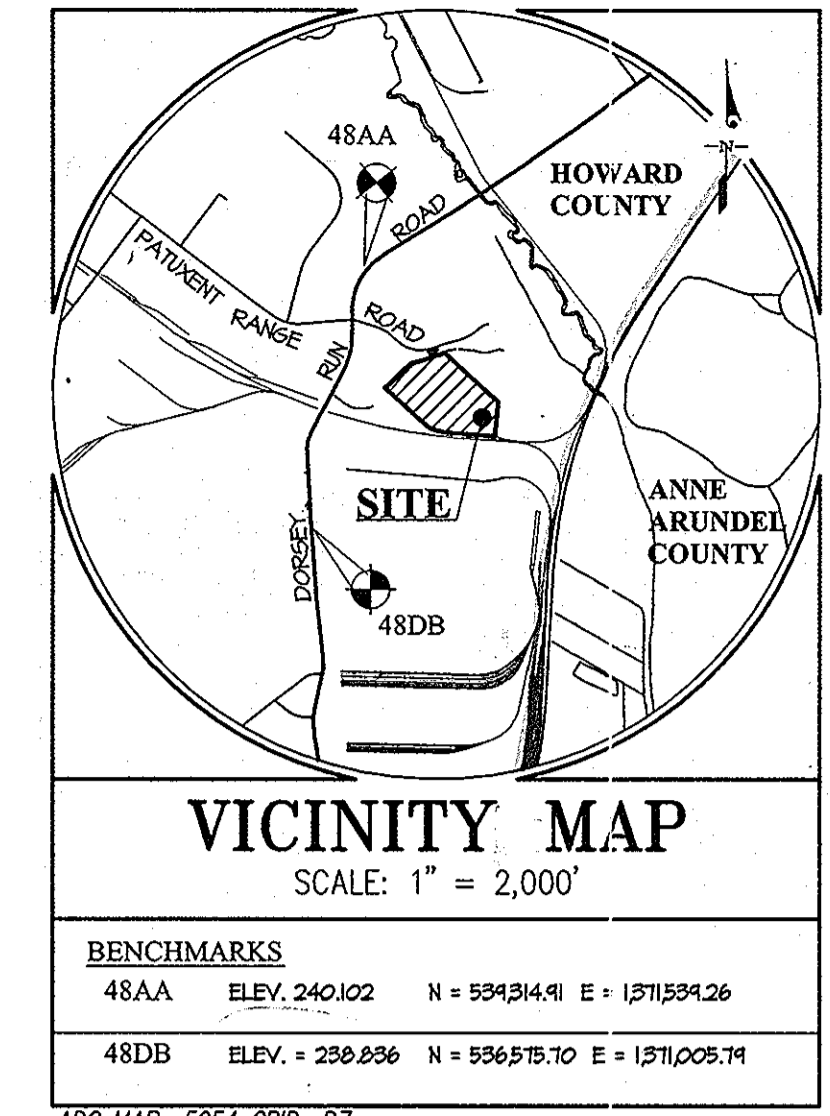
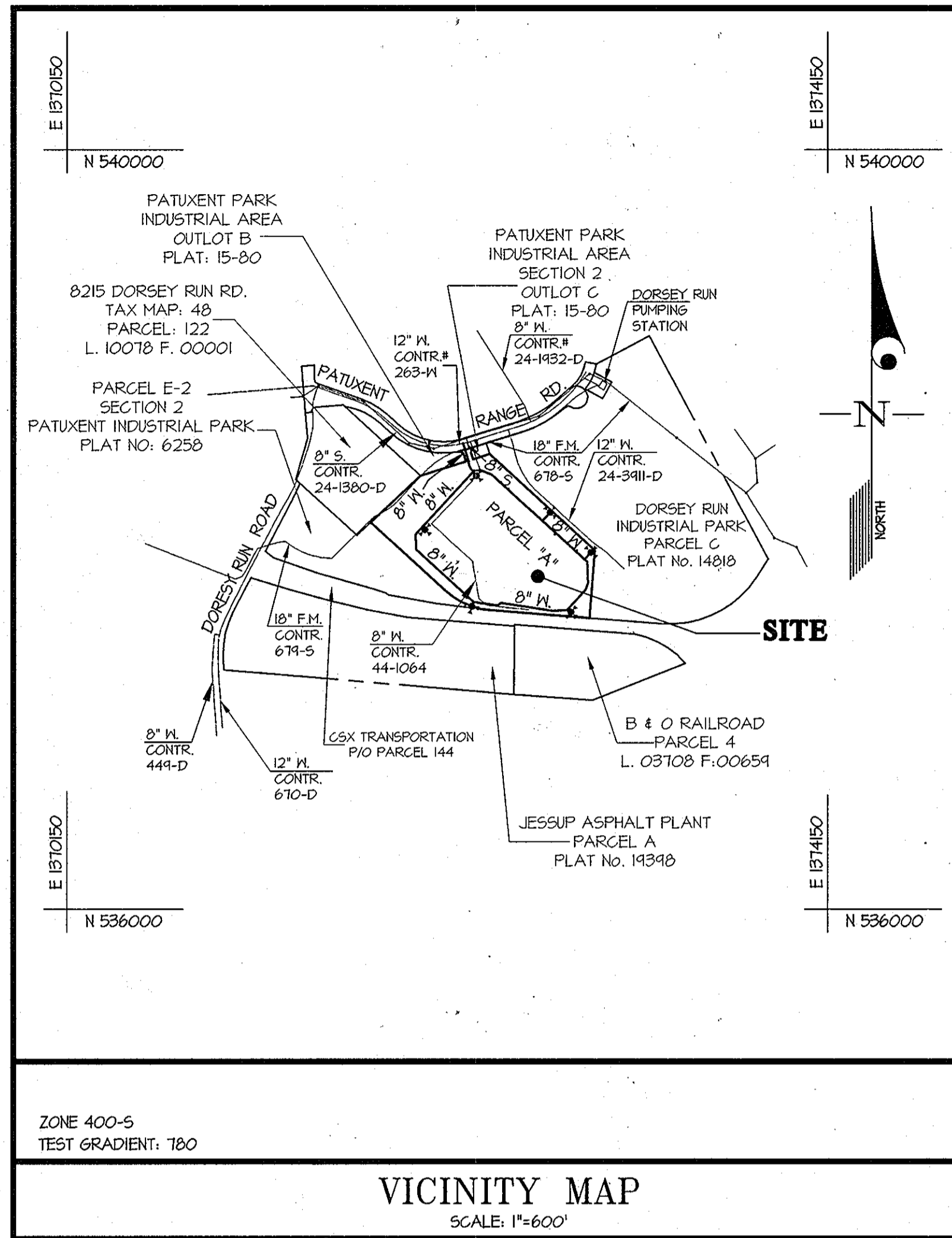


ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
6" WATER (400 PVC, DR-18) (to fire hydrants)	184 L.F.			
8" WATER (400 PVC, DR-18)	2688 L.F.			
8" SEWER	62 L.F.			
8" x 1/2" H.B.	7 EA.			
8" x 1/4" H.B.	6 EA.			
8" x 3/8" H.B.	3 EA.			
8" x 8" T.	1 EA.			
12" x 8" T.S.&V.	1 EA.			
8" x 6" F.H.T.	6 EA.			
6" V. (fire hydrants)	6 EA.			
8" V.	5 EA.			
CABLE TEST STATION	8 EA.			
8" HIGH-DEFLECTION COUPLING	26 EA.			

NAME OF UTILITY CONTRACTOR: \_\_\_\_\_

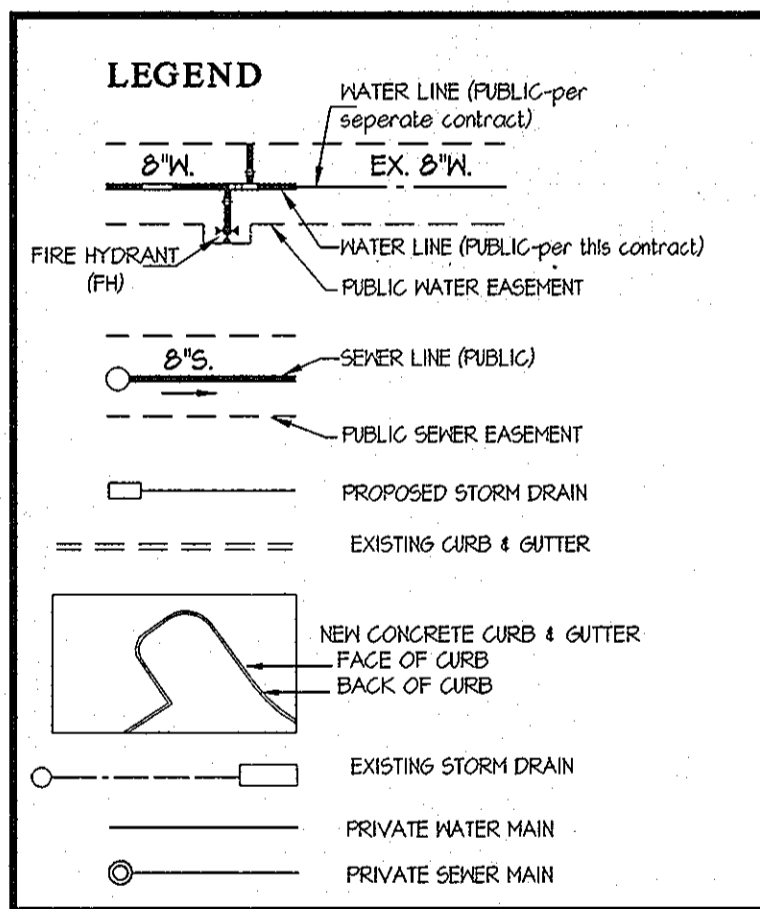
SURVEY AND DRAFTING DIV. \_\_\_\_\_ CHECKBOX: AS-BUILT DATE: \_\_\_\_\_



- GENERAL NOTES**
- 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.
  - TOPOGRAPHIC AERIAL SURVEY WAS PERFORMED ON MARCH, 2012 BY MCKENZIE SNYDER.
  - 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 NO. 48AA, AND NO. 48DB. ALL VERTICAL CONTROLS ARE BASED ON NAVD'83. VERTICAL CONTROLS PROVIDED ON THE DRAWINGS ARE STANDARD DISCS ON CONCRETE MONUMENTS.
  - 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 THE DRAWINGS. IN THE EVENT THE CONTRACTOR'S WORK REQUIRES THE BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONIES OWNED BY THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
  - FOR DETAILS NOT SHOWN ON THE DRAWING, 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  $\diamond$  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 OPERATIONS 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 (CONTRACTOR SERVICES)	410-637-8713
BGE (EMERGENCY)	410-685-0123
BUREAU OF UTILITIES	410-313-4400
COLONIAL PIPELINE COMPANY	410-785-1340
MISS UTILITY	1-800-257-7777
STATE HIGHWAY ADMINISTRATION	410-531-5533
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 CONSTRUCTION OF THE MAIN.
  - THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410)313-1430 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 DPM REQUIREMENTS PER SECTION 18.114(A) OF THE HOWARD COUNTY CODE.

- PART II WATER**
- ALL WATER MAINS TO BE D.I.P. CLASS 54 UNLESS OTHERWISE NOTED.
  - TOPS OF ALL WATER MAINS TO 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 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 THE 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.
  - TRACER WIRE AND CONTINUITY TEST STATIONS SHALL BE INSTALLED ON ALL DIP AND PVC WATER MAINS IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL.
  - FOR PVC WATER MAINS, ALL RECORDS FOR THE QUALITY CONTROL AND QUALIFICATION TEST REQUIREMENTS NOTED IN SECTION 51 OF ASHRA STANDARD C900 FOR PVC PRESSURE PIPE SHALL BE SUBMITTED WITH THE PIPE MATERIAL CERTIFICATIONS OR SHOP DRAWINGS PRIOR TO APPROVAL OF THE MATERIAL FOR USE. THE TEST RECORDS SHALL BE FOR THE PIPE TO BE INSTALLED UNDER THIS CONTRACT. ALL PVC PIPE SHALL CONTAIN MARKINGS TO ALLOW CROSS REFERENCING OF THE PIPE SUPPLIED TO THE TEST RECORDS RECEIVED.
  - UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS, SEVENTEEN (17) POUND SACRIFICIAL ANODES SHALL BE INSTALLED ON ALL VALVES AND METALLIC FITTINGS USED WITH PVC WATER MAINS IN ACCORDANCE WITH VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION. MAGNESIUM ANODES SHALL BE INSTALLED ON ALL VALVES AND DUCTILE IRON FITTINGS INCLUDING RESTRAINTS AND HARNESSSES. ZINC ANODES SHALL BE INSTALLED ON ALL STAINLESS STEEL FITTINGS AND SADDLES USED WITH PVC MAINS. ALL "TEES" USED WITH PVC MAINS SHALL BE DUCTILE IRON.
- PART III**
- ALL SEWER MAINS SHALL BE DIP 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 16" WALLS ARE FOR BRICK MANHOLES ONLY.
  - MANHOLES DESIGNATED P.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS, STANDARD DETAIL 65.52. WHERE WATERTIGHT FRAMES 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.



**SHEET INDEX**

- COVER SHEET
- WATER & SEWER PLAN
- WATER & SEWER PROFILES

TYPE OF BUILDING	OFFICE/WAREHOUSE
NUMBER OF UNITS	1
NUMBER OF S.H.C.'s	1 (PRIVATE)
NUMBER OF W.H.C.'s	1
AREA OF COMMERCIAL LOT/PARCEL	14.61± ACRES
SEWER SHED	N/A
PUMPING STATION	DORSEY RUN

CONTRACT No. 24-4766-D  
 PATUXENT PARK INDUSTRIAL AREA Δ  
 PARCEL "A"  
 HOWARD COUNTY, MARYLAND  
 DEPARTMENT OF PUBLIC WORKS

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SDP 13-013, SECTION 308 OF THE SPECIFICATIONS AT SITE DEVELOPMENT PLAN STAGE.

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

APPROVED: *John P. DeWitt* 10/31/13  
 DATE: 10/31/13

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND

*Steve Con* 10/25/13  
 CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY, MARYLAND

*Chris Edwards* 11/4/13  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

GLWGUTSCHICK LITTLE & WEBER, P.A.  
 CIVIL ENGINEERS; LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK  
 BURTONSVILLE, MARYLAND 20866  
 TEL: 301-421-4024 FAX: 410-890-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

G.L.W. No. 12014

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE PLANS 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. 12975

EXP. DATE: MAY 26, 2014

10-17-13

BY	NO	REVISION	DATE
		Water & sewer revised for single building site layout sheet & revised.	10/20/13

Revised Δ  
 COVER SHEET

600' SCALE MAP NO. 48 BLOCK NO. 3

PATUXENT PARK INDUSTRIAL AREA  
 CONTRACT No. 24-4766-D  
 PARCEL "A"  
 HOWARD COUNTY, MARYLAND  
 ELECTION DISTRICT No. 6

SCALE AS SHOWN  
 SHEET 1 OF 3

PREPARED FOR:  
 PATUXENT 8235, LLC  
 898 AIRPORT PARK RD  
 SUITE 210  
 GLEN BURNIE, MD 21061  
 ATTN: DAVE LAZAS  
 410-347-7170

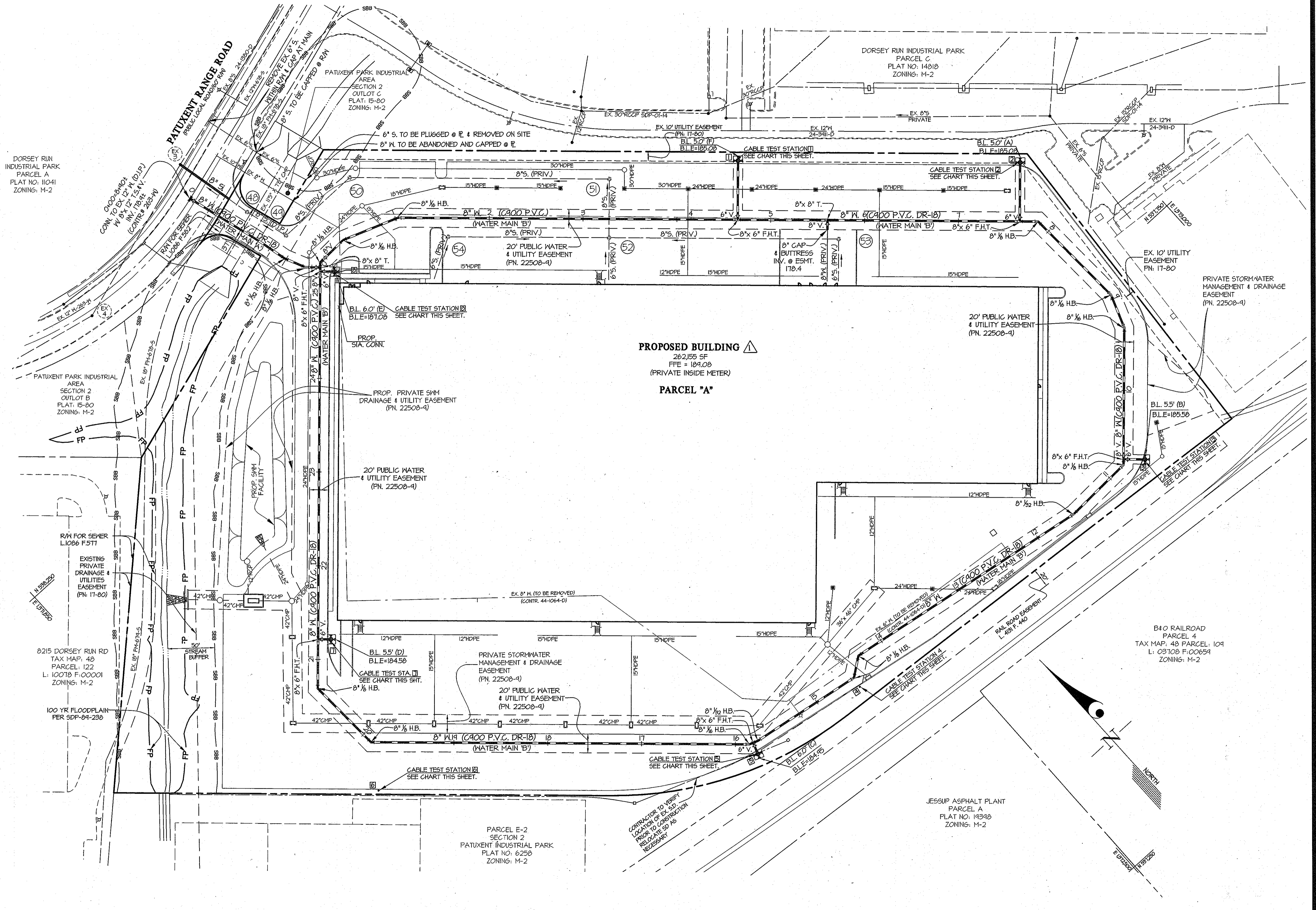
Note: This is a replacement sheet for the previously approved sheet 1 dated Feb. 2013.



FITTING CHART			
STATION	FITTING	NAD '83/91 COORDINATES	
WATER MAIN "A"			
0+00	12" x 8" T.S. 4V.	N 5384541.0 E 1312233.20	
1+19	8" x 1/2" H.B.	N 5383341.19 E 1312235.20	
1+43	8" x 1/2" H.B.	N 538317.46 E 1312215.27	
1+54	8" x 8" T.	N 538306.75 E 1312226.91	
WATER MAIN "B"			
0+00	8" x 8" T.	N 538306.75 E 1312226.91	
0+05	8" x 1/2" H.B.	N 538310.66 E 1312240.49	
0+34	8" x 1/2" H.B.	N 538312.15 E 1312324.56	
1+02	8" x 1/2" H.B.	N 538240.61 E 1312303.80	
4+65	8" x 6" F.H.T.	N 538045.91 E 1312651.03	
5+60	8" x 8" T.	N 53191.24 E 1312121.61	
7+65	8" x 6" F.H.T.	N 531842.46 E 1312812.64	
7+85	8" x 1/2" H.B.	N 531824.14 E 1312801.12	
8+45	8" x 1/2" H.B.	N 531714.51 E 1312814.98	
4+33	8" x 1/2" H.B.	N 531683.98 E 1312814.11	
10+74	8" x 6" F.H.T.	N 531580.30 E 1312184.18	
10+80	8" x 1/2" H.B.	N 531575.84 E 1312180.10	
11+54	8" x 1/2" H.B.	N 531571.51 E 1312105.87	
14+23	8" x 1/2" H.B.	N 531614.31 E 1312433.96	
14+59	8" x 1/2" H.B.	N 531600.24 E 1312414.86	
15+75	8" x 1/2" H.B.	N 531618.88 E 1312243.16	
15+81	8" x 6" F.H.T.	N 531620.71 E 1312288.74	
15+85	8" x 1/2" H.B.	N 531622.27 E 1312284.45	
19+88	8" x 1/2" H.B.	N 531844.63 E 1311986.48	
20+64	8" x 1/2" H.B.	N 531715.29 E 1311983.43	
21+21	8" x 6" F.H.T.	N 538013.91 E 1312018.78	
25+14	8" x 6" F.H.T.	N 538303.45 E 1312283.88	

FIRE HYDRANT CHART			
FH	NAD '83/91 COORDINATES	WM. STA.	
A	N 531884.32 E 1312415.14	7+65	
B	N 531564.84 E 1312801.01	10+74	
C	N 531608.67 E 1312284.36	15+81	
D	N 538004.67 E 1312028.86	21+21	
E	N 538243.22 E 1312245.05	25+14	
F	N 538042.57 E 1312643.57	4+65	

CABLE TEST STATION CHART			
STR.	STATION	OFFSET	REMARKS
WATER MAIN "B"			
1	4+63	63' LEFT	HO. CO. STD. DETAIL W-115
2	7+63	63' LEFT	HO. CO. STD. DETAIL W-115
3	10+76	23' LEFT	HO. CO. STD. DETAIL W-115
4	14+53	12' LEFT	HO. CO. STD. DETAIL G-8-21
5	15+83	13' LEFT	HO. CO. STD. DETAIL W-115
6	19+80	5' LEFT	HO. CO. STD. DETAIL G-8-21
7	21+19	14' RIGHT	HO. CO. STD. DETAIL W-115
8	25+12	15' RIGHT	HO. CO. STD. DETAIL W-115

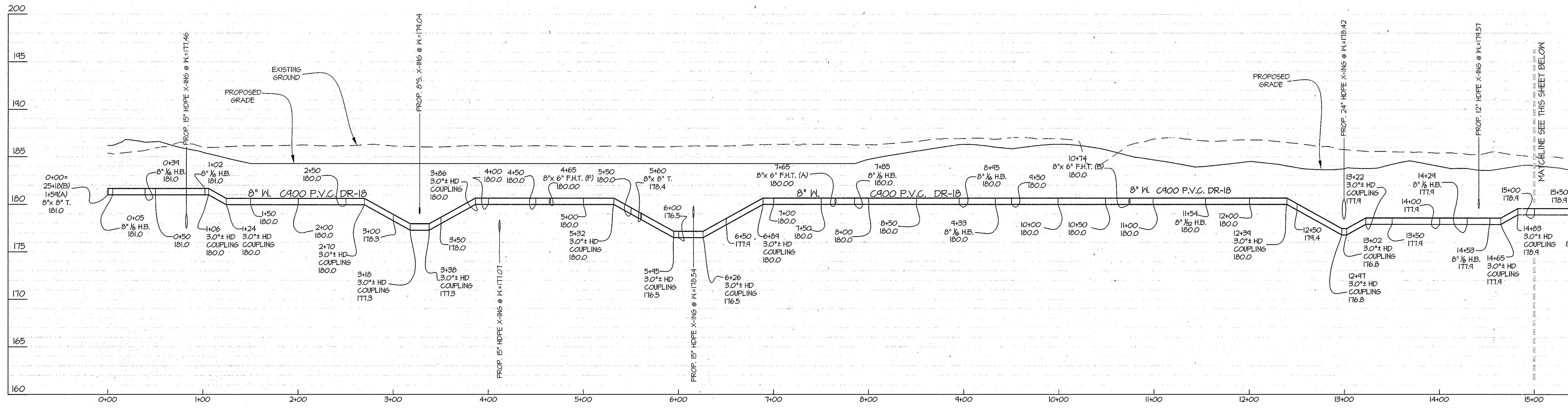


FOR PROFILES SEE SHEET 3 OF 3.

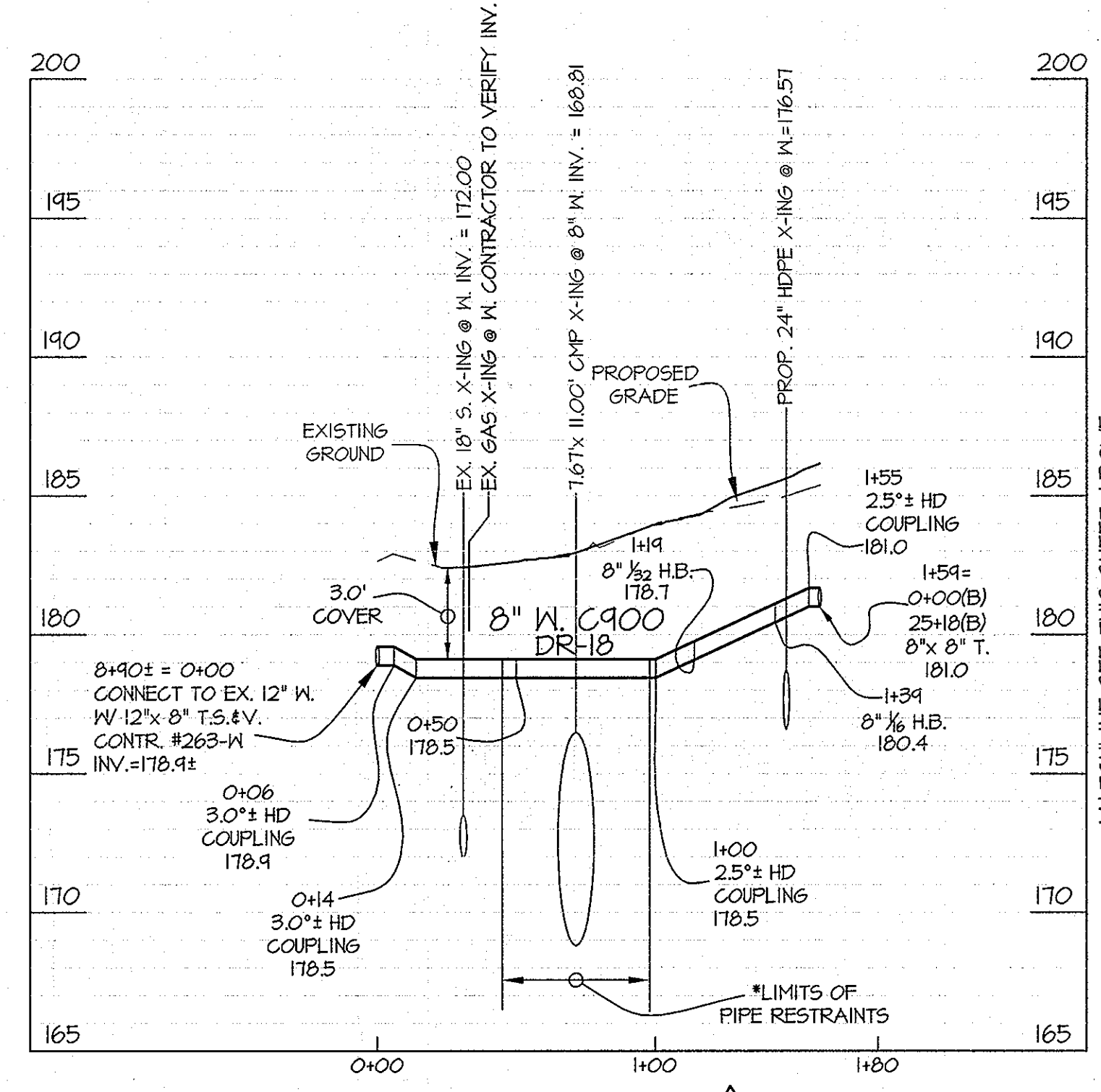
Note: This is a replacement sheet for the previously approved sheet 2 dated Feb. 2011.

PREPARED FOR:  
 PATUXENT 8235, LLC  
 898 AIRPORT PARK RD  
 SUITE 210  
 GLEN BURNIE, MD 21061  
 ATTN: DAVE LAZAS  
 410-347-7170

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND S. C. Green CHIEF, BUREAU OF UTILITIES 10/20/13	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND Chief, Development Engineering Division 11-4-13	<b>GLWGUTSCHICK LITTLE &amp; WEBER, P.A.</b> CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK BURTONSVILLE, MARYLAND 20886 TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186	PROFESSIONAL CERTIFICATION I HEREBY CERTIFY THAT THESE PLANS 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. 12975 EXP. DATE: MAY 26, 2014 10-17-13	STATE OF MARYLAND PROFESSIONAL ENGINEER 10-17-13	Revised <b>WATER &amp; SEWER EXTENSION PLAN</b> Water/sewer revised for single building site layout. 10/20/13	600' SCALE MAP NO. 48 BLOCK NO. 3	<b>PATUXENT PARK INDUSTRIAL AREA</b> CONTRACT No. 24-4766-D PARCEL "A" HOWARD COUNTY, MARYLAND ELECTION DISTRICT No. 6	SCALE 1" = 50'
								SHEET 2 OF 3

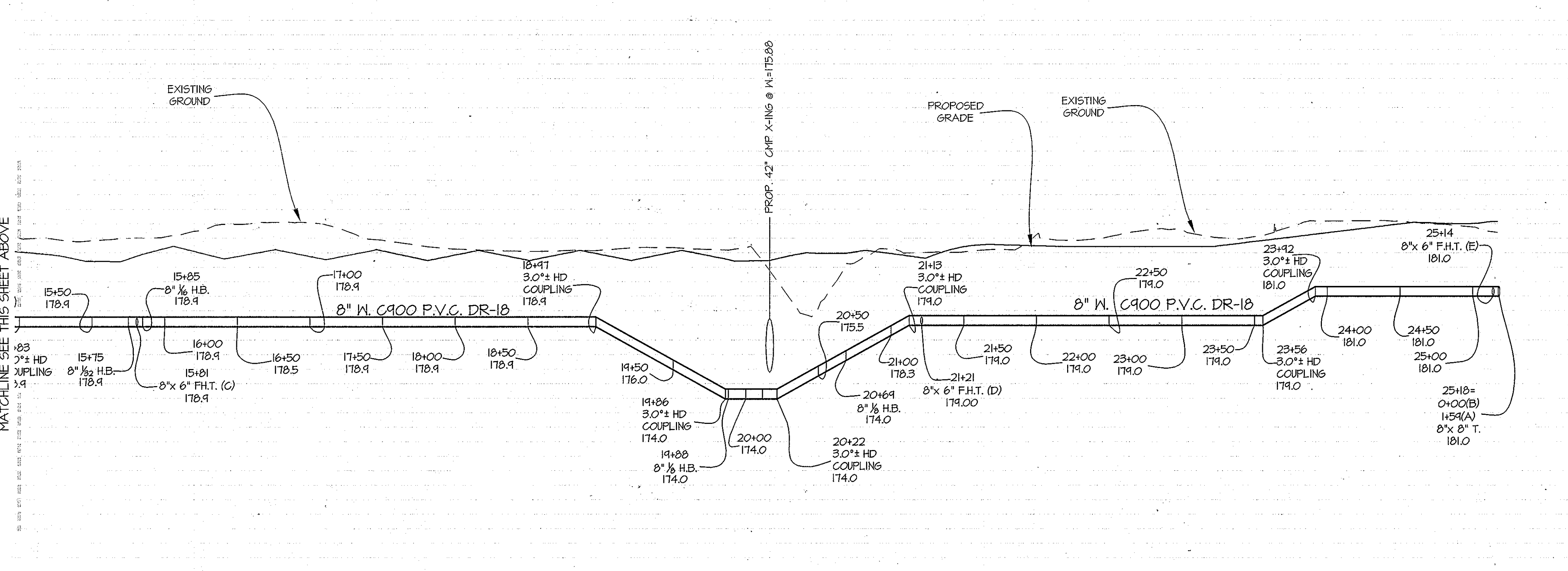


WATERLINE "B" Δ

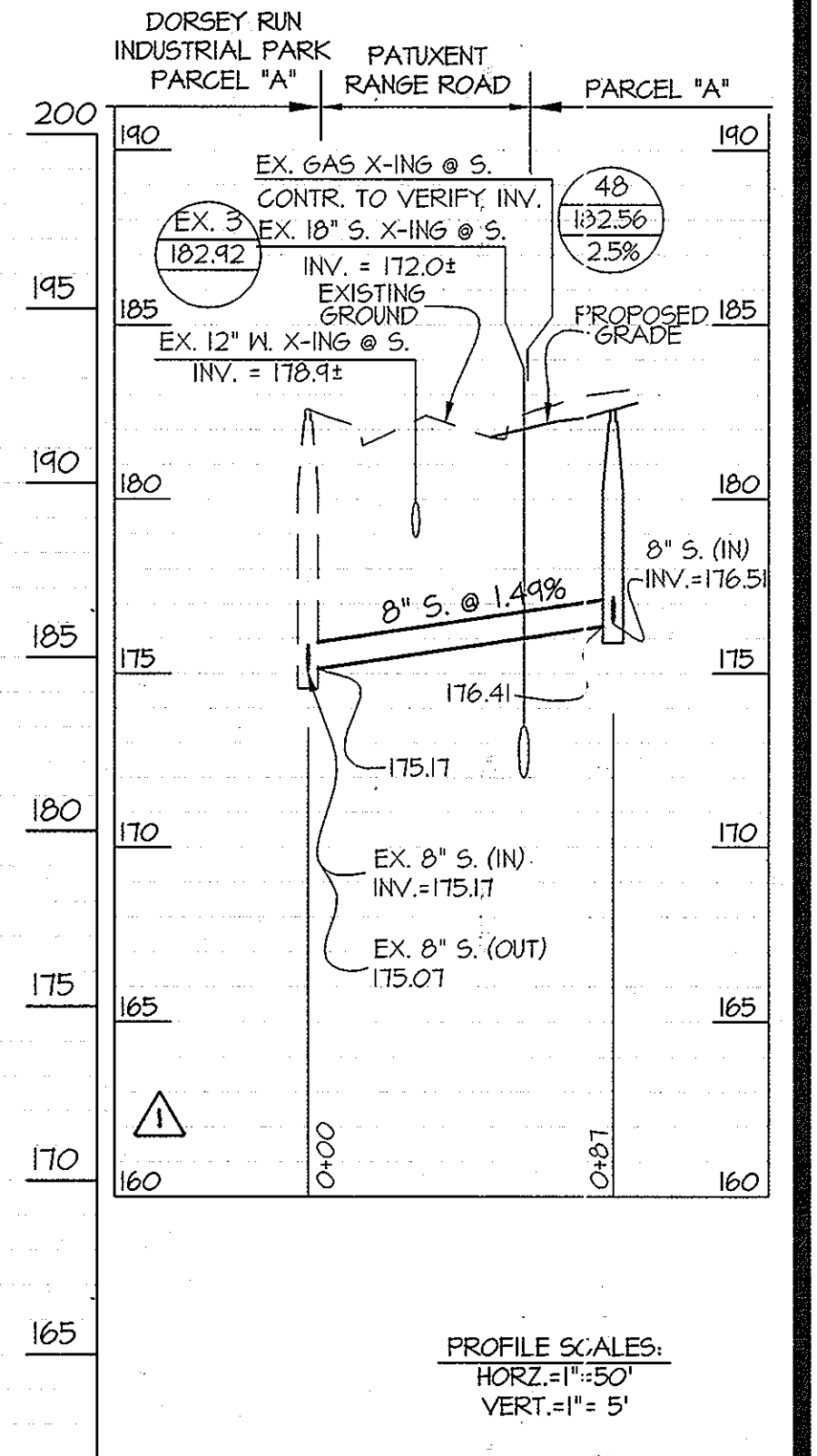


WATERLINE "A" Δ

NOTE: RESTRAIN JOINTS FROM W. STA. 0+45 TO W. STA. 0+48



WATERLINE "B" (CONTINUED) Δ



PROFILE SCALES:  
HORIZ.=1"=50'  
VERT.=1"=5'

Note: This is a replacement sheet for the previously approved sheet # dated Feb. 2013.

FOR PLAN VIEW SEE SHEET 2 OF 3

PREPARED FOR:  
PATUXENT 8235, LLC  
898 AIRPORT PARK RD  
SUITE 210  
GLEN BURNIE, MD 21061  
ATTN: DAVE LAZAS  
410-347-7170

L:\CADD\DRAWINGS\2014\PLANS BY GLEWUB-WA-SEW\1204-KS2-Resized.dwg PLOTTED: 10/17/2013 9:05 AM, LAST SAVED: 10/17/2013 8:29 AM, PLOTTED BY: Don Sweeney

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*Steve Green* 10/28/13  
DATE

DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY, MARYLAND

*Chris Chubb* 11/4/13  
DATE

**GLWGUTSCHICK LITTLE & WEBER, P.A.**  
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK  
BURTONSVILLE, MARYLAND 20866  
TEL: 301-421-4024 BAL: 410-890-1820 DC/VA: 301-899-2524 FAX: 301-421-4186

DES. Wsj DRN. Wsj CHK. DDS

DATE  
OCT., 2013

G.L.W. No.  
12014

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE PLANS 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. 12975

EXP. DATE: MAY 26, 2014

10-17-13 *[Signature]*



BY	NO	REVISION	DATE
Δ		Water/sewer revised for single building site layout	10/20/13

Revised Δ  
WATER and SEWER PROFILES

600' SCALE MAP NO. 48 BLOCK NO. 3

**PATUXENT PARK INDUSTRIAL AREA**  
CONTRACT No. 24-4766-D  
PARCEL "A"  
HOWARD COUNTY, MARYLAND  
ELECTION DISTRICT No. 6

SCALE AS SHOWN

SHEET 3 OF 3