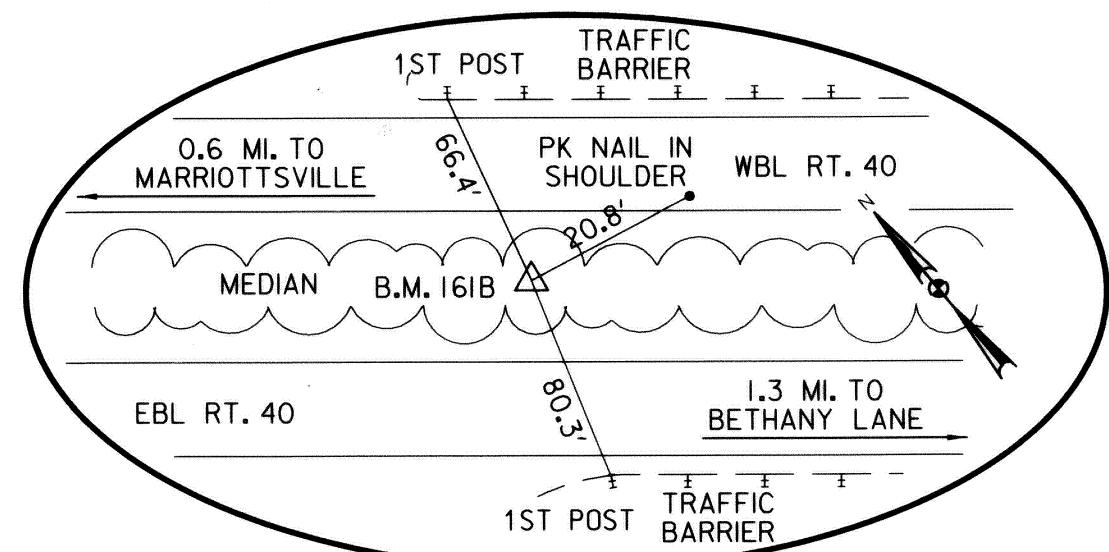
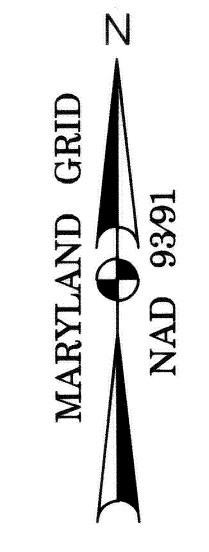


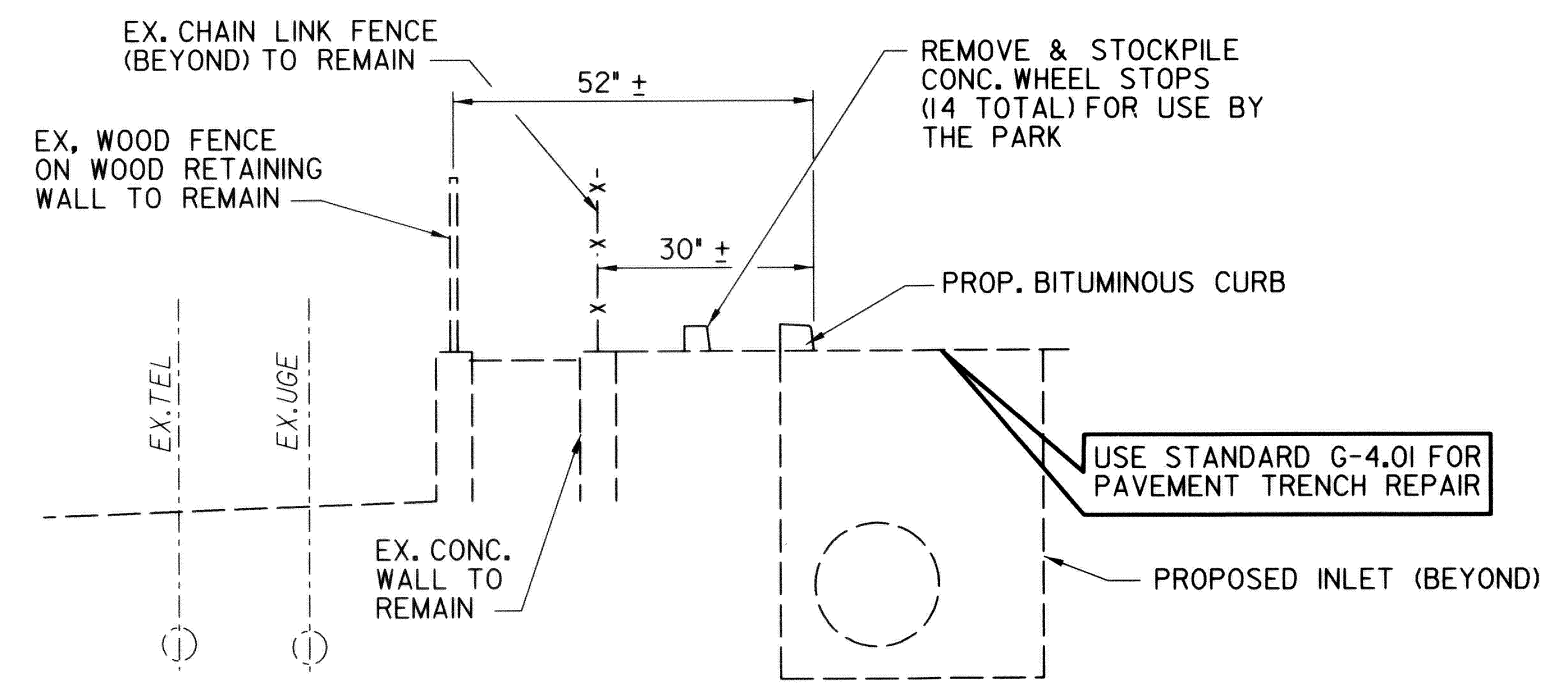
B.M. 161A



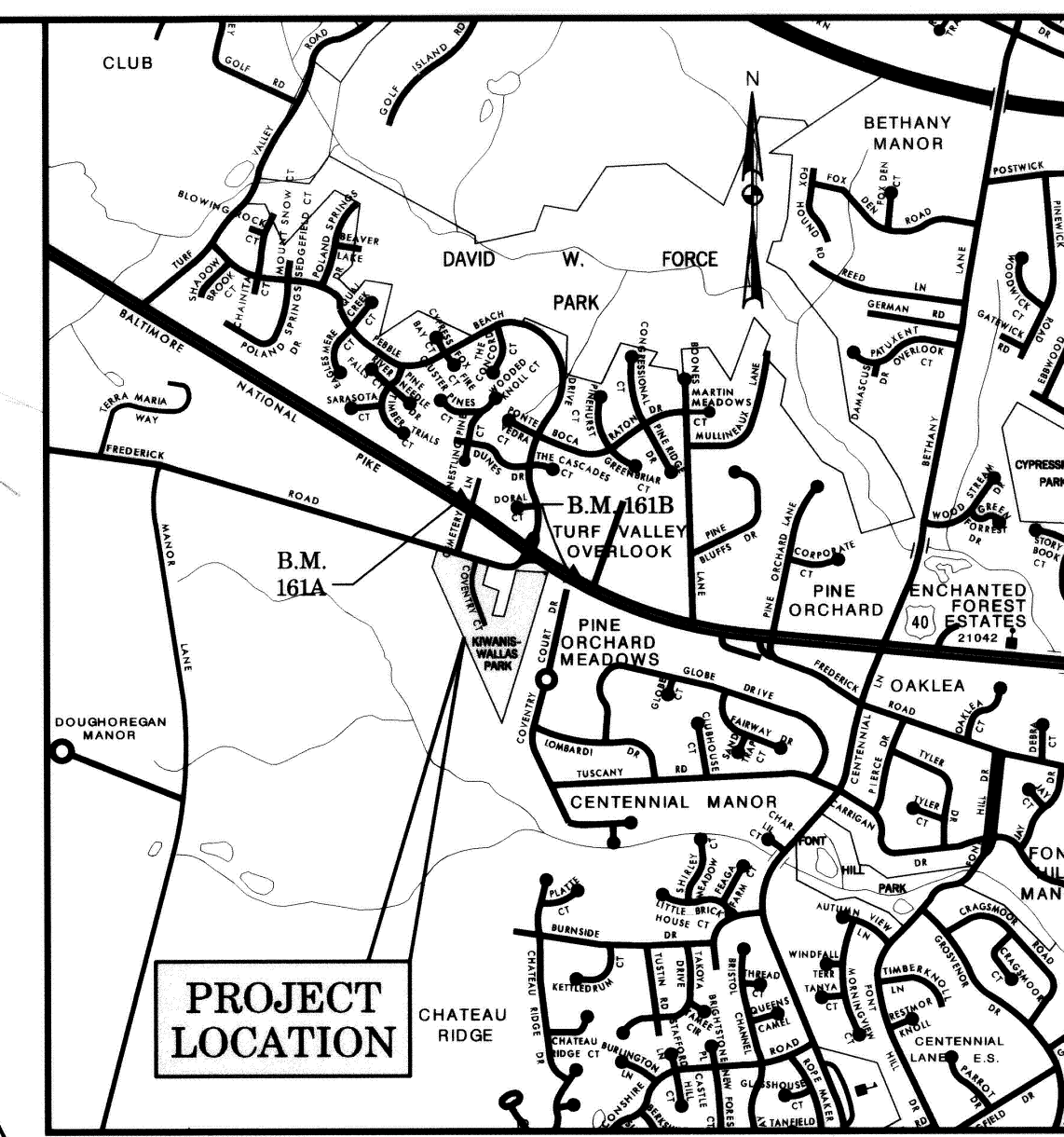
B.M. 161B



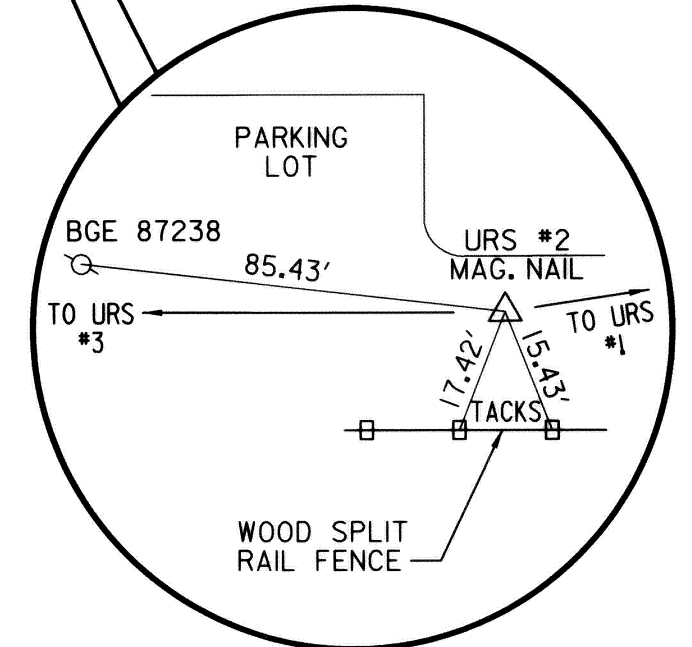
N 588,150  
E 1,347,350



SECTION A-A  
NOT TO SCALE



VICINITY MAP  
SCALE: 1" = 2000'



URS #2

GENERAL NOTES:

- OWNER/DEVELOPER: HOWARD COUNTY DEPARTMENT OF RECREATION & PARKS  
7120 OAKLAND MILLS ROAD  
COLUMBIA, MD 21046
- TAX MAP NO.: 25
- ZONING: R-20
- ALL STORM DRAIN SHALL BE REINFORCED CONCRETE PIPE (RCP)
- PLACEMENT OF THE CLASS I RIPRAP IS ELIGIBLE UNDER THE GENERAL WATERWAY CONSTRUCTION PERMIT UNDER SECTION 24(a) & (b).
- PROPERTY LINES ARE APPROXIMATE.
- SURVEY SHOWN ON THIS PLAN WAS PERFORMED BY URS IN APRIL 2005.
- HORIZONTAL CONTROL: COORDINATES SHOWN HEREON ARE BASED ON MARYLAND STATE REFERENCE SYSTEM NAD '83/91' AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL SYSTEMS NO. BM61A, BM61B.
- VERTICAL CONTROL: LOCATION AND ELEVATION OF BENCHMARKS SHOWN ON THIS PLAN ARE BASED ON NAVD '88'.

HOWARD COUNTY MARYLAND  
DEPT. OF PUBLIC WORKS  
PARCEL 73  
L 2412 F 171

PROPOSED BITUMINOUS CURB - REMOVE AND STOCKPILE WHEEL STOPS AS DIRECTED BY THE COUNTY.

REMOVE THE EXISTING PIPE (APPROX. 110 L.F.) WITHIN PARCEL 85 TO THE FENCE LINE AND PLUG END, BACKFILL AND STABILIZE

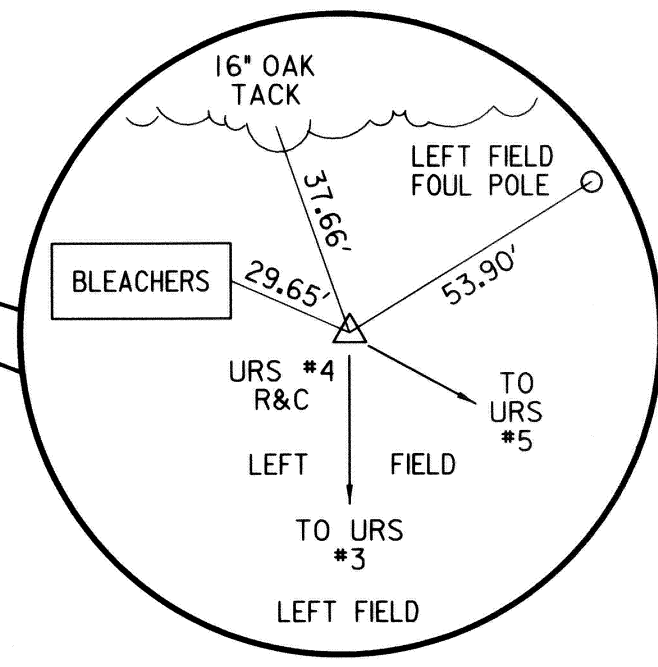
NOTES  
1. PLACE SILT FENCE @ 35' INTERVALS AS THE STORM DRAIN PROGRESSES.  
2. ALL SOIL FROM THE TRENCH EXCAVATION SHALL BE PLACED ON THE UPHILL SIDE OF THE TRENCH

COORDINATE TABLE			
POINT	NORTHING	EASTING	ELEVATION
1	588,495.41	1,347,825.82	0.00
2	588,172.87	1,347,745.76	462.92
3	587,794.14	1,347,574.57	458.14
4	587,742.30	1,347,133.27	436.78
5	588,685.26	1,347,477.43	0.00
6	589,186.52	1,346,745.07	0.00
7	589,823.47	1,345,699.40	0.00
8	587,803.93	1,347,468.13	449.82 (FLY)
9	588,051.24	1,347,609.08	455.28 (FLY)
161	589,509.37	1,346,343.63	463.09 HO. CO. 161A
162	590,475.26	1,344,753.94	469.99 HO. CO. 161B

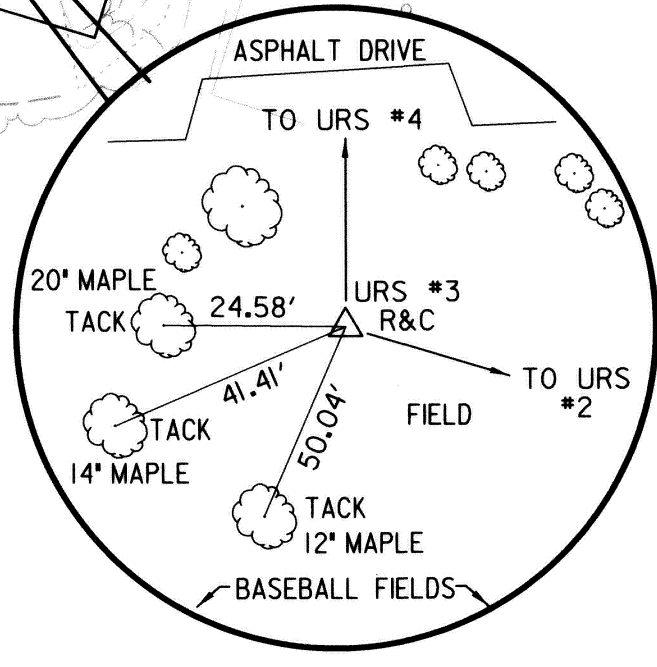
REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.  
*Jim Meyer* 11/7/05  
U.S. NATURAL RESOURCES CONSERVATION SERVICE DATE  
*John R. Roberts* 11/7/05  
HOWARD SOIL CONSERVATION DISTRICT DATE

'MISS UTILITY'  
THE CONTRACTOR SHALL NOTIFY 'MISS UTILITY' AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.

- LEGEND**
- STABILIZED CONSTRUCTION ENTRANCE
  - SF SILT FENCE
  - AGIP AT GRADE INLET PROTECTION
  - LOD LIMIT OF DISTURBANCE
  - SOIL STABILIZATION MATTING
  - EXIST. UNDERGROUND ELECTRIC
  - EXIST. UNDERGROUND TELEPHONE
  - EXIST. WATER
  - EXISTING SANITARY SEWER



URS #4



URS #3

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

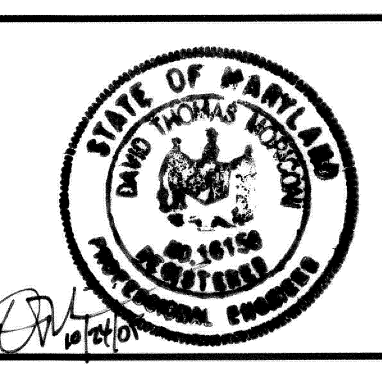
*Steve Shaver* 11/9/05  
DIRECTOR OF PUBLIC WORKS DATE

*William Z. Hall* 11-4-05  
CHIEF, DIVISION OF TRANSPORTATION AND SPECIAL PROJECTS DATE

*William Z. Hall* 11/9/05  
CHIEF, BUREAU OF ENGINEERING DATE

*William Z. Hall* 11-4-05  
CHIEF, BUREAU OF HIGHWAYS DATE

PREPARED BY  
**URS**  
4 NORTH PARK DRIVE  
HUNT VALLEY, MARYLAND  
TEL: (410) 785-7220



DES: DTM			
DRN: EGB			
CHK: DTM			
DATE: 6/05	BY NO.	REVISION	DATE

STORM DRAIN AND  
EROSION & SEDIMENT CONTROL  
PLAN

SCALE MAP NO. N/A BLOCK NO.

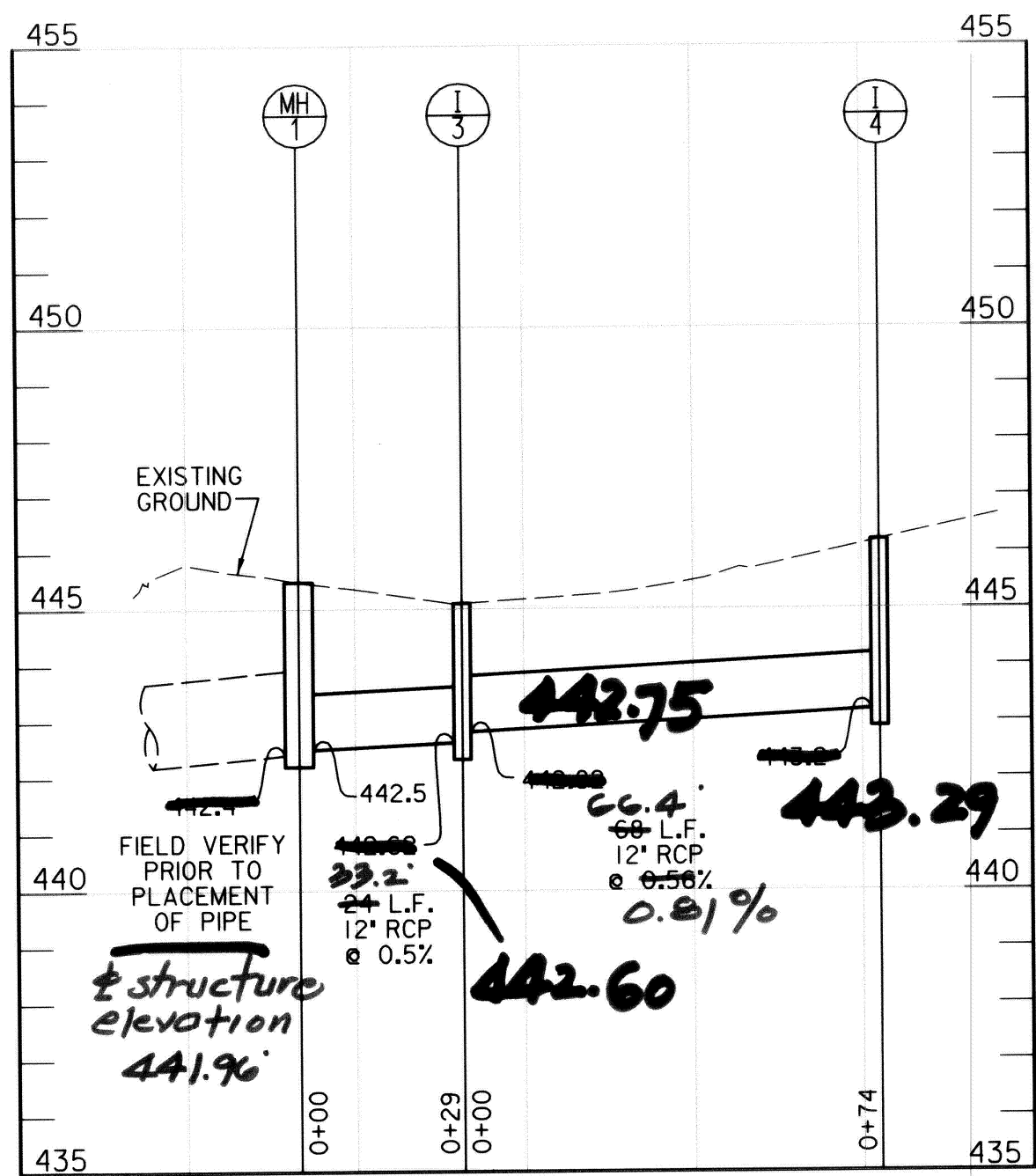
SCALE  
1" = 30'

SHEET  
1 OF 3

KIWANIS-WALLAS PARK  
STORM DRAIN IMPROVEMENTS

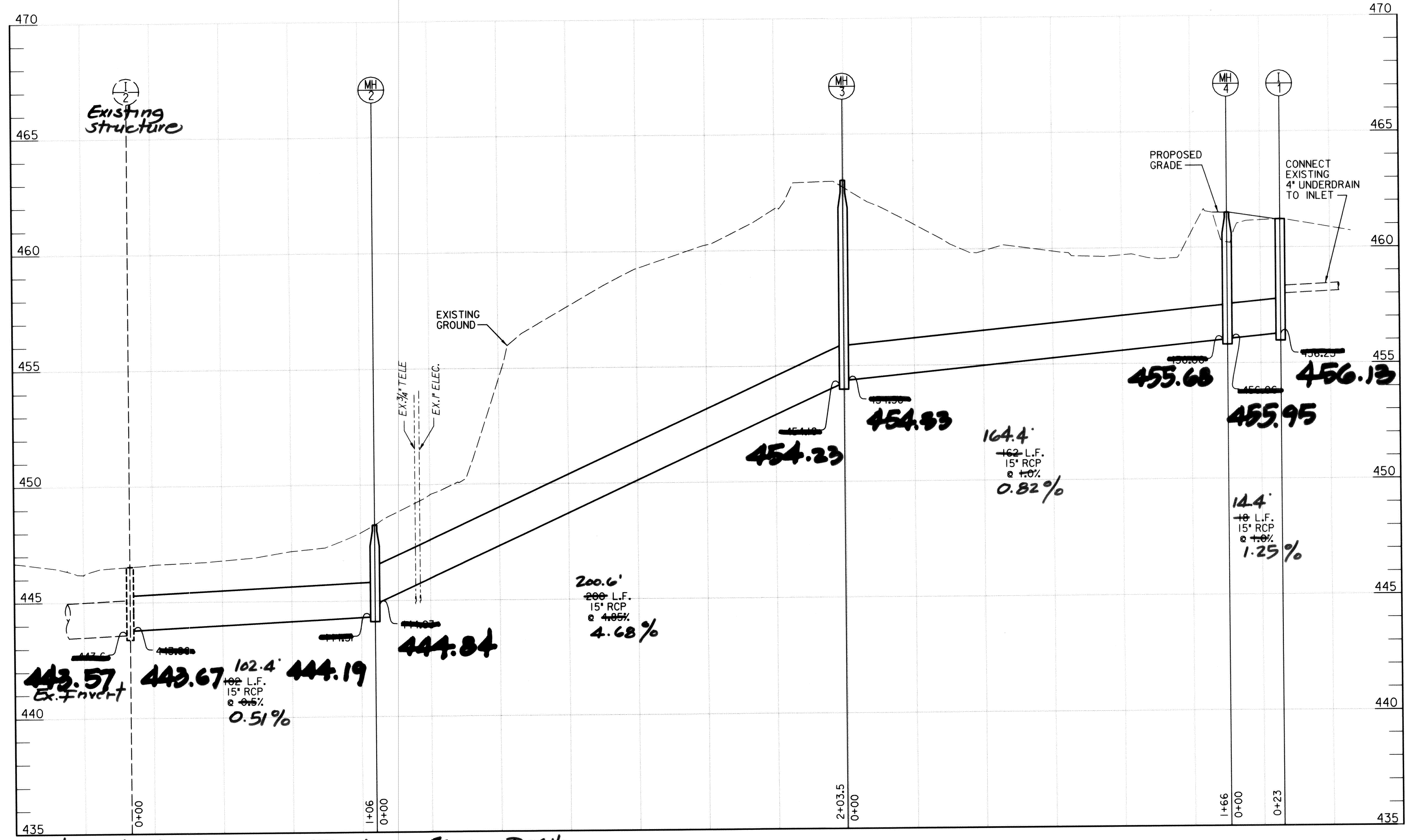
3RD ELECTION DISTRICT - HOWARD COUNTY, MARYLAND  
CAPITAL PROJECT D-1118



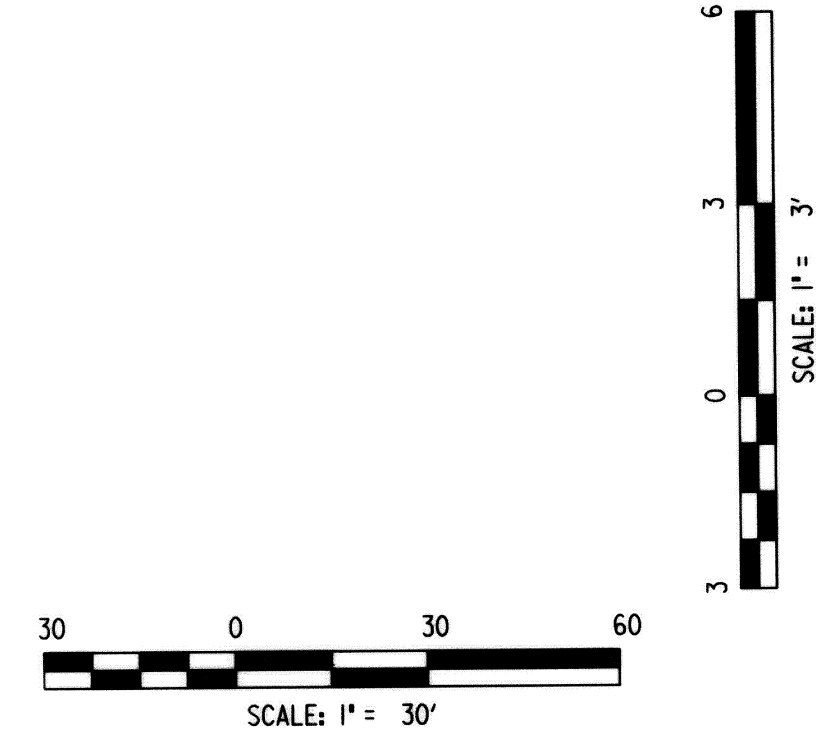


STRUCTURE NO.	WORK POINT		STRUCTURE TYPE	HOWARD COUNTY STD. NO.	TOP OF GRATE ELEVATION	INVERT ELEVATION		REMARKS
	NORTHING	EASTING				IN	OUT	
INLET								
I-1	588,071.86	1,347,726.50	TYPE A-10	SD 4.02	460.4	--	456.25	THROAT ELEVATION PROVIDED
EXIST. I-2	588,021.19	1,347,429.73	--	--	--	443.8	443.60	CONNECT 15' TO EXIST. INLET
I-3	587,974.87	1,347,397.08	PRECAST 'WR' INLET	SD 4.35	445.1	442.82	442.62	
I-4	587,903.97	1,347,418.71	PRECAST 'WR' INLET	SD 4.35	446.2	--	443.2	
MANHOLE								
MH-1	588,004.00	1,347,392.55	4'-0" SHALLOW PRECAST MH	G 5J2	445.75	442.5	442.4	FIELD VERIFY
MH-2	587,920.23	1,347,461.35	4'-0" STD. PRECAST MH	G 5J2	448.3	444.93	444.31	SET FRAME & COVER AT EXIST. PAVEMENT ELEV.
MH-3	587,890.83	1,347,662.72	4'-0" STD. PRECAST MH	G 5J2	463.0	454.38	454.18	
MH-4	588,059.52	1,347,711.49	4'-0" STD. PRECAST MH	G 5J2	461.5	456.06	456.00	

NOTE:  
1. WORK POINT FOR INLETS ARE CENTER OF THE PROPOSED STRUCTURES AT THE CURB LINE. WORK POINT FOR MANHOLES ARE TO THE CENTER OF THE PROPOSED STRUCTURES.



NOTE: AS BUILT INFORMATION SHOWING 1.5.07  
Revision: D. Miller

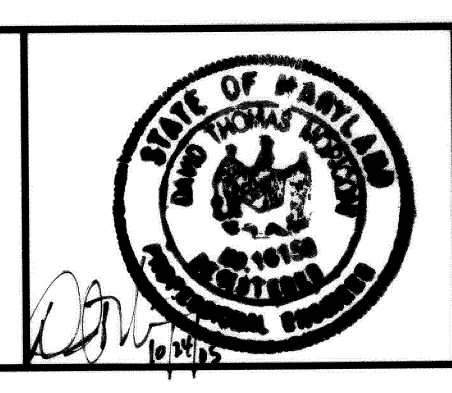


DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

Director of Public Works: Steve Shanan, 11/01/05  
Chief, Division of Transportation and Special Projects: Steve Shanan, 11/01/05

Chief, Bureau of Engineering: [Signature], 11/4/05  
Chief, Bureau of Highways: [Signature], 11-4-05

PREPARED BY  
**URS**  
4 NORTH PARK DRIVE  
HUNT VALLEY, MARYLAND  
TEL: (410) 755-7220



DES: DTM  
DRN: EGB  
CHK: DTM  
DATE: 6/05

BY NO. REVISION DATE

STORM DRAIN PROFILES AND DETAILS

SCALE MAP NO. N/A BLOCK NO.

KIWANIS-WALLAS PARK  
STORM DRAIN IMPROVEMENTS

3RD ELECTION DISTRICT - HOWARD COUNTY, MARYLAND  
CAPITAL PROJECT D-1118

SCALE AS SHOWN  
SHEET 2 OF 3



**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 3 INCHES OF SOIL BY RAKING, DISCING, OR OTHER ACCEPTABLE MEANS BEFORE SEEDING. IF NOT PREVIOUSLY LOOSENED.

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

1) PREFERRED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS. PER 1,000 SQUARE FEET) AND 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS. PER 1,000 SQUARE FEET) BEFORE SEEDING. HARROW OR DISC INTO UPPER 3 INCHES OF SOIL AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS. PER 1,000 SQUARE FEET).

2) ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS. PER 1,000 SQUARE FEET) AND 1,000 LBS. PER ACRE 10-10-10 FERTILIZER (23 LBS. PER 1,000 SQUARE FEET) BEFORE SEEDING. HARROW OR DISC INTO UPPER 3 INCHES OF SOIL.

SEEDING: FOR THE PERIOD MARCH 1 THROUGH APRIL 30 AND FROM AUGUST 1 THROUGH OCTOBER 15, SEED WITH 60 LBS. PER ACRE (1.4 LBS. PER 1,000 SQUARE FEET) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THROUGH JULY 31, SEED WITH 60 LBS. PER ACRE (1.4 LBS. PER 1,000 SQUARE FEET) OF KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS. PER ACRE (0.05 LBS. PER 1,000 SQUARE FEET) OF WEEPING LOVEGRASS. DURING THE PERIOD OCTOBER 16 THROUGH FEBRUARY 28, PROTECT SITE BY ONE OF THE FOLLOWING OPTIONS:

1) 2 TONS PER ACRE OF WELL-ANCHORED MULCH STRAW AND SEED AS SOON AS POSSIBLE IN THE SPRING.

2) USE SOD.

3) SEED WITH 60 LBS. PER ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS PER ACRE WELL-ANCHORED STRAW.

MULCHING: APPLY 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS. PER 1,000 SQUARE FEET) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GALLONS PER 1,000 SQUARE FEET) OF EMULSIFIED ASPHALT ON FLAT AREAS, ON SLOPES, 8 FEET OR HIGHER, USE 347 GALLONS PER ACRE (8 GALLONS PER 1,000 SQUARE FEET) 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 REDISTRIBUTED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER 3 INCHES OF SOIL BY RAKING, DISCING, OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.

SOIL AMENDMENTS: APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS. PER 1,000 SQUARE FEET).

SEEDING: FOR PERIODS MARCH 1 THROUGH APRIL 30 AND FROM AUGUST 15 THROUGH NOVEMBER 15, SEED WITH 2 1/2 BUSHELS PER ACRE OF ANNUAL RYE (3.2 LBS. PER 1,000 SQUARE FEET). FOR THE PERIOD MAY 1 THROUGH AUGUST 14, SEED WITH 3 LBS. PER ACRE OF WEEPING LOVEGRASS (0.07 LBS. PER 1,000 SQUARE FEET). FOR THE PERIOD NOVEMBER 16 THROUGH 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 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS. PER 1,000 SQUARE FEET) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GALLONS PER 1,000 SQUARE FEET) OF EMULSIFIED ASPHALT ON FLAT AREAS, ON SLOPES, 8 FEET OR HIGHER, USE 347 GALLONS PER ACRE (8 GALLONS PER 1,000 SQUARE FEET) FOR ANCHORING. REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

**SEQUENCE OF CONSTRUCTION**

- OBTAIN THE GRADING PERMIT PRIOR TO CONSTRUCTION. (1 DAY)
- INSTALL THE PERIMETER SEDIMENT CONTROL MEASURES INCLUDING SILT FENCE, SUPER SILT FENCE, EARTH DIKE, AND STABILIZED CONSTRUCTION ENTRANCE AS SHOWN ON PLAN. (3 DAYS)
- CLEAR AND GRUB THE SITE AS NEEDED. (2 DAYS)
- INSTALL NEW STORM DRAINS BEGINNING DOWNSTREAM TO UPSTREAM BACKFILL AND STABILIZE AS WORK PROGRESSES.
- STABILIZE THE DISTURBED AREAS WITH TOPSOIL, PERMANENT SEEDING AND MULCHING AS NEEDED. (2 DAYS)
- CONTRACTOR SHALL CLEAN ALL PIPES INSTALLED AS PART OF THIS PROJECT AFTER ALL UPSTREAM AREAS HAVE BEEN STABILIZED.
- UPON THE HOWARD CO. INSPECTOR'S APPROVAL, REMOVE ALL EROSION AND SEDIMENT CONTROL DEVICES AND STABILIZE THE REMAINING AREAS WITH PERMANENT SEEDING. (5 DAYS)

NOTE: THE TIME LINE EXCLUDES WEATHER RELATED DELAYS.

**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 (410-313-1855).
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1994 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:
  - A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3:1.
  - B) 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 THE PERIMETER IN ACCORDANCE WITH VOLUME 1, CHAPTER 7, 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 FOR PERMANENT SEEDING, SOD, TEMPORARY SEEDING, AND MULCHING SECTION G. TEMPORARY STABILIZATION WITH MULCH ALONE SHALL 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 SITE AREA - 24.0 ACRES
  - AREA DISTURBED - 0.4 ACRES
  - AREAS TO BE ROOFED OR PAVED - 0 ACRES
  - AREA TO BE VEGETATIVELY STABILIZED - 0.26 ACRES
  - TOTAL CUT - 428 C.Y.
  - TOTAL FILL - 10 C.Y.
  - OFF-SITE WASTE SITE - HOWARD COUNTY LANDFILL
  - OFF-SITE BORROW SITE - APPROVED SITE
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF 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 PIPE LENGTHS OR THAT WHICH SHALL BE BACKFILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.
- SITE GRADING WILL BEGIN ONLY AFTER ALL PERIMETER SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED AND ARE IN A FUNCTIONING CONDITION.
- SEDIMENT WILL BE REMOVED FROM TRAPS WHEN ITS DEPTH REACHES CLEAN OUT ELEVATION SHOWN ON THE PLANS.
- CUT AND FILL QUANTITIES PROVIDED UNDER SITE ANALYSIS DO NOT REPRESENT BID QUANTITIES. THESE QUANTITIES DO NOT DISTINGUISH BETWEEN TOPSOIL, STRUCTURAL FILL OR EMBANKMENT MATERIAL, NOR DO THEY REFLECT CONSIDERATION OF UNDERCUTTING OR REMOVAL OF UNSUITABLE MATERIAL. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH SITE CONDITIONS WHICH MAY AFFECT THE WORK.
- CONSTRUCTION WITHIN, ALONG OR ACROSS STREAM CHANNELS SHALL, AS A MINIMUM CONFORM TO CRITERIA DESCRIBED UNDER "MARYLAND'S GUIDELINES TO WATERWAY CONSTRUCTION".

**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". Slip-lap 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 effected 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
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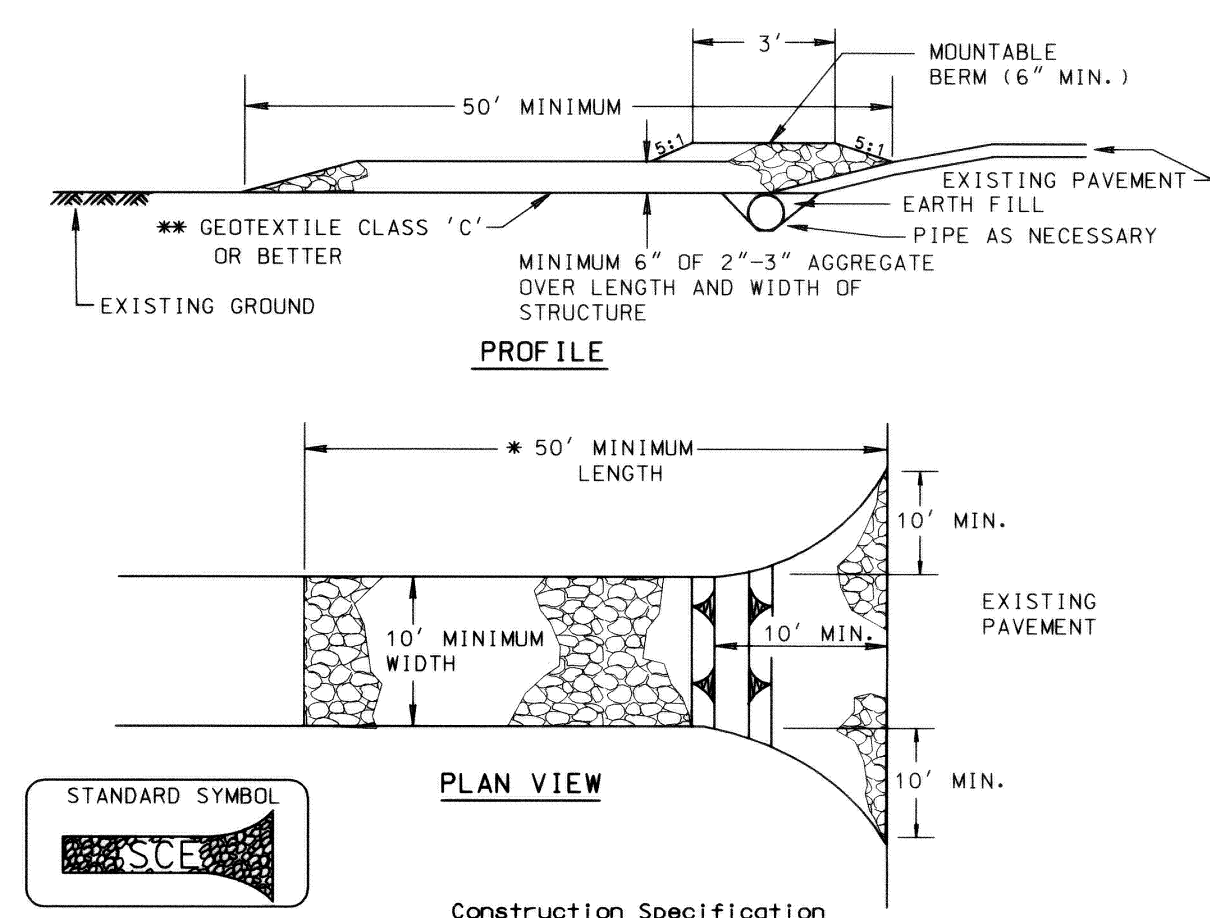
REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

*Jim Moore* 11/7/05 DATE  
U.S. NATURAL RESOURCES CONSERVATION SERVICE

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

*John Kolstad* 11/7/05 DATE  
HOWARD SOIL CONSERVATION DISTRICT

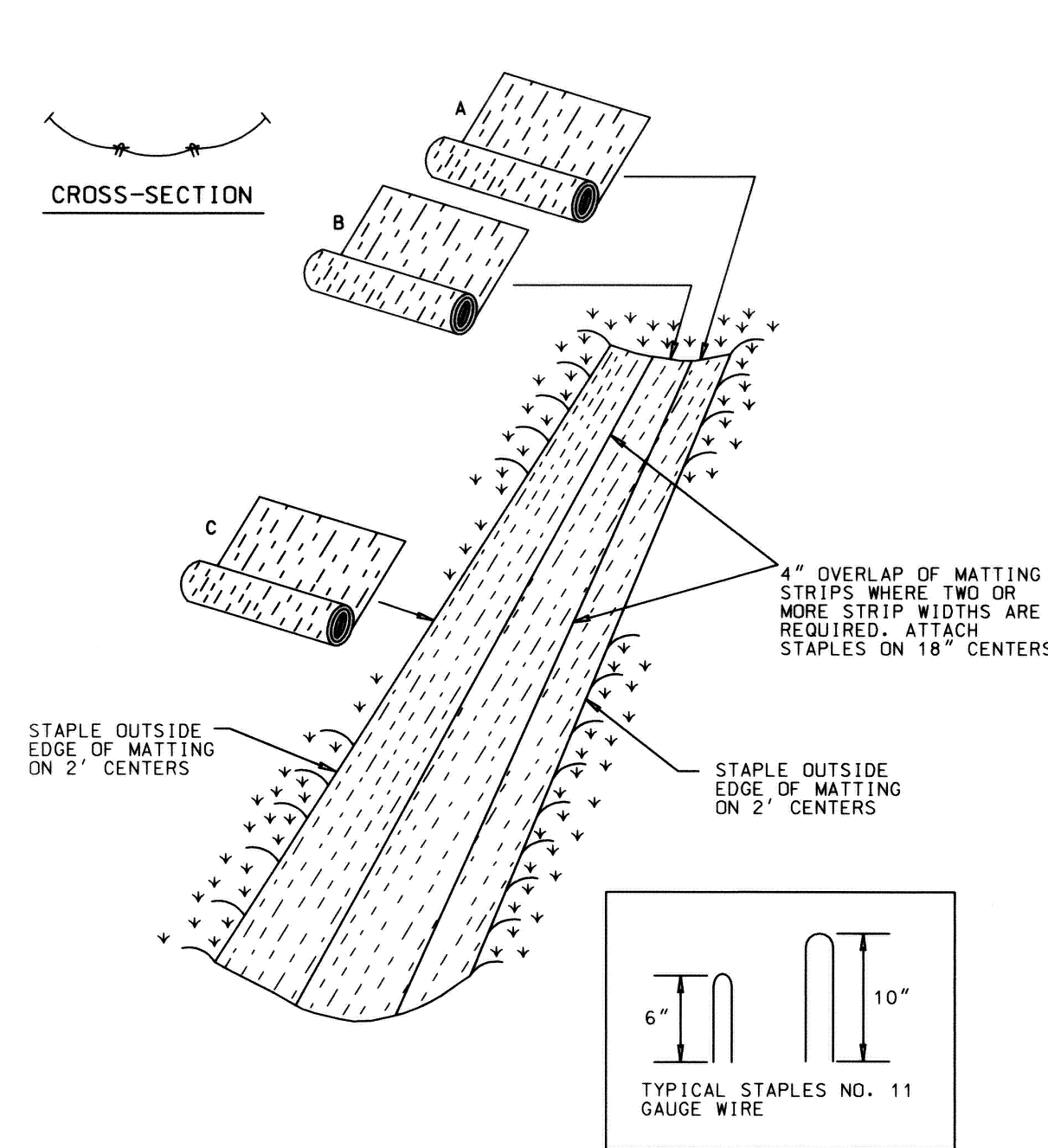
**DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE**



- 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
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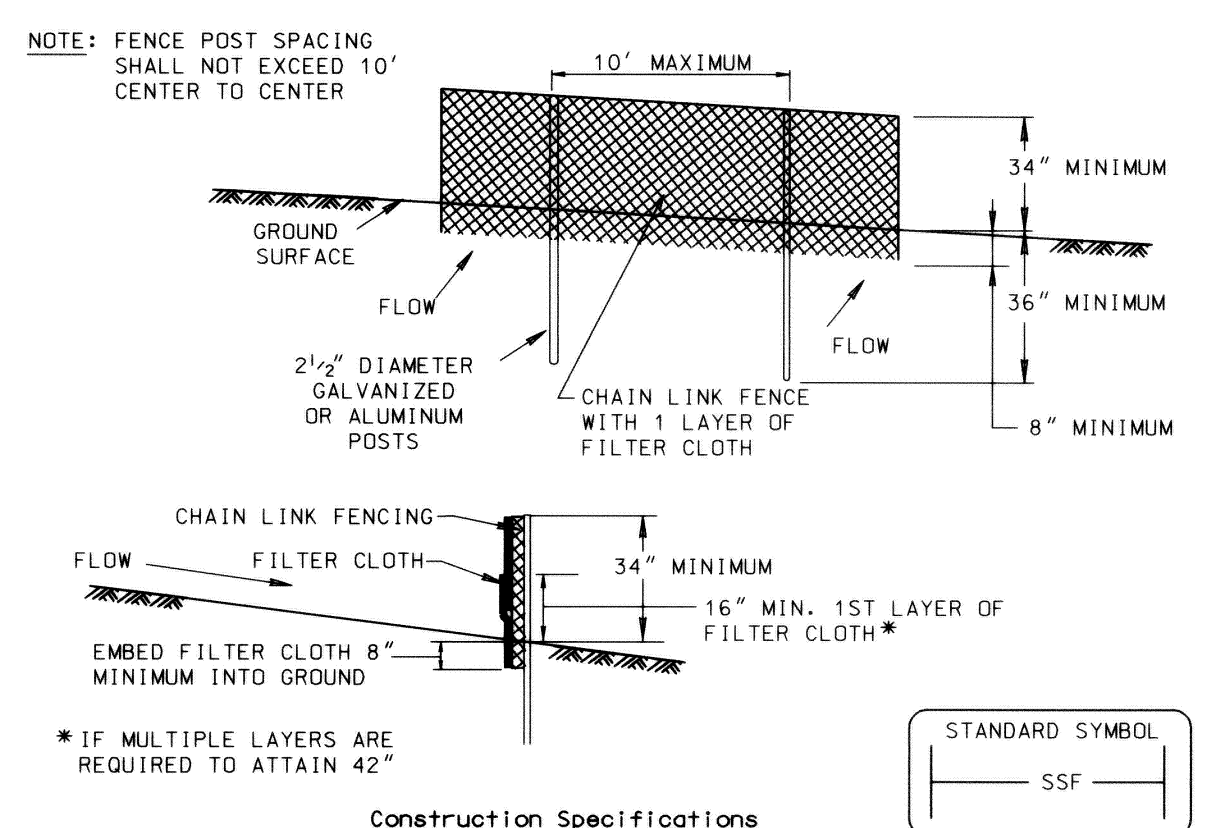
**DETAIL 30 - EROSION CONTROL MATTING**



- 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 G - 22 - 2	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION
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**DETAIL 33 - SUPER SILT FENCE**

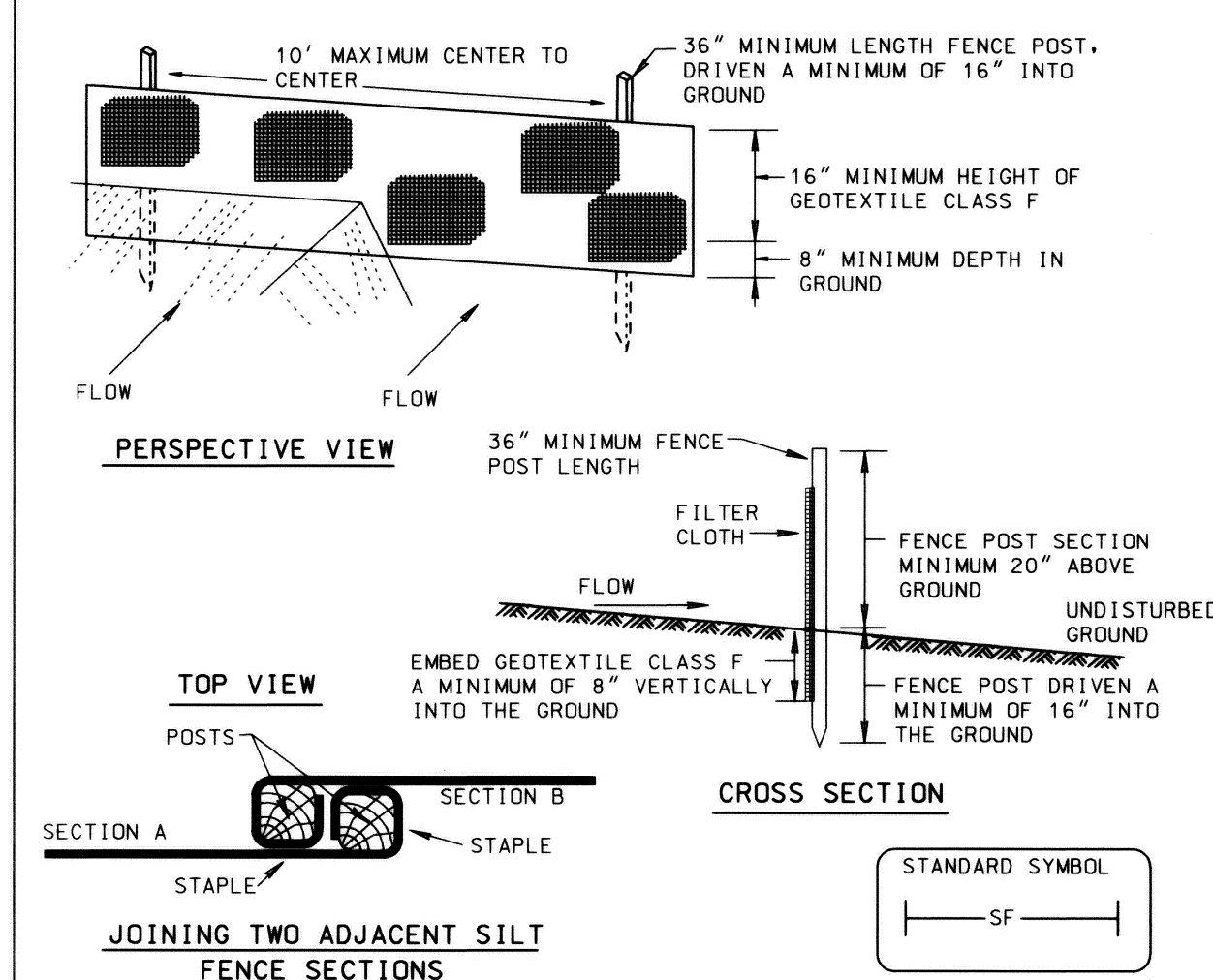


- NOTE: FENCE POST SPACING SHALL NOT EXCEED 10' CENTER TO CENTER
- Fencing shall be 42" in height and constructed in accordance with the latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6' fence shall be used, substituting 42" fabric and 6' length posts.
  - Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence.
  - Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.
  - Filter cloth shall be embedded a minimum of 8" into the ground.
  - When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.
  - Maintenance shall be performed as needed and silt buildups removed when "bulges" develop in the silt fence, or when silt reaches 50% of fence height
  - Filter cloth 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 <sup>2</sup> /minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE H - 26 - 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION
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**DETAIL 22 - SILT FENCE**



- 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 1/2" 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 pond 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 <sup>2</sup> /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.

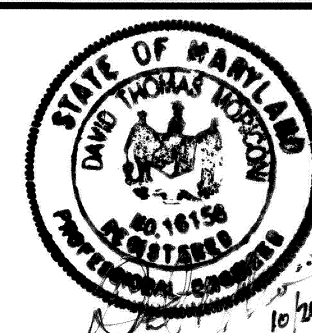
U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE E - 16 - 9	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION
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**DEPARTMENT OF PUBLIC WORKS**  
HOWARD COUNTY, MARYLAND

*John J. O'Hara* 11/9/05 DATE  
DIRECTOR OF PUBLIC WORKS

*Steve Shanahan* 11/10/05 DATE  
CHIEF, DIVISION OF TRANSPORTATION AND SPECIAL PROJECTS

*William J. Mankin* 11-4-05 DATE  
CHIEF, BUREAU OF HIGHWAYS



DES: DTM			
DRN: EGB			
CHK: DTM			
DATE: 6/05			
BY NO.		REVISION	DATE

**EROSION & SEDIMENT CONTROL NOTES & DETAILS**

SCALE MAP NO. N/A BLOCK NO.

**KIWANIS-WALLAS PARK STORM DRAIN IMPROVEMENTS**

3RD ELECTION DISTRICT - HOWARD COUNTY, MARYLAND  
CAPITAL PROJECT D-1118

SCALE  
N.T.S.

SHEET  
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