3351 WS/1 Ruppert Woods

QUANTITIES

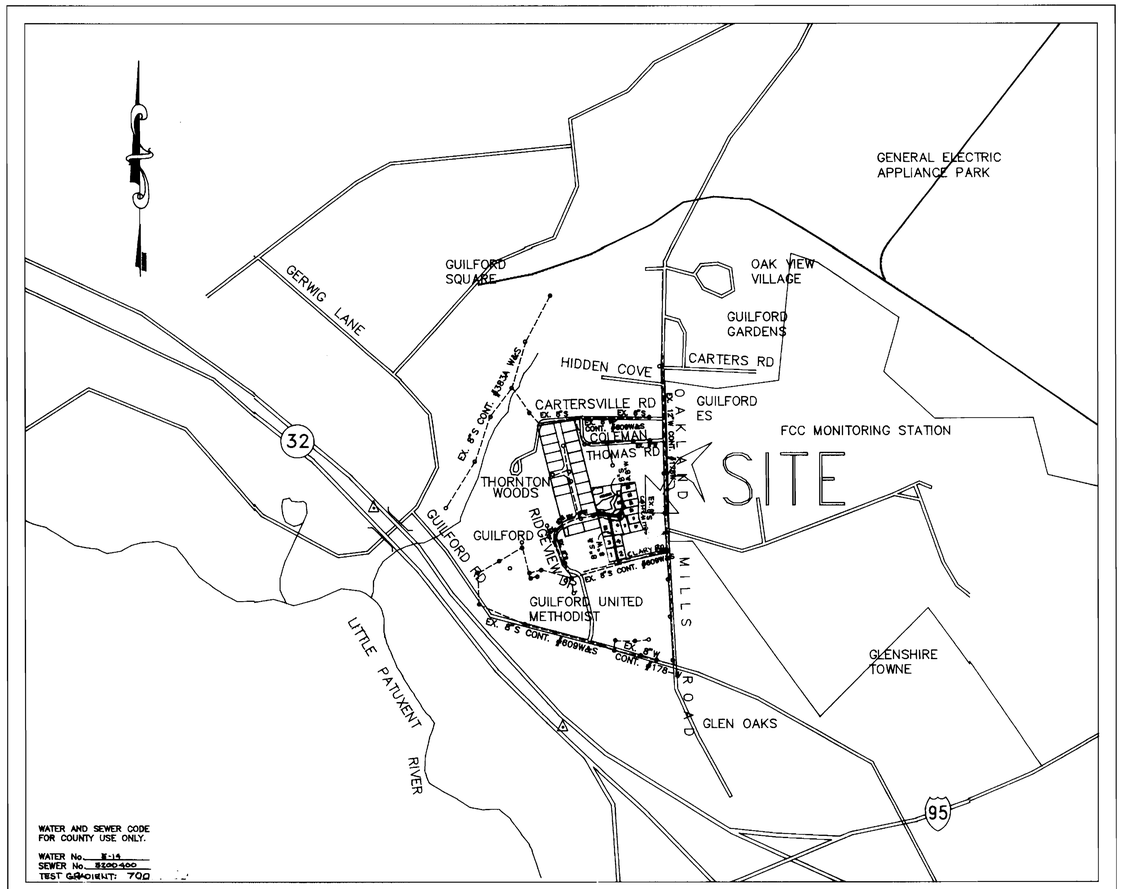
ITEMS	QUANTITIES ESTIMATED		AS - BUILT QUANTITIES		TYPE	MANUFACTURER/SUPPLIER
8" SEWER	675	L.F.	913	L.F.	PVC-SDR 35	J.M. MANUFACTURING CO. INC.
8" WATER	364	L.F.	580	L.F.	D.I.P. - CLASS 52	GRIFFIN PIPE CO.
6" WATER	279	L.F.	301	L.F.	" "	" "
1" WHC	100	L.F.	100	L.F.	TYPE K COPPER	HOWELL METALS / BRS.
3/4" WHC	220	L.F.	227	L.F.	" "	" "
4" SHC	220	L.F.	301	L.F.	PVC SDR 35	J.M. MANUF. / BRS.
8"X6" REDUCER	2	EACH	2	EA.	D.I.P.	GRIFFIN / BRS.
8" VALVE	1	EACH	3	EA.	GATE	MUELLER / BRS.
6" VALVE	1	EACH		EA.	GATE	" "
6"X8" TAPPING SLEEVE	1	EACH		EA.	D.I.P.	" "
8" X 8"	1	EACH		EA.	D.I.P.	GRIFFIN / BRS
8" X 6" TEE	1	EACH		EA.	D.I.P.	" "
AIR REL. VLV. & VALVE	1	EACH		EA.	APCO COMBO	APCO / BRS
MANHOLES (TYPE "S")	5	EACH	5	EA.	PRECAST	MARYLAND PRECAST
FIRE HYDRANT	1	EACH		EA.	6'-FH	MILLER / BRS.

NAME OF UTILITY CONTRACTOR :

SURVEY AND DRAFTING DIVISION AS BUILT DATE :

WATER & SEWER STRUCTURE SCHEDULE

ITEMS	ELEVATION	LOCATION	
MH-101 (TYPE "S")	354.80(RIM)	N166608.680 , E414486.274	
MH-102 "	359.56(RIM)	N166804.236 , E414514.777	
MH-103 "	366.70(RIM)	N166841.848 , E414540.503	
MH-104 "	368.35(RIM)	N166864.063 , E414536.282	
MH-105 "	364.71(RIM)	N166862.701 , E414497.100	
8" X 8" TEE	348.80	N166810.870 , E414492.028	(STA 1+07.94)
8" X 6" TEE	350.83	N166810.013 , E414488.242	(STA 1+21.94)
8"- 1/16 H.B.	353.47	N166807.543 , E414513.354	(STA 1+78.77)
8"X6" REDUCER	359.90	N166809.909 , E414498.179	(STA 1+36.45)
8"- 1/8 H.B.	360.04	N166813.714 , E414438.831	(STA 3+80.04)
8"- 1/4 H.B.	350.54	N166802.705 , E414490.750	(STA 0+27.11)



WATER AND SEWER CODE FOR COUNTY USE ONLY.

WATER No. X-14
SEWER No. 5200-600
TEST GRADIENT: 700

TYPE OF BUILDING SINGLE FAMILY
NUMBER OF LOTS 14
No. OF WATER HOUSE CONNECTIONS 14
No. OF SEWER HOUSE CONNECTIONS 14
DRAINAGE AREA LITTLE PATUXENT
TREATMENT PLANT: LITTLE PATUXENT WATER QUALITY MANAGEMENT CENTER, SAVAGE, HOWARD COUNTY.

LOCATION MAP
SCALE : 1" = 600'

GENERAL NOTES

1. Approximate location of existing mains are shown. The contractor shall take all necessary precautions to protect existing mains and services and maintain uninterupted supply. Any damage incurred shall be repaired immediately to the satisfaction of the Engineer at the Contractor's expenses.
2. All horizontal controls are based on Maryland State Coordinates.
3. All vertical controls are based on U.S.G.S. data.
4. All pipe elevations shown are invert elevations.
5. 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 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.
6. For details not shown on the drawings, and for materials and construction methods use Howard County Design Manuals, Vol. IV, Standard specifications and Detail for Construction (Latest Edition). The contractor shall have a copy of Volume IV on the job.
7. 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 the construction operations at his own expense.
8. Contractors 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
BG&E Co. Contractor Services	850-4620
BG&E Co. Under Ground Damage Control	787-9068
Miss Utility	1 800 257-7777
Colonial Pipeline Co.	795-1390
Howard County Department of Public Works Bureau of Utilities	313-4900

9. 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.
10. Contractors 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.
11. All water mains to be D.I.P. Class 52 unless otherwise noted.
12. Tops of all water mains to have a minmum of 3 1/2' cover otherwise noted.
13. Valves adjacent to tees shall be strapped to tees.
14. All fittings shall be buttressed or anchored with concrete in accordance with the Standard Details unless otherwise provided for on the drawings.
15. Fire hydrants shall be set to the burry line elevations shown on the drawings. All fire hydrants shall be restrained in accordance with detail W.1-11 and W.2-13. Soil around the fire hydrant shall be compacted in accordance with Section 1000 and 1005 of the Standard Specifications.
16. The contractor shall not operate any water main valves on existing water system.
17. All water house connections shall be for inside meter setting unless otherwise noted on plans or in specifications.
18. All sewer mains shall be D.I.P. RCP, VCPX, CSPX, RCCP and P.V.C. unless otherwise noted.
19. All manholes shall be 4'-0" inside diameter unless otherwise noted.
20. Force mains shall be D.I.P. only
21. Manholes shown with 12" and 16" walls are for brick manholes only.
22. Manholes designated W.T. in plan and profile shall have watertight frame and covers, Standard Details G5.52. Where watertight manhole frame and cover is used, set top of frame 1" - 8" above finished grade unless otherwise noted on the drawings.
23. House(s) with the symbol "C.N.S" indicates that cellar cannot be served.
24. Horizontal and vertical datum are based on Maryland State coordinate system as projected by Howard County station (NAD 83) 42E3 and 42E4.

BENCHMARKS

HOWARD CO. MON. #	ELEV.
BENCHMARK # 1 TOP OF CONC. MONUMENT	353.18
HOWARD CO. MON. #	ELEV.
BENCHMARK # 2 TOPMOST BOLT OF F.H.	384.98

RUPPERT WOODS
CONTRACT No. 24-3351-D
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH ARTICLE 15 OF THE HOWARD COUNTY DESIGN MANUAL AND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS AND ALSO AS SHOWN ON THE GRADING AND SEDIMENT CONTROL PLAN F-94-103

REVIEW FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

U.S. SOIL CONSERVATION SERVICE — DATE 7/1/94

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

APPROVED :

HOWARD SOIL CONSERVATION DISTRICT — DATE 7/1/94

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS — DATE 7/5/94
ACTING CHIEF, BUREAU OF ENGINEERING — DATE 7/5/94
CHIEF, BUREAU OF UTILITIES — DATE 6-27-94
CHIEF, LAND DEVELOPMENT DIVISION — DATE 7/5/94

Loria Engineering Inc.
CONSULTING ENGINEERS
3230 BETHANY LANE, SUITE 4, ELLICOTT CITY, MD.
410-465-0400

DES : JNC
DRN : JNC
CHK : MLL
DATE : 06-15-94

BY	NO.	REVISION	DATE

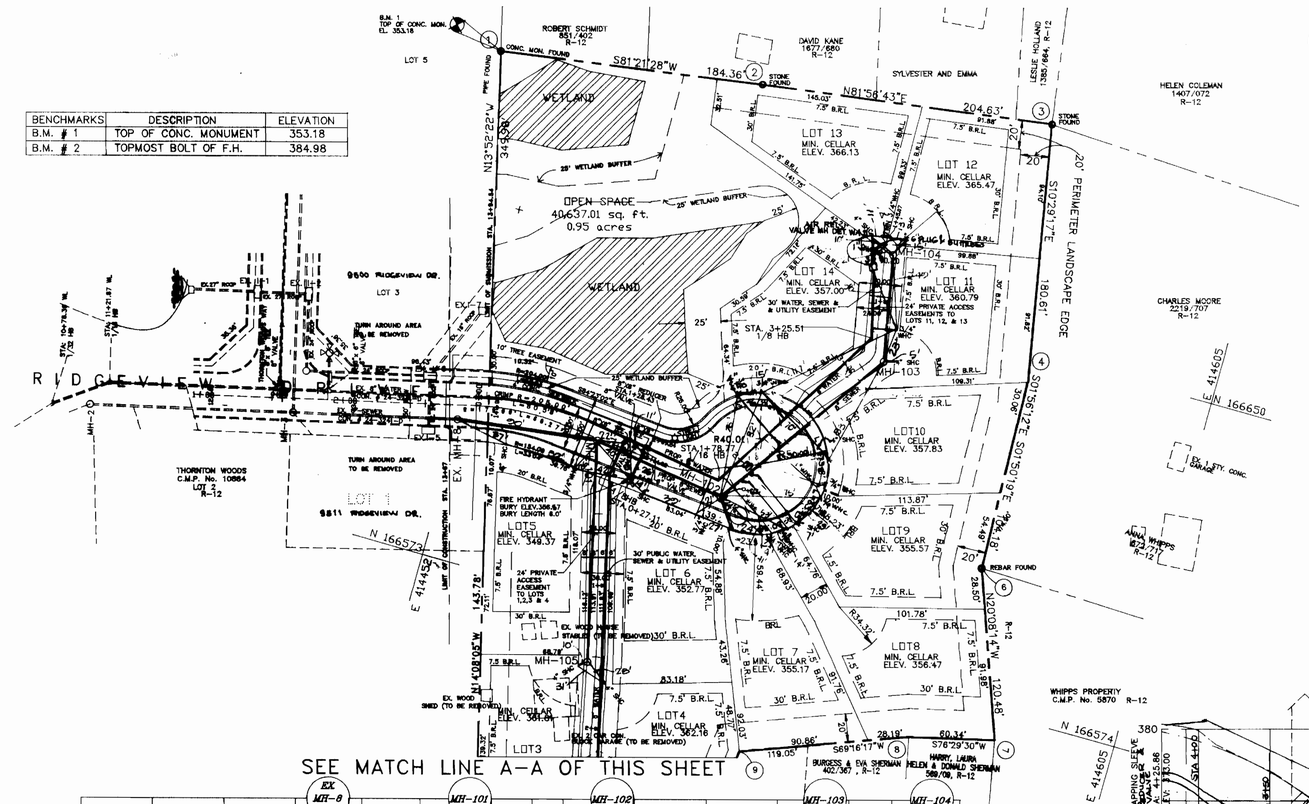
PLAN & PROFILE OF WATER & SEWER MAINS
CONTRACT NO. 24-3351-D
600' SCALE MAP NO. 42 BLOCK 11

COVER SHEET
RUPPERT WOODS
LOTS 1 THRU 15
TAX MAP 42 PARCEL 42 & 373
6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

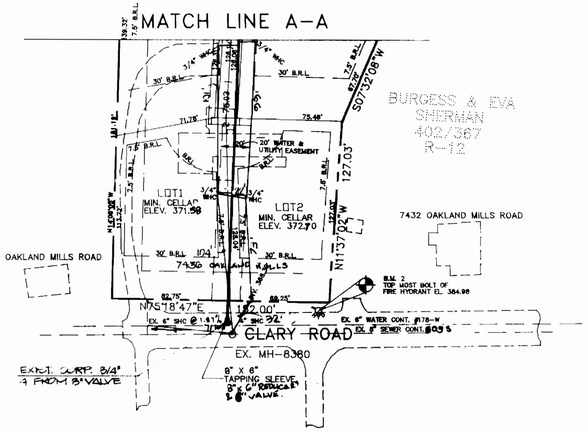
SCALE AS SHOWN

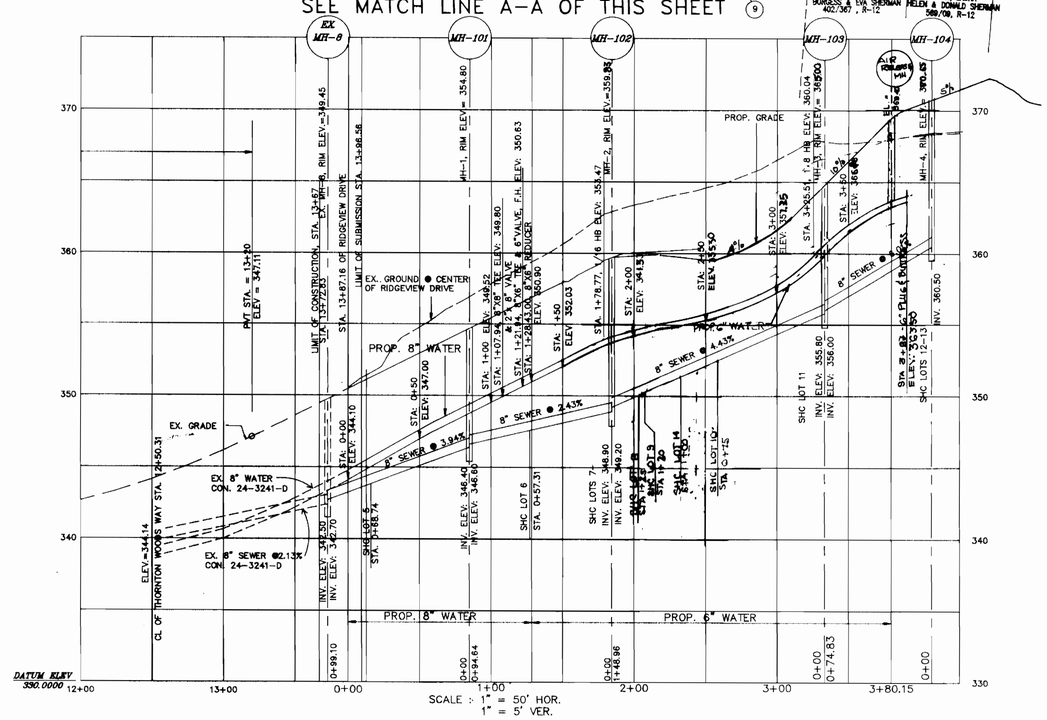
SHEET 1 OF 2

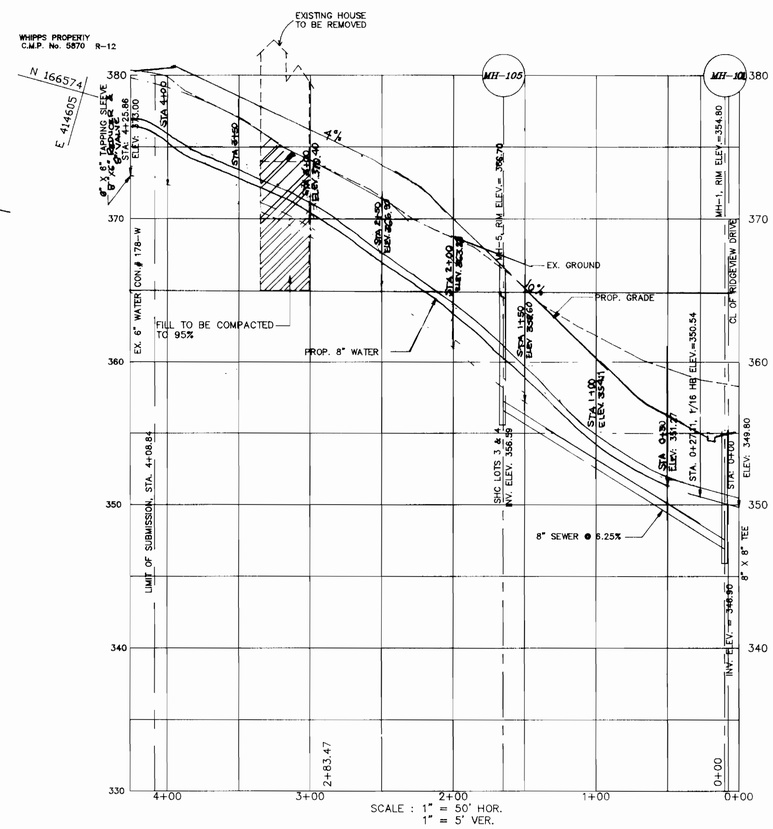
BENCHMARKS	DESCRIPTION	ELEVATION
B.M. # 1	TOP OF CONC. MONUMENT	353.18
B.M. # 2	TOPMOST BOLT OF F.H.	384.98



SEE MATCH LINE A-A OF THIS SHEET







NOTE:
(a) WATER HOUSE CONNECTION IS NOT EXISTING FOR HOUSE AT 7436 OAKLAND MILLS ROAD. SEWER HOUSE CONNECTION IS EXISTING FROM CLARY ROAD, CONTRACT NO. 603-S.
(b) THE EXISTING SEWER & HOUSE CONNECTION WILL BE USED FOR LOT NO. 1.

LOT NO.	SHC EL.(AT PROPERTY LINE)
1	367.17
2	368.30
3	356.69
4	357.09
5	344.37
6	348.17
7	349.92
8	351.27
9	351.47
10	352.67
11	356.29
12	360.87
13	361.03
14	352.65

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS — DATE 7/5/94
CHIEF, BUREAU OF ENGINEERING — DATE
CHIEF, BUREAU OF UTILITIES — DATE 6-27-94
CHIEF, LAND DEVELOPMENT DIVISION — DATE 7/5/94

Doria Engineering Inc.
CONSULTING ENGINEERS–LAND PLANNERS–SURVEYORS
3230 BETHANY LANE, SUITE 4, ELLICOTT CITY, MD.
410-465-0400

DES : JNC
DRN : JER
CHK : MLL
DATE: 5/25/94

BY	NO.	REVISION	DATE

PLAN & PROFILE OF WATER & SEWER MAINS

CONTRACT NO. 24-3351-D
600' SCALE MAP NO. 42 BLOCK 11

RUPPERT WOODS

LOTS 1 THRU 15
TAX MAP 42 PARCEL 42 & 373
6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 2 OF 2

3351 ws/2 Ruppert Woods

3351 w/position sht. Ruppert Woods

RUPPERT WOODS
LOTS 1 THRU 15

HOWARD COUNTY
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
SURVEY & DRAFTING DIVISION

Scale 1" = 50

J&J WHITE MARCH, MD. 168816