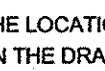


**GENERAL NOTES**

**PART I**

- APPROXIMATE LOCATIONS 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.
- TOPOGRAPHY FIELD SURVEYS WERE PERFORMED ON MARCH 1998 BY POTOMAC AERIAL SURVEYS.
- HORIZONTAL AND VERTICAL SURVEY CONTROLS:  
THE COORDINATES SHOWN ON THE DRAWINGS ARE BASED ON MARYLAND STATE REFERENCE SYSTEM NAD '83/91 AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS 4382 AND 4386.  
ALL VERTICAL CONTROLS ARE BASED ON NAVD'88. VERTICAL CONTROLS PROVIDED ON DRAWINGS ARE:  
GEODETIC SURVEY CONTROL 34C2 (N 562321.798 / E 1329750.722) BRASS DISC SET ON TOP OF A CONCRETE MONUMENT.  
GEODETIC SURVEY CONTROL 0044 (N 562,176.47 / E 1,329,641.87) BRASS DISC SET ON TOP OF A CONCRETE MONUMENT.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
- 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 LOCATIONS OF THE TEST PITS. A NOTE 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 ON THESE PLANS:  

AT&T	1-800-252-1133
BGE (CONSTRUCTION SERVICES)	410-637-8713
BGE (EMERGENCY)	410-685-0123
BUREAU OF UTILITIES	410-313-4900
COLONIAL PIPELINE CO	410-795-1390
MISS UTILITY	1-800-257-7777
STATE HIGHWAY ADMINISTRATION	410-631-5553
VERIZON	1-800-743-0033

- 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 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 DFW REQUIREMENTS PER SECTION 18.114(a) OF THE HOWARD COUNTY CODE.

**PART II - WATER**

- ALL WATER MAINS SHALL BE DIP CLASS 54 UNLESS OTHERWISE NOTED.
- TOPS OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3'-6" OF 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 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 SECTION 1005 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- TRACER WIRE AND CONTINUITY TEST STATIONS SHALL BE INSTALLED ON ALL DIP AND PVC WATER MAINS IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL.

**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.
- LOW PRESSURE SEWER SHALL BE SDR-21 PVC OR HDPE DR11 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 COVERS, STANDARD DETAIL G5.52. WHERE WATERTIGHT FRAME AND COVER IS 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 THE CELLAR CANNOT BE SERVED.

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 308 OF THE SPECIFICATIONS AND WITH SITE DEVELOPMENT PLAN SDP-15-004.

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

*John L. Roberts*  
 SOIL CONSERVATION DISTRICT  
 DATE: 7/22/15

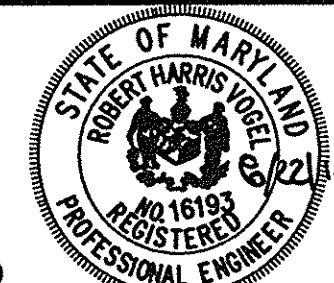
DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING  
 HOWARD COUNTY, MARYLAND

*Steve C. Gann*  
 CHIEF, BUREAU OF UTILITIES  
 DATE: 7/27/15

*Chad Coleman*  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 DATE: 7/27/15

**ROBERT H. VOGEL ENGINEERING, INC.**  
 ENGINEERS • SURVEYORS • PLANNERS  
 8407 MAIN STREET TEL: 410.461.7666  
 ELLICOTT CITY, MD 21043 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, LICENSE NO. 16193, EXPIRATION DATE: 09-27-2018

DRN: KG DES: DZE  
 CHK: RHV  
 DATE: JUNE 2015

BY	NO.	REVISION	DATE

**FINAL WATER & SEWER CONSTRUCTION PLAN**  
**CONTRACT 24\_4886\_D**

600' SCALE MAP NO. 50 BLOCK NO. 6

TAX MAP 34 BLOCK 06  
 2ND ELECTION DISTRICT

**COLEMAN FIAT**  
 HOLWECK SUBDIVISION PARCEL 'K-4'  
 12520 NEW CAR DRIVE  
 PARCEL 365 (L. 08594 / F. 00473)  
 PLAT NO. 16013

ZONED: B-2  
 LOT: PARCEL K-4  
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET 1 OF 2

# FINAL WATER & SEWER CONSTRUCTION PLAN

## COLEMAN FIAT

### HOLWECK SUBDIVISION PARCEL 'K-4'

#### 12520 NEW CAR DRIVE

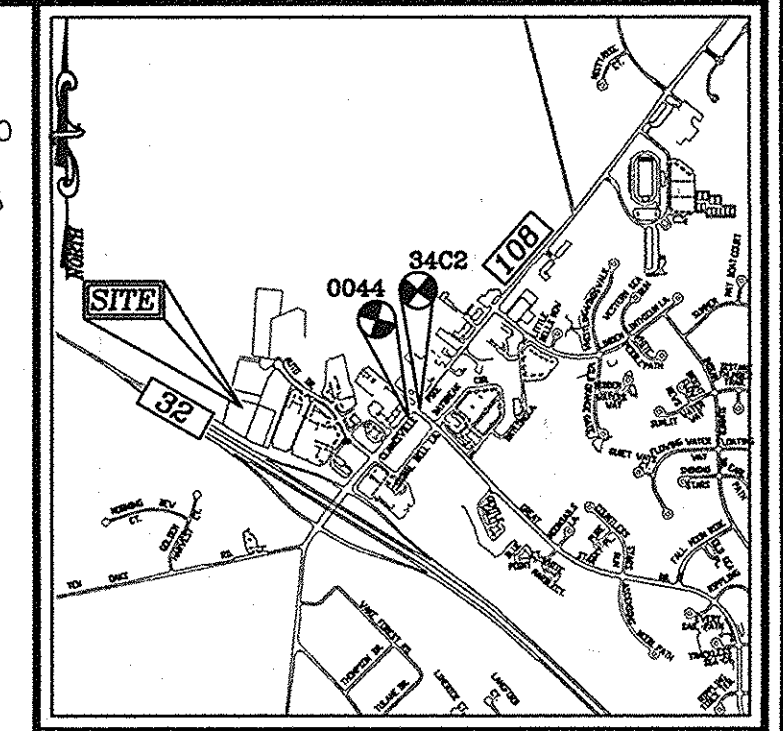
#### PARCEL 365 (L. 08594 / F. 00473)

#### PLAT NO. 16013

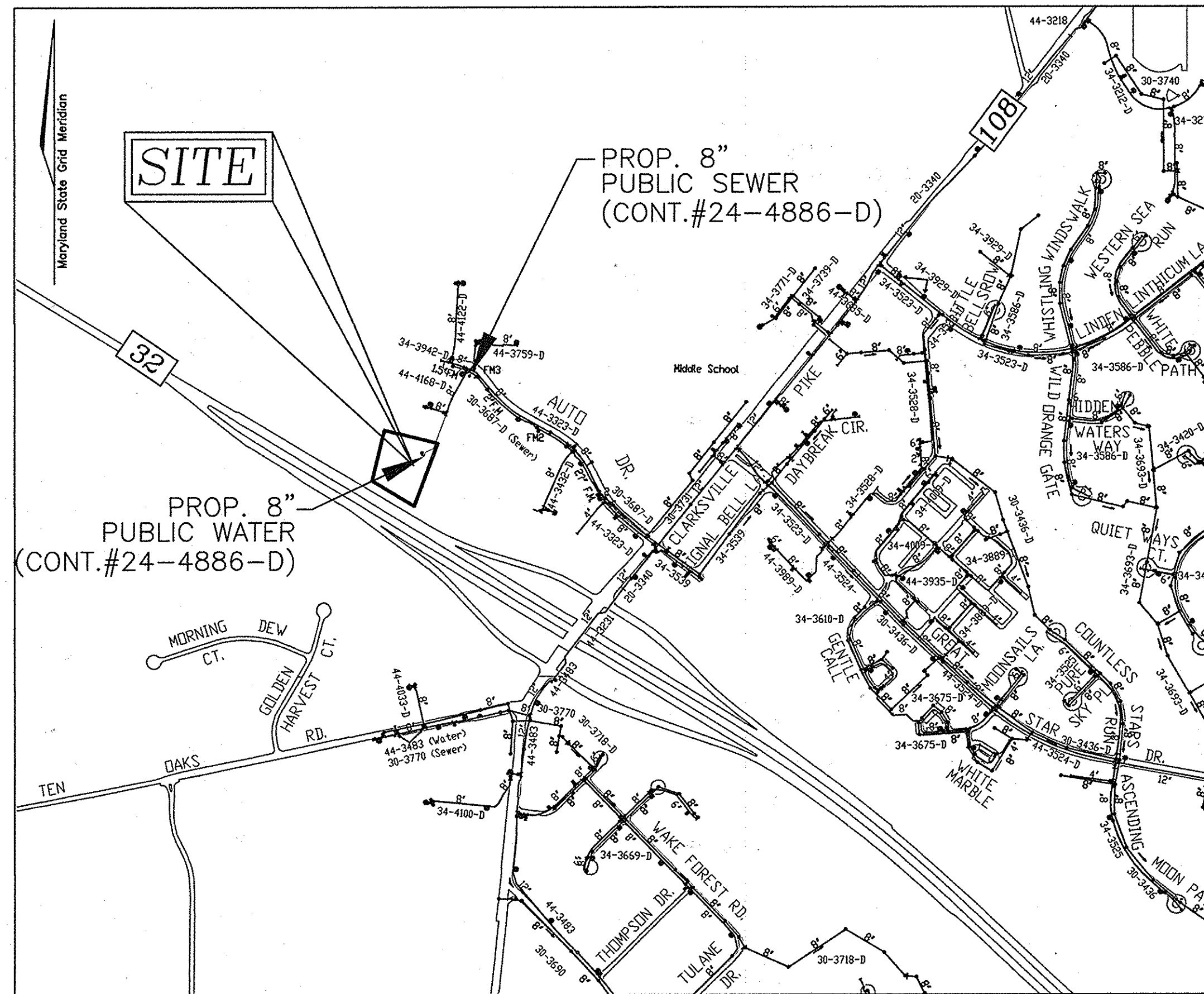
## CONTRACT 24-4886-D

## HOWARD COUNTY, MARYLAND

**BENCHMARKS**  
 HOWARD COUNTY BENCHMARK 34C2  
 N 562321.798 E 1329750.722 ELEV. 487.90  
 HOWARD COUNTY BENCHMARK 0044  
 N 562,176.47 E 1,329,641.87 ELEV. 485.25



**VICINITY MAP**  
 SCALE: 1"=2,000'  
 ADC MAP COORDINATE: PG. 4933 / K-7



**VICINITY MAP**  
 SCALE: 1"=600'

WATER ZONE: 630W  
 TEST GRADIENT: 780

TYPE OF BUILDING :	AUTOMOBILE SALES AND SERVICE
NO. OF BUILDING :	1
NO. OF SINGLE WATER HOUSE CONNECTIONS:	1
NO. OF SINGLE SEWER HOUSE CONNECTIONS:	1
SEWER SHED :	MIDDLE PATUXENT RIVER
TREATMENT PLANT :	MIDDLE PATUXENT RIVER WATER TREATMENT PLANT

**LEGEND**

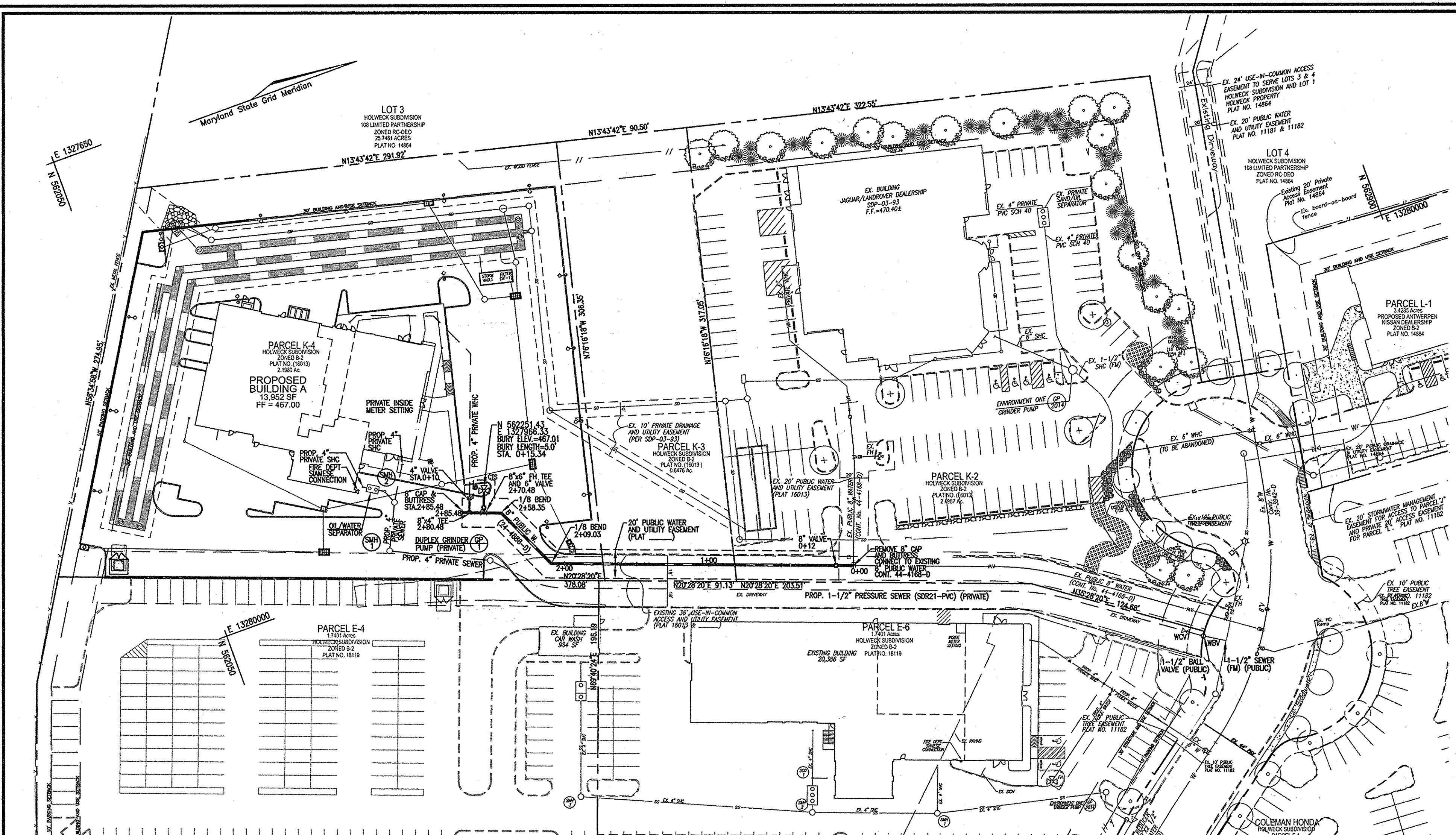
- EXISTING TREELINE
- PROPOSED TREELINE
- EXISTING WATER MAIN
- PROPOSED WATER MAIN
- FIRE HYDRANT
- PROPOSED VALVE
- PROPOSED TEE
- PROPOSED STORM DRAIN
- EXISTING STORM DRAIN
- EXISTING SEWER
- SEWER MANHOLE
- PRIVATE WATER HOUSE CONNECTION
- PRIVATE SEWER
- PROPOSED SIGN
- PROPOSED LIGHT

**QUANTITIES**

NAME OF UTILITY CONTRACTOR :		SURVEY AND DRAFTING DIVISION AS-BUILT DATE :		
ITEMS	QUANTITIES ESTIMATED	QUANTITIES	TYPE	AS-BUILT MANUFACTURER/SUPPLIER
WATER				
8" WATER DIP CLASS 54	285 LF			
6" WATER DIP CLASS 54	15 LF			
4" WATER DIP CLASS 54	10 LF			
8" - 1/8" BEND	2 EA			
5-1/4" FIRE HYDRANT	1 EA			
8" CAP	1 EA			
4" VALVE	1 EA			
6" VALVE	1 EA			
8" VALVE	1 EA			
8"x4" TEE	1 EA			
8"x6" TEE	1 EA			
SEWER				
1-1/2" PRESSURE SEWER SDR-21 PVC	16 LF			

**OWNER/DEVELOPER**  
 1318 COMPANY LLC  
 10400 AUTO PARK AVE  
 BETHESDA, MD 20817-1006  
 C/O: JIM COLEMAN  
 301-469-6600



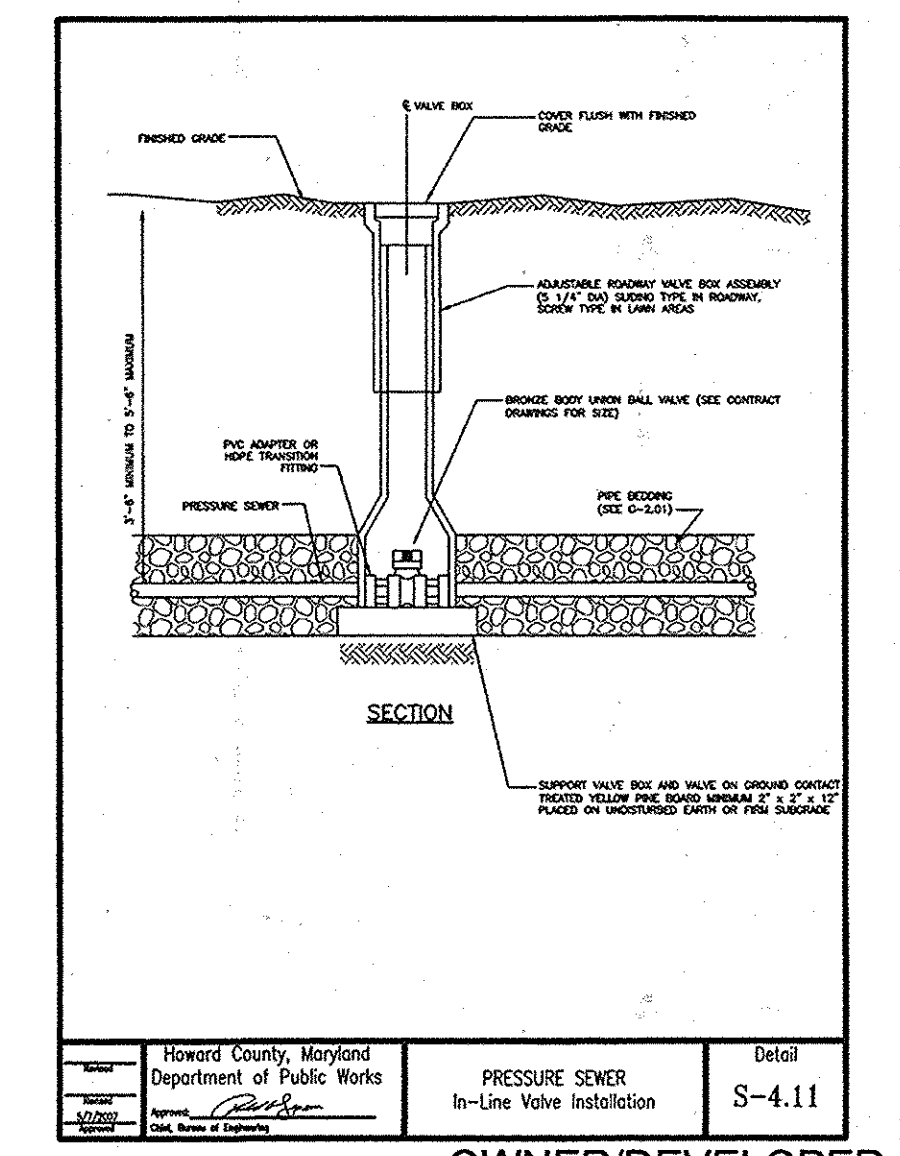
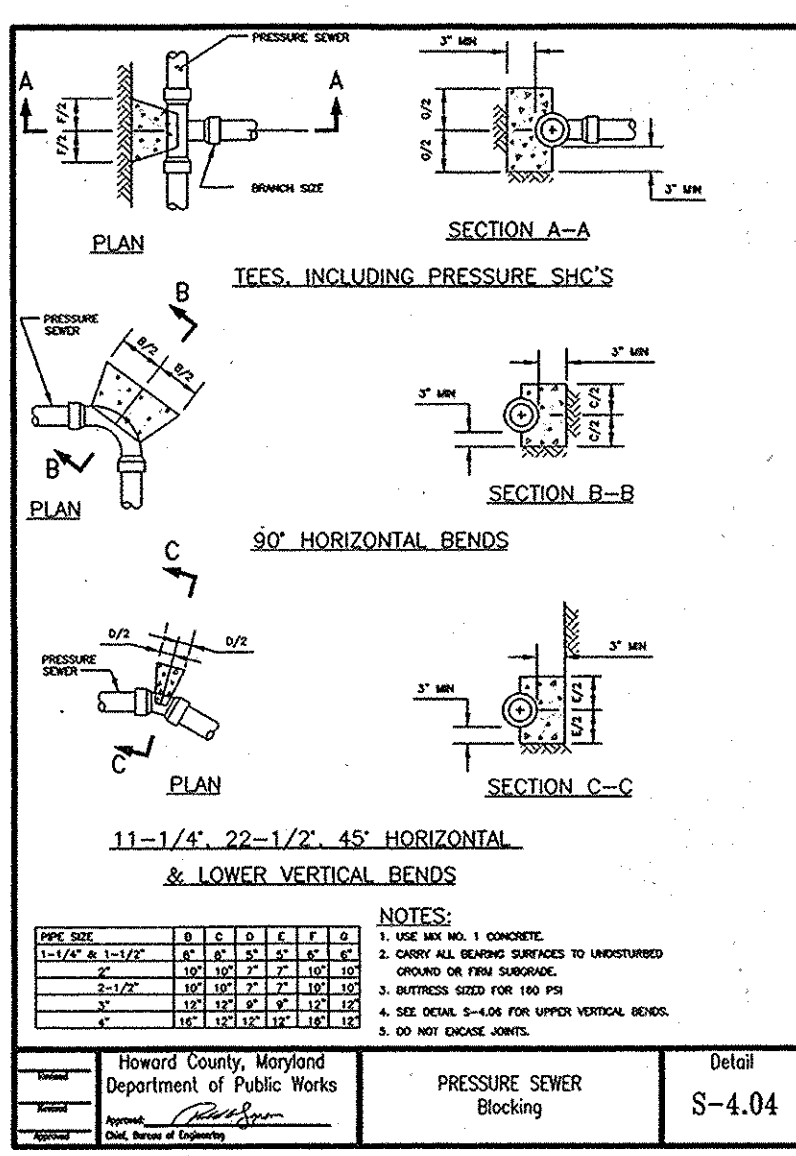
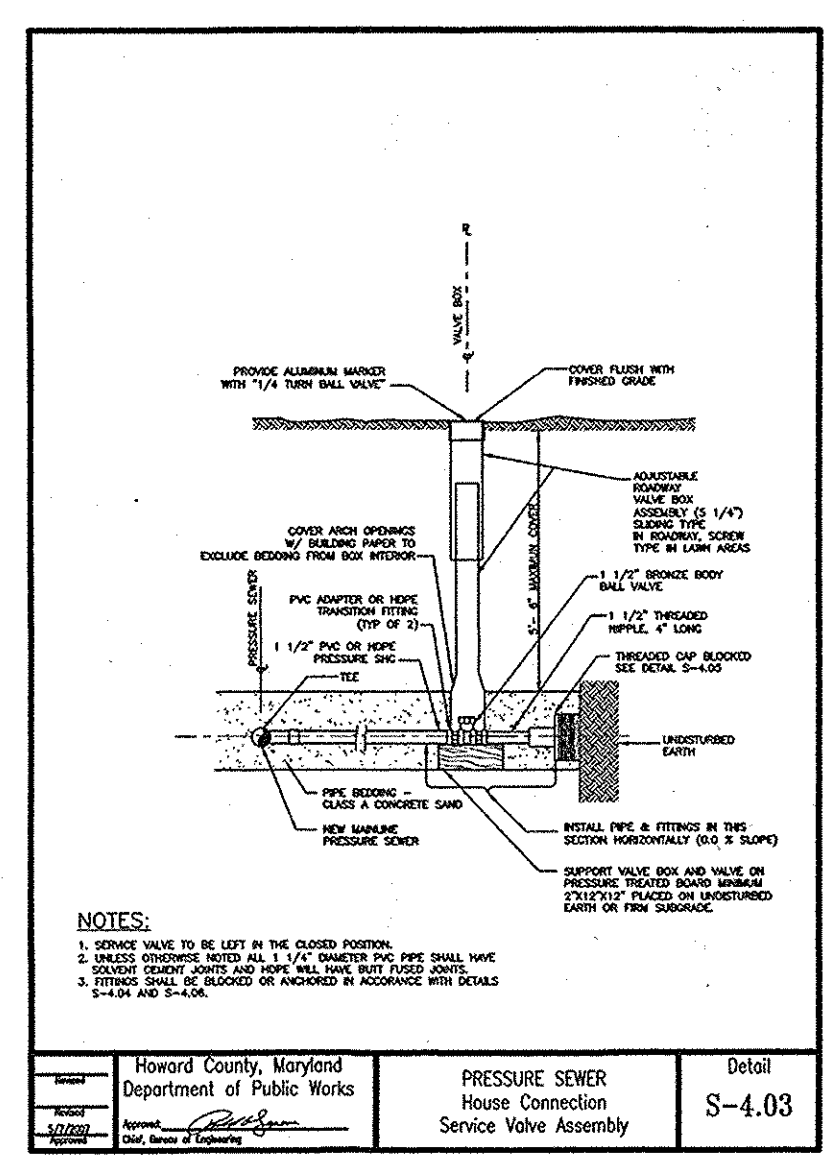
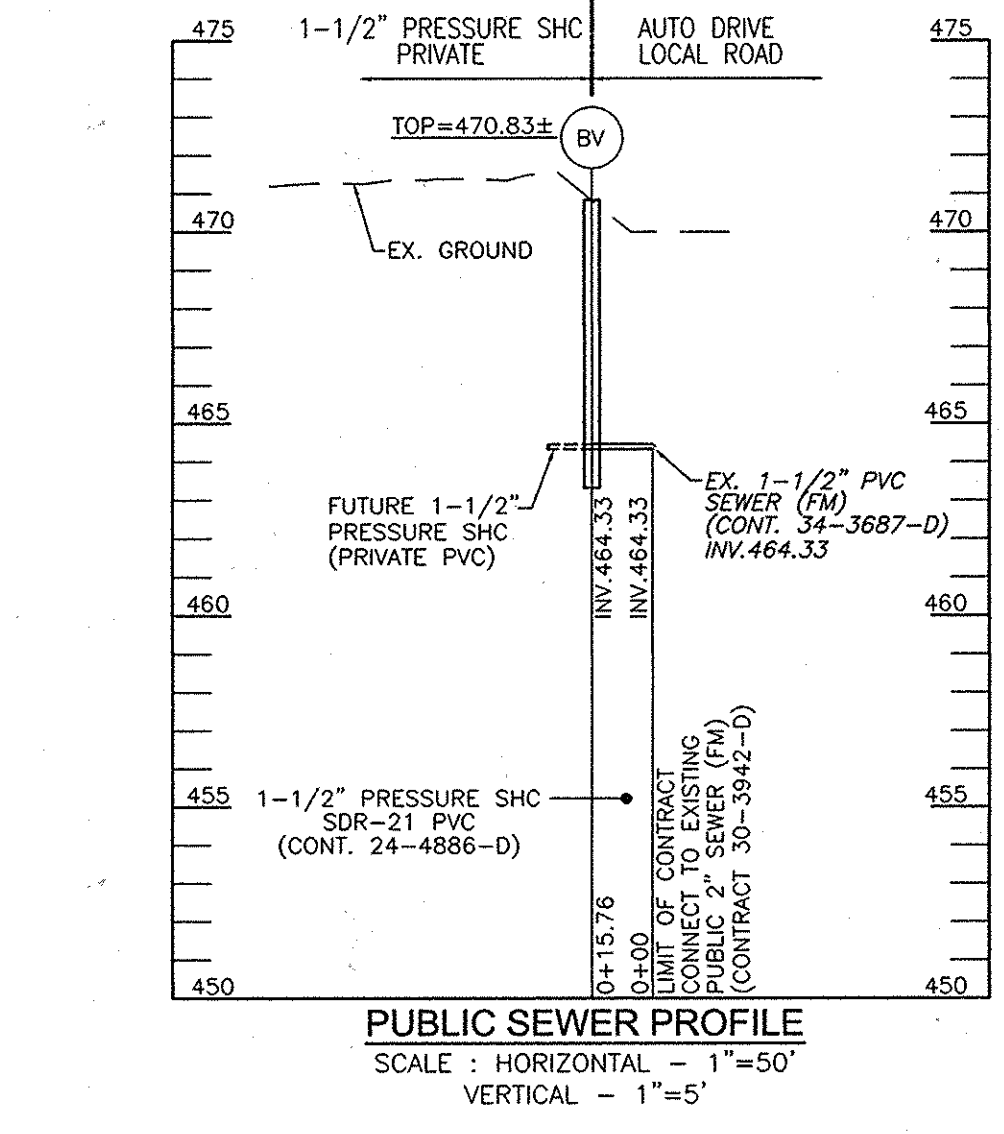
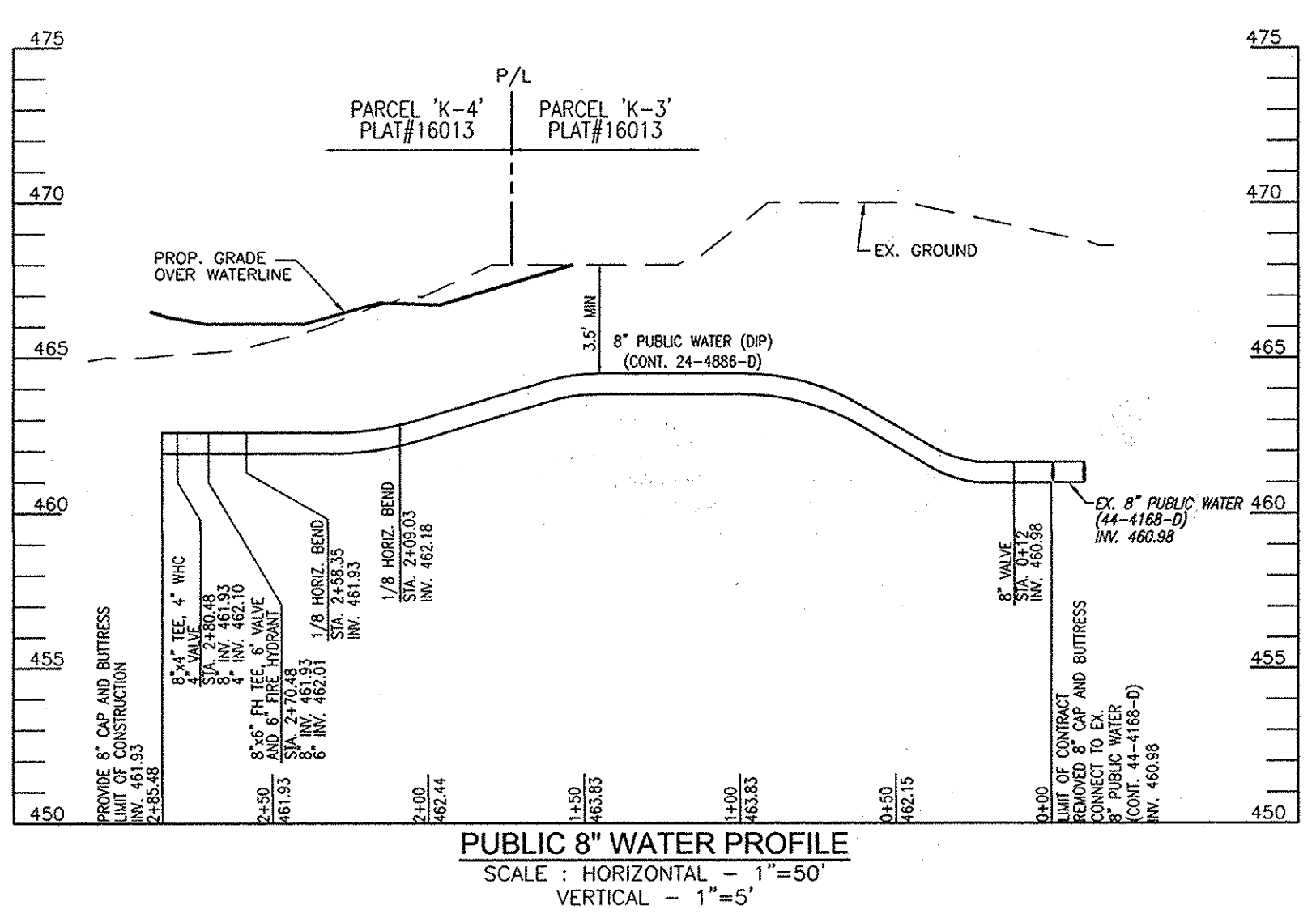
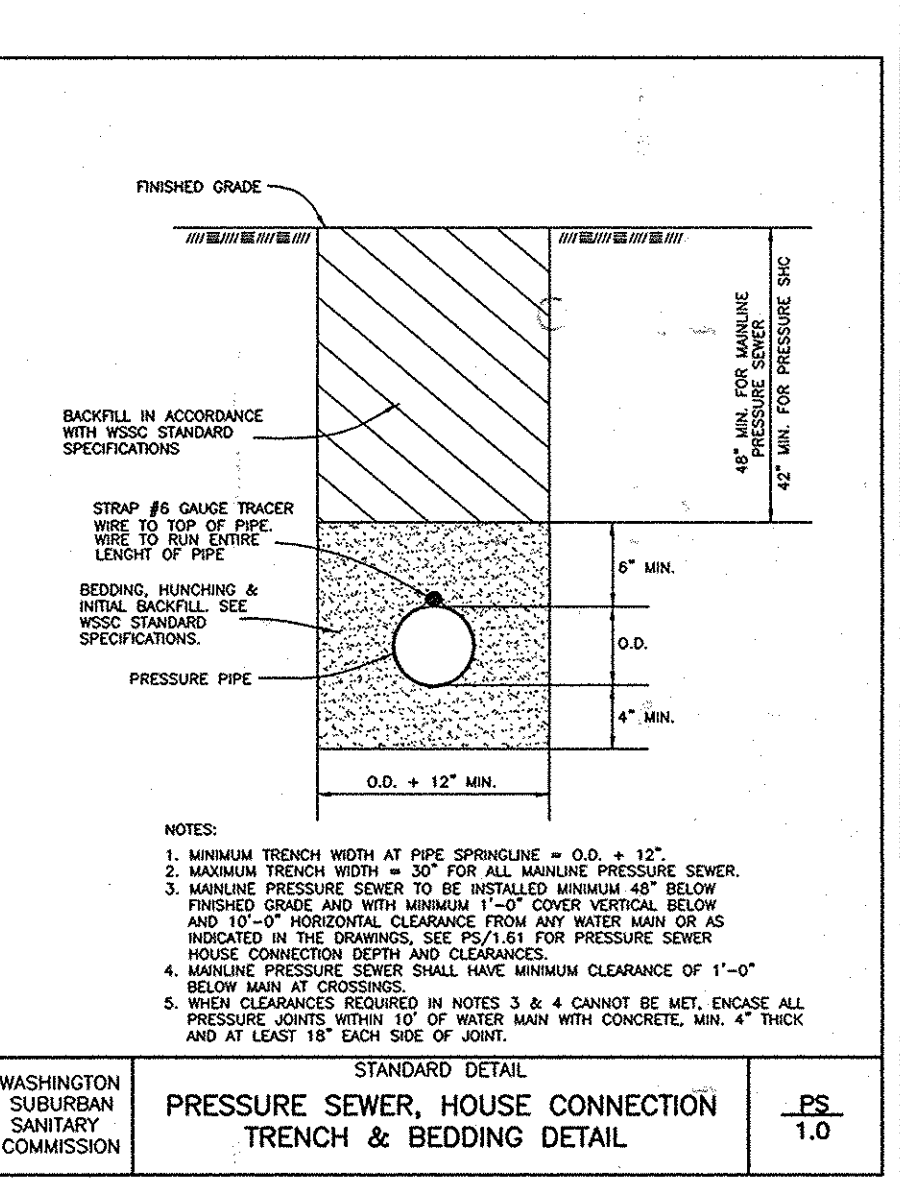
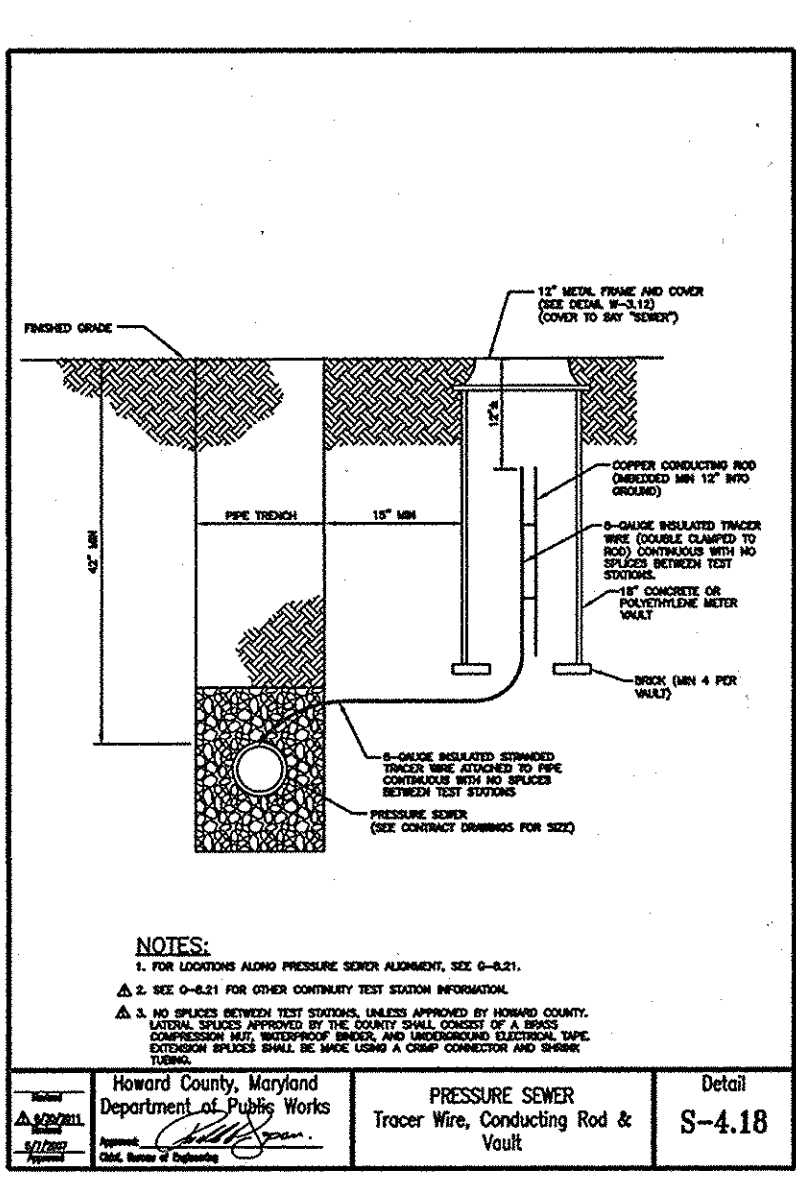
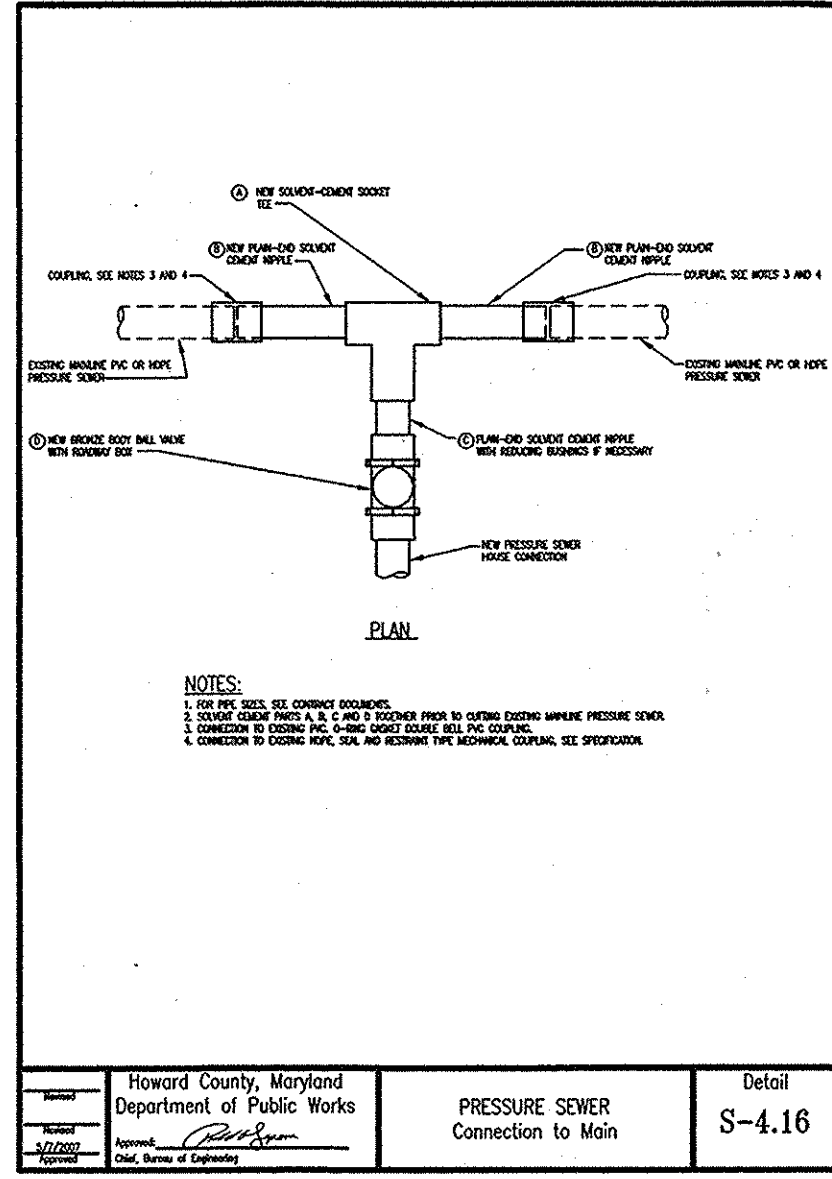


LAYOUT PLAN  
SCALE: 1"=50'

WL STA.	APPLURANCE	NORTHING	EASTING
WL STA. 0+00	CONNECT TO EX. 8" PUBLIC WATER	562473.73	1329102.92
WL STA. 0+12	8" VALVE	562465.48	1328998.72
WL STA. 2+09.09	8" - 18" HGR. BEND	562277.80	1328929.81
WL STA. 2+58.41	8" - 18" HGR. BEND	562257.43	1327984.94
WL STA. 2+74.24	8" X 8" TEE, 8" VALVE, 6" FH	562261.43	1327966.33
WL STA. 2+84.24	8" X 4" TEE	562238.09	1327977.20
WL STA. 2+89.24	8" CAP AND BUTTRESS	562232.01	1327975.45

**LEGEND:**

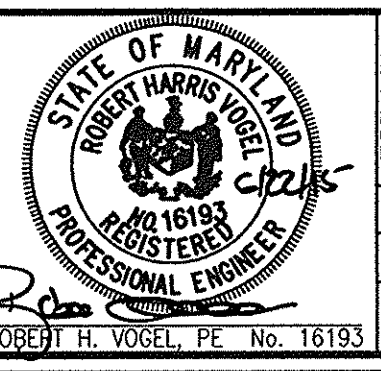
	EXISTING CURB AND GUTTER
	PROPOSED CURB AND GUTTER
	EXISTING LIGHT POLE WITH CONCRETE BASE
	EXISTING MAILBOX
	EXISTING SIGN
	EXISTING SANITARY MANHOLE
	EXISTING SANITARY LINE
	EXISTING CLEANOUT
	EXISTING FIRE HYDRANT
	EXISTING WATER LINE
	PROPOSED STORM DRAIN
	PROPOSED STORM DRAIN INLET
	EXISTING FENCE
	PROPERTY LINE
	RIGHT-OF-WAY LINE



DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

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SCALE AS SHOWN  
SHEET 2 OF 2

TAX MAP 34 BLOCK 06  
2ND ELECTION DISTRICT

ZONED: B-2  
LOT: PARCEL K-4  
HOWARD COUNTY, MARYLAND