

# 8" Water and 8" Sewer Main Extension Emerson Section 2 – Phase 5B

Howard County, Maryland Department of Public Works

Contract No. 24-4148-D

## 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 supply. 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 plans.
- Clear all utilities by a minimum of 13 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, Volumes 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 location 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:
 

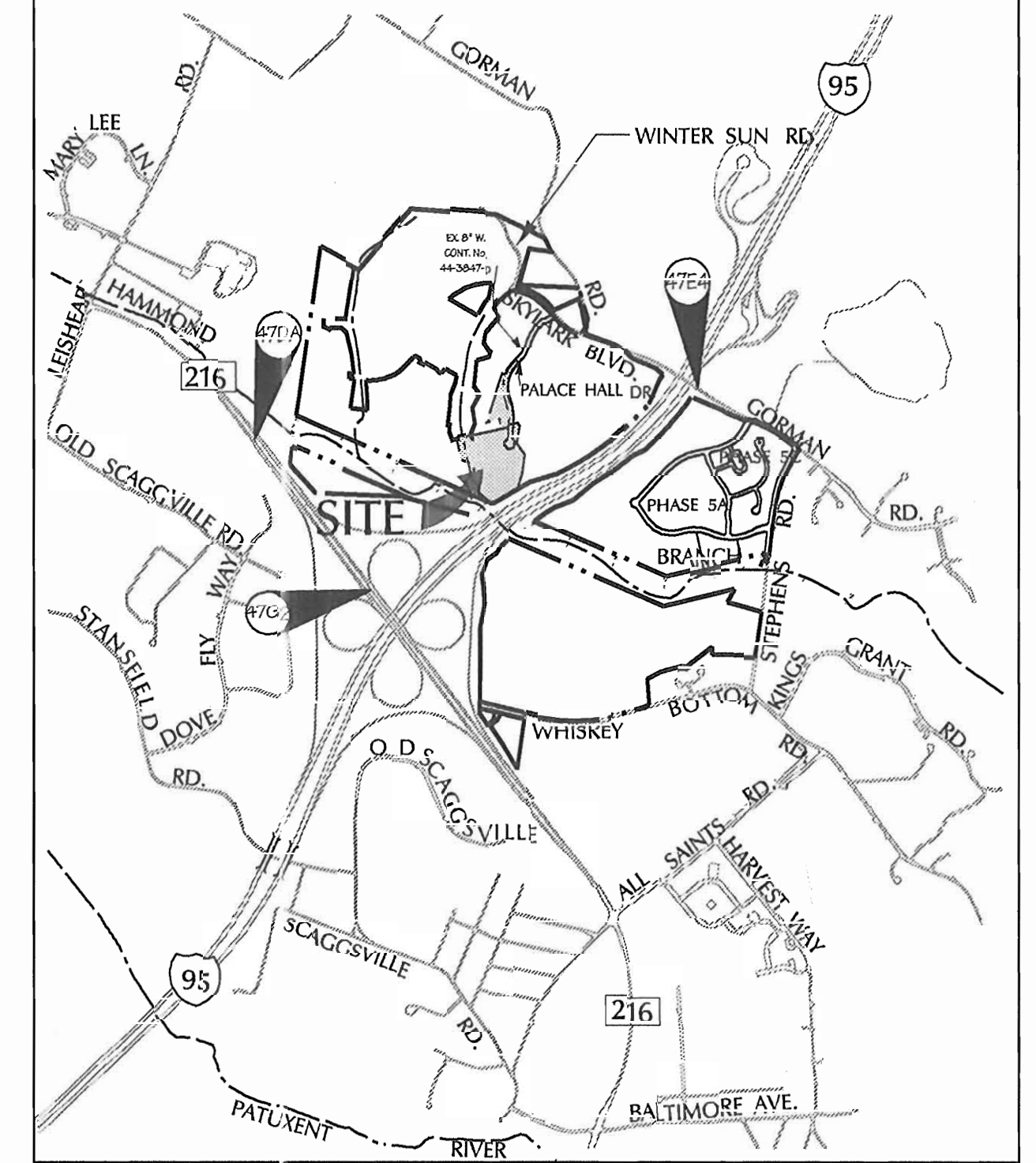
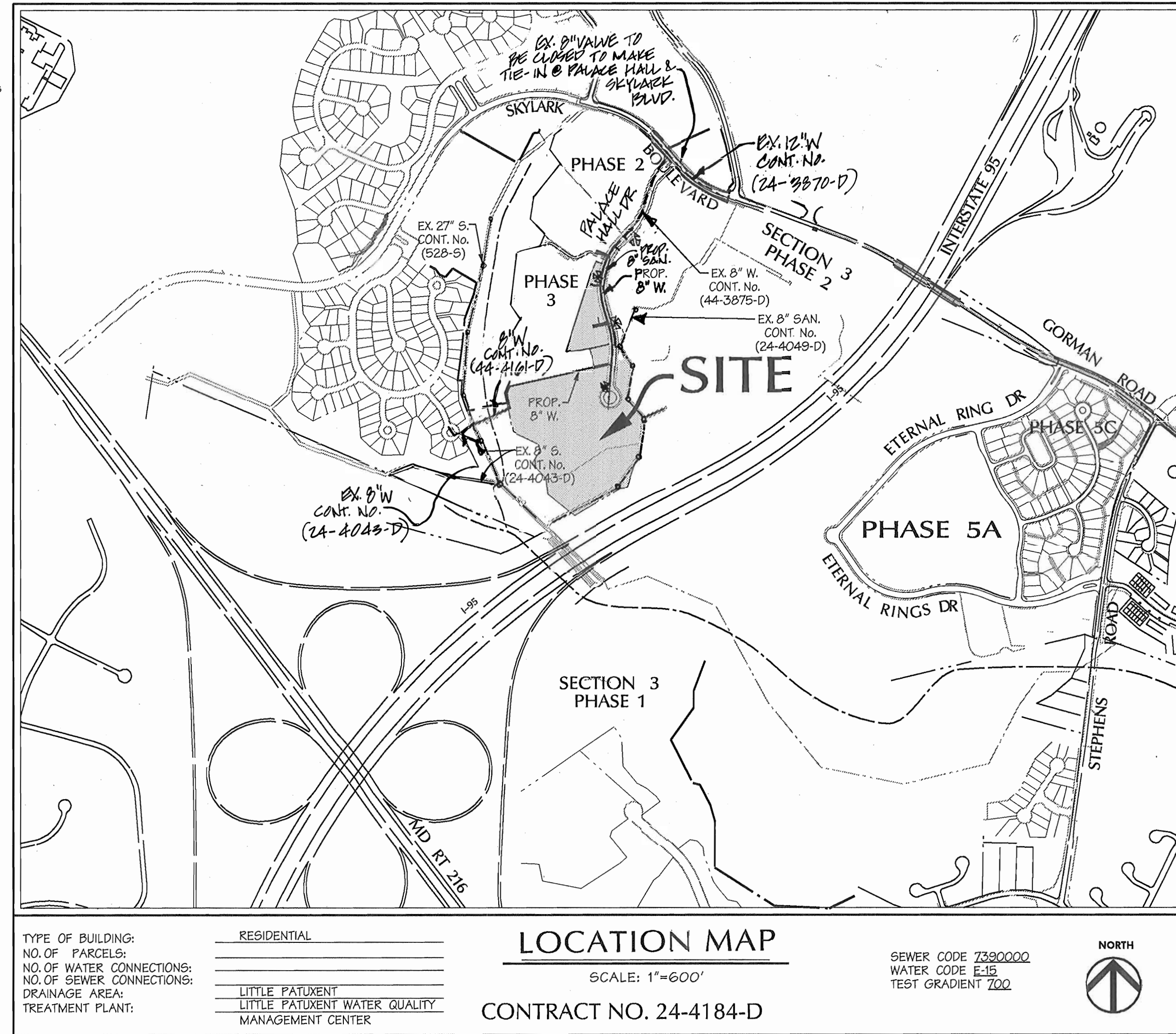
State Highway Administration	410-531-5533
BGE (Contractor Services)	410-850-4620
BGE (Underground Damage Control)	410-787-8068
Miss Utility	1-800-257-7777
Colonial Pipeline Co.	410-795-1390
Bureau of Utilities	410-313-4900
AT&T	1-800-252-1133
Verizon	1-800-743-0033/410-224-9210
- Trees and shrubs are 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.
- 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 (5) working days before any open cutting or boring/jacking operation in County road for laying water/sewer mains or house connections. The approval of these drawings will constitute compliance with DPW requirements per Section 18.114(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 covers, Standard Detail GS-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.



Vicinity Map  
SCALE: 1"=2000'

### BENCHMARK DESCRIPTION

COORDINATES IN MARYLAND NAD83(91) (HORIZONTAL) AND NGVD29 (VERTICAL) DATUMS.

477A NORTHING: 163191.9104  
EASTING: 412965759  
ELEVATION: 316905 ft.

4764 NORTHING: 163326.2295  
EASTING: 413136.2550  
ELEVATION: 339.909ft.

4702 NORTHING: 162440.1212  
EASTING: 4118539279  
ELEVATION: 364.210ft.

DEVELOPER: THE HOWARD RESEARCH & DEVELOPMENT CORPORATION  
10275 LITTLE PATUXENT PARKWAY  
COLUMBIA, MARYLAND 21044

QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
8" D.I.P.	2120 LF			
6" D.I.P.	40 LF			
8" VALVE	7			
6" VALVE	3			
8" x 8" TEE	5			
8" x 6" TEE	3			
6" FIRE HYDRANT	3			
1/32 BEND (8")	4			
1/16 BEND (8")	1			
1/8 BEND (8")	1			
1/4 BEND (8")	1			
8" CAP	6			
8" PVC SEWER	760 LF			
STD. MANHOLES	6 EA			
MANHOLES- VERT. FT.	73 FT			
8" TYPE 'A' DROP				
8" TYPE 'B' DROP				
NAME OF UTILITY CONTRACTOR:				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE:				

SHEET INDEX	
SHEET	DESCRIPTION
1	COVER SHEET
2	8" WATER MAIN, 8" SANITARY SEWER PLAN, 8" SANITARY SEWER PROFILE
3	WATER MAIN PROFILE

### Legend

EX CURB & GUTTER	400	PROP. SEWER	6" S.
EX MAJOR CONTOURS	402	PROP. WATER	4" W.
EX MINOR CONTOURS	EX 21" RCP	PROPERTY LINE	
EX STORM DRAIN	EX 8" S.	ROADWAY RIGHT-OF-WAY	
EX SEWER	EX 8" W.	PROPOSED LOT LINE	
EX WATER	EX 8" W.	PROPOSED EASEMENT	
EXISTING TREE LINE	15" RCCP CL. IV	PROPOSED CURB & GUTTER	
EXISTING WETLAND LIMIT		PROPOSED SIDEWALK	
PROP. STORM DRAIN		PROPOSED GUARD RAIL	
WATER LINE STATIONING		PROPOSED RIP-RAP	

REVIEWED FOR NATURAL RESOURCES CONSERVATION SERVICE AND MEETS TECHNICAL REQUIREMENT

*Jim Meyer* 9/23/04  
SIGNATURE DATE

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

APPROVE: *John K. Walters* 9/23/04  
HOWARD C.O.D. DATE

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND WITH ROAD CONSTRUCTION PLANS F-04-1127.

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*Ruth B. Berman* 11-3-04  
CHIEF - BUREAU OF UTILITIES - DATE

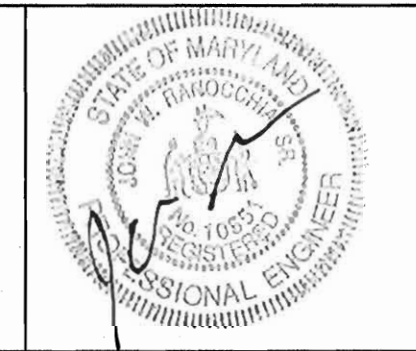
DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND

*John K. Walters* 11/16/04  
CHIEF - DEVELOPMENT ENGINEERING DIVISION - DATE

**DMW**  
Daft-McCune-Walker, Inc.

A Team of Land Planners, Landscape Architects, Golf Course Architects, Engineers, Surveyors & Environmental Professionals

300 East Pennsylvania Avenue  
Towson, Maryland 21286  
(410) 286-3353  
Fax 286-4705



DESIGN BY:	KAD
DRAWN BY:	WDE
CHECKED BY:	
DATE:	8/30/04
BY NO.	
REVISION	
DATE	

TITLE SHEET	
WATER AND SEWER	
6th ELECTION DISTRICT	
800 SCALE MAP NO. 47	BLOCK NO. 7.8.9.13

EMERSON  
Section 2, Phase 5B  
"PALACE HALL DRIVE" PARCEL 837

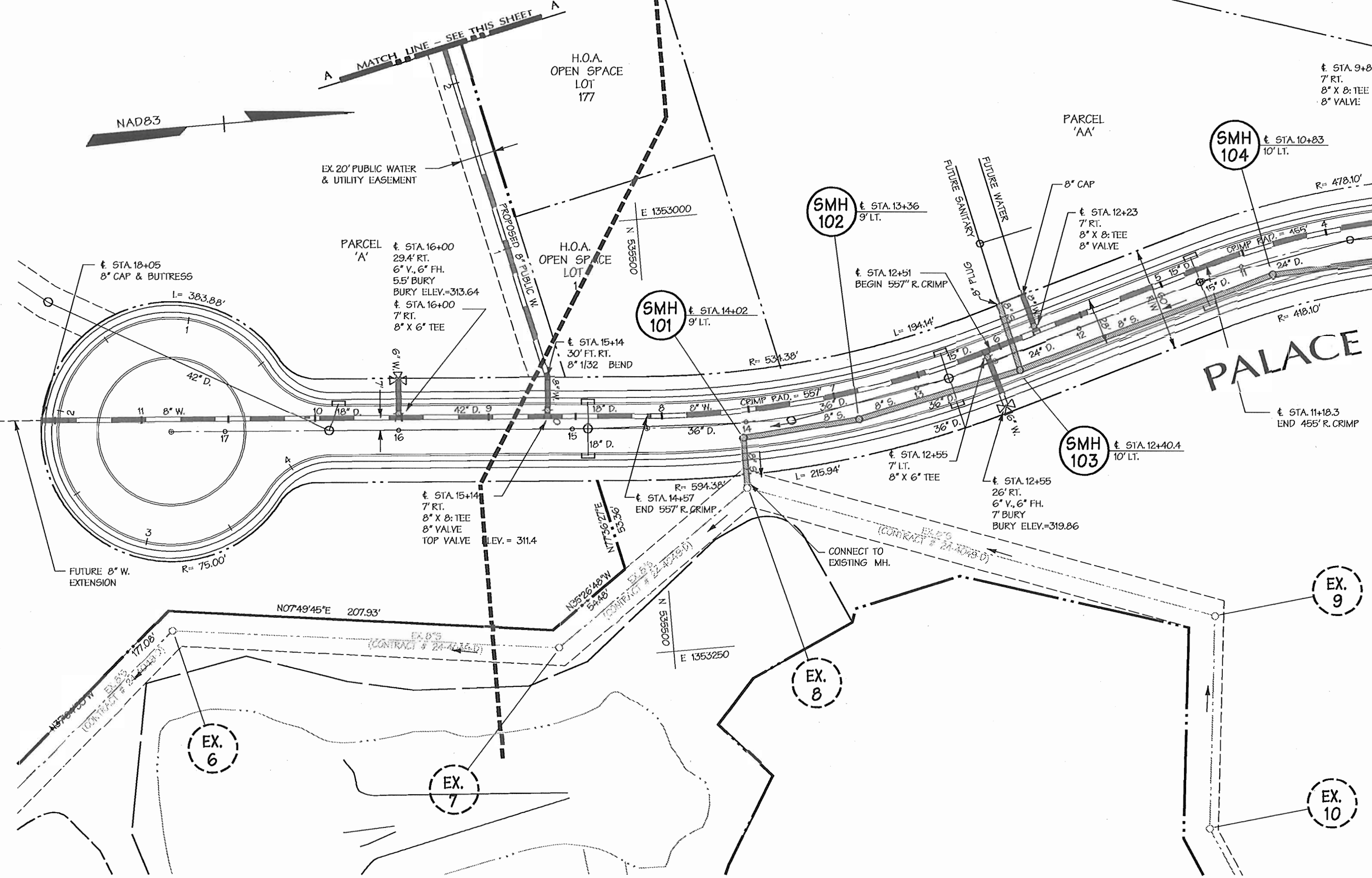
CONTRACT NO. 24-4148-D

SCALE: 1"=600'

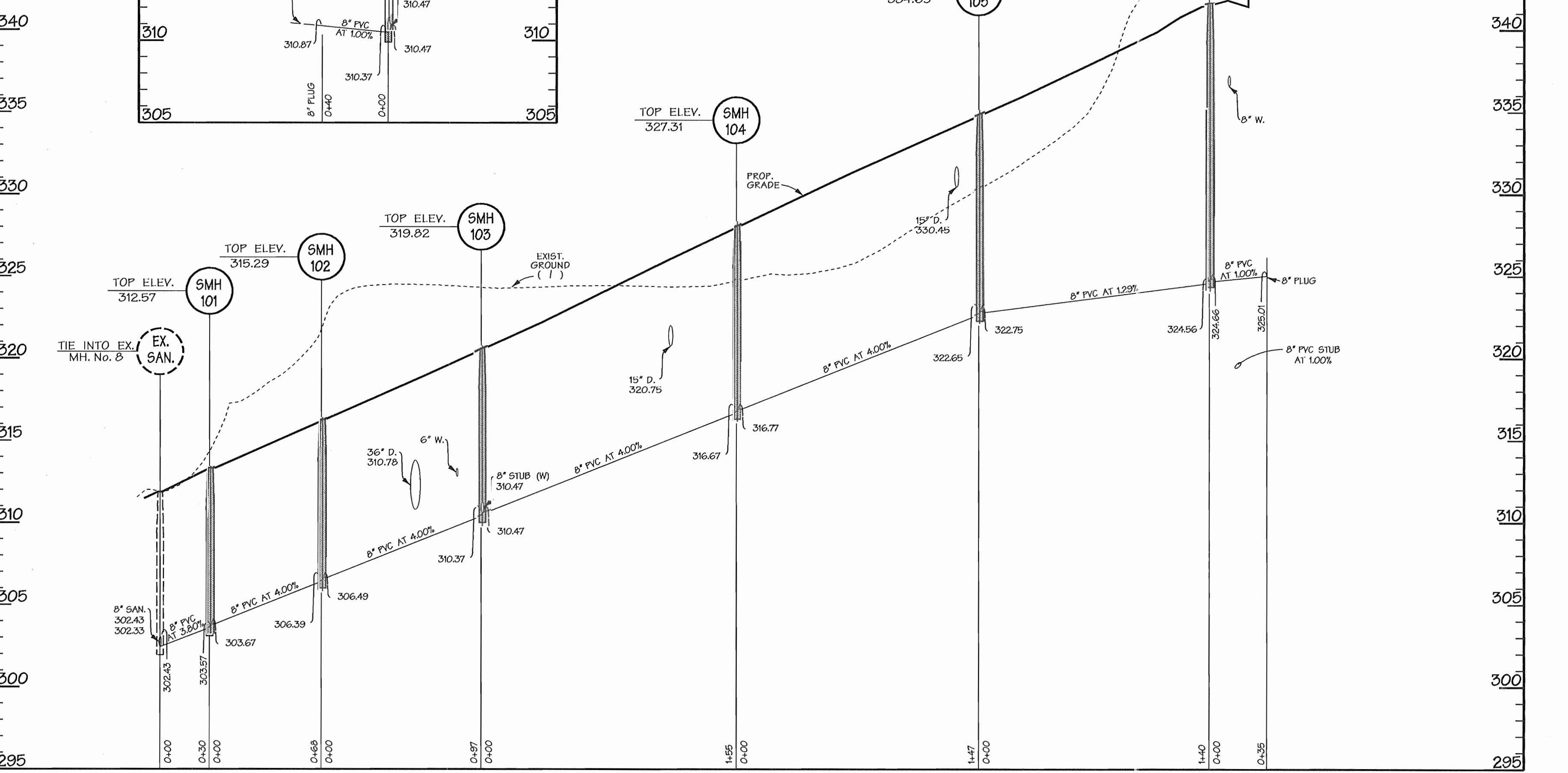
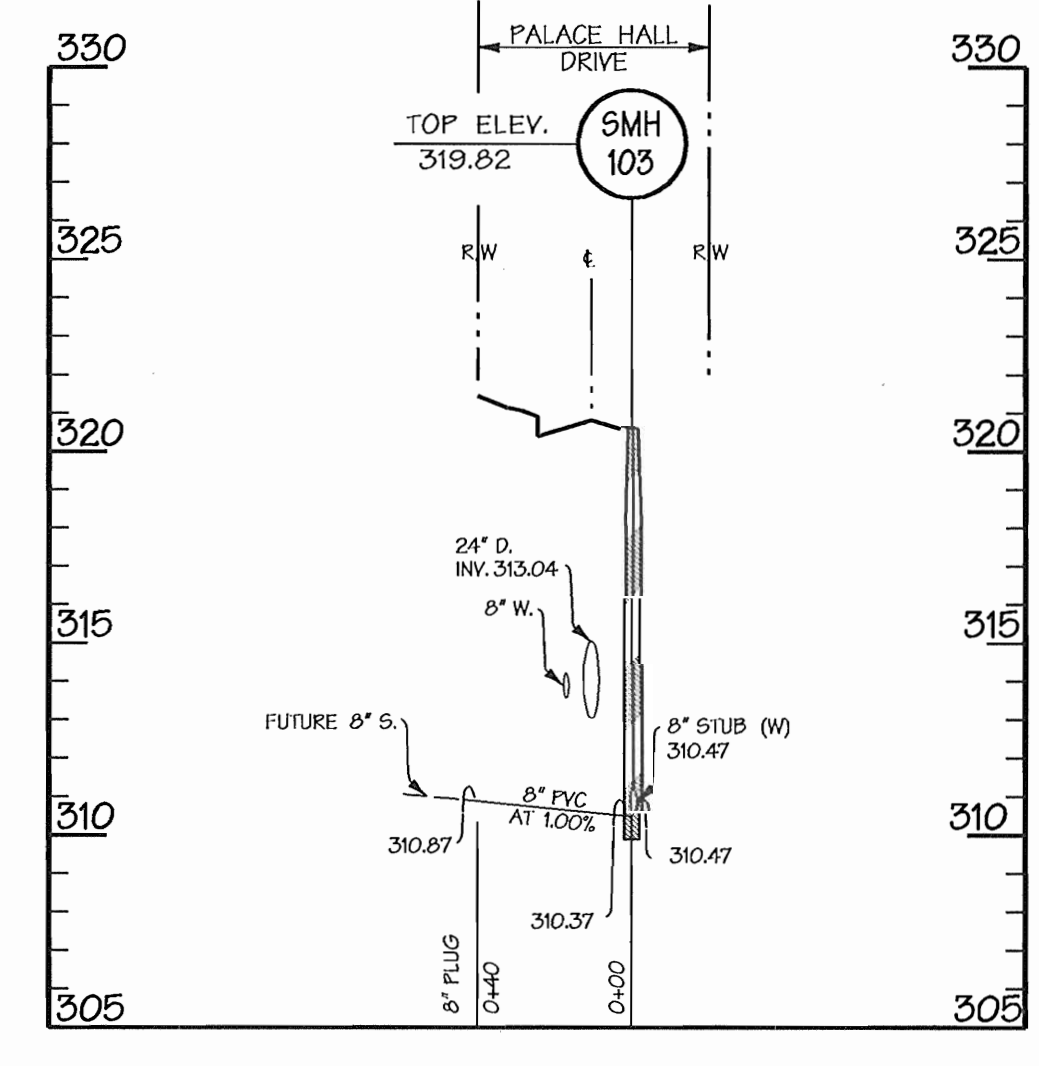
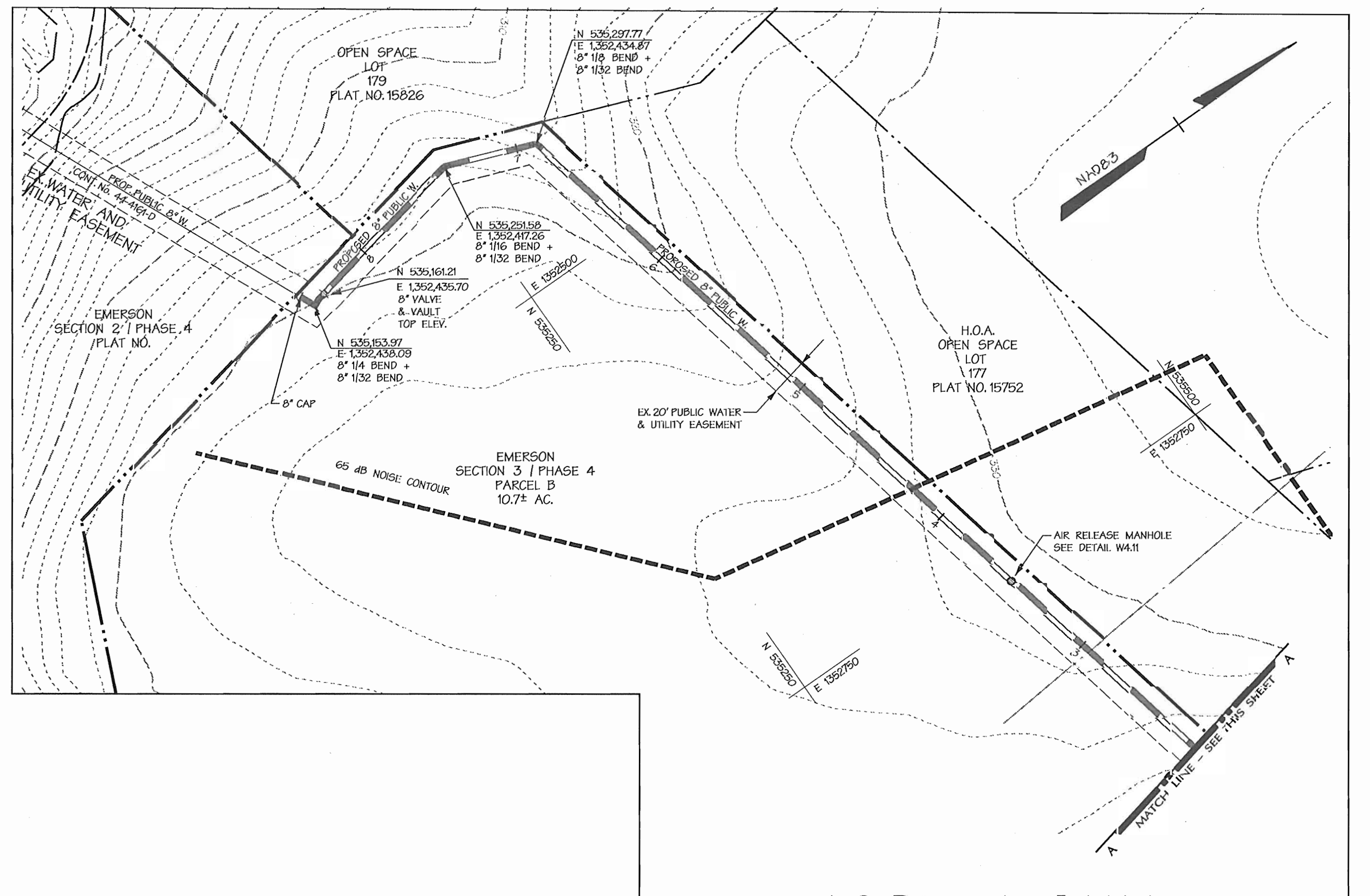
SHEET 1 of 3

# Legend

EX CURB & GUTTER	---	PROP. SEWER	-----	6" S.
EX. MAJOR CONTOURS	--- A00 ---	PROP. WATER	-----	4" W.
EX. MINOR CONTOURS	--- A02 ---	PROPERTY LINE	----	
EX. STORM DRAIN	--- EX. 24" RCP ---	ROADWAY RIGHT-OF-WAY	=====	
EX. SEWER	--- EX. 8" S. ---	PROPOSED LOT LINE	-----	
EX. WATER	--- EX. 8" W. ---	PROPOSED EASEMENT	-----	
EXISTING WETLAND LIMIT	~~~~~	PROPOSED CURB & GUTTER	-----	
PROP. STORM DRAIN	--- 15" RCP CL. IV ---	PROPOSED SIDEWALK	-----	



NOTE: SET HYDRANTS 2' FROM SIDEWALK



SANITARY SEWER PROFILE

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

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*Richard B...*  
CHIEF - BUREAU OF UTILITIES - DATE

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND

*...*  
CHIEF - DEVELOPMENT ENGINEERING DIVISION - DATE

**DMW**  
Draff-McCune-Walker, Inc.  
200 East Pennsylvania Avenue  
Towson, Maryland 21286  
(410) 296-3333  
Fax 296-4705

A Team of Land Planners,  
Landscape Architects,  
Golf Course Architects,  
Engineers, Surveyors &  
Environmental Professionals



DESIGN BY:	DFM
DRAWN BY:	WDE/KDE
CHECKED BY:	
DATE:	1/2/04

BY	NO.	REVISION	DATE

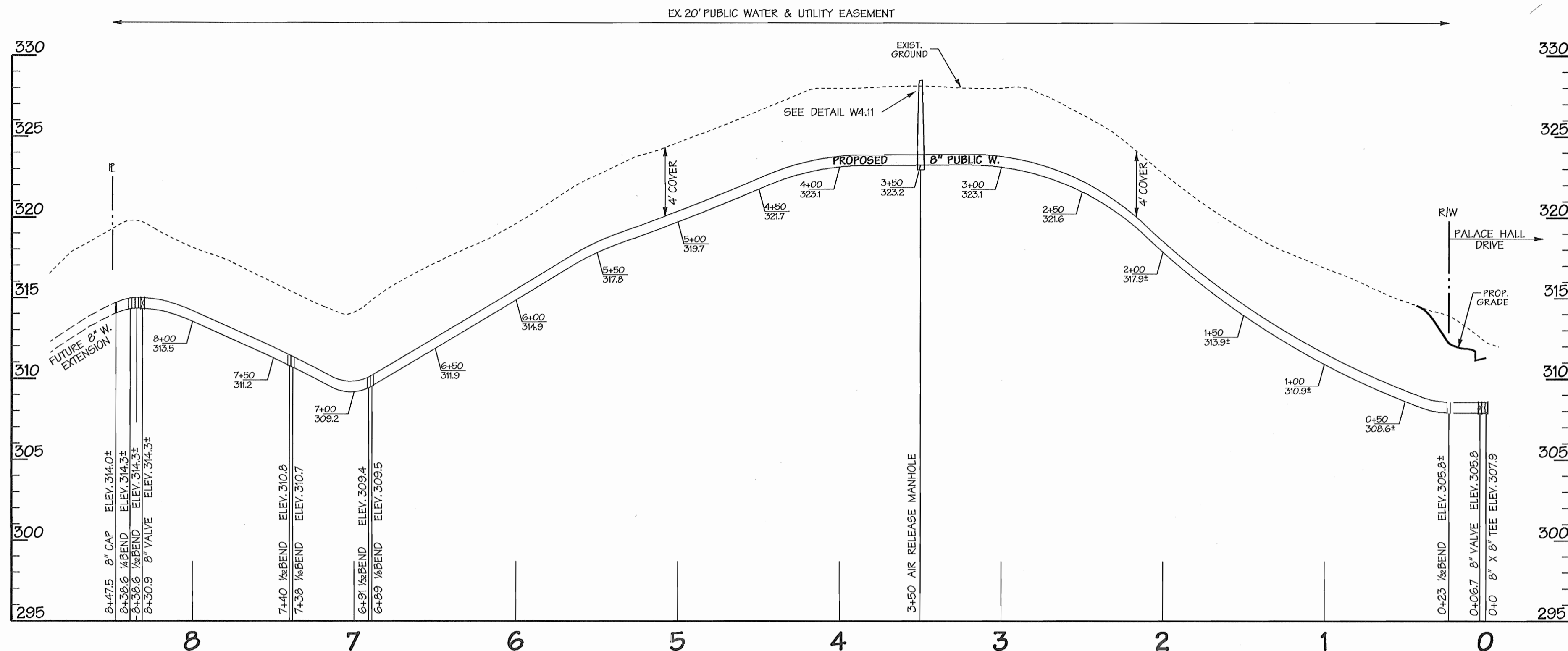
PROPOSED 8" WATER MAIN  
6th ELECTION DISTRICT  
CONTRACT NO. 24-4148-D

**EMERSON**  
Section 2, Phase 5B  
"PALACE HALL DRIVE" PARCEL 837

SCALE: 1"=50'  
SHEET 2 of 3

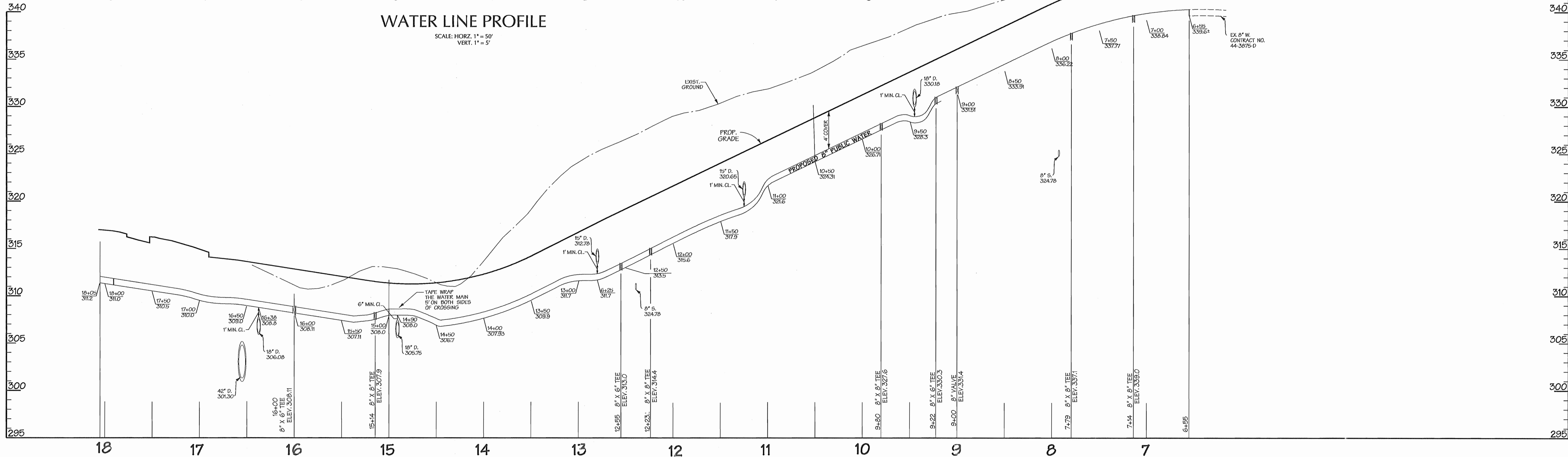
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WATER LINE PROFILE

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



WATER LINE PROFILE  
(C/L STATIONING)

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

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

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND



Daf-McCune-Walker, Inc.  
A Team of Land Planners,  
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(410) 296-3333  
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DESIGN BY:  
KAD  
DRAWN BY:  
WDE  
CHECKED BY:  
DATE:  
11/2/04

PROPOSED 8" WATER MAIN  
PALACE HALL DRIVE  
6th ELECTION DISTRICT

EMERSON  
Section 2, Phase 5B  
"PALACE HALL DRIVE" PARCEL 837

SCALE:  
1"=50'

SHEET  
3 of 3

*R. B. ...*  
CHIEF - BUREAU OF UTILITIES - DATE

*[Signature]*  
CHIEF - DEVELOPMENT ENGINEERING DIVISION - DATE

BY	NO.	REVISION	DATE

600 SCALE MAP NO. 47 BLOCK NO. 7, 8, 9, 13

CONTRACT NO. 24-4148-D