

GENERAL NOTES

PART I

- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- TOPOGRAPHIC FIELD SURVEYS WERE PERFORMED ON MAY 24, 2001 BY FREDERICK WARD AND ASSOCIATES.
- HORIZONTAL AND VERTICAL SURVEY CONTROLS:
THE COORDINATES SHOWN ON THE DRAWINGS ARE BASED ON MARYLAND STATE REFERENCE SYSTEM HAD 183/91 AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 3805, AND NO. 3806.
ALL VERTICAL CONTROLS ARE BASED ON NAVD'88. VERTICAL CONTROLS PROVIDED ON DRAWINGS ARE:
GEODETIC SURVEY CONTROL 3805 (ELEV. 193.726 FT.)
BRASS DISC SET ON TOP OF A CONCRETE MONUMENT, 5.6' NORTH OF CONCRETE CURB ON ROUTE 1, WEST OF AMBERMAN AVENUE.
GEODETIC SURVEY CONTROL 3806 (ELEV. 175.228 FT.)
BRASS DISC SET ON TOP OF A CONCRETE MONUMENT, 44' SOUTH OF LIGHTPOLE AND 6.5' WEST OF ADJACENT ATLANTIC SUPPLY CO., EAST OF ROUTE 1.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED.
- CLEAR ALL UTILITIES BY A MINIMUM OF 12 INCHES. CLEAR ALL POLES BY 5'-0" MINIMUM OR TUNNEL AS REQUIRED UNLESS OTHERWISE NOTED. THE OWNER HAS CONTACTED THE UTILITY COMPANIES AND HAS MADE ARRANGEMENTS FOR BRACING OF POLES AS SHOWN ON DRAWINGS. IN THE EVENT THE CONTRACTOR'S WORK REQUIRES THE BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONIES OWED THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (LATEST EDITION). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
- WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL AT THE LOCATION OF THE TEST PIT. A NOTES OR NOTES CONTAINING THE RESULTS OF THE TEST PIT OR PITS IS INCLUDED ON THE DRAWINGS. EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED WORK FOR WHICH TEST PITS HAVE NOT BEEN DUG SHALL BE LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATION AT HIS OWN EXPENSE.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN THESE PLANS:
AT 87..... 1-800-252-1133
BGE (CONTRACTOR SERVICE)..... 410-850-4620
BGE (EMERGENCY)..... 410-685-1400
BUREAU OF UTILITIES..... 410-313-4900
COLONIAL PIPELINE CO..... 410-795-1390
MISS UTILITY..... 1-800-257-7777
STATE HIGHWAY ADMINISTRATION..... 410-531-5533
VERIZON..... 1-800-743-0033/410-224-9210
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG THE LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE CONSTRUCTION OF THE MAIN.
- THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410) 313-7450 AT LEAST FIVE WORKING DAYS BEFORE ANY OPEN CUTTING OR BORING/JACKING OF ANY COUNTY ROAD FOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(a) OF THE HOWARD COUNTY CODE.

PART II - WATER

- ALL WATER MAINS TO BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
- TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3'-6" COVER UNLESS OTHERWISE NOTED.
- VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
- ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
- FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD DETAILS. THE SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND 1005 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.

PART III - SEWER

- ALL SEWER MAINS SHALL BE D.I.P. OR P.V.C UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- FORCE MAINS SHALL BE D.I.P. ONLY.
- MANHOLES SHOWN WITH 12" AND 18" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVER, STANDARD DETAIL 65.52. WHERE WATERTIGHT MANHOLE FRAME AND COVERS ARE USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND WITH SITE DEVELOPMENT PLAN SDP-09-022

THIS DEVELOPMENT IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

John K. Robertson 10/29/05
SOIL CONSERVATION DISTRICT DATE

Jim M. ... 10/29/05
SOIL CONSERVATION DISTRICT DATE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET TEL: 410.461.7666
ELLCOTT CITY, MD 21043 FAX: 410.461.8961



DES:	DZ				
DRN:	DZ				
CHK:	WGZ				
DATE:	OCTOBER 2005	BY:	NO.	REVISION	DATE
				MODIFY PLAN FOR SDP-09-022	4/30/09

FINAL WATER AND SEWER PLAN COVER SHEET

600' SCALE MAP NO. 37 BLOCK NO. 24

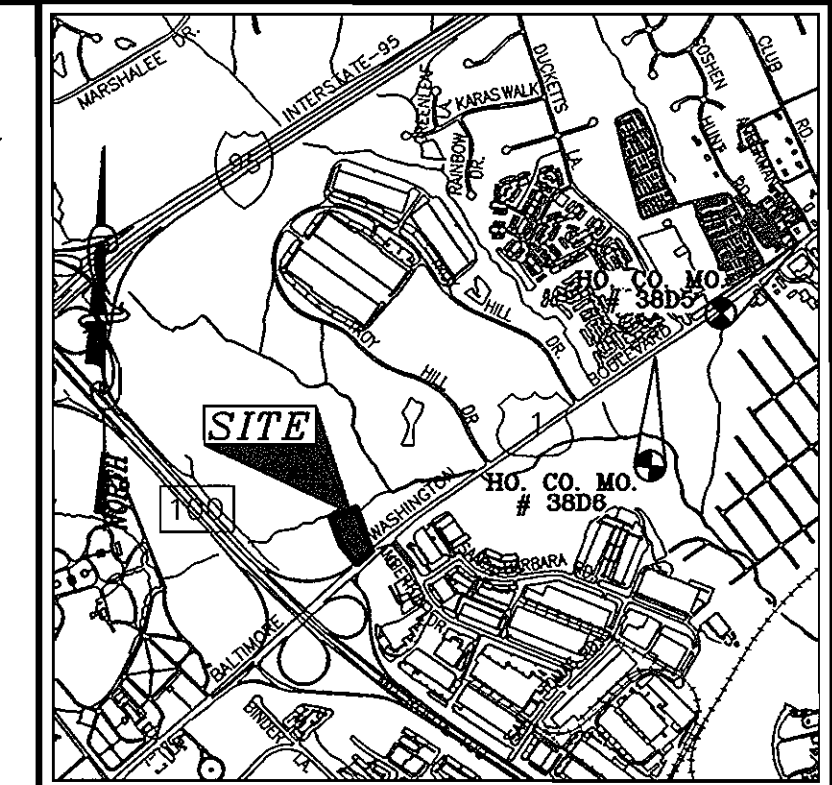
EZ STORAGE FACILITY US RTE. 1 CONTRACT NO. 14-4194-D

TAX MAP 37, BLOCK 24 PARCEL 189
1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

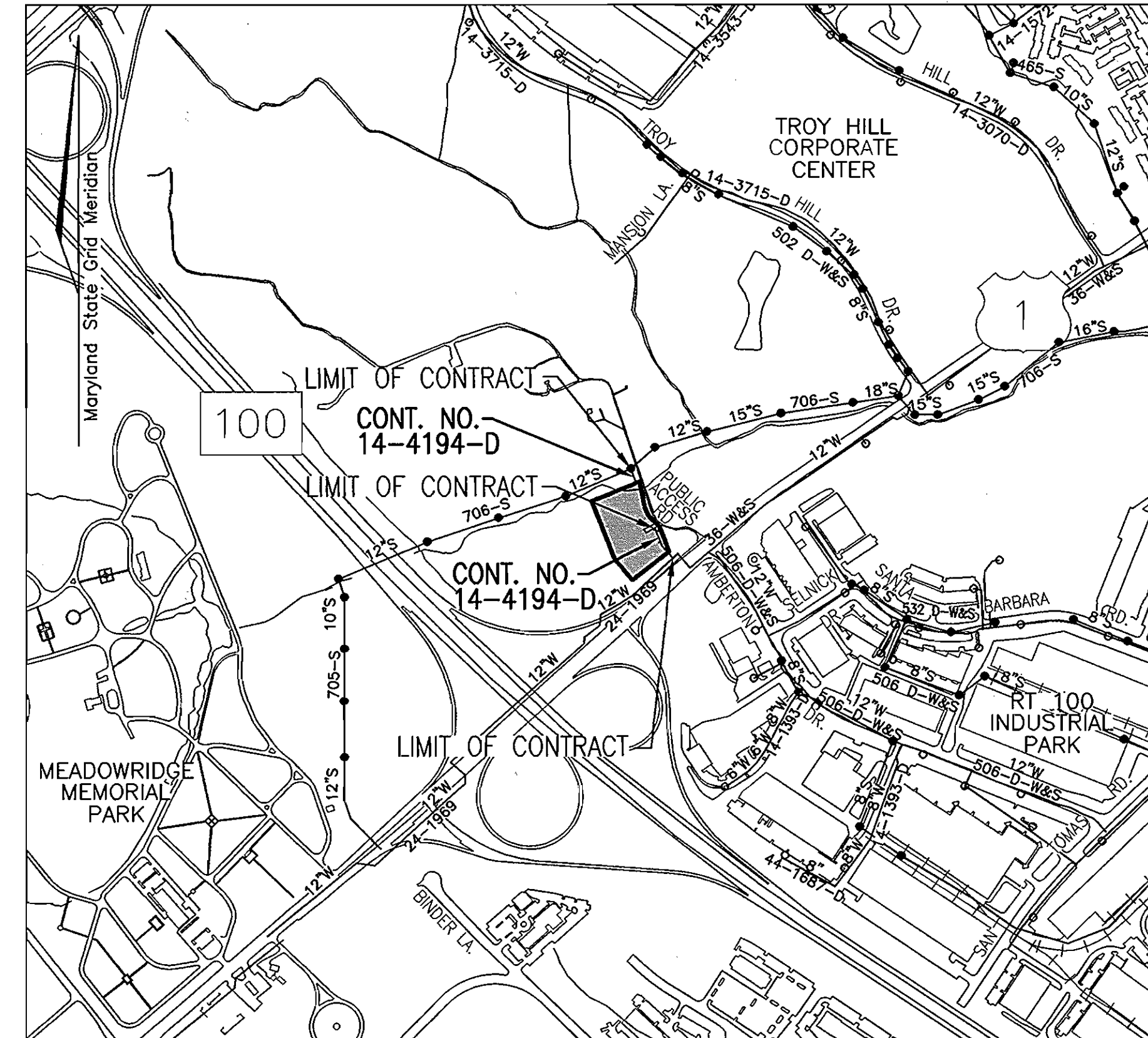
SCALE AS SHOWN SHEET 1 OF 2

FINAL WATER AND SEWER PLAN EZ STORAGE FACILITY US RTE. 1 CONT. No. 14-4194-D

BENCHMARKS
HOWARD COUNTY BENCHMARK 3806
N 557155.459 E 1384992.262 ELEV. 175.228
HOWARD COUNTY BENCHMARK 3805
N 558378.575 E 1386524.158 ELEV. 193.726



VICINITY MAP
SCALE: 1"=2000'



LOCATION MAP
SCALE: 1"=600'

WATER CODE: A03
SEWER CODE: 2152200
TEST GRADIENT: 450

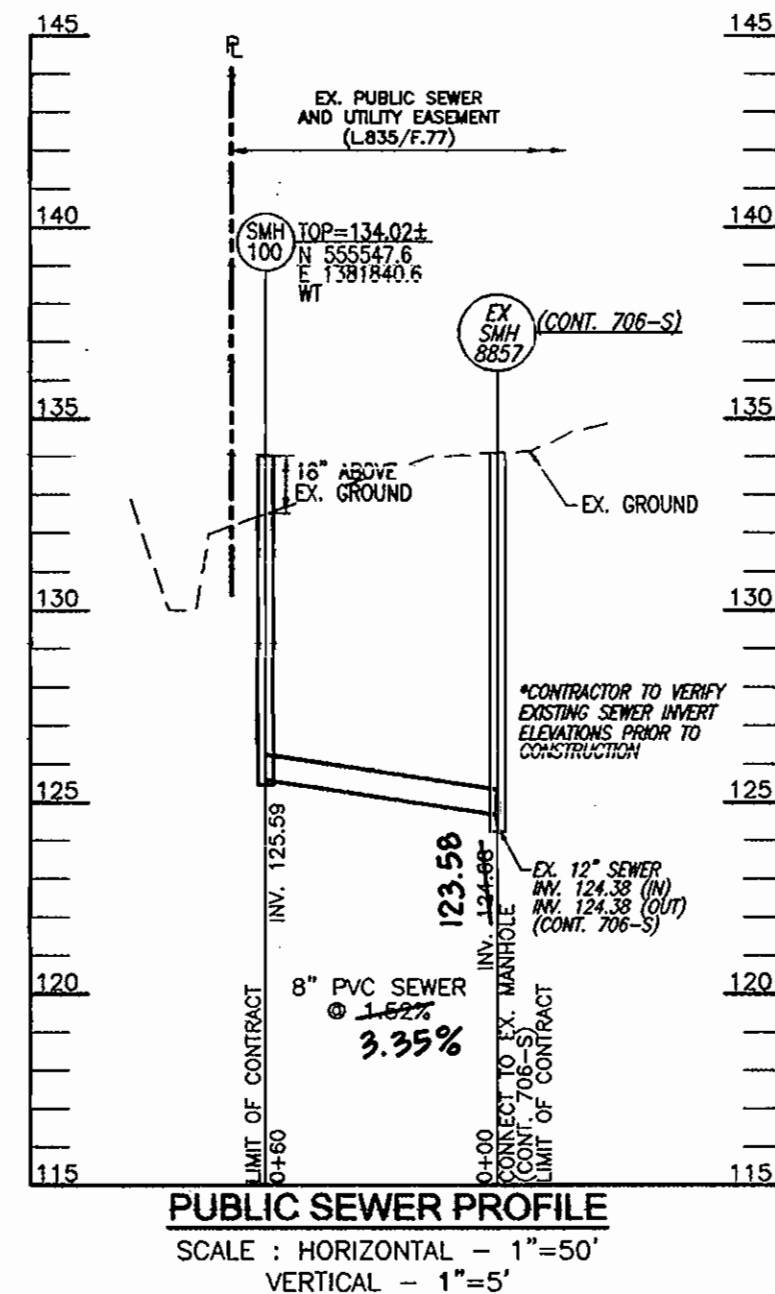
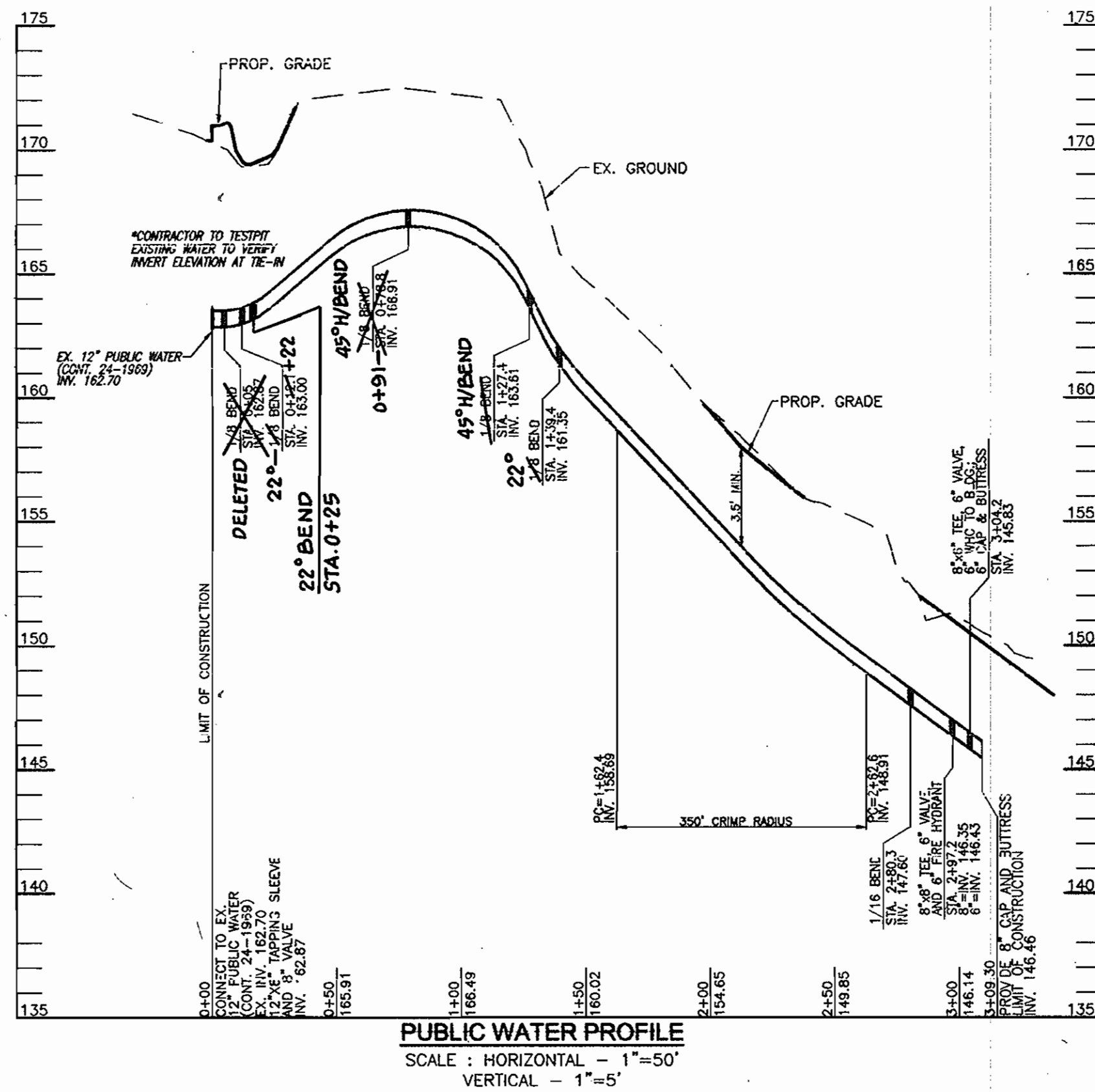
Type of Building :	GENERAL OFFICE & RETAIL
No. of Lots/Parcels :	1
No. of Water House Connections :	2
No. of Sewer House Connections :	1
Drainage Area :	PATAPSCO
Treatment Plant :	PATAPSCO RIVER

QUANTITIES					
NAME OF UTILITY CONTRACTOR : W.F. WILSON AND SONS, INC.					
SURVEY AND DRAFTING DIVISION AS-BUILT DATE : JULY 2009					
ITEMS	QUANTITIES ESTIMATED	QUANTITIES	AS-BUILT		
			TYPE	MANUFACTURER/SUPPLIER	
WATER					
12" x 8" TAPPING SLEEVE & VALVE	1 EA	1 EA.	TAPPING SLEEVE	MUELLER COMPANY/WATER WORKS SUPPLY	
8" WATER	310 LF	310 L.F.	D.I.P., CL. 54	ATLANTIC ST. CAST IRON/ " " "	
8" x 6" TEE	2 EA	2 EA.	D.I.P., CL. 54	TYLER/UNION FOUNDRY/ " " "	
8"-1/2" BEND	5 EA	5 EA.	M. J.	" " " " " " "	
8"-1/2" BEND	1 EA	1 EA.	M. J.	" " " " " " "	
6" VALVE	2 EA	2 EA.	RWGATE V.	MUELLER COMPANY/ " " "	
6" WATER	24 LF	19 L.F.	D.I.P., CL. 54	ATLANTIC ST. CAST IRON/ " " "	
6" FIRE HYDRANT	1 EA	1 EA.	5/2" DRANGE	MUELLER COMPANY/ " " "	
6" CAP & BUTTRESS	1 EA	1 EA.	M. J.	TYLER/UNION FOUNDRY/ " " "	
SEWER					
MANHOLES	1 EA	1 EA.	4' PRECAST	ATLANTIC CON. PRODUCTS/WATER WORKS SUPPLY	
8" PVC SEWER	60 LF	60 L.F.	PVC, SDR-35	HAROD/WATER WORKS SUPPLY	
8" DIP SEWER	-	10 L.F.	D.I.P., CL. 54	ATLANTIC ST. CAST IRON/ " " "	

AS BUILT
DATE: JULY 2009

DEVELOPER

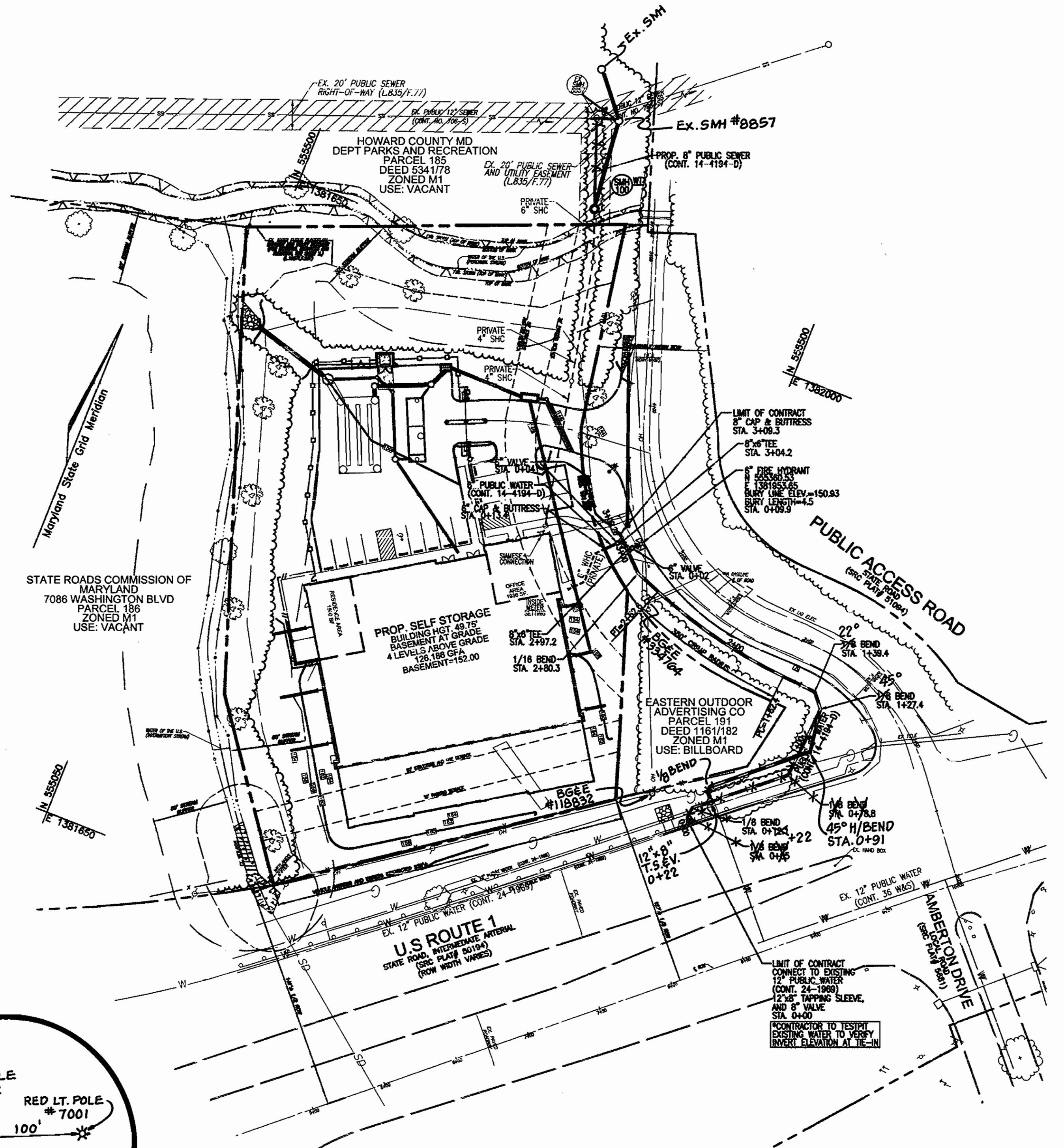
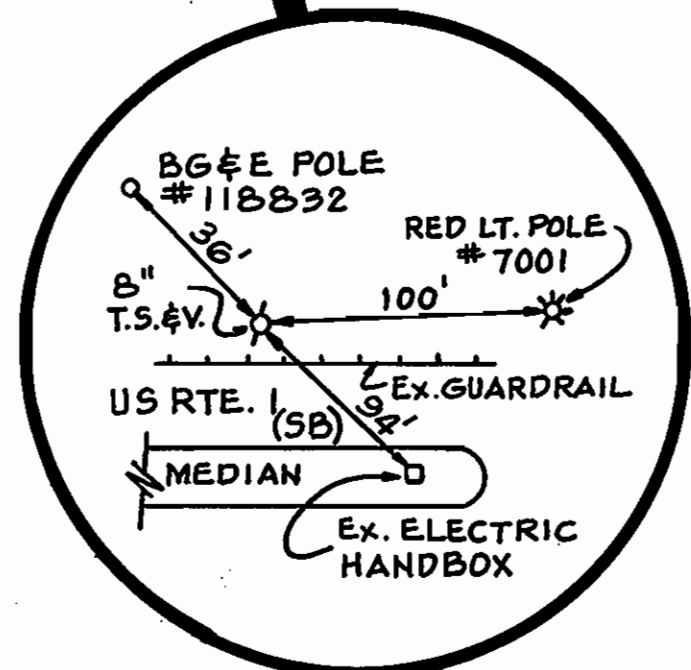
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WATER VALVE - AS BUILTS

PUBLIC WATER MAIN		FITTING	
STA.			
0+00	0+22	12"x8" TAPPING SLEEVE AND VALVE	
0+05	DELETED		
0+15	0+22	22° 1/8 BEND	
0+25	0+91	45° 1/8 BEND	
1+27.4		45° 1/8 BEND	
1+39.4		22° 1/8 BEND	
1+62.4		P.C. 350' CRIMP RADIUS	
2+82.6		P.T. 350' CRIMP RADIUS	
2+80.3		1/16 BEND	
2+87.2		8"x6" TEE, 6" VALVE, & 6" FIRE HYDRANT	
3+04.2		8"x6" TEE, 6" VALVE, 6" WHC TO BLDG, & 6" CAP AND BUTTRISS	
3+09.15		8" CAP AND BUTTRISS	

VALVES	FROM	TO	DISTANCE	REMARKS
B"V 0+22 ±	RED LT. POLE #7001	VALVE	100'	
T.S. & V.	ELEC. HANDBOX	VALVE	94'	IN CONC. MEDIAN
BG&E #118832	VALVE	VALVE	36'	CENTER OF RTE. 1
6" FH VALVE	FH, 2+97	6" VALVE	65'	
2+97	8" VALVE, 3+04	6" VALVE	8'	
BG&E #334704	6" VALVE	6" VALVE	37'	
6"V, 3+04	FH, 2+97	8" VALVE	12.5'	
WHC VALVE	BG&E #334704	8" VALVE	44'	
8" VALVE, 2+97	8" VALVE	8" VALVE	8'	



AS BUILT
DATE: JULY 2009

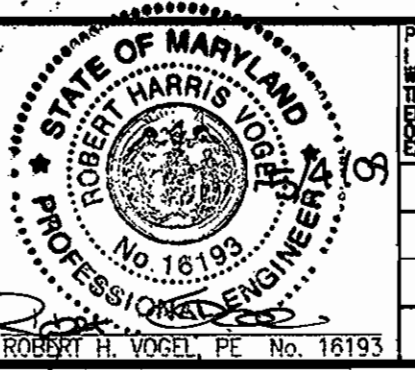
THIS SHEET REPLACES SHEET 2 OF 2 SIGNED BY THE CHIEF, DEVELOPMENT ENGINEERING, 10-24-05.

DEVELOPER
SIENA CORPORATION
8221 SNOWDEN RIVER PARKWAY
COLUMBIA, MD 21045
443-539-3060

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Steve Clark
CHIEF, BUREAU OF UTILITIES
5/16/09 DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
Chris Zimmerman
CHIEF, DEVELOPMENT ENGINEERING DIVISION
5/16/09 DATE

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET, ELLICOTT CITY, MD 21043
TEL: 410.461.7666 FAX: 410.461.8961



PROFESSIONAL CERTIFICATE
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. EXPIRES ON DATE 08-27-2014

DES:	DZ		
DRN:	DZ	1	MODIFIED WATER AND SEWER PLAN FOR NEW PROPOSED SDP.
CHK:	RHV		
DATE:	MARCH 2009	NO.	
REVISION		DATE	

FINAL WATER AND SEWER PLAN
PLAN VIEW AND PROFILE

EZ STORAGE FACILITY
US ROUTE 1
(L. 8772 / F. 223)
CONTRACT NO. 14-4194-D
TAX MAP 37 BLOCK 24
1ST ELECTION DISTRICT
PARCEL 189
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 2 OF 2

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