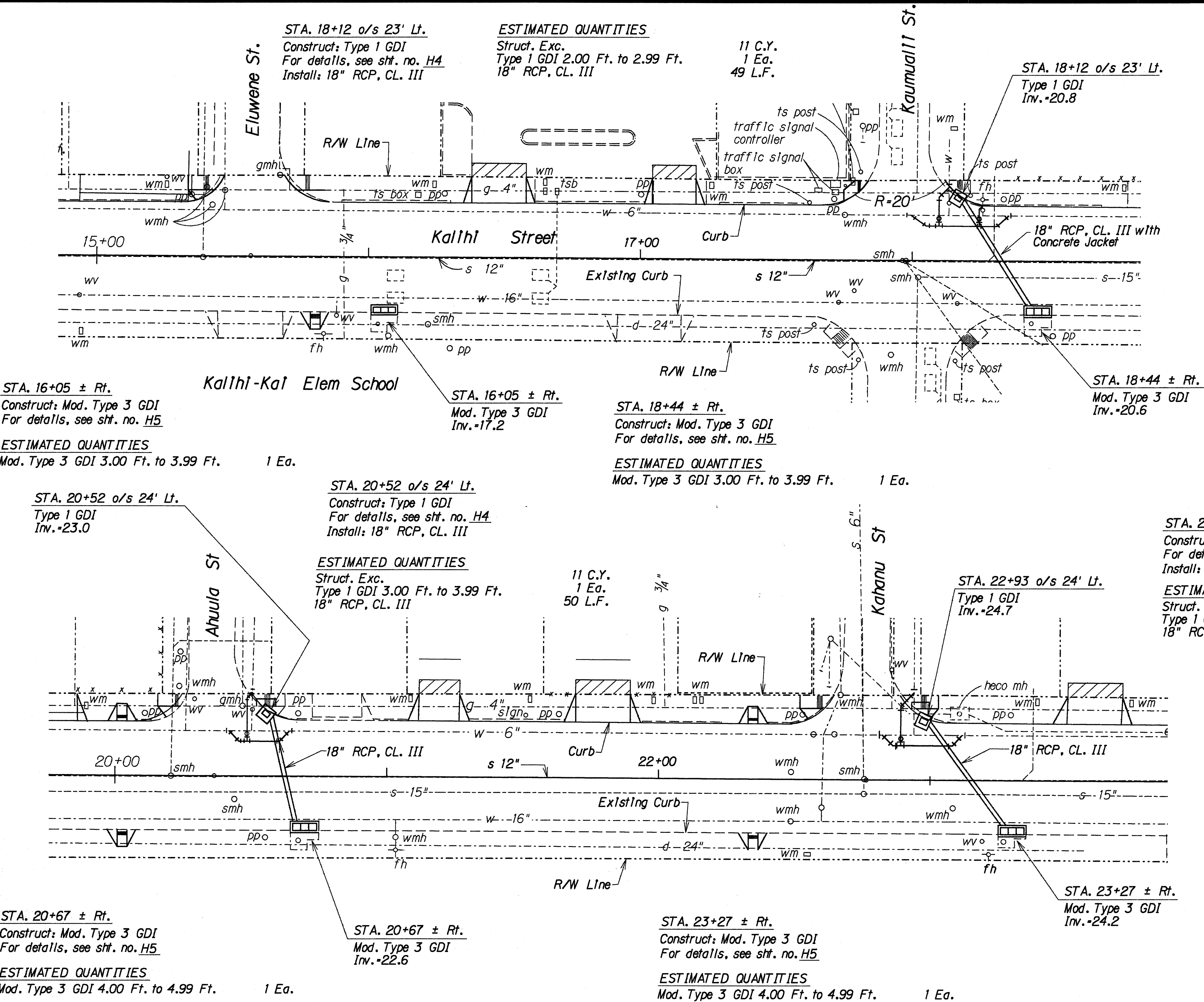


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	63A-01-88	1990	9	17

DRAINAGE NOTES

1. The Contractor shall verify and check all dimensions and details on the drawings before proceeding with the work. Any discrepancy shall be brought to the attention of the Engineer for clarification.
2. All existing utilities and improvements whether or not shown on plans shall be protected at all times by the Contractor unless specified otherwise. Any damages resulting from the contractor's operations shall be immediately repaired or restored as directed by the Engineer at the Contractor's expense.
3. The Contractor at his own expense shall keep the project area and surrounding area free from rubbish, noise, dust, erosion etc.. The work shall be done in conformance with the air and water pollution control standards and regulations of the State Dept. of Health.
4. The Contractor is responsible for maintaining existing drainage flow conditions until final construction is completed.
5. Culverts within the catch basins shall be cut flush with the inside face of the wall. Above work shall be considered incidental to the various contract items.
6. Demolishing of existing structure shall not be paid for separately, but shall be considered incidental to the various contract items.
7. Concrete shall be Class A unless otherwise noted.
8. Chamfer all exposed concrete edges 1".
9. Restoration of Pavement around GDI shall not be paid for separately but shall be considered incidental to the GDI.



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE PLAN
KALIHl STREET IMPROVEMENTS
DIllingham Blvd. To North King Street
PROJECT NO. 63A-01-88

Scale: 1" = 20' Date: Aug., 1989
SHEET No. H1 OF 6 SHEETS

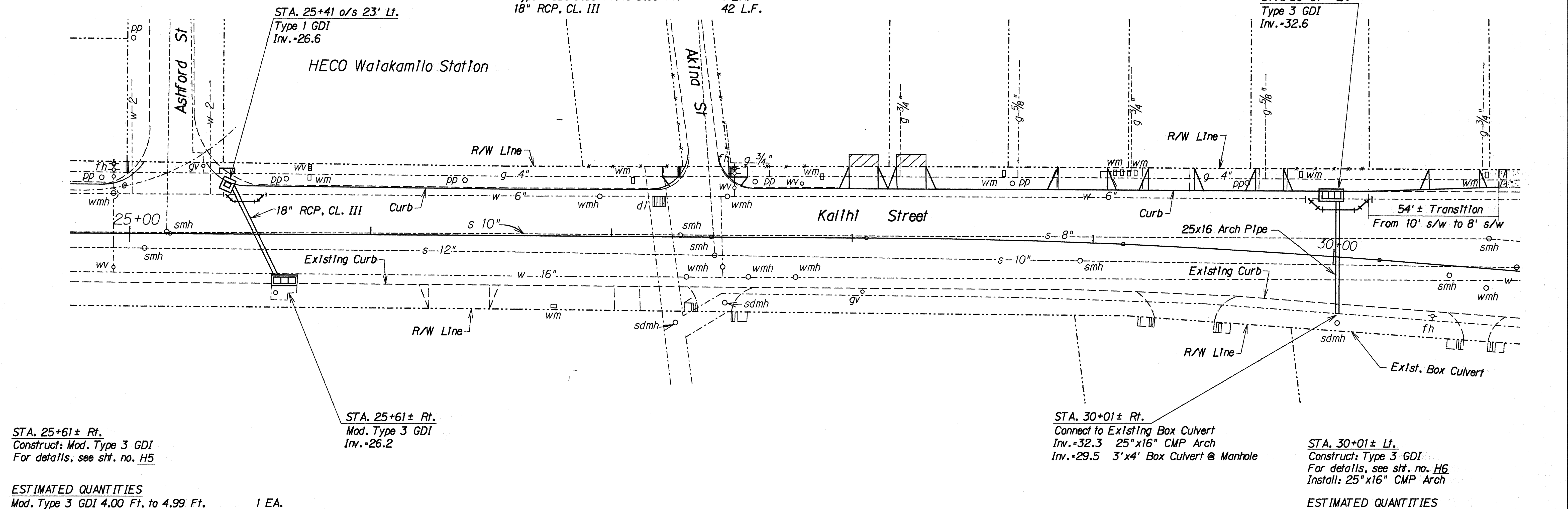
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	63A-01-88	1990	10	17

STA. 25+41 o/s 23' Lt.
Construct: Type 1 GDI
For details, see sh. no. H4
Install: 18" RCP, CL. III

ESTIMATED QUANTITIES

Struc. Exc.
Type 1 GDI 3.00 Ft. to 3.99 Ft. 11 C.Y.
18" RCP, CL. III 1 EA.
42 L.F.

STA. 30+01± Lt.
Type 3 GDI
Inv. = 32.6



STA. 25+61± Rt.
Construct: Mod. Type 3 GDI
For details, see sh. no. H5

ESTIMATED QUANTITIES

Mod. Type 3 GDI 4.00 Ft. to 4.99 Ft. 1 EA.

STA. 30+01± Rt.
Connect to Existing Box Culvert
Inv. = 32.3 25"x16" CMP Arch
Inv. = 29.5 3'x4' Box Culvert @ Manhole

STA. 30+01± Lt.
Construct: Type 3 GDI
For details, see sh. no. H6
Install: 25"x16" CMP Arch

ESTIMATED QUANTITIES

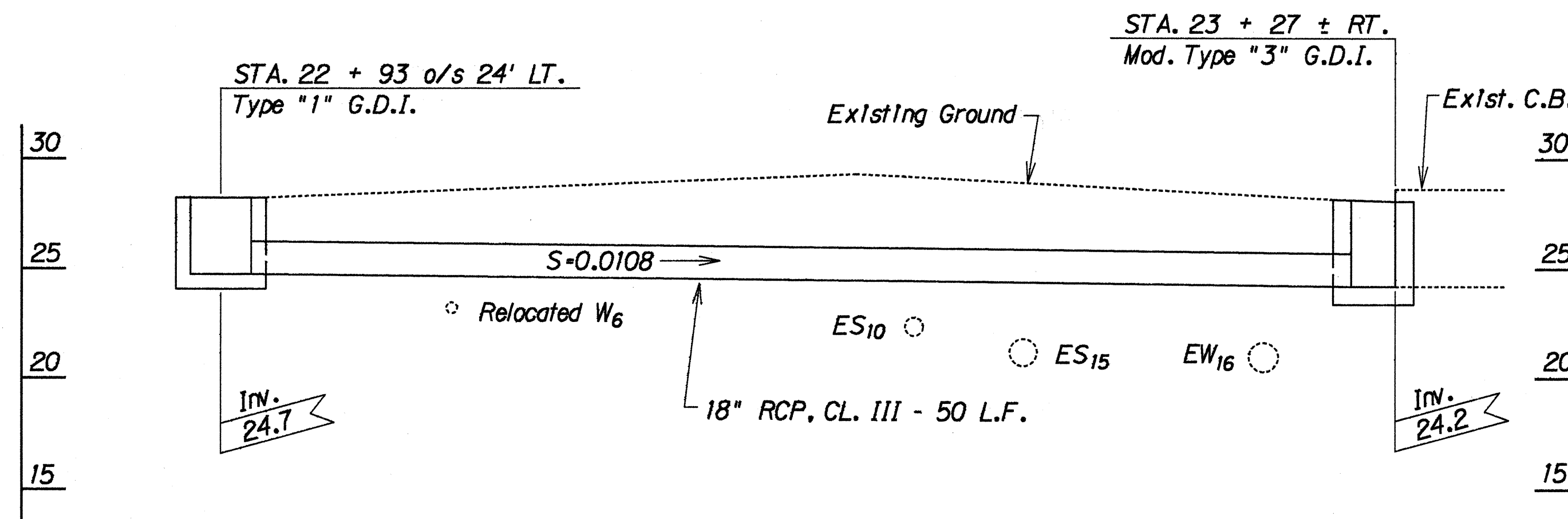
Struc. Exc. 23 C.Y.
Type 3 GDI 3.00 Ft. to 3.99 Ft. 1 EA.
25"x16" CSP Arch sh. "t" = .079" or
25"x16" CAP Arch sh. "t" = .075" 45 L.F.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

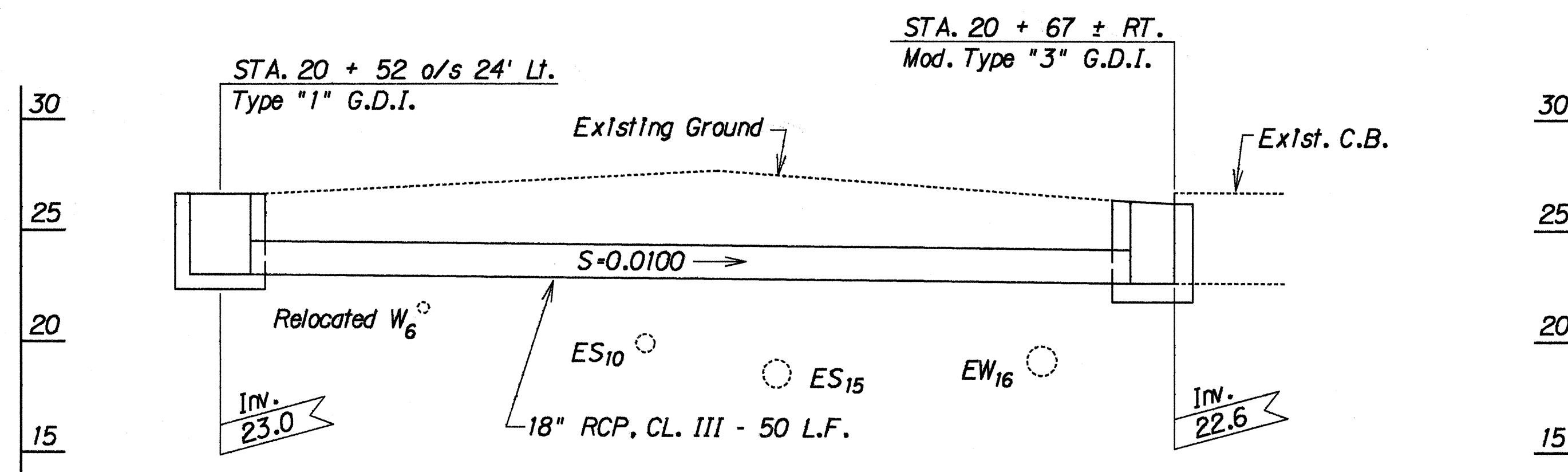
DRAINAGE PLAN
KALIHI STREET IMPROVEMENTS
Dillingham Blvd. To North King Street
PROJECT NO. 63A-01-88

Scale: 1" = 20'
Date: Aug., 1989
SHEET No. H2 OF 6 SHEETS

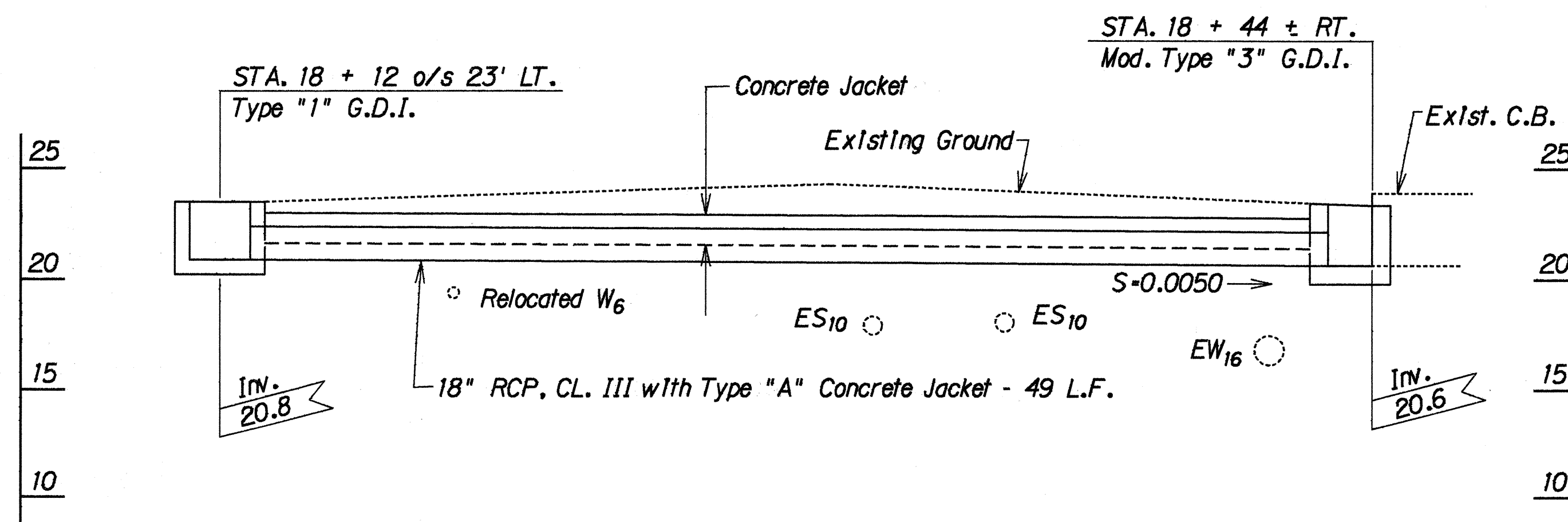
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HAWAII	HAW.	63A-01-88	1990	11	17



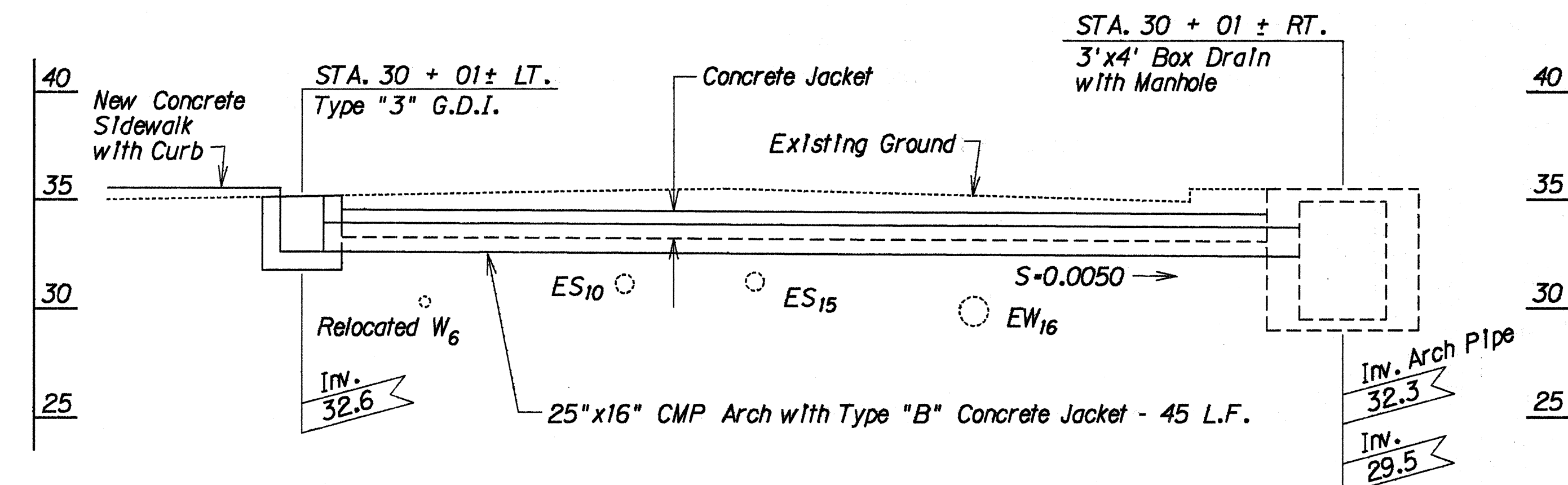
PROFILE AT KAHANU



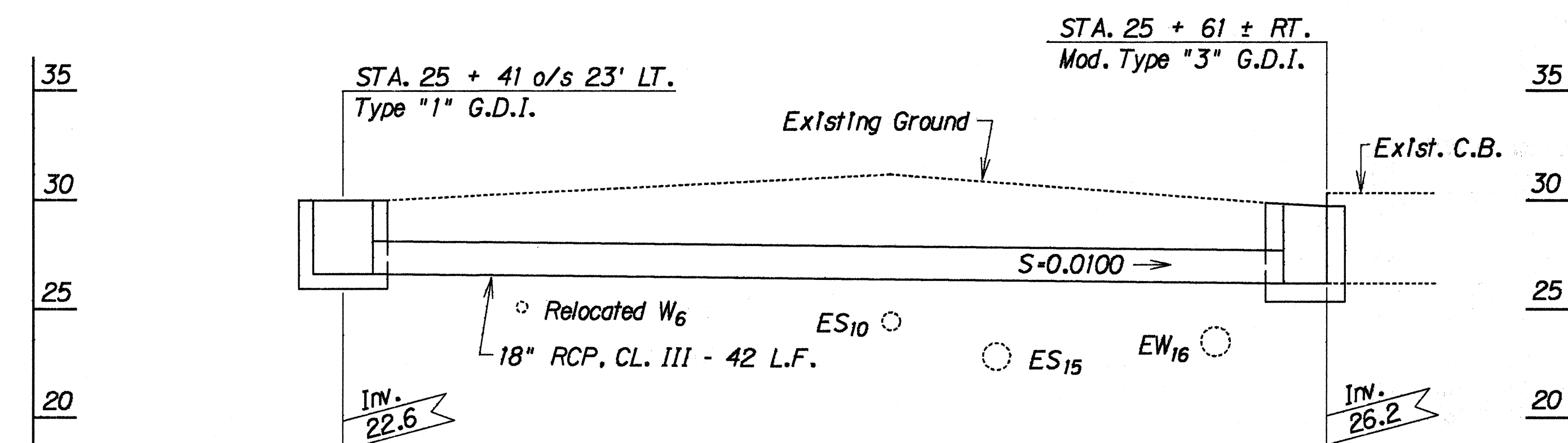
PROFILE AT AHUULA



PROFILE AT KAUMUALII



PROFILE AT STA. 30 + 01±



PROFILE AT ASHFORD

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

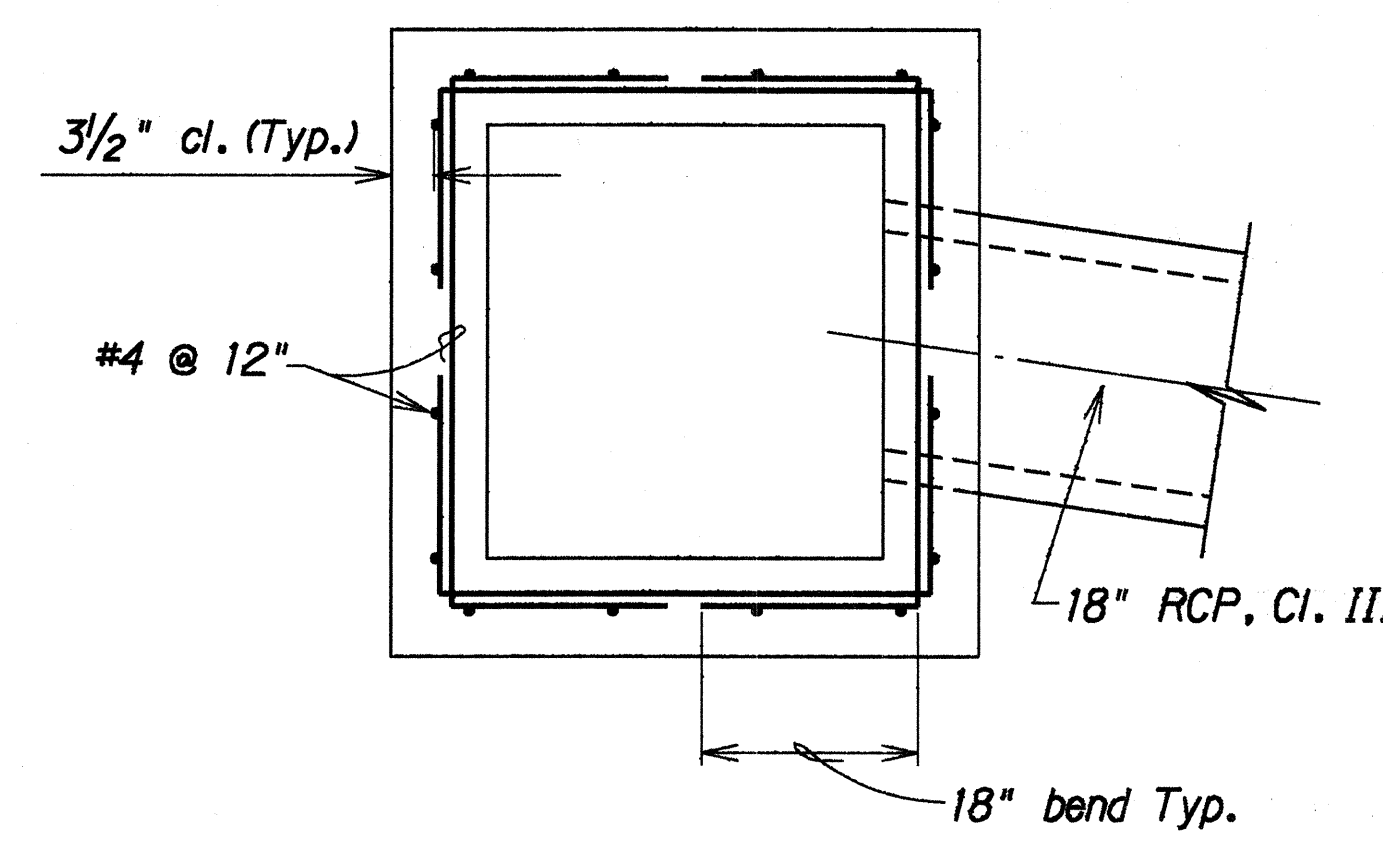
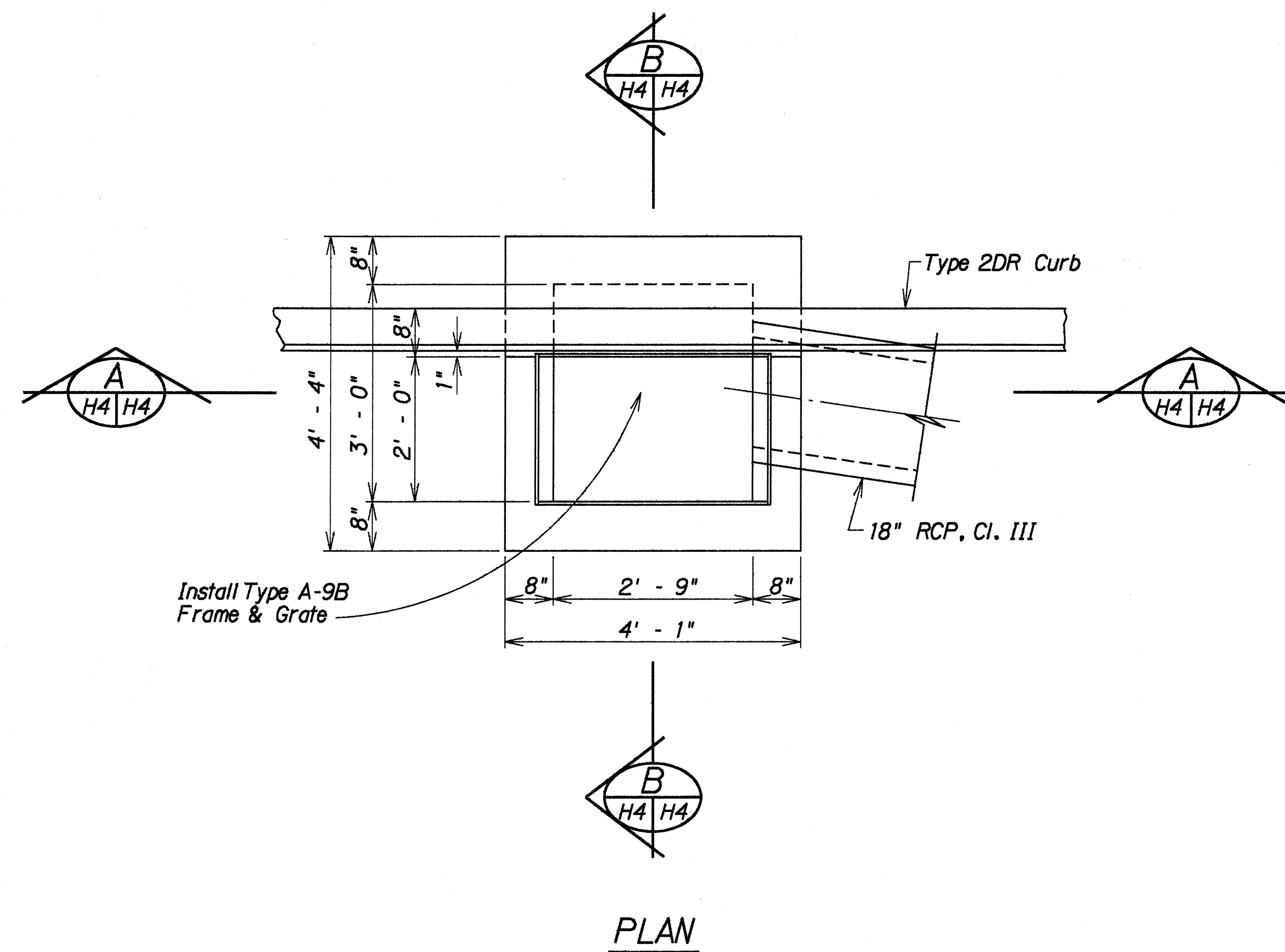
DRAINAGE DETAILS

KALIHI STREET IMPROVEMENTS
Dillingham Blvd. To North King Street
PROJECT NO. 63A-01-88

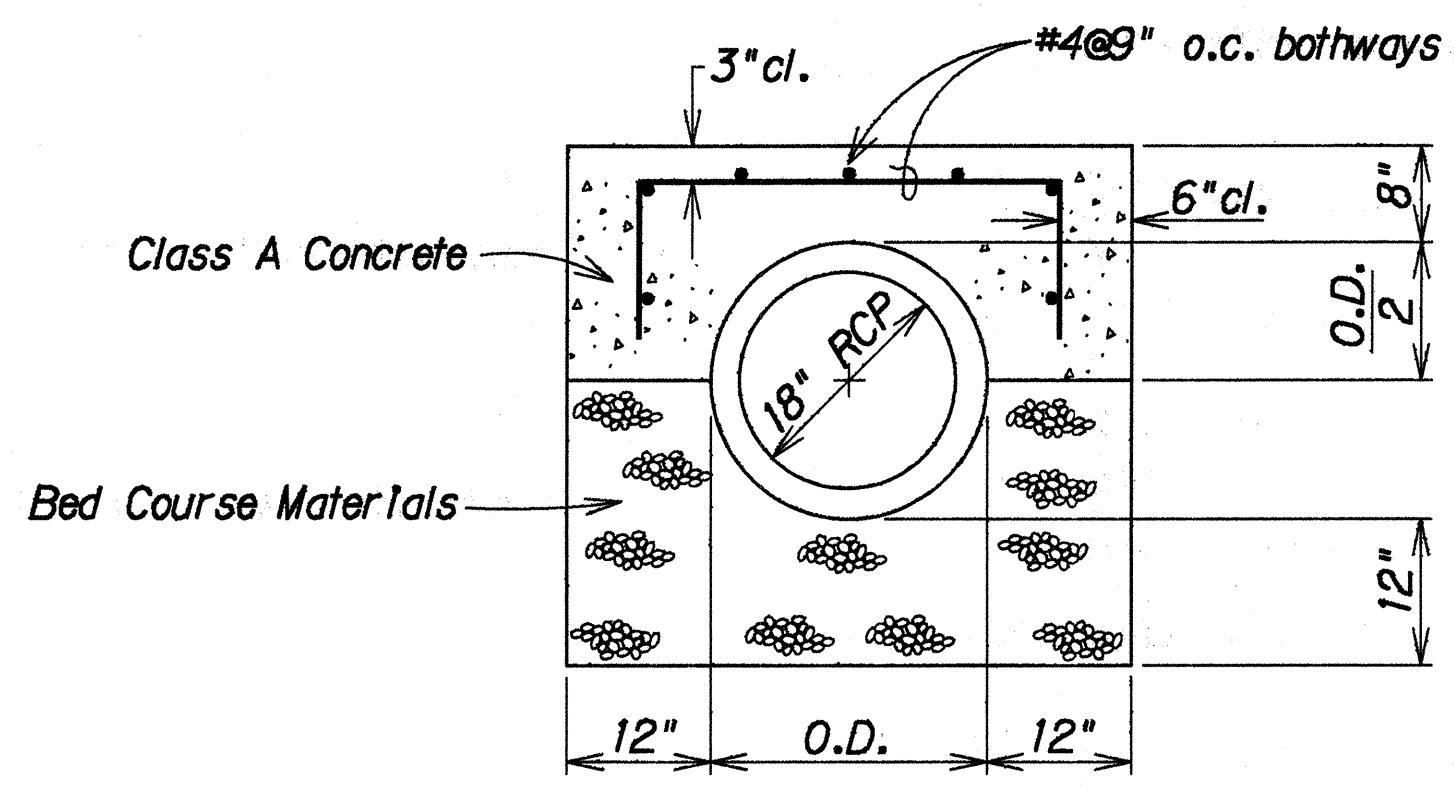
Scale: 1" = 5' Date: Aug., 1989

SHEET No. H3 OF 6 SHEETS

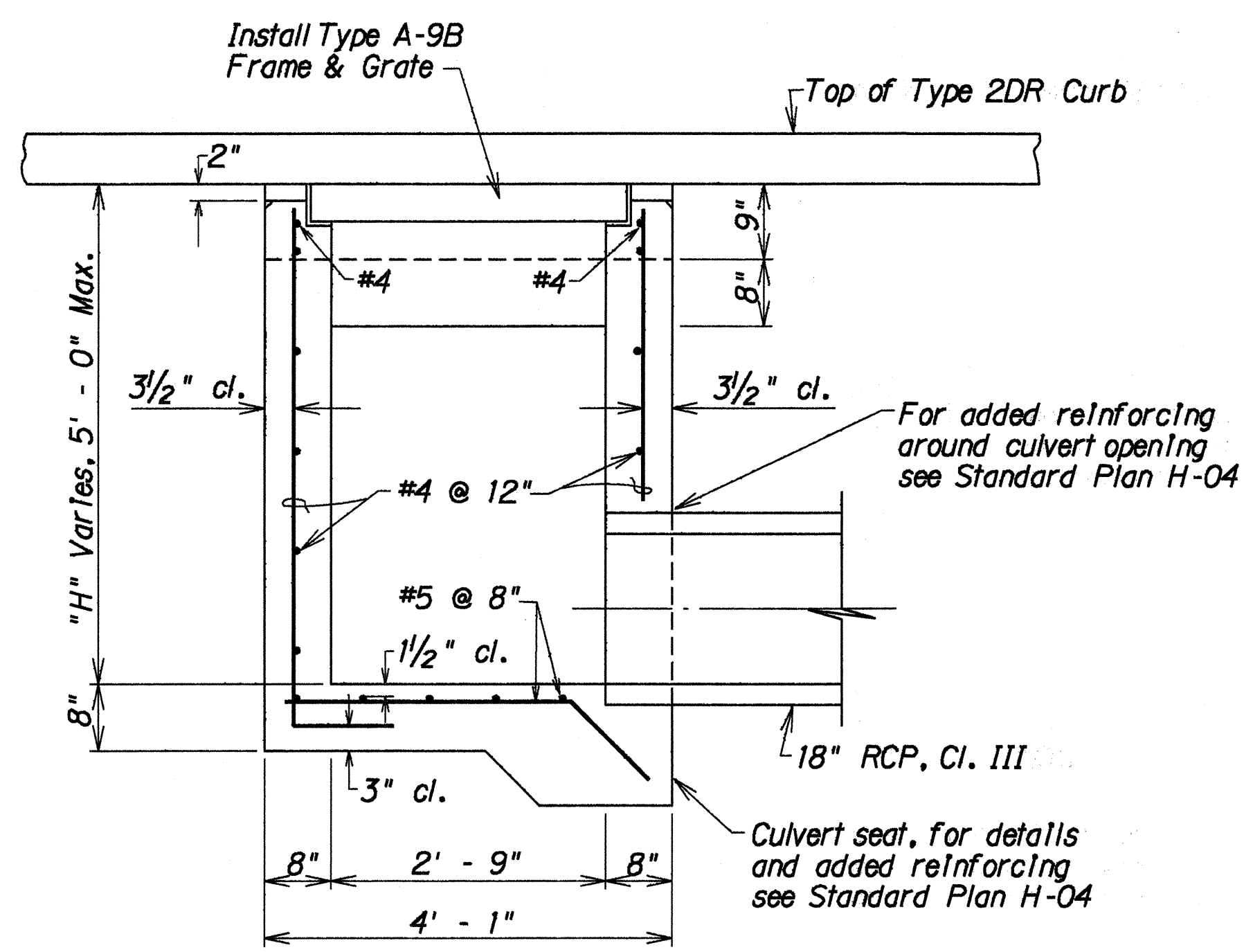
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HAWAII	HAW.	63A-01-88	1990	12	17



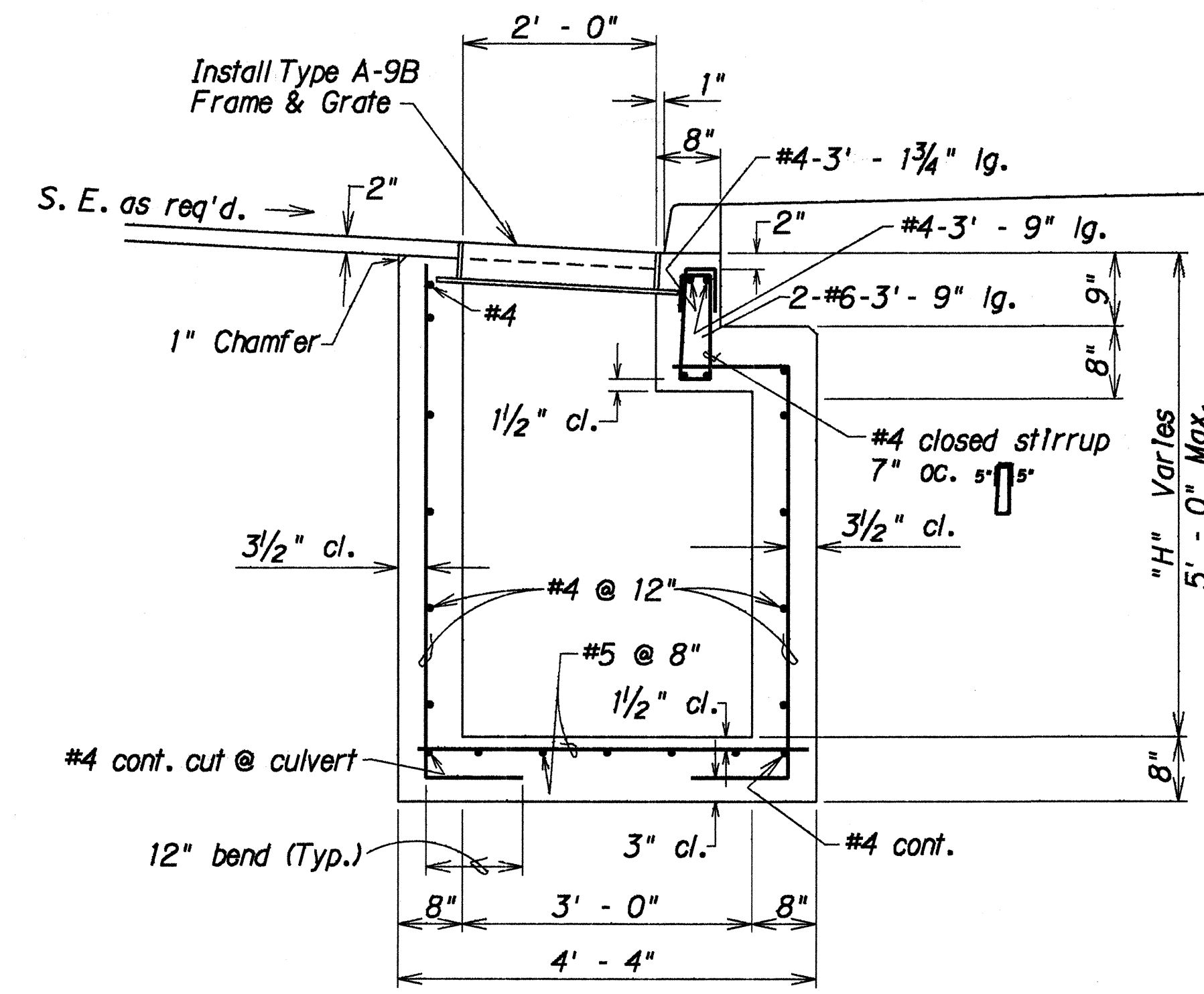
PLAN VIEW OF WALL SECTION



TYPE "A" JACKET

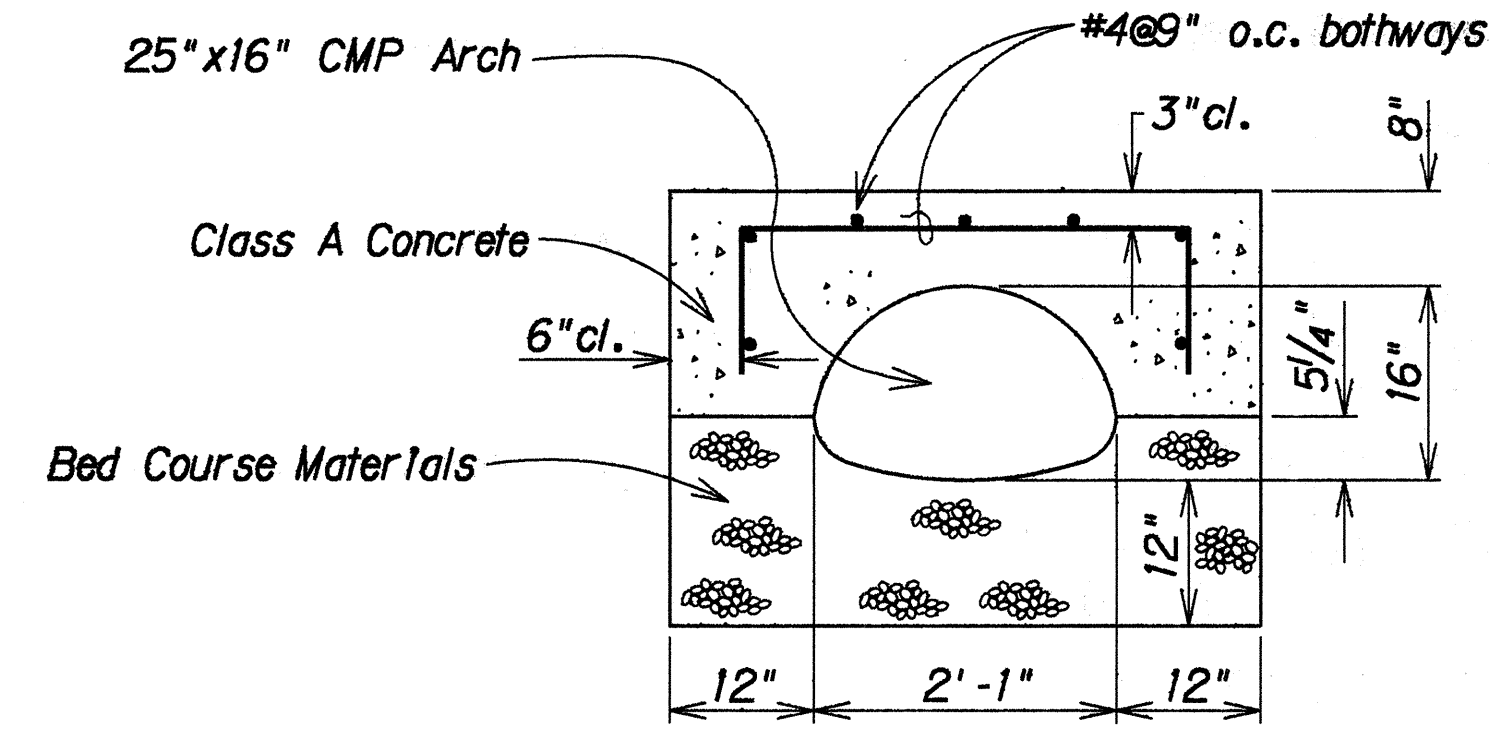


SECTION A



SECTION B

DETAILS OF TYPE 1 GRATED DROP INLET



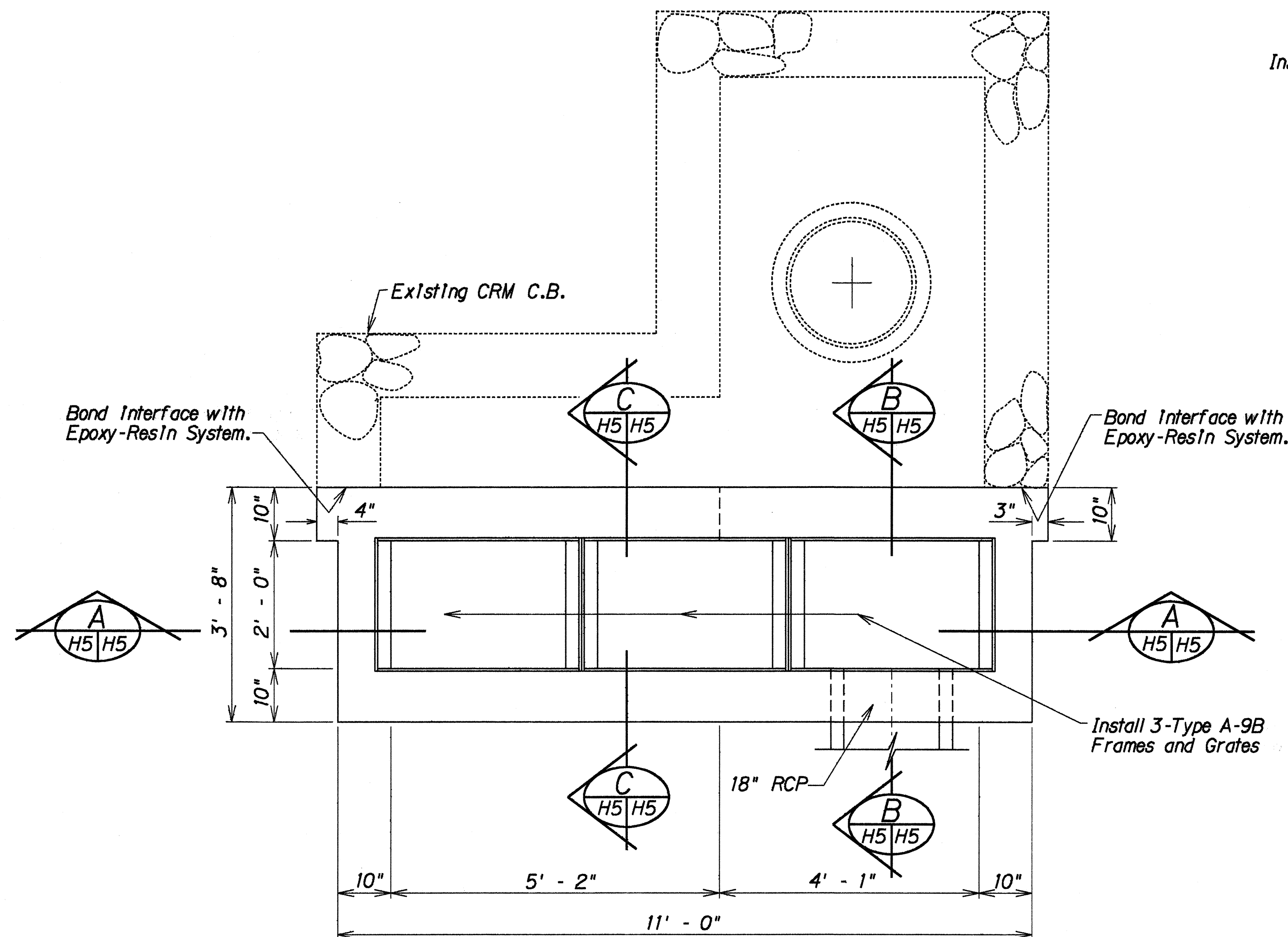
TYPE "B" JACKET

DETAILS OF CONCRETE JACKET

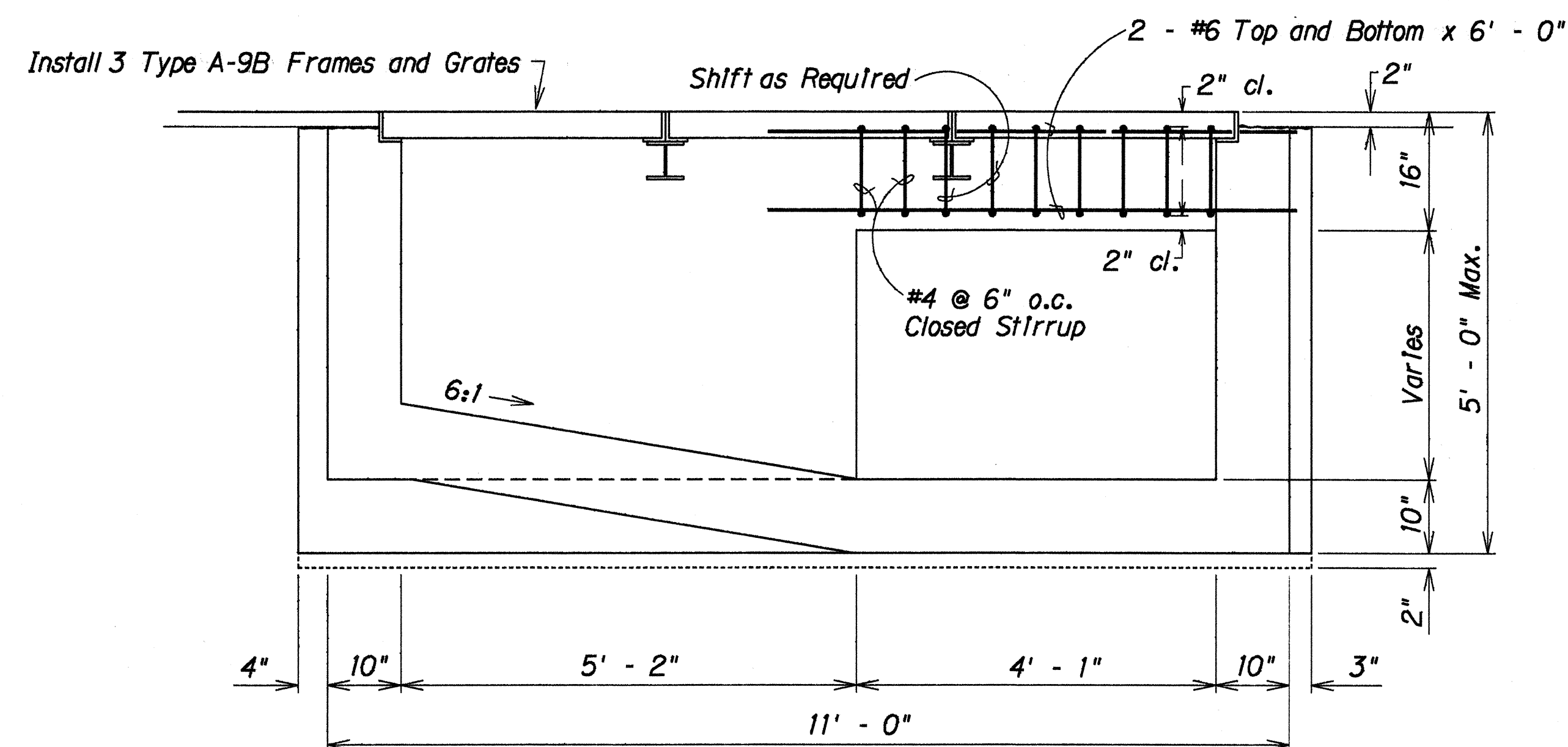
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS
KALIHI STREET IMPROVEMENTS
Dillingham Blvd. To North King Street
PROJECT NO. 63A-01-88
Scale: 3/4" = 1'-0" Date: Aug., 1989

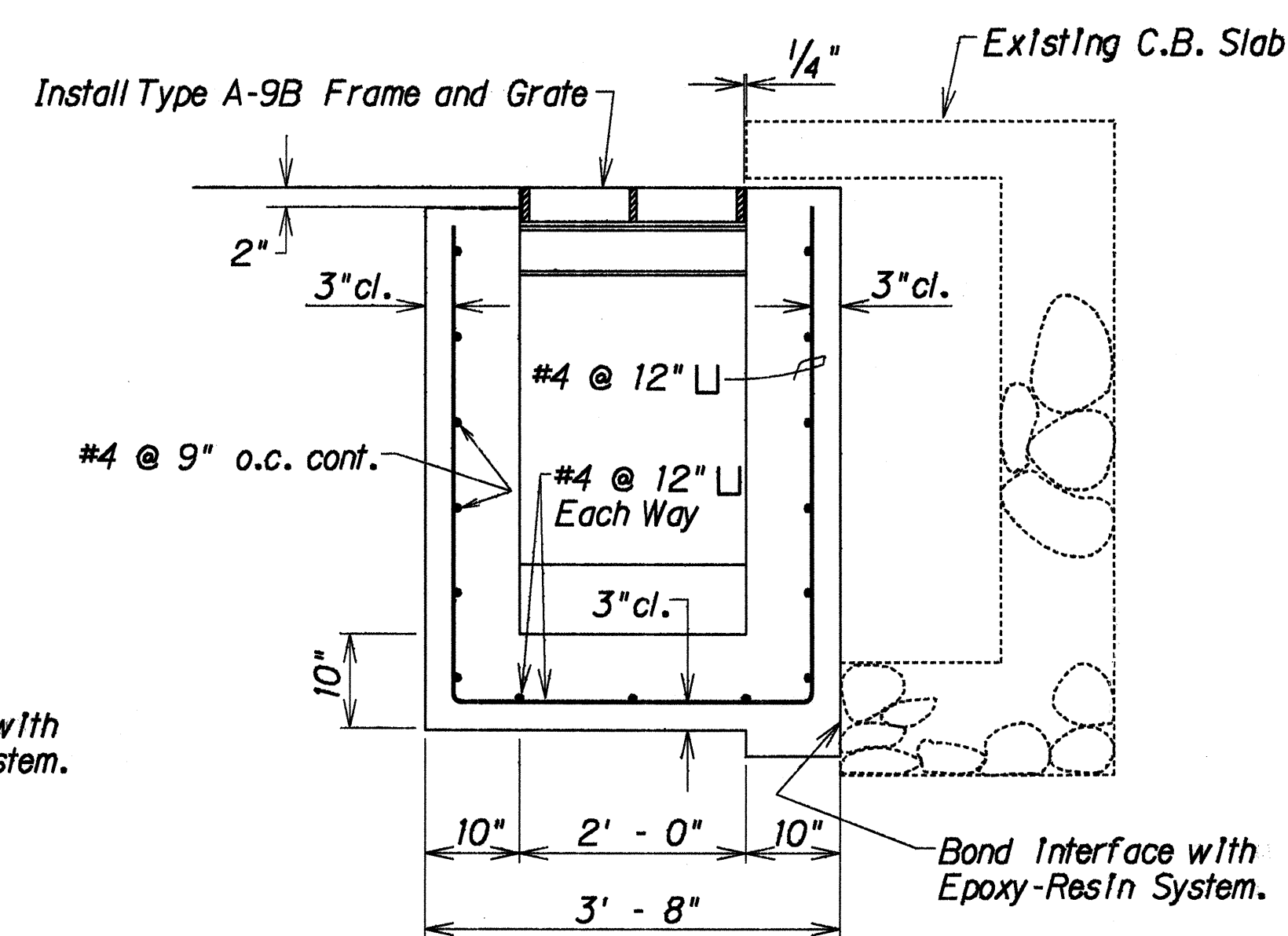
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	63A-01-88	1990	13	17



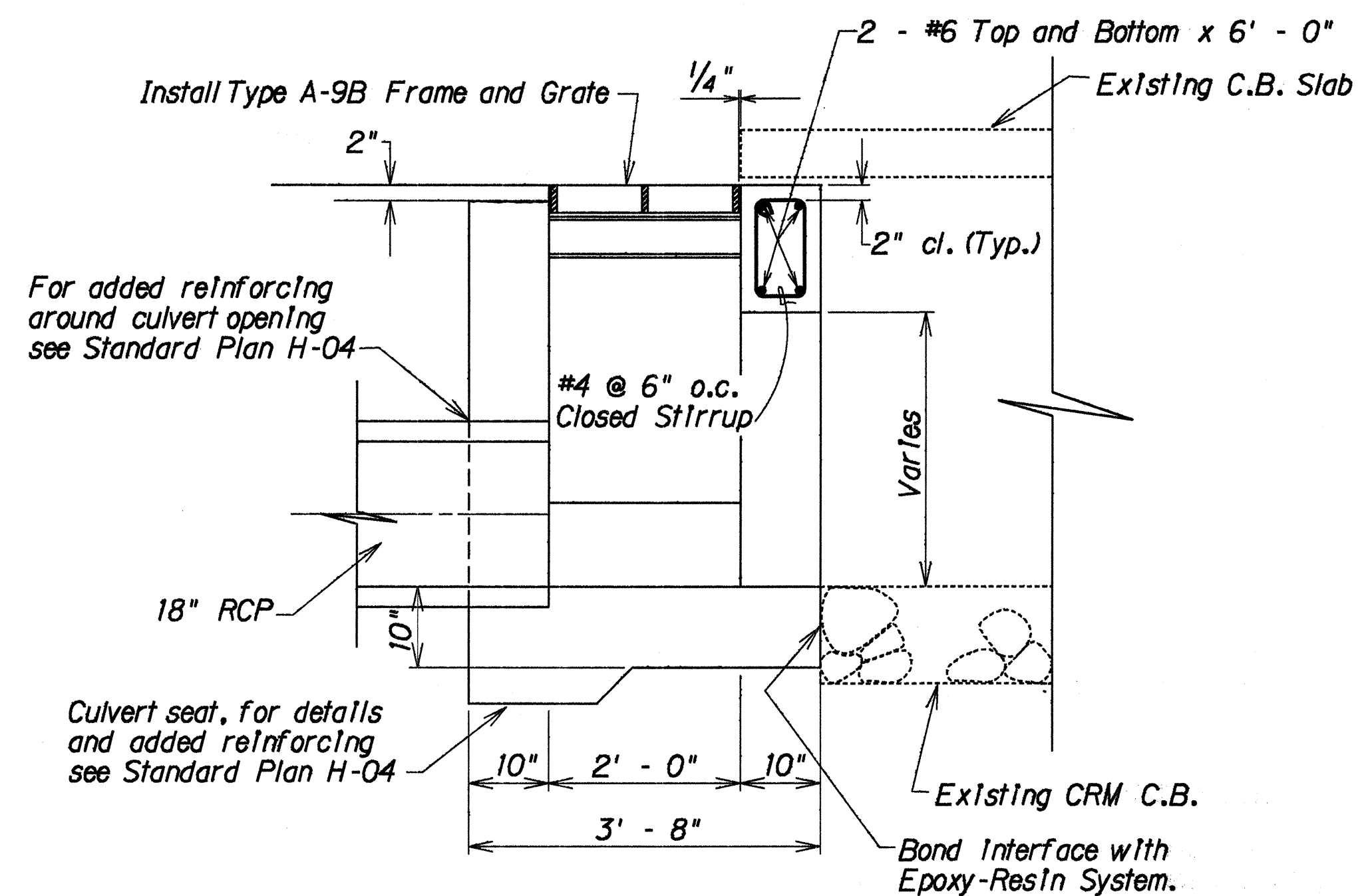
PLAN



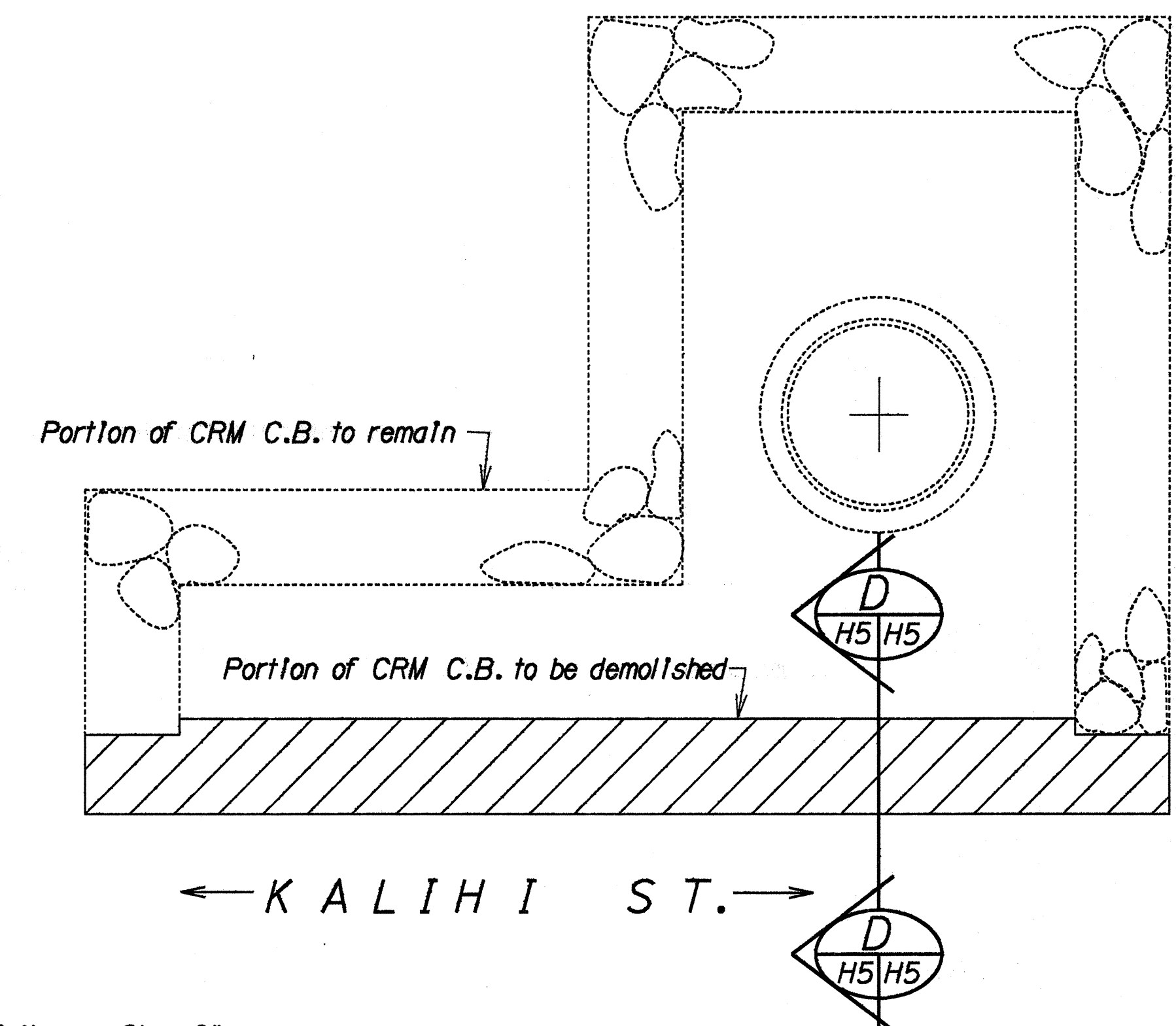
SECTION A
H5 H5



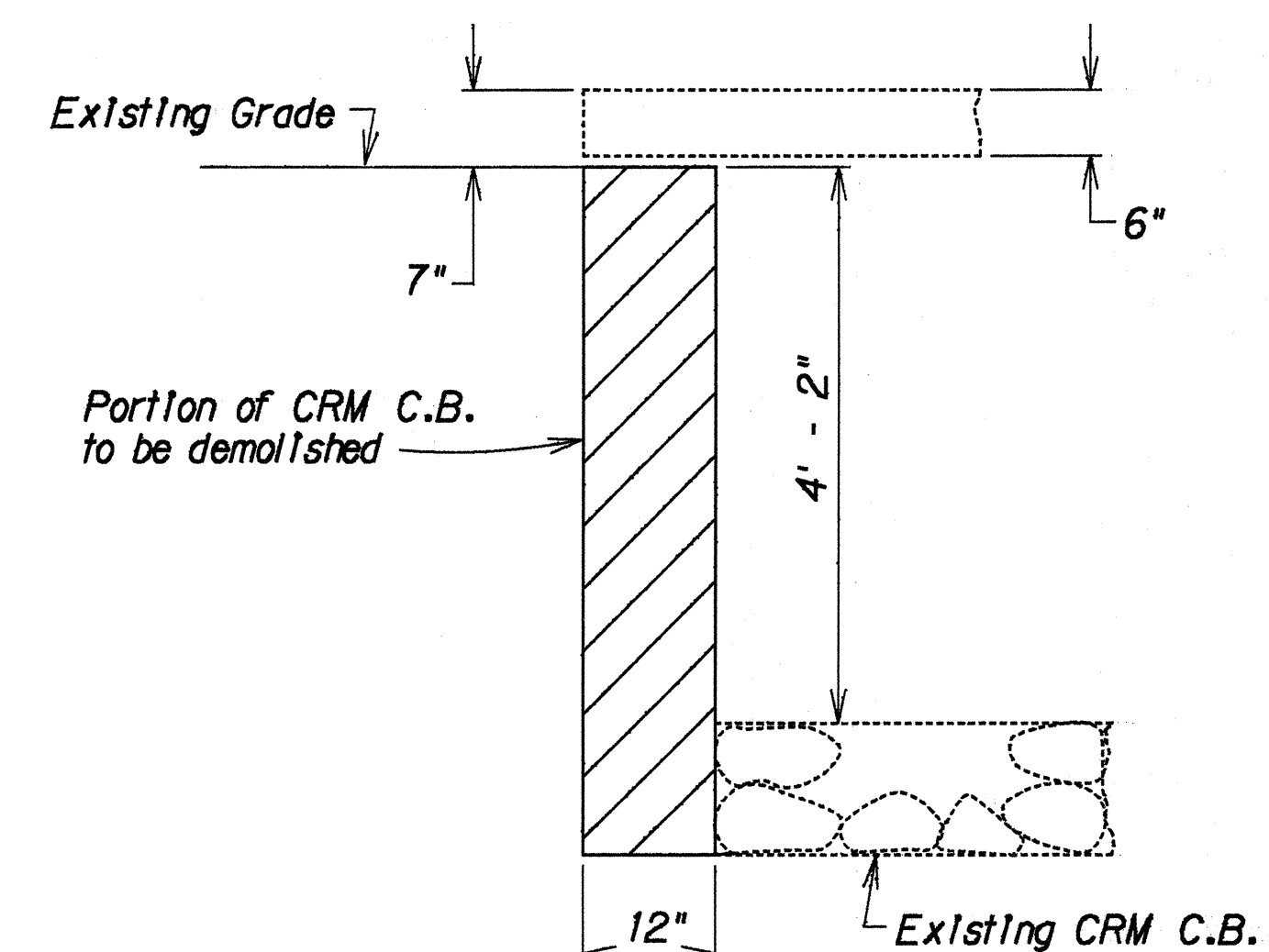
SECTION C
H5 H5



SECTION B
H5 H5



PLAN



SECTION D
H5 H5

DETAILS OF MODIFIED TYPE 3 GRATED DROP INLET

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

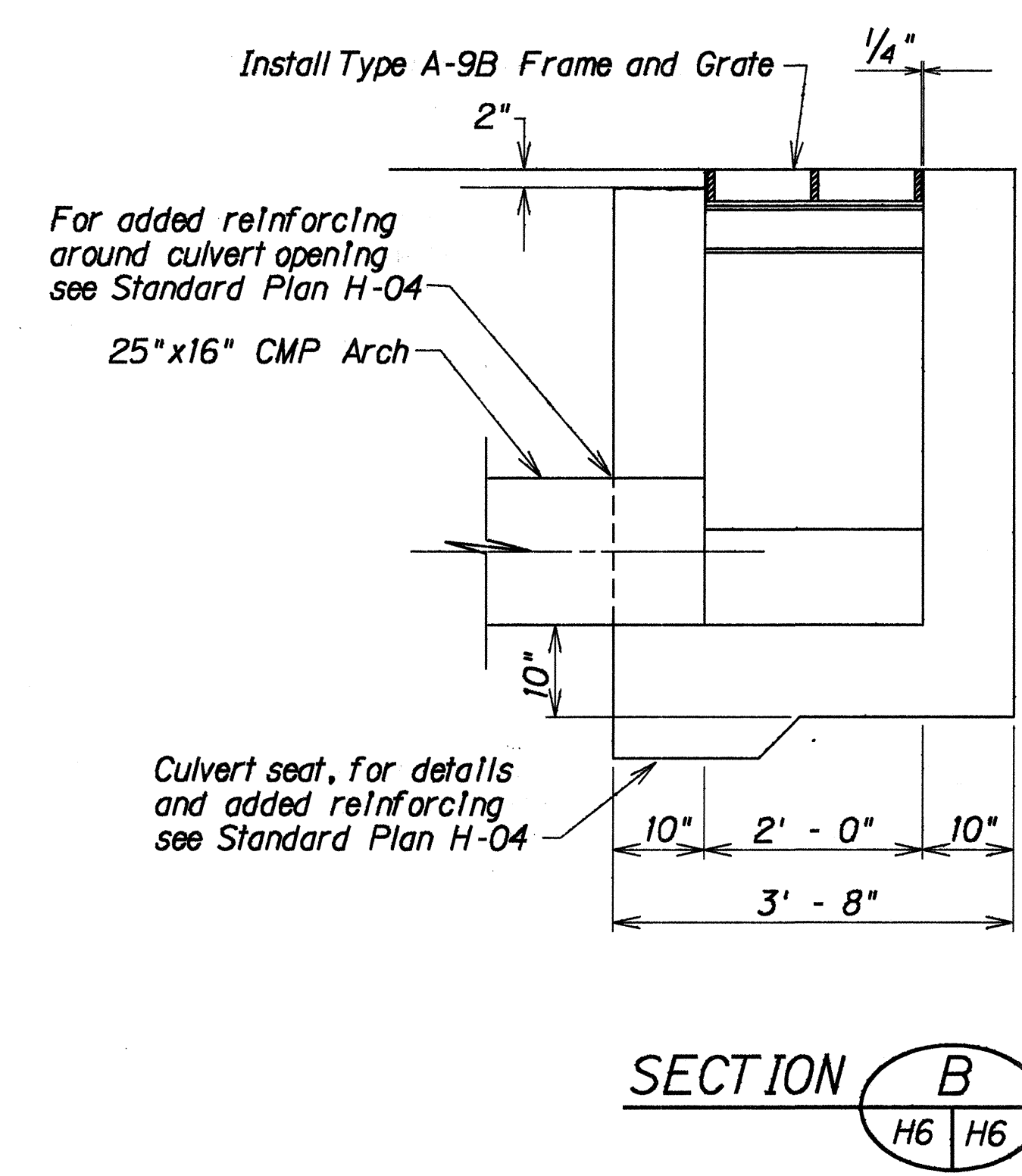
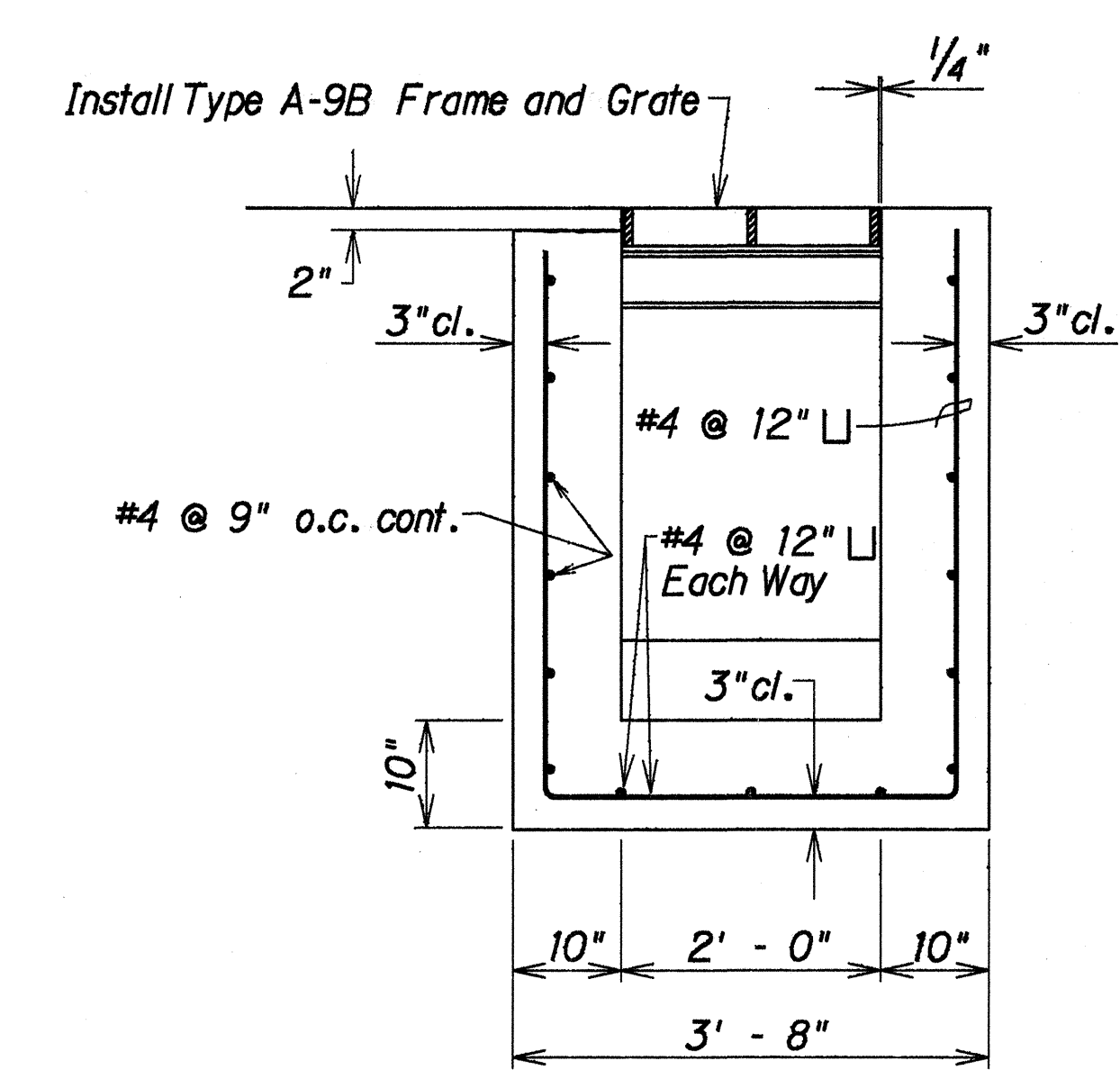
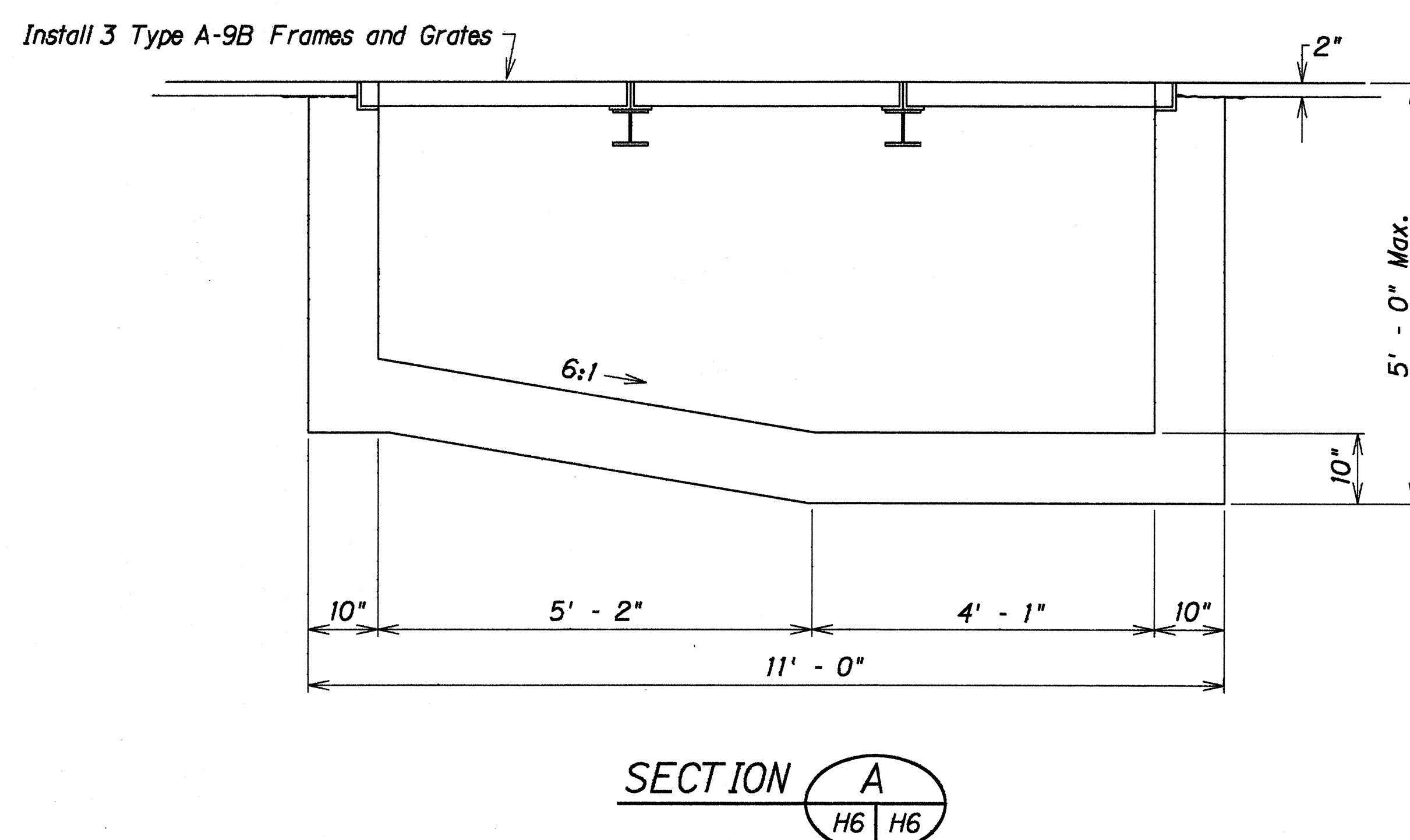
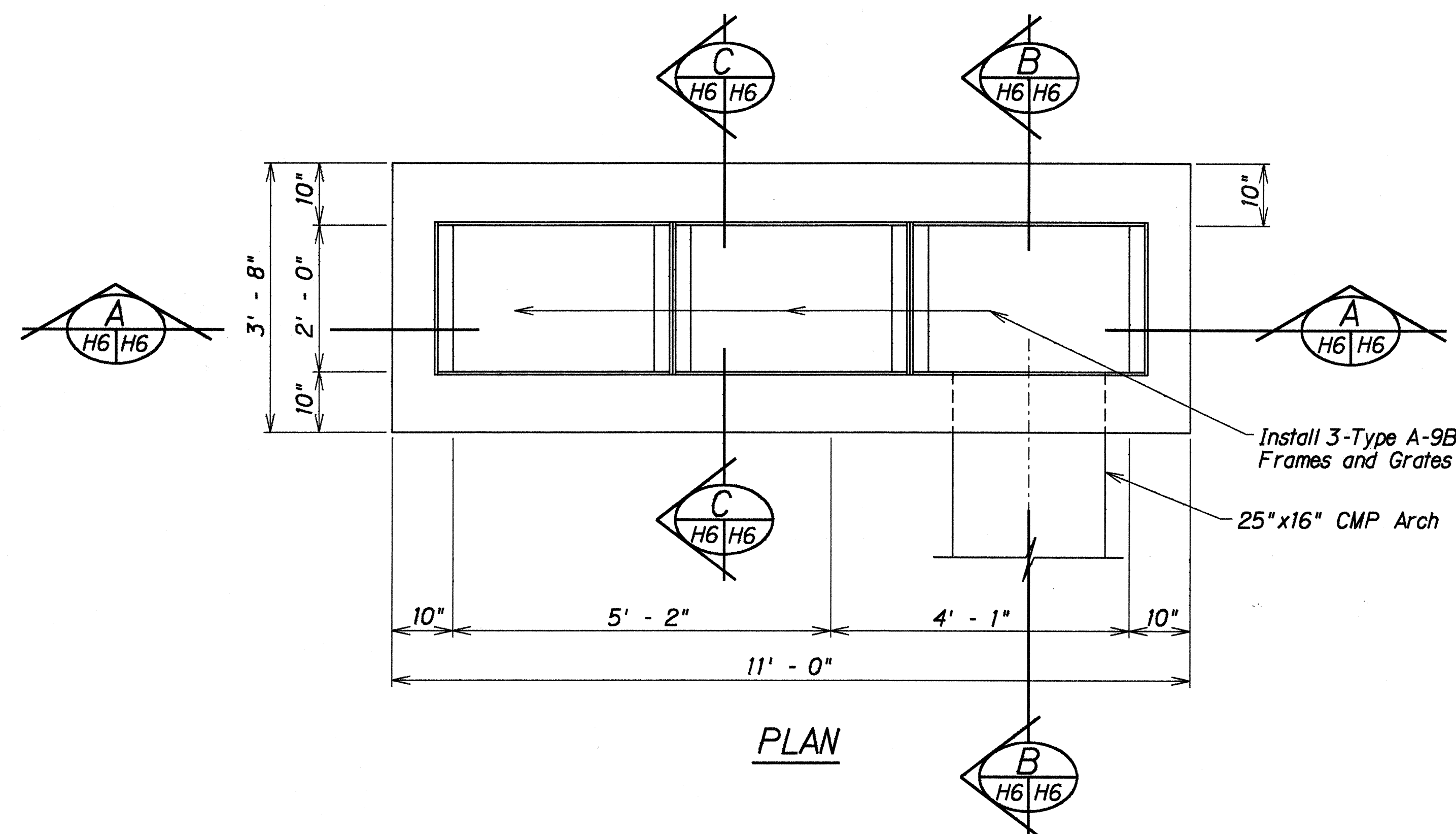
DRAINAGE DETAILS

KALIHI STREET IMPROVEMENTS
Dillingham Blvd. To North King Street
PROJECT NO. 63A-01-88

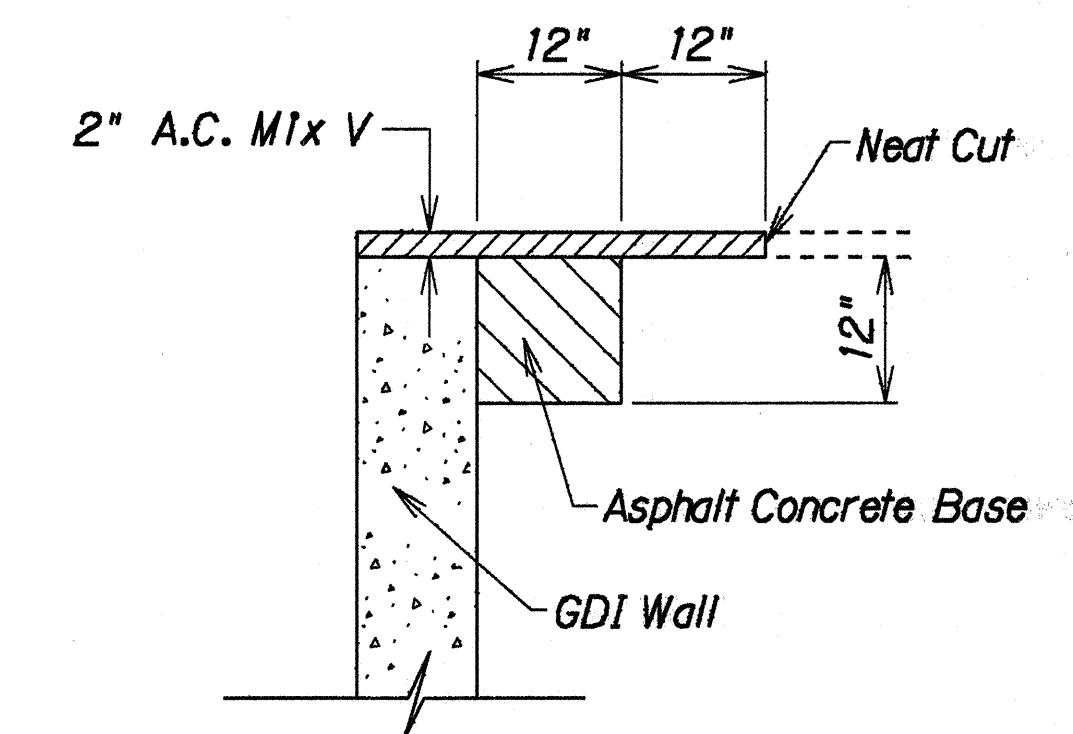
Scale: 3/4" = 1' - 0" Date: Aug., 1989

SHEET No. H5 OF 6 SHEETS

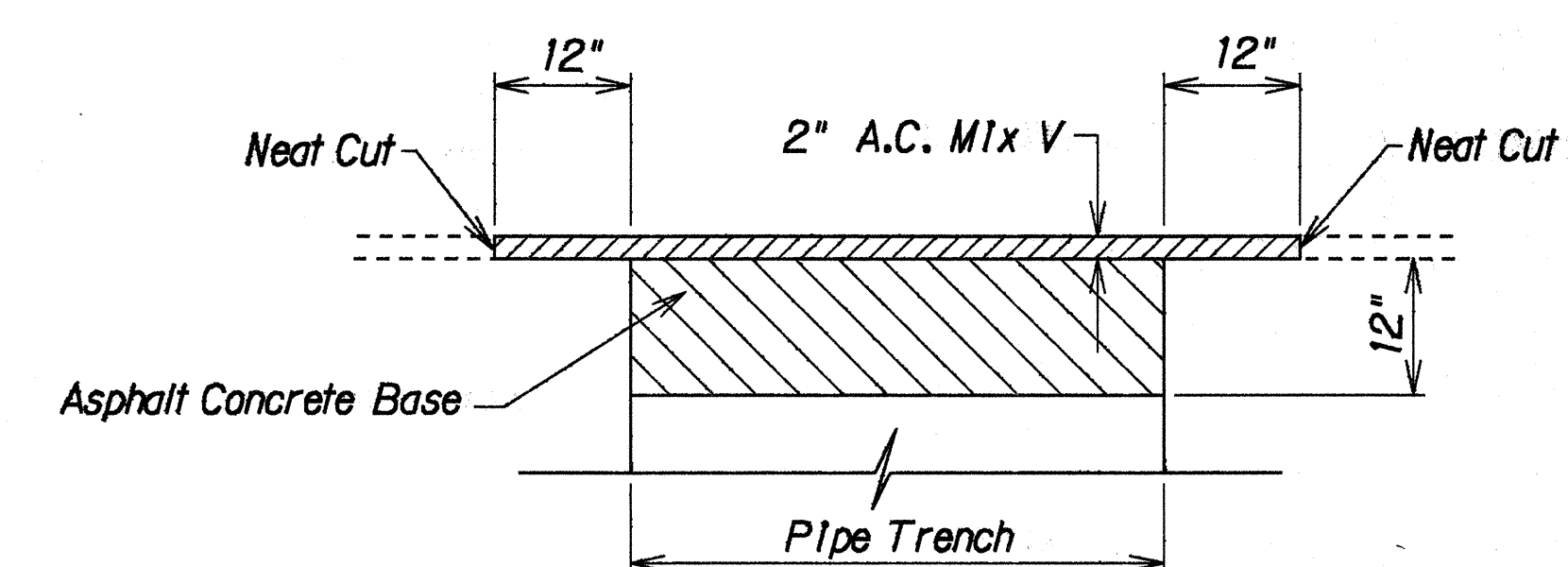
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	63A-01-88	1990	14	17



DETAILS OF TYPE 3 GRATED DROP INLET



PAVEMENT AT GDI



PAVEMENT OVER PIPE TRENCH

TYPICAL DETAIL OF PAVEMENT RESTORATION
Scale: 3/4" = 1' - 0"

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS

KALIHI STREET IMPROVEMENTS
Dillingham Blvd. To North King Street
PROJECT NO. 63A-01-88

Scale: 3/4" = 1' - 0" Date: Aug., 1989

SHEET No. H6 OF 6 SHEETS