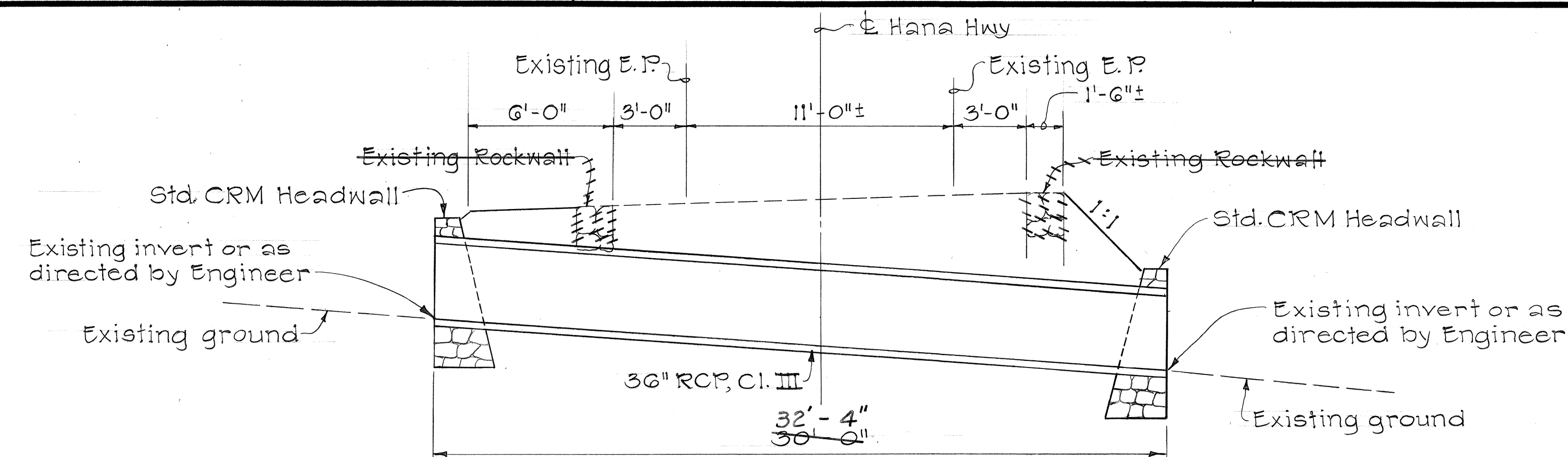


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360B-01-80	1980	16	28



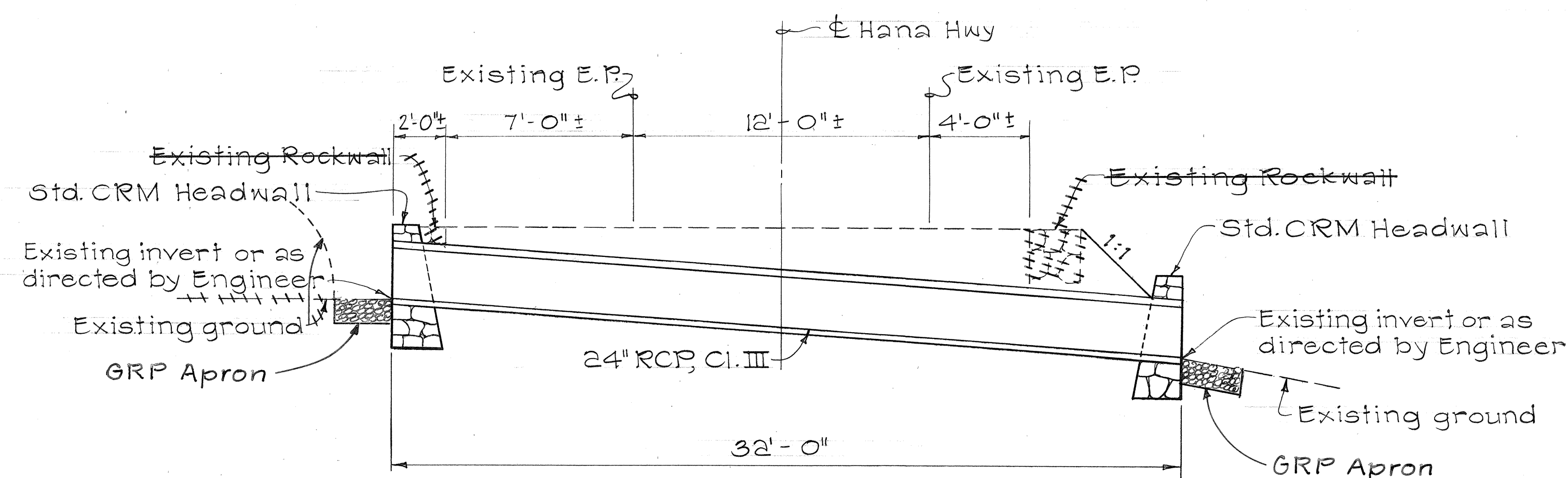
SECTION "F"
BRIDGE NO. 2 STA. 12+62±
STA. 11+50±

SECTION "F" Sta. 12+62±
Bridge No. 2 Sta. 11+50±
Construct: 2-Std. CRM Headwalls
Install: 36" RCP, Cl. III

ESTIMATED QUANTITIES
36" RCP, Cl. III = 30 L.F.
CRM = 8 C.Y.
Structure Excavation = 41 C.Y.

GENERAL NOTES:

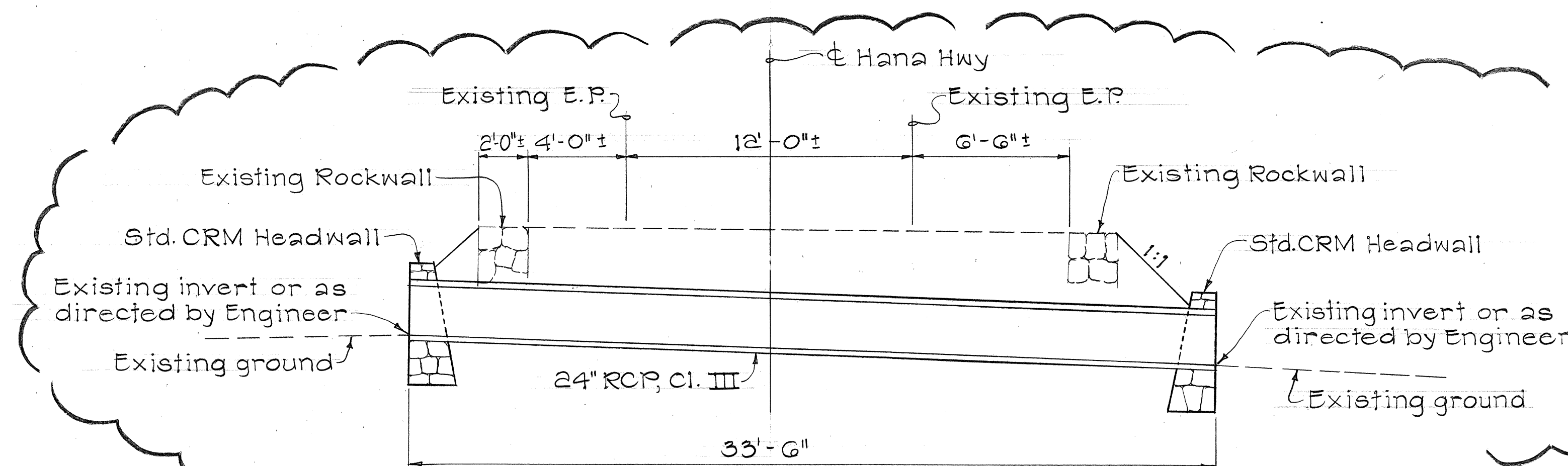
1. Inverts shall be same as existing or as directed by the Engineer.
2. Alignment of culverts shall be same as existing or as directed by the Engineer.
3. Contractor shall demolish and remove existing culverts as required.
4. The entrance condition of the culvert shall be graded to the satisfaction of the Engineer. Above work shall be considered incidental to the various contract items.
5. The outlet of the culvert shall be graded to provide a free flowing condition. Above work shall be considered incidental to the various contract items.



SECTION "F"
BRIDGE NO. 4 STA. 15+15±
STA. 8+10±

SECTION "F" Sta. 15+15±
Bridge No. 4 Sta. 8+10±
Construct: 2-Std. CRM Headwalls
Install: 24" RCP, Cl. III

ESTIMATED QUANTITIES
24" RCP, Cl. III = 32 L.F.
CRM = 4 C.Y.
Structure Excavation = 35 C.Y.



OILOWAI BRIDGE STA. 15+45±
(NOT IN CONTRACT)

Oilowai Bridge Sta. 15+45±
Construct: 2-Std. CRM Headwalls
Install: 24" RCP, Cl. III

ESTIMATED QUANTITIES
24" RCP, Cl. III = 34 L.F.
CRM = 4 C.Y.
Structure Excavation = 32 C.Y.

PROFILE ALONG ϕ OF CULVERTS - HANA HIGHWAY

7/22/80	Deleted Replacement of Culvert at Oilowai Bridge Sta. 15+45±
DATE	REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS

HANA HIGHWAY IMPROVEMENTS

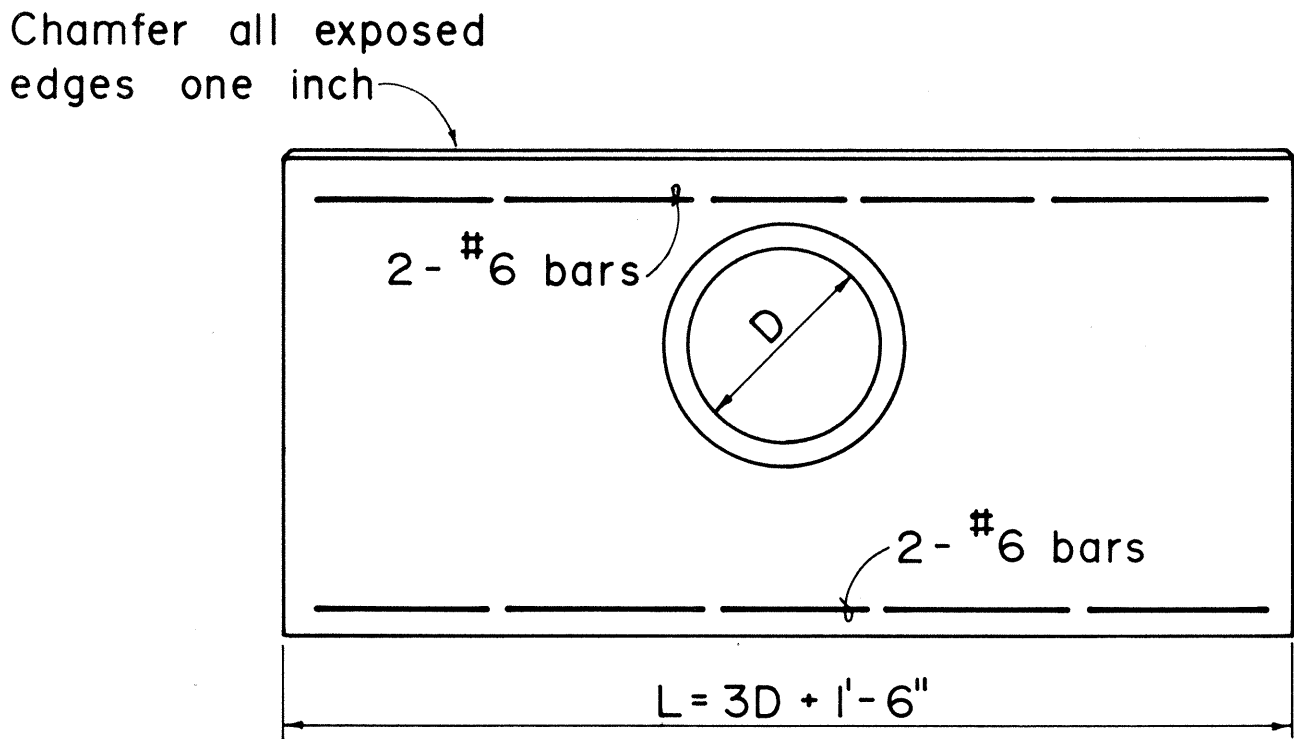
HANA TOWARDS WAILUA PHASE I

PROJ. No. 360B-01-80

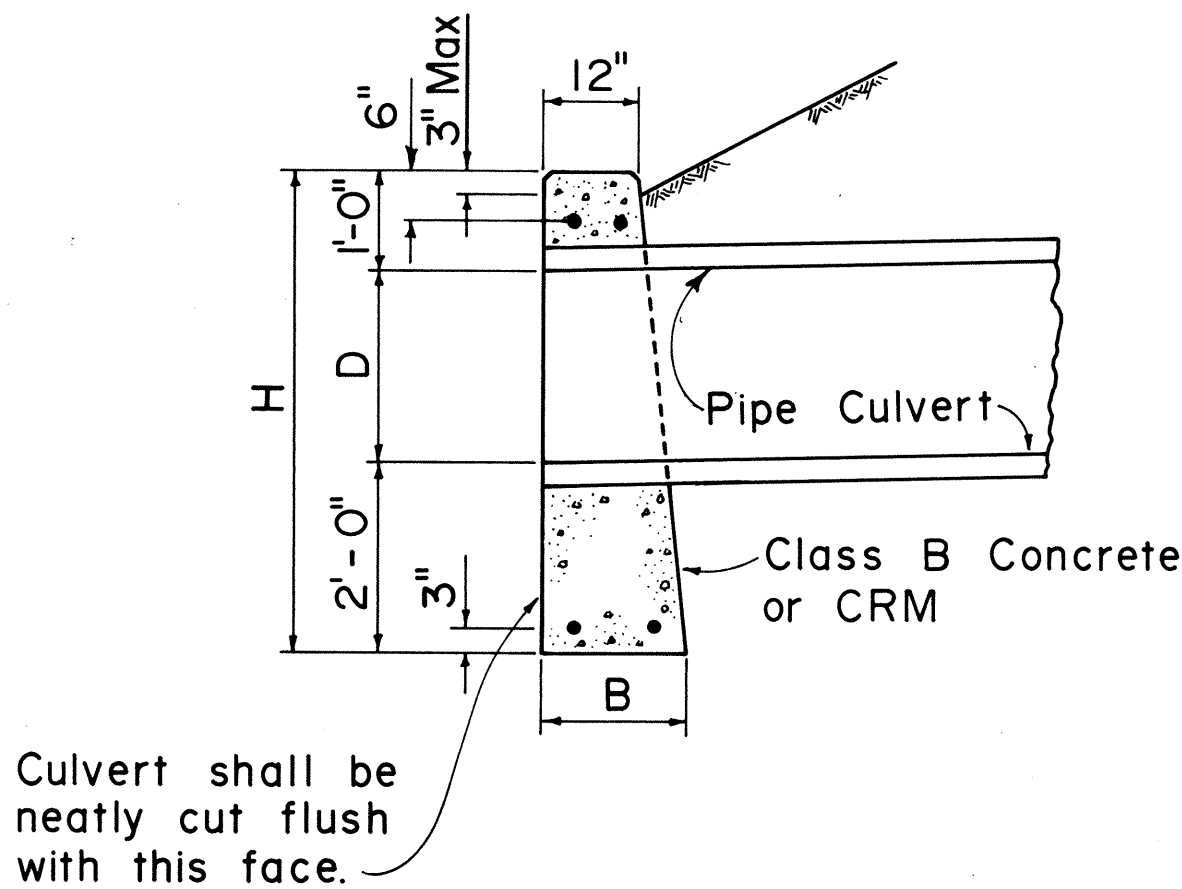
Scale: 1/4" = 1'-0" Date: May, 1980

SHEET No. 1 OF 2 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	3603-01-80	1980	17	28



ELEVATION



SECTION

DATA FOR CONC. HDWL.			
D	B	L	H
18"	1'-6"	6'-0"	4'-6"
24"	1'-6"	7'-6"	5'-0"
30"	2'-0"	9'-0"	5'-6"
36"	2'-0"	10'-6"	6'-0"
42"	2'-6"	12'-0"	6'-6"
48"	2'-6"	13'-6"	7'-0"

DATA FOR CRM HDWL.			
D	B	L	H
18"	1'-9"	6'-0"	4'-6"
24"	2'-0"	7'-6"	5'-0"
30"	2'-3"	9'-0"	5'-6"
36"	2'-6"	10'-6"	6'-0"

CONCRETE OR CRM HEADWALL

APPROVAL RECOMMENDED:
T. Nakano
 HYDRAULIC DESIGN ENGINEER 6-19-79
 DATE

APPROVED:
Harold Zalewski
 ASSISTANT CHIEF, ENGINEERING 6-22-79
 DATE

NO.	REVISION	APPROVED BY	DATE
1.	Supersedes Sht. DH 10 approved 12-17-69	H.T.	6/22/79

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

STANDARD DETAIL
 CONCRETE OR CEMENT
 RUBBLE MASONRY HEADWALLS

Not To Scale
 Date: June 1979

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