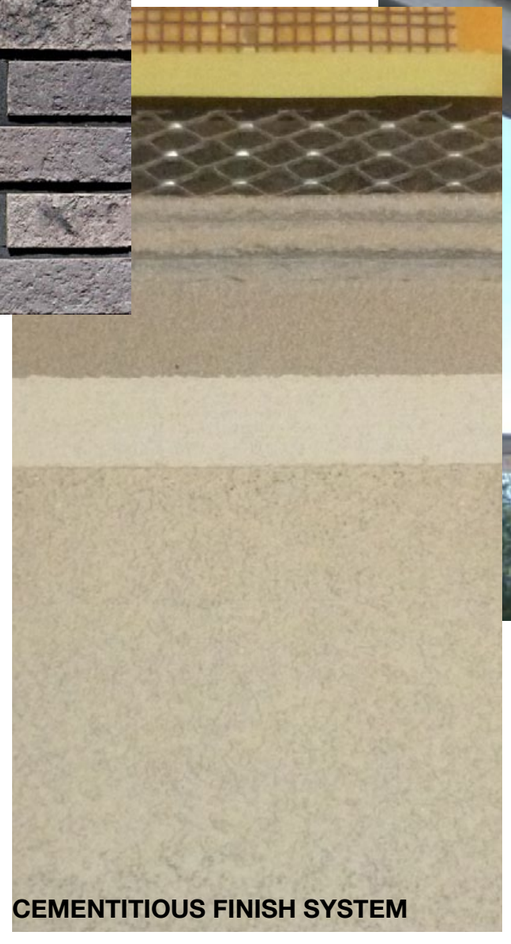
IRON SPOT GRAY BRICK

WIRE-CUT RED BRICK

WHITE BRICK

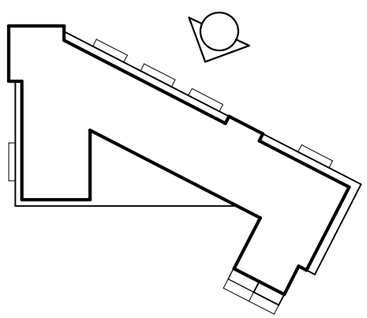


CEMENTITIOUS FINISH SYSTEM

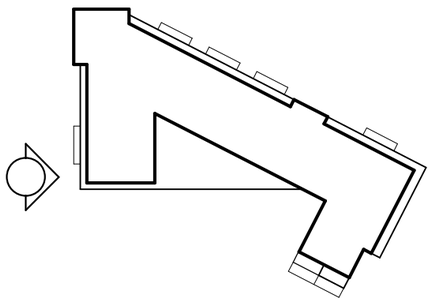
CEMENTITIOUS PANEL SYSTEM

CEMENT BOARD PLANK SYSTEM

NOTE: FLEXIBILITY IS REQUESTED TO VARY THE FINAL SELECTION OF EXTERIOR MATERIALS WITHIN THE COLOR RANGES AND GENERAL MATERIAL TYPES PROPOSED, BASED ON AVAILABILITY AT THE TIME OF CONSTRUCTION WITHOUT REDUCING THE QUALITY OF MATERIALS.

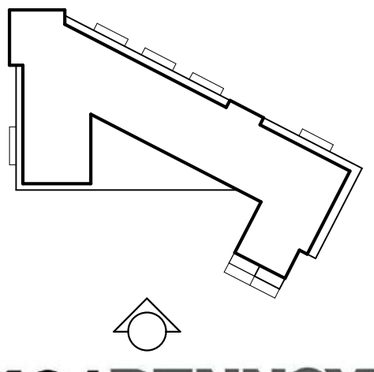


NOTE: FLEXIBILITY IS REQUESTED TO VARY THE EXTERIOR DESIGN AND MATERIALS OF THE GROUND-FLOOR RETAIL SPACE BASED ON THE PREFERENCES OF THE INDIVIDUAL RETAILER, PROVIDED THAT THE RETAILER DOES NOT MODIFY THE BUILDING FOOTPRINT OR REDUCE THE QUALITY OF THE MATERIALS USED ON THE EXTERIOR OF THE GROUND FLOOR OF THE PROJECT.



NOTE: FLEXIBILITY IS REQUESTED TO VARY THE EXTERIOR DESIGN AND MATERIALS OF THE GROUND-FLOOR RETAIL SPACE BASED ON THE PREFERENCES OF THE INDIVIDUAL RETAILER, PROVIDED THAT THE RETAILER DOES NOT MODIFY THE BUILDING FOOTPRINT OR REDUCE THE QUALITY OF THE MATERIALS USED ON THE EXTERIOR OF THE GROUND FLOOR OF THE PROJECT.


ROOF
78' - 0"
FLOOR 7
68' - 0"
FLOOR 6
58' - 0"
FLOOR 5
48' - 0"
FLOOR 4
38' - 0"
FLOOR 3
28' - 0"
FLOOR 2
18' - 0"
FLOOR 1
0"
WIRE-CUT RED BRICK
CEMENTITIOUS FINISH SYSTEM
LOW-E COATING RESIDENTIAL GLAZING
CEMENTITIOUS PANEL SYSTEM
IRON SPOT GRAY BRICK

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FLOOR 2
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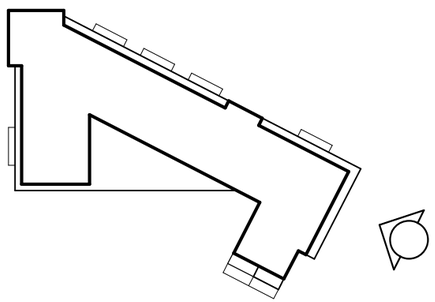
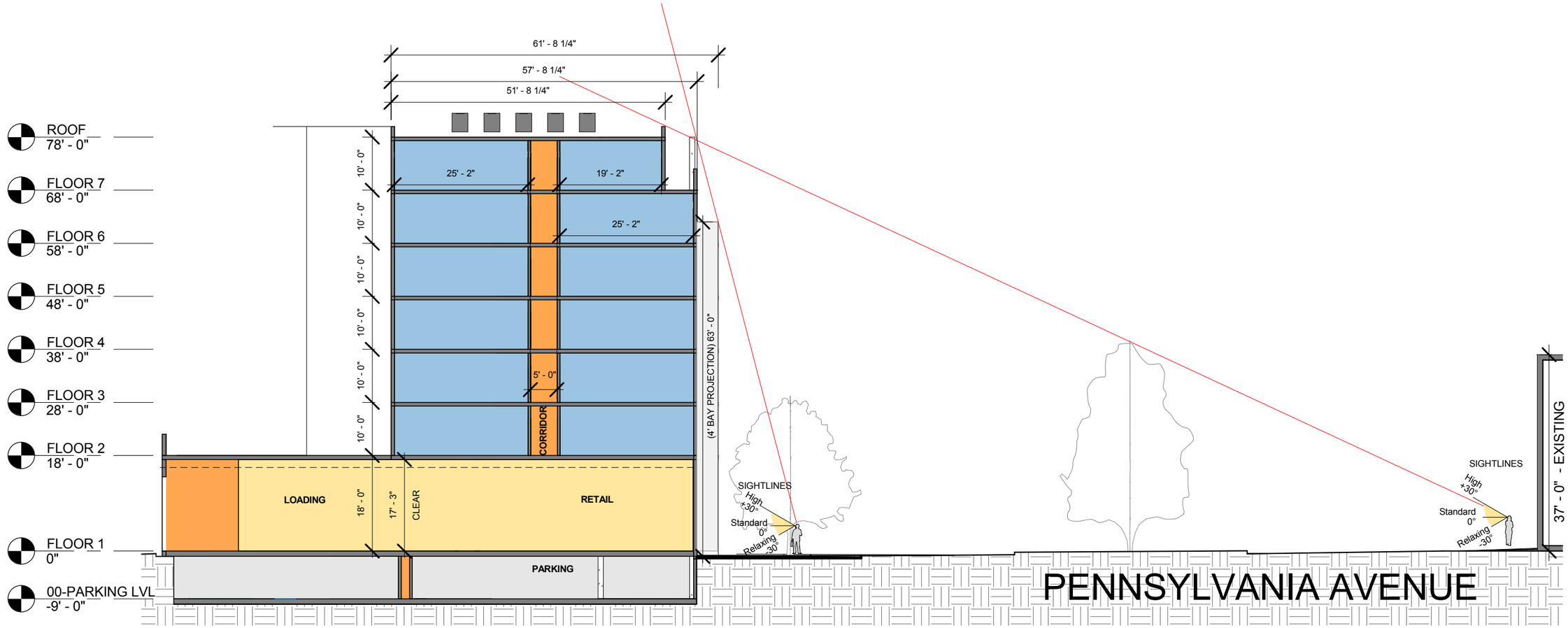
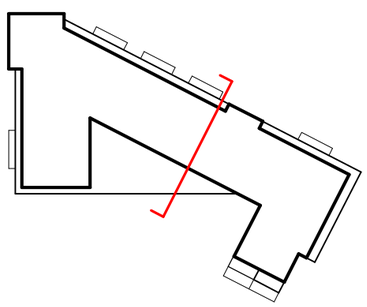
FLOOR 1
0"
WIRE-CUT RED BRICK
CEMENTITIOUS FINISH SYSTEM
CEMENTITIOUS PANEL SYSTEM
LOW-E COATING RESIDENTIAL GLAZING
CEMENT BOARD PLANKS
IRON SPOT GRAY BRICK







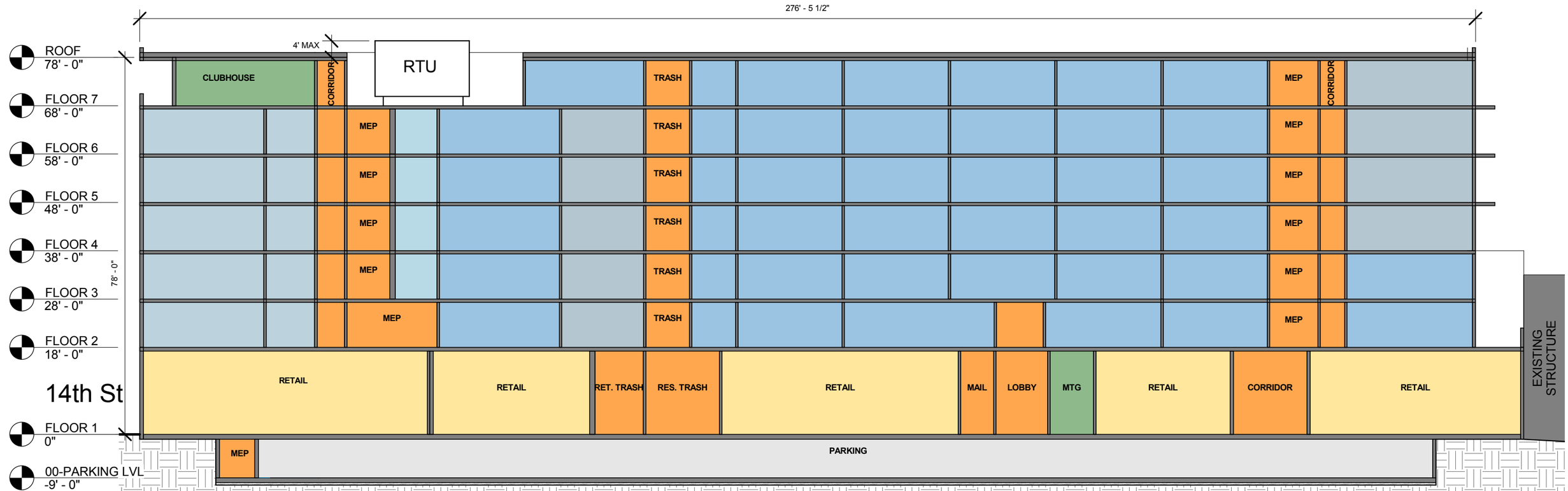
RETAIL

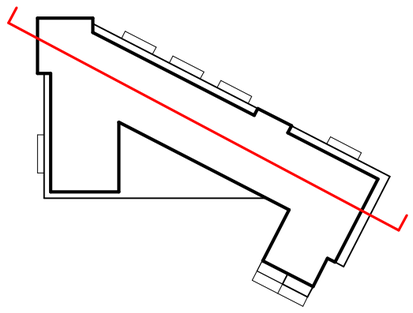
RESIDENTIAL

CORE

AMENITY

PARKING





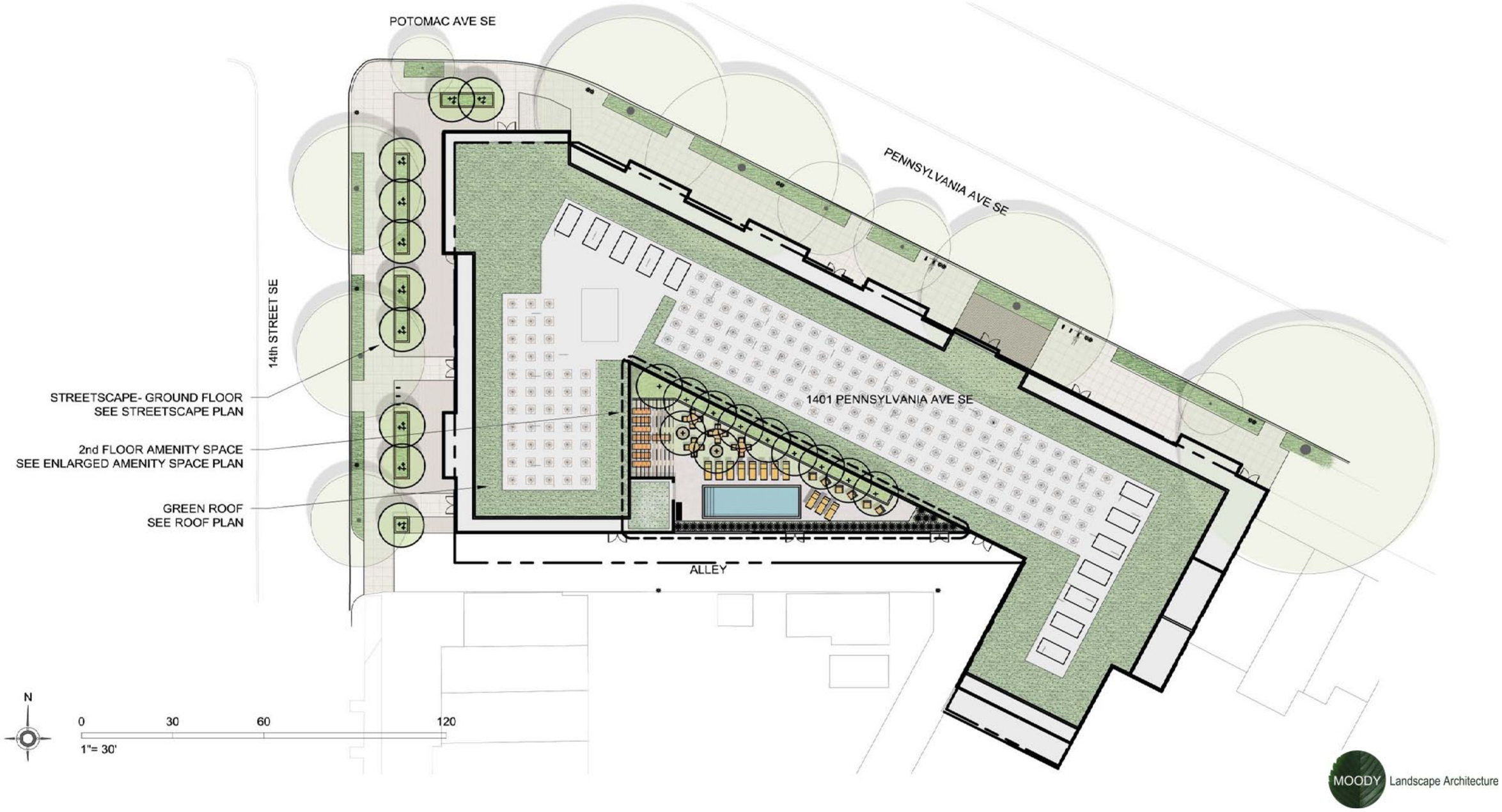
RETAIL

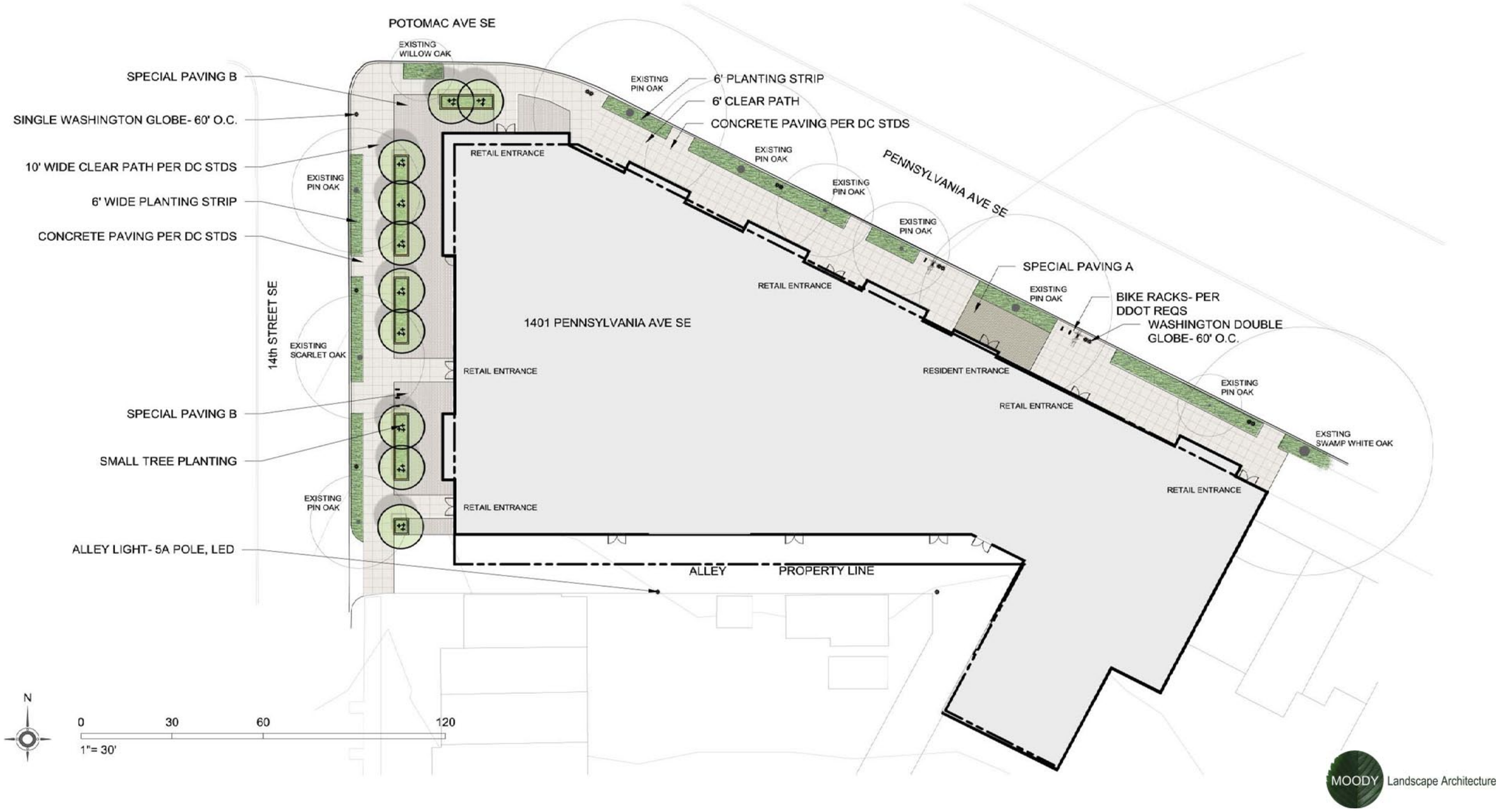
RESIDENTIAL

CORE

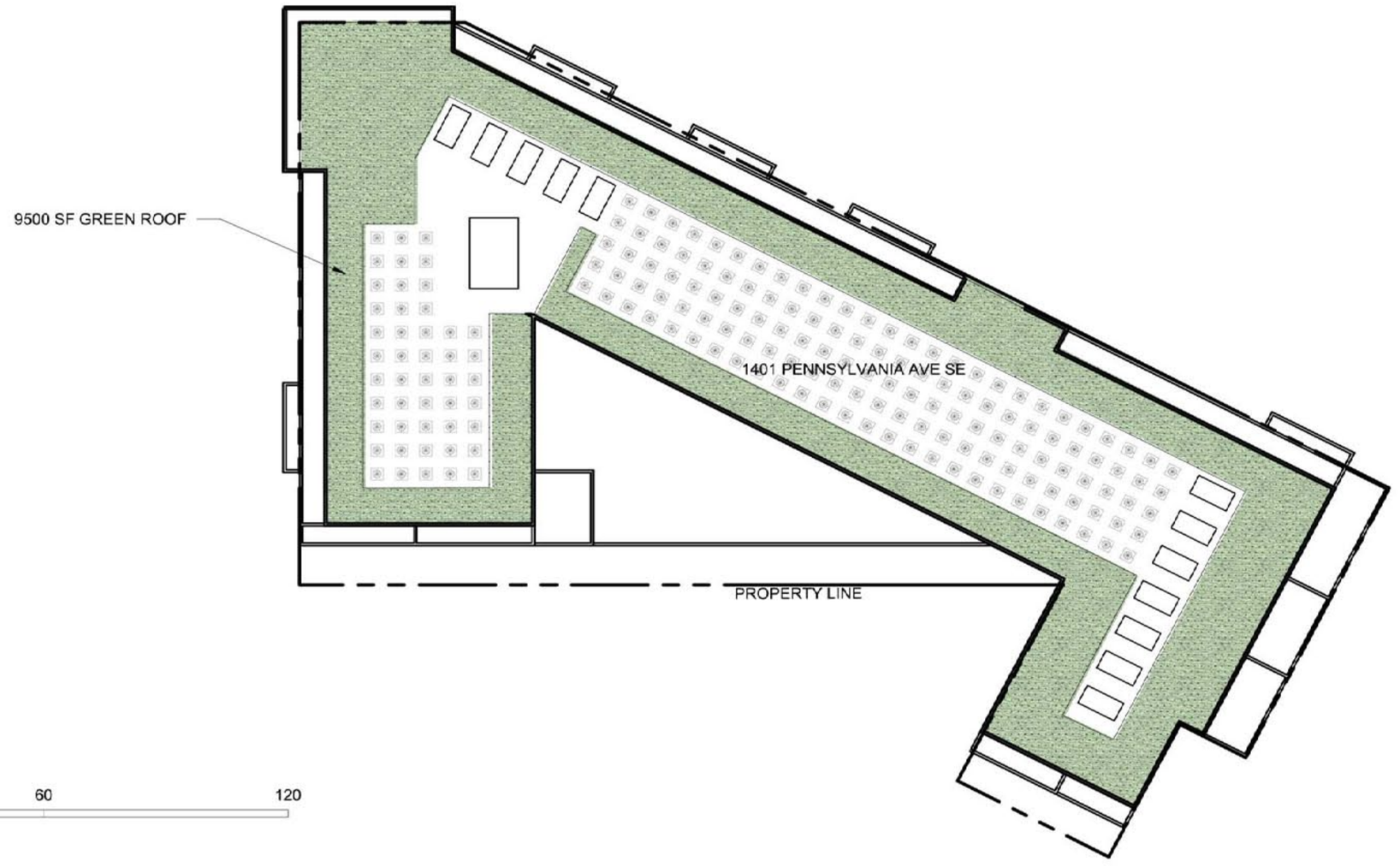
AMENITY

PARKING


POTOMAC AVE SE
PENNSYLVANIA AVE SE
14th STREET SE
1401 PENNSYLVANIA AVE SE
ALLEY
STREETSCAPE- GROUND FLOOR
SEE STREETSCAPE PLAN
2nd FLOOR AMENITY SPACE
SEE ENLARGED AMENITY SPACE PLAN
GREEN ROOF
SEE ROOF PLAN
N
0
30
60
120
1"= 30'
MOODY Landscape Architecture

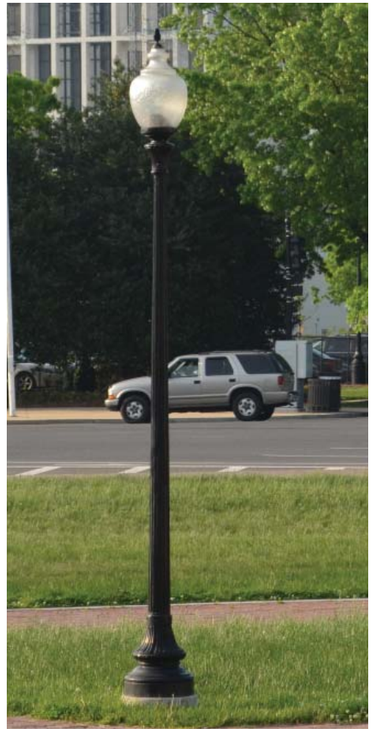


MOODY Landscape Architecture

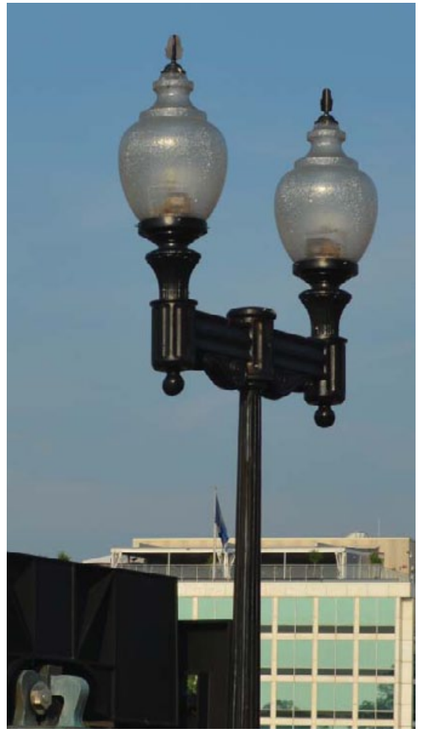


MOODY Landscape Architecture

MOODY Landscape Architecture



Washington Globe Street Light



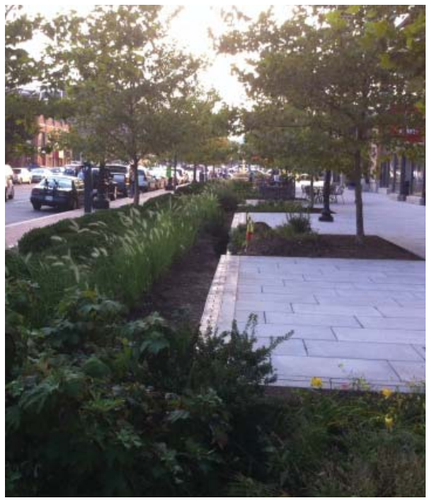
Twin-20 Double Globe Street Light

Public Bench

Trash Receptacle

Bicycle Rack

Small Tree Planting in Raised Planter



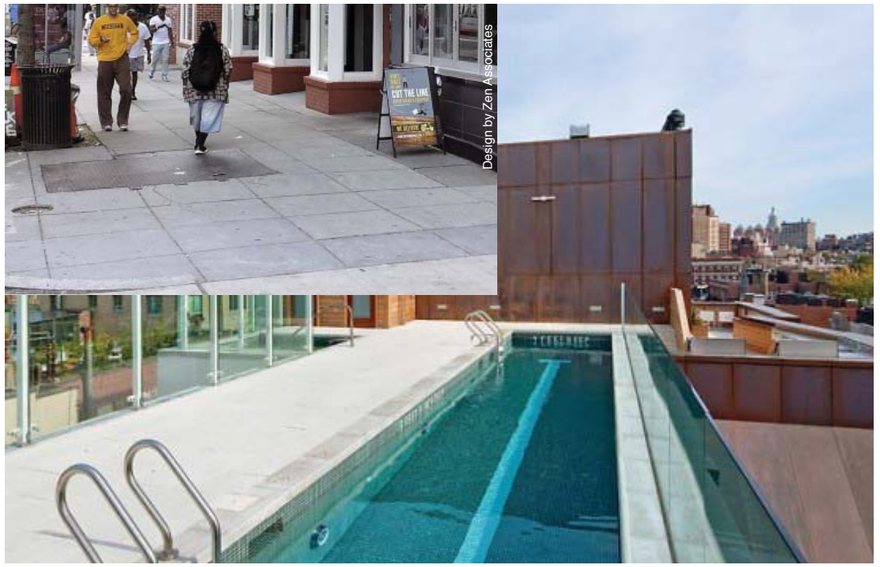
Planting Strip

DC Standard Concrete Paving

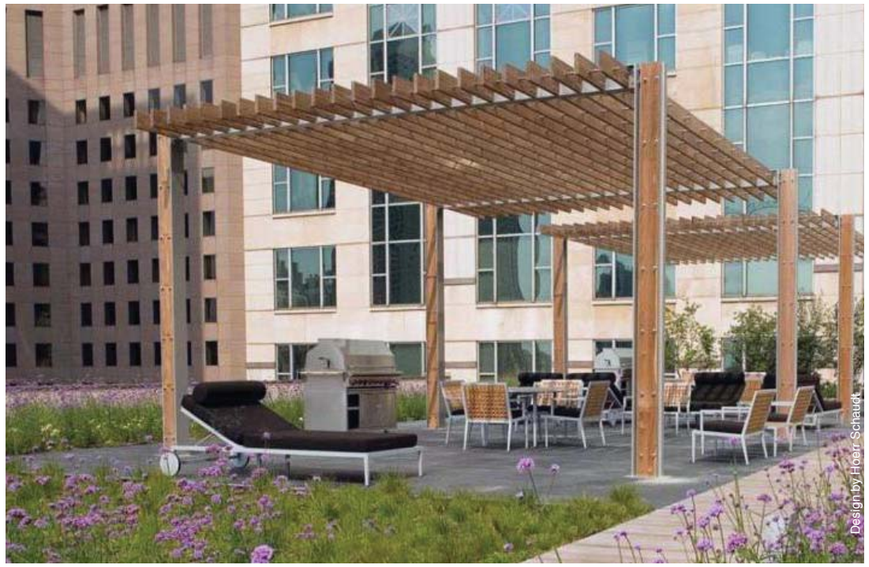
Special Paving

Special Paving

MOODY Landscape Architecture

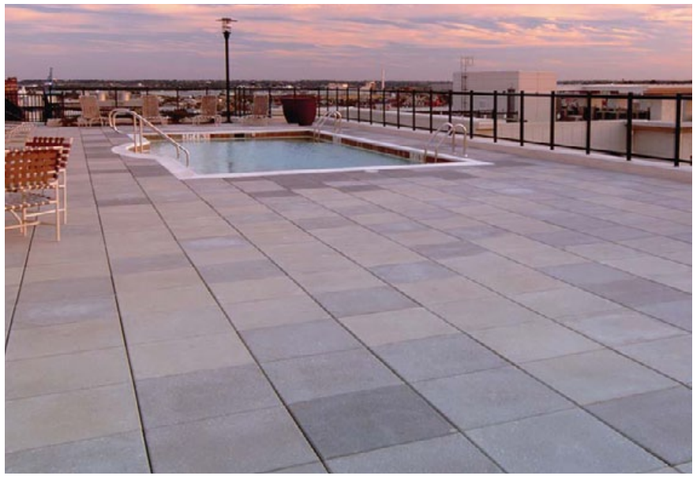


Pool (inclusion subject to market conditions)



Shade Structure

Planters



Pavers

Wood Deck

Planters

Wood Bench

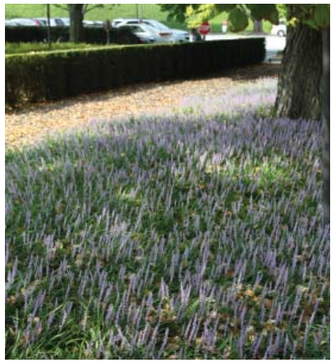
MOODY Landscape Architecture

Columnar Hornbeam
Carpinus betulus ‘Frans Fontaine’

Sweetbay Magnolia
Magnolia virgininiana ‘Moonglow’

Green Mountain Boxwood
Buxus x ‘Green Mountain’

Oakleaf Hydrangea
Hydrangea quercifolia



Liriope
Liriope spicata

St. Johns Wort
Hypericum perforatum

Autumn Stonecrop
Sedum ‘Matrona’

Yarrow
Achillea millefolium

Switchgrass
Panicum virgatum

Feather Reed Grass
Calamagrostis x acutiflora

Green Roof Precedent Image

Green Roof Precedent Image

MOODY Landscape Architecture

1401-1433 PENNSYLVANIA AVE, SE
SQUARE 1065; LOTS 142, 30-33, 820
WASHINGTON, DC

DEMOLITION NOTES:

1. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES FOR SHUTOFF, CAPPING AND CONTINUATION OF UTILITY SERVICES AS REQUIRED.
2. CONTRACTOR SHALL REMOVE AND TRANSPORT ALL DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM ALL DEMOLITION OPERATIONS TO A LEGAL DISPOSAL OFF SITE.
3. REMOVAL OF ASPHALT AND CONCRETE PAVEMENT SHALL INCLUDE THE REMOVAL OF ALL SURFACE, BASE AND SUBBASE MATERIALS.
4. EXISTING CONDITIONS SHOWN HEREON WERE TAKEN FROM A SURVEY PREPARED BY AMT LLC. ENTITLED, "BOUNDARY AND TOPOGRAPHIC SURVEY, 1401-1433 PENNSYLVANIA AVE. S.E., LOTS 142, 30-33, 820 IN SQ. 1065", DATED 03/09/15, AND FROM AVAILABLE UTILITY COMPANY RECORDS.
5. ALL UNDERGROUND UTILITY LOCATIONS, INCLUDING WATER, STORM DRAINAGE, SANITARY SEWER, ELECTRICAL, TELEPHONE AND GAS WERE TAKEN FROM AVAILABLE RECORDS AND FIELD VERIFIED WHERE POSSIBLE. THE LOCATION OF ALL UTILITIES SHOWN ARE APPROXIMATE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY AND DETERMINE THE EXACT LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO COMMENCING WORK. REPORT ANY DISCREPANCY TO ENGINEER. MARKING LOCATIONS OF EXISTING UTILITIES, CONTACT "MISS UTILITY" AT (800) 257-7777, 48-HOURS PRIOR TO ANY EXCAVATION.
6. THE CONTRACTOR MUST HAND-DIG TEST PITS AT ALL UTILITY CROSSINGS TO DETERMINE THE EXACT LOCATION AND DEPTH OF ALL UTILITIES AS WELL IN DEMOLITION WORK AND PRIOR TO ORDERING PIPE MATERIALS AND STRUCTURE. UTILITIES FOUND DURING DEMOLITION OR CONSTRUCTION ACTIVITIES SHALL BE THE RESPONSIBILITY OF ANY CONTRACTOR ENGAGED IN EXCAVATION AT THIS SITE. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY UTILITY FINDINGS WHICH DEVIATE FROM THE CONDITIONS SHOWN.
7. ALL SEDIMENT AND EROSION CONTROL METHODS SHALL BE INSTALLED BEFORE THE START OF ANY EXCAVATION AND/OR DEMOLITION AS PER DISTRICT OF COLUMBIA EROSION AND CONTROL HANDBOOK. IF ANY ONSITE INSPECTION REVEALS FURTHER EROSION CONTROL MEASURES ARE NECESSARY, THE SAME SHALL BE PROVIDED. REFER TO SHEETS C1.02, C5.01 AND C5.02 SEDIMENTATION AND EROSION CONTROL PLANS, NOTES, AND DETAILS.
8. SEE SEDIMENTATION AND EROSION CONTROL PLAN FOR ALL EXISTING TREES TO REMAIN AND BE PROTECTED.
9. NOTE PROXIMITY OF ADJACENT STRUCTURES AND UTILITY LINES AND MAINTAIN CONTINUED SERVICE DURING CONSTRUCTION. COORDINATE WITH RESPECTIVE UTILITY COMPANIES AND ENGINEER SHOULD RELOCATION OF SERVICE BE REQUIRED.
10. EXISTING UTILITIES (STRUCTURES AND LINES) NOT REQUIRED FOR FUTURE SERVICE TO BE REMOVED TO FACILITATE CONSTRUCTION. UTILITIES TO BE CAPPED AS PER UTILITY PURVEYOR'S STANDARDS AND SPECIFICATIONS. COORDINATE REQUIREMENTS WITH UTILITY PURVEYOR'S.
11. REMOVAL OF ALL WALLS/RETAINING WALLS AND FENCES SHALL INCLUDE THE REMOVAL OF THEIR FOUNDATION UNLESS OTHERWISE INDICATED ON THESE DRAWINGS.
12. ALL EXISTING DC STREETLIGHT POLES THAT ARE BEING PERMANENTLY REMOVED MUST BE RETURNED IN GOOD CONDITION TO THE DISTRICT OF COLUMBIA WAREHOUSE AT 1735 15TH STREET NE OFF WEST VIRGINIA AVENUE CONTACT NUMBER (202) 576-5258.
13. EXISTING WATER AND SEWER SERVICES NOT REQUIRED FOR FUTURE USE TO BE REMOVED TO EXTENT NECESSARY TO FACILITATE NEW CONSTRUCTION. REMAINDER OF SERVICE TO BE CAPPED AT MAIN AND EXISTING VALVES AND TEES TO BE REMOVED PER DC/WATER STANDARDS SPECIFICATIONS.COORDINATE REQUIREMENTS WITH DC WATER UTILITY INSPECTOR AT (202) 787-4299. PAVEMENT TO BE REMOVED PER DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS.
14. CONTRACTOR TO BE RESPONSIBLE FOR LAYOUT, EXTENT AND DESIGN OF SHEETING, SHORING AND SUPPORT OF EXISTING UTILITIES AND ADJACENT STRUCTURES. SHORING, BRACING AND UNDERPINNING SHALL BE DESIGNED BY A STRUCTURAL ENGINEER, LICENSED IN THE DISTRICT OF COLUMBIA, HIRED BY THE CONTRACTOR AS NECESSARY TO ENSURE SUPPORT OF SURROUNDING STRUCTURES AND UTILITIES.
15. CONTRACTOR TO RELOCATE PARKING METERS IF REQUIRED AND AS DIRECTED BY D.C. BUREAU OF PARKING. COORDINATE REQUIREMENT WITH LARRY BROWN OF PARKING SERVICES AT (202) 671-2291.
16. NOTIFY DC WATER AT (202) 787-4299 48 HOURS PRIOR TO START OF CONSTRUCTION.
17. UNLESS OTHERWISE SHOWN ON THESE DRAWINGS, EXISTING PAVEMENT ON 14TH STREET, SE, POTOMAC AVENUE, SE, AND PENNSYLVANIA AVENUE, SE TO REMAIN. PROVIDE PRE-CONSTRUCTION VIDEO OF EXISTING PAVEMENT ON 14TH STREET, SE, POTOMAC AVENUE, SE, AND PENNSYLVANIA AVENUE, SE EXISTING PAVEMENT THAT IS DISTURBED OR DAMAGED DURING CONSTRUCTION, SHALL BE REPLACED PER DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS AT NO ADDITIONAL COST.
18. PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES VERIFY INVERT ELEVATION OF EXISTING UTILITIES. NOTIFY ENGINEER OF ANY DISCREPANCIES WITH INFORMATION SHOWN PRIOR TO ORDERING ANY STRUCTURES.
19. CONTACT "MISS UTILITY" AT (800) 257-7777 48 HOURS PRIOR TO CONSTRUCTION.
20. CONTACT DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION-PUBLIC SPACE MAINTENANCE ADMINISTRATION 48 HOURS PRIOR TO START OF CONSTRUCTION AT (202) 645-6030 OR (202) 645-6031.
21. ALL PROPOSED UTILITY WORK TO BE PERFORMED UNDER THE INSPECTION OF DC WATER.
22. USE MANHOLE ENTRY SEALS WHERE REQUIRED.
23. CONTRACTOR TO PROVIDE A PRE AND POST TV VIDEO SEWER ON EXISTING SEWER AROUND THE SITE PER DC WATER STANDARDS AND SPECIFICATIONS.

SITE NOTES:

1. WHERE NEW WORK MEETS EXISTING, NOTE FIELD LOCATION AND ELEVATIONS OF EXISTING FEATURES BEFORE BEGINNING CONSTRUCTION AND REPORT ANY DISCREPANCY TO THE ARCHITECT OR ENGINEER.
2. VERIFY LOCATION OF EXISTING UTILITIES BEFORE PROCEEDING WITH WORK. NOTIFY OWNER'S REPRESENTATIVE, DC WATER (202-787-4299) AND "MISS UTILITY" (1-800-257-7777) 48 HOURS BEFORE PROCEEDING WITH ANY EXCAVATIONS. HAND DIG TEST PITS AT ALL UTILITY CROSSINGS AND DETERMINE EXACT CLEARANCE OF ALL PROPOSED INSTALLATIONS WELL IN ADVANCE OF CONSTRUCTION. NOTIFY ENGINEER OF ANY CONFLICTS WITH PLAN ELEVATIONS.
3. WORK AND MATERIALS IN THE PUBLIC RIGHT-OF-WAY SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE APPLICABLE DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS. ON-SITE WORK AND MATERIALS CODE.
4. ELEVATIONS SHOWN HEREON ARE BASED ON D.C. DATUM.
5. DIMENSIONS ARE TO FACE OF WALL AND CURB, EDGE OF WALK AND PAVEMENT, CENTERLINE OF COLUMN, PIPE AND UTILITY STRUCTURE. UNLESS OTHERWISE NOTED.
6. FRAMES AND COVERS OF EXISTING STRUCTURES TO BE ADJUSTED TO MATCH NEW FINISHED GRADES.
7. OMISSIONS AND/OR ADDITIONS OF UTILITIES FOUND DURING CONSTRUCTION SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OR ENGINEER IMMEDIATELY OF ANY INFORMATION CONCERNING FOUND UTILITY, NOT SHOWN ON PLANS.
8. EXISTING SURFACE CONDITIONS DISTURBED OR DAMAGED DURING CONSTRUCTION SHALL BE REPLACED TO MATCH EXISTING CONDITIONS. CONTRACTOR TO COORDINATE EXTENT WITH ARCHITECT OR ENGINEER.
9. TEST PITS ARE REQUIRED AT ALL LOCATIONS) WHERE PROPOSED UTILITIES CROSS EXISTING UTILITIES. INVESTIGATIONS) TO IDENTIFY HORIZONTAL LOCATION, ELEVATION AND SIZE OF EXISTING UTILITIES. THE ENGINEER IS TO BE NOTIFIED OF THIS INFORMATION.
10. IF A 1' MINIMUM VERTICAL CLEARANCE CAN NOT BE MAINTAINED AT UTILITY CROSSING, THE CONTRACTOR IS TO NOTIFY THE ENGINEER BEFORE PROCEEDING WITH WORK.
11. TRANSITION CURB, GUTTER, PAVING AND SIDEWALK TO MEET EXISTING IN LINE AND ON GRADE OR AS DIRECTED BY ENGINEER.
12. ALL DEBRIS AND EXCESS MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR AT AN APPROVED OFF-SITE LOCATION.
13. ALL ON-SITE WATER LINES TO HAVE A MINIMUM COVER OF 4'-0". WATER FITTINGS SHALL BE PROPERLY TIED AND ANCHORED, PER DC WATER STANDARDS AND SPECIFICATIONS.
14. WHERE PORTIONS OF EXISTING BITUMINOUS OR CONCRETE PAVING ARE TO BE REMOVED,THE EXISTING PAVEMENT SHALL BE SAW-CUT.
15. REMOVE FRAMES AND COVERS OF SEWER MANHOEE/INEETS AND/OR WATER MAIN VALVE CASTINGS TO BE ABANDONED AND FILL TO GRADE.
16. ALL CURB SPOT SHOTS ARE TOP OF CURB, UNLESS OTHERWISE NOTED. 17. NOTIFY WASHINGTON GAS AT (202) 750-4205, 48 HOURS PRIOR TO ANY EXCAVATION IN THE VICINITY OF ANY TRANSMISSION MAIN. FOR FURTHER INFORMATION OR PROBLEMS, CONTACT MR. CHUCK WHITEY AT WASHINGTON GAS AT (703) 750-4205.
17. PROVIDE A MINIMUM OF 5 FEET HORIZONTAL AND 1 FOOT VERTICAL CLEARANCE BETWEEN 12" DIAMETER AND SMALLER DISTRIBUTION EXISTING GAS FACILITIES AND PROPOSED FACILITIES.
18. PROVIDE A MINIMUM OF 5 FEET HORIZONTAL AND 2 FEET VERTICAL CLEARANCE BETWEEN 16" DIAMETER OR GREATER TRANSMISSION GAS FACILITIES AND PROPOSED FACILITIES.
19. ALL PROPOSED WORK TO BE CONSTRUCTED IN ACCORDANCE WITH LATEST STANDARDS AND SPECIFICATIONS OF THE DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION AND WATER AND SEWER AUTHORITY.
20. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING SIDEWALK, CURB AND GUTTER TO REMAIN OR TO REPLACE SIDEWALK, CURB AND GUTTER DAMAGED DURING CONSTRUCTION.
21. EXISTING FULL DEPTH PAVEMENT SECTION, CURB AND GUTTER TO BE REMOVED AND REPLACED TO EXTENT NECESSARY TO FACILITATE CONSTRUCTION OF NEW UTILITIES. MATERIALS TO COMPLY WITH DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS.

DC WATER STANDARD CONSTRUCTION NOTES:

1. CONTACT: NOTIFY THE FOLLOWING DC WATER DEPARTMENTS PRIOR TO THE COMMENCEMENT OF UTILITY CONSTRUCTION:
   a) CONSTRUCTION INSPECTION SECTION AT (202) 787-4024 AT LEAST TWO WEEKS PRIOR TO THE COMMENCEMENT OF UTILITY CONSTRUCTION TO SCHEDULE PRE-CONSTRUCTION MEETING.
   b) WATER SERVICES AT (202) 612-3400 OR 3460 AT LEAST ONE WEEK PRIOR TO THE COMMENCEMENT OF UTILITY CONSTRUCTION.
   c) SEWER SERVICES AT (202) 264-3624 OR 3829 AT LEAST ONE WEEK PRIOR TO THE COMMENCEMENT OF UTILITY CONSTRUCTION.
2. STANDARDS: ALL CONSTRUCTION, MATERIALS, AND APPURTENANCES SHALL COMPLY WITH THE LATEST EDITIONS OF THE DC WATER PROJECT DESIGN MANUAL, STANDARD DETAILS & DESIGN GUIDELINES, AND SPECIFICATIONS.
3. LEAD SERVICE REPLACEMENT: IF THIS PROJECT INCLUDES THE REPLACEMENT OF A WATER MAIN THAT HAS EXISTING LEAD WATER SERVICE LATERALS, THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE DC WATER CONSTRUCTION INSPECTION SECTION AT (202) 787-4024 AT LEAST 90 DAYS PRIOR TO CONSTRUCTION TO ALLOW ADEQUATE TIME TO INITIATE STANDARD LEAD SERVICE REPLACEMENT PROTOCOL. LATERAL REPLACEMENT INCLUDES THE FULL LENGTH OF PIPE IN PUBLIC SPACE.
4. OWNER RESPONSIBILITY: THE OWNER IS RESPONSIBLE FOR ALL WORK AND COSTS ASSOCIATED WITH EXCAVATION, INSTALLATION, AND RESTORATION OF PUBLIC SPACE TO PERFORM A WATER/SEWER CONNECTION/ABANDONMENT. ONCE THE CONTRACTOR HAS OBTAINED A PUBLIC SPACE PERMIT HE/SHE MUST THEN CONTACT DC WATER PRIOR TO PERFORMING THE EXCAVATION TO INSTALL/INSPECT THE UTILITY WORK. THE OWNER SHALL BE HELD RESPONSIBLE FOR ALL DAMAGES TO EXISTING STRUCTURES AND UTILITIES CAUSED BY CONSTRUCTION ACTIVITY.
5. DC WATER RESPONSIBILITY: DC WATER IS RESPONSIBLE FOR INSTALLATION OF SMALL WATER SERVICE TAPS (2" DIAMETER AND LESS) TO THE PUBLIC MAIN, SMALL WATER SERVICE TAP REMOVALS FROM THE PUBLIC MAIN, FURNISHING & INSTALLING THE METER IN PUBLIC SPACE, AND INSPECTION OF WORK PERFORMED ON THE PUBLIC SYSTEMS.
6. MISS UTILITY: CONTACT MISS UTILITY AT (800) 257-7777 48 HOURS BEFORE ANY DIGGING.
7. PLAN SET: A SET OF SIGNED & SEALED AND DC WATER STAMPED PLANS SHALL BE KEPT AT ALL TIMES AT THE JOB SITE ON WHICH ALL CHANGES OR VARIATIONS IN THE WORK, INCLUDING ALL EXISTING UTILITIES, ARE TO BE RECORDED AND/OR CORRECTED DAILY.
8. ABANDONMENTS: THE OWNER MUST PHYSICALLY DISCONNECT EXISTING WATER, SEWER, AND STORM LATERALS THAT ARE ARE TO BE ABANDONED AT THEIR CONNECTION TO THE PUBLIC MAIN.
9. UNMETERED WATER: THERE SHALL BE NO UNMETERED CONNECTIONS TO THE CITY'S WATER SYSTEM, INCLUDING CONNECTIONS BYPASSING METERS FOR TESTING ON-SITE PLUMBING OR FOR OBTAINING CONSTRUCTION WATER.
10. PRESSURE TESTING AGAINST VALVES: PRESSURE TESTING AGAINST VALVES WILL NOT BE ALLOWED.
11. WATER METER INSTALLATION: TO SCHEDULE THE INSTALLATION OF A DOMESTIC WATER-METER CONTACT PERMIT OPERATIONS AT (202) 646-8600. DC WATER WILL FURNISH AND INSTALL THE METER AFTER THE CONNECTION TO THE MAIN HAS BEEN MADE AND THE METER PIT/VAULT HAS BEEN INSTALLED.
12. CROSS CONTAMINATION CONTROL: ASSE 1048 CERTIFIED BACKFLOW PREVENTION ARE REQUIRED ON ALL FIRE SERVICES AND ARE TO BE LOCATED INSIDE THE BUILDING (UNLESS AN EXTERNAL LOCATION IS NECESSARY OR REQUIRED BY DC WATER) WHERE IT IS SUPPLIED, OWNED, OPERATED, AND MAINTAINED BY THE OWNER. DC WATER DOES NOT FURNISH NOR INSTALL FIRE DOUBLE CHECK DETECTOR FIRE PROTECTION BACKFLOW PREVENTION ASSEMBLIES.
13. UTILITY SERVICE DISRUPTIONS: PHASE ALL UTILITY WORK TO MAINTAIN UTILITY SERVICES TO THE SURROUNDING AREA DURING ALL PHASES OF CONSTRUCTION. LIMIT REQUIRED UTILITY SHUT-DOWNS IN NUMBER AND DURATION. COORDINATE THESE SHUT DOWNS WITH DC WATER CONSTRUCTION INSPECTION STAFF.
14. WATER VALVE OPERATION: THE CONTRACTOR IS REQUIRED TO COORDINATE WITH DC WATER FOR ALL NECESSARY WATER MAIN SHUT DOWNS WITH ADEQUATE ADVANCED NOTICE. ONLY DC WATER EMPLOYEES MAY SHUT DOWN A PUBLIC WATER MAIN. A CERTIFIED PLUMBER IS ONLY AUTHORIZED TO TURN OFF VALVES INSIDE METER PITS.
15. WATER GATE VALVE LOCATION: LOCATE GATE VALVES FOR DOMESTIC AND FIRE SERVICES AS CLOSE TO THE PUBLIC WATER MAIN TEE AS POSSIBLE. HOWEVER, IF NECESSARY ADJUSTMENTS ARE REQUIRED DUE TO CONFLICTS, COORDINATE WITH A DC WATER INSPECTOR.
16. MATERIAL: THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING SHOP CUTS TO THE APPROPRIATE DC WATER OFFICE FOR APPROVAL OR OBTAINING A DC WATER APPROVAL STAMP FOR ALL WORK IN PUBLIC SPACE IN ADVANCE OF INSTALLATION. ONLY APPROVED MATERIALS MAY BE USED.
17. TEMPORARY CONDITIONS MINIMUM COVER: A NOMINAL FOUR FEET OF COVER IS REQUIRED FOR ALL WATER MAINS AT FINAL GRADE. COVER OF LESS THAN FOUR FEET REQUIRES DC WATER APPROVAL.
18. AS-BUILT: DEVELOPERS, CONTRACTORS AND/OR PLUMBERS MUST SUBMIT FINAL CONSTRUCTION AS-BUILT INFORMATION TO THE APPROPRIATE DC WATER INSPECTOR(S) FOR REVIEW AND APPROVAL, UPON COMPLETION OF INSTALLATION OF NEW SERVICES OR ABANDONMENT OF EXISTING SERVICES. WHEN THE FINAL AS-BUILT IS APPROVED THE DEPOSIT WILL BE RETURNED TO THE APPLICANT. SEE DC WATER AS-BUILT REQUIREMENTS FOR ADDITIONAL INFORMATION.
19. CONFLICTS: THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF EXISTING UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF PROPOSED UTILITIES. A MINIMUM OF ONE FOOT VERTICAL AND FIVE FEET HORIZONTAL CLEARANCE FROM OTHER UTILITIES SHALL BE MAINTAINED FROM ANY UTILITIES AND PUBLIC WATER AND SEWER MAINS.
20. FIRE HYDRANT USE: THE USE OF A FIRE HYDRANT AS A WATER SOURCE IS PROHIBITED UNLESS A PERMIT HAS BEEN OBTAINED FROM DC WATER FOR USE OF A SPECIFIC HYDRANT(S). DAILY OR EXTENDED USE PERMITS CAN BE OBTAINED FROM DC WATER PERMIT OPERATIONS DEPARTMENT (202) 646-8600.
21. FIRE HYDRANT STATUS: THE CONTRACTOR SHALL NOTIFY FEMS AT (202) 277-1889, PRIOR TO TAKING ANY FIRE HYDRANT OUT OF SERVICE OR RENDERING ANY HYDRANT INACCESSIBLE FOR ANY REASON. FEMS IS ALSO TO BE PROVIDED WITH THE LOCATION OF ANY NEW INSTALLATION OF PRIVATE FIRE HYDRANTS.
22. DC WATER SAFETY OFFICE: THE DC WATER SAFETY OFFICE CAN BE CONTACTED AT (202) 787-4350.
23. SEWER BACKWATER PREVENTION: THE PLUMBING SYSTEM MUST BE IN COMPLIANCE WITH SECTION 715 OF THE 2006 INTERNATIONAL PLUMBING CODE WHICH STATES A BACKWATER VALVE IS REQUIRED FOR ALL PLUMBING FIXTURES BELOW THE ELEVATION OF THE MANHOLE COVER OF THE NEXT UPSTREAM MANHOLE IN THE PUBLIC SEWER.

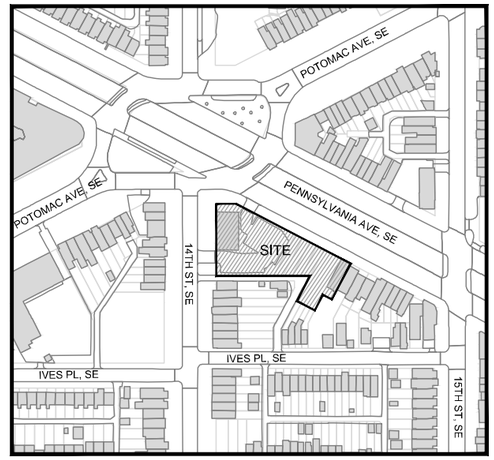
UTILITY CONTACTS:

SEWER/WATER:
DC WATER - (202) 787-4299
5000 OVERLOOK AVE. SW
5TH FLOOR
WASHINGTON, DC 20032

ELECTRICITY:
PEPCO
FRED JOHNSON (202) 872-2833 701
9TH STREET NW, ROOM 6005
WASHINGTON, DC 20068

GAS:
WASHINGTON GAS CO.
VANN JONES (703) 750-5983
6801 INDUSTRIAL ROAD
SPRINGFIELD, VA 22151

COMMUNICATIONS:
VERIZON COMMUNICATIONS
DIVNA YANCEY (301) 282-7736
FDC-1
13101 COLUMBIA PIKE
CONDUIT GROUP - LOWER LEVEL
SILVER SPRING, MD 20904



VICINITY MAP
SCALE: 1" = 300'

CIVIL DRAWING LIST - PUD:

C1.00	COVER SHEET
C1.01	EXISTING CONDITIONS PLAN
C1.02	EROSION AND SEDIMENT CONTROL PLAN
C1.03	SITE PLAN
C1.04	GRADING PLAN
C1.05	UTILITY PLAN
C5.01	EROSION AND SEDIMENT CONTROL NOTES
C5.02	EROSION AND SEDIMENT CONTROL DETAILS
C7.01	STORMWATER MANAGEMENT PLANS

PROJECT NARRATIVE:

THE PROJECT CONSISTS OF THE DEVELOPMENT OF A RESIDENTIAL BUILDING AND ASSOCIATED IMPROVEMENTS THE CORNER OF PENNSYLVANIA AVENUE SE, POTOMAC AVENUE SE, AND 14TH STREET SE. THE SITE WILL BE SERVICED BY NEW WATER, FIRE PROTECTION, STORM DRAIN, AND SANITARY SEWER SERVICES. SITE ACCESS TO THE BELOW GRADE PARKING SHALL BE OFF A PARTLY PUBLIC AND PARTLY PRIVATE ALLEY WHICH WILL BE CONSTRUCTED IN PART WITH THIS PROJECT.

ENGINEER

CIVIL ENGINEER
BOWMAN CONSULTING GROUP
2121 EISENHOWER AVENUE, SUITE 302
ALEXANDRIA, VIRGINIA 22314
(703) 548-5781
PROJECT MANAGER: MATTHEW SENENMAN, P.E.
PRINCIPAL: MARK S. STIRES, P.E.

ABBREVIATIONS:

APPROX	APPROXIMATE
ASPH	ASPHALT
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AWWA	AMERICAN WATER WORKS ASSOCIATION
BC	BACK OF CURB
BF	BASEMENT FLOOR
BLDG	BUILDING
BM	BENCHMARK
BOV	BLOW OFF VALVE
BRL	BUILDING RESTRICTION LINE
BW	BOTTOM OF WALL
C&G	CURB AND GUTTER
CB	CATCH BASIN
CC	CONCRETE CURB
CIP	CAST IRON PIPE
L	CENTERLINE
CMP	CORRUGATED METAL PIPE
CO	CLEAN OUT
CONC	CONCRETE
DIP	DUCTILE IRON PIPE
DI	DROP INLET
DOM	DOMESTIC
EBL	EAST BOUND LANE
EG	EDGE OF GUTTER
EL	ELEVATION
ELEC	ELECTRIC
ELEV	ELEVATION
ENT	ENTRANCE
EP	EDGE OF PAVEMENT
EQUIP	EQUIPMENT
ESMT	EASEMENT
EW	END WALL
EX	EXISTING
FC	FACE OF CURB
FD	FLOOR DRAIN
FF	FIRST FLOOR
FG	FINISH GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
G	GAS
GR	GUARD RAIL OR GRATE INLET
HC	HANDICAP
HP	HIGH POINT
HR	HAND RAIL
INV	INVERT
IP	IRON PIPE
IPS	IRON PIPE SET
LP	LOW POINT
MH	MANHOLE
O/H	OVERHEAD
PCC	PORTLAND CEMENT CONCRETE
PROP	PROPOSED
PVMT	PAVEMENT
SAN	SANITARY
SEW	SEWER
STD	STANDARD
S/W	SIDEWALK
TC	TOP OF CURB
TEL	TELEPHONE
TP	TEST PIT OR TREE PROTECTION
TW	TOP OF WALL OR TAILWATER
UP	UTILITY POLE
UG	UNDERGROUND
UGE	UNDERGROUND ELECTRIC
UGT	UNDERGROUND TELEPHONE
UGC	UNDERGROUND CABLE
UD	UNDERDRAIN
WL	WATER LINE
WM	WATER METER

LEGEND

EXISTING		PROPOSED
350	INDEX CONTOUR	350
352	INTERMEDIATE CONTOUR	352
EX. E.P.	EDGE OF PAVEMENT	PROP. E.P.
EX. C & G	CURB AND GUTTER	
	TRANSITION	
	PROPOSED HEADER CURB	
	PROPERTY LINE	
	LOT LINE	
	RIGHT-OF-WAY	
	EASEMENT	
EX 8" W/M	WATER LINE	8" DIP W/M
EX. W/V	WATER VALVE	
	REDUCER	
EX 8" SAN	SANITARY SEWER	8" SAN
EX 15" RCP	STORM SEWER	15" RCPR
CATV	CABLE TV	CATV
	ELECTRIC SERVICE-UNDERGROUND	
OHE	ELECTRIC SERVICE-OVERHEAD	OHE
OHT	OVERHEAD TELEPHONE	OHT
	TELEPHONE SERVICE	
G	GAS LINE	G
+ 25.32	SPOT ELEVATION	25.32
	UTILITY POLE	
	GUY POLE	
	TRANSFORMER	T
	SIGN	
1255	SANITARY SEWER IDENTIFIER	A
1229	STORM DRAIN IDENTIFIER	A
	WATER METER	
	FIRE HYDRANT	
	STREET LIGHT	
	TEST PIT LOCATION RECOMMENDED/REQUIRED	
	HANDICAP RAMP	
15" OAK	TREE	
	CONCRETE SIDEWALK	

LINE TABLE - LOT 142				
LINE #	SURVEYED		RECORD	
	DIRECTION	LENGTH	DIRECTION	LENGTH
L1	N 90°00'00" E	40.66'	N 90°00'00" E	40.00'
L2	S 62°27'00" E	132.02'	S 62°17'55" E	131.17'
L3	S 27°33'00" W	92.42'	S 27°42'05" W	92.64'
L4	N 90°00'00" W	114.96'	N 90°00'00" W	113.07'
L5	N 00°00'00" E	143.00'	N 00°00'00" E	143.00'
AREA	17,227 SQ.FT. OR 0.39548 AC.		17,020 SQ.FT. OR 0.39073 AC.	

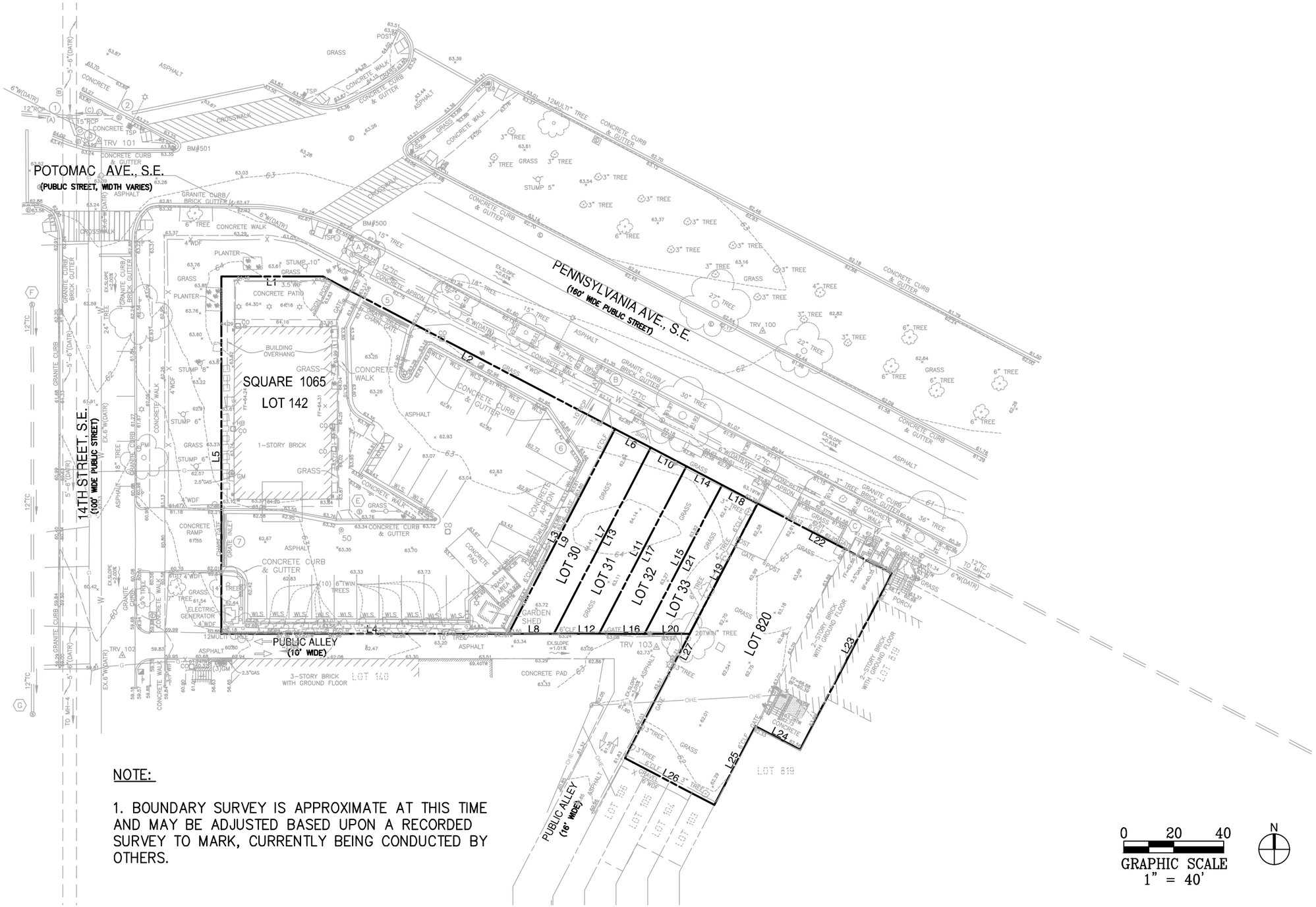
LINE TABLE - LOT 30				
LINE #	SURVEYED		RECORD	
	DIRECTION	LENGTH	DIRECTION	LENGTH
L6	S 62°27'00" E	16.10'	S 62°17'55" E	16.00'
L7	S 27°33'00" W	84.02'	S 27°42'05" W	84.24'
L8	N 90°00'00" W	18.16'	N 90°00'00" W	18.07'
L9	N 27°33'00" E	92.42'	N 27°42'05" E	92.64'
AREA	1,420 SQ.FT. OR 0.03260 AC.		1,415 SQ.FT. OR 0.03248 AC.	

LINE TABLE - LOT 31				
LINE #	SURVEYED		RECORD	
	DIRECTION	LENGTH	DIRECTION	LENGTH
L10	S 62°27'00" E	16.10'	S 62°17'55" E	16.00'
L11	S 27°33'00" W	75.61'	S 27°42'05" W	75.84'
L12	N 90°00'00" W	18.16'	N 90°00'00" W	18.07'
L13	N 27°33'00" E	84.02'	N 27°42'05" E	84.24'
AREA	1,285 SQ.FT. OR 0.02950 AC.		1,281 SQ.FT. OR 0.02941 AC.	

LINE TABLE - LOT 32				
LINE #	SURVEYED		RECORD	
	DIRECTION	LENGTH	DIRECTION	LENGTH
L14	S 62°27'00" E	16.10'	S 62°17'55" E	16.00'
L15	S 27°33'00" W	67.21'	S 27°42'05" W	67.44'
L16	N 90°00'00" W	18.16'	N 90°00'00" W	18.07'
L17	N 27°33'00" E	75.61'	N 27°42'05" E	75.84'
AREA	1,150 SQ.FT. OR 0.02640 AC.		1,146 SQ.FT. OR 0.02631 AC.	

LINE TABLE - LOT 33				
LINE #	SURVEYED		RECORD	
	DIRECTION	LENGTH	DIRECTION	LENGTH
L18	S 62°27'00" E	16.10'	S 62°17'55" E	16.00'
L19	S 27°33'00" W	58.81'	S 27°42'05" W	59.04'
L20	N 90°00'00" W	18.16'	N 90°00'00" W	18.07'
L21	N 27°33'00" E	67.21'	N 27°42'05" E	67.44'
AREA	1,015 SQ.FT. OR 0.02330 AC.		1,012 SQ.FT. OR 0.02323 AC.	

LINE TABLE - LOT 820				
LINE #	SURVEYED		RECORD	
	DIRECTION	LENGTH	DIRECTION	LENGTH
L22	S 62°27'00" E	60.60'	S 62°17'55" E	60.00'
L23	S 27°33'00" W	79.54'	S 27°42'05" W	79.78'
L24	N 62°27'00" W	20.20'	N 62°17'55" W	20.00'
L25	S 27°33'00" W	35.46'	S 27°42'05" W	35.22'
L26	N 62°27'00" W	40.40'	N 62°17'55" W	40.00'
L27	N 27°33'00" E	115.00'	N 27°42'05" E	115.00'
AREA	6,253 SQ.FT. OR 0.14354 AC.		6,196 SQ.FT. OR 0.14224 AC.	



NOTE:

1. BOUNDARY SURVEY IS APPROXIMATE AT THIS TIME AND MAY BE ADJUSTED BASED UPON A RECORDED SURVEY TO MARK, CURRENTLY BEING CONDUCTED BY OTHERS.

0 20 40

GRAPHIC SCALE
1" = 40'

N

1401 PENNSYLVANIA

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EXISTING CONDITIONS PLAN

C1.01

May 28, 2015

SEDIMENT AND EROSION CONTROL NARRATIVE:

INSTALL SEDIMENT AND EROSION CONTROL MEASURES INCLUDING SILT FENCE, INLET PROTECTION, TREE PROTECTION, AND STABILIZED CONSTRUCTION ENTRANCE AT SITE. FOLLOWING DISCONNECTION OF UTILITIES, CONCRETE ENTRANCE AND EXISTING CURB RAMPS. DURING DEMOLITION, DEBRIS WILL BE REMOVED FROM SITE BY TRUCK. CONTRACT DC DEPARTMENT OF THE ENVIRONMENT, WATERSHED PROTECTION DIVISION AT 202–535–2250 TO SCHEDULE PRE–CONSTRUCTION MEETING.

AREA OF DISTURBANCE:

TOTAL SITE AREA: 28,098 SF (0.645 ACRES)
AREA TO BE DISTURBED: 40,618 SF (0.933 ACRES)
VOLUME OF EARTH TO BE REMOVED: ±12,488 CY (ASSUMING 12' OF EXCAVATION OVER FOOTPRINT)

SEDIMENT AND EROSION CONTROL NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF SHEETING AND SHORING AND SUPPORT OF EXISTING UTILITIES AND ADJACENT STRUCTURES. SHORING, BRACING, AND UNDERPINNING DESIGNED BY THE CONTRACTOR'S STRUCTURAL ENGINEER LICENSED IN THE DISTRICT OF COLUMBIA SHALL BE PROVIDED AS NECESSARY TO ENSURE THEIR SUPPORT.
2. PROVIDE SILT FENCE AT THE PERIMETER OF DISTURBED AREA OR EXCAVATION TO REMAIN IN PLACE UNTIL SITE IS STABILIZED OR OTHERWISE APPROVED BY THE INSPECTOR.
3. PROVIDE CONSTRUCTION FENCE AT THE PERIMETER OF DISTURBED AREA OR EXCAVATION TO REMAIN IN PLACE UNTIL SITE IS STABILIZED OR OTHERWISE APPROVED BY THE INSPECTOR.
4. CONTRACTOR TO MAINTAIN ON–SITE STAMPED AND SIGNED, SEDIMENT AND EROSION CONTROL DRAWINGS APPROVED BY THE DEPARTMENT OF THE ENVIRONMENT, WATERSHED PROTECTION DIVISION.
5. THE APPLICATION MUST NOTIFY THE DEPARTMENT OF THE ENVIRONMENT BY PHONE (202–535–2250) AT LEAST 24 HOURS PRIOR TO START OF GRADING ACTIVITY AND WITHIN TWO (2) WEEKS AFTER COMPLETION OF PROJECT TO REQUEST INSPECTION. IF THERE IS NEED TO MAKE CHANGES OR MODIFICATIONS IN THE APPROVED DESIGN, DEPARTMENT OF THE ENVIRONMENT MUST BE NOTIFIED IMMEDIATELY.

CONSTRUCTION AND STABILIZATION SEQUENCE:

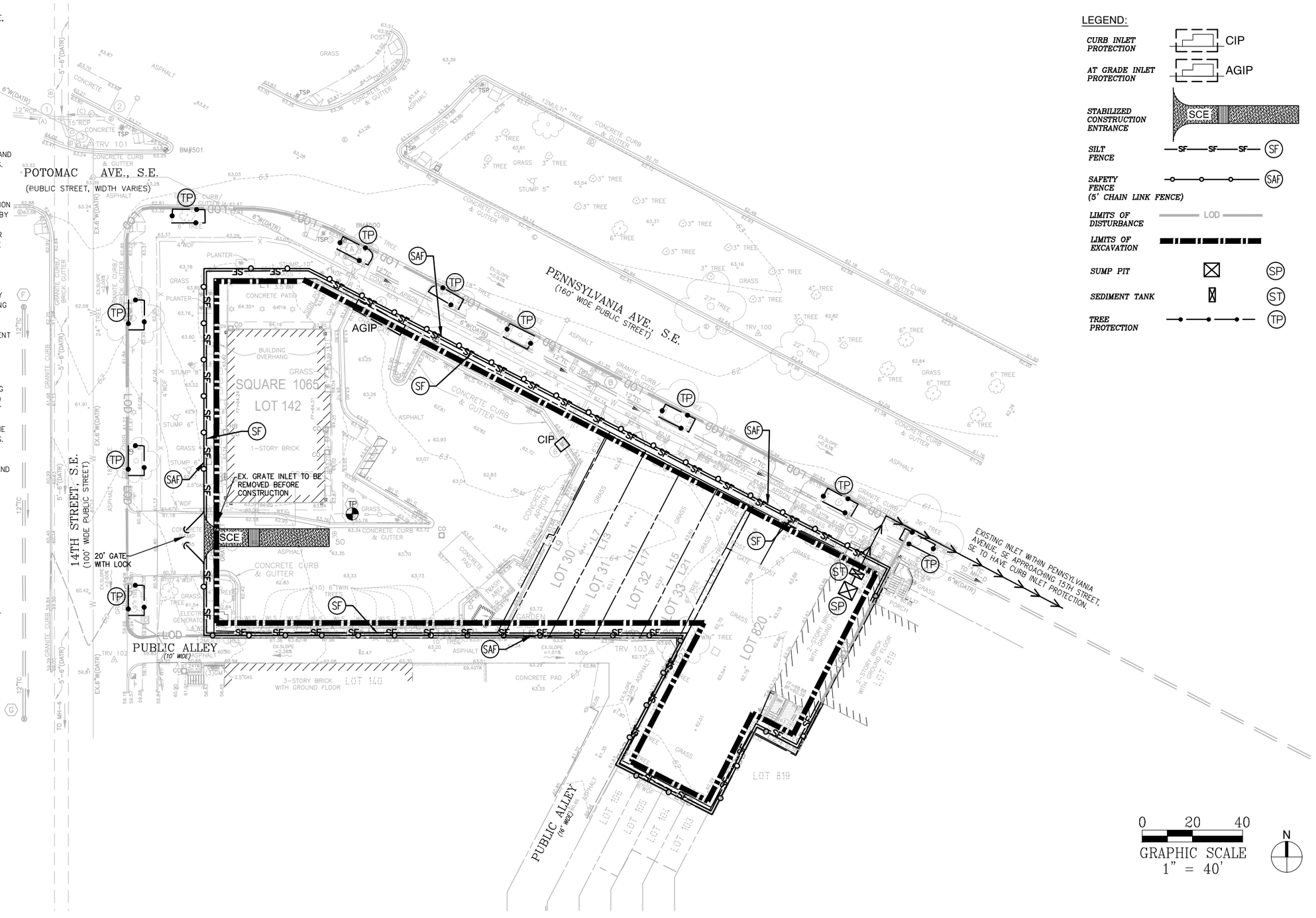
1. CONTACT DC WATERSHED PROTECTION DIVISION AT 202–535–1364 TO SCHEDULE THE PRE–CONSTRUCTION MEETING PRIOR TO MOBILIZATION.
2. INSTALL SEDIMENT AND EROSION CONTROL MEASURES AS NEEDED INCLUDING STABILIZED CONSTRUCTION ENTRANCE, WASH RACK, INLET PROTECTION, AND SILT FENCE AS INDICATED ON THIS SHEET. SEE SHEET C5.02 FOR SEDIMENT AND EROSION CONTROL DETAILS.
3. SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AND APPROVED BY THE INSPECTOR PRIOR TO COMMENCING ANY OTHER LAND DISTURBING ACTIVITIES.
4. DISCONNECT UTILITIES AND RAZE BUILDING TO SURFACE.
5. AT THE COMPLETION OF THIS PHASE OF CONSTRUCTION, FOLLOWING SITE STABILIZATION AND UPON INSPECTOR'S APPROVAL, TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES CAN BE REMOVED.

CONSTRUCTION DATES:

- THE PROPOSED WORK DUE TO COMMENCE IN THE SPRING OF 2017 AND IS ANTICIPATED TO TAKE APPROXIMATELY 12 MONTHS.
- EXACT BEGINNING AND END OF CONSTRUCTION IS TO BE ESTABLISHED BY THE OWNER.

DUST CONTROL NOTES:

1. THE CONTRACTOR SHALL CONDUCT OPERATIONS AND MAINTAIN THE PROJECT SITE AS TO MINIMIZE THE CREATION AND DISPERSION OF DUST. DUST CONTROL SHALL BE USED THROUGHOUT THE WORK AT THE SITE.
2. THE CONTRACTOR MUST PROVIDE CLEAN WATER, FREE FROM SALT, OIL AND OTHER DELETERIOUS MATERIAL TO BE USED FOR ON–SITE DUST CONTROL.
3. THE CONTRACTOR SHALL SUPPLY WATER SPRAYING EQUIPMENT CAPABLY OF ACCESSING ALL WORK AREAS.
4. THE CONTRACTOR SHALL IMPLEMENT STRICT DUST CONTROL MEASURES DURING ACTIVE CONSTRUCTION PERIODS ON SITE. THESE MEASURES WILL GENERALLY CONSIST OF WATER APPLICATIONS THAT SHALL BE APPLIED A MINIMUM OF ONCE PER DAY DURING DRY WEATHER OR MORE OFTEN AS REQUIRED TO PREVENT DUST EMISSIONS.
5. FOR WATER APPLICATION TO UNDISTURBED SOIL SURFACES, THE CONTRACTOR SHALL:
   A. APPLY WATER WITH EQUIPMENT CONSISTING OF TANK, SPRAY BAR, PUMP WITH DISCHARGE PRESSURE GAUGE;
   B. ARRANGE SPRAY BAR HEIGHT, NOZZLE SPACING, AND SPRAY PATTERN TO PROVIDE COMPLETE COVERAGE OF GROUND WITH WATER;
   C. DISPERSE WATER THROUGH NOZZLES ON SPRAY BAR AT 20 PSI (137.8 K PA) MINIMUM. KEEP AREAS DAMP WITHOUT CREATING NUISANCE CONDITIONS SUCH AS PONDING.
6. FOR WATER APPLICATION TO SOIL SURFACES DURING DEMOLITIONS AND/OR EXCAVATION, THE CONTRACTOR SHALL:
   A. APPLY WATER WITH EQUIPMENT CONSISTING OF A TANK, PUMP WITH DISCHARGE GAUGES, HOSES, AND MIST NOZZLES;
   B. LOCATE TANK AND SPRAYING EQUIPMENT SO THAT THE ENTIRE DISTURBED AREA CAN BE MISTED WITHOUT INTERFERING WITH DEMOLITION AND/OR EXCAVATION EQUIPMENT OR OPERATIONS. KEEP AREAS DAMP WITHOUT CREATING NUISANCE CONDITIONS SUCH AS PONDING;
   C. APPLY WATER SPRAY IN A MANNER TO PREVENT MOVEMENT OF SPRAY BEYOND SITE BOUNDARIES.



LEGEND:

- CURB INLET PROTECTION — CIP
- AT GRADE INLET PROTECTION — AGIP
- STABILIZED CONSTRUCTION ENTRANCE — SCE
- SILT FENCE — SF
- SAFETY FENCE (5' CHAIN LINK FENCE) — SAF
- LIMITS OF DISTURBANCE — LOD
- LIMITS OF EXCAVATION
- SUMP PIT — SP
- SEDIMENT TANK — ST
- TREE PROTECTION — TP

GRAPHIC SCALE
0 20 40
1" = 40'

N

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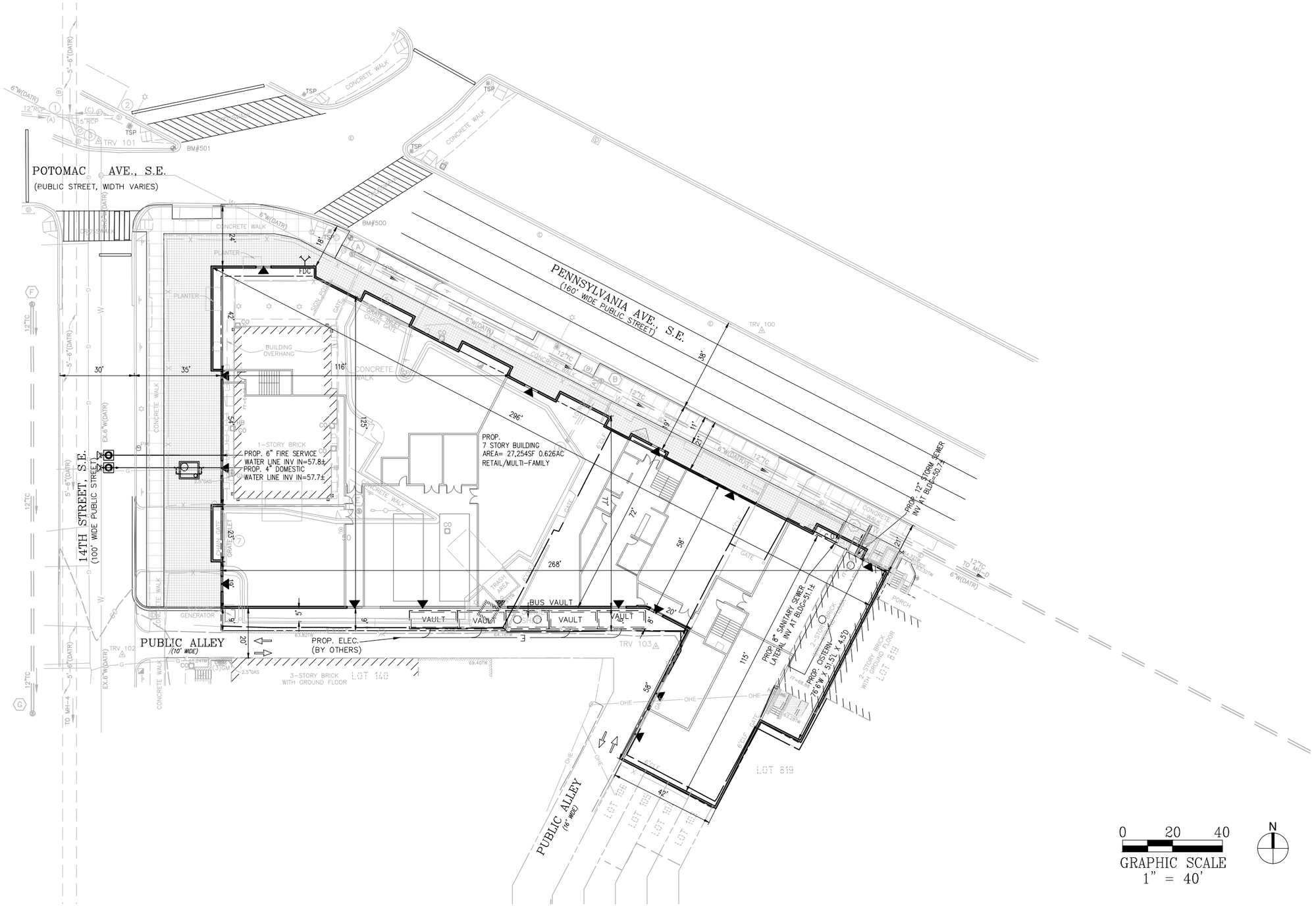
EROSION AND SEDIMENT CONTROL PLAN

May 28, 2015

C1.02



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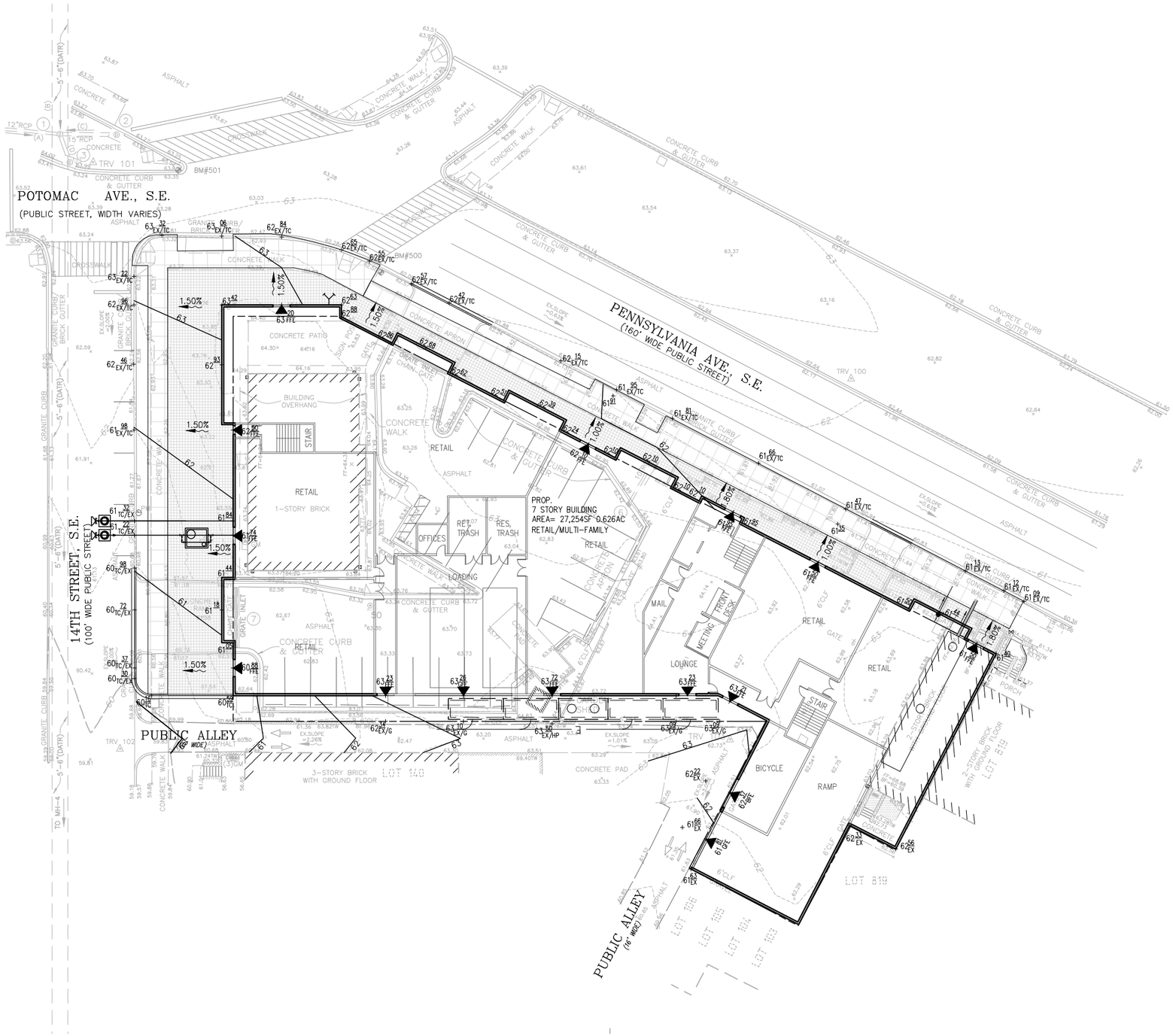
SITE PLAN

May 28, 2015

C1.03



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GRAPHIC SCALE
1" = 40'

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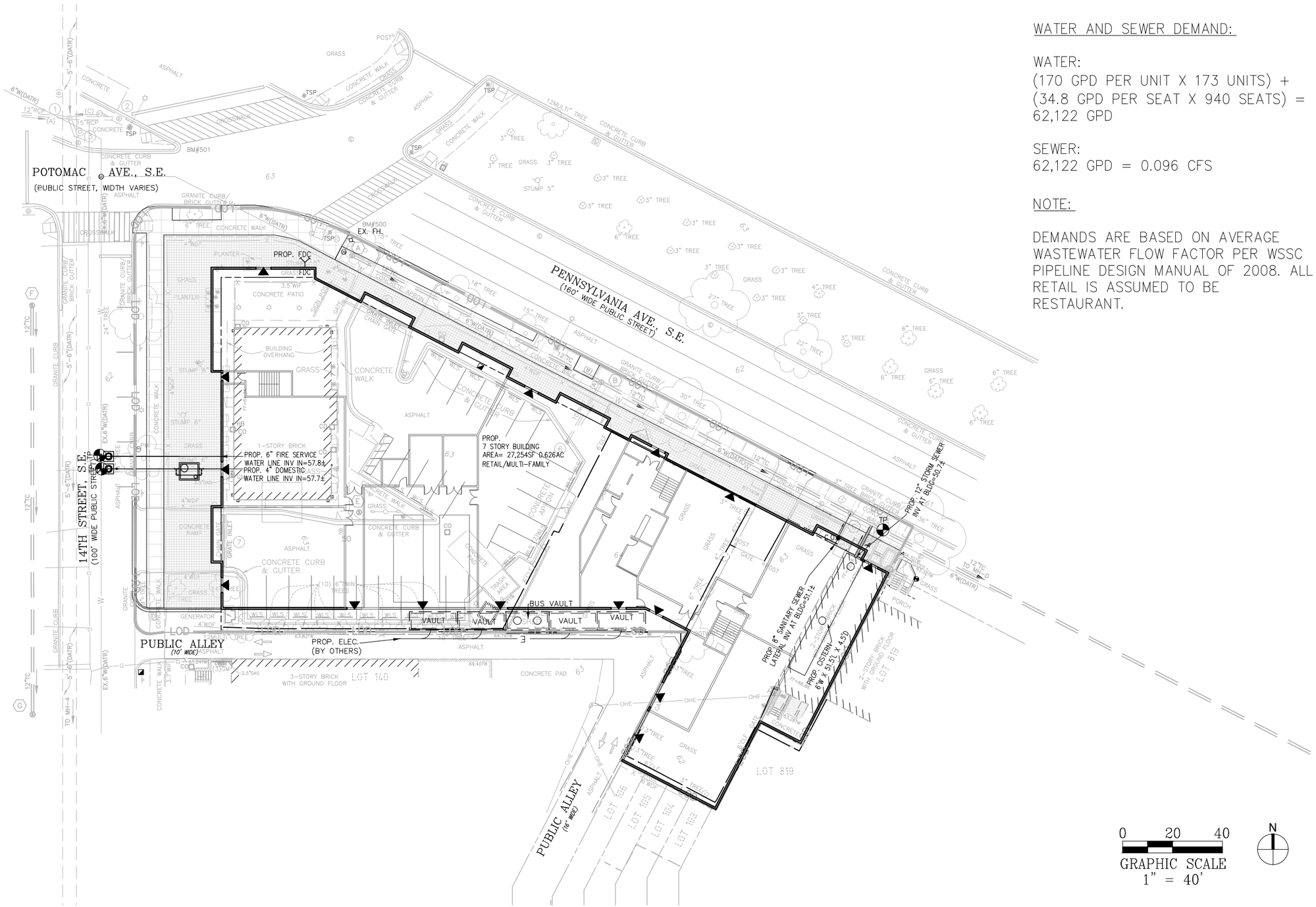
GRADING PLAN

May 28, 2015

C1.04



WATER AND SEWER DEMAND:

WATER:
(170 GPD PER UNIT X 173 UNITS) +
(34.8 GPD PER SEAT X 940 SEATS) =
62,122 GPD

SEWER:
62,122 GPD = 0.096 CFS

NOTE:

DEMANDS ARE BASED ON AVERAGE WASTEWATER FLOW FACTOR PER WSSC PIPELINE DESIGN MANUAL OF 2008. ALL RETAIL IS ASSUMED TO BE RESTAURANT.

STANDARDS AND SPECIFICATIONS FOR DUST CONTROL:

1. THE CONTRACTOR SHALL CONDUCT OPERATIONS AND MAINTAIN THE PROJECT SITE AS TO MINIMIZE THE CREATION AND DISPERSION OF DUST. DUST CONTROL SHALL BE USED THROUGHOUT THE WORK AT THE SITE.
2. THE CONTRACTOR MUST PROVIDE CLEAN WATER, FREE FROM SALT, OIL AND OTHER DELETERIOUS MATERIAL TO BE USED FOR ON-SITE DUST CONTROL.
3. THE CONTRACTOR SHALL SUPPLY WATER SPRAYING EQUIPMENT CAPABLY OF ACCESSING ALL WORK AREAS.
4. THE CONTRACTOR SHALL IMPLEMENT STRICT DUST CONTROL MEASURES DURING ACTIVE CONSTRUCTION PERIODS ON SITE. THESE MEASURES WILL GENERALLY CONSIST OF WATER APPLICATIONS THAT SHALL BE APPLIED A MINIMUM OF ONCE PER DAY DURING DRY WEATHER OR MORE OFTEN AS REQUIRED TO PREVENT DUST EMISSIONS.
5. FOR WATER APPLICATION TO UNDISTURBED SOIL SURFACES, THE CONTRACTOR SHALL:
   A. APPLY WATER WITH EQUIPMENT CONSISTING OF TANK, SPRAY BAR, PUMP WITH DISCHARGE PRESSURE GAUGE;
   B. ARRANGE SPRAY BAR HEIGHT, NOZZLE SPACING, AND SPRAY PATTERN TO PROVIDE COMPLETE COVERAGE OF GROUND WITH WATER;
   C. DISPERSE WATER THROUGH NOZZLES ON SPRAY BAR AT 20 PSI (137.8 K PA) MINIMUM. KEEP AREAS DAMP WITHOUT CREATING NUISANCE CONDITIONS SUCH AS PONDING.
6. FOR WATER APPLICATION TO SOIL SURFACES DURING DEMOLITIONS AND/OR EXCAVATION, THE CONTRACTOR SHALL:
   A. APPLY WATER WITH EQUIPMENT CONSISTING OF A TANK, PUMP WITH DISCHARGE GAUGES, HOSES, AND MIST NOZZLES;
   B. LOCATE TANK AND SPRAYING EQUIPMENT SO THAT THE ENTIRE DISTURBED AREA CAN BE MISTED WITHOUT INTERFERING WITH DEMOLITION AND/OR EXCAVATION EQUIPMENT OR OPERATIONS. KEEP AREAS DAMP WITHOUT CREATING NUISANCE CONDITIONS SUCH AS PONDING;
   C. APPLY WATER SPRAY IN A MANNER TO PREVENT MOVEMENT OF SPRAY BEYOND SITE BOUNDARIES.

DISTRICT OF COLUMBIA STANDARD SEDIMENT CONTROL NOTES:

1. ALL SEDIMENT AND EROSION CONTROL METHODS SHALL BE INSTALLED BEFORE THE START OF AN EXCAVATION AND/OR CONSTRUCTION AS PER STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR THE DISTRICT OF COLUMBIA. IF AN ON-SITE INSPECTION REVEALS FURTHER EROSION CONTROL MEASURES ARE NECESSARY THE SAME SHALL BE PROVIDED.
2. ALL DEBRIS TO BE REMOVED FROM SITE.
3. ALLEY AND/OR STREETS SHALL BE SWEPT CLEAN AT ALL TIMES DURING EXCAVATION AND CONSTRUCTION.
4. ALL CATCH BASINS AND AREA DRAINS SHALL BE PROTECTED DURING EXCAVATION AND CONSTRUCTION.
5. IF ANY CATCH BASIN OR DRAIN BECOMES CLOGGED AS A RESULT OF EXCAVATION OR CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS CLEANING.
6. WHEN A SEDIMENT TRAP/SEDIMENT TANK HAS REACHED 67% CAPACITY, CLEAN OUT OF SAME IS REQUIRED.
7. ANY STOCKPILING, REGARDLESS OF LOCATION ON THE SITE, SHALL BE STABILIZED WITHIN 28 DAYS AFTER ESTABLISHMENT AND FOR THE DURATION OF THE PROJECT.

37.0 STANDARDS AND SPECIFICATIONS FOR LAND GRADING:

DEFINITION: RESHAPING OF THE EXISTING LAND SURFACE IN ACCORDANCE WITH A PLAN AS DETERMINED BY ENGINEERING SURVEY AND LAYOUT.

PURPOSE: THE PURPOSE OF LAND GRADING SPECIFICATIONS IS TO PROVIDE FOR EROSION CONTROL AND VEGETATIVE ESTABLISHMENT ON THOSE AREAS WHERE THE EXISTING LAND SURFACE IS TO BE RESHAPED BY GRADING ACCORDING TO A PLAN.

DESIGN CRITERIA: THE GRADING PLAN SHOULD BE BASED UPON THE INCORPORATION OF BUILDING DESIGNS AND STREET LAYOUTS THAT FIT AND UTILIZE EXISTING TOPOGRAPHY AND DESIRABLE NATURAL SURROUNDINGS TO AVOID EXTREME GRADE MODIFICATIONS. INFORMATION TO DETERMINE LIMITATIONS THAT MUST BE IMPOSED UPON THE GRADING OPERATION RELATED TO SLOPE STABILITY, EFFECT ON ADJACENT PROPERTIES, AND DRAINAGE PATTERNS, MEASURES FOR DRAINAGE AND WATER REMOVAL AND VEGETATIVE TREATMENT, ETC.

THE PLAN MUST SHOW EXISTING AND PROPOSED CONTOURS OF THE AREA(S) TO BE GRADED. THE PLAN
SHALL ALSO INCLUDE PRACTICES FOR EROSION CONTROL, SLOPE STABILIZATION, SAFE DISPOSAL OF RUNOFF
WATER AND DRAINAGE, SUCH AS WATERWAYS, LINED DITCHES, REVERSE SLOPE BENCHES (INCLUDE GRADE AND CROSS SECTION), GRADE STABILIZATION STRUCTURES, RETAINING WALLS, AND SURFACE AND
SUBSURFACE DRAINS. THE PLAN SHALL ALSO INCLUDE PHASING OF THESE PRACTICES. THE FOLLOWING
SHALL BE INCORPORATED INTO THE PLAN:

1. PROVISIONS SHALL BE MADE TO SAFELY CONDUCT SURFACE RUNOFF TO STORM DRAINS, PROTECTED OUTLETS OR TO STABLE WATER COURSES TO INSURE THAT SURFACE RUNOFF WILL NOT DAMAGE SLOPES OR OTHER GRADED AREAS.

2. CUT AND FILL SLOPES THAT ARE TO BE STABILIZED WITH GRASSES SHALL NOT BE STEEPER THAN 2:1. (WHERE THE SLOPE IS TO BE MOWED THE SLOPE SHOULD BE NO STEEPER THAN 3:1; 4:1 IS PREFERRED BECAUSE OF SAFETY FACTORS RELATED TO MOWING STEEP SLOPES.) SLOPES EXCEEDING 2:1 SHALL REQUIRE SPECIAL DESIGN AND STABILIZATION CONSIDERATIONS THAT SHALL BE ADEQUATELY SHOWN ON THE PLANS.

3. REVERSE BENCHES SHALL BE PROVIDED WHENEVER THE VERTICAL INTERVAL (HEIGHT) OF ANY 2:1 SLOPE EXCEEDS 20 FEET; FOR 3:1 SLOPE IT SHALL BE INCREASED TO 30 FEET AND FOR 4:1 TO 40 FEET. BENCHES SHALL BE LOCATED TO DIVIDE THE SLOPE FACE AS EQUALLY AS POSSIBLE AND SHALL CONVEY THE WATER TO A STABLE OUTLET. SOILS, SEEPS, ROCK OUTCROPS , ETC. , SHALL ALSO BE TAKEN INTO CONSIDERATION WHEN DESIGNING BENCHES.

   A. BENCHES SHALL BE A MINIMUM OF SIX-FEET WIDE TO PROVIDE FOR EASE OF MAINTENANCE.

   B. BENCHES SHALL BE DESIGNED WITH A REVERSE SLOPE OF 6:1 OR FLATTER TO THE TOE OF THE UPPER SLOPE AND WITH A MINIMUM OF ONE FOOT IN DEPTH. BENCH GRADIENT TO THE OUTLET SHALL BE BETWEEN 2 PERCENT AND 3 PERCENT, UNLESS ACCOMPANIED BY APPROPRIATE DESIGN AND COMPUTATIONS.

   C. THE FLOW LENGTH WITHIN A BENCH SHALL NOT EXCEED 800' UNLESS ACCOMPANIED BY APPROPRIATE DESIGN AND COMPUTATIONS. FOR FLOW CHANNEL STABILIZATION, SEE TEMPORARY SWALE.

37.0 STANDARDS AND SPECIFICATIONS FOR LAND GRADING:

4. SURFACE WATER SHALL BE DIVERTED FROM THE FACE OF ALL CUT AND/OR FILL SLOPES BY THE USE OF EARTH DIKES, DITCHES AND SWALES OR CONVEYED DOWNSLOPE BY THE USE OF A DESIGNED STRUCTURE, EXCEPT WHERE:

   A. THE FACE OF THE SLOPE IS OR SHALL BE STABILIZED AND THE FACE OF ALL GRADED SLOPES SHALL BE PROTECTED FROM SURFACE RUNOFF UNTIL THEY ARE STABILIZED.

   B. THE FACE OF THE SLOPE SHALL NOT BE SUBJECT TO ANY CONCENTRATE FLOWS OF SURFACE WATER SUCH AS FROM NATURAL DRAINAGEWAYS, GRADED SWALES, DOWNSPOUTS, ETC.

   C. THE FACE OF THE SLOPE WILL BE PROTECTED BY SPECIAL EROSION CONTROL MATERIALS, TO INCLUDE, BUT NOT LIMITED TO: APPROVED VEGETATIVE STABILIZATION PRACTICES (SEE SECTION G), RIP-RAP OR OTHER APPROVED STABILIZATION METHODS.

5. CUT SLOPES OCCURRING IN RIPABLE ROCK SHALL BE SERRATED AS SHOWN IN DETAIL 70, SERRATED SLOPES ON THE FOLLOWING DIAGRAM. THESE SERRATIONS SHALL BE MADE WITH CONVENTIONAL EQUIPMENT AS THE EXCAVATION IS MADE. EACH STEP OR SERRATION SHALL BE CONSTRUCTED ON THE CONTOUR AND WILL HAVE STEPS CUT AT NOMINAL TWO-FOOT INTERVALS WITH NOMINAL THREE-FOOT HORIZONTAL SHELVES. THESE STEPS WILL VARY DEPENDING ON THE SLOPE RATIO OR THE CUT SLOPE. THE NOMINAL SLOPE LINE IS 1:5:1. THESE STEPS WILL WEATHER AND ACT TO HOLD MOISTURE, LIME, FERTILIZER AND SEED THUS PRODUCING A MUCH QUICKER AND LONGER LIVED VEGETATIVE COVER AND BETTER SLOPE STABILIZATION. OVERLAND FLOW SHALL BE DIVERTED FROM THE TOP OF ALL SERRATED CUT SLOPES AND CARRIED TO A SUITABLE OUTLET.

6. SUBSURFACE DRAINAGE SHALL BE PROVIDED WHERE NECESSARY TO INTERCEPT SEEPAGE THAT WOULD OTHERWISE ADVERSELY AFFECT SLOPE STABILITY OR CREATE EXCESSIVELY WET SITE CONDITIONS.

7. SLOPES SHALL NOT BE CREATED SO CLOSE TO PROPERTY LINES AS TO ENDANGER ADJOINING PROPERTIES WITHOUT ADEQUATELY PROTECTING SUCH PROPERTIES AGAINST SEDIMENTATION, EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED DAMAGES.

8. FILL MATERIAL SHALL BE FREE OF SNOW, ICE, FROZEN MATERIALS, TRASH, BRICK, CLAY LUMPS, HAZARDOUS MATERIAL, BROKEN CONCRETE, TREE ROOTS, SOD, ASHES, CINDERS, GLASS, PLASTER, ORGAINIC MATTER, BRUSH, LOGS, STUMPS, BUILDING DEBRIS AND ANY OTHER FOREIGN MATERIAL. IT SHOULD BE FREE OF STONES OVER TWO (2) INCHES IN DIAMETER WHERE COMPACTED BY HAND OR MECHANICAL TAMPERS OR OVER EIGHT (8) INCHES IN DIAMETER WHERE COMPACTED BY ROLLERS OR OTHER EQUIPMENT. FROZEN MATERIAL SHALL NOT BE PLACED IN THE FILL NOR SHALL THE FILL MATERIAL BE PLACED ON A FROZEN FOUNDATION.

9. STOCKPILES, BORROW AREAS AND SPOIL SHALL BE SHOWN ON THE PLANS AND SHALL BE SUBJECT TO THE PROVISIONS OF THIS STANDARD AND SPECIFICATIONS.

10. ALL DISTURBED AREAS SHALL BE STABILIZED STRUCTURALLY OR VEGETATIVELY IN COMPLIANCE WITH 42.0 STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION.

38.0 STANDARDS AND SPECIFICATIONS FOR TOPSOIL:

DEFINITION: PLACEMENT OF TOPSOIL OVER A PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION

PURPOSE: TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW PH, MATERIALS TOXIC TO PLANTS, AND/OR
UNACCEPTABLE SOIL GRADATION.

CONDITIONS WHERE PRACTICE APPLIES:

I. THIS PRACTICE IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE:

   a. THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH.

   b. THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS OF FURNISH CONTINUING SUPPLIES OF MOISTURE AND PLANT NUTRIENTS.

   c. THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH.

   d. THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE.

II. FOR THE PURPOSE OF THESE STANDARDS AND SPECIFICATIONS, AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN FOR ADEQUATE STABILIZATION. AREAS HAVING SLOPES STEEPER THAN 2:1 SHALL HAVE THE APPROPRIATE STABILIZATION SHOWN ON THE PLANS.

CONSTRUCTION AND MATERIAL SPECIFICATIONS:

I. TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED IN THE NRCS DISTRICT OF COLUMBIA SOIL SURVEY MANUAL.

II. TOPSOIL SPECIFICATIONS – SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:

   i. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE WATERSHED PROTECTION DIVISION. REGARDLESS, TOPSOIL SHALL NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND SHALL CONTAIN LESS THAN 5% BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 11/2 " IN DIAMETER.

   II. TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACKGRASS, JOHNSONGRASS, NUTSEDGE, POISON IVY, THISTLE, OTHER POSIONOUS PLANTS OR OTHERS AS SPECIFIED.

   III. WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE SHALL BE SPREAD AT THE RATE OF 4-8 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL. LIME SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL IN CONJUNCTION WITH TILLAGE OPERATIONS AS DESCRIBED IN THE FOLLOWING PROCEDURES.

38.0 STANDARDS AND SPECIFICATIONS FOR TOPSOIL, CONT.:

III. FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES:

   i. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 42.0 VEGETATIVE STABILIZATION – SECTION I – VEGETATIVE STABILIZATION METHOD AND MATERIALS.

IV. FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES:

   i. ON SOIL MEETING TOPSOIL SPECIFICATIONS, OBTAIN TEST RESULTS DICTATING FERTILIZER AND LIME AMENDMENTS REQUIRED TO BRING THE SOIL INTO COMPLIANCE WITH THE FOLLOWING:

      a. PH FOR TOPSOIL SHALL BE BETWEEN 6.0 AND 7.5. IF THE TESTED SOIL DEMONSTRATES A PH OF LESS THAN 6.0, SUFFICIENT LIME SHALL BE PRESCRIBED TO RAISE THE PH TO 6.5 OR HIGHER.

      b. ORGANIC CONTENT OF TOPSOIL SHALL BE NOT LESS THAN 1.5 PERCENT BY WEIGHT.

      c. TOPSOIL HAVING SOLUBLE SALT CONTENT GREATER THAN 500 PARTS PER MILLION SHALL NOT BE USED.

      d. NO SOD OR SEED SHALL BE PLACED ON SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS OR CHEMICALS USED FOR WEED CONTROL UNTIL SUFFICIENT TIME HAS ELAPSED (14 DAYS MIN.) TO PERMIT DISSIPATION OF PHYTO-TOXIC MATERIALS.

   NOTE: TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE WATERHED PROTECTION AGENCY, MAY BE USED IN LIEU OF NATURAL TOPSOIL.

   ii. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 42.0 VEGETATIVE STABILIZATION – SECTION I– VEGETATIVE STABILIZATION METHOD AND MATERIALS.

V. TOPSOIL APPLICATION

   i. WHEN TOPSOILING, MAINTAIN NEEDED EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, EARTH DIKES, SLOPE SILT FENCE AND SEDIMENT TRAPS AND BASINS.

   II. GRADES ON THE AREAS TO BE TOPSOILED, WHICH HAVE BEEN PREVIOUSLY ESTABLISHED, SHALL BE MAINTAINED, ALBEIT 4" – 8" HIGHER IN ELEVATION.

   III. TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED IN A 4" – 8" LAYER AND LIGHTLY COMPACTED TO A MINIMUM THICKNESS OF 4". SPREADING SHALL BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.

   IV. TOPSOIL SHALL NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION.

VI. ALTERNATIVE FOR PERMANENT SEEDING – INSTEAD OF APPLYING THE FULL AMOUNTS OF LIME AND COMMERCIAL FERTILIZER, COMPOSTED SLUDGE AND AMENDMENTS MAY BE APPLIED AS SPECIFIED BELOW:

   i. COMPOSTED SLUDGE MATERIAL FOR USE AS A SOIL CONDITIONER FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES SHALL BE TESTED TO PRESCRIBE AMENDMENTS AND FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

      a. COMPOSTED SLUDGE SHALL BE SUPPLIED BY, OR ORIGINATE FROM, A PERSON OR PERSONS THAT ARE PERMITTED (AT THE TIME OF ACQUISITION OF THE COMPOST) BY EITHER THE STATE OF MARYLAND OR THE STATE OF VIRGINA.

      b. COMPOSTED SLUDGE SHALL CONTAIN AT LEAST 1 PERCENT NITROGEN, 1.5 PERCENT PHOSPHORUS, AND 0.2 PERCENT POTASSIUM AND HAVE A PH OF 7.0 TO 8.0. IF COMPOST DOES NOT MEET THESE REQUIREMENTS, THE APPROPRIATE CONSTITUENTS MUST BE ADDED TO MEET THE REQUIREMENTS PRIOR TO USE.

      c. COMPOSTED SLUDGE SHALL BE APPLIED AT A RATE OF 1 TON/1,000 SQUARE FEET.

   ii. COMPOSTED SLUDGE SHALL BE AMENDED WITH A POTASSIUM FERTILIZER APPLIED AT THE RATE OF 4 LB/1,000 SQUARE FEET, AND 1/3 THE NORMAL LIME APPLICATION RATE.

REFERENCES: GUIDELINE SPECIFICATIONS, SOIL PREPARATION AND SODDING. MD- V A, PUB. #1, COOPERATIVE EXTENSION SERVICE, UNIVERSITY OF MARYLAND AND VIRGINIA POLYTECHNIC INSTITUTES. REVISED 1973.

STANDARDS AND SPECIFICATIONS FOR VEHICLE WASH RACK:

DEFINITION: AN ON-SITE AREA WHERE TIRES AND UNDER CARRAIGE OF A VEHICLE CAN BE WASHED.

PURPOSE: THE "VEHICLE WASH AREA" IS PROVIDED TO MINIMIZE THE QUANTITY OF SEDIMENT DEPOSITED ON PUBLIC SPACE BY VEHICLES LEAVING THE SITE.

CONDITIONS WHERE PRACTICE APPLIES: THE "VEHICLE WASH AREA" SHALL BE PROVIDED ON-SITE AND DRAINED ON-SITE. THE AREA MAY BE CONSTRUCTED OF RUBBLE, OR OTHER HARD POROUS MATERIAL. A WORKING WATER HOSE MUST BE LOCATED IN THE AREA DURING ALL CONSTRUCTION ACTIVITY.

1.

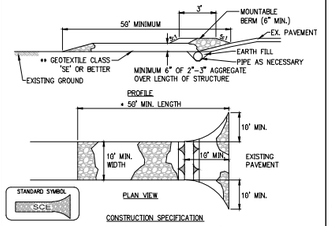
FABRIC PROPERTIES	MINIMUM ACCEPTABLE VALUE	TEST METHOD
GRAB TENSILE STRENGTH (LBS)	90	ASTM D1682
ELONGATION AT FAILURE (%)	50	ASTM D1682
MULLEN BURST STRENGTH (PSI)	190	ASTM D3788
PUNCTURE STRENGTH (LBS)	50	ASTM D751
SLURRY FLOW RATE (GAL/MIN/SF)	0.3	MODIFIED VIRGINIA DOT VTM-51
EQUIVALENT OPENING SIZE	40-80	US ST SIEVE CW-02215
ULTRAVIOLET RADIATION STABILITY (%)	90	ASTM G-26

2. FENCE POST (FOR FABRICATION UNITS): THE LENGTH SHALL BE A MINIMUM OF 36 INCHES LONG. WOOD POSTS WILL BE OF SOUND QUALITY HARDWOOD WITH A MINIMUM CROSS SECTIONAL AREA OF 3.0 SQUARE INCHES. STEEL POSTS WILL BE STANDARD T AND U SECTION WEIGHING NOT LESS THAN 1.00 POUND PER LINEAR FOOT.

3. WIRE FENCE (FOR FABRICATED UNITS): WIRE FENCING SHALL BE A MINIMUM OF 14 GAUGE 6" MESH OPENING, OR AS APPROVED.

4. PREFABRICATED UNITS: ENVIRONFENCE OR APPROVED EQUIVALENT MAY BE USED IN LIEU OF THE ABOVE METHOD PROVIDING THE UNIT IS INSTALLED PER THE MANUFACTURER'S INSTRUCTIONS.

DETAIL 1 - STABILIZED CONSTRUCTION ENTRANCE



STANDARD SYMBOL: SCE

CONSTRUCTION SPECIFICATION

1. LENGTH – MINIMUM OF 50' (•30' FOR SINGLE RESIDENCE LOT).
2. WIDTH – 10' MINIMUM, SHOULD BE FLARED AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
3. GEOTEXTILE FABRIC (FILTER CLOTH) SHALL BE PLACED OVER THE EXISTING GROUND PRIOR TO PLACING STONE. •• THE PLAN APPROVAL AUTHORITY MAY NOT REQUIRE SINGLE FAMILY RESIDENCES TO USE GEOTEXTILE.
4. STONE – CRUSHED AGGREGATE (2" TO 3") OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT SHALL BE PLACED AT LEAST 6" DEEP OVER THE LENGTH AND WIDTH OF THE ENTRANCE.
5. SURFACE WATER – ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED THROUGH THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE. PIPE INSTALLED THROUGH THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROTECTED WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 6" STONE OVER THE PIPE. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY A PIPE WILL NOT BE NECESSARY. PIPE SHOULD BE SIZED ACCORDING TO THE AMOUNT OF RUNOFF TO CONVEYED. A 6" MINIMUM WILL BE REQUIRED. THE MOUNTABLE BERM IS REQUIRED ON ALL SCEs NOT LOCATED AT A HIGH SPOT.
6. LOCATION – A STABILIZED CONSTRUCTION ENTRANCE SHALL BE LOCATED AT EVERY POINT WHERE CONSTRUCTION TRAFFIC ENTERS OR LEAVES A CONSTRUCTION SITE. VEHICLES LEAVING THE SITE MUST TRAVEL OVER THE ENTIRE LENGTH OF THE STABILIZED CONSTRUCTION ENTRANCE.

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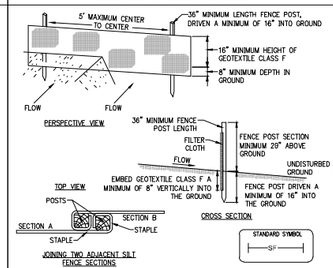
DETAIL 4 - SILT FENCE



CONSTRUCTION SPECIFICATIONS

1. FENCE POSTS SHALL BE A MINIMUM OF 36" LONG DRIVEN 16" MINIMUM INTO THE GROUND. WOOD POSTS SHALL BE 1 1/2" x 1 1/2" SQUARE (MIN.) CUT, OR 1 3/4" DIAMETER (MIN.) ROUND AND SHALL BE OF SOUND QUALITY HARDWOOD. STEEL POSTS WILL BE STANDARD T OR U SECTION WEIGHTING NOT LESS THAN 1.00 POUND PER LINEAR FOOT.
2. GEOTEXTILE SHALL BE FASTENED SECURELY TO EACH FENCE POST WITH WIRE TIES OR STAPLES AT TOP AND MID-SECTION AND SHALL MEET THE FOLLOWING REQUIREMENTS FOR GEOTEXTILE CLASS F.

TENSILE STRENGTH	50 LBS/IN (MIN.)	TEST: ASTM D-4595
TENSILE MODULUS	20 LBS/IN (MIN.)	TEST: ASTM D-4595
FLOW RATE	0.3 GAL/FT2/MINUTE (MAX.)	TEST: ASTM D-5141
FILTERING EFFICIENCY	75% (MIN.)	TEST: ASTM D-5141

3. WHERE ENDS OF GEOTEXTILE FABRIC COME TOGETHER, THEY SHALL BE OVERLAPPED, FOLDED AND STAPLED TO PREVENT SEDIMENT BYPASS.
4. SILT FENCE SHALL BE INSPECTED AFTER EACH RAINFALL EVENT AND MAINTAINED WHEN BULGES OCCUR OR WHEN SEDIMENT ACCUMULATION REACHED 30% OF THE FABRIC HEIGHT.

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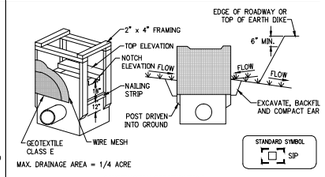
DETAIL 6A - STANDARD INLET PROTECTION



MAX. DRAINAGE AREA = 1/4 ACRE

CONSTRUCTION SPECIFICATIONS

1. EXCAVATE COMPLETELY AROUND THE INLET TO A DEPTH OF 18" BELOW THE NOTCH ELEVATION.
2. DRIVE THE 2" x 4" CONSTRUCTION GRADE LUMBER POSTS 1' INTO THE GROUND AT EACH CORNER OF THE INLET. PLACE NAIL STRIPS BETWEEN THE POSTS ON THE ENDS OF THE INLET. ASSEMBLE THE TOP PORTION OF THE 2" x 4" FRAME USING THE OVERLAP JOINT SHOWN ON DETAIL 6A. THE TOP OF THE FRAME (WEIR) MUST BE 6" BELOW ADJACENT ROADWAYS WHERE FLOODING AND SAFETY ISSUES MAY ARISE.
3. STRETCH THE 1/2" x 1/2" WIRE MESH TIGHTLY AROUND THE FRAME AND FASTEN SECURELY. THE ENDS MUST MEET AND OVERLAP AT A POST.
4. STRETCH THE GEOTEXTILE CLASS E TIGHTLY OVER THE WIRE MESH WITH THE GEOTEXTILE EXTENDING FROM THE TOP OF THE FRAME TO 18" BELOW THE INLET NOTCH ELEVATION. FASTEN THE GEOTEXTILE FIRMLY TO THE FRAME. THE ENDS OF THE GEOTEXTILE MUST MEE AT A POST, BE OVERLAPPED AND FOLDED THAN FASTENEND DOWN.
5. BACKFILL AROUND THE INLET IN COMPACTING 6" LAYERS UNTIL THE LAYER OF EARTH I LEVEL WITH THE NOTCH ELEVATION ON THE ENDS AND TOP ELEVATION ON THE SIDES.
6. IF THE INLET IS NOT IN A SUMP, CONSTRUCT A COMPACTED EARTH DIKE ACROSS THE DITCH LINE DIRECTLY BELOW IT. THE TOP OF THE EARTH DIKE SHOULD BE AT LEAST 6" HIGHER THAN THE TOP OF THE FRAME.
7. THE STRUCTURE MUST BE INSPECTED PERIODICALLY AND AFTER EACH RAIN AND THE GEOTEXTILE REPLACED WHEN IT BECOMES CLOGGED.

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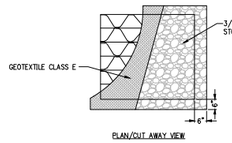
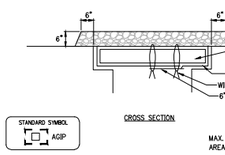
DETAIL 6B - AT GRADE INLET PROTECTION





STANDARD SYMBOL: AGIP

MAX. DRAINAGE AREA = 1/4 ACRE

CONSTRUCTION SPECIFICATIONS

1. LIFT GRATE AND WRAP WITH GEOTEXTILE CLASS E TO COMPLETELY COVER ALL OPENINGS, THEN SET GRATE BACK IN PLACE.
2. PLACE 3/4" TO 1 1/2" STONE, 4"-6" THICK ON THE GRATE TO SECURE THE FABRIC AND PROVIDE ADDITIONAL FILTRATION.

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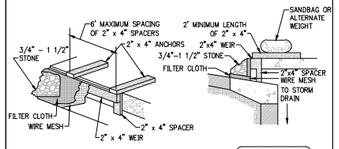
DETAIL 6C - CURB INLET PROTECTION (COG OR COS INLETS)



MAX. DRAINAGE AREA = 1/4 ACRE

STANDARD SYMBOL: CIP

CONSTRUCTION SPECIFICATIONS

1. ATTACH A CONTINUOUS PIECE OF WIRE MESH (30" MINIMUM WIDTH BY THROAT LENGTH PLUS 4") TO THE 2" x 4" WEIR (MEASURING THROAT LENGTH PLUS 2") AS SHOWN ON THE STANDARD DRAWING.
2. PLACE A CONTINUOUS PIECE OF GEOTEXTILE CLASS E THE SAME DIMENSIONS AS THE WIRE MESH OVER THE WIRE MESH AND SECURELY ATTACH IT TO THE 2" x 4" WEIR.
3. SECURELY NAIL THE 2" x 4" WEIR TO A 9" LONG VERTICAL SPACER TO BE LOCATE BETWEEN THE WEIR AND THE INLET FACE (MAX. 4' APART).
4. PLACE THE ASSEMBLY AGAINST THE INLET THROAT AND NAIL (MINIMUM 2' LENGTHS OF 2" x 4" TO THE TOP OF THE WEIR AT SPACER LOCATIONS). THESE 2" x 4" ANCHORS SHALL EXTEND ACROSS THE INLET TOP AND BE HELD IN PLACE BY SANDBAGS OR ALTERNATE WEIGHT.
5. THE ASSEMBLY SHALL BE PLACE SO THAT THE END SPACERS ARE A MINIMUM 1' BEYOND BOTH ENDS OF THE THROAT OPENING.
6. FORM THE 1/2" x 1/2" WIRE MESH AND THE GEOTEXTILE FABRIC TO THE CONCRETE GUTTER AND AGAINST THE FACE OF THE CURB ON BOTH SIDES OF THE INLET. PLACE CLEAN 3/4" x 1 1/2" STONE OVER THE WIRE MESH AND GEOTEXTILE IN SUCH A MANNER TO PREVENT WATER FROM ENTERING THE INLET UNDER OR AROUND THE GEOTEXTILE.
7. THIS TYPE OF PROTECTION MUST BE INSPECTED FREQUENTLY AND THE FILTER CLOTH AND STONE REPLACED WHEN CLOGGED WITH SEDIMENT.
8. ASSURE THAT THE STORM FLOW DOES NOT BYPASS THE INLET BY INSTALLING A TEMPORARY EARTH OR ASPHALT DIKE TO DIRECT THE FLOW TO THE INLET.

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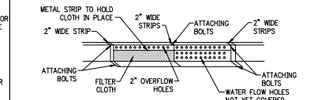
DETAIL 6E - AT GRADE INLET GUARD



* AT EACH INTERSECTION OF INLET PROTECTOR OVERLAP A MINIMUM OF 2"

STANDARD INLET GUARD ATTACHMENT METHOD

- THE TOP MEASUREMENT OF 7-1/2" IS SET TO PROVIDE A 2" EXTENTION FOR OVERFLOW WHILE AVOIDING BLOCKAGE OF THE MANHOLE COVER.
- MAKE A WATERTIGHT CONNECTION ALONG THE SIDES AND BOTTOM OF THE INLET GUARD WITH THE STREET AND CURB.

STANDARD INLET GUARD DIMENSIONS

STANDARD INLET GUARD CROSS SECTION

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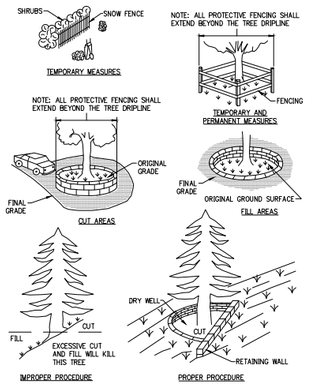
DETAIL 74 - TREE PROTECTION



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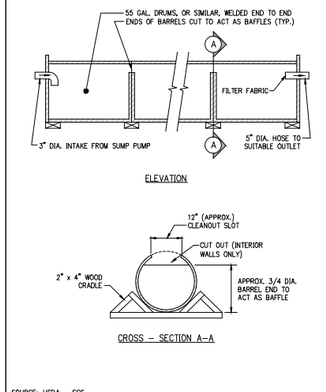
DETAIL 34 - PORTABLE SEDIMENT TANK (HORIZONTAL)



SOURCE: USDA – SCS

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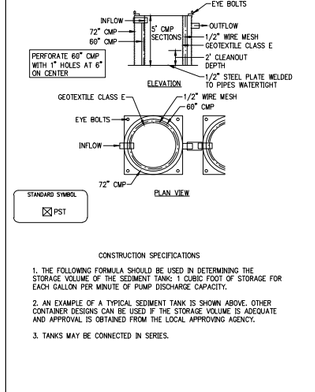
DETAIL 35 - PORTABLE SEDIMENT TANK (VERTICAL)



STANDARD SYMBOL: PST

CONSTRUCTION SPECIFICATIONS

1. THE FOLLOWING FORMULA SHOULD BE USED IN DETERMINING THE STORAGE VOLUME OF THE SEDIMENT TANK: 1 CUBIC FOOT OF STORAGE FOR EACH GALLON PER MINUTE OF PUMP DISCHARGE CAPACITY.
2. AN EXAMPLE OF A TYPICAL SEDIMENT TANK IS SHOWN ABOVE. OTHER CONTAINER DESIGNS CAN BE USED IF THE STORAGE VOLUME IS ADEQUATE AND APPROVAL IS OBTAINED FROM THE LOCAL APPROVING AGENCY.
3. TANKS MAY BE CONNECTED IN SERIES.

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SWRv and WQTv Summary

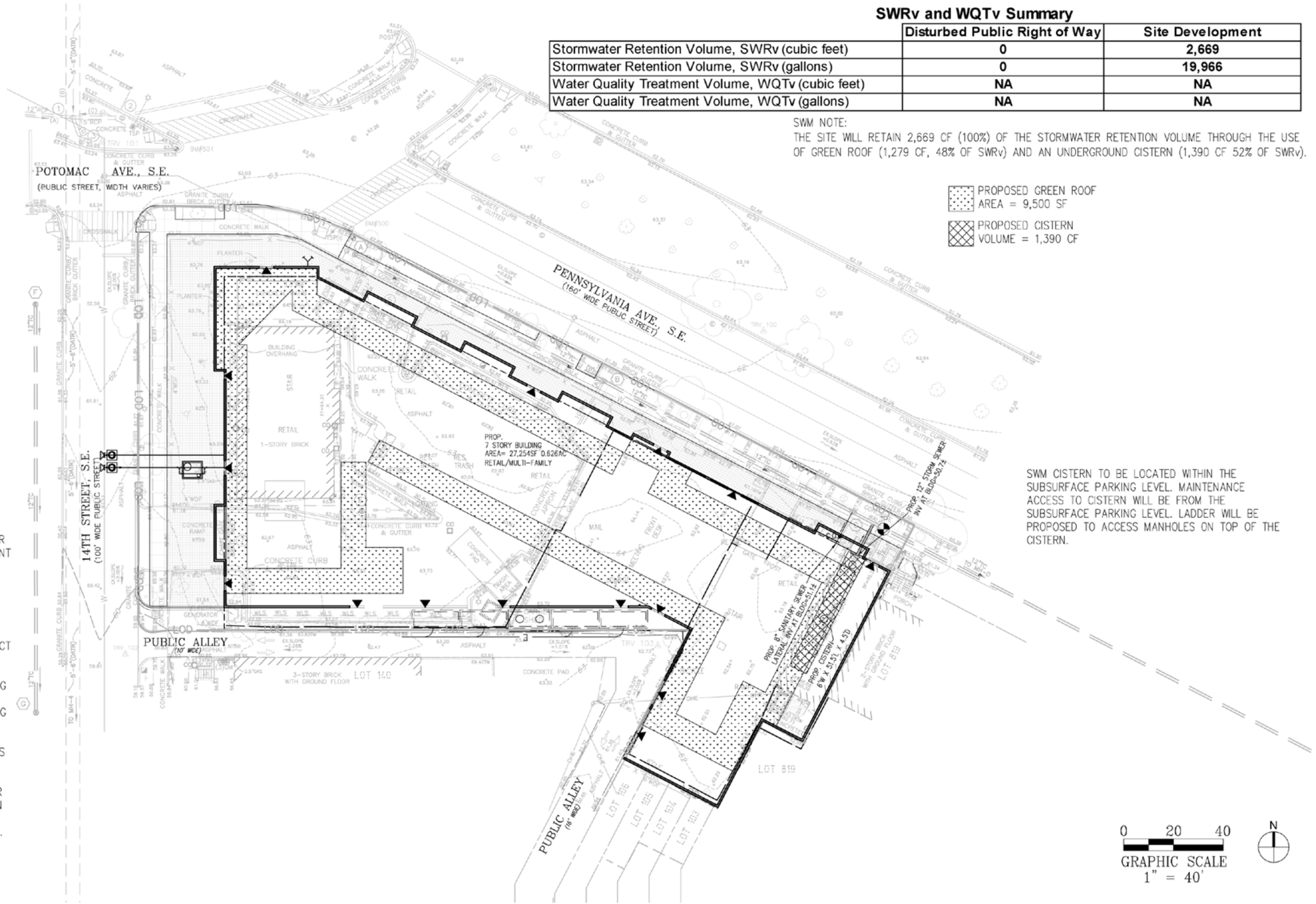
	Disturbed Public Right of Way	Site Development
Stormwater Retention Volume, SWRv (cubic feet)	0	2,669
Stormwater Retention Volume, SWRv (gallons)	0	19,966
Water Quality Treatment Volume, WQTv (cubic feet)	NA	NA
Water Quality Treatment Volume, WQTv (gallons)	NA	NA

SWM NOTE:
THE SITE WILL RETAIN 2,669 CF (100%) OF THE STORMWATER RETENTION VOLUME THROUGH THE USE OF GREEN ROOF (1,279 CF, 48% OF SWRv) AND AN UNDERGROUND CISTERN (1,390 CF 52% OF SWRv).

PROPOSED GREEN ROOF
AREA = 9,500 SF

PROPOSED CISTERN
VOLUME = 1,390 CF

SWM CISTERN TO BE LOCATED WITHIN THE SUBSURFACE PARKING LEVEL. MAINTENANCE ACCESS TO CISTERN WILL BE FROM THE SUBSURFACE PARKING LEVEL. LADDER WILL BE PROPOSED TO ACCESS MANHOLES ON TOP OF THE CISTERN.



STORMWATER MANAGEMENT NARRATIVE:

CONCEPTUAL STORMWATER MANAGEMENT PROVIDED FOR PUD REVIEW ONLY. DURING THE FURTHER DEVELOPMENT OF THE PUD AND FORTHCOMING DEVELOPMENT OF THE FINAL SITE PLAN, STORMWATER MANAGEMENT DESIGN WILL BE ADVANCED TO REFLECT ADDITIONAL DETAILS. THE DESIGN CRITERIA FOR THE PROJECT INCLUDE:

- STORMWATER MANAGEMENT DESIGN WILL MEET OR EXCEED THE CURRENT STANDARDS OF THE DISTRICT OF COLUMBIA IN PLACE AT THE TIME OF PUD APPROVAL.
- THE STORMWATER RUNOFF WILL BE TREATED USING LOW IMPACT DEVELOPMENT BMP MEASURES
- THE STORMWATER RUNOFF WILL BE TREATED USING A COMBINATION OF ON-SITE AND OFF-SITE STORMWATER MANAGEMENT PRACTICES SUCH AS GREEN ROOF, BIORETENTION AREAS, AND CISTERNS FOR WATER REUSE.

NOTE: ONLY APPROXIMATE AREAS WHERE STORMWATER MANAGEMENT PRACTICES WILL BE LOCATED HAVE BEEN SHOWN ON THE PLAN, THE ACTUAL DESIGN OF THE FACILITIES WILL BE PROVIDED DURING FINAL SITE PLAN.