF VIENNA, VIRGINIA 22180

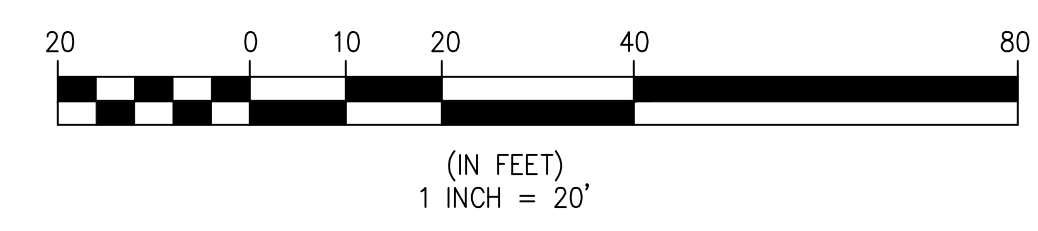




**LEGEND**

DESCRIPTION	EXISTING
EDGE OF PAVEMENT	EP
MANHOLE	MH
WATER VALVE	WV
WATER METER	WM
GAS METER	GM
TRAFFIC CONTROL BOX	TCB
LIGHT POLE	LP
LIGHT POLE WITH SIGNALS	LP/S
CURB & GUTTER CG-2	CG-2
TRANSITION FROM CG-6 TO CG-6R	CG-6/6R
SANITARY SEWER	S
SANITARY LATERAL	SL
CLEAN OUT	CO
STORM SEWER	SS
WATER MAIN	W
FIRE HYDRANT	F
PLUG	P
OVERHEAD WIRES	OW
UTILITY POLE	UP
UNDERGROUND ELECTRIC	UE
TELEPHONE	T
GAS MAIN	G
ELECTRICAL	E
TRANSFORMER	TR
HANDICAP RAMP (CG-12)	HR
GUARDRAIL	GR
FENCE	F
TRAFFIC FLOW	TF
LIGHT	L
DOOR	D
TREES	T
LIMITS OF CLEARING AND GRADING	LCAG

**NOTE:**  
 1. SEE SHEET P-0102 FOR TREE INVENTORY.  
 2. BOUNDARY AND TOPOGRAPHIC SURVEY PROVIDED BY GREENWAY ENGINEERING ON 10/07/2019.



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 INCORPORATED  
 ESTABLISHED 1945

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 FALLS CHURCH, VIRGINIA 22046  
 (703) 532-6163 Fax (703) 533-1301  
 www.WLPINC.com

DATE: 11/01/19  
 SCALE: 1"=20'

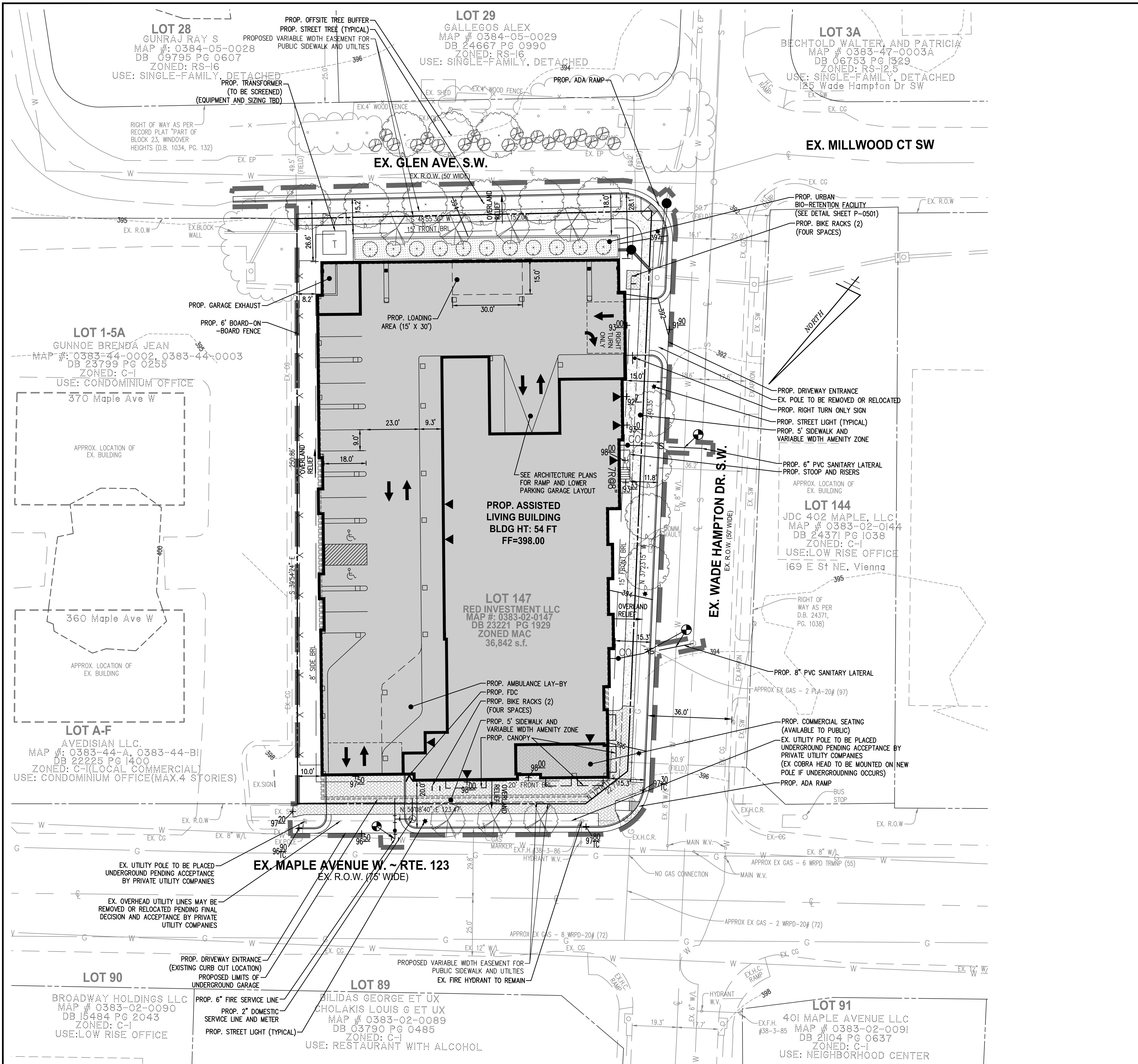
REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

**EXISTING CONDITIONS PLAN**

**SUNRISE OF VIENNA**  
 MAC AMENDMENT PLAN  
 374 - 380 MAPLE AVENUE WEST  
 TOWN OF VIENNA, VIRGINIA 22180





### LEGEND

PROPOSED	DESCRIPTION	EXISTING
	CURB & GUTTER CG-2	
	TRANSITION FROM CG-6 TO CG-6R	
	SANITARY SEWER S	
	SANITARY LATERAL SL	
	CLEAN OUT C.O.	
	STORM SEWER	
	WATER MAIN W	
	FIRE HYDRANT PLUG	
	OVERHEAD WIRES	
	UTILITY POLE	
	UNDERGROUND ELECTRIC UE	
	TELEPHONE T	
	GAS MAIN G	
	ELECTRICAL E	
	TRANSFORMER	
	HANDICAP RAMP (CG-12)	
	GUARDRAIL	
	FENCE	
	TRAFFIC FLOW	
	LIGHT	
	DOOR	
	TREES	
	CONTOURS	
	SPOT ELEVATION	
	DRAINAGE FLOW DIRECTION	
	TOP OF CURB TC	
	BOTTOM OF CURB BC	
	TOP OF WALL TW	
	BOTTOM OF WALL BW	
	HIGH POINT HP	
	TEST PIT TP	
	LIMITS OF CLEARING AND GRADING	

### ZONING TABULATION

EXISTING/PROPOSED ZONE: MAPLE AVENUE COMMERCIAL (MAC)

ZONING TABULATIONS	MAC ZONING REQUIREMENTS	PROVIDED
LOT WIDTH	NONE	143.08
BUILDING WIDTH	NONE	124 FT (MAPLE AVE)
BUILDING HEIGHT	4 STORIES, 54 FT	4 STORIES, 54 FT
AVERAGE FRONT GRADE	NONE	397.75
YARD REQUIREMENTS		
FRONT - MAPLE AVENUE WEST	20 FT	20.0 FT
FRONT - WAIDE HAMPTON DR. SW	15 FT	15.0 FT
FRONT - GLEN AVENUE SW	15 FT	26.6 FT
SIDE (EAST PROPERTY LINE)	8 FT	8.2 FT
LOADING SPACE DEPTH	25 FT	30 FT
LOADING SPACE WIDTH	15 FT/50 FT BLDG WIDTH**	15 FT
LOADING SPACE HEIGHT	15 FT	15 FT
IMPERVIOUS AREA (MAXIMUM)	80% + 10% INCENTIVE BONUS = 90%	86.07%
OPEN SPACE	15% OF LOT AREA (5,526 SF)	25.42%

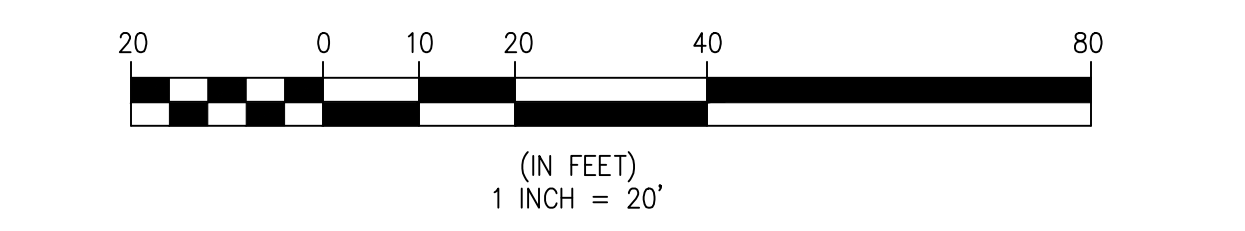
\*\*MODIFICATION REQUESTED FOR LOADING WIDTH REDUCTION TO 15 FT

- ### NOTES
- THE PROPERTY IS DESIGNATED BY FAIRFAX COUNTY, VIRGINIA, AS HAVING TAX ASSESSMENT MAP NUMBER 0383-02-0147, ZONED MAC. THIS APPLICATION IS REQUESTING AN AMENDMENT TO THE PREVIOUSLY APPROVED APPLICATION FOR THIS PROPERTY UNDER THE MAC ORDINANCE.
  - TOTAL COMPUTED AREA OF THE PROPERTY IS 36,842 SQUARE FEET OR 0.8458 ACRES.
  - BASED ON REVIEW OF AVAILABLE RECORDS, THERE ARE NO SIGNIFICANT HISTORICAL OR ENVIRONMENTAL FEATURES ON THIS SITE.
  - SEE SHEET P-0201 FOR CONTEXT PLAN DEPICTING EXISTING STRUCTURES WITHIN 200 FT OF THE PROPOSED DEVELOPMENT.

### OVERLAND RELIEF NARRATIVE

STORMWATER FROM THE SITE WILL PREDOMINANTLY BE CAPTURED BY THE ROOF DRAINAGE SYSTEMS WHICH WILL FEED AN URBAN BIO-RETENTION PLANTER SYSTEM AND BE ROUTED TO THE EXISTING STORM SEWER IN WAIDE HAMPTON DRIVE. THE REMAINING STORMWATER WILL DISCHARGE AS NON-CONCENTRATED SHEET FLOW TOWARD MAPLE AVENUE WEST, WAIDE HAMPTON DRIVE SW AND GLEN AVENUE SW AS DEPICTED ON THIS PLAN (OVERLAND DRAINAGE ARROWS).

OVERLAND RELIEF FOR THE SURROUNDING AREA WILL FOLLOW A PATH TO THE SOUTH OF THE SITE THROUGH PUBLIC ROADS AND ADJACENT PROPERTIES (ROUGHLY FOLLOWING THE ALIGNMENT OF THE EXISTING TOWN OF VIENNA STORM SEWERS) WHERE WATER ULTIMATELY FLOWS TOWARD A TRIBUTARY OF HUNTER'S BRANCH.



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**WALTER L. PHILLIPS**

INCORPORATED ESTABLISHED 1945

DATE: 11/01/19

SCALE: 1" = 20'

CHECKED: AV  
DRAWN: ITFB

CONCEPT PLAN

**SUNRISE OF VIENNA**

MAC AMENDMENT PLAN

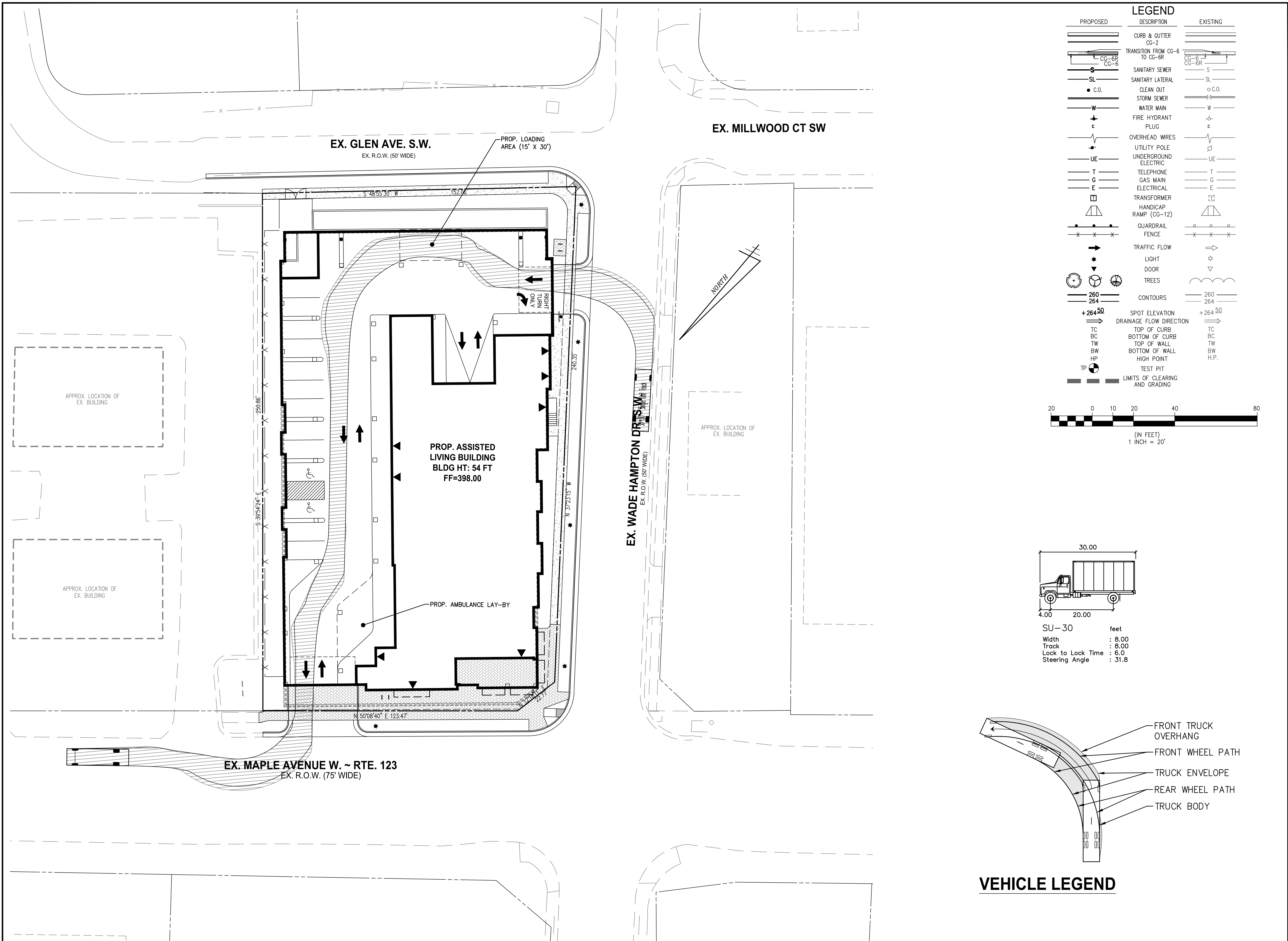
374 - 380 MAPLE AVENUE WEST

TOWN OF VIENNA, VIRGINIA 22180

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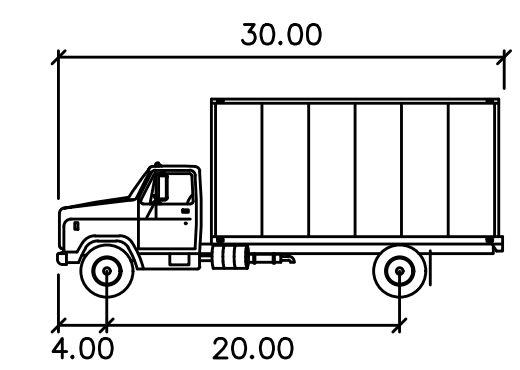
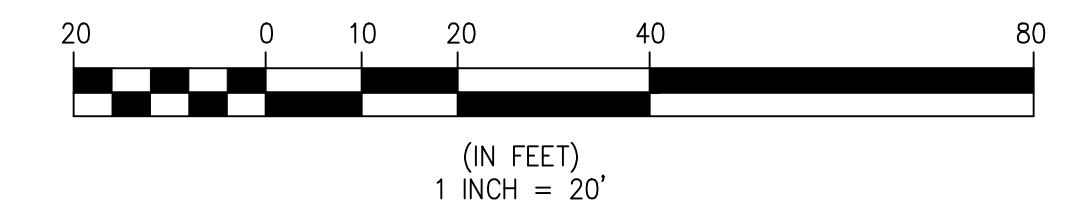
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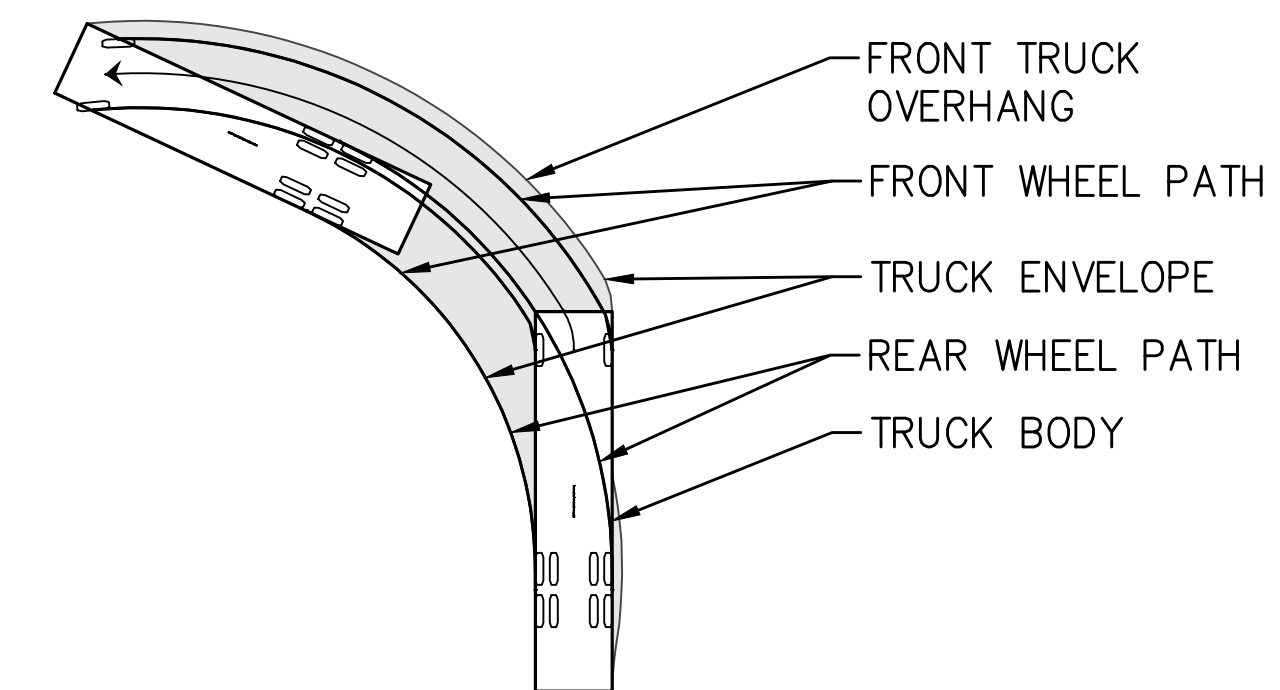
**LEGEND**

PROPOSED	DESCRIPTION	EXISTING
	CURB & GUTTER CG-2	
	TRANSITION FROM CG-6 TO CG-6R	
	SANITARY SEWER S	
	SANITARY LATERAL SL	
	CLEAN OUT C.O.	
	STORM SEWER	
	WATER MAIN W	
	FIRE HYDRANT PLUG	
	OVERHEAD WIRES	
	UTILITY POLE UNDERGROUND ELECTRIC	
	TELEPHONE	
	GAS MAIN	
	ELECTRICAL	
	TRANSFORMER	
	HANDICAP RAMP (CG-12)	
	GUARDRAIL	
	FENCE	
	TRAFFIC FLOW	
	LIGHT	
	DOOR	
	TREES	
	CONTOURS	
	SPOT ELEVATION	
	DRAINAGE FLOW DIRECTION	
	TOP OF CURB TC	
	BOTTOM OF CURB BC	
	TOP OF WALL TW	
	BOTTOM OF WALL BW	
	HIGH POINT HP	
	TEST PIT	
	LIMITS OF CLEARING AND GRADING	



SU-30 feet

Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.8



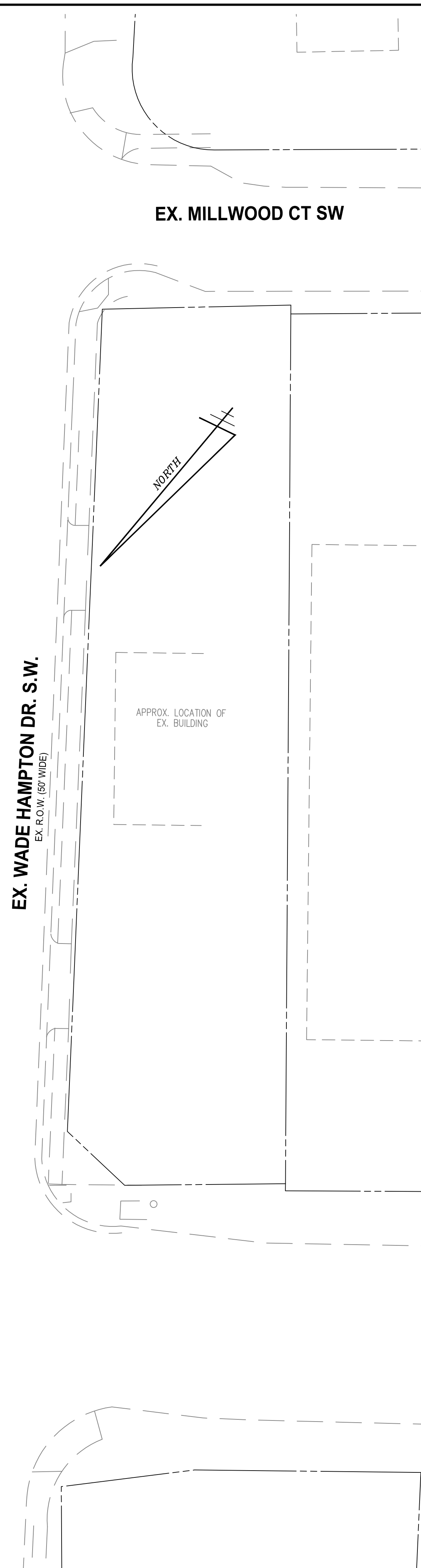
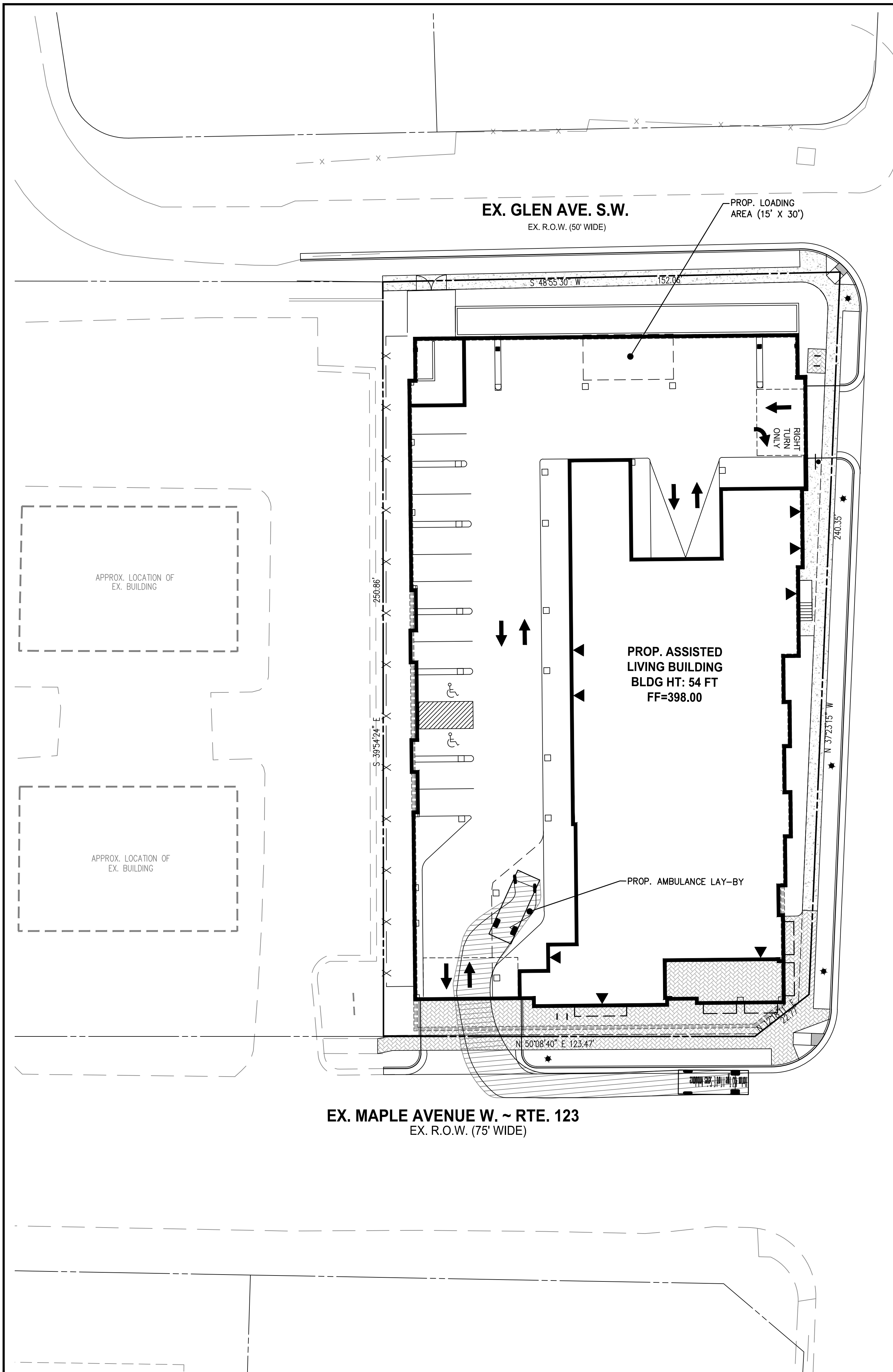
**VEHICLE LEGEND**

Engineers • Surveyors • Planners  
 Landscape Architects • Arborists  
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 207 PARK AVENUE  
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 IN CORP. STATE OF VIRGINIA  
 ARON M. WILSON  
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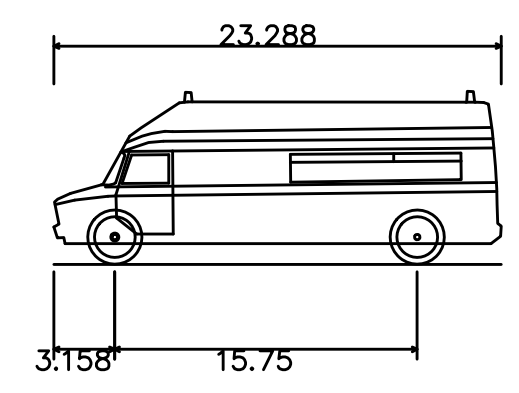
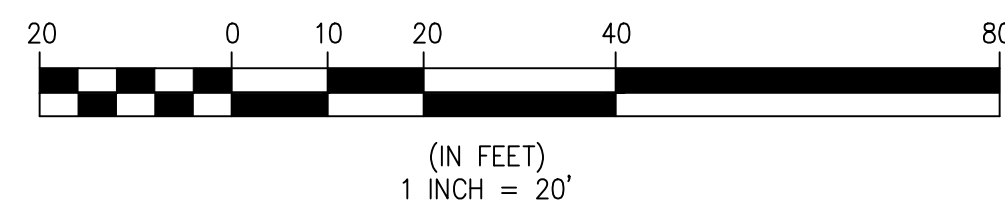
NO.	DESCRIPTION	DATE	REV. BY	APPROVED

**VEHICLE TURNING MOVEMENTS**  
**SUNRISE OF VIENNA**  
 MAC AMENDMENT PLAN  
 374 - 380 MAPLE AVENUE WEST  
 TOWN OF VIENNA, VIRGINIA 22180

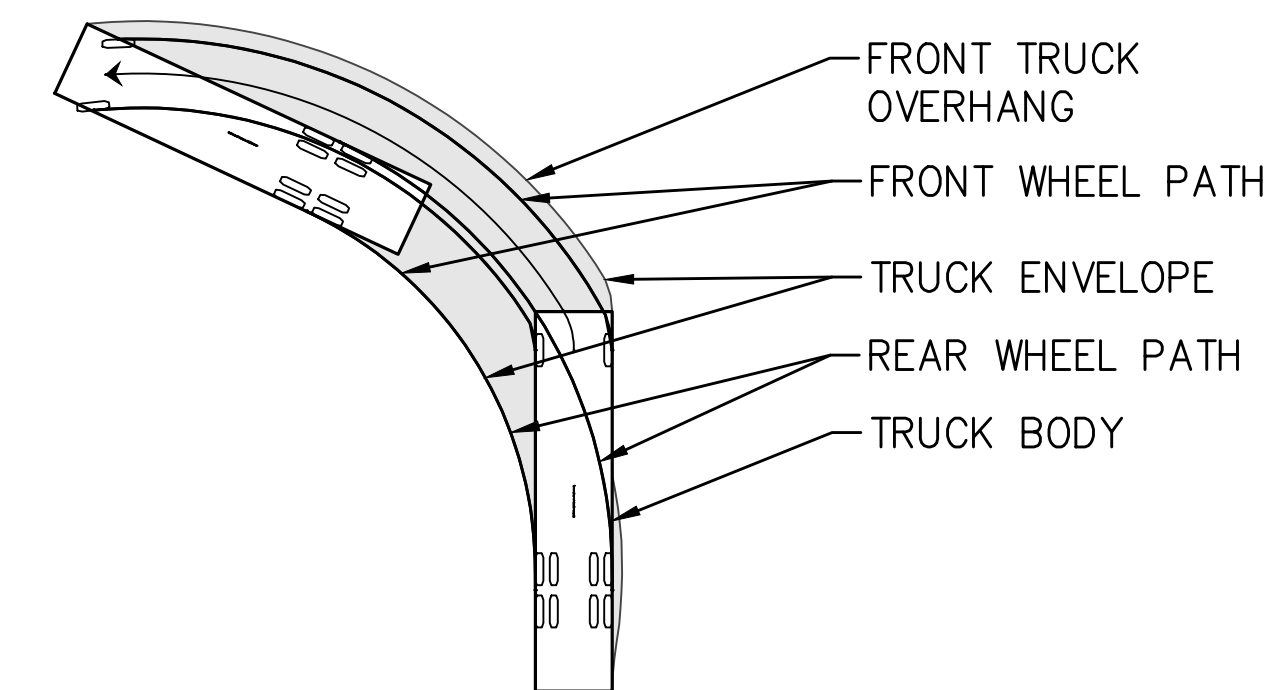




PROPOSED	DESCRIPTION	EXISTING
	CURB & GUTTER CG-2	
	TRANSITION FROM CG-6 TO CG-6R	
	SANITARY SEWER S	
	SANITARY LATERAL SL	
	CLEAN OUT C.O.	
	STORM SEWER	
	WATER MAIN W	
	FIRE HYDRANT PLUG	
	OVERHEAD WIRES	
	UTILITY POLE	
	UNDERGROUND ELECTRIC UE	
	TELEPHONE T	
	GAS MAIN G	
	ELECTRICAL E	
	TRANSFORMER	
	HANDICAP RAMP (CG-12)	
	GUARDRAIL	
	FENCE	
	TRAFFIC FLOW	
	LIGHT	
	DOOR	
	TREES	
	CONTOURS	
	SPOT ELEVATION	
	DRAINAGE FLOW DIRECTION	
	TOP OF CURB TC	
	BOTTOM OF CURB BC	
	TOP OF WALL TW	
	BOTTOM OF WALL BW	
	HIGH POINT HP	
	TEST PIT	
	LIMITS OF CLEARING AND GRADING	



Horton 453 Type I Ford E-Series Ambulance  
 Overall Length 23.288ft  
 Overall Width 8.021ft  
 Overall Body Height 9.000ft  
 Min Body Ground Clearance 1.075ft  
 Track Width 6.021ft  
 Lock-to-lock time 9.00s  
 Curb to Curb Turning Radius 27.400ft

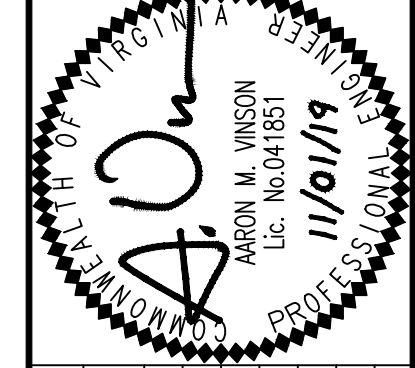


**VEHICLE LEGEND**

**VEHICLE TURNING MOVEMENTS - AMBULANCE**

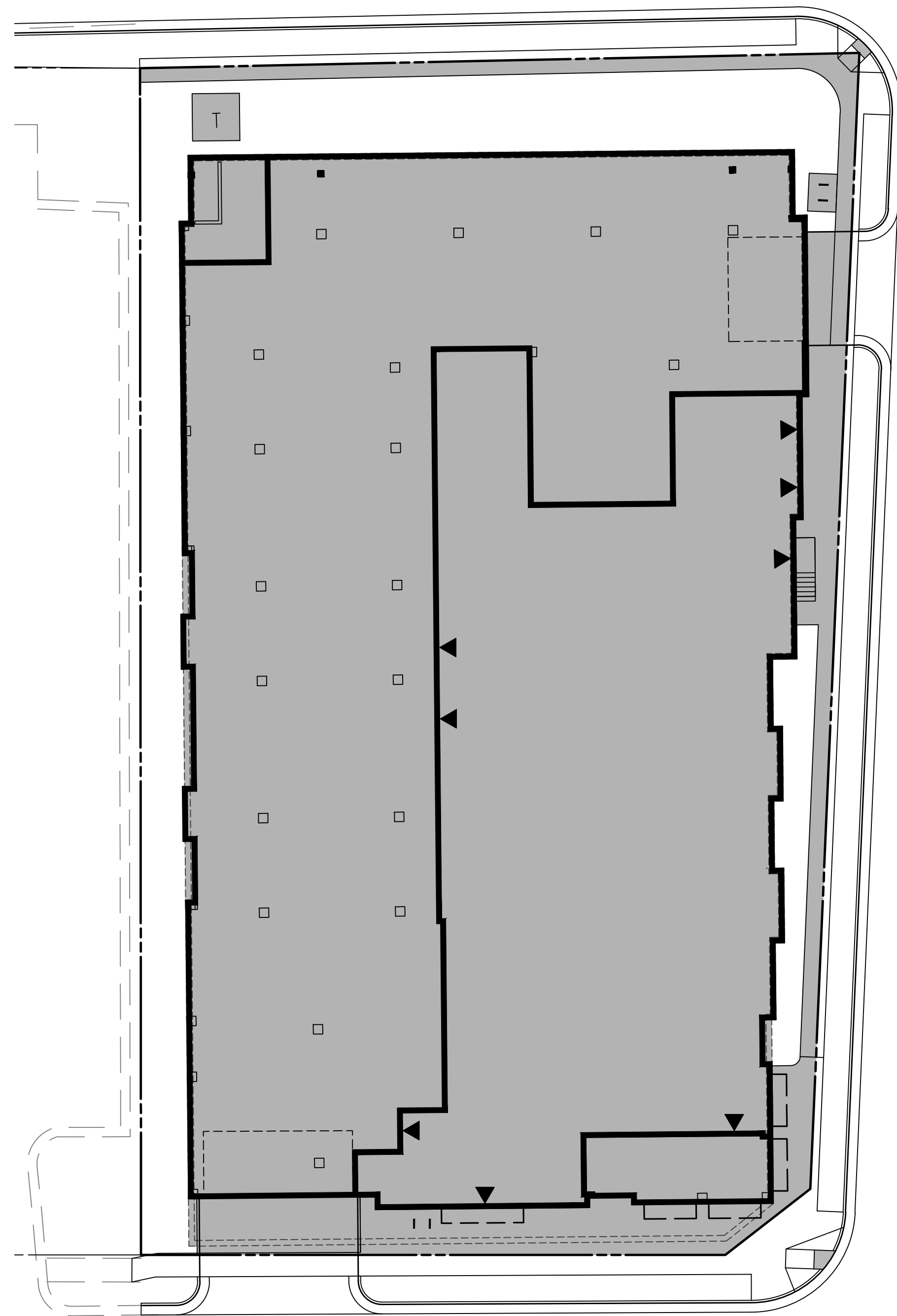
**SUNRISE OF VIENNA**  
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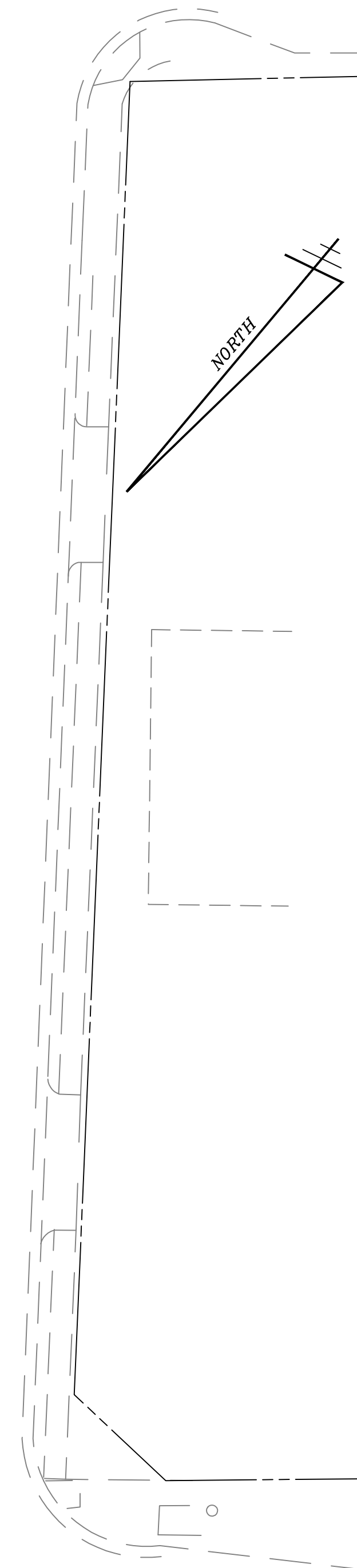


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 (703) 532-6163 Fax (703) 533-1301  
 www.WLPINC.com  
 ESTABLISHED 1945  
 DATE: 11/01/2019  
 SCALE: 1" = 20'  
 DRAWN: TFB  
 CHECKED: AV





**IMPERVIOUS AREA DIAGRAM**  
1" = 30'



**OPEN SPACE DIAGRAM**  
1" = 30'

**IMPERVIOUS AREA COVERAGE**

LOT AREA:		36,842 SF (0.8458 AC)
MAX IMPERVIOUS SURFACE	90% OF LOT AREA*	33,157 SF MAX.
LOT AREA - MAX IMPERVIOUS SURFACE = MIN PERVIOUS SURFACE		
MIN PERVIOUS SURFACE	10% OF LOT AREA*	3,685 SF MIN.

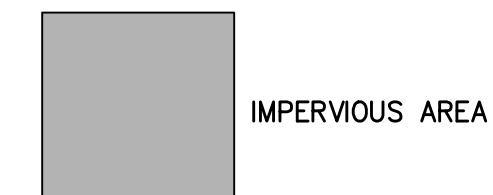
TOTAL IMPERVIOUS SURFACE	86.07% OF LOT AREA	±31,710 SF
TOTAL PERVIOUS SURFACE	13.93% OF LOT AREA	±5,132 SF

\*INCENTIVES USED TO INCREASE MAX IMPERVIOUS COVER FROM 80% TO 90%

FINAL CALCULATIONS WILL BE PROVIDED AT SITE PLAN.

EXISTING IMPERVIOUS AREA = 32,881 SF (89.2%)

**LEGEND**

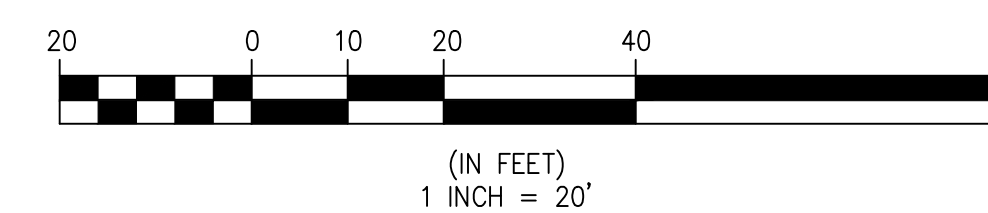
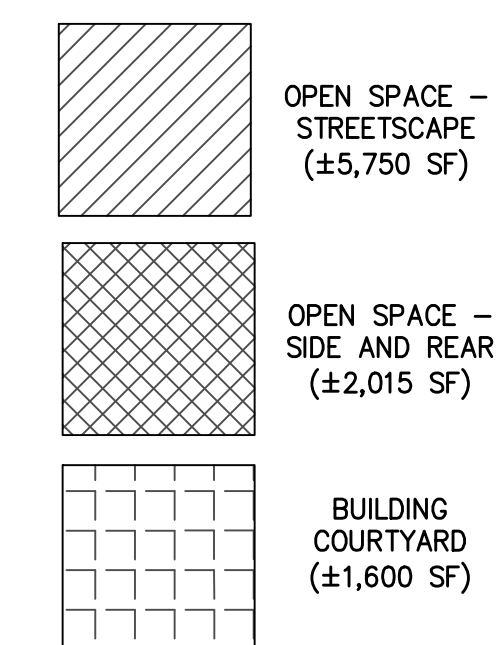


**OPEN SPACE CALCULATION**

LOT AREA:		36,842 SF (0.8458 AC)
MIN OPEN SPACE REQUIRED	15% OF LOT AREA	5,526 SF MIN.
OPEN SPACE PROVIDED	±25.42% OF LOT AREA	±9,365 SF

**NOTES:**

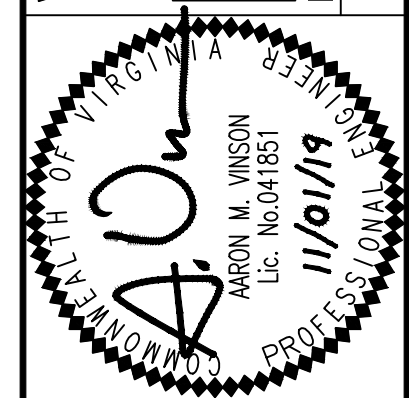
1. THIS PLAN IS FOR THE APPROVAL OF 15% OPEN SPACE. FINAL CALCULATIONS WILL BE PROVIDED AT SITE PLAN.



**OPEN SPACE AND IMPERVIOUS AREA ANALYSIS**

**SUNRISE OF VIENNA**  
MAC AMENDMENT PLAN  
374 - 380 MAPLE AVENUE WEST  
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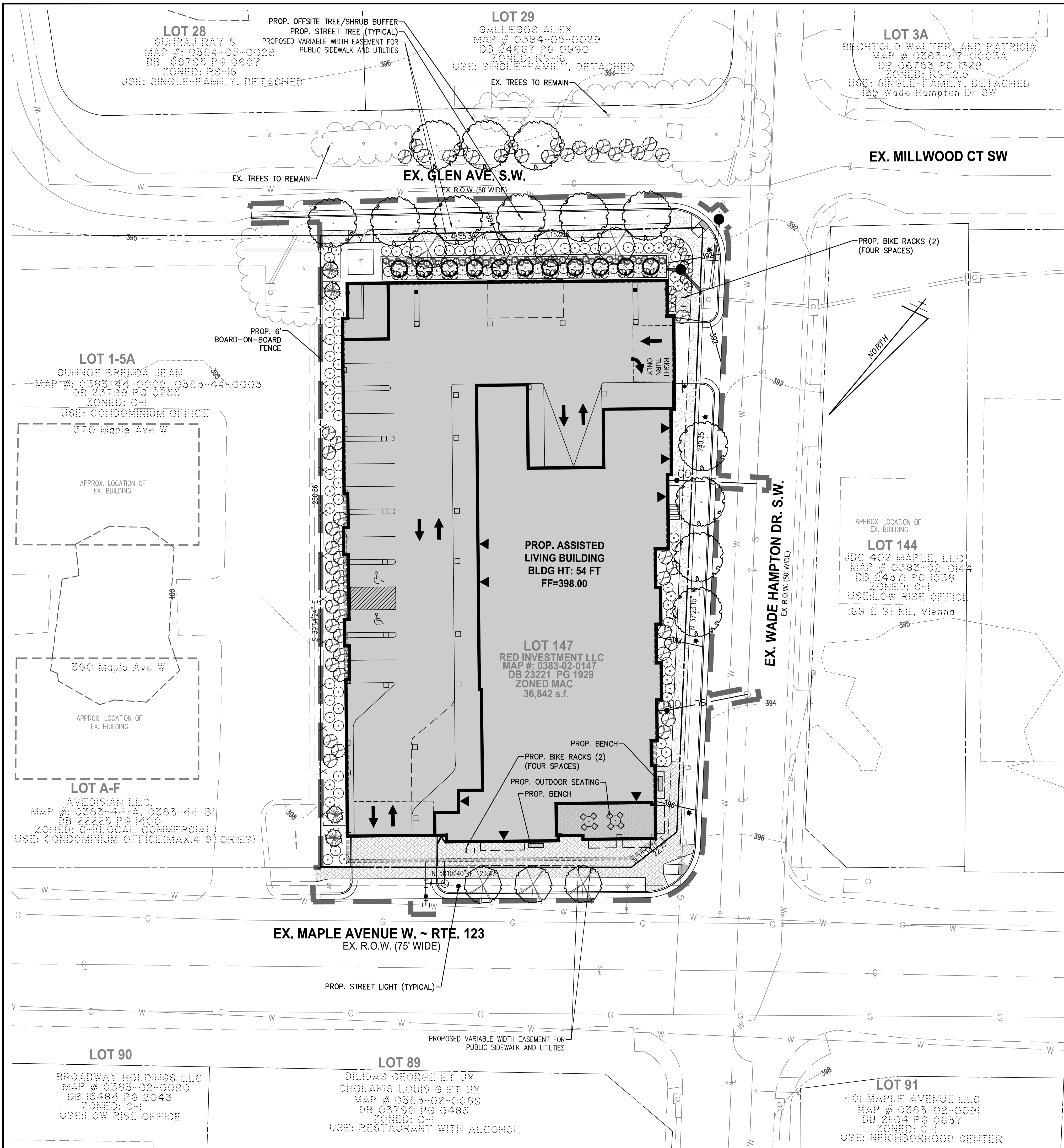
NO.	DESCRIPTION	DATE	REV. BY	APPROVED BY	DATE



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CHECKED: AV  
DRAWN: TFB  
DATE: 11/01/2019  
SCALE: 1" = 20'





**LEGEND**

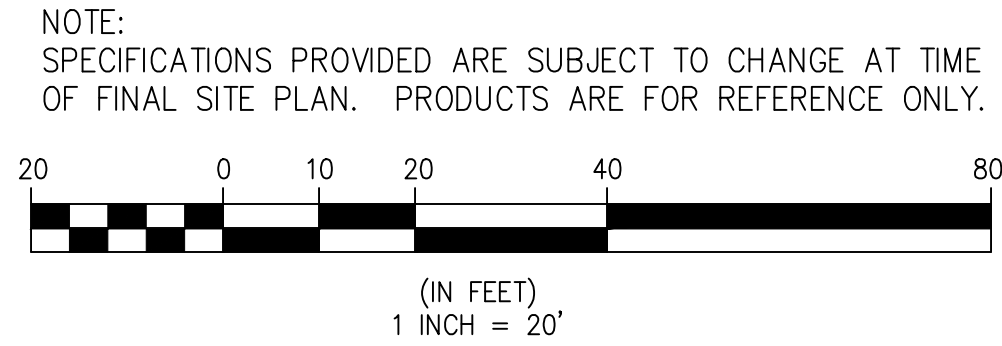
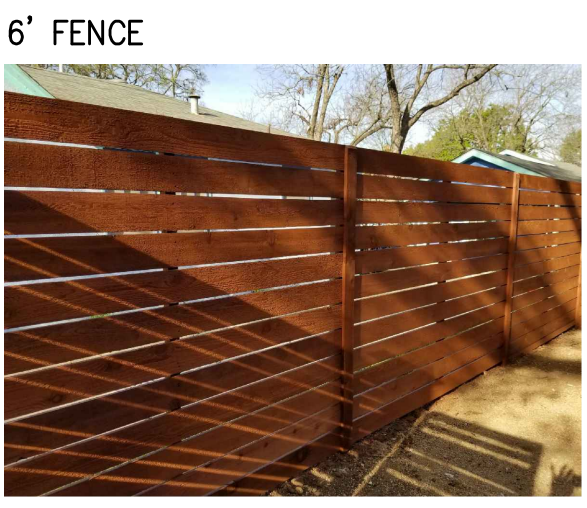
- PROPOSED DECIDUOUS TREES
- PROPOSED ORNAMENTAL TREE
- PROPOSED EVERGREEN TREE
- PROPOSED SHRUBS, GRASSES
- PROPOSED BENCH
- PROPOSED TRASH CAN
- PROPOSED BIKE RACK
- PROPOSED STREETLIGHT
- LIMITS OF CLEARING AND GRADING

**PLANT POOL**

BOTANICAL NAME	COMMON NAME
<b>TREES</b>	
ACER RUBRUM	RED MAPLE
PLATANUS x ACERFOLIA	LONDON PLANETREE
QUERCUS PHELLOS	WILLOW OAK
LIQUIDAMBAR STYRACIFLUA	
'SLENDER SILHOUETTE'	COLUMNAR SWEETGUM
CERIS CANADENSIS	REDBUD
MAGNOLIA VIRGINIANA	SWEETBAY
THUJA OCCIDENTALIS	
'GREEN GIANT'	ARBORVITAE
AMELANCHIER ARBOREA	SERVICEBERRY
CHIONANTHUS VIRGINIANA	FRINGETREE
<b>SHRUBS</b>	
ARONIA ARBUTIFOLIA	RED CHOKEBERRY
CALLICARPA AMERICANA	AMERICAN BEAUTYBERRY
ILEX GLABRA	INKBERRY
ILEX VERTICILLATA	WINTERBERRY
VBURNUM DENTATUM	ARROWWOOD
ITEA VIRGINICA	SWEETSPICE
RHUS AROMATICA 'ORO-LOW'	FRAGRANT SUMAC
CLETHRA ALMIFOLIA	SUMMERSWEET CLETHRA
AESCULUS PARVIFLORA	BOTTLEBRUSH BUCKEYE
HYDRANGEA QUERCIFOLIA	OAKLEAF HYDRANGEA
<b>PERENNIALS</b>	
PANICUM VIRGATUM	SWITCH GRASS
SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM
CAREX PENNSYLVANICA	SEDGE
ECHINACEA PURPUREA	PURPLE CONEFLOWER
RUBRACKIA FULGIDA	BLACK-EYED SUSAN

NOTE: PLANTING LIST PROVIDED IS SUBJECT TO CHANGE AT TIME OF FINAL SITE PLAN.

**MATERIALS**

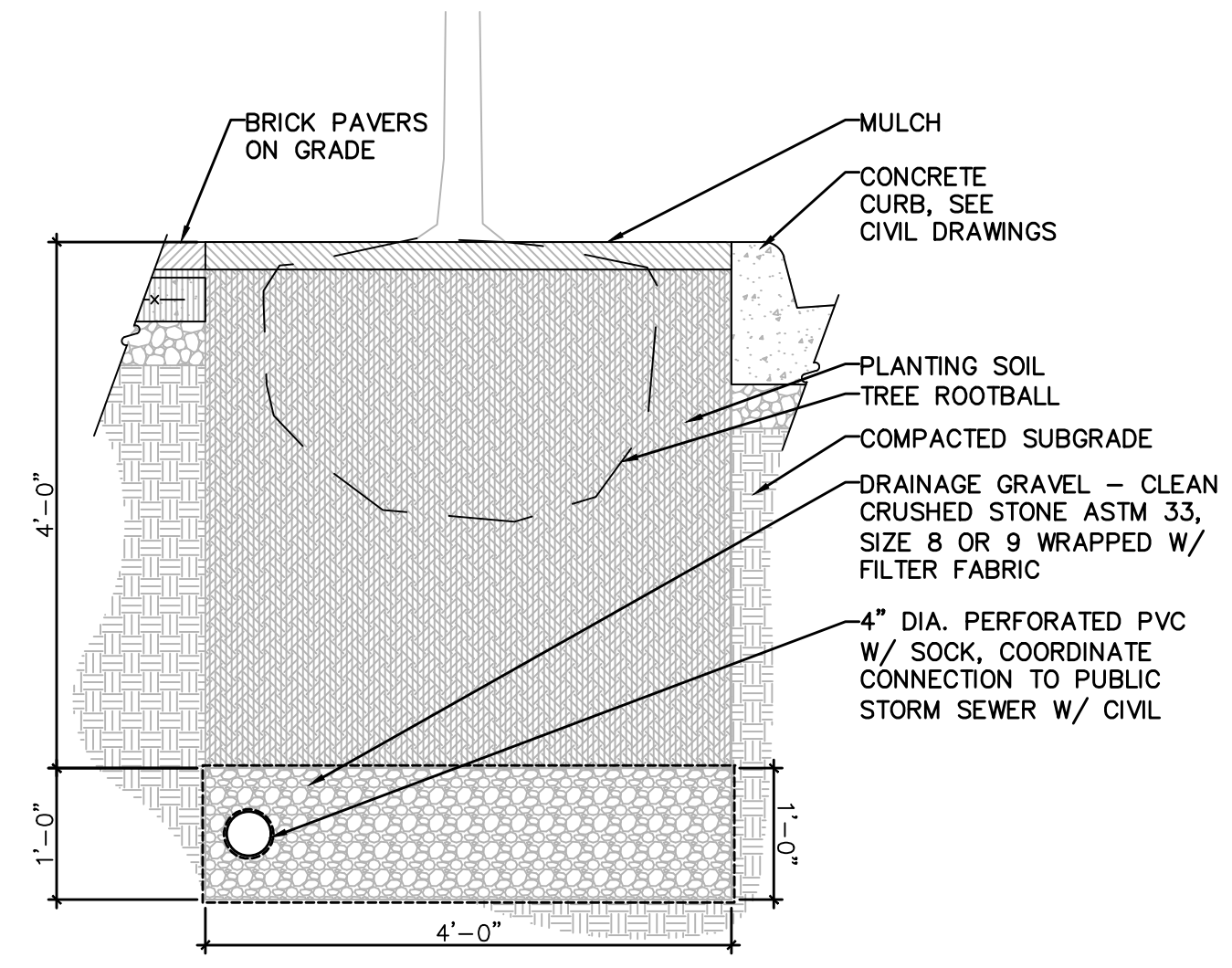


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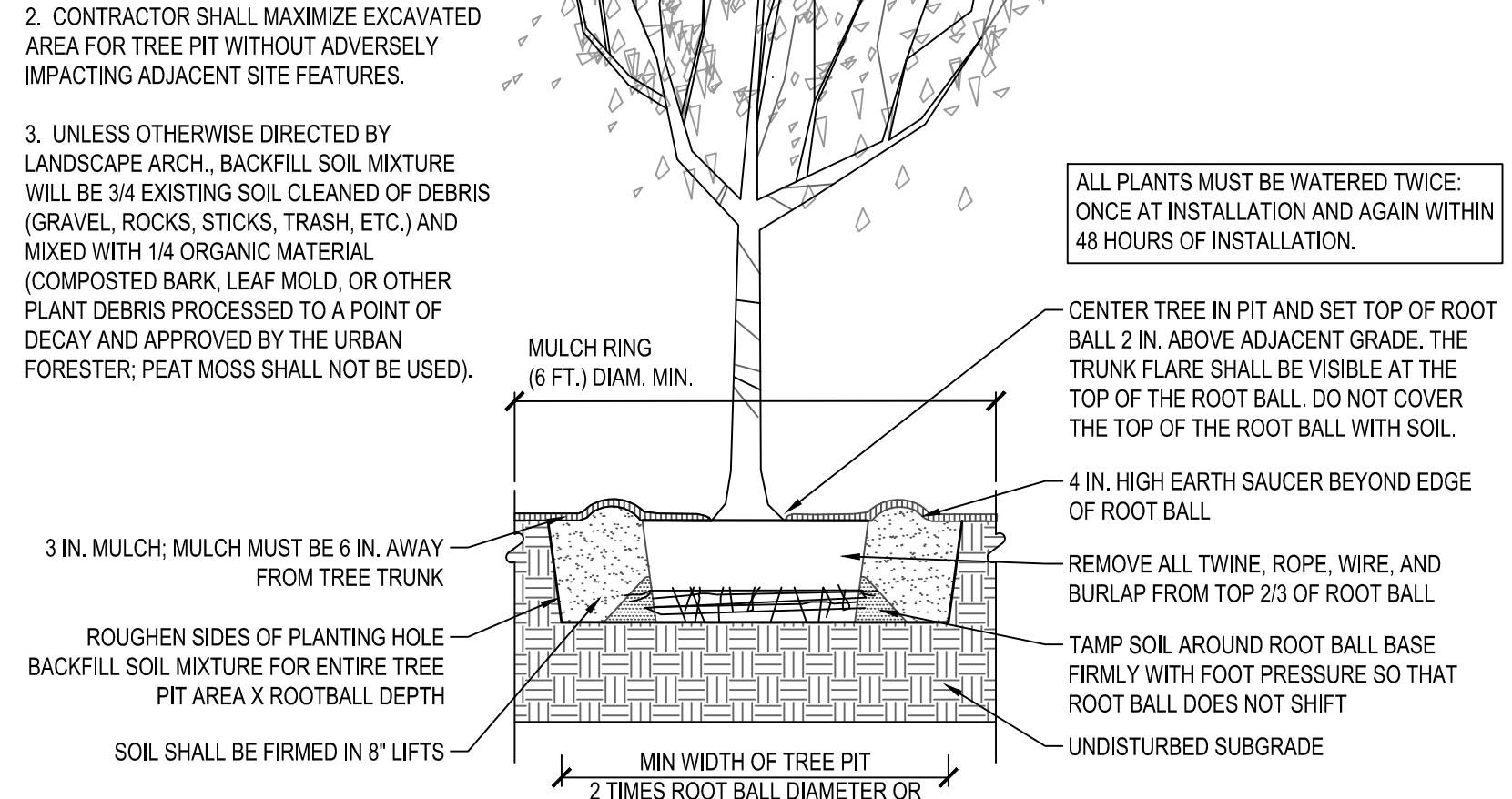
**CONCEPTUAL LANDSCAPE PLAN**  
**SUNRISE OF VIENNA**  
 MAC AMENDMENT PLAN  
 374 - 380 MAPLE AVENUE WEST  
 TOWN OF VIENNA, VIRGINIA 22180





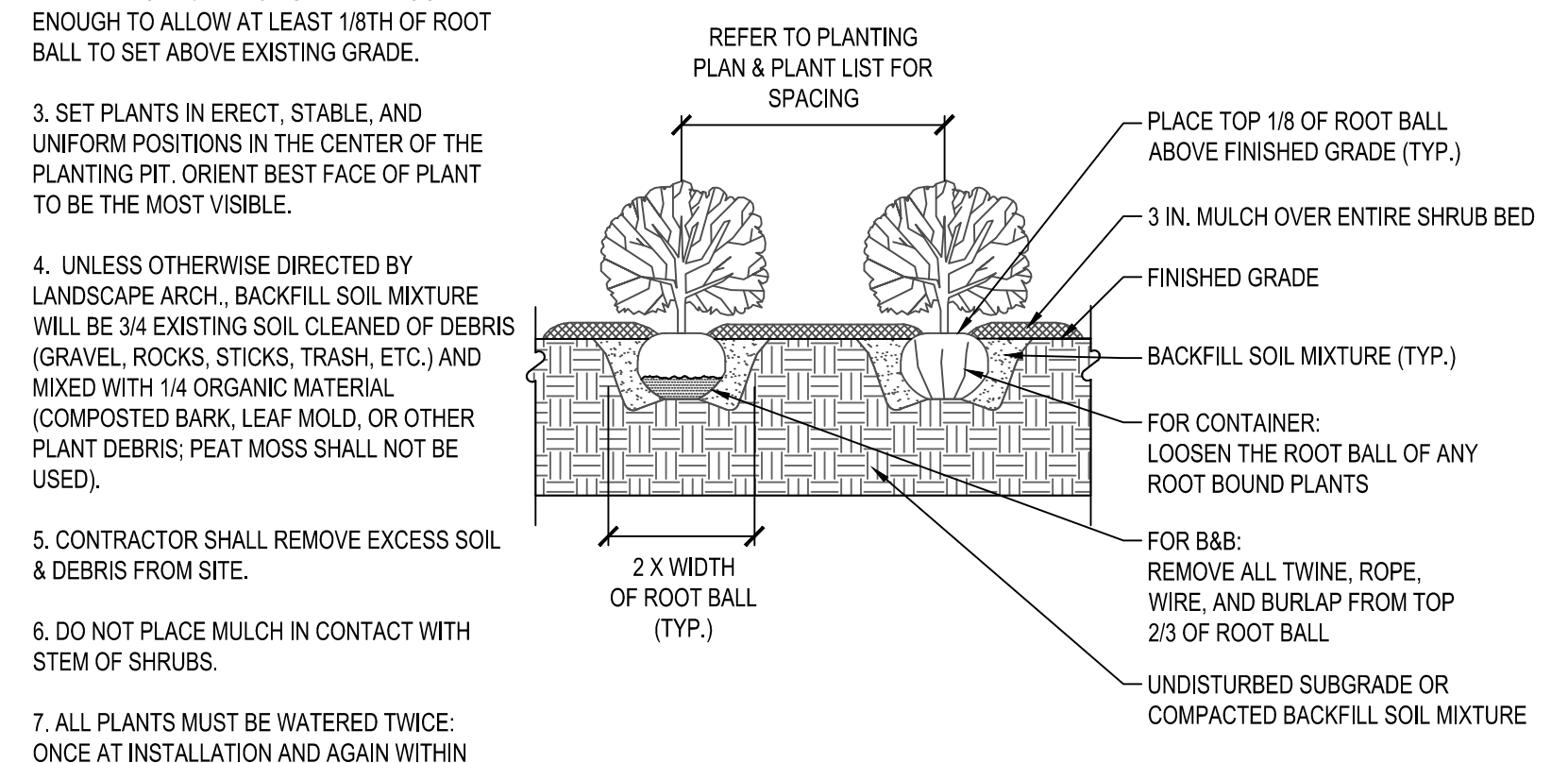
**PROPOSED PLANTING BED DETAIL**  
SCALE: NTS - OR SIMILAR TO BE COORDINATED AT TIME OF SITE PLAN

- NOTES:**
1. AT PLANTING PRUNE ONLY CROSSING LIMBS, BROKEN OR DEAD BRANCHES, AND ANY BRANCHES THAT POSE A HAZARD TO PEDESTRIANS PER ANSI STANDARD A300. DO NOT PRUNE INTO OLD WOOD ON EVERGREENS.
  2. CONTRACTOR SHALL MAXIMIZE EXCAVATED AREA FOR TREE PIT WITHOUT ADVERSELY IMPACTING ADJACENT SITE FEATURES.
  3. UNLESS OTHERWISE DIRECTED BY LANDSCAPE ARCH., BACKFILL SOIL MIXTURE WILL BE 3/4 EXISTING SOIL CLEANED OF DEBRIS (GRAVEL, ROCKS, STICKS, TRASH, ETC.) AND MIXED WITH 1/4 ORGANIC MATERIAL (COMPOSTED BARK, LEAF MOLD, OR OTHER PLANT DEBRIS PROCESSED TO A POINT OF DECAY AND APPROVED BY THE URBAN FORESTER; PEAT MOSS SHALL NOT BE USED).



**TREE PLANTING DETAIL**  
SCALE: NTS

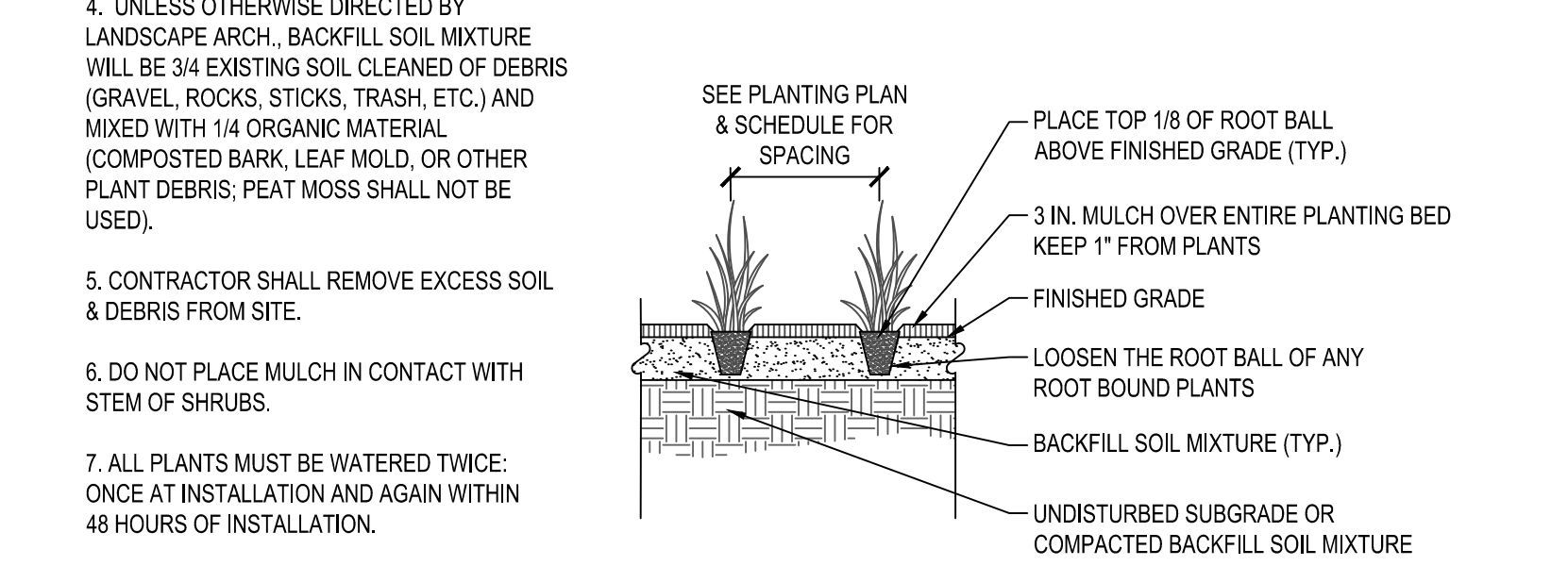
- NOTES:**
1. AT PLANTING PRUNE ONLY BROKEN OR DEAD BRANCHES PER ANSI STANDARD 300 STANDARD.
  2. PLANTING PIT/TRENCH SHALL BE DUG DEEP ENOUGH TO ALLOW AT LEAST 1/8TH OF ROOT BALL TO SET ABOVE EXISTING GRADE.
  3. SET PLANTS IN ERECT, STABLE, AND UNIFORM POSITIONS IN THE CENTER OF THE PLANTING PIT. ORIENT BEST FACE OF PLANT TO BE THE MOST VISIBLE.
  4. UNLESS OTHERWISE DIRECTED BY LANDSCAPE ARCH., BACKFILL SOIL MIXTURE WILL BE 3/4 EXISTING SOIL CLEANED OF DEBRIS (GRAVEL, ROCKS, STICKS, TRASH, ETC.) AND MIXED WITH 1/4 ORGANIC MATERIAL (COMPOSTED BARK, LEAF MOLD, OR OTHER PLANT DEBRIS; PEAT MOSS SHALL NOT BE USED).
  5. CONTRACTOR SHALL REMOVE EXCESS SOIL & DEBRIS FROM SITE.
  6. DO NOT PLACE MULCH IN CONTACT WITH STEM OF SHRUBS.
  7. ALL PLANTS MUST BE WATERED TWICE: ONCE AT INSTALLATION AND AGAIN WITHIN 48 HOURS OF INSTALLATION.



**SHRUB PLANTING DETAIL**  
SCALE: NTS

- NOTES:**
1. AT PLANTING PRUNE ONLY BROKEN OR DEAD BRANCHES PER ANSI STANDARD 300 STANDARD.
  2. PLANTING PIT/TRENCH SHALL BE DUG DEEP ENOUGH TO ALLOW AT LEAST 1/8TH OF ROOT BALL TO SET ABOVE EXISTING GRADE.
  3. SET PLANTS IN ERECT, STABLE, AND UNIFORM POSITIONS IN THE CENTER OF THE PLANTING PIT. ORIENT BEST FACE OF PLANT TO BE THE MOST VISIBLE.
  4. UNLESS OTHERWISE DIRECTED BY LANDSCAPE ARCH., BACKFILL SOIL MIXTURE WILL BE 3/4 EXISTING SOIL CLEANED OF DEBRIS (GRAVEL, ROCKS, STICKS, TRASH, ETC.) AND MIXED WITH 1/4 ORGANIC MATERIAL (COMPOSTED BARK, LEAF MOLD, OR OTHER PLANT DEBRIS; PEAT MOSS SHALL NOT BE USED).
  5. CONTRACTOR SHALL REMOVE EXCESS SOIL & DEBRIS FROM SITE.
  6. DO NOT PLACE MULCH IN CONTACT WITH STEM OF SHRUBS.
  7. ALL PLANTS MUST BE WATERED TWICE: ONCE AT INSTALLATION AND AGAIN WITHIN 48 HOURS OF INSTALLATION.

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



**PERENNIAL/GROUNDCOVER PLANTING DETAIL**  
SCALE: NTS

CONCEPTUAL LANDSCAPE NOTES AND DETAILS

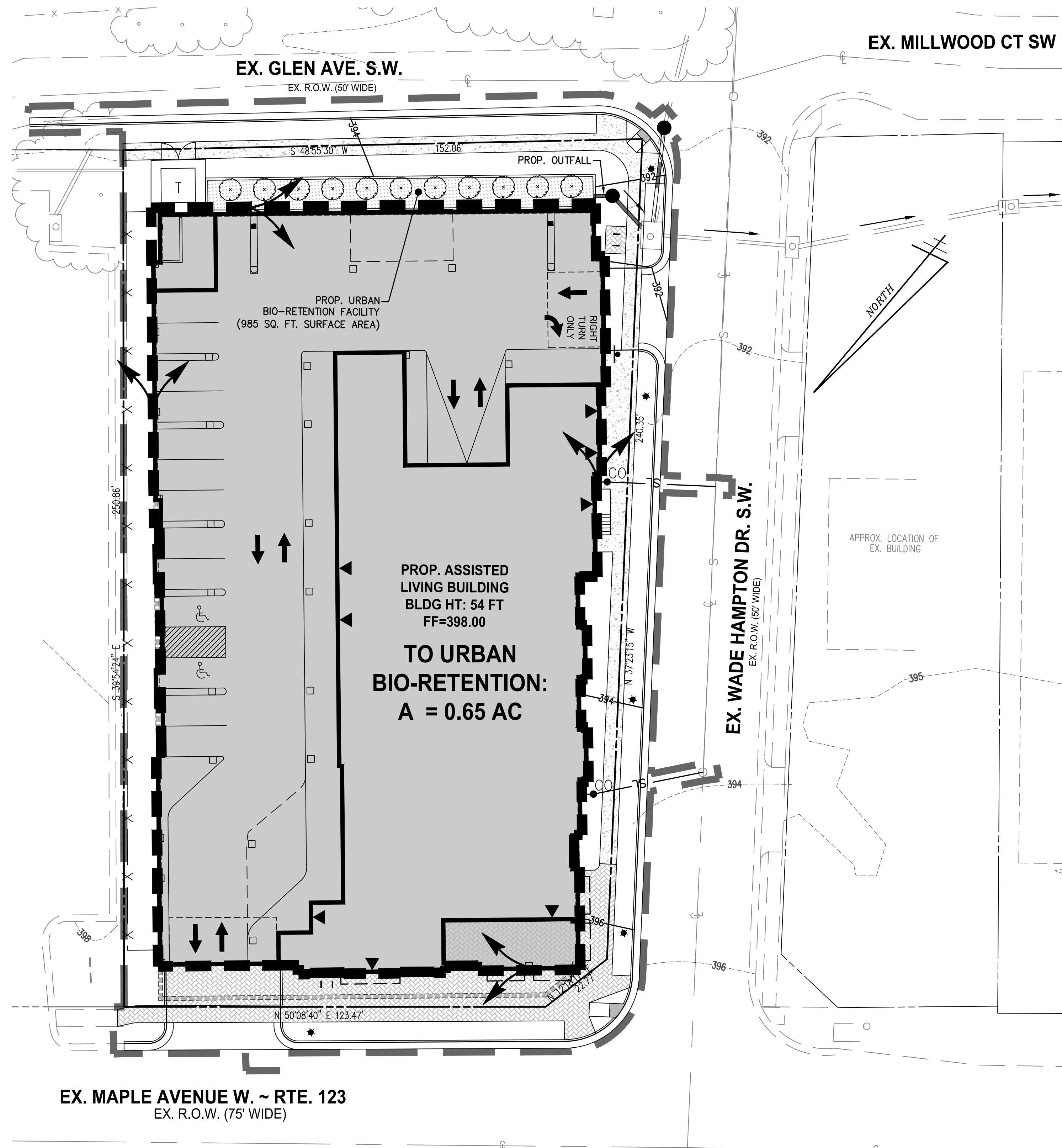
**SUNRISE OF VIENNA**  
MAC AMENDMENT PLAN  
374 - 380 MAPLE AVENUE WEST  
TOWN OF VIENNA, VIRGINIA 22180

**WALTER L. PHILLIPS**  
INCORPORATED  
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SCALE: 1" = 20'

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NO.	DESCRIPTION	REVISION APPROVED BY		DATE	APPROVED	DATE
		REV. BY	DATE			

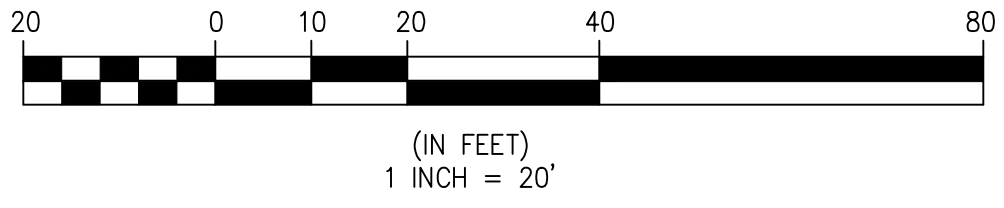
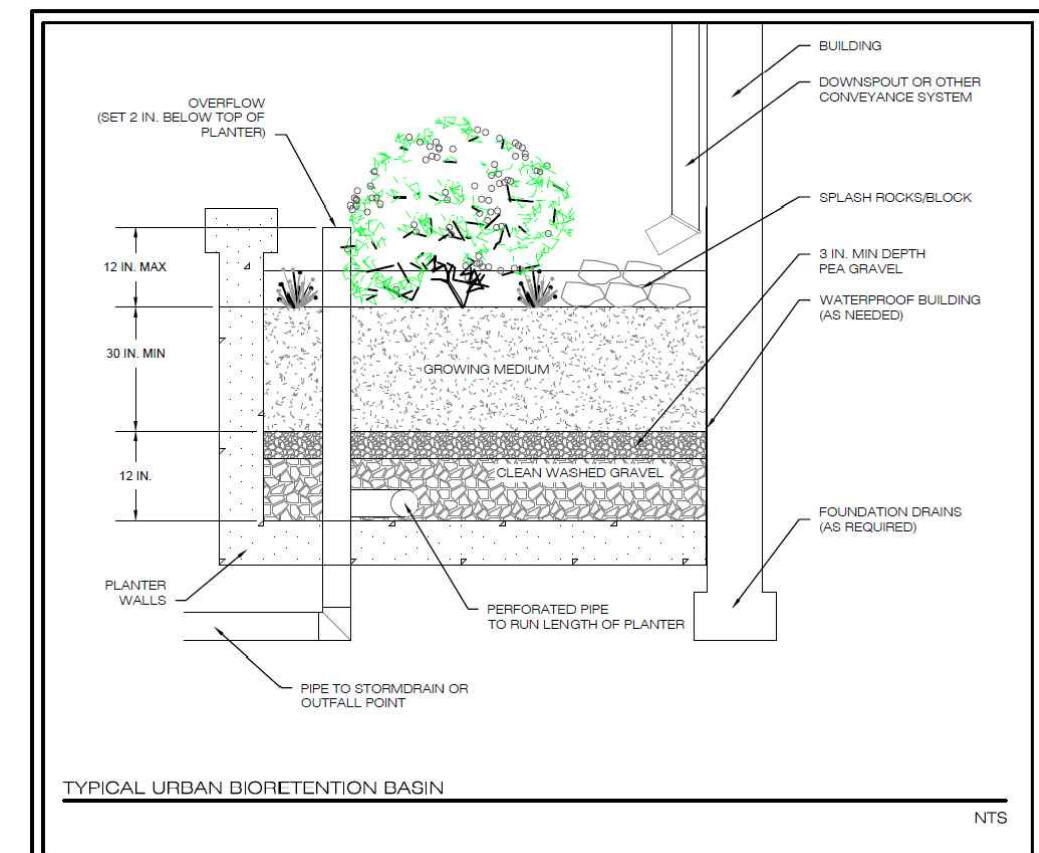




EX. MAPLE AVENUE W. ~ RTE. 123  
EX. R.O.W. (75' WIDE)

**TYPICAL URBAN BIO-RETENTION PLANTER**

N.T.S. - CONFIGURATION SUBJECT TO ADJUSTMENT AT THE TIME OF SITE PLAN



**STORMWATER MANAGEMENT AND WATER QUALITY NARRATIVES**

**EXISTING CONDITIONS:**  
THE TOTAL PARCEL AREA OF THE SITE IS 36,842 SF OR 0.8458 ACRES. THE LIMITS OF DISTURBANCE AREA FOR THE PROJECT IS 44,185 SF OR 1.0143 ACRES. FOR THE PURPOSES OF STORMWATER MANAGEMENT THE SITE AREA WILL BE THE LIMITS OF DISTURBANCE.

CURRENTLY, THE SITE CONSISTS OF ONE (1) COMMERCIAL BUILDING, SURFACE PARKING, LANDSCAPE AREAS, AND UTILITY INFRASTRUCTURE. THERE ARE NO EXISTING STORMWATER MANAGEMENT QUALITY OR QUANTITY CONTROL MEASURES ON SITE. THE SITE DRAINS FROM NORTH TO SOUTH ACROSS THE SITE AS SHEET FLOW OR VIA STORM SEWERS. ALL STORMWATER ENTERS THE MUNICIPAL STORM SEWER SYSTEM VIA CURB INLETS ALONG THE ADJACENT PUBLIC STREETS.

**PROPOSED CONDITIONS:**  
THE PROJECT INVOLVES THE CONSTRUCTION OF AN ASSISTED LIVING BUILDING WHICH INCLUDES A GROUND FLOOR RESTAURANT, A GARAGE STRUCTURE (WITH ONE FLOOR BELOW GRADE), SIDEWALKS, UTILITY SERVICES, AND A STORMWATER MANAGEMENT BMP (URBAN BIO-RETENTION).

**STORMWATER QUALITY:**  
IN ORDER TO COMPLY WITH CHAPTER 23 OF THE TOWN OF VIENNA CODE OF ORDINANCES (STORMWATER ORDINANCE) FOR STORMWATER QUALITY, A LEVEL 1 URBAN BIO-RETENTION FACILITY (±985 SQ. FT. OF SURFACE AREA) IS PROPOSED. THIS STORMWATER BMP WILL REDUCE PHOSPHORUS LEVELS IN ORDER TO COMPLY WITH APPLICABLE TOWN OF VIENNA AND STATE OF VIRGINIA REQUIREMENTS. SEE VRRM SPREADSHEET ON P-0503.

**STORMWATER QUANTITY:**  
THE SITE DRAINS FROM NORTH TO SOUTH AND DISCHARGES AS CONCENTRATED FLOW AT A SINGLE OUTFALL WHERE IT ENTERS AN EXISTING 12" RCP STORM PIPE. SEE OUTFALL INFORMATION ON SHEET P-0502. SEE STORMWATER QUANTITY COMPUTATIONS ON THIS SHEET. STORMWATER FROM THE SITE ULTIMATELY DISCHARGES INTO A TRIBUTARY OF HUNTER'S BRANCH.

**CHANNEL PROTECTION:** THE SITE STORM OUTFALL AND ALL PIPES PROPOSED WITH THIS DEVELOPMENT WILL BE COMPRISED OF CONCRETE OR OTHER NON-ERODIBLE MATERIALS OR RESTORED CHANNELS DESIGNED TO ACCEPT STORMWATER FROM THE SUBJECT PROPERTY UP TO THE LIMITS OF ANALYSIS. THEREFORE, THE SITE CAN DISCHARGE THE 2-YEAR, 24-HOUR STORM WITHOUT CAUSING EROSION IN THE SYSTEM AND DETENTION IS NOT REQUIRED FOR THE PURPOSES OF CHANNEL PROTECTION.

BASED ON THIS ANALYSIS, IT IS THE OPINION OF THE SUBMITTING ENGINEER THAT THE SITE COMPLIES WITH THE CHANNEL PROTECTION CRITERIA OUTLINED IN THE STATE STORMWATER REGULATIONS (9VAC25-870-66).

**FLOOD PROTECTION:** THE SITE STORM OUTFALL AND ALL PIPES PROPOSED WITH THIS DEVELOPMENT WILL BE ADEQUATE TO RECEIVE THE 10-YEAR, 24-HOUR STORMWATER DISCHARGE FROM THE SITE AND UPSTREAM DRAINAGE AREA, UP TO THE LIMITS OF ANALYSIS. THEREFORE, DETENTION IS NOT REQUIRED FOR THE PURPOSES OF FLOOD CONTROL.

BASED ON THIS, IT IS THE OPINION OF THE SUBMITTING ENGINEER THAT THE SITE COMPLIES WITH THE FLOOD PROTECTION CRITERIA OUTLINED IN THE STATE STORMWATER REGULATIONS (9VAC25-870-66).

NOTE THAT IMPLEMENTATION OF RUNOFF REDUCTION PRACTICES (URBAN BIO-RETENTION) ON THIS SITE WILL BRING THE POST-DEVELOPMENT FLOW RATE DOWN TO THE PRE-DEVELOPMENT PRE-DEVELOPMENT FLOW RATE.

**ADJACENT PROPERTIES:**  
ALL UNCONTROLLED SHEET FLOW FROM THE SITE WILL BE DIRECTED TO EXISTING CURB INLETS WITHIN THE PUBLIC RIGHT-OF-WAY AND INTO THE MUNICIPAL STORM SEWER SYSTEM. THERE WILL NOT BE ANY ADVERSE IMPACT TO ADJACENT PROPERTIES AS A RESULT OF THIS PROJECT AND THE PROPOSED IMPROVEMENTS.

**FLOODPLAIN BOUNDARY:**  
THIS SITE IS LOCATED OUTSIDE OF THE 100-YEAR FLOODPLAIN BOUNDARY.

**RESOURCE PROTECTION AREAS:**  
THERE ARE NO RESOURCE PROTECTION AREAS KNOWN TO EXIST ON THE SITE AND NO RESOURCE PROTECTION AREAS ARE DEPICTED ON AVAILABLE RECORD MAPS.

THE SITE IS LOCATED IN THE ACCOTINK-HUNTER'S BRANCH/ACCOTINK CREEK WATERSHED.

THE STORMWATER MANAGEMENT PLAN PROVIDED ON THIS PLAN IS SUBJECT TO ADJUSTMENT AT THE TIME OF FINAL ENGINEERING.

**SITE FLOW SUMMARY**

PRE-DEVELOPMENT

Hydrograph type	= SCS Runoff	Peak discharge	= 3,302 cfs
Storm frequency	= 2 yrs	Time to peak	= 12.12 hrs
Time interval	= 1 min	Hyd. volume	= 9,889 cuft
Drainage area	= 1,010 ac	Curve number	= 95
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.17 in	Distribution	= Custom

PRE-DEVELOPMENT

Hydrograph type	= SCS Runoff	Peak discharge	= 5,249 cfs
Storm frequency	= 10 yrs	Time to peak	= 12.12 hrs
Time interval	= 1 min	Hyd. volume	= 16,223 cuft
Drainage area	= 1,010 ac	Curve number	= 95
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.87 in	Distribution	= Custom

POST-DEVELOPMENT 2-YEAR

Hydrograph type	= SCS Runoff	Peak discharge	= 3,049 cfs
Storm frequency	= 2 yrs	Time to peak	= 12.12 hrs
Time interval	= 1 min	Hyd. volume	= 8,780 cuft
Drainage area	= 1,010 ac	Curve number	= 92
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.17 in	Distribution	= Custom

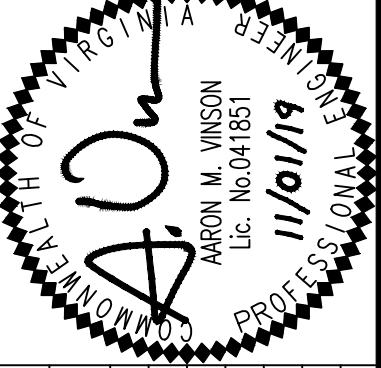
POST-DEVELOPMENT 10-YEAR

Hydrograph type	= SCS Runoff	Peak discharge	= 5,111 cfs
Storm frequency	= 10 yrs	Time to peak	= 12.12 hrs
Time interval	= 1 min	Hyd. volume	= 15,389 cuft
Drainage area	= 1,010 ac	Curve number	= 93
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.87 in	Distribution	= Custom

CONCEPTUAL STORMWATER MANAGEMENT NARRATIVE AND DETAILS

**SUNRISE OF VIENNA**  
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NO.	DESCRIPTION	DATE	REV. BY	APPROVED BY	DATE







Project Name: **Sunrise of Vienna**  
 Date: **11/1/2019**  
 Linear Development Project? **No**

**CLEAR ALL**

data input cells  
 constant values  
 calculation cells  
 final results

**Site Information**

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

Enter Total Disturbed Area (acres) → **1.01**

Maximum reduction required: **20%**  
 The site's net increase in impervious cover (acres) is: **0**  
 Post-Development TP Load Reduction for Site (lb/yr): **0.37**

**Pre-ReDevelopment Land Cover (acres)**

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed forest/open space					0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be mowed/managed				0.16	0.16
Impervious Cover (acres)				0.85	0.85
<b>Total</b>					<b>1.01</b>

**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 land					0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be mowed/managed				0.17	0.17
Impervious Cover (acres)				0.84	0.84
<b>Area Check</b>	<b>OK</b>	<b>OK</b>	<b>OK</b>	<b>OK</b>	<b>1.01</b>

**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 <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)	0.16	0.16
Weighted Rv(turf)	0.25	0.25
% Managed Turf	16%	16%
Impervious Cover (acres)	0.85	0.85
Rv(impervious)	0.95	0.95
% Impervious	84%	84%
<b>Total Site Area (acres)</b>	<b>1.01</b>	<b>1.01</b>
<b>Site Rv</b>	<b>0.84</b>	<b>0.84</b>

**LAND COVER SUMMARY -- POST DEVELOPMENT**

Land Cover Summary-Post (Final)		
Post-Development	Final	ReDev
<b>Post-Development &amp; New Impervious</b>		
Forest/Open Space Cover (acres)	0.00	0.00
Weighted Rv(forest)	0.00	0.00
% Forest	0%	0%
Managed Turf Cover (acres)	0.17	0.17
Weighted Rv (turf)	0.25	0.25
% Managed Turf	17%	17%
Impervious Cover (acres)	0.84	0.84
Rv(impervious)	0.95	0.95
% Impervious	83%	83%
<b>Final Site Area (acres)</b>	<b>1.01</b>	<b>1.01</b>
<b>Final Post Dev Site Rv</b>	<b>0.83</b>	<b>0.83</b>

**Treatment Volume and Nutrient Load**

	Pre-ReDevelopment	Post-Development
Pre-ReDevelopment Treatment Volume (acre-ft)	0.0710	0.0710
Pre-ReDevelopment Treatment Volume (cubic feet)	3,091	3,091
Pre-ReDevelopment TP Load (lb/yr)	1.94	1.94
Pre-ReDevelopment TP Load per acre (lb/acre/yr)	1.91	1.91
Baseline TP Load (lb/yr) (0.41 lbs/acre/yr applied to pre-redevelopment area excluding pervious land proposed for new impervious cover)		0.42

**Treatment Volume and Nutrient Load**

	Final Post-Development	Post-ReDevelopment	Post-Development
Final Post-Development Treatment Volume (acre-ft)	0.0704	0.0704	--
Final Post-Development Treatment Volume (cubic feet)	3,067	3,067	--
Final Post-Development TP Load (lb/yr)	1.93	1.93	--
Final Post-Development TP Load per acre (lb/acre/yr)	1.90	1.90	--
Max. Reduction Required (Below Pre-ReDevelopment Load)		20%	
TP Load Reduction Required for Redeveloped Area (lb/yr)		0.37	
TP Load Reduction Required for New Impervious Area (lb/yr)			0

<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 1 shows load reduction requirement 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) **0.37**

**Nitrogen Loads (Informational Purposes Only)**

Pre-ReDevelopment TN Load (lb/yr)	13.89	Final Post-Development TN Load (Post-ReDevelopment & New Impervious) (lb/yr)	13.78
-----------------------------------	-------	--	-------

**Drainage Area A**

Drainage Area A Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals	Land Cover Rv
Forest/Open Space (acres)					0.00	0.00
Managed Turf (acres)				0.17	0.17	0.25
Impervious Cover (acres)				0.84	0.84	0.95
<b>Total</b>					<b>1.01</b>	

**CLEAR BMP AREAS**

Total Phosphorus Available for Removal in D.A. A (lb/yr) **1.93**  
 Post Development Treatment Volume in D.A. A (ft<sup>3</sup>) **3,067**

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

Practice	Runoff Reduction Credit (%)	Managed Turf Credit Area (acres)	Impervious Cover 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
<b>6. Bioretention (RR)</b>													
6.a. Bioretention #1 or Micro-Bioretention #1 or Urban Bioretention (Spec #9)	40		0.65	0	897	1,345	2,242	25	0.00	1.41	0.77	0.63	

**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 (ad)	0.00	0.00	0.00	0.00	0.00	OK
IMPERVIOUS COVER (ad)	0.84	0.00	0.00	0.00	0.00	OK
IMPERVIOUS COVER TREATED (ad)	0.65	0.00	0.00	0.00	0.00	OK
MANAGED TURF AREA (ad)	0.17	0.00	0.00	0.00	0.00	OK
MANAGED TURF AREA TREATED (ad)	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>) **3,067**

**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> )	897	0	0	0	0	897
TP LOAD AVAILABLE FOR REMOVAL (lb/yr)	1.93	0.00	0.00	0.00	0.00	1.93
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.77	0.00	0.00	0.00	0.00	0.77
TP LOAD REMAINING (lb/yr)	1.15	0.00	0.00	0.00	0.00	1.15
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	6.44	0.00	0.00	0.00	0.00	6.44

**Total Phosphorus**

FINAL POST-DEVELOPMENT TP LOAD (lb/yr)	1.93
TP LOAD REDUCTION REQUIRED (lb/yr)	0.37
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.77
TP LOAD REMAINING (lb/yr)	1.15
REMAINING TP LOAD REDUCTION REQUIRED (lb/yr):	0.00 **
<b>** TARGET TP REDUCTION EXCEEDED BY 0.4 LB/YEAR **</b>	

**Total Nitrogen (For Informational Purposes)**

POST-DEVELOPMENT LOAD (lb/yr)	13.78
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	6.44
REMAINING POST-DEVELOPMENT NITROGEN LOAD (lb/yr)	7.34

Drainage Area A		A Soils	B Soils	C Soils	D Soils	Total Area (acres):
Forest/Open Space -- undisturbed, protected forest/open space or reforested land	Area (acres)	0.00	0.00	0.00	0.00	1.01
	CN	30	55	70	77	Runoff Reduction Volume (ft <sup>3</sup> ): 897
Managed Turf -- disturbed, graded for yards or other turf to be mowed/managed	Area (acres)	0.00	0.00	0.00	0.17	
	CN	39	61	74	80	
Impervious Cover	Area (acres)	0.00	0.00	0.00	0.84	
	CN	98	98	98	98	
		CN(D.A. A)				
		95				
		1-year storm				
RV <sub>Developed</sub> (watershed-inch) with no Runoff Reduction*		2.08	2.62	4.29		
RV <sub>Developed</sub> (watershed-inch) with Runoff Reduction*		1.84	2.37	4.05		
Adjusted CN*		92	92	93	1-year storm	2.62
					2-year storm	3.17
					10-year storm	4.87

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ESTABLISHED 1945  
 I.N.C.O.R.P.O.R.A.T.E.D.  
 SCALE: 1" = 20'  
 DATE: 11/01/19

NO.	DESCRIPTION	DATE	APPROVED	REVISION

**VRRM SPREADSHEET**

**SUNRISE OF VIENNA**  
 MAC AMENDMENT PLAN  
 374 - 380 MAPLE AVENUE WEST  
 TOWN OF VIENNA, VIRGINIA 22180





**RUST | ORLING**  
ARCHITECTURE

1215 CAMERON STREET  
ALEXANDRIA, VA  
22314

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**SUNRISE OF VIENNA**  
380 Maple Avenue  
Vienna, Virginia

18012

REVISIONS

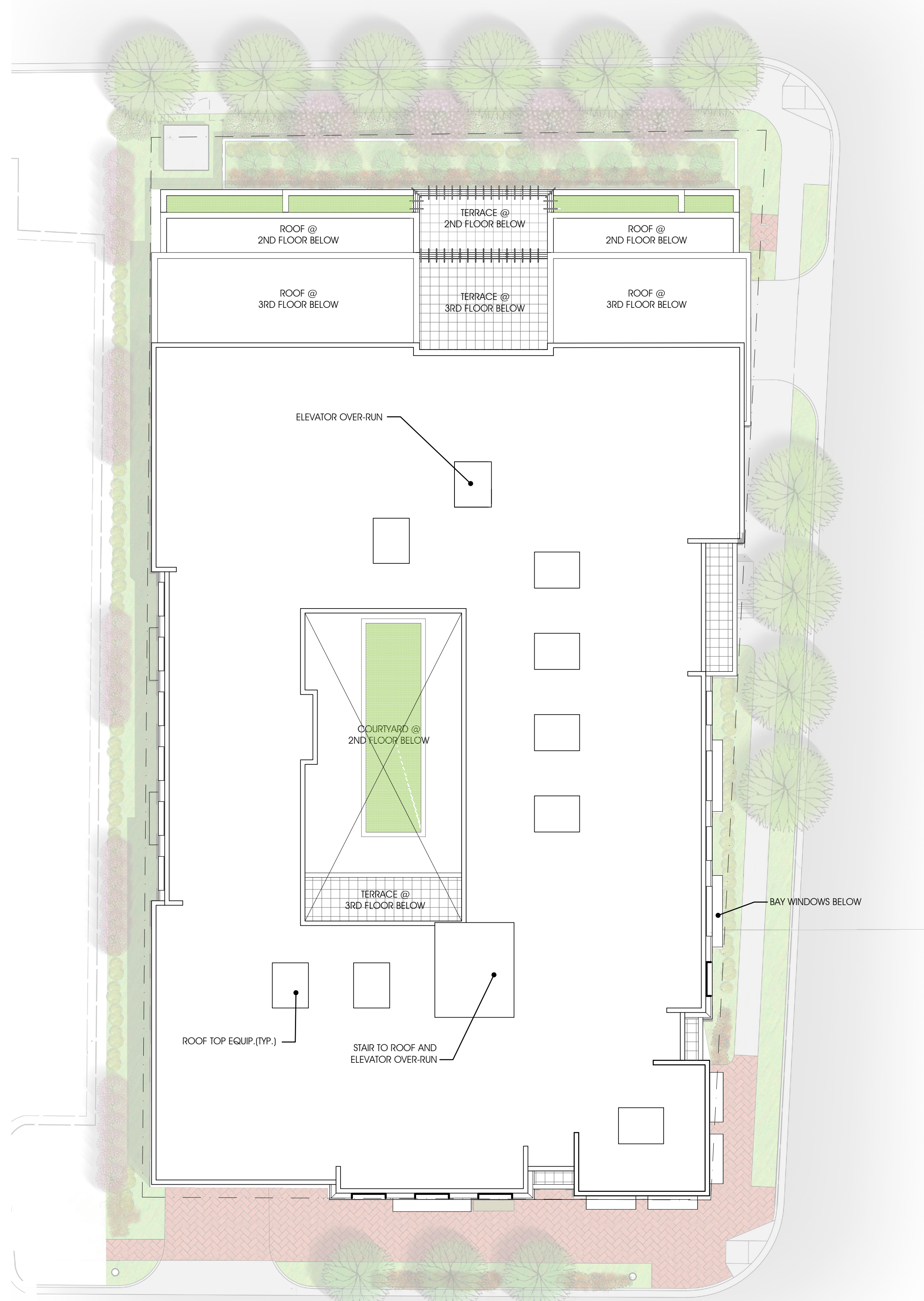
DATE	DESCRIPTION

MAC PLAN  
AMENDMENT  
11.01.19

FLOOR PLANS

SHEET NO.

**A1.1**



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

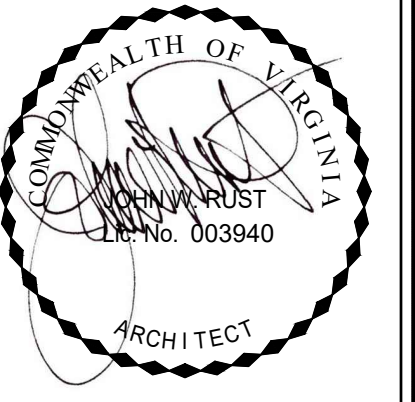
A



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

B





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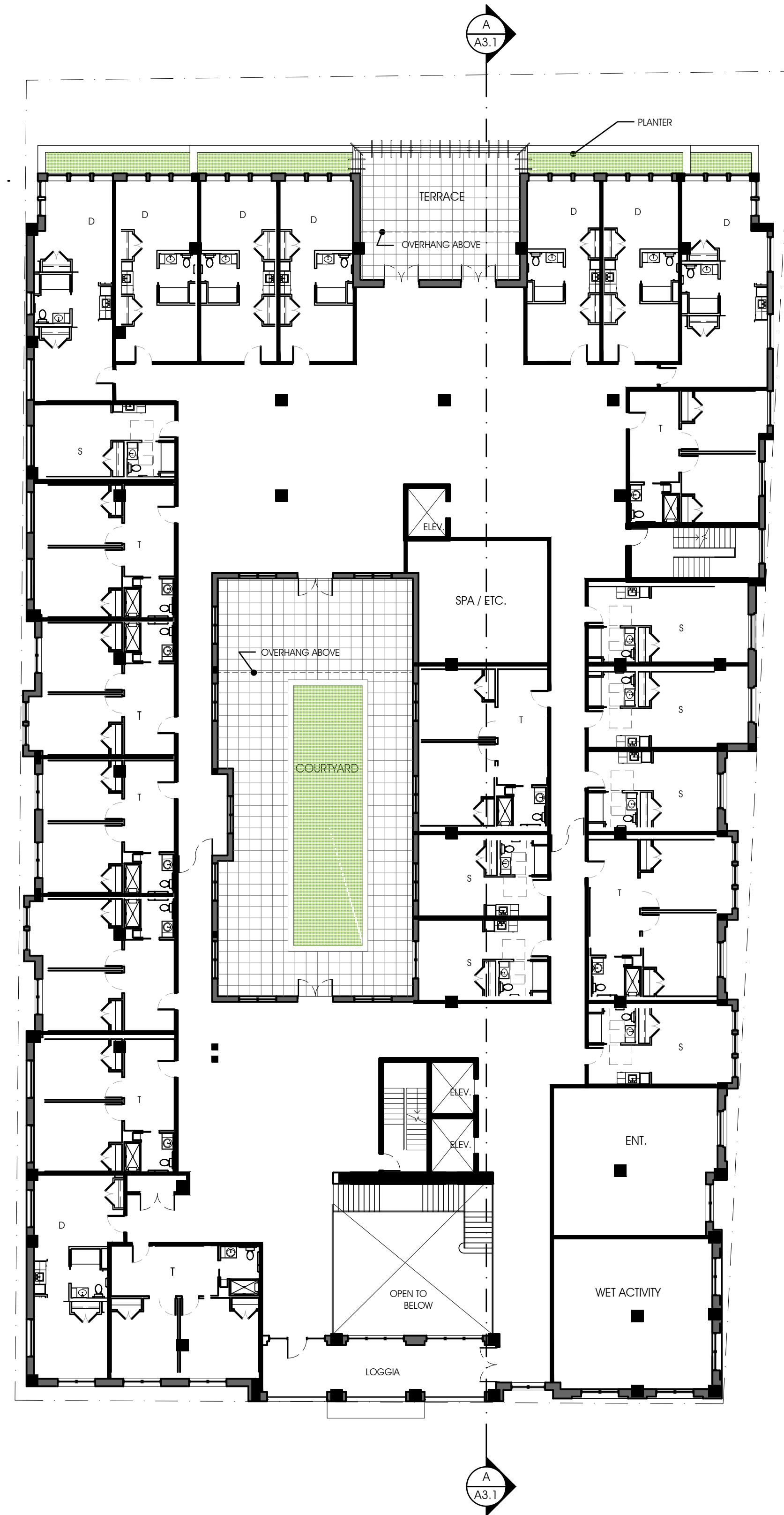
DATE	DESCRIPTION

MAC PLAN  
AMENDMENT  
11.01.19

FLOOR PLANS

SHEET NO.

**A1.2**



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



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

B

A





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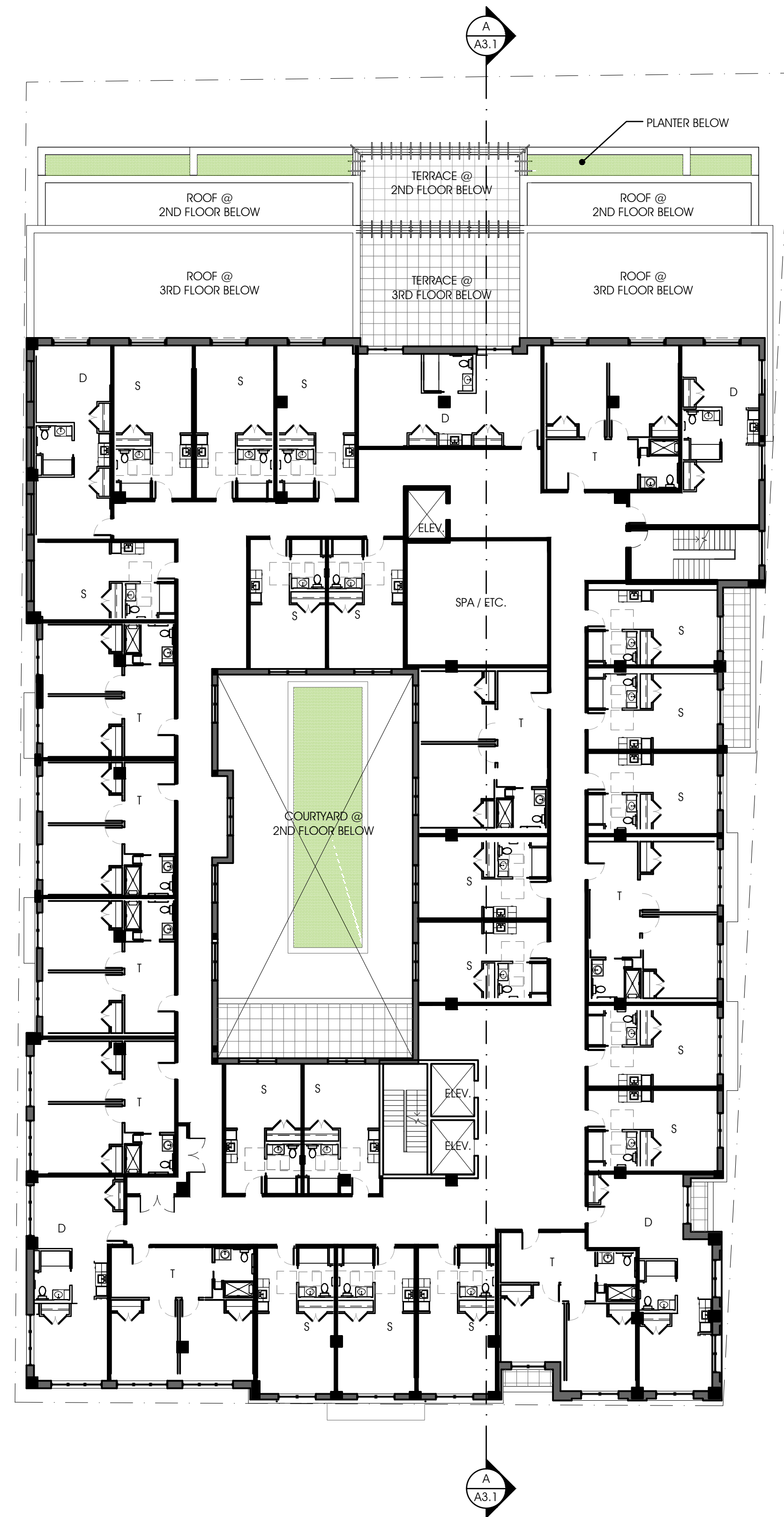
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MAC PLAN  
AMENDMENT  
11.01.19

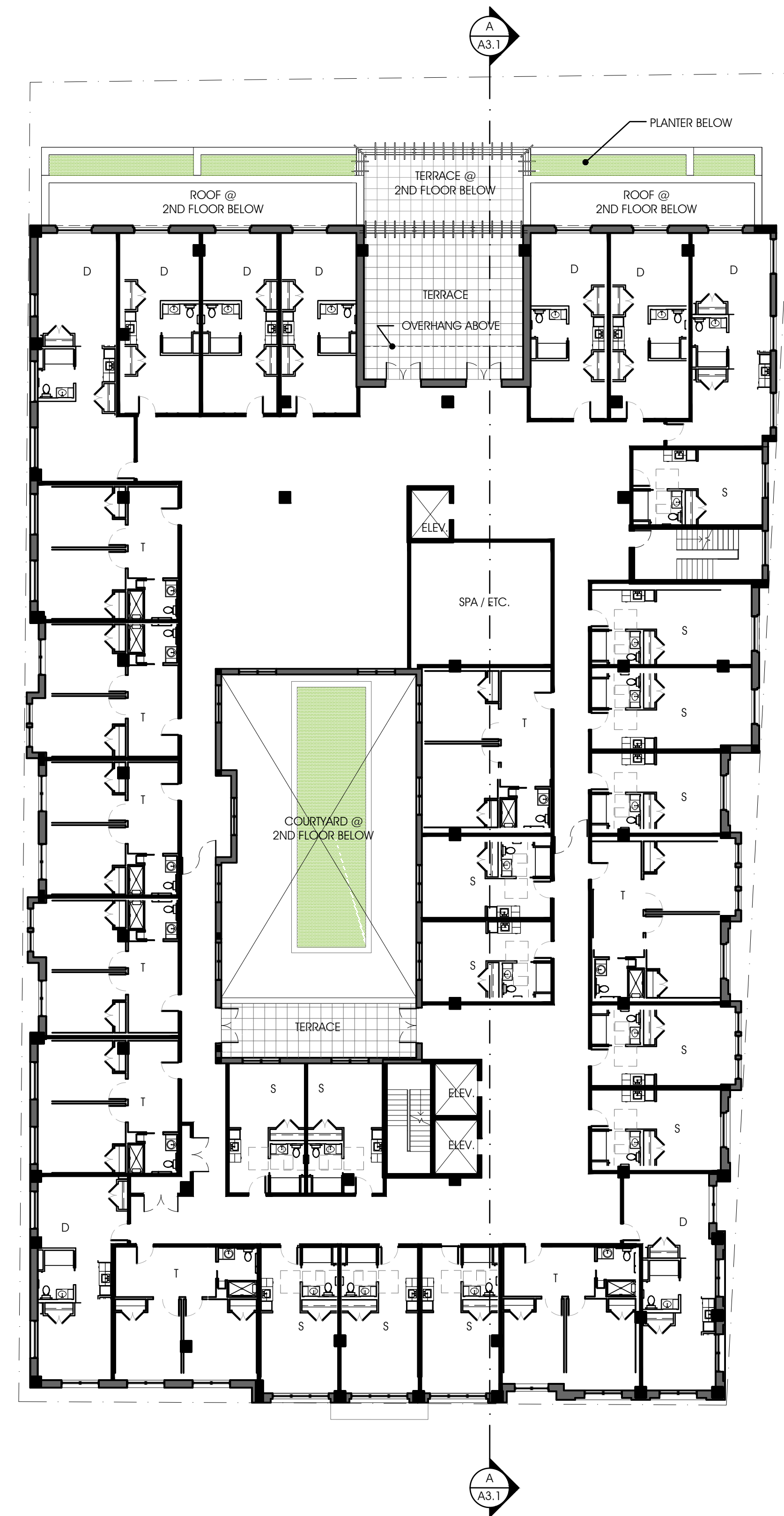
FLOOR PLANS

SHEET NO.

**A1.3**



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



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

B

A





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DATE	DESCRIPTION

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AMENDMENT  
11.01.19

EXTERIOR  
ELEVATIONS

SHEET NO.

**A2.1**



MAPLE AVENUE ELEVATION  
3/32" = 1'-0"

B



WADE HAMPTON DRIVE ELEVATION  
3/32" = 1'-0"

A





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DATE	DESCRIPTION

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11.01.19

EXTERIOR  
ELEVATIONS

SHEET NO.

**A2.2**



GLEN AVENUE ELEVATION  
3/32" = 1'-0"

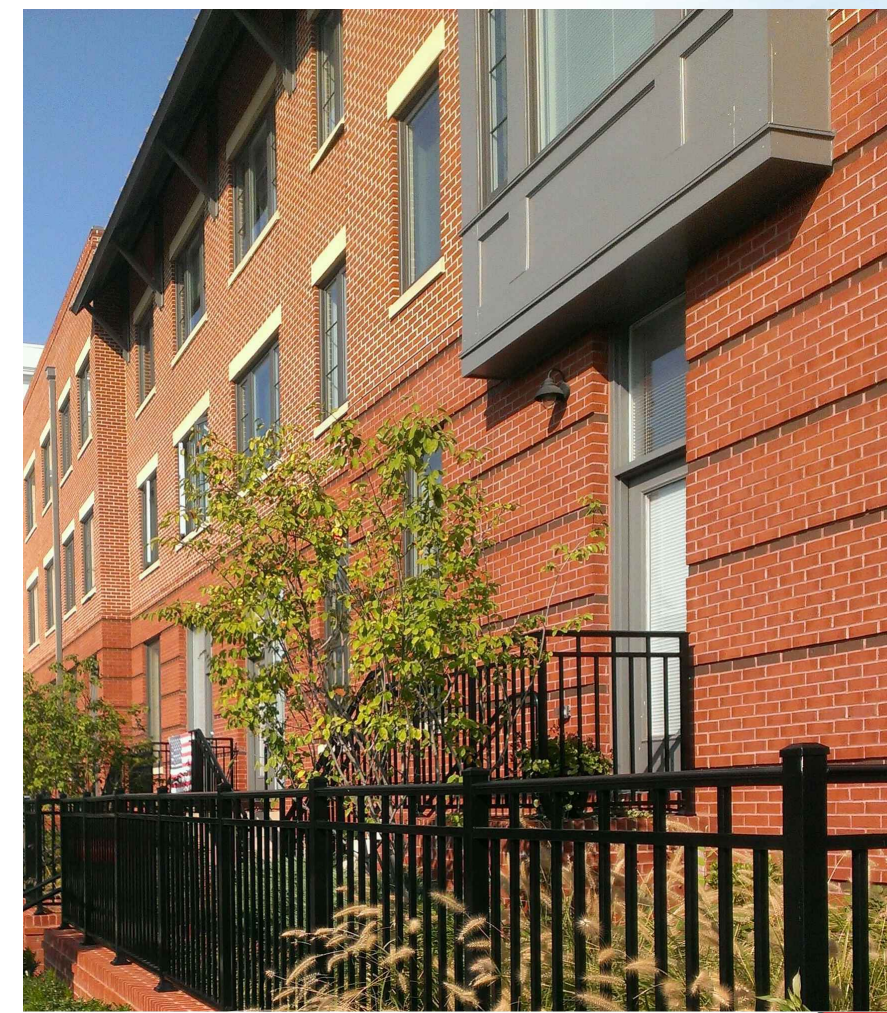
B



SIDE ELEVATION  
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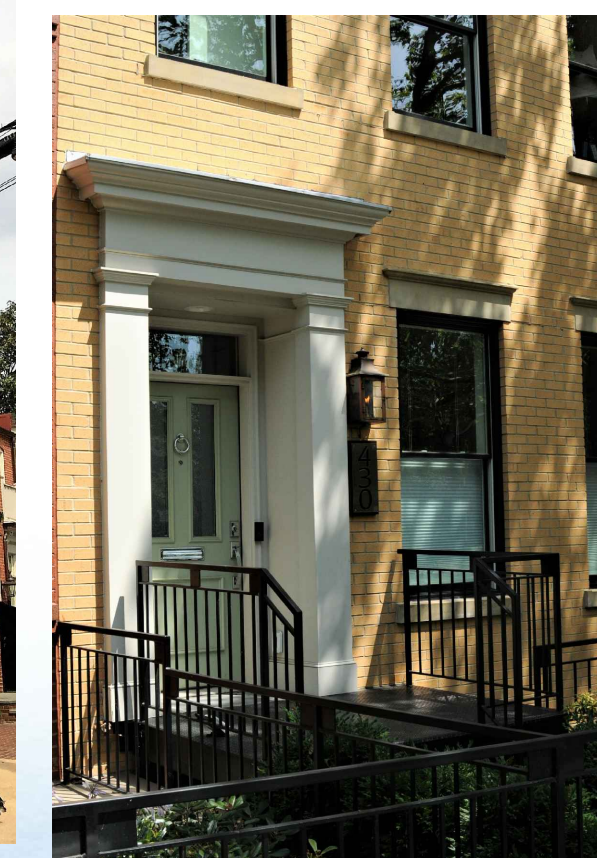
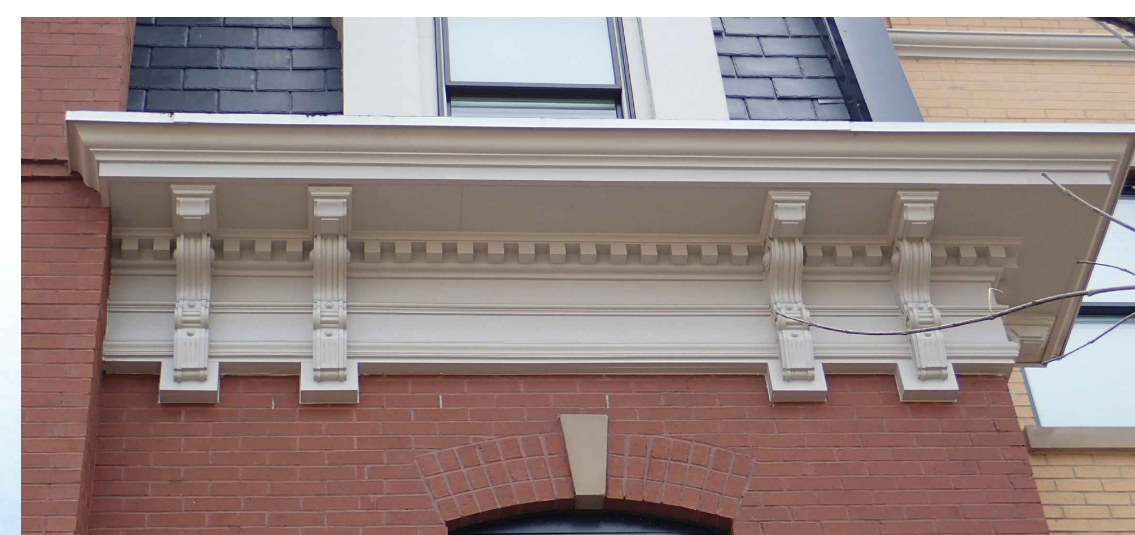
A





MAPLE AVENUE ELEVATION  
3/32" = 1'-0"

B

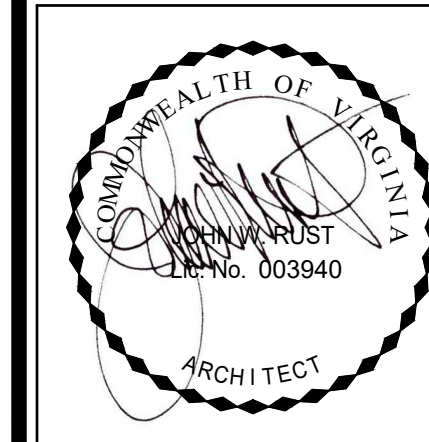


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WADE HAMPTON DRIVE ELEVATION  
3/32" = 1'-0"

A



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REVISIONS

DATE	DESCRIPTION

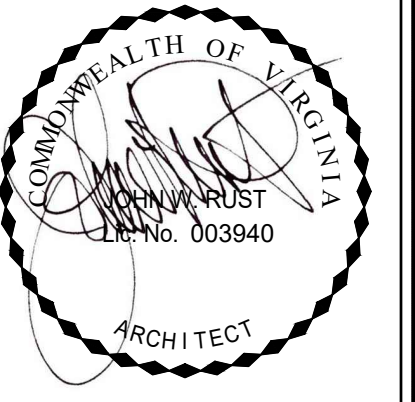
MAC PLAN  
AMENDMENT  
11.01.19

IMAGERY SHEET

SHEET NO.

A2.3





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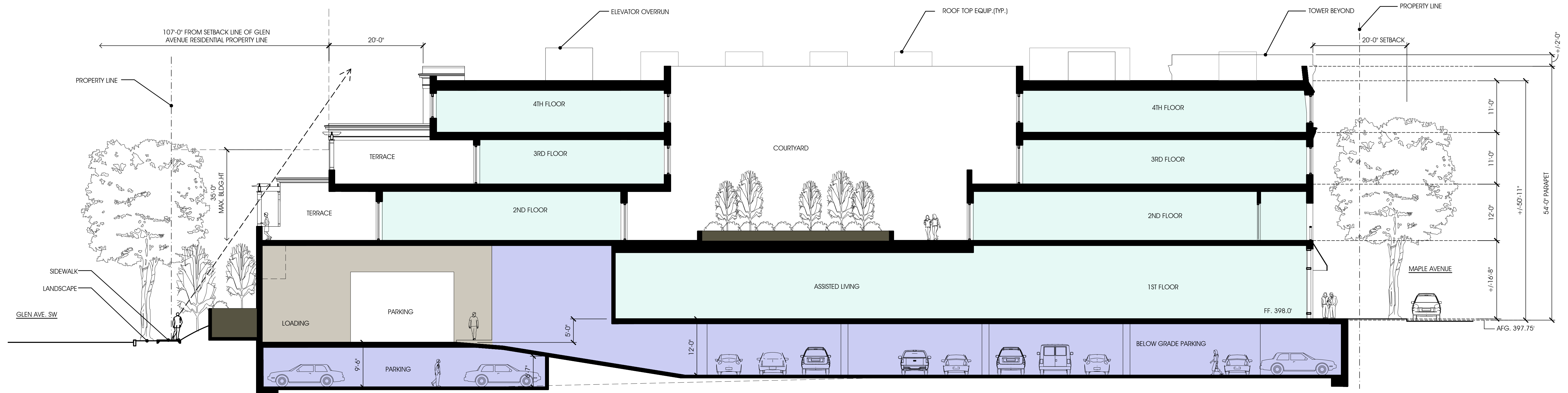
DATE	DESCRIPTION

MAC PLAN  
AMENDMENT  
11.01.19

BUILDING  
SECTION

SHEET NO.

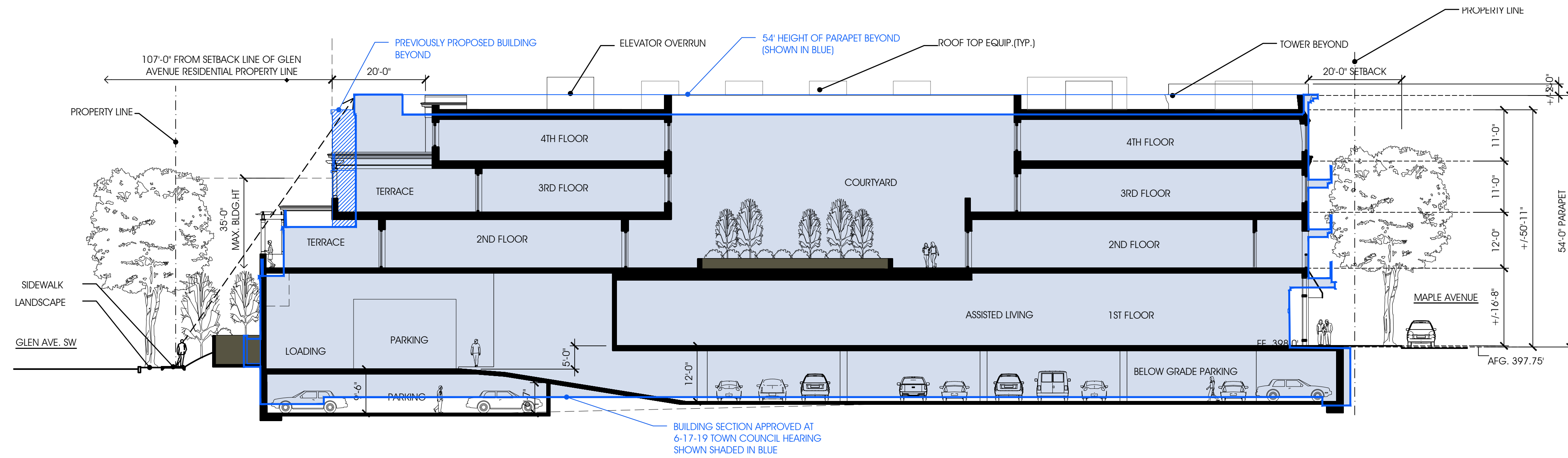
**A3.1**



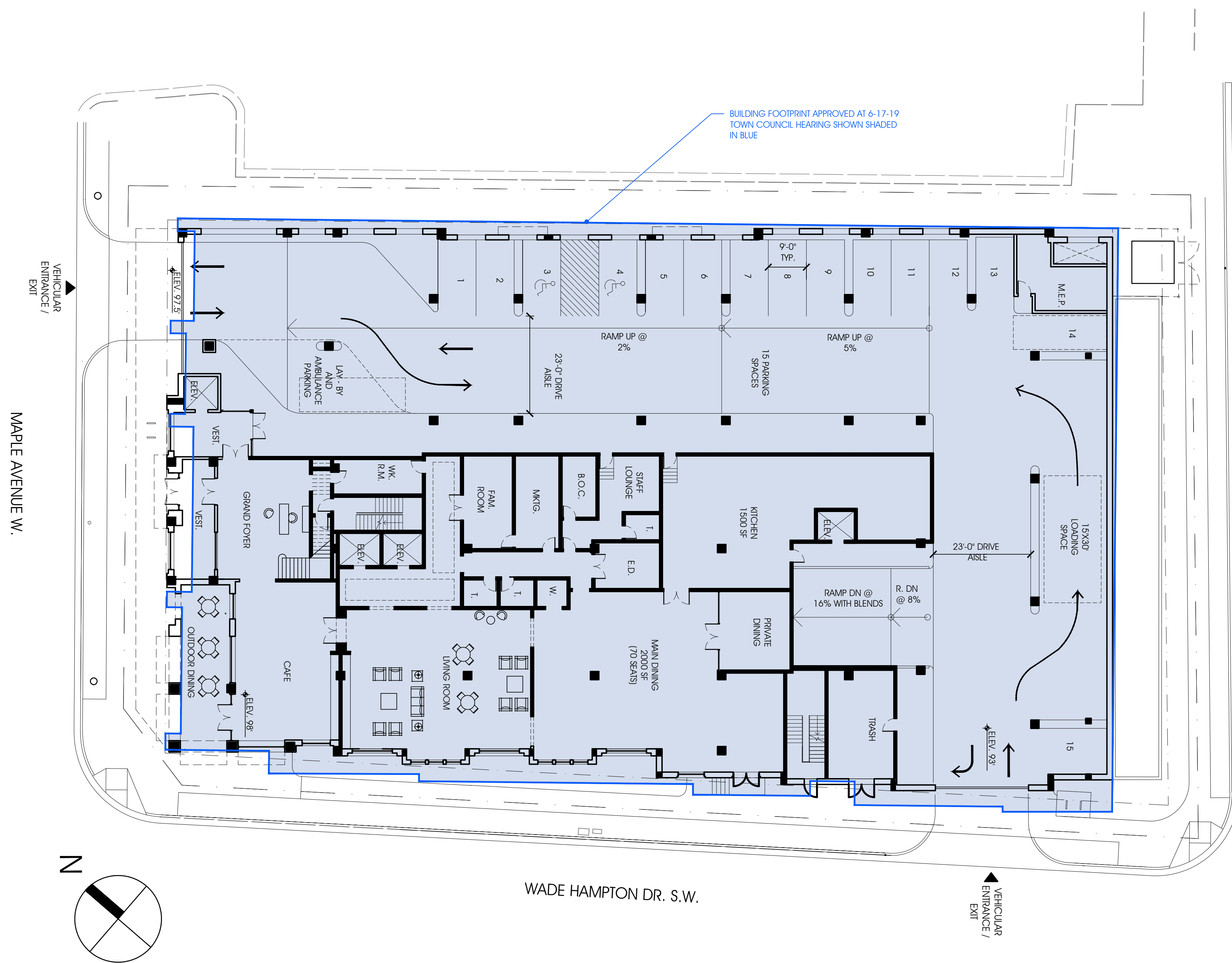
A

BUILDING SECTION  
3/32" = 1'-0"





COMPARISONS WITH PREVIOUS PROJECT SECTION  
1/16"=1'-0"



COMPARISONS WITH PREVIOUS PROJECT PLAN  
1/16"=1'-0"

B

A



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DATE	DESCRIPTION

MAC PLAN  
AMENDMENT  
11.01.19

COMPARISONS  
WITH PREVIOUS  
PROJECT

SHEET NO.  
**A4.1**



LOT 1-5A

APPROX. LOCATION OF EX. BUILDING

APPROX. LOCATION OF EX. BUILDING

LOT A-F

EX

1.7 0.8 0.4 0.3 0.3 0.5 0.6 0.7 0.7 0.5 0.6 0.6 0.7 0.7 0.7 0.8 1.3 1.9 2.0 1.7 1.4 0.8 0.3 0.1 0.1

2.1 1.0 0.5 0.3 0.3 0.4 0.4 0.4 0.4 0.6 0.7 0.8 1.0 1.7 1.8 2.1 2.1 1.3 0.7 0.3 0.2 0.1

1.5 0.9 0.5 0.3 0.2 0.2 0.2 0.2 0.2 0.3 0.3 0.3 0.4 0.6 0.9 1.7 1.6 1.3 0.9 0.7 0.5 0.3 0.1 0.1

0.8 0.6 0.4 0.3 0.2 0.1 0.1 0.1 0.1 0.1 0.2 0.2 0.2 0.4 0.6 0.8 0.6 0.5 0.4 0.3 0.2 0.2 0.1 0.1

0.4 0.3 0.2 0.2 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.2 0.4 0.3 0.3 0.2 0.2 0.1 0.1 0.1 0.1 0.1

LOT 90

LOT 89

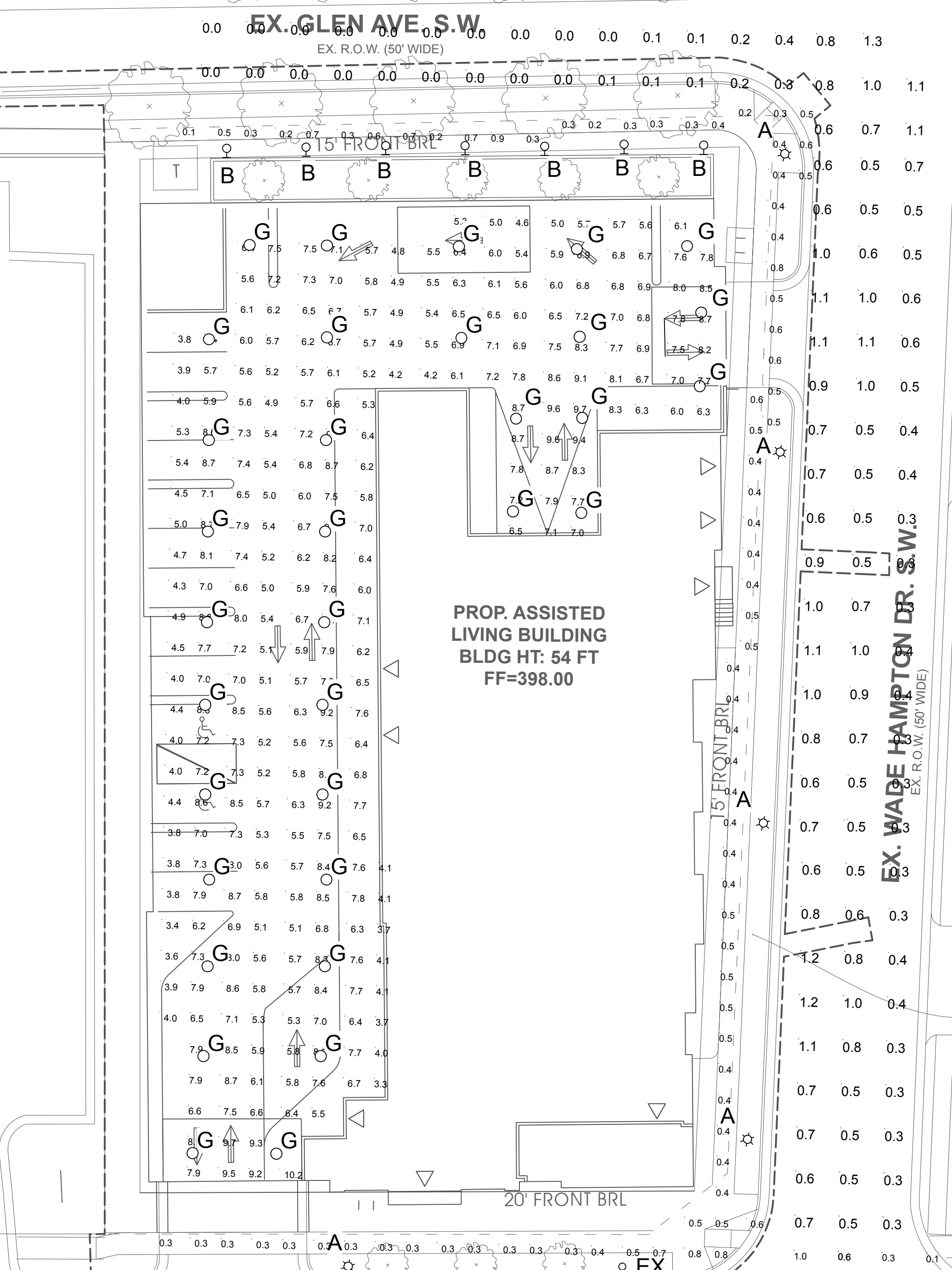
FINAL LIGHT SELECTION TO BE APPROVED BY BAR							ETR - EXISTING TO REMAIN
FIXT. TYPE	DESCRIPTION	MANUFACTURER	CAT. NO.	LAMPS		REMARKS	
				NO.	TYPE		
A	NEW DOMINION LED CARLYLE GLOBE	HOLOPHANE CARLYLE	TYPE 3 70W EQ GRN 42316039 DEC RD TAPERED GRN 42062757	1	26 WATT 4000K LED	U GROUND POLE 14' POLE HEIGHT	
B	EXTERIOR RECESSED STEP LIGHT	PERFORMANCE IN LIGHTING	71419 INSERT +1	1	7 WATT 3000K LED	U WALL RECESSED MTD @ 3' UON	
G	GARAGE LED FIXTURE LED FIXTURE	GE	ECR-A-0-A5-F-525-40K-4-B-D	1	35 WATT 4000K LED	U RECESSED CEILING MTD @ CEILING HEIGHT VARIES	

AREA DESCRIPTION	STATISTICS				
	AVERAGE	MAXIMUM	MINIMUM	MAX/MIN	AVG/MIN
PARKING GARAGE	6.6	10.2	3.3	3.1:1	2.0:1
MAPLE AVENUE	0.5	2.1	0.1	21.0:1	5.0:1
WADE HAMPTON	0.6	1.2	0.3	4.0:1	2.0:1
CROSSWALK	0.6	1.1	0.1	11.0:1	6.0:1
SIDEWALK	0.4	1.4	0.1	14.0:1:1	5.0:1

EX. MILLWOOD CT SW

EX. GLEN AVE. S.W.  
EX. R.O.W. (50' WIDE)

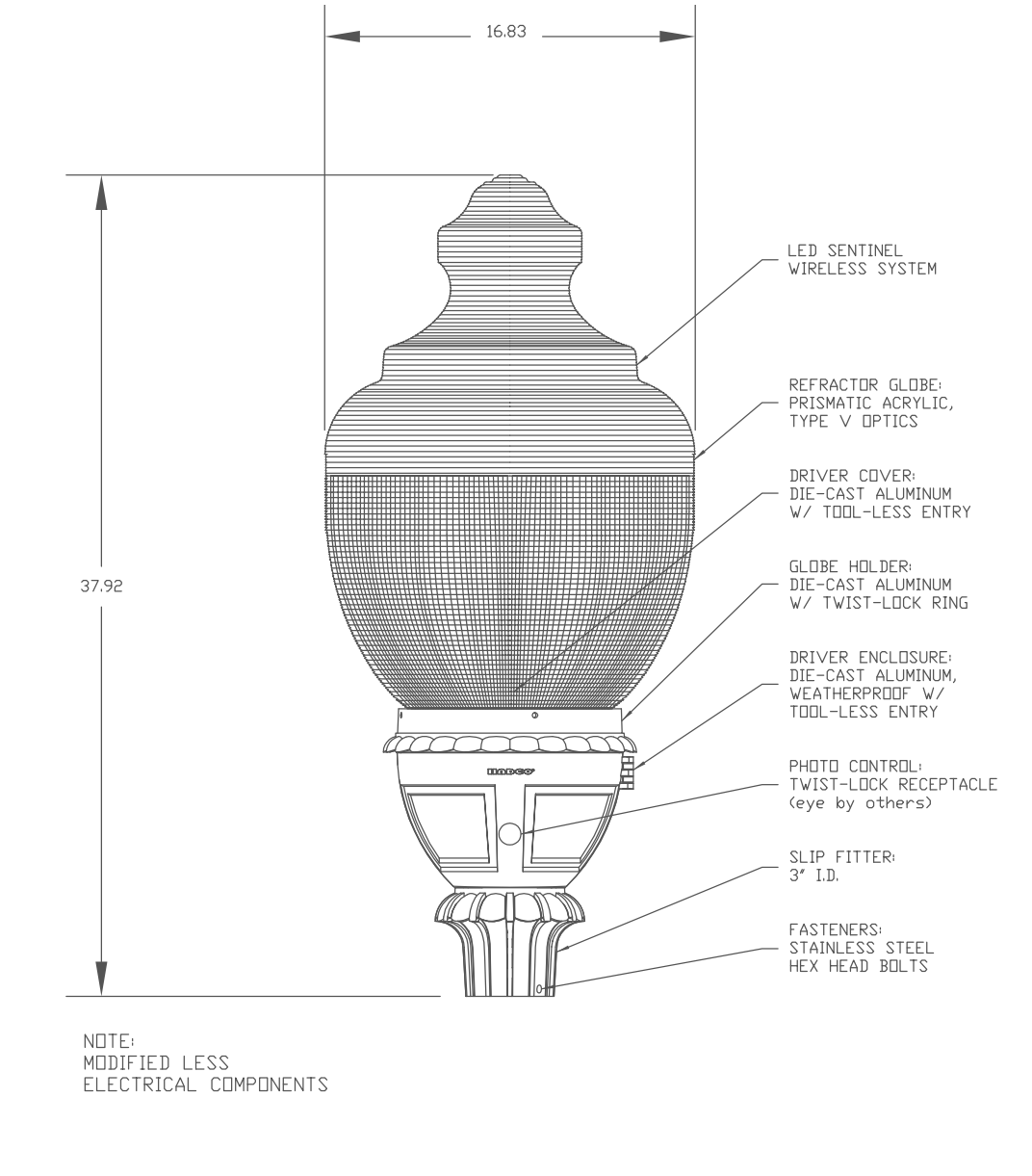
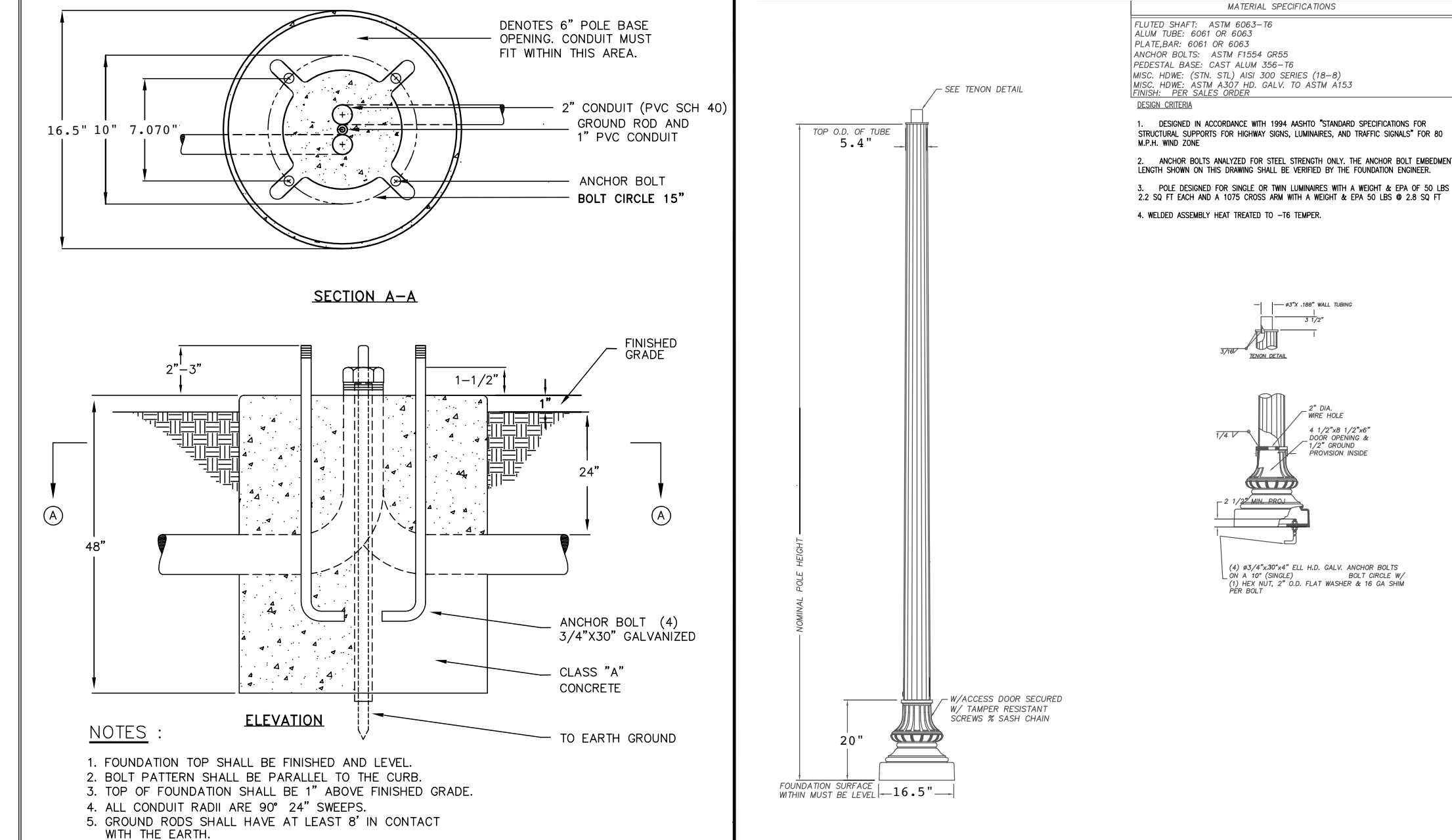
EX. WADE HAMPTON DR. S.W.  
EX. R.O.W. (60' WIDE)



APPROX. LOCATION OF EX. BUILDING  
LOT 144

APPROX. EX. GAS - 2  
PLA-20# (97)

STREET LIGHTING FIXTURE - DETAILS - NOT TO SCALE



**SITE LIGHTING - ELECTRICAL**

**SUMMIT ENGINEERS, INC.**  
Mechanical/Electrical Consultants  
8307 Lee Hwy, Arlington, VA 22207  
703-633-6593 [summitengineers.com](http://summitengineers.com)

SUMMIT PROJECT # 2019085.00

**SUNRISE OF VIENNA II**  
374-380 MAPLE AVENUE WEST  
TOWN OF VIENNA, VIRGINIA 22180

SCALE: 1" = 20'-0" SHEET: E-001 DRAWN: ALW CHECKED: JKD  
SUBMITTED DATE: 10.31.19