

**GENERAL NOTES**

- All storm drain and Paving shall be constructed in accordance with the latest details and Specifications of Howard County & M.D. 514.
- Types of storm drain structures refer to the Standard Details of Howard County and Maryland State Highway Administration.
- Trench compaction for storm drains within Road or Street Rights-of-Way limits shall be in accordance with Howard Co. Design Manual Vol. IX (Class C Trench Bedding to be used under all storm drains, except where shown otherwise).
- Information concerning underground utilities was obtained from available records, but the contractor must determine the exact location and elev. of the mains by digging test pits, by hand, at all crossings, well in advance of construction.
- All utility companies shall be notified 24 hrs. in advance of construction.
- All traffic control devices, parking, and signing to be done in accordance with the "Manual of Uniform Traffic Control Devices," 1978 Edition.
- Sag or Crest Vertical curves were designed in accordance with "Howard County Design Manual Vol. III".
- Provide Concrete Sidewalk Ramps, Ho. Co. Std. Type A, R-4.01 where shown in plan.
- Design Speed: 30 mph.
- Storm Water Management Provided in central Facility for Glenshire Towne, Sect. 1, F-85-12.
- Contractor or Developer shall contact the Construction Inspection/Survey Division 24 hours before commencing work at 792-7272.
- Provide 175 watt modern post top fixture on a 14' grey Fiberglass pole. Street light to be located and constructed in accordance with Ho. Co. Design Manual Volume III.

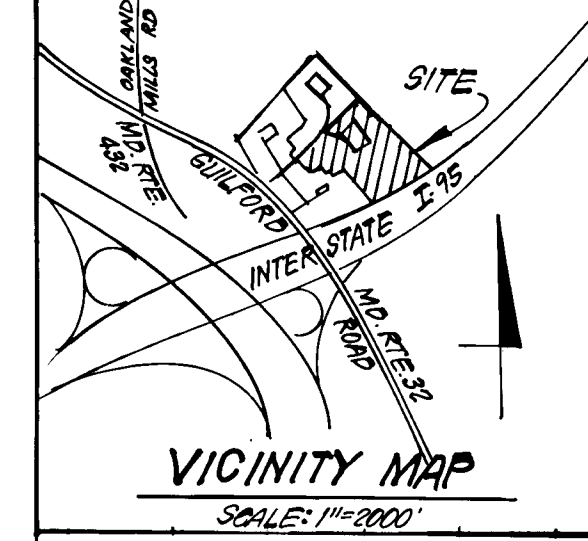
4 CURVE DATA  
PC: 6151.57 to PT: 6119.12  
R= 320.00'  
Δ= 30°00'00"  
L= 167.55'  
T= 85.74'  
CHD= N22°16'43"W  
195.64'

4 CURVE DATA  
PC: 0150.07 to PT: 3135.54  
R= 670.00'  
Δ= 24°24'11"  
L= 285.47'  
T= 144.93'  
CHD= S48°12'28"E- 283.31'

**CURB & GUTTER LEGEND**  
Std. 7" Comb. C&G  
Rev. 7" Comb. C&G  
Std. 6" Comb. C&G  
Rev. 6" Comb. C&G

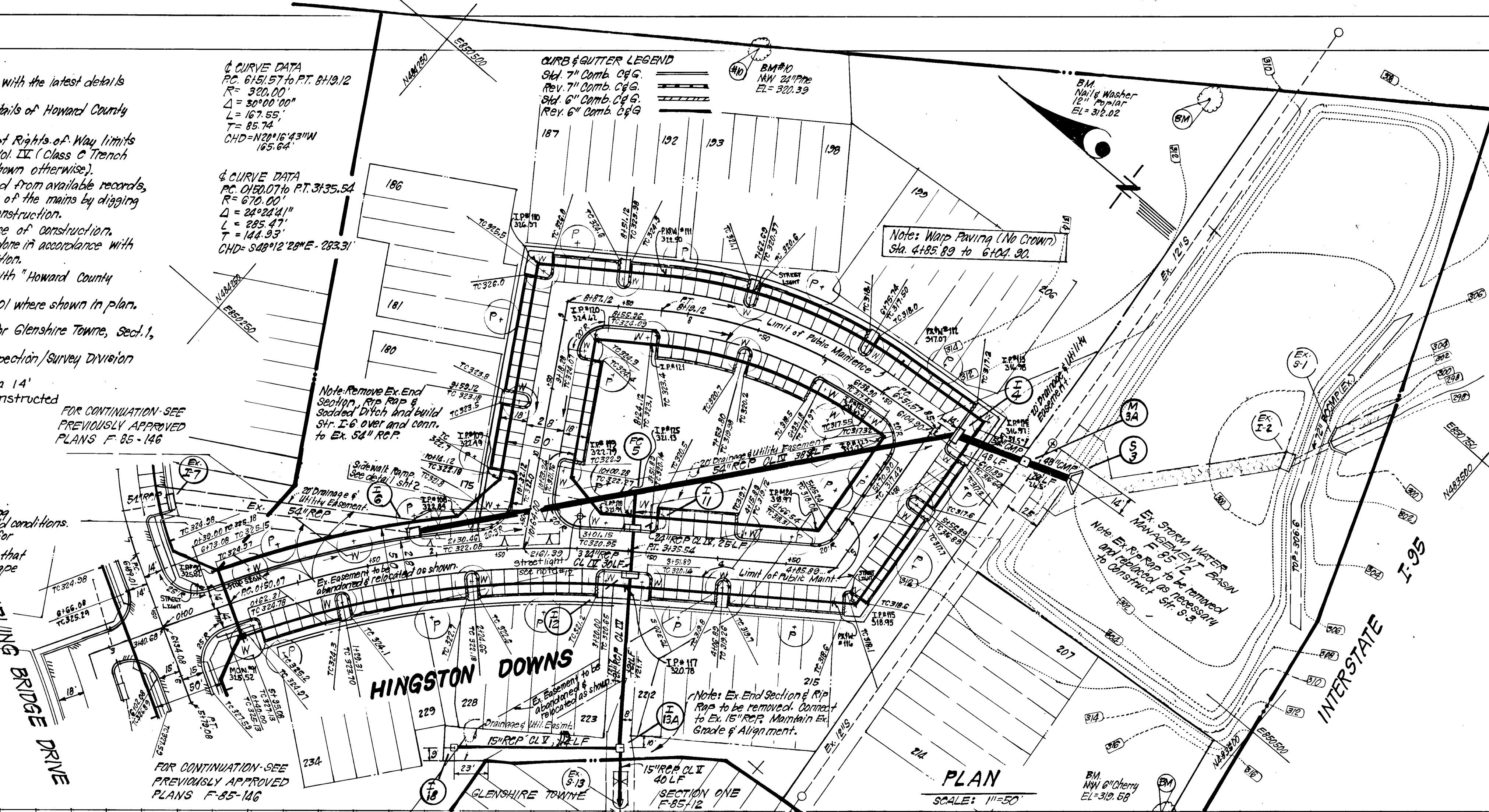
KEY	PLANT NAME	SIZE	QUANT.	REMARKS
P	QUERCUS PALUSTRIS PIN OAK	2 1/2" CAL MIN.	20	B&B HEAVY HEADS
W	QUERCUS PHELLOS WILLOW OAK	"	28	"

**NOTES:**  
1. Contractor shall verify location of underground utilities prior to digging.  
2. Plant locations of trees may be adjusted slightly to accommodate field conditions.  
3. Planting procedures shall comply with "Landscape Specifications for Baltimore-Washington Metropolitan Areas."  
4. Substitutions to the above species may be permitted provided that the planting is in accordance with the street tree and landscape requirements as specified in Section 16.131 of the Howard Co. SS Subdivision Regulations.



FOR CONTINUATION-SEE  
PREVIOUSLY APPROVED  
PLANS F-85-146

FOR CONTINUATION-SEE  
PREVIOUSLY APPROVED  
PLANS F-85-146



**PLAN**  
SCALE: 1"=50'

**DEVELOPER'S/BUILDER'S CERTIFICATE**  
"I/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 of Developer/Builder: JOHN STRYGAK  
Date: 8-1-85



**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.  
Reviewed for: F. L. HARRIS, B.C.D. and meets Technical Requirements  
Signature: [Signature] Date: 1-23-86  
U.S. Soil Conservation Service  
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
Signature: [Signature] Date: 1/23/86  
Signature: [Signature] Date: 7-23-85

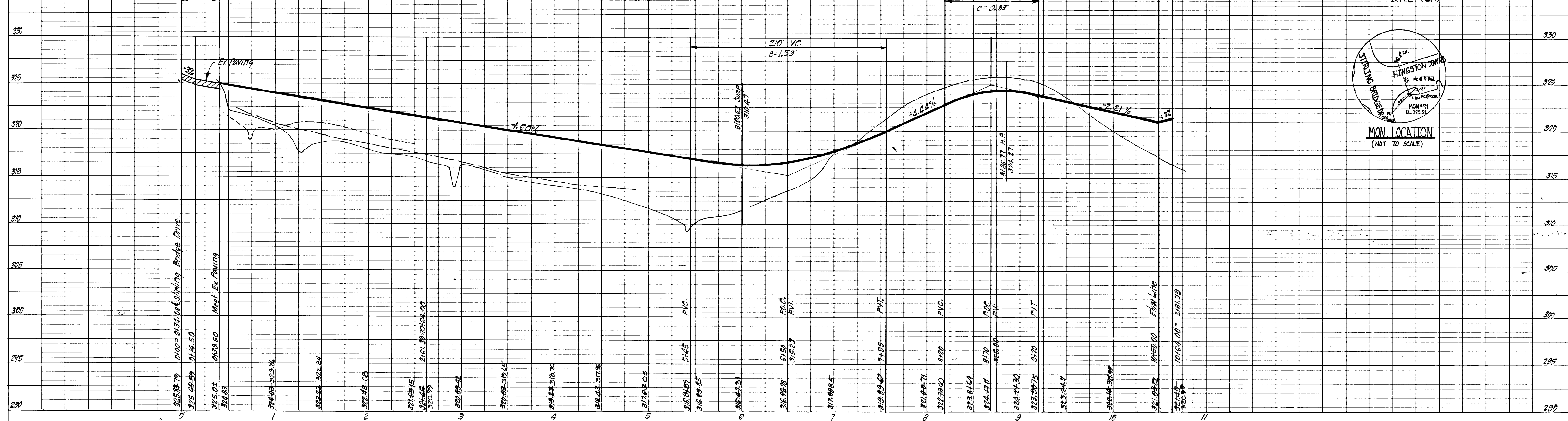
APPROVED: Department of Public Works  
Signature: [Signature] Date: 1-29-86  
Chief, Bureau of Engineering  
APPROVED: Howard County Office of Planning & Zoning  
Signature: Louis F. [Signature] Date: 1-24-86  
Chief, Division of Land Development & Zoning Administration

**CLARK • FINEFROCK & SACKETT**  
ENGINEERS • PLANNERS • SURVEYORS  
11314 LOCKWOOD DRIVE • SILVER SPRING, MARYLAND 20904 • (301) 593-3400

DESIGNED	ROAD CONSTRUCTION PLANS HINGSTON DOWNS	SCALE	AS SHOWN
DRAWN		DRAWING	1 OF 3
CHECKED		JOB NO.	81-060
DATE	JULY 1985	FILE NO.	81-060-D

FOR: PLUTE HOME CORP.  
1180 NEW HAMPSHIRE AVE.  
SILVER SPRING, MD. 20904

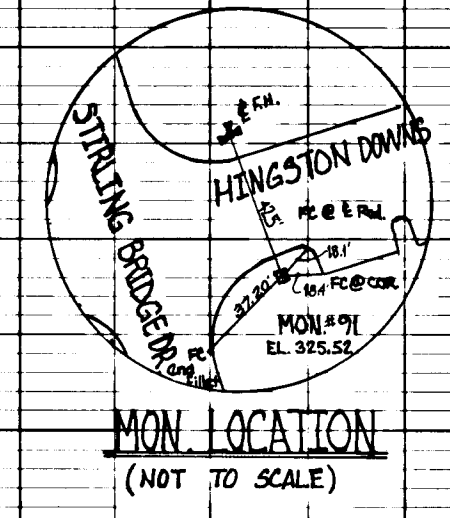
**PROFILE HINGSTON DOWNS**



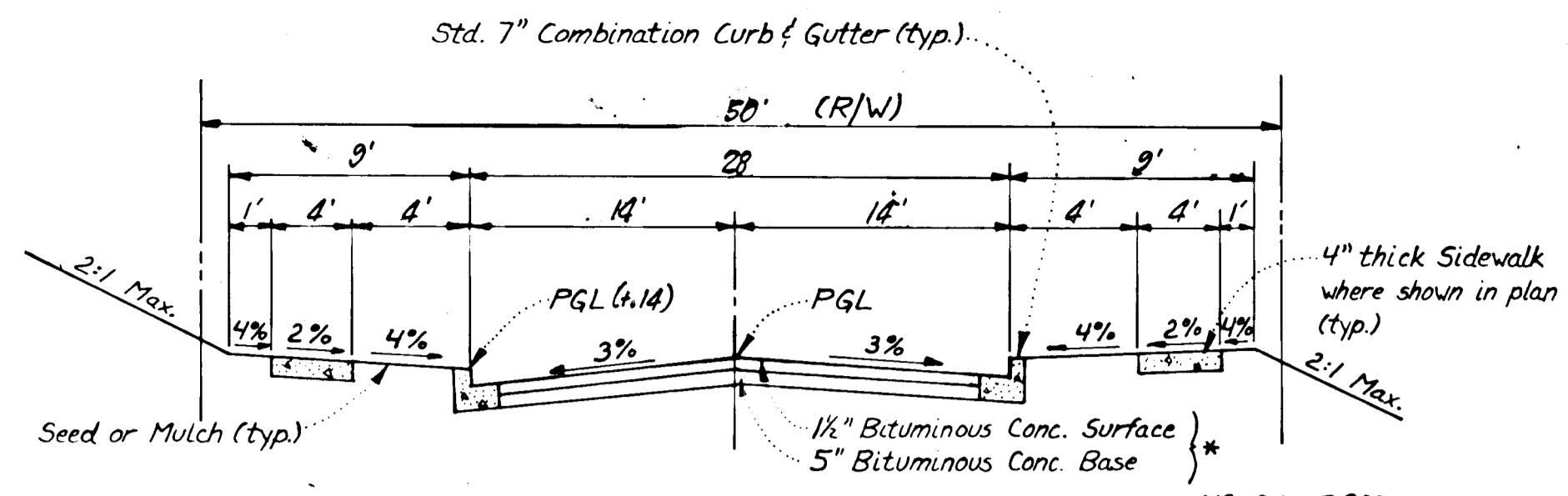
AS-BUILT SURVEY CERTIFIED BY  
DONALD B. SACKETT, Md. I.S.  
NO. 60592 ON 3-16-88.

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

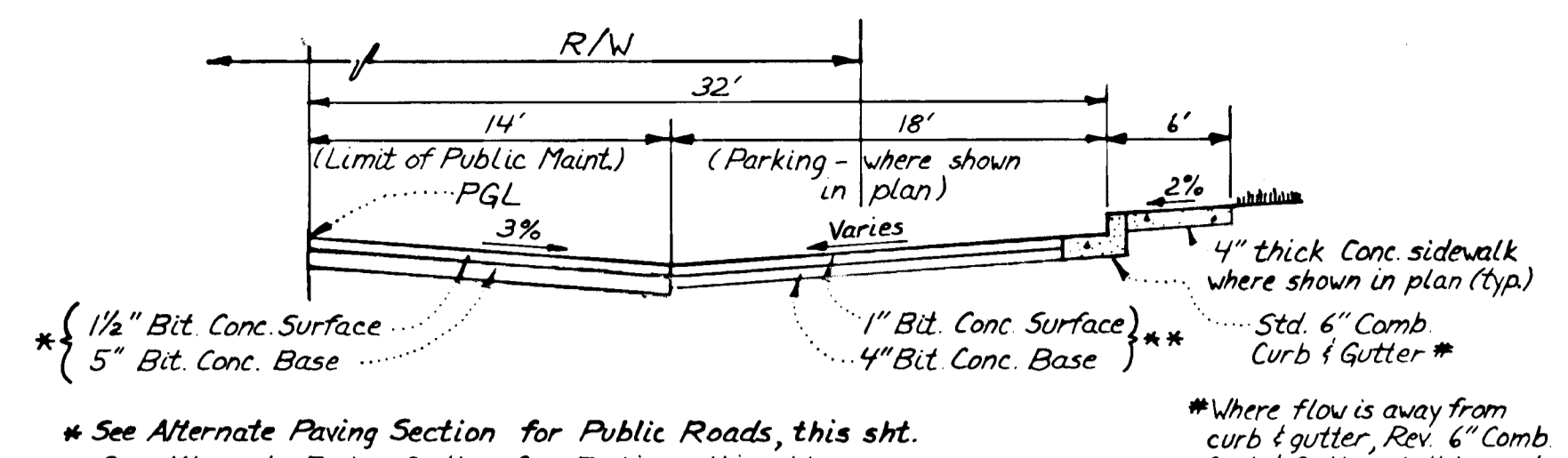
PROFILE LEGEND  
Profile Grade Line  
Existing G.  
B.R.L. (R.F.)  
B.R.L. (L.F.)



#1098

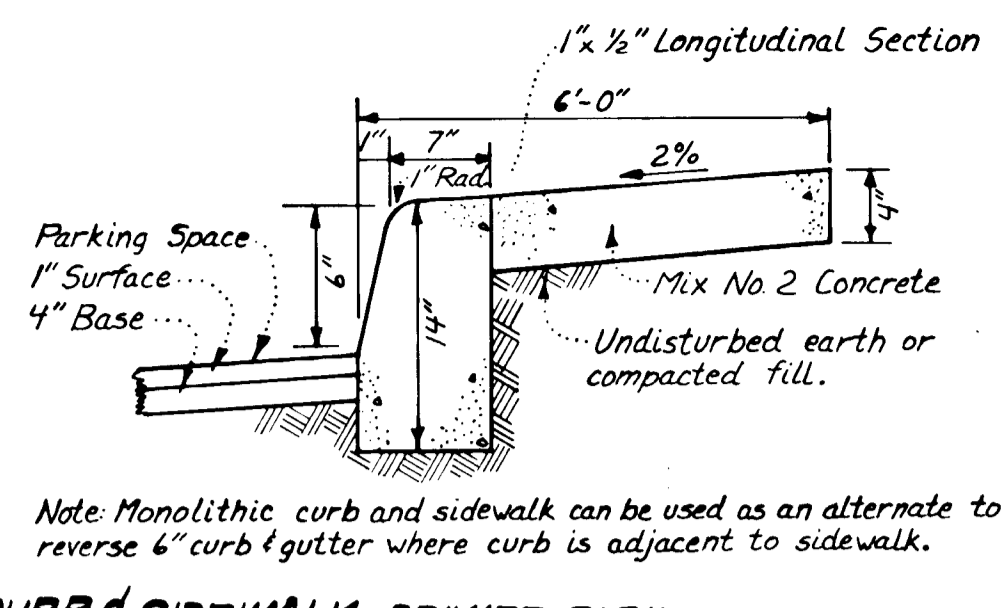


**TYPICAL PAVING SECTION - PUBLIC ROADS**  
 HINGSTON DOWNS - STA. 0100 TO 0162.31  
 NO SCALE  
 \* For Alternate Paving Section - See det. this sht.

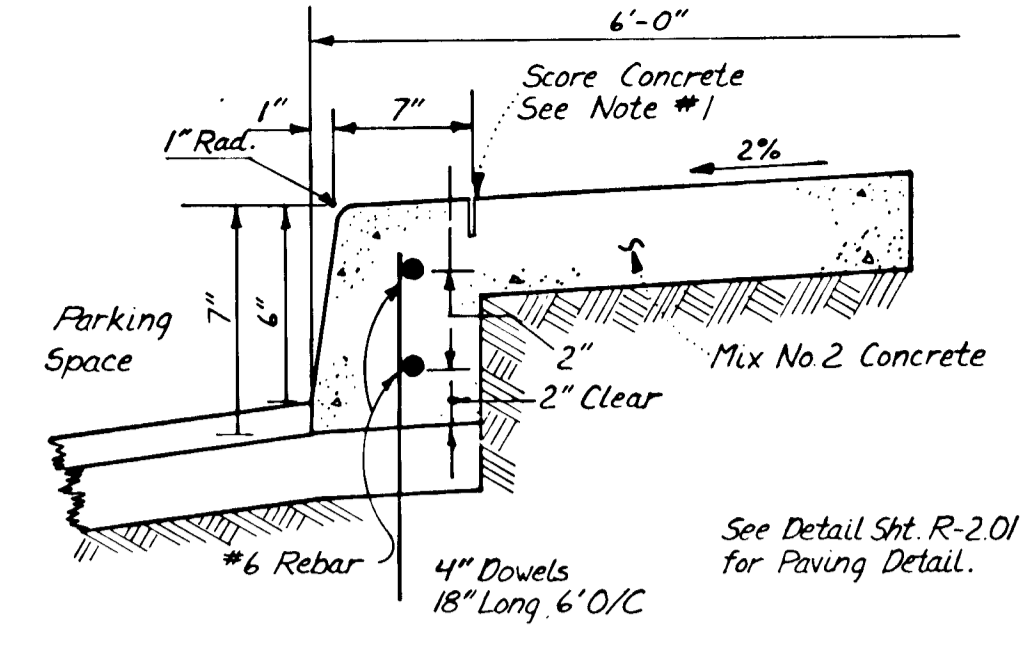


**TYPICAL HALF SECTION - PARKING ADJACENT TO PUBLIC ROADS**  
 HINGSTON DOWNS - STA. 0162.31 TO 10164.00  
 NO SCALE  
 \* See Alternate Paving Section for Public Roads, this sht.  
 \*\* See Alternate Paving Section for Parking, this sht.

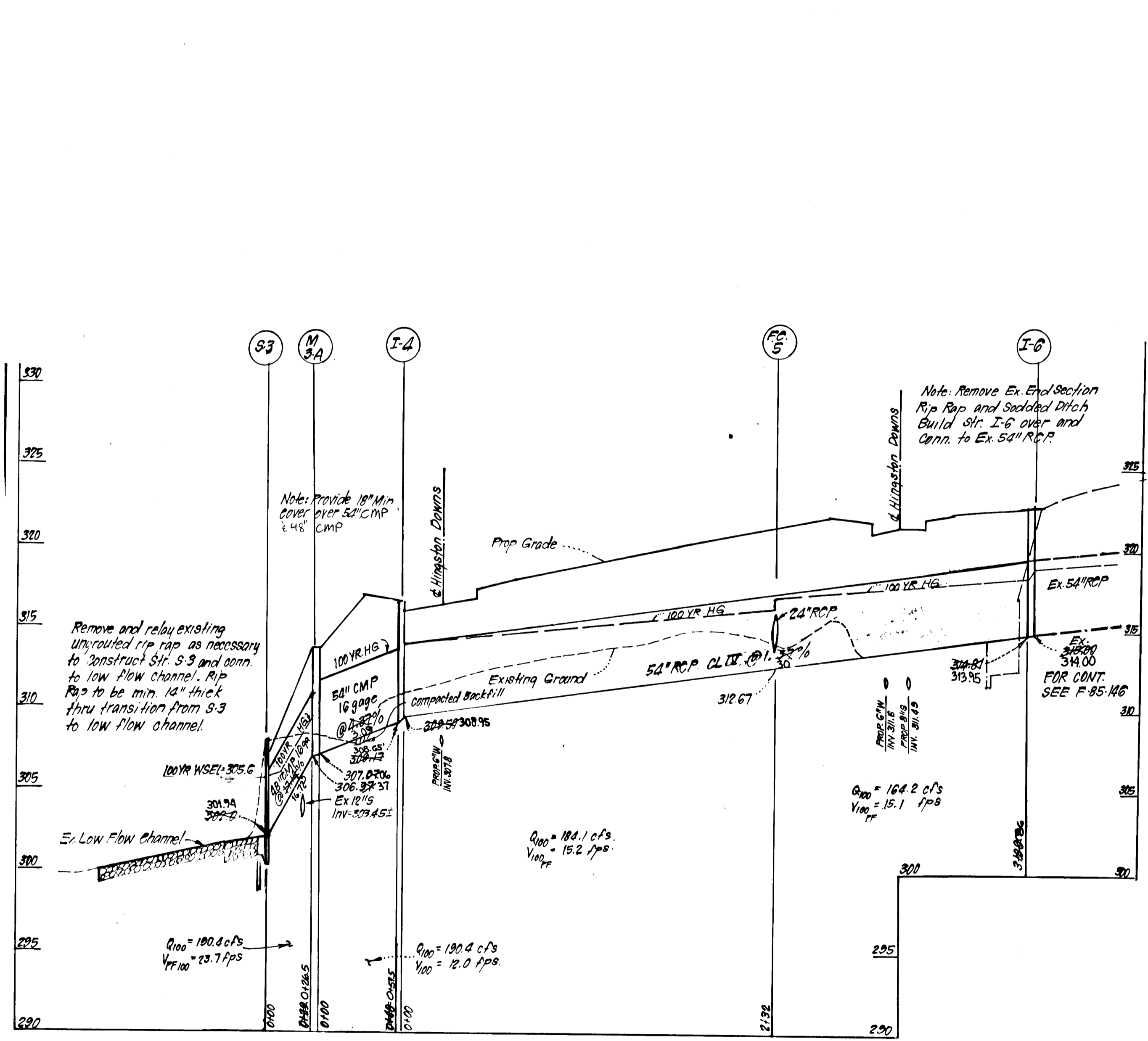
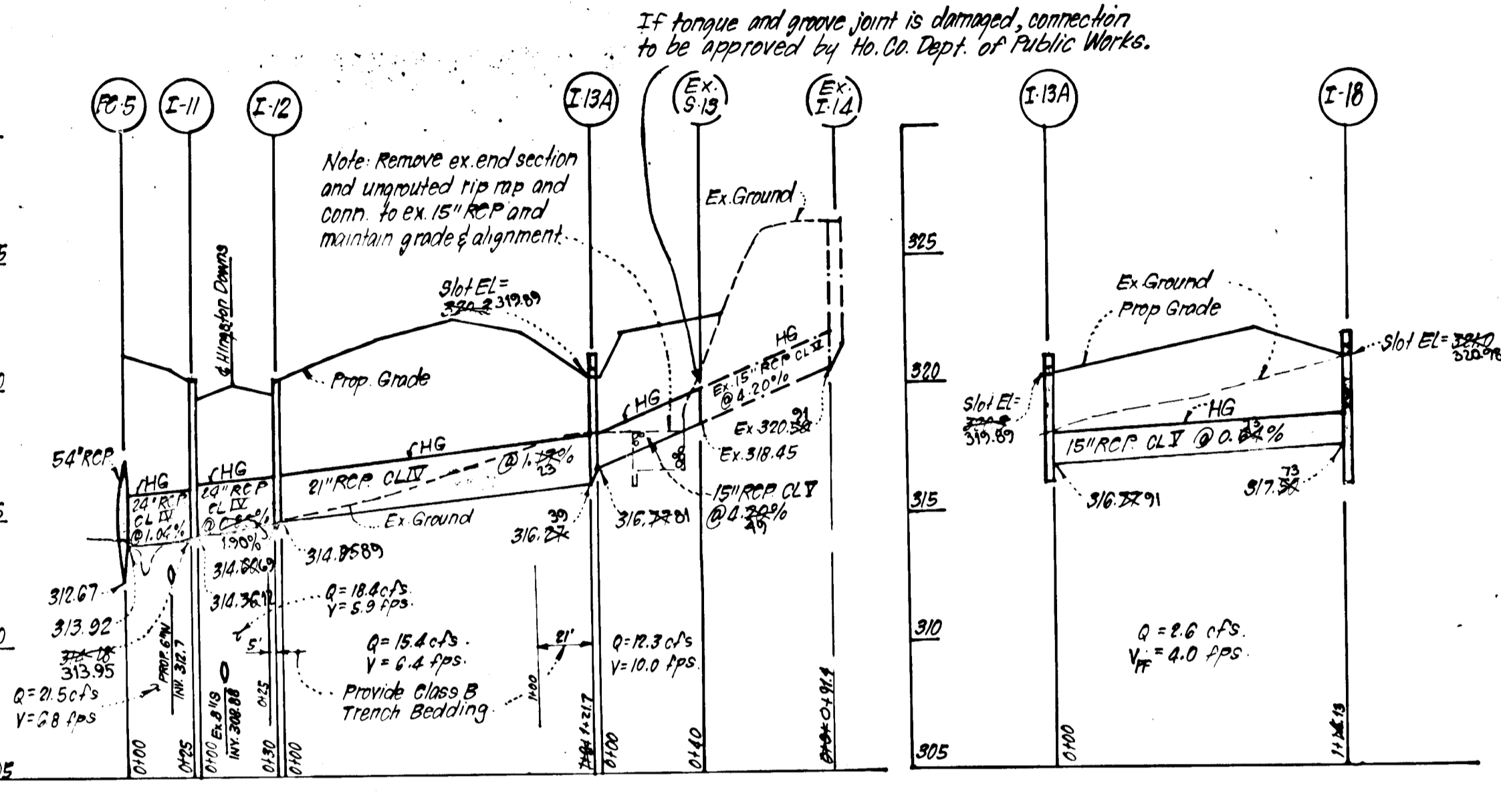
Notes:  
 1. Longitudinal joint between sidewalk & curb shall be continuous and to a depth of 1/4 the thickness of the sidewalk or 1" longitudinal joints shall run from back edge of sidewalk continuous to the bottom face of curb to a depth of 1/4 the sidewalk thickness or 1" and spaced 5' apart.  
 2. Provide 1/2" expansion joints at 15' intervals, in longitudinal joints to full cross-section.



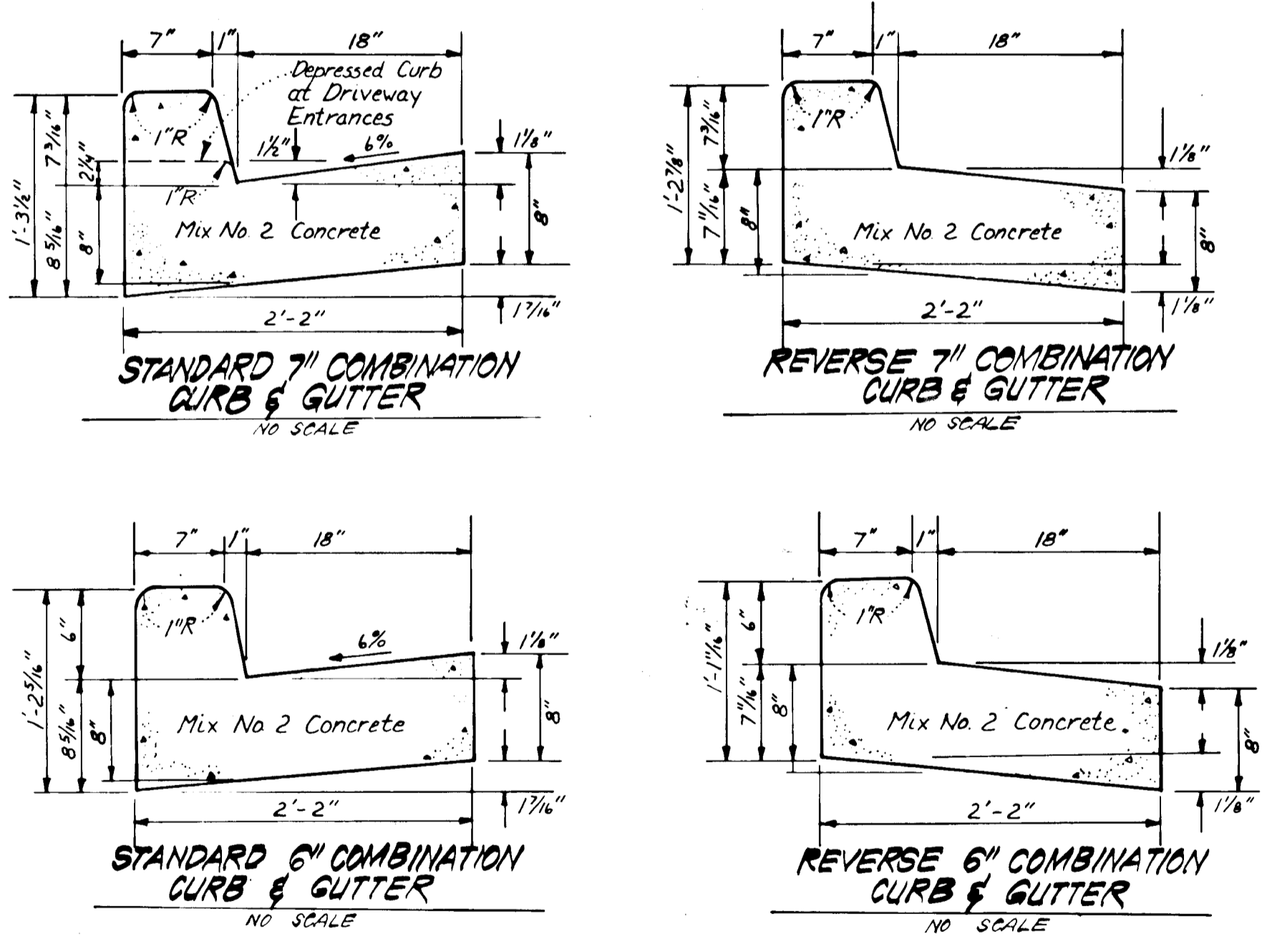
**MONOLITHIC CURB & SIDEWALK - PRIVATE PARKING AREA**  
 NO SCALE



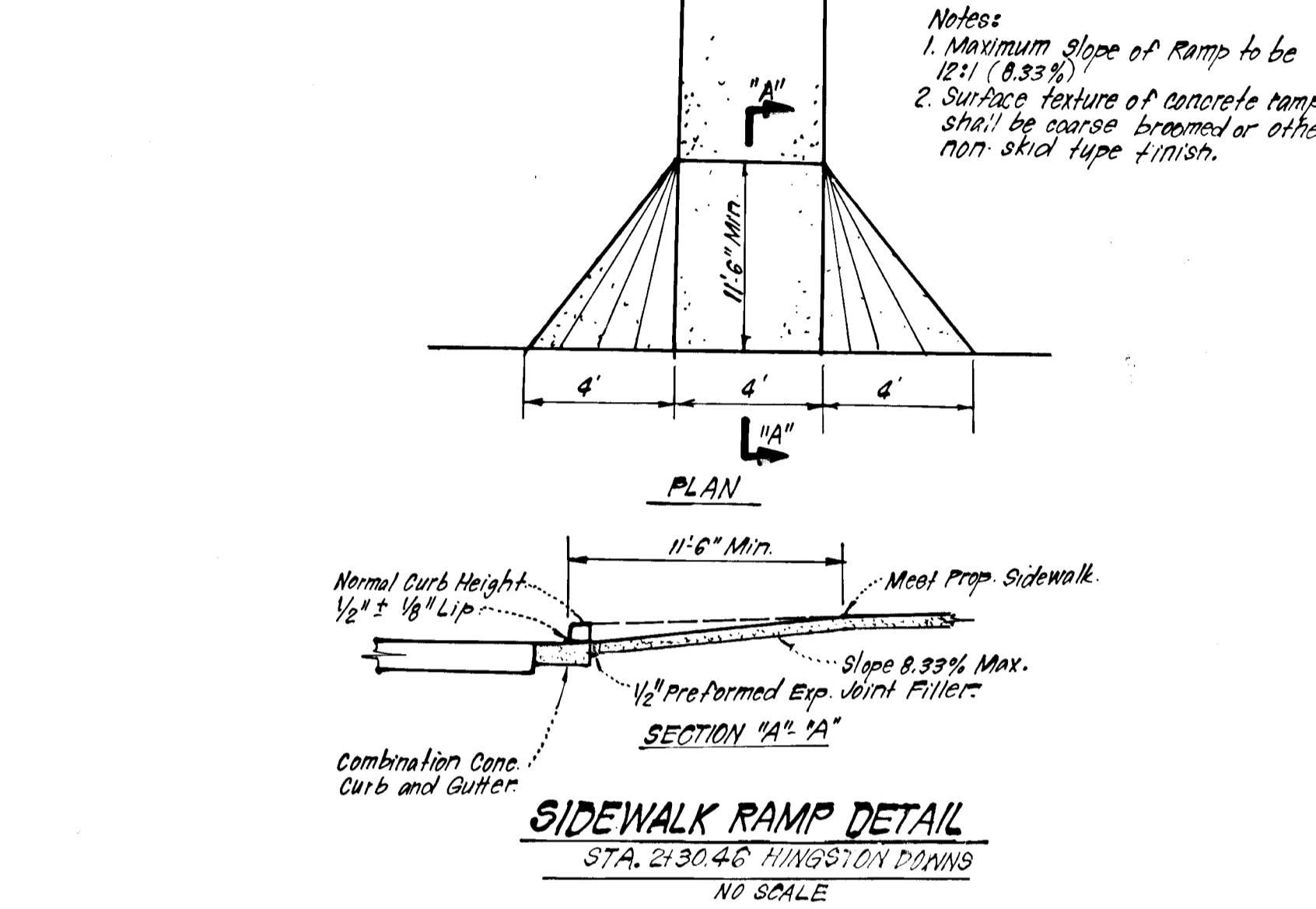
**ALTERNATE SECTION**  
 NO SCALE



**STORM DRAIN PROFILES**  
 SCALES: HORIZ 1/4"=50'  
 VERT 1/4"=5'



**STANDARD 7" COMBINATION CURB & GUTTER**  
 NO SCALE  
**REVERSE 7" COMBINATION CURB & GUTTER**  
 NO SCALE  
**STANDARD 6" COMBINATION CURB & GUTTER**  
 NO SCALE  
**REVERSE 6" COMBINATION CURB & GUTTER**  
 NO SCALE



**SIDEWALK RAMP DETAIL**  
 STA. 2130.46 HINGSTON DOWNS  
 NO SCALE

**STRUCTURE SCHEDULE**

No.	TYPE	INV. IN.	INV. OUT.	TOP ELEVATION UPPER LOWER	REMARKS	LOCATION
S-3	4" Endwall	301.74	302.00	301.74	No. Co. Sht. S.D.S. 11 Dia-48"	See Plan
T-4	A-10 Inlet	308.75	308.85	308.75	SD 2.01 W-216"	" "
FD-5	Field Connection			308.65	316.675	" "
T-6	A-6 Inlet	314.00	314.35	314.00	SD 2.01 24"x54"	" "
T-7	A-10 Inlet	314.35	314.60	314.35	SD 4.02 W-216"	691'-30" 1187' 14" LF
T-7-2	A-10 Inlet	314.35	314.60	314.35	SD 4.02 W-216"	691'-30" 3140' 14" LF
T-12	A-10 Inlet	316.25	316.50	316.25	SD 4.11 310" SQ.	691'-30" 3140' 14" LF
T-13A	D Inlet	317.50	317.50	317.50	SD 4.11 216" SQ.	See Plan
T-13B	D Inlet	317.50	317.50	317.50	SD 4.11 216" SQ.	See Plan
M-3A	Shallow Brick Manhole	307.00	306.00	307.00	316.00	6.505 5'x3' dia. See Plan

# Provide slots in all sides.  
 Δ All inverts to be fully developed.

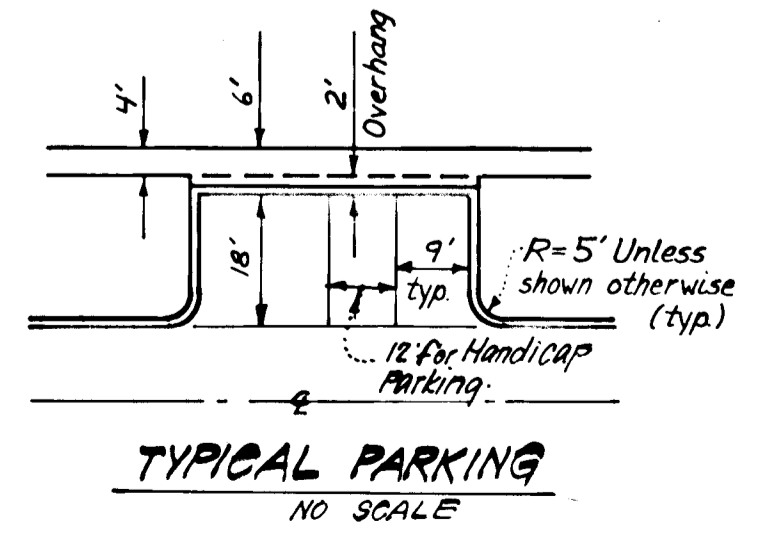
**PIPE SCHEDULE**

SIZE	TYPE	LENGTH
18"	RCP CL IV	154 LF
24"	RCP CL IV	184 LF
30"	RCP CL IV	55 LF
36"	RCP CL IV	50 LF
48"	CMP 16 gage	48 LF
48"	CMP 16 gage	28 LF

\* 3"x11" corrugations.

AS-BUILT SURVEY CERTIFIED BY  
 DONALD B. SACKETT, Md. L.S.  
 No. 6059 ON 3-16-88.

**DEVELOPER'S/BUILDER'S CERTIFICATE**  
 "I/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: [Signature]  
 Date: 8-1-85



**TYPICAL PARKING**  
 NO SCALE

**ALTERNATE PAVING SECTION FOR PUBLIC ROADS**  
 NO SCALE

Bituminous Conc Surface	1/2"
Bituminous Conc Base	2 1/4"
Prime	8"
8" Crusher Run Base (Placed in 2 Courses)	8" or 6"
or	6"
6" Dense Graded Stabilized Aggregate Base Course	6"

**ALTERNATE PAVING SECTION FOR PARKING AREAS**  
 NO SCALE

Bituminous Conc Surface	1"
Bituminous Conc. Base	2"
Prime	5"
5" Crusher Run Base Course	5" or 4"
or	4"
4" Dense Graded Stabilized Aggregate Base Course	4"

Reviewed for [Signature] S.P.D.  
 [Signature] 6-23-86  
 U.S. Soil Conservation Service

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

Signature: [Signature] 1/23/86



**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: [Signature] 7-23-85  
 Date

APPROVED: DEPARTMENT OF PUBLIC WORKS  
 [Signature] 1-23-86  
 Chief, Bureau of Engineering  
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING  
 [Signature] 1-24-86  
 Chief, Division of Land Development & Zoning Administration

**CLARK • FINEFROCK & SACKETT**  
 ENGINEERS • PLANNERS • SURVEYORS  
 11317 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 593-3400

DESIGNED	ULS	ROAD CONSTRUCTION PLANS STORM DRAIN & PAVING DETAILS	SCALE	AS SHOWN
DRAWN	R/W		DRAWING	2 OF 3
CHECKED	ULS		JOB NO.	81-080
DATE	JULY 1985	FOR: PULTE HOME CORP. 11120 New Hampshire Ave. Silver Spring, Md. 20904	FILE NO.	81-080-D

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, discing or other acceptable means before seeding.

**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/1000 square ft) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/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/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. Harrow 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 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 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 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, discing 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 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.

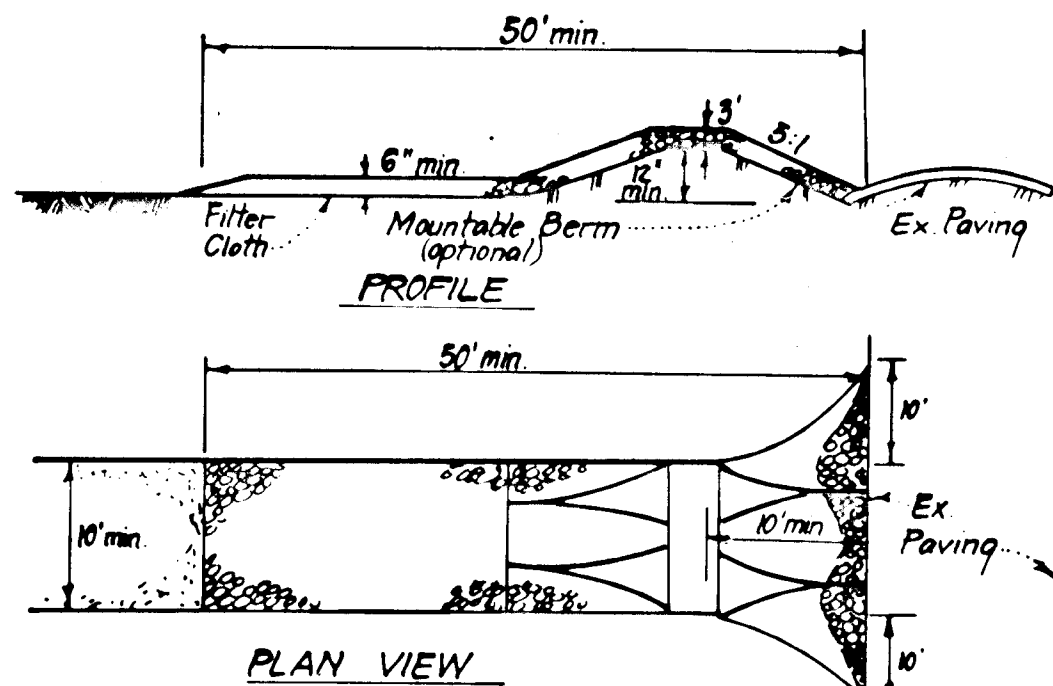
**Mulching:** Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes, 8 ft or higher, use 348 gal per acre (8 gal/1000 sq ft) for anchoring.

Refer to the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

SEDIMENT 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 3:1, 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. 51) sod (Sec. 54), temporary seeding (Sec. 51) and mulching (Sec. 52.) 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	10.059 Acres
Area Disturbed	6.398 Acres
Area to be roofed or paved	1.228 Acres
Area to be vegetatively stabilized	2.002 Acres
Total Cut	3400 Cu. yds
Total Fill	27520 Cu. yds
Offsite waste/borrow area location	N/A
- 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 DPM sediment control inspector.
- 10) 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.
- 11) If houses are to be constructed on an "As-Sold" 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 day (see detail below). N/A
- 13) The total amount of straw bale dikes/silt fence equals None L.F.



- CONSTRUCTION SPECIFICATIONS:**
1. Stone size - Use 2" stone, or reclaimed or recycled concrete equivalent.
  2. Length - As required, but not less than 50 feet (except on 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 at 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 single family residence lot.
  6. Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopes 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 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 (SCE)

DEVELOPERS/BUILDERS CERTIFICATE

"I/we certify that all development and construction will be done according to the 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."

John Brinkak 8-1-85

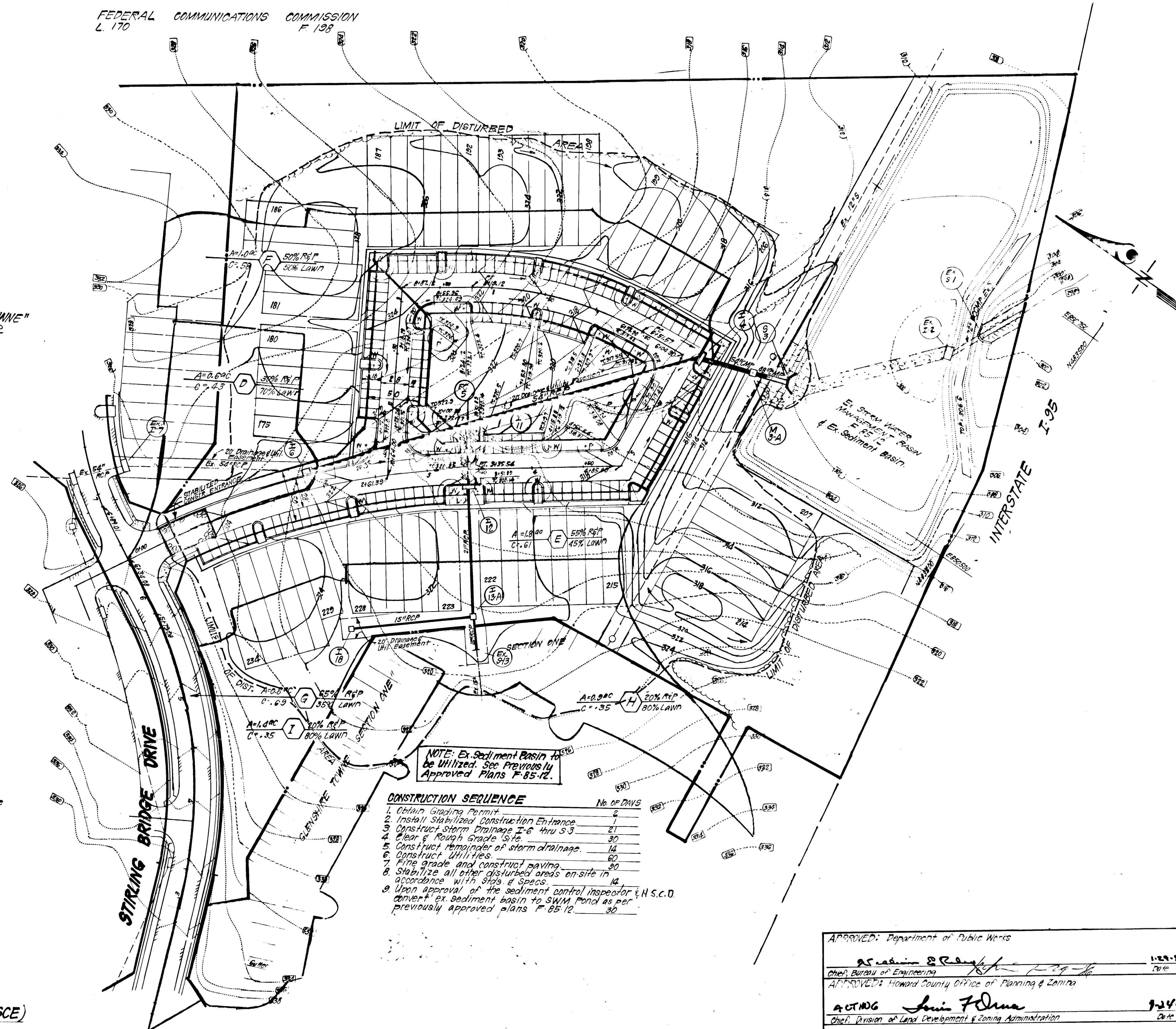
PLAN SCALE: 1"=50'

Reviewed for HOWARD COUNTY...  
Stephen J. Fisher 1/23/86

ENGINEERS 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.

7-24-85



NOTE: Ex. Sediment Basin to be Utilized. See Previously Approved Plans F-85-12.

**CONSTRUCTION SEQUENCE**

NO.	DESCRIPTION	NO. OF DAYS
1.	Obtain Grading Permit	2
2.	Install Stabilized Construction Entrance	1
3.	Construct Storm Drainage I-6 thru S-3	21
4.	Clear & Rough Grade Site	30
5.	Construct remainder of storm drainage	14
6.	Construct Utilities	60
7.	Final grade and construct paving	90
8.	Stabilize all other disturbed areas on-site in accordance with Sds & Specs	14
9.	Upon approval of the sediment control inspector & H.S.C.D. convert ex. sediment basin to SWM Pond as per previously approved plans F-85-12.	30

#1098

APPROVED: Department of Public Works  
 9-24-85  
 Chief, Bureau of Engineering  
 APPROVED: Howard County Office of Planning & Zoning  
 9-24-85  
 ACTING Louis F. Orma  
 Chief, Division of Land Development & Zoning Administration

**CLARK • FINEFROCK & SACKETT**  
 ENGINEERS • PLANNERS • SURVEYORS  
 11314 LOCKWOOD DRIVE • SILVER SPRING, MARYLAND 20904 • (301) 593-3400

DESIGNED	AS	SCALE	AS SHOWN
DRAWN	KIW	DRAWING	3 of 3
CHECKED	AS	JOB NO.	81-000
DATE	JULY 1985	FILE NO.	81-000

FOR: DLE HOME DEP  
 1120 New Hampshire Ave.  
 Silver Spring, Md 20904