

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

Howard County, Maryland Department of Public Works
Contract No. 44-4161-D

GENERAL NOTES

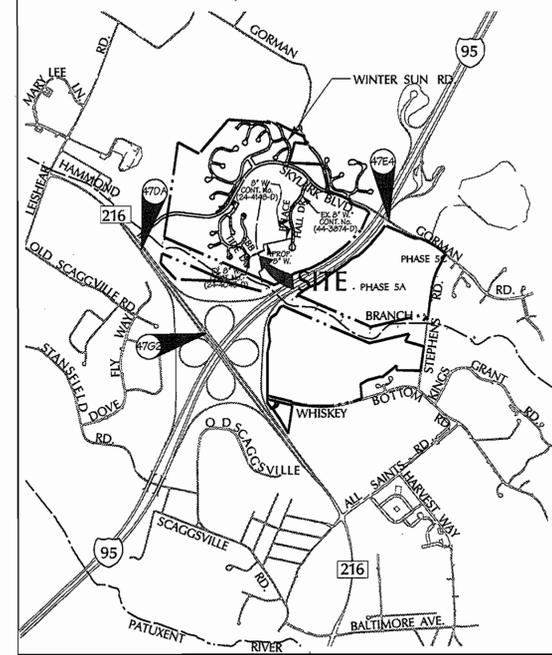
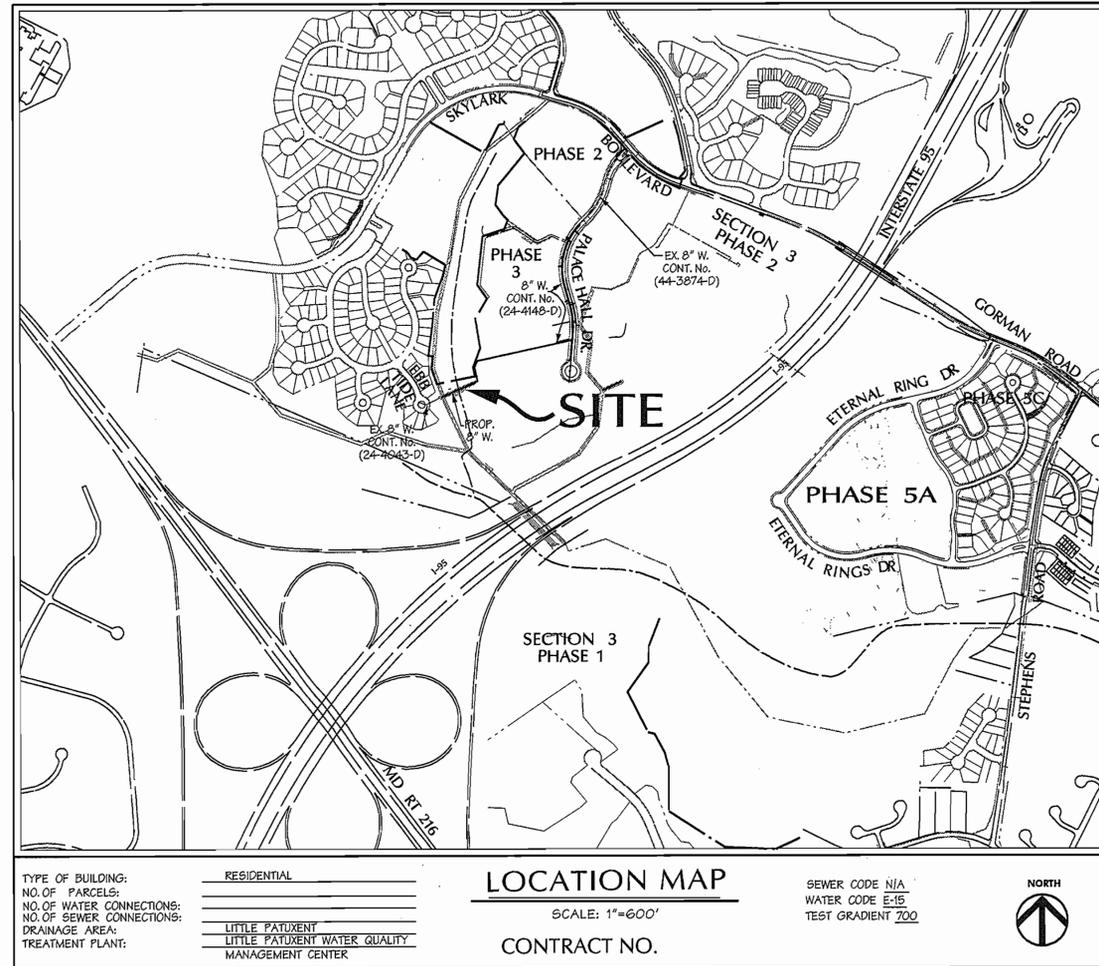
PART I - GENERAL

- 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 tunnels 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  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)	410-250-4620
BGE (Underground Damage Control)	410-787-9068
Misc Utility	1-800-257-7777
Colonial Pipeline Co.	410-795-1580
Bureau of Utilities	410-315-4900
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 10.114(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 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.



Vicinity Map
SCALE: 1"=2000'

BENCHMARK DESCRIPTION

COORDINATES IN MARYLAND NAD83(91) (HORIZONTAL) AND NAVD29 (VERTICAL) DATUMS.

474A NORTHING: 163191.9104
EASTING: 412265759
ELEVATION: 315505 ft.

474A NORTHING: 163326.2295
EASTING: 412536.2550
ELEVATION: 336.909ft.

4752 NORTHING: 162440.1212
EASTING: 412539273
ELEVATION: 364.210ft.

QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
8" D.I.P.	273'	274'	DIP	ATLANTIC STATES CAST IRON PIPE CO./HUGHES
4" D.I.P.	10'	10'	DIP	ATLANTIC STATES CAST IRON PIPE CO./HUGHES
4" VALVE	1	1	GATE	KENNEDY/HUGHES
8" X 4" TEE	1	1	DIP	TYLER/HUGHES
BLOW-OFF ASSEMBLY	1	1		CRISPIN/HUGHES
1/32" HORIZ. BEND	—	1	DIP	TYLER/HUGHES

NAME OF UTILITY CONTRACTOR: UTILITIES UNLIMITED
SURVEY AND DRAFTING DIVISION AS-BUILT DATE: NOV. 30, 2005

SHEET INDEX

SHEET	DESCRIPTION
1	COVER SHEET
2	8" WATER MAIN, PLAN AND PROFILE

Legend

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

REVIEWED FOR NATURAL RESOURCES CONSERVATION SERVICE AND MEETS TECHNICAL REQUIREMENT

Jim Meyer 7/12/04
SIGNATURE DATE

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

John Roberts 7/12/04
APPROVED HOWARD S.C.D. DATE

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND WITH ROAD CONSTRUCTION PLANS F-04-127.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

DMW
Daft-McCune-Walker, Inc.

200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-3333
Fax 296-4705



DESIGN BY: KAD
DRAWN BY: WDE
CHECKED BY:
DATE: 7/17/04

BY	NO.	REVISION	DATE

TITLE SHEET
WATER PLAN
6th ELECTION DISTRICT

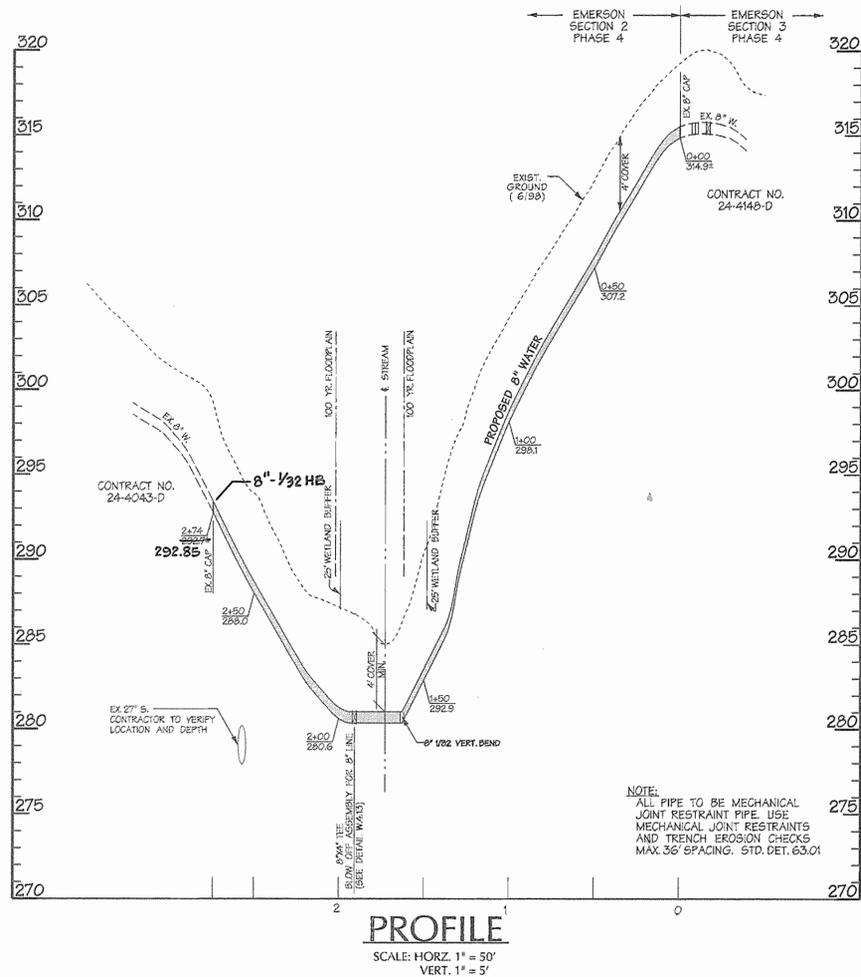
600 SCALE MAP NO. 47 BLOCK NO. 7, 8, 9, 13

AS BUILT
DATE: NOV. 30, 2005

NOTE: THIS CONTRACT NO. 44-4161-D ALSO DESIGNATED AS "WL-3" WILL CONNECT EMERSON, SECTION 2, PHASE 4 TO EMERSON, SECTION 2, PHASE 5B.

EMERSON
Section 2, Phase 5B
THE HOWARD RESEARCH & DEVELOPMENT CORPORATION
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044
CONTRACT NO. 44-4161-D

SCALE: 1"=600'
SHEET 1 of 2

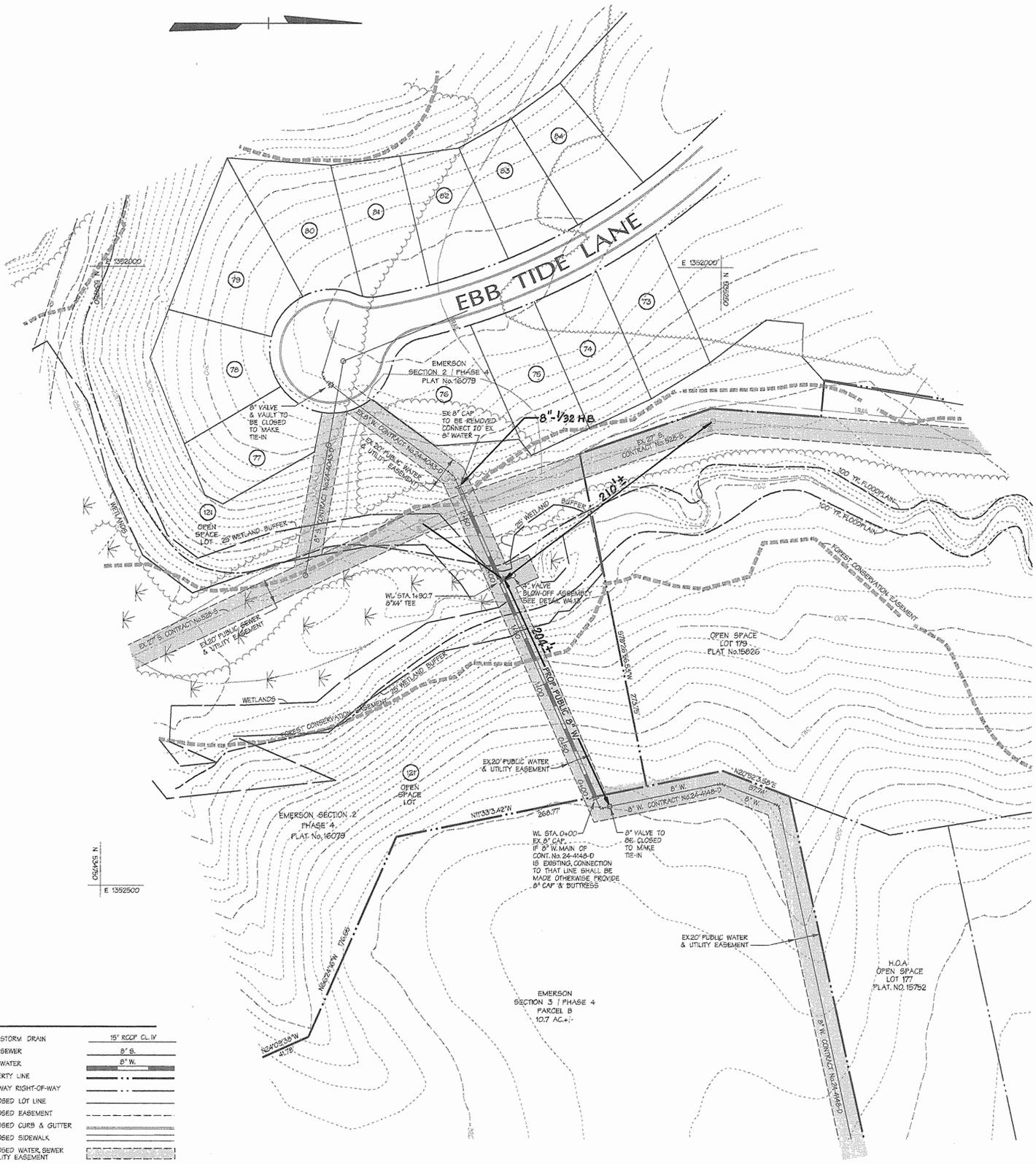


NOTE:
ALL PIPE TO BE MECHANICAL JOINT RESTRAINT PIPE. USE MECHANICAL JOINT RESTRAINTS AND TRENCH EROSION CHECKS MAX. 36' SPACING. STD. DET. 63.01

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

Legend

EX. CURB & GUTTER	PROF. STORM DRAIN	15' RCDP CL.V
EX. MAJOR CONTOURS	PROF. SEWER	8" S.
EX. MINOR CONTOURS	PROF. WATER	8" W.
EX. STORM DRAIN	PROPERTY LINE	---
EX. SEWER	ROADWAY RIGHT-OF-WAY	---
EX. WATER	PROPOSED LOT LINE	---
EXISTING TREE LINE	PROPOSED EASEMENT	---
EXISTING WETLAND LIMIT	PROPOSED CURB & GUTTER	---
WETLAND BUFFER	PROPOSED SIDEWALK	---
100 YR. FLOODPLAIN	PROPOSED WATER SEWER & UTILITY EASEMENT	---
STREAM BUFFER		



AS BUILT
DATE: NOV. 30, 2005

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>R. M. B...</i> CHIEF - BUREAU OF UTILITIES - DATE	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND <i>M. D. ...</i> CHIEF - DEVELOPMENT ENGINEERING DIVISION - DATE	DMW Daft-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: KAD							PROPOSED 8" WATER MAIN 6th ELECTION DISTRICT 600 SCALE MAP NO. 47 BLOCK NO. 7, 8, 9, 13	EMERSON SECTION 2 PHASE 5B THE HOWARD RESEARCH & DEVELOPMENT CORPORATION 10275 Little Patuxent Parkway Columbia, Maryland 21044 CONTRACT NO. 44-4161-D	SCALE: 1"=50'
				DRAWN BY: WDE/KDE						SHEET 2 of 2			
				CHECKED BY: DATE: 7/7/04	BY NO.	REVISION	DATE						

Mod. Jul 7, 10:40:33 2004

Wed Jul 7, 10:43:35 2004