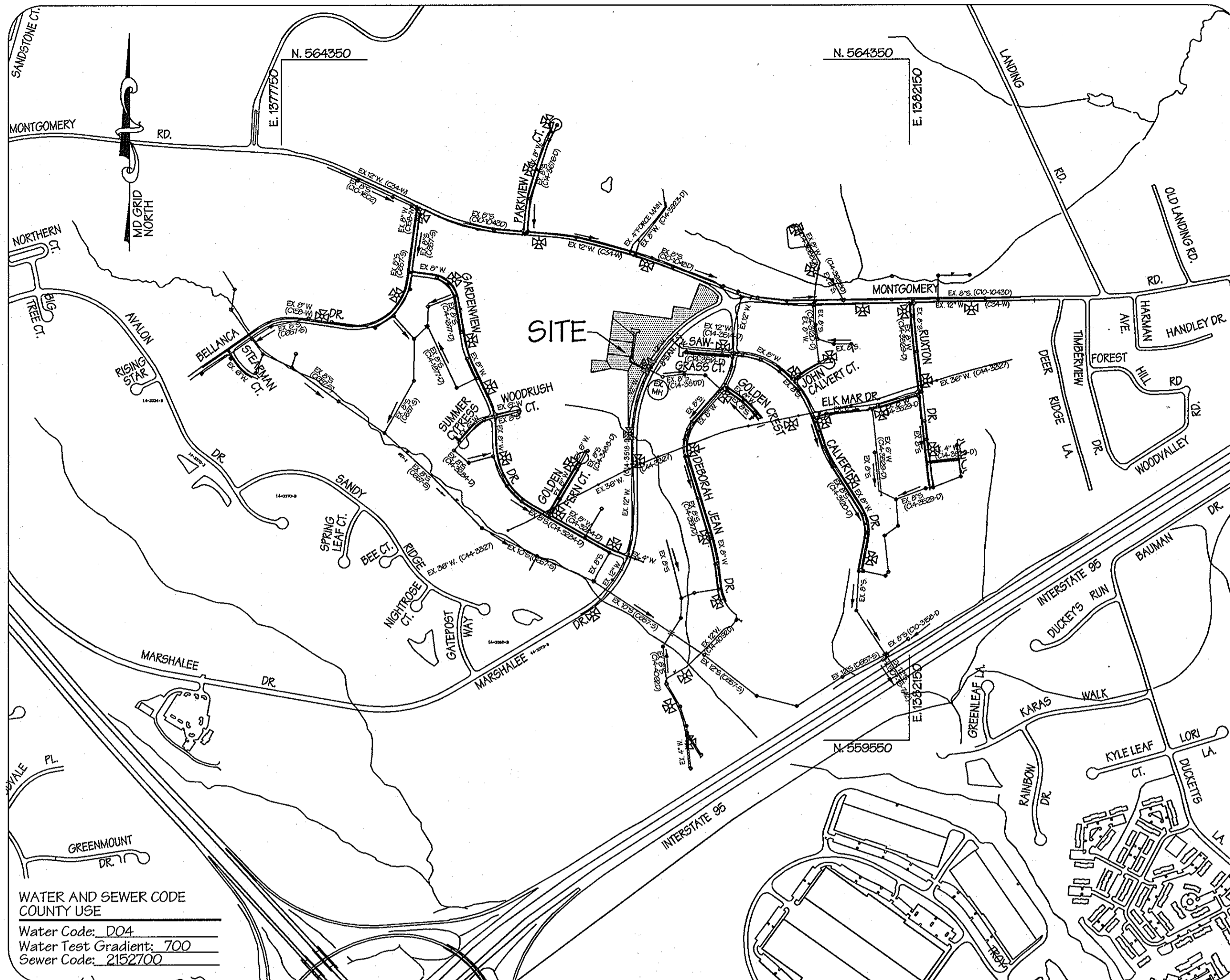


**BENCHMARKS:**

Ho. Co. Monument # 2645005  
 Elevation: 291.929  
 Description: Concrete Monument 0.3 ft. below surface at top of bank

Ho. Co. Monument # 2645006  
 Elevation: N/A  
 Description: Concrete Monument 0.2 ft. below surface at top of bank



LOCATION MAP  
 1" = 600'

Type of Buildings:	Single Family Detached
Number of Lots/Parcels:	3 Buildable & 1 Non-Buildable
Number of W.H.C.'s:	N/A
Number of S.H.C.'s:	N/A
Drainage Area:	Patapsco
Treatment Plant:	Patapsco Wastewater Treatment Plant

WATER AND SEWER CODE COUNTY USE  
 Water Code: D04  
 Water Test Gradient: 700  
 Sewer Code: 2152700

WATER & SEWER CONSTRUCTION PLANS

**MARSHALEE WOODS**

SECTION TWO AREA THREE - OPEN SPACE LOTS 145, 146, 147 & NON-BUILDABLE BULK PARCEL 'A';  
 SECTION TWO AREA FOUR - OPEN SPACE LOT 148;  
 SECTION TWO AREA FIVE - LOTS 150, 151, 152, OPEN SPACE LOTS 149, 153 AND P/O NON-BUILDABLE BULK PARCEL 'A'  
 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 CONTRACT NO. 14-4217-D

No.	INDEX OF SHEETS	Description
1	Cover Sheet	
1A	Revised Cover Sheet	
2	Plan View	
2A	Revised Plan View	
3	Profiles	
3A	Revised Profiles	

GENERAL NOTES

- PART I:**
- Approximate location 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 NA VD 88.
  - All pipe elevations shown are invert elevations unless otherwise noted on the plans.
  - Clear all utilities by a minimum of 12". Clear all poles by 5'-0" minimum or tunnel as required. 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 poles.
  - For details not shown on the drawing, and for materials and construction methods, use Howard County Design Manual, Volume IV, Standard Specifications and Detail 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 pit. 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.
  - Contractor shall notify the following utility companies or agencies at least five (5) working days before starting work shown on these plans:
 

AT & T	1-800-252-1135
BGE (Contractor Services)	410-250-4620
BGE (Underground Damage Control)	410-787-9069
Bureau of Utilities	410-515-4300
Colonial Pipeline Co.	410-795-1390
Miss Utility	1-800-257-7777
State Highway Administration	410-531-5635
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 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 (5) five working days before any 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 18.114(a) of the Howard County Code.
- PART II: WATER**
- All water mains to be D.I.P. Class 52 unless otherwise noted.
  - Top of all water mains to 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 the 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 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 G5.52. 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 cellar cannot be served.

THIS SHEET REPLACES THE SHEET SIGNED ON 9-30-04, BY CHIEF, BUREAU OF UTILITIES; AND SIGNED 9-14-04 BY CHIEF, DEVELOPMENT ENGINEERING DIVISION.

WHEELER CONSTRUCTION		AS-BUILT		
ITEM	QUANTITIES ESTIMATED	QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
8" San.	133 L.F.		PVC	
San. Manhole	0 Ea.	0		
4" SHC	0 L.F.	0		
4" Water	18 L.F.	0		
6" Water	52 L.F.	56	DEP	
6" x 4" Reducer	1 Ea.	0		
12" x 6" Tee	1 Ea.	1	DEP	
4" Cap	1 Ea.	0		
1" WHC	0 L.F.	0		
12" Water	1071 L.F.		DEP	
12" X 6" FHT	2 Ea.	3	DEP	
Fire Hydrant	2 Ea.	3		
6" Valve	3 Ea.	4	DEP	
12" Cap	1 Ea.	1	DEP	
12" Valve	3 Ea.	2	DEP	

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS  
  
 NATURAL RESOURCES CONSERVATION SERVICE

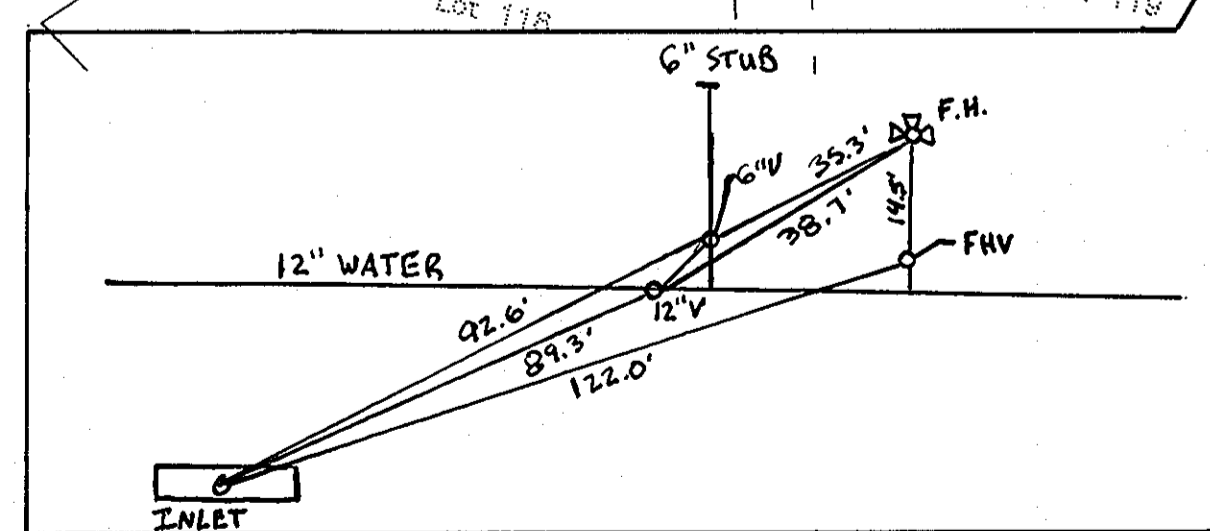
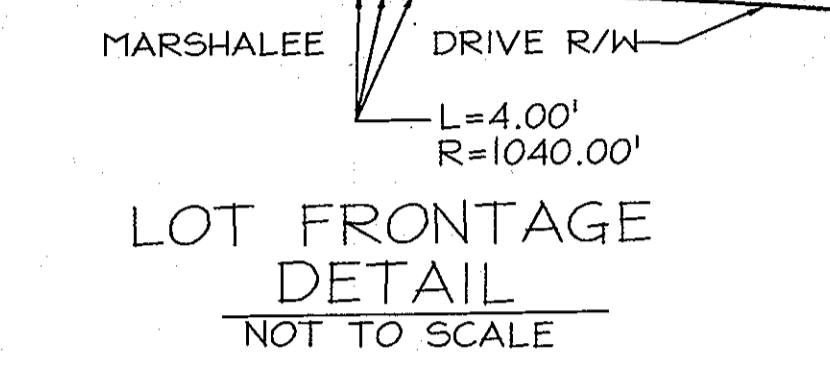
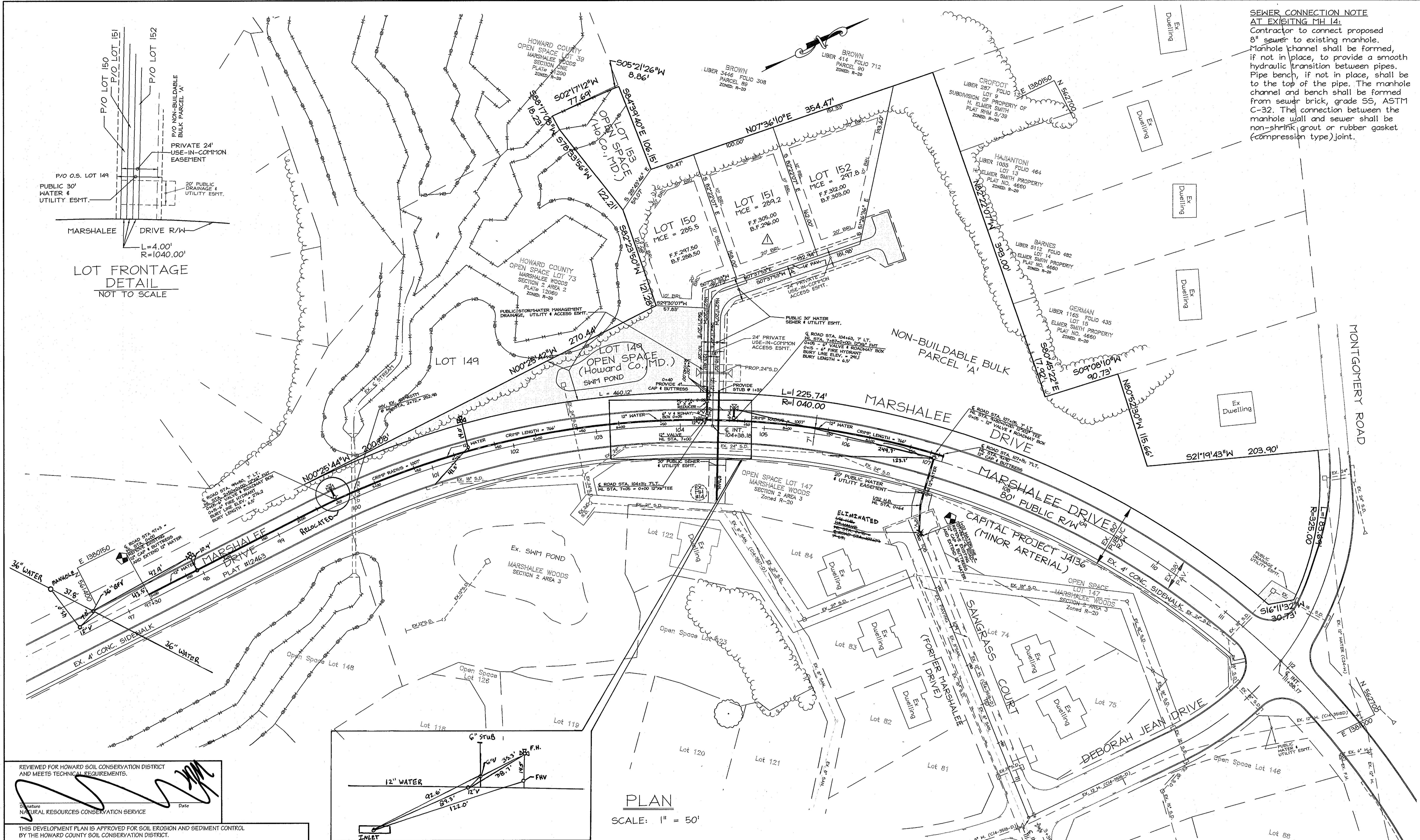
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.  
  
 HOWARD COUNTY SOIL CONSERVATION DISTRICT

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS AND THE MARSHALEE DRIVE CAPITAL PROJECT J-4136 PHASE IIIA. (F04-95)

OWNER/DEVELOPER  
 MARSHALEE WOODS LIMITED PARTNERSHIP  
 8825 P COLUMBIA 100 PARKWAY  
 COLUMBIA, MD 21045  
 (410) 730 - 0810

DEPARTMENT OF PUBLIC WORKS  CHIEF-BUREAU OF UTILITIES	DEPARTMENT OF PLANNING & ZONING  CHIEF-DEVELOPMENT ENGINEERING DIVISION	<b>LDE Inc.</b> Engineers, Surveyors, Planners 9250 Rumsey Road, Suite 106 Columbia, Maryland - 21045 (410)715-1070 - (301)596-3424 - FAX(410)715-9540	 DESIGNER K.B.W. DRAWN K.B.W. CHECKED B.D.B. DATE 07/2004	DESIGNED K.B.W. DRAWN K.B.W. CHECKED B.D.B. DATE 07/2004	REVISIONS NO. 1 REVISION REVISE QUANTITIES PER REVISION & ADD NOTE. DATE 7/2012	COVER SHEET	<b>MARSHALEE WOODS</b> 1st ELECTION DISTRICT, HOWARD COUNTY, MARYLAND CONTRACT NO. 14-4217-D	SCALE As Shown SHEET 1 A OF 3
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**SEWER CONNECTION NOTE AT EXISTING MH 14:**  
 Contractor to connect proposed 8" sewer to existing manhole. Manhole channel shall be formed, if not in place, to provide a smooth hydraulic transition between pipes. Pipe bench, if not in place, shall be from sewer brick, grade SS, ASTM C-32. The connection between the manhole wall and sewer shall be non-shrink grout or rubber gasket (compression type) joint.



THIS SHEET REPLACES THE SHEET SIGNED ON 9-30-04, BY CHIEF, BUREAU OF UTILITIES; AND SIGNED 9-14-04 BY CHIEF, DEVELOPMENT ENGINEERING DIVISION.


REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.  
 Signature: [Signature]  
 Date: [Date]

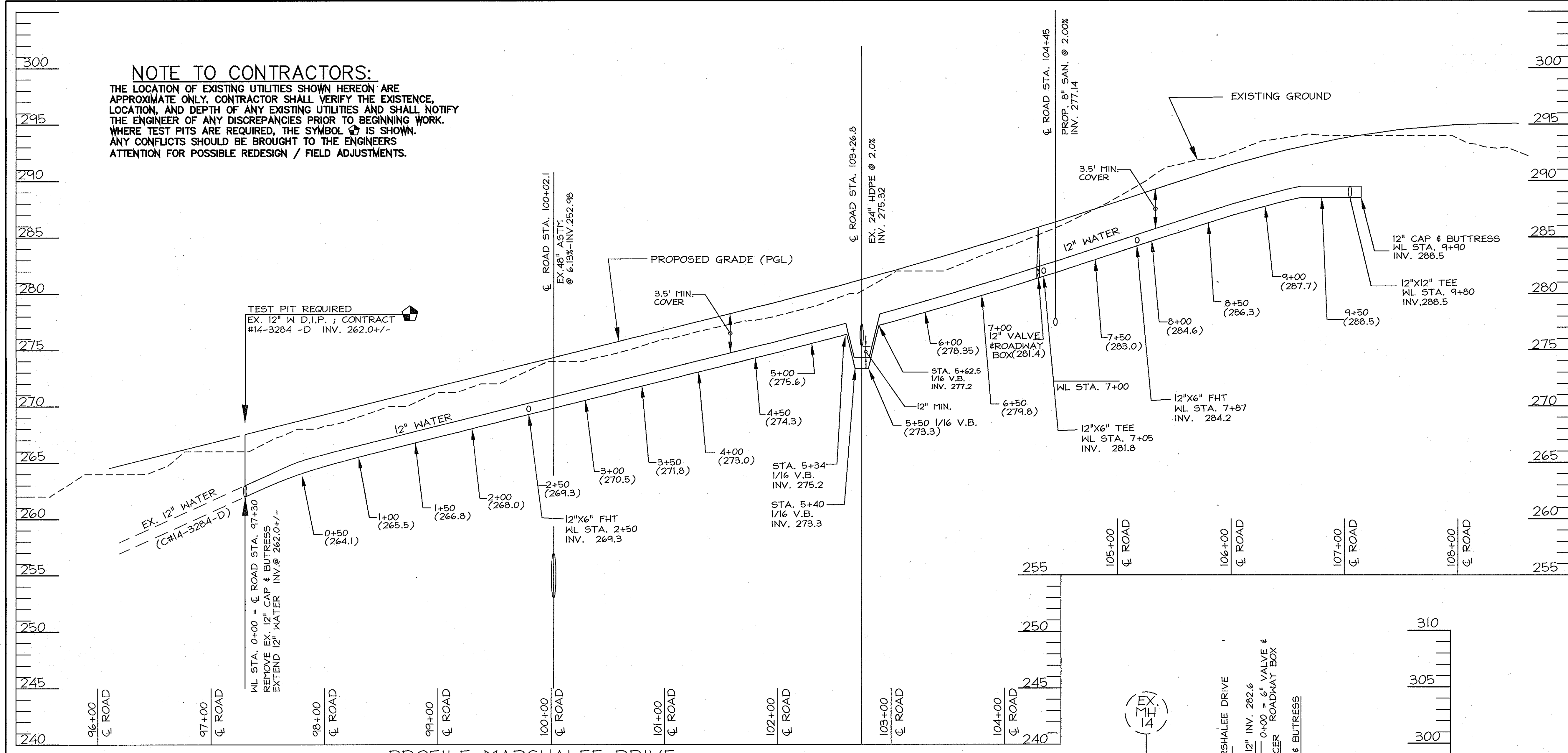
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

John R. Robinson  
 HOWARD SOIL CONSERVATION DISTRICT  
 8/17/08 DATE

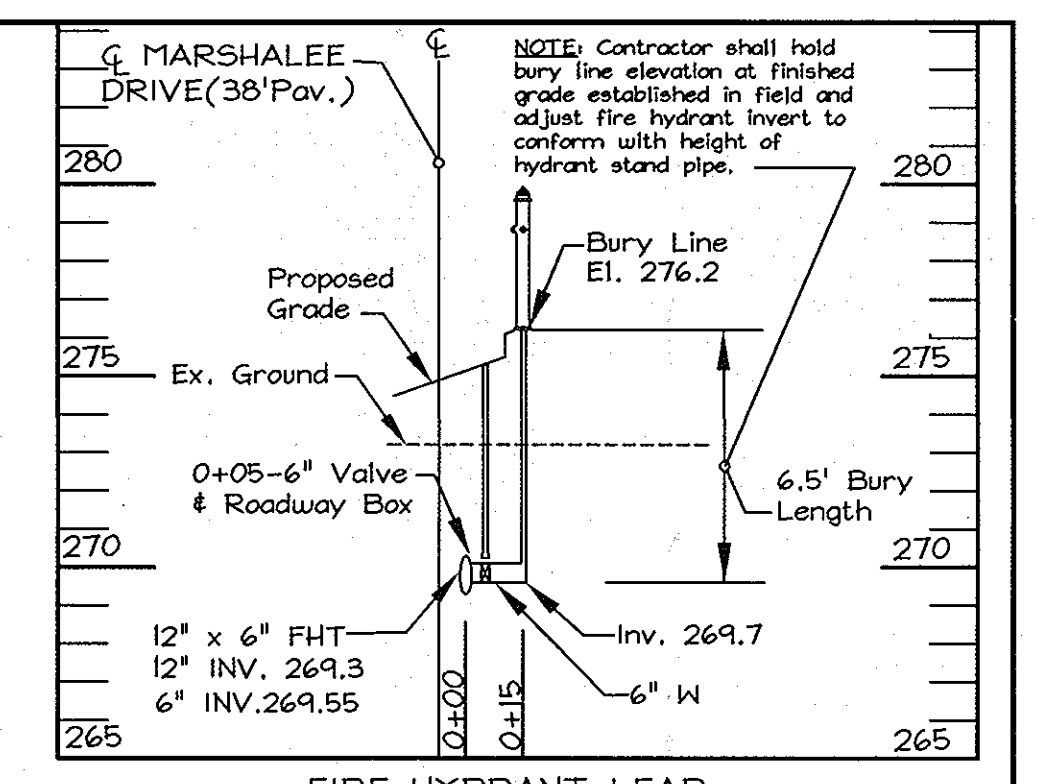
SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS AND THE MARSHALEE DRIVE CAPITAL PROJECT J-4136 PHASE IIIA. (FO4-05)

DEPARTMENT OF PUBLIC WORKS	DEPARTMENT OF PLANNING & ZONING	<b>LDE Inc.</b> Engineers, Surveyors, Planners 9250 Rumsey Road, Suite 106 Columbia, Maryland - 21045 (410)715-1070 - (301)596-3424 - FAX(410)715-9540		DESIGNED K.B.W.				PLAN MARSHALEE WOODS 1st ELECTION DISTRICT, HOWARD COUNTY, MARYLAND CONTRACT NO. 14-4217-D	SCALE As Shown
 CHIEF-BUREAU OF UTILITIES 7/14/08 DATE	 CHIEF-DEVELOPMENT ENGINEERING DIVISION 8/17/08 DATE			CHECKED KCF B.D.B. DATE 07/20/04	BY NO.	DRAWN K.B.W. REVISION REVISE PLAN PER AS-BUILT CAP. PROJ. J4136 3A & BA 06 02% & ADD NOTE.	DATE 7/20/08		600 SCALE MAP NO. 37 BLOCK 15

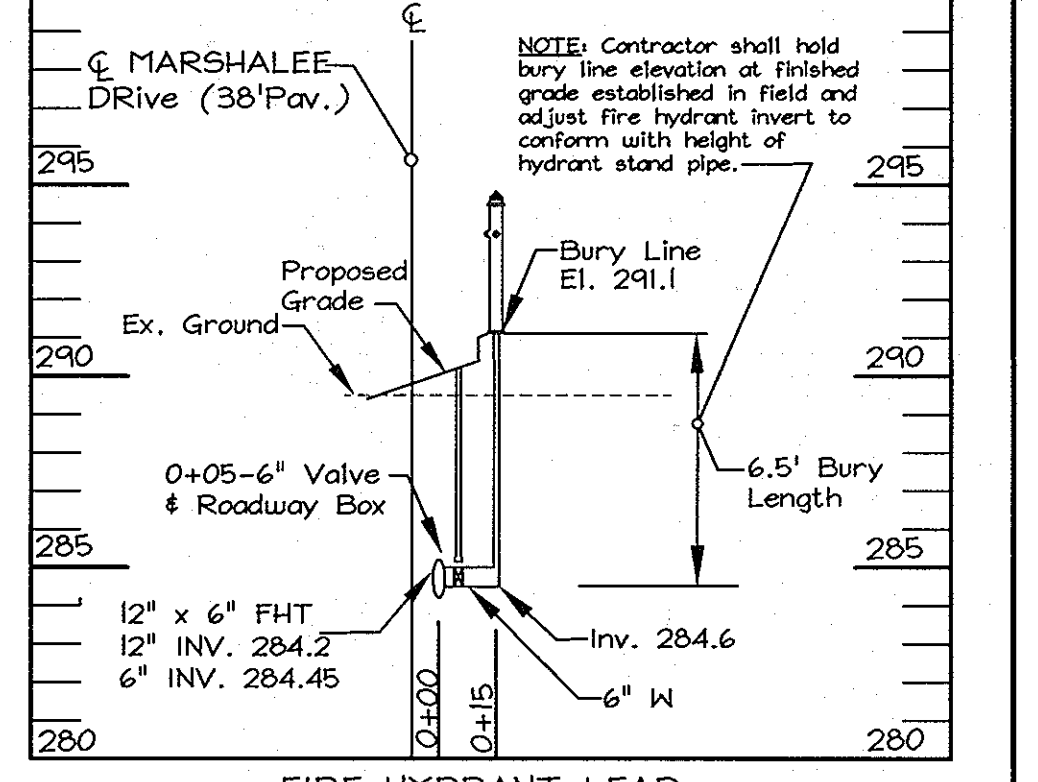
**NOTE TO CONTRACTORS:**  
 THE LOCATION OF EXISTING UTILITIES SHOWN HEREON ARE APPROXIMATE ONLY. CONTRACTOR SHALL VERIFY THE EXISTENCE, LOCATION, AND DEPTH OF ANY EXISTING UTILITIES AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING WORK. WHERE TEST PITS ARE REQUIRED, THE SYMBOL  IS SHOWN. ANY CONFLICTS SHOULD BE BROUGHT TO THE ENGINEER'S ATTENTION FOR POSSIBLE REDESIGN / FIELD ADJUSTMENTS.



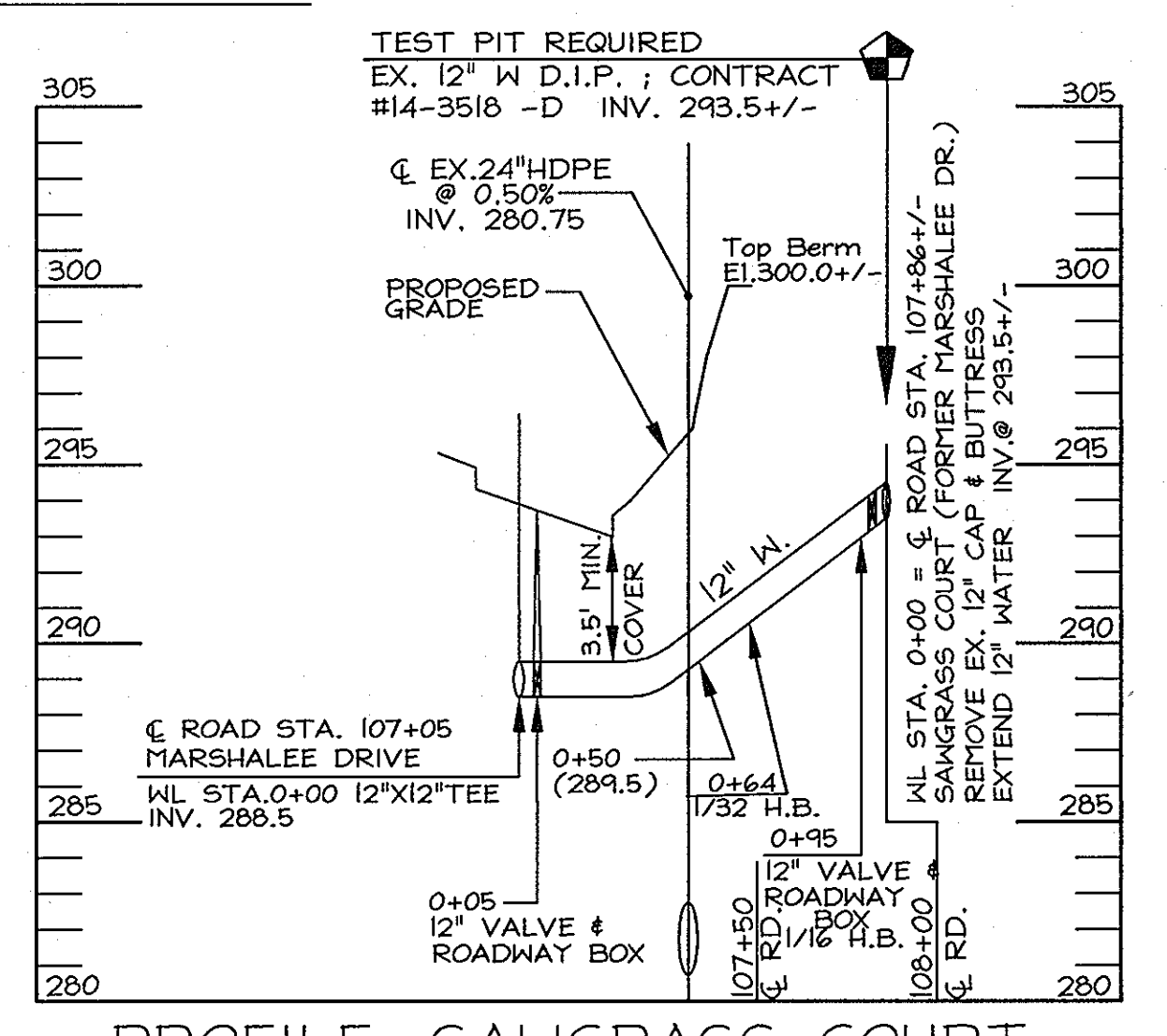
PROFILE-MARSHALEE DRIVE  
 SCALE: 1"=50' H., 1"=5' V.



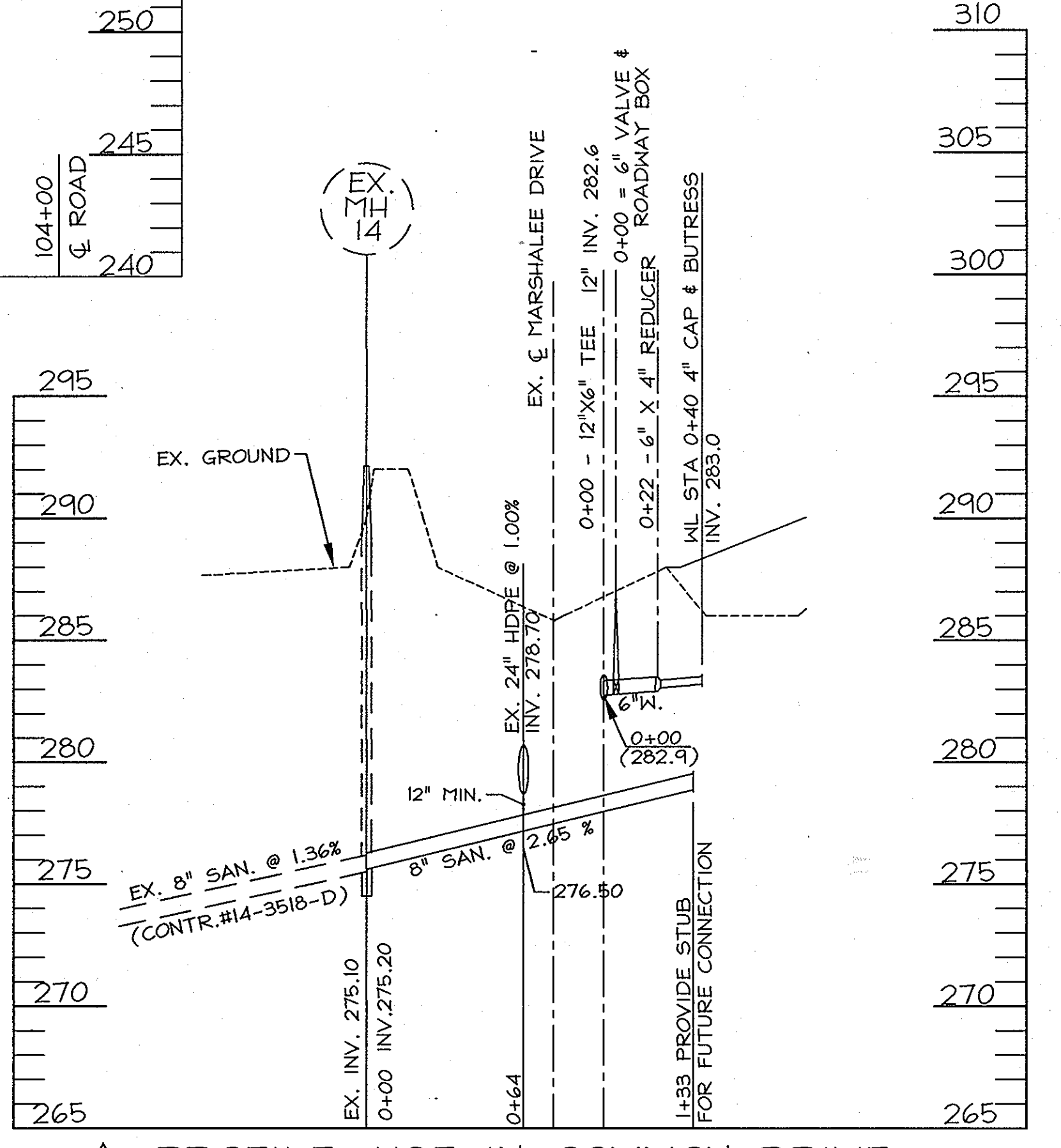
FIRE HYDRANT LEAD  
 Marshalee Drive 99+80 =  
 Water Line Station 2+50



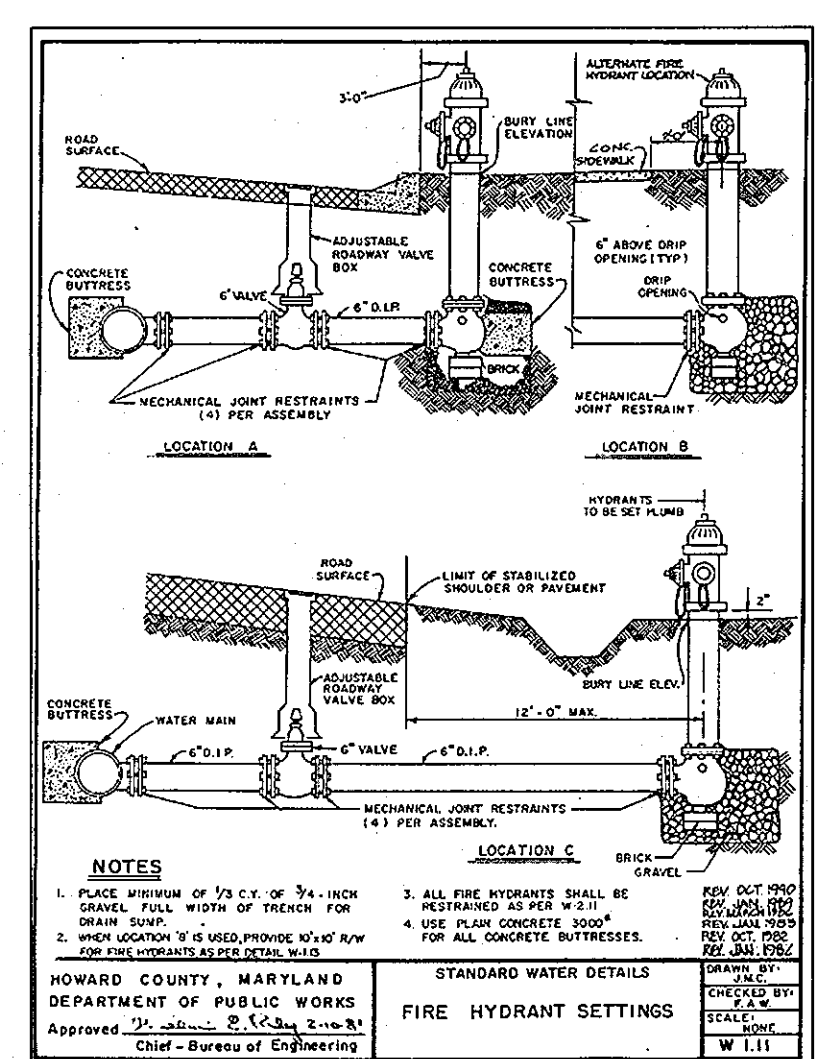
FIRE HYDRANT LEAD  
 Marshalee Drive 104+63 =  
 Water Line Station 7+87




PROFILE: SAWGRASS COURT  
 SCALE: 1"=50' H., 1"=5' V.



PROFILE: USE-IN-COMMON DRIVE  
 SCALE: 1"=50' H., 1"=5' V.

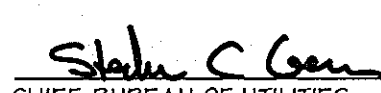




**NOTES**  
 1. PLACE WITHIN OF 1/2" OF 3/4" INCH SAND, FROM WATER OF TRENCH FOR ALL CONCRETE BUTTRESSES.  
 2. WHEN LOCATED IN A TRENCH, PROVIDE 1/2" OF SAND UNDER BUTTRESSES.  
 3. ALL FIRE HYDRANT SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD WATER DETAILS.  
 4. ALL FIRE HYDRANT SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD WATER DETAILS.  
 5. ALL FIRE HYDRANT SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD WATER DETAILS.

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.  
 Signature:  Date: 7/24/08  
 CHIEF-BUREAU OF UTILITIES

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS AND THE MARSHALEE DRIVE CAPITAL PROJECT J-4136 PHASE IIIA. (F04-95)

THIS SHEET REPLACES THE SHEET SIGNED ON 9-30-04, BY CHIEF, BUREAU OF UTILITIES; AND SIGNED 9-14-04 BY CHIEF, DEVELOPMENT ENGINEERING DIVISION.

DEPARTMENT OF PUBLIC WORKS  7/24/08 CHIEF-BUREAU OF UTILITIES	DEPARTMENT OF PLANNING & ZONING  8/11/08 CHIEF-DEVELOPMENT ENGINEERING DIVISION	<b>LDE Inc.</b> Engineers, Surveyors, Planners 9250 Rumsey Road, Suite 106 Columbia, Maryland - 21045 (410)715-1070 - (301)596-3424 - FAX(410)715-9540	 DESIGNED: K.B.W. DRAWN: K.B.W. CHECKED: B.D.B. DATE: 07/2004	REVISION 1. REVISE PROFILE (USE IN COMMON) PER CAP. 1/2008 2. PROJ. J4136 3A & ADD NOTE.	DATE: 7/2012 600 SCALE MAP NO. 37	BLOCK 15	<b>MARSHALEE WOODS</b> 1st ELECTION DISTRICT, HOWARD COUNTY, MARYLAND CONTRACT NO. 14-4217-D	SCALE: As Shown SHEET: 3A OF 3
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