

**CURB & GUTTER LEGEND**

Mod. Comb. C & G	---
Std. 7" C & G	---

**PLANT SCHEDULE**

KEY	PLANT NAME	SIZE	QUANT.	REMARKS
(G)	Zelkova serr. "Village Green"	2 1/4 CAL.	16	8 1/2' B. HEADS
(R)	Acer Rubrum "Red Sunser"	"	21	"
(M)	Red Sunset Maple	"	"	"

- STREET TREE NOTES:**
- Contractor shall verify location of underground utilities prior to digging.
  - Final location of trees may be adjusted slightly to accommodate field conditions.
  - Planting procedure shall comply with "Landscape Specs. for Baltimore-Washington Metropolitan Areas".
  - Substitution of the approved species may be permitted provided that the planting is in accordance with the street tree and landscape requirements as specified in Section 16.151 of the Ho. Co. Subdivision Regulations.

Note: Extreme Care to be Utilized When Working near Ex 4" Gas Main. Test pits to be dug by hand, at all crossings well in advance of construction.

**SPECIAL NOTE FOR I-3**  
Remove existing top slab w/ manhole lid. Replace with solid slab. See H.C. Std. SD 4-11 for reinforcement & dimensions (neglect opening for access). Brick shut slabs.

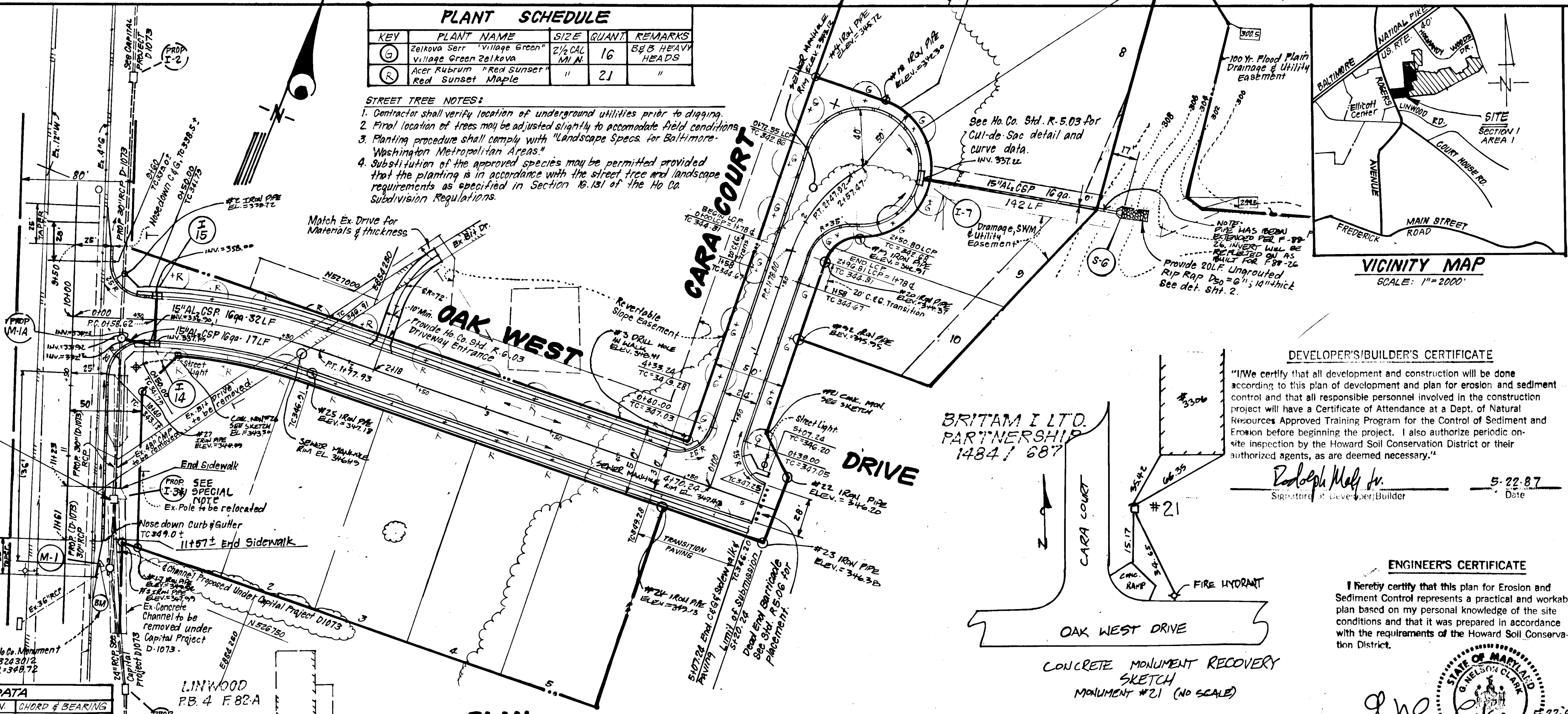
Reviewed for: Howard Co. S.C.D.  
Name: *Howard Co. S.C.D.*  
Signature: *Howard Co. S.C.D.*  
Date: 7-1-87  
U.S. Soil Conservation Service

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

Approved: *Howard Co. S.C.D.* Date: 7/1/87

**CENTERLINE CURVE DATA**

STATIONS	RADIUS	Δ	ARC	TAN	CHORD & BEARING
0+00 TO 0+25	400.00	17°05'24"	119.31	60.10	118.87 N78°49'09"E
0+25 TO 0+50	250.00	18°01'51"	78.67	39.67	78.35 N178°24'55"E
0+50 TO 0+75	106.37	37°33'45"	69.92	36.28	88.67 N16°11'03"E



**DEVELOPER'S/BUILDER'S CERTIFICATE**

"I hereby certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary."

Signature: *Joseph Maff Jr.* Date: 5-22-87

**ENGINEER'S CERTIFICATE**

"I hereby 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."

Signature: *G. Nelson Clark* Date: 5-22-87

- GENERAL NOTES**
- All storm drain & paving shall be constructed in accordance with the latest edition and specifications of Howard County & MD SHA.
  - Types of storm drainage refer to the Standard Details of Ho. Co. & MD SHA.
  - Trench excavation for storm drains within road or street right-of-way limits shall be in accordance with "Ho. Co. Design Manual, Vol. II" Std. G 2.01.
  - Information concerning underground utilities was obtained from available records, but the contractor must determine the exact location and elevation of mains by digging test pits, by hand, at all utility crossings, well in advance of construction.
  - All utility companies shall be notified 24 hrs. in advance of construction.
  - All traffic services, parking and signing to be done in accordance with the "Manual of Uniform Traffic Control Devices" 1978 Edition.
  - Sign and Crest Vertical Curves were designed in accordance with "Ho. Co. Design Manual, Vol. III".
  - Provide Conc. Sidewalk Ramps Ho. Co. Std. Type A, R 4.01 where shown in plan.
  - Design Speed: See table sht. 3 Zoning: RSC.
  - The contractor or developer shall contact the Construction Inspection/Survey Division 24 hrs. in advance of commencement of work Ph. 772-7272.
  - Flood Plain Elevations derived from Normandy Woods, Sect 1, parcel A-1, PB. 30 F. 95 and Section 2, Plat 4072.
  - Denotes 100 year flood plain elevation.
  - Denotes 250 W.H. Mercury Vapor Lamp Pendant Mounted Fixture on 30 Ft. Galv. Steel Pole.
  - Denotes 175 W.H. "Modern" Mercury Vapor Lamp Post Top Fixture on 14 Ft. Gray Fiberglass Pole. Street lights to be installed 2'-10" behind curbs and in accordance with Ho. Co. Design Manual Vol. III.

APPROVED: DEPARTMENT OF PUBLIC WORKS  
Chief, Bureau of Engineering: *John P. ...* Date: 7-6-87

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING  
Chief, Division of Land Development & Zoning Administration: *Louis F. ...* Date: 7-2-87

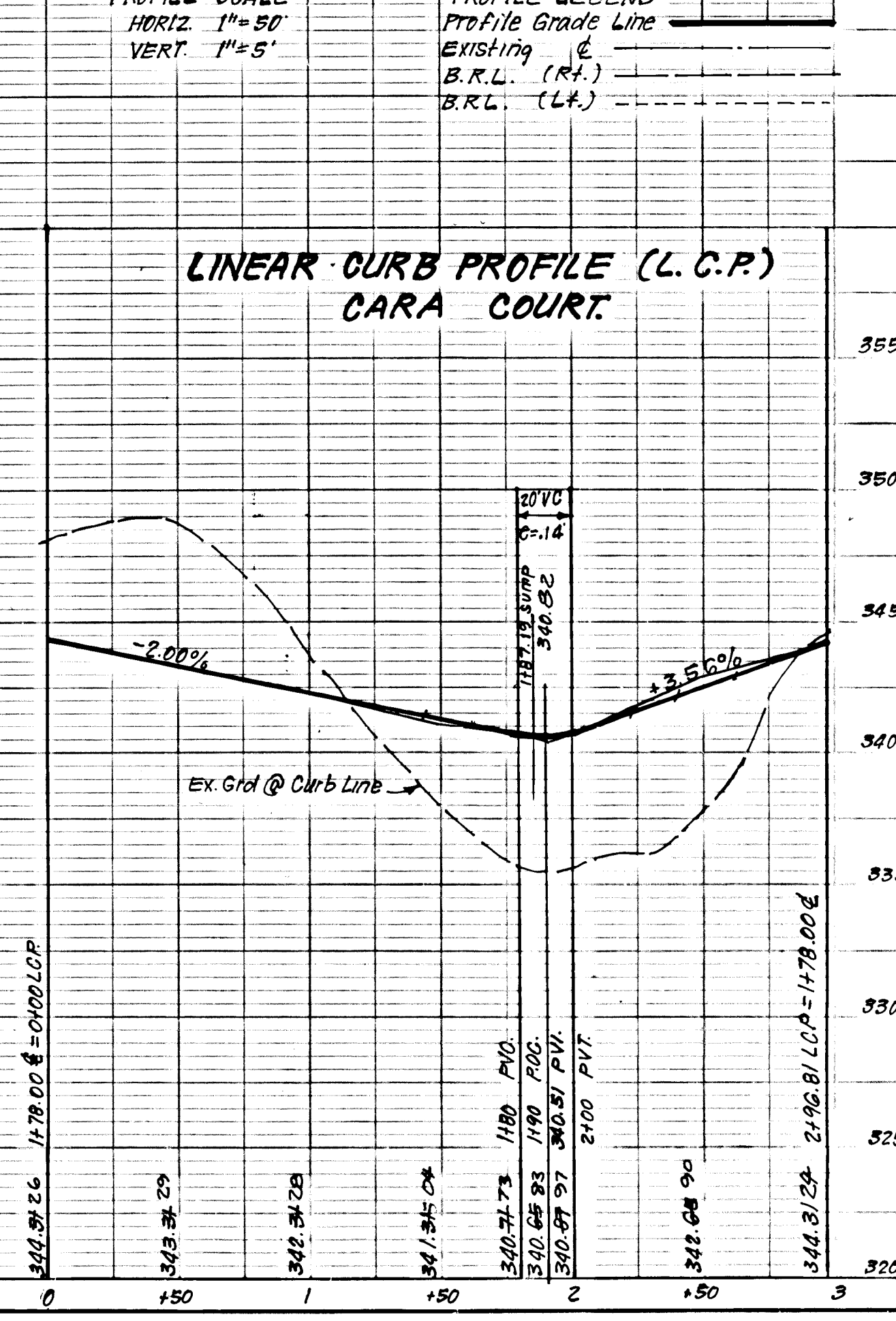
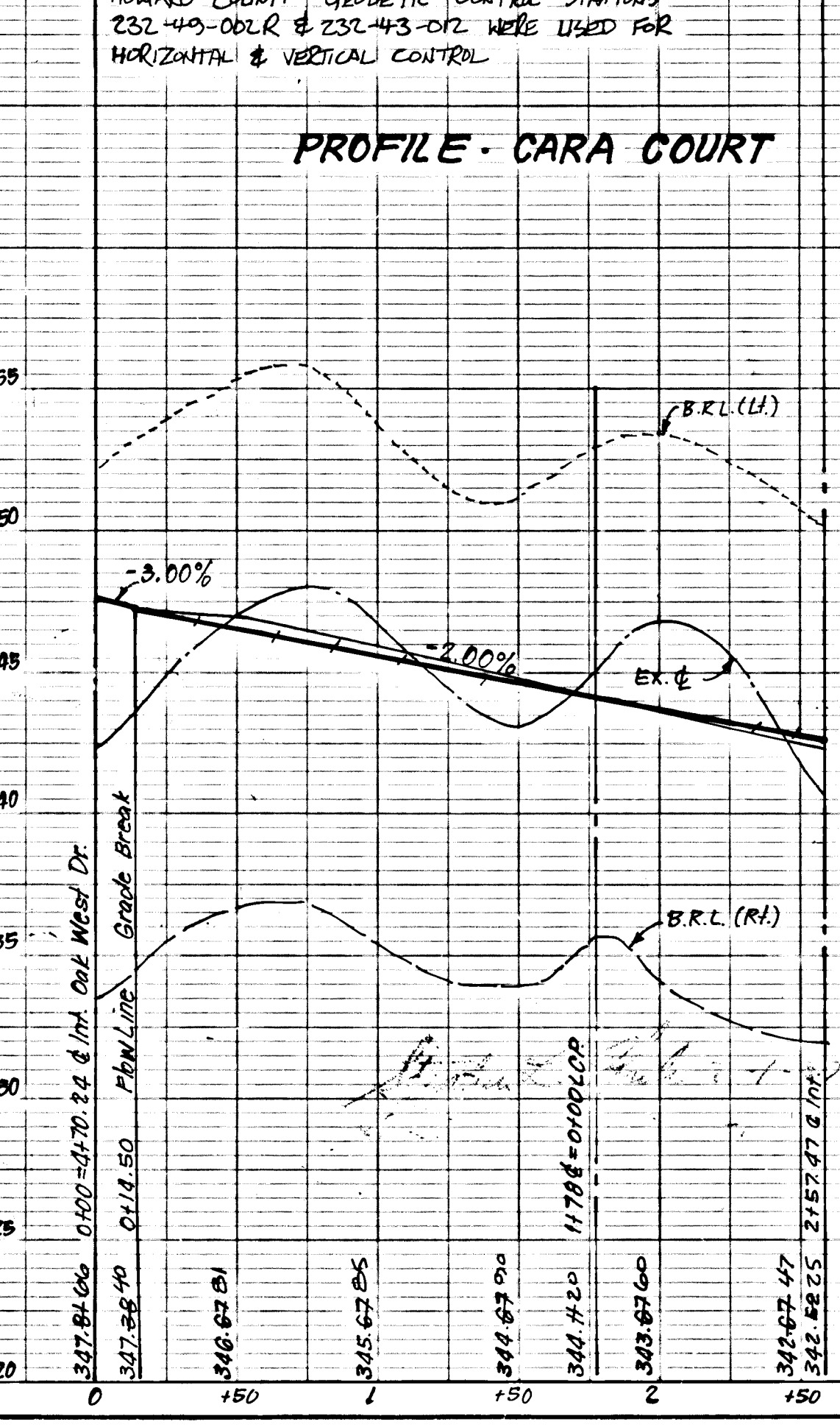
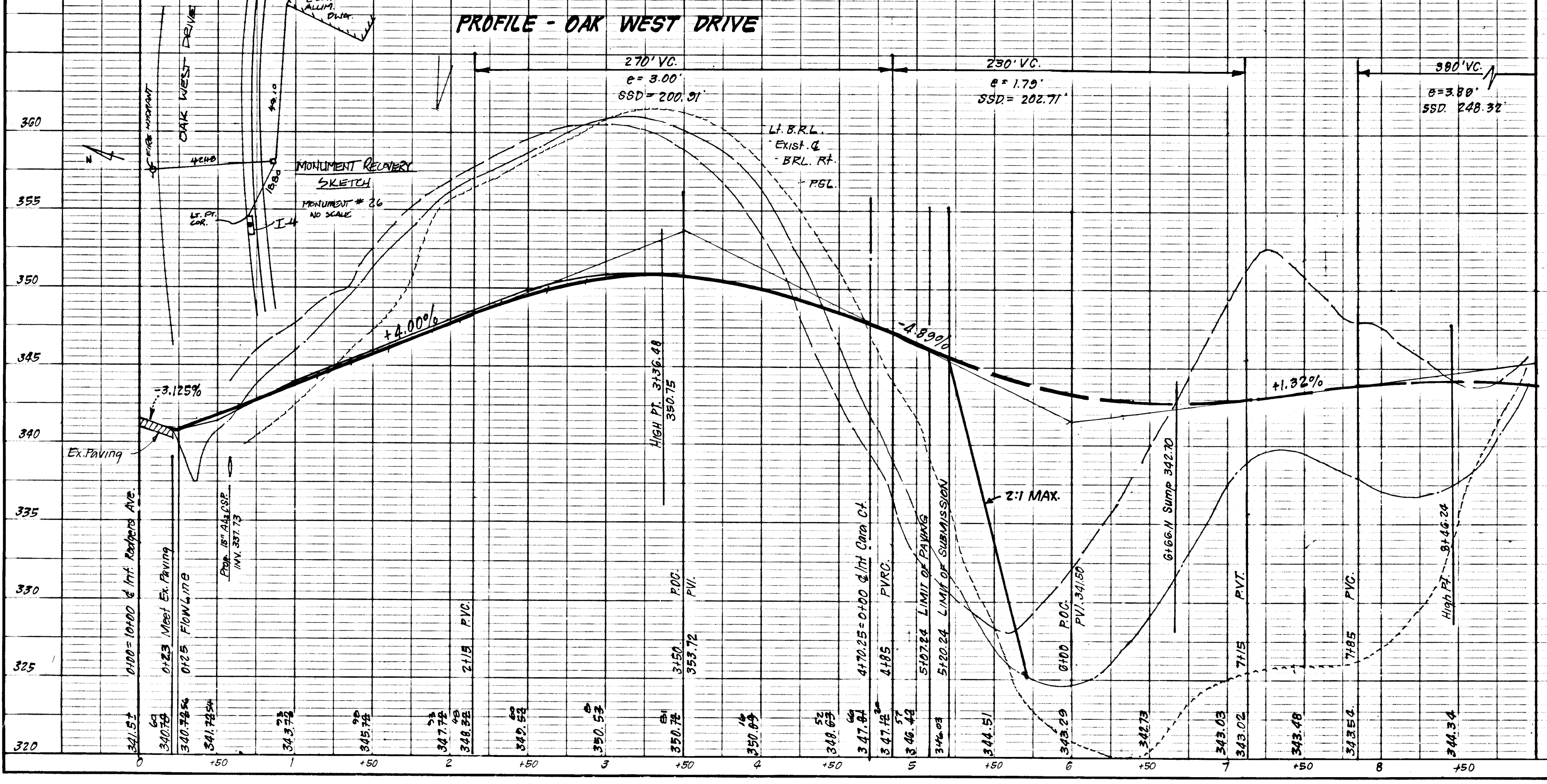
**CLARK · FINEFROCK & SACKETT INC.**  
ENGINEERS · PLANNERS · SURVEYORS  
1135 LOCKWOOD DRIVE · SILVER SPRING, MARYLAND 20904 · (301) 593-3400

**ROAD CONSTRUCTION PLANS**  
OAK WEST DRIVE AND CARA COURT  
SECTION 1 AREA 1  
**OAK WEST**  
2ND ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

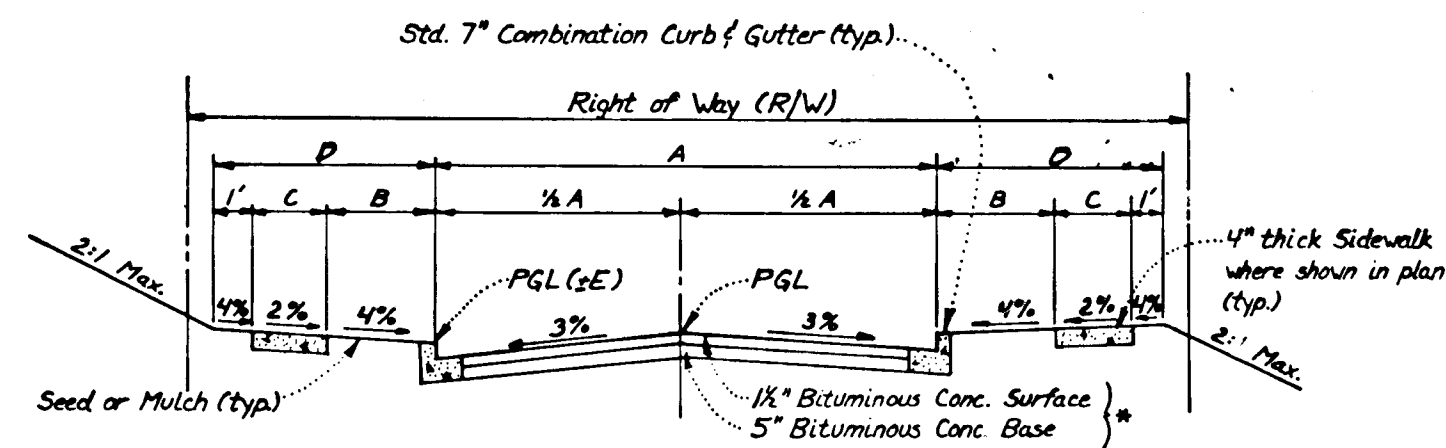
DESIGNED: G.L.B.  
DRAWN: G.L.B.  
CHECKED: G.L.B.  
DATE: 5-22-87

SCALE: As Shown  
DRAWING: 1 OF 4  
JOB NO.: 86-047  
FILE NO.: 86-047-D

FOR: BRITAM DEVELOPMENT GROUP  
9800 Red Branch Rd. #250  
Columbia Md. 21045



STREET NAME & STATION	TYPE OF TRAFFIC	A	B	C	D	R/W	ZONING	DESIGN SPEED	E
OAK WEST DRIVE Sta. 0+00 to 4+33.24	LOCAL	30'	4'	4'	9'	50'	RSC	30 MPH	1.01
CLARK COUNTY Sta. 0+50 to 1+78	CUL DE SAC	24'	4'	4'	9'	50'	RSC	25 MPH	1.16



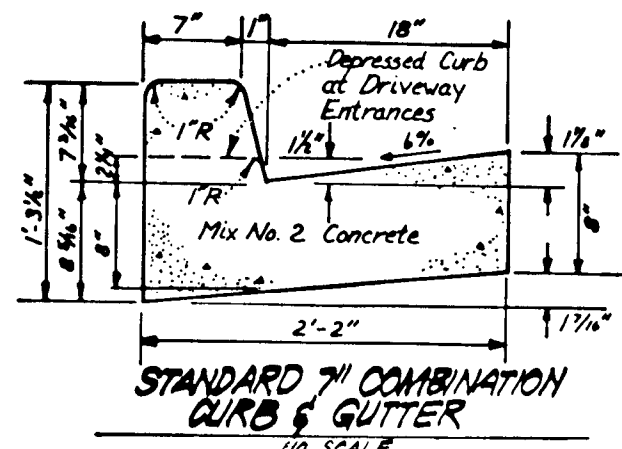
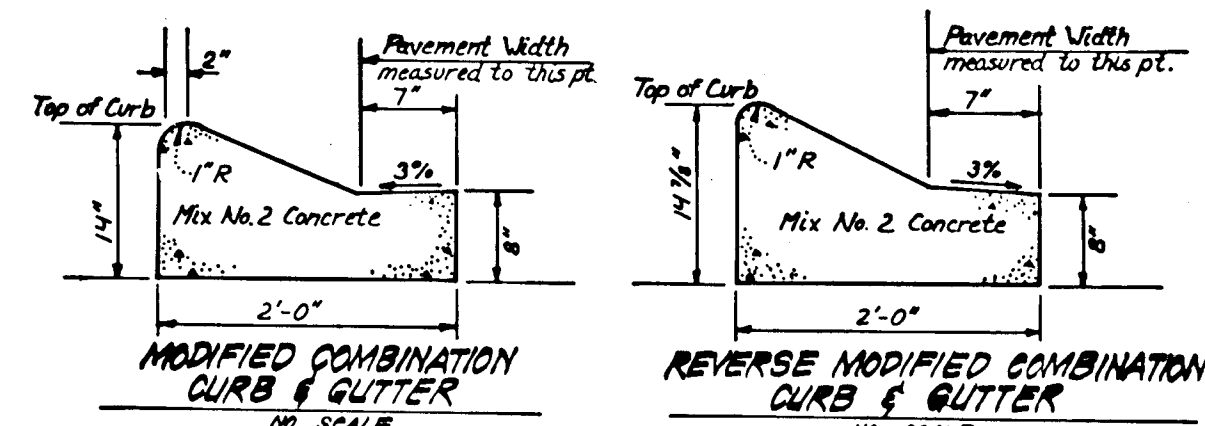
TYPICAL PAVING SECTION - PUBLIC ROADS

\* For Alternate Paving Section - See det. this sheet.

\* Match Existing Cross Slope (3.125%)  
 Note: Minimum Widening Strip to be 4'. See Ho. Co. Detail R.10.01.  
 \* For Alternate Paving Section See below (P.5)

TYPICAL HALF-SECTION - ROGERS AVENUE.

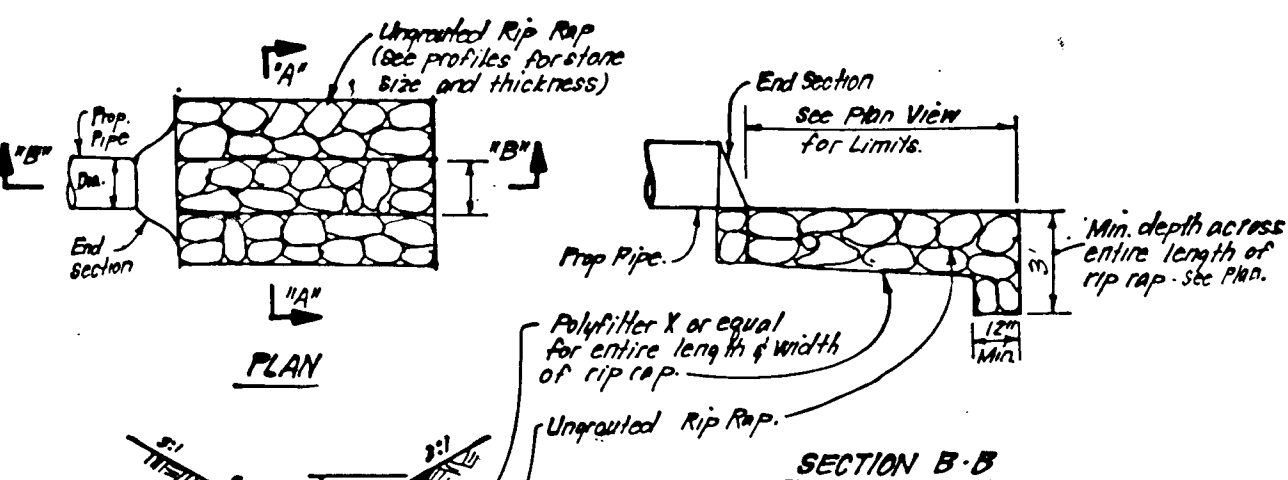
NO SCALE  
 STATION 9+50 to STATION 11+57



1 1/2" Bituminous Conc. Surface	1 1/2"
1 1/2" Bituminous Conc. Base	1 1/2"
5" Bituminous Conc. Base	5"
Prims	
8" Crusher Run Base Course or 6" Dense Graded Stabilized Aggregate Base Course	8" or 6"

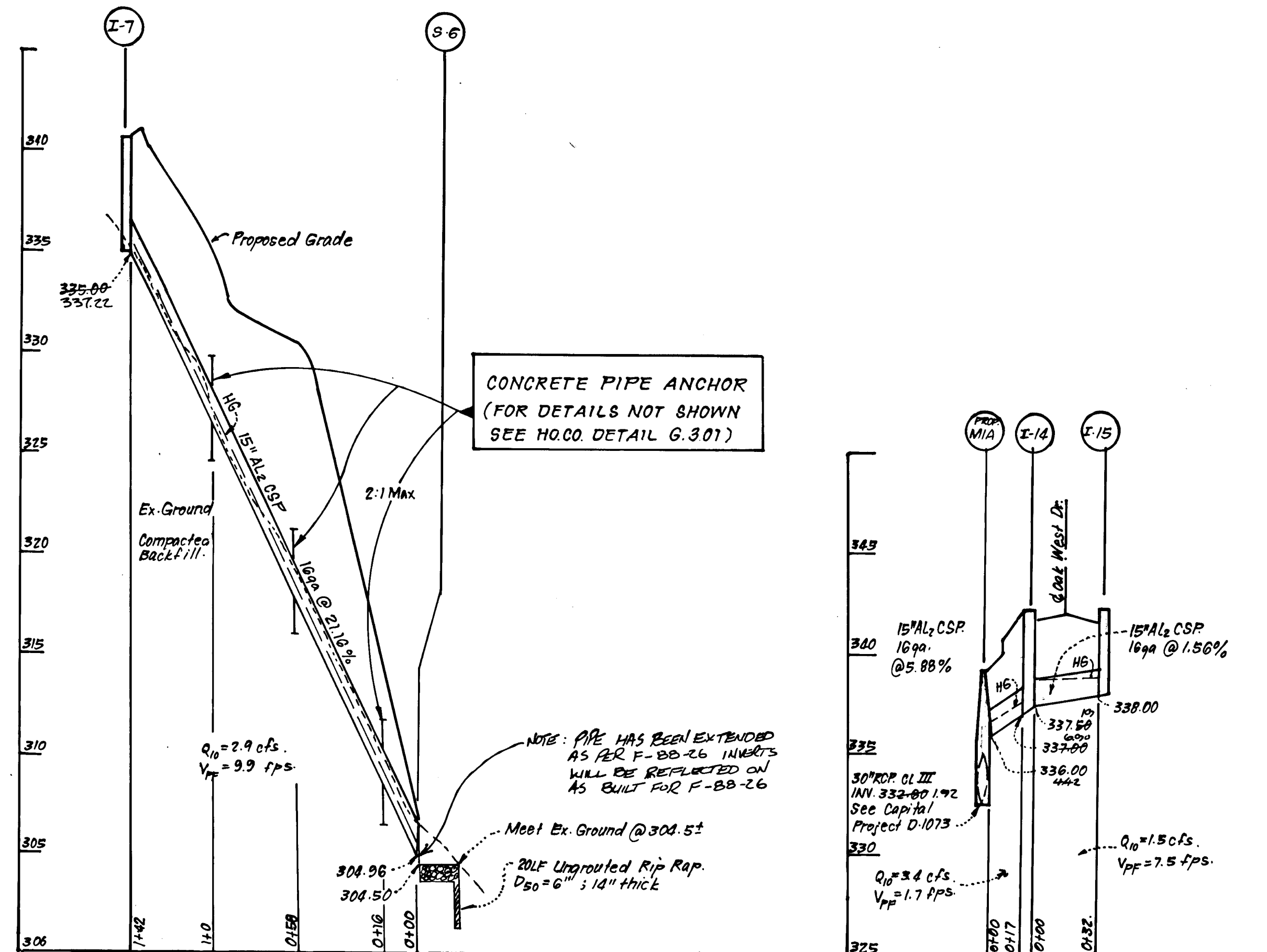
ALTERNATE PAVING SECTION FOR PUBLIC ROADS  
NO SCALE  
(SECTION P-2)

ALTERNATE PAVING SECTION FOR ROGERS AVENUE  
NO SCALE  
(SECTION P-5)



SECTION A-A

UNGRADED RIPRAP PAVING DETAILS  
NO SCALE



STORM DRAINAGE PROFILES

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

Date	No	Revision
7.14.89	2	Add Stationing note
9.23.87	1	Revised SD I-7 to S-6

STRUCTURE SCHEDULE

NR.	TYPE	INV. IN	INV. OUT	TOP ELEVATION		REMARKS	LOCATION
				UPPER	LOWER		
S-6	Metal End Section	304.96	304.50			Ho. Co. Std. SD 5.61	See Plan
I-7	A-10 Inlet			330.64	331.22	" SD 4.02 W=2'6"	" "
MIA	Brick Manhole	332.00	332.00	339.20	341.12	" G 5.01	" "
I-14	A-B Inlet w/Deflectors	337.50	337.50	341.23	341.23	" SD 4.01 W=2'6"	4 Inlet Sta. 0+15.6 Oak West Dr. 15.83' LT
I-15	A-B Inlet w/Deflectors		338.00	346.23	341.00	" SD 4.01 W=2'6"	6 Inlet Sta. 0+15.6 Oak West Dr. 15.83' RA

Structure Notes:

- All Inverts to be fully developed.
- For C & G Transitions @ applicable Inlets, See Ho. Co. Std. R.3.00.
- See Ho. Co. Std. SD 4.83 for Inlet Deflectors.
- Precast Concrete Manholes may be substituted for brick manholes See Ho. Co. Std. G-5.12.

\* NOTE: PIPE HAS BEEN EXTENDED AS PER F-88-26  
 INVERTS WILL BE REFLECTED ON AS-BUILT FOR F-88-26

PIPE SCHEDULE

SIZE	TYPE	LENGTH
15"	AL <sub>2</sub> CSP 16ga.	191 LF

\* 2 1/2" x 1/2" corrugations  
 CMP w/Aluminized coating (or other suitable erosion protective coating) may be substituted for AL<sub>2</sub>CSP

DEVELOPER'S/BUILDER'S CERTIFICATE

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*Joseph M. ...*  
 Signature of Developer/Builder  
 5-22-87  
 Date

Reviewed for Howard S.C.D.  
 Name  
 and meets Technical Requirements  
*James M. ...* 7-1-87  
 Signature Date  
 U.S. Soil Conservation Service

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

*Stephen L. ...* 7-1-87

ENGINEER'S CERTIFICATE

I hereby 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.

*G. Nelson Clark*  
 Signature  
 5-22-87  
 Date

APPROVED: DEPARTMENT OF PUBLIC WORKS

*William B. ...*  
 Signature  
 7-6-87  
 Date

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

*ACTIX ...*  
 Signature  
 7-2-87  
 Date

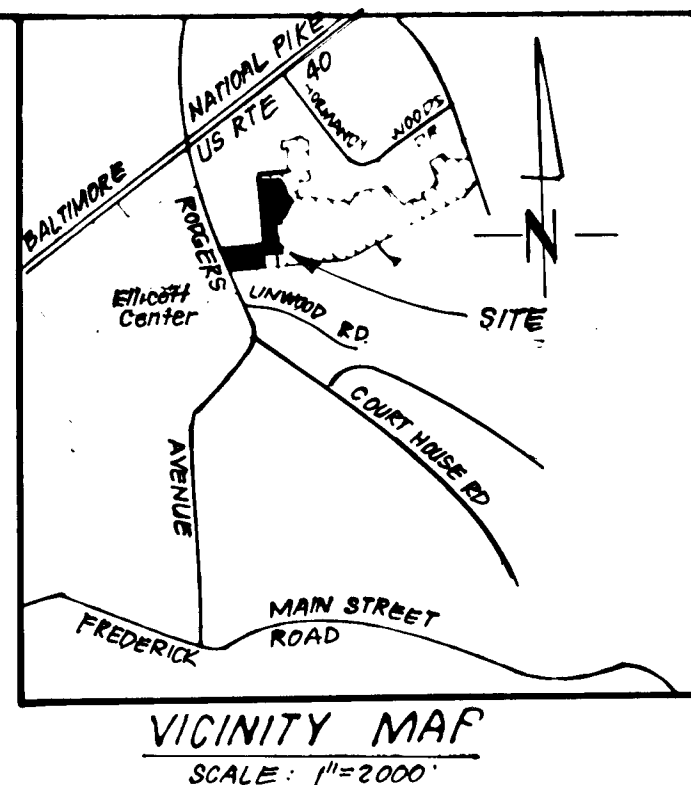
CLARK · FINEFROCK & SACKETT INC.  
 ENGINEERS · PLANNERS · SURVEYORS

11315 LOCKWOOD DRIVE · SILVER SPRING, MARYLAND 20904 · (301) 593-3400

DESIGNED	SCALE
GLB	AS SHOWN
DRAWN	DRAWING
KIW	2 OF 4
CHECKED	JOB NO
GLB	86-047
DATE	FILE NO.
5-22-87	86-047-D

F-87-12/ AS-BUILT JAN 24, 1992

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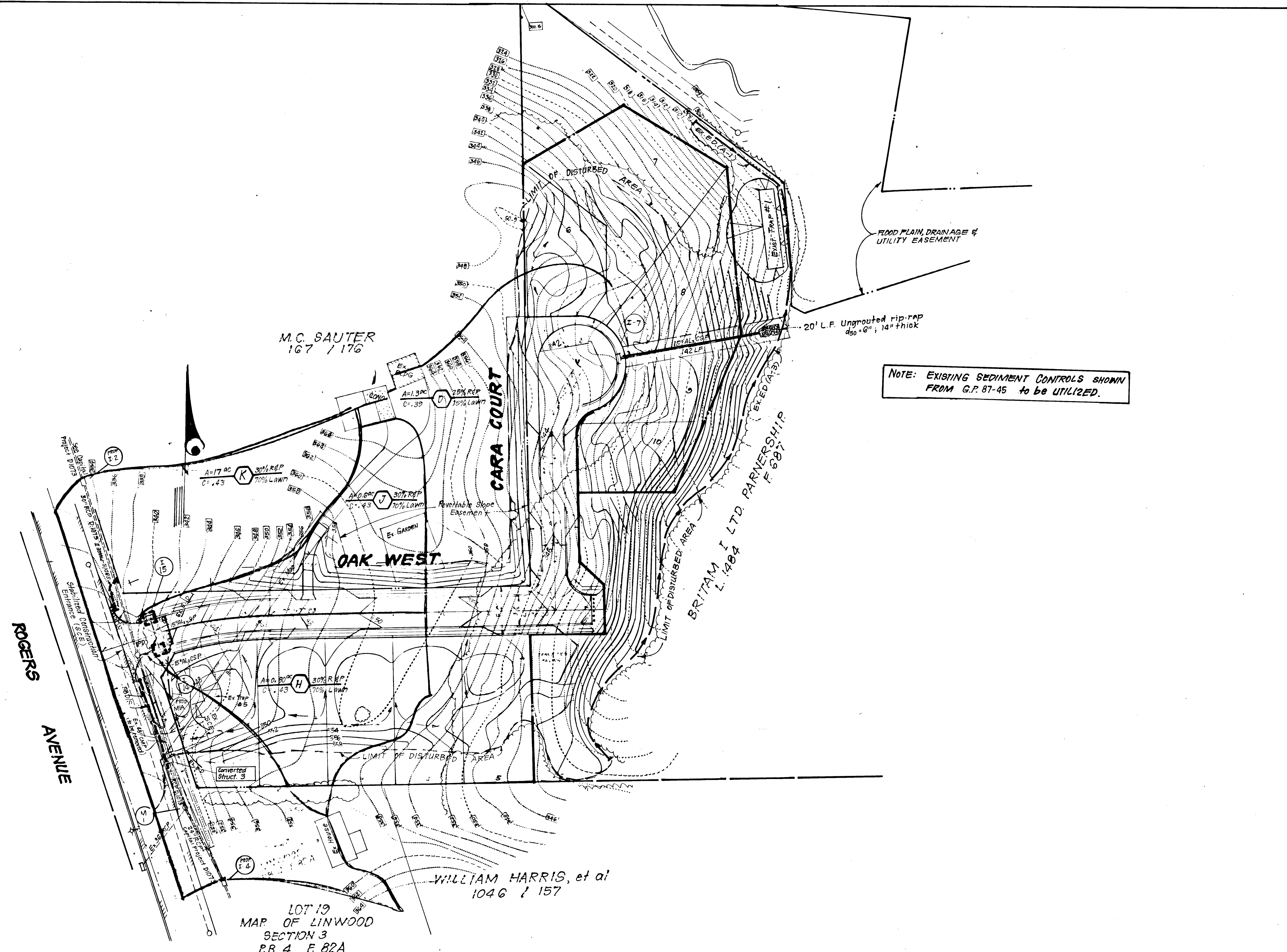


**LEGEND:**

- 1. Contour Interval 2 Ft
- 2. Existing Contour - - - - -
- 3. Proposed Contour - - - - -
- 4. Existing Earth Dike EX. E.D.(A-1)
- 5. Straw Bale Dike or Silt Fence SBD/S
- 6. Inlet Protection

**CONSTRUCTION SEQUENCE:**

	No. of Days
1. Obtain grading permit.	2
2. Install sediment controls and adjust/repair existing controls as necessary.	5
3. Rough grade as necessary.	10
4. Install storm drainage, paving & utilities.	100
5. Fine grade and stabilize site.	5
6. Upon approval of the sediment control inspector, remove sediment controls & stabilize.	5



NOTE: EXISTING SEDIMENT CONTROLS SHOWN FROM G.P. 87-45 to be UTILIZED.

No	Rev. Prop. I-13 to Converted Str. #3	Date
1	Rev. Prop. I-13 to Converted Str. #3	7-14-89
	REVISION	Date

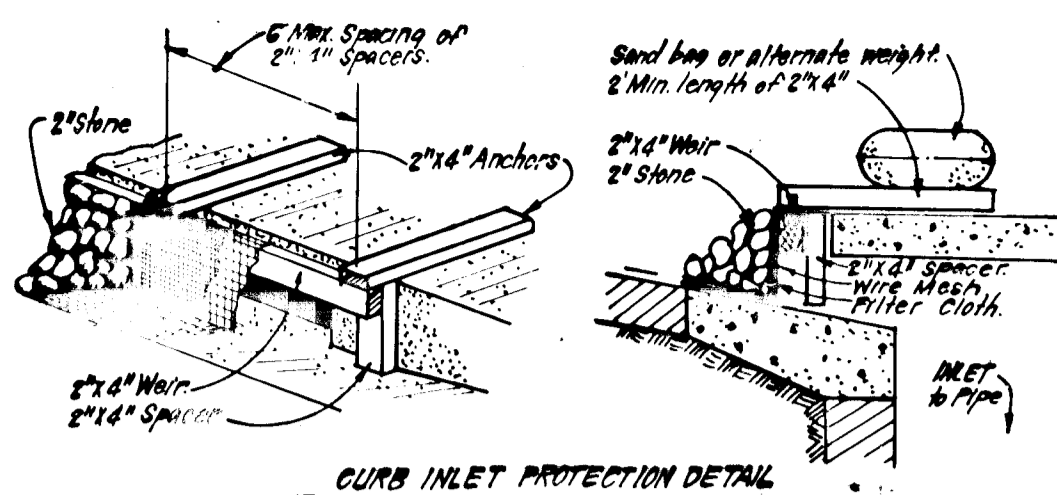
Reviewed for Howard S.C.D.  
 and meets Technical Requirements  
 Signature: [Signature] Date: 7-1-87  
 U.S. Soil Conservation Service  
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 Signature of Developer/Builder: [Signature] Date: 5-22-87

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 Signature: [Signature] Date: 5-22-87  
 G. Nelson Clark

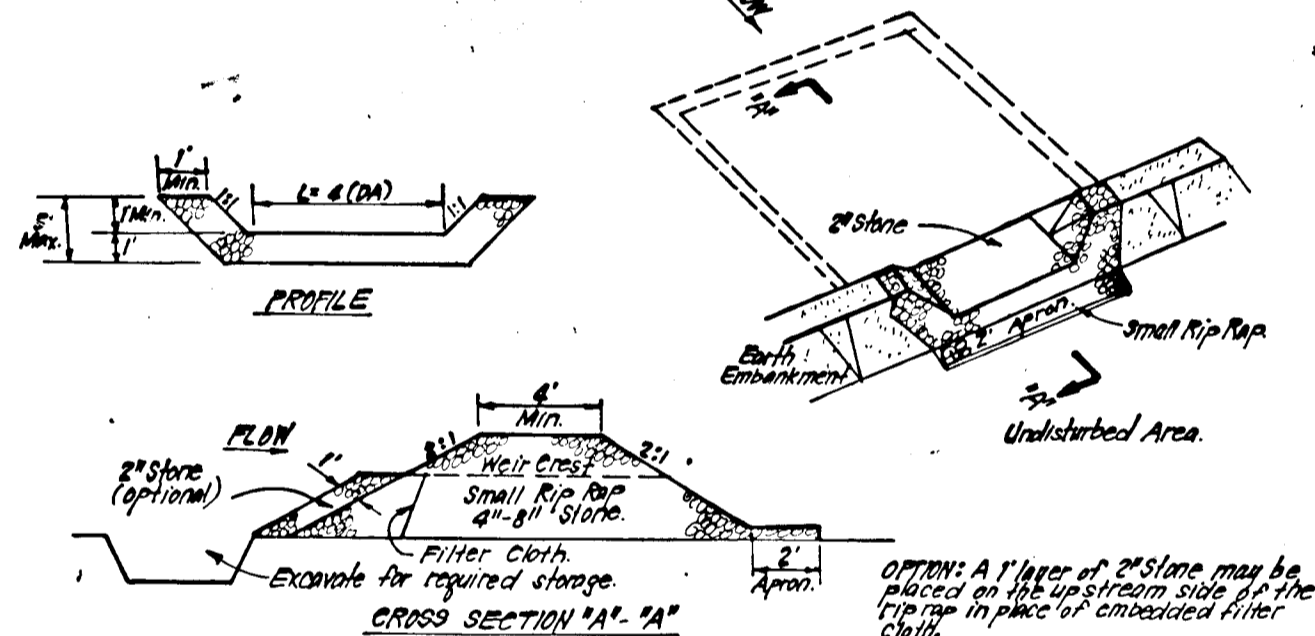
9-23-87	1	Rev. S.D. I-7 to 9-2
Date	No	Revision
APPROVED: DEPARTMENT OF PUBLIC WORKS		
[Signature]		7-6-87
Chief, Bureau of Engineering		Date
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING		
[Signature]		7-2-87
Chief, Division of Land Development & Zoning Administration		Date
<b>CLARK · FINEFROCK &amp; SACKETT INC.</b>		
ENGINEERS · PLANNERS · SURVEYORS		
11315 LOCKWOOD DRIVE · SILVER SPRING, MARYLAND 20904 · (301) 593-3400		
DESIGNED	ROAD CONSTRUCTION PLANS SEDIMENT & EROSION CONTROL PLAN & DRAINAGE AREA MAP	SCALE AS SHOWN
DRAWN	KIW	DRAWING 3 OF 4
CHECKED	GLB	JOB NO 86 047
DATE	FOR BRITAM DEVELOPMENT GROUP 9030 Red Branch Rd #550 Columbia Md. 21045	FILE NO 86 047 D
5-22-87		

8921



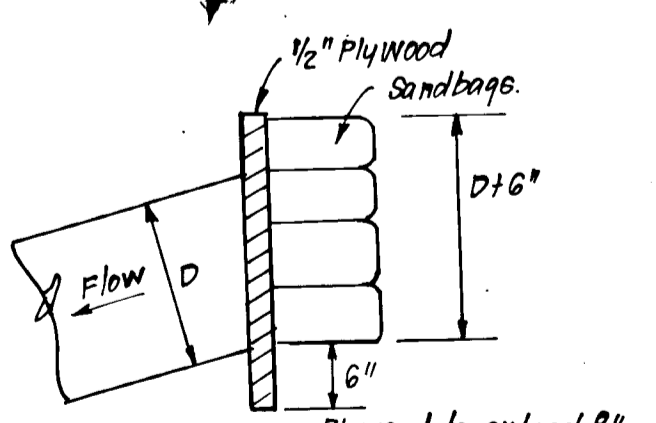
**CONSTRUCTION SPECIFICATIONS:**  
**MATERIALS:**  
 A. Wood frame is to be constructed of 2x4 construction grade lumber.  
 B. Wire mesh must be of sufficient strength to support filter fabric, and also for curb inlets, with water fully impounded upstream.  
 C. Filter cloth must be of a type approved for this purpose resistant to sunlight with a size, Eps. 30-45, to allow sufficient passage of water and removal of sediment.  
 D. Stone is to be 2" in size and clean, since fines would clog the cloth.  
**II. PROCEDURE: SWALE DITCHLINE OR VARD INLET PROTECTION**  
 1. Excavate swale around inlet to a depth of 18" below reach elevation.  
 2. Drive 2x4 posts 1" on center at 10' centers of inlet. Place nail strips between posts on ends of inlet. Assemble top portion of 2x4 frame using over lap joint (SWAY). Top of frame (weir) must be 6" below edge of roadway adjacent to inlet.  
 3. Stretch wire mesh tightly around frame and secure to posts. Ends must meet at post. Be sure mesh is tight and does not sag between posts.  
 4. Stretch filter cloth tightly over wire mesh. Cloth must extend from top of frame to 18" below inlet reach elev. Fasten securely to frame. Ends must meet at post. Be sure mesh is tight and does not sag between posts.  
 5. Backfill around inlet in compacted 6" layers until layer of earth is even with reach elevation on ends and top elevation on sides.  
 6. To the inlet is not in a low spring, construct a compacted earth dike in the ditch line below it. The top of this earth dike is to be at least 6" higher than the top of frame (weir).  
**III. PROCEDURE: CURB INLET PROTECTION**  
 1. Attach a continuous piece of wire mesh (30 min. width by throat length plus 4") to the 2x4 weir (measuring throat length plus 2" for drain on end drawings).  
 2. Place a piece of approved filter cloth (50-45 Gens.) of the same dimensions as the wire mesh over the wire mesh and securely attach to the 2x4 weir.  
 3. Securely nail the 2x4 weir to any vertical supports to be located between the weir and inlet (max. 6' apart).  
 4. Place the assembly against the inlet throat and nail (min. 2" lengths of 2x4" to the top of the weir at spaced locations. These 2x4" anchors shall extend across the inlet top and be tied in place by damming or otherwise using it.  
 5. The assembly shall be placed so that the end spacers are a min. 1" beyond both ends of throat opening.  
 6. From wire mesh and filter cloth to the concrete gutter and against the face of 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.  
 7. This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.  
 8. Assume that stone will be replaced, but by installing temporary earth or asphalt ditches directing flow to inlet.

**INLET PROTECTION DETAIL (I.P.D.)**  
NO SCALE

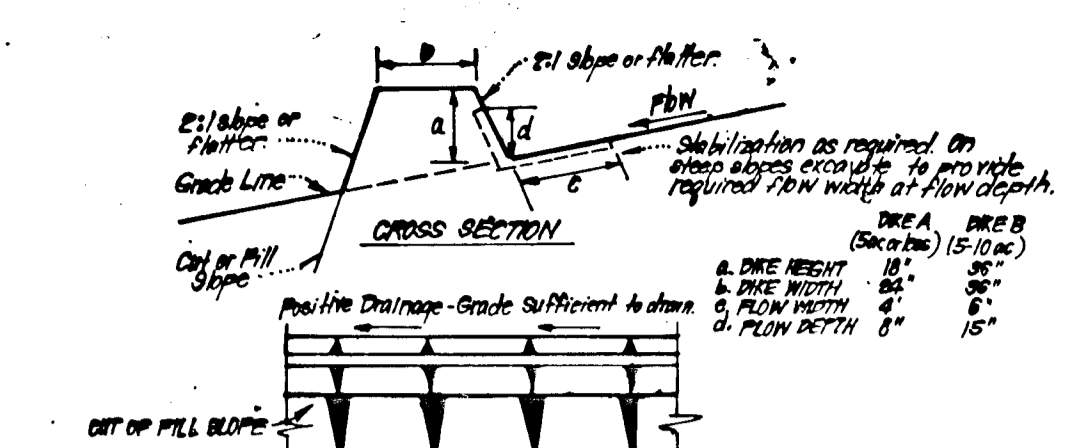


**CONSTRUCTION SPECIFICATIONS:**  
 1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The top area shall be graded.  
 2. The fill material for the embankment shall be free of rocks and other woody vegetation as well as oversized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by tamping with wire mesh and filter cloth.  
 3. All cut and fill slopes shall be 2:1 or flatter.  
 4. The stone used in the outlet shall be small rip rap 4" to 6" in size with a thickness of 2" appropriate placed on the upstream side of the outlet.  
 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.

**STONE OUTLET SEDIMENT TRAP (S.O.ST.) STY.**  
NO SCALE



**PIPE BLOCKING DETAIL**  
NO SCALE

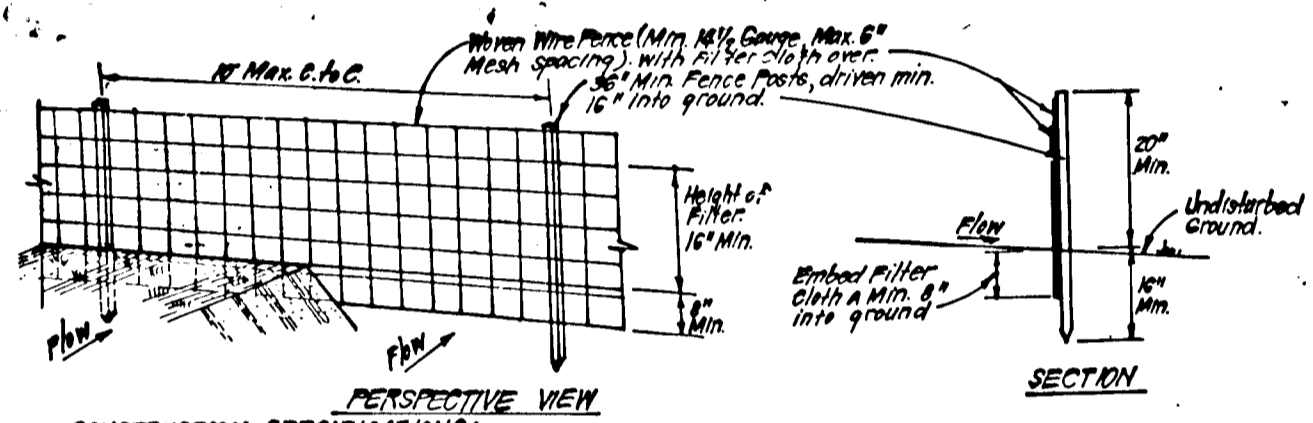


**CONSTRUCTION SPECIFICATIONS:**  
 1. All dikes shall be constructed by earth-moving equipment.  
 2. All dikes shall have positive drainage to an outlet.  
 3. Top width may be wider and side slopes may be flatter if desired to facilitate cleaning by maintenance vehicles.  
 4. Field location should be adjusted as needed to utilize a stabilized slope outlet.  
 5. Earth dikes shall have an outlet that functions with a minimum of erosion. Runoff shall be directed to a sediment trapping device such as a sediment trap or sediment basin where either the dike channel or the drainage area above the dike are not adequately stabilized.  
 6. Sediment traps shall be (A) in accordance with standard specifications for seed and straw mulch or (B) in accordance with standard specifications for seed and straw mulch or (C) in accordance with standard specifications for seed and straw mulch as per chart below.

TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1	0.5-3.0%	Seed and straw mulch	Seed and straw mulch
2	3.1-5.0%	Seed and straw mulch	Seed and straw mulch
3	5.1-8.0%	Seed and straw mulch	Seed and straw mulch
4	8.1-10.0%	Lined Rip Rap 4" Stone	Lined Rip Rap 4" Stone

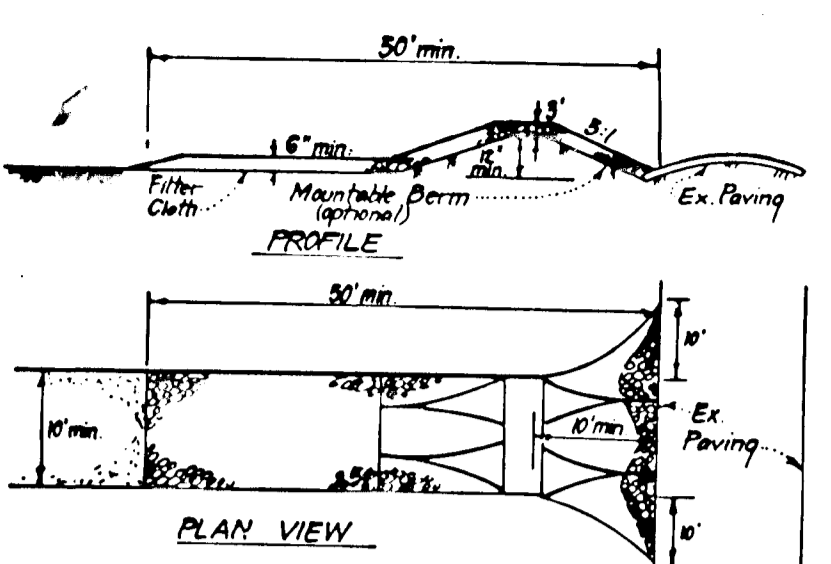
A. Stone to be 2" size, or recycled concrete equivalent, in a layer at least 3" thick and be pressed into soil with construction equipment.  
 B. Rip rap to be 4" in a layer at least 3" thick, pressed into soil.  
 C. Approved equivalents can be substituted for any of the above materials.  
 7. Periodic inspection and required maintenance must be provided after each rain.

**EARTH DIKE DETAIL (E.D.)**  
NO SCALE



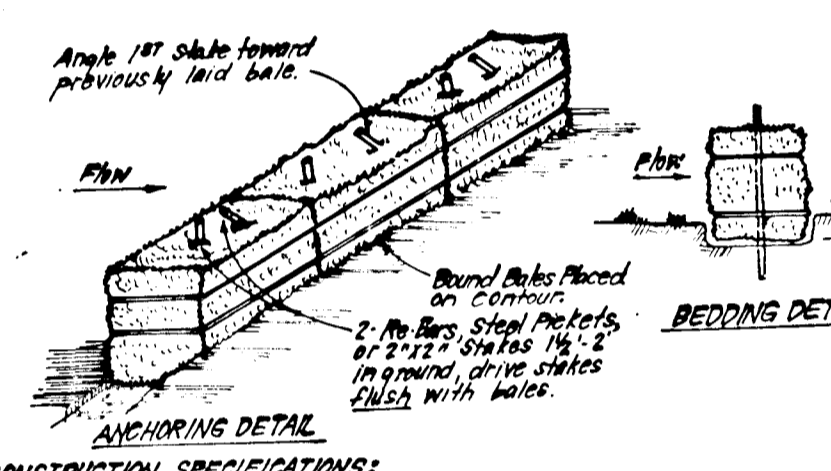
**CONSTRUCTION SPECIFICATIONS:**  
 1. Woven wire fence to be fastened securely to fence posts with wire ties or staples.  
 2. Filter cloth to be fastened securely to woven wire fence with ties spaced every 8' at top and mid sections.  
 3. When 2 sections of filter cloth adjoin each other they shall be overlapped by 6" and stapled.  
 4. Maintenance shall be performed as needed and material removed when "bulges" develop in silt fence.  
 POSTS: Steel either T or I Type or 2" Hardwood  
 FENCE: Woven Wire, 1 1/4 Gage 6" Max. Mesh opening  
 FILTER CLOTH: Filter, Mynal, Mynal, Sublimite, TIRON or Approved  
 PREFABRICATED UNIT: Geofab, Earthforce, or Approved equal.

**SILT FENCE DETAIL (S)**  
NO SCALE



**CONSTRUCTION SPECIFICATIONS:**  
 1. Stone size - Use 2" stone or reclaimed or recycled concrete equivalent.  
 2. Length - As required, but not less than 50 feet (exception a single residence lot where a 30 foot minimum length would apply).  
 3. Thickness - Not less than six (6) inches.  
 4. Width - Ten (10) foot minimum, but not less than the full width of points where ingress or egress occurs.  
 5. Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a slope flatter than 2:1.  
 6. Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mounted curb with 3" depth 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 cleaning of any measures used to trap sediment. All material applied, dragged, 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 (SCE)**  
NO SCALE



**CONSTRUCTION SPECIFICATIONS:**  
 1. Bales shall be placed at the top of a slope or on the contour and in a row with ends tightly abutting the adjacent.  
 2. Each bale shall be embedded in the soil a min. of 4" and placed so the bindings are horizontal.  
 3. Bales shall be securely anchored in place by either 2 stakes or re-bars driven thru the bale.  
 4. The 1st stake in each row shall be driven toward the previously laid bale at an angle to force the bales together. Stakes shall be driven flush with the bale.  
 5. Inspection shall be frequent and repair/replacement shall be made promptly as needed.  
 6. Bales shall be removed when they have served their usefulness so as not to block or impede storm flow or drainage.

**STRAW BALE DIKE DETAIL (SBD)**  
NO SCALE

**SEDMENT CONTROL NOTES**

- 1) A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (992-2437)
- 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 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- 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 greater than 2:1, b) 14 days as to all other disturbed or graded areas on the project site.
- 4) All sediment traps/basins shown must be fenced and warning signs posted around their 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 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 5) and temporary seedings (Sec. 50) and mulching (Sec. 51). Temporary stabilization with mulch alone 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 permission for their removal has been obtained from the Howard County Sediment Control Inspector.
- 7) Site Analysis:  
 Total Area of Site: 26.66 Acres  
 Area Disturbed: 4.45 Acres  
 Area to be vegetatively stabilized: 2.90 Acres  
 Total Cut: Cu. yds.  
 Total Fill: Cu. yds.  
 Office waste/hazardous area location: N/A  
 \* Site Previously Graded:  
 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 control must be provided, if deemed necessary by the Howard County DSW sediment control inspector.  
 10) On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be required 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.  
 11) If houses are to be constructed on an "As-Built" basis, at random, Single Lot Sediment Control as shown below shall be implemented. N/A  
 12) All pipes to be blocked at the end of each bay (see detail below).  
 13) The total amount of straw bale dikes/silt fence equals 150 L.F.

**PERMANENT SEEDING NOTES**

- Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.
- Seeding Preparation:** Loosen upper three inches of soil by raking, disking or other acceptable means before seeding.
- Soil Amendments:** In lieu of soil test recommendations, use one of the following schedules:  
 1) Preferred - 100 lbs per acre dolomitic limestone (92 lbs/1000 sq ft) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding. Narrow or disc 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).  
 2) 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. Narrow or disc 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 60 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 60 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 reseeding.

**TEMPORARY SEEDING NOTES**

- Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is needed.
- Seeding Preparation:** Loosen upper three inches of soil by raking, disking or other acceptable means before seeding.
- 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 November 15, seed with 25 bushel per acre of annual ryegrass (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 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

APPROVED: DEPARTMENT OF PUBLIC WORKS  
 Approved: [Signature] 7-6-87 Date  
 Chief, Bureau of Engineering  
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING  
 Approved: [Signature] 7-2-87 Date  
 Chief, Division of Land Development & Zoning Administration

**CLARK · FINEFROCK & SACKETT INC.**  
 ENGINEERS · PLANNERS · SURVEYORS  
 11315 LOCKWOOD DRIVE · SILVER SPRING, MARYLAND 20904 · (301) 593-3400

DESIGNED	GLB	SCALE	As Shown
DRAWN	KIW	DRAWING	4 of 4
CHECKED	GLB	JOB NO	86-047
DATE	5-22-87	FILE NO	86-047-D

**ROAD CONSTRUCTION PLANS**  
**SEDIMENT & EROSION CONTROL DETAILS**

**OAK WEST**  
 SECTION 1 AREA 1  
 2ND ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

FDR: BRITAM DEVELOPMENT GROUP  
 9030 Red Branch Rd. #250  
 Columbia Md. 21045

F-87-121 AS-BUILT JAN. 24, 1992

Reviewed for [Signature] Howard S.C.D. Name and meets Technical Requirements  
 Signature Date  
 U.S. Soil Conservation Service  
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
 Approved Date

**DEVELOPER'S/BUILDER'S CERTIFICATE**  
 "We certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary."  
 [Signature] 5-22-87 Date  
 Signature of Developer/Builder

**ENGINEER'S CERTIFICATE**  
 I hereby 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.  
 [Signature] 5-22-87 Date  
 G. Nelson Clark

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