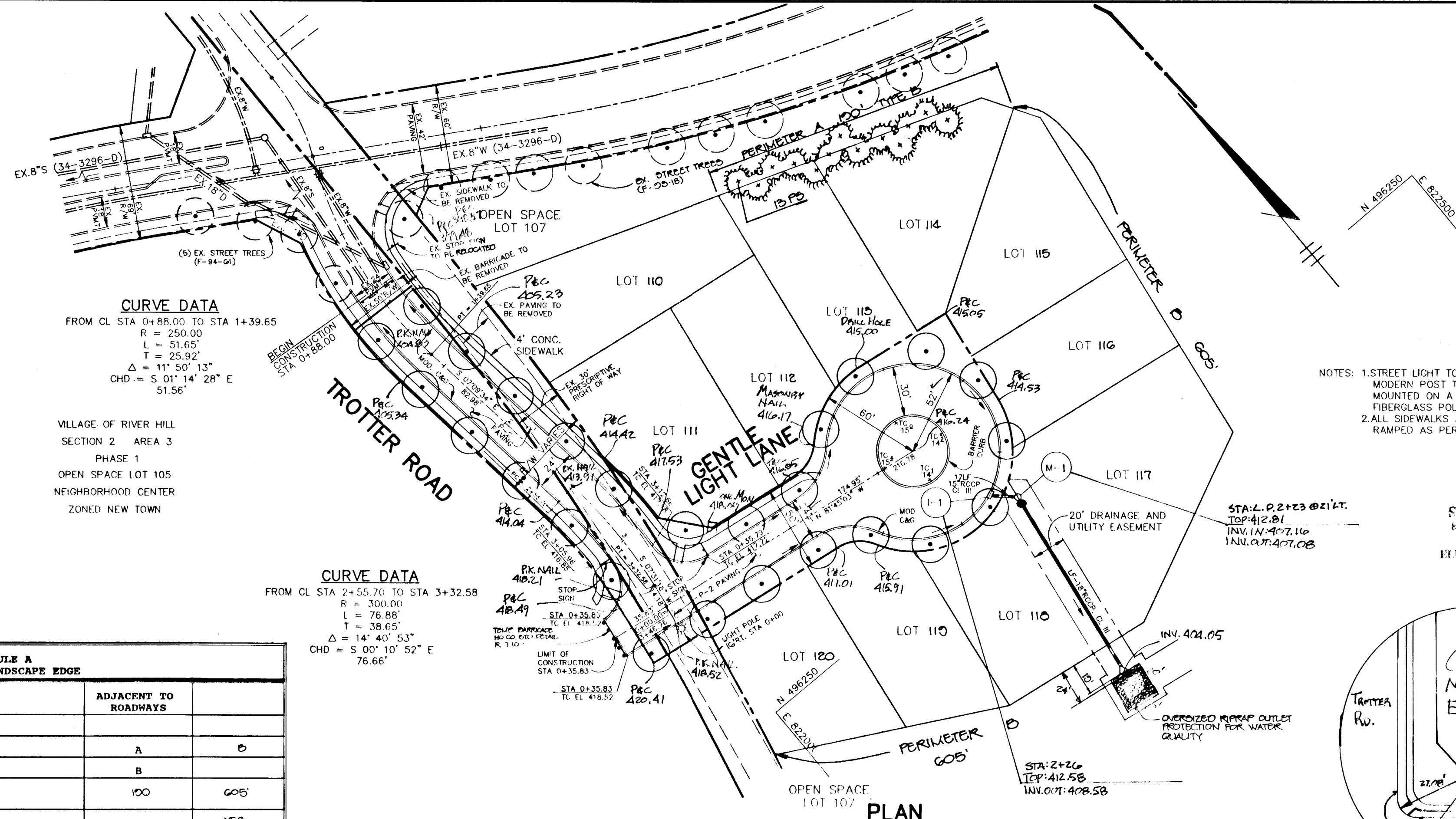


SHEET INDEX	
NO.	DESCRIPTION
1	TITLE SHEET, PLAN AND PROFILES OF TROTTER ROAD AND GENTLE LIGHT LANE
2	DRAINAGE AREA MAP, SEDIMENT CONTROL PLAN, PROFILE AND DETAIL SHEET
3	DETAIL SHEET

PLANT LIST

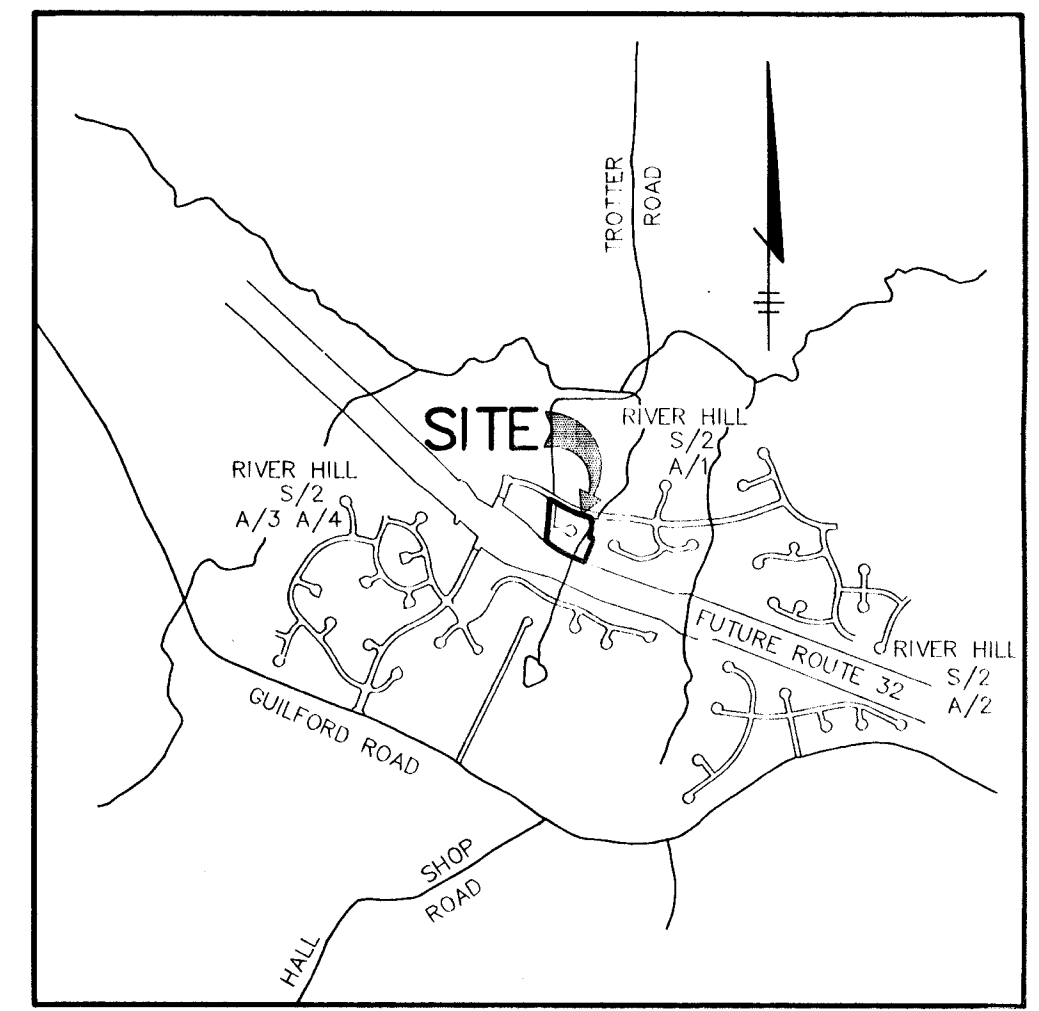
KEY	QTY	NAME	DATE	REMARKS
STREET TREES PC	60	FROND GALLERIANA (CLEVELAND BLUE)	02'-0" CAL. 12'-15" HT.	D1D
LANDSCAPE TREES PD	15	FROND GALLERIANA (WHITE FINE)	6'-0" HT.	D1D UNPLANTED



CURVE DATA
 FROM CL STA 0+88.00 TO STA 1+39.65
 R = 250.00
 L = 51.65'
 T = 25.92'
 Δ = 11° 50' 13"
 CHD = S 01° 14' 28" E 51.56'

CURVE DATA
 FROM CL STA 2+55.70 TO STA 3+32.58
 R = 300.00
 L = 76.88'
 T = 38.65'
 Δ = 14° 40' 53"
 CHD = S 00° 10' 52" E 76.66'

NOTES: 1. STREET LIGHT TO BE 100 WATT HPS VAPOR MODERN POST TOP FIXTURE (BRONZE) MOUNTED ON A 14 FOOT BRONZE FIBERGLASS POLE AND SHOWN THUS
 2. ALL SIDEWALKS AT INTERSECTIONS TO BE RAMPED AS PER DETAILS SHOWN ON SHEET 3.



VICINITY MAP

AS-BUILT
 SCALE: 1" = 100'
 PROFESSIONAL LAND SURVEYOR
 ARTHUR B. MUEGGE
 LICENSE NO. 10001
 DATE: 3/17/95

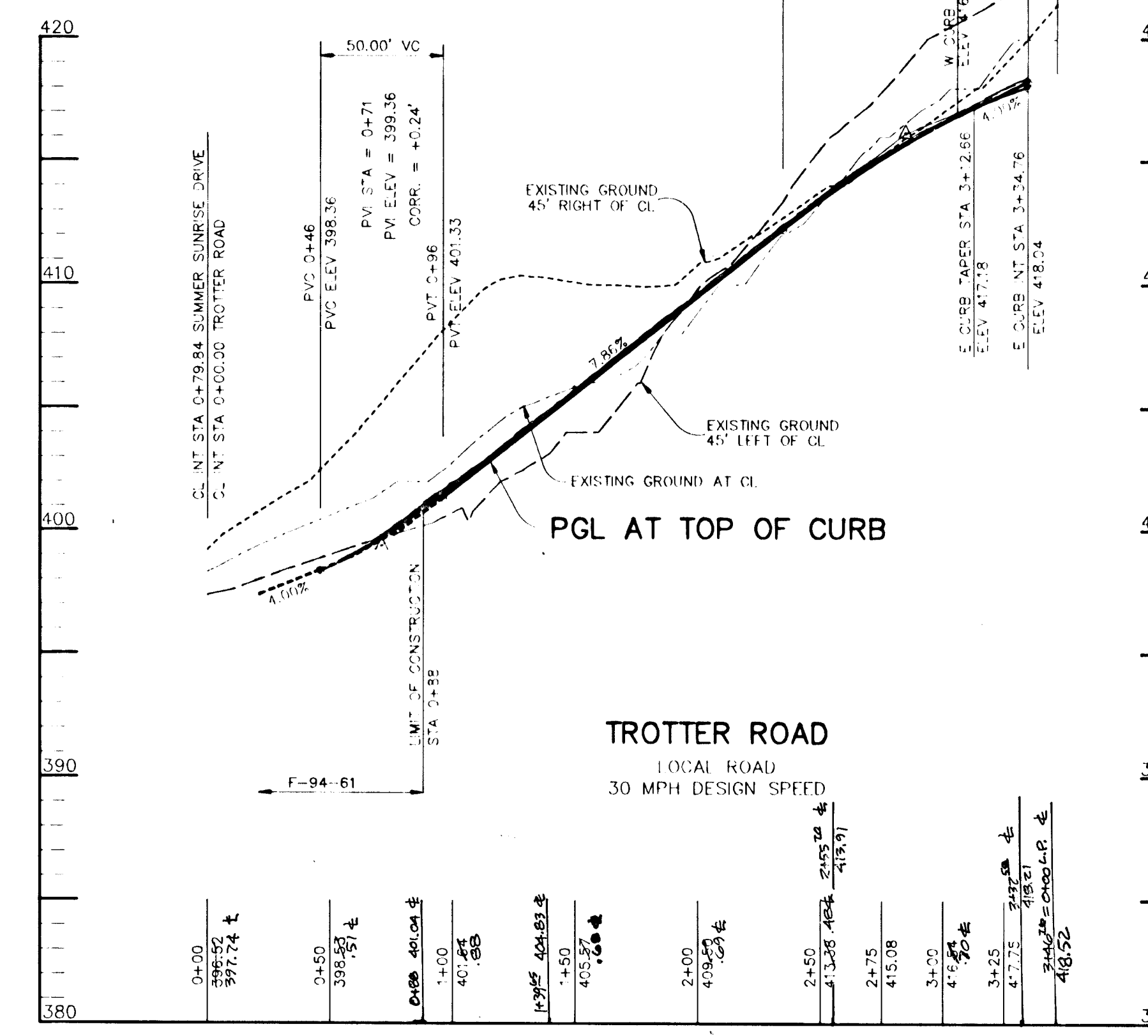
BENCHMARKS
 BM#1 RAILROAD SPIKE IN POLE #525680 TROTTER ROAD ELEV. 393.27
 N 496697.02 E 822026.81
 BM#2 RAILROAD SPIKE IN POPLAR ELEV. 438.92
 N 495551.90 E 820727.80

GENERAL NOTES

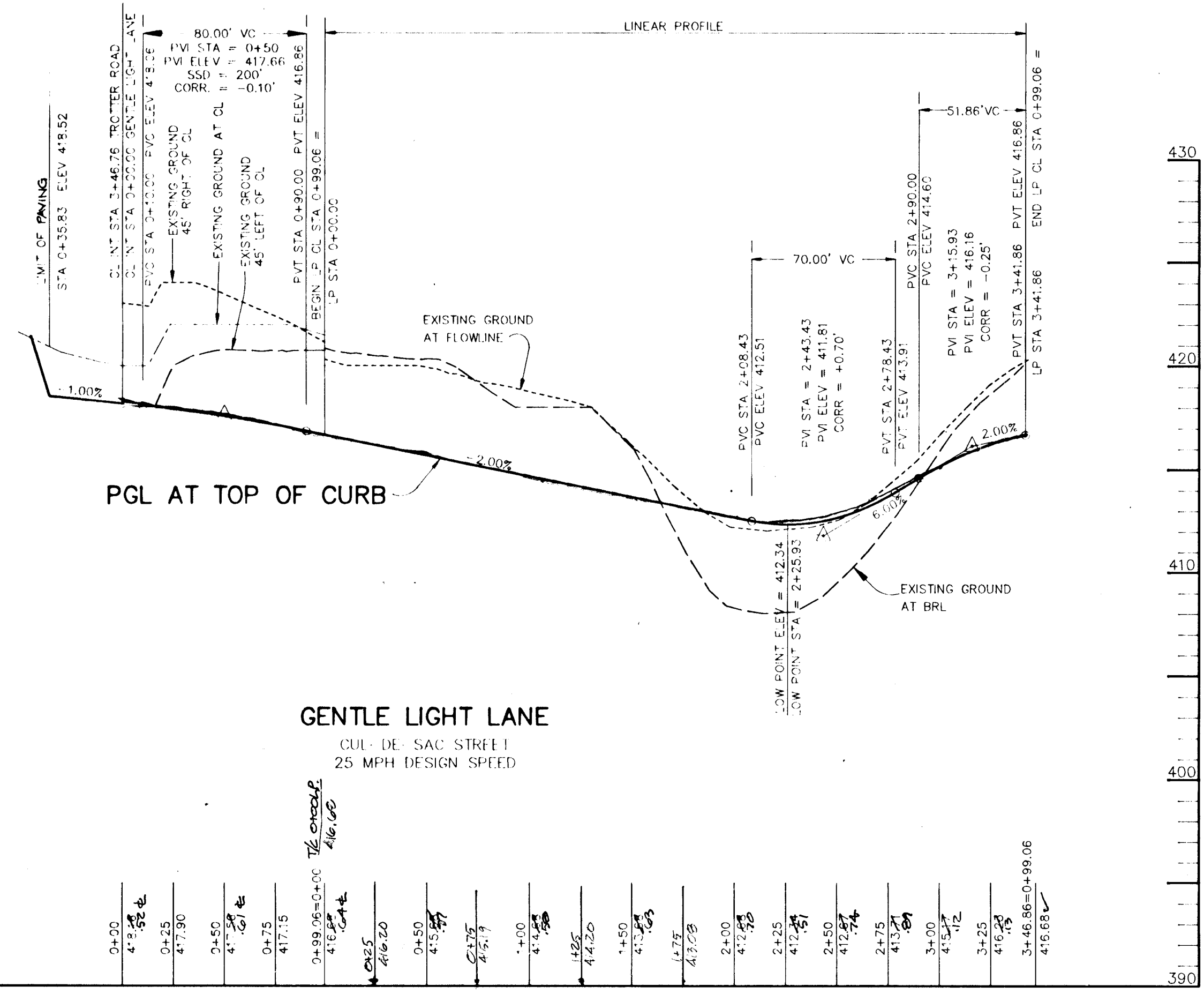
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. EXISTING UTILITIES ARE SHOWN BASED ON THE BEST AVAILABLE INFORMATION.
- THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
 BELL TELEPHONE SYSTEM 393-3449
 LONG DISTANCE CABLE DIVISION 393-3553 OR 3554
 BALTIMORE GAS AND ELECTRIC CO. 539-8000
 HOWARD COUNTY BUREAU OF UTILITIES 313-4900
 COLONIAL PIPELINE 795-1390
- TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
- ALL STREET CURB RETURNS SHALL HAVE 25' RADIUS UNLESS OTHERWISE NOTED.
- STORM DRAIN TRENCHES WITHIN ROAD RIGHT OF WAY SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, 1.4. STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, LATEST AMENDMENTS.
- PIPE SHALL NOT BE INSTALLED BY THE CONTRACTOR UNTIL THE LENGTH CALLED FOR AT EACH STATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD.
- DESIGNED TRAFFIC SPEED IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIAL STANDARDS
 ALL 50' RIGHT OF WAYS 25 AND 30 M.P.H.
- ALL ELEVATIONS SHOWN ARE BASED ON THE U.S.C. AND G.S. MEAN SEA LEVEL DATUM, 1929.
- ALL FILL AREAS WITHIN ROADWAY AND UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM OF 95% COMPACTION OF AASHTO T-180.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- PROFILES STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- SUBJECT PROPERTY ZONED NEW TOWN PER 10-18-93 COMPREHENSIVE ZONING PLAN.
- NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT WITHIN 6" OF FINISHED GRADE.
- ALL STORM DRAIN PIPE BEDDING SHALL BE CLASS 10 AS SHOWN IN FIG. 11.4. VOLUME 1 OF HOWARD COUNTY DESIGN MANUAL UNLESS OTHERWISE NOTED.
- SEE DEPARTMENT OF PLANNING AND ZONING FILE NOS. S-91-03, P-94-01, F-94-01, F-04-12.
- STREET LIGHT PLACEMENT AND TYPE OF FIXTURE AND POLE SELECTED SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOL. II (1993) AND AS MODIFIED BY THE "GUIDELINES FOR STREET LIGHTS IN RESIDENTIAL DEVELOPMENTS (JUNE 1993)" WHICH INCLUDES GUIDELINES FOR LATERAL AND LONGITUDINAL PLACEMENT.
- WATER QUALITY IS PROVIDED BY OVERSIZED RIP-RAP PADS SIZED TO STORE 1/2 INCH RUNOFF FROM THE ROADWAYS.
- STREET TREES (26 TOTAL) THE LOCATION, TYPE AND NUMBER OF TREES SHOWN ON THIS PLAN ARE TENTATIVE AND ARE USED FOR INFO PURPOSES ONLY. THE FINAL LOCATION AND VARIETY OF TREES MAY VARY TO ACCOMMODATE FIELD CONDITIONS INCLUDING 20' CLEARANCE OF ANY STREET LIGHT AND BUILDING LANDSCAPE PROGRAMS. BOND RELEASE IS CONTINGENT UPON SECTION 15.131 OF THE HOWARD COUNTY SUBDIVISION REGULATIONS, AS APPROVED BY THE DEPARTMENT OF PLANNING AND ZONING.
- TOPOGRAPHY SHOWN HEREON IS FROM AERIAL MAPS FLOWN IN 1989 BY MAPPING ASSOCIATES, INC.
- PUBLIC WATER AND SEWER SYSTEMS AS PER CONTRACT NO. 34-9556-D ARE TO BE UTILIZED FOR THIS SITE. SEWER SERVICE DRAINAGE AREA MIDDLE PATUXENT.
- THE 100-YEAR FLOODPLAIN STUDY WAS PREPARED BY WHITMAN REARDANT AND ASSOCIATES AND WAS APPROVED UNDER S-91-03 ON 12-17-91.
- METALINS DELINEATION IS PROVIDED BY ISEA-TECHNOLOGY ASSOC., INC. AND WAS APPROVED BY ARMY CORPS OF ENGINEERS ON 8-20-93.
- TRAFFIC STUDY WAS PREPARED BY GOROVE/SLADE ASSOCIATES AND WAS APPROVED UNDER S-91-03 ON 12-17-91.
- NOISE STUDY WAS PREPARED BY STANARD ENGINEERING, INC. AND APPROVED UNDER S-91-13 AND P-92-15 ON 6-26-92 AND 4-1-93 RESPECTIVELY.
- GEOTECHNICAL STUDY FOR STORMWATER MANAGEMENT FOR THIS PROJECT IS PROVIDED BY THE ROBERT BALTER COMPANY.
- BOUNDARY SURVEY WAS PREPARED BY KOI, INC., AUGUST 28, 1991.
- ALL STREET LIGHTS SHALL BE LOCATED BETWEEN 2'-0" AND 4'-0" BEHIND FACE OF CURB.
- THE COORDINATES SHOWN HEREON ARE BASE ON NAD 22 MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY MONUMENT NO. 2337001, 2337002 AND 2437003.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PRECAUTIONS, AND SAFETY PRECAUTIONS AND REGULATIONS.

SCHEDULE A PERIMETER LANDSCAPE EDGE		
CATEGORY	ADJACENT TO ROADWAYS	
Perimeter Edge	A	D
Landscape Type	B	
Linear Feet of Roadway Frontage/Perimeter	100	605'
Credit for Existing Vegetation	NO	YES
Yes No Linear Feet Describe below if needed		605'
Number of Plants Required		
Shade Trees	0	0
Evergreen Trees	13	0
Shrubs	0	0
Number of Plants Provided		
Shade Trees	0	0
Evergreen Trees	13	0
Shrubs	0	0
Describe plant substitution credits below if needed		

NOTES: This plan has been prepared in accordance with the provisions of Section 16.124 of the Howard County Code and the Landscape Manual.
 NO LANDSCAPING IS REQUIRED FOR PERIMETER D DUE TO RESTORATION OF EX. TREES.
 26 STREET TREES REQUIRED AND PROVIDED BASED ON 1040' OF R.O.W.
 FINANCIAL SURETY FOR THE REQUIRED 13 TREES, IN THE AMOUNT OF \$1300.00, IS PART OF THE DEVELOPER'S AGREEMENT.



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



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

AS BUILT CERTIFICATE

DATE: 4/15/95

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.
Gina Summary CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
William M. Duerksen CHIEF, BUREAU OF HIGHWAYS
Paul J. Egan CHIEF, BUREAU OF SIGNING

DATE NO. REVISION

OWNER / DEVELOPER
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 THE ROUSE BUILDING
 10275 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044

PROJECT: VILLAGE OF RIVER HILL SECTION 2 AREA 3 PHASE 2 LOTS 110 - 120 & 107

AREA: TAX MAP NO. 35 ZONED NEW TOWN PART OF PARCELS 70 & 240 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE: TITLE SHEET, PLAN AND PROFILES OF TROTTER ROAD AND GENTLE LIGHT LANE

RIEMER MUEGGE & ASSOCIATES, INC.
 Planners • Engineers • Surveyors
 8818 Centre Park Drive • Suite 200 • Columbia, MD 21045
 410-997-8900 FAX: 410-997-9282

3-17-95 DATE
 DESIGNED BY: C.J.R.
 DRAWN BY: D.A.M.
 PROJECT NO: 88103
 DATE: MARCH 17, 1995
 SCALE: AS SHOWN
 DRAWING NO. 1 OF 3

1487

STRUCTURE SCHEDULE

NO.	ITEM	LOCATION	INV. IN	INV. OUT	TOP ELEV.	REMARKS
I-1	A-5 INLET	LP STA 248.15 GENTLE LIGHT LANE	-	408.23	412.62	SEE HO CO STD DETAIL SD 4.01
M-1	4'-0" DIAMETER MANHOLE	21' LT OF LP STA 248.15 GENTLE LIGHT LANE	407.16	407.00	412.81	SEE HO CO STD DETAIL G 5.12
E-1	18" CONCRETE END SECTION	SEE SHEET 1	404.00	404.00	-	SEE HO CO STD DETAIL SD 5.51

STONE OUTLET TRAP NO. 1
 DRAINAGE AREA: 0.88 ACRES
 STORAGE VOLUME REQUIRED: 1584 CF
 STORAGE VOLUME PROVIDED: 1653 CF @ EL. 399.0
 EMBANKMENT ELEVATION: 401.0
 CREST ELEVATION: 400.0
 BOTTOM ELEVATION: 396.0
 BOTTOM ELEVATION: 9'x40'
 CLEANOUT ELEVATION: 398.0
 SIDE SLOPES: 1:1
 OUTLET WIDTH: 5'

SEQUENCE OF CONSTRUCTION

- OBTAIN GRADING PERMIT.
- INSTALL SCE W/BERM, STONE OUTLET SEDIMENT TRAP, EARTH DIKE, SILT FENCE AND TREE PROTECTIVE FENCE (5 DAYS). NOTE: SILT FENCE TO BE STAKED AT 5'-5' INTERVALS.
- CLEAR AND GRUB SITE (3 DAYS).
- BEGIN GRADING FOR ROADS.
- AS SUBGRADE ELEVATION IS OBTAINED, INSTALL UTILITIES, INCLUDING WATER, SEWER AND STORM DRAIN (2 WEEKS).
- INSTALL CURB AND GUTTER AND PAVE (2 WEEKS).
- STABILIZE ALL DISTURBED AREA IN ACCORDANCE WITH THE PERMANENT SEEDING NOTES (1 DAY).
- INSTALL STREET TREES, LIGHTS AND COMPLETE CONSTRUCTION (3 DAYS).
- UPON PERMISSION OF THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, REMOVE ALL REMAINING SEDIMENT CONTROLS AND STABILIZE ANY REMAINING DISTURBED AREAS IN ACCORDANCE WITH THE PERMANENT SEEDING NOTES.

BY THE DEVELOPER:
 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 INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.
 Gregory R. Khan 3-17-95
 DATE

BY THE ENGINEER:
 I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 Arthur E. Muegge 3-17-95
 ENGINEER DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.
 Patricia Engle 3/23/95
 NATURAL RESOURCES CONSERVATION SERVICE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 John P. Blanton 3/23/95
 HOWARD SOIL CONSERVATION DISTRICT

AS-BUILT CERTIFICATE
 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.
 Gina Summary 4/15/95
 CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH

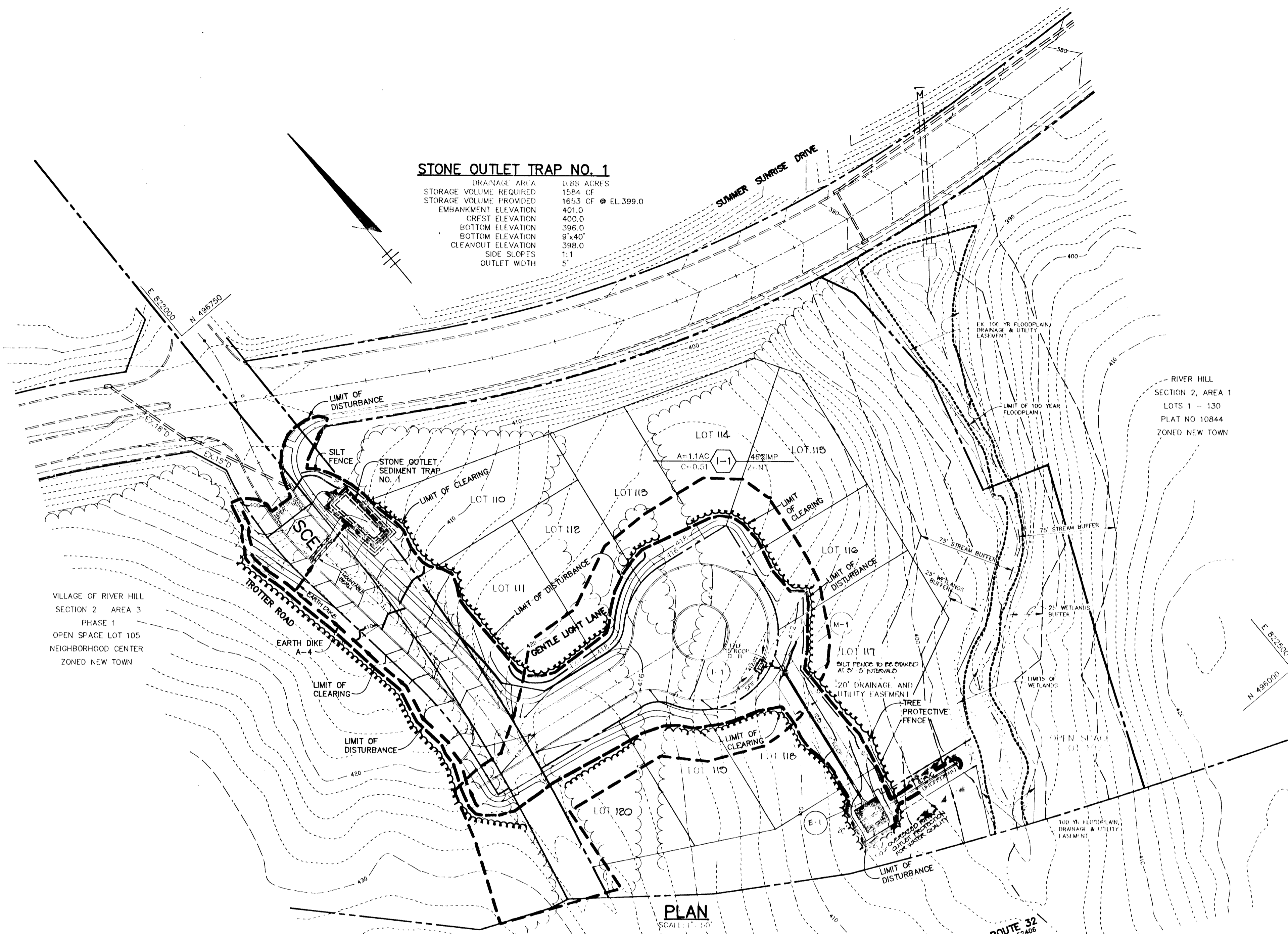
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
 Andrew M. Daniels 3/21/95
 CHIEF, BUREAU OF HIGHWAYS
 Robert J. Seaman 4/3/95
 CHIEF, BUREAU OF ENGINEERING

DATE NO. REVISION
 OWNER / DEVELOPER
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 THE ROUSE BUILDING
 10275 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044

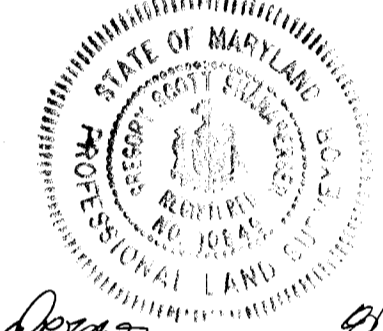
PROJECT: VILLAGE OF RIVER HILL
 SECTION 2 AREA 3 PHASE 2
 LOTS 110-120 & 107
 AREA: TAX MAP NO. 33 ZONED NEW TOWN
 PART OF PARCELS 70 & 240
 SECTION DISTRICT HOWARD COUNTY, MARYLAND
 TITLE: DRAINAGE AREA MAP,
 GRADING AND SEDIMENT CONTROL PLAN,
 AND PROFILES SHEET

RIEMER MUEGGE & ASSOCIATES, INC.
 Planners • Engineers • Surveyors
 8818 Centre Park Drive • Suite 200 • Columbia, MD 21045
 410-997-8900 FAX: 410-997-9202

3-17-95
 DATE
 DESIGNED BY: C.J.R.
 DRAWN BY: D.A.M.
 PROJECT NO: 88103
 DATE: MARCH 17, 1995
 SCALE: AS SHOWN
 DRAWING NO. 2 OF 3

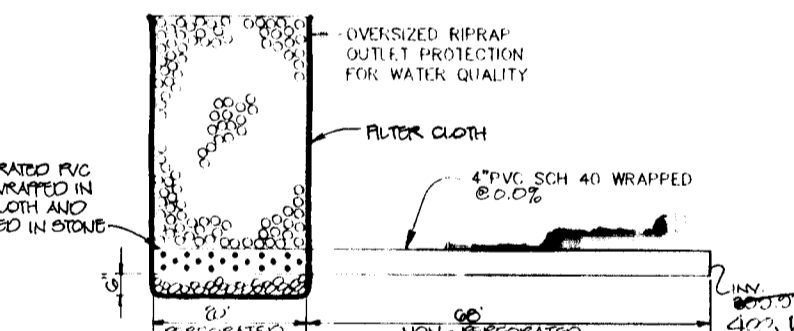


SHANBERGER & LANE
 8726 TOWN & COUNTRY BLVD.
 SUITE 104
 BELLCREST CITY, MARYLAND 21043

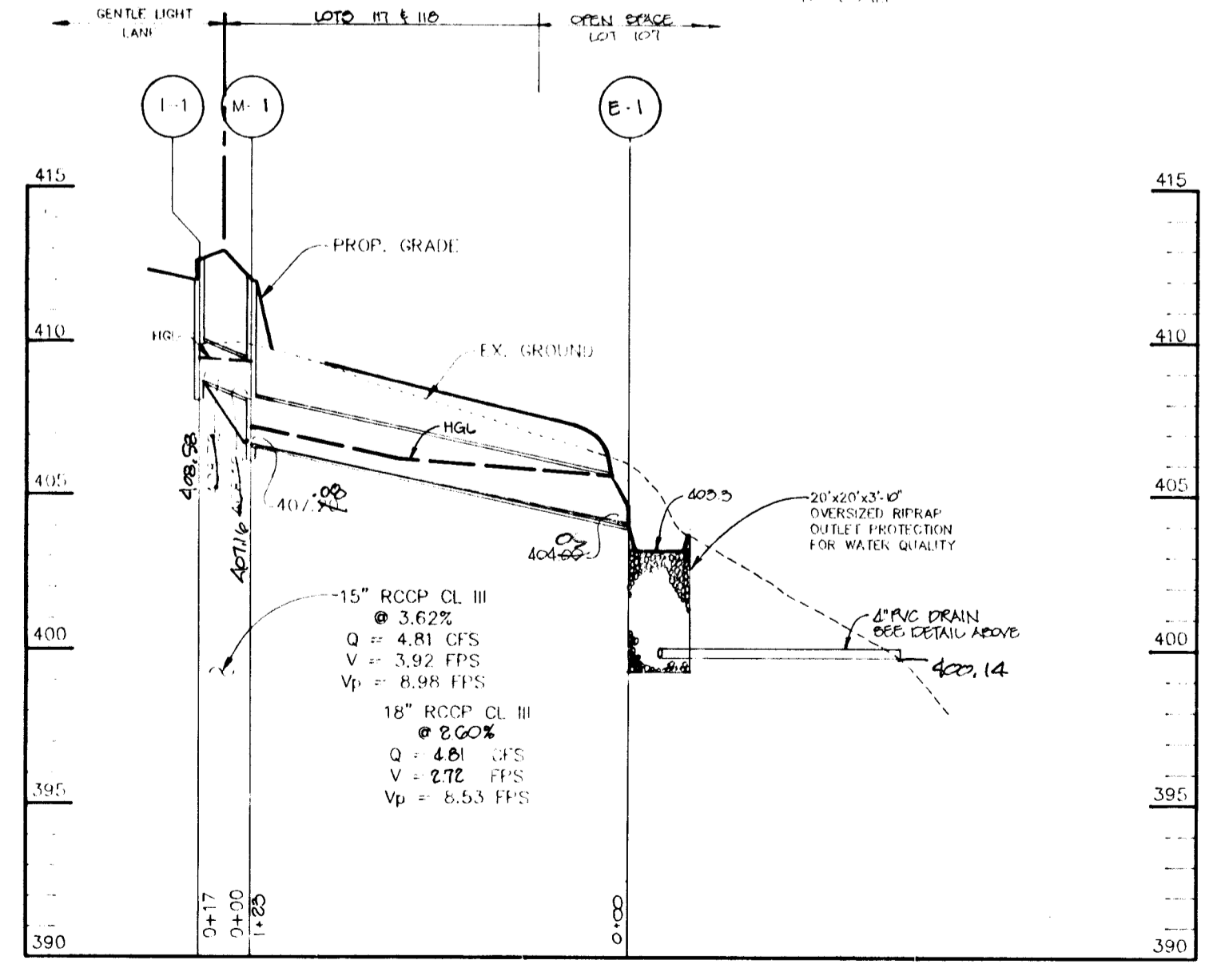


AS-BUILT

Arthur E. Muegge
 Professional Engineer



TYP. WATER QUALITY RIPRAP AREA DRAIN DETAIL



PROFILE
 HOR. - 1"=50'
 VERT. - 1"=5'

1487

TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redistributed where a short-term vegetative cover is needed.

Seeded Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened.

Soil Amendments: Apply 600 lbs. per acre 10-10-10 fertilizer (14 lbs. per 1000 sq.ft.).

Seeding: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2-1/2 bushels per acre of annual ryegrass (3.2 lbs. per 1000 sq.ft.). For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (0.07 lbs. per 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. per 1000 sq.ft.) of untreated small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal. per acre (5 gal. per 1000 sq.ft.) of emulsified asphalt on flat areas. On slopes, 8 ft. or higher, use 347 gal. per acre (8 gal. per 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.

PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.

Seeded Preparation: Loosen upper three 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 1000 sq.ft.) and 600 lbs. per acre 10-10-10 fertilizer (14 lbs. per 1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs. per acre 30-0-0 ureaform fertilizer (9 lbs. per 1000 sq.ft.).
- 2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs. per 1000 sq.ft.) and 1000 lbs. per acre 10-10-10 fertilizer (23 lbs. per 1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil.

Seeding: For the period March 1 thru April 30 and from August 15 thru October 15, seed with 60 lbs. per acre (1.4 lbs. per 1000 sq.ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs. Kentucky 31 Tall Fescue per acre and 2 lbs. per acre (0.05 lbs. per 1000 sq.ft.) of weeping lovegrass. During the period October 16 thru 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.

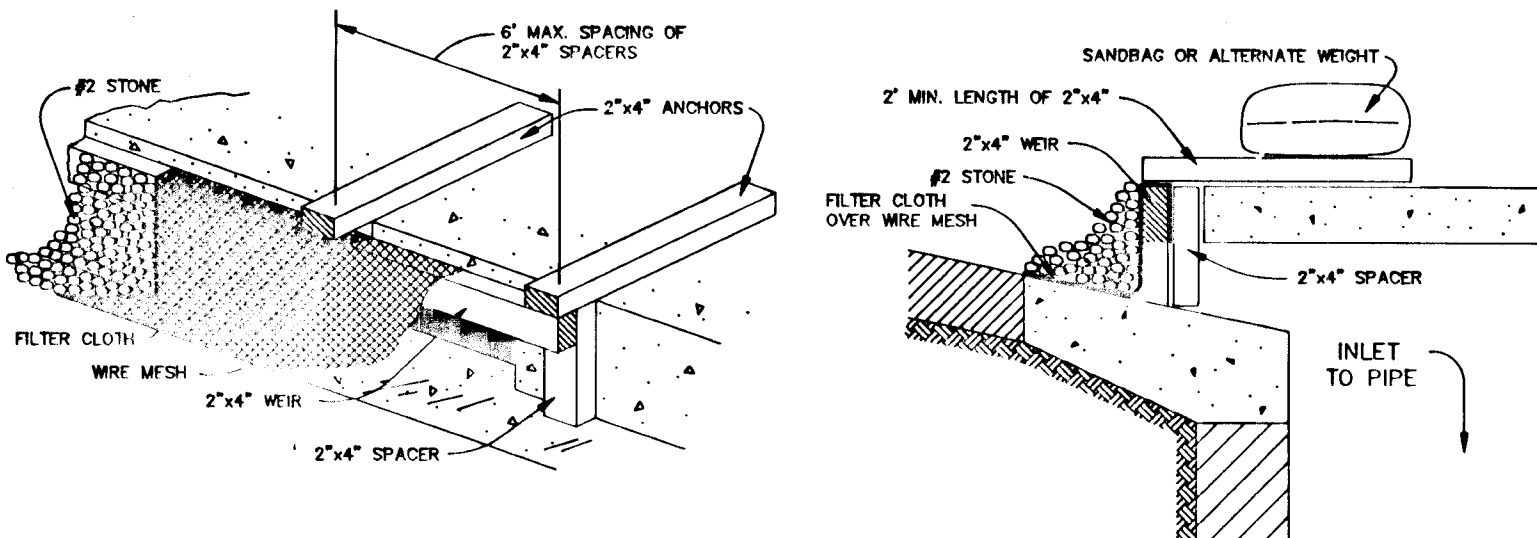
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Maintenance: Inspect all seeded areas and make needed repairs, replacements and reseeds.

SEDIMENT CONTROL NOTES

1. A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION (313-1855).
2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL AND EROSION CONTROL, AND REVISIONS THERETO.
3. 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 AND ALL SLOPES GREATER THAN 3:1, B) 14 DAYS AS TO OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
4. ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THE PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1991 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL AND EROSION CONTROL FOR PERMANENT SEEDINGS (SEC. 51), SOIL (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 53). TEMPORARY STABILIZATION WITH MULCH ALONG CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
6. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMITS FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
7. SITE ANALYSIS:

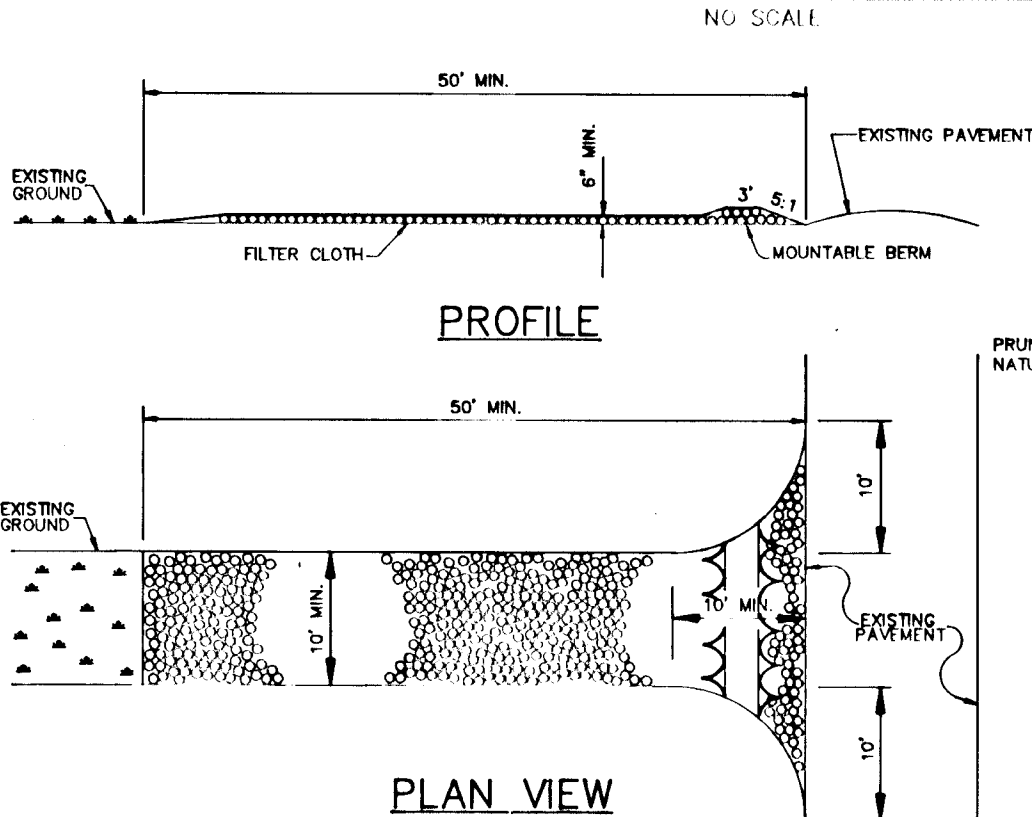
TOTAL AREA OF SITE	4.75 ACRES
AREA TO BE ROOFED OR PAVED	1.26 ACRES
AREA TO BE VEGETATIVELY STABILIZED	0.82 ACRES
TOTAL CUT	6000 CU.YDS.
TOTAL FILL	6000 CU.YDS.
8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
9. ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
10. SITE GRADING WILL BEGON ONLY AFTER ALL PERIMETER SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED AND ARE IN A FUNCTIONING CONDITION.
11. SEDIMENT WILL BE REMOVED FROM TRAPS WHEN ITS DEPTH REACHES CLEAN OUT ELEVATION SHOWN ON THE PLANS.
12. 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.
13. ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 AC., 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.
14. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN BE BACKFILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.



CONSTRUCTION SPECIFICATIONS

- WOODEN FRAME IS TO BE CONSTRUCTED OF 2"x4" CONSTRUCTION GRADE LUMBER.
- WIRE MESH MUST BE OF SUFFICIENT STRENGTH TO SUPPORT FILTER FABRIC AND STONE, WITH WATER FULLY IMPOUNDED AGAINST IT.
- FILTER CLOTH MUST BE OF A TYPE APPROVED FOR THIS PURPOSE, RESISTANT TO SUNLIGHT WITH A SEIVE SIZE, EGS 40-85, TO ALLOW SUFFICIENT PASSAGE OF WATER AND REMOVAL OF SEDIMENT.
- STONE IS TO BE 2" IN SIZE AND CLEAN, SINE FINES WOULD CLOG THE CLOTH.
- PROCEDURE FOR CURB INLET PROTECTION:
 - ATTACH A CONTINUOUS PIECE OF WIRE MESH (30" MIN. WIDTH BY THROAT LENGTH PLUS 4" TO THE 2"x4" WIRE (MEASURING THROAT LENGTH PLUS 2") AS SHOWN ON THE STANDARD DRAWING.
 - PLACE A PIECE OF APPROVED FILTER CLOTH (40-85 SEIVE) OF THE SAME DIMENSIONS AS THE WIRE MESH OVER THE WIRE MESH AND SECURELY ATTACH TO THE 2"x4" WIRE.
- SECURELY NAIL THE 2"x4" WIRE TO 8" LONG VERTICAL SPACERS TO BE LOCATED BETWEEN THE WIRE AND INLET FACE (MAX. 8" APART).
- PLACE THE ASSEMBLY AGAINST THE INLET THROAT AND NAIL (MINIMUM 2" LENGTHS OF 2"x4" TO THE TOP OF THE WIRE AT SPACER LOCATIONS THESE 2"x4" ANCHORS SHALL EXTEND ACROSS THE INLET TOP AND BE HELD IN PLACE BY SANDRAGS OR ALTERNATE WEIGHT.
- THE ASSEMBLY SHALL BE PLACED SO THAT THE END SPACERS ARE A MINIMUM 1" BEYOND BOTH ENDS OF THE THROAT OPENING.
- FORM THE WIRE MESH AND FILTER CLOTH TO THE CONCRETE CURB AND AGAINST THE FACE OF THE CURB ON BOTH SIDES OF THE INLET. PLACE CLEAN 2" STONE OVER THE WIRE MESH AND FILTER FABRIC IN SUCH A MANNER AS TO PREVENT WATER FROM ENTERING THE INLET UNDER OR AROUND THE FILTER CLOTH.
- THIS TYPE OF PROTECTION MUST BE INSPECTED FREQUENTLY AND THE FILTER CLOTH AND STONE REPLACED WHEN CLOGGED WITH SEDIMENT.
- ASSURE THAT STORM FLOW DOES NOT BYPASS INLET BY INSTALLING TEMPORARY EARTH OR ASPHALT DIKES DIRECTING FLOW INTO INLET.

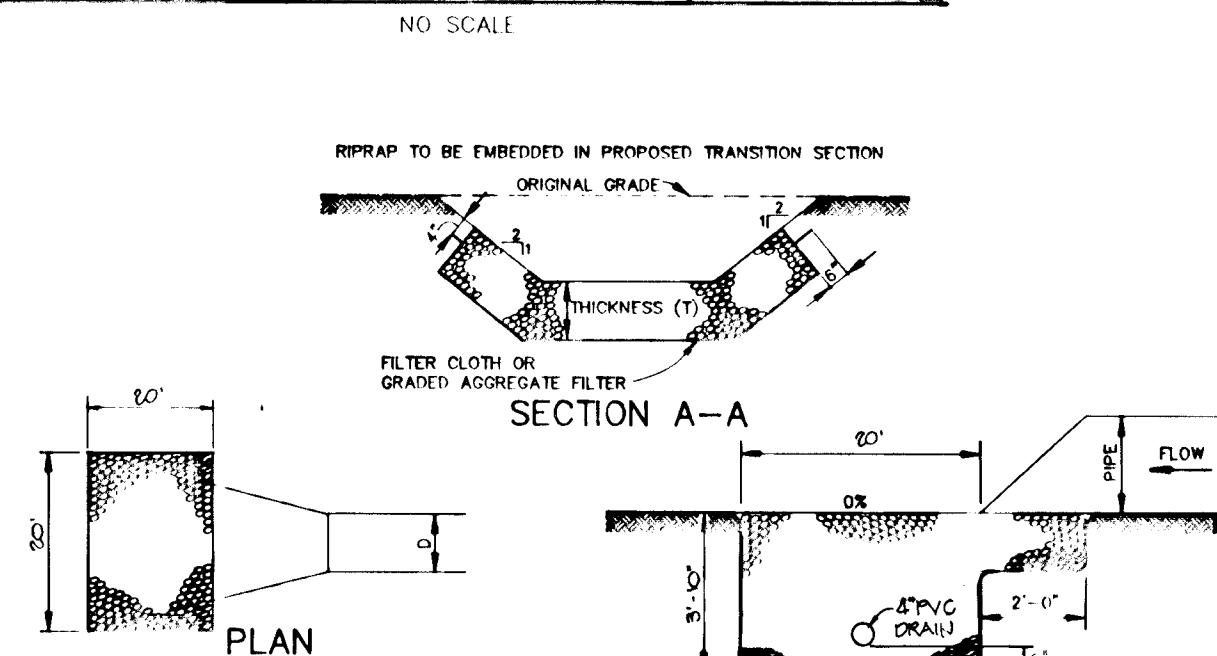
STONE FILTER INLET PROTECTION



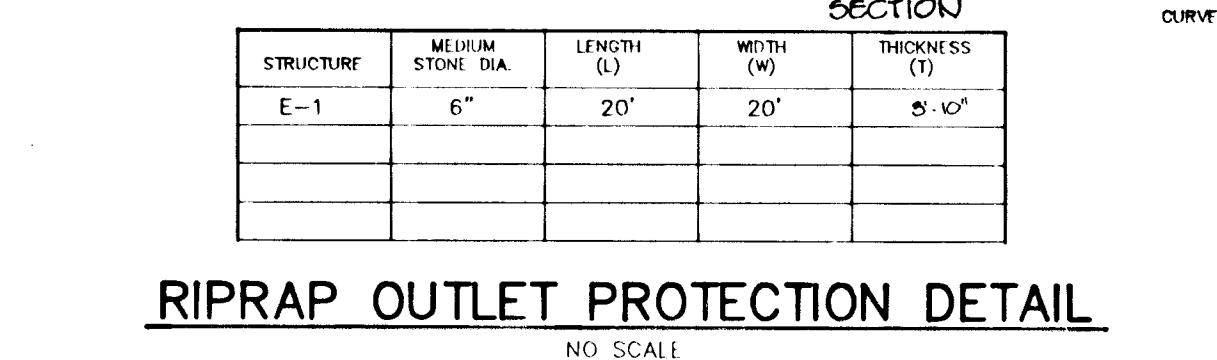
CONSTRUCTION SPECIFICATIONS

1. STONE SIZE - USE 2" STONE OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - AS REQUIRED, BUT NOT LESS THAN 30 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM WOULD APPLY).
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - TEN (10) FEET MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS AND EGRESS OCCURS.
5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER CLOTH WILL NOT BE REQUIRED ON A SINGLE RESIDENCE LOT.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE FILTERED ACROSS THE ENTRANCE. IF PIPING IS INRACTICAL, A MOUNTABLE BEAM 3" SLOPE WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ENTRANCE

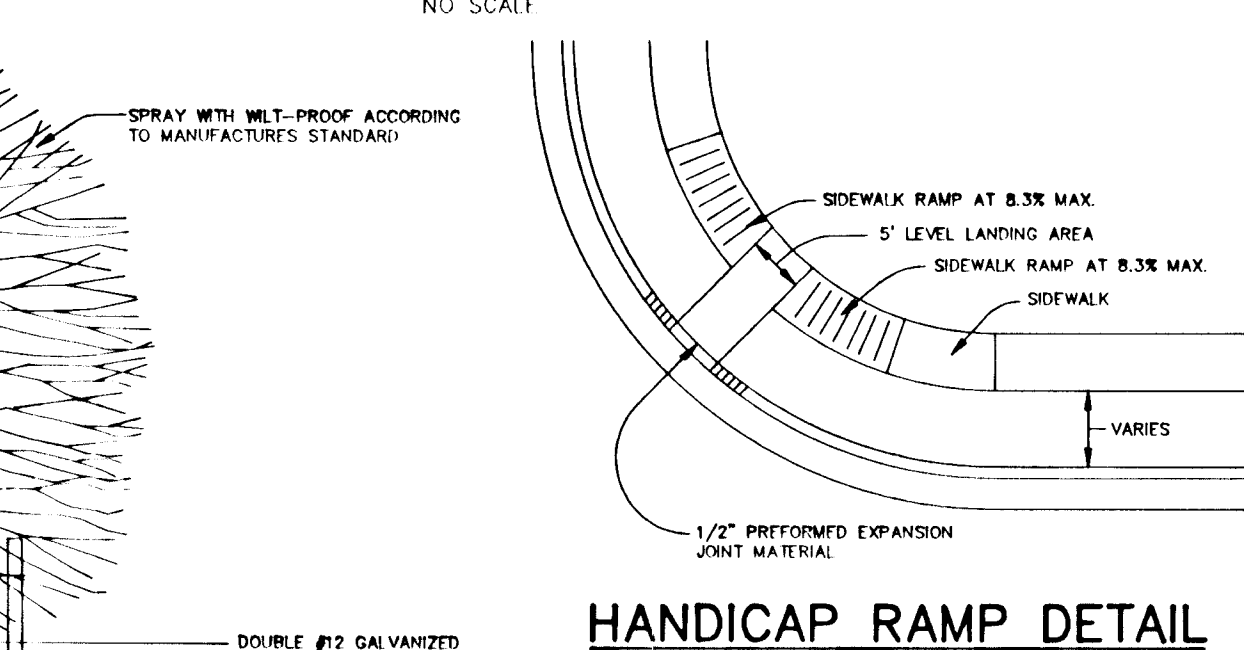


RIPRAP OUTLET PROTECTION DETAIL



ZONING DISTRICTS	E	F	G	H	R/W	A
RESIDENTIAL	50'	60'	60'	50'	24'	

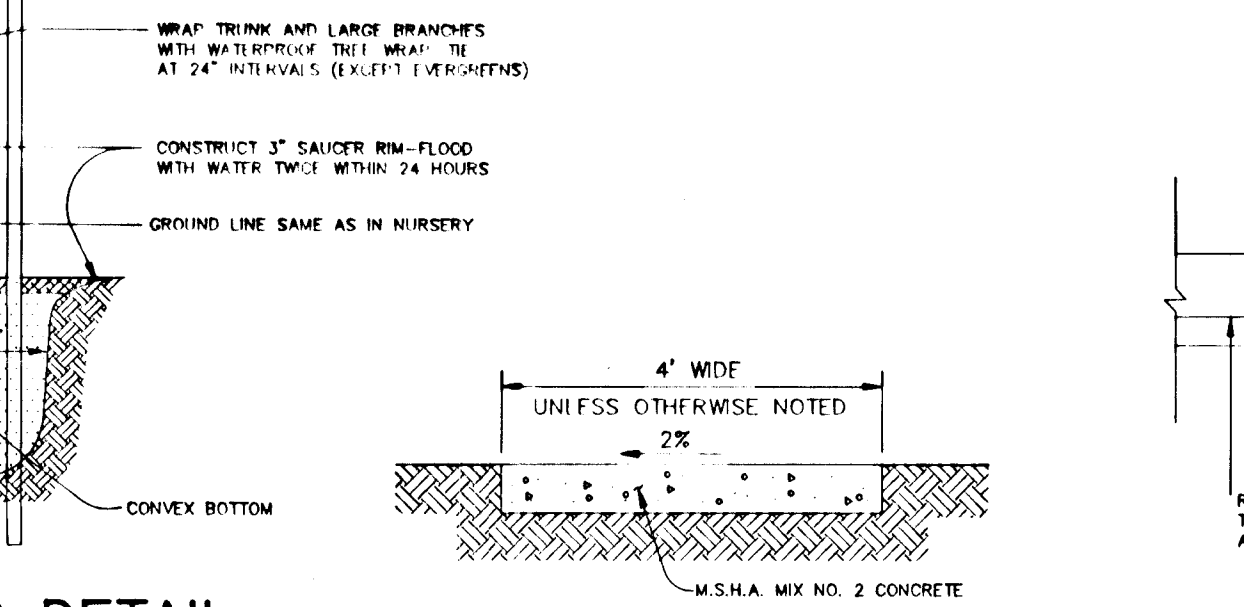
SILT FENCE DETAIL



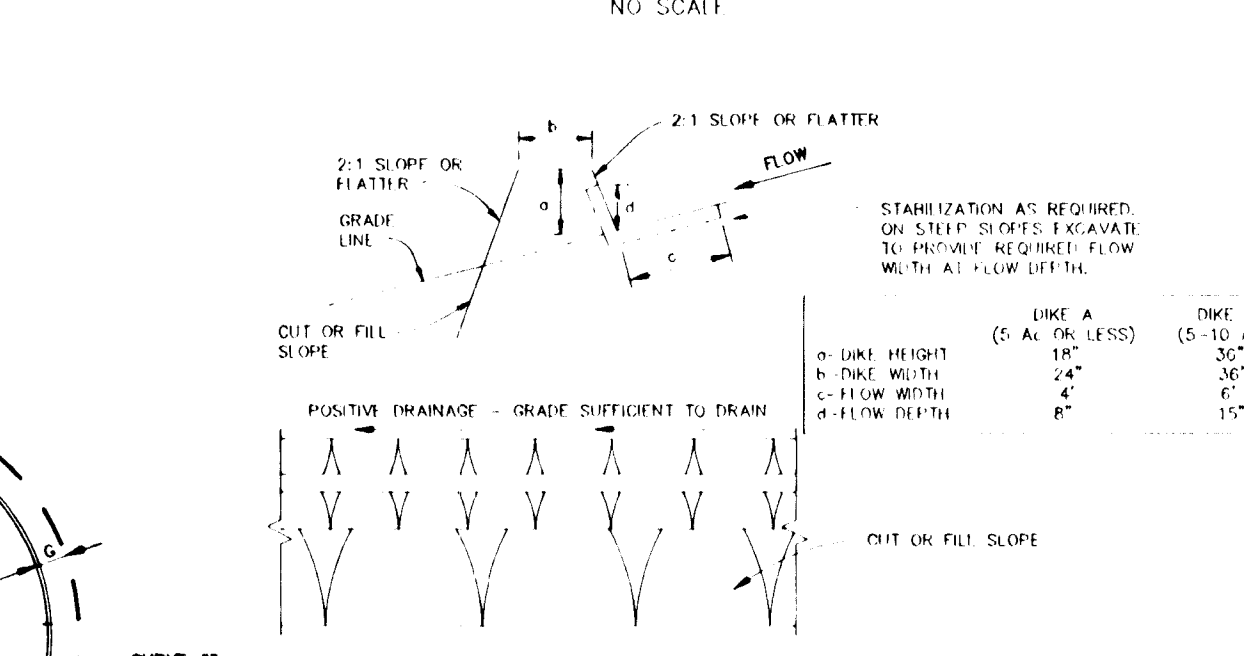
CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES AND STAPLES.
2. FILTER CLOTH TO BE FASTENED TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES (6") AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE 30' FENCE.

HANDICAP RAMP DETAIL



SIDEWALK DETAIL



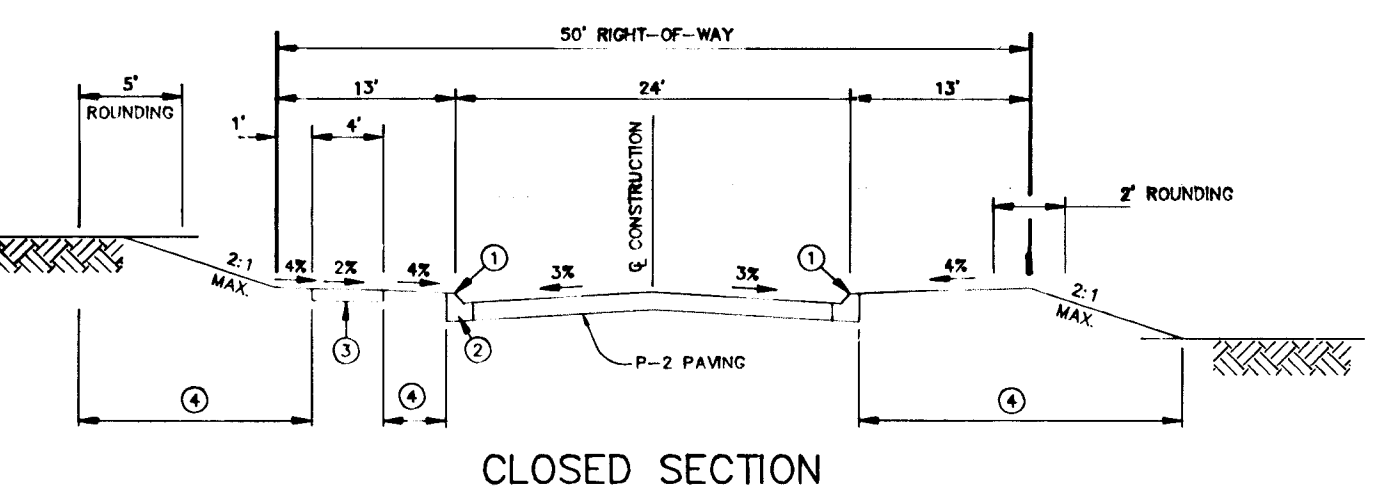
CONSTRUCTION SPECIFICATIONS

1. ALL DIKES SHALL BE CONSTRUCTED BY EARTH MOVEMENT TO BE MAINTAINED.
2. ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
3. TOP WIDTH MAY BE WHEN AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CROPPING BY CONSTRUCTION TRAIL.
4. FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET.
5. EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF FRICTION. DIKES SHALL BE COVERED TO A STORMWATER TRAPPING DEVICE SUCH AS A SEDIMENT TRAP OR SEDIMENT BASIN WHICH EITHER USES THE DIKE CHANNEL OR THE DRAINAGE AREA ABOVE THE DIKE AREA WITH ADEQUATELY STABILIZED FLOW CHANNEL AS PER THE CHART BELOW.
6. STABILIZATION SHALL BE: (A) IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SILT AND STRAW MULCH OR STRAW MULCH IF NOT IN SEEDING SEASON, (B) FLOW CHANNEL STABILIZATION.

GENTLE LIGHT LANE CUL-DE-SAC DETAIL



EARTH DIKE



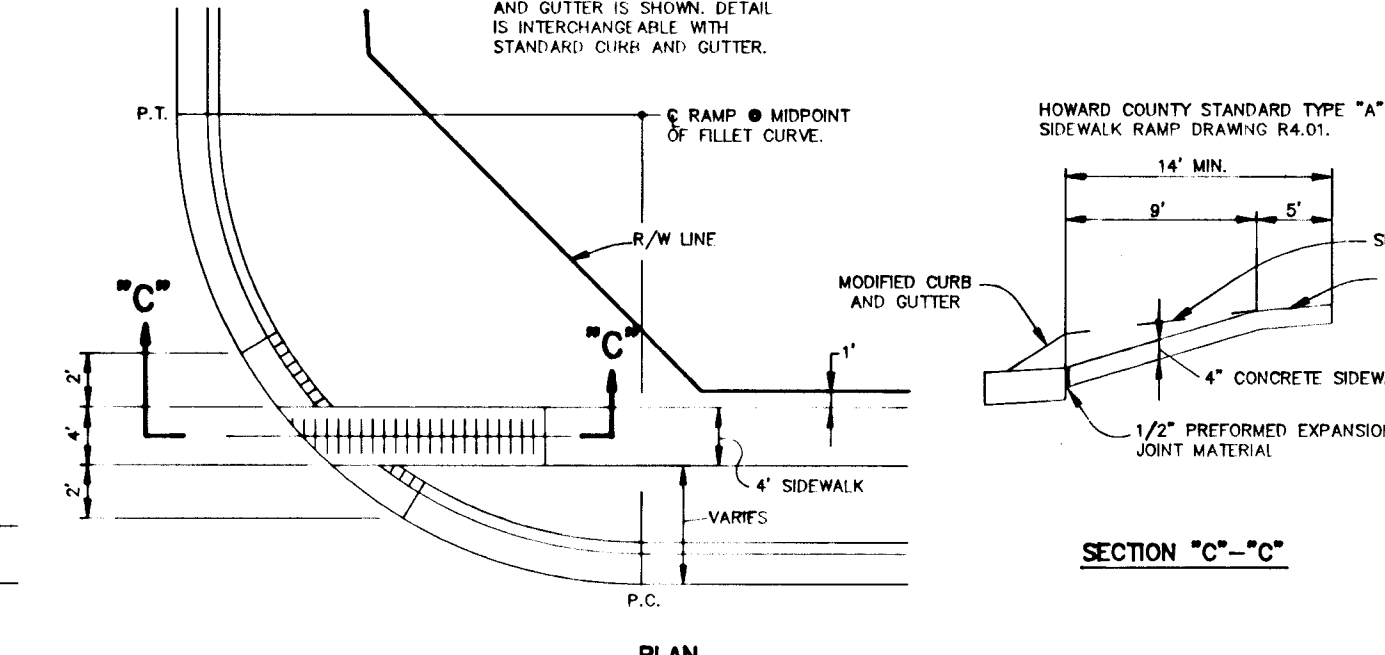
CLOSED SECTION

1. PROFILE GRADE LINE (PGL), SEE DESIGN MANUAL.
2. TYPE OF CURB VARIES (MOD. COMB. CURB & GUTTER - SEE ROAD PLAN).
3. 4" CONCRETE SIDEWALK AS REQUIRED BY SUBDIVISION REGULATIONS.
4. INDICATES 2" TOPSOIL, SEED AND MULCH.
5. DESIGN SPEED = 25 M.P.H.



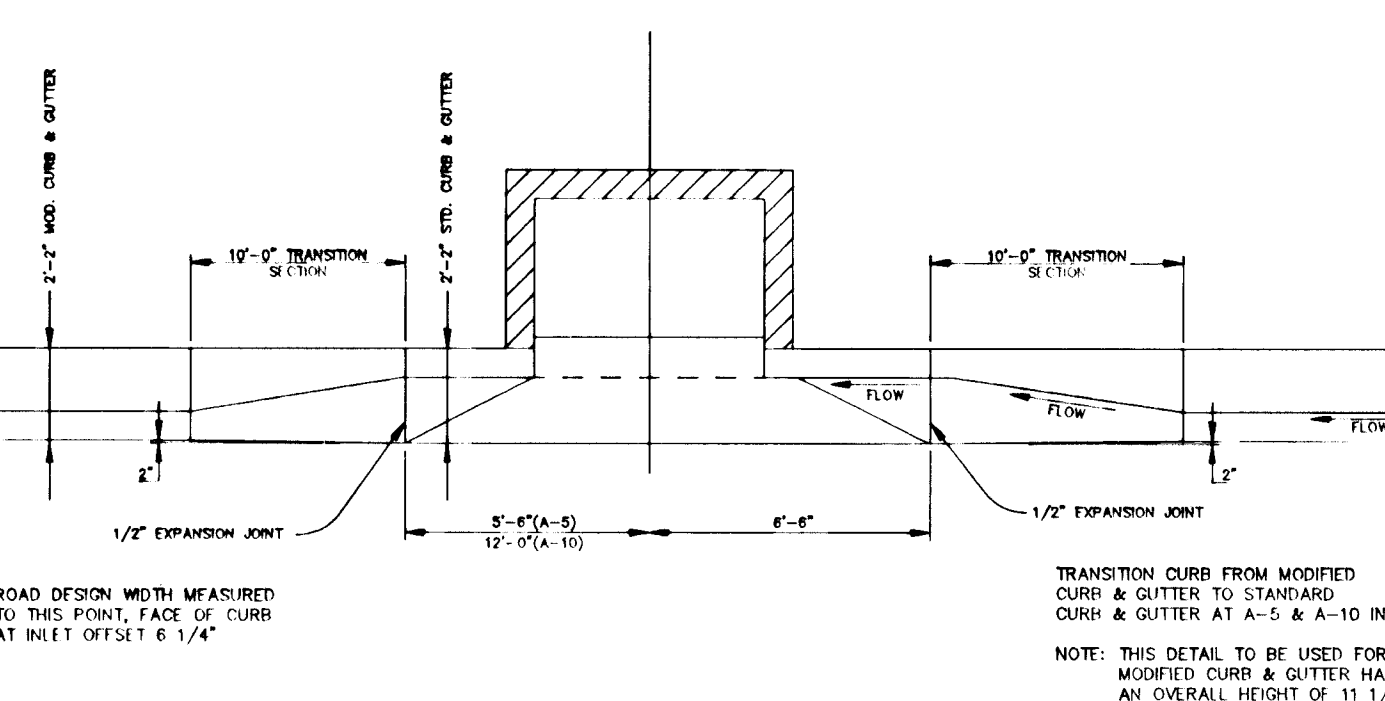
TYPICAL SECTION

NO SCALE
TROTTER ROAD FROM CL STA 0+88.00 TO CL STA 3+09.76
GENTLE LIGHT LANE FROM CL STA 0+00.00 TO CL STA 1+35.68

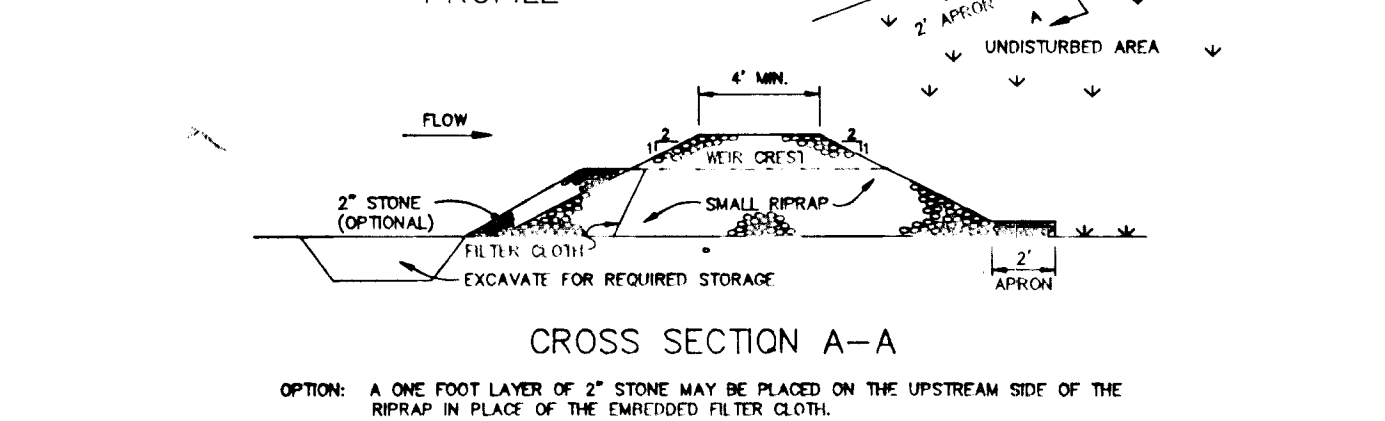
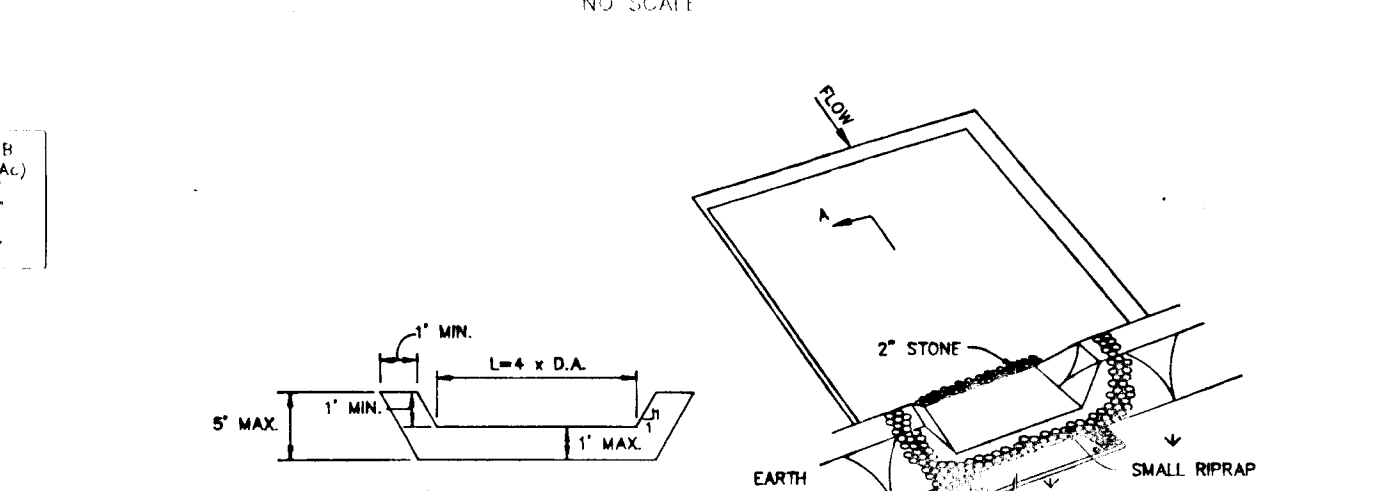


HANDICAP RAMP DETAIL

NO SCALE
MODIFIED COMBINATION CURB AND GUTTER IS SHOWN. DETAIL IS INTERCHANGEABLE WITH STANDARD CURB AND GUTTER.



MODIFIED COMBINATION CURB AND GUTTER TRANSITION CURB SECTION AT "A" TYPE INLETS



CONSTRUCTION SPECIFICATIONS

1. AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED.
2. THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS AND OTHER WOODY VEGETATION AS WELL AS OVER-SIZED STONES, ROCKS, ORGANIC MATERIAL OR OTHER OBSTRUCTIVE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRACKING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.
3. ALL OUT AND FILL SLOPES SHALL BE 2:1 OR FLATTER.
4. THE STONE USED IN THE OUTLET SHALL BE SMALL RIPRAP 4"-8" ALONG WITH A 1" THICKNESS OF 2" AGGREGATE PLACED ON THE UP-GRAD E SIDE OF THE SMALL RIPRAP OR EMBANKED FILTER CLOTH IN THE RIPRAP.
5. SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP.
6. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
7. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION IS MINIMIZED.
8. THE STRUCTURE SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

BY THE DEVELOPER:

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 AFFILIANCE 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 INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Gregory R. Khan
DI (010) 3-17-95

BY THE ENGINEER:

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Arthur E. Muegge
ENGINEER 3-17-95

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

Patricia Engle/M...
NATURAL RESOURCES ENGINEERING SERVICE 3/23/95

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

John P. Redinger
HOWARD SOIL CONSERVATION DISTRICT 3/22/95

AS BUILT CERTIFICATE

DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

Gina Shurman
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH 4/5/95

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

Andrew M. Danaher
CHIEF, BUREAU OF HIGHWAYS 3-29-95

Samuel J. Eason
CHIEF, BUREAU OF ENGINEERING 4/3/95

DATE NO. REVISION

OWNER / DEVELOPER

THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
THE ROUSE BUILDING
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044

PROJECT VILLAGE OF RIVER HILL
SECTION 2 AREA 3 PHASE 2
LOTS 110 - 120 & 107

AREA TAX MAP NO. 35 ZONING DISTRICT N1W TOWN
PART OF PARCELS 70 & 240
5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE DETAIL SHEET

RIEMER MUEGGE & ASSOCIATES, INC.
Planners • Engineers • Surveyors
8818 Center Park Drive • Suite 200 • Columbia, MD 21045
410-997-8800 FAX: 410-997-8282

3-17-95
DATE
DESIGNED BY: C.J.R.
DRAWN BY: D.A.M.
PROJECT NO: 88103
DATE: MARCH 17, 1995
SCALE: AS SHOWN
DRAWING NO. 3 OF 3

F-05-A6