

GORMAN ROAD SCHOOL SEWER HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS

CAPITAL PROJECT No. S-6204
CONTRACT No. 20-3516

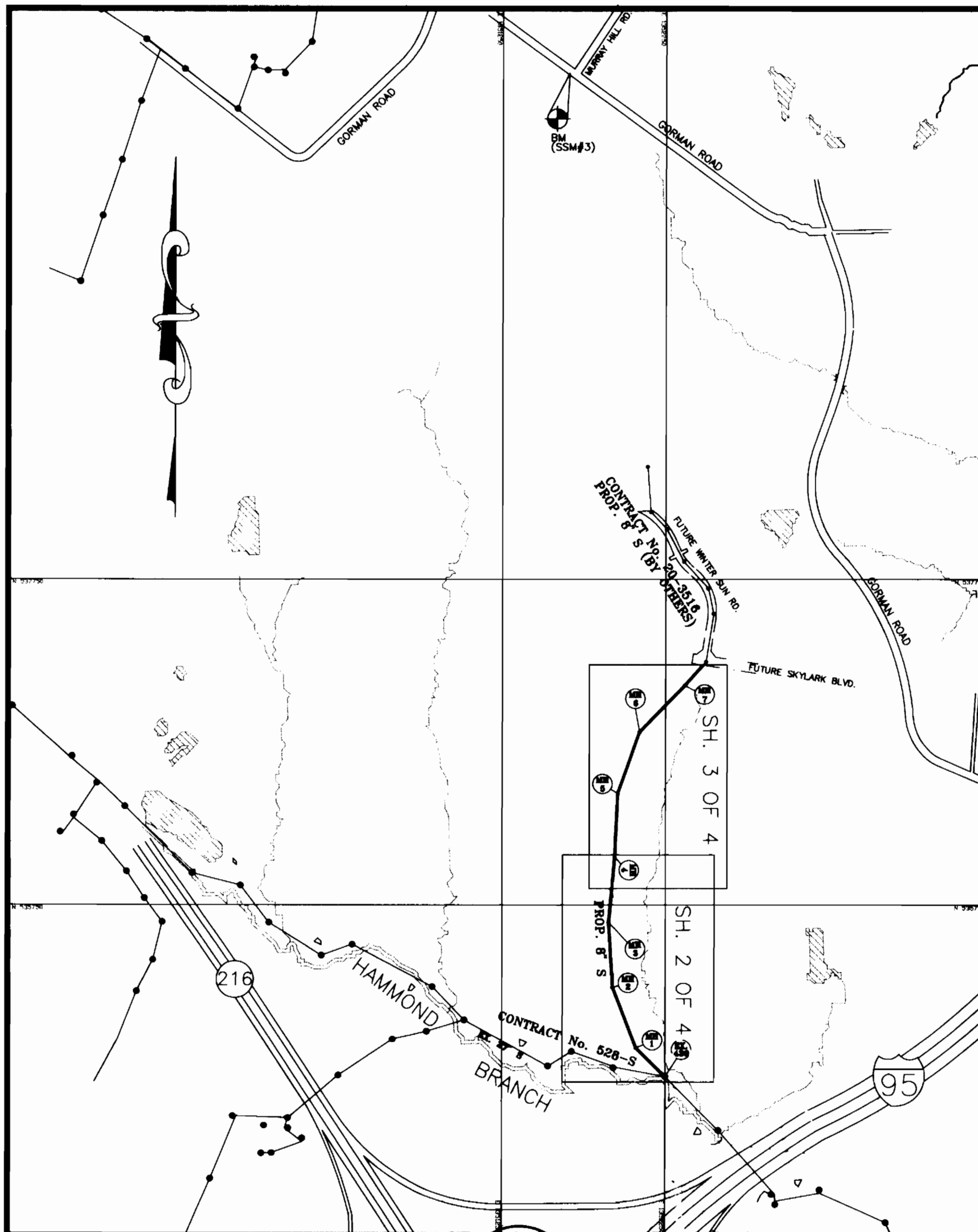
GENERAL NOTES

1. APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR 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 UNLESS OTHERWISE NOTED ON THE PLANS.
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 THE BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONEY OWNED BY 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 DETAILS 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:
 AT&T..... 885-3803
 BOBE (CONTRACTOR SERVICES)..... 850-4820
 BOBE - UNDERGROUND DAMAGE CONTROL..... 787-9088
 BUREAU OF UTILITIES (DPW)..... 313-4900
 CHESAPEAKE & POTOMAC TELEPHONE CO..... 567-8085
 COLONIAL PIPELINE CO..... 785-1390
 MISS UTILITY..... 1-800-257-7777
 STATE HIGHWAY ADMINISTRATION..... 531-5533
9. TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE 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. 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(g) OF THE HOWARD COUNTY CODE.
12. ALL SEWER MAINS SHALL BE P.V.C. UNLESS OTHERWISE NOTED.
13. ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
14. FORCE MAINS SHALL BE D.I.P. ONLY.
15. MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
16. MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATER TIGHT FRAME AND COVER, STANDARD DETAIL 65.52. WHERE WATER TIGHT MANHOLE FRAME AND COVER ARE USED, SET TOP OF FRAME 1'-0" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
17. HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.
18. ALL D.I.P. TO HAVE POLYETHYLENE PIPE ENCASEMENT.

INDEX OF SHEETS

SHEET No.	DESCRIPTION
1	TITLE SHEET
2	8-INCH SANITARY SEWER PLAN, PROFILE & NOTES 95-216 CORPORATION PROPERTY EX. MH 439 TO MH 4
3	8-INCH SANITARY SEWER PLAN, PROFILE & NOTES 95-216 CORPORATION PROPERTY MH 4 TO MH 7
4	EROSION & SEDIMENT CONTROL, NOTES & DETAILS

QUANTITIES				
ITEM	UNIT	ESTIMATE	AS-BUILT	MATERIAL SUPPLIER
8" S	L.F.	1,599	1	WINDHAM-TRINITY
8" DIP	L.F.	1,178		WINDHAM-TRINITY
STD. MANHOLE	EA.	6		ATLANTIC MH
STD. TYPE "B" DROP MANHOLE	EA.	1	1	ATLANTIC MH
NAME OF UTILITY CONTRACTOR: WINDHAM-TRINITY				
CHECKBOX		Tob		
AS-BUILT DATE:		2/13/97		
SURVEY AND DRAFTING DIVISION				



LOCATION MAP

SCALE: 1" = 600'

TYPE OF BUILDING: N/A
 NUMBER OF PARCELS: N/A
 NUMBER OF HOUSE CONNECTIONS: N/A
 DRAINAGE AREA: PATAPSCO

DEVELOPER'S CERTIFICATION	ENGINEER'S CERTIFICATION
<p>"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT."</p> <p><i>Bill Jenson</i> 8/30/96 BUREAU OF ENGINEERING DEPARTMENT OF PUBLIC WORKS</p>	<p>"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT."</p> <p><i>Timothy J. Wolfe</i> 9/23/96 TIMOTHY J. WOLFE</p> <p>SPOTTS, STEVENS & MCCOY, INC. 555 FAIRMOUNT AVENUE, SUITE 230 TOWSON, MARYLAND 21284</p>
<p>REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.</p> <p><i>J. G. Gault</i> 8/23/96 J. G. GAULT TOWSON, MARYLAND 21284 CONSERVATION SERVICE</p>	<p>THIS DEVELOPMENT PLAN IS APPROVED FOR THE SOIL EROSION & SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.</p> <p><i>Timothy J. Wolfe</i> 8/23/96 APPROVED HOWARD COUNTY S.C.D.</p>

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James H. Jenson 8/30/96
 DIRECTOR OF PUBLIC WORKS DATE
Robert J. Jenson 8-29-96
 CHIEF, BUREAU OF UTILITIES DATE
Bill Jenson 8/30/96
 CHIEF BUREAU OF ENGINEERING DATE
James L. Gault 8/29/96
 ASST. CHIEF, WATER AND SEWER DESIGN DIVISION DATE



DES: FCL				
DRN: FCL				
CHK: TWV				
DATE: Aug., '96	BY	NO.	REVISION	DATE

TITLE SHEET

GORMAN ROAD SCHOOL SEWER

CAPITAL PROJECT No. S-6204
 CONTRACT No. 20-3516
 ELECTION DISTRICT GUILFORD No. 6
 AS-BUILT 2/13/97

SCALE AS SHOWN SHEET 1 OF 5

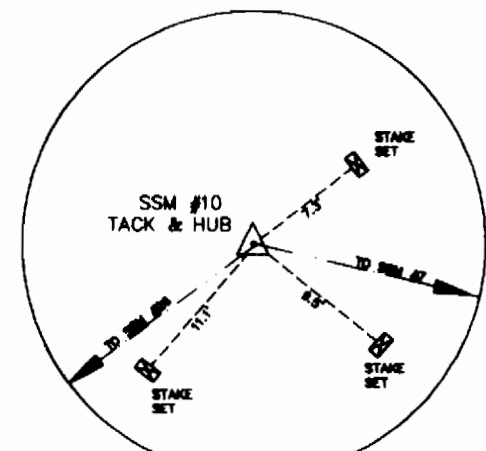
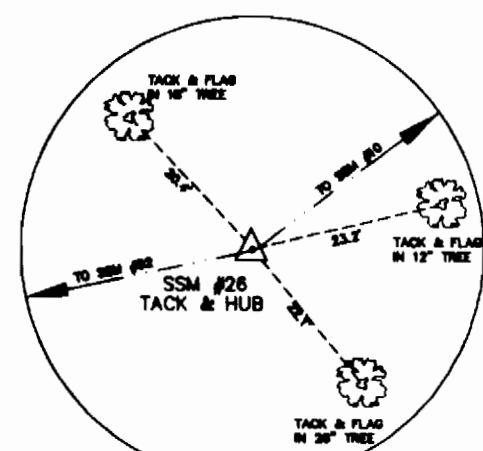
FILE NAME: C:\AWP\8884_006.DWG

SURVEY CONTROL

1. HOWARD COUNTY STATION 42EA

STD. HOWARD CO. SURVEY DISC SET ON CONC. MONUMENT ON THE NORTH SIDE OF GUILFORD RD. BETWEEN MURRY HILL RD. & RT #32 OVERPASS.

NORTH(83) 547,603.6748
EAST (83) 1,355,440.3193
ELEV. 312.586



2. HOWARD COUNTY STATION 47AB

STD. HOWARD CO. SURVEY DISC SET ON CONC. MONUMENT ON THE NORTH SIDE OF GORMAN RD. ±1000' S.E. OF LEISHEAR RD.

NORTH(83) 540,058.257
EAST (83) 1,350,005.064
ELEV. 397.67

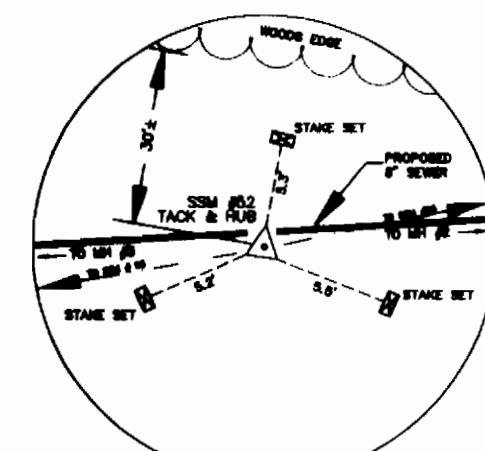
SSM PI #26
N 535115.399
E 1352164.756
ELEV. = 298.15

SSM PI #10
N 534844.043
E 1352315.674
ELEV. = 280.27

3. BENCH MARK (BM)

PIN w/ CAP "S.S.M.#3" SET ON THE S.W. COR. OF GORMAN & MURRY HILL ROADS.

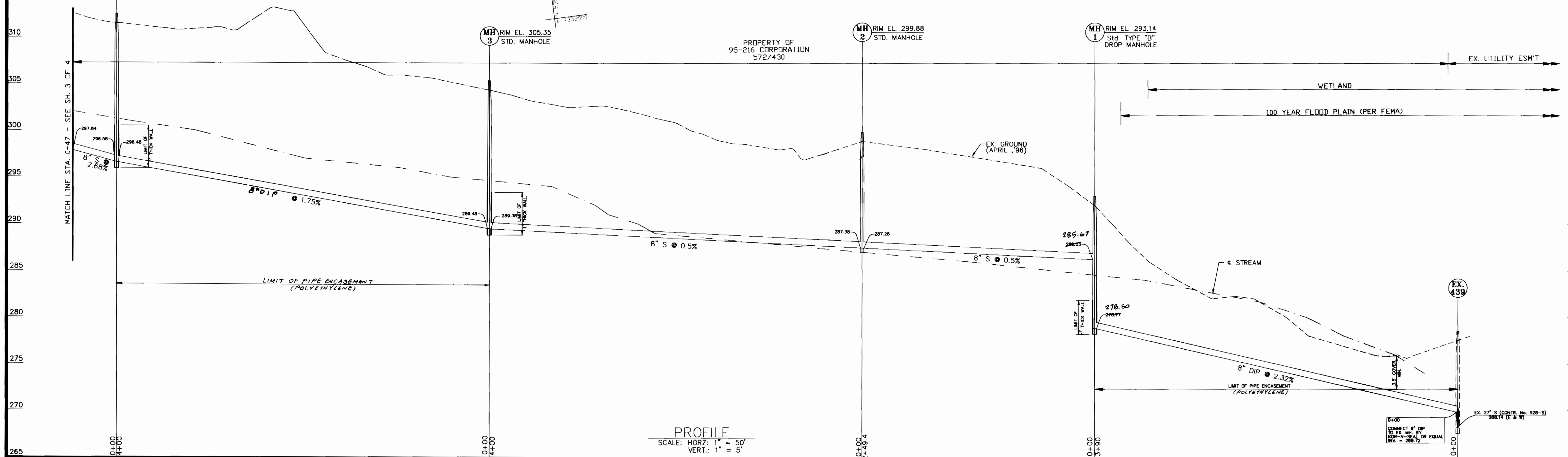
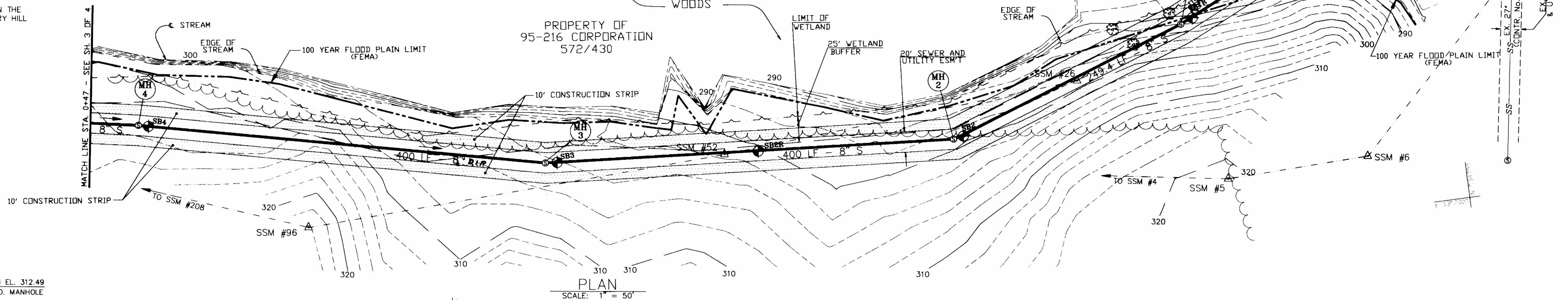
NORTH 540,389.677
EAST 1,351,715.049
ELEV. 386.45



SSM PI #52
N 535466.708
E 1352139.039
ELEV. = 301.61

RESTORATION SCHEDULE		
LOCATION	DISTANCE	TYPE
EX. MH TO MH-1 8" SEWER	390 L.F.	SEEDING
MH-1 TO MH-2 8" SEWER	250 L.F.	SEEDING
MH-2 TO MH-3 8" SEWER	400 L.F.	SEEDING
MH-3 TO MH-4 8" SEWER	400 L.F.	SEEDING
MH-4 TO 0+47 8" SEWER	47 L.F.	SEEDING

STAKEOUT COORDINATES SCHEDULE		
STRUCTURE	NORTHING	EASTING
MH-1	535,007.86	1,352,206.37
MH-2	535,243.26	1,352,124.14
MH-3	535,642.13	1,352,154.11
MH-4	536,032.22	1,352,242.63
STA. 0+47	536,079.03	1,352,251.16



Sewer

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Jana A. Lewis 8/30/96
DIRECTOR OF PUBLIC WORKS DATE

Thomas L. Riddle 8/29/96
CHIEF, BUREAU OF ENGINEERING DATE

Thomas L. Riddle 8/29/96
Asst. CHIEF, WATER AND SEWER DESIGN DIVISION DATE

SSM
SPOTTS, STEVENS and MCGOY, INC.
ENGINEERS & SURVEYORS • SCIENTISTS
555 FAIRMOUNT AVENUE, STE. 230
TOWSON, MARYLAND, 21286-5497
(410)484-0500 FAX (410)296-3580



DES: FCL					
DRN: FCL					
CHK: TWW					
DATE: Aug., '96	BY:	NO.:	REVISION:	DATE:	

8-INCH SANITARY SEWER
PLAN, PROFILE & NOTES
95-216 CORPORATION PROPERTY
FROM EX. MH. TO MH 4

600' SCALE MAP NO. 47 BLOCK NO. 2, 8 & 14

GORMAN ROAD SCHOOL SEWER
CAPITAL PROJECT No. S-6204
CONTRACT No. 20-3516
ELECTION DISTRICT GUILFORD No. 6
HOWARD COUNTY, MARYLAND

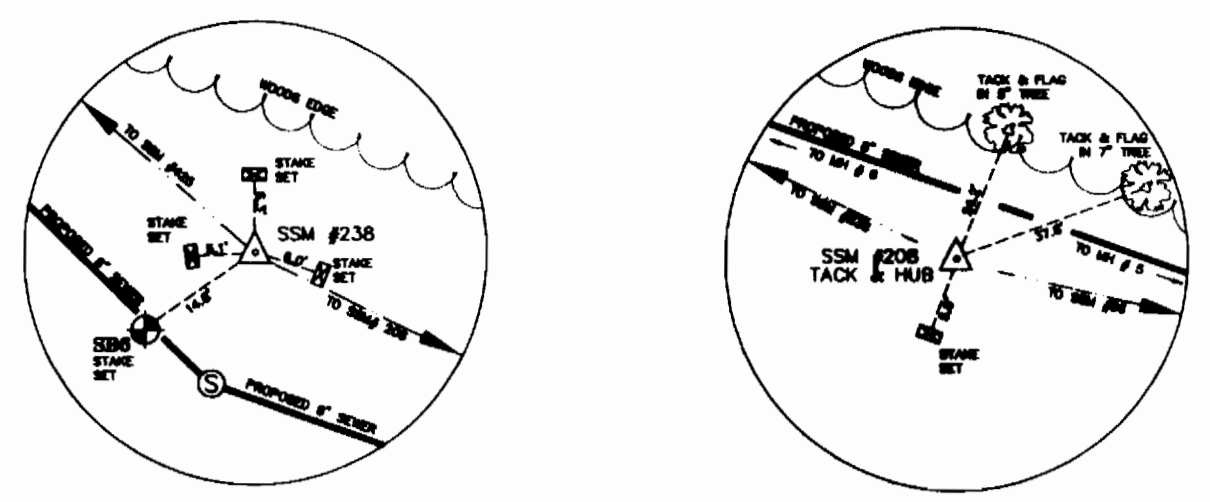
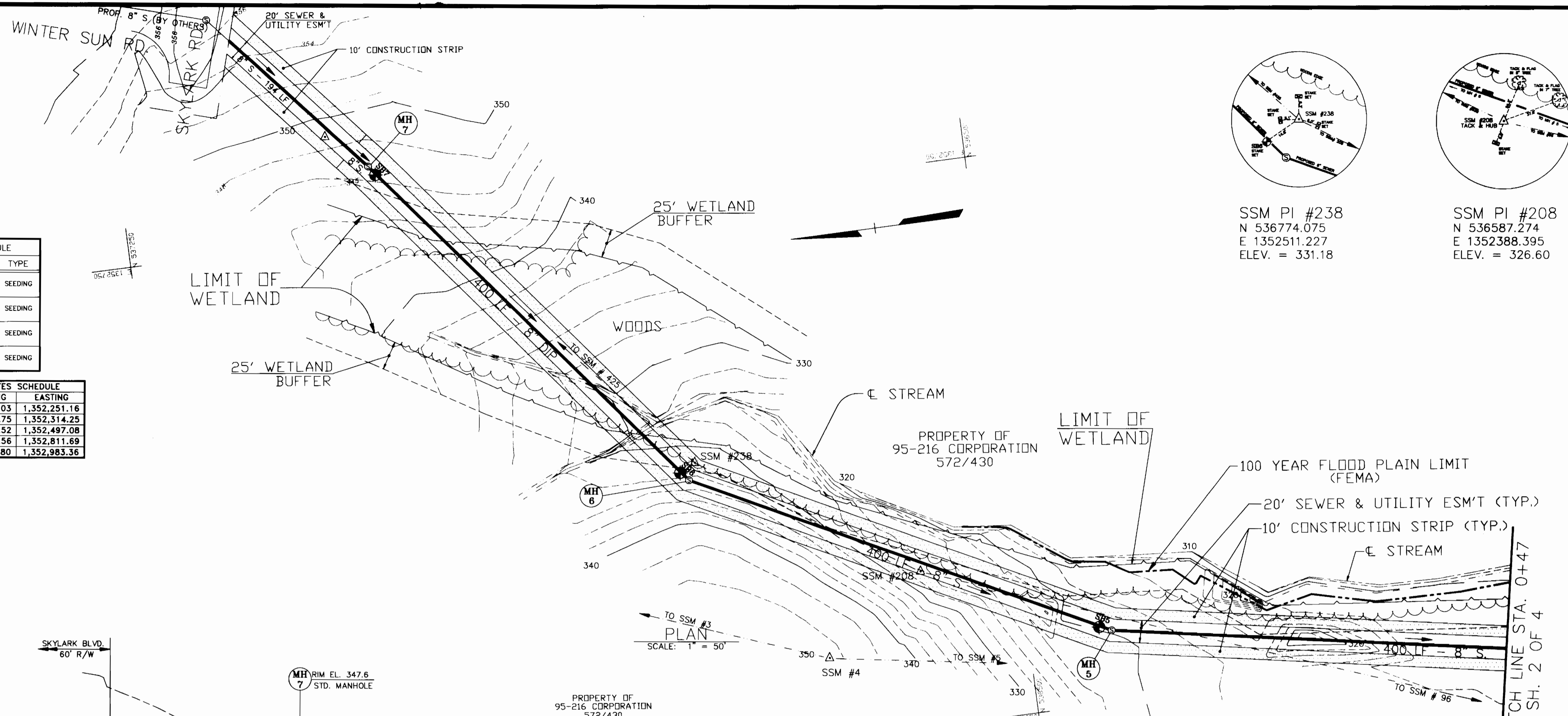
SCALE AS SHOWN
SHEET 2 OF 5

FILE: 5684/025/80196.DWG

C.P. # S-6204

School Sewer

D.P.P.



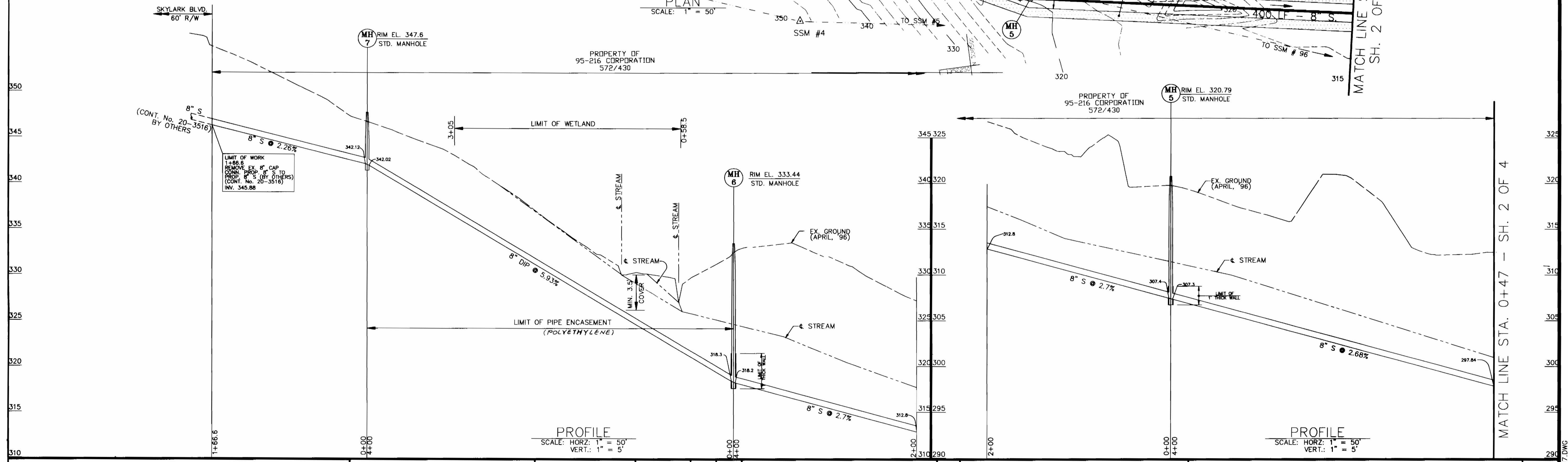
SSM PI #238
 N 536774.075
 E 1352511.227
 ELEV. = 331.18

SSM PI #208
 N 536587.274
 E 1352388.395
 ELEV. = 326.60

RESTORATION SCHEDULE		
LOCATION	DISTANCE	TYPE
0+47 TO MH-5 8" SEWER	353 L.F.	SEEDING
MH-5 TO MH-6 8" SEWER	400 L.F.	SEEDING
MH-6 TO MH-7 8" SEWER	400 L.F.	SEEDING
MH-7 TO STA. 1+66.6 8" SEWER	166.6 L.F.	SEEDING

STAKEOUT COORDINATES SCHEDULE		
STRUCTURE	NORTHING	EASTING
STA. 0+47	536,079.03	1,352,251.16
MH-5	536,425.75	1,352,314.25
MH-6	536,781.52	1,352,497.08
MH-7	537,028.56	1,352,811.69
STA. 0+27.4	537,136.80	1,352,983.36

PLAN
 SCALE: 1" = 50'



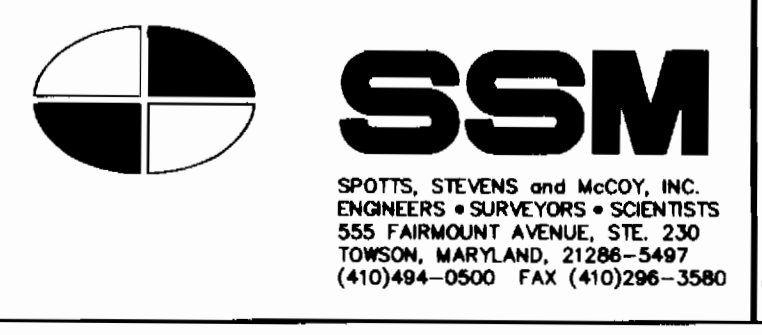
PROFILE
 SCALE: HORIZ: 1" = 50'
 VERT.: 1" = 5'

PROFILE
 SCALE: HORIZ: 1" = 50'
 VERT.: 1" = 5'

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

James J. ... 8/30/96
 DIRECTOR OF PUBLIC WORKS
 CHIEF, BUREAU OF UTILITIES

Paul J. ... 8/30/96
 CHIEF, BUREAU OF ENGINEERING
 CHIEF, WATER AND SEWER DESIGN DIVISION



DES: FCL					
DRN: FCL					
CHK: TWW					
DATE: Aug., '96	BY	NO.	REVISION	DATE	

8-INCH SANITARY SEWER
 PLAN, PROFILE & NOTES
 95-216 CORPORATION PROPERTY
 FROM MH 4 TO MH 7

600' SCALE MAP NO. 47 BLOCK NO. 8

GORMAN ROAD SCHOOL SEWER
 CAPITAL PROJECT No. S-6204
 CONTRACT No. 20-3516
 ELECTION DISTRICT GUILFORD No. 6
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
 SHEET 3 OF 2

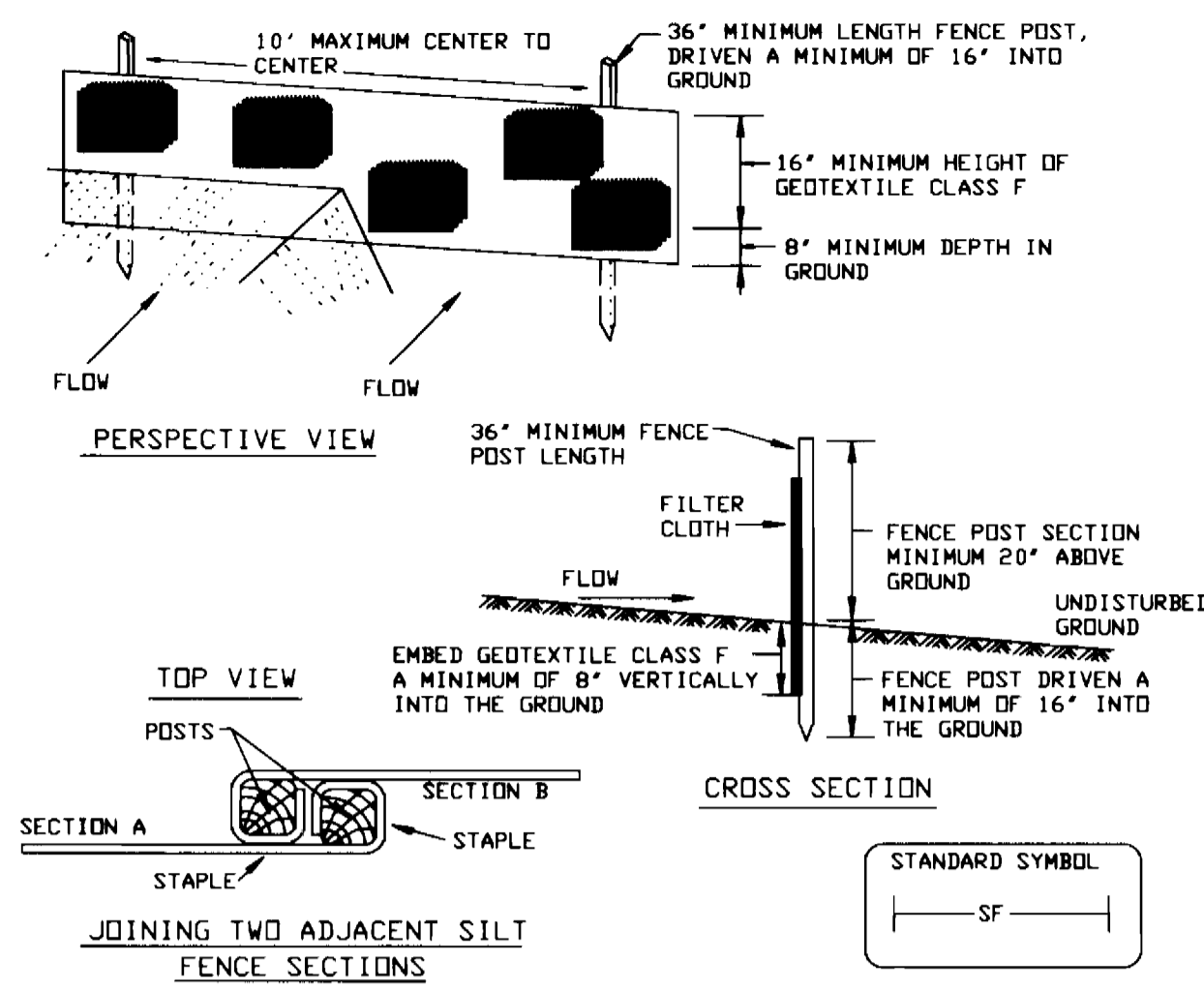
FILE: 568A\02\80197.DWG

STANDARD SEDIMENT CONTROL NOTES

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION, (313-1855).
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT "MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", AND REVISIONS THERETO.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
 - 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1.
 - 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. I, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL (SEC. G20.0) FOR PERMANENT SEEDINGS, SOD, TEMPORARY SEEDING AND MULCHING. TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:

TOTAL AREA OF SITE	NA	ACRES
AREA DISTURBED	0.89	ACRES
AREA TO BE ROOFED OR PAVED	0.25	ACRES
AREA TO BE VEGETATIVELY STABILIZED	0.64	ACRES
TOTAL CUT	17,000	CU. YDS.
TOTAL FILL	17,000	CU. YDS.
OFFSITE WASTE/BORROW AREA LOCATION	NA	
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF THE DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE (3) PIPE LENGTHS OR THAT WHICH CAN BE BACK FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.
- CONTRACTOR SHALL PLACE EXCAVATED MATERIALS ON UPHILL SIDE OF TRENCH AND PLACE SILT FENCE ON DOWNHILL SIDE OF TRENCH.

DETAIL 22 - SILT FENCE



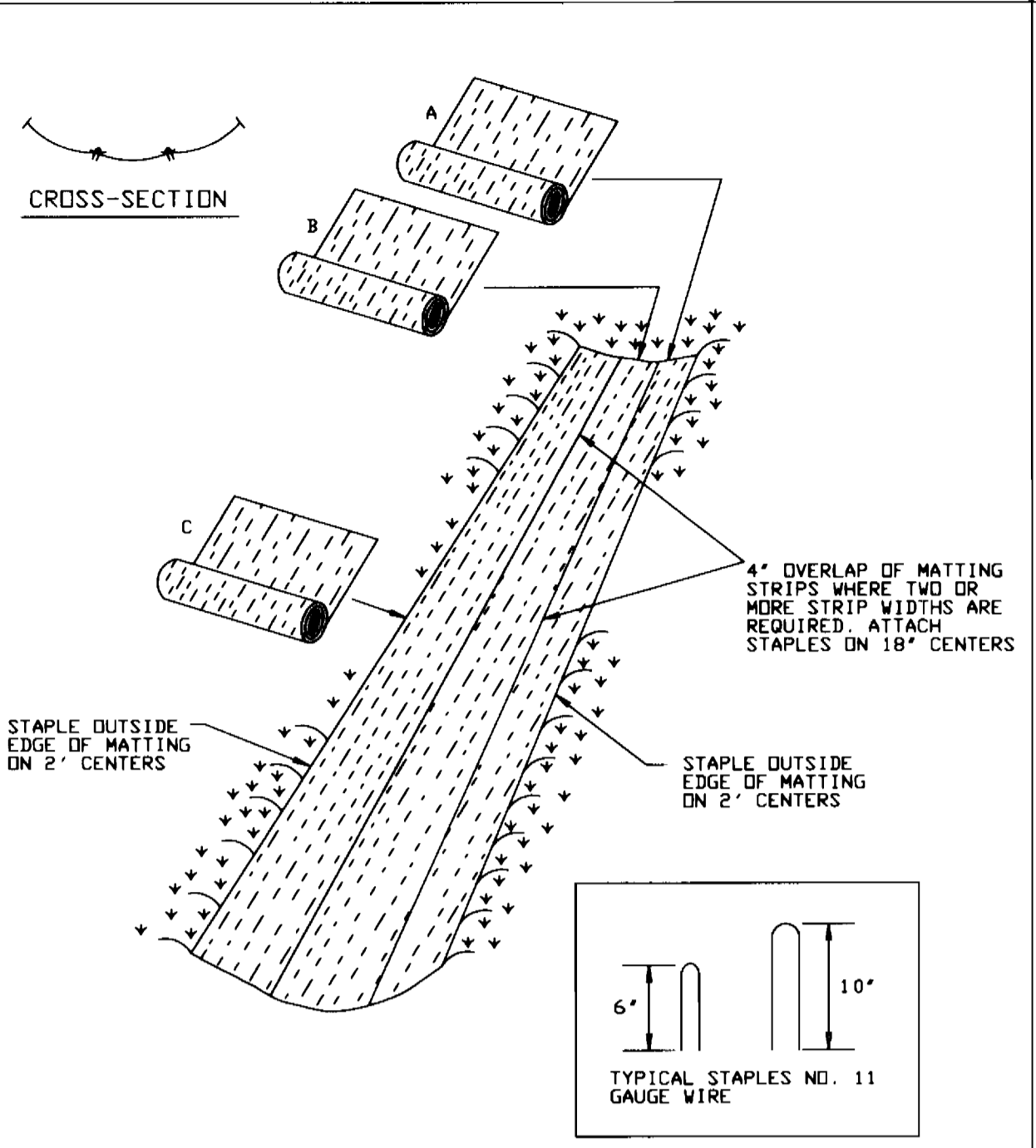
Construction Specifications

- Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 1 1/2" x 1 1/2" square (minimum) cut, or 1 3/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pound per linear foot.
- Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:

Tensile Strength	50 lbs/in (min.)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal ft ² /minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322
- Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.
- Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE E - 15 - 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION
---	--------------------	---

DETAIL 30 - EROSION CONTROL MATTING



Construction Specifications

- Key-in the matting by placing the top ends of the matting in a narrow trench, 6" in depth. Backfill the trench and tamp firmly to conform to the channel cross-section. Secure with a row of staples about 4" down slope from the trench. Spacing between staples is 6".
- Staple the 4" overlap in the channel center using an 18" spacing between staples.
- Before stapling the outer edges of the matting, make sure the matting is smooth and in firm contact with the soil.
- Staples shall be placed 2" apart with 4 rows for each strip, 2 outer rows, and 2 alternating rows down the center.
- Where one roll of matting ends and another begins, the end of the top strip shall overlap the upper end of the lower strip by 4", shiplap fashion. Reinforce the overlap with a double row of staples spaced 6" apart in a staggered pattern on either side.
- The discharge end of the matting liner should be similarly secured with 2 double rows of staples.

Note: If flow will enter from the edge of the matting then the area affected by the flow must be keyed-in.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE G - 22 - 2	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION
---	--------------------	---

EROSION CONTROL MATTING

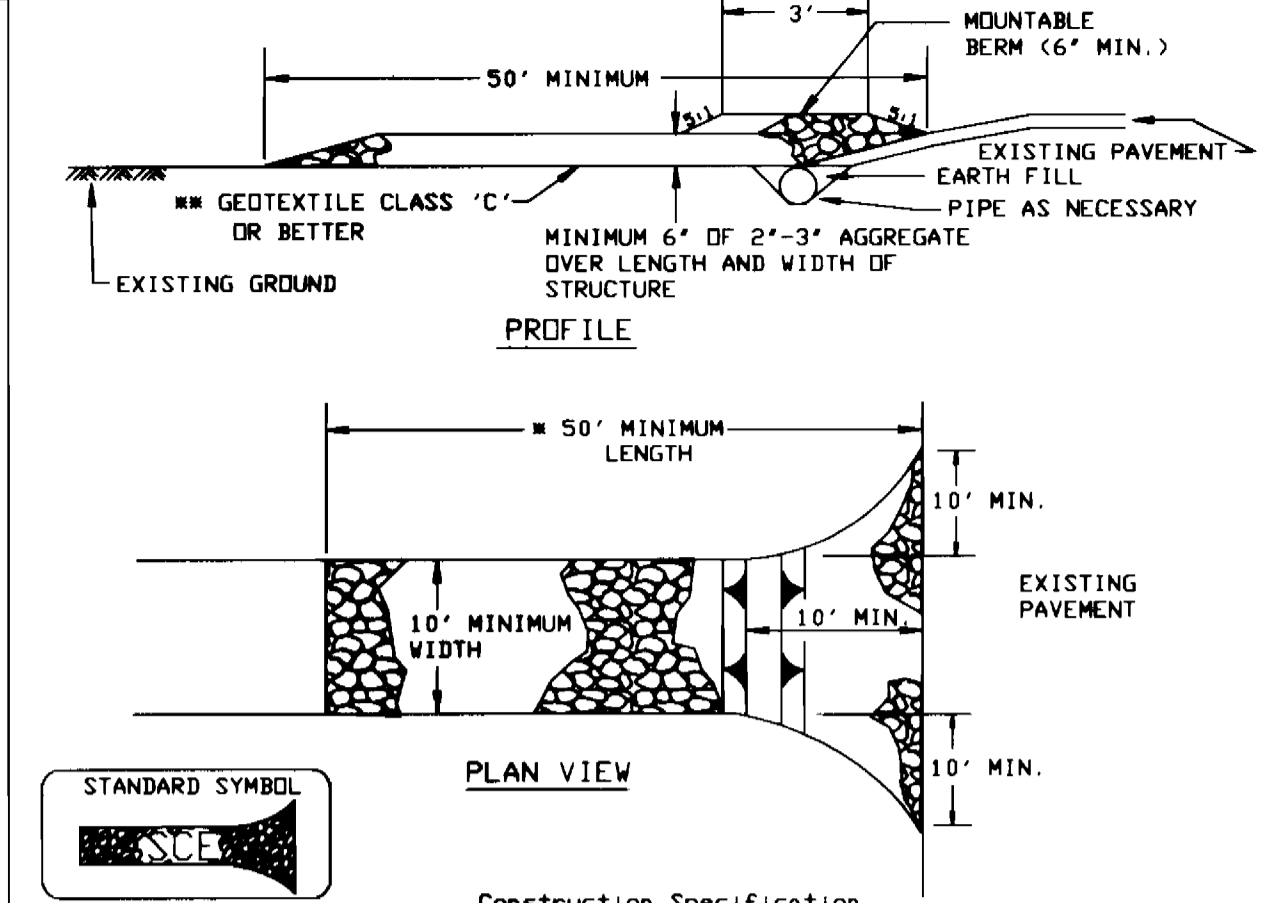
Construction Specifications

- Key-in the matting by placing the top ends of the matting in a narrow trench, 6" in depth. Backfill the trench and tamp firmly to conform to the channel cross-section. Secure with a row of staples about 4" down slope from the trench. Spacing between staples is 6".
- Staple the 4" overlap in the channel center using an 18" spacing between staples.
- Before stapling the outer edges of the matting, make sure the matting is smooth and in firm contact with the soil.
- Staples shall be placed 2" apart with 4 rows for each strip, 2 outer rows, and 2 alternating rows down the center.
- Where one roll of matting ends and another begins, the end of the top strip shall overlap the upper end of the lower strip by 4", shiplap fashion. Reinforce the overlap with a double row of staples spaced 6" apart in a staggered pattern on either side.
- The discharge end of the matting liner should be similarly secured with 2 double rows of staples.

Note: If flow will enter from the edge of the matting then the area affected by the flow must be keyed-in.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE G - 22 - 2A	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION
---	---------------------	---

DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE



Construction Specification

- Length - minimum of 50' (#30' for single residence lot).
- Width - 10' minimum, should be flared at the existing road to provide a turning radius.
- Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. The plan approval authority may not require single family residences to use geotextile.
- Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.
- Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.
- Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE F - 17 - 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION
---	--------------------	---

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 ACRES DOLOMITIC LIMESTONE (92 LBS/1000 SQ FT.) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14LBS/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 60 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 16 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 SEEDING 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 600 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 16 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 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

CONDITIONS AND MANAGEMENT PRACTICES FOR WORK CONDUCTED IN NONTIDAL WETLANDS*

- Stockpile and maintain separately the top 6"-12" of topsoil material, to be replaced as the top layer of the backfilled material;
- Remove excess fill or construction material or debris to an upland disposal area;
- Place materials in a location and manner which does not adversely impact surface or subsurface water flow into or out of the nontidal wetland;
- Maintain the hydrologic regime of the nontidal wetlands upstream, downstream, or adjacent to the wetland;
- Place heavy equipment on mats or suitable design the equipment to prevent damage to the nontidal wetlands;
- Use previously excavated material as backfill, unless it contains waste metal products, unslightly debris toxic material or an other deleterious substances. Use clean borrow material when excavated material is not suitable for use as backfill;
- All stabilization in the wetland and buffer shall be of the following species: Annual Ryegrass (*Lolium multiflorum*), Millet (*Setaria italica*), Barley (*Hordeum sp.*), Oats (*Avena sp.*) and/or Rye (*Sacale cereale*). These species allow for the stabilization of the site while also allowing for the voluntary revegetation of natural wetland species. Other non-persistent vegetation may be acceptable, but must be approved by the Division. Kentucky 31 fescue shall not be utilized in the wetland or buffer areas. The area should be seeded and mulched to reduce erosion after construction activities have been completed;
- Upon completion of the project nontidal wetlands and the 25-foot nontidal wetland buffer will not be mowed or otherwise managed to prevent the re-establishment of the pre-existing cover;
- After installation has been completed, make post construction grades and elevations of nontidal wetlands the same as the original grades and elevations.

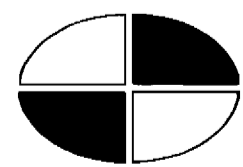
SEQUENCE OF CONSTRUCTION

- CONTACT HOWARD COUNTY BUREAU OF CONSTRUCTION INSPECTION DIVISION (313-1870) PRIOR TO STARTING DATE.
- INSTALL EROSION AND SEDIMENT CONTROL DEVICES AS PER SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL VOL. IV. EXCAVATE AND INSTALL PROPOSED 8" SEWER MAIN. RESTORE EARTH TRENCHES TO THEIR ORIGINAL CONDITION AS PER HOWARD COUNTY STANDARDS. (TRENCH TO BE BACKFILLED AND STABILIZED ON SAME DAY) (TOTAL DURATION 45 DAYS)
- RESTORE ALL DISTURBED AREAS AND STABILIZE WITH PERMANENT SEEDING. (45 DAYS)
- UPON PERMISSION FROM HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES. (2 DAYS)

WRA TRACKING No. 199664330
AUTHORIZATION No. 96-NI-0553

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works: *James H. Lee* 8/30/96
 Chief, Bureau of Engineering: *Paul J. Sisson* 8/30/96
 Chief, Bureau of Utilities: *John J. Sisson* 8-27-96
 Chief, Water and Sewer Division Design: *John J. Sisson* 8-27-96



SSM
SPOTTIS, STEVENS AND MCCOY, INC.
ENGINEERS & SURVEYORS & SCIENTISTS
555 FAIRMOUNT AVENUE, STE. 230
TOWSON, MARYLAND, 21286-5487
(410)944-0500 FAX (410)286-3000



DES: FCL				
DRN: FCL				
CHK: TWW				
DATE: Aug., '96	BY	NO.	REVISION	DATE

EROSION & SEDIMENT CONTROL
NOTES AND DETAILS

600' SCALE MAP NO. _____ BLOCK NO. _____

GORMAN ROAD SCHOOL SEWER
CAPITAL PROJECT No. S-6204
CONTRACT No. 20-3516
ELECTION DISTRICT GULFORD No. 6
HOWARD COUNTY, MARYLAND

SCALE
AS SHOWN
SHEET
4 OF 5

C.R.P. 3-6-204

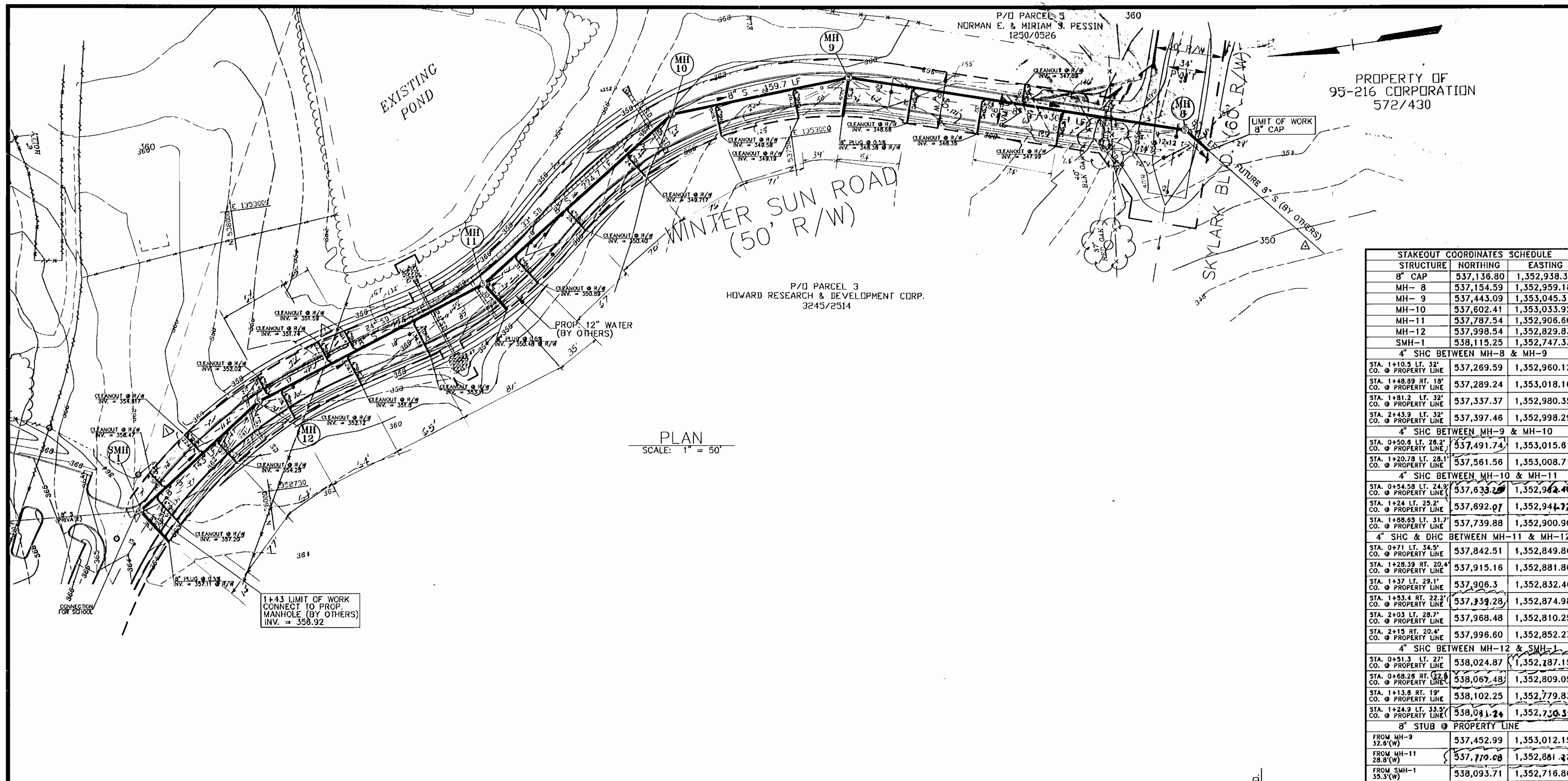
Sewer

Sewer

FILE: 568410251_B0229.DWG

C.P.# S-6204

SEWER



PLAN
SCALE: 1" = 50'

STAKEOUT COORDINATES SCHEDULE		
STRUCTURE	NORTHING	EASTING
8" CAP	537,136.80	1,352,938.36
MH-8	537,154.59	1,352,959.18
MH-9	537,443.09	1,353,045.31
MH-10	537,602.41	1,353,033.92
MH-11	537,787.54	1,352,906.80
MH-12	537,998.54	1,352,829.83
SMH-1	538,115.25	1,352,747.33
4" SHC BETWEEN MH-8 & MH-9		
STA. 1+10.5 LT. 32'	537,269.59	1,352,960.12
CO. @ PROPERTY LINE	537,289.24	1,353,018.16
STA. 1+48.89 RT. 18'	537,289.24	1,353,018.16
CO. @ PROPERTY LINE	537,337.37	1,352,980.35
STA. 1+81.2 LT. 32'	537,337.37	1,352,980.35
CO. @ PROPERTY LINE	537,397.46	1,352,998.29
STA. 2+43.9 LT. 32'	537,397.46	1,352,998.29
CO. @ PROPERTY LINE	537,491.74	1,353,015.81
STA. 0+50.6 LT. 28.2'	537,491.74	1,353,015.81
CO. @ PROPERTY LINE	537,561.56	1,353,008.71
STA. 1+20.79 LT. 28.1'	537,561.56	1,353,008.71
CO. @ PROPERTY LINE	537,632.20	1,352,962.40
STA. 0+54.58 LT. 24.3'	537,632.20	1,352,962.40
CO. @ PROPERTY LINE	537,692.07	1,352,941.72
STA. 1+24 LT. 25.2'	537,692.07	1,352,941.72
CO. @ PROPERTY LINE	537,739.88	1,352,900.90
STA. 1+88.63 LT. 31.7'	537,739.88	1,352,900.90
CO. @ PROPERTY LINE	537,842.51	1,352,849.86
STA. 0+71 LT. 34.5'	537,842.51	1,352,849.86
CO. @ PROPERTY LINE	537,915.16	1,352,881.86
STA. 1+28.19 RT. 20.4'	537,915.16	1,352,881.86
CO. @ PROPERTY LINE	537,906.3	1,352,832.46
STA. 1+37 LT. 29.1'	537,906.3	1,352,832.46
CO. @ PROPERTY LINE	537,953.4	1,352,874.98
STA. 1+53.4 RT. 22.2'	537,953.4	1,352,874.98
CO. @ PROPERTY LINE	537,968.48	1,352,810.25
STA. 2+03 LT. 28.7'	537,968.48	1,352,810.25
CO. @ PROPERTY LINE	537,996.60	1,352,852.27
STA. 2+15 RT. 20.4'	537,996.60	1,352,852.27
CO. @ PROPERTY LINE	538,024.87	1,352,807.15
STA. 0+51.3 LT. 27'	538,024.87	1,352,807.15
CO. @ PROPERTY LINE	538,067.48	1,352,809.05
STA. 0+68.26 RT. 32.8'	538,067.48	1,352,809.05
CO. @ PROPERTY LINE	538,102.25	1,352,779.83
STA. 1+13.8 RT. 19'	538,102.25	1,352,779.83
CO. @ PROPERTY LINE	538,041.24	1,352,750.33
STA. 1+24.9 LT. 33.3'	538,041.24	1,352,750.33
CO. @ PROPERTY LINE	537,452.99	1,353,012.15
FROM MH-9 32.6'(W)	537,452.99	1,353,012.15
FROM MH-11 28.8'(W)	537,719.08	1,352,881.33
FROM SMH-1 35.3'(W)	538,093.71	1,352,716.86

PROPERTY OF 95-216 CORPORATION 572/430

NUMBER OF PARCELS: 20
SEWER HOUSE CONNECTIONS: 20
DRAINAGE AREA: PATUXENT
TREATMENT PLANT: LITTLE PATUXENT WASTEWATER PLANT

WATER CODE FOR COUNTY USE ONLY: E15
SEWER CODE FOR COUNTY USE ONLY: 7390000
TEST GRADIENT WATER = 700

VICINITY MAP
SCALE: 1" = 600'

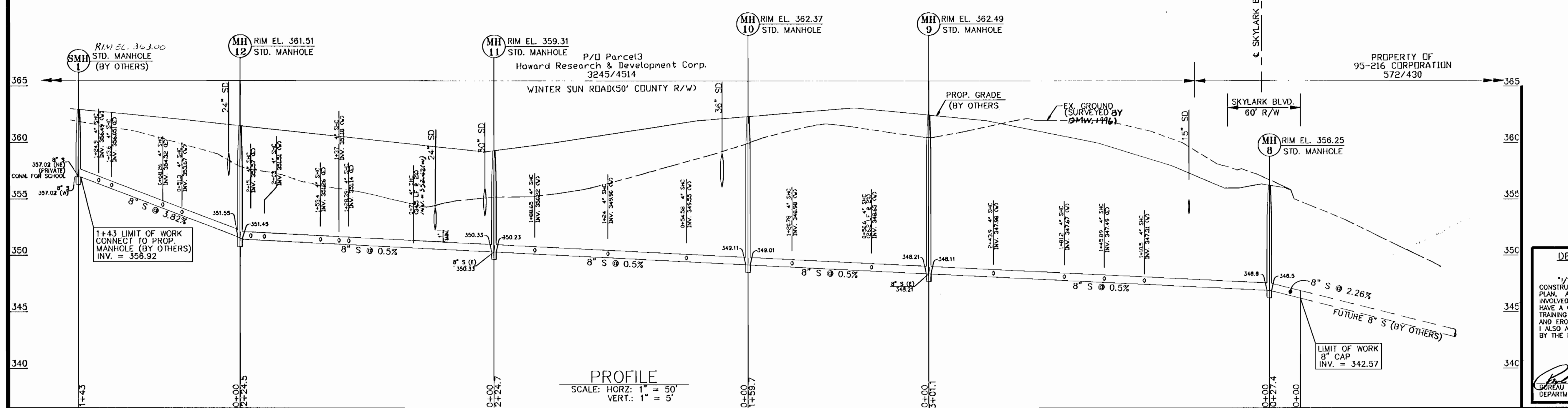
QUANTITIES			
ITEM	UNIT	ESTIMATE	AS-BUILT
8" S	LF.	1156	1156
4" SHC	LF.	473	473
4" DHC	LF.	34.5	34.5
STD. MANHOLE	EA.	5	5

NAME OF UTILITY CONTRACTOR: _____

AS-BUILT DATE: 8-1-97

SURVEY AND DRAFTING DIVISION

- 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 CONTRACTOR AT HIS OWN 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 UNLESS OTHERWISE NOTED ON THE PLANS.
 - CLEAR ALL UTILITIES BY A MINIMUM OF 8". 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 FOR 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.
 - 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 MADE 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: 865-3803
BGE (CONTRACTOR SERVICES): 859-4620
BGE - UNDERGROUND DAMAGE CONTROL: 787-8088
BUREAU OF UTILITIES (DPW): 315-4900
CHESAPEAKE & POTOMAC TELEPHONE CO.: 597-8585
COLONIAL PIPELINE CO.: 789-1390
MSB UTILITY: 1-800-257-7777
STATE HIGHWAY ADMINISTRATION: 331-5533
 - TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE 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.
 - 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/ANCHOR 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(a) OF THE HOWARD COUNTY CODE.
 - ALL SEWER MAINS SHALL BE D.I.P. OR 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 18" WALLS ARE FOR BRICK MANHOLES ONLY.
 - MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATER-TIGHT FRAME AND COVER, STANDARD METAL CO.22, WHERE WATER-TIGHT MANHOLE FRAME AND COVER ARE USED, SET TOP OF FRAME 1'-0" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
 - HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.



PROFILE
SCALE: HORIZ: 1" = 50'
VERT: 1" = 5'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James J. Co. 5/31/96
DIRECTOR OF PUBLIC WORKS DATE

Paul D. Eppson 5/31/96
CHIEF, BUREAU OF ENGINEERING DATE

Richard Sumner 5-31-96
CHIEF, BUREAU OF UTILITIES DATE

Or. O. O. O. 5-31-96
CHIEF, WATER AND SEWER DESIGN DIVISION DATE

SSM
SPOTTS, STEVENS and MCCOY, INC.
ENGINEERS + SURVEYORS + SCIENTISTS
555 FAIRMOUNT AVENUE, STE. 230
TOWSON, MARYLAND, 21286-5497
(410)94-0500 FAX (410)298-3590

STATE OF MARYLAND
PROFESSIONAL ENGINEER
TIMOTHY W. WOLFE
15528

DES: FCL					
DRN: FCL					
CHK: TWW					
DATE: May, 98					
BY: FCL	NO.	REVISION	DATE		
		REVISE COORDINATES & 4" SHC LENGTHS.	6/22/98		

8-INCH SANITARY SEWER
PLAN, PROFILE & NOTES
GORMAN ROAD

600' SCALE MAP NO. 47 BLOCK NO. 8 & 14

GORMAN ROAD SCHOOL SEWER - WINTER SUN ROAD

CAPITAL PROJECT No. S-6204
CONTRACT No. 20-3518
ELECTION DISTRICT GULFORD No. 6
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 2 OF 2

AS BUILT 8-1-97

FILE: 568A 023 801 95.DWG