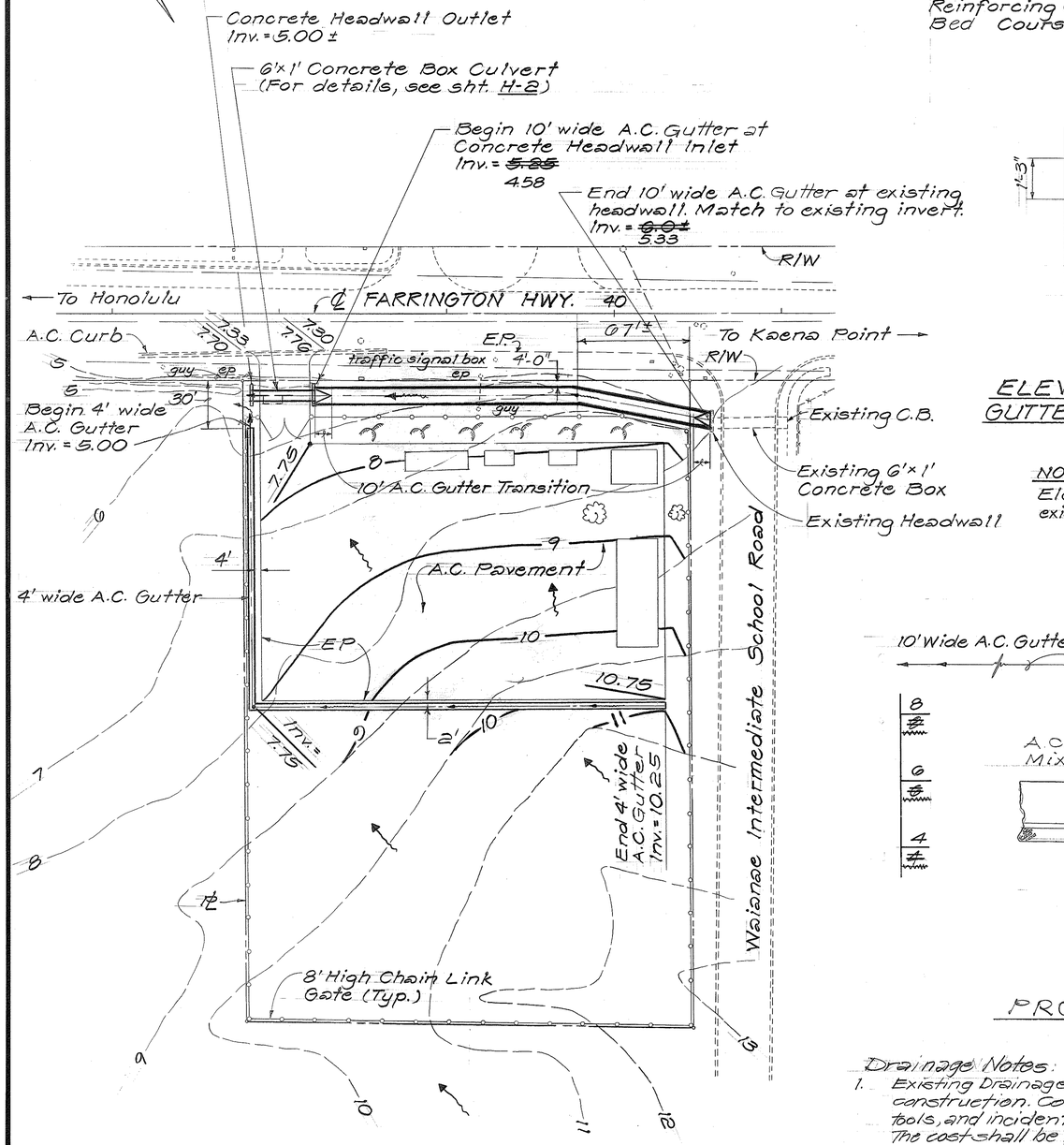
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-01-86	1987	6	12

TEMPORARY EROSION CONTROL LEGEND

- V-Type Ditch Gravel Sediment Trap (For Detail, See plan sht. no. 5)
- Trapezoidal Type Ditch Gravel Sediment Trap (For Detail, See plan sht no. 5)
- Direction of Sheet Flow.

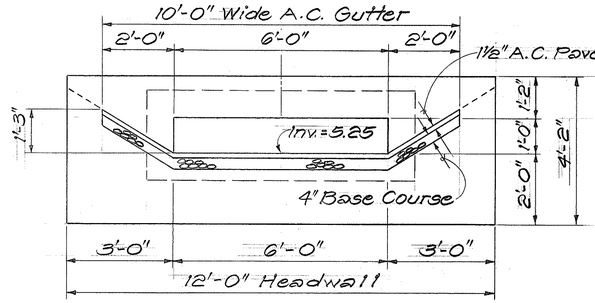
True North
Scale: 1"=40'



GRADING AND DRAINAGE PLAN

ESTIMATED QUANTITIES

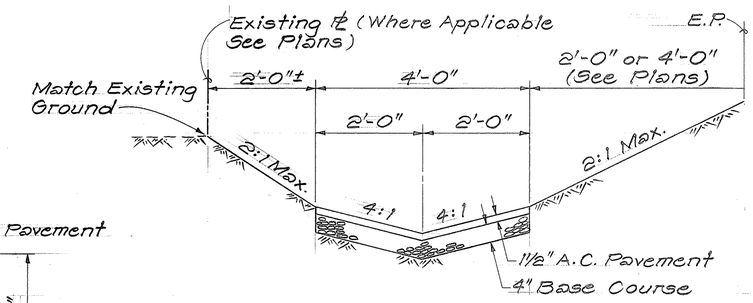
Excavation	10 C.Y.
Concrete, Class A	6 C.Y.
Precast Modules for 6'x1' Concrete Box Culvert	8 EA.
4'-Wide A.C. Gutter	410 L.F.
10'-Wide A.C. Gutter	235 L.F.
Bed Course Material for Curb and/or Gutter	49 C.Y.
Reinforcing Steel	570 LB.
Bed Course Material for Culvert	5 C.Y.



ELEVATION VIEW OF 10'-WIDE A.C. GUTTER AT CONCRETE HEADWALL INLET

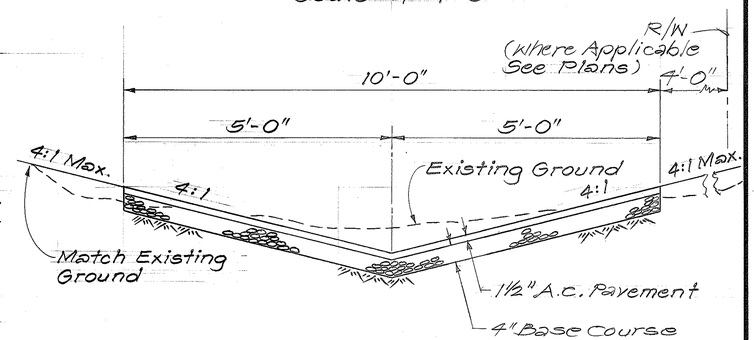
Scale: ½"=1'-0"

NOTE:
Elevation view of 10' wide A.C. Gutter at existing headwall similar to detail above.



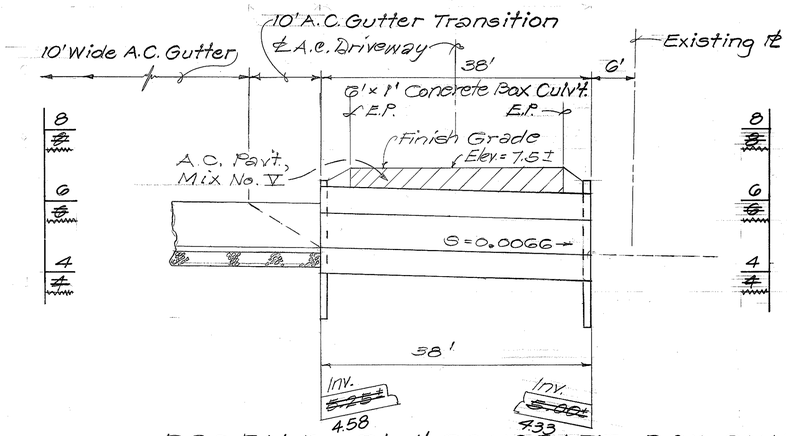
4' WIDE A.C. GUTTER

Scale: ¾"=1'-0"



10' WIDE A.C. GUTTER

Scale: ¾"=1'-0"



PROFILE - 6'x1' CONCRETE BOX CULVERT

Scale: Horiz. 1" = 10'
Vert 1" = 2'

3. Backfill for 6'x1' Concrete Box Culvert will not be measured and paid for separately but shall be considered incidental to the various contract items.

Drainage Notes:

1. Existing Drainage system shall be functional at all times during construction. Contractor shall furnish materials, equipment, labor, tools, and incidentals necessary to accomplish maintenance of flow. The cost shall be incidental to the various contract items.
2. Contractor shall verify the locations of all existing culverts in the field. Any existing culverts damaged during construction shall be repaired or replaced by the contractor at his expense.

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GRADING AND DRAINAGE PLAN AND DETAILS

Relocation of Waianae Baseyard
Project No. HWY-0-01-86

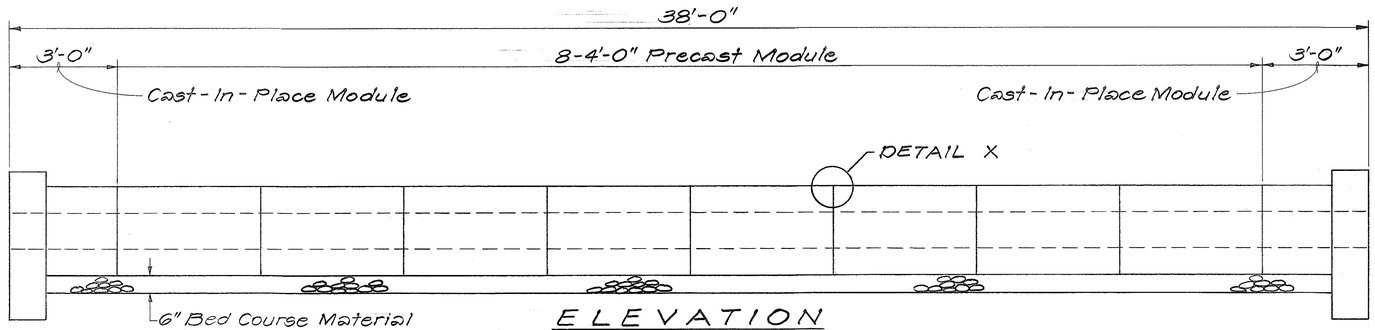
Scale: As Noted Date: June 1986

SHEET No. H1 OF 2 SHEETS

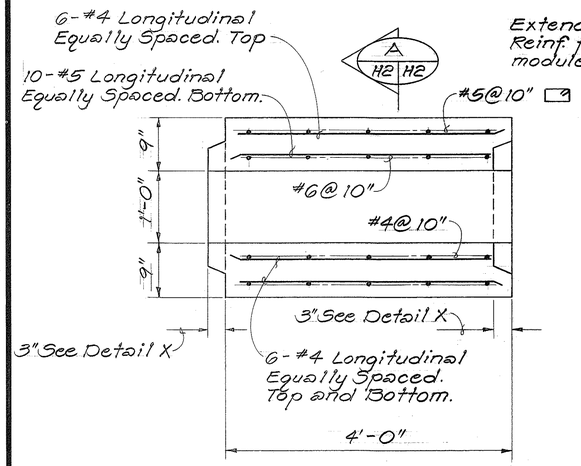
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-01-86	1987	7	12

GENERAL NOTES:

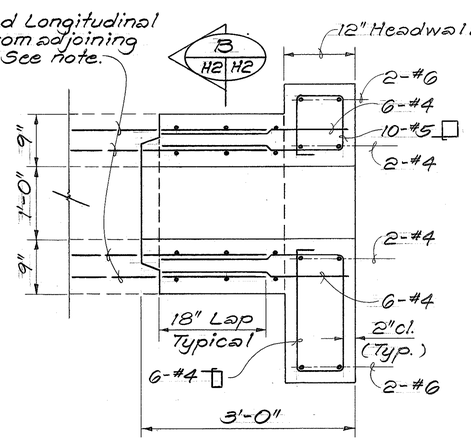
1. Design Load: HS 20-44
2. Reinforced Concrete-Class A
3. Reinforced Steel - ASTM A615 Grade 40



ELEVATION
Scale: 1/2" = 1'-0"



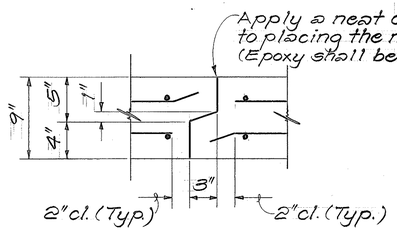
PRECAST MODULE SECTION
Scale: 1" = 1'-0"



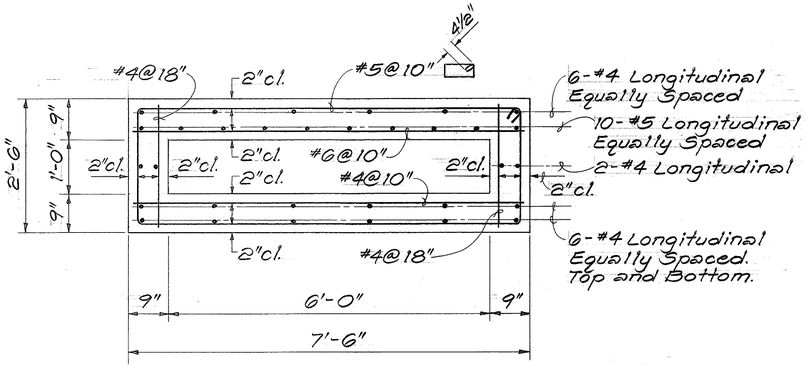
CAST-IN-PLACE MODULE SECTION
Scale: 1" = 1'-0"

NOTE

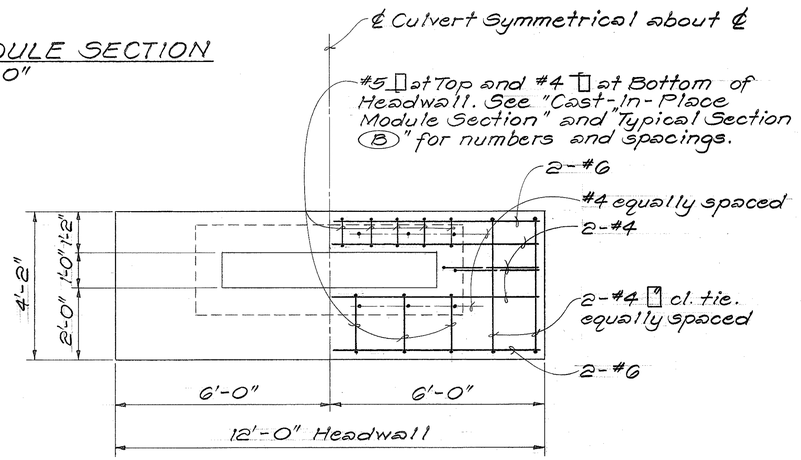
For the Precast Modules adjacent to the Cast-In-Place End Modules, extend all longitudinal reinf. 1'-6", and lap with adjoining longitudinal reinf. of the Cast-In-Place Module.



DETAIL X
Scale: 1 1/2" = 1'-0"



PRECAST MODULE - TYPICAL SECTION (A)
CAST-IN-PLACE BOX - TYPICAL SECTION (B) EXCEPT AS NOTED
Scale: 3/4" = 1'-0"



TYPICAL HEADWALL ELEVATION
Scale: 1/2" = 1'-0"

6' x 1' CONCRETE BOX CULVERT

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS

Relocation of Waianae Baseyard
Project No. HWY-0-01-86

Scale: As Noted Date: June 1986

SHEET No. H2 OF 2 SHEETS