

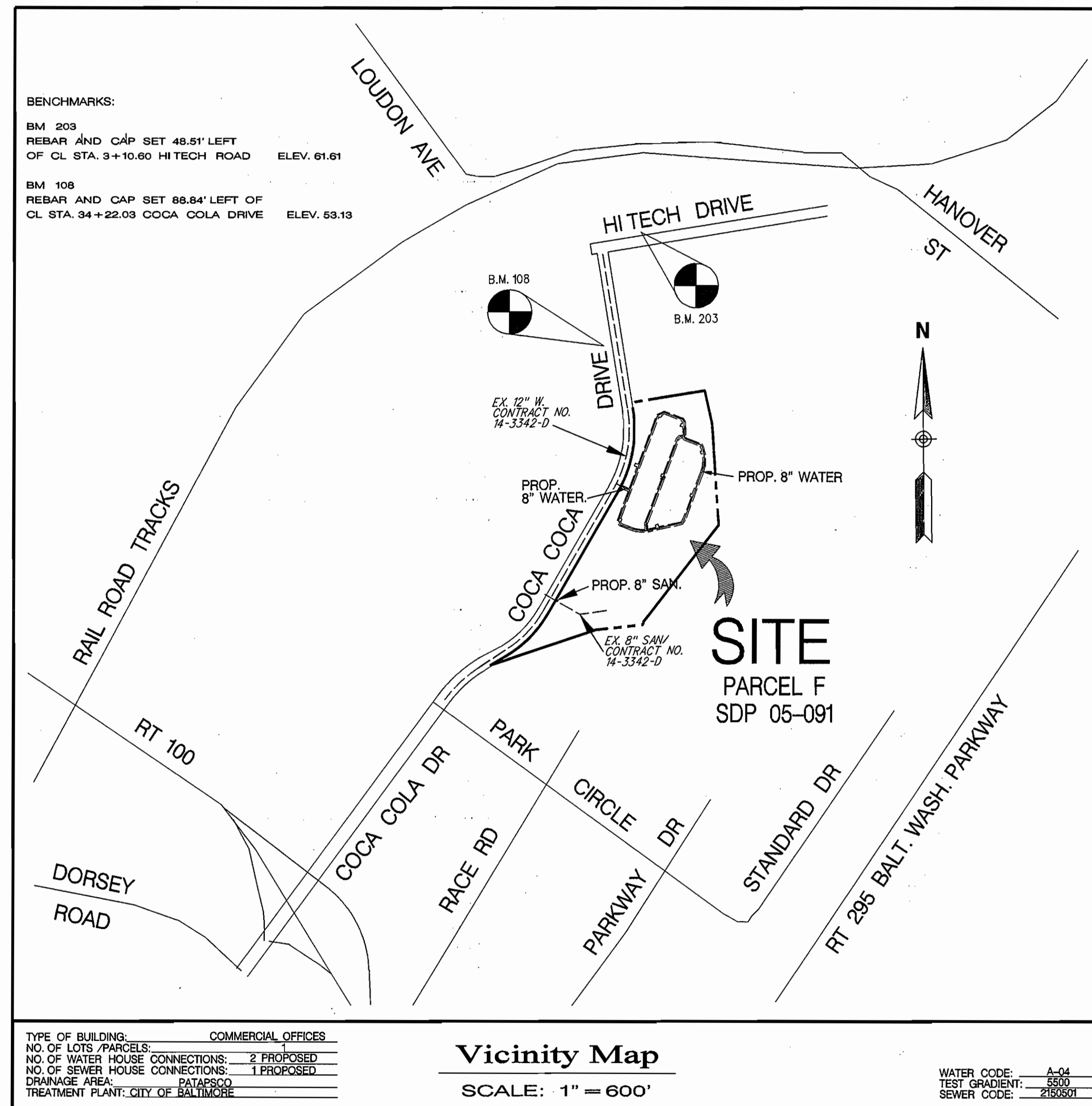
Contract No. 14-4283-D

PROPOSED FACILITIES FOR Parcel F Patapsco Valley Business Center

PUBLIC WATER & SEWER CONSTRUCTION PLANS
Howard County, Maryland Department of Public Works

QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
8" P.V.C. SANITARY SEWER	10 LF	10 L.F.	SDR 26	J.M. MFG / BRS
TYPE "B" DROP CONNECTION	1	1	SDR 26	J.M. MFG / BRS
6" D.I.P. WATER MAIN	127 LF	127	CL-52	GRIFFIN PIPE / BRS
8" D.I.P. WATER MAIN	3312 LF	3312	CL-52	GRIFFIN PIPE / BRS
6" VALVE & ROADWAY BOX	8	8	GATEVAL.	MUELLER CO / BRS
8" VALVE & ROADWAY BOX	8	8		MUELLER CO / BRS
8" X 6" TEE	8	8	DIP	U.S. PIPE / BRS
8" X 8" TEE	5	5	DIP	U.S. PIPE / BRS
6" FIRE HYDRANT	9	9	MUELLER	MUELLER CO / BRS
12"x8" TAPPING SLEEVE & VALVE	1	1	SS-TAP/VALVE	JCM / MUELLER / BRS
8"-1/8" HORZ. BEND	9	9	D1 350	U.S. PIPE / BRS
8"-1/16" HORZ. BEND	4	4	D1 350	U.S. PIPE / BRS
8"-1/32" HORZ. BEND	1	1	D1 350	U.S. PIPE / BRS
12" SLEEVE AND SPACER	1	0		
12"x8" REDUCER	1	0		

NAME OF UTILITY CONTRACTOR: C.T.G. Inc.
SURVEY AND DRAFTING DIVISION 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 field surveys were performed on by DuVal and Associates, P.A. in October 2004.
 - Horizontal and Vertical Survey Controls:
 The coordinate information shown on the drawings are based on Maryland State Reference System NAD'83/91. All vertical controls provided on the drawings based on Howard County Control BM 108 & 203.
 - 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 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 material 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 include 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:
 ATT 1-800-252-1133
 BGE (Construction Services) 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 410-531-6533
 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 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 DPW requirements per Section 16.1 14(a) of the Howard County Code.
- Part II WATER**
- All water mains shall be DIP Class 52 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.
- Part III SEWER**
- All water mains shall be DIP or PVC unless otherwise noted.
 - All manholes shall be 4'-0" inside diameter unless otherwise noted.
 - Force mains shall be DIP only.
 - Manholes shown with 12" & 16" walls are for brick manholes only.
 - Manholes designated W.T. in plan and profile shall have watertight frame & cover, Standard Detail 05-52. Where watertight manhole frames & 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.

SDP 05-091
 REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT

 SIGNATURE: John R. Robertson DATE: 5/4/05
 U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY CONSERVATION DISTRICT.
 APPROVED:
 HOWARD C.D. DATE: 5/4/05

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND SITE DEVELOPMENT PLAN SDP 05-091

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

 CHIEF - BUREAU OF UTILITIES - DATE: 5/9/05

DEPARTMENT OF PLANNING & ZONING
 HOWARD COUNTY, MARYLAND

 CHIEF - DEVELOPMENT ENGINEERING DIVISION - DATE: 5/11/05

Matis Warfield
 consulting engineers
 10840 York Road, Suite M
 Hunt Valley, Maryland 21330
 Phone 410-883-7904
 Fax 410-883-1766
 www.matiswarfield.com



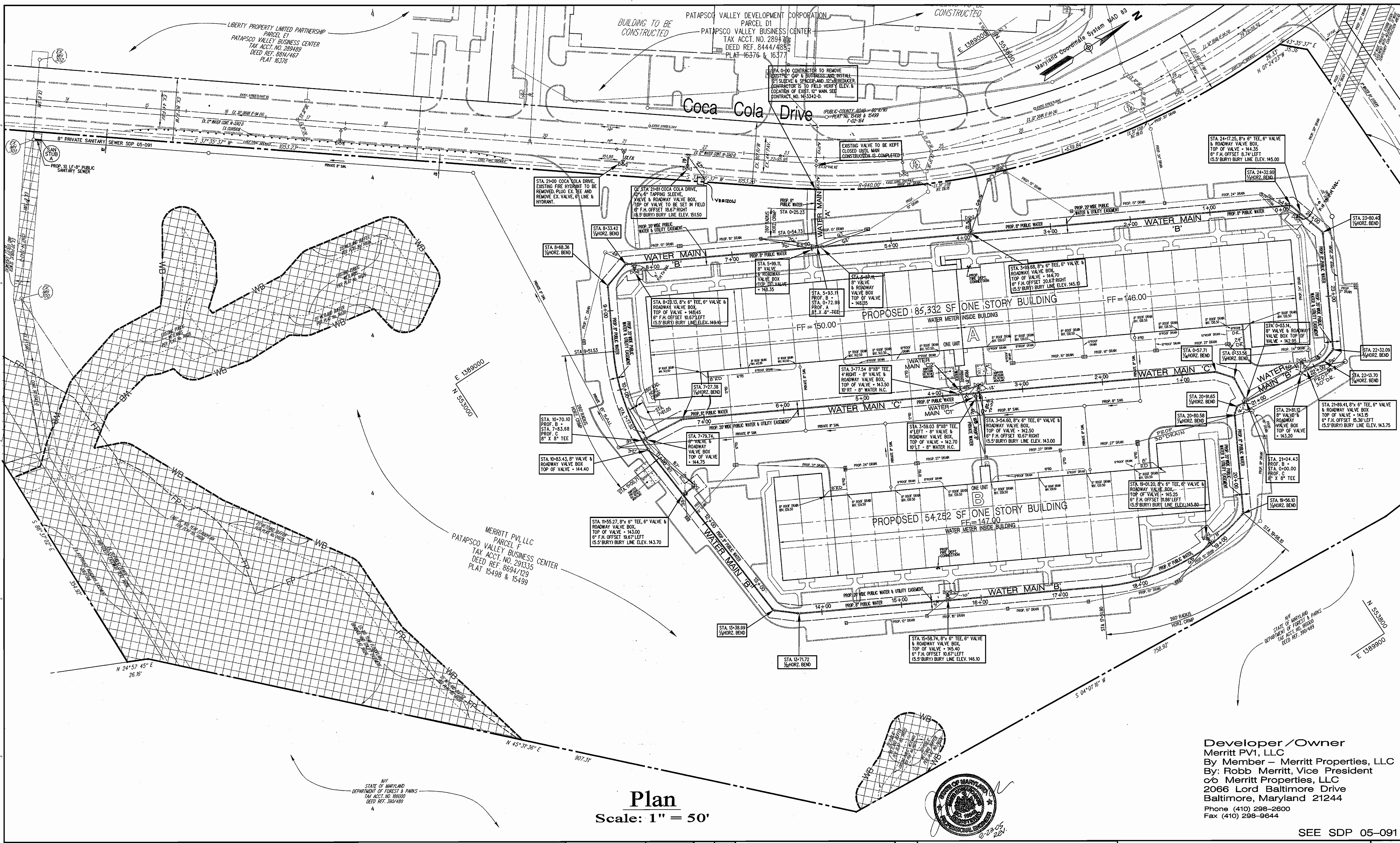
DESIGNED BY:	R.L.N.				
DRAWN BY:	A.M./R.L.N.				
CHECKED BY:	J.E.M.				
DATE:	4/7/05				
BY NO.	K.C.I. 1	AS-BUILT DATA			
REVISION					
DATE					

SHEET INDEX	
NO.	SHEET TITLE
1	COVER SHEET
2	WATER & SEWER PLAN
3	WATER & SEWER PROFILES
4	WATER PROFILES

Developer / Owner
 Merritt PV1, LLC
 By: Member - Merritt Properties, LLC
 By: Robb Merritt, Vice President
 c/o Merritt Properties, LLC
 2066 Lord Baltimore Drive
 Baltimore, Maryland 21244
 Phone (410) 298-2600
 Fax (410) 298-9644

Water & Sewer Cover Sheet
 600 SCALE MAP NO. 38 BLOCK NO. 20

PUBLIC WATER & SEWER
Proposed Water & Sewer Facilities for Parcel F Patapsco Valley Business Center
 CONTRACT NO. 14-4283-D
 1st Election District
 SCALE AS SHOWN
 SHEET 1 OF 4



Plan
Scale: 1" = 50'

Developer / Owner
Merritt PVI, LLC
By Member - Merritt Properties, LLC
By: Robb Merritt, Vice President
c/o Merritt Properties, LLC
2066 Lord Baltimore Drive
Baltimore, Maryland 21244
Phone (410) 298-2600
Fax (410) 298-9644

SEE SDP 05-091

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

R.H. B... 5-9-05
CHIEF - BUREAU OF UTILITIES - DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

[Signature] 5/17/05
CHIEF - DEVELOPMENT ENGINEERING DIVISION - DATE

Matis Warfield
consulting engineers

10540 York Road, Suite M
hunt valley, maryland 21080
phone 410-883-7004
facsimile 410-883-1708
www.matiswarfield.com



DESIGNED BY:	MWJ	1	REVISED BUILDING SIZES-ADJUSTED S.D.	8-23-05
R.L.N.				
DRAWN BY:	A.M./R.L.N.			
CHECKED BY:	J.E.M.			
DATE:	KCI	1	ASBUILT DATA	4/19/06
4/7/06	BY	NO.	REVISION	DATE

Water & Sewer Plan

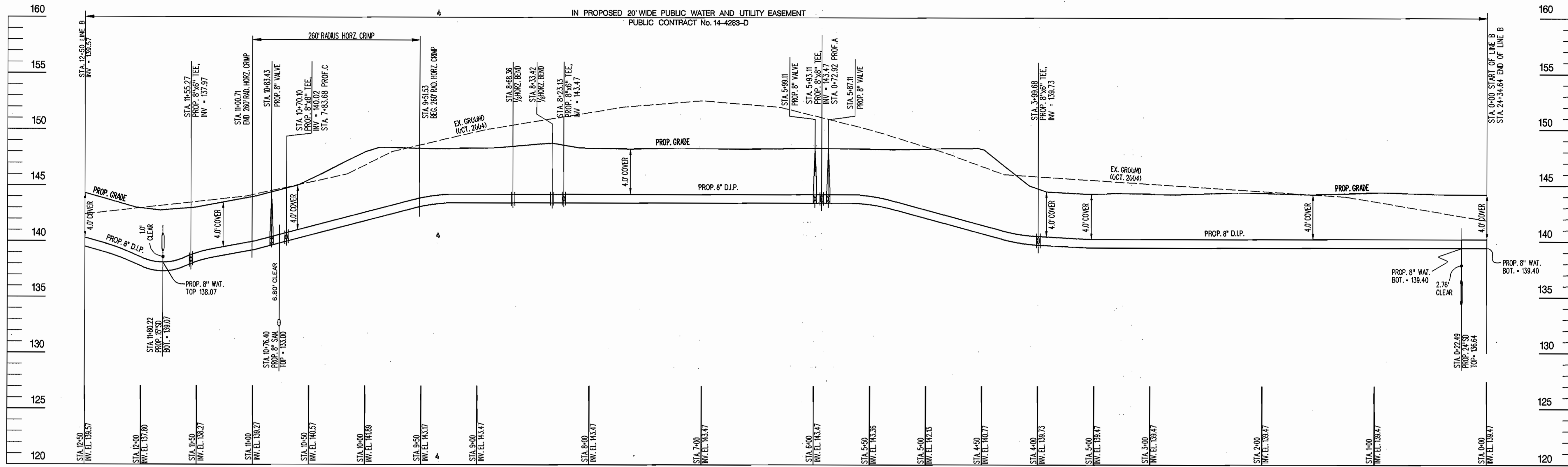
600 SCALE MAP NO. 38 BLOCK NO. 20

PUBLIC WATER & SEWER

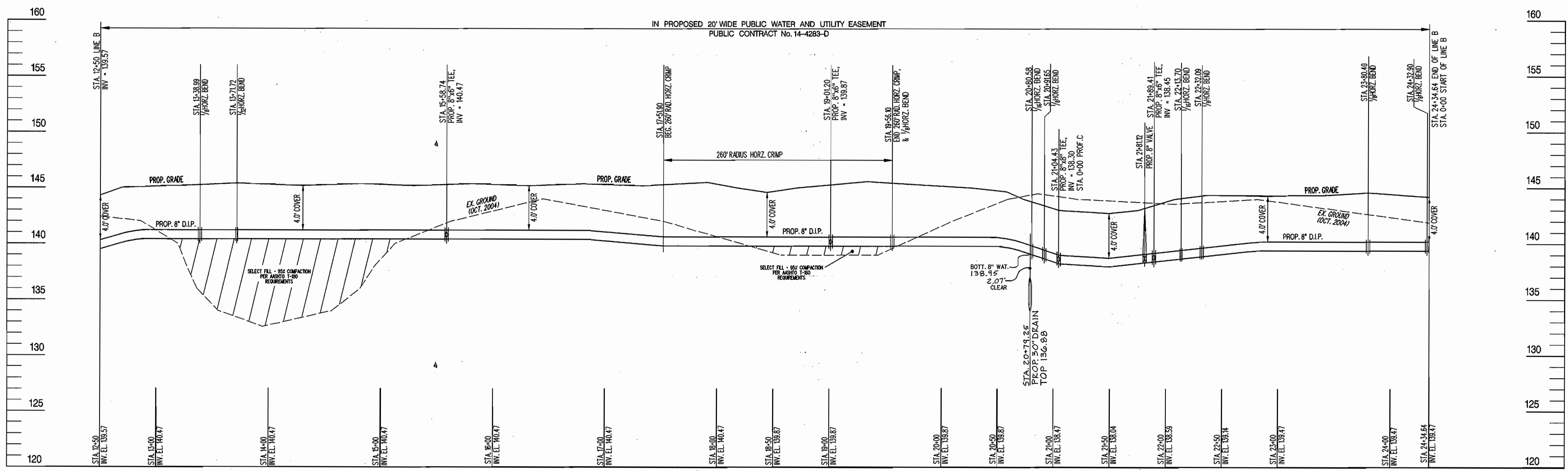
Proposed Water & Sewer Facilities for Parcel F Patapsco Valley Business Center

CONTRACT NO. 14-4283-D

SCALE 1" = 50'
SHEET 2 OF 4
1st Election District



PROP. WATER MAIN PROFILE 'B'
Scale: Horz: 1" = 50'
Vert: 1" = 5'



PROP. WATER MAIN PROFILE 'B'
Scale: Horz: 1" = 50'
Vert: 1" = 5'



Developer/Owner
Merritt PVI, LLC
By Member - Merritt Properties, LLC
By: Robb Merritt, Vice President
c/o Merritt Properties, LLC
2066 Lord Baltimore Drive
Baltimore, Maryland 21244
Phone (410) 298-2600
Fax (410) 298-9644

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
R. L. Beaman 5/9/05
CHIEF - BUREAU OF UTILITIES - DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
[Signature] 5/17/05
CHIEF - DEVELOPMENT ENGINEERING DIVISION - DATE

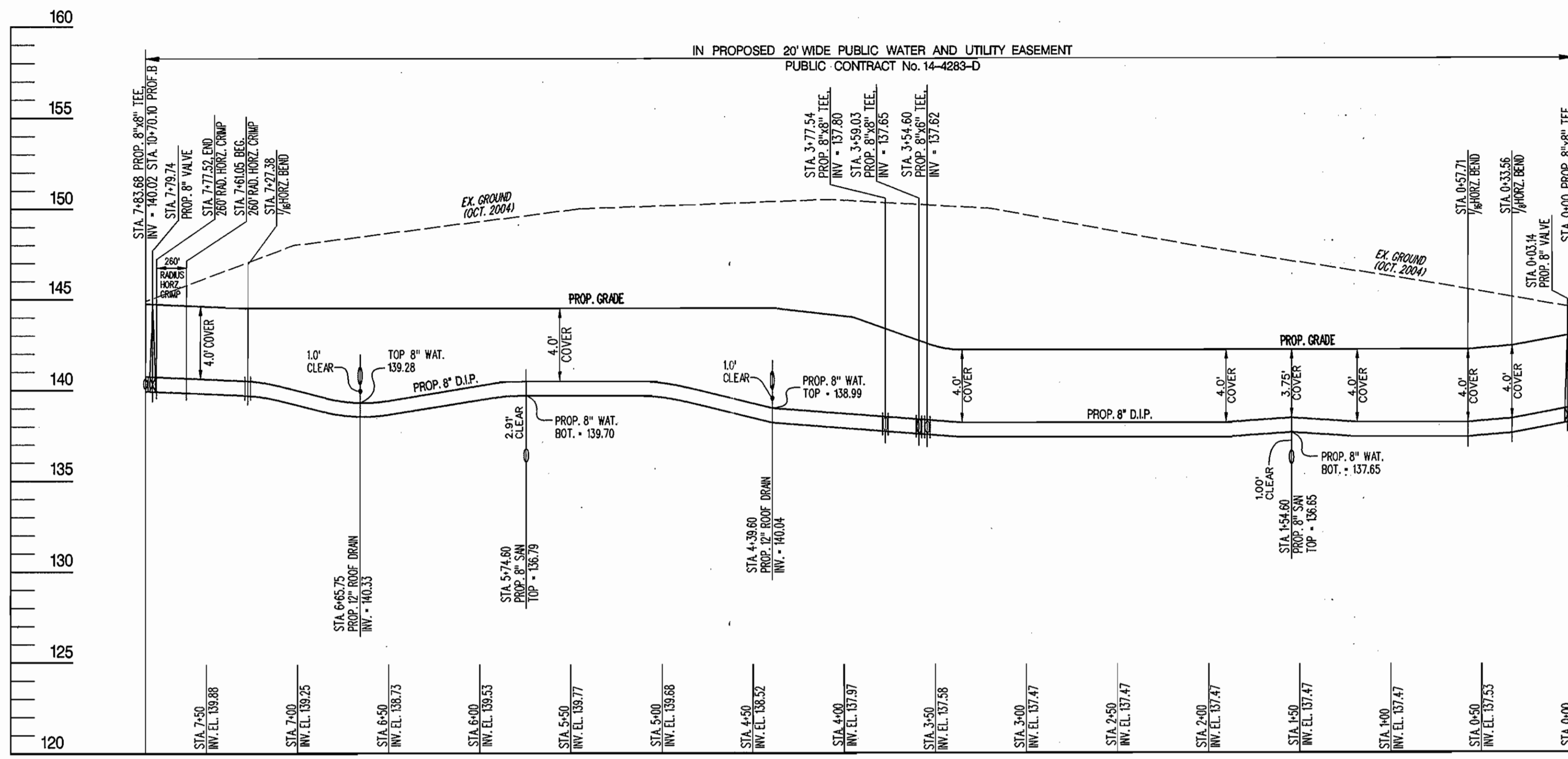
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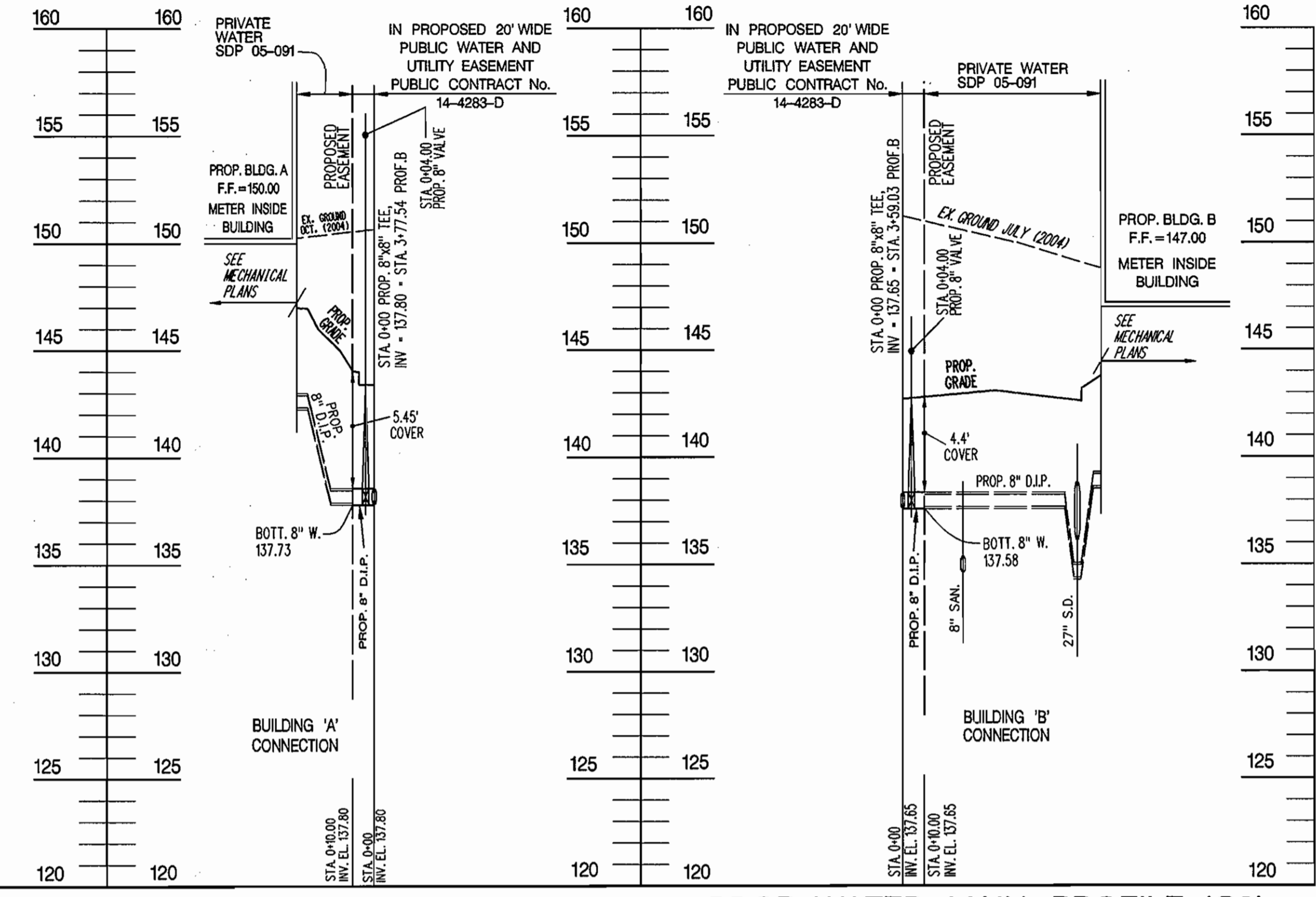
DESIGNED BY:	MW/J	1	REVISED 30" S.D. CROSSING STA. 20+79.25	8/23/05
R.L.N.			PROFILE 'B'	
DRAWN BY:	A.M./R.L.N.			
CHECKED BY:	J.E.M.			
DATE:	4/7/05			
BY	NO.	REVISION	DATE	

Water Profiles
600 SCALE MAP NO. 38 BLOCK NO. 20

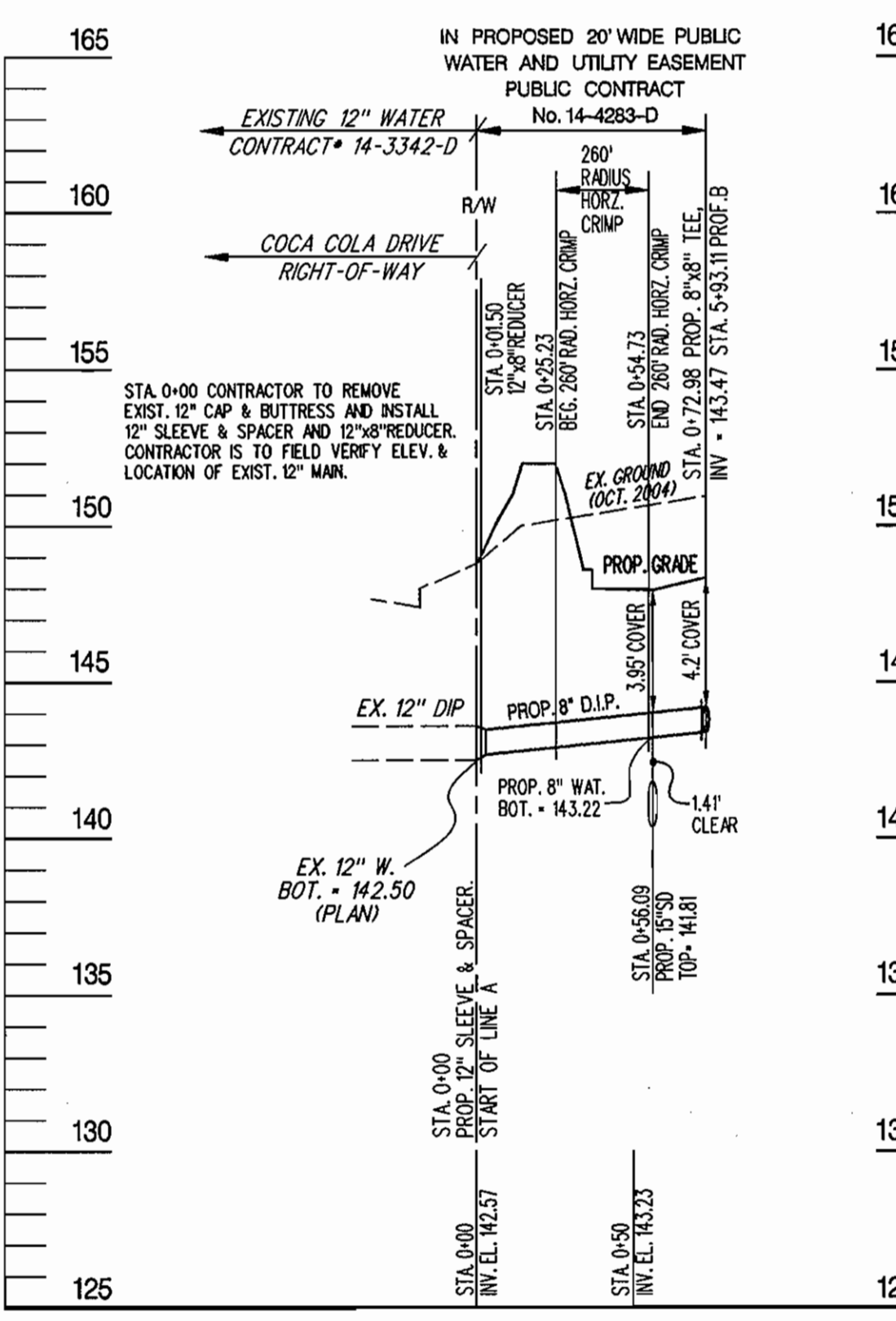
PUBLIC WATER
Proposed Water & Sewer Facilities for
Parcel F
Patapsco Valley Business Center
CONTRACT NO. 14-4283-D
1st Election District
SCALE AS SHOWN
SHEET 3 OF 4



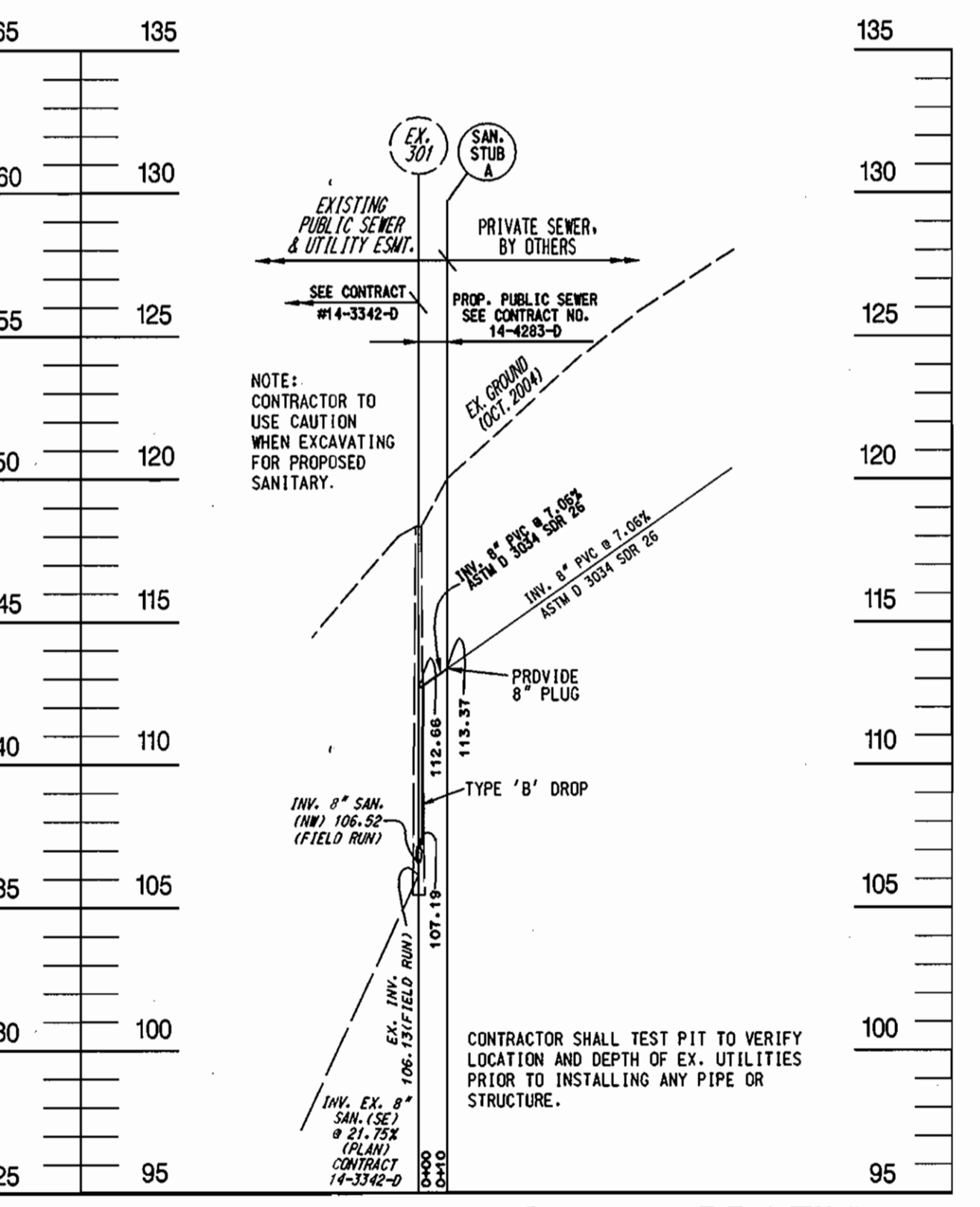
PROP. WATER MAIN PROFILE 'C'
 Scale: Horz: 1" = 50'
 Vert: 1" = 5'



PROP. WATER MAIN PROFILE 'C1' PROP. WATER MAIN PROFILE 'C2'
 Scale: Horz: 1" = 50'
 Vert: 1" = 5'



PROP. WATER MAIN PROFILE 'A'
 Scale: Horz: 1" = 50'
 Vert: 1" = 5'



PROP. SANITARY SEWER PROFILE
 Scale: Horz: 1" = 50'
 Vert: 1" = 5'

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 HOWARD COUNTY, MARYLAND
 R. H. Benjamin 5-9-05
 CHIEF - BUREAU OF UTILITIES - DATE

DEPARTMENT OF PLANNING & ZONING
 HOWARD COUNTY, MARYLAND
 [Signature] 5/1/05
 CHIEF - DEVELOPMENT ENGINEERING DIVISION - DATE

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DRAWN BY:	A.M./R.L.N.
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DATE:	4/7/05
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Water & Sewer Profiles
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 1st Election District
 SCALE AS SHOWN
 SHEET 4 OF 4