GENERAL NOTES

PART 1 – GENERAL

1. 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.
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, 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.
6. 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.
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 CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.
8. CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:

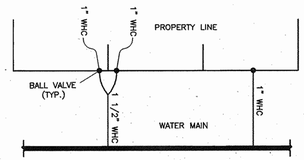
   STATE HIGHWAY ADMINISTRATION.....531–5533
   BALTIMORE GAS & ELECTRIC CO.
   CONTRACTOR SERVICES.....850–4620
   BALTIMORE GAS & ELECTRIC CO.
   UNDERGROUND DAMAGE CONTROL.....787–9068
   MISS UTILITY.....1–800–257–7777
   HOWARD CO. DEPT. OF PUBLIC WORKS
   BUREAU OF UTILITIES.....313–4900
9. TREES 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. 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.
11. PLACE REGULATION "MEN WORKING" AND WARNING SIGNS AS REQUIRED TO COMPLY WITH MARYLAND STATE HIGHWAY ADMINISTRATION MANUAL OF TRAFFIC CONTROL FOR HIGHWAY MAINTENANCE OPERATIONS.
12. THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY AT (410) 313–2450 AT LEAST FIVE 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 DPW REQUIREMENTS PER SECTION 18.114(a) OF THE HOWARD COUNTY CODE.
13. PREVIOUS HOWARD COUNTY FILE NUMBER: SDP–04–97

PART 2 – WATER

1. ALL WATER MAINS TO BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
2. TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3–1/2' COVER UNLESS OTHERWISE NOTED.
3. VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
4. ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
5. 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.
6. THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
7. ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING UNLESS OTHERWISE NOTED ON PLANS OR IN SPECIFICATIONS.

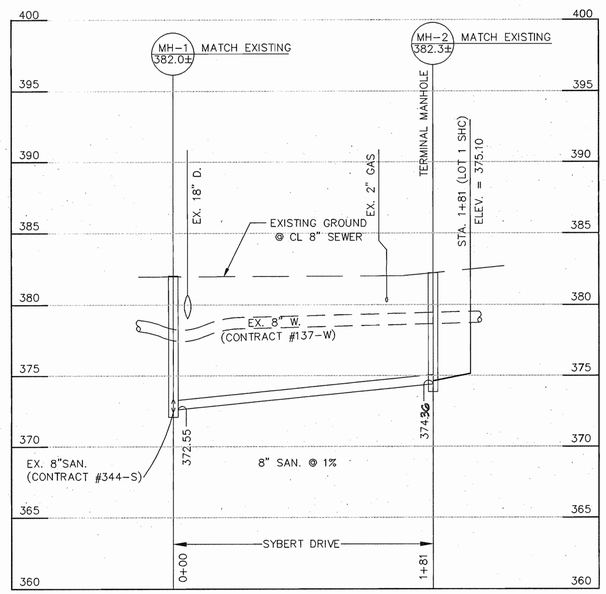
PART 3 – SEWER

1. ALL SEWER MAINS SHALL BE DIP OR P.V.C. UNLESS OTHERWISE NOTED.
2. THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2' – 0" OF EXTERIOR MANHOLE WALL.
3. ALL MANHOLES SHALL BE 4' – 0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
4. FORCE MAINS SHALL BE D.I.P. ONLY.
5. MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
6. 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.
7. HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.



TYPICAL WATER HOUSE CONNECTIONS

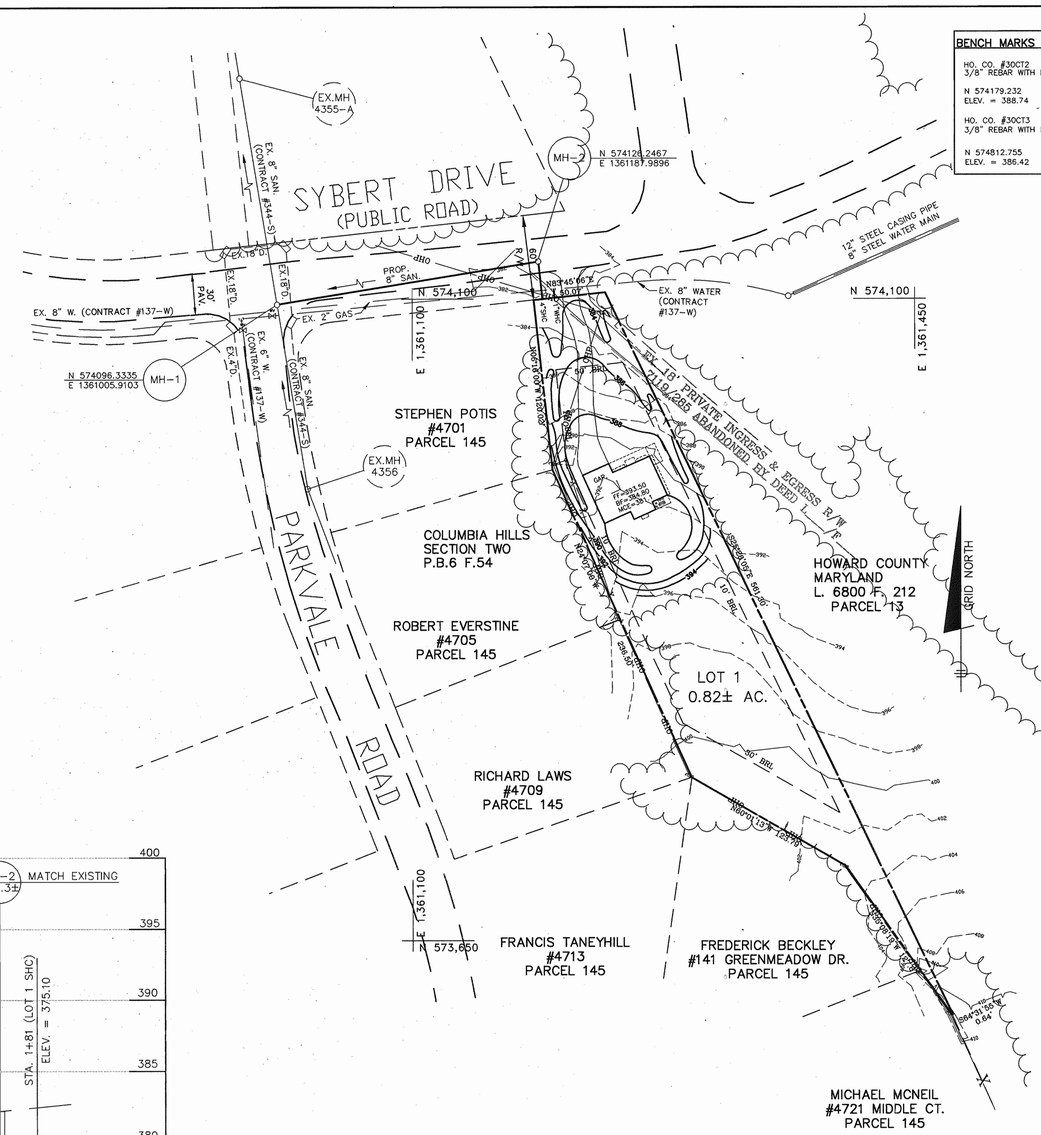
NOT TO SCALE



SEWER PROFILE

VERTICAL SCALE: 1" = 5'

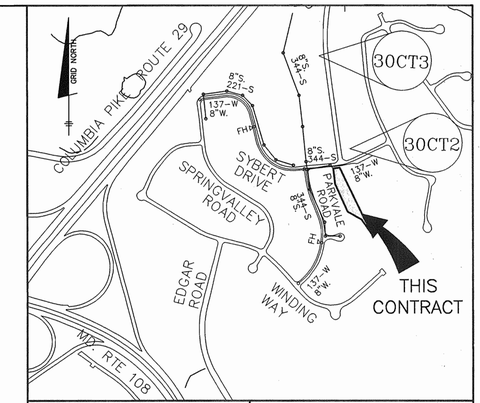
HORIZONTAL SCALE: 1" = 50'



PLAN

SCALE: 1" = 50'

BENCH MARKS	NAD'83 HORIZONTAL
HO. CO. #30CT2 3/8" REBAR WITH RED PLASTIC CAP	
N 574179.232	E 1361312.723
ELEV. = 388.74	
HO. CO. #30CT3 3/8" REBAR WITH RED PLASTIC CAP	
N 574812.755	E 1361173.247
ELEV. = 386.42	



WATER AND SEWER COUNTY CODE	
WATER CODE:	F09
SEWER CODE:	5750610
TEST GRADIENT:	700

TYPE OF BUILDING: SINGLE FAMILY DETACHED
NUMBER OF LOTS: 1 BUILDABLE
NUMBER OF SHC'S: 1
NUMBER OF WHC'S: 1
DRAINAGE AREA: PATUXENT
TREATMENT PLANT: LITTLE PATUXENT WATER QUALITY MANAGEMENT CENTER

VICINITY MAP

SCALE: 1" = 600'

LEGEND

EXIST. WATER MAIN
EXIST. SEWER MAIN
EXIST. SEWER MANHOLE
PROP. WATER MAIN
PROP. SEWER MAIN
PROP. STORM DRAIN
PROP. SEWER MANHOLE
PROP. TERMINAL MANHOLE
PROP. SEWER HOUSE CONNECTION
PROP. WATER HOUSE CONNECTION (DOUBLE – 1 1/2")
PROP. WATER HOUSE CONNECTION (SINGLE – 1")
PROP. FIRE HYDRANT
PROP. VALVE

SHC TABLE				
LOT NO.	INVERT AT MAIN	INVERT AT P/L OR ESMT.	MCE	REMARKS
1	375.60	375.10	381.10	–

QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS–BUILT		
		QUANTITIES	TYPE	MANUF./SUPPLIER
1" WHC	6 L.F.			
4" SHC	26 L.F.			
8" SEWER	181 L.F.			
MANHOLES	2 EACH			
NAME OF UTILITY CONTRACTOR:				
SURVEY AND DRAFTING DIVISION AS–BUILT DATE:				

HOWARD SOIL CONSERVATION DISTRICT:
REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

8/10/04
NATURAL RESOURCES CONSERVATION — DATE

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

8/10/04
HOWARD SOIL CONSERVATION DISTRICT — DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY STANDARD SPECIFICATIONS AND AS PER SEDIMENT CONTROL PLAN SDP–04–97

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

8-20-04
CHIEF, BUREAU OF UTILITIES — DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

8/31/04
CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE

BENCHMARK
ENGINEERS ▲ LAND SURVEYORS ▲ PLANNERS
ENGINEERING, INC.
8480 BALTIMORE NATIONAL PIKE ▲ SUITE 418
ELLICOTT CITY, MARYLAND 21043
PHONE: 410–465–6105 FAX: 410–465–6644

STATE OF MARYLAND — DONALD MASON — PROFESSIONAL ENGINEER
8/3/04

DES: LDD	
DRN: LDD	
CHK: DAM	
DATE: 8/04	

BY	NO.	REVISIONS	DATE

FINAL
WATER AND SEWER
PLAN, PROFILE AND DETAILS

600 SCALE MAPS: W30 & S30 BLOCK: 5

COLUMBIA HILLS
CORPORATION PROPERTY
ELECTION DISTRICT NO. 2
CONTRACT NO. 24–4206–D

SCALE: AS SHOWN

SHEET NO. 1 OF 1

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