

PLANS SYMBOLS

STATE LINE	SPRINGS
COUNTY LINE	MARSH
TOWNSHIP OR RANGE LINE	TIMBER
SECTION LINE	ORCHARD
QUARTER LINE	BRUSH
SIXTEENTH LINE	NURSERY
RIGHT OF WAY LINE	CATCH BASIN
PRESENT RIGHT OF WAY LINE	FIRE HYDRANT
CONTROL OF ACCESS LINE	CATTLE GUARD
PROPERTY LINE (Except Land Lines)	OVERPASS (Highway Over)
VACATED PLATTED PROPERTY	UNDERPASS (Highway Under)
CORPORATE OR CITY LIMITS	BRIDGE
TRUNK HIGHWAY CENTER LINE	BUILDING (One Story Frame)
RETAINING WALL	F FRAME C CONCRETE
RAILROAD	S STONE T TILE
RAILROAD RIGHT OF WAY LINE	B BRICK ST STUCCO
RIVER OR CREEK	IRON PIPE OR ROD
DRY RUN	MONUMENT (STONE, CONCRETE, OR METAL)
DRAINAGE DITCH	WOODEN HUB
DRAIN TILE	GRAVEL PIT
CULVERT	SAND PIT
DROP INLET	BORROW PIT
GUARD RAIL	ROCK QUARRY
BARBED WIRE FENCE	
WOVEN WIRE FENCE	
CHAIN LINK FENCE	
RAILROAD SMOKE FENCE	
STONE WALL OR FENCE	
HEDGE	
RAILROAD CROSSING SIGN	
RAILROAD CROSSING BELL	
ELECTRIC WARNING SIGN	
CROSSING SIGN	
MEANDER CORNER	

UTILITIES SYMBOLS

POWER POLE LINE	CONDUIT
TELEPHONE OR TELEGRAPH POLE LINE	TELEPHONE CABLE IN CONDUIT
JOINT TELEPHONE AND POWER ON TELEPHONE POLES	ELECTRIC CABLE IN CONDUIT
ANCHOR	TELEPHONE MAINHOLE
STEEL TOWER	ELECTRIC MAINHOLE
STREET LIGHT	BURIED TELEPHONE CABLE
POSTAL TELEPHONE CABLE TERMINAL	BURIED ELECTRIC CABLE
GAS MAIN	AERIAL TELEPHONE CABLE
WATER MAIN	SEWER (SANITARY OR STORM)
	SEWER MAINHOLE

NOTE SECTION NUMBERS ARE FROM THE SOUTH

PIT DATA

PIT NO. _____ Located in _____

PIT NO. _____ Located in _____

**RAMSEY COUNTY
DEPARTMENT OF PUBLIC WORKS**

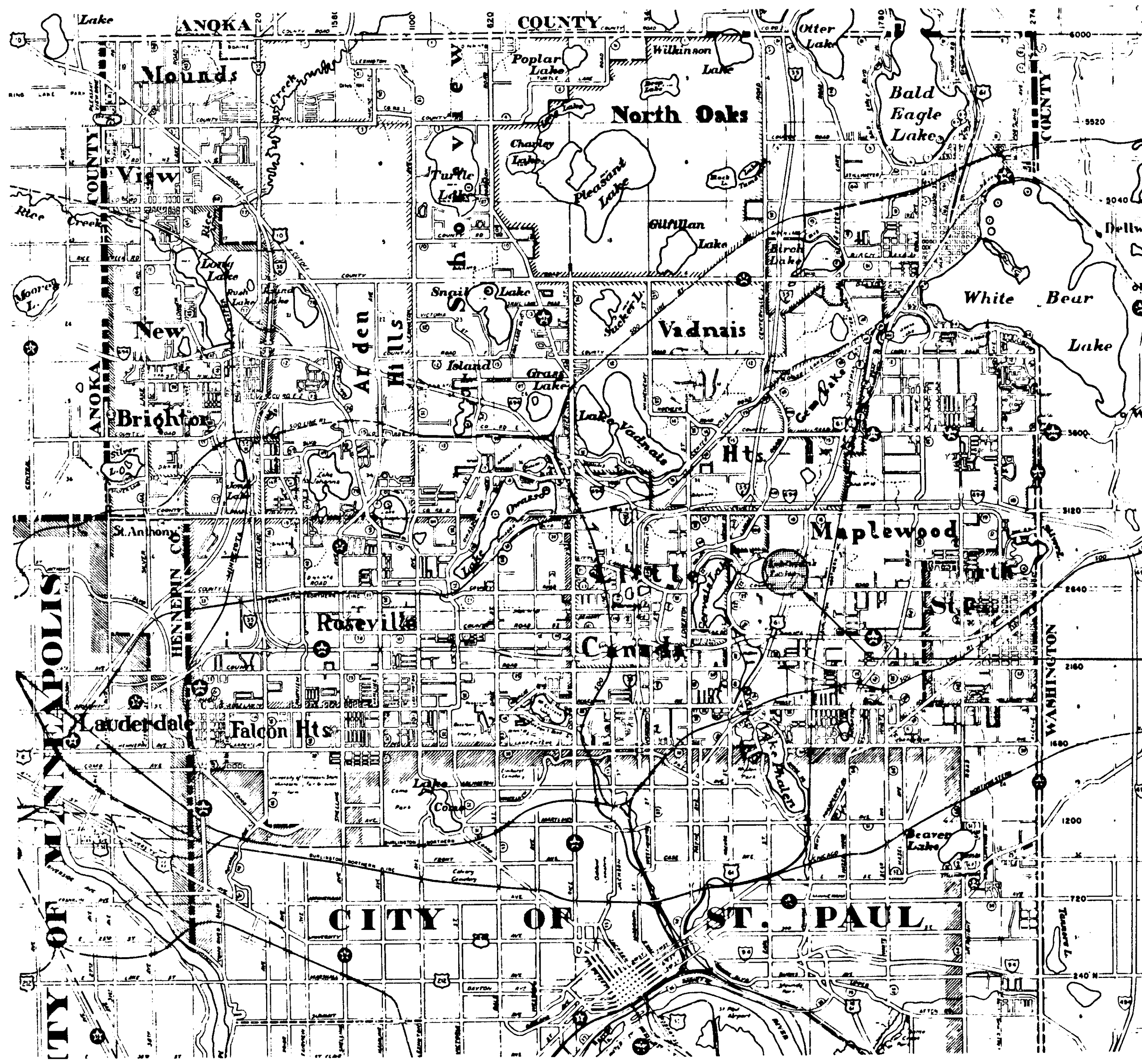
CONSTRUCTION PLANS FOR EXCAVATION, PLACEMENT OF FILL, TIMBER WEIR INSTALLATION, CONSTRUCTION OF PUMP STATION & APPURTANCES, AND RESTORATION FOR THE:

**KOHLMAN WETLAND
TREATMENT SYSTEM**

LOCATION: BETWEEN TH61 AND KOHLMAN LAKE NORTH-ERLY OF COUNTY ROAD C IN THE CITY OF MAPLEWOOD

INDEX

- 1 TITLE SHEET
- 2 QUANTITIES, DETAIL PLATES, PROJECT SITE
- 3 PROJECT LAYOUT, EASEMENT REQUIREMENTS, SOIL LOG
- 4 COMPONENT DETAILS



PROJECT SITE

E.P.A. PROJECT NO. S-804690020
RAMSEY CO. PUBLIC WORKS NO. 47281

DESIGN SQUAD: *ST* DATE: 10/10/82
DRAWN BY: *STH* DATE: 10/19/82
CHECKED BY: *STH* DATE: 10-19-82

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE: 12-03-82 REG. NO. 11659 ENGR. *Daniel E. Schacht*

RECOMMENDED FOR APPROVAL: *PKK* DATE: 12-20-82
TRAFFIC ENGR.

RECOMMENDED FOR APPROVAL: *Go...* DATE: 12/20/82
COUNTY ENGINEER

RECOMMENDED FOR APPROVAL: *STH* DATE: 10-19-82
ENV ENGR

APPROVED: *Go...* DATE: 12/22/82
CHAIRMAN OF THE RAMSEY COUNTY BOARD

RECOMMENDED FOR APPROVAL: *M...* DATE: 12-03-82
MAINT ENGR

APPROVED: _____ DATE: _____

RECOMMENDED FOR APPROVAL: *JRU* DATE: 12-02-82
CONST ENGR

APPROVED: _____ DATE: _____

RECOMMENDED FOR APPROVAL: *LRF* DATE: 12-02-82
DESIGN ENGR

RECOMMENDED FOR APPROVAL: *STH* DATE: 12-02-82
ASST ENGR

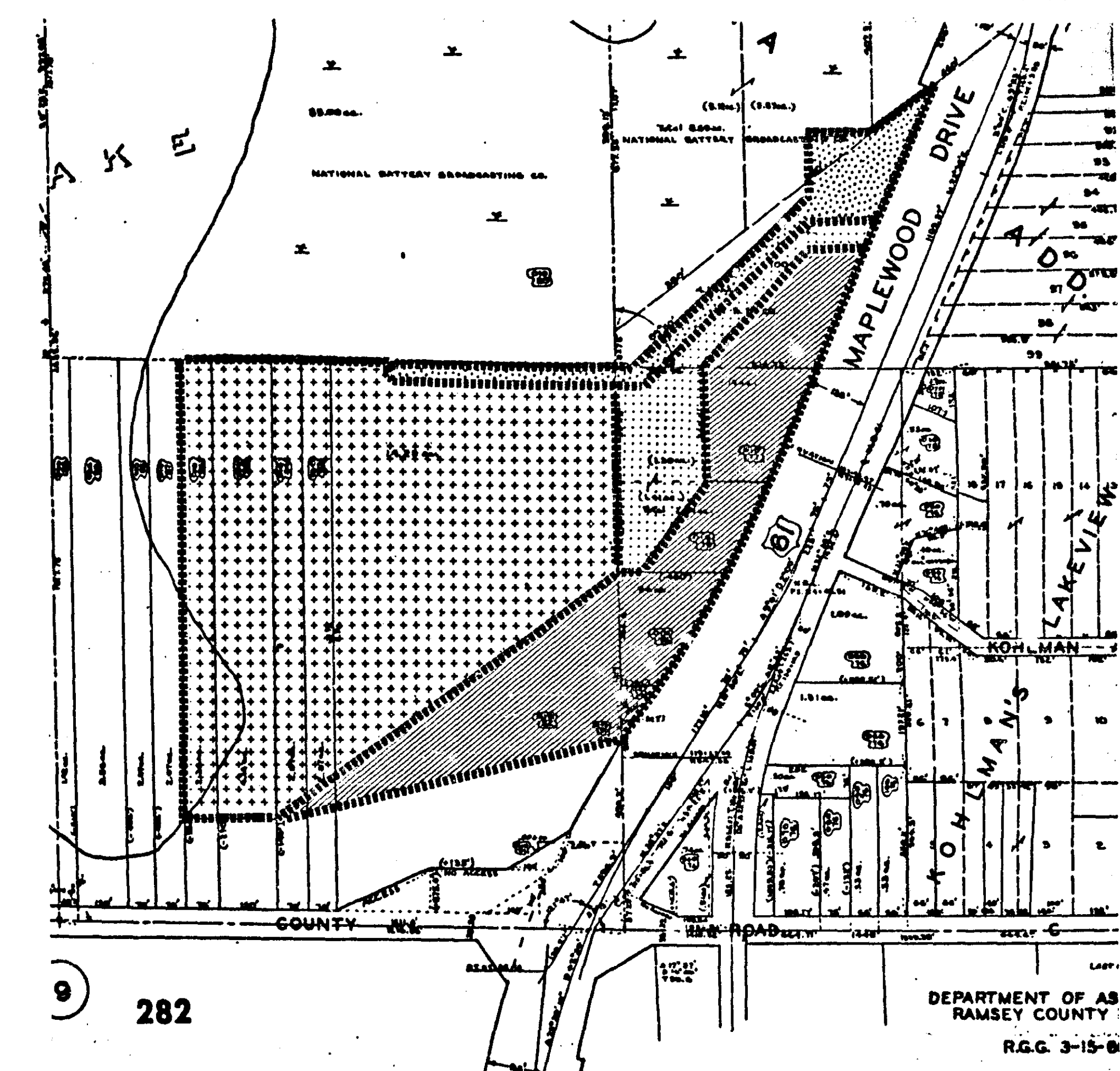
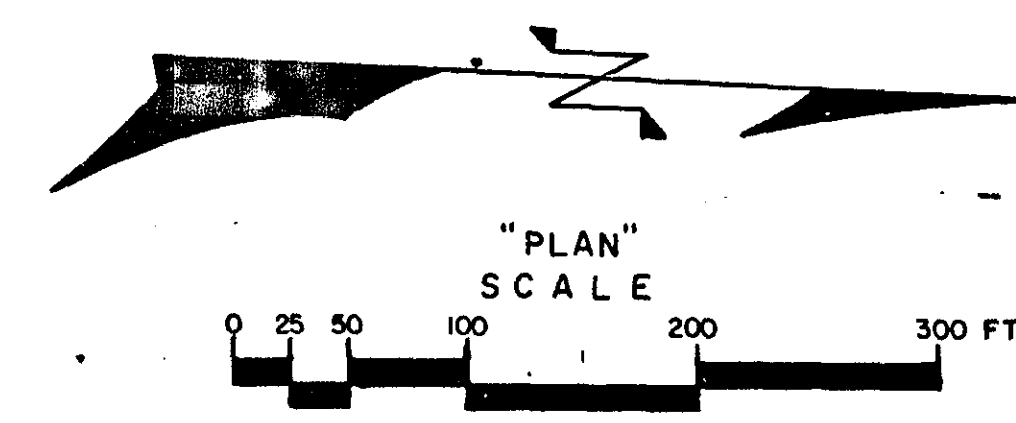
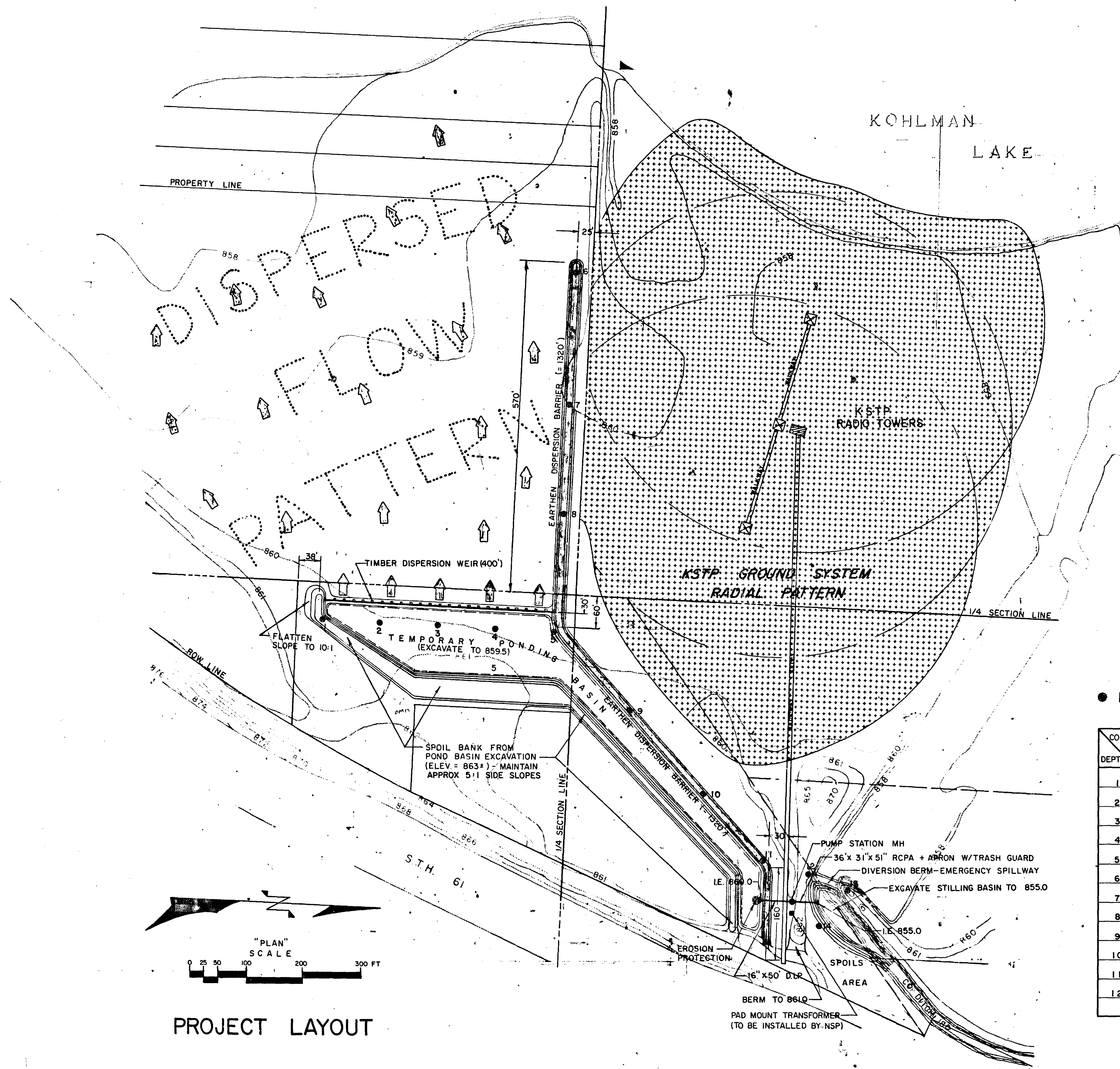
APPROVED: *W...* DATE: 12-2-82
COORDINATOR ENGR

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: *STH*
DATE: 12/26/84

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.
Daniel E. Schacht
Date: 10-19-82 Reg. No. 11659

PLAN REVISIONS		
DATE	SHEET NO.	BY
11/4/82	1,2,3,4	<i>STH</i>
12/1/82	3	<i>STH</i>

THE 1978 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION" SHALL GOVERN.



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DEPARTMENT OF AS
RAMSEY COUNTY
R.C.C. 3-15-8

PERMANENT FLOWAGE EASEMENT
TEMPORARY CONSTRUCTION & PERMANENT ACCESS EASEMENT
PERMANENT FLOWAGE EASEMENT NO RESTRICTION ON FILLING OR DEVELOPMENT
PERMANENT FLOWAGE, PERMANENT ACCESS & TEMPORARY CONSTRUCTION EASEMENT

SECTION 4, R.22W., T.29 N. SCALE: 1" = 300' DATE: 3/3/82

REQUIRED EASEMENTS
(TO BE ACQUIRED BY OTHERS)

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

DONE BY: *[Signature]*
DATE: 12/22/84

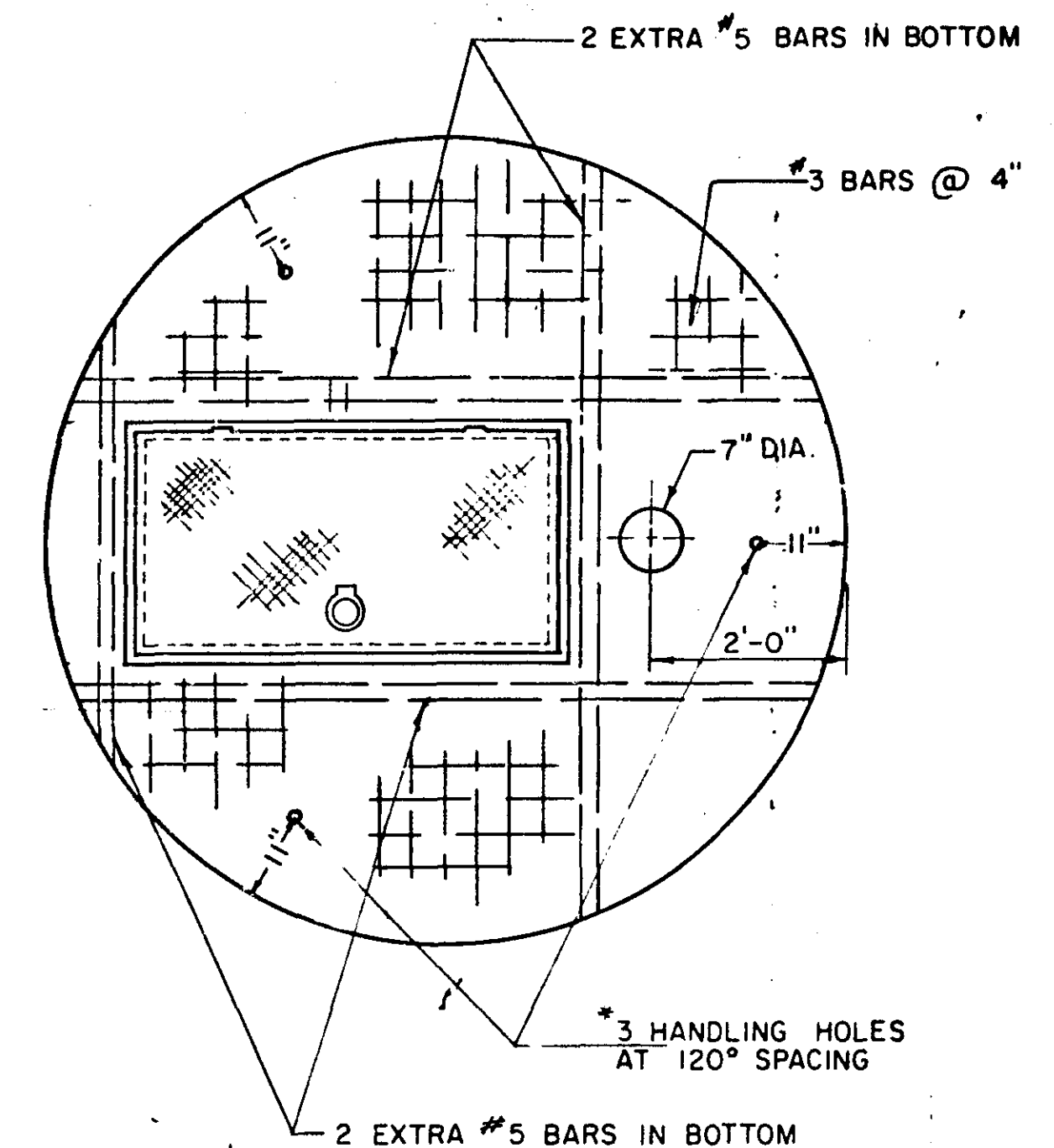
● DENOTES SOIL CORE LOCATION

CORE #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	CORE #
DEPTH															DEPTH
1	PEAT	PEAT	PEAT	PEAT	PEAT	PEAT	PEAT	PEAT	PEAT	PEAT	PEAT	PEAT	PEAT	PEAT	1
2	PEAT	PEAT	PEAT	PEAT	PEAT	PEAT	PEAT	PEAT	PEAT	PEAT	PEAT	PEAT	PEAT	PEAT	2
3	PEAT	PEAT	PEAT	PEAT	PEAT	PEAT	PEAT	PEAT	PEAT	PEAT	PEAT	PEAT	PEAT	PEAT	3
4	PEAT	PEAT	PEAT	PEAT	PEAT	PEAT	PEAT	PEAT	PEAT	PEAT	PEAT	PEAT	PEAT	PEAT	4
5	PEAT	SILTY CLAY	PEAT	SILTY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY	PEAT	SILT	SALTY PEAT	PEAT	PEAT	PEAT	PEAT	5
6	SILTY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY	PEAT	SILT	SILT	PEAT	PEAT	PEAT	PEAT	6
7	SILTY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY	PEAT	SILT	SILT	PEAT	PEAT	PEAT	PEAT	7
8	SILTY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY	PEAT	SILT	SILT	PEAT	PEAT	PEAT	PEAT	8
9	SILTY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY	PEAT	SILT	SILT	PEAT	PEAT	PEAT	PEAT	9
10	SILTY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY	PEAT	SILT	SILT	PEAT	PEAT	PEAT	PEAT	10
11	SILTY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY	PEAT	SILT	SILT	PEAT	PEAT	PEAT	PEAT	11
12	SILTY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY	PEAT	SILT	SILT	PEAT	PEAT	PEAT	PEAT	12

SOIL LOG

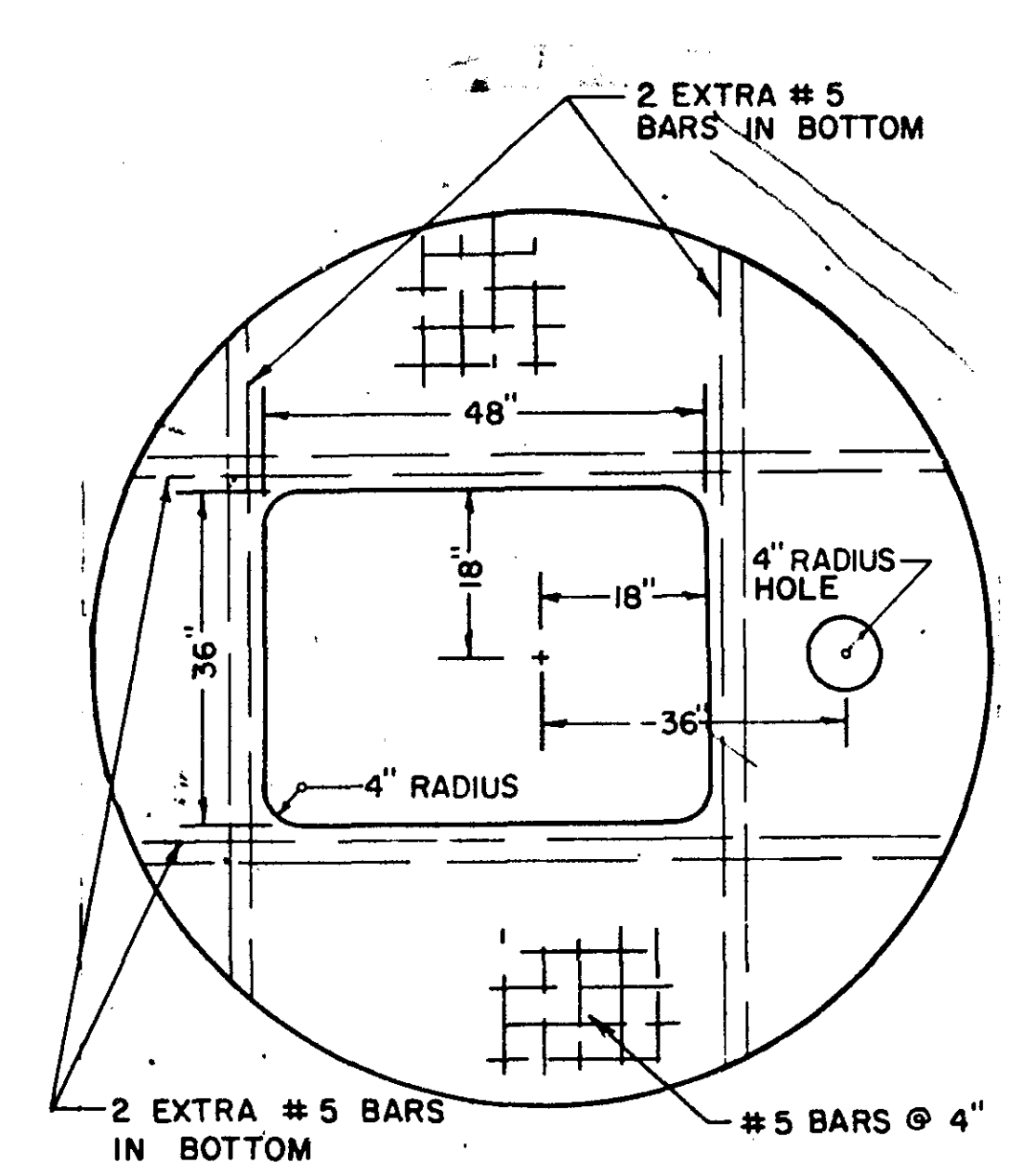
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

Daniel G. Schacht
Date 10/27/82 Reg. No. 11659

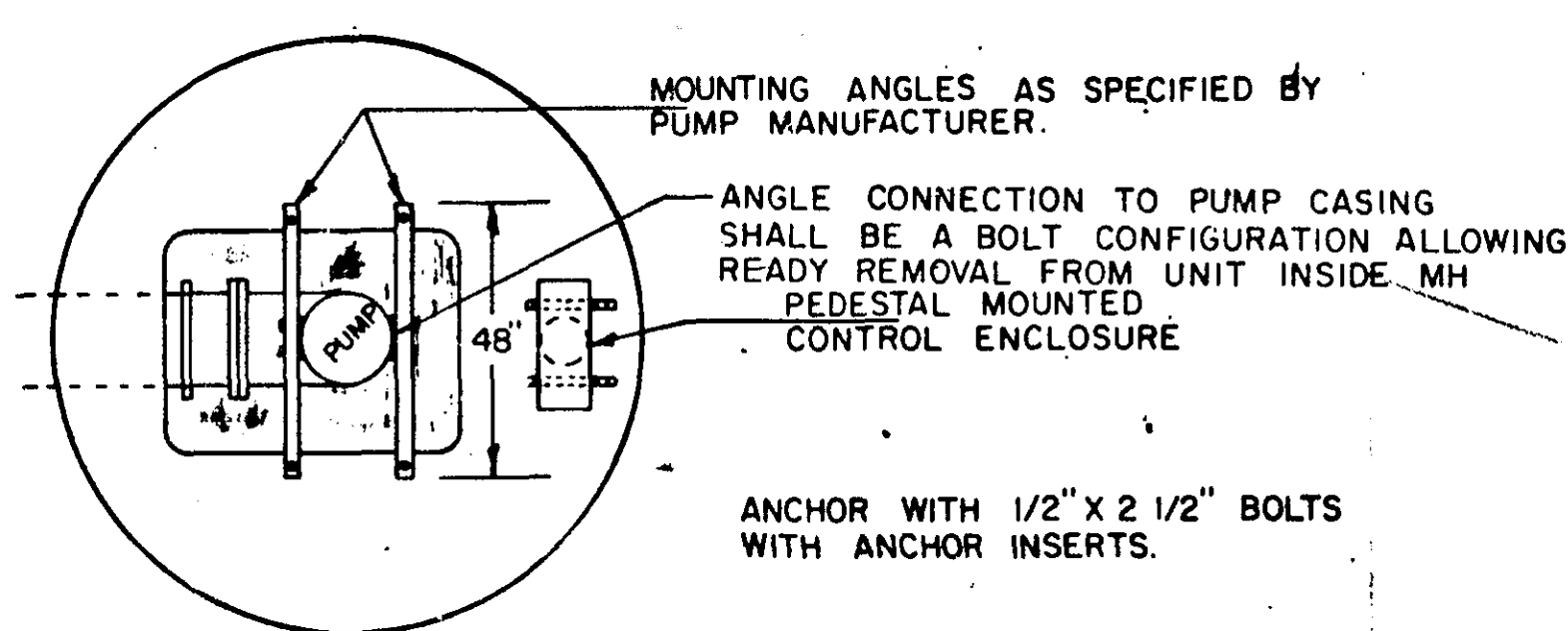


* NOTE: TOP SLAB SHALL BE FURNISHED WITH HANDLING HOLES. HANDLING HOOKS WILL NOT BE ACCEPTED. SLABS TO BE CONSTRUCTED PER STD. PLATE 4108 D EXCEPT AS NOTED.

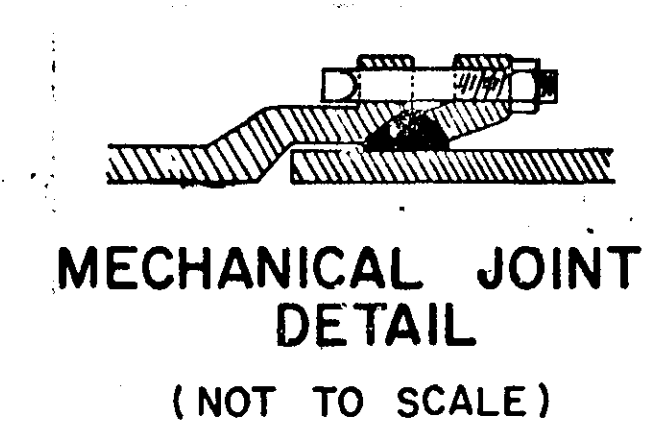
TOP SLAB DETAIL
(NOT TO SCALE)



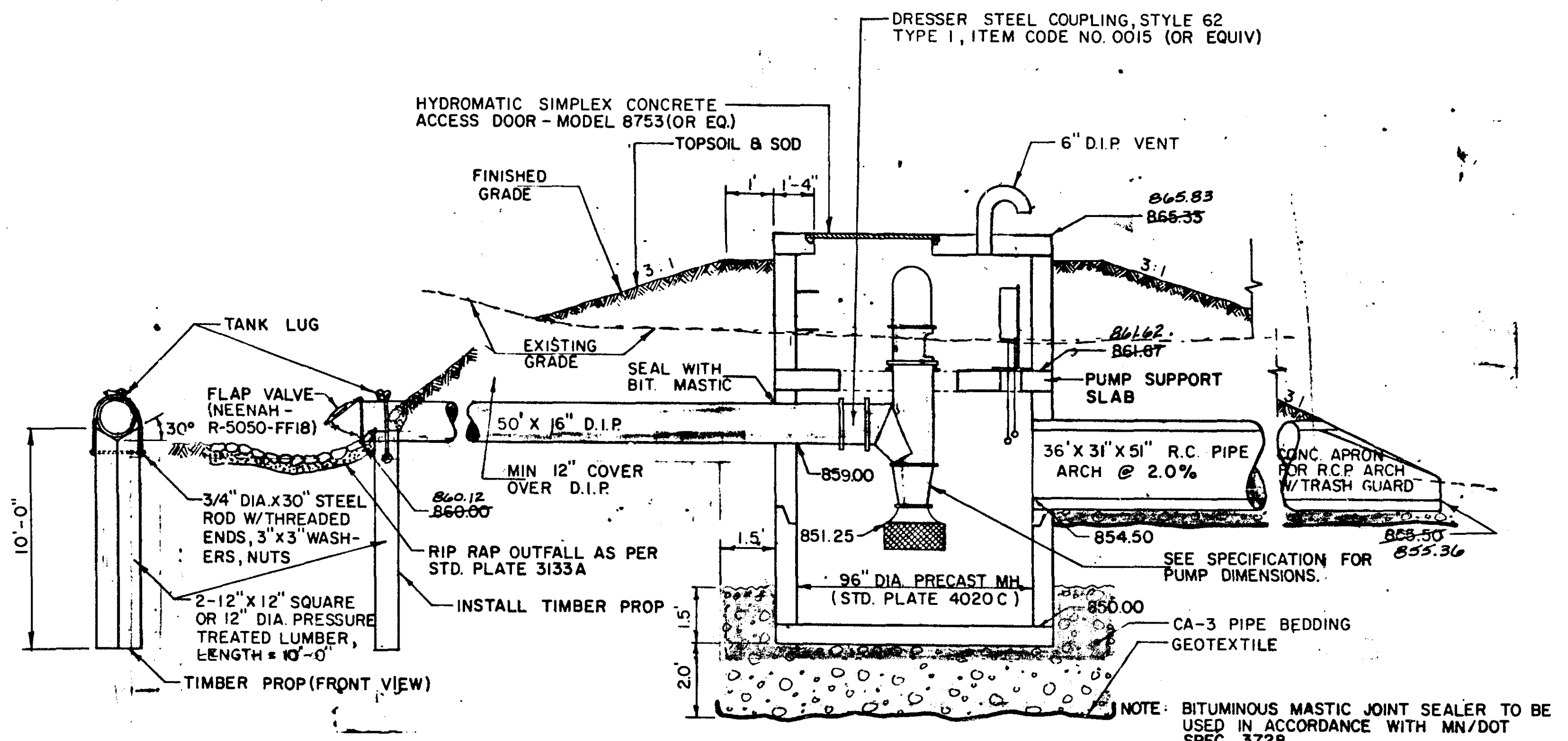
PUMP SUPPORT SLAB DETAIL
(NOT TO SCALE)



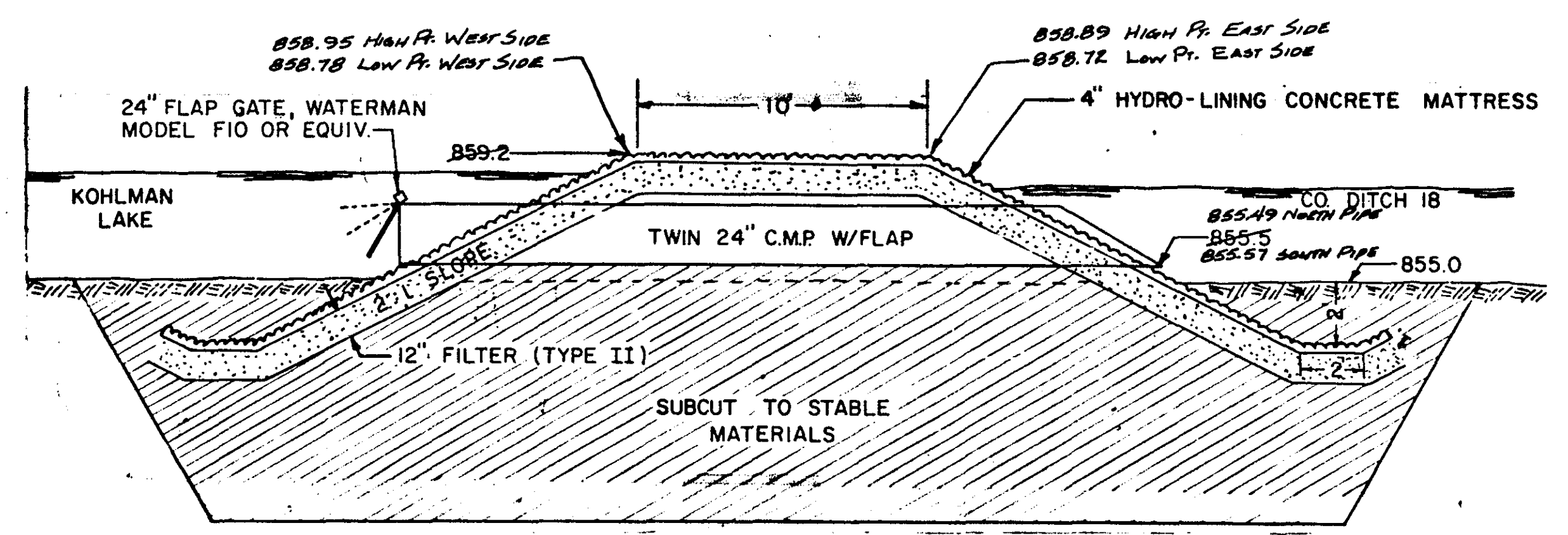
MOUNTING ANGLES DETAIL
(NOT TO SCALE)



MECHANICAL JOINT DETAIL
(NOT TO SCALE)

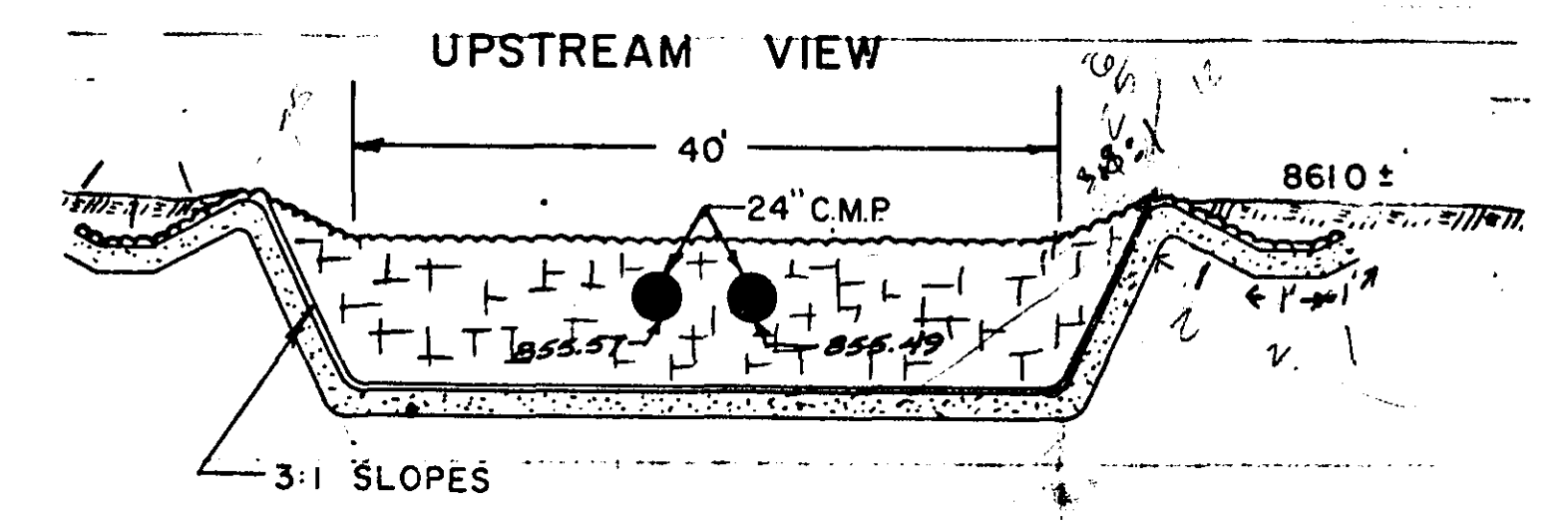


PUMP STATION MANHOLE
(NOT TO SCALE)



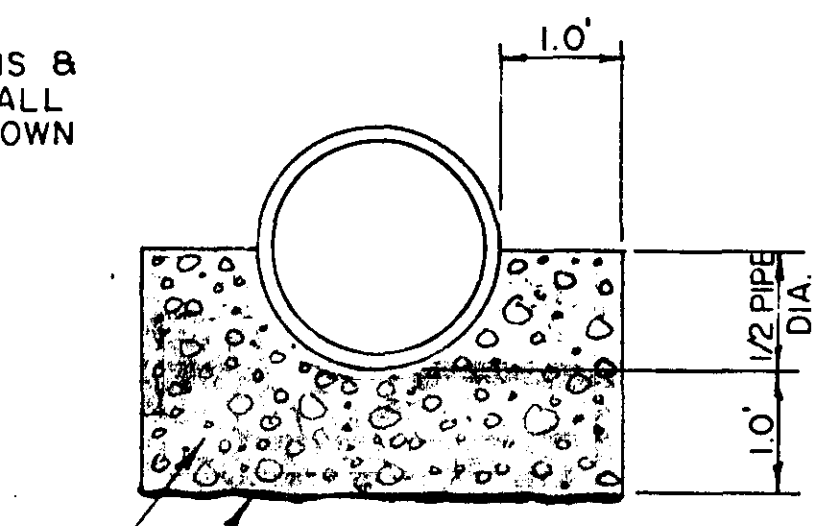
PROFILE VIEW
(NOT TO SCALE)

DIVERSION BERM - EMERGENCY SPILLWAY
(NOT TO SCALE)

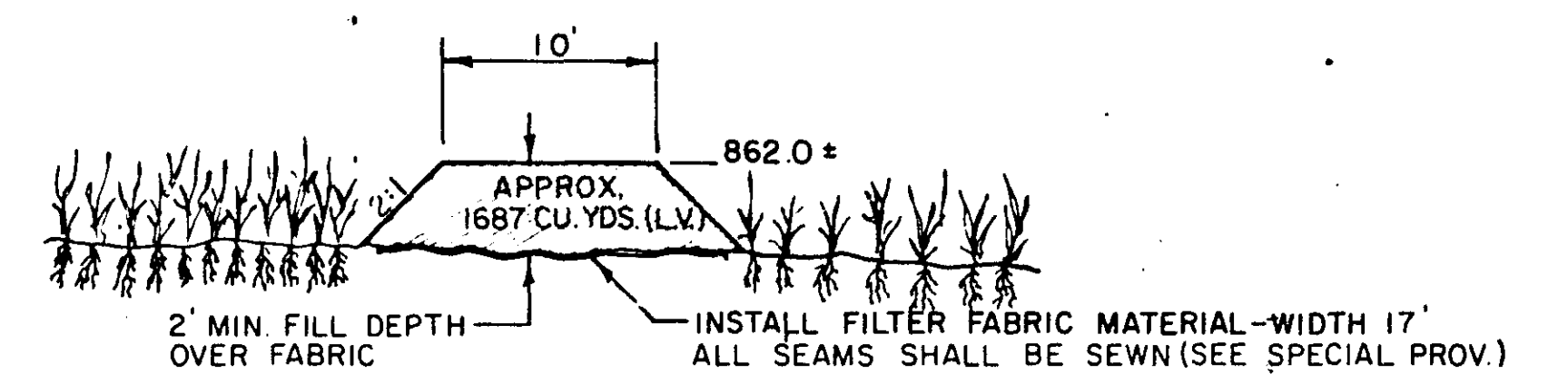


FILL MATERIAL FOR DIKE SHALL EXHIBIT SEMI PLASTIC TO PLASTIC CHARACTERISTICS IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM. ALL MATERIAL DELIVERED TO THE DIKE AREA SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE ENGINEER.

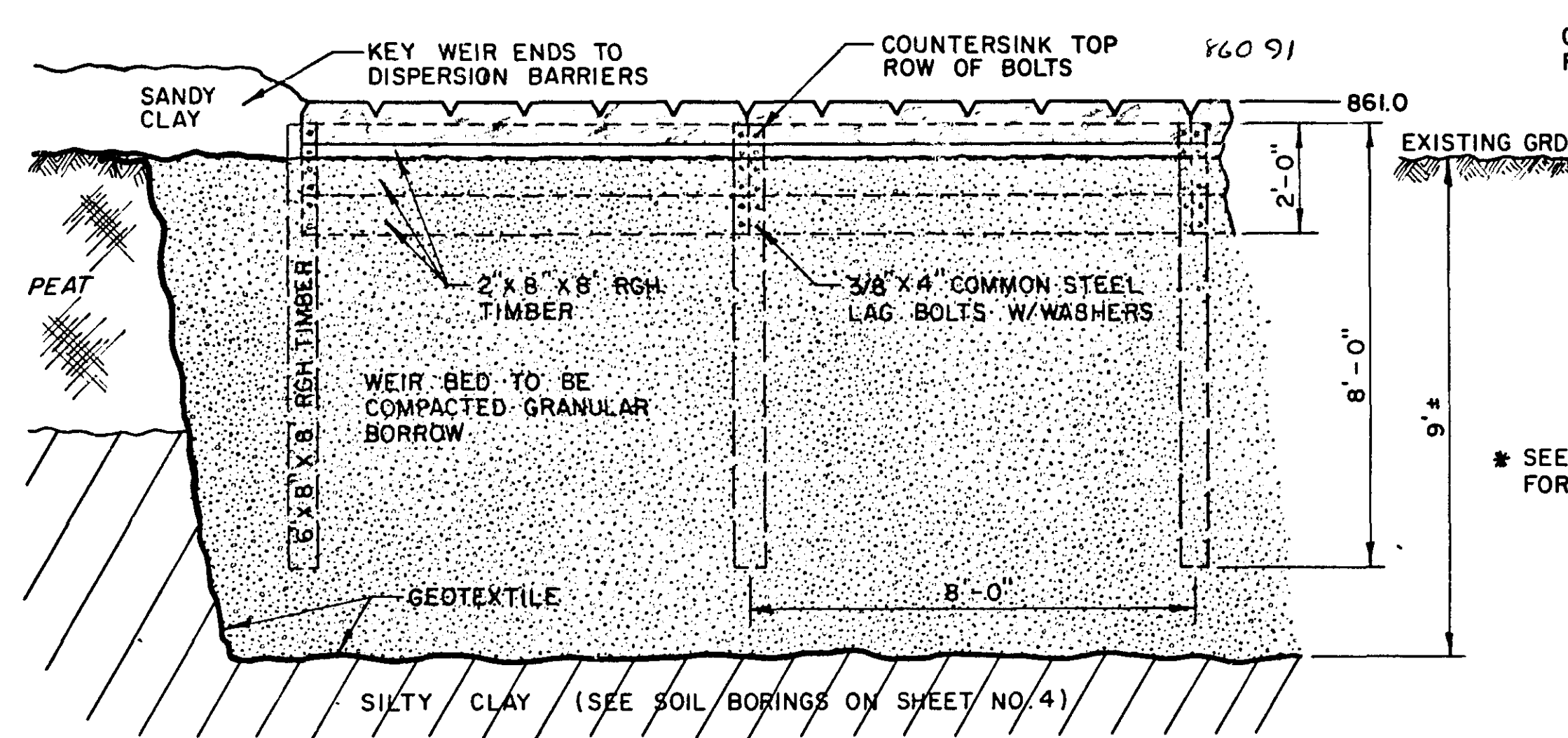
NOTE: ALL RCP SECTIONS & D.I.P. SECTIONS SHALL BE BEDDED AS SHOWN



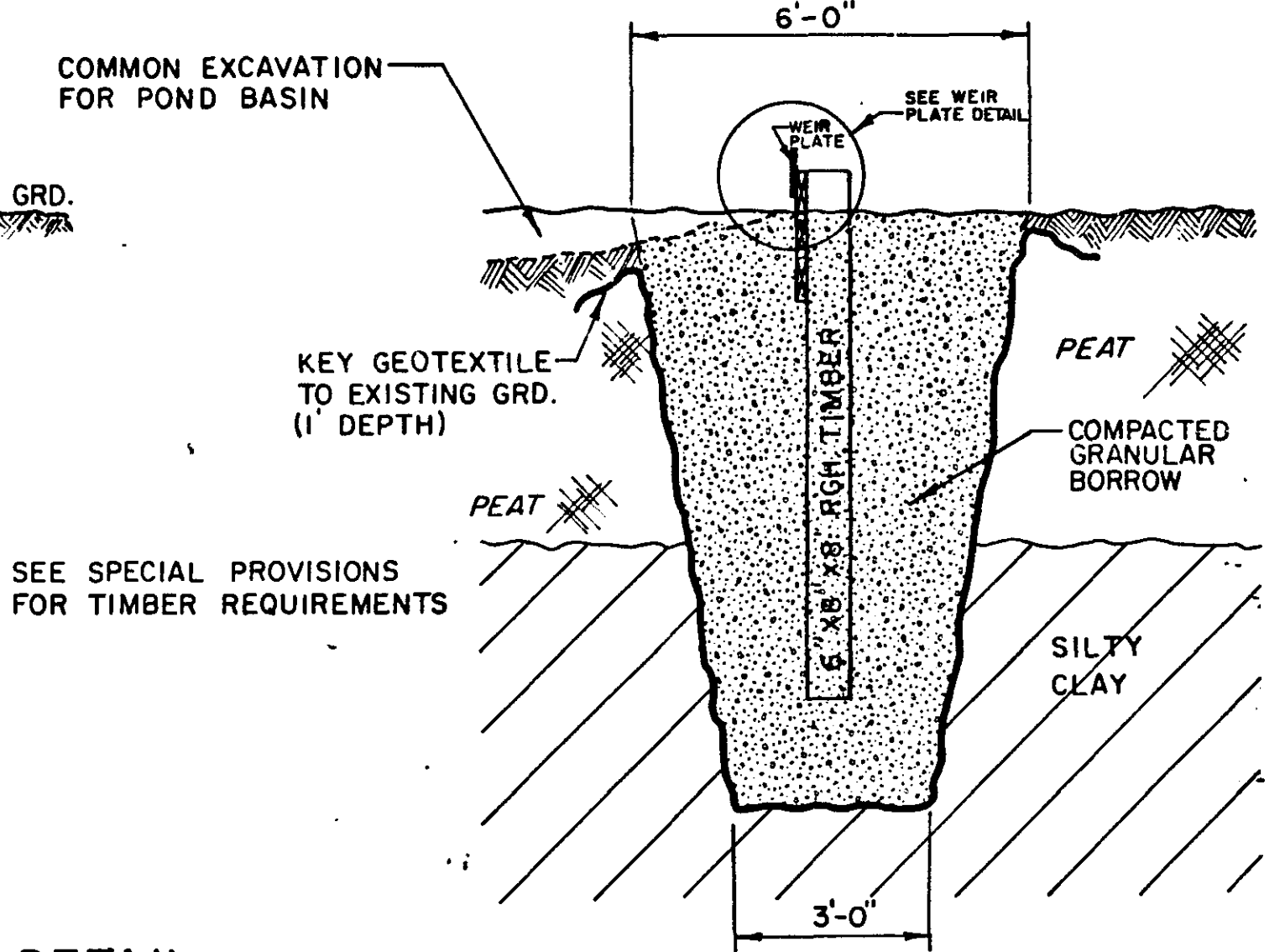
PIPE BEDDING
(SCALE: 1" = 2.0')



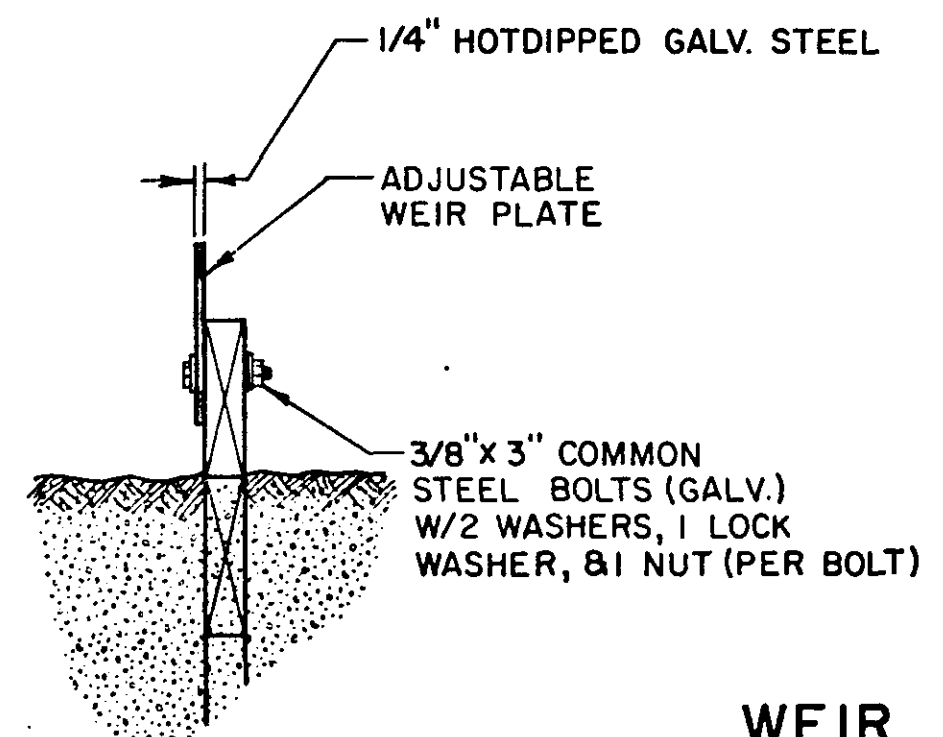
TYPICAL SECTION EARTHEN DISPERSION BARRIER
(NOT TO SCALE)



TIMBER WEIR DETAIL
SCALE: 1" = 3'-0"



NOTE: TRENCH EXCAVATION SHALL BE PAID AS COMMON EXCAVATION



WEIR PLATE DETAIL
SCALE: 1" = 1'-0"

* WEIR PLATE SHALL BE INSTALLED IN 8 SECTIONS. PAYMENT SHALL BE ON A LUMP SUM BASIS FOR EB.1. HARDWARE SHALL BE PAID SEPARATELY.

ASBUILT PLAN CONFORMING TO CONST. RECORDS
DONE BY: *DJH*
DATE: 12/26/04

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.
Daniel J. Schmitt
Date 10/27/02, Reg. No. 11654