

**GENERAL NOTES**

DEPARTMENT OF PUBLIC WORKS - BUREAU OF ENGINEERING - UTILITY DESIGN DIVISION  
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.
- Topographic field surveys were performed on 3/2009 Axis Geospatial, LLC. Additional topography shown taken from Howard County GIS.
- 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. 3T1M4, No. 3T1M5.  
All vertical controls are based on NAVD 88. Vertical controls provided on the drawings are pk nails. (See Traverse Coordinate Schedule)
- 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 sewer 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 owed 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 'T' 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 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
BSE (Construction Services)	410-697-8713
BSE (Emergency)	410-695-0123
Bureau of Utilities	410-313-4400
Colonial Pipeline Co.	410-745-1340
Miss Utility	1-800-251-7777
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) 313-7450 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 DPM requirements per Section 18.114(a) of the Howard County Code.

**Part II WATER**

- All water mains shall be D.I.P. Class 54 unless otherwise noted.
- Tops of all water mains shall have a minimum of 5'-6" of cover unless otherwise noted.
- Valves adjacent to trees shall be strapped to trees.
- 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 wires 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 5.1 of the ANWA 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. All PVC pipe shall be DR18.
- Unless otherwise noted on the plans or in the specifications 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. Seventeen (17) pound Magnesium anodes shall be installed on all valves and ductile iron fittings including restraints and harnesses. Twelve (12) pound 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.
- All pavements will be metered separately with meters located inside each building.

**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 16" walls are for brick manholes only.
- Manholes designated M.T. in plan and profile shall have watertight frame and cover, Standard Detail 65.52. Where watertight manhole 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 the cellar cannot be served.

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 308 OF THE SPECIFICATIONS AND AS SHOWN ON SDP-II-003

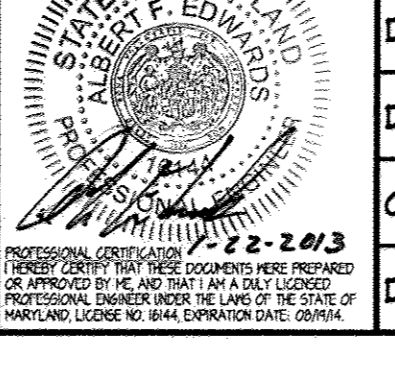
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
Plan #: X-XX-XXX; SDP #: SDP-II-003

APPROVED  
*John R. Robertson* 2/14/13  
HOWARD SOIL CONSERVATION DISTRICT DATE

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
*Thomas E. Butler* 2/21/13  
BUREAU OF ENGINEERING, CHIEF DATE  
*Shirley Green* 2/1/13  
BUREAU OF UTILITIES, CHIEF DATE

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND  
*Chris Edwards* 2-20-13  
DEVELOPMENT ENGINEERING DIVISION, CHIEF DATE M.G.

**SITE RESOURCES**  
Comprehensive Land Planning & Site Design Services  
14315 Arundellville Pike • Poolesville, Maryland 21131  
(410) 885-3300 • Fax (410) 885-3300



DES: KFR	SRI 1	REVISE EXISTING & PROPOSED WATER	8/27/13
DRN: AM	SRI 3	ADD WTC & SHC FOR PAVILIONS	1/23/13
CHK: AFE			
DATE: 01/22/13	BY NO.	REVISION	DATE

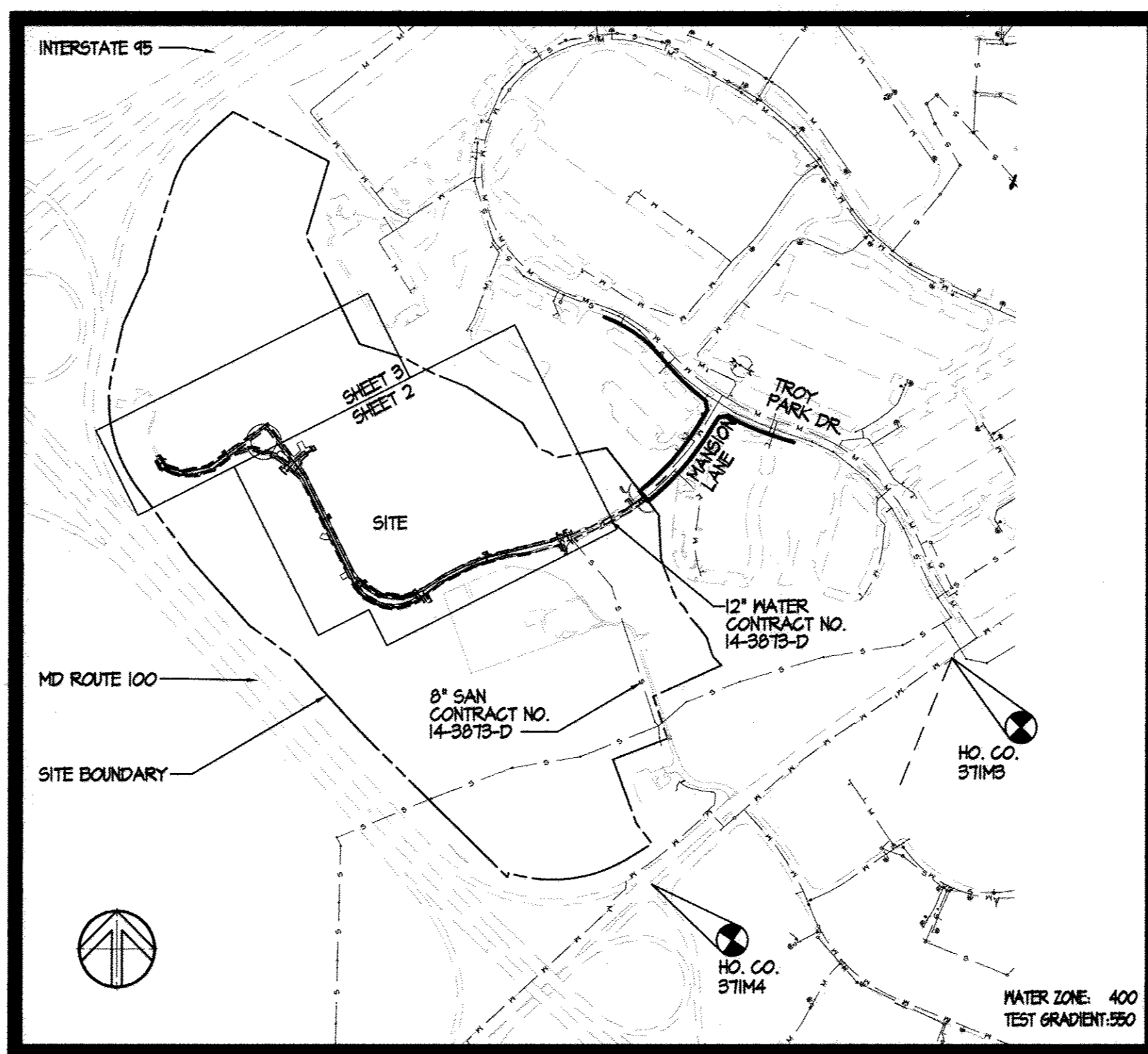
**FINAL WATER AND SEWER CONSTRUCTION PLAN**  
TAX MAP NO. 37 BLOCK NO. 16

TROY PARK - PHASE I  
WATER & SEWER EXTENSION  
HOWARD COUNTY, MARYLAND  
DEPARTMENT OF PUBLIC WORKS  
CONTRACT NO. 14-4694-D  
CAPITAL PROJECT NUMBER N-3957  
PART OF THE TROY HILL CORPORATE CENTER PHASE III, PARCELS A-21 & A-22  
6450 MANSION LANE  
3rd ELECTION DISTRICT  
SCALE: AS SHOWN  
SHEET 1 OF 10

# TROY PARK - PHASE I WATER & SEWER EXTENSION

HOWARD COUNTY, MARYLAND  
DEPARTMENT OF PUBLIC WORKS  
CONTRACT NO. 14-4694-D  
CAPITAL PROJECT NUMBER N-3957

PART OF THE TROY HILL CORPORATE CENTER PHASE III, PARCELS A-21 & A-22

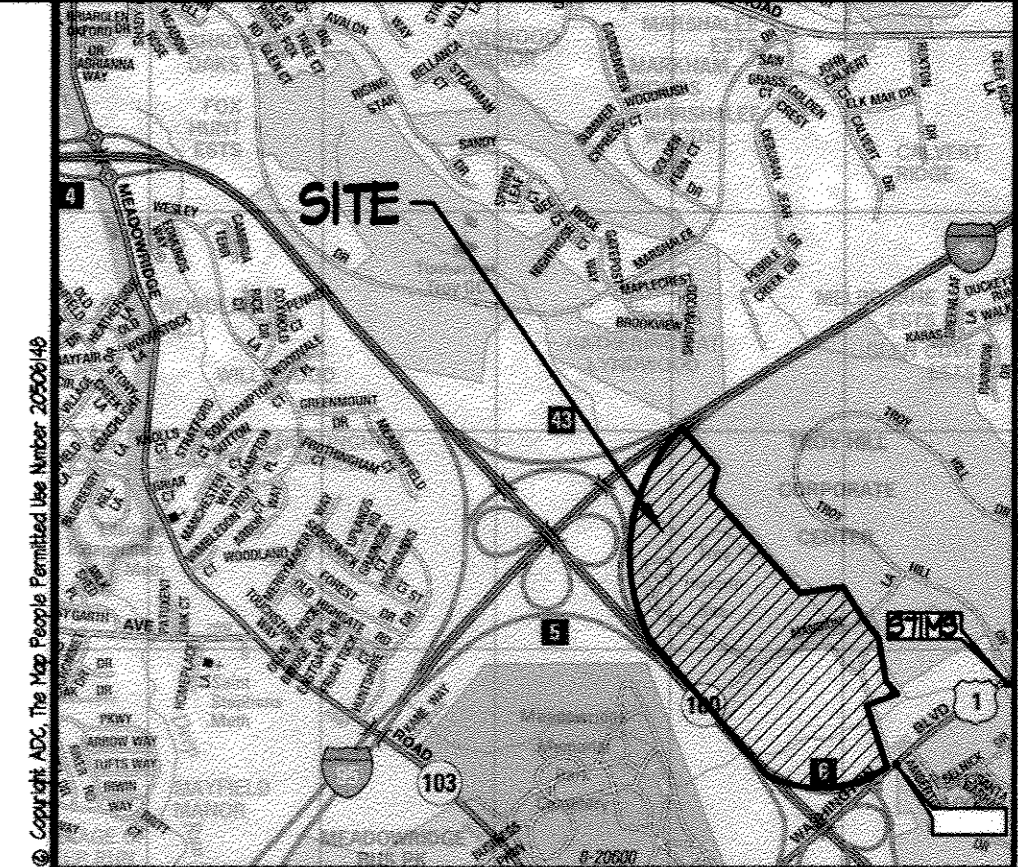


**LOCATION MAP**  
SCALE: 1" = 600'

TYPE OF BUILDING:	NONE
NUMBER OF LOTS:	1
NUMBER OF S.H.C.S:	0
AREA OF PARCEL:	109.04 AC.
SEWER SHED:	PATAPSCO
TREATMENT PLANT:	DEEP RUN
DISTURBED AREA:	34.40 AC.

**HOWARD COUNTY GEODETIC SURVEY CONTROL NUMBERS**

DESCRIPTION BENCH MARK: 3T1M5  
ALSO KNOWN AS: R-125  
NSD PID: JV0628  
CLASSIFICATION: 2nd ORDER  
GENERAL LOCATION: US-1 0.5 MI NE OF RT-100  
DESCRIPTION: DISC ON BRIDGE ABUTMENT  
N: 555,920.5832 E: 1,383,176.3040  
NAVD88 ELEVATION: 51,785 mts = 129,961 velft.  
  
DESCRIPTION BENCH MARK: 3T1M4  
ALSO KNOWN AS: N/A  
NSD PID: N/A  
CLASSIFICATION: 2nd ORDER  
GENERAL LOCATION: END OF RAMP FROM I-100 TO US-1 (SBL)  
DESCRIPTION: LIGHT POLE BOLT  
N: 554,891,6680 E: 1,381,808,3573  
NAVD88 ELEVATION: 51,864 mts = 170,156 velft.



**VICINITY MAP**  
ADC MAP 4536, GRID5 H-410, J-410, K-410  
1" = 2000'

**LEGEND**

---	PROPERTY LINE
- - - -	EXISTING WALK
⊖	EXISTING STORM DRAIN
⊖	EXISTING WATER
⊖	EXISTING SANITARY SEWER
---	EXISTING STREAM
---	EXISTING FLOODPLAIN
⊖	PROPOSED STORM DRAIN
---	PROPOSED WATER
---	PROPOSED SANITARY SEWER
⊖	PROPOSED WATER HOUSE SERVICE & METER BOX
⊖	SANITARY SEWER HOUSE CONNECTION

**DRAWING INDEX**

SHEET #	DRAWING TITLE
1	OF 10 COVER SHEET
2	OF 10 WATER AND SEWER PLAN
3	OF 10 WATER AND SEWER PLAN
4	OF 10 WATER PROFILES
5	OF 10 WATER PROFILES
6	OF 10 WATER PROFILES
7	OF 10 WATER PROFILES
8	OF 10 SEWER PROFILES
9	OF 10 SEWER PROFILES
10	OF 10 WATER & SEWER PROFILES

**WELL & SEPTIC TABLE**

PARCEL #	ADDRESS	STATUS
195 A-21	6450 MANSION LANE	TO REMAIN
195 A-22	6451 MANSION LANE	TO REMAIN
191	TOT2 WASHINGTON BLVD	TO REMAIN
185	PRIVATE RD, ELK RIDGE, MD 21075	TO REMAIN
184	TOT2 WASHINGTON BLVD	TO REMAIN
141	WASHINGTON BLVD, ELK RIDGE, MD 21075	TO REMAIN
332	TOT2 WASHINGTON BLVD	TO REMAIN
345	RT. 100, ELK RIDGE, MD 21074	TO REMAIN
361	6500 NW MANSION LANE	TO REMAIN

**OWNER/DEVELOPER**

HOWARD COUNTY MARYLAND  
DEPARTMENT OF RECREATION AND PARKS  
2550 COURTHOUSE DR  
ELLSGOTT CITY MARYLAND 21043  
(410) 313-2100

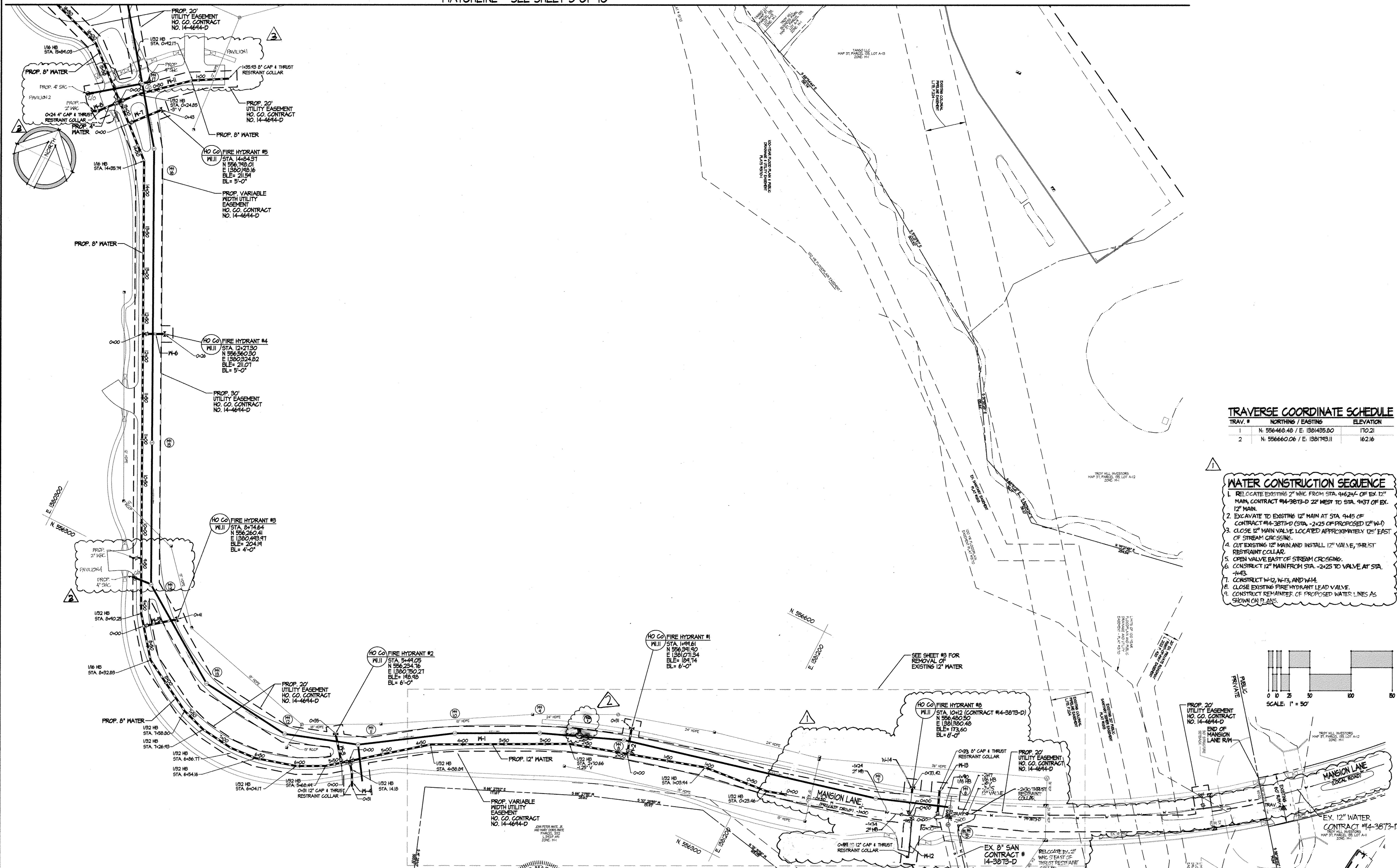
**SITE DATA**

ADDRESS: 6500 MANSION LANE  
SUBDIVISION NAME: TROY HILL ELK RIDGE  
SECTION / AREA: N/A  
PARCEL NO: PARCEL 561  
LIBE/FOLIO: 571444  
BLOCK No.: 16  
ZONE: 37  
TAX MAP No.: 37  
ELECTION DISTRICT: 3  
CENSUS TRACT: 8102.02  
600 SCALE MAP #: 51

**QUANTITIES**

ITEM	ESTIMATED QUANTITY	AS-BUILT		
		QUANTITY	TYPE	MANUFACTURER/SUPPLIER
2" WTC	40 L.F.			
12" WATER PIPE (PVC C900)	663 L.F.			
8" WATER PIPE (PVC C900)	1,815 L.F.			
6" WATER PIPE (PVC C900)	224 L.F.			
4" WATER PIPE (PVC C900)	24 L.F.			
6" WATER PIPE (DIP CLASS 54)	3 L.F.			
FIRE HYDRANT (BURY 4'-0")	1 EA.			
FIRE HYDRANT (BURY 4'-6")	1 EA.			
FIRE HYDRANT (BURY 5'-0")	3 EA.			
FIRE HYDRANT (BURY 6'-0")	2 EA.			
FIRE HYDRANT (BURY 6'-6")	1 EA.			
12" X 12" TAPPING SLEEVE & VALVE	1 EA.			
12" X 8" TAPPING SLEEVE & VALVE	1 EA.			
12" X 12" TEE	1 EA.			
12" X 6" TEE	2 EA.			
8" X 6" TEE	5 EA.			
8" CROSS	1 EA.			
12" VALVE	8 EA.			
8" VALVE	5 EA.			
6" VALVE	1 EA.			
THRUST RESTRAINT COLLAR	7 EA.			
12" 6" REDUCER	1 EA.			
8" X 4" REDUCER	1 EA.			
8" SAN	2570 L.F.			
SEWER MANHOLE	18 EA.			

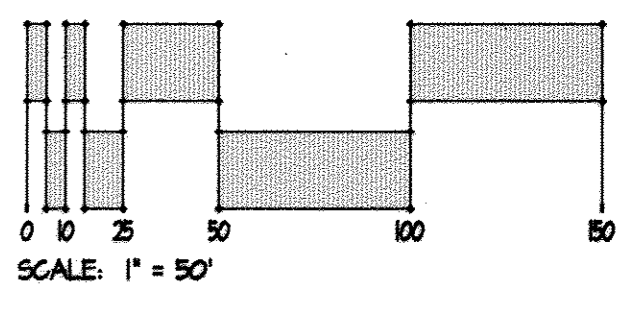
13/02/2013 10:52 AM, Project: 1318 - 1318-0000-0000 - Water/Sewer/Stormwater - Survey and Drafting Division - 2/14/13 10:52 AM



**TRAVERSE COORDINATE SCHEDULE**

TRAV. #	NORTHING / EASTING	ELEVATION
1	N. 556468.48 / E. 1801435.80	170.21
2	N. 556660.06 / E. 1801793.11	162.16

- WATER CONSTRUCTION SEQUENCE**
1. RELOCATE EXISTING 2" MNC FROM STA. 446.24 OF EX. 12" MAIN, CONTRACT #14-3873-D 22' WEST TO STA. 437 OF EX. 12" MAIN.
  2. EXCAVATE TO EXISTING 12" MAIN AT STA. 9445 OF CONTRACT #14-3873-D (STA. -2+25 OF PROPOSED 12" W-1).
  3. CLOSE 12" MAIN VALVE LOCATED APPROXIMATELY 125' EAST OF STREAM CROSSING.
  4. CUT EXISTING 12" MAIN AND INSTALL 12" VALVE, THRUST RESTRAINT COLLAR.
  5. OPEN VALVE EAST OF STREAM CROSSING.
  6. CONSTRUCT 12" MAIN FROM STA. -2+25 TO VALVE AT STA. +1+43.
  7. CONSTRUCT W-12, W-13, AND W-14.
  8. CLOSE EXISTING FIRE HYDRANT LEAD VALVE.
  9. CONSTRUCT REMAINDER OF PROPOSED WATER LINES AS SHOWN ON PLANS.



DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
*Thomas J. Butler* 2/2/13  
 BUREAU OF ENGINEERING, CHIEF DATE

DEPARTMENT OF PLANNING & ZONING  
 HOWARD COUNTY, MARYLAND  
*Chad Coladonato* 2-20-13  
 DEVELOPMENT ENGINEERING DIVISION, CHIEF DATE

**SITE RESOURCES**  
 Comprehensive Land Planning & Site Design Services  
 1415 Annetonville Pike • Poolesville, Maryland 21131  
 (410) 882-3388 • Fax (410) 882-3389

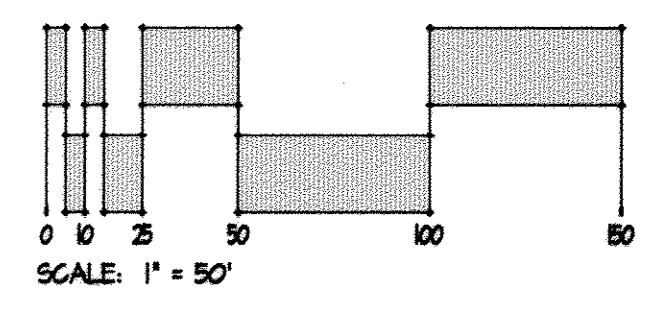
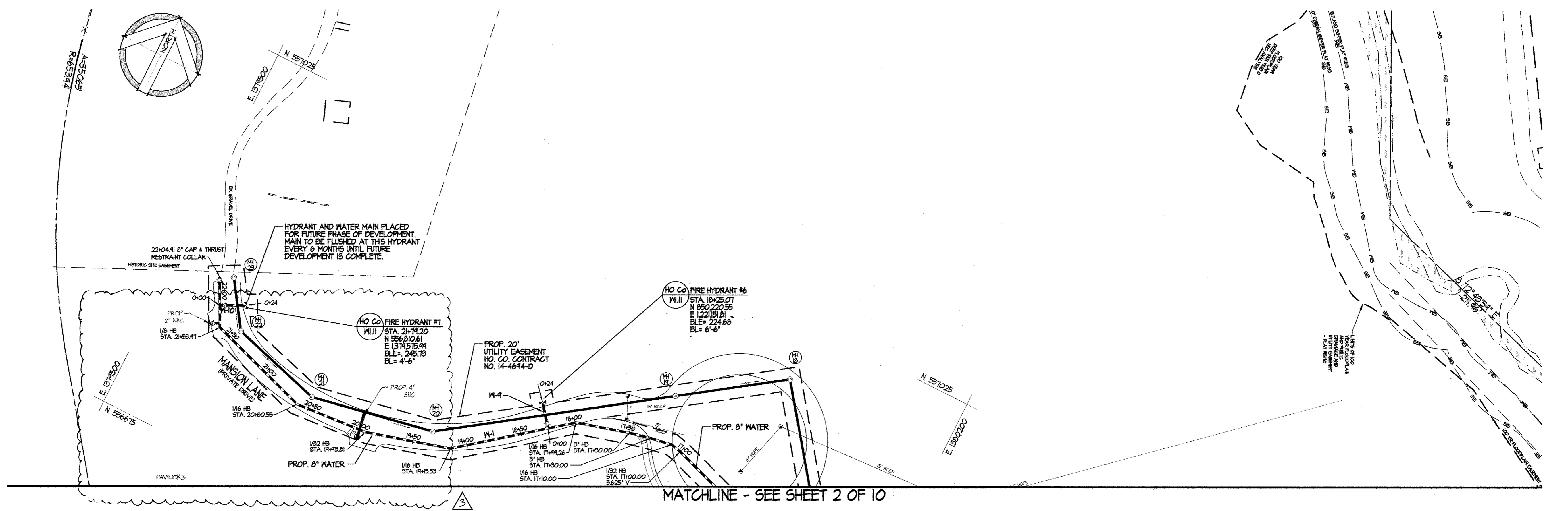
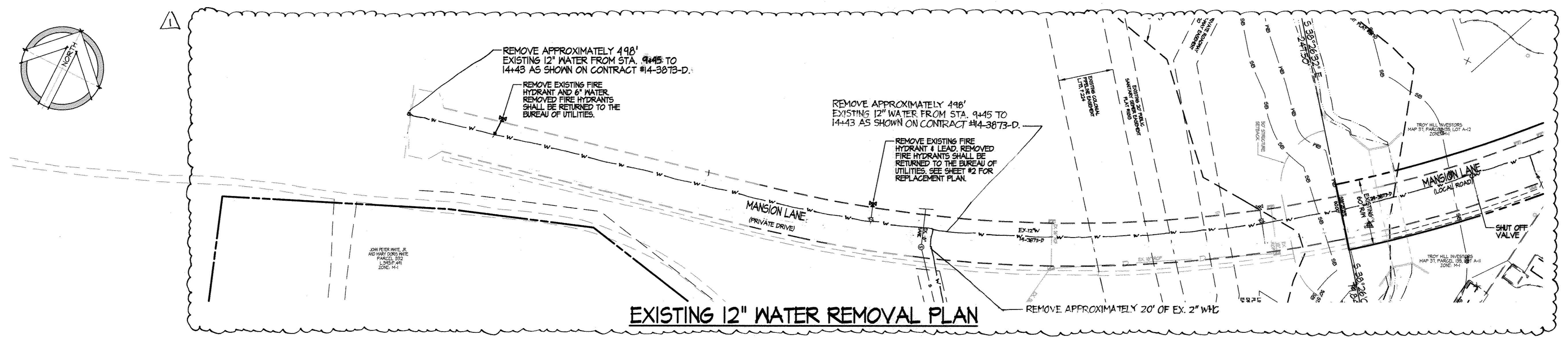
DES: KPR	SRI 1	REVISE EXISTING & PROPOSED WATER	6/27/13
DRN: AM	SRI 2	ADD MANHOLE 1	3/24/17
CHK: AFE	SRI 3	ADD WVC & SHC FOR PAVLIONS	9/23/18
DATE: 01/22/13	BY NO.	REVISION	DATE

**WATER AND SEWER PLAN**  
 TAX MAP NO. 37 BLOCK NO. 16

TROY PARK - PHASE I  
 WATER & SEWER EXTENSION  
 HOWARD COUNTY, MARYLAND  
 DEPARTMENT OF PUBLIC WORKS  
 CONTRACT NO. 14-4694-D  
 CAPITAL PROJECT NUMBER N-3457  
 PART OF THE TROY HILL CORPORATE CENTER PHASE IIIB, PARCELS A-21 & A-22  
 6450 MANSION LANE  
 3rd ELECTION DISTRICT

SCALE: 1"=50'  
 SHEET 2 OF 10

2:10/0022-Troy Park Phase I Site Plan/Design/CA/14-4694-D.dwg 1:23:23 2018 03:47pm e.m.




2:10:0022-Troy Park Phase I Site Plan (Dwg) A-21 - Master Engineer: P:\proj\dwg\layout - Jan 22, 2013 09:48:01 a.m.

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
*Thomas J. Butler* 2/21/13  
 BUREAU OF ENGINEERING, CHIEF DATE  
*William C. Green* 2/11/13  
 BUREAU OF UTILITIES, CHIEF DATE

DEPARTMENT OF PLANNING & ZONING  
 HOWARD COUNTY, MARYLAND  
*Chad Edwards* 2-20-13  
 DEVELOPMENT ENGINEERING DIVISION, CHIEF DATE M.G.

  
**SITE RESOURCES**  
 Comprehensive Land Planning & Site Design Services  
 14145 Ardenville Pike • Poolesville, Maryland 21131  
 (410) 883-3300 • fax (410) 883-3309

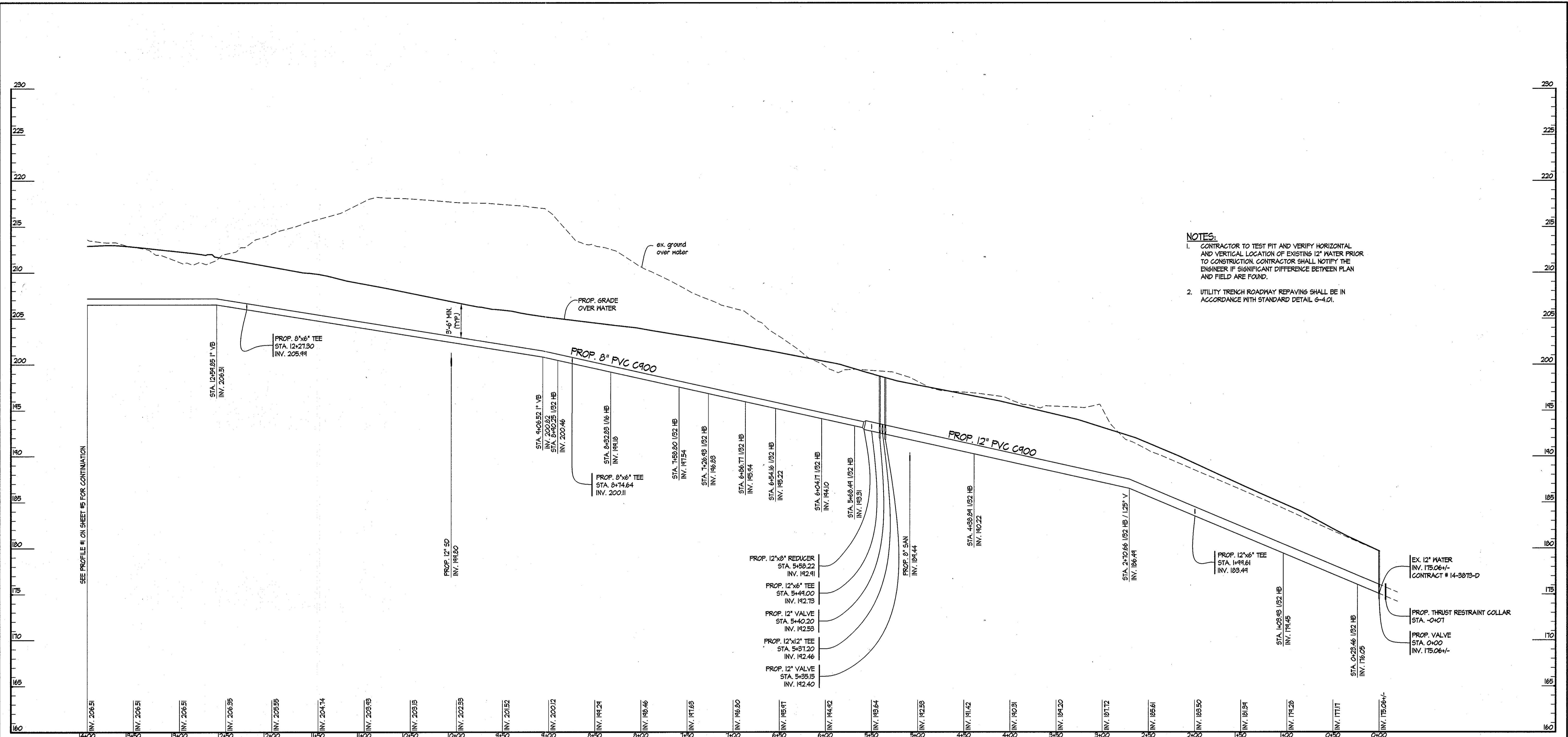
  
 THOMAS J. BUTLER  
 PROFESSIONAL ENGINEER  
 LICENSE NO. 122193  
 EXPIRES 12/31/2013

DES: KPR	SRI 1	REVISE EXISTING & PROPOSED WATER	8/27/13
DRN: AM	SRI 3	ADD WAC & SHC FOR PAVILIONS	1/23/14
CHK: AFE			
DATE: 01/22/13	BY NO.	REVISION	DATE

**WATER AND SEWER PLAN**  
 TAX MAP NO. 31 BLOCK NO. 16

TROY PARK - PHASE I  
 WATER & SEWER EXTENSION  
 HOWARD COUNTY, MARYLAND  
 DEPARTMENT OF PUBLIC WORKS  
 CONTRACT NO. 14-4694-D  
 CAPITAL PROJECT NUMBER N-3957  
 PART OF THE TROY HILL CORPORATE CENTER PHASE IIB, PARCELS A-21 & A-22  
 6450 MANSION LANE  
 3rd ELECTION DISTRICT

SCALE: 1" = 50'  
 SHEET 3 OF 10



**NOTES:**

- CONTRACTOR TO TEST PIT AND VERIFY HORIZONTAL AND VERTICAL LOCATION OF EXISTING 12" WATER PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER IF SIGNIFICANT DIFFERENCE BETWEEN PLAN AND FIELD ARE FOUND.
- UTILITY TRENCH ROADWAY REPAVING SHALL BE IN ACCORDANCE WITH STANDARD DETAIL 6-4.01.

W-1 STA. 0+00 TO 14+00

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

2:\10\0222-Troy Park Phase I Site Plan\DWG\01-Water Profiles.dwg - Layout Jan 22, 2013 01:18pm a.m.

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
*Momas & Butler 2/21/13*  
BUREAU OF ENGINEERING, CHIEF  
*Silva C. Genn 2/1/13*  
BUREAU OF UTILITIES, CHIEF

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND  
*Chief Edwards 2/20/13*  
DEVELOPMENT ENGINEERING DIVISION, CHIEF

**SITE RESOURCES**  
INCORPORATED  
Comprehensive Land Planning & Site Design Services  
14315 Ardmoreville Pike • Phoenix, Maryland 21151  
(410) 883-3388 • Fax (410) 883-3382

DES: KFR				
DRN: AM				
CHK: AFE				
DATE: 01/22/13	BY	NO.	REVISION	DATE

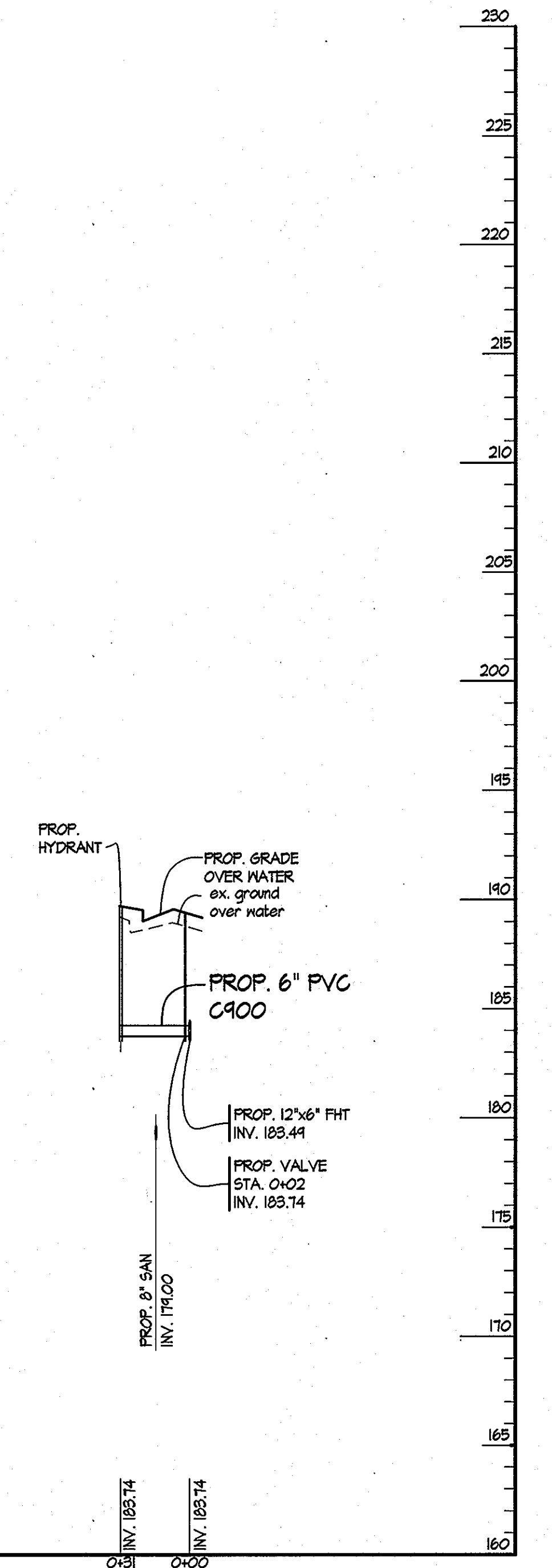
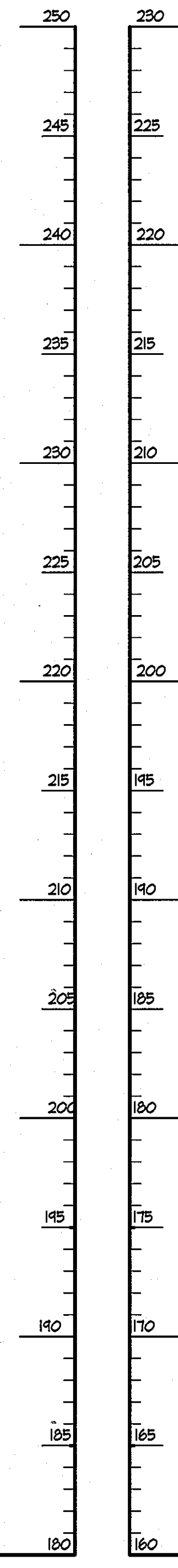
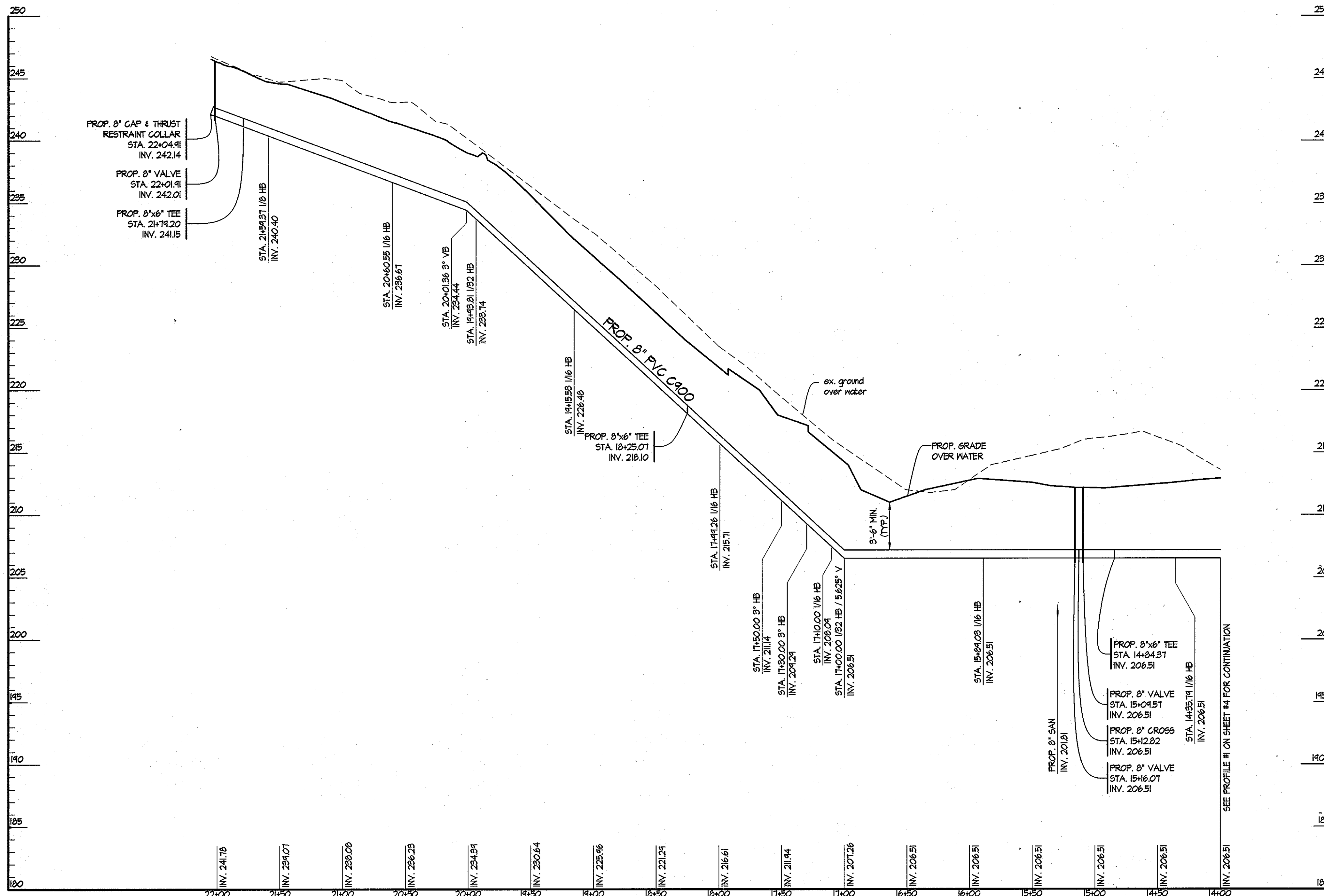
**WATER PROFILES**

TAX MAP NO. 37 BLOCK NO. 16

TROY PARK - PHASE I  
WATER & SEWER EXTENSION  
HOWARD COUNTY, MARYLAND  
DEPARTMENT OF PUBLIC WORKS  
CONTRACT NO. 14-4694-D  
CAPITAL PROJECT NUMBER N-3957  
PART OF THE TROY HILL CORPORATE CENTER PHASE IIIB, PARCELS A-21 & A-22  
6450 MANSION LANE  
3rd ELECTION DISTRICT

SCALE: AS SHOWN  
SHEET 4 OF 10

SDP-11-003



① W-1 STA. 14+00 TO 22+04.91

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

② W-2 STA. 0+00 TO 0+31

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

③ W-3 STA. 0+00 TO 0+35

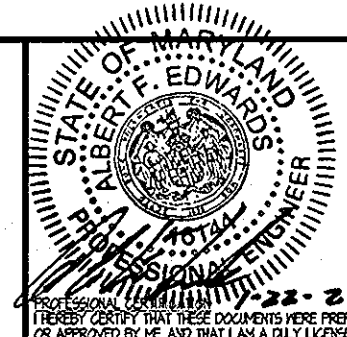
SCALES: HORIZ. 1" = 50'  
VERT. 1" = 5'

Z:\10\0022-Troy\_Park\_Phase I Site Plan\DWG\02\_Plotter\_Profile.dwg - Layout - Jan 22, 2013 01:18pm a.m.

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
*Thomas E. Sullivan* 2/21/13  
BUREAU OF ENGINEERING, CHIEF  
*Silvia C. Green* 2/11/13  
BUREAU OF UTILITIES, CHIEF

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND  
*Chad Church* 2.20.13  
DEVELOPMENT ENGINEERING DIVISION, CHIEF

**SITE RESOURCES**  
INCORPORATED  
Comprehensive Land Planning & Site Design Services  
4315 Ardmoreville Pike • Phoenix, Maryland 21151  
(410) 683-3388 • Fax (410) 683-3389



DES: KFR			
DRN: AM			
CHK: AFE			
DATE: 01/22/13			
BY	NO.	REVISION	DATE

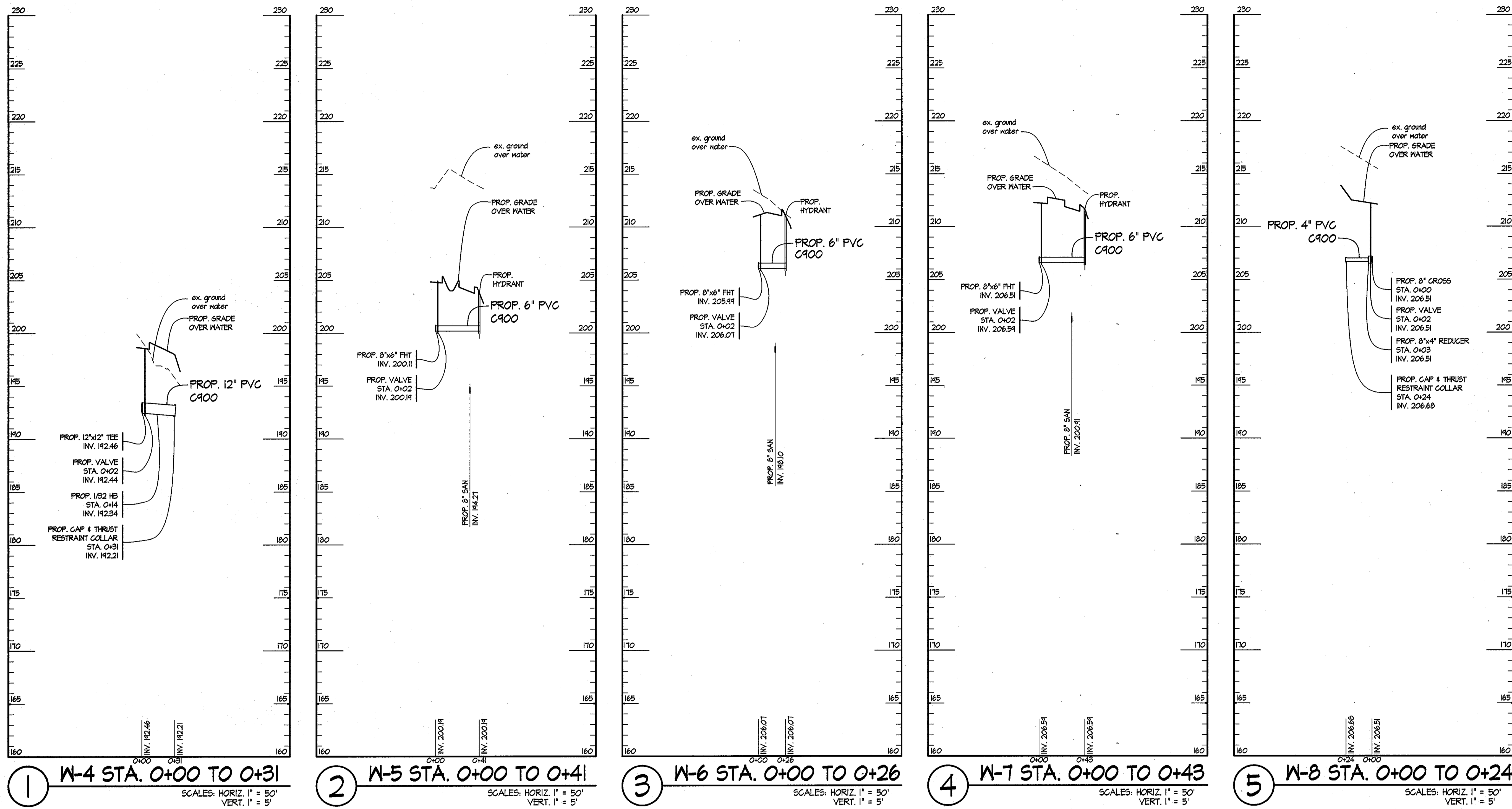
**WATER PROFILES**

TAX MAP NO. 31      BLOCK NO. 16

TROY PARK - PHASE I  
WATER & SEWER EXTENSION  
HOWARD COUNTY, MARYLAND  
DEPARTMENT OF PUBLIC WORKS  
CONTRACT NO. 14-4694-D  
CAPITAL PROJECT NUMBER N-3957  
PART OF THE TROY HILL CORPORATE CENTER PHASE III, PARCELS A-21 & A-22  
6450 MANSION LANE  
3rd ELECTION DISTRICT

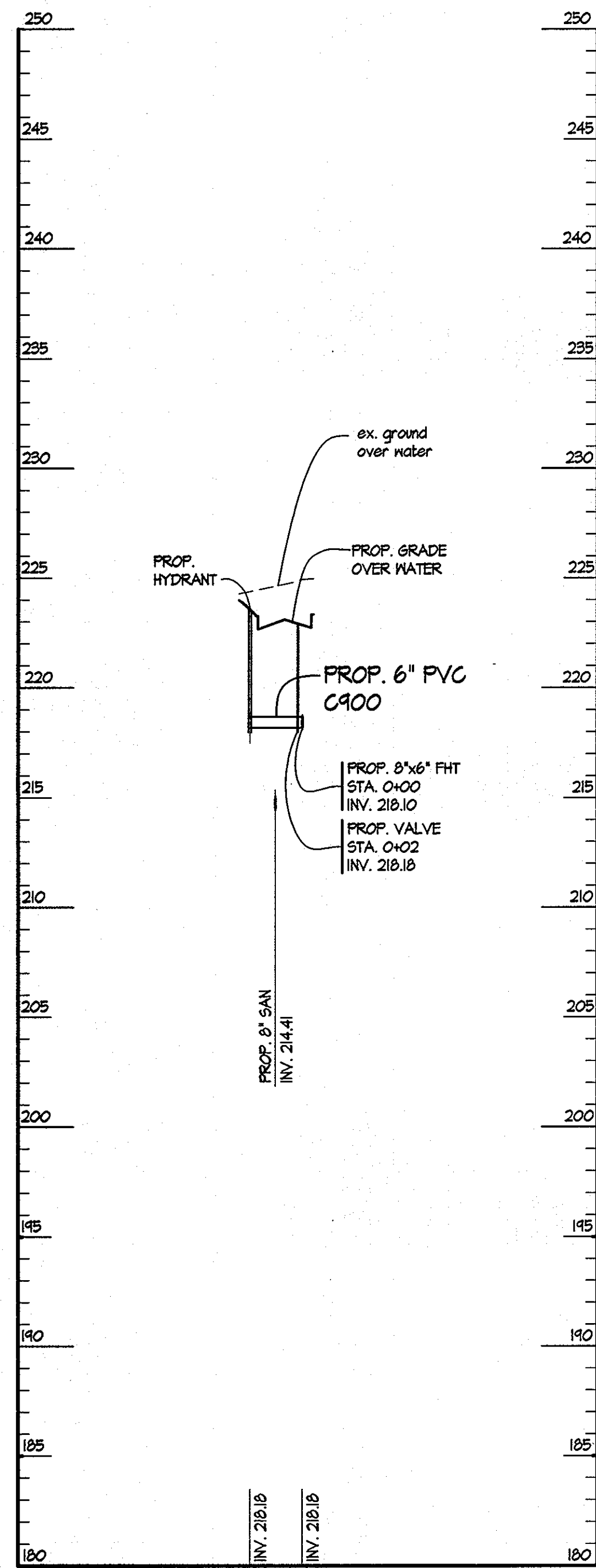
SCALE:  
AS SHOWN

SHEET  
5 OF 10

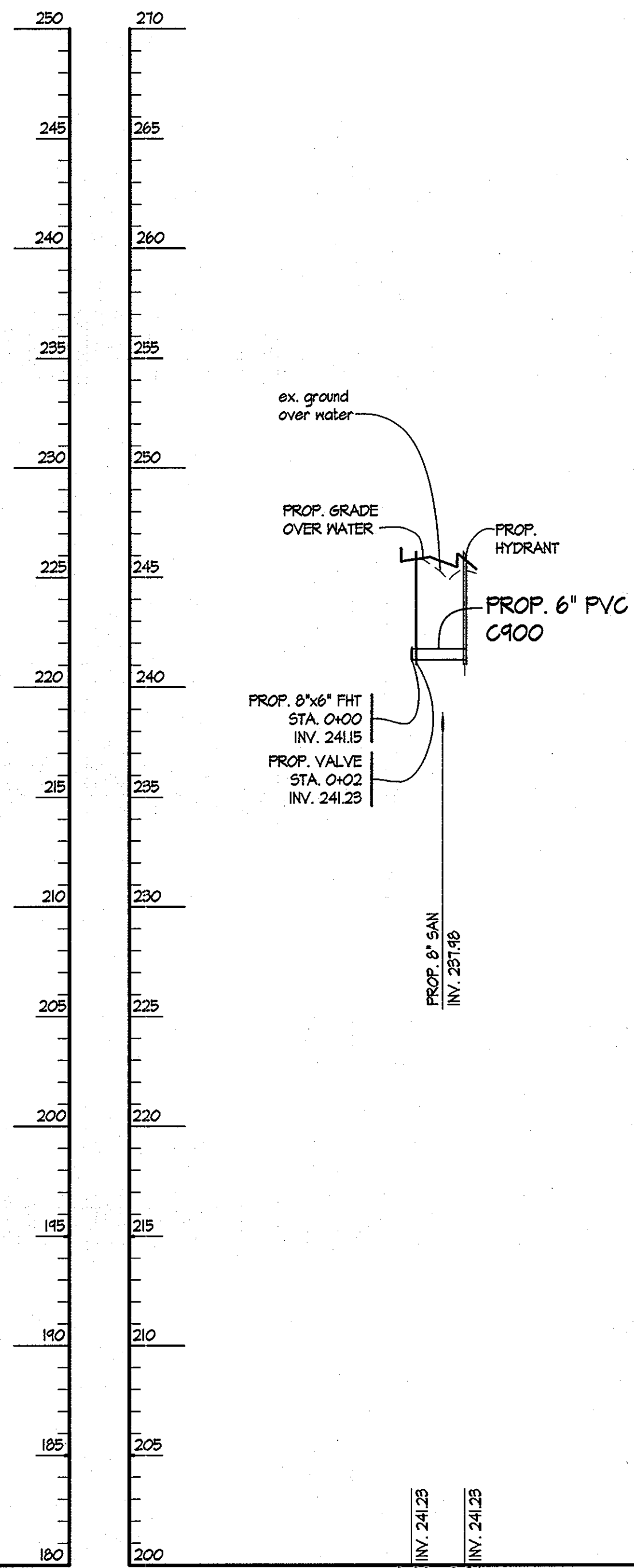


Z:\10\0222-Troy Park Phase I Site Plan\DWG\03\_Plotter\_Profile.dwg-Layout Jan 22, 2013 01:17pm a.m.

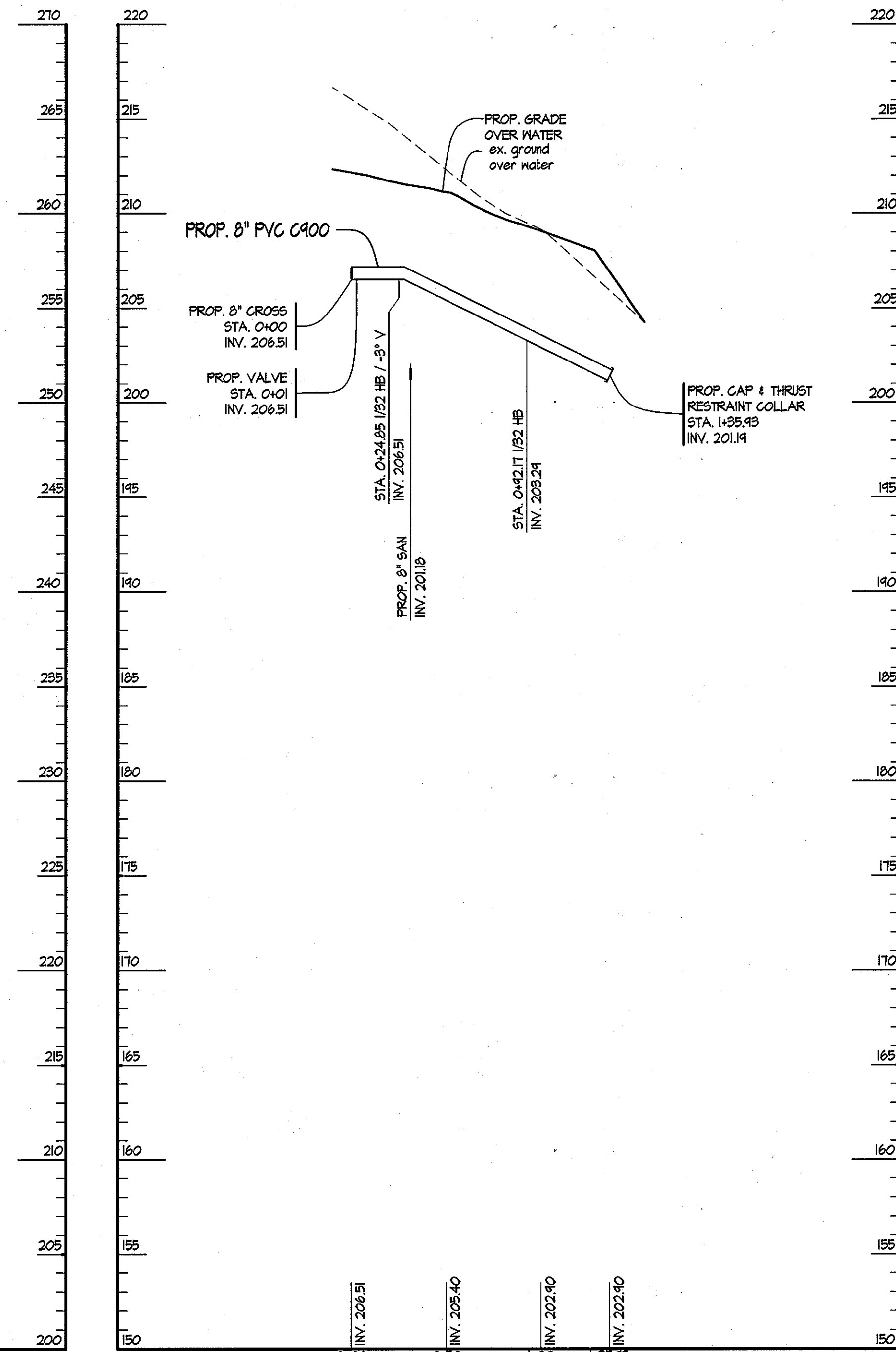
<p>DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND</p> <p><i>Mona E. Suttler</i> 2/26/13 BUREAU OF ENGINEERING, CHIEF DATE</p> <p><i>Shirley Cream</i> 2/1/13 BUREAU OF UTILITIES, CHIEF DATE</p>	<p>DEPARTMENT OF PLANNING &amp; ZONING HOWARD COUNTY, MARYLAND</p> <p><i>Chad Edmund</i> 2.20.13 DEVELOPMENT ENGINEERING DIVISION, CHIEF DATE M.C.</p>	<p><b>SITE RESOURCES</b> INCORPORATED Comprehensive Land Planning &amp; Site Design Services 14315 Arundelville Pike • Poolesville, Maryland 21130 (410) 683-3388 • fax (410) 683-3382</p>		<p>DES: KFR DRN: AM CHK: AFE DATE: 01/22/13</p>	<p><b>WATER PROFILES</b></p>	<p>TROY PARK - PHASE I WATER &amp; SEWER EXTENSION HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS CONTRACT NO. 14-4694-D CAPITAL PROJECT NUMBER N-3957 PART OF THE TROY HILL CORPORATE CENTER PHASE III B, PARCELS A-21 &amp; A-22 6450 MANSION LANE 3rd ELECTION DISTRICT</p>	<p>SCALE: AS SHOWN</p> <p>SHEET 6 OF 10</p>								
				<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>BY</th> <th>NO.</th> <th>REVISION</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	BY	NO.	REVISION	DATE					<p>TAX MAP NO. 37      BLOCK NO. 16</p>		
BY	NO.	REVISION	DATE												



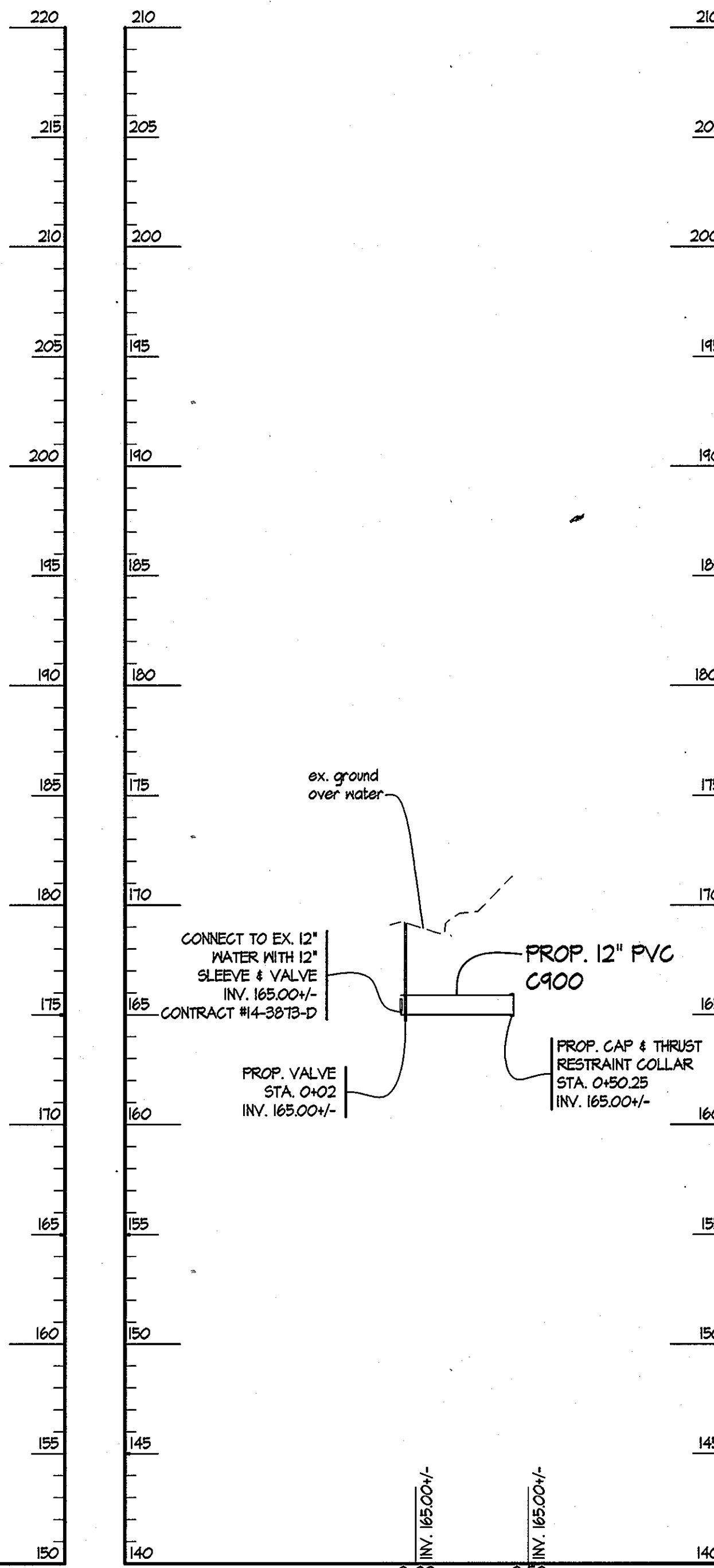
① N-9 STA. 0+00 TO 0+24  
 SCALES: HORIZ. 1" = 50'  
 VERT. 1" = 5'



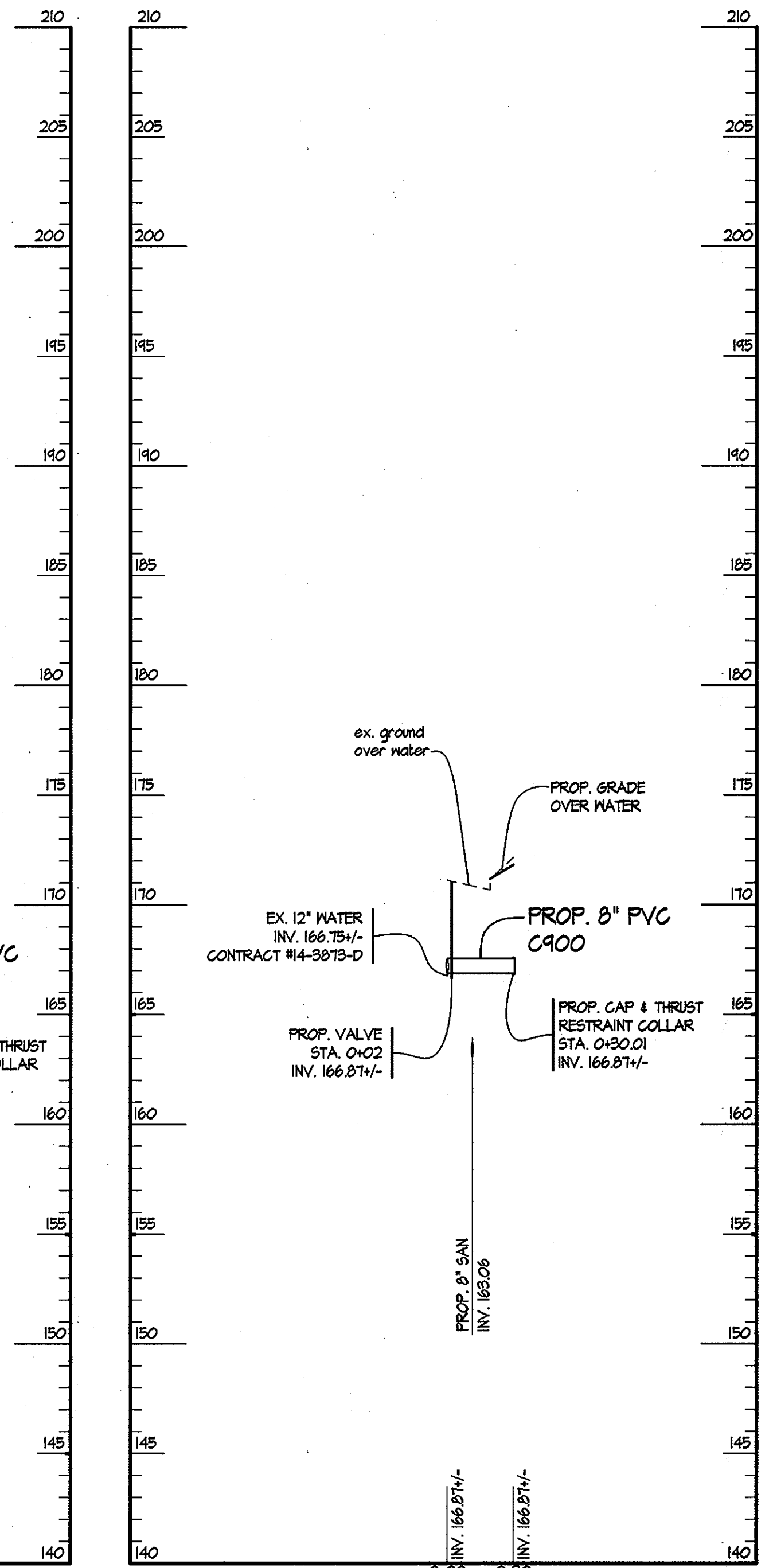
② N-10 STA. 0+00 TO 0+24  
 SCALES: HORIZ. 1" = 50'  
 VERT. 1" = 5'



③ N-11 STA. 0+00 TO 1+35.93  
 SCALES: HORIZ. 1" = 50'  
 VERT. 1" = 5'



④ N-12 STA. 0+00 TO 0+50  
 SCALES: HORIZ. 1" = 50'  
 VERT. 1" = 5'



⑤ N-13 STA. 0+00 TO 0+30  
 SCALES: HORIZ. 1" = 50'  
 VERT. 1" = 5'

Z:\10\0222-Troy Park Phase I 58a Plan\DWG\N-01-Water\_Profiles.dwg - Layout - Sun, 22, 2013, 01:17pm, o.m

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
*Thomas E. Suttler* 2/21/13  
 BUREAU OF ENGINEERING, CHIEF DATE  
*Shane C. ...* 2/11/13  
 BUREAU OF UTILITIES, CHIEF DATE

DEPARTMENT OF PLANNING & ZONING  
 HOWARD COUNTY, MARYLAND  
*Paul Edwards* 2-20-13  
 DEVELOPMENT ENGINEERING DIVISION, CHIEF DATE

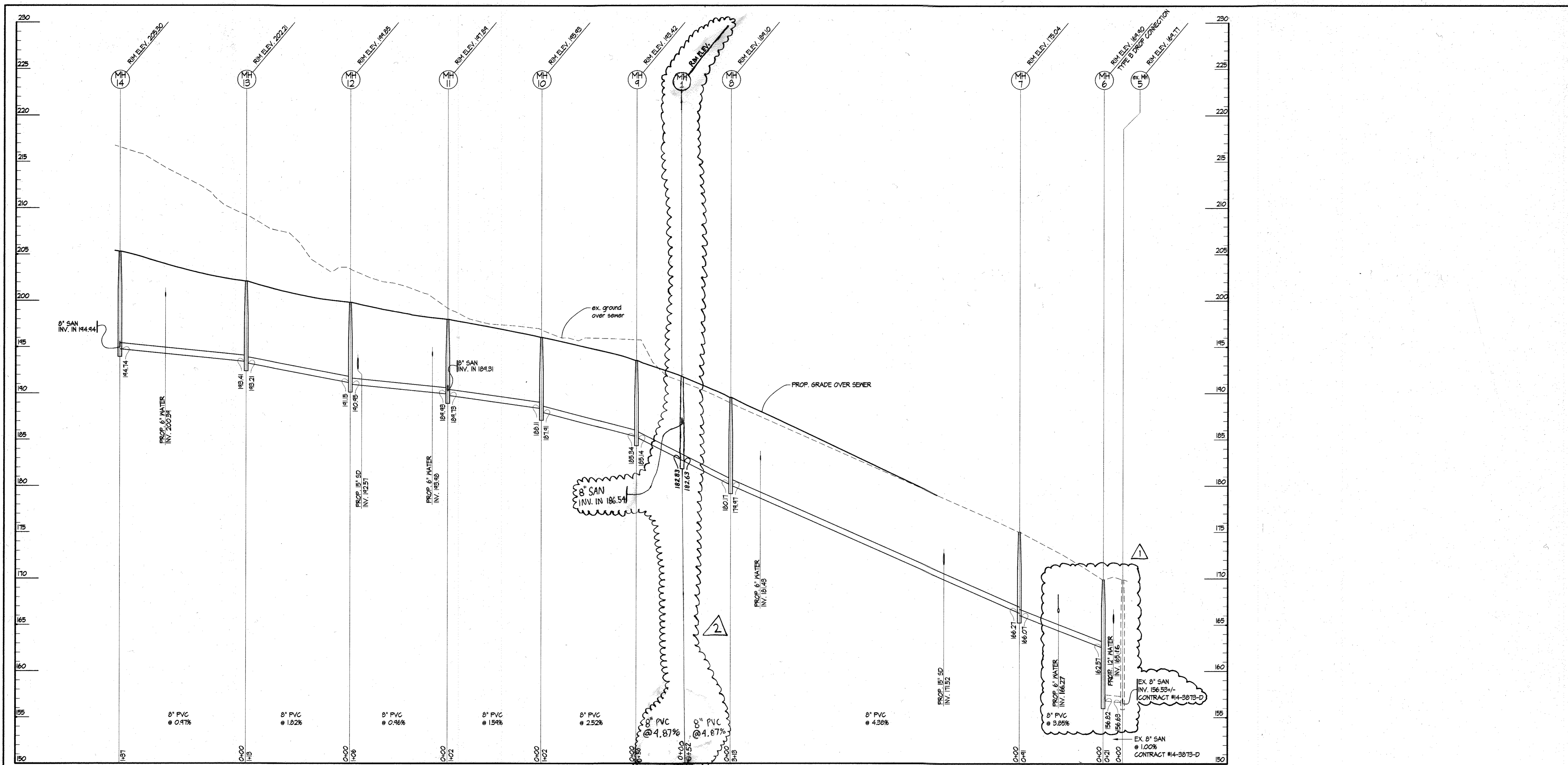
**SITE RESOURCES**  
 INCORPORATED  
 Comprehensive Land Planning & Site Design Services  
 14315 Annapolis Pike • Poolesville, Maryland 21151  
 (410) 833-3338 • Fax (410) 833-3332  
 PROFESSIONAL ENGINEERING LICENSE # 2-2013

DES:	KFR				
DRN:	AM				
CHK:	AFE				
DATE:	01/22/13				
BY:	NO.				
REVISION:					
DATE:					

TAX MAP NO. 37 BLOCK NO. 16

TROY PARK - PHASE I  
 WATER & SEWER EXTENSION  
 HOWARD COUNTY, MARYLAND  
 DEPARTMENT OF PUBLIC WORKS  
 CONTRACT NO. 14-4694-D  
 CAPITAL PROJECT NUMBER N-3957  
 PART OF THE TROY HILL CORPORATE CENTER PHASE IIIB, PARCELS A-21 & A-22  
 6450 MANSION LANE  
 3rd ELECTION DISTRICT

SCALE: AS SHOWN  
 SHEET 7 OF 10



1 MH-14 TO ex. MH-5


SCALE: HORIZ. 1" = 50'  
VERT. 1" = 5'

I:\01\0202-2013\Proj\Drawings\1414\_Sewer\_Profile\1414\_Sewer\_Profile.dwg - 2/22/2013 10:17am - 0.1m

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
*Thomas J. Suttler* 2/23/13  
 BUREAU OF ENGINEERING, CHIEF DATE

*Steve Clemon* 2/11/13  
 BUREAU OF UTILITIES, CHIEF DATE

DEPARTMENT OF PLANNING & ZONING  
 HOWARD COUNTY, MARYLAND  
*Chad Edwards*  
 DEVELOPMENT ENGINEERING DIVISION, CHIEF DATE M.G.

  
**SITE RESOURCES**  
 INCORPORATED  
 Comprehensive Land Planning & Site Design Services  
 1415 Annapolis Pike • Poolesville, Maryland 21131  
 (410) 851-3300 • Fax (410) 851-3300

DES: KFR	SRI 1	REVISE EXISTING & PROPOSED WATER	8/27/13
DRN: AM	SRI 2	ADD MANHOLE 1	3/24/11
CHK: AFE			
DATE: 01/22/13	BY NO.	REVISION	DATE

SEWER PROFILES

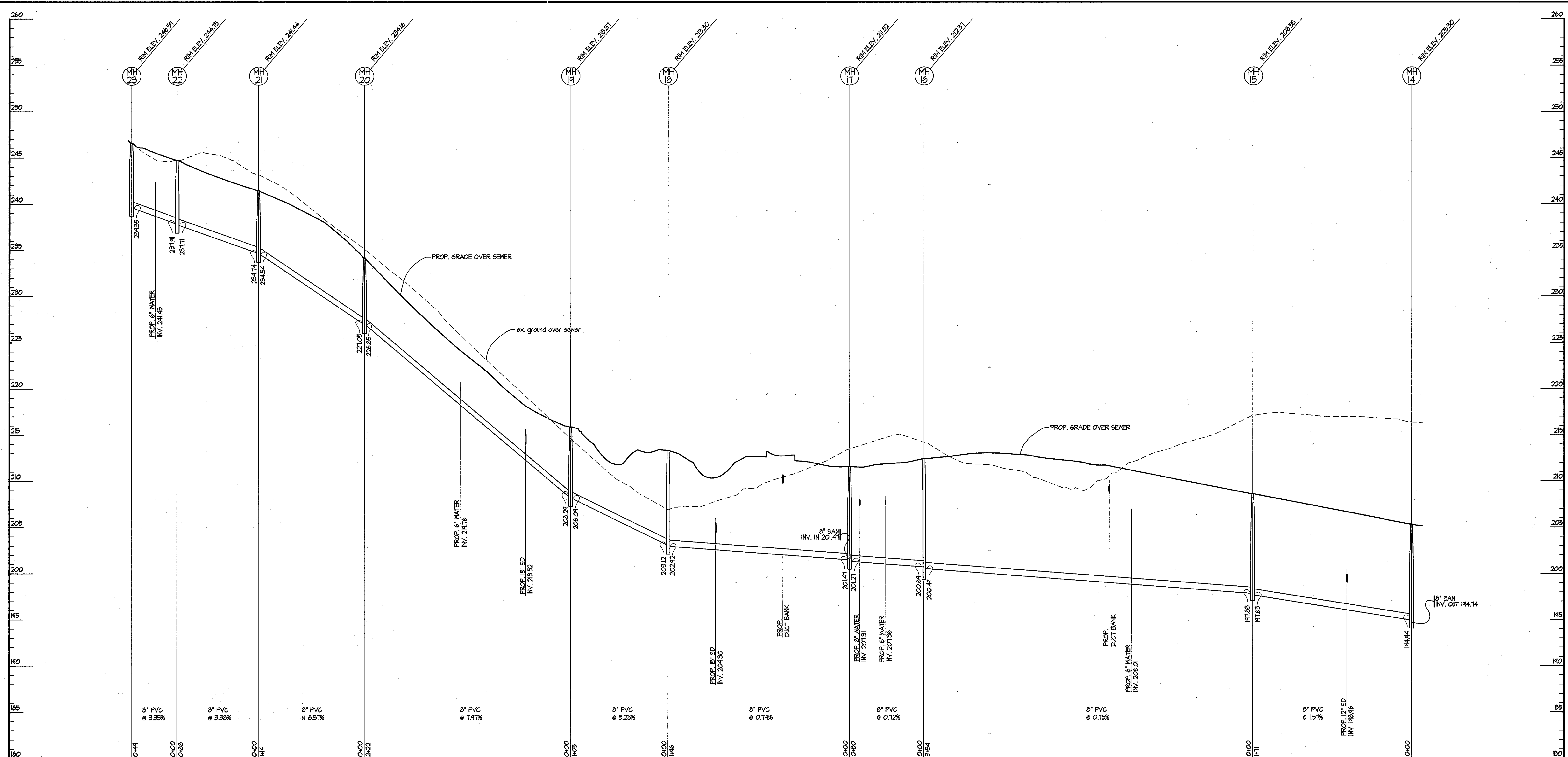
TAX MAP NO. 37 BLOCK NO. 16

TROY PARK - PHASE I  
 WATER & SEWER EXTENSION  
 HOWARD COUNTY, MARYLAND  
 DEPARTMENT OF PUBLIC WORKS  
 CONTRACT NO. 14-4694-D  
 CAPITAL PROJECT NUMBER N-3451  
 PART OF THE TROY HILL CORPORATE CENTER PHASE III, PARCELS A-21 & A-22  
 6450 MANSION LANE  
 3rd ELECTION DISTRICT

SCALE: AS SHOWN

SHEET 8 OF 10





1 MH-22 TO MH-14

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

Z:\100022-1\roy\_pos\Profile 1 Site Plan\DWG\12\_Sewer\_Profiles.dwg, Layout, Jan 22, 2013 01:11pm, e.m

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
*Thomas J. Smith* 2/2/13  
BUREAU OF ENGINEERING, CHIEF DATE  
*Silvia Chuan* 2/1/13  
BUREAU OF UTILITIES, CHIEF DATE

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND  
*Chad Church* 2/20/13  
DEVELOPMENT ENGINEERING DIVISION, CHIEF DATE M.G.

**SITE RESOURCES**  
INCORPORATED  
Comprehensive Land Planning & Site Design Services  
14315 Ardmoreville Pike • Phoenix, Maryland 21131  
(410) 683-3388 • fax (410) 683-3389



DES: KFR					
DRN: AM					
CHK: AFE					
DATE: 01/22/13	BY	NO.	REVISION	DATE	

**SEWER PROFILES**

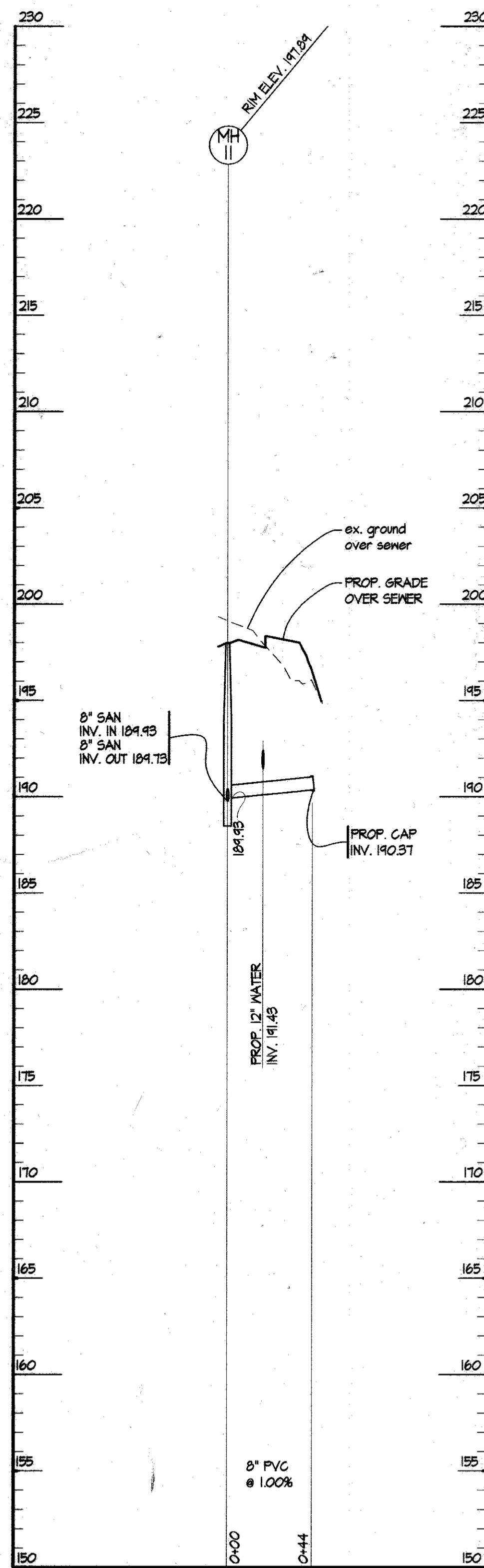
TAX MAP NO. 37 BLOCK NO. 16

TROY PARK - PHASE I  
WATER & SEWER EXTENSION  
HOWARD COUNTY, MARYLAND  
DEPARTMENT OF PUBLIC WORKS  
CONTRACT NO. 14-4694-D  
CAPITAL PROJECT NUMBER N-3957  
PART OF THE TROY HILL CORPORATE CENTER PHASE IIIB, PARCELS A-21 & A-22  
6450 MANSION LANE  
3rd ELECTION DISTRICT

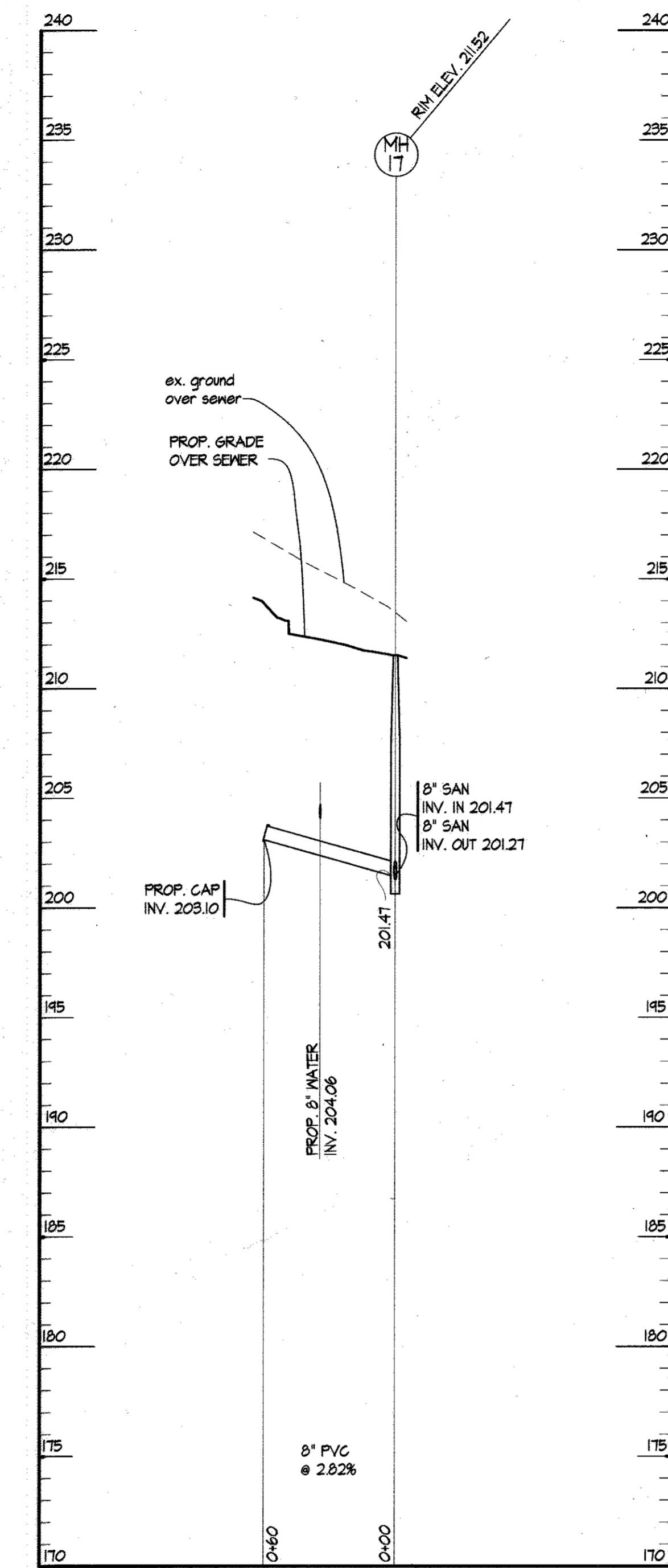
SCALE: AS SHOWN  
SHEET 9 OF 10

**SEWER STRUCTURE TABLE**

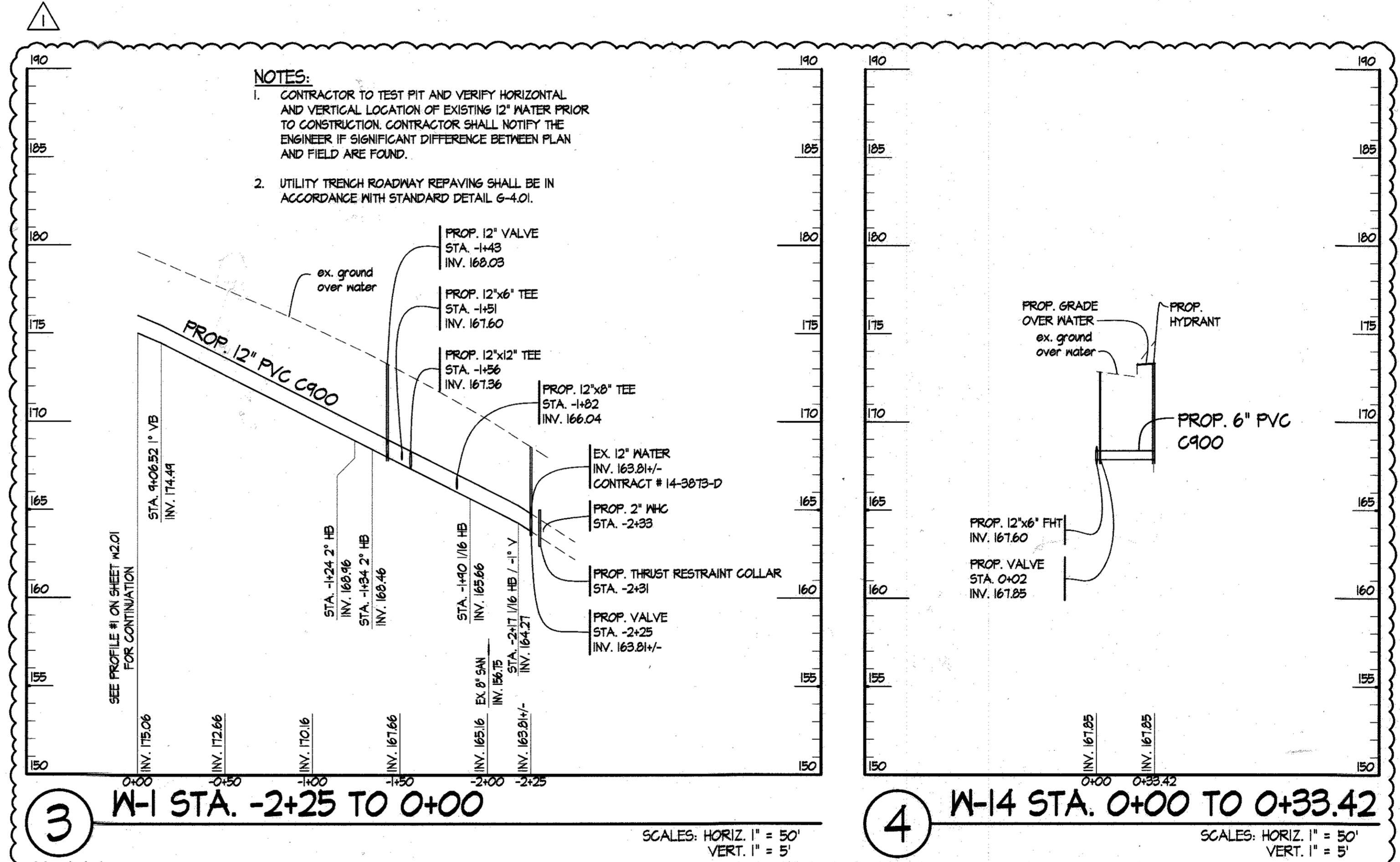
STRUCTURE	NORTHINGS	EASTING	DESCRIPTION	NOTES
MH-6	556474.36	1381432.12	HO. CO. STD. DETAIL 6-512	TYPE B DROP MANHOLE DETAIL 5-1.32
MH-7	556448.58	1381546.74	HO. CO. STD. DETAIL 6-512	
MH-8	556375.91	1381043.00	HO. CO. STD. DETAIL 6-512	
MH-9	556335.40	1380948.09	HO. CO. STD. DETAIL 6-512	
MH-10	556288.93	1380856.30	HO. CO. STD. DETAIL 6-512	
MH-11	556232.94	1380771.41	HO. CO. STD. DETAIL 6-512	
MH-12	556185.42	1380672.52	HO. CO. STD. DETAIL 6-512	
MH-13	556207.35	1380560.35	HO. CO. STD. DETAIL 6-512	
MH-14	556223.17	1380446.65	HO. CO. STD. DETAIL 6-512	
MH-15	556436.51	1380310.39	HO. CO. STD. DETAIL 6-512	
MH-16	556753.77	1380212.61	HO. CO. STD. DETAIL 6-512	
MH-17	556817.23	1380164.40	HO. CO. STD. DETAIL 6-512	
MH-18	556912.46	1380046.11	HO. CO. STD. DETAIL 6-512	
MH-19	556912.64	1379960.16	HO. CO. STD. DETAIL 6-512	
MH-20	556785.01	1379778.30	HO. CO. STD. DETAIL 6-512	
MH-21	556763.45	1379666.36	HO. CO. STD. DETAIL 6-512	
MH-22	556787.50	1379582.07	HO. CO. STD. DETAIL 6-512	
MH-23	556827.94	1379554.46	HO. CO. STD. DETAIL 6-512	
MH-1	556349.77	1380177.61	HO. CO. STD. DETAIL 6-514	TYPE A DROP MANHOLE 5-1.32



**1 STUB TO MH-II**  
 SCALES: HORIZ. 1" = 50'  
 VERT. 1" = 5'



**2 STUB TO MH-17**  
 SCALES: HORIZ. 1" = 50'  
 VERT. 1" = 5'



**3 N-1 STA. -2+25 TO 0+00**      SCALES: HORIZ. 1" = 50'  
 VERT. 1" = 5'

**4 N-14 STA. 0+00 TO 0+33.42**      SCALES: HORIZ. 1" = 50'  
 VERT. 1" = 5'

- NOTES:**
- CONTRACTOR TO TEST PIT AND VERIFY HORIZONTAL AND VERTICAL LOCATION OF EXISTING 12" WATER PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER IF SIGNIFICANT DIFFERENCE BETWEEN PLAN AND FIELD ARE FOUND.
  - UTILITY TRENCH ROADWAY REPAVING SHALL BE IN ACCORDANCE WITH STANDARD DETAIL 6-4.01.

2:10:0022-Troy Park Phase I Site Plan/Utility/3. Sewer - Profiles.dwg-Layout Jan 22, 2013 01:17pm a.m.

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>Thomas R. Smith</i> 2/25/13 BUREAU OF ENGINEERING, CHIEF <i>Silvia Chan</i> 2/1/13 BUREAU OF UTILITIES, CHIEF	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND <i>Chad Edwards</i> 2/20/13 DEVELOPMENT ENGINEERING DIVISION, CHIEF	SITE RESOURCES Incorporated Comprehensive Land Planning & Site Design Services 14315 Invertooth Pike • Pikesville, Maryland 21115 (410) 663-3388 • Fax (410) 663-3388	DES: KFR SRI 1 REVISE EXISTING & PROPOSED WATER 8/27/13 SRI 2 ADD MANHOLE 1 3/24/17 DRN: AM CHK: AFE DATE: 01/22/13	WATER AND SEWER PROFILES TROY PARK - PHASE I WATER & SEWER EXTENSION HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS CONTRACT NO. 14-4644-D CAPITAL PROJECT NUMBER N-3457 PART OF THE TROY HILL CORPORATE CENTER PHASE IIIIB, PARCELS A-21 & A-22 6450 MANSION LANE 3rd ELECTION DISTRICT	SCALE: AS SHOWN SHEET 10 OF 10
--	--	---	--	---	---