



# 2018 2018 2018 2018 2018 2018 2018 TERRACE MANOR, LLC SQUARE 5894, LOT 0063 ZONED: RA-I

# SANITARY STRUCTURE TABLE

<u>55 2830</u> TOP = 244.48<sup>1</sup> LID LOCKED - NO ACCESS

<u>SS 1570</u> TOP = 207.80' NV IN = 194.65' (10" FROM 2830) INV OUT = 194.60' (10" TO 2354)

<u>55 2354</u> TOP = 192.04' INV IN = 179.04' (10" FROM 1570)

INV OUT = 178.94' (10" TO 2798)

<u>SS 2544</u> TOP = 192.34' NV IN = 179.44' (10" FROM WEST) INV OUT = 179.39' (10" TO 2798)

<u>55 2798</u> TOP = 191.02' NV IN = 177.62' (10" FROM 2354) INV IN = 177.52' (10" FROM 2544) INV OUT = 177.47' (10" TO 2833)

55 2833

TOP = 190.27'
INV IN = 177.47' (10" FROM EAST) INV IN = 177 02' (IO" FROM 2798) INV OUT = 177.04' (10" TO SOUTH)

2122 (MANHOLE & DROP INLET) TOP = 192.70' INV OUT = 188.10' (15" TO UNKNOWN)

2324 (MANHOLE & DROP INLET) TOP = 192.23' INV NOT FOUND - FILLED WITH DEBRIS

2372 (MANHOLE & DROP INLET) TOP = 190.76' INV NOT FOUND - FILLED WITH DEBRIS

<u>2644</u> (DROP INLET GRATE) TOP = 210.19' INV OUT = 207.84' (10" CIP TO 2652)

2652 (DROP INLET GRATE) TOP = 206.72' INV IN = FILLED WITH DEBRIS (10" CIP FROM 2652) INV OUT = 204.19' (10" CIP TO EOI) INV IN = 181.58' (36" FROM 2054)

<u>2832</u> (MANHOLE) TOP = 189.89' INV IN = 181.54' (36" FROM 2792)

INV OUT = 181.54' (36" TO SOUTH)

2055 (MANHOLE) TOP = 215.08' INV IN = 208.48' (18" FROM 1978) INV IN = 207.63' (12" FROM 2083)

INV OUT = 206.78 (18" TO 2054)

TOP = 203.86' INV IN = 187.46' (18" FROM 2055) INV IN = 193.26' (18" FROM NORTHEAST)

INV OUT = 187.51 (36" TO 2797)

<u>2797</u> (MANHOLE) TOP = 191.13'

STORM STRUCTURE TABLE

### INV OUT = 181.53 (36" TO 2832) 2836 (MANHOLE)

TOP = 192.96' INV IN = 187.70' (12" RCP FROM WEST) INV OUT = 187.59' (12" TO 2324)

### **LEGEND**

FIRE HYDRANT

WATER MANHOLE/METER

SANITARY MANHOLE CLEANOUT

STORM DRAIN MANHOLE DROP INLET GRATE

POWER POLE GUY WIRE

LIGHT POLE

ELECTRIC MANHOLE HANDICAP PARKING SPACE

PARKING SPACE COUNTS

### Linetypes

CURB & GUTTER
PROPERTY LINES FENCE LINE OVERHEAD UTILITY LINE ELECTRIC LINE GAS LINE WATER LINE = == == == STORM SEWER LINE 

**ASPHALT** 

CONCRETE

WROUGHT IRON FENCE

I. THE PROPERTY SHOWN HEREON IS NOW IN THE NAME OF TERRACE MANOR, LLC RECORDED IN DEED BOOK 214, PAGE III AMONG THE LAND RECORDS OF THE DISTRICT OF COLUMBIA SURVEYOR'S OFFICE (DCSO). THE PROPERTY IS ZONED RA-I.

2. THE PROPERTY HAS A RECORD AND MEASURED AREA OF 100,265 SQUARE FEET (2.3018 ACRES).

3. BOUNDARY AND PHYSICAL IMPROVEMENTS SHOWN HEREON IS BASED ON A CURRENT FIELD SURVEY PERFORMED BY THIS FIRM BETWEEN OCTOBER 3, 2017 AND OCTOBER 10, 2017.

4. HORIZONTAL DATUM SHOWN HEREON IS DCSO NORTH AS ESTABLISHED BY THIS SURVEY.

DURING THE PROCESS OF OUR PHYSICAL SURVEY NO INDICATIONS OF CEMETERIES, GRAVE SITES AND BURIAL GROWNDS WERE FOUND. NO FURTHER INSPECTION OF THIS PROPERTY HAS BEEN MADE FOR POSSIBLE CEMETERIES.

6. NO CERTIFICATION IS MADE AS TO THE LOCATIONS OF UNDERGROUND UTILITIES SUCH AS, BUT NOT LIMITED TO ELECTRIC, GAS, TELEPHONE, CATV, WATER, SANITARY AND STORM SEWERS.

NO GEOTECHNICAL, SUBSURFACE, FIELD REVIEWS, RESEARCH, AGENCY OR GOVERNMENTAL RECORD REVIEWS, OR OTHER INVESTIGATIONS HAVE BEEN MADE FOR THE PURPOSE OF LOCATING, OR DETERMINING THE EXISTENCE OF WETLANDS, HAZARDOUS MATERIALS, OR OTHER ENVIRONMENTAL CONCERNS ON SITE IN THE PERFORMANCE OF THIS SURVEY BY CHRISTOPHER CONSULTANTS, LTD FOR THE DEPORTED AS AS ALLOWS LEPECH. PROPERTY AS SHOWN HEREON.

ALL BUILDING DIMENSIONS ARE MEASURED AT THE OUTSIDE GROUND LEVEL OF BUILDING, OVERALL SQUARE FOOTAGE HAS BEEN DETERMINED BY EXTERIOR DIMENSIONS AT GROUND LEVEL.

9. EXISTING PARKING SPACES: 48 STANDARD

<u>3 HANDICAP</u> 51 TOTAL

### **BUILDING SUMMARY**

BUILDING I: 3341-3353 23RD STREET, S.E. (PER LOCATION DRAWING DATED 08/02/2012 PREPARED BY MILLENNIUM ENGINEERING, LLC) 3 STORY BRICK BUILDING AREA = ±10,303 SQUARE FEET (SEE GENERAL NOTE 8)

 $HEIGHT = \pm 31.1'$ 

BUILDING 2: 2270-2272 SAVANNAH STREET, S.E. (PER LOCATION DRAWING DATED 08/02/2012 PREPARED BY MILLENNIUM ENGINEERING, LLC) 3 STORY BRICK BUILDING

AREA = 12,669 SQUARE FEET (SEE GENERAL NOTE 8)

BUILDING 3: 2276 SAVANNAH STREET, S.E., 3371-3373 23RD STREET, S.E. (PER LOCATION DRAWING DATED 08/02/2012 PREPARED BY MILLENNIUM ENGINEERING, LLC) 3 STORY BRICK BUILDING

AREA = 14,427 SQUARE FEET (SEE GENERAL NOTE 8) HEIGHT = 126.2'



<u>1693</u> (DROP INLET GRATE) TOP = 205.36'

INV OUT = INACCESSIBLE

<u>1910</u> (DROP INLET GRATE) TOP = 219.05' INV OUT = 216.70' (6" CIP TO 1978)

2083 (MANHOLE & DROP INLET) TOP = 216.81'

INV OUT = 212.26' (12" TO 2055)

<u>1976 (</u>MANHOLE & DROP INLET) TOP = 216.46' INV NOT FOUND - FILLED WITH DEBRIS

2712 (DROP INLET GRATE) INV IN = 207.63' (...

TOP = 213.77' INV IN = 211.52' (10" CIP FROM BUILDING) 2054 (MANHOLE) INV OUT = FILLED WITH DEBRIS TOP = 203.86' (211.07' AT DEBRIS) INV IN = 187.46' (1...





SAVANNAH STREET,

**CURVE TABLE** 



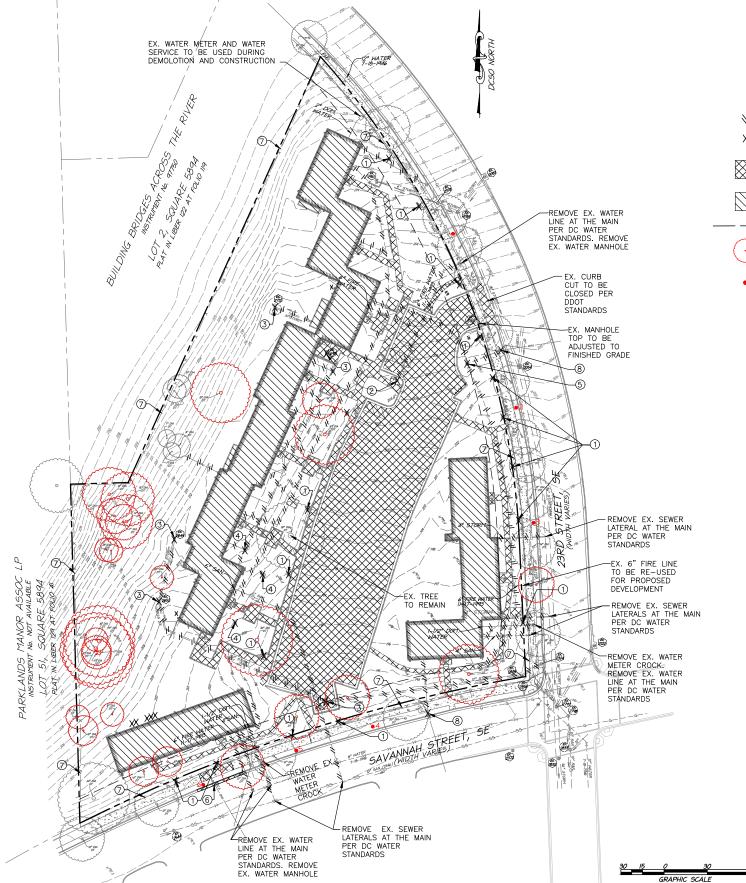
### **DEMOLITION NOTES**

- CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES FOR SHUTOFF, CAPPING, AND CONTINUATION OF UTILITY SERVICES AS REQUIRED.
- CONTRACTOR SHALL REMOVE AND TRANSPORT ALL DEBRIS, RUBBISH, AND OTHER MATERIALS RESULTING FROM ALL DEMOLITION OPERATIONS TO A LEGAL OFF-SITE DISPOSAL FACILITY.
- REMOVAL OF ASPHALT AND CONCRETE PAVEMENT SHALL INCLUDE THE REMOVAL OF ALL SURFACE, BASE AND SUBBASE MATERIALS.
- 4. CONTRACTOR SHALL VERIFY ALL EXISTING SITE CONDITIONS PRIOR TO BID AND CONSTRUCTION. ANY DISCREPANCIES IN THE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE IN WRITING, PRIOR TO FINAL BID AND
- 5. CONTRACTOR SHALL VERIFY THE ELEVATIONS OF ALL EXISTING UTILITIES WELL IN ADVANCE OF CONDUCTING CONSTRUCTION OPERATIONS TO ENSURE PROPER CONNECTIONS WITH PROPOSED UTILITIES.
- 6. PROPOSED WATER AND SEWER UTILITY WORK WITHIN THE PUBLIC RIGHT-OF-WAY TO BE PERFORMED UNDER INSPECTION OF DC WATER.
- ALL UNDERGROUND UTILITY LOCATIONS, INCLUDING WATER, STORM DRAINAGE, SANITARY SEWER, ELECTRICAL, TELEPHONE AND GAS WERE TAKEN FROM AVAILABLE RECORDS AND FIELD VERRIFED 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 AND DISCREPANCY TO THE ENGINEER. CONTACT 'MISS UTILITY' AT 1–800–257–7777, AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION.
- CONTRACTOR MUST HAND DIG TEST PITS AT ALL UTILITY CROSSINGS TO DETERMINE THE EXACT LOCATION AND DEPTH OF ALL UTILITIES WELL IN ADVANCE OF DEMOLITION WORK AND PRIOR TO ORDERING PIPE MATERIALS AND STRUCTURES. UTILITIES FOUND DURING DEMOLITION OF CONSTRUCTION ACTIVITIES SHALL BE THE SOLE RESPONSIBILITY OF ANY CONTRACTOR ENGAGED IN EXCAVATION AT THIS SITE. THE OWNER'S REPRESENTATIVE SHALL BE NOTIFIED IMMEDIATELY OF ANY UTILITY FINDINGS WHICH DEVIATE FROM THE CONDITIONS SHOWN.
- ALL SIDEWALKS, CURBS, CURBS & GUTTER AND DRIVEWAYS DISTURBED OR DAMAGED DURING CONSTRUCTION SHALL BE REPLACED IN COMPLETE SECTIONS TO THE NEAREST JOINT PER DDOT STANDARDS AND SPECIFICATIONS AT NO ADDITIONAL COST.
- 10. NOTE PROXIMITY OF ADJACENT STRUCTURES AND UTILITY LINES AND MAINTAINED CONTINUED SERVICE DURING CONSTRUCTION. COORDINATE WITH RESPECTIVE UTILITY COMPANIES AND ENGINEER SHOULD THE RELOCATION OF SERVICE(S) BE REQUIRED.
- 11. 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. THIS INCLUDES EXISTING TRANSFORMERS AND CONCRETE TRANSFORMER PADS.
- REMOVAL OF ALL WALLS/RETAINING WALLS AND FENCES SHALL INCLUDE THE REMOVAL OF THEIR FOUNDATION UNLESS OTHERWISE INDICATED ON DRAWINGS. ALL EXISTING ON-SITE FENCING IS TO BE REMOVED.
- 13. 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 OF WEST VIRGINIA AVENUE. CONTACT NUMBER 202-576-5258.
- 14. IN AREAS WHERE PROPOSED CONSTRUCTION MAY CONFLICT WITH EXISTING UTILITIES, THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO AVOID DAMAGE TO EXISTING UTILITIES. IF ANY UNDERGROUND UTILITY IS DAMAGED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE AND THE OWNER OF THE
- 15. ANY DAMAGE SUSTAINED TO UTILITIES ABOVE AND BELOW GROUND SHALL BE REPAIRED BY OR UNDER THE DIRECTION OF THE UTILITY OWNER AT THE CONTRACTOR'S EXPENSE. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR BACKFILL OR EXCAVATE THE AFFECTED UTILITY WITHOUT FIRST RECEIVING PERMISSION FROM THE UTILITY OWNER. BACKFILL REMOVED FROM TRENCHES MAY ONLY BE REUSED IF IT COMPLIES WITH THE FILL REQUIREMENTS LISTED IN THE SPECIFICATIONS.
- 16. EXISTING WATER AND SEWER SERVICES NOT REQUIRED FOR FUTURE USE ARE 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 AND SPECIFICATIONS. COORDINATE REQUIREMENTS WITH DC WATER UTILITY INSPECTOR AT 202-787-4299. PAVEMENT TO BE REMOVED PER DDOT STANDARDS AND SPECIFICATIONS.
- ABANDONMENT OF EXISTING 2" AND SMALLER DIAMETER WATER SERVICES:
   ASSURE THAT FINAL METER READING HAS BEEN OBTAINED.
   RETURN DC WATER OWNED WATER METER WITH AMR READING, TRANSMITTER
- (IF ANY) TO DC WATER CUSTOMER SERVICE METER BRANCH.

  2) EXCAVATE AND EXPOSE THE EXISTING TAP, AND CAP THE CONNECTION AT PUBLIC WATER MAIN. THE REMAINING WATER SERVICE PIPE IS ABANDONED IN PLACE.
- 3) WHEN METER PIT IS LOCATED IN PUBLIC SPACE, REMOVE FRAME AND COVER, AND BACKFILL IT.
- A MINIMUM OF THE TOP TWO (2) FEET OF ALL EXISTING VALVE BOXES DESIGNATED TO BE ABANDONED, INCLUDING THE FRAME AND COVER, SHALL BE REMOYED. THE REMAINING PORTION OF THE STRUCTURE SHALL BE FILLED WITH NOW COUNTED THE STRUCTURE SHALL BE FILLED WITH NON-COMPACTABLE SELECT STONE BACKFILL.
- 18. UTILITY ABANDONMENT WORK WILL BE COMPLETED DURING THE RAZE PROCESS.
- 19. 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.
- 24. EXISTING STREET LIGHT POLE RELOCATIONS WILL REQUIRE NEW POWER LINE CONNECTIONS INTO EXISTING ELECTRICAL CONDUITS OR MANHOLES, WHICH MAY REQUIRE ADDITIONAL PAVEMENT REMOVAL AND REPLACEMENT.
- 25. CONTACT DDOT-PUBLIC SPACE MAINTENANCE ADMINISTRATION 48 HOURS PRIOR TO START OF CONSTRUCTION AT 202-645-6030 OR 202-645-6031
- 26. FOR ALL EXISTING PIPES THAT ARE SHOWN TO BE REMOVED, IF ANY PORTION OF THE EXISTING PIPE IS LEFT IN THE GROUND, IT MUST BE GROUTED FULL.
- 27. CONTRACTOR TO PROVIDE TREE PROTECTION PER DDOT'S, URBAN FORESTRY ADMINISTRATION STANDARDS FOR ALL EXISTING TREES THAT ARE TO REMAIN WITHIN THE PROPERTY OF PUBLIC SPACE.

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### **DEMOLITION LEGEND**

EX. UTILITY LINE TO BE REMOVED

EX. MISCELLANEOUS SITE FEATURE OR STRUCTURE

EX. PAVEMENT TO BE REMOVED ALONG WITH ASSOCIATED CURB & GUTTER, STEPS

EX. BUILDING TO BE REMOVED, INCLUDING ALL ASSOCIATED ITEMS

PROPERTY LINES

EX. TREE TO BE REMOVED

SIX RANDOM PIECES OF ~24" RCP STICKING UP OUT OF THE GROUND. REMOVE THEM. IF THE PIPE KEEPS GOING THEN CUT THEN OFF ~1' BELOW GRADE, GROUT, AND COVER THEM WITH DIRT AND GRASS SEED.

### ADDITIONAL DEMOLITION CALL-OUTS

REMOVE EX. SITE LIGHT
REMOVE EX. FIRE HYDRANT
REMOVE EX. STORM INLET OR STORM MANHOLE
REMOVE EX. CLEANOUT
REMOVE EX. CLEANOUT
REMOVE EX. CURB & GUTTER
REMOVE EX. CURB & GUTTER
REMOVE EX. SITE FENCING







### SITE AND UTILITY PLAN

### **PROJECT NARRATIVE**

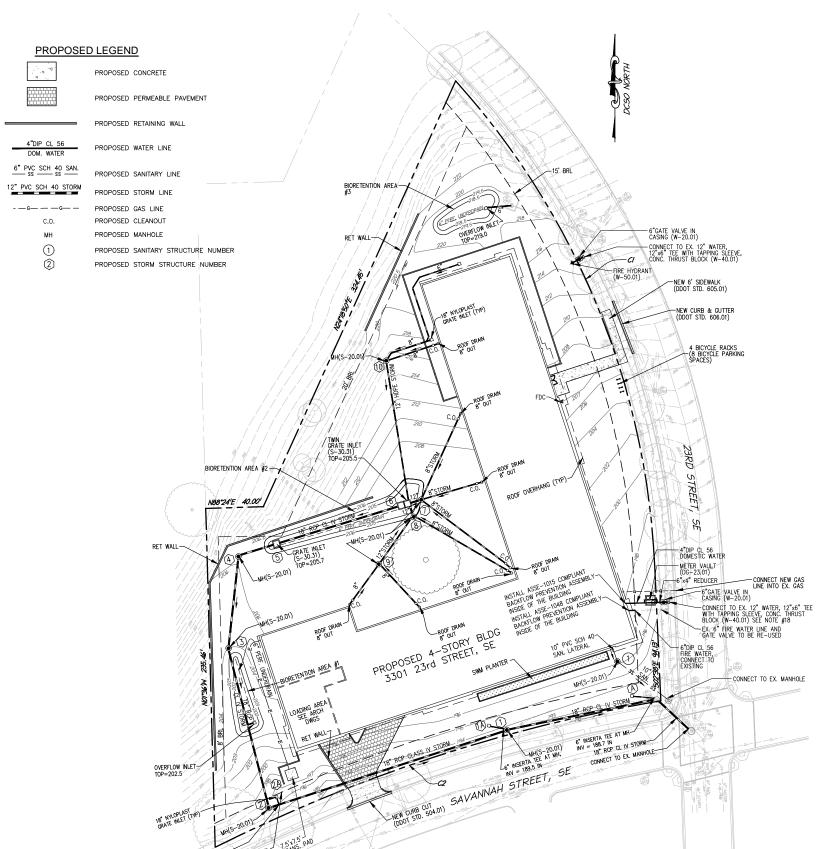
THE PROJECT IS LOCATED AT 3301 23RD STREET SE, WASHINGTON, DC.
THE SITE PROPERTY IS COMPOSED OF THREE PARCELS OPERATING AS A
RESIDENTIAL APARTMENT COMPLEX. THE EXISTING APARTMENTS BUILDINGS
WILL BE RAZED, INCLUDING THE EXISTING PARKING AREA, AND A NEW
4-STORY APARTMENT BUILDING WITH UNDERGROUND PARKING WILL BE
CONSTRUCTED. THERE ARE 130 RESIDENTIAL UNITS PROPOSED AS PART OF

THE EXISTING BUILDING HAS EXISTING ELECTRIC, TELECOM, WATER AND SANITARY SEWER SERVICES. ALL OF THESE EXISTING SERVICES WILL BE ABANDONED OR REMOVED.

NEW UTILITIES WILL BE PROVIDED TO SERVICE THE PROPOSED APARTMENT BUILDING AS PART OF THIS PROJECT, WHICH INCLUDES A NEW DOMESTIC WATER LINE, A NEW FIRE WATER LINE, NEW STORM AND SANITARY LATERALS, AND NEW ELECTRIC SERVICE.

THE SITE DRAINS FROM THE NORTHWEST TO THE SOUTHEAST WITH EXISTING SLOPES MOSTLY IN THE RANGE OF 8 TO 15% ONSITE AND SOME ADJOINING SLOPES UP TO 40%. THE EXISTING SOILS ONSITE HAVE BEEN ALTERED BY PREVIOUS DEVELOPMENT AND PREDOMINATELY CONSIST OF KEPORT URBAN LAND COMPLEX AND UDORTHANTS. THE ADJOINING STEEP SLOPES CONSIST OF CHRISTIANA-URBAN LAND COMPLEX AND CROOM VERY GRAVELLY SANDY LOAM. ONSITE SOIL TESTING INDICATES PERCOLATION RATES THAT WILL REQUIRE SWM/BMP MEASURES TO HAVE UNDERDRAINS.

THERE ARE NO EXISTING STORMWATER MANAGEMENT (SWM) FACILITIES ON THE PROPERTY. PROPOSED SWM MEASURES AS PART OF THIS PROJECT INCLUDE GREEN ROOF, BIORETENTION FACILITIES AND PLANTING LARGE TREFS.



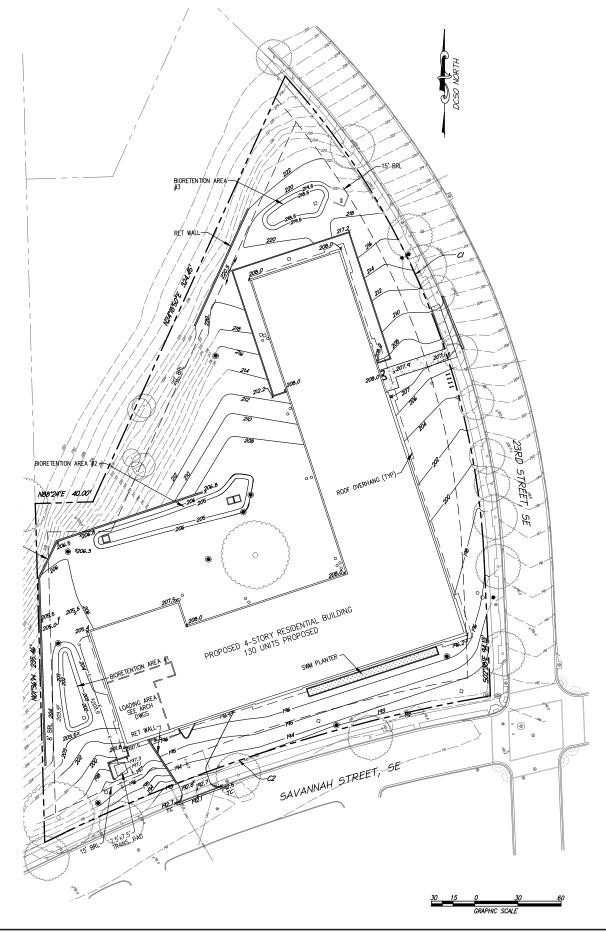
### NOTES

- WHERE NEW WORK MEETS EXISTING, NOTE FIELD LOCATIONS AND ELEVATIONS OF EXISTING FEATURES BEFORE BEGINNING CONSTRUCTION AND REPORT ANY DISCREPANCIES TO THE ARCHITECT OR ENGINEER.
- DIMENSIONS ARE TO FACE OF WALL AND CURB, EDGE OF WALK OR PAVEMENT, CENTERLINE OF PIPE OR UTILITY STRUCTURE, UNLESS OTHERWISE NOTED.
- 3. FRAMES AND COVERS OF EXISTING STRUCTURES TO BE ADJUSTED TO MATCH NEW FINISHED GRADES AS NEEDED.
- 4. 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 IF ANY INFORMATION CONCERNING FOUND UTILITY IS NOT SHOWN ON PLANS.
- 5. EXISTING SURFACE CONDITIONS DISTURBED OR DAMAGED DURING CONSTRUCTION SHALL BE REPLACED TO MATCH EXISTING CONDITIONS. CONTRACTOR TO COORDINATE EXTENT WITH ARCHITECT OR ENGINEER.
- 6. TEST PITS ARE REQUIRED AT ALL LOCATIONS WHERE PROPOSED UTILITIES CROSS EXISTING UTILITIES. INVESTIGATIONS TO IDENTIFY HORIZONTAL LOCATIONS, ELEVATION AND SIZE OF EXISTING UTILITIES. THE ENGINEER IS TO BE NOTIFIED OF THIS INFORMATION.
- 7. IF A 1' MINIMUM VERTICAL CLEARANCE CANNOT BE MAINTAINED AT UTILITY CROSSINGS, THE CONTRACTOR IS TO NOTIFY THE ENGINEER BEFORE PROCEEDING WITH WORK.
- 8. TRANSITION CURB, GUTTER, PAVING AND SIDEWALK TO MEET EXISTING IN LINE AND GRADE OR AS DIRECTED BY ENGINEER.
- 9. ALL DEBRIS AND EXCESS MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR AT AN APPROVED OFF-SITE LOCATION.
- ALL NEW WATER LINES TO HAVE A MINIMUM COVER OF 4 FEET. WATER FITTINGS SHALL BE PROPERLY TIED AND ANCHORED PER DC WATER STANDARDS AND SPECIFICATIONS.
- 11. WHERE PORTIONS OF EXISTING BITUMINOUS OR CONCRETE PAVING ARE TO BE REMOVED, THE EXISTING PAVEMENT SHALL BE SAW-CUT.
- 12. NOTIFY WASHINGTON GAS AT 202-750-4205, 48 HOURS PRIOR TO AN EXCAVATION IN THE VICINITY OF ANY GAS TRANSMISSION MAIN. FOR FURTHER INFORMATION OR PROBLEMS, CONTACT CHUCK WHITLEY AT WASHINGTON GAS AT 703-750-4205.
- 13. PROVIDE A MINIMUM OF 5 FEET OF HORIZONTAL AND 1 FOOT VERTICAL CLEARANCE BETWEEN 12" DIAMETER AND SMALLER DISTRIBUTION EXISTING GAS FACILITIES AND PROPOSED FACILITIES.
- 14. ALL PROPOSED WORK TO BE CONSTRUCTED IN ACCORDANCE WITH LATEST STANDARDS AND SPECIFICATIONS OF DDOT AND DC WATER.
- 15. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING SIDEWALK, DRIVEWAYS, CURB AND GUTTER THAT IS TO REMAIN OR TO REPLACE SIDEWALK, DRIVEWAYS, AND/OR CURB AND GUTTER DAMAGED DURING CONSTRUCTION.
- 16. 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 DDOT STANDARDS AND SPECIFICATIONS.
- 17. ALL STORM DRAINS 12" IN DIAMETER OR SMALLER SHALL BE SCHEDULE 40 PVC PIPE. ALL STORM DRAINS OVER 12" IN DIAMETER SHALL BE REINFORCED CONCRETE PIPE, CLASS IV.
- 18. CONTRACTOR TO VERIFY IN THE FIELD THAT THE INSTALLATION OF DOMESTIC WATER LINE CONNECTION AT THE MAIN WILL NOT IMPACT THE UNDISTURBED SOIL BEHIND THE THRUST BLOCK AT THE TEE CONNECTION OF THE EXISTING FIRE WATER LINE THAT IS TO REMAIN. COORDINATE WITH THE CIVIL ENGINEER IF IT MAY BE NECESSARY TO SHIFT THE DOMESTIC LINE A LITTLE BIT FURTHER TO THE NORTH.
- 19. CONTRACTOR TO CLEAN THE EXISTING YARD INLET AND EXISTING 6"
  STORM SEWER OUTFALL PIPE ALL THE WAY OUT TO EXISTING STORM
  STRUCTURE #1978 LOCATED WITHIN PUBLIC SPACE. CONTRACTOR TO
  NOTIFY ENGINEER AND OWNER SHOULD THEY DISCOVER THAT EITHER THE
  INLET OR STORM PIPE ARE COMPROMISED AFTER CLEANING, IF SO,
  CONTRACTOR TO PROVIDE OWNER WITH AN ALTERNATE PRICE TO REPLACE
  THE INLET AND/OR STORM PIPE UP TO STRUCTURE #1978.





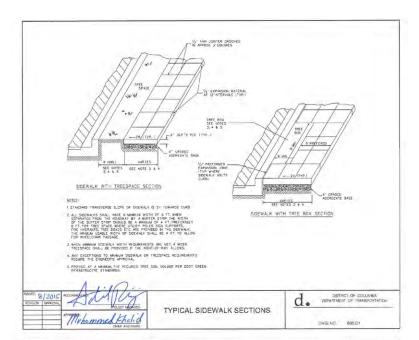


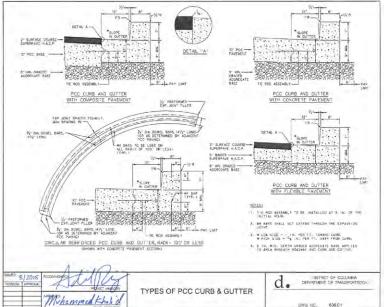


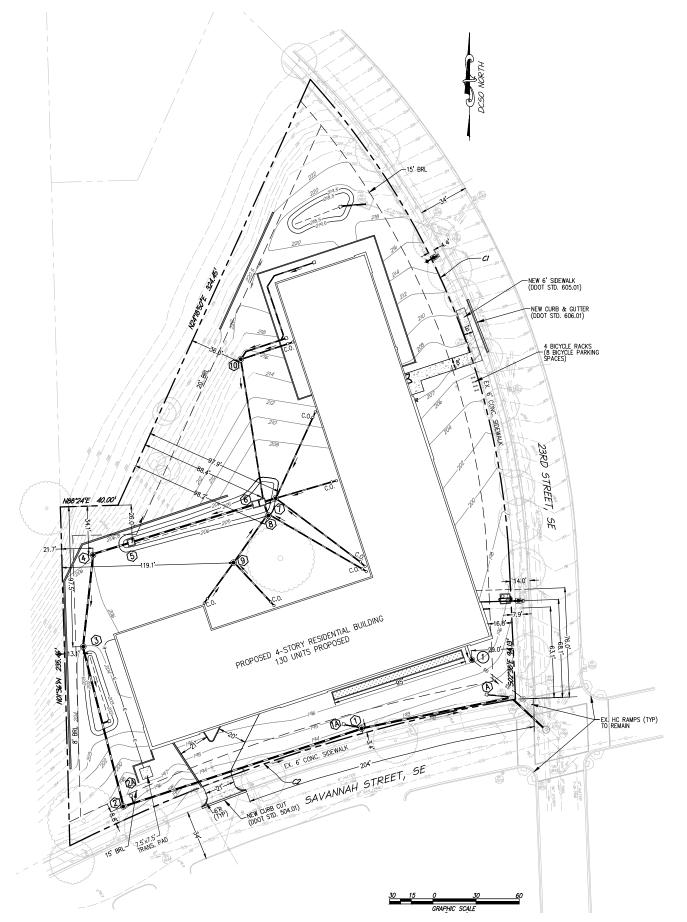


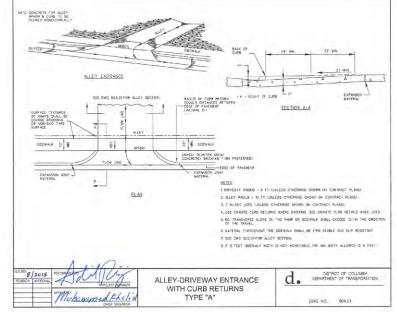


















### STORMWATER MANAGEMENT NARRATIVE

THE EXISTING TERRACE MANOR APARTMENT BUILDINGS AND THE EXISTING PARKING LOT AREA ON THE PROPERTY WILL BE DEMOLISHED. THE PROJECT PROPOSES A NEW APARTMENT BUILDING AS WELL AS UNDERGROUND PARKING. THIS WORK IS CONSIDERED A MAJOR LAND DISTURBING ACTIVITY AND SHALL PROVIDE ON-SITE RETENTION OF THE FIRST 1.2 INCHES OF RAINFALL FOR THE ENTIRE AMOUNT OF DISTURBED AREA (93,470 SF). THESE NUMBERS WERE USED FOR THE STORMWATER MANAGEMENT COMPUTATIONS. ALSO, THE PROPERTY IS ZONED RA-1 (FORMER R-5-A), THEREFORE, GREEN AREA REQUIREMENTS APPLY TO THIS PROJECT AND REQUIRES A MINIMUM GREEN AREA RATIO SCORE OF 0.40.

THE SITE IS LOCATED IN THE MS4 (SEPARATE SEWER SYSTEM AREA) AND IS WITHIN THE ANACOSTIA RIVER WATERSHED. HOWEVER, THE SITE IS LOCATED <u>OUTSIDE</u> OF THE ANACOSTIA WATERFRONT DEVELOPMENT ZONE (AWDZ). THERE WILL BE A DECREASE IN STORM RUNOFF WHEN THE PROJECT IS CONSTRUCTED AND ALL STORMWATER MANAGEMENT MEASURES IMPLEMENTED WHEN COMPARED TO CURRENT EXISTING CONDITIONS.

THE GENERAL RETENTION COMPLIANCE CALCULATOR WAS USED IN DOEE'S SWM DATABASE TO DEMONSTRATE THE REQUIRED AMOUNT OF STORMWATER RETENTION HAS BEEN PROVIDED. THE SITE'S STORMWATER RETENTION VOLUME (SWR) IS BASED UPON 93,470 SF OF "MAJOR LAND DISTURBING ACTIVITY" WHICH UTILIZES A 1.2" REGULATORY RAIN EVENT. THIS RESULTS IN A SWRV OF 4,654 CF (35,328 GALLONS) THAT MUST BE PROVIDED FOR ONLESTE

PROPOSED SWM CONTROLS INCLUDE A LARGE AMOUNT OF EXTENSIVE GREEN ROOF, THREE BIORETENTION AREAS, LARGE TREE PLANTINGS, PERMABLE PAVEMENT TO TREAT VEHICULAR TRAFFIC AND A STORMWATER MANAGEMENT PLANTER ALONG THE SOUTH SIDE OF THE BUILDING.

### NOTES

- SEE SHEET C-402 FOR PLANT LIST AND SPECIFIC BIORETENTION DETAILS, INCLUDING BIORETENTION MATERIAL SPECIFICATIONS AND BIORETENTION PLANT LISTS.
- 2. DC WATER REQUIRES A MINIMUM 6-FOOT CLEARANCE FROM A WATER MAIN TO A TREE BODY, AND WILL NOT ALLOW ANY NEW TREES TO BE PLANTED ALONG THE WESTERN SIDE OF 23RD STREET RIGHT-OF-WAY DUE TO THE CLOSE PROXIMITY OF THE EXISTING 12" WATER MAIN.
- 3. REFER TO LANDSCAPE DRAWINGS FOR ALL PROPOSED LANDSCAPING, GREEN AREA RATIO, ETC.

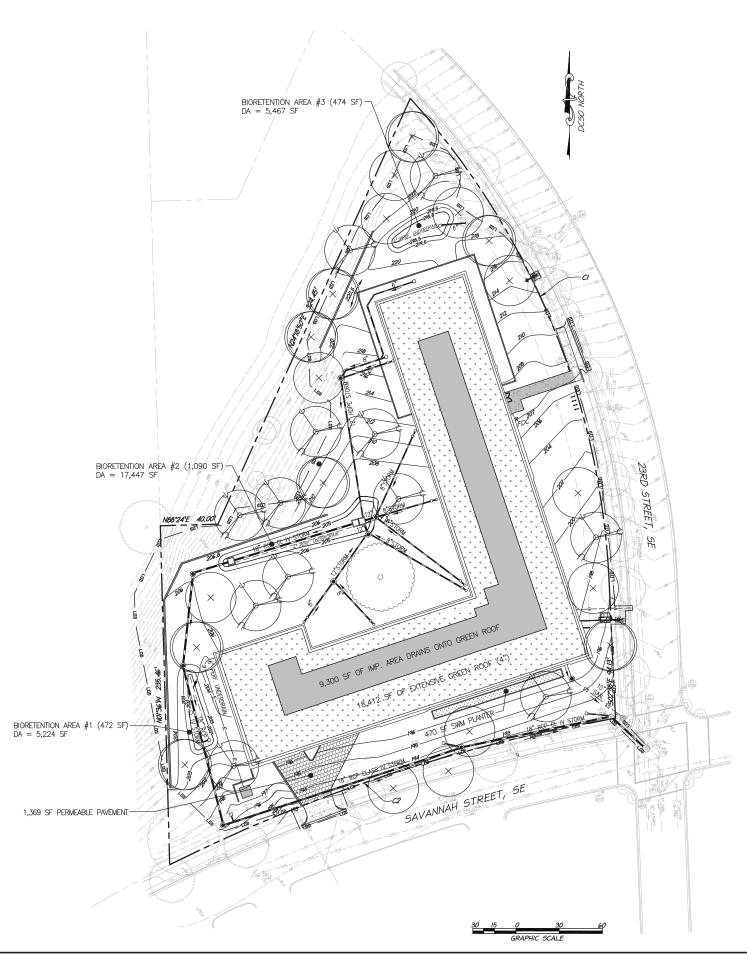
### **LEGEND**





PROPOSED LARGE TREES (35' CANOPY) PROVIDING SWM RETENTION CREDIT

PROPOSED ON-SITE IMPERVIOUS AREA



### STORMWATER MANAGEMENT PLAN AND NARRATIVE

				C+-	rmuratar	Mone	20000	st Dia	n C0	mulia	D.	***				
				510	rmwater	Iviana	agemer	it Pia	in Co	mpiiai	ice Da	ıta				
	Site Ad	idress			3301 23rd Stre	rd Street SE Plan nu			nber	60	08					
	Stormy	water Ma	anagemen	t Plan?	Yes		(	Green Ar	rea Ratio	o? Ye	s					
	Soil Erosion and Sediment Control?				Yes			Floodplain Review? No			•					
	Type o	f Activity	/		Major Land Disturbing			AWDZ?	- 1	Non-AWD	7					
	Is the entire site in the CSS?				No											
			Total Are	a (sf) Site	Area PRO	ow		Curve No	umbers							
	Natura	al	0	0	0		[	Additional Detention Provided								
	Compacted 60,738 60,3			63 375			Pre-development 7		t 70	2-ye	2-year storm adjusted CN			66		
	Impervious 13,284 12,6			12,65	659 625			Pre-project 92		15-y	15-year storm adjusted CN 72			72		
	BMP 20,448 20,448 0									100-	year storm a					
	Total 94,470 93,470					70 1,000										
	Requir	ements	Summary	(total is the	sum of PROV	V and Pare	cel)	,	PROW (f	ft³) Pa	rcel (ft³)	Total (ft	³) Tot	al (Gallons)		
	SWRv							6	59	4,6	554	4,723	35,3	328		
	WQTv							(	0	0		0	0			
	On-site retention achieved								70		322	4,892 36,59		96		
	On-site treatment achieved							0			405 405		3,03	32	!	
	% of SWRv met on-site							102%			104% 103.59%		103			
	SRC eligibility												1,26	58		
	Offv												0			
					Sit	te Drain	age Area	Comp	liance	Data						
Site rainage		Total area (square	Natural (square feet)	Compacted (square feet)	Impervious (square feet)	BMP (square feet)	Vehicular access area	SWRv (cubic feet)	WQTv (cubic feet)	Volume retained (cubic feet)	Volume treated (cubic feet)	2-year storm adjusted Curve	15-year storm adjusted Curve	100-year storm adjusted Curve	SDA Minimum Compliance	
Area ID	Way	feet)								ieet,	ieet,	Number	Number	Number		

### Site BMP Compliance Data

BMP ID number	Туре	Total CDA (square feet)	(square feet)	(square feet)	(square feet)	BMP (square feet)	Total Post project vehicular access area	Volume received from upstream BMPs (cubic feet)	Max volume received by BMP (cubic feet)		Retention calculation		Volume treated (cubic feet)	Downstrean BMP ID Numbers
6008-1-1	Extensive green roof	27,716			9,304	18,412			3,730	3,304	100% of storage volume	3,304		
6008-1-2	Traditional bioretention - Standard	5,224		4,752		472			232	685	60% of storage volume	232		
6008-1-3	Traditional bioretention - Standard	17,447		16,357		1,090			726	1,576	60% of storage volume	726		
6008-1-4	Proprietary practice	3,480		635	2,845		2,845		405	699			405	
6008-1-5	Tree preservation										20 cubic feet per tree	20		
6008-1-6	Tree planting										10 cubic feet per tree	140		
6008-3-1	Tree planting										10 cubic feet per tree	160		
6008-4-1	Traditional bioretention - Standard	5,467		4,993		474			241	644	60% of storage volume	241		

### PROW Drainage Area Compliance Data

Site Drainage Area ID	Right	Total area (square feet)	Natural (square feet)	Compacted (square feet)	Impervious (square feet)	BMP (square feet)	Vehicular access area	(cubic	retained	
6008-2	$\boxtimes$	1,000		375	625			69	70	

### PROW BMP Compliance Data

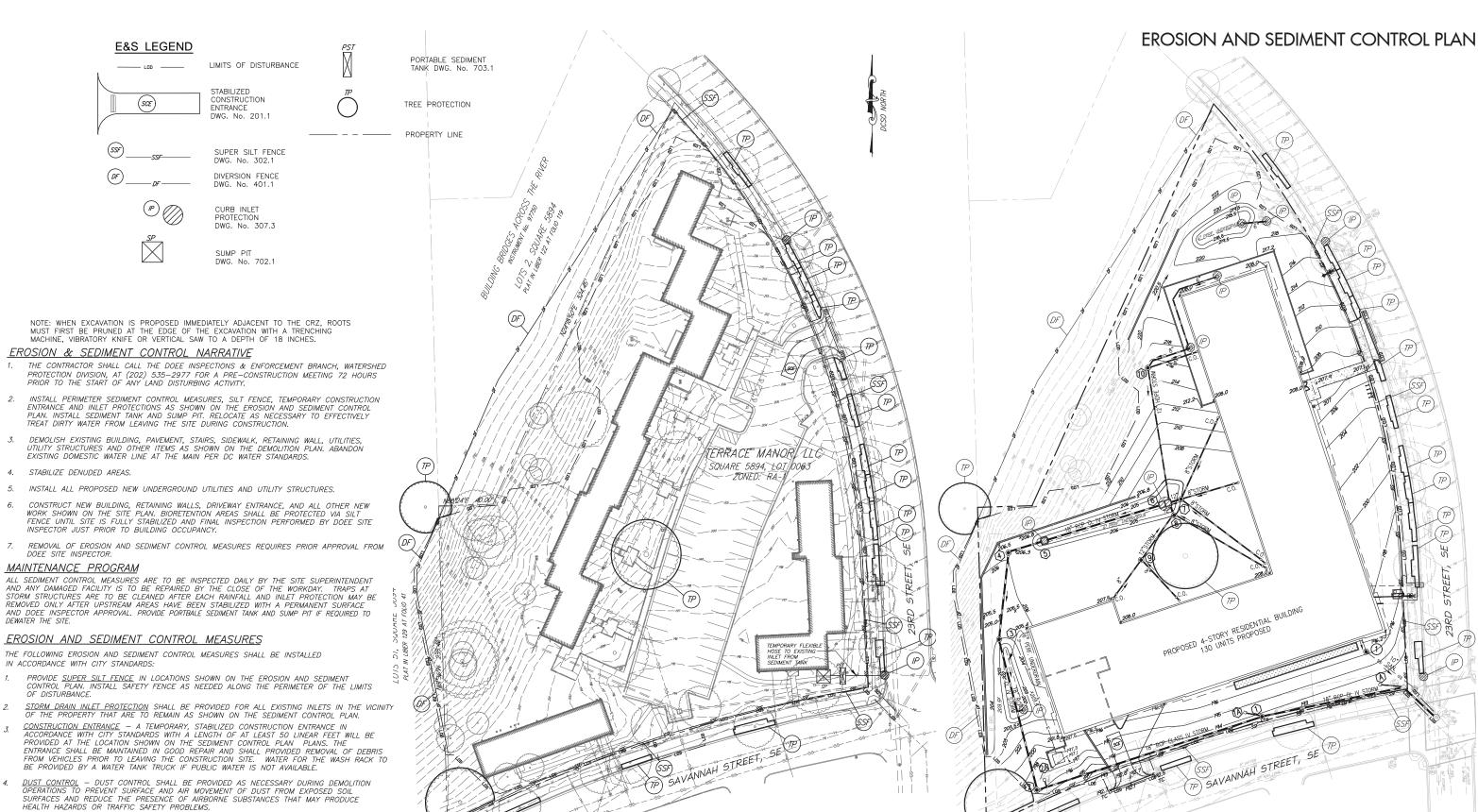
BMP		Total CDA (square feet)	Natural (square feet)	Compacted (square feet)	Impervious (square feet)	BMP (square feet)	Total Post project vehicular access area	Volume received from upstream BMPs (cubic feet)	Max volume received by BMP (cubic feet)	volume	Retention calculation		Downstream BMP ID Numbers
6008-2	1 Tree preservation										20 cubic feet per tree	40	
6008-2	2 Tree planting										10 cubic feet per tree	30	

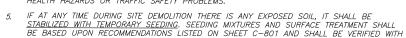
SHEET 5-6











THE CITY INSPECTOR BASED UPON CONSTRUCTION DATES.

### <u>UTILITY INSTALLATION NOTES</u>

PLACE EXCAVATED MATERIALS UPSLOPE OF THE TRENCH.

FILTER WATER PUMPED FROM EXCAVATIONS PRIOR TO DISCHARGING TO THE STORM SEWER SYSTEM.

PROVIDE STABILIZATION (INTERIM OR PERMANENT) AFTER THE TRENCH IS REFILLED.





PHASE 1



PHASE 2

## **EROSION AND SEDIMENT CONTROL DETAILS**

