

BENCHMARKS
 HOWARD COUNTY SURVEY CONTROL STATION 35GA
 N 553,249.7018 E 1,332,627.308
 HOWARD COUNTY SURVEY CONTROL STATION 35G2
 N 554,965.6604 E 1,332,934.94

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	787-4068
Misc Utility	1-800-257-7777
Colonial Pipeline Co.	745-1340
Bureau of Utilities, Howard County Department of Public Works	313-4400
- 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 52 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 plans or in specifications.
- All sewer mains shall be D.I.P. 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 N.T. in plan and profile shall have watertight frame and covers, Standard Detail 65.52. 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. Lots 212 and 213 do not have cellar service as approved by the Bureau of Engineering.
- Manholes can be either brick or precast concrete structures.
- Contractor is solely responsible for construction means, methods, techniques, procedures, and safety precautions and programs.
- The fire hydrant shall be installed as per standard detail K.1.11.
- Fire hydrants will be located 3' FROM BACK OF CURB unless otherwise noted.
- For sprinkler systems, all townhomes or multi-family dwelling units should have a minimum of 1" connection with a 3/4" meter.
- The contractor shall notify the Bureau of Highways, Howard County, at (410) 313-7450 at least five (5) working days before any open cut of any County road or boring/jacking operation in County roads for laying water/sewer mains or house connections. The approval of these drawings will constitute compliance with DPM requirements per Section 12.114(d) of the Howard County Code.

QUANTITIES

ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
4" WATER	213 LF	213	D.I.P.	GRIFFIN PIPE M+C
6"x4" T	1 EA.	1	D.I.P.	TYLER/M+C
4" 1/8" HB	1 EA.	1 EA.	D.I.P.	" "
8" SEWER	114 LF	114 LF	P.V.C. SDR 35	DIAMOND M+C
4' DIA. MANHOLE	1 EA.	1 EA.	PRECAST	ATLANTIC PRECAST
MANHOLE EXTENSION	5.4 VF	0		
1 1/2" DRAIN	1 EA.	1 EA.	BRASS	CAMBRIDGE/M+C
3/4" WHC	60 LF	64	COPPER	FORD/M+C
4" SHC	46 LF	61 LF	P.V.C. SDR 35	DIAMOND
1/2" COPPER	—	12 LF	COPPER	FORD/M+C

NAME OF UTILITY CONTRACTOR: H. T. I.

Sediment control measures for this contract will be implemented in accordance with Section 214 of the Specifications and as shown on F-98-79

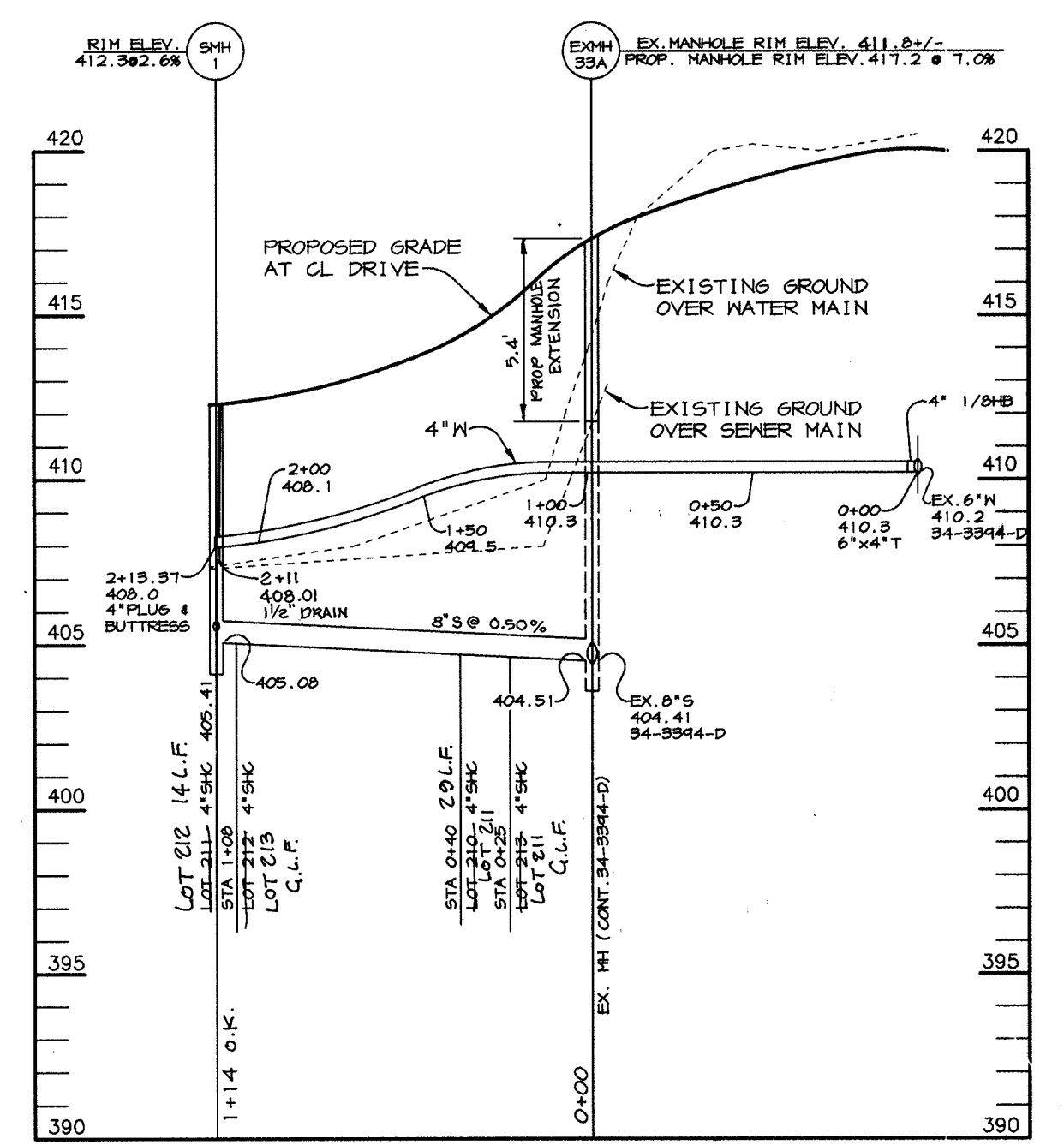
CHECKBOX
 AS-BUILT DATE: 6/12/00
 SURVEY AND DRAFTING DIVISION

Review for Howard Soil Conservation District and meets technical requirements.

Cliff Simmons, Esq. 3/10/98 DATE
 NATURAL RESOURCES CONSERVATION SERVICE

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

Cliff Simmons, Esq. 3/10/98 DATE
 HOWARD SOIL CONSERVATION DISTRICT



PROFILE

SCALE: HOR.-1"=50'
 VERT.-1"=5'

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

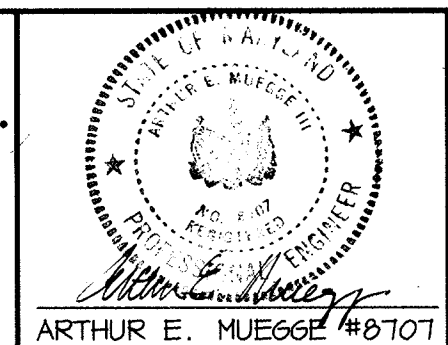
Randy Benjamin 3-5-98 DATE
 CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING
 HOWARD COUNTY, MARYLAND

Cliff Simmons 5/11/98 DATE
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

RIEMER MUEGGE & ASSOCIATES, INC.
 ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
 8818 Centre Park Drive, Columbia, Maryland 21045
 tel 410.997.8900 fax 410.997.9282
 FILL: 93213/WS1.DWG

Arthur E. Muegge #8701



DES: DAM				
DRN: DAM				
CHK: C.J.R.				
DATE: 8-2-00	K.G.I. 1	AS-BUILT CONDITIONS ADDED TO PLAN	10/18/00	
BY NO.		REVISION	DATE	

PLAN AND PROFILE OF WATER AND SEWER MAINS

600' SCALE MAP NO. 35 BLOCK NO. 15

CLARKS GLEN SECTION 4
 LOTS 211 - 215
 5th ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 CONTRACT 34-3666-D

SCALE AS SHOWN
 SHEET 1 OF 1