

Benchmark
Description

COORDINATES IN MARYLAND NAD83(91) (HORIZONTAL) AND NGVD29 (VERTICAL) DATUMS.
 47DA NORTHING: 163191.9104
 EASTING: 412865.759
 ELEVATION: 315.905 ft.
 47EA NORTHING: 163326.2295
 EASTING: 41336.2590
 ELEVATION: 339.909ft.
 47G2 NORTHING: 162440.1212
 EASTING: 41853.0279
 ELEVATION: 364.210ft.

GENERAL NOTES

PART I - GENERAL

- 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.
- All horizontal controls are based on Maryland State Coordinates, NAD 83/91.
- All vertical controls are based on NAVD 88.
- 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 contracted 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 symbol \oplus 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)	410-850-4620
BGE (Underground Damage Control)	410-787-9068
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 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 13.114(a) of the Howard County Code.

PART II - WATER

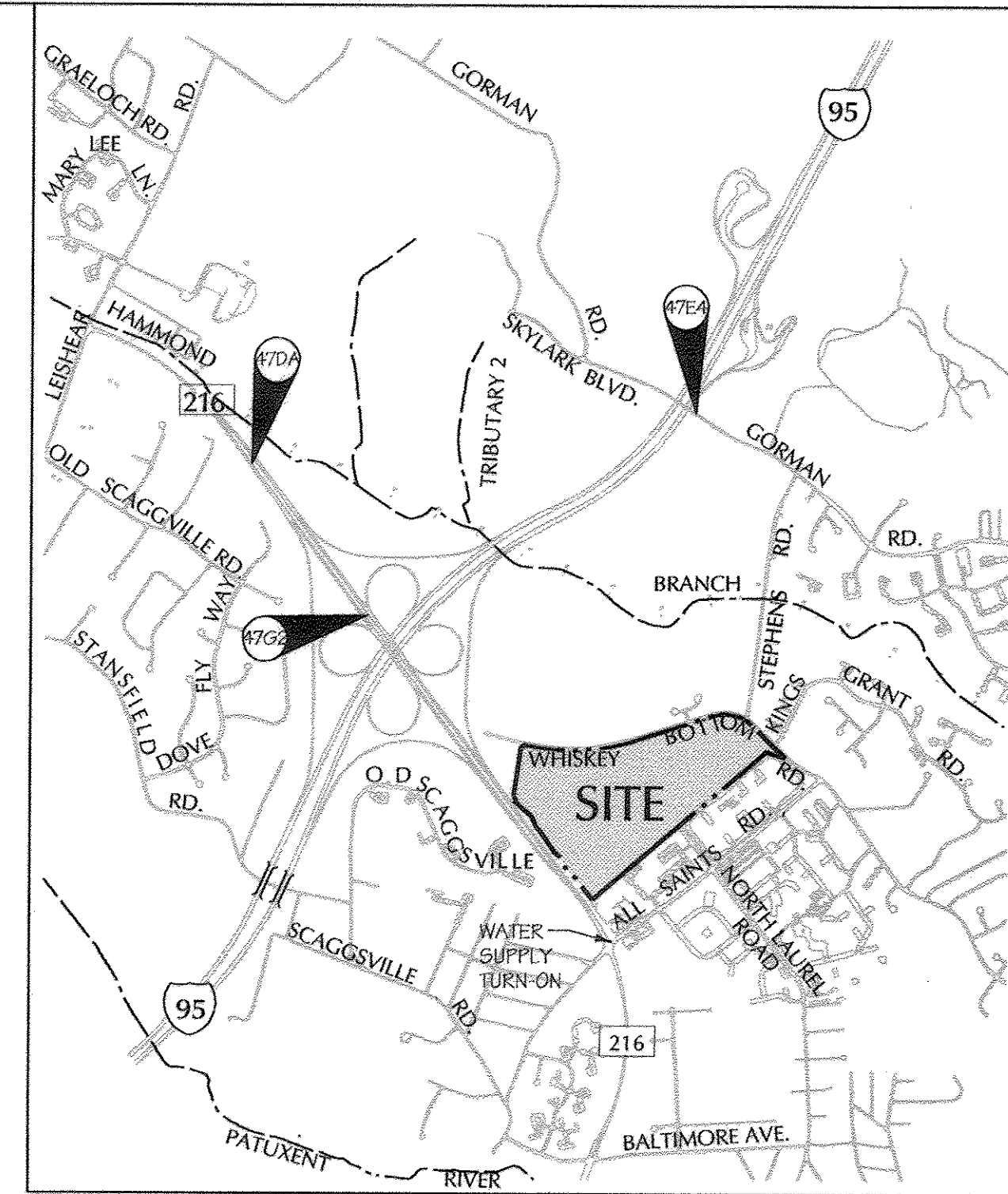
- All water mains shall be D.I.P. Class 52 unless otherwise noted.
- Tops of all water mains shall have a minimum of 3'-6" of cover unless otherwise noted.
- Valves adjacent to tees shall be strapped to tees.
- All fittings shall be buttressed or anchored with concrete in accordance with Standard Details 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

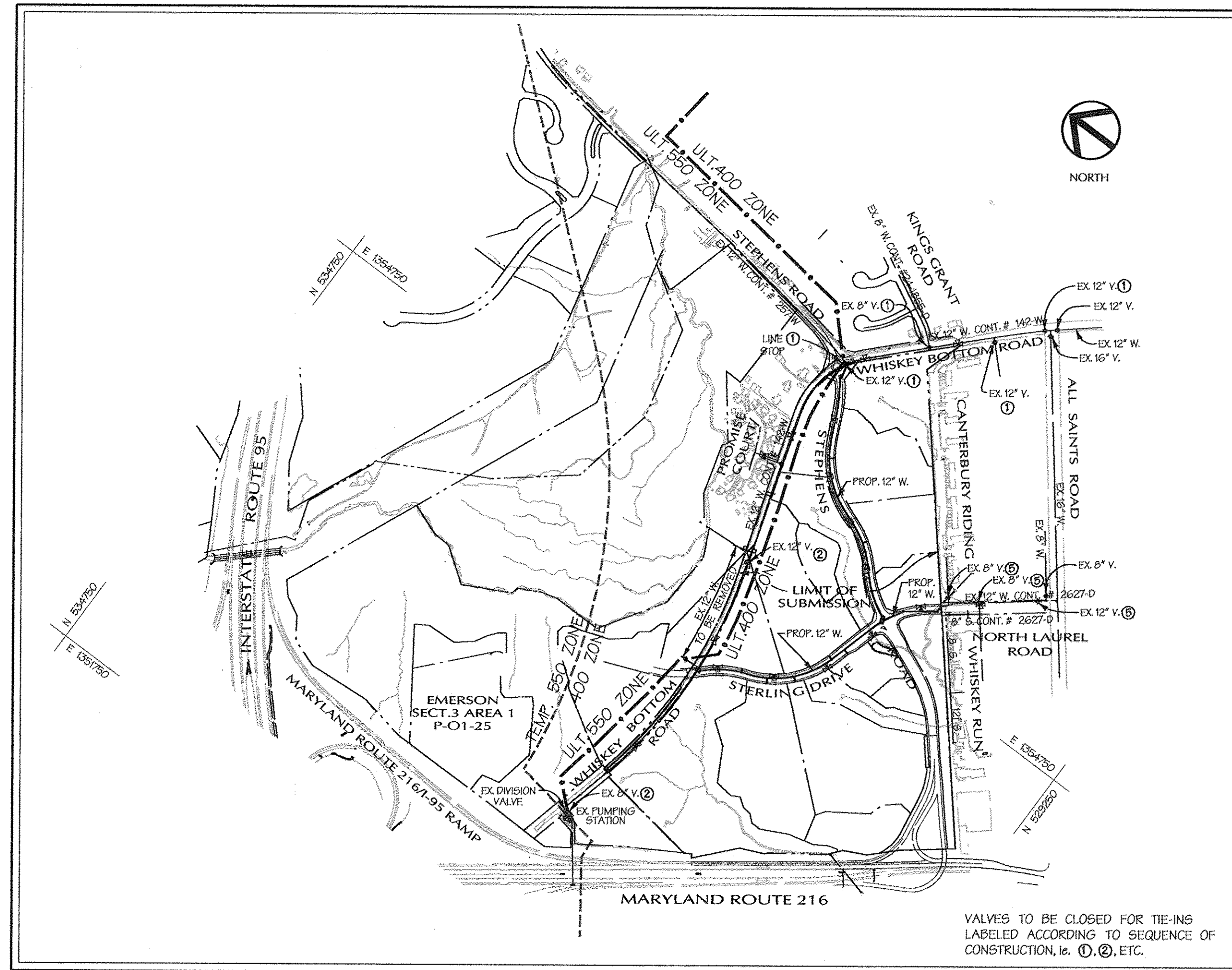
- All sewer mains shall be D.I.P. or P.V.C. unless otherwise noted.
- All manholes shall be 4'-0" inside diameter unless otherwise noted.
- Force mains shall be D.I.P. only.
- Manholes shown with 12" and 16" walls are for brick manholes only.
- Manholes designated W.T. in plan and profile shall have watertight frame and cover, Standard Detail C5.52. Where watertight manhole frames and cover 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.

12" Water and Sewer Main Extension for Revitz Property

Howard County, Maryland Department of Public Works Contract No. 24-4014-D



Vicinity Map
SCALE: 1"=2000'



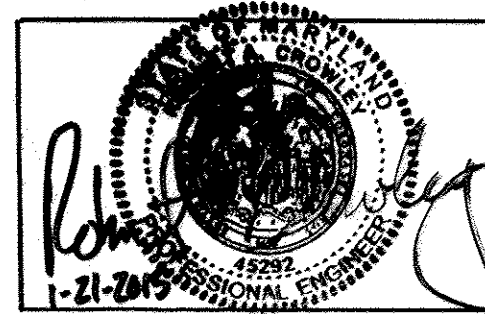
TYPE OF BUILDING:	OFFICE / FLEX.
NO. OF PARCELS:	2
NO. OF WATER HOUSE CONNECTIONS:	8
DRAINAGE AREA:	LITTLE PATUXENT
TREATMENT PLANT:	LITTLE PATUXENT WATER QUALITY MANAGEMENT CENTER

LOCATION MAP

SCALE: 1"=600'
CONTRACT NO. 24-4014-D

WATER CODE: C05
TEST GRADIENT: 950
SEWER CODE: 742500

THE PURPOSE OF REDLINE REVISION #2 IS TO:
 1. SHOW THE PROPOSED EMERSON CAMPUS SECURITY FENCE.
 2. ADD AN ADDITIONAL DRAWING SHEET ASSOCIATED WITH THE PROPOSED EMERSON CAMPUS SECURITY FENCE.



JACOBS

PROFESSIONAL CERTIFICATION
 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. 45292 EXPIRATION DATE: 05/21/2014

AS BUILT
DATE: FEBRUARY 2005

ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
12" D.I.P.	3366'	3366'	CL 52	GRIFFIN / BRS
8" D.I.P.	257'	257'	CL 52	GRIFFIN / BRS
6" D.I.P.	191'	191'	CL 52	GRIFFIN / BRS
12" x 12" TEE	3	3	CL 53	U.S. PIPE / BRS
12" x 8" TEE	8	8	CL 53	U.S. PIPE / BRS
12" x 6" TEE	9	9	CL 53	U.S. PIPE / BRS
12" VALVE	7	7	2360	MUELLER / BRS
8" VALVE	8	8	2360	MUELLER / BRS
6" VALVE	9	9	2360	MUELLER / BRS
1/2 BEND (12")	4	4	TRIMITE	U.S. PIPE / BRS
8" CAP	8	8	DI	U.S. PIPE / BRS
6" FIRE HYDRANT	9	9	CENTURION	MUELLER / BRS
1/2 BEND (12")	2	2	CL 53	U.S. PIPE / BRS
8" PVC SEWER	1553'	1553'	SDR35	DIAMOND / HUGHES SUPPLY
8" D.I.P. SEWER	1178'	1178'	CL 52	GRIFFIN / BRS
STD. MANHOLES	15	15		PRECAST ATLANTIC / ATLANTIC
TYPE 'A' DROP CONN.	4	4		POURED IN PLACE
TYPE 'B' DROP CONN.	1	1		PRECAST AMERICAST / AMERICAST
12" LINE STOP	1	0	X	ELIMINATED

NAME OF UTILITY CONTRACTOR: C. S. MILLER, INC.
 SURVEY AND DRAFTING DIVISION AS-BUILT DATE: FEBRUARY 2005

Sheet Index

SHEET	DESCRIPTION
1	TITLE SHEET
2	PLAN - PROPOSED 12" WATER MAIN STEPHENS RD. & STERLING DR.
3	WATER AND SANITARY SEWER PROFILES
4	WATER AND SANITARY SEWER PROFILES

AS BUILT FENCE LAYOUT PLAN

SEQUENCE OF CONSTRUCTION

- CLOSE EXISTING VALVES ON WHISKEY BOTTOM ROAD AND STEPHENS ROAD (1). INSTALL LINE STOP IN 12" WATER ON WHISKEY BOTTOM ROAD, WEST OF TEE AT STEPHENS ROAD. CUT THE EXISTING 12" MAIN AND INSTALL THE 12" x 12" TEE AND 12" VALVE ON WHISKEY BOTTOM ROAD. CONSTRUCT THE TWO 12" VALVES, 1/2 BEND AND 20' OF 12" D.I.P. WITH CAP AND BUTTRESS ON STEPHENS ROAD. RE-OPEN THE EXISTING VALVES AND RESTORE SERVICE TO WHISKEY BOTTOM ROAD AND STEPHENS ROAD.
- CLOSE EXISTING VALVES ON WHISKEY BOTTOM ROAD TO PERMIT THE CONSTRUCTION AT STERLING DRIVE (2). CUT THE EXISTING 12" MAIN AND INSTALL THE 12" x 12" TEE, 12" VALVE, 1/2 BEND AND 20' OF 12" D.I.P. WITH CAP AND BUTTRESS. RE-OPEN EXISTING VALVES AND RESTORE SERVICE TO WHISKEY BOTTOM ROAD.
- CONSTRUCT REMAINING WATER MAINS ON STEPHENS ROAD, STERLING DRIVE AND NORTH LAUREL ROAD. TEST AND CHLORINATE THE NEW WATER MAINS.
- ON WHISKEY BOTTOM ROAD WHERE THE TWO NEW CONNECTIONS WERE MADE, REMOVE THE CAPS AND BUTTRESSES AND CONNECT TO THE NEW MAINS.
- CLOSE EXISTING VALVES ON NORTH LAUREL ROAD (5) AND MAKE CONNECTION TO THE EXISTING 12" WATER. RE-OPEN VALVES AND RESTORE SERVICE TO NORTH LAUREL ROAD.
- THE SHUT-DOWN OF WATER SERVICE SHALL BE COORDINATED WITH THE HOWARD COUNTY BUREAU OF UTILITIES. NOTIFICATION SHALL BE GIVEN 5 DAYS PRIOR TO THE SHUT-DOWN AND ONE HOUR PRIOR TO THE SHUT-DOWN FOR CHANGES TO BE MADE TO THE WATER SUPPLY.

REVIEWED FOR NATURAL RESOURCES CONSERVATION SERVICE AND MEETS TECHNICAL REQUIREMENT

John R. ... 10/24/02
SIGNATURE DATE

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

John ... 10/24/02
APPROVED DATE

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND WITH ROAD CONSTRUCTION PLANS F-02-III.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

DMW
Dart · McCune · Walker, Inc.

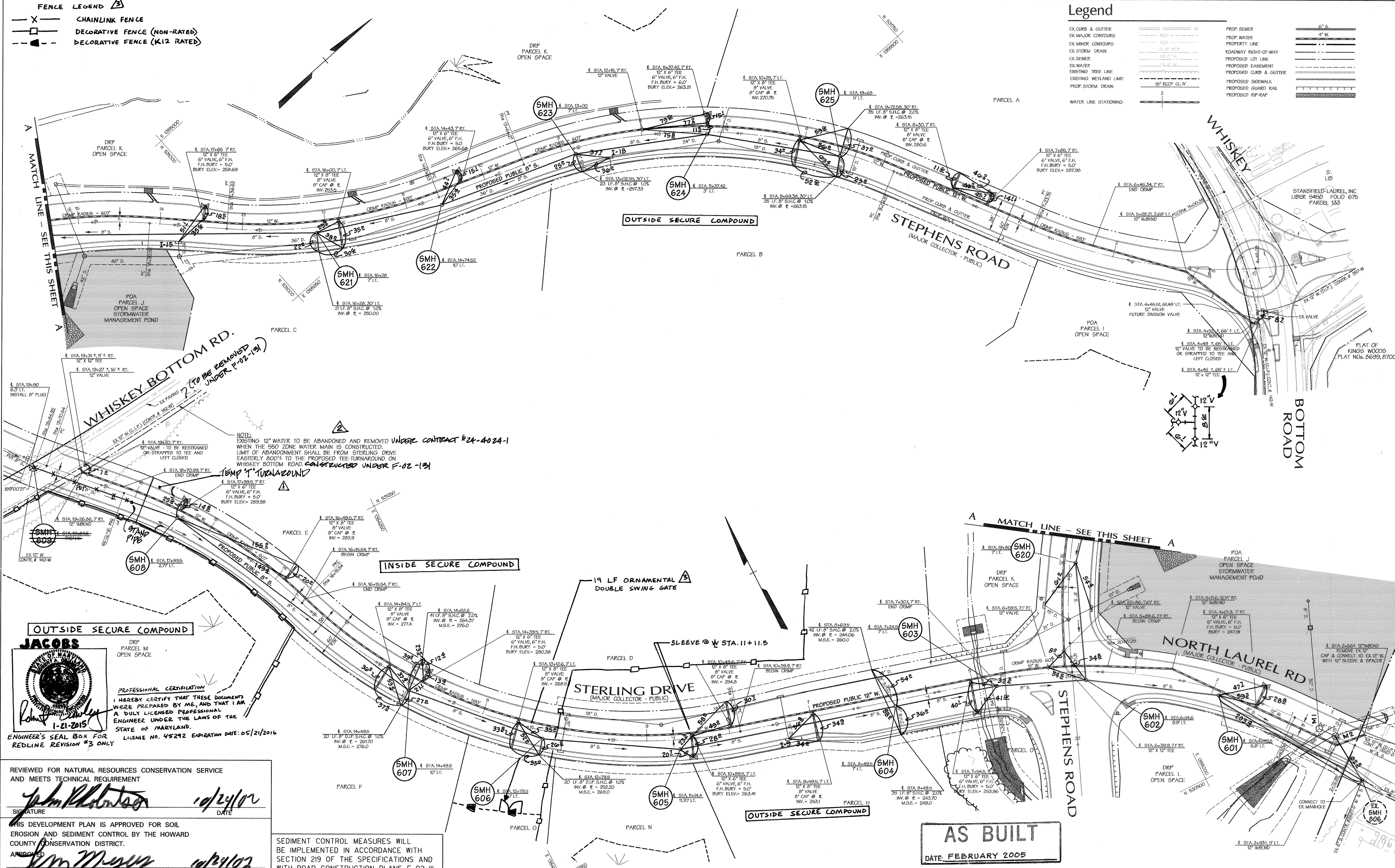
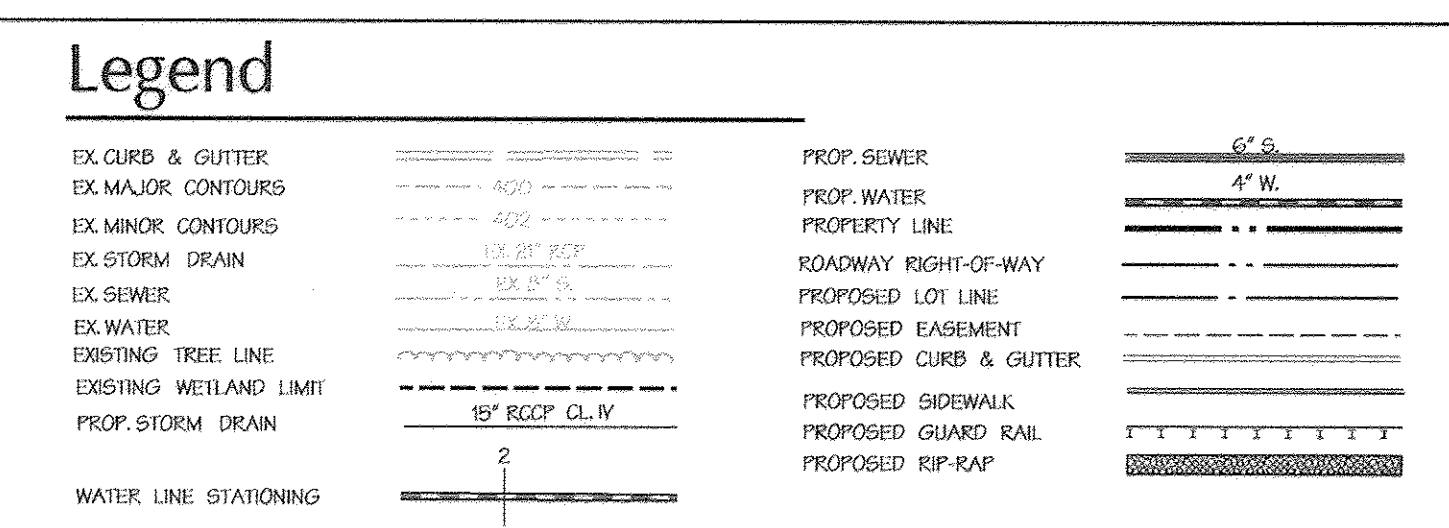
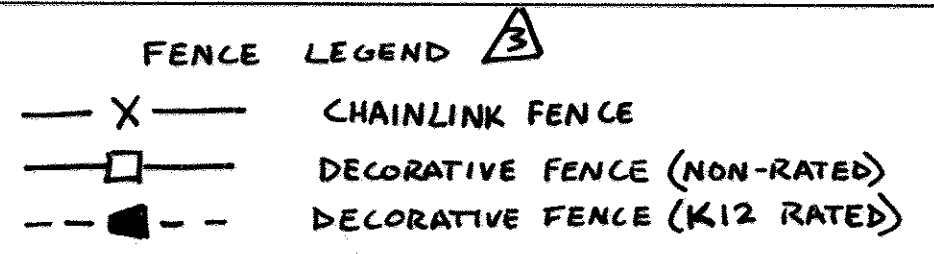
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals
 200 East Pennsylvania Avenue
 Towson, Maryland 21286
 410 296 3333
 Fax 296 4705

DESIGN BY:	DFM
DRAWN BY:	WDE
CHECKED BY:	JACOBS
DATE:	10-03-02

TITLE SHEET	WATER AND SEWER
6th ELECTION DISTRICT	
600 SCALE MAP NO. 47	BLOCK NO. 20

REVITZ PROPERTY
 THE HOWARD RESEARCH & DEVELOPMENT CORPORATION
 10275 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044
 PARCEL P. 165, P/O PAR. 837
 CONTRACT NO. 24-4014-D

SCALE
1"=600'
SHEET
1 OF 4



NOTE:
EXISTING 12" WATER TO BE ABANDONED AND REMOVED UNDER CONTRACT #24-4024-1 WHEN THE B50 ZONE WATER MAIN IS CONSTRUCTED. LIMIT OF ABANDONMENT SHALL BE FROM STERLING DRIVE EASTERLY 800'± TO THE PROPOSED TEE-TURNAROUND ON WHISKEY BOTTOM ROAD CONSTRUCTED UNDER F-02-131

JACOBS
Professional Certification
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
ENGINEER'S SEAL BOX FOR REDLINE REVISION #3 ONLY

REVIEWED FOR NATURAL RESOURCES CONSERVATION SERVICE AND MEETS TECHNICAL REQUIREMENT
DATE: 10/24/02

APPROVED: [Signature]
DATE: 10/24/02

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND WITH ROAD CONSTRUCTION PLANS F-02-III.

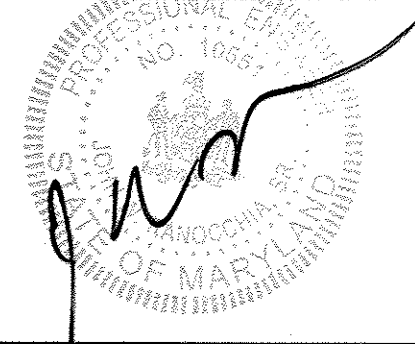
AS BUILT
DATE: FEBRUARY 2005

NOTE: INSTALL ALL FIRE HYDRANTS 3' BEYOND BACK OF CURB 01-NT-0500/200260639

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

DMW
Daft · McCune · Walker, Inc.
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

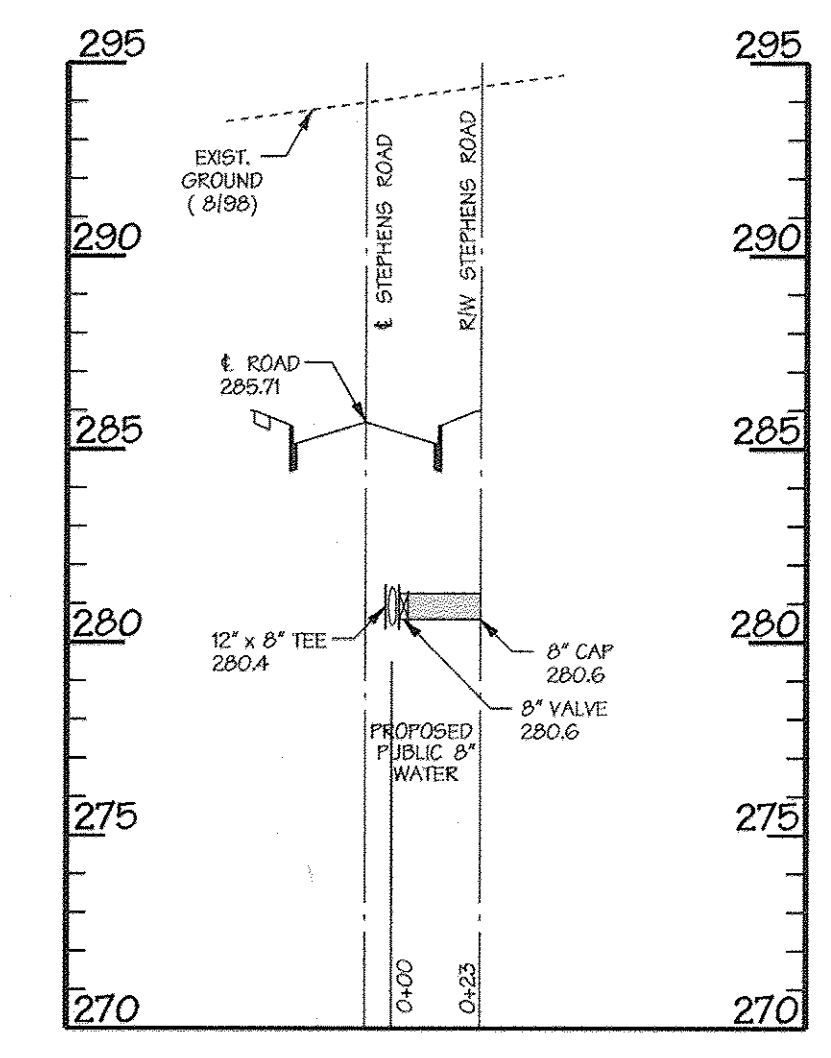
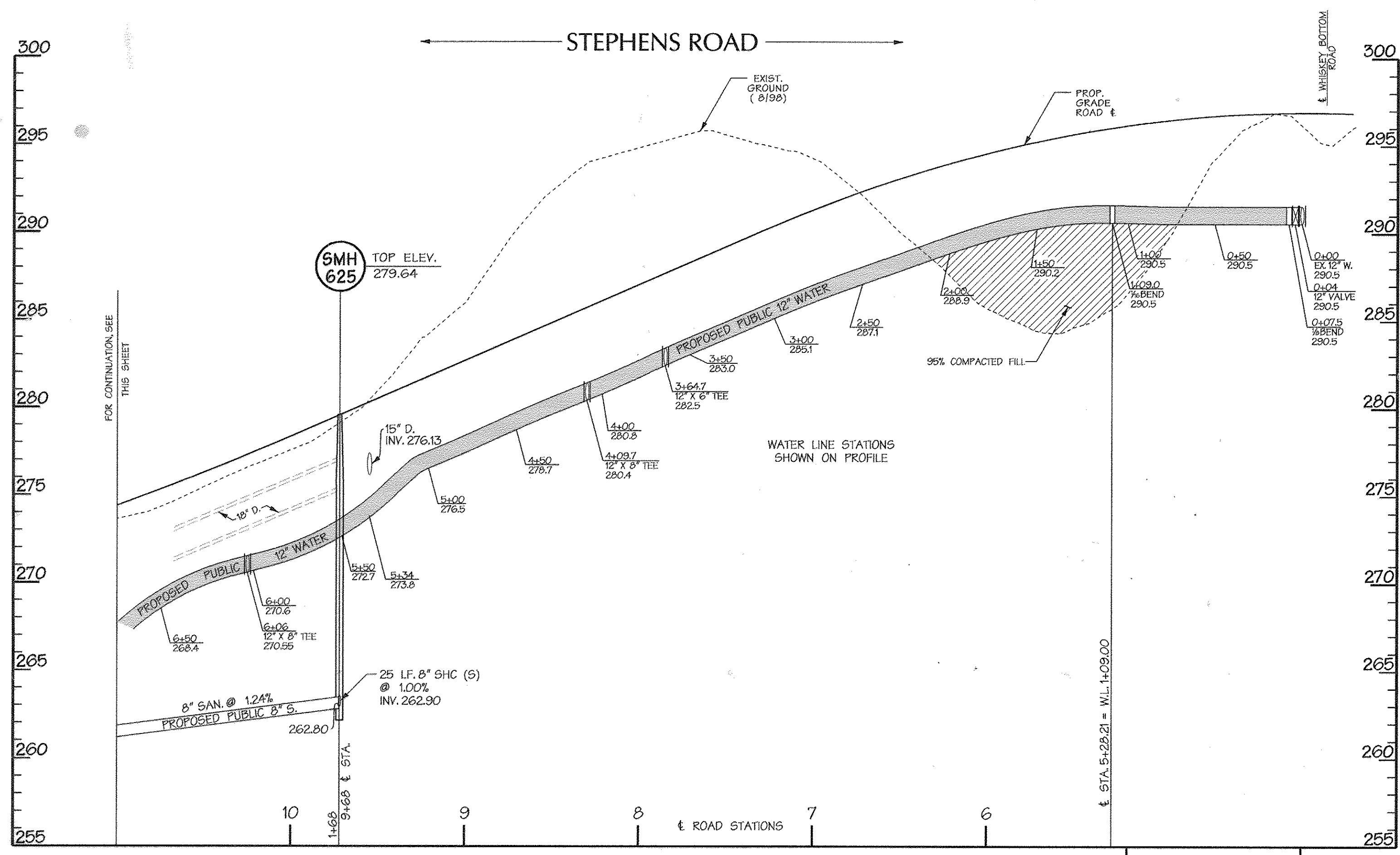


DESIGN BY:	DFM		
DRAWN BY:	WDE		
CHECKED BY:	JACOBS		
DATE:	10-3-02		
BY	NO.	REVISION	DATE
DMW	1	CAMPUS PERIMETER SECURITY FENCE	1/21/05
DMW	2	REVISED NOTES REFERRING TO EX 12" W	
DMW	3	ADD TEMP T TURNAROUND	1/10/05

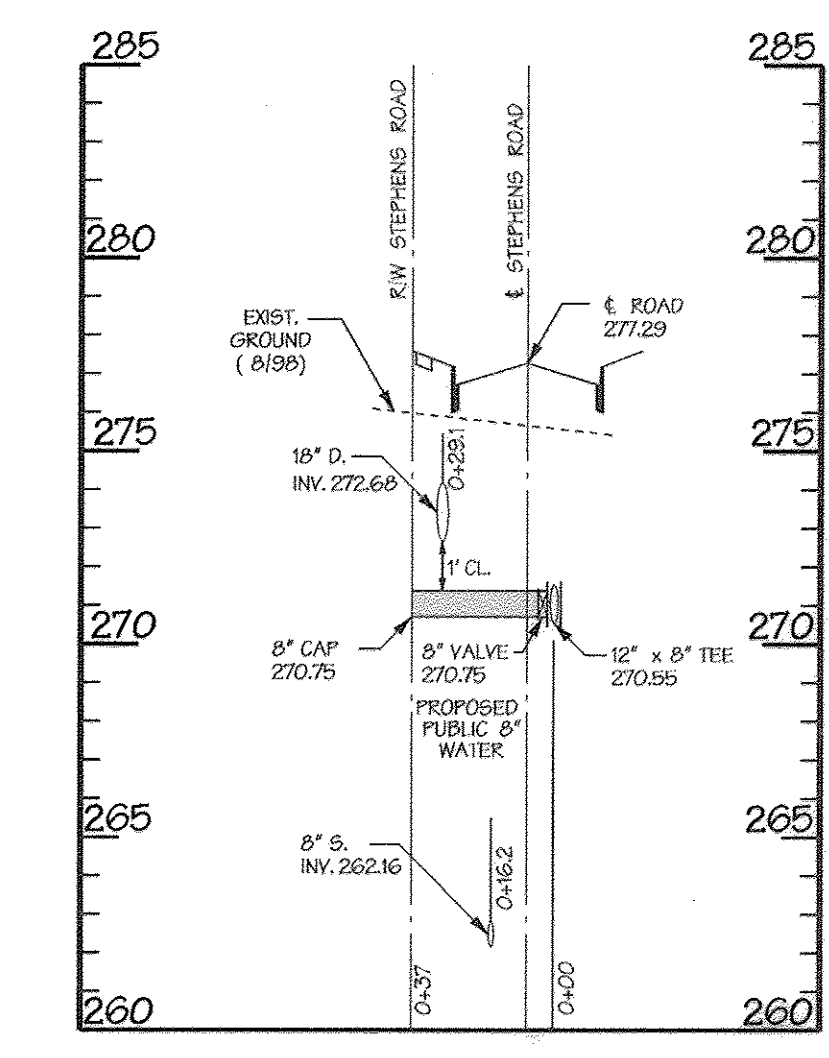
PROPOSED 12" WATER MAIN
STEPHENS ROAD AND STERLING DRIVE
6th ELECTION DISTRICT

REVITZ PROPERTY
THE HOWARD RESEARCH & DEVELOPMENT CORPORATION
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044
CONTRACT NO. 24-4014-D

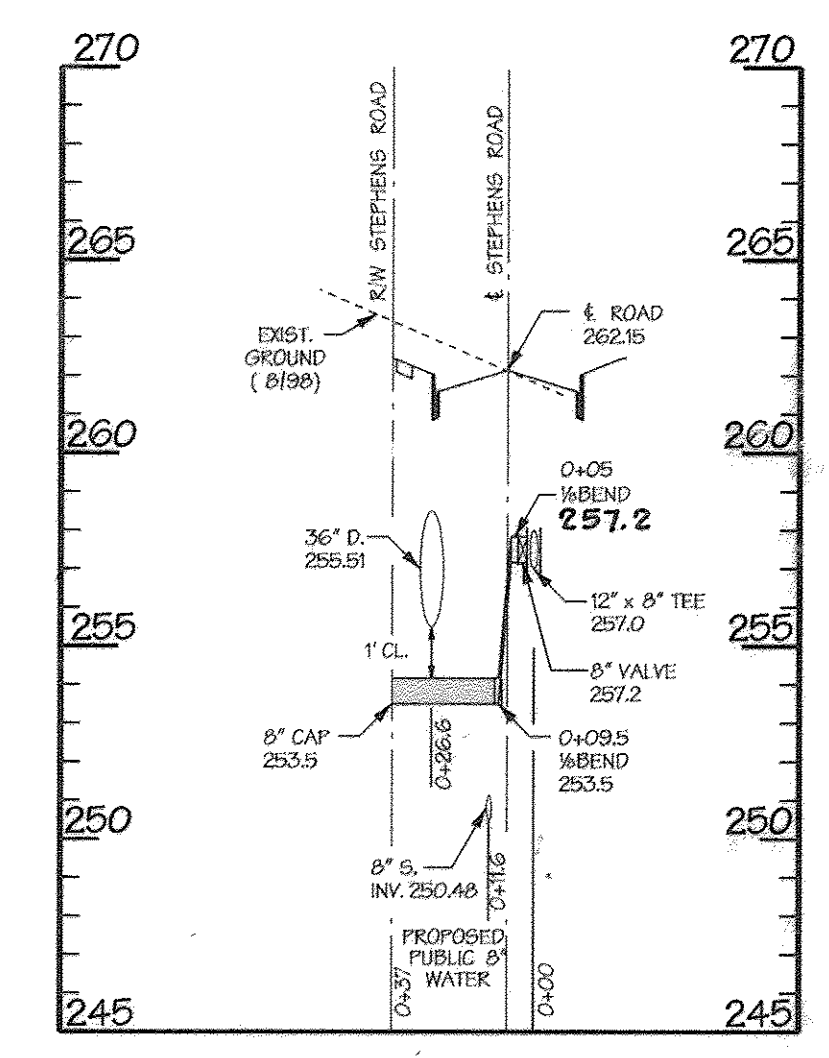
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SHEET: 2 OF 2



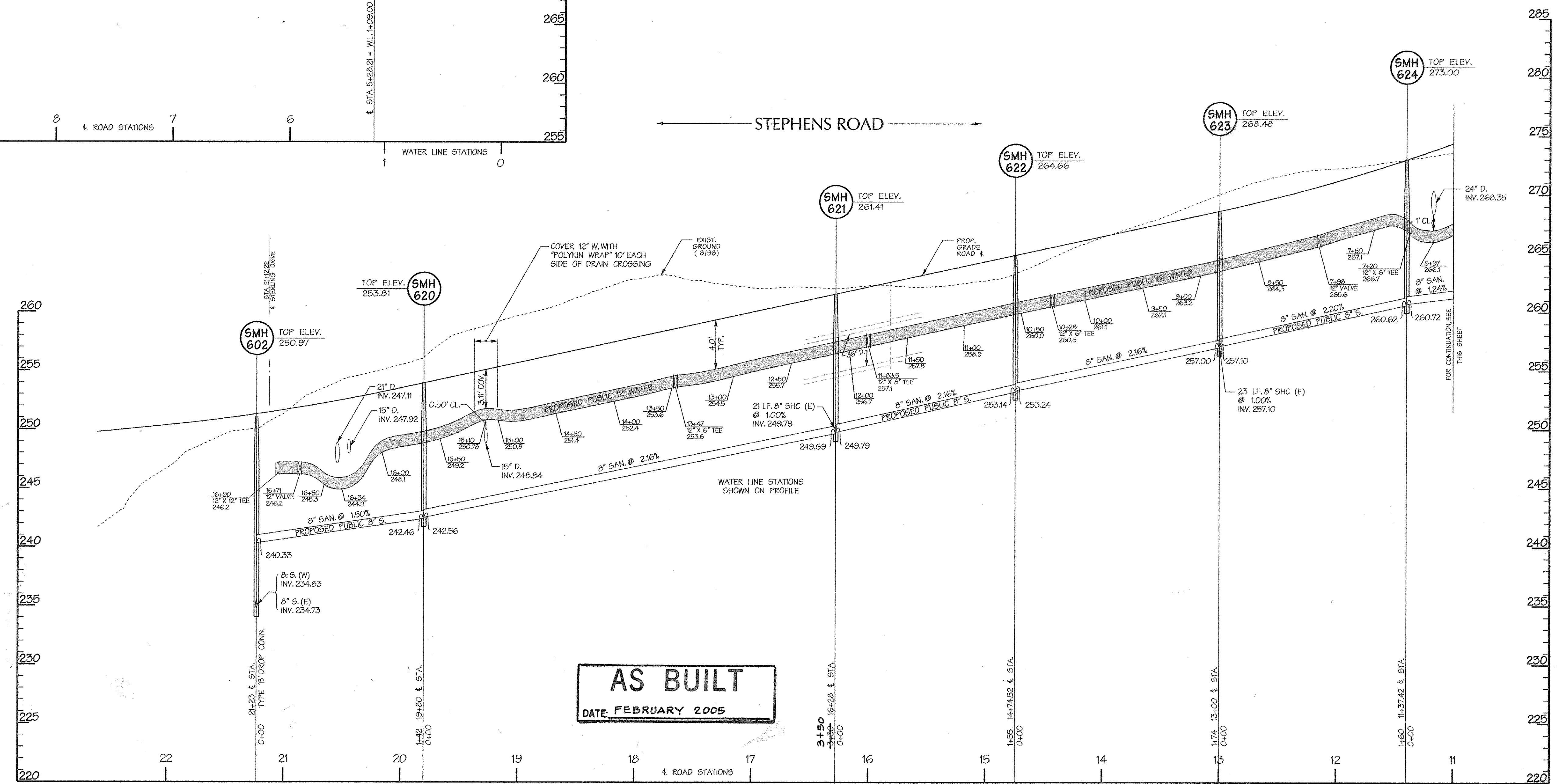
LATERAL PROFILE - STEPHENS ROAD
 @ STA 8+30
 WL. STA. 4+09.7



LATERAL PROFILE - STEPHENS ROAD
 @ STA 10+25
 WL. STA. 6+06



LATERAL PROFILE - STEPHENS ROAD
 @ STA 16+00
 WL. STA. 11+83.5



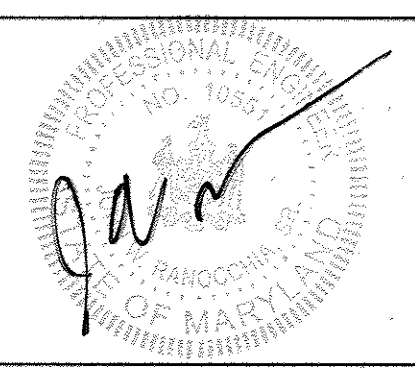
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 DATE: FEBRUARY 2005

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DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 R. J. ... 10-11-02
 CHIEF - BUREAU OF UTILITIES - DATE

DEPARTMENT OF PLANNING & ZONING
 HOWARD COUNTY, MARYLAND
 ... 10/11/02
 CHIEF - DEVELOPMENT ENGINEERING DIVISION - DATE

DMW
 Daft · McCune · Walker, Inc.
 A Team of Land Planners, 200 East Pennsylvania Avenue
 Landscape Architects, Towson, Maryland 21286
 Engineers, Surveyors & 410 296 3333
 Environmental Professionals Fax 296 4705

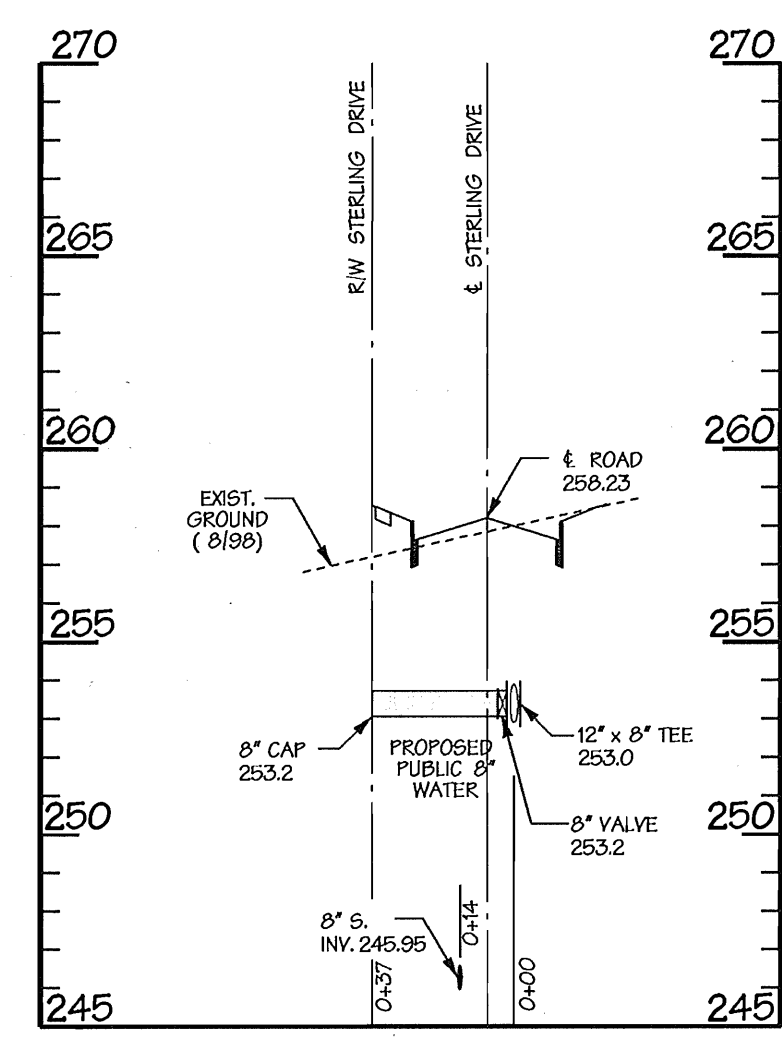


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DATE:	10-03-02
BY NO.	
REVISION	
DATE	

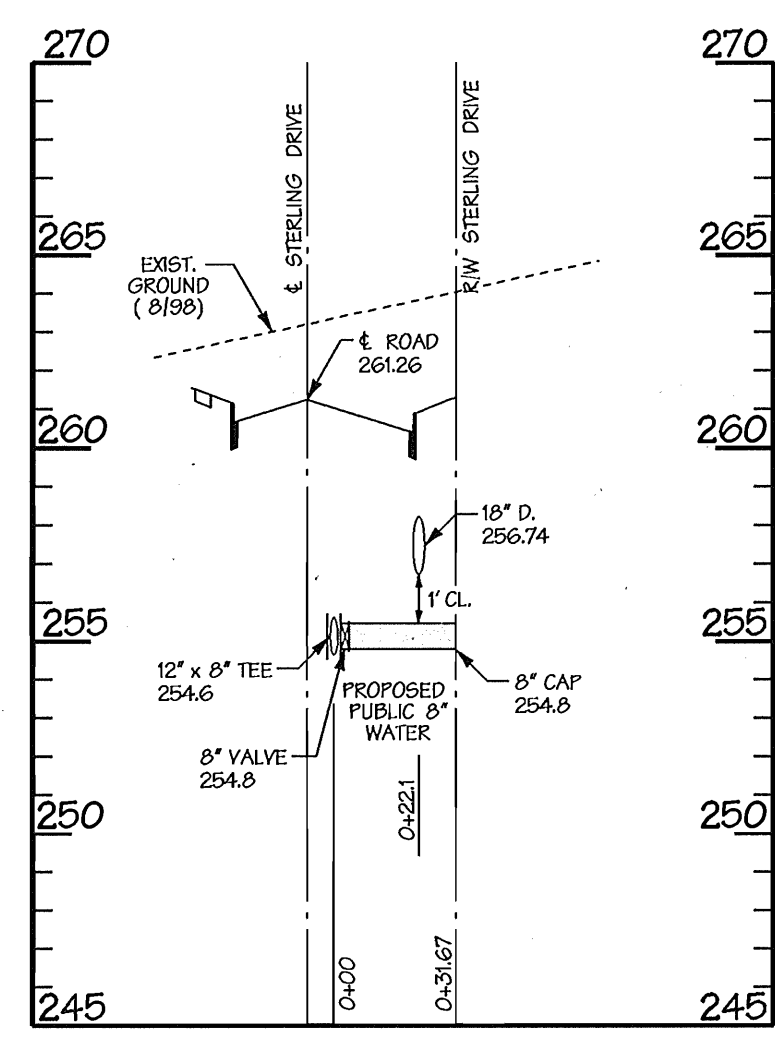
WATER AND SANITARY SEWER PROFILES
 6th ELECTION DISTRICT
 600 SCALE MAP NO. 47 BLOCK NO. 20

REVITZ PROPERTY
 THE HOWARD RESEARCH & DEVELOPMENT CORPORATION
 10275 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044
 CONTRACT NO. 24-4014-D

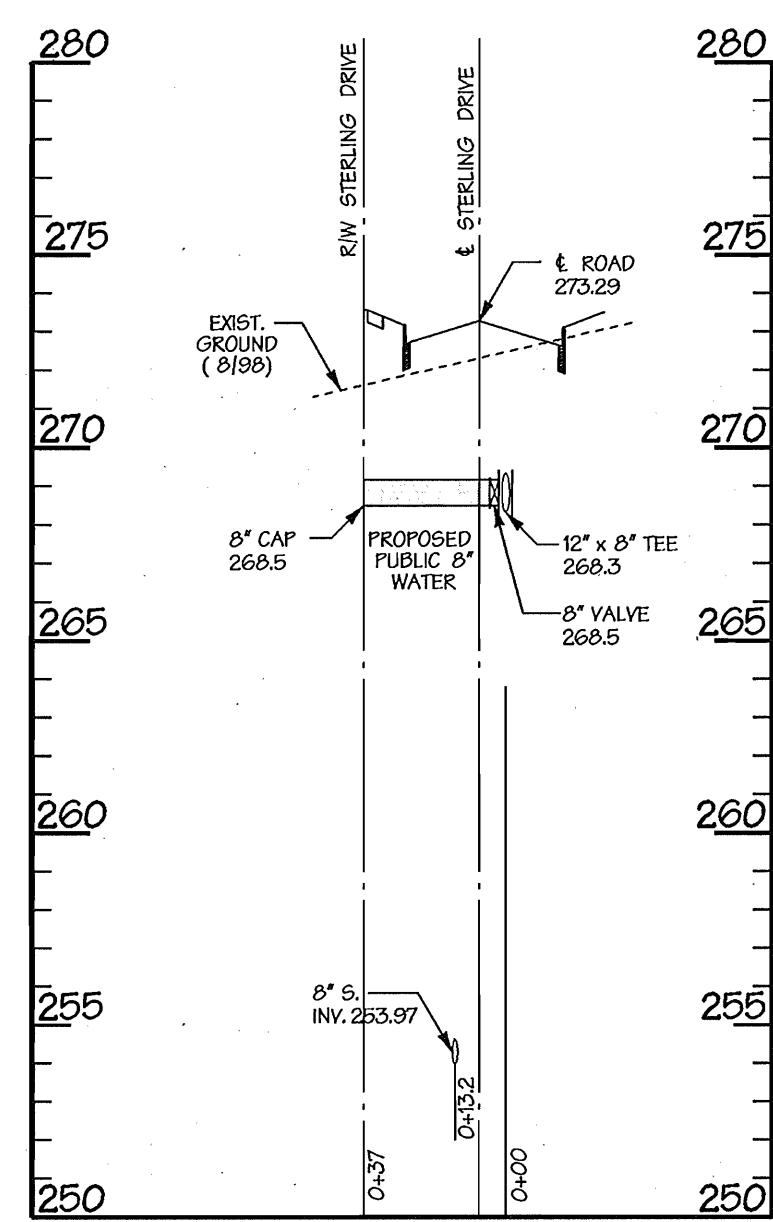
01-NT-0500/200260639
 SCALE
 HORZ.: 1" = 50'
 VERT.: 1" = 5'
 SHEET
 4 OF 10



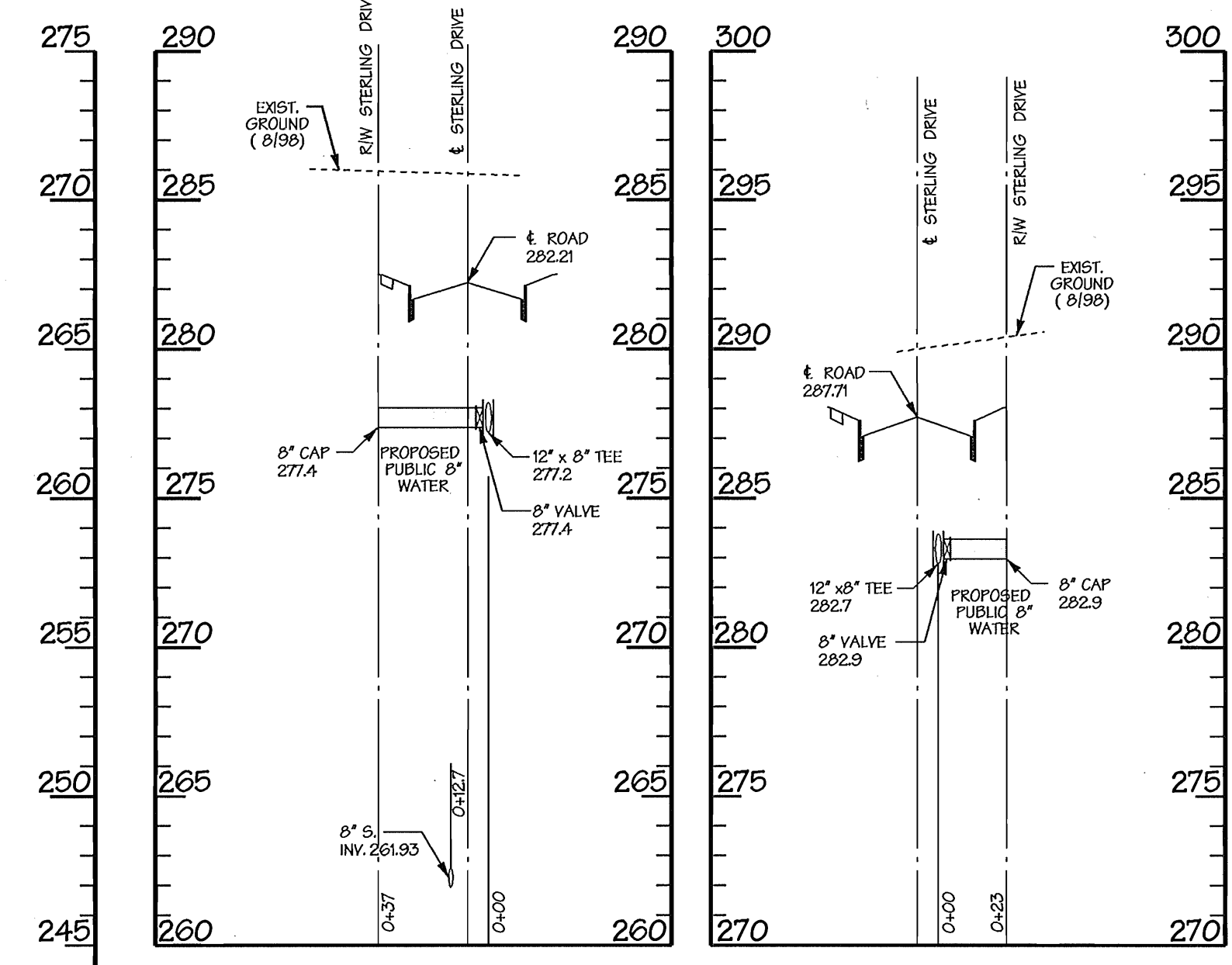
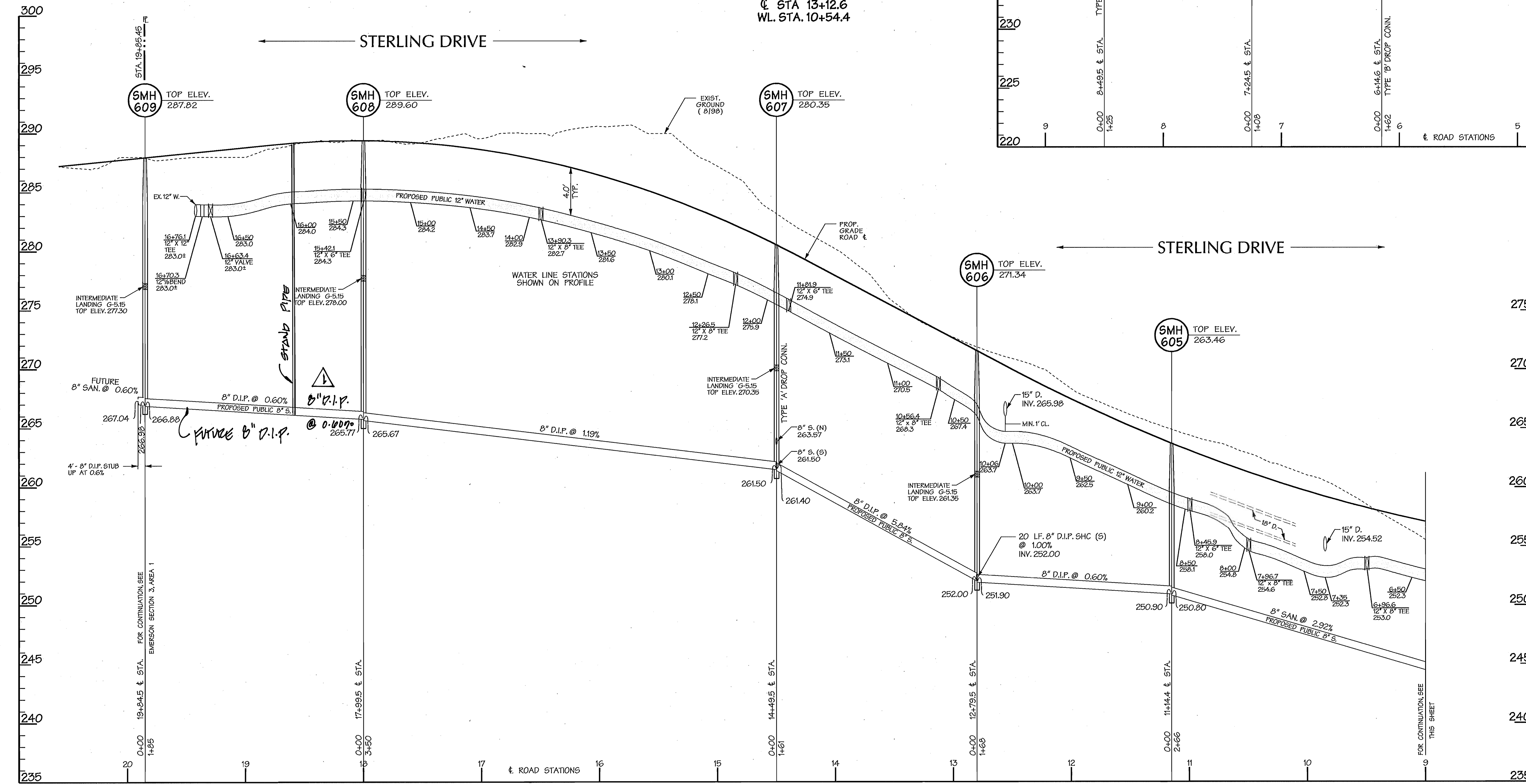
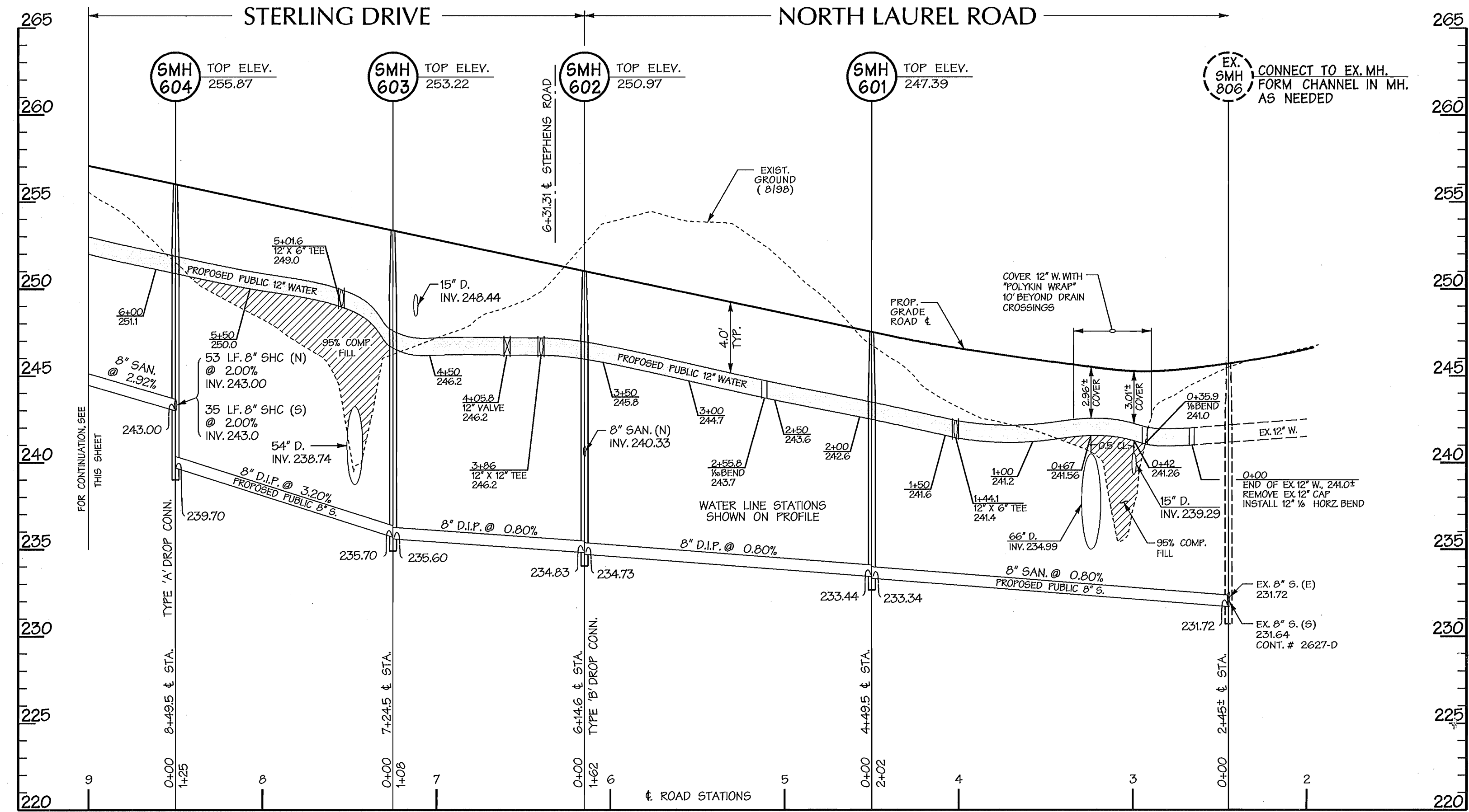
LATERAL PROFILE - STERLING DRIVE
 @ STA 9+49.5
 WL. STA. 6+96.6



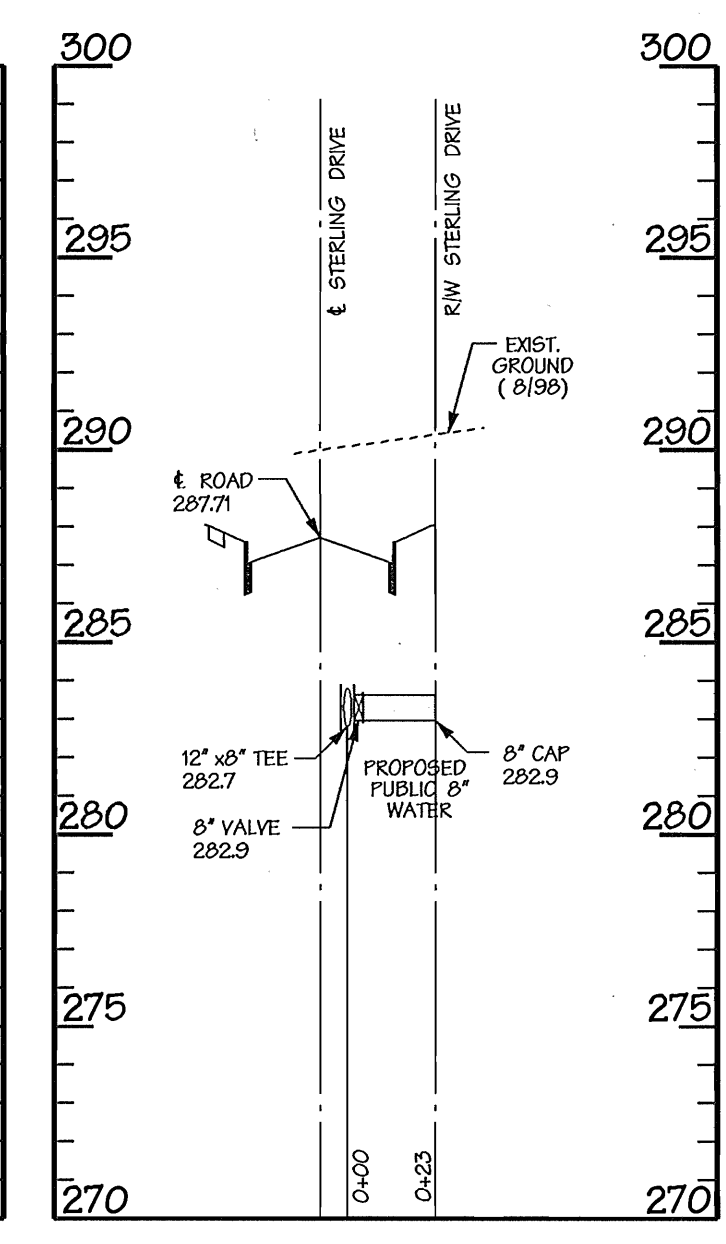
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 @ STA 10+49.6
 WL. STA. 7+96.7



LATERAL PROFILE - STERLING DRIVE
 @ STA 13+12.6
 WL. STA. 10+54.4



LATERAL PROFILE - STERLING DRIVE
 @ STA 14+84.5
 WL. STA. 12+26.5



LATERAL PROFILE - STERLING DRIVE
 @ STA 16+49.3
 WL. STA. 13+90.3

Mon Oct 7 09:00:54 2008 (0071) S:\scale\01011514

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Chief - Bureau of Utilities - DATE

DEPARTMENT OF PLANNING & ZONING
 HOWARD COUNTY, MARYLAND
 Chief - Development Engineering Division - DATE

DMW
 Daft · McCune · Walker, Inc.
 A Team of Land Planners, 200 East Pennsylvania Avenue
 Landscape Architects, Towson, Maryland 21286
 Engineers, Surveyors & Environmental Professionals 410 296 3333
 Fax 296 4705



DESIGN BY:	DFM
DRAWN BY:	WDE
CHECKED BY:	
DATE:	10-03-02
BY:	DMW
NO.:	1
REVISION:	REV. SEWER PROFILES
DATE:	11/06/05

WATER AND SANITARY SEWER PROFILES
 6th ELECTION DISTRICT
 600 SCALE MAP NO. 47 BLOCK NO. 20

REVITZ PROPERTY
 THE HOWARD RESEARCH & DEVELOPMENT CORPORATION
 10275 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044
 CONTRACT NO. 24-4014-D

SCALE
 HORZ.: 1"=50'
 VERT.: 1"=5'
 SHEET
 3 OF 4

01-NT-0500/200260639

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