

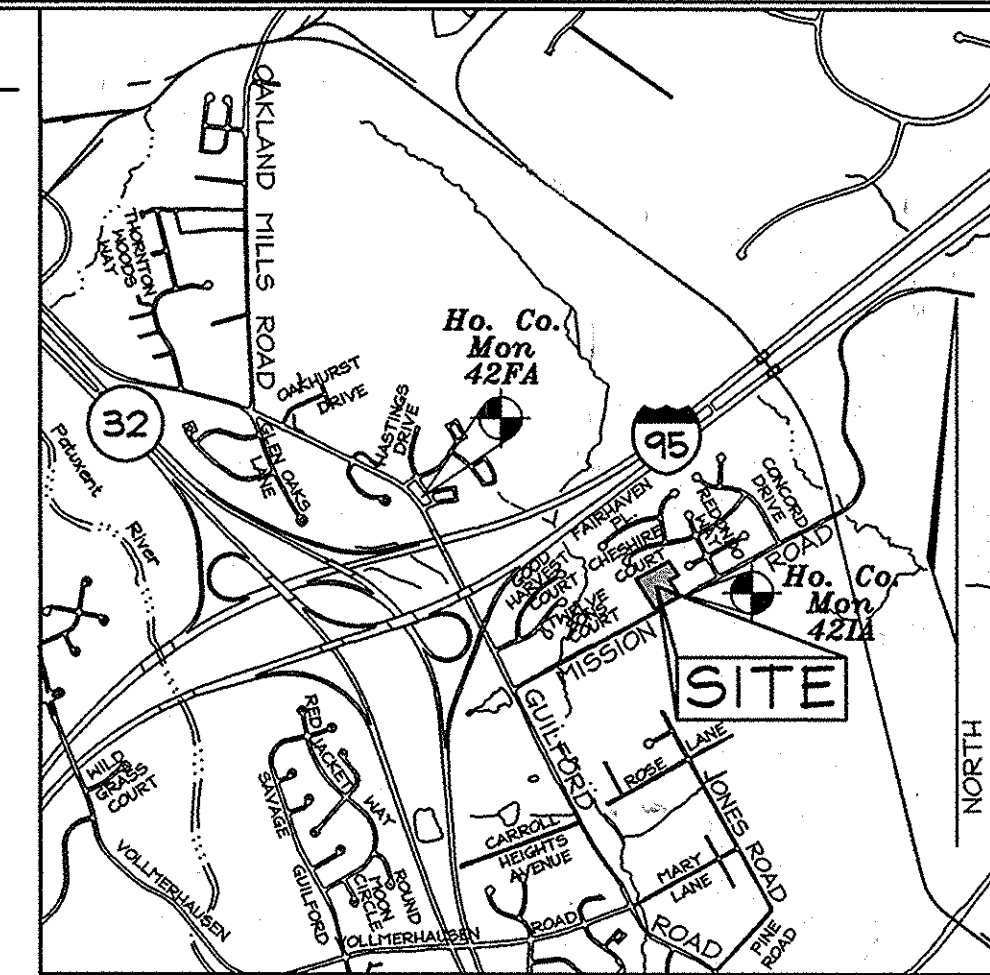
PUBLIC WATER AND SEWER FINAL PLANS

R.W. DORSEY PROPERTY

LOTS 1 THRU 9 AND OPEN SPACE LOT 10 HOWARD COUNTY, MARYLAND CONTRACT NO. 24-4573-D

LEGEND

Existing contours	— 552
Proposed Contour	— 552.5
Existing Spot Elevation	352.3
Proposed Spot Elevation	+82.53
Direction of Flow	→
Soil Boundary	- · - · -
Ex. Utility Pole	⊕
Ex. Tree	⊙
Ex. Evergreen	⊙
Ex. Water	—
Ex. San.Sew.	—
Prop. Water	—
Prop. San.Sew.	—
Prop. FH	⊗



BENCHMARKS

SCALE: 1"=200'

HOWARD COUNTY ADC MAP 5053 K5

Sta. 42IA N 543,390.4150 (feet) E 1,364,912.6600 (feet)	Elev. 311.99 (feet) (NADV'88)
Sta. 42FA N 544,412.8160 (feet) E 1,362,179.3700 (feet)	Elev. 341.83 (feet) (NADV'88)

GENERAL NOTES

- PART I - GENERAL**
- Subject property Zoned "R-SC" per 02/02/04 Comprehensive Zoning Plan.
 - The project is in conformance with the latest Howard County Standards unless waivers have been approved.
 - 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, with two foot contour intervals, were performed on July 2005 by FSH & Associates, Inc.
 - Horizontal and Vertical Survey Controls: The coordinates shown on the Drawings are based on Maryland State Reference System NAD '83/'91 as projected by Howard County Geodetic Control Stations No. 42IA and No. 42FA, Howard County monuments. (See Vicinity Map.) All vertical controls are based on NAVD '88. Vertical controls provided on the drawings are 42IA and 42FA, Howard County monuments. (See Vicinity Map.)
 - Existing utilities are based on Howard County Contract Drawings and field run surveys.
 - 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. In the event the Contractor's work requires the bracing of poles, any costs incurred by the Owner for the bracing or damage repair associated therewith, shall be deducted from monies owed to the Contractor. The Contractor shall coordinate with the utility companies to schedule the bracing of the poles.
 - For details not shown on the Drawings, 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.
 - Existing utilities in the vicinity of the proposed work, 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 (Construction Services)	410,850,4620
BGE (Emergency)	410,635,0223
Bureau of Utilities	410,315,4900
Colonial Pipeline Company	410,795,1390
Miss Utility	1,800,257,7777
Verizon	1,800,743,0033/1,800,525,7244
 - Trees and shrubs are to be protected from damage to the maximum possible extent. Trees and shrubs to remain, 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 the construction of the main.
 - The Contractor shall notify the Bureau of Highways, Howard County, at 410,315,7450 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 18.11(a) of the Howard County Code.
 - There is no floodplain on this site.
 - There are no wetlands on this site.

PART II - WATER

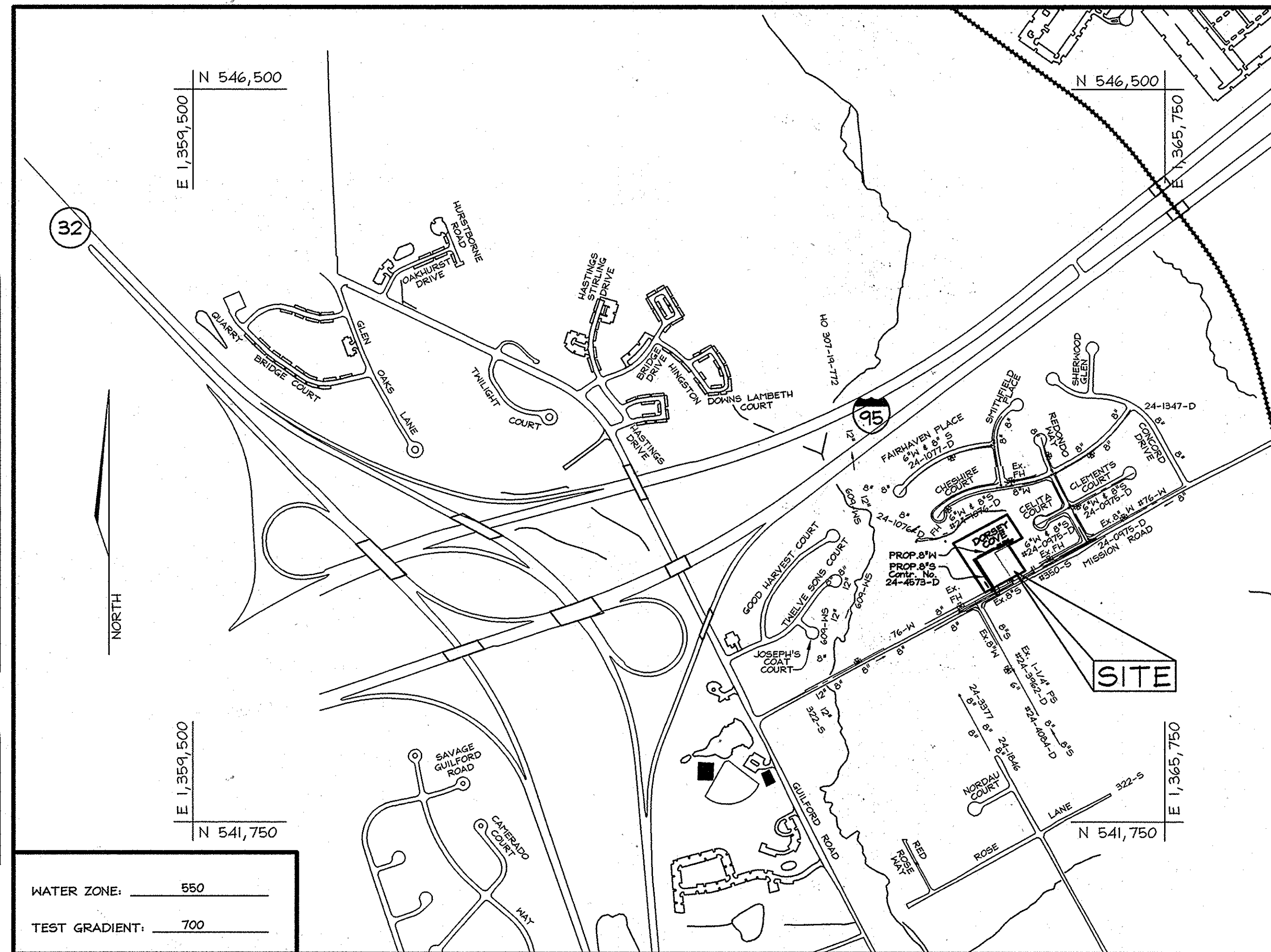
- All water mains to be 8" D.I.P. Class 54 unless otherwise noted. Trench detail: Howard County Std. Det. G-2.11.
- Tops of all water mains to have a minimum of 3'-6" of cover unless otherwise noted.
- Valves adjacent to tees shall be strapped to tees.
- All fittings shall be buttressed or anchored with 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 Fire Hydrants 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. The Bureau of Utilities shall be informed before the closing of public water mains.
- All water house connections shall be for inside meter settings unless otherwise noted on the Plans or in the Specifications.
- Water house connections (WHC) shall be copper.

PART III - SEWER

- All sewer mains shall be D.I.P. or P.V.C. unless otherwise noted. Trench detail: Howard County Std. Det. G-2.11 or G-2.12.
- All manholes shall be 4'-0" inside diameter unless otherwise noted.
- Manholes shown with 12" and 16" walls are for brick manholes only.
- Manholes designated W.T. in plan and profile shall have watertight frame & cover, Standard Detail G5.52. Where watertight manhole frame 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 cellar cannot be served.

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HERITAGE LAND DEVELOPMENT
3060 Washington Road Suite 220
Glenwood, MD 21738
(410) 489-7900



LOCATION PLAN
SCALE: 1"=600'

WATER ZONE: 550
TEST GRADIENT: 700

TYPE OF BUILDING:	RESIDENTIAL
NO. OF LOTS/PARCELS:	10
NO. OF WATER HOUSE CONNECTIONS:	9
NO. OF SEWER HOUSE CONNECTIONS:	9
SEWER SHED:	LITTLE PATUXENT
TREATMENT PLANT:	PATUXENT

SHEET INDEX

DESCRIPTION	SHEET No.
Water and Sewer Cover Sheet	1 of 3
Water and Sewer Plans	2 of 3
Water and Sewer Profiles	3 of 3

QUANTITIES

NAME OF UTILITY CONTRACTOR :
SURVEY AND DRAFTING DIVISION AS-BUILT DATE :

ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
MANHOLE	3 Ea.(26.5 V.F.)	3 EA.	PRE CAST	CONTRACTORS PRECAST/SAME
8" SEWER	538 L.F.	538 L.F.	D.I.P.	AMERICAN C.I.P./FERGUSON
4" SHC	133 L.F.	133 L.F.	SDR 35	NORTH AMERICAN PIPE/FERGUSON
8" WATER	513 L.F.	513 L.F.	D.I.P.	AMERICAN C.I.P./FERGUSON
1" WHC	114 L.F.	114 L.F.	K COPPER	MUELLER IND/FERGUSON
FIRE HYDRANT W/ 6" Valve	2 Ea.	2 E.A.	MUELLER	MUELLER COMP/FERGUSON
8" CAP & BUTTRESS	1 Ea.	1 E.A.	D.I.P. MJ	TYLER UNION/FERGUSON
1/8" HB	4 Ea.	4 E.A.	D.I.P. MJ	TYLER UNION/FERGUSON
8x8 T&V	1 Ea.	1 E.A.	S/S MJ	MUELLER COMP/FERGUSON
Pavt. Replacement	42.84 S.Y.			

PRIVATE WELL AND SEPTIC SYSTEMS TO BE ABANDONED

PROPERTY	EXISTING WELL	TBA	EXISTING SEPTIC	TBA
8734 Mission Rd. (Lot 1)	✓	✓	✓	✓
8742 Mission Rd. (Lot 3)			✓	

NOTE: Water meters will not be released by Howard County to any new building until the existing well and septic systems have been abandoned in accordance with Howard County, Health Department regulations and the existing buildings are reconnected to public water and sewer.

BUILDABLE LOTS FRONT FRONTAGE CHART

Lot #	Total frontage along Public R/W
1	75.77'
2	65.10'
3	75.29'
4	4.01'
5	4.01'
6	4.01'
7	4.01'
8	4.01'
9	4.01'

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 309 OF THE STANDARD SPECIFICATIONS AND WITH ROAD CONSTRUCTION PLANS F-22-123

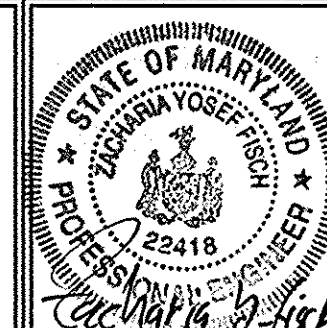
THIS DEVELOPMENT IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

John R. Robertson 2/25/09
SOIL CONSERVATION DISTRICT DATE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

FSH Associates
Engineers Planners Surveyors
6339 Howard Lane, Elkridge, MD 21075
Tel: 410-567-5200 Fax: 410-798-1562
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DESIGN BY: AY
DRAWN BY: HKPJS
CHECKED BY: APG-D
DATE: Feb. 5, 2009

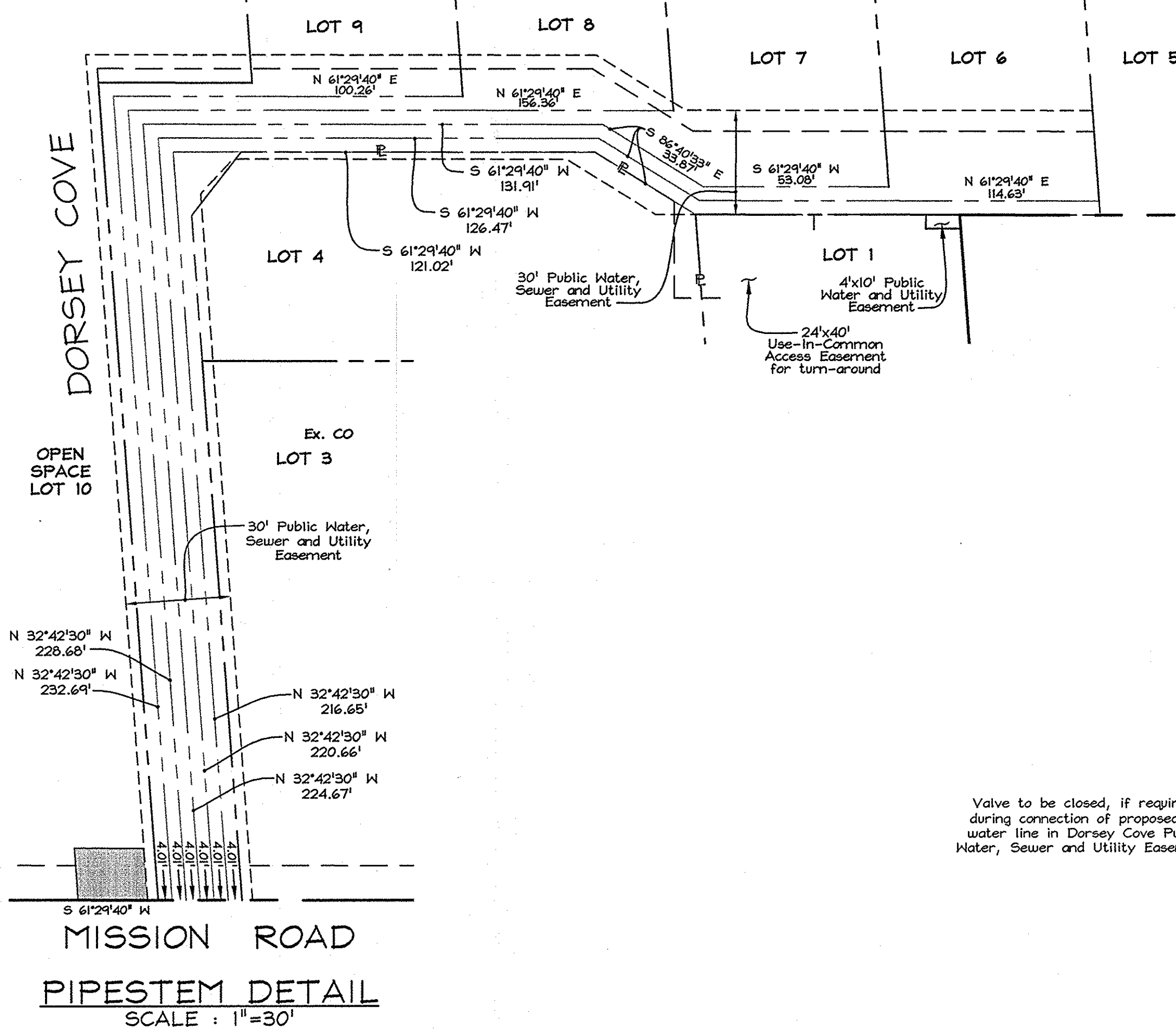
NO.	REVISION	DATE
1	AS-BUILT	1-13-15

**WATER AND SEWER
COVER SHEET**

R.W. DORSEY PROPERTY
LOTS 1 THRU 9 AND OPEN SPACE LOT 10
8742 MISSION ROAD
CONTRACT NO. 24-4573-D
TAX MAP 42 PARCEL 425
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET NO. 1 OF 3

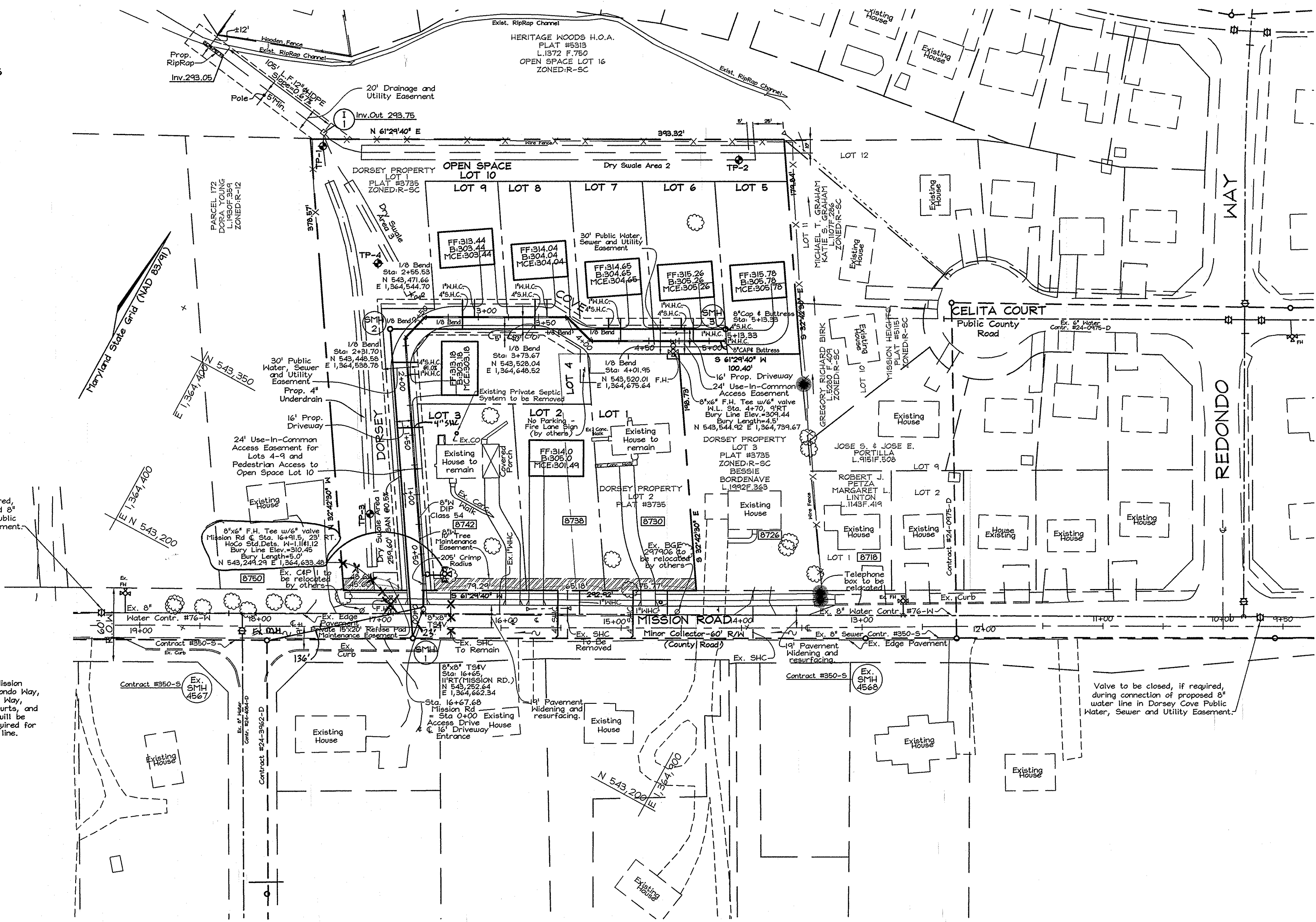
600' SCALE MAP NO.: 42 BLOCK NO.: 24



NOTE:
Water service connections along Mission Road between Faun Run and Redondo Way, Celita, Clements and Cheshire Courts, and Fairhaven and Smithfield Places will be affected by valve closures, if required for connection of Dorsey Cove Water line.

LOT #	FROM	TO	DISTANCE
5	SAN MH-3	M/V 5	9'
5	SHC LOT 5	M/V 5	7'
6	SHC LOT 6	M/V 6	10'
6	F/H	M/V 6	28'
7	F/H	M/V 7	53'
7	W/M LOT 8	M/V 7	55'
8	W/M LOT 7	M/V 8	55'
8	SHC LOT 8	M/V 8	10'
9	FHC LOT 9	M/V 9	11'
9	SAN MH-2	M/V 9	64'
4	SAN MH-2	M/V 4	37'
4	SHC LOT 4	M/V 4	9' 7"
2	F/H	M/V 2	112'
2	SHC LOT 1	M/V 2	67'

LOT #	FROM	TO	DISTANCE
4	SAN MH-2	SHC 4	37'
4	SHC LOT 9	SHC 4	58'
9	SAN MH-2	SHC 9	58'
9	SHC LOT 4	SHC 9	58'
8	SHC LOT 4	SHC 8	102'
8	SAN MH-2	SHC 8	114'
7	F/H	SHC 7	69' 8"
7	SHC LOT 6	SHC 7	61' 5"
6	F/H	SHC 6	28'
6	SAN MH-3	SHC 6	49'
5	SAN MH-3	SHC 5	6'
5	F/H	SHC 5	53' 8"
3	SAN MH-2	SHC 3	77'
3	W/M LOT 4	SHC 3	42'



PLAN SCALE: 1"=50'

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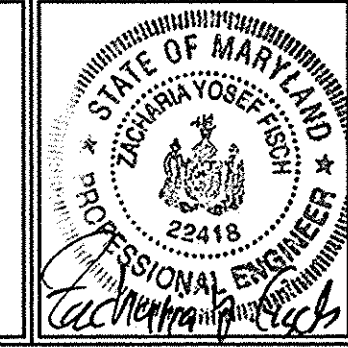
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

S. C. ...
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

...
CHIEF, DEVELOPMENT ENGINEERING DIVISION

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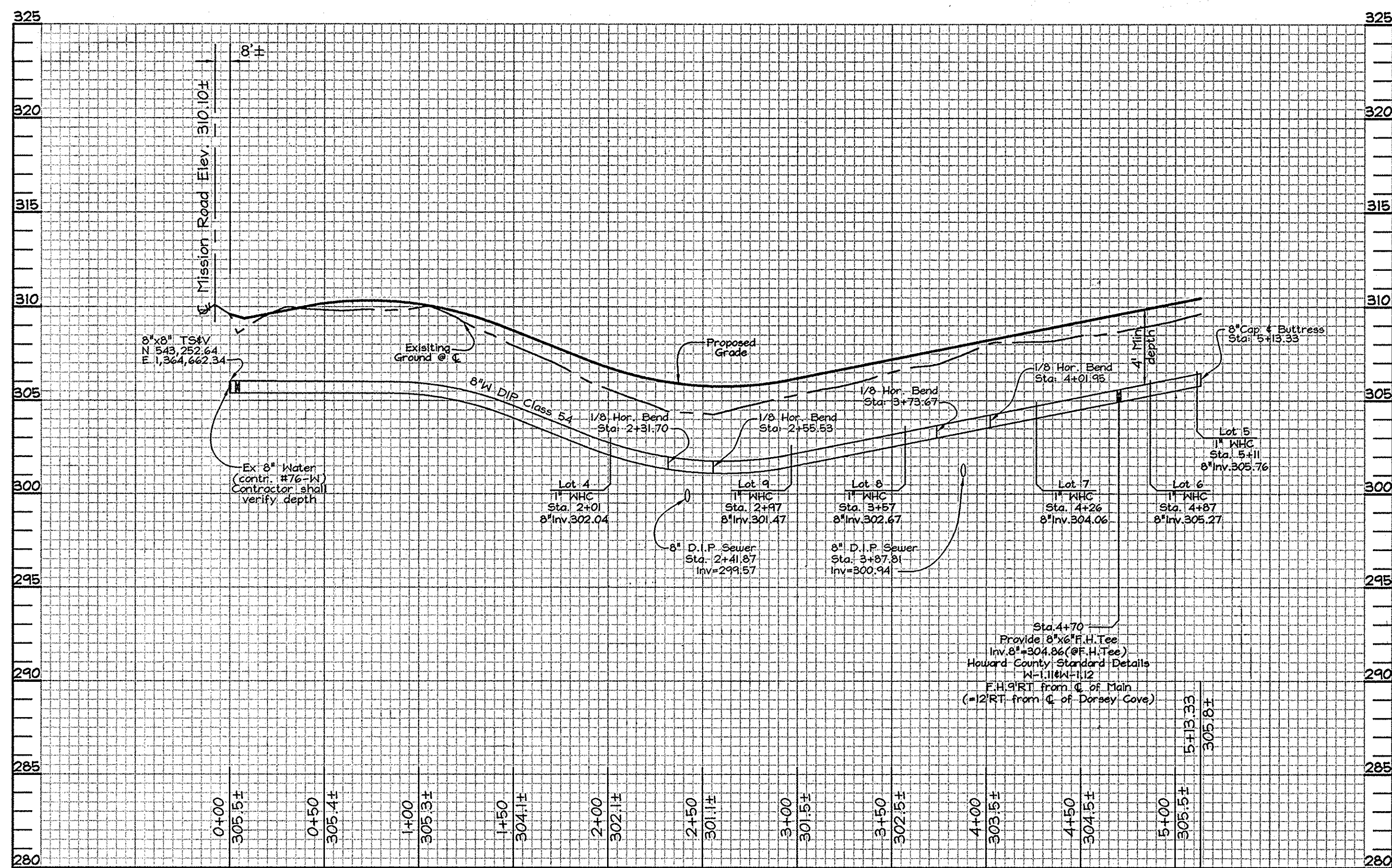
BY NO.	REVISION	DATE
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WATER AND SEWER PLANS

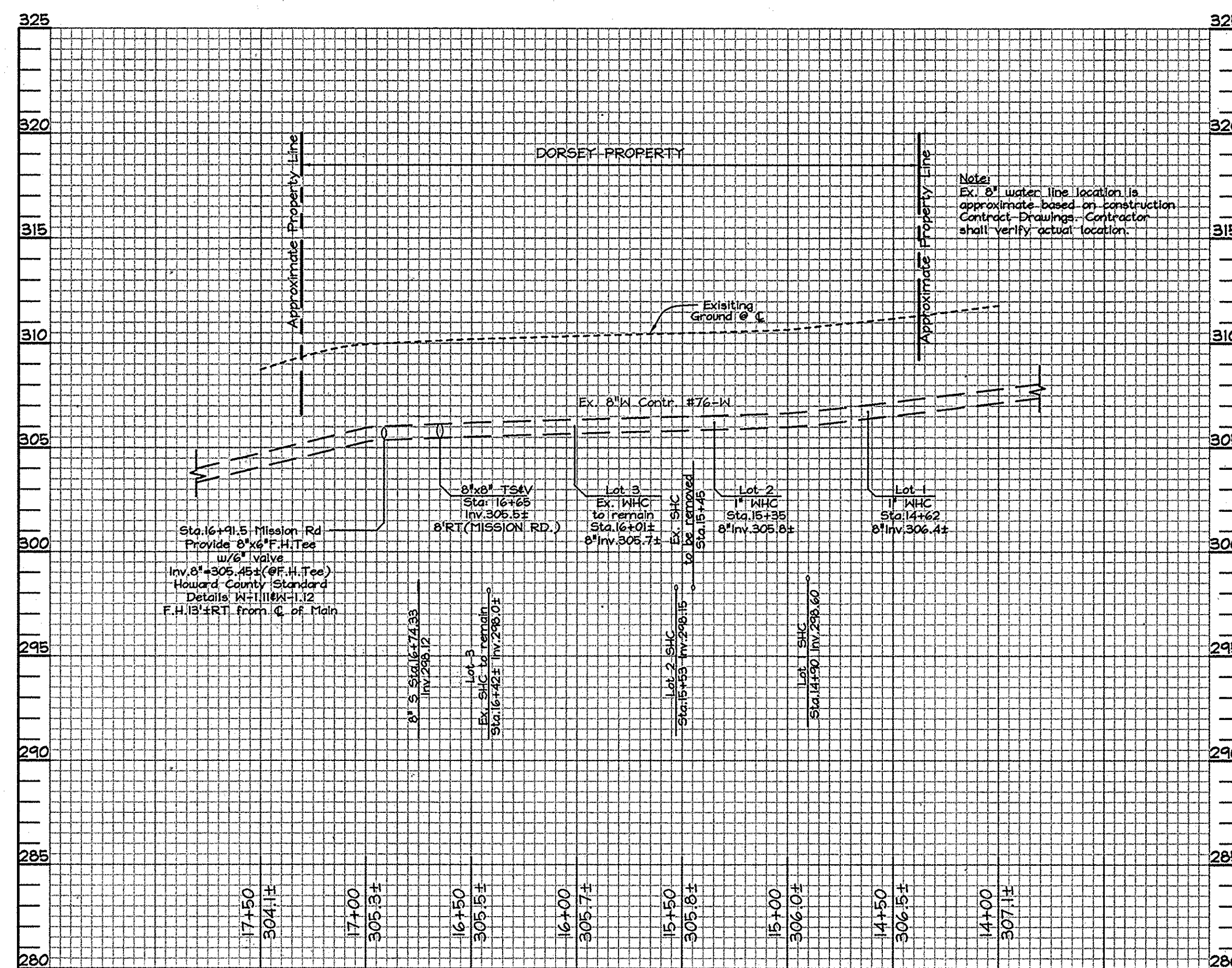
600' SCALE MAP NO.: 42 BLOCK NO.: 24

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CONTRACT NO. 24-4573-D
TAX MAP 42 PARCEL 425
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

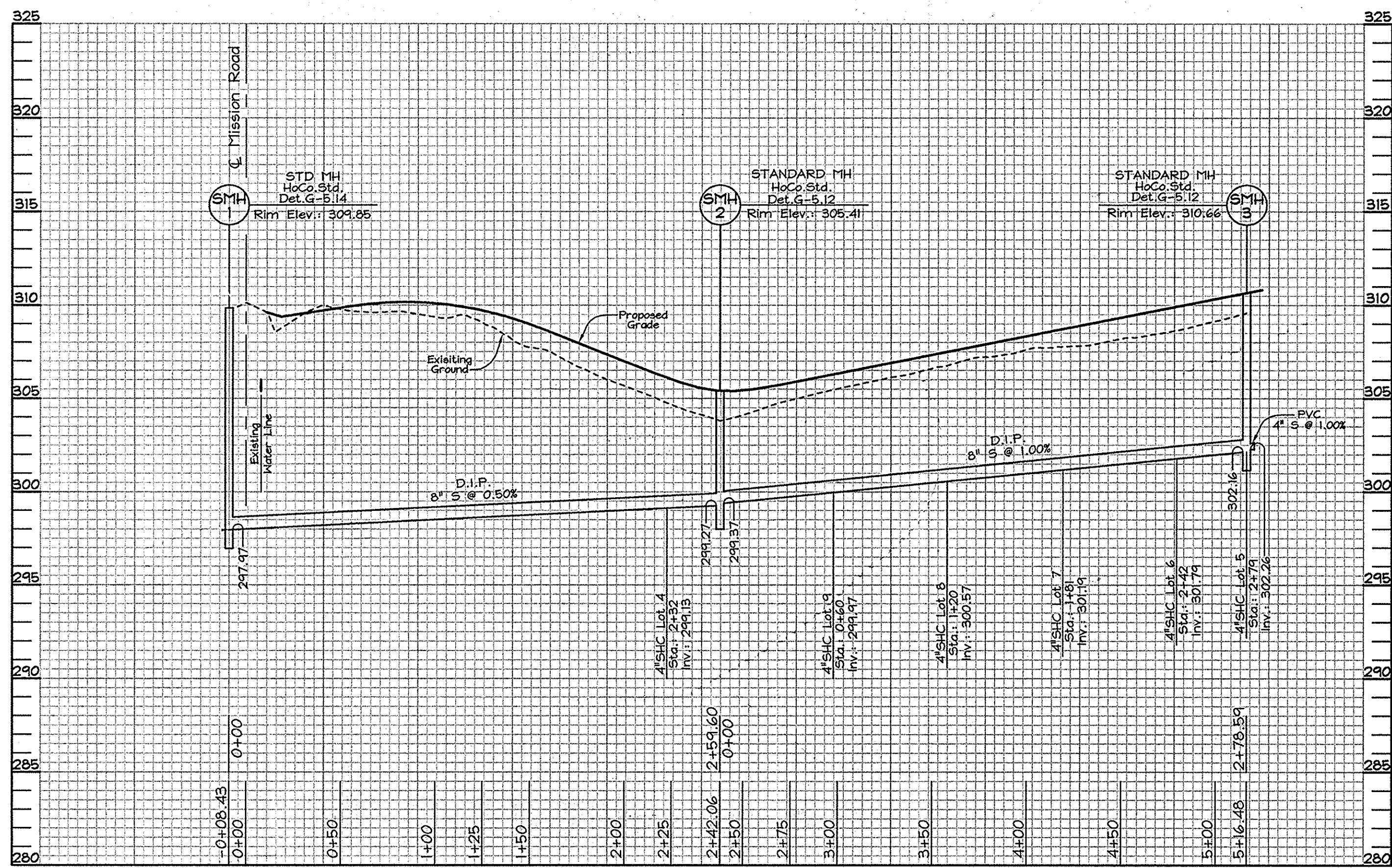
SCALE AS SHOWN
SHEET NO. 2 OF 3



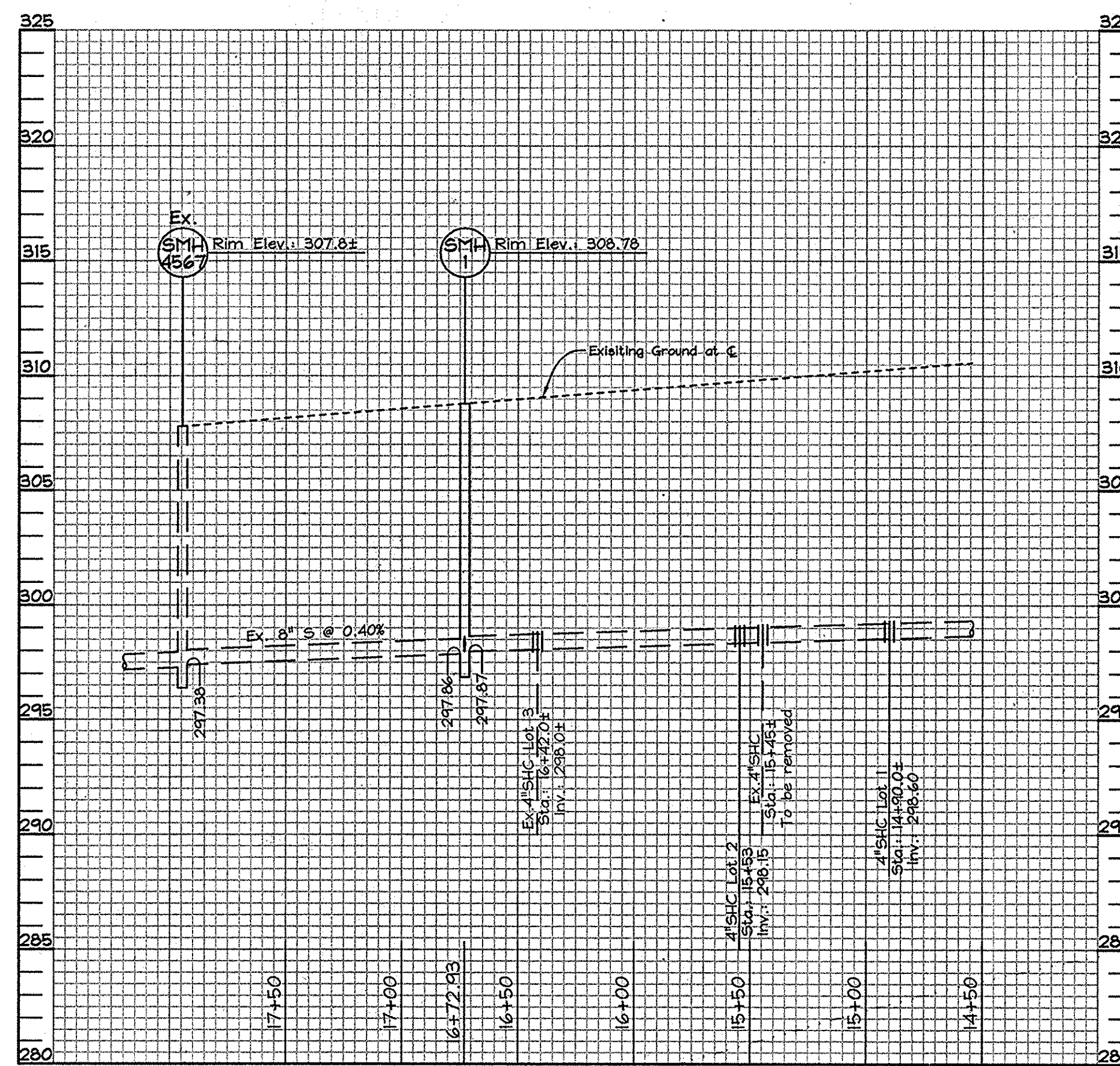
WATER PROFILE for DORSEY COVE
Scale: Horizontal-1"=50'
Vertical-1"=5'



WATER PROFILE for MISSION ROAD
Scale: Horizontal-1"=50'
Vertical-1"=5'



SEWER PROFILE for DORSEY COVE
Scale: Horizontal-1"=50'
Vertical-1"=5'



SEWER PROFILE for MISSION ROAD
Scale: Horizontal-1"=50'
Vertical-1"=5'

SEWER HOUSE CONNECTION CHART					
Lot No.	Station	4" SHC Inv. @ 8" Sewer Main	SHC Inv. @ Utility Easement or R/W Line	MINIMUM CELLAR ELEVATION	ACTUAL CELLAR ELEVATION
FROM EX. SMH # 4567 TO SMH 1					
Lot 1	1+83 LT	4" SHC INV.: 298.60	Existing	Existing	Existing
Lot 2	1+18 LT	4" SHC INV.: 298.15	Existing	301.49	305.00
Lot 3	0+33 LT	EX. 4" SHC INV.: 298.0±	Existing	Existing	Existing
FROM SMH 1 TO SMH 2					
Lot 4	2+32 RT	4" SHC INV.: 299.15	299.35	303.18	303.18
FROM SMH 2 TO SMH 3					
Lot 5	@ SMH 3	4" SHC INV.: 302.26 @ MH 3	302.26	305.78	305.78
Lot 6	2+42 LT	4" SHC INV.: 301.79	301.88	305.26	305.26
Lot 7	1+81 LT	4" SHC INV.: 301.19	301.28	304.65	304.65
Lot 8	1+20 LT	4" SHC INV.: 300.57	300.82	304.04	304.04
Lot 9	0+60 LT	4" SHC INV.: 299.97	300.22	303.44	303.44

* Note: All S.H.C.'s are on a 1.0% slope, from sewer main to Utility Easement Line. All S.H.C.'s are on a 1.0% slope from Utility Easement Line to rear B.R.L., unless noted otherwise.

SEWER MANHOLE TABLE				
MH #	COORDINATES	TOP MH ELEVATION	REMARKS	M.H. TYPE & Ho.Co. STD. DET.
1	N 543,230.69 E 1,364,664.45	309.85	MISSION ROAD	STD., G-5.14
2	N 543,444.13 E 1,364,524.17	305.41	DORSEY COVE	STD., G-5.12
3	N 543,582.08 E 1,364,769.98	310.66	DORSEY COVE	STD., G-5.12

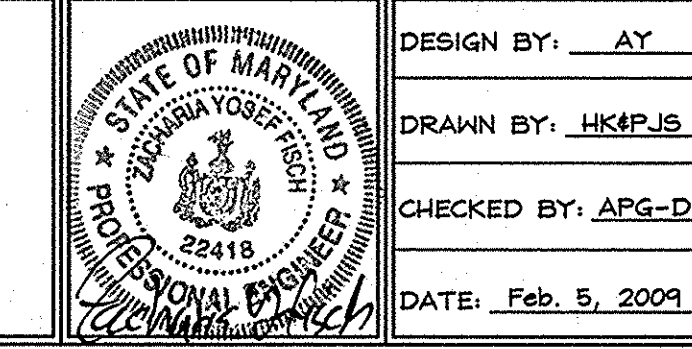
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WATER AND SEWER PROFILES
600' SCALE MAP NO.: 42 BLOCK NO.: 24

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SCALE AS SHOWN
SHEET NO. 3 OF 3