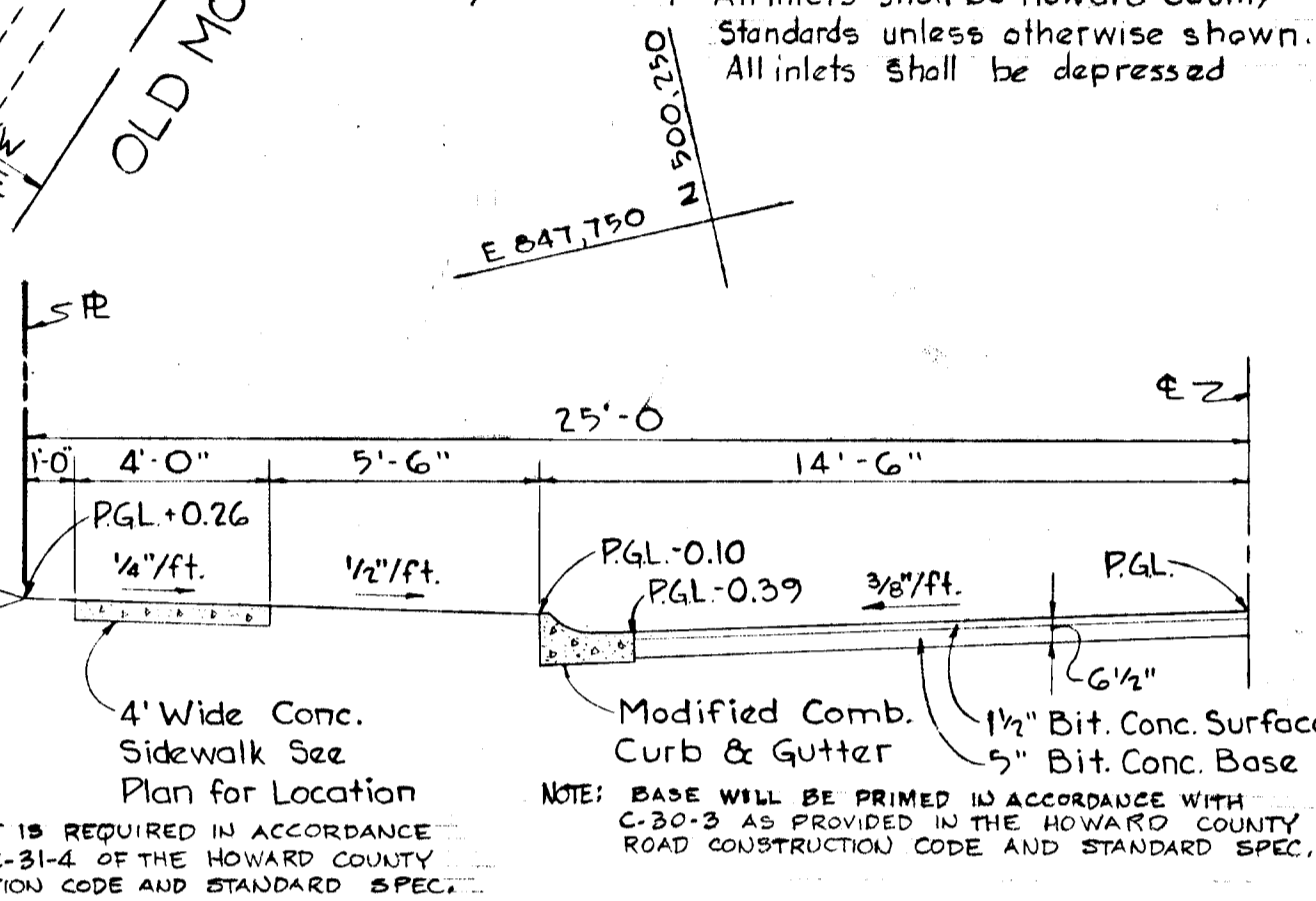
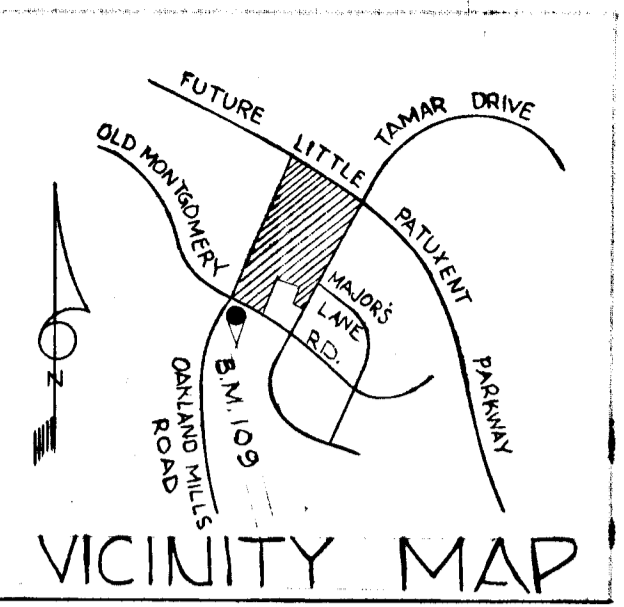


GENERAL NOTES

- Bench Mark M-109 Elev. 416.42
41.0 feet south east of the centerline of Oakland Mills Road, 17.0 feet west of the centerline of Old Montgomery Road, 3.0 feet south of a pole # 24148, 2.0 feet north east of a metal witness post, set in concrete post projecting 2 inches
- Storm Drain trenches within road right-of-way shall be backfilled and compacted in accordance with Howard County Road Code
- Proposed grading as shown is required to allow proper drainage to all sump Special "K" Inlets.
- All work shall be done in accordance with Howard County Road Construction Code and Standard Specification of any construction.
- All utility companies must be notified 24 hours in advance
- Secondary residential streets are designed for 25 MPH traffic speed in accordance with AASHTO Standard
- All inlets shall be Howard County Standards unless otherwise shown. All inlets shall be depressed

4/27/72 2 Moved sidewalk as per Office of P&Z letter - 5/11/72
5/6/72 1 As per DPW Comments dated 2/9/72
Rev. Date Rev. No. Revision Description



COLUMBIA
6TH ELECTION DISTRICT
HOWARD COUNTY MARYLAND

OWNER AND DEVELOPER
HOWARD RESEARCH AND DEVELOPMENT CORP.

PROJECT AREA - SECTION I, AREA G
VILLAGE OF LONGREACH

PROJECT TITLE
PLAN AND PROFILE
SEALING MESSAGE ROAD

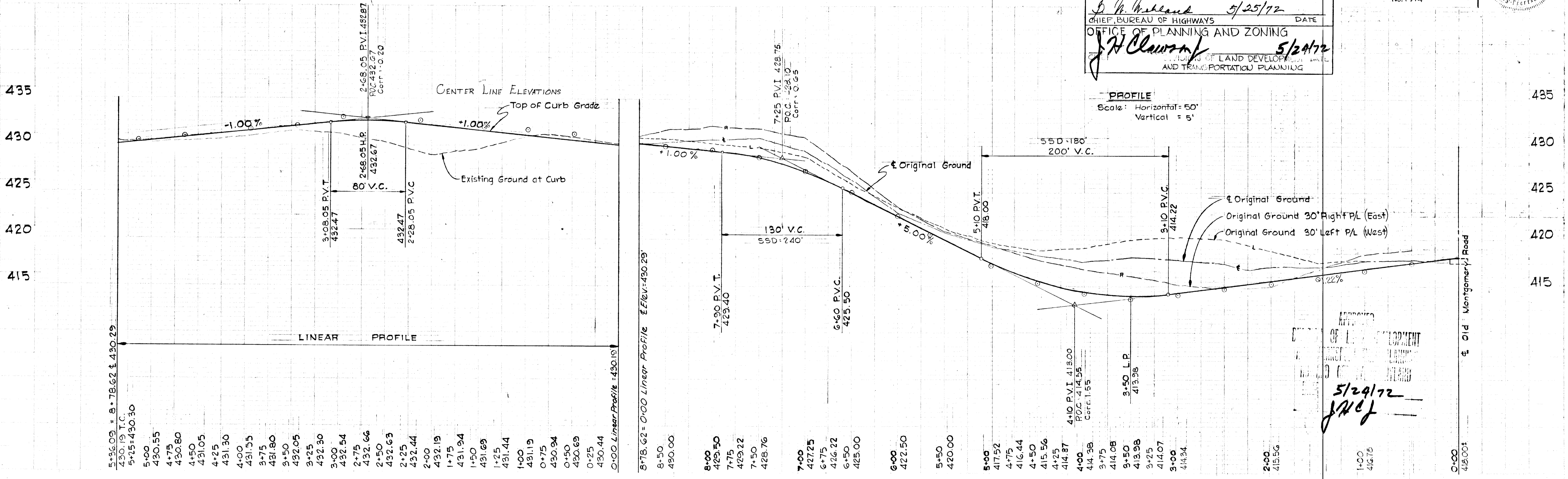
SCALE: As Shown DATE: September 29, 1971

WHITMAN, REQUARDT & ASSOCIATES
ENGINEERS
BALTIMORE, MARYLAND
21202

DEPARTMENT OF PUBLIC WORKS
J. H. McKeand 5/25/72
CHIEF, BUREAU OF HIGHWAYS DATE

OFFICE OF PLANNING AND ZONING
J. H. Clawson 5/24/72
DIRECTOR OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING

Kenneth A. McCord
KENNETH A. MCCORD
Registered Engineer
No. 1974

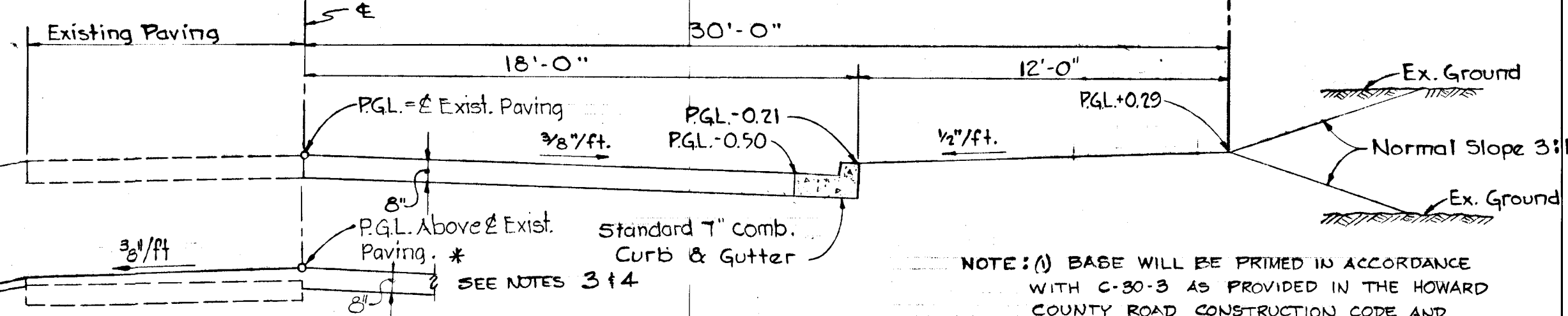
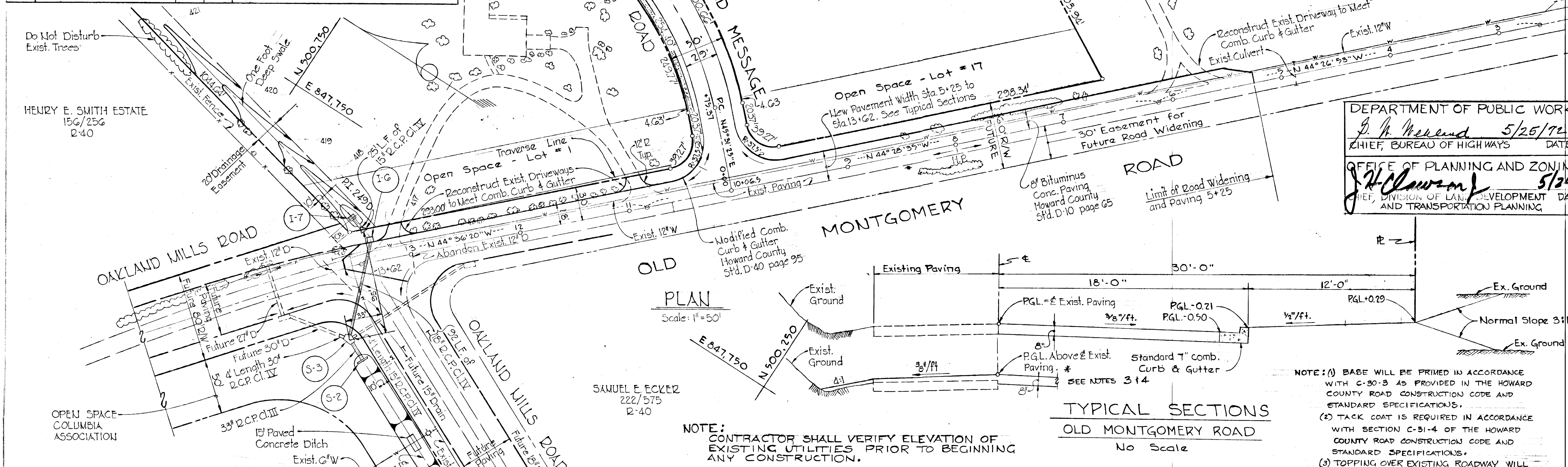


APPROVED
OFFICE OF PLANNING AND ZONING
5/24/72
JAC

Storm Drain	Structure	Schedule
1-6	Std. 4'-5" width = 2'-6"	Top El. Inlet 411.92 Location: Inlet 19.42' right of Sta. 13+33
1-7	Special 1/2" See Detail Sht. 3	415.92/412.97 See Plan & Profile
5-2	Std. 1/2" Endwall	413.15/409.40 See Plan & Profile
5-3	Junction Chamber See Detail Sheet 4	416.00/409.50 See Plan & Profile

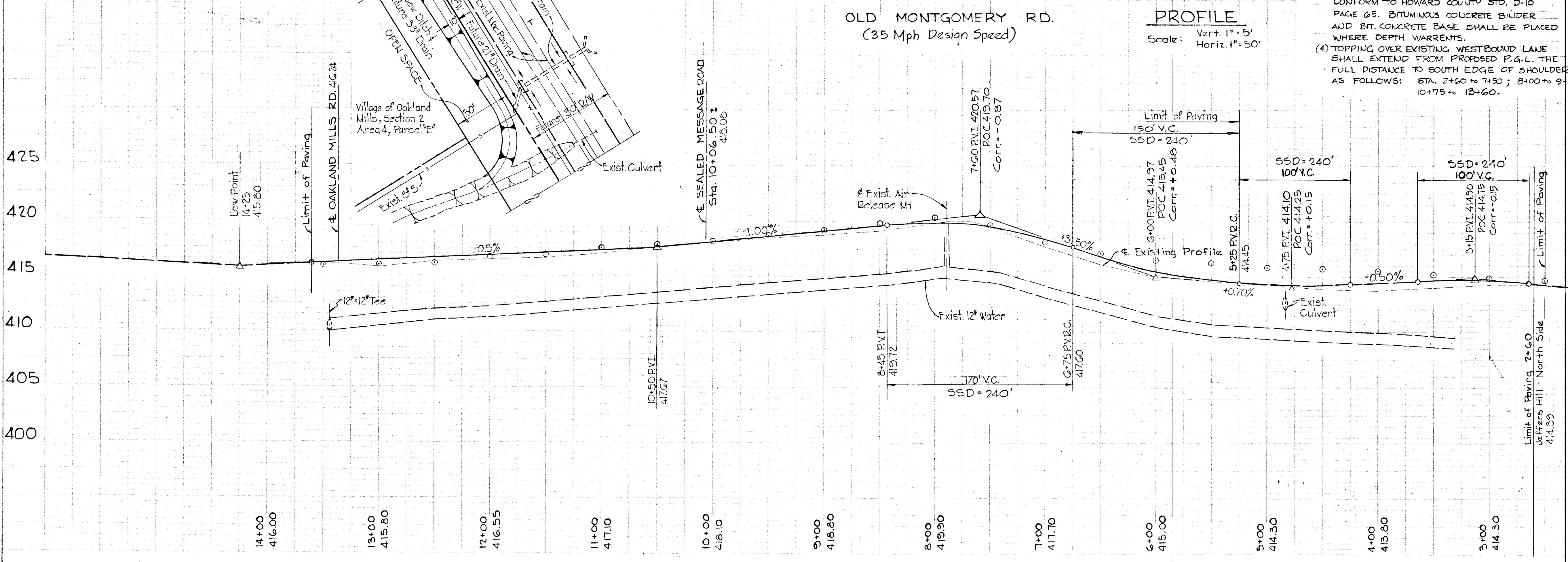
PGL above \pm existing grade
 PGL = \pm existing grade

AS-BUILT ELEVATIONS TAKEN ON MARCH 29, 1974



NOTE: CONTRACTOR SHALL VERIFY ELEVATION OF EXISTING UTILITIES PRIOR TO BEGINNING ANY CONSTRUCTION.

- NOTE:
- (1) BASE WILL BE PRIMED IN ACCORDANCE WITH C-30-3 AS PROVIDED IN THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND STANDARD SPECIFICATIONS.
 - (2) TACK COAT IS REQUIRED IN ACCORDANCE WITH SECTION C-31-4 OF THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND STANDARD SPECIFICATIONS.
 - (3) TOPPING OVER EXISTING ROADWAY WILL CONFORM TO HOWARD COUNTY STD. D-10 PAGE 65. BITUMINOUS CONCRETE BINDER AND BIT. CONCRETE BASE SHALL BE PLACED WHERE DEPTH WARRANTS.
 - (4) TOPPING OVER EXISTING WESTBOUND LAINE SHALL EXTEND FROM PROPOSED P.G.L. THE FULL DISTANCE TO SOUTH EDGE OF SHOULDER AS FOLLOWS: STA. 2+60 TO 7+50; 8+00 TO 9+50; 10+75 TO 13+60.

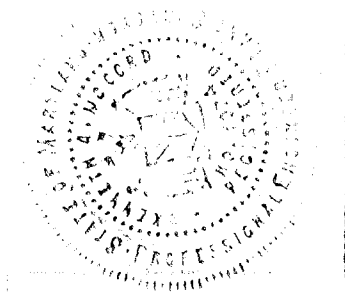


DEPARTMENT OF PUBLIC WORKS
 3/6/72
 Rev. Date Rev. No. As per DPW Comments dated 2/9/72
 Revision Description
 J. H. Mendenhall 5/25/72
 CHIEF, BUREAU OF HIGHWAYS DATE
 J. H. Clawson 5/29/72
 CHIEF, DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING DATE

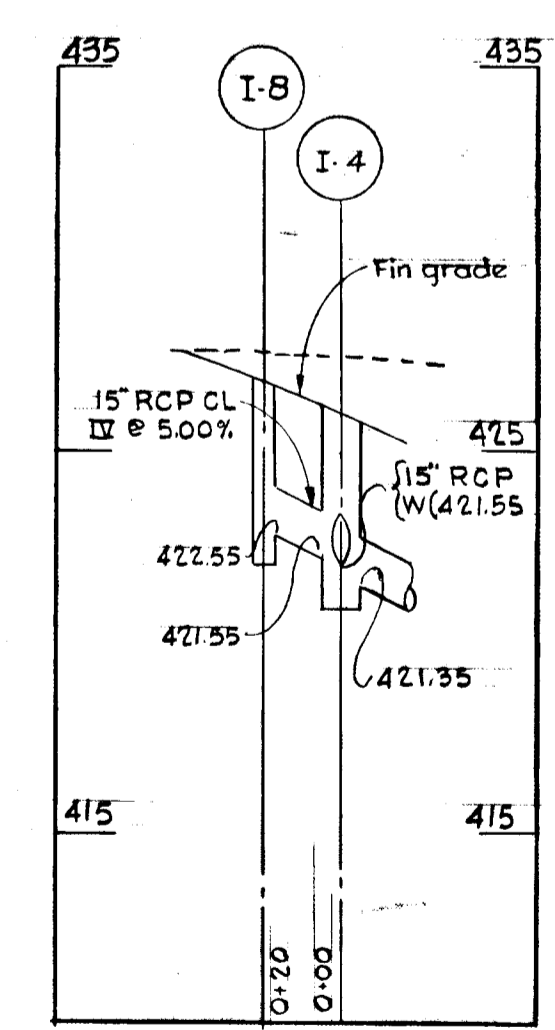
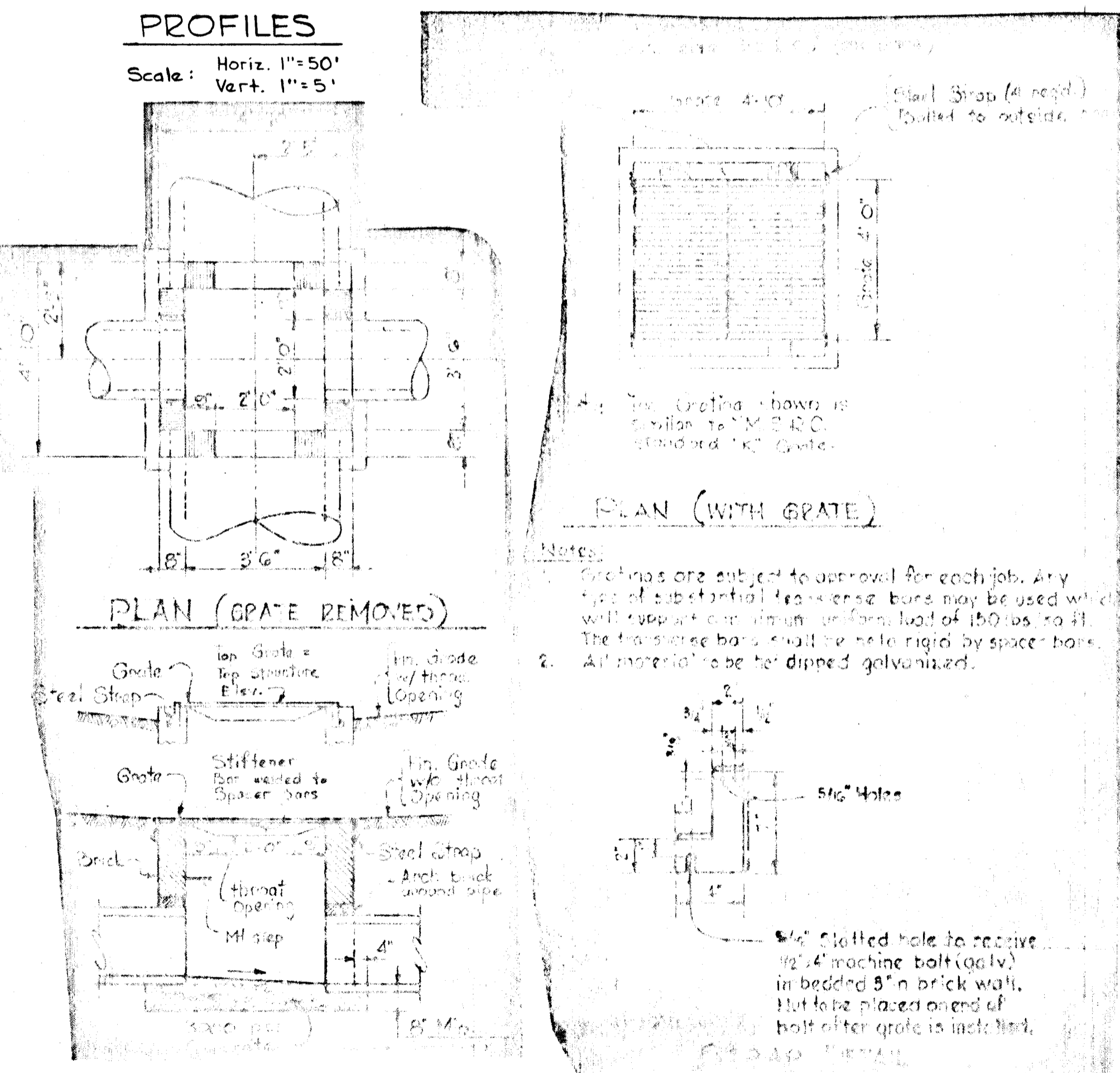
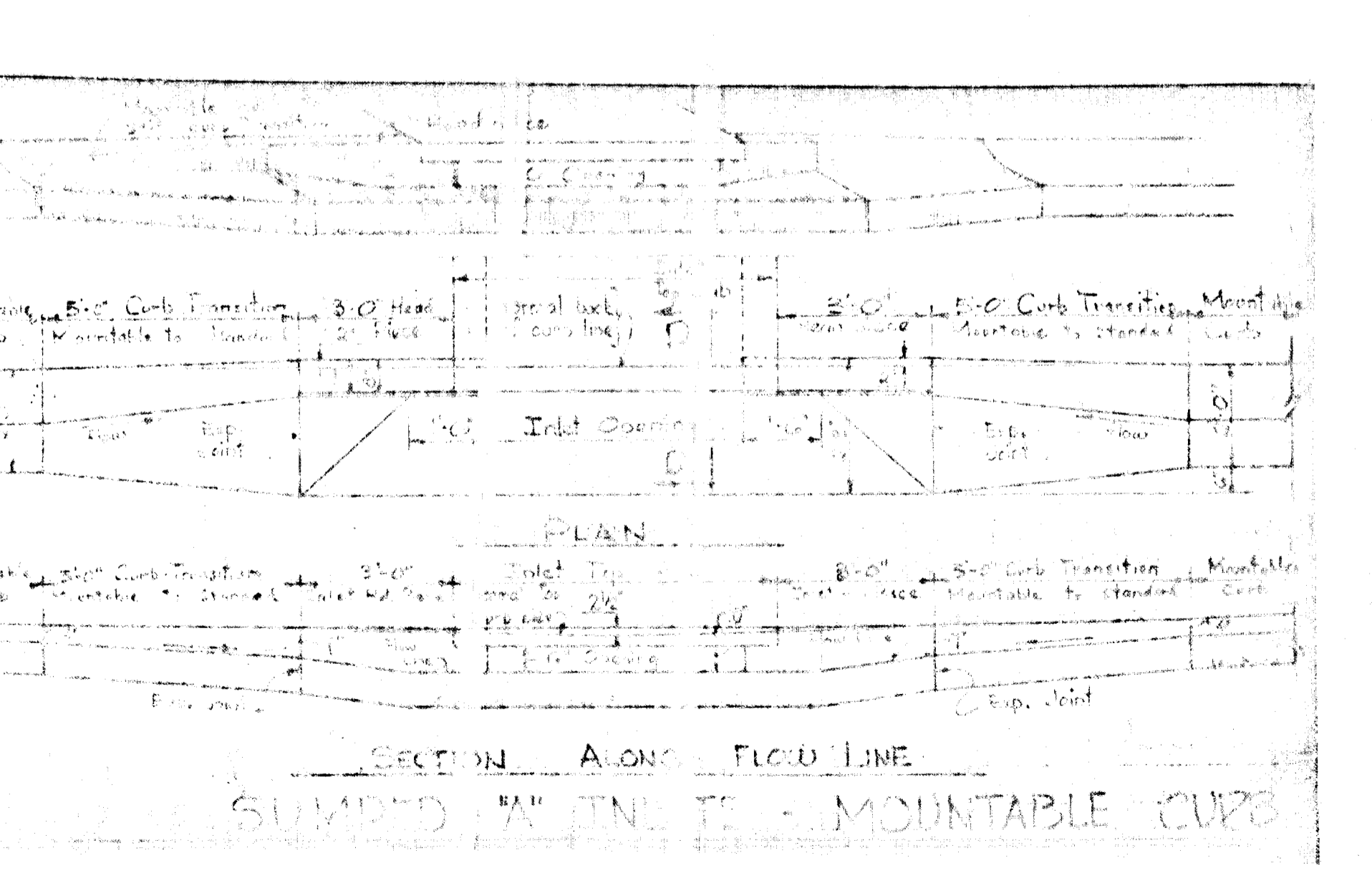
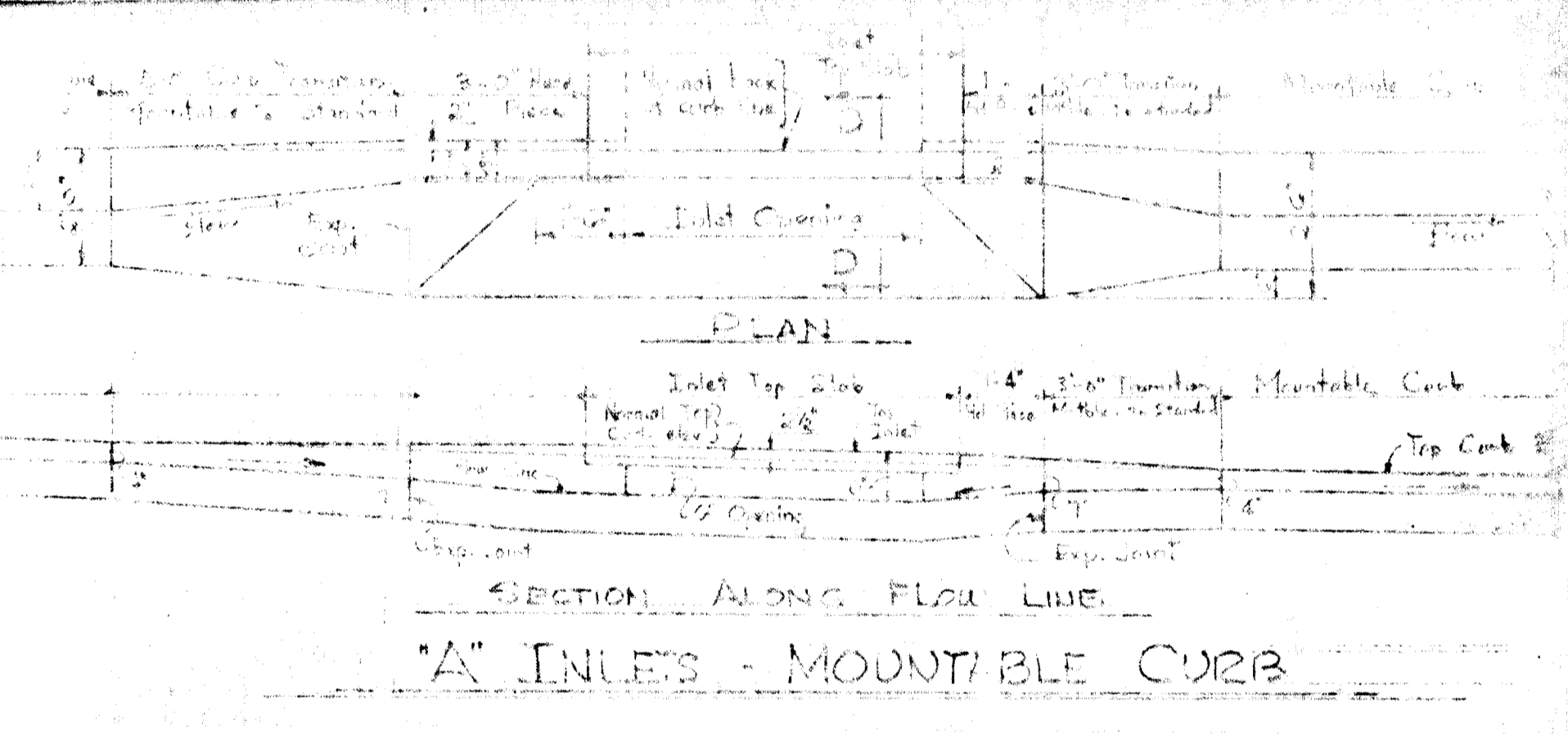
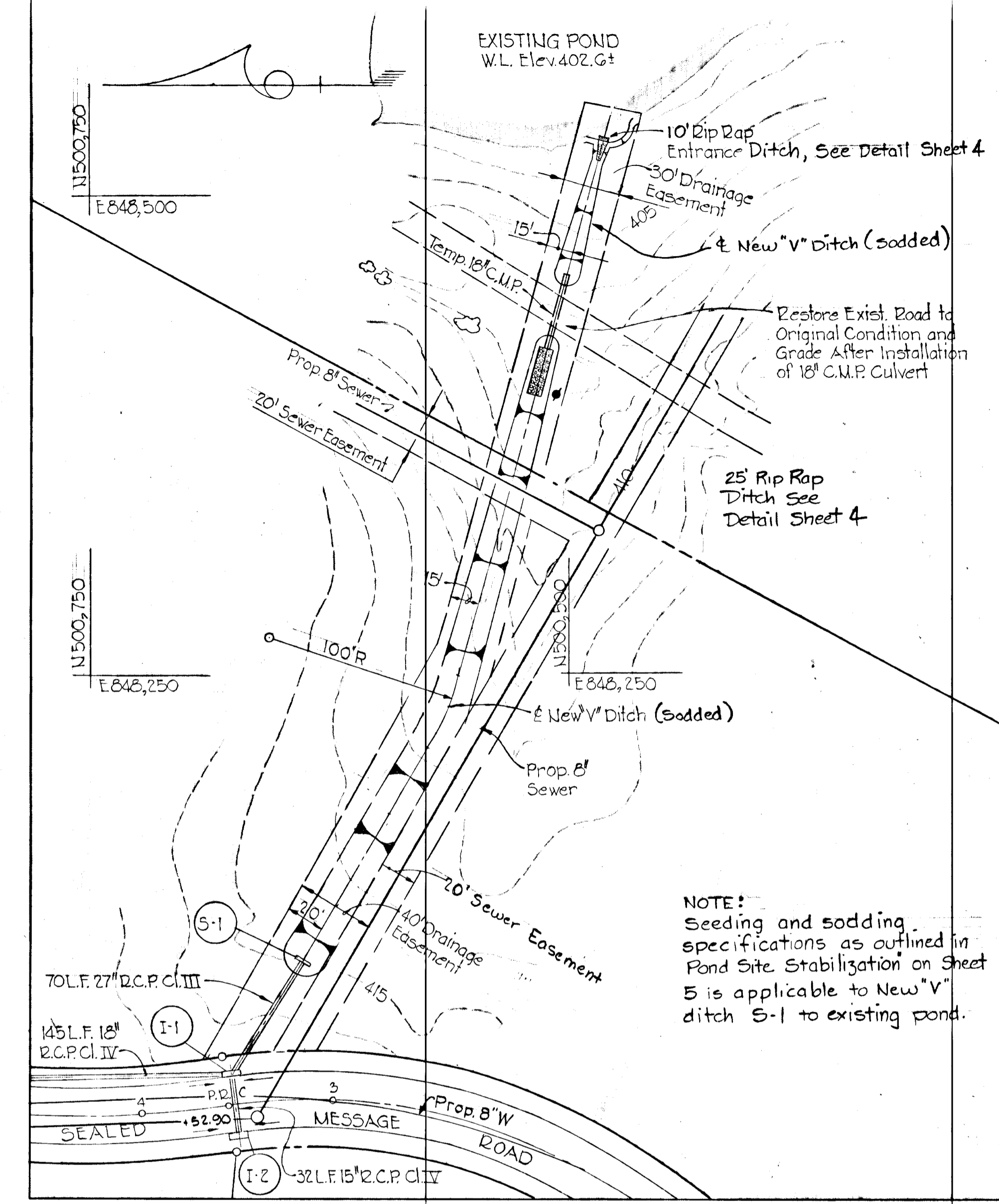
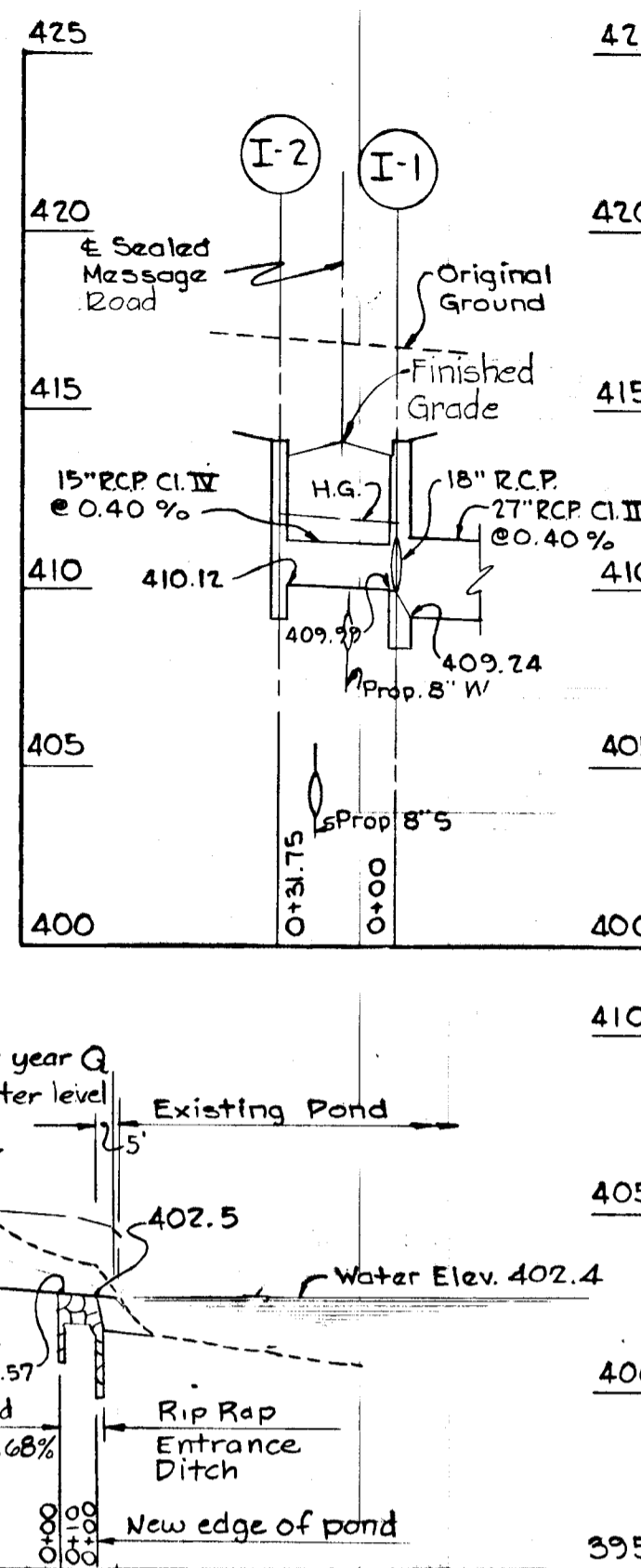
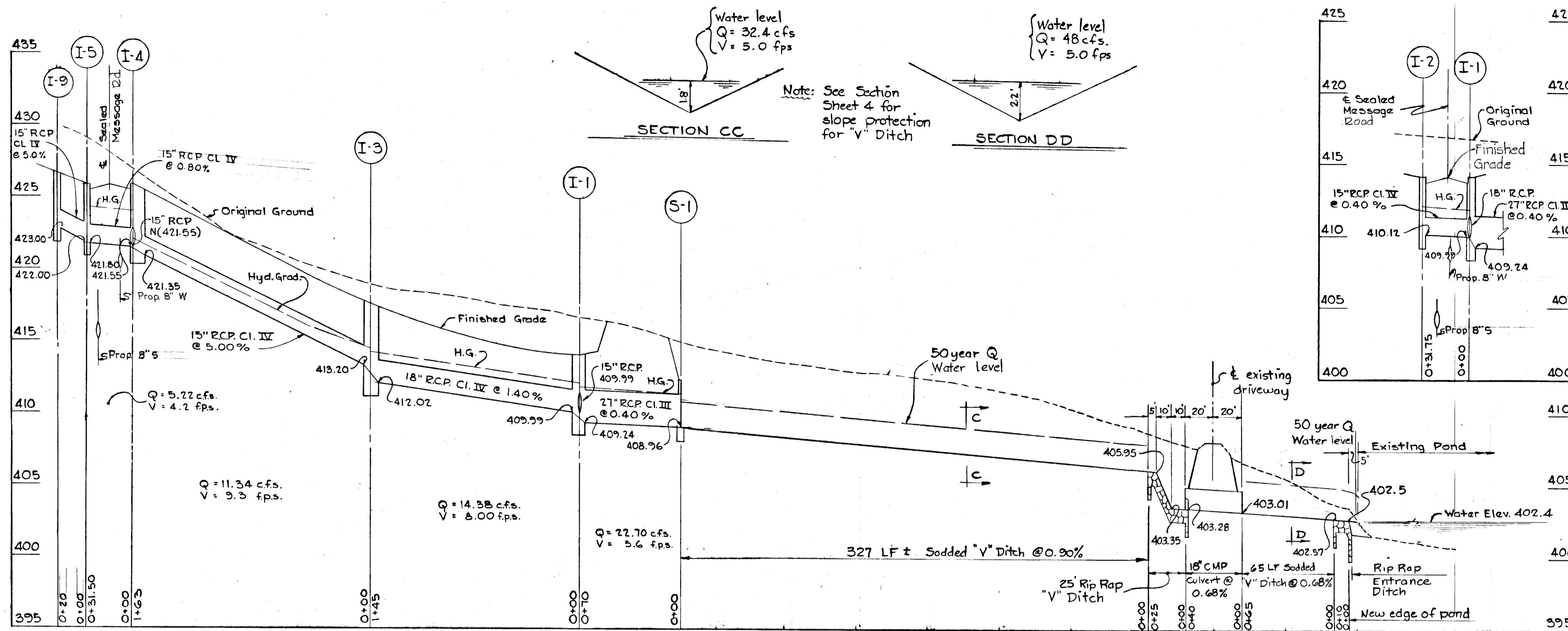
COLUMBIA
 6TH ELECTION DISTRICT
 HOWARD COUNTY MARYLAND
 OWNER AND DEVELOPER
 HOWARD RESEARCH AND DEVELOPMENT CORP.

PROJECT AREA - SECTION 1, AREA 6
 VILLAGE OF LONGREACH
 PROJECT TITLE
 PLAN AND PROFILE
 OLD MONTGOMERY RD.
 SCALE: As Shown DATE: Sept. 29, 1971

WHITMAN, REQUARDT & ASSOCIATES
 ENGINEERS
 BALTIMORE, MARYLAND
 21202
 Kenneth A. McCord
 KENNETH A. MCCORD
 Registered Engineer
 No. 1974

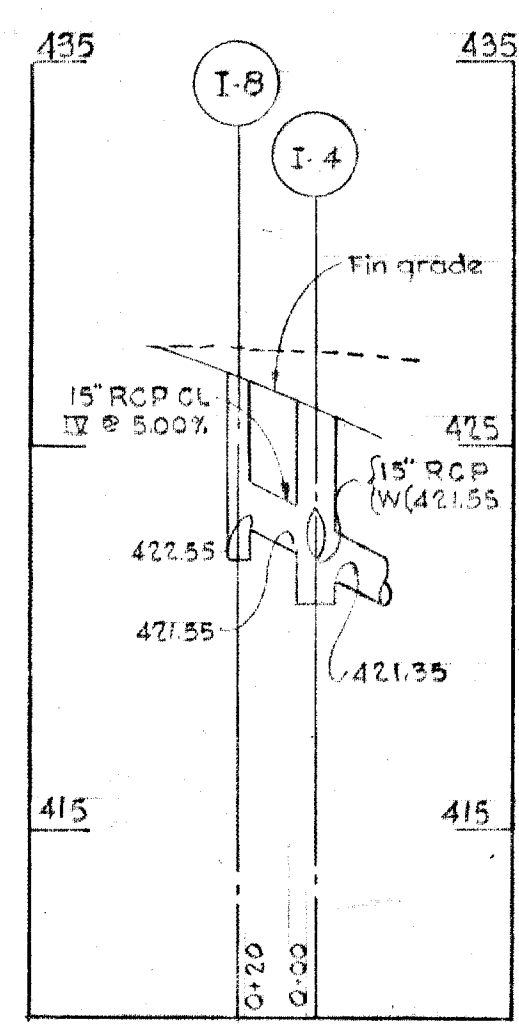
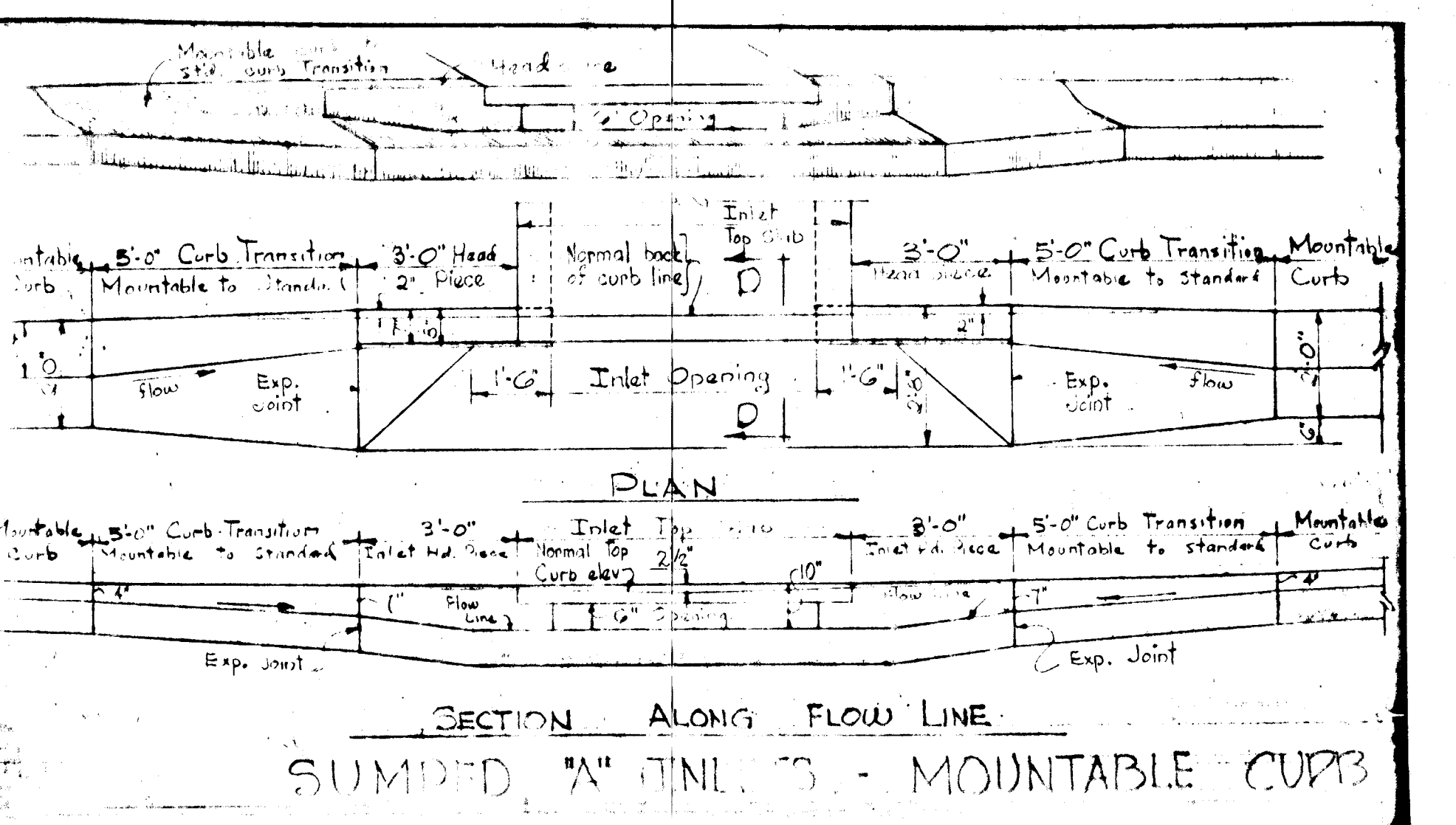
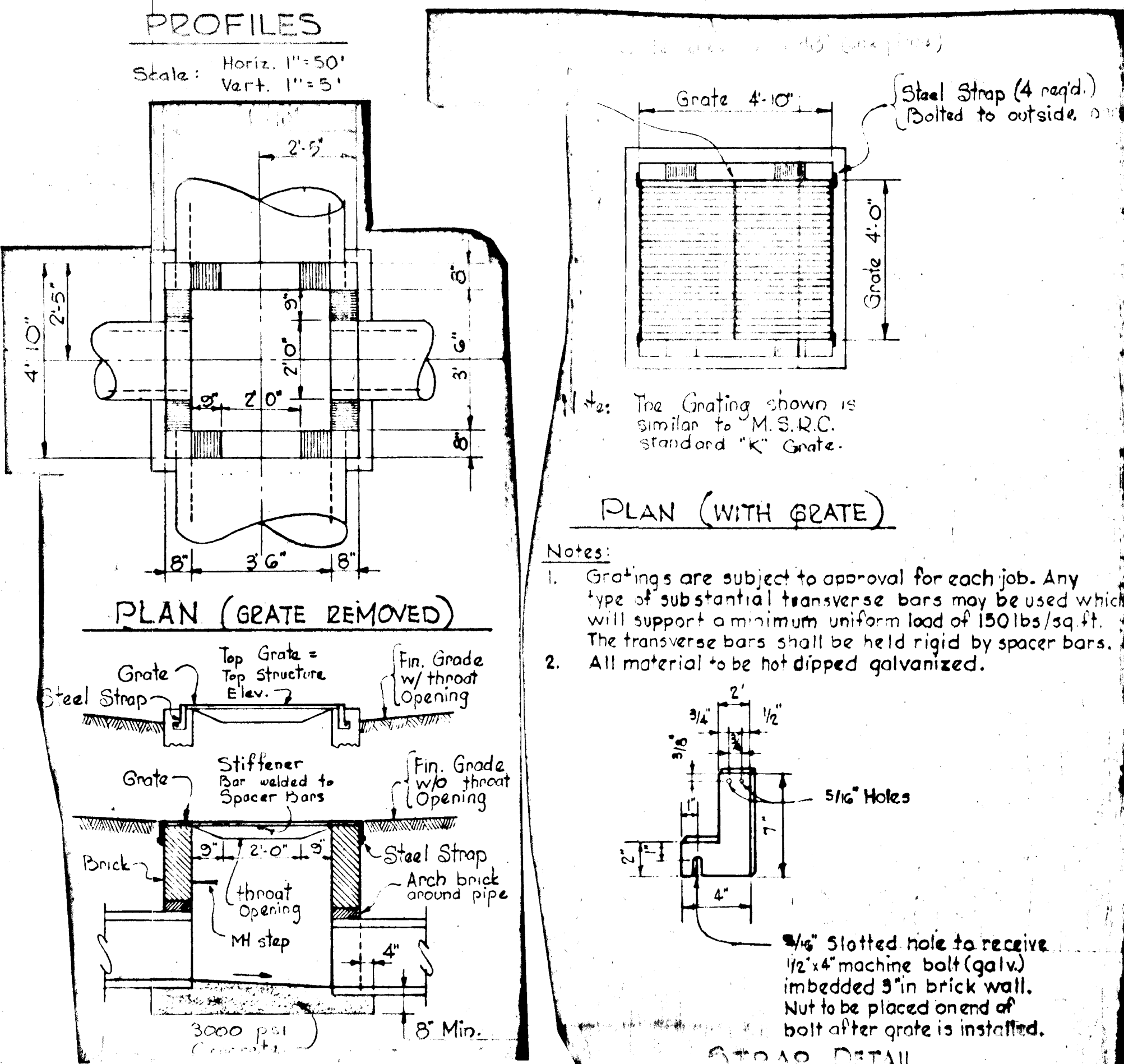
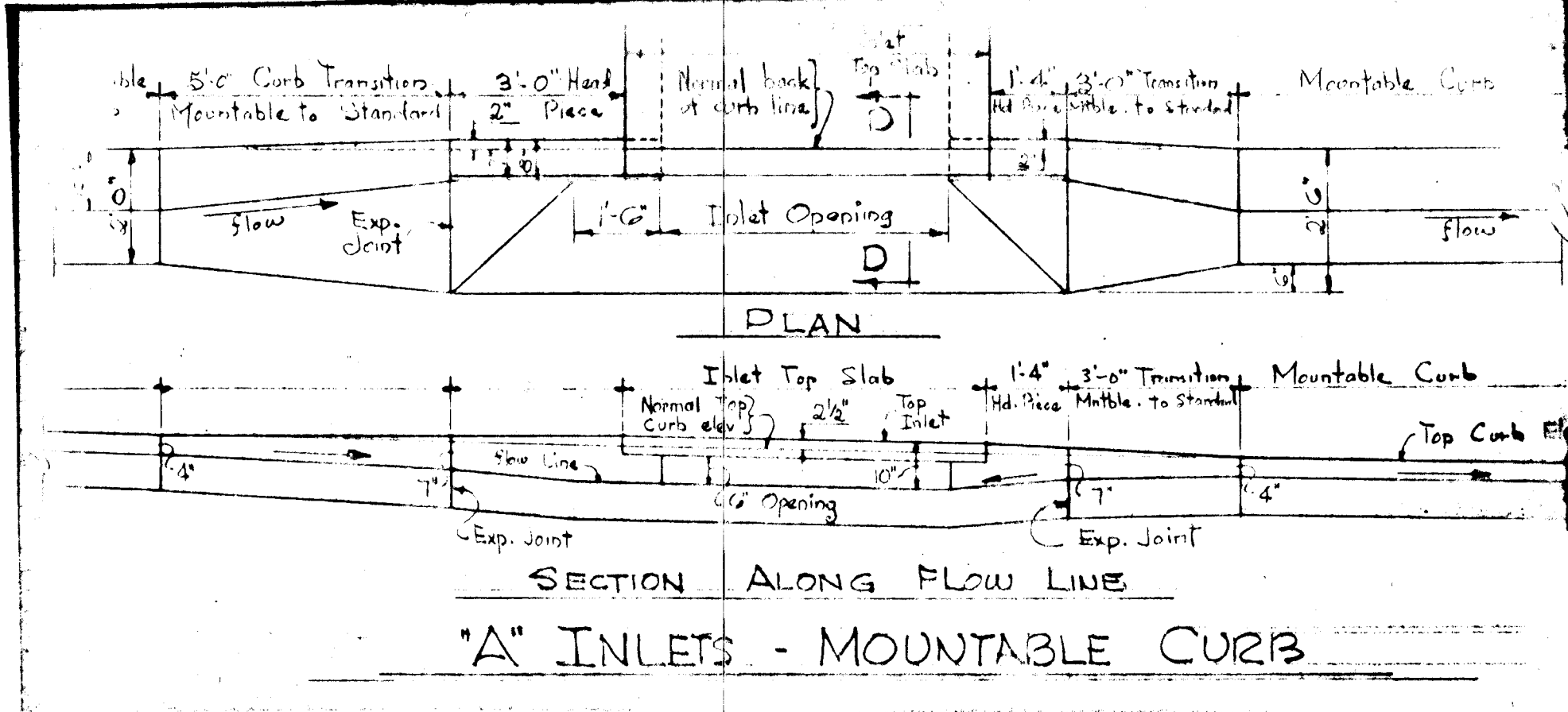
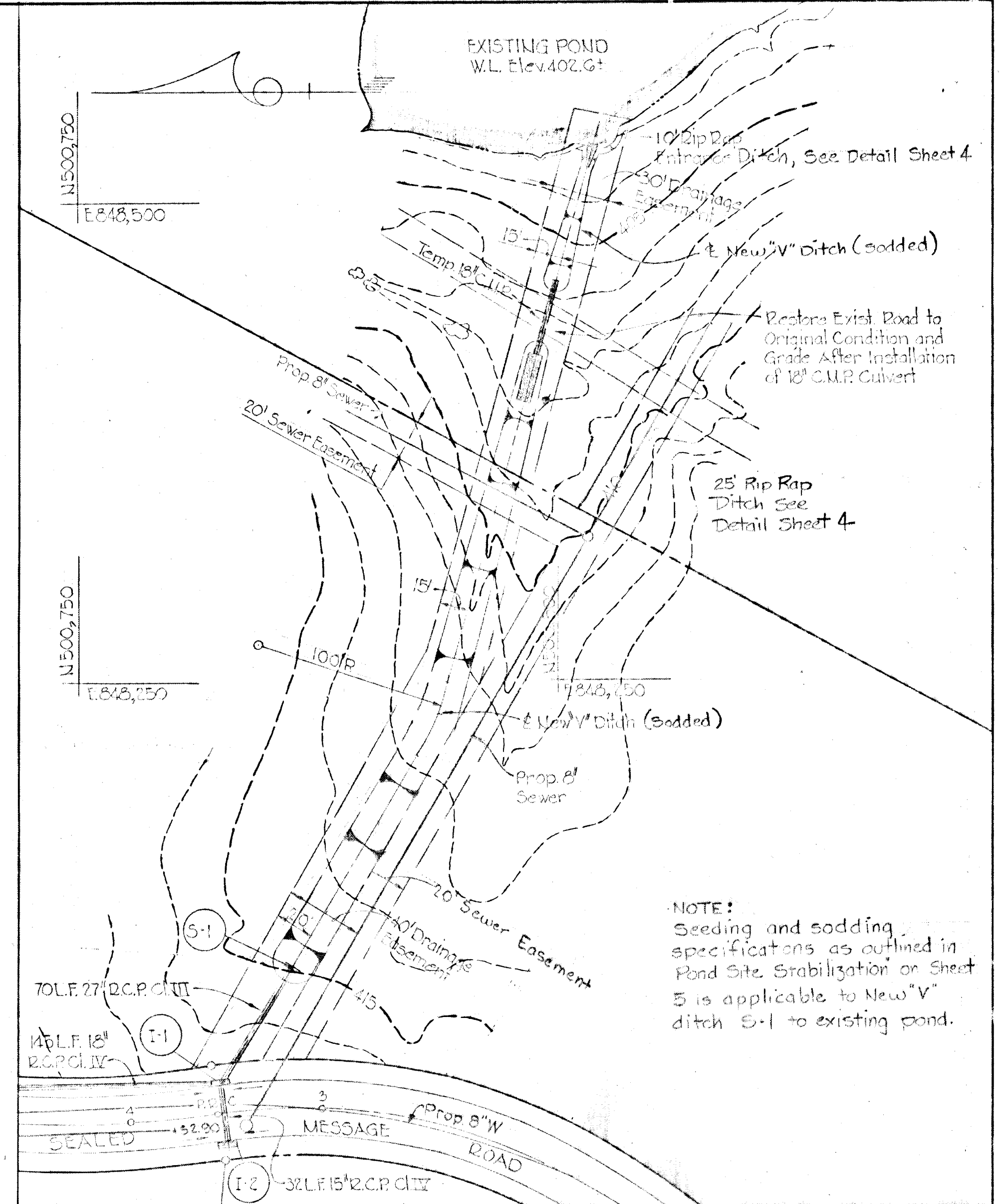
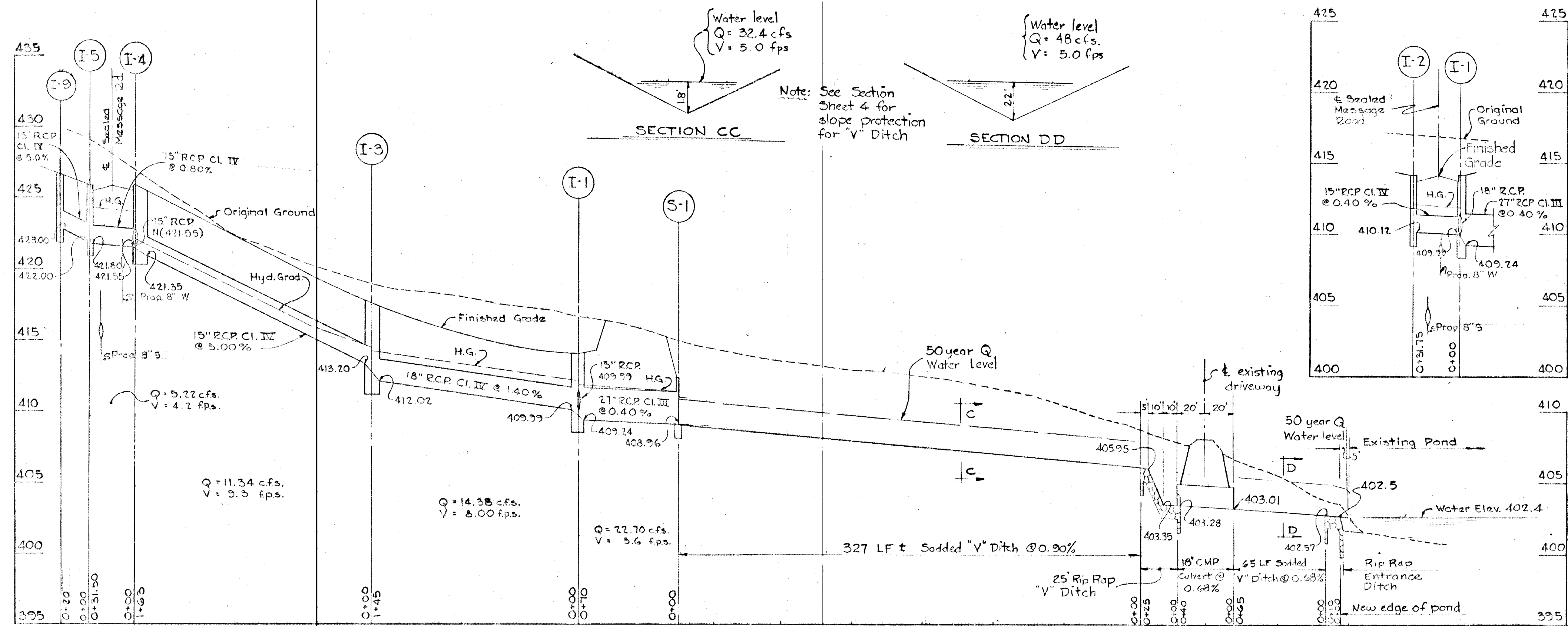


APPROVED
 DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING
 HOWARD COUNTY MARYLAND
 DATE 5/29/72
 J.H.C.



APPROVED
DIVISION OF LAND DEVELOPMENT
AND TRANSPORTATION PLANNING
HOWARD COUNTY, MARYLAND
DATE: 5/29/72
JAC

3/6/72	1	As per DPW Comment dated 2/9/72
Rev. Date	Rev. No.	Revision Description
COLUMBIA		
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
OWNER AND DEVELOPER THE HOWARD RESEARCH AND DEVELOPMENT CORP.		
PROJECT AREA - SECTION 1, AREA G		
VILLAGE OF LONGREACH		
PROJECT TITLE		
DRAINAGE PLANS, PROFILES AND DETAILS		
SCALE: As Shown		DATE: September 29, 1971
WHITMAN, REQUARDT & ASSOCIATES ENGINEERS BALTIMORE, MARYLAND 21202		
DEPARTMENT OF PUBLIC WORKS <i>G. M. McKeand</i> 5/25/72 CHIEF, BUREAU OF HIGHWAYS DATE		<i>Kenneth A. McCord</i> KENNETH A. MCCORD Registered Engineer No. 1974
OFFICE OF PLANNING AND ZONING <i>W. F. Clauson</i> 5/29/72 CHIEF, DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING DATE		



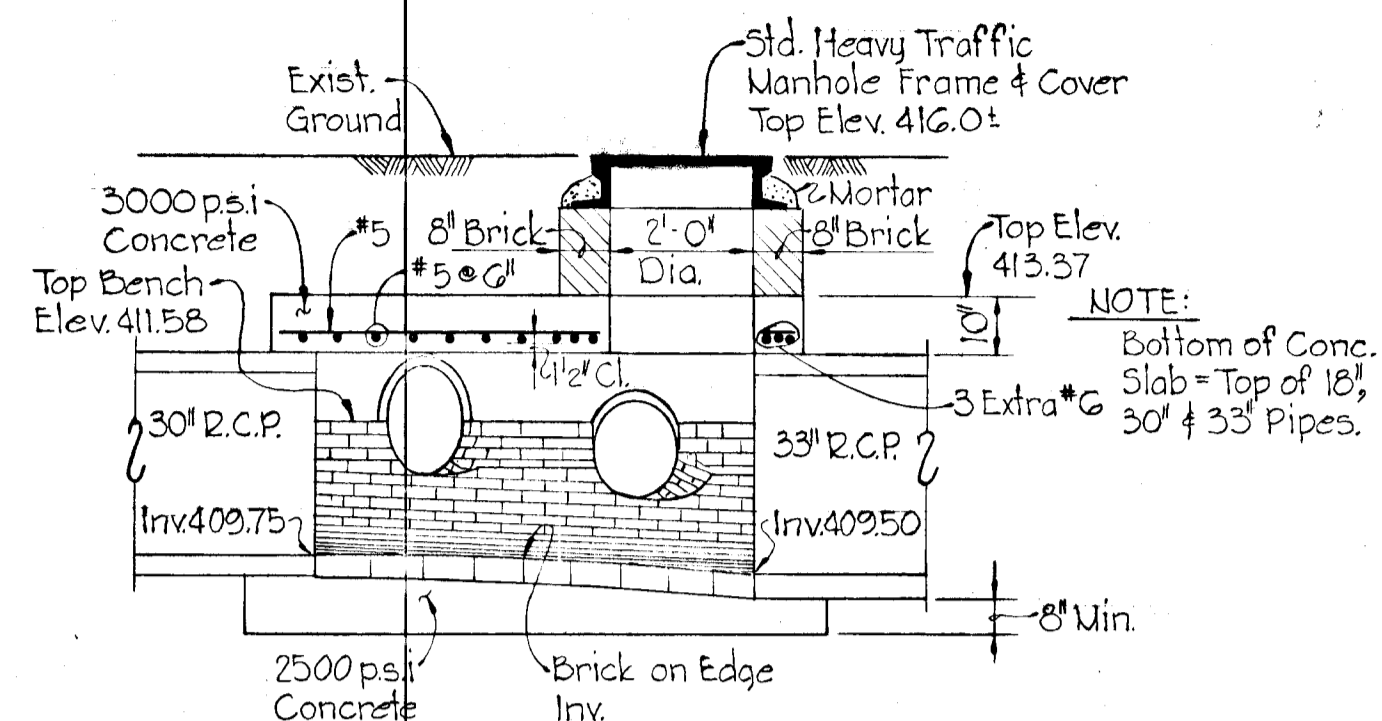
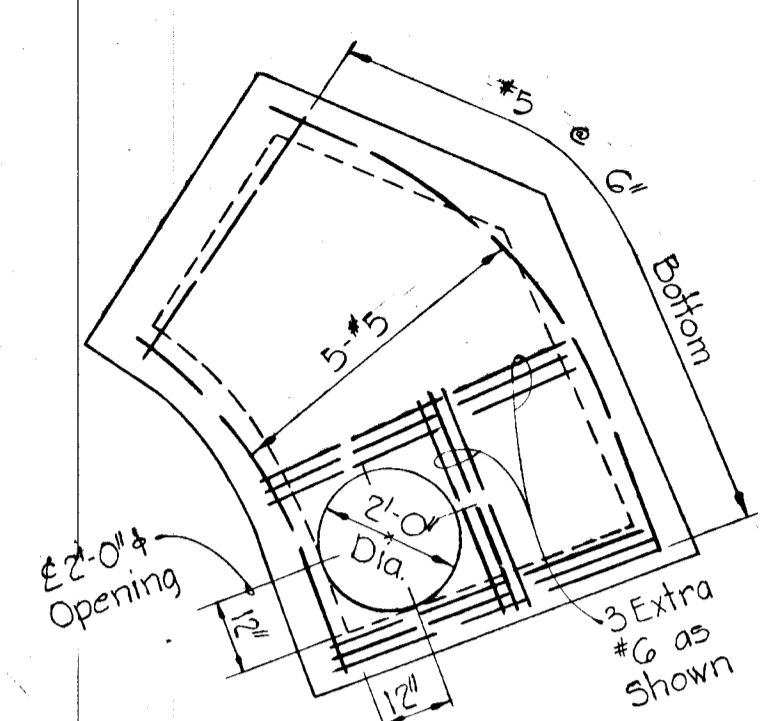
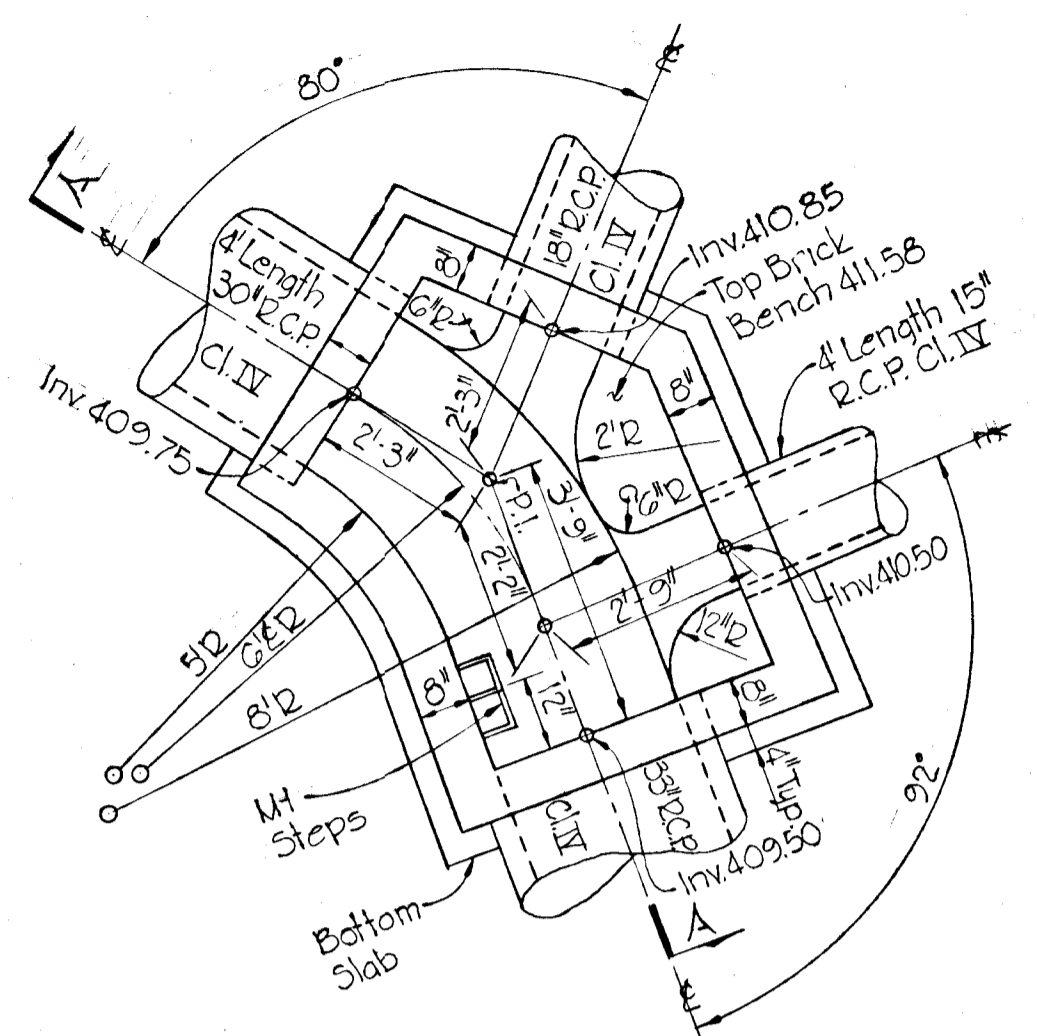
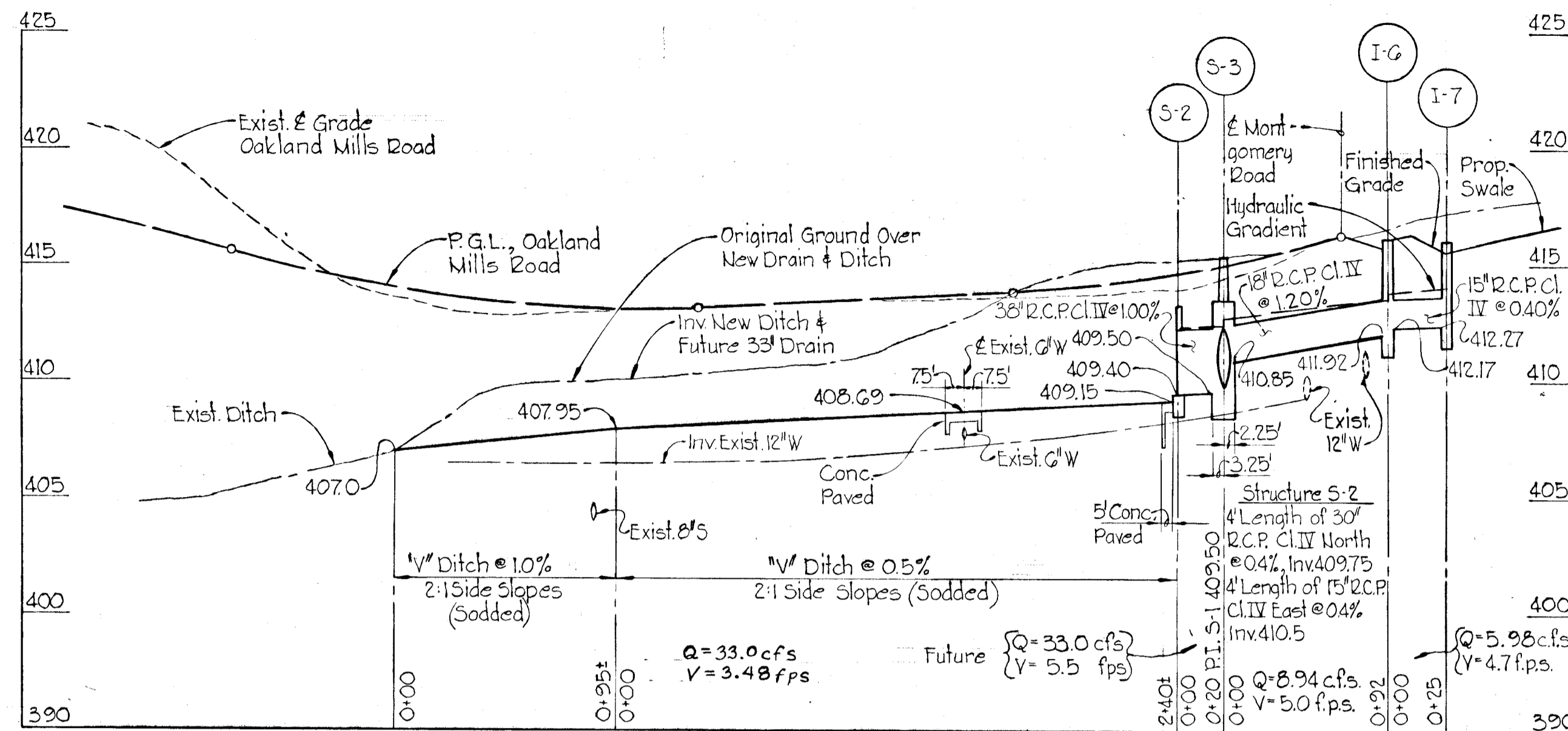
Notes:

- Gratings are subject to approval for each job. Any type of substantial transverse bars may be used which will support a minimum uniform load of 150 lbs/sq ft. The transverse bars shall be held rigid by spacer bars.
- All material to be hot dipped galvanized.

5/16" Slotted hole to receive 1/2"x4" machine bolt (galv) imbedded 3" in brick wall. Nut to be placed on end of bolt after grate is installed.

DEPARTMENT OF PUBLIC WORKS
G. M. McLeod 5/25/72
 CHIEF, BUREAU OF HIGHWAYS DATE
 OFFICE OF PLANNING AND ZONING
V. H. Cleveland 5/21/72
 CHIEF, DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING DATE

3/2/72	1	As per OPW Comment dated 2/21/72
Rev. Date	Rev. No.	Revision Description
COLUMBIA		
6 TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
OWNER AND DEVELOPER THE HOWARD RESEARCH AND DEVELOPMENT CORP.		
PROJECT AREA - SECTION I, AREA G		
VILLAGE OF LONGREACH		
PROJECT TITLE DRAINAGE PLANS, PROFILES AND DETAILS		
SCALE: As Shown	DATE: September 29, 1971	
WHITMAN, REARDT & ASSOCIATES ENGINEERS BALTIMORE, MARYLAND 21202		
		<i>Kenneth A. McCord</i> KENNETH A. MCCORD Registered Engineer No. 1974

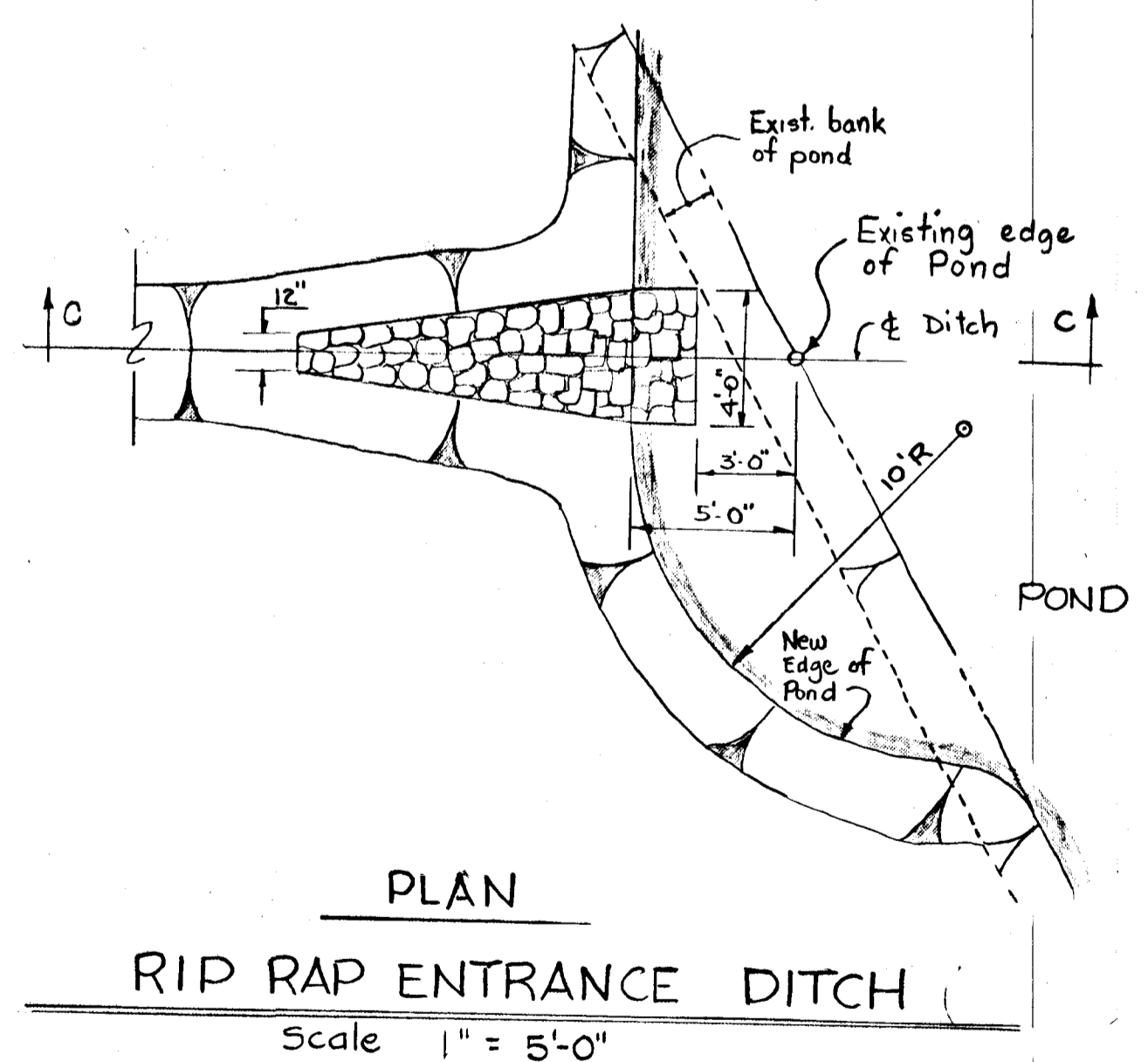
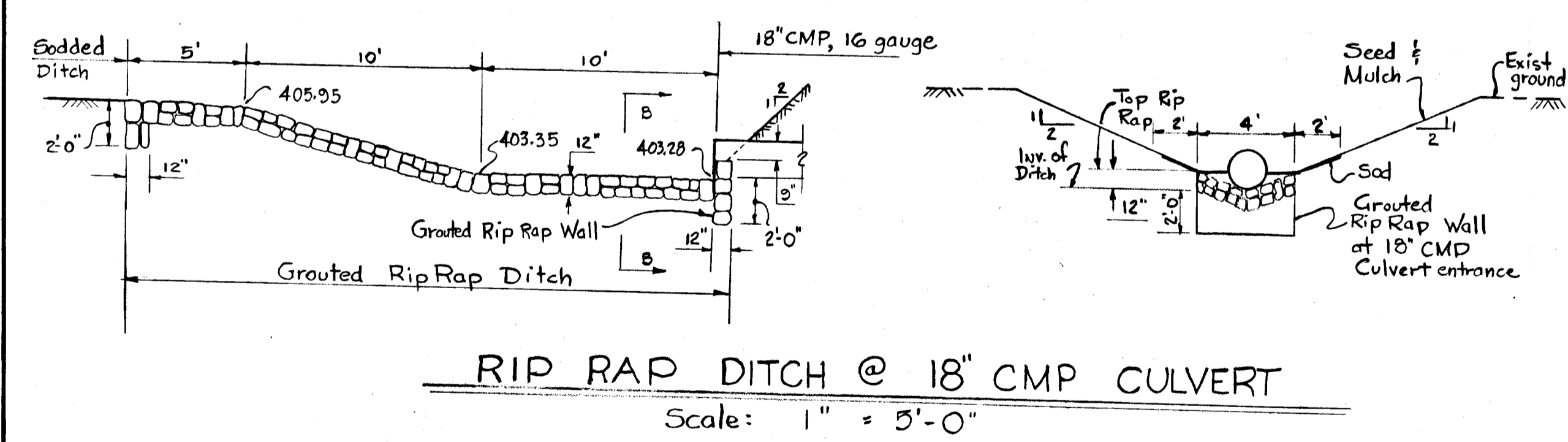
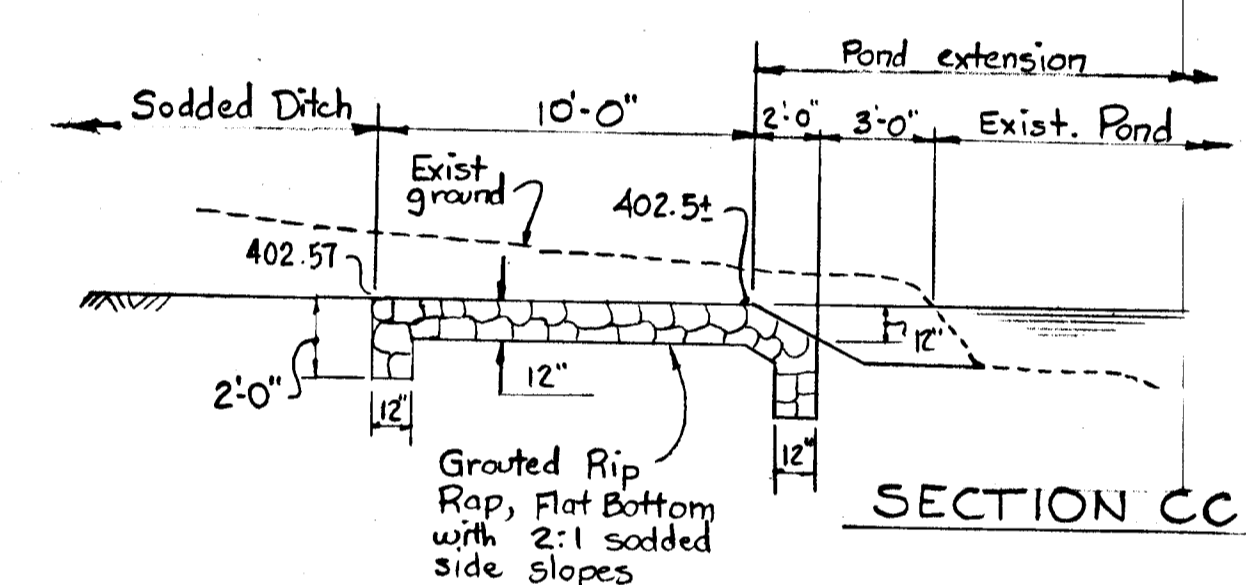
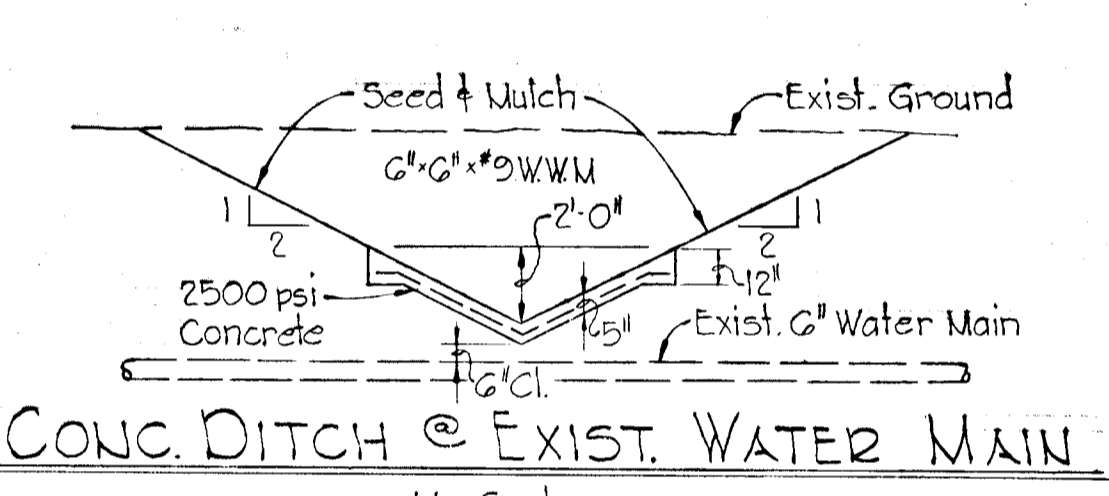
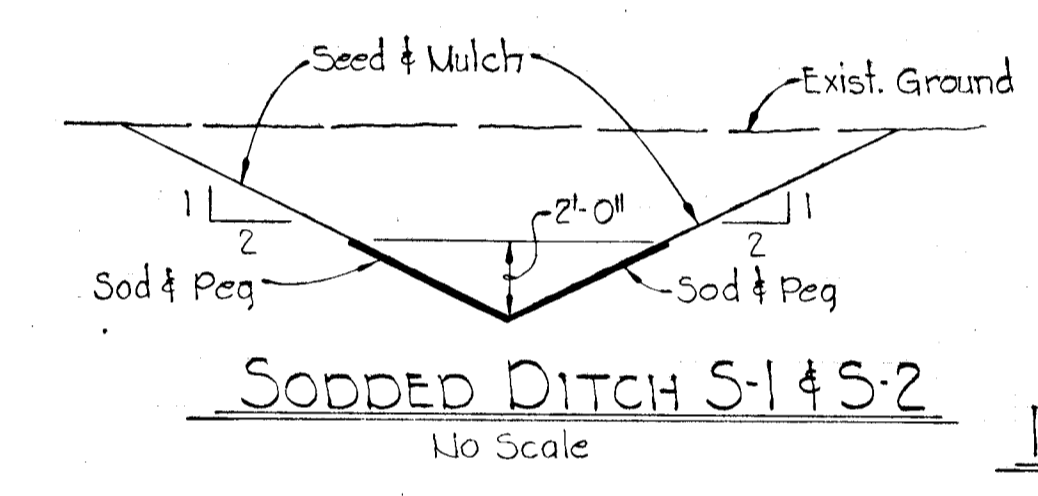


PLAN BELOW CONCRETE SLAB

PLAN CONCRETE SLAB

SECTION A-A

DETAIL - STRUCTURE S-3
Scale: 3/4" = 1'-0"



RIP RAP DITCH @ 18" CMP CULVERT
Scale: 1" = 5'-0"

PLAN
RIP RAP ENTRANCE DITCH
Scale 1" = 5'-0"

APPROVED
DEPARTMENT OF LAND DEVELOPMENT
AND TRANSPORTATION PLANNING
HOWARD COUNTY, MARYLAND
5/29/72
JAC

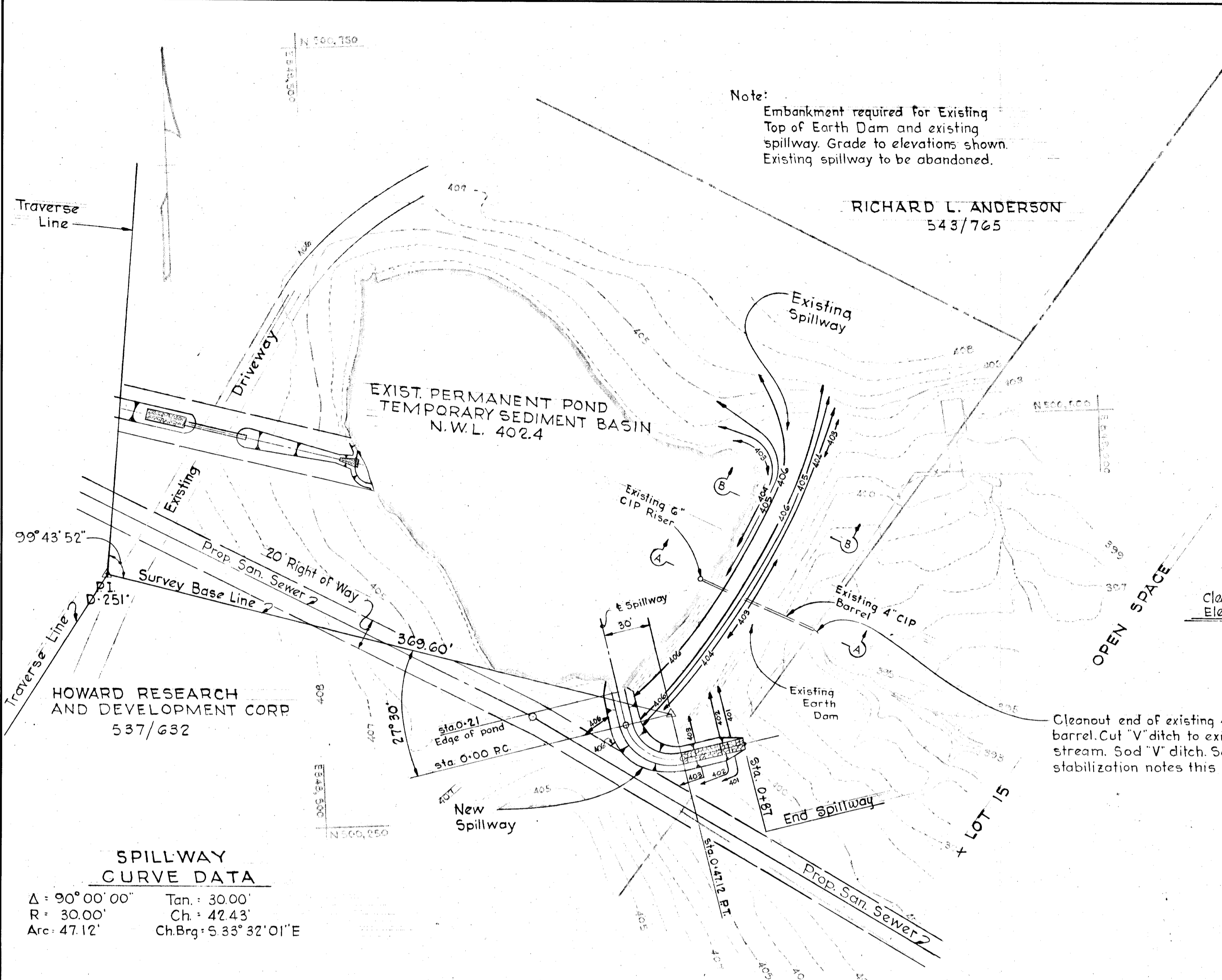
3/6/72	1	As per DPW Comments dated 2/9/72
Rev. Date	Rev. No.	Revision Description

COLUMBIA
6th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
OWNER AND DEVELOPER
HOWARD RESEARCH AND DEVELOPMENT CORP.
PROJECT AREA - SECTION 1, AREA G
VILLAGE OF LONGREACH
PROJECT TITLE
DRAINAGE PROFILE AND DETAILS
SCALE: As Shown DATE: September 29, 1971

WHITMAN, REQUARDT & ASSOCIATES
ENGINEERS
BALTIMORE, MARYLAND
21202

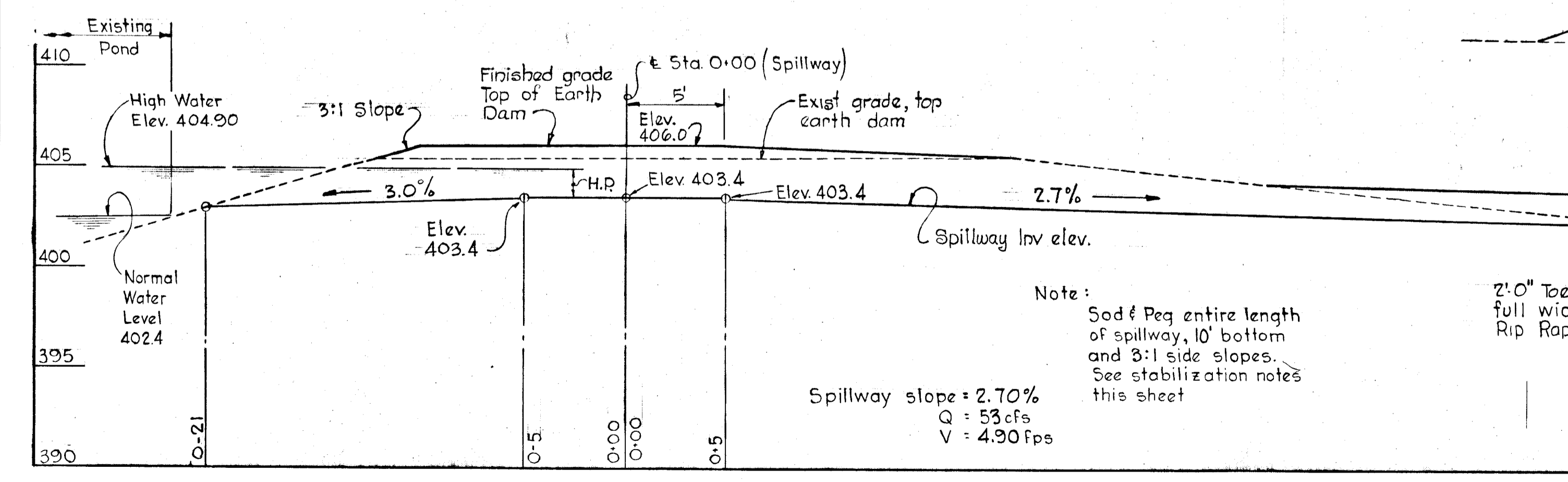
DEPARTMENT OF PUBLIC WORKS
5/25/72
CHIEF, BUREAU OF HIGHWAYS DATE
OFFICE OF PLANNING AND ZONING
5/29/72
DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING

Kenneth A. McCord
KENNETH A. MCCORD
Registered Engineer
No. 1974

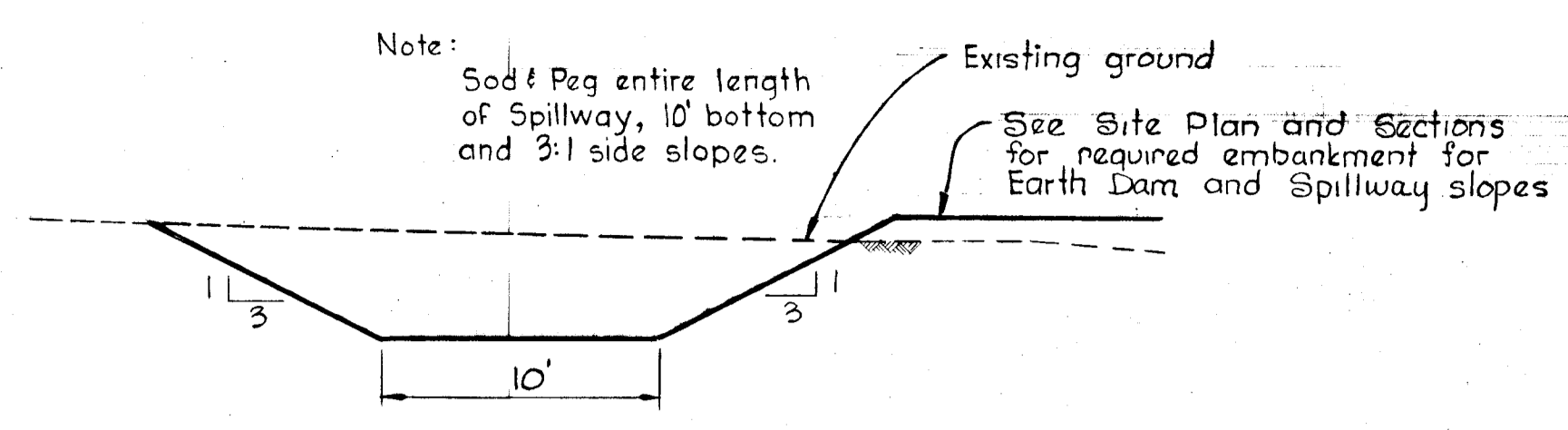


SPILLWAY CURVE DATA
 $\Delta = 90^{\circ}00'00''$ Tan. = 30.00'
 $R = 30.00'$ Ch. = 42.43'
 $Arc = 47.12'$ Ch.Brg. = S 83° 32' 01" E

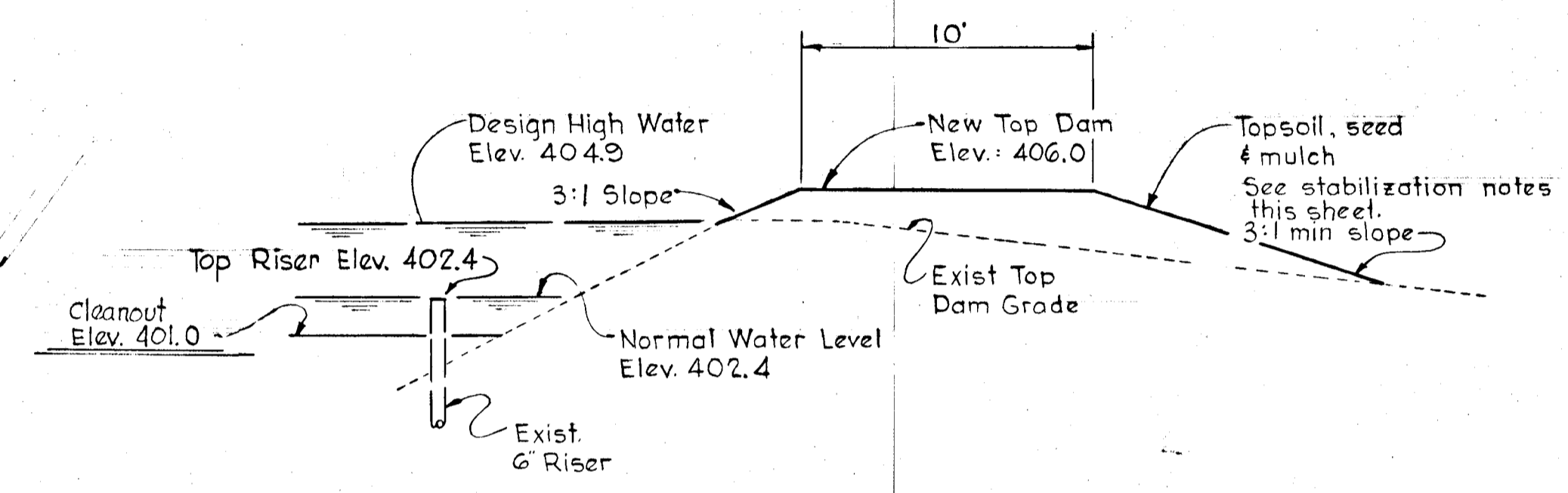
SITE PLAN
 Scale: 1" = 50'



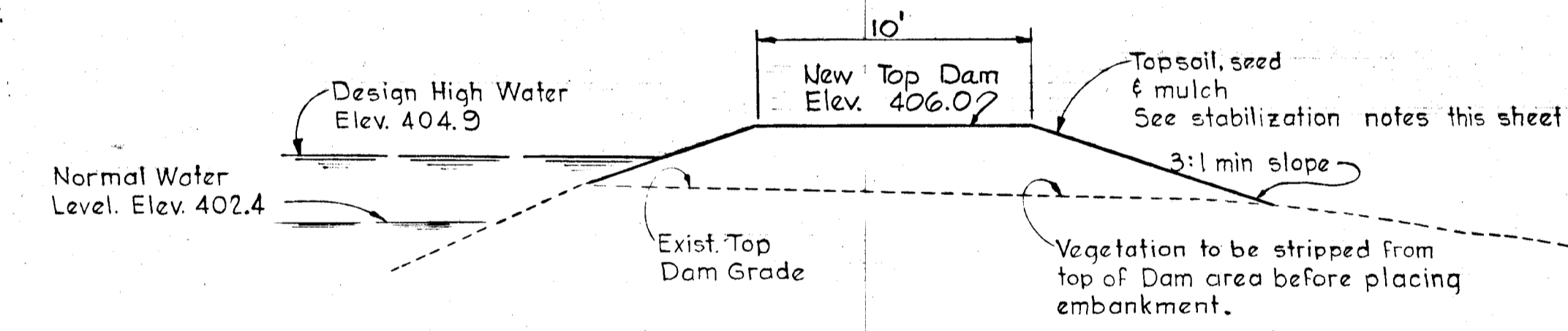
PROFILE - NEW SPILLWAY
 Scale: 1" = 5'



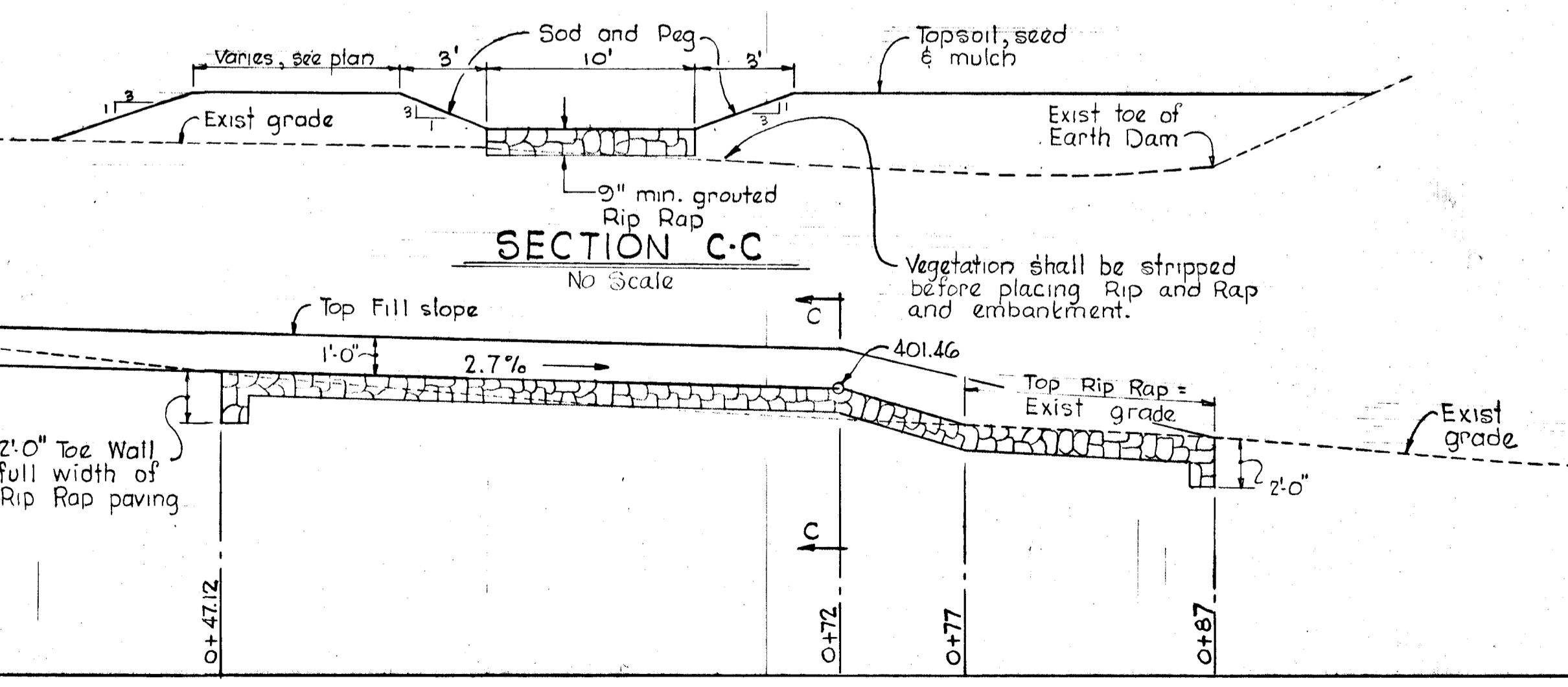
SPILLWAY SECTION
 No Scale



SECTION A-A
 Scale: 1" = 5'



SECTION B-B
 Scale: 1" = 5'



SECTION C-C
 No Scale

POND SITE STABILIZATION

- Permanent Seeding:
 - Ground limestone - 92 lbs./1000 S.F.
 - Seed shall be Kentucky 31 tall fescue - 1.25 lbs./1000 S.F. and *Sericca lespedeza*, (unhulled) 0.50 lbs./1000 S.F.
 - Fertilizer (10-10-10) - 11.5 lbs./1000 S.F.
- Spillway area to be sodded and Pegged. Use:
 - Ground limestone - 46 lbs./1000 S.F.
 - Fertilizer (10-10-10) - 11.5 lbs./1000 S.F.
 - Sod - Kentucky 31 tall fescue
- Topsoil to be spread a minimum 4 inches in depth, fertilizer and limestone to be disced into upper 3 inches then fine grade, seed or sod, straw mulch placed at rate of 11.5 lbs./1000 S.F. Hydroseed method for seeding is permissible.

APPROVED HOWARD SOILS CONSERVATION DISTRICT
James M. Nelson 5-24-72
 DISTRICT CONSERVATIONIST DATE
Robert W. Zichow 5-24-72
 SOILS CONSERVATIONIST DATE

Rev. Date	Rev. No.	Revision Description
COLUMBIA		
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
OWNER AND DEVELOPER THE HOWARD RESEARCH AND DEVELOPMENT CORP		
PROJECT AREA		
VILLAGE OF LONG REACH SECTION I, AREA G		
PROJECT TITLE		
SEDIMENT CONTROL PLAN EXISTING POND EARTH DAM & SPILLWAY IMPROVEMENTS		
Scale: As Shown		Date: May 8 1972
WHITMAN, REQUART & ASSOCIATES ENGINEER BALTIMORE, MARYLAND		
<i>Kenneth A. McCord</i> KENNETH A. McCORD Registered Engineer No. 1974		