

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	83B-01-87M	1987	13	24

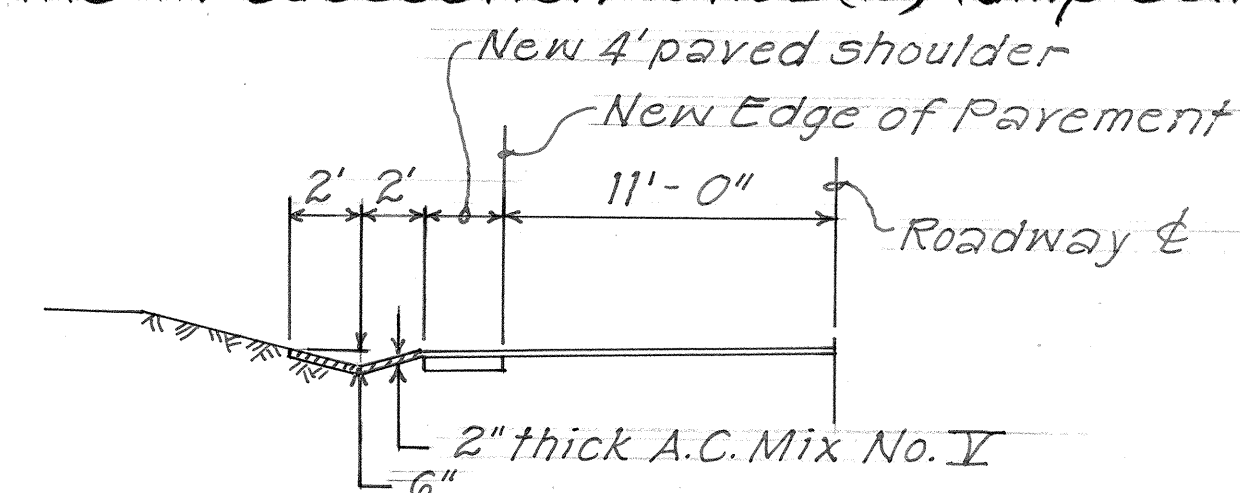
DRAINAGE SUMMARY

PROJECT: Kamehameha Highway Resurfacing

PROJECT NO. 83B-01-87M

ITEM NO.	UNIT USED	*206 2021 (C.Y.)	*202 1001 (LBS)	*503 0011 (C.Y.)	603 7201 L.F.	604 5001 EA.	604 5002 EA.	604 5003 EA.	609 2216 L.F.
STRUCTURE	STATION	Structure Excavation for Drainage System	Reinforcing Steel Other Than in Bridges	Class A Concrete Other Than in Bridges	6" x 6" x 1/4" Reinforced Concrete Pipe, 10' Length	Type "A-9P" Grated Drop Inlet, 3.50 feet to 5.00 feet	Type "A-9P" Grated Drop Inlet, 6.00 feet to 7.00 feet	Type "A-9P" Catch Basin, 3.00 feet to 5.00 feet	Type 2 61216 Gutter
Type A-9P GDI	Sta. 85+34 Rt.					1			
Type A-9P GDI	Sta. 95+33 Rt.					1			
Type A-9P GDI	Sta. 107+08 Rt.						1		
Type A-9P C.B.	Sta. 110+75 Rt.	49			74			1	
Type A-9P C.B.	Sta. 111+50 Rt.	49			74			1	
Type A-9P C.B.	Sta. 112+25 Rt.	128			192			1	
Type A-9P C.B.	Sta. 114+15 Rt.	124			186			1	
Type A-9P C.B.	Sta. 116+00 Rt.	27			40			1	
Conc. Headwall	Sta. 116+03 Lt.		42	13					
Type A-9P GDI	Sta. 167+81 Rt.					1			
Type 2 61216 Gutter	Sta. 108+50 Rt. to Sta. 120+17 Rt.								1158
TOTAL		377	42	13	566	3	1	5	1158

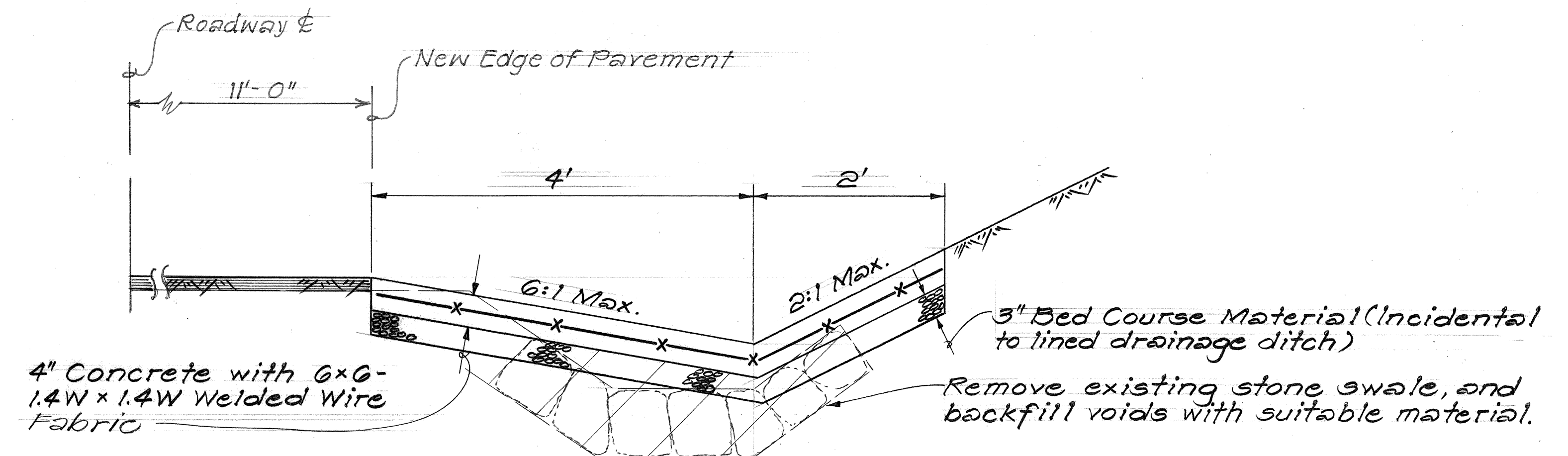
*In the event of plan alterations causing increase or decrease to the quantity of specified lump sum work, the estimated quantities shall be used to determine theoretical unit price as define in subsection 104.02 (B) lump sum items.



ASPHALT CONCRETE LINED SWALE
STA. 222+50 LT. ~ STA. 225+00 LT.
N.T.S.

GENERAL NOTES

- Existing drainage system will be functional at all times during construction. Contractor is to furnish materials, equipment, labor, tools and incidentals necessary to accomplish maintenance of flow. The cost shall be incidental to the various contract items.
- Demolishing and removing a portion or the entire existing structure shall not be paid for separately, but shall be considered incidental to the various contract items.
- Contractor shall verify the locations of all culverts in the field. Any culvert damaged during construction shall be repaired or replaced by the Contractor at his expense.

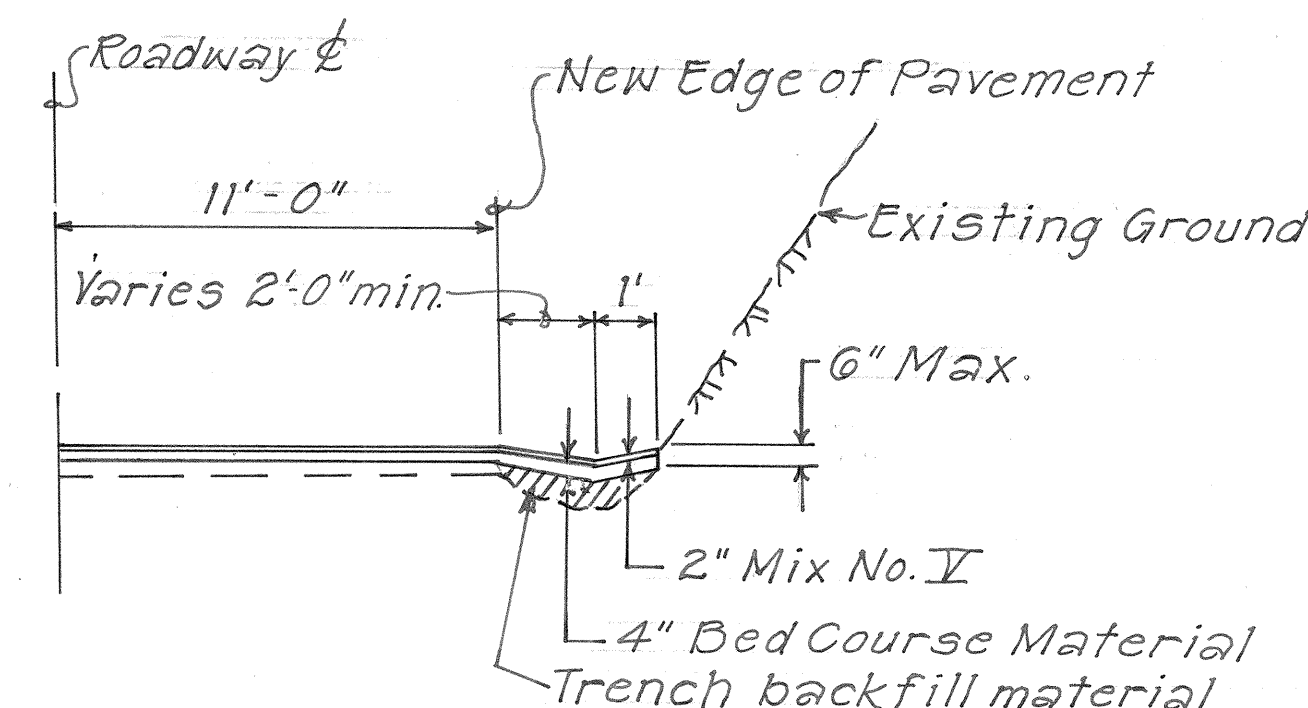


TYPE 2-61216 GUTTER DETAIL

Scale: 1" = 1'-0"

NOTE:

- Gutter shall be longitudinally broom finished.
- Provide expansion joints and construction joints. For details see standard plan B-01.



ASPHALT CONCRETE LINED SWALE
STA. 120+17 RT. ~ STA. 124+50 RT.
N.T.S.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS

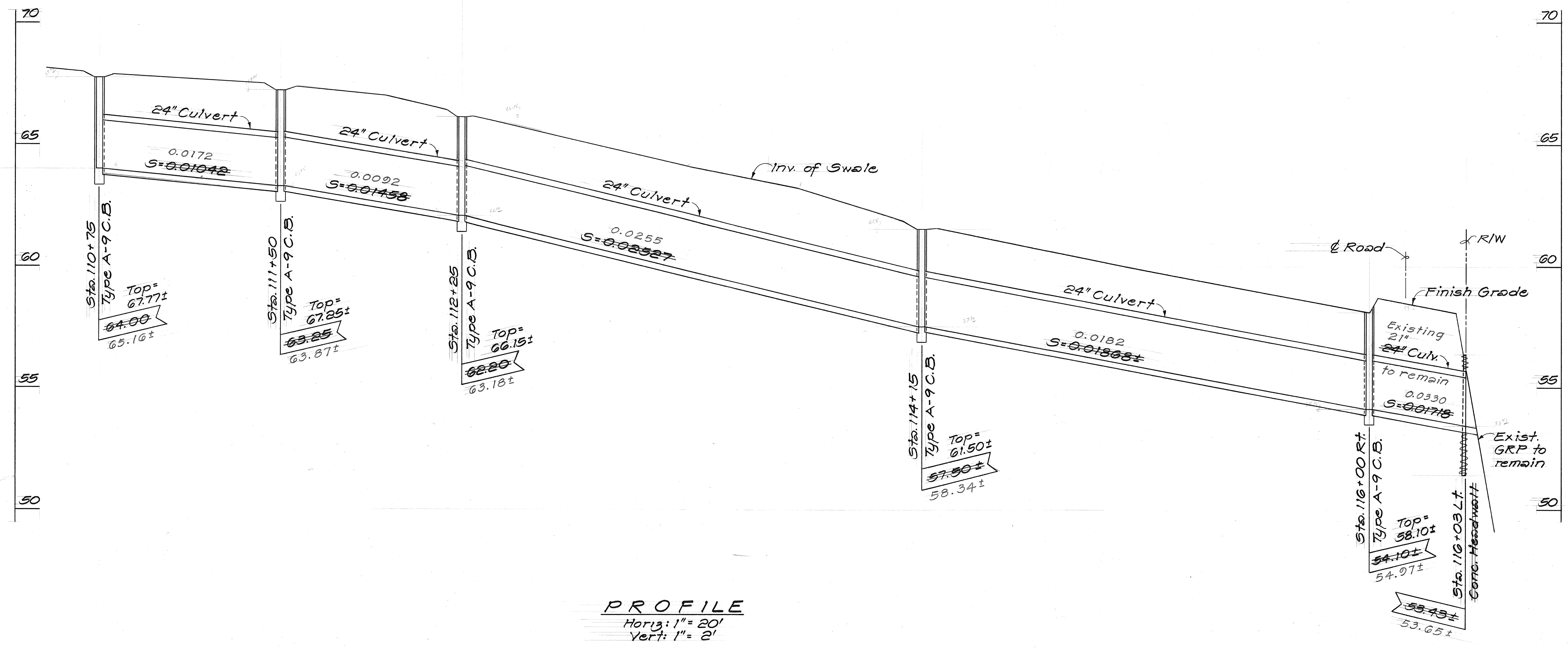
Kamehameha Highway Resurfacing

Proj. No. 83B-01-87M

Scale: As Shown Date: Oct. 1986

SHEET No. 11 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	83B-01-87M	1987	14	24



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

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

DRAINAGE DETAILS

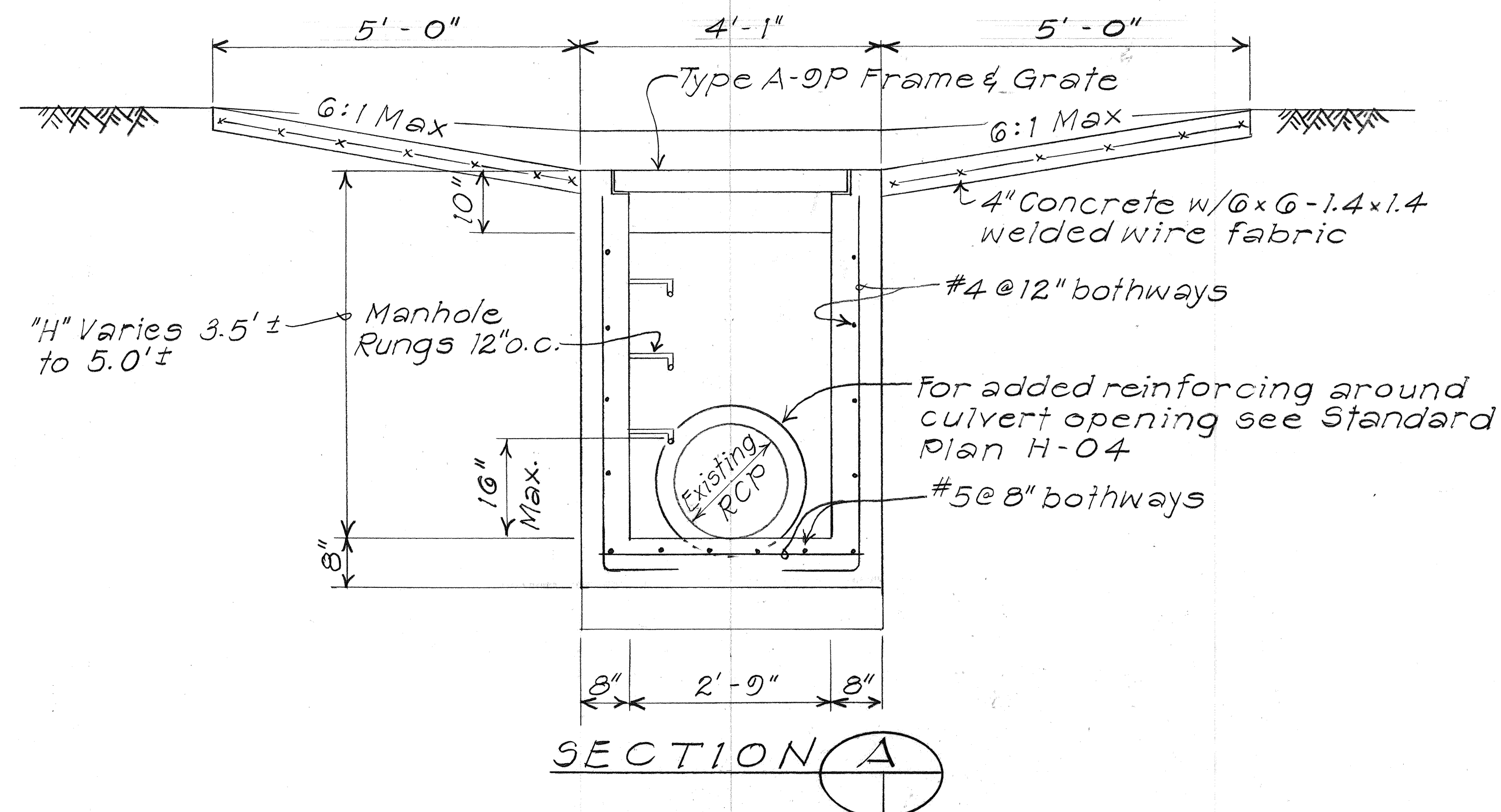
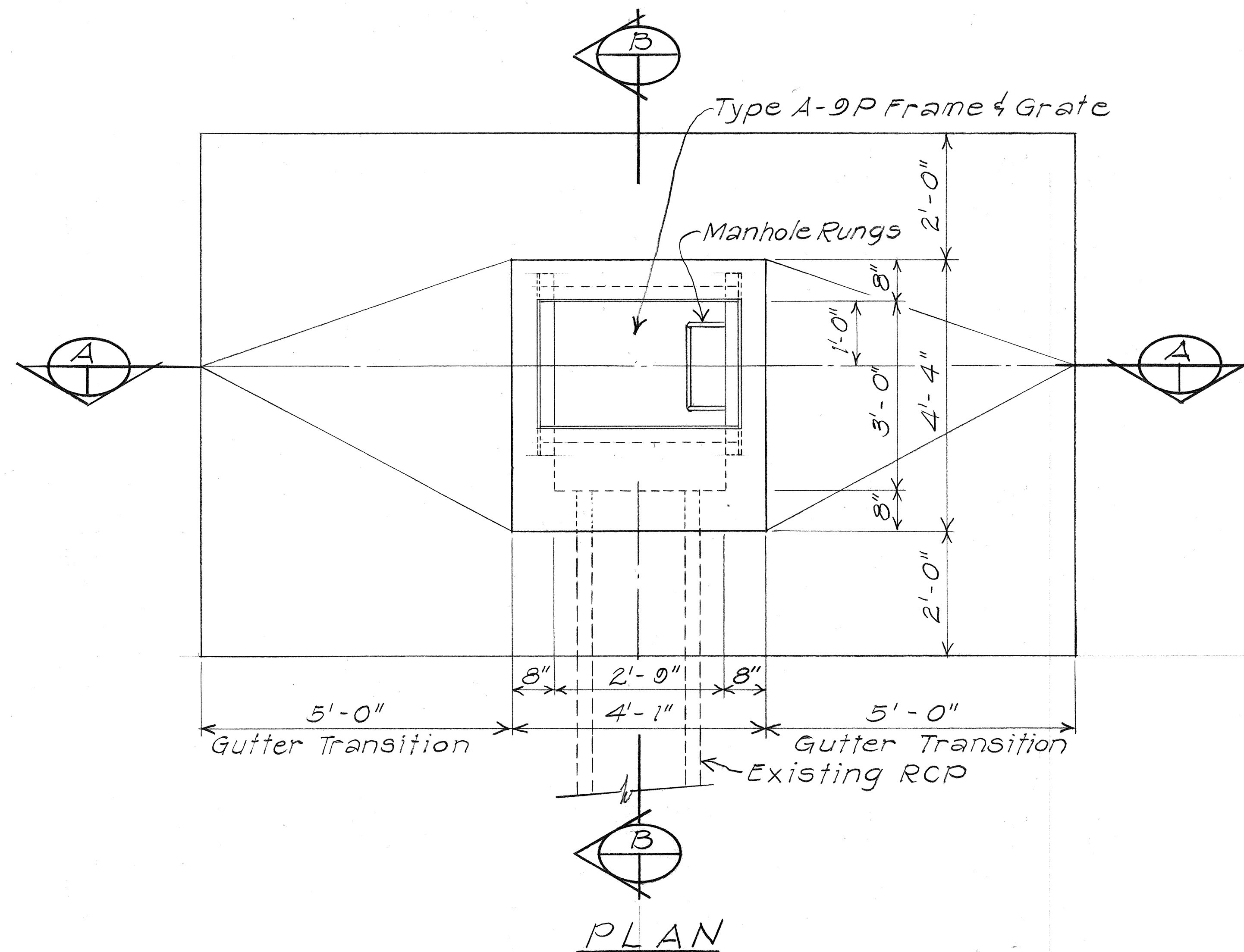
Kamehameha Highway Resurfacing

Proj. No. 83B-01-87M

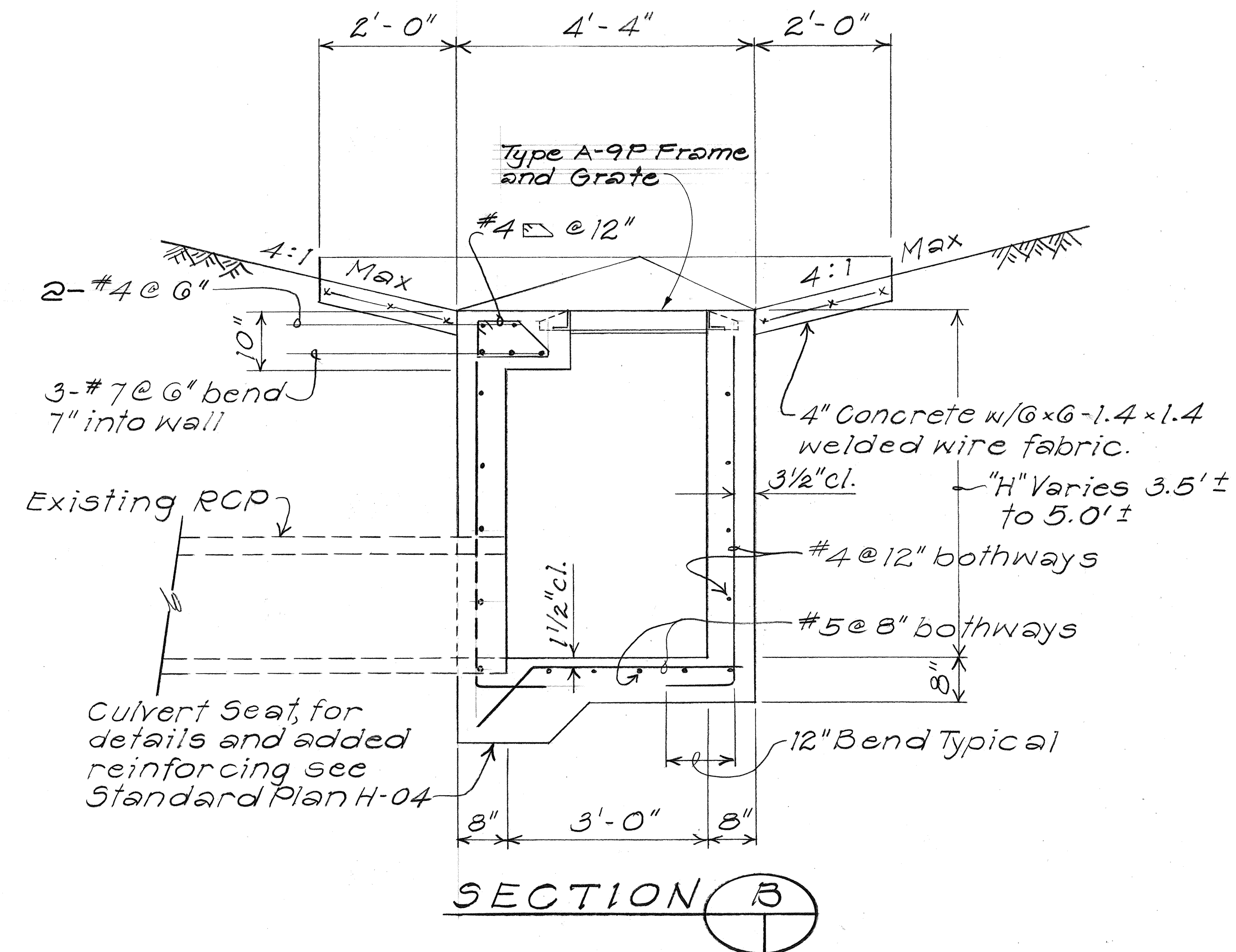
Scale: As Shown Date: Dec. 1986

SHEET No. 14 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	83B-01-87M	1987	15	24

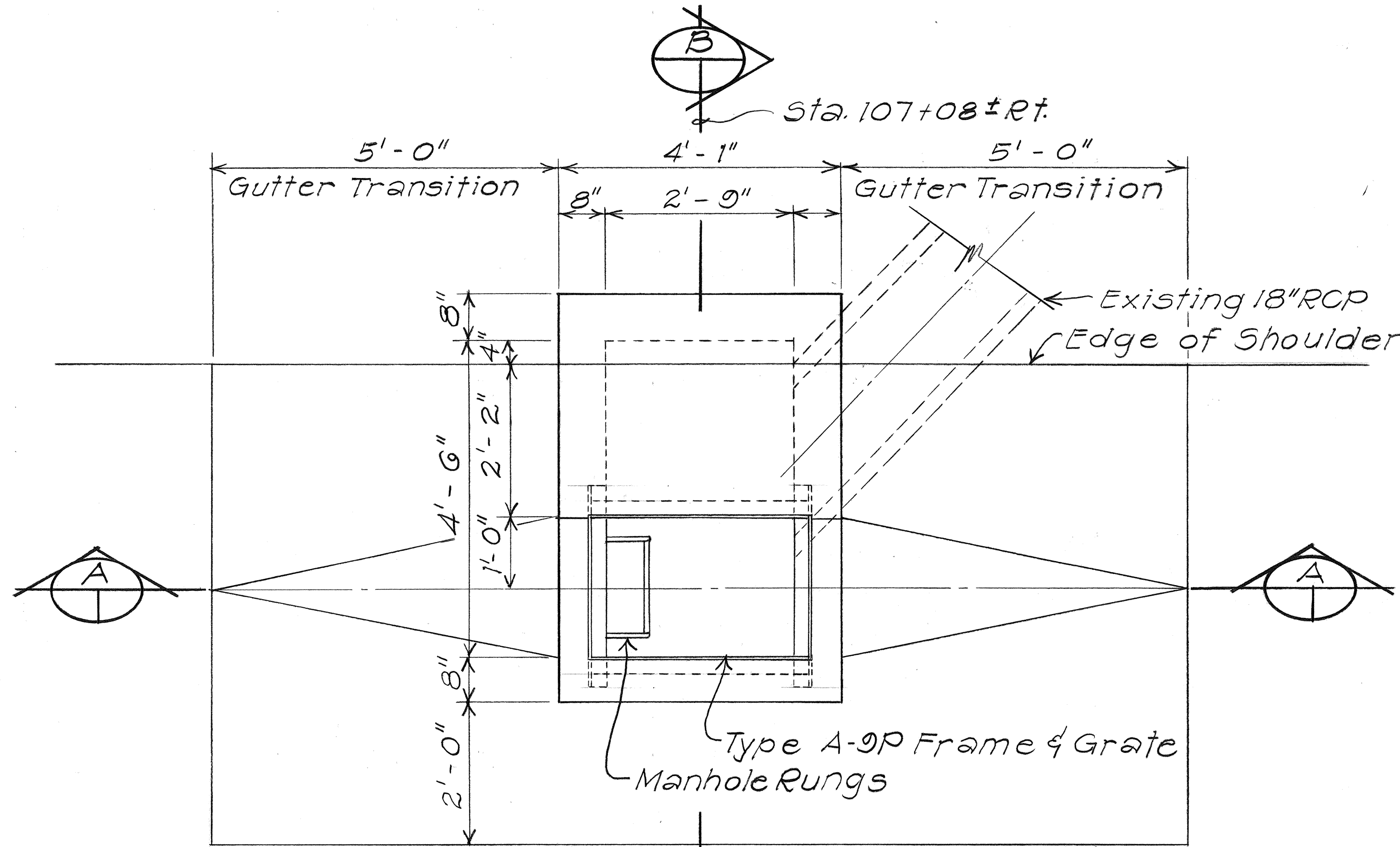


TYPE A-9P GRATED DROP INLET
Scale: 3/4" = 1'-0"

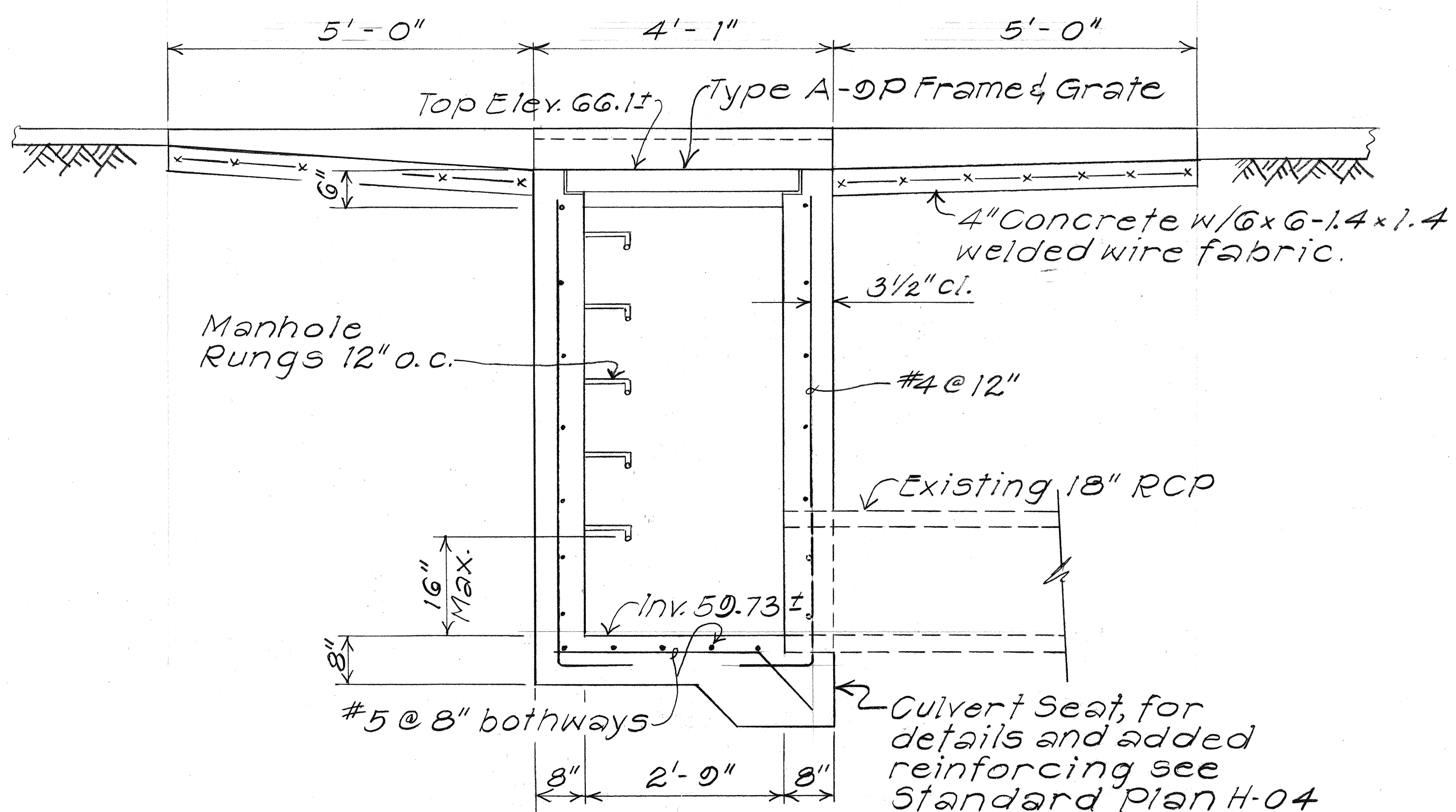


STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
DRAINAGE DETAILS
<i>Kamehameha Highway Resurfacing</i>
Proj. No. 83B-01-87M
Scale: As Shown Date: Oct. 1986
SHEET No. 13 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	83B-01-87M	1987	16	24



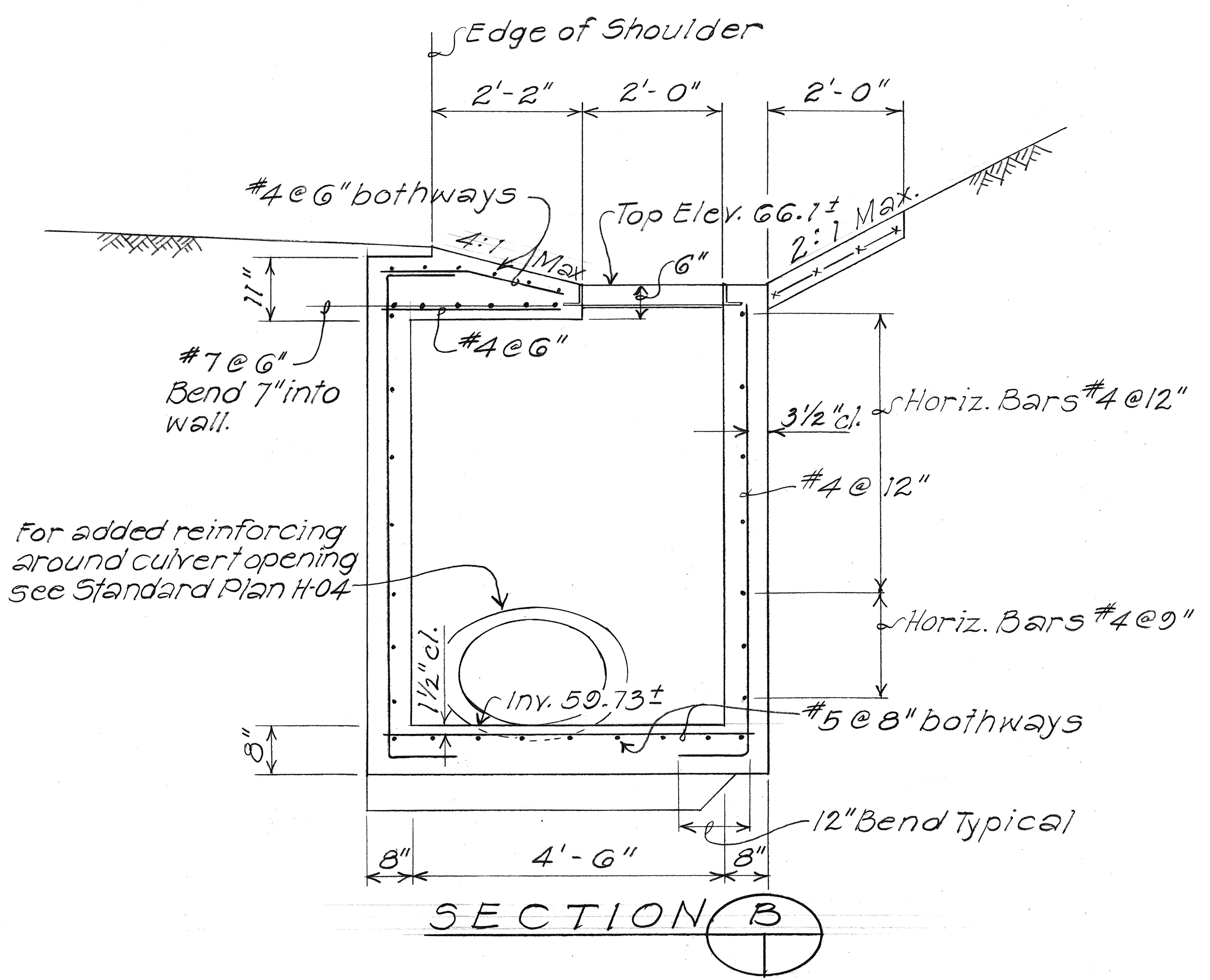
PLAN



SECTION A-A

TYPE A-9P GRATED DROP INLET AT STA 107+08± RT.

Scale: 3/4" = 1'-0"



SECTION B-B

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS

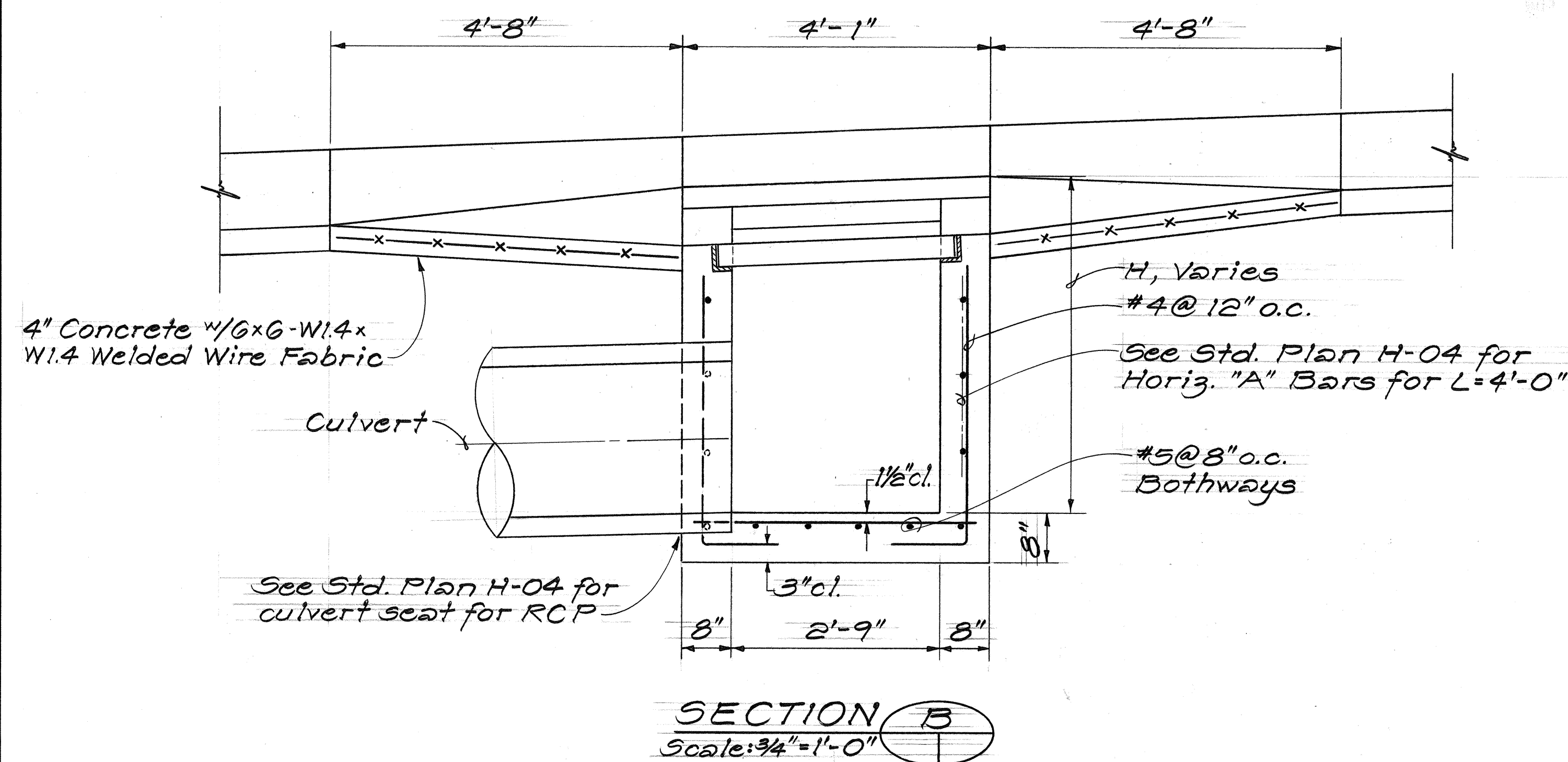
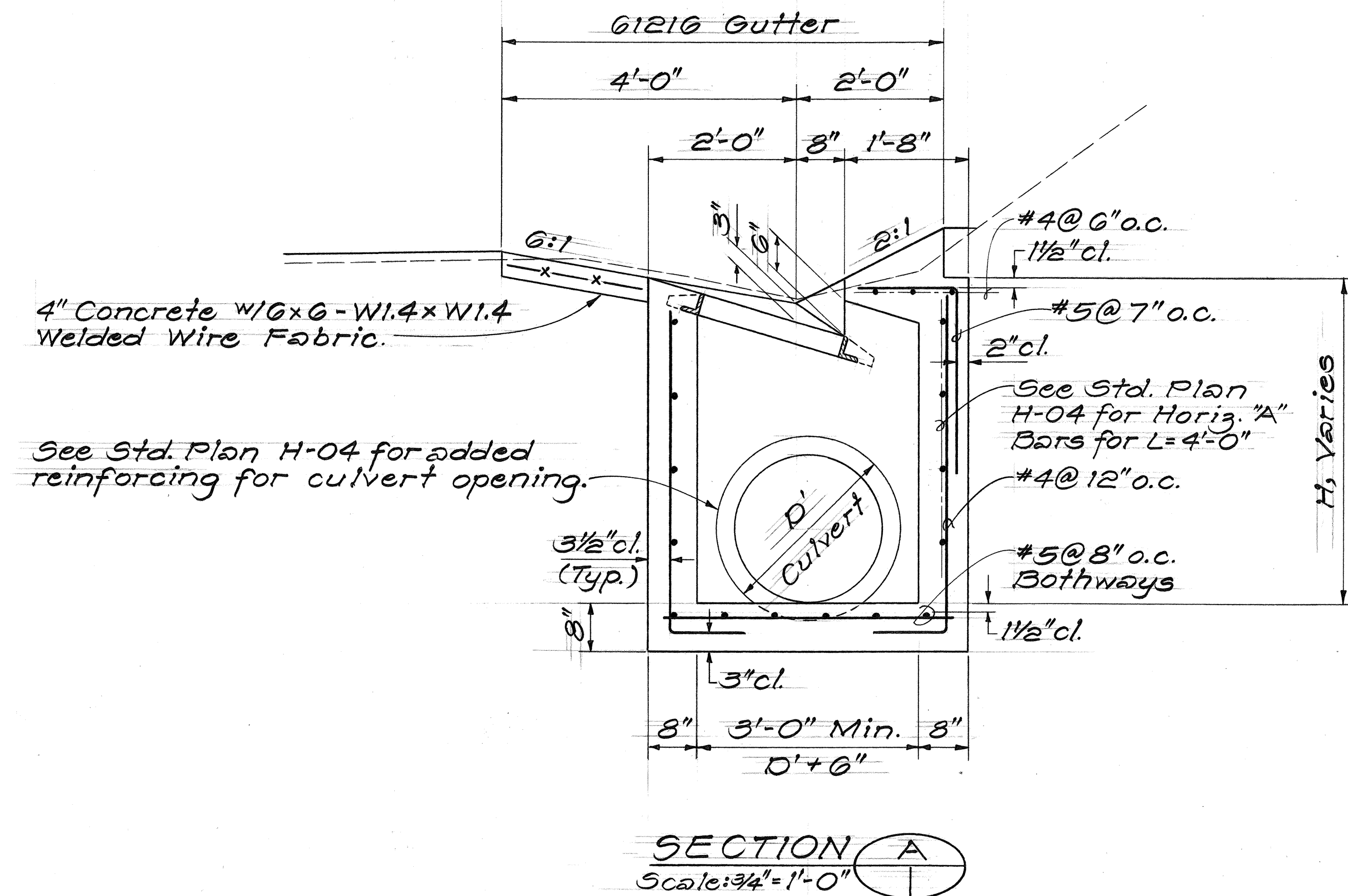
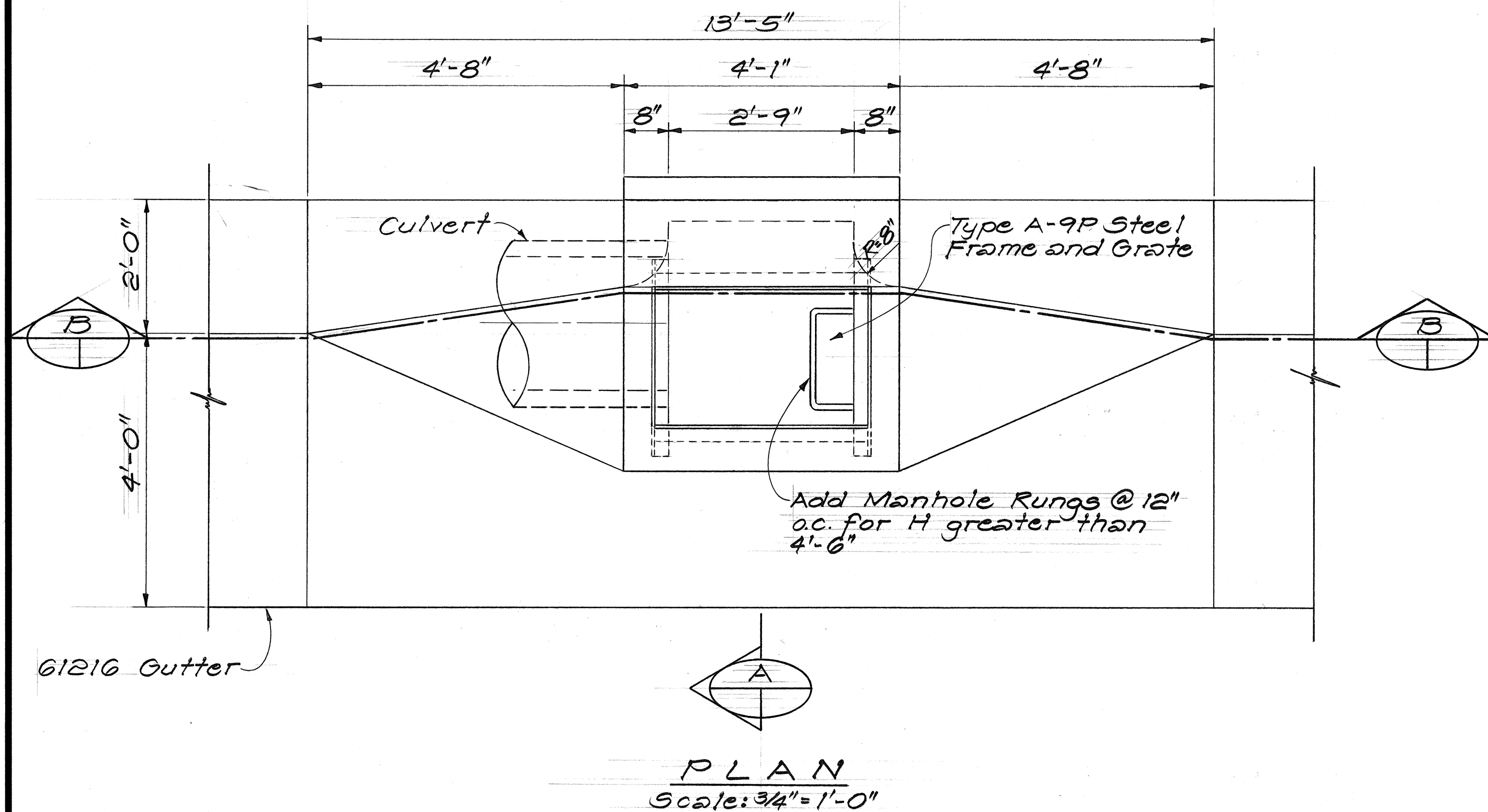
Kamehameha Highway Resurfacing

Proj. No. 83B-01-87M

Scale: As Shown Date: Oct. 1986

SHEET No. 14 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	83B-01-87M	1987	17	24



TYPE A-9P CATCH BASIN

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

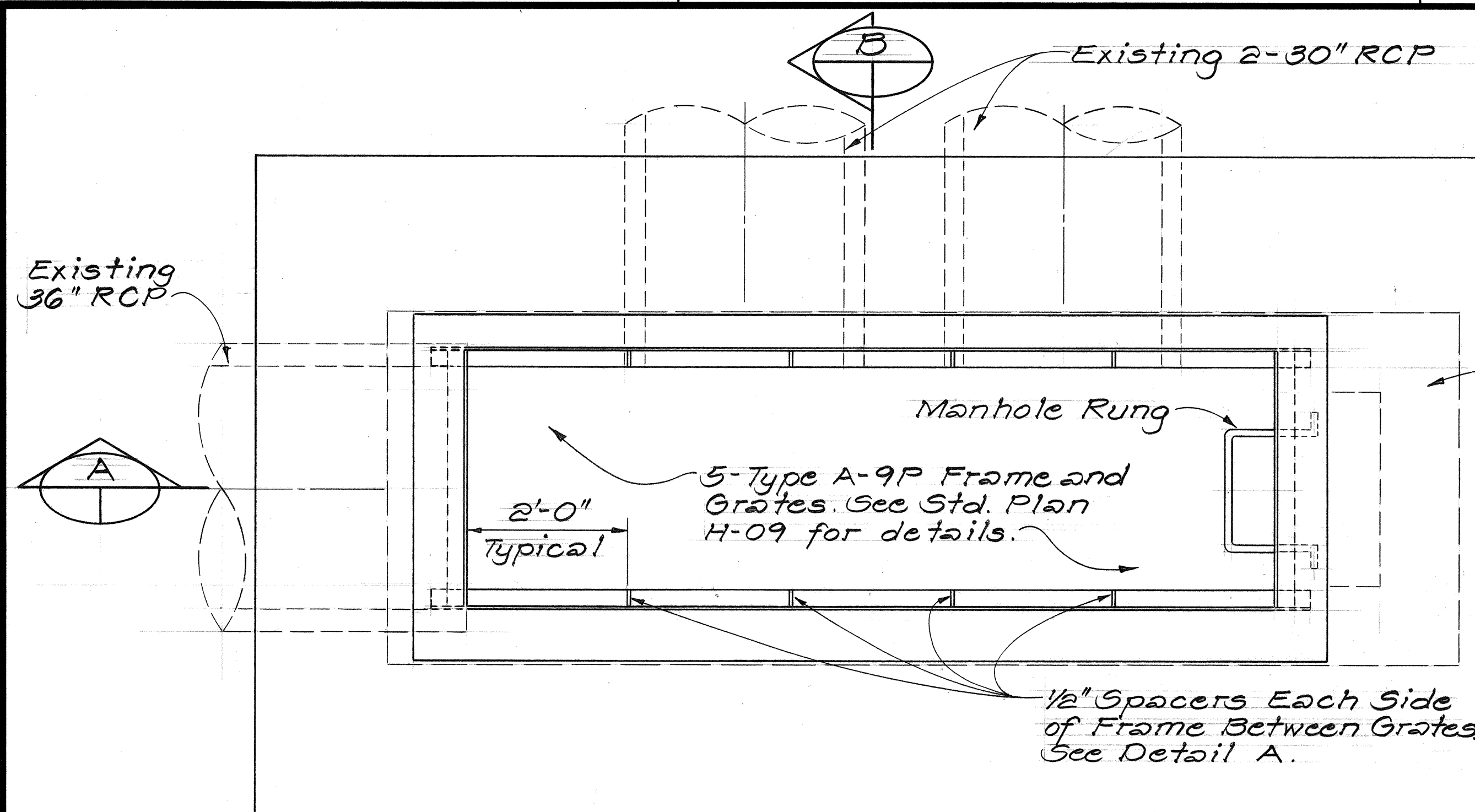
DRAINAGE DETAILS
Kamehameha Highway Resurfacing

Proj. No. 83B-01-87M
Scale: As Shown Date: Oct. 1986

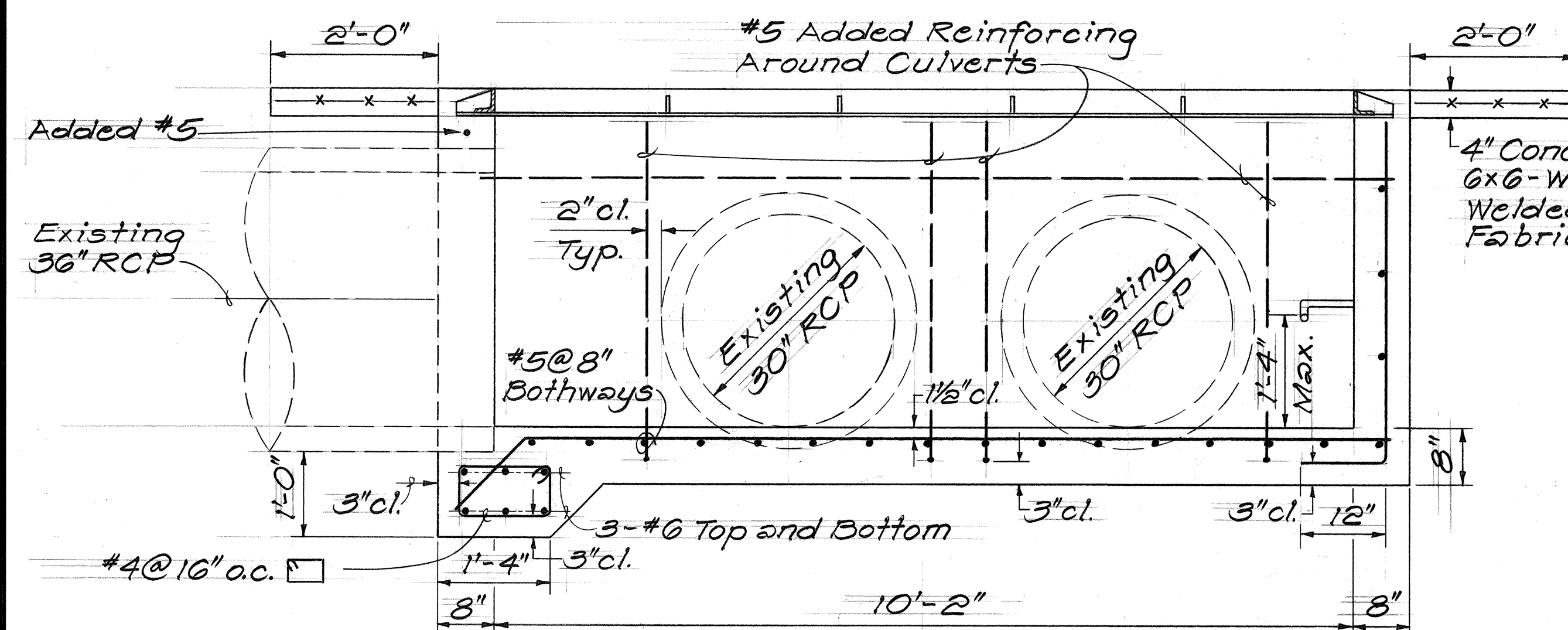
SHEET No. 15 OF 25 SHEETS

ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
DRAWN BY	
DESIGNED BY	
NOTED BY	
CHECKED BY	

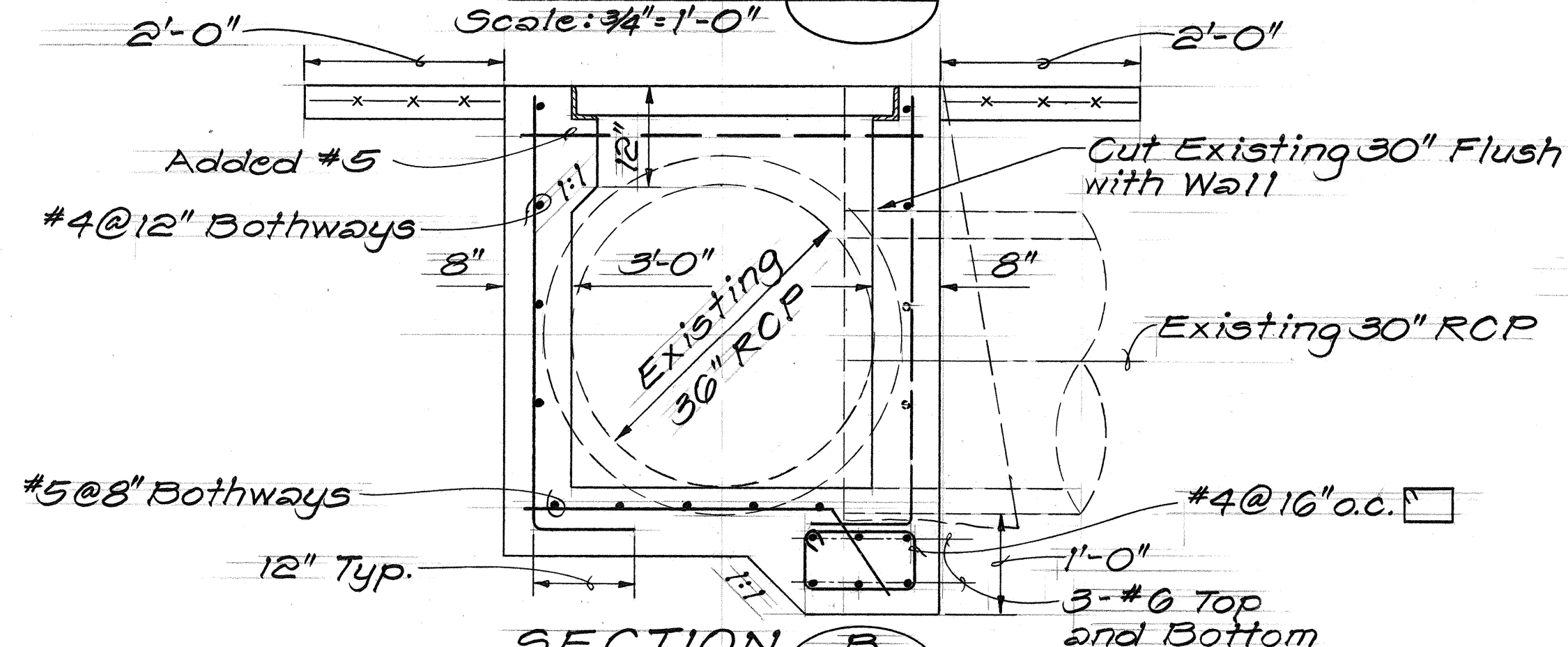
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HAWAII	HAW.	83B-01-87M	1987	C0175-1	24



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



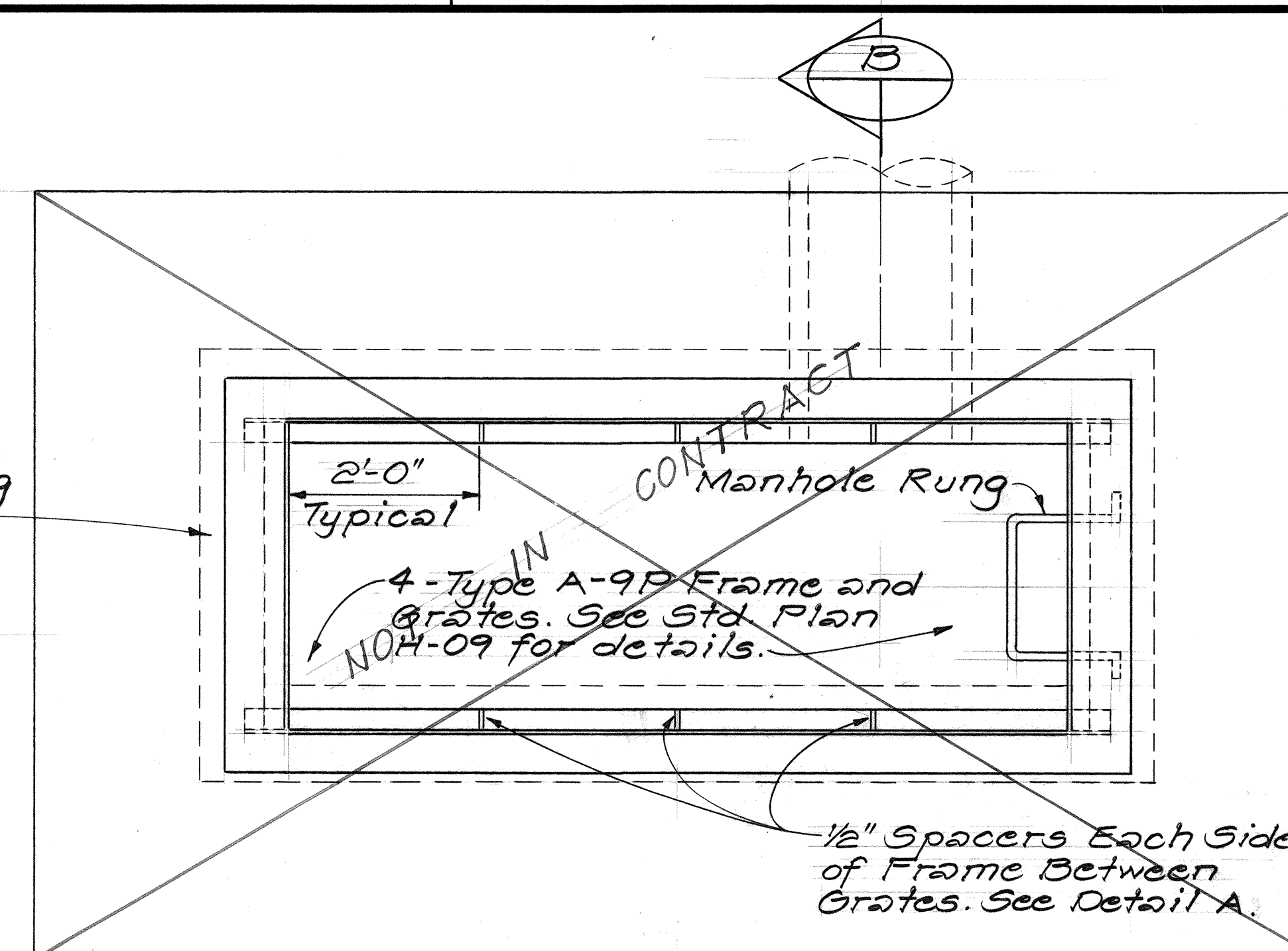
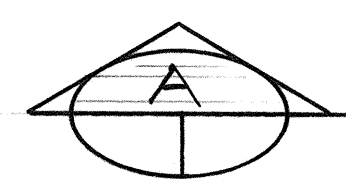
SECTION A
Scale: 3/4" = 1'-0"



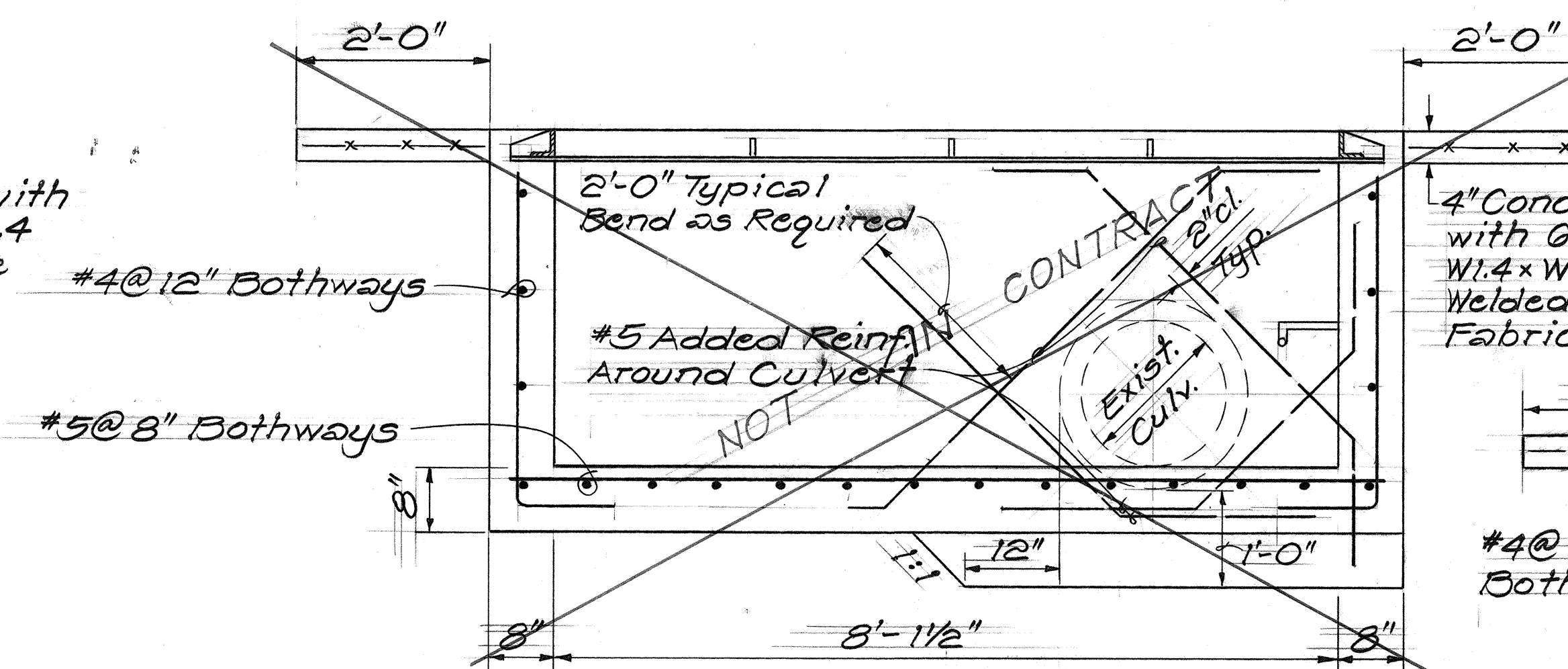
SECTION B
Scale: 3/4" = 1'-0"

5-TYPE A9P GRATED DROP INLET AT STA. 157+45

Demolish and Remove Existing GDI.

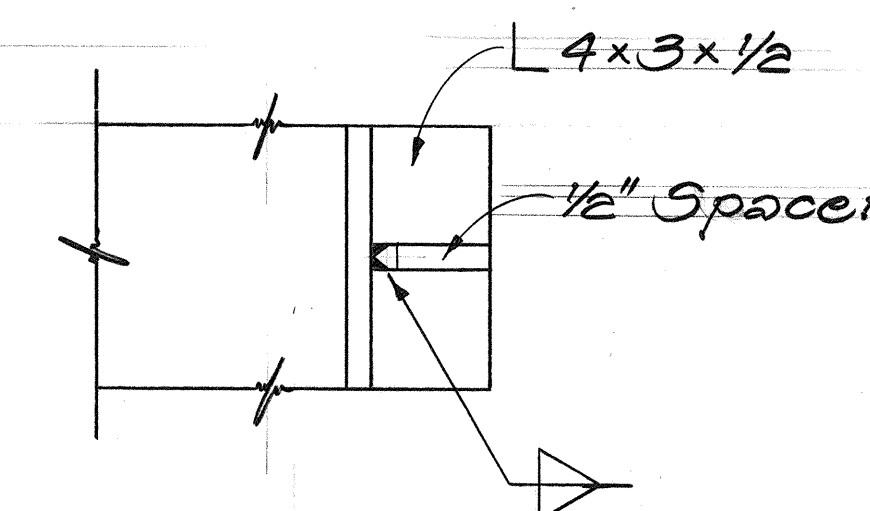


PLAN
Scale: 3/4" = 1'-0"

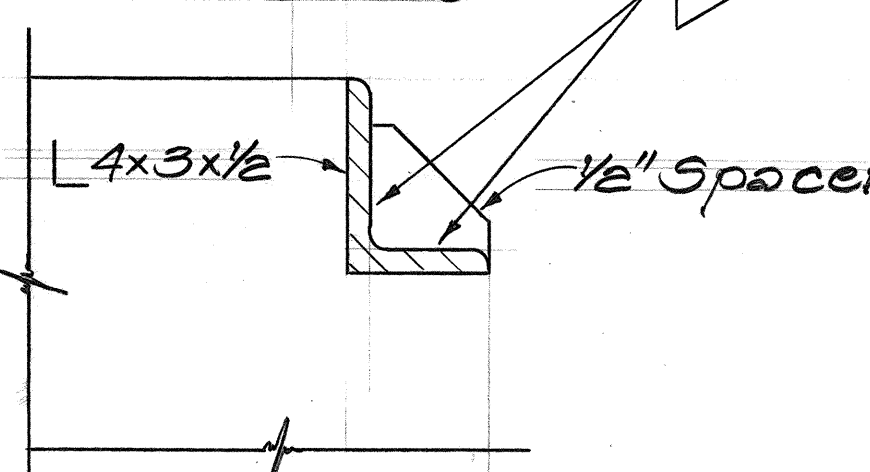


SECTION A
Scale: 3/4" = 1'-0"

4-TYPE A9P GRATED DROP INLET AT STA. 183+50



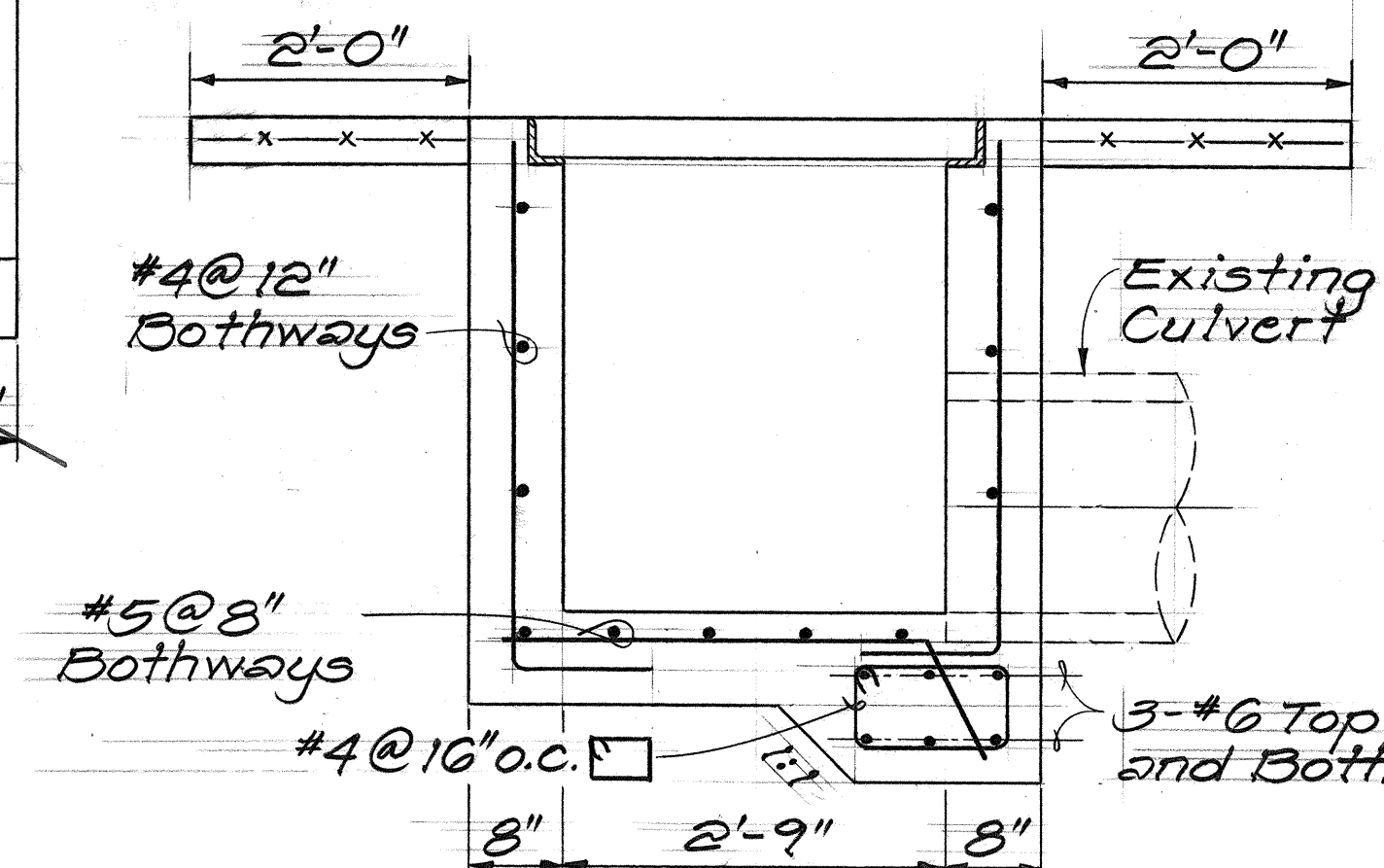
PLAN
Scale: 3" = 1'-0"



SECTION
Scale: 3" = 1'-0"

1/2" SPACER
Scale: 3" = 1'-0"

DETAIL A



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

DATE	_____
SURVEY PLOTTED BY	_____
DESIGNED BY	_____
NOTED BY	_____
CHECKED BY	_____
NO.	_____

6-2-87 This sheet added for GDIs at Sta. 157+45 Rt & Sta. 183+50 Rt.

DATE REVISION

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
DRAINAGE DETAILS
Kamehameha Highway Resurfacing Proj. No. 83B-01-87M
Scale: As Shown Date: June 1987
SHEET NO. H5A OF 5 SHEETS

C.017 S-1