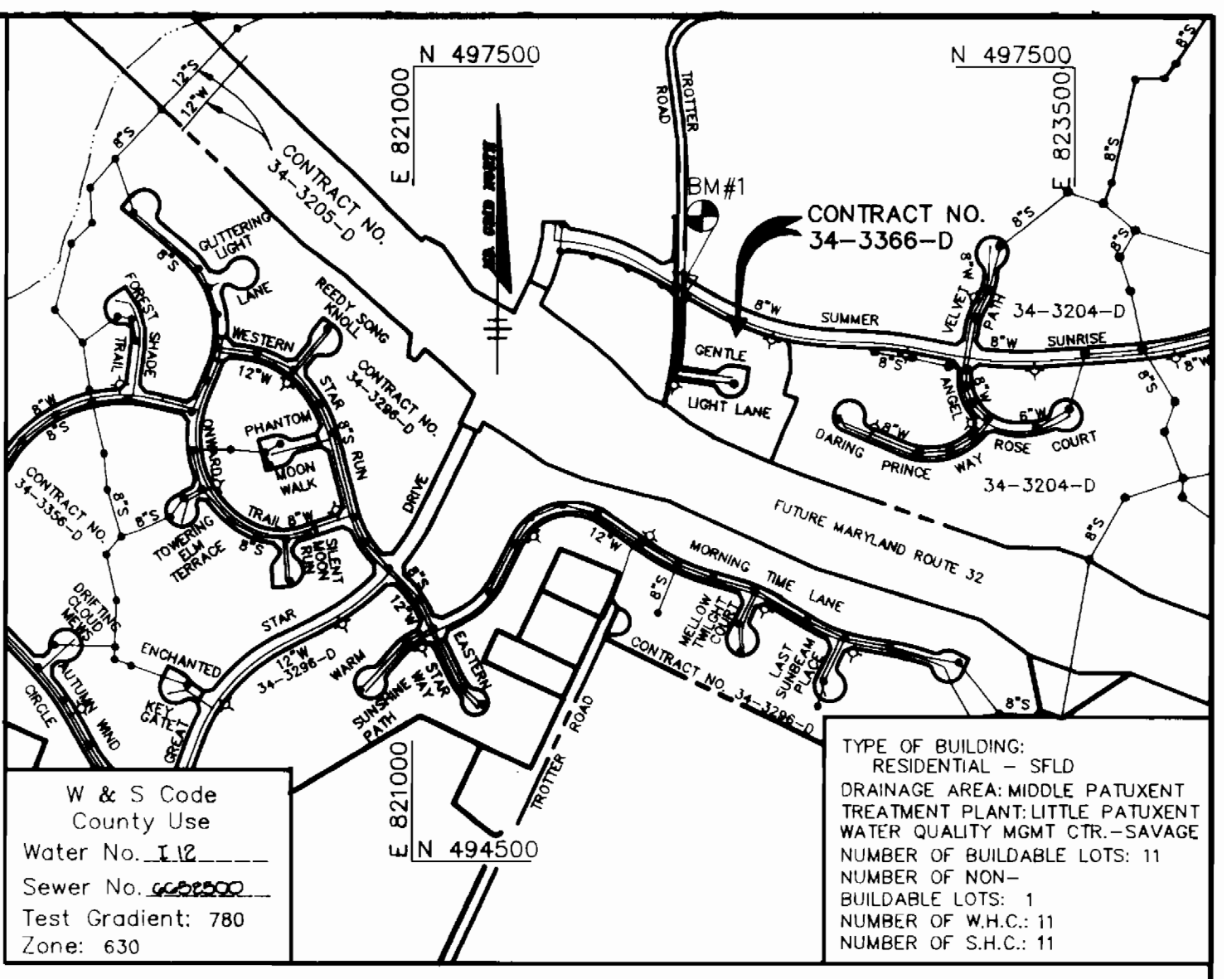
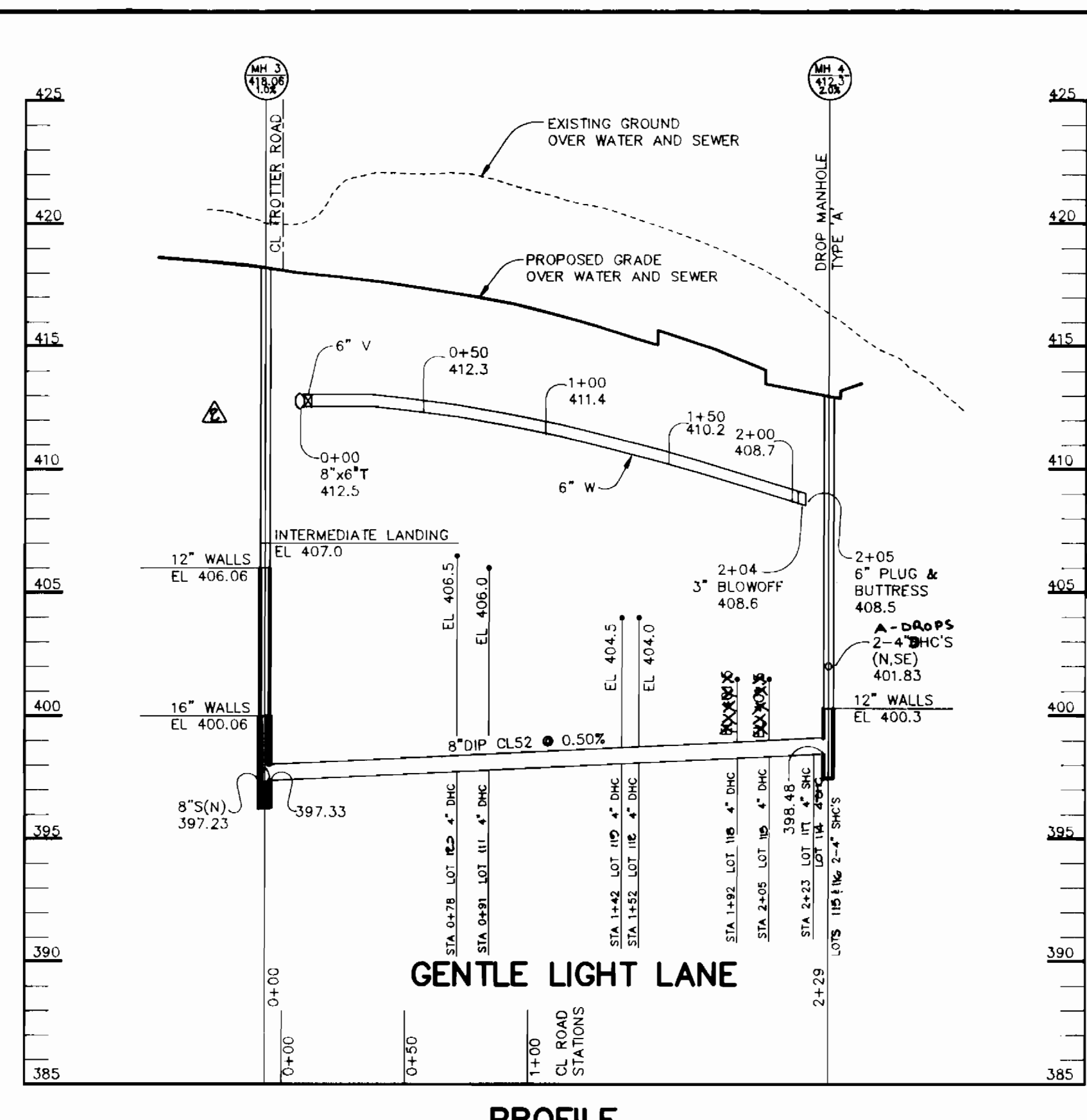
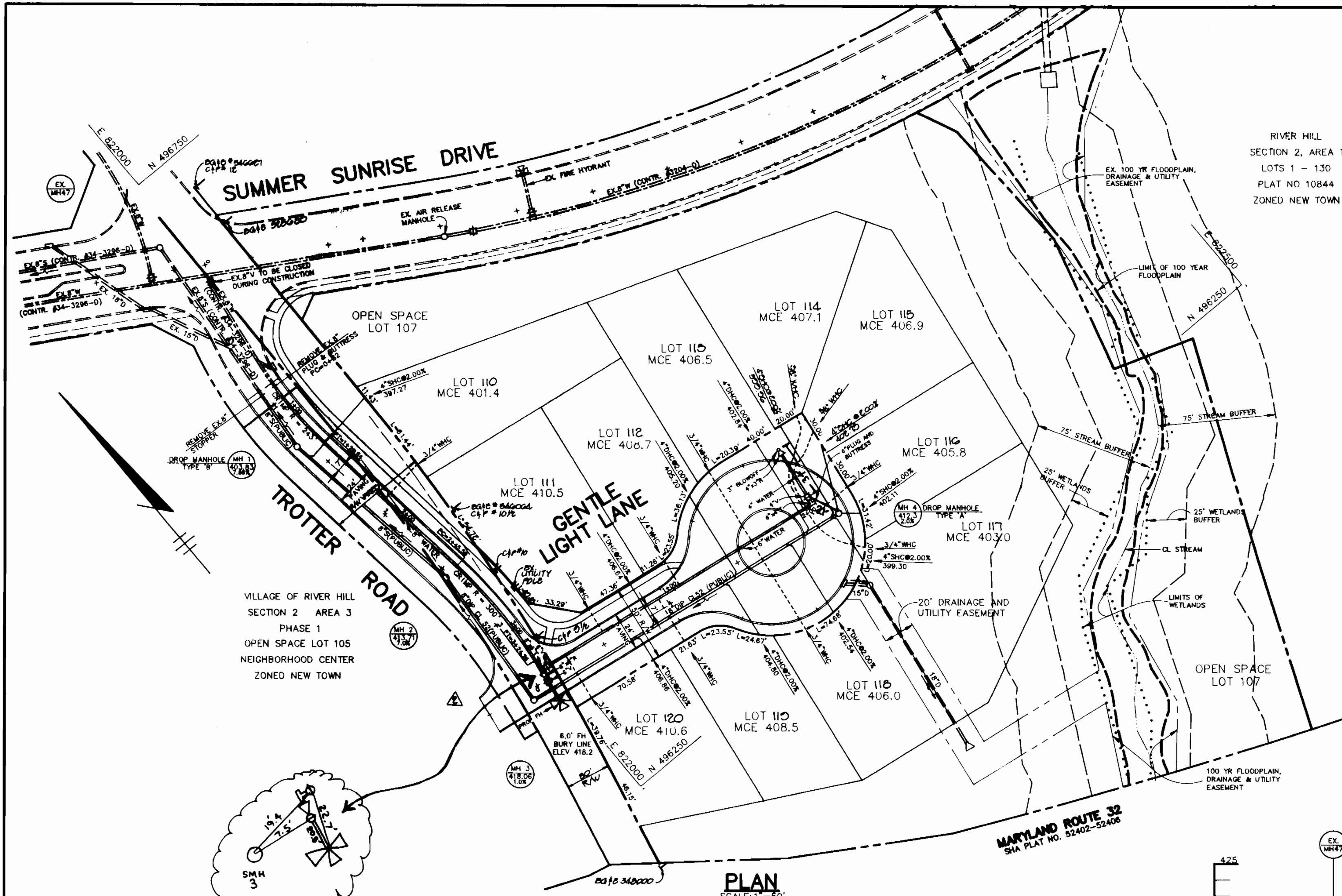


AS-BUILT 2-5-96
3366 WS/1, VRH, 2/3 Ph. 2, lots 110-120 & 107



GENERAL NOTES

- 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.
- All vertical controls are based on U.S.G.S. data.
- All pipe elevations shown are invert elevations.
- Clear all utilities by a minimum of 6". Clear all poles by 2'-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 bracing of additional poles or damages shall be deducted from money owed 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 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 working days before starting work shown on these plans:
State Highway Administration 531-5533
Baltimore Gas & Electric Co. Contractor Services 850-4620
Baltimore Gas & Electric Co. Underground Damage Control 787-9098
Miss Utility 1-800-257-7777
Colonial Pipeline Co. 795-1390
Bureau of Utilities, Howard County Department of Public Works 313-4900
- Trees and shrubs are to be protected from damage to 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 line of excavation. Payment for such removal shall be included in the unit price bid for construction of the main.
- All water mains to be D.I.P. Class S2 unless otherwise noted.
- Tops of all water mains to have a minimum of 3-1/2' 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 restrained and buttressed with concrete in accordance with Standard Details. 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.
- All water house connections shall be for inside meter setting unless otherwise noted on specifications.
- All sewer mains shall be DIP, RCP, VCPX, CSPX, RCCP and 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 G5.52. Where watertight manhole frame and cover is 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.
- Manholes can be either brick or precast concrete structures.

QUANTITIES

ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
8" WATER	251 LF	252 LF	DIP CL S2	GRIFFIN PIPE
6" WATER	227 LF	227 LF	DIP CL S2	GRIFFIN PIPE
3/4" WHC	420 LF	455 LF	B.B., TYPE K	CAMBRIDGE LEE
8" SEWER	166 LF	174 LF	PVC SDR-35	ETI NATIONAL
8" DIP CLS2	326 LF	326 LF	DIP CL S2	GRIFFIN PIPE
4" SHC	441 LF	394 LF	DIP CL S2	GRIFFIN PIPE
FIRE HYDRANTS	1 EA.	1 EA.	CS02-A126-CL B	KENNEDY
4" SHC PVC	191 LF	191 LF	6DR 35	ETI NATIONAL
6" VALVES	2 EA.	2 EA.	CS09-A126-CL B	KENNEDY
SEWER MANHOLES	4 EA.	4 EA.	PRECAST	ATLANTIC
3" BLOWOFF	1 EA.	1 ea.	Eclipse No. 85	Kupferce
4" Valve	1 ea.	1 ea.	CS09-A126-CL B	Kennedy

PLAN
SCALE: 1"=50'

SEWER AS-BULTS

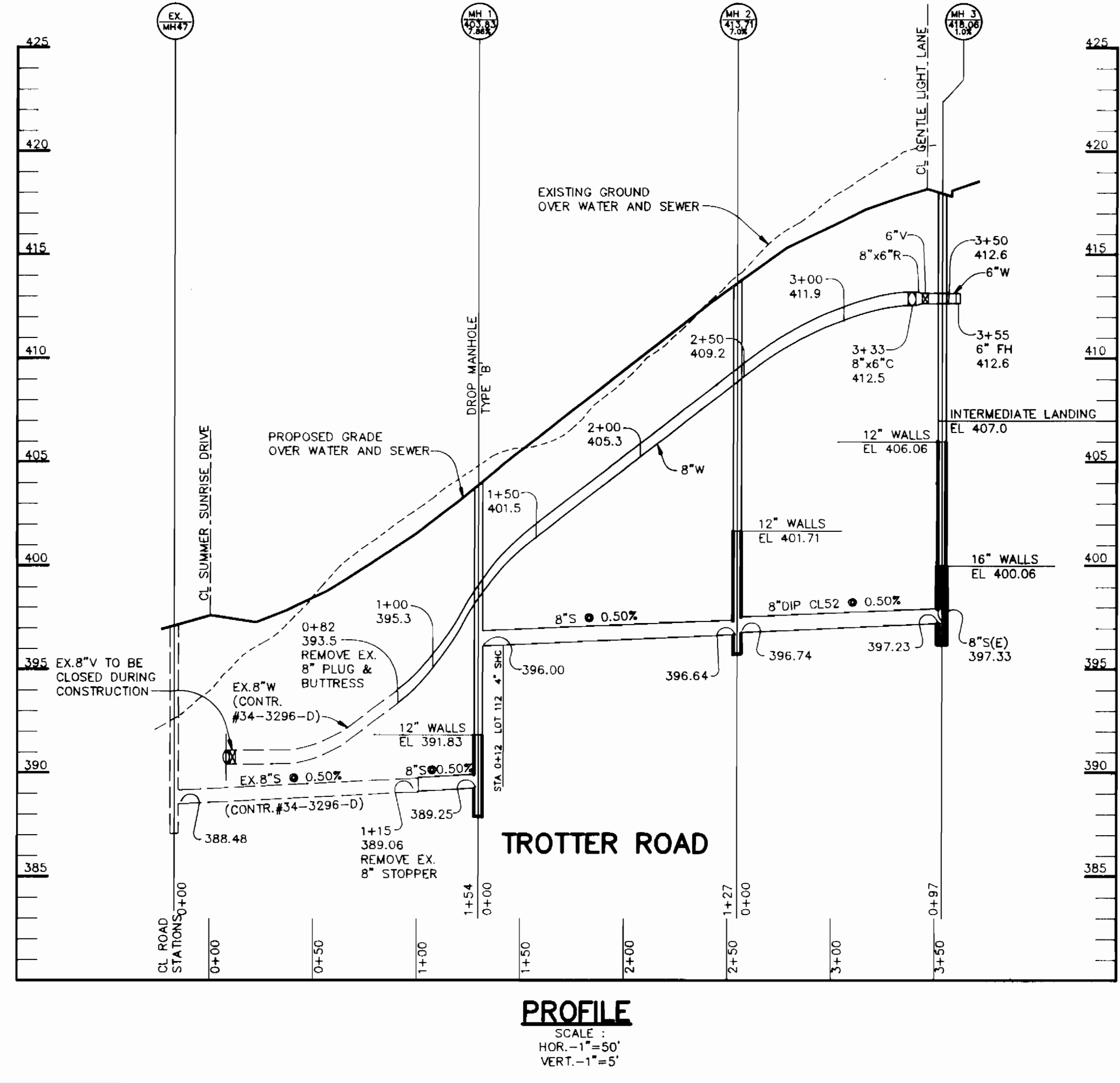
LOT #	DESCRIPTION	LOT #	DESCRIPTION
110	61' TO S.D. INLET 56' TO MH 1	120	27' TO WHC 119 46' TO WHC 120
111	30' TO WHC 111 32' TO WHC 112		
112	41' TO WHC 112 21' TO WHC 113		
113	34' TO WHC 113 20' TO SHC 114		
114	20' TO SHC 114 11' TO WHC 114		
115	7' TO WHC 115 23' TO WHC 116		
116	10' TO WHC 116 23' TO WHC 117		
117	10' TO WHC 117 18' TO S.D. MH		
118	32' TO S.D. MH 21' TO WHC 118		
119	27' TO WHC 118 48' TO WHC 119		

MANHOLE LOCATION SCHEDULE

SEWER MANHOLE	LOCATION
1	7' RT OF CL STA 1+30
2	2.5' RT OF CL STA 2+55
3	7' LT OF CL STA 0+07
4	5' RT OF LP STA 1+79

WATER AS-BULTS

LOT #	DESCRIPTION	LOT #	DESCRIPTION
110	78' TO MH 1 74' TO MH 2	115	6' TO SHC 115 35' TO WHC 116
111	68' TO FH 30' TO SHC 111	116	35' TO SHC 115 19' TO MH 4
112	41' TO SHC 112 32' TO SHC 112	117	28' TO MH 4 11' TO SHC 117
113	21' TO SHC 112 35' TO SHC 113	118	21' TO SHC 118 27' TO SHC 119
114	11' TO SHC 114 16' TO WHC 115	119	48' TO SHC 119 27' TO SHC 120



NAME OF UTILITY CONTRACTOR: Utilities Unlimited, Inc.

Sediment control measures for this contract will be implemented in accordance with Section 219 of the Specifications and as shown on F-95-4G

Review for Howard Soil Conservation District and meets technical requirements.

Patricia Engle 4/4/95 DATE
NATURAL RESOURCE CONSERVATION SERVICE

This plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.

John K. Roberts 4/4/95 DATE
HOWARD SOIL CONSERVATION DISTRICT

CHECKBOX
AS-BUILT DATE _____
SURVEY AND DRAFTING DIVISION

BENCHMARKS

BM#1 RAILROAD SPIKE IN POLE #525680
TROTTER ROAD ELEV. 393.27
N 496697.02 E 822026.81

BM#2 RAILROAD SPIKE IN POPLAR
ELEV. 438.92
N 495551.90 E 820727.80

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James J. Shea 4/6/95 DATE
DIRECTOR OF PUBLIC WORKS

Paul J. Ryan 4/6/95 DATE
CHIEF, BUREAU OF ENGINEERING

Michael J. Marshall 4/6/95 DATE
CHIEF, BUREAU OF UTILITIES

Arthur E. Muegge 4/6/95 DATE
CHIEF, LAND DEVELOPMENT

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
8818 Centre Park Drive • Suite 200 • Columbia, MD 21045
410-997-8900 FAX: 410-997-9282

ARTHUR E. MUEGGE #27107

DES: C.J.R.
DRN: DAM
CHK: WAD
DATE: 5-20-96

REMOVED 8" W. 6" V. AIR RELEASE MANHOLE
CHANGED 8" C. TO 8" G. T. GENTLE LIGHT LANE

CHANGED 8" G. T. TO 8" G. C. 9th 0+0 GENTLE LIGHT LANE

PLAN AND PROFILE OF WATER AND SEWER MAINS

600' SCALE MAP NO. 35 BLOCK NO. 14

VILLAGE OF RIVER HILL
SECTION 2 AREA 3 PHASE 2
LOTS 110-120 & 107
5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO. 34-3366-D

SCALE AS SHOWN
SHEET 1 OF 1