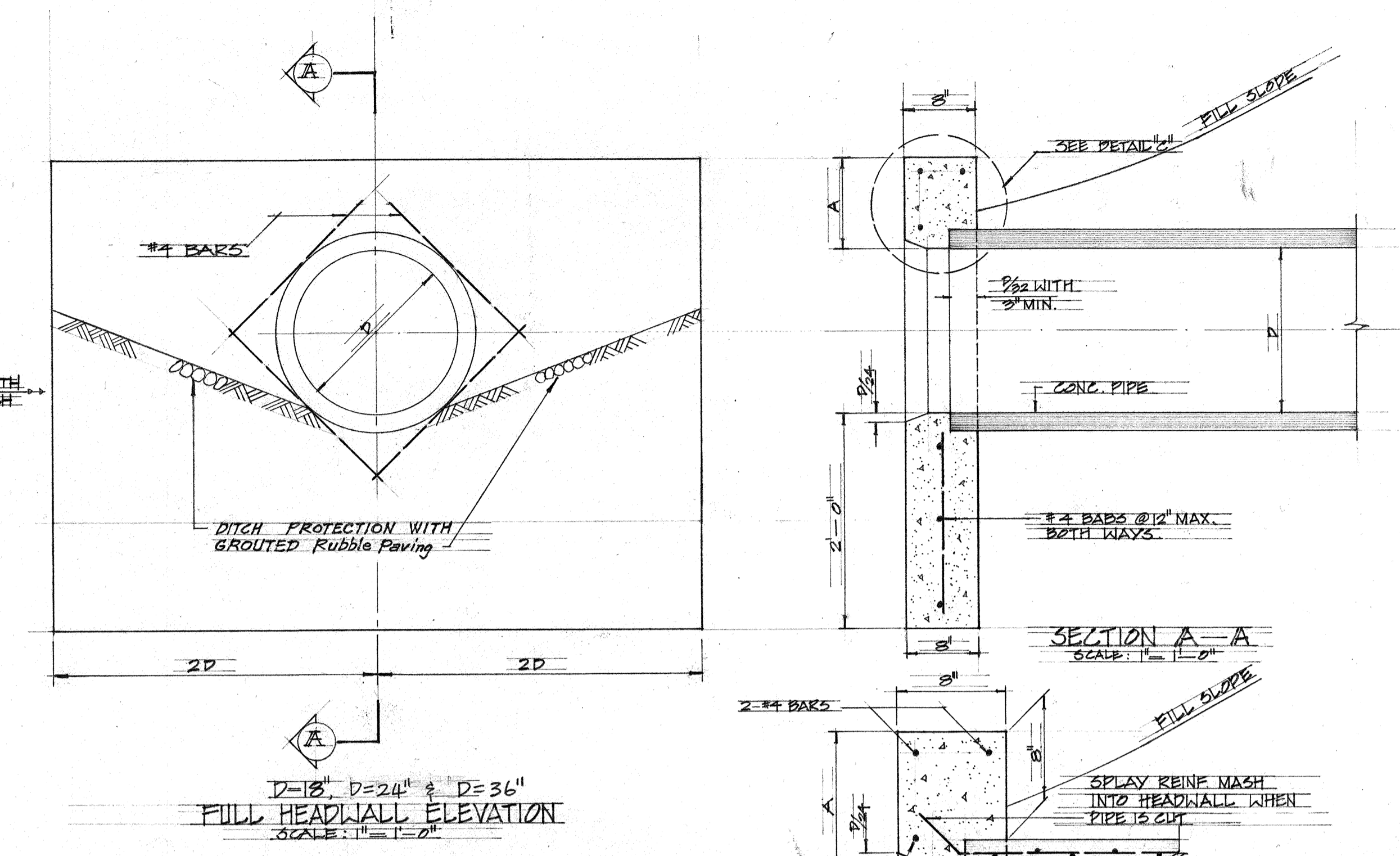
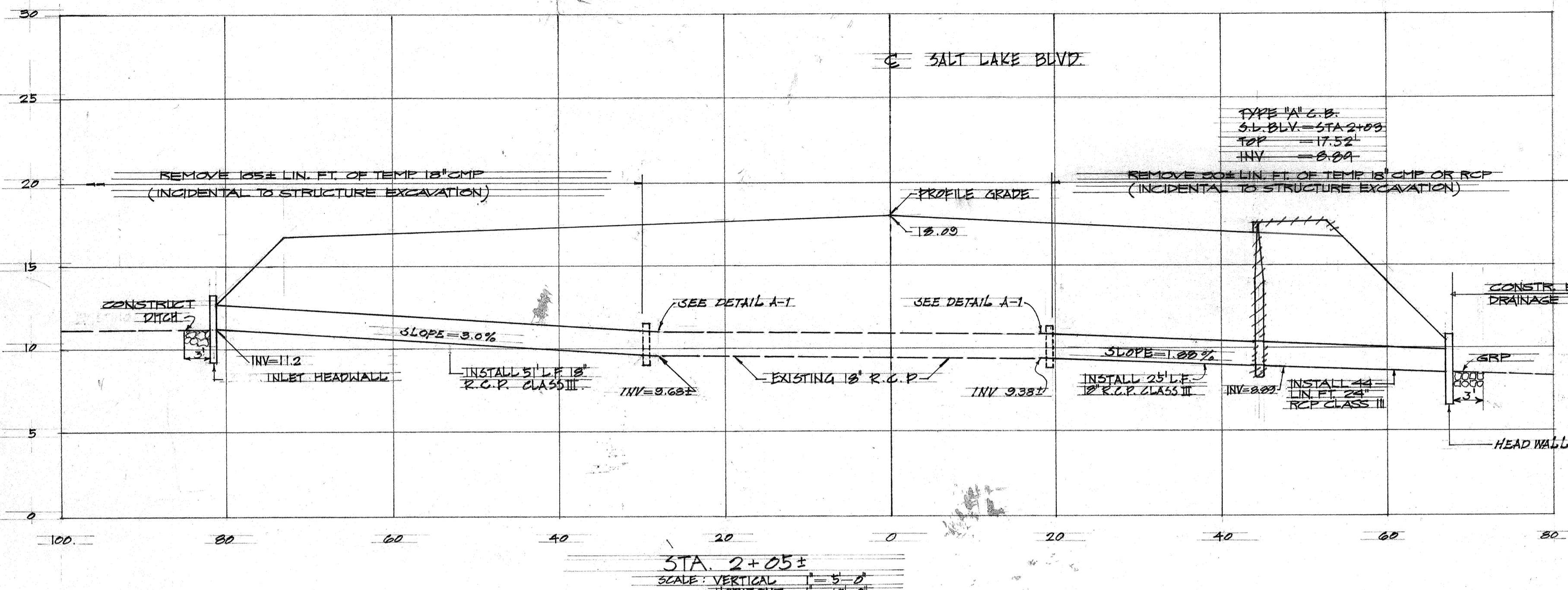
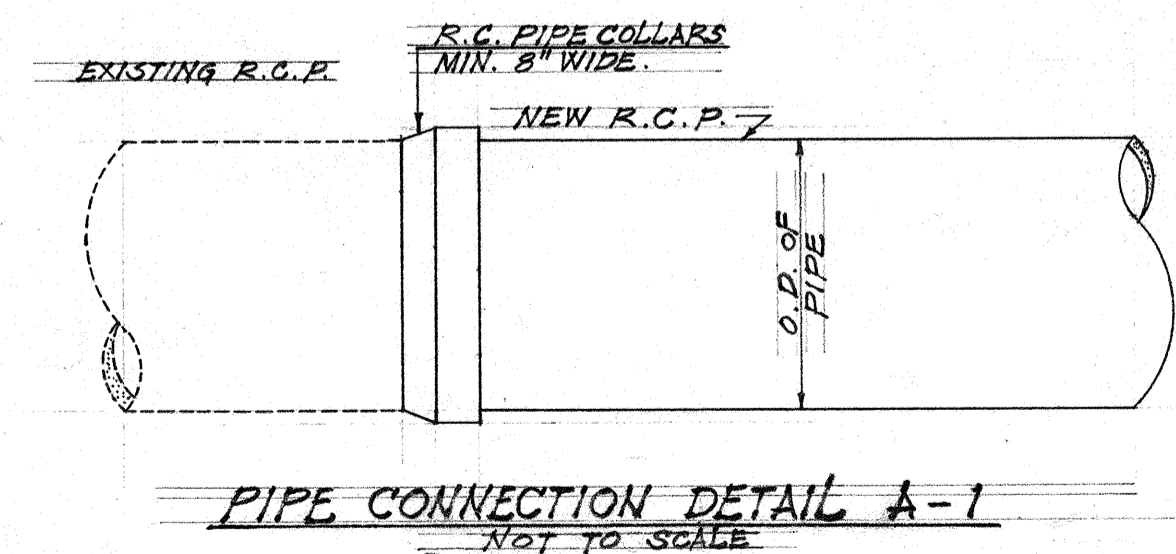
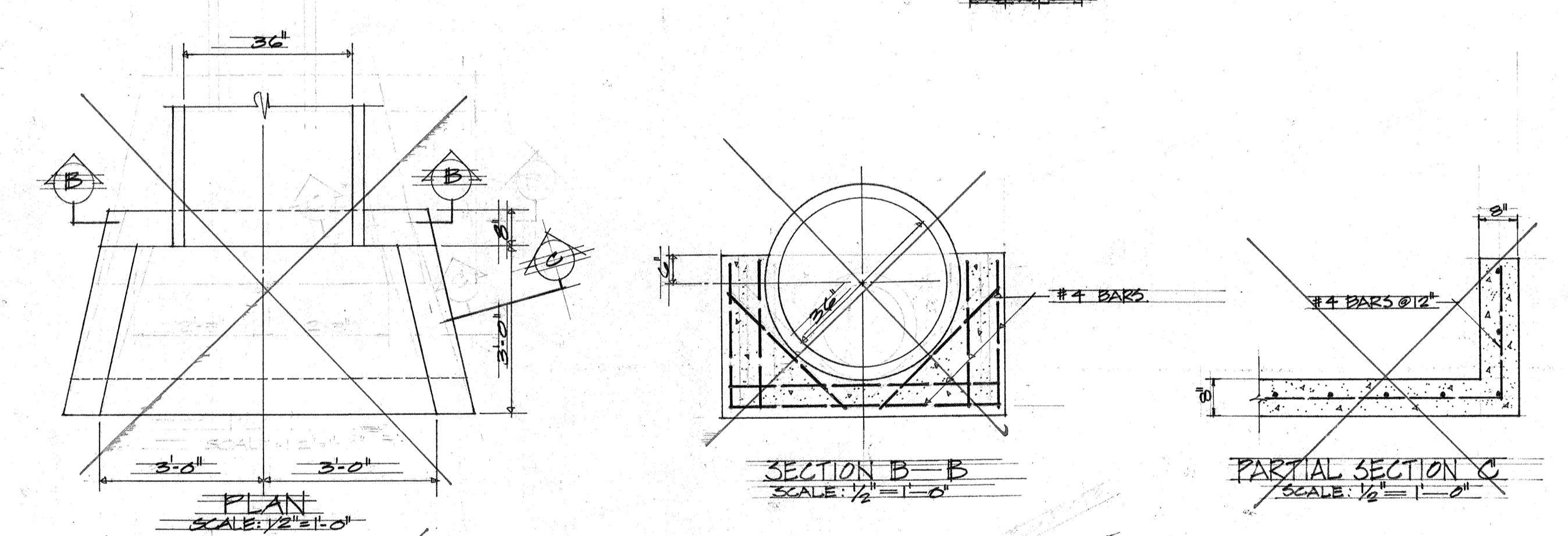
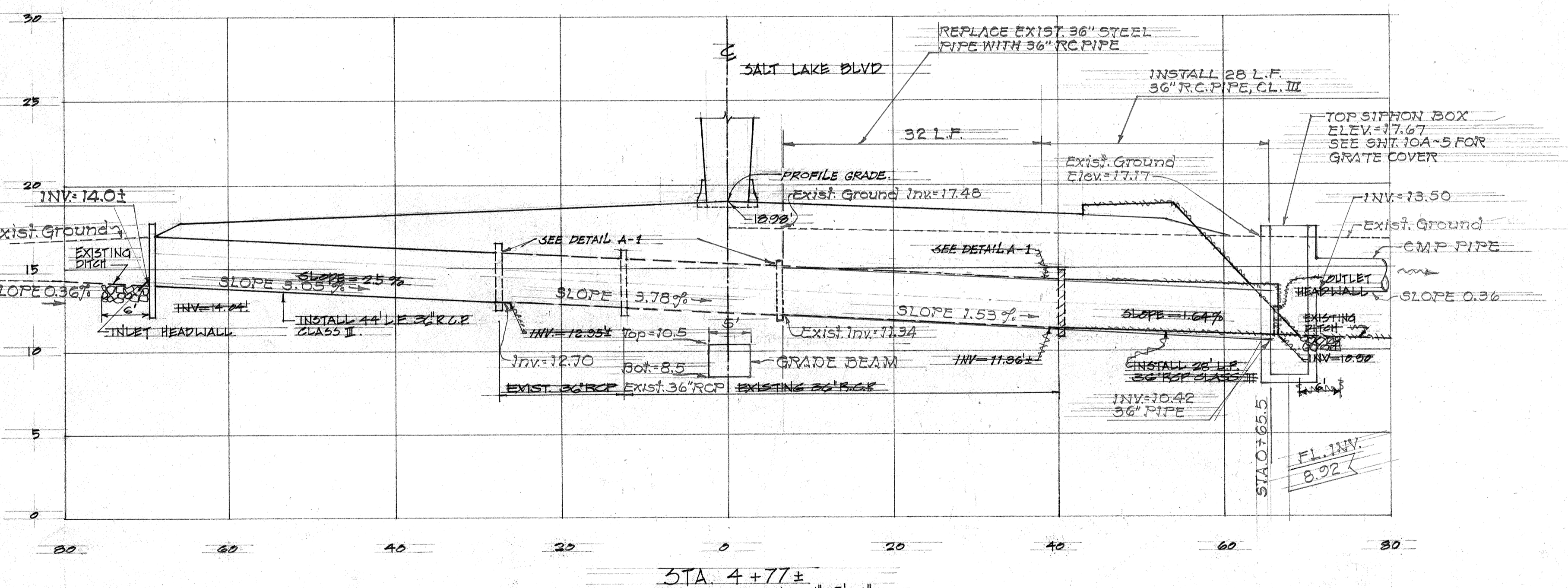


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1-H1-1 (104)-13	1972	10	185



NOTES:  
 18\"/>

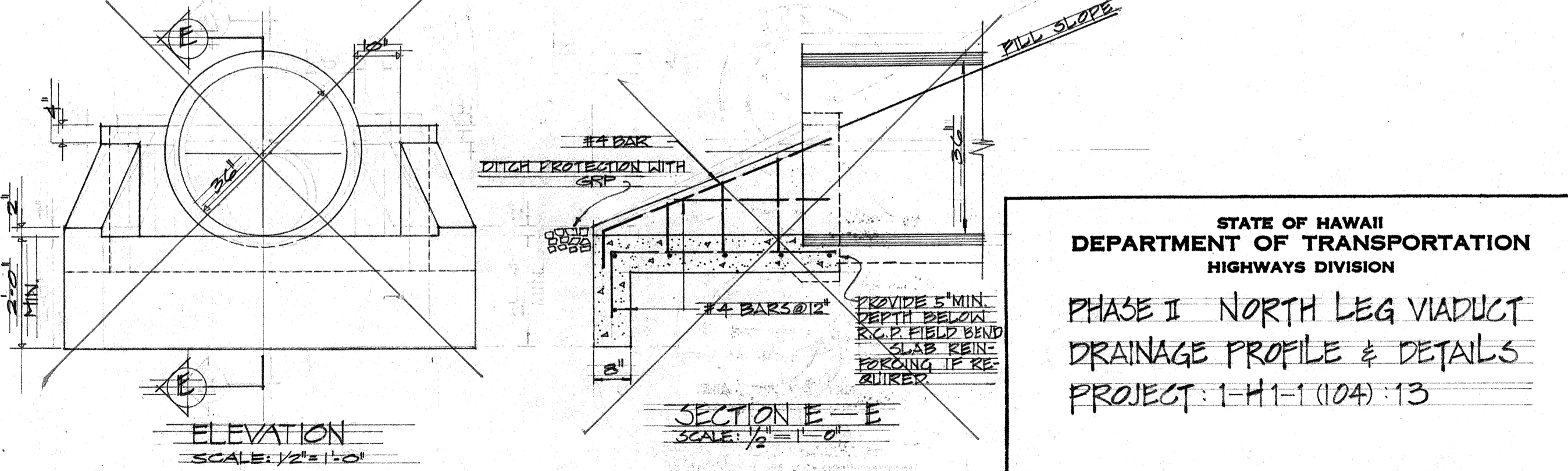


NOTES:  
 THE COLLAR JOINT SHALL BE OF EQUAL STRENGTH AS THE PIPE  
 CUT EXISTING PIPE & JOINT WITH NEW PIPE, DEMOLISH AND REMOVE ALL EXISTING HEADWALL



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

GENERAL NOTES:  
 ALL CONG. SHALL BE CLASS A



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

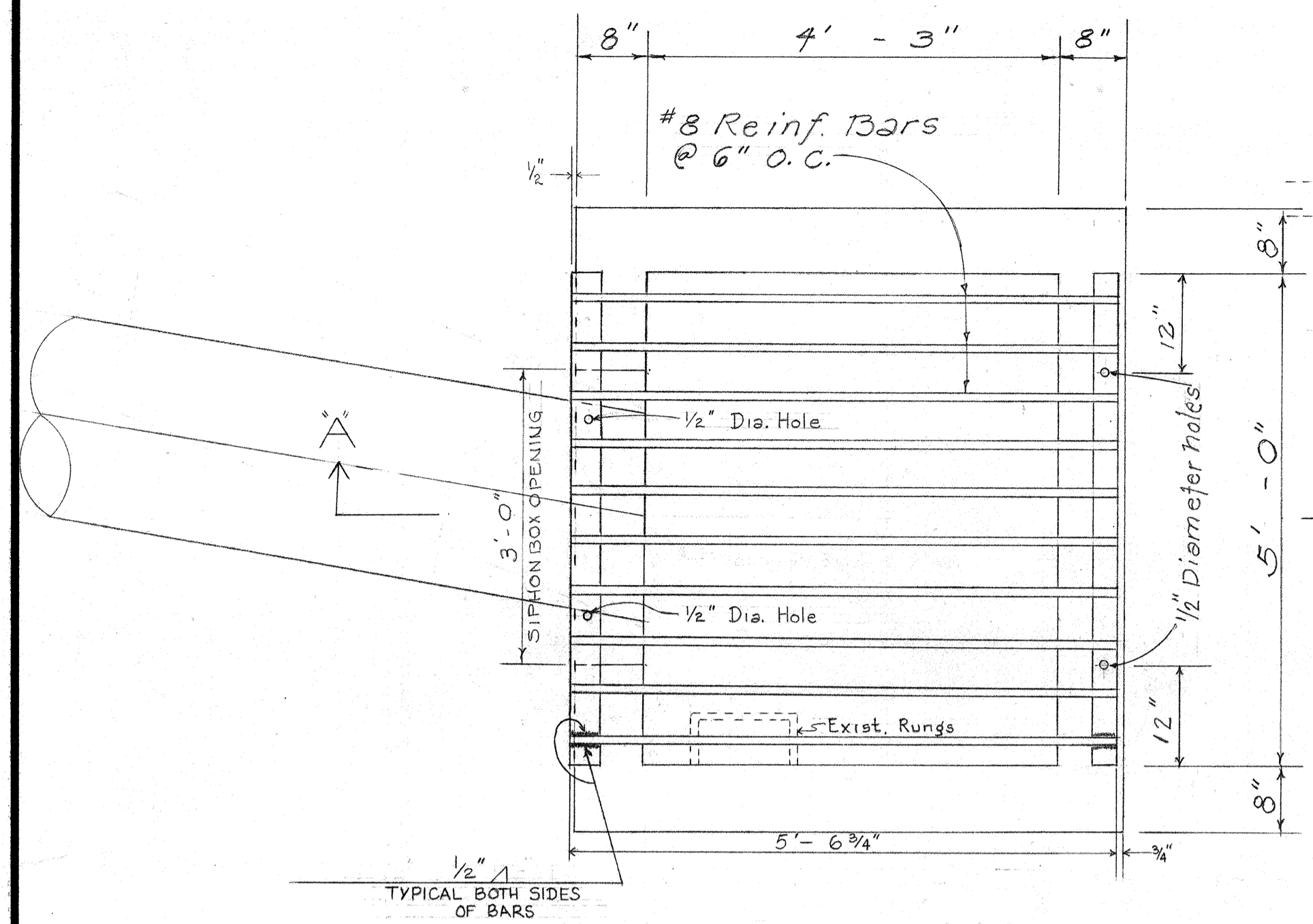
PHASE I NORTH LEG VIADUCT  
DRAINAGE PROFILE & DETAILS  
PROJECT: 1-H1-1 (104)-13

SCALE AS SHOWN      DATE: 6/9/78

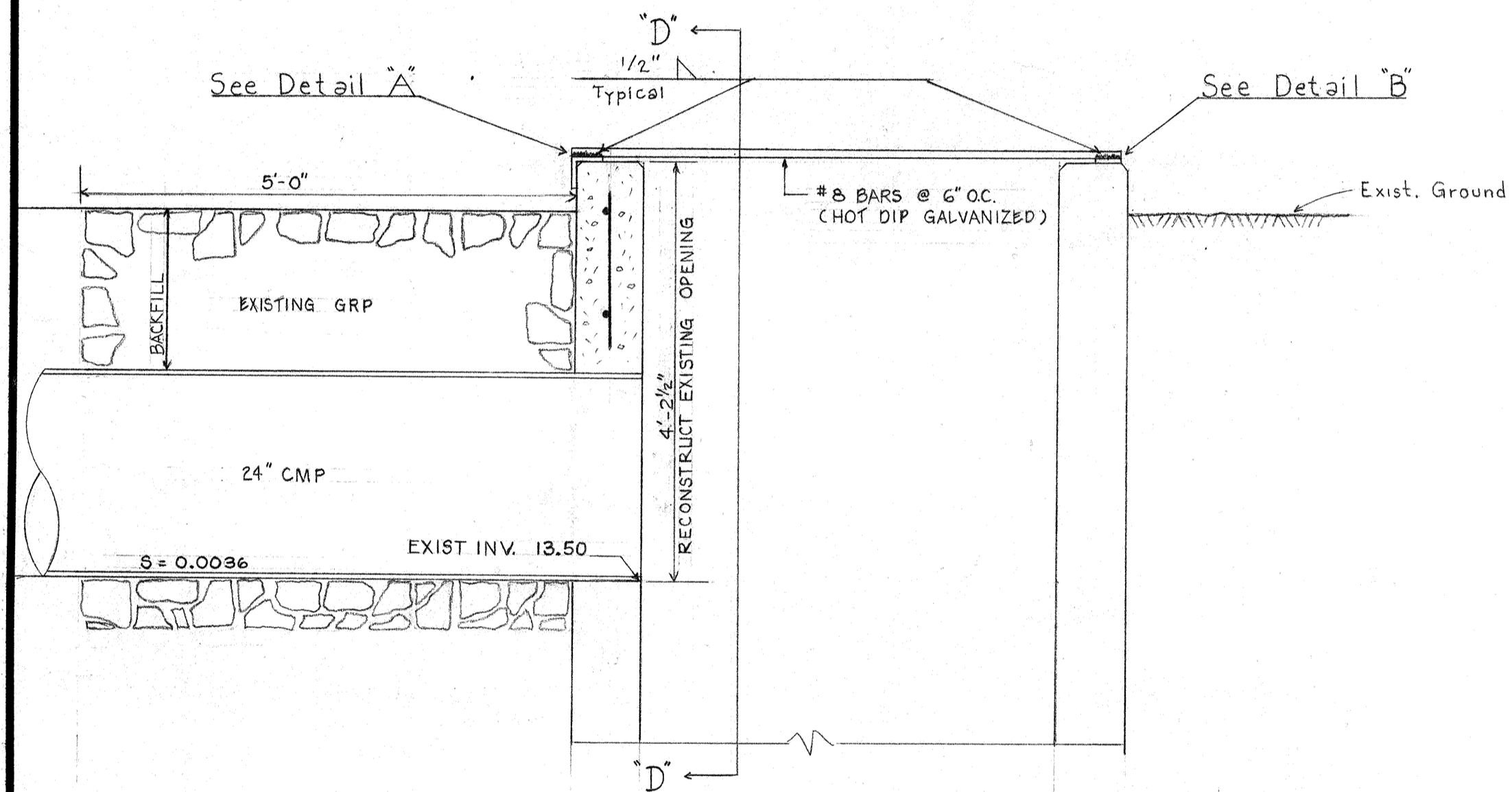
**SHEET No. 10 OF 185 SHEETS**

DATE: \_\_\_\_\_  
 SURVEY PLANNED BY: \_\_\_\_\_  
 PLAN CHECKED BY: \_\_\_\_\_  
 ORIGINAL DESIGNED BY: \_\_\_\_\_  
 NOTE BOOK QUANTITIES BY: \_\_\_\_\_  
 NO. CHECKED BY: \_\_\_\_\_

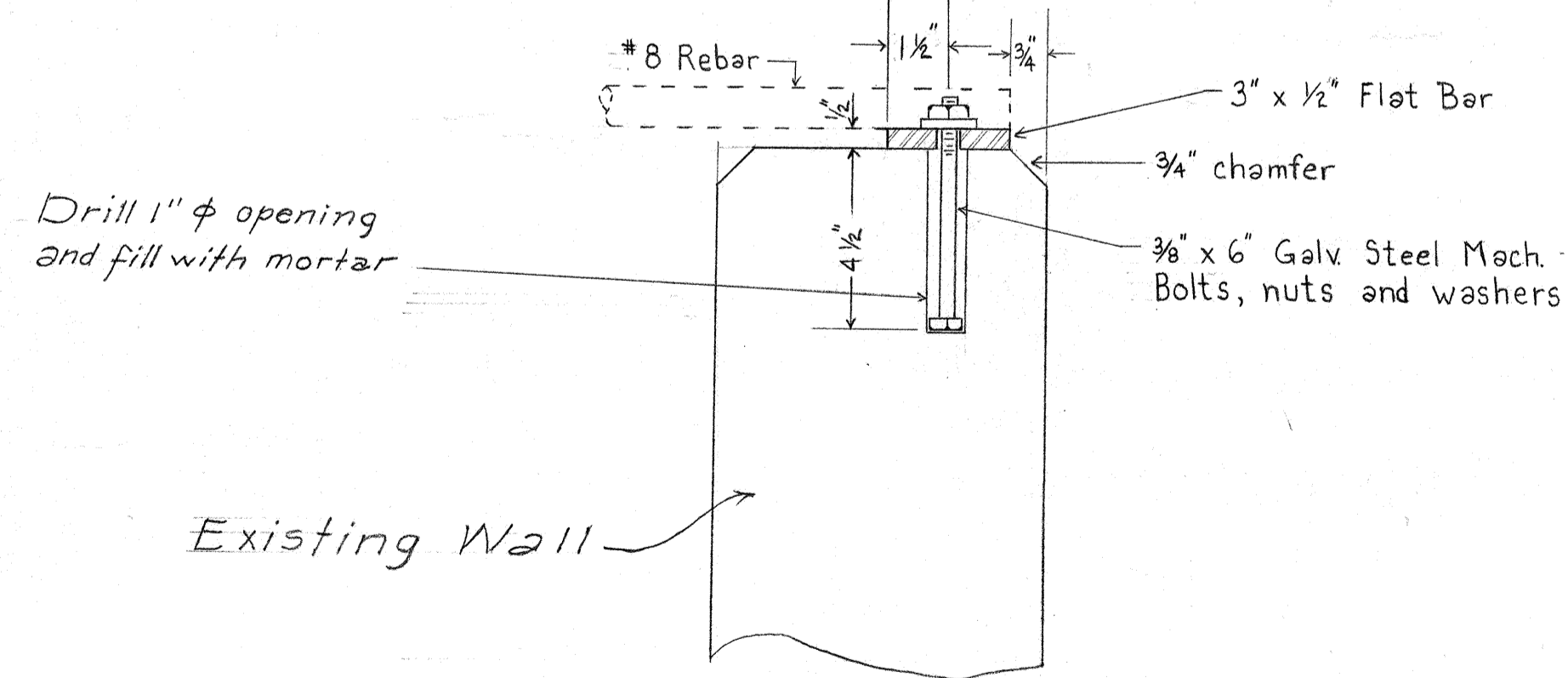
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1 (104) : 13	1972	10 A-5	



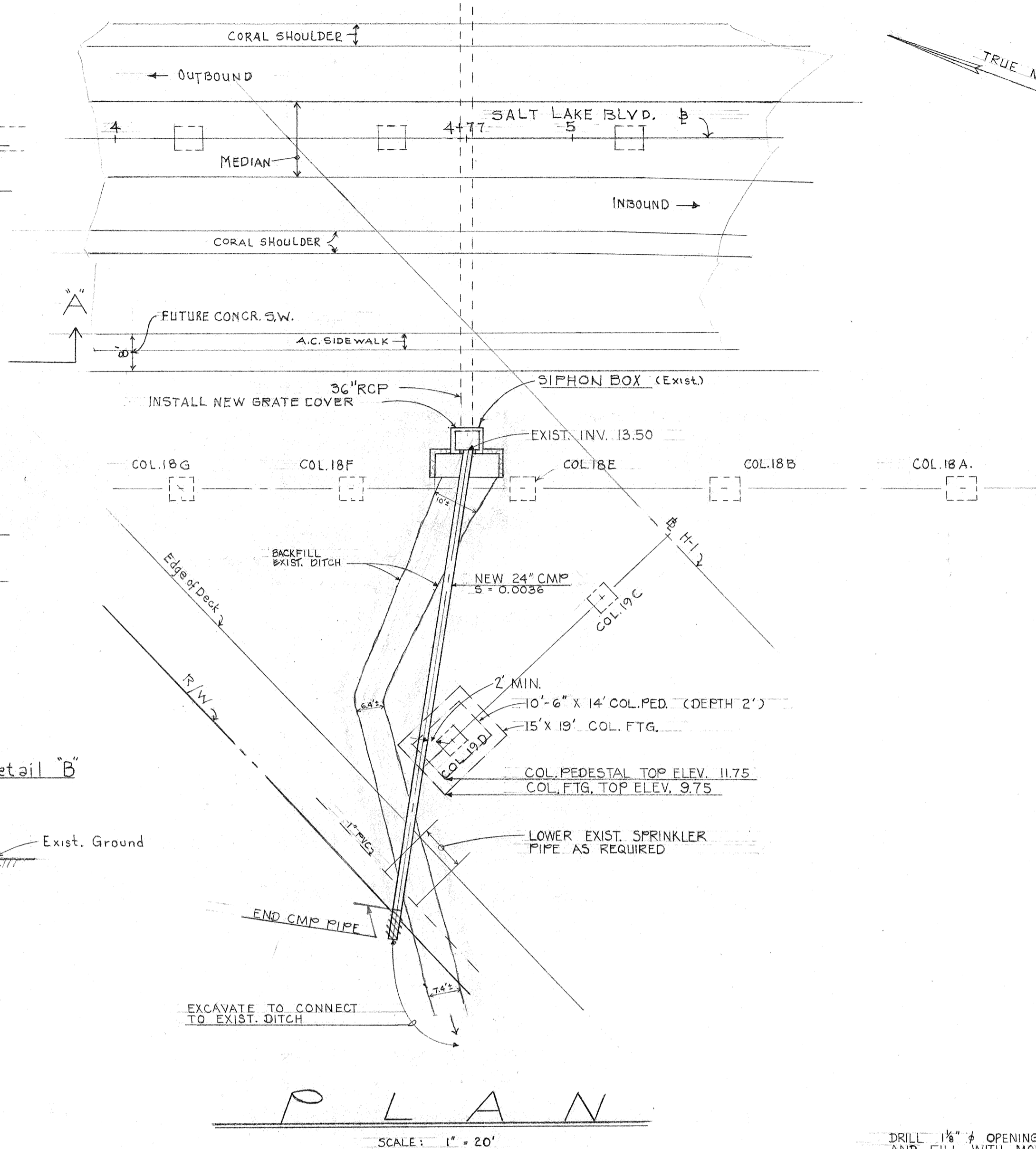
**PLAN OF GRATE**  
Scale: 3/4" = 1'-0"



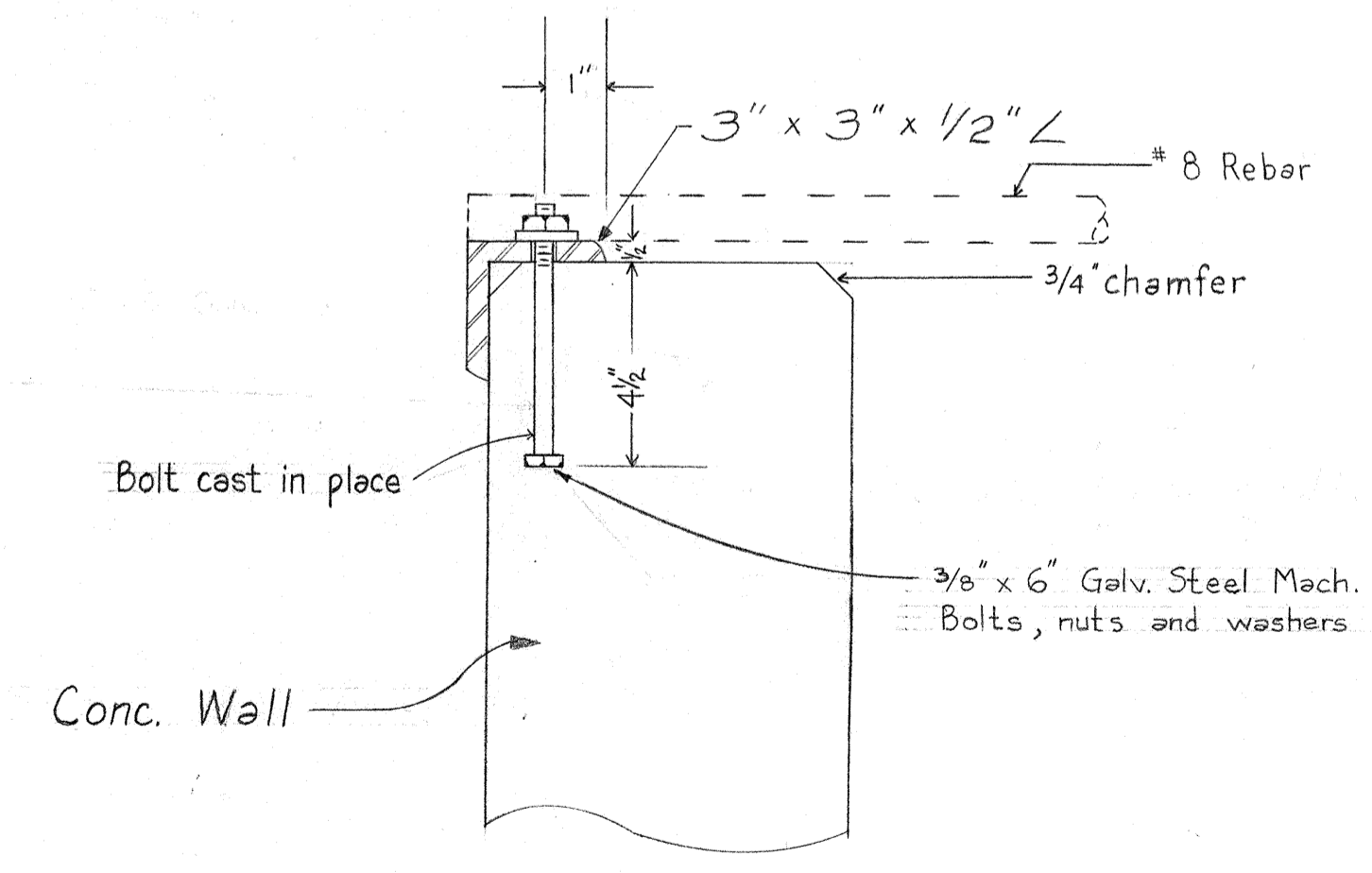
**SECTION "A-A"**  
Scale: 3/4" = 1'-0"



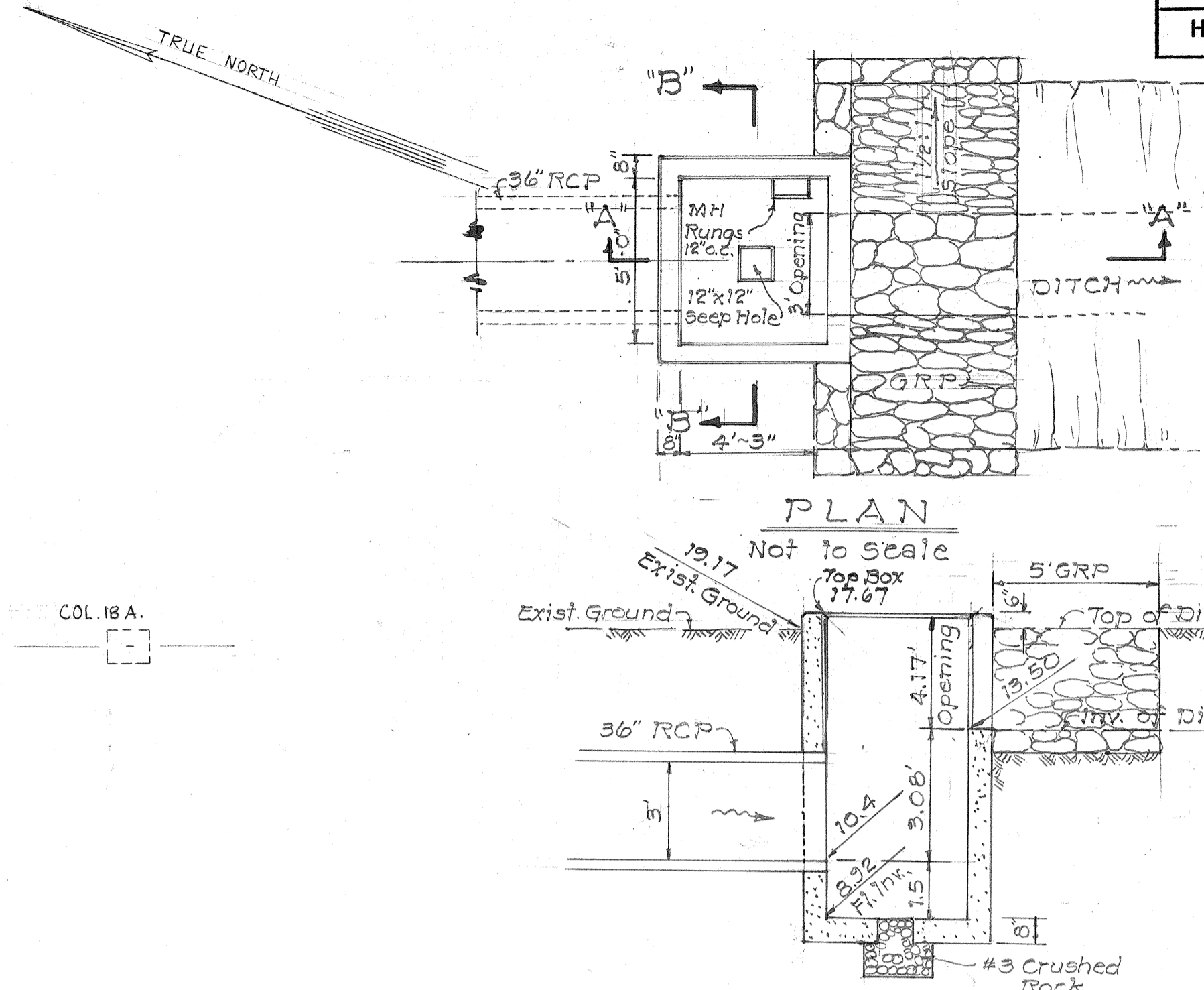
**DETAIL "B"**  
Scale: 3" = 1'-0"



**PLAN**  
SCALE: 1" = 20'



**DETAIL "A"**  
Scale: 3" = 1'-0"

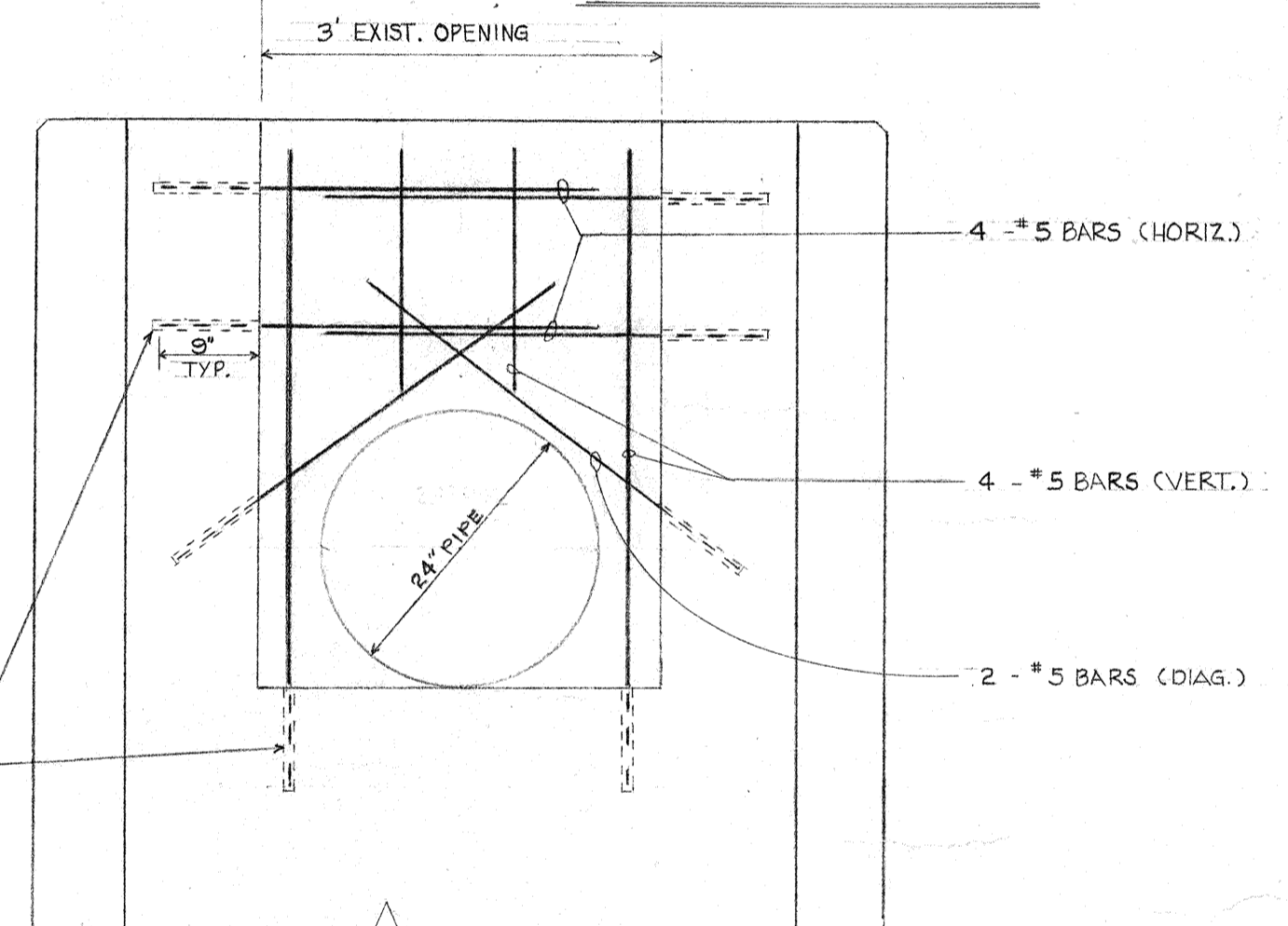


**PLAN**  
Not to Scale

**SECTION "A-A"**

**SECTION "B-B"**

**SECTION "C-C"**



**SECTION "D-D"**  
SCALE: 3/4" = 1'-0"

**NOTE:**

1. Grates and frames and Reinforcing steel shall be hot dip galvanized after fabrication.
2. All structural steel shall conform to ASTM Designation Structural steel A283, Grade D.
3. All reinforcing steel shall be either deformed or plain round bars, and shall be either Grade 40 or Grade 60.

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

GRATING COVER AND 24-INCH CMP  
FOR SIPHON OUTLET BOX AT SALT  
LAKE BLVD STA. 4+77: RIGHT

H-1, NORTH LEG VIADUCT  
FAI PROJECT NO. I-HI-1(104):13

SCALE: AS NOTED      DATE: OCT. 6, 1975  
SHEET NO.      OF SHEETS

SURVEY PLOTTED BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 ORIGINAL PLAN: \_\_\_\_\_  
 DRAWN BY: \_\_\_\_\_  
 NOTE BOOK: \_\_\_\_\_  
 DESIGNED BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_  
 No. \_\_\_\_\_