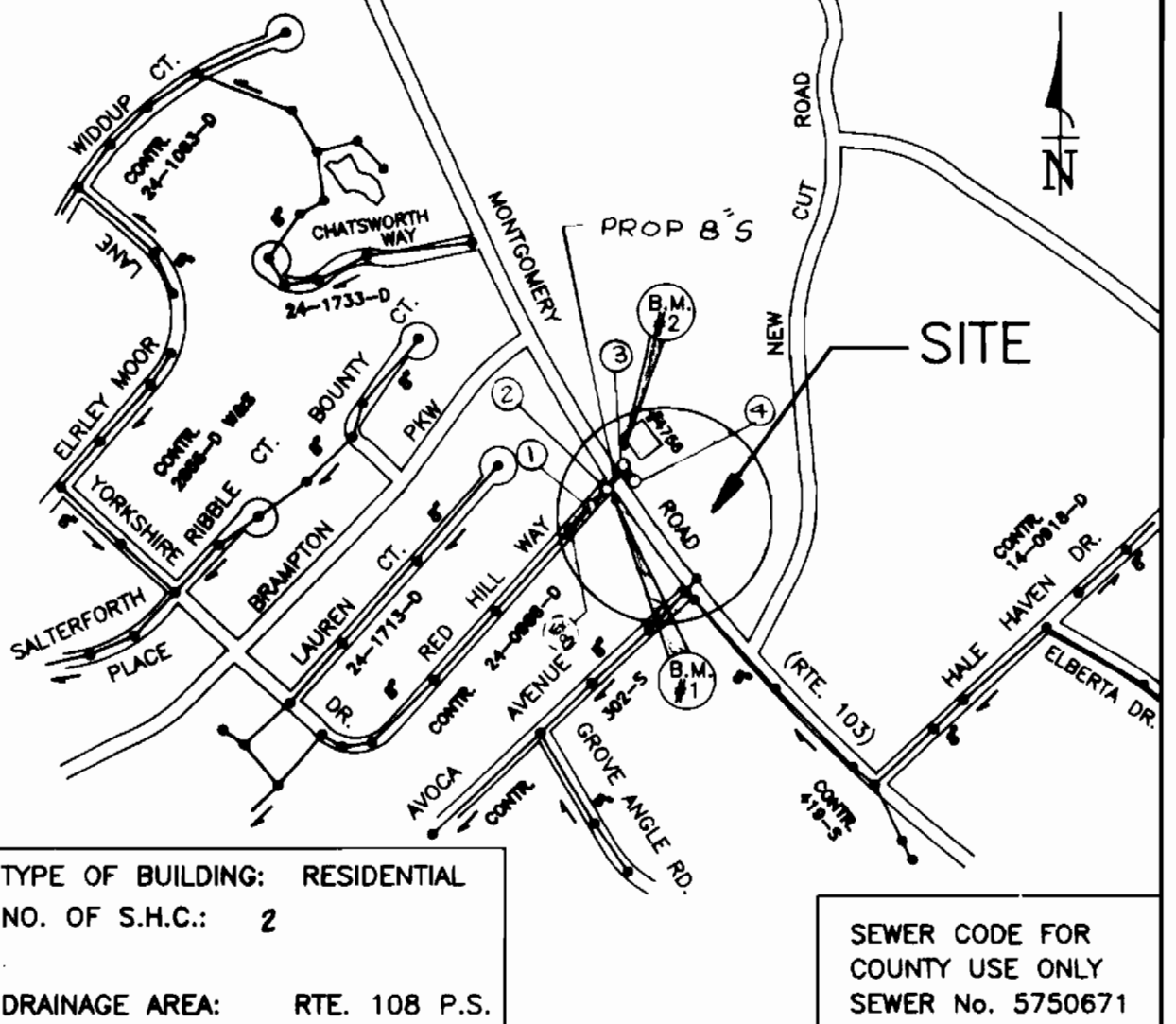
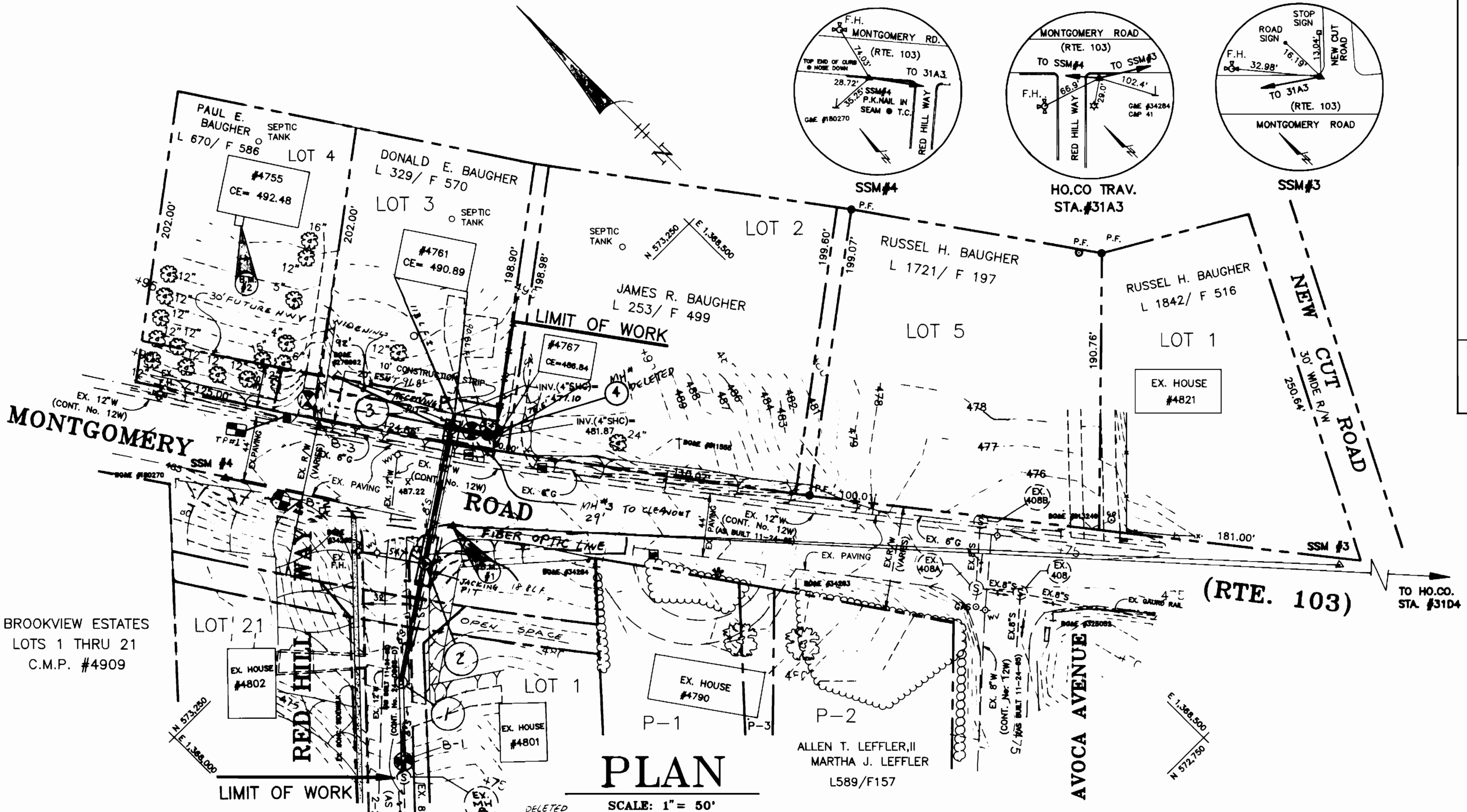


3339 ws/1 Montgomery rd. sewer @ Red Hill Way

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 SERVICE. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR EXPENSE.
- ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
- ALL VERTICAL CONTROLS ARE BASED ON U.S.C.S. DATA.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
- 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 THE BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONEY 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.
- 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:

AT&T.....	885-3803
BGAEE (CONTRACTOR SERVICES).....	850-4820
BGAEE - UNDERGROUND DAMAGE CONTROL.....	787-9088
BUREAU OF UTILITIES (DPW).....	313-4900
CHESAPEAKE & POTOMAC TELEPHONE CO.....	597-8585
COLONIAL PIPELINE CO.....	795-1390
MISSISSIPPI UTILITY.....	557-7777
STATE HIGHWAY ADMINISTRATION.....	531-5533
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT.
- CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
- 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 SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(d) OF THE HOWARD COUNTY CODE.
- ALL SEWER MAINS SHALL BE D.I.P. OR P.V.C. UNLESS OTHERWISE NOTED. COUNTY CODE.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- FORCE MAINS SHALL BE D.I.P. ONLY.
- MANHOLES SHOWN WITH 12" AND 18" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVER, STANDARD DETAIL 05.52. WHERE WATERTIGHT MANHOLE FRAME AND COVER ARE USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWING.
- HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED. NOTED ON THE DRAWINGS.



BENCH MARKS

BM1: HOWARD COUNTY (STA.31A3) CONC. MON. S.E. CORNER OF MONTGOMERY ROAD & RED HILL WAY (2.5' FROM CURB LINE). ELEV. = 487.85

BM2: FRONT RIGHT CORNER OF BRICK PORCH OF HOUSE #4755. ELEV. = 499.98

COORDINATES

MANHOLES	NORTH	EAST
EX. MH#8	579,119.7572	1,360,091.6094
MH-1	579,160.4265	1,360,187.1210
MH-2	579,209.2360	1,360,208.8778
MH-3	579,265.8860	1,360,289.2551
MH-4	579,285.2690	1,360,299.8916

RESTORATION SCHEDULE

LOCATION	DISTANCE	TYPE
EX. MH#8 TO MH-1	65.1'	PAVING
MH-1 TO MH-2	84'	20' PAVING, 94' CRODING 10' CURB
MH-2 TO MH-3	95'	35' SEED
MH-3 TO MH-4	25'	10' PAVING, 15' CRODING
H.C.#4761, LOT 3	10'	SEEDING
S.H.C.#4767, LOT 2	5'	SEEDING

QUANTITIES

ITEM	UNIT	ESTIMATE	AS-BUILT	MATERIAL SUPPLIER
8" SEWER	L.F.	204	159.5	DIP US PIPE # (found) CP
STD MANHOLE	EA.	2	2 EA	ATLANTIC CONC. PRODUCTS
TYPE "D" DROP MH	EA.	1	1 EA	
4" S.H.C.	L.F.	15	13 LF	
TERMINAL MANHOLE	EA.	1	0 EA	
MH	VF	10	13 VF	ATLANTIC CONC. PRODUCTS
8" TYPE "D" DROP CONN. TO EX. MAINS	EA.	1	1 EA	
36" STEEL SLEEVE @ 20'	L.F.	65	62.5	BALCO PIPE

DEVELOPER'S CERTIFICATION	ENGINEER'S CERTIFICATION
<p>I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THE PLAN, AND THAT ANY RESPONSIBLE PERSONNEL MEMBER IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF THE ENVIRONMENT APPROVED THROUGH PROGRAM FOR CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I/ALSO AFFIRM PERSONNEL ON-SITE SUPERVISION BY THE HOWARD SOIL CONSERVATION DISTRICT.</p> <p><i>Patricia E. Wolfe</i> 12/5/94 ENGINEER U.S. SOIL CONSERVATION SERVICE</p>	<p>I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THE PLAN, AND THAT ANY RESPONSIBLE PERSONNEL MEMBER IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF THE ENVIRONMENT APPROVED THROUGH PROGRAM FOR CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I/ALSO AFFIRM PERSONNEL ON-SITE SUPERVISION BY THE HOWARD SOIL CONSERVATION DISTRICT.</p> <p><i>Patricia E. Wolfe</i> DATE ENGINEER U.S. SOIL CONSERVATION SERVICE</p>

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:

- PREFERRED** - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ FT.) AND 800 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ FT.) BEFORE SEEDING. HARROW OR DISK INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS/1000 SQ FT.).
- ACCEPTABLE** - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ FT.) AND 1000 LBS PER ACRE 10-10-10 FERTILIZER (23 LBS/1000 SQ FT.) BEFORE SEEDING. HARROW OR DISK INTO UPPER THREE INCHES OF SOIL.

SEEDING - FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 80 LBS PER ACRE (1.4 LBS/1000 SQ FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 80 LBS KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS PER ACRE (.05 LBS/1000 SQ FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 15 THRU FEBRUARY 28, PROTECT SITE BY OPTION (1) 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) USE SOD. OPTION (3) SEED WITH 80 LBS/ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WELL ANCHORED STRAW.

MULCHING - APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL/1000 SQ FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ FT.) FOR ANCHORING.

MAINTENANCE - INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

TEMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

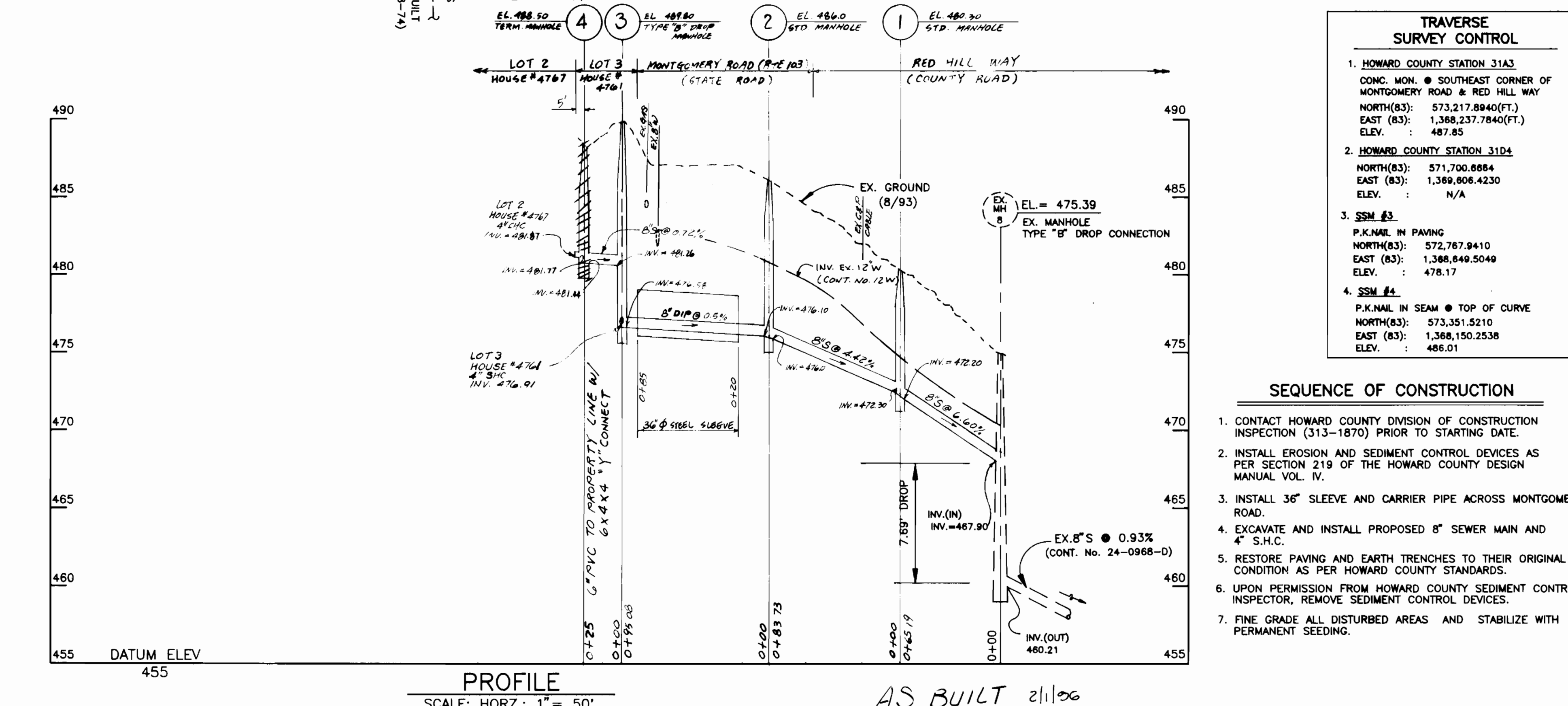
SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS - APPLY 80 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ FT.).

SEEDING - FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU OCTOBER 15, SEED WITH 2-1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS/1000 SQ FT.). FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS PER ACRE OF WEEPING LOVEGRASS (.07 LBS/1000 SQ FT.). FOR THE PERIOD NOVEMBER 15 THRU FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOD.

MULCHING - APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL PER ACRE (5 GAL/1000 SQ FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FT OR HIGHER, USE 348 GAL PER ACRE (8 GAL/1000 SQ FT.) FOR ANCHORING.

REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.



TRAVERSE SURVEY CONTROL

- HOWARD COUNTY STATION 31A3 CONC. MON. @ SOUTHEAST CORNER OF MONTGOMERY ROAD & RED HILL WAY
 NORTH(83): 573,217.8940(FT.)
 EAST (83): 1,368,237.7840(FT.)
 ELEV. : 487.85
- HOWARD COUNTY STATION 3104
 NORTH(83): 571,700.8884
 EAST (83): 1,369,808.4230
 ELEV. : N/A
- SSM #3
 P.K.NAIL IN PAVING
 NORTH(83): 572,767.9410
 EAST (83): 1,368,849.5049
 ELEV. : 478.17
- SSM #4
 P.K.NAIL IN SEAM @ TOP OF CURVE
 NORTH(83): 573,351.5210
 EAST (83): 1,368,150.2538
 ELEV. : 486.01

- SEQUENCE OF CONSTRUCTION**
- CONTACT HOWARD COUNTY DIVISION OF CONSTRUCTION INSPECTION (313-1870) PRIOR TO STARTING DATE.
 - INSTALL EROSION AND SEDIMENT CONTROL DEVICES AS PER SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL VOL. IV.
 - INSTALL 36" SLEEVE AND CARRIER PIPE ACROSS MONTGOMERY ROAD.
 - EXCAVATE AND INSTALL PROPOSED 8" SEWER MAIN AND 4" S.H.C.
 - RESTORE PAVING AND EARTH TRENCHES TO THEIR ORIGINAL CONDITION AS PER HOWARD COUNTY STANDARDS.
 - UPON PERMISSION FROM HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES.
 - FINE GRADE ALL DISTURBED AREAS AND STABILIZE WITH PERMANENT SEEDING.

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND



DES:	G.S.				
DRN:	G.S.				
CHK:	T.W.W.				
DATE:	SEPT.'94				
FL	1	RELOCATE ALIGNMENT TO E. OF RED HILL WAY PER CO #2			
BY	NO.				
		REVISION	DATE	600' SCALE MAP NO. 31	BLOCK NO. 7

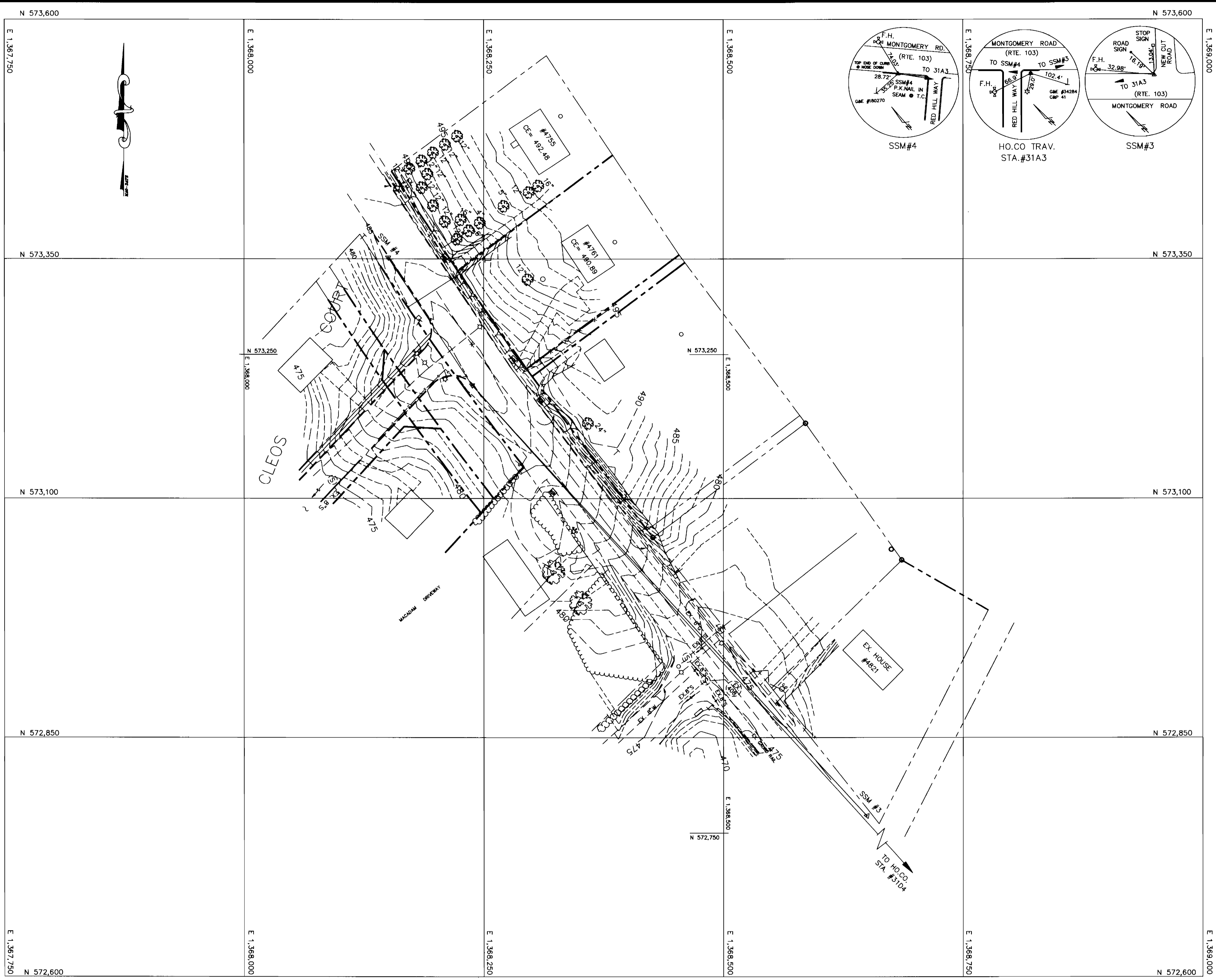
8-INCH SEWER MAIN
 PLAN & PROFILE

MONTGOMERY ROAD SEWER @ RED HILL WAY
 CAPITAL PROJECT: S-6179
 ELECTION DISTRICT: 2
 CONTRACT No.: 20-3339

AS-BUILT 2/11/06

FILE NAME: C:\DWG\5684-003\80083

3339 pos. sht / topo C.P. # S-6179

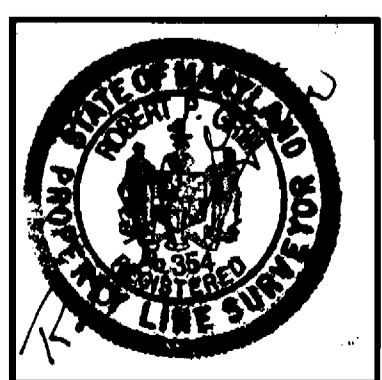


TOPOGRAPHIC SURVEY PLAT

SUBD. NAME: _____
 SEC: _____ AREA: _____
 CAP. PROJ. NO. S-6179
 CONTRACT NO. 20-3339
 FIELD BOOK NO. 337
 SCALE: 1" = 50'

SURVEYOR'S CERTIFICATION

I, Robert P. Grim, certify that this Topographic Survey is the actual record of the electronic data collection topographic survey performed by me or by personnel under my direct supervision. This plat is the original and final graphic representation of the field survey performed on or about 23 November, 1994. The instruments used to perform this survey were, Theodolite: TOPCON, GTS 3B. Accuracy: Distance measurement, +/- (5mm + 5 ppm)m.s.e., Angular Measurement: Less than 5", Data Collector: Hewlett Packard, 48SX. This Topographic Survey Plat meets requisite accuracy as specified for this project by the Howard County, Department of Public Works.



6				12			
5				11			
4				10			
3				9			
2				8			
1				7			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY

PREPARED BY:
SSM
 SPOTTS, STEVENS and McCOY, INC.
 ENGINEERS * SURVEYORS
 PLANNERS * SCIENTISTS
 555 Fairmount Ave., Suite 230
 Towson, Maryland 21286-5497
 (410) 494-0500 FAX 296-3580

SHEET NO. 1 OF 1