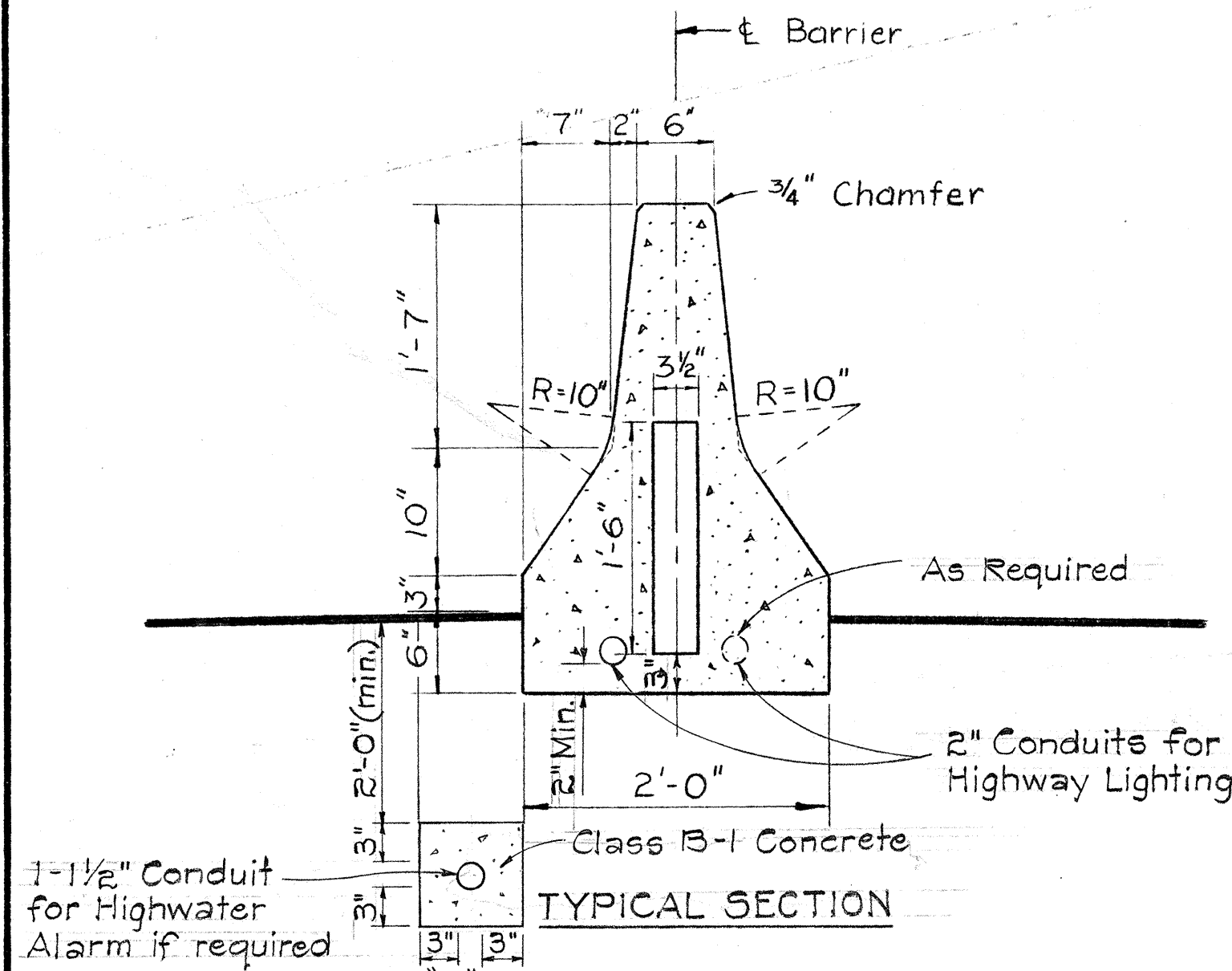


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H-1(53)23	1969	10	39

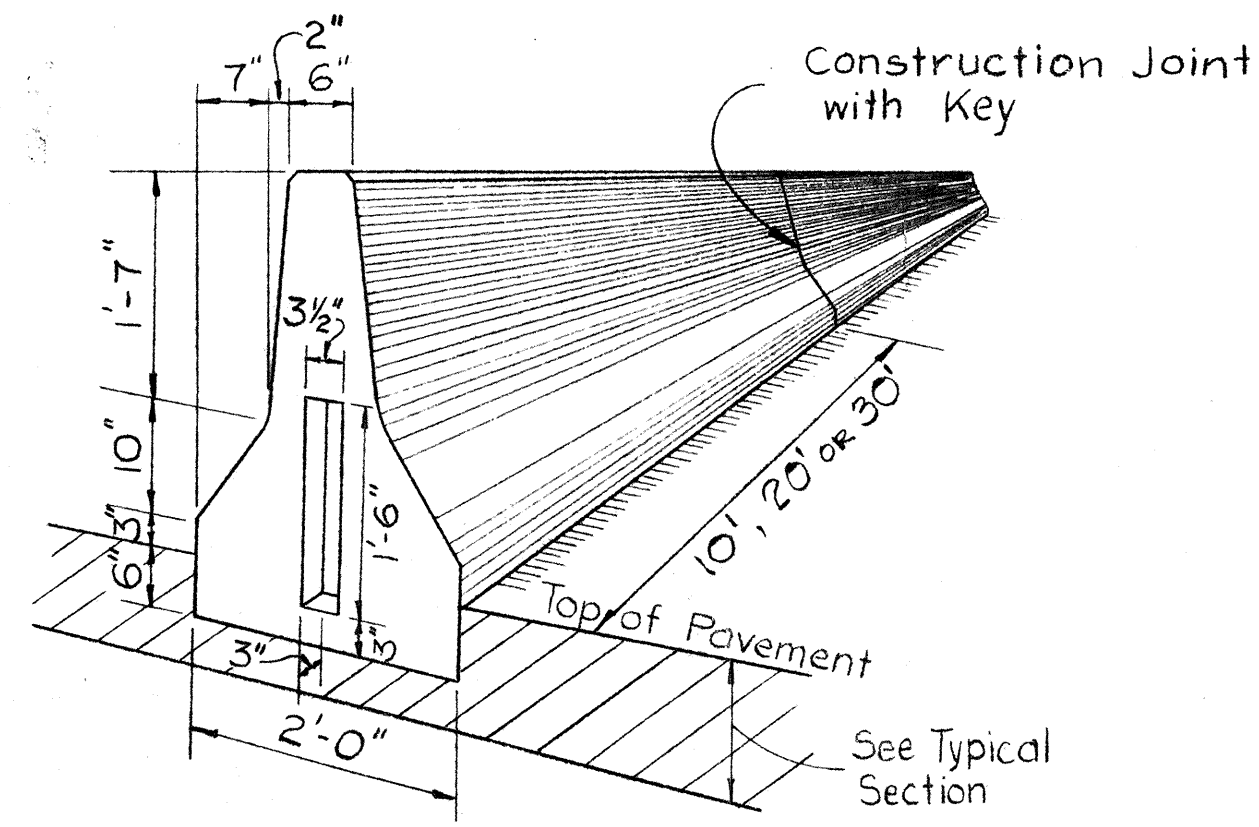
Revised: Jan. 20, 1969
 Revised: Apr. 2, 1969
 July 30, 1969

GENERAL NOTES

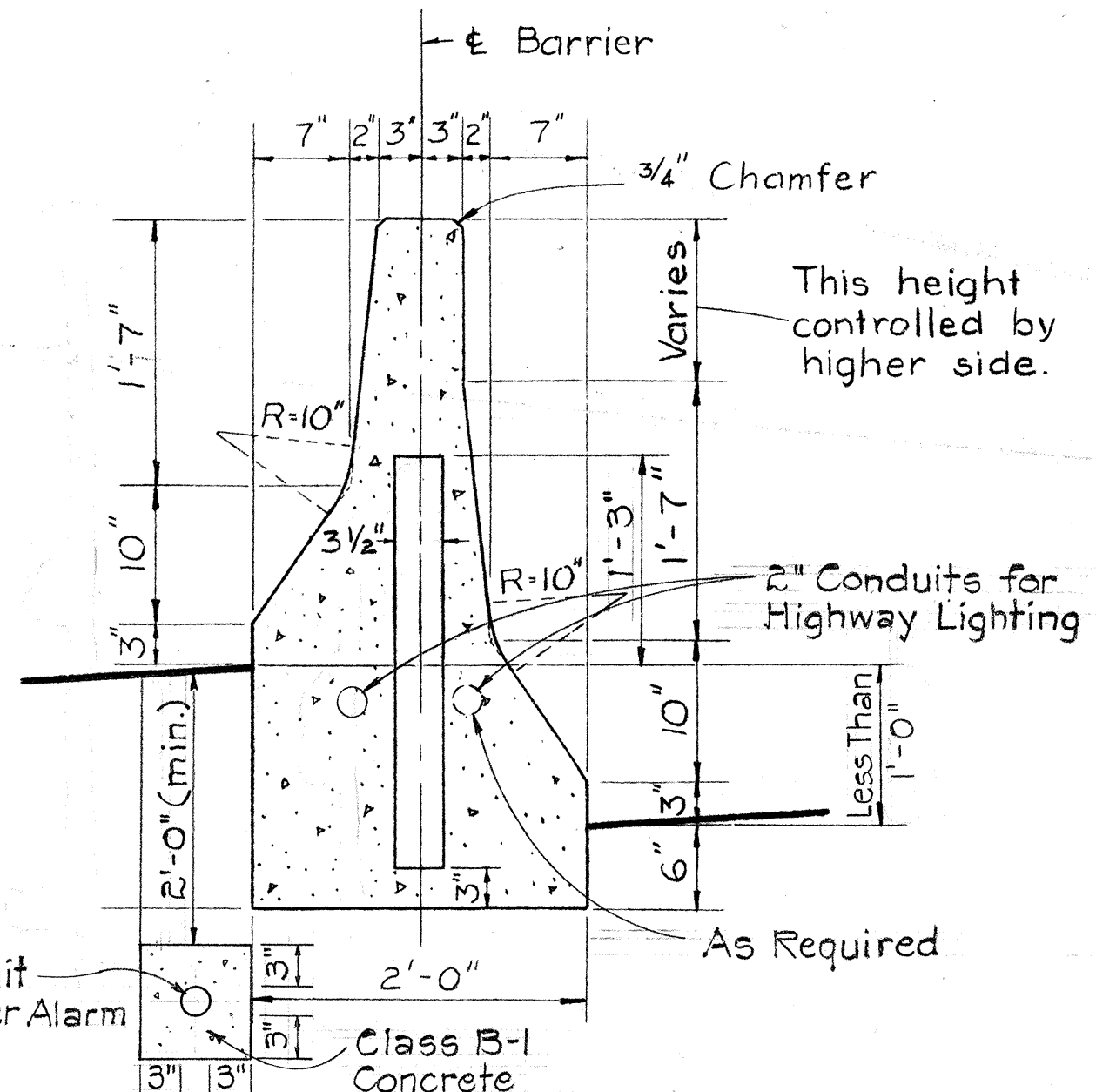
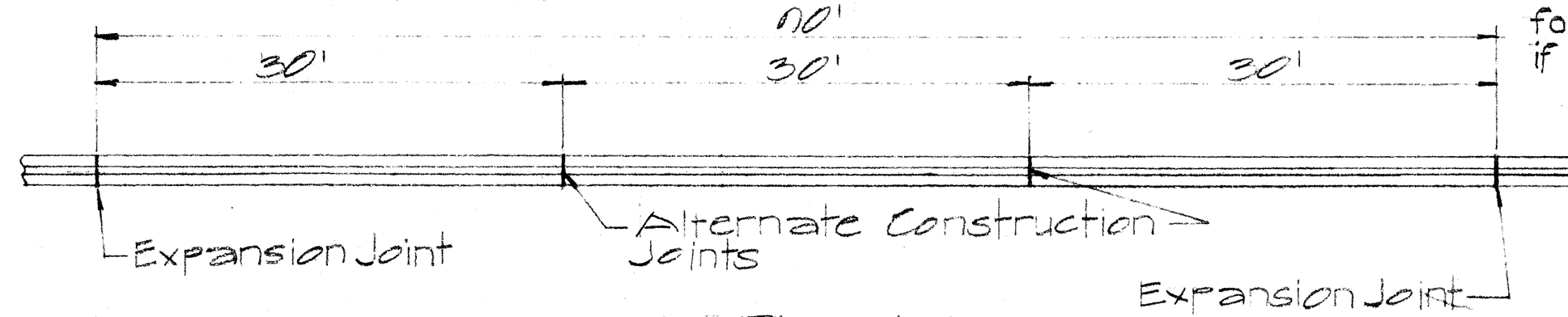
- Concrete for concrete barriers shall be Class A-1.
- Construction joints with keys shall be provided for all concrete barriers. Construction joint keys and key-ways shall be compatible at transitions between cast-in-place and precast concrete barriers. Dowels may be used in lieu of construction joint with key as shown in the Alternate Construction Joint Detail.
- Precast concrete barrier may be installed as an option to cast-in-place Type "A" concrete barrier.
- Expansion Joints shall be constructed at ninety-foot (90 ft.) intervals or at existing expansion joints of structures. (Use 1/2" pre-molded joint filler, incidental to concrete barrier.)
- For hole spacing details see sheet nos. 9 and 14.
- Conduits shall be galvanized steel or PVC plastic conduits except that risers into bases and exposed conduits shall be galvanized steel.
- For Note see sheet No. 14.



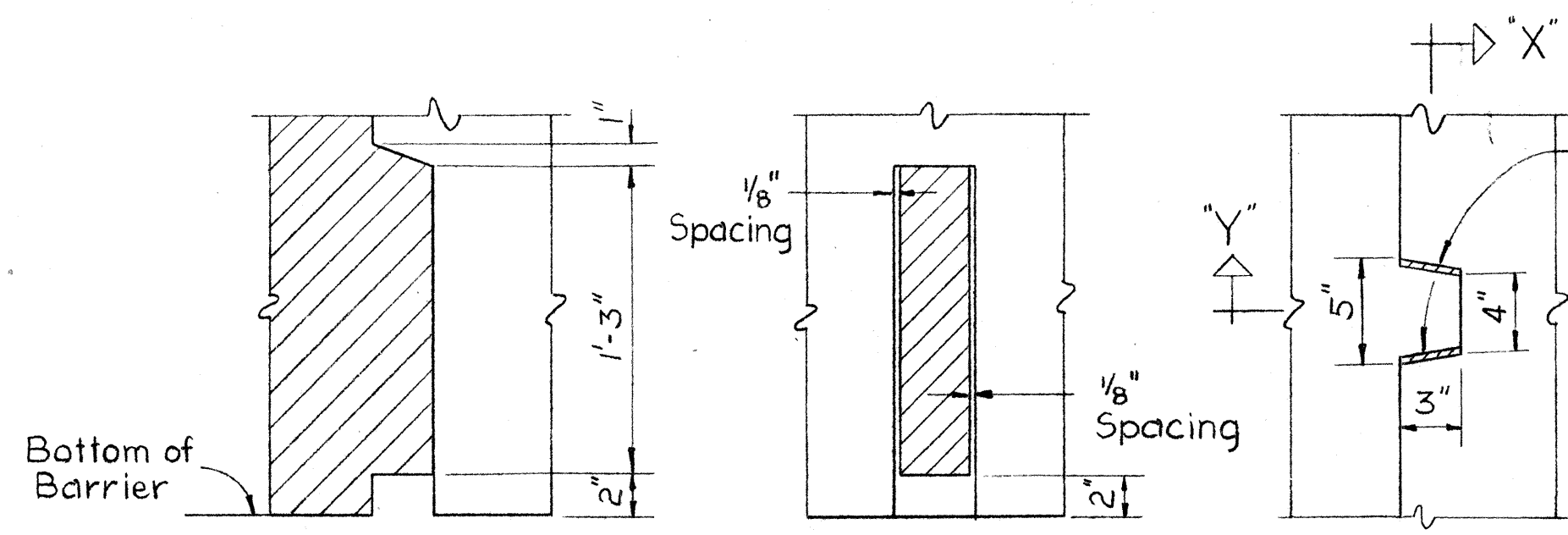
TYPE "A" CONCRETE BARRIER
 (AT TANGENT SECTIONS)
 SCALE: 1" = 1'-0"



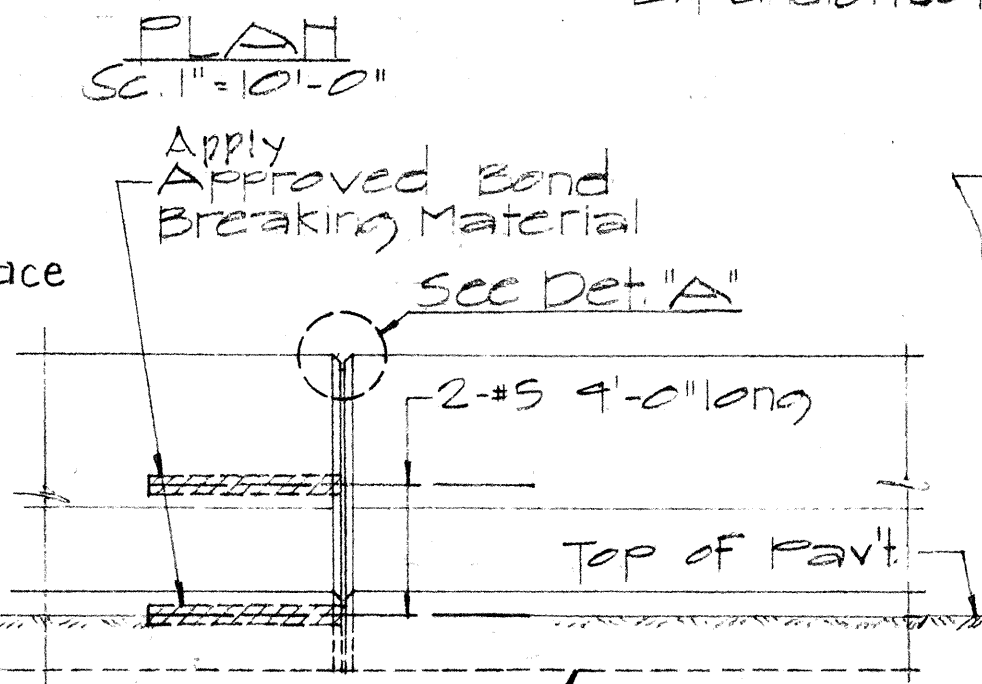
TYPE "A" CONCRETE BARRIER



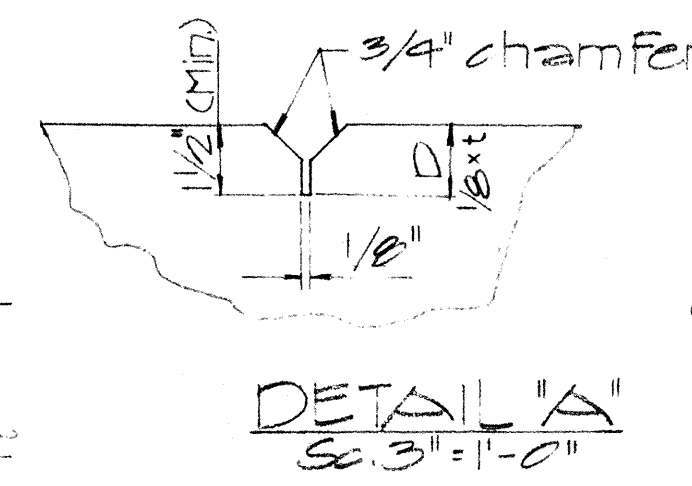
TYPE "D" CONCRETE BARRIER
 (AT SUPERELEVATED SECTIONS)
 SCALE: 1" = 1'-0"



SECTION "Y-Y" SECTION "X-X"
 CONSTRUCTION JOINT KEY DETAILS
 FOR PRECAST CONCRETE BARRIER
 Scale: 1/2" = 1'-0"

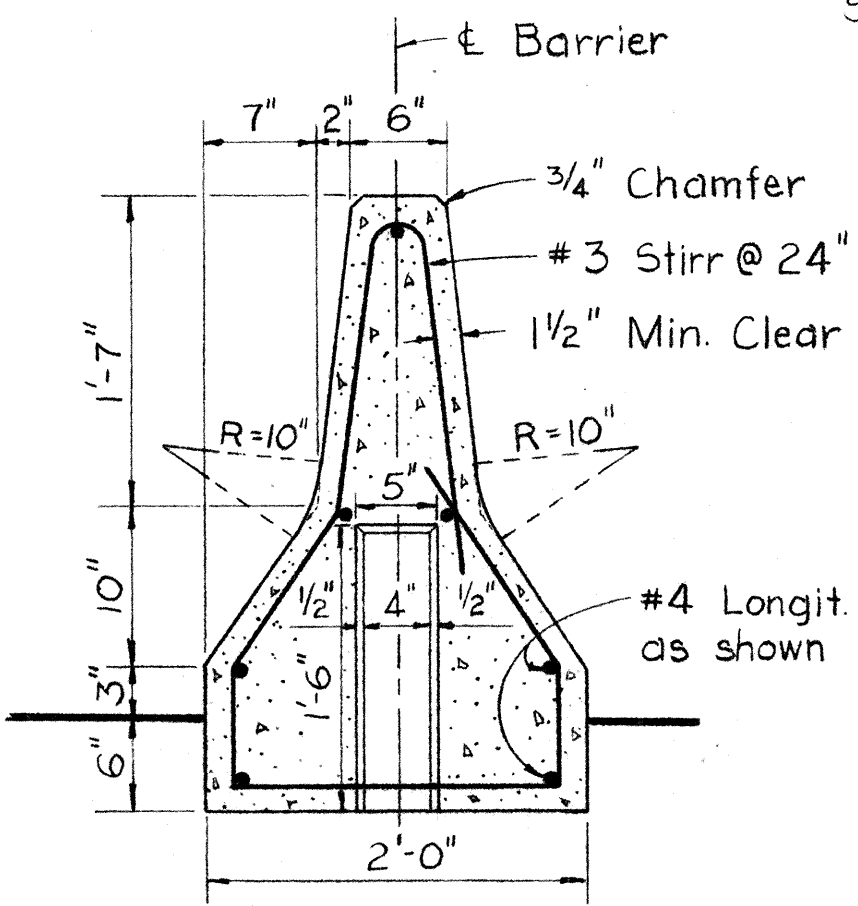


ELEVATION
 Scale: 1/2" = 1'-0"

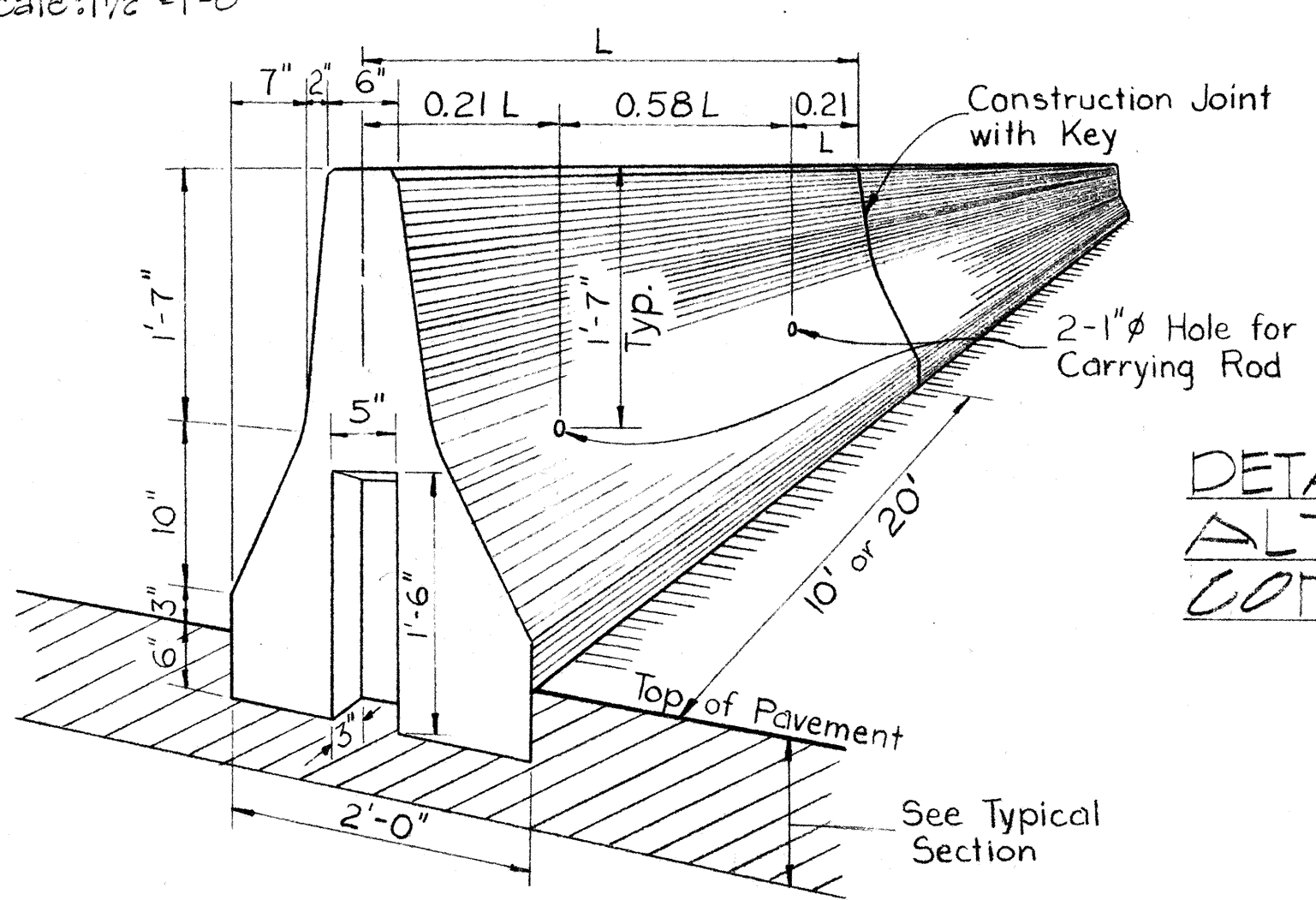


DETAIL "A"
 Scale: 3/4" = 1'-0"

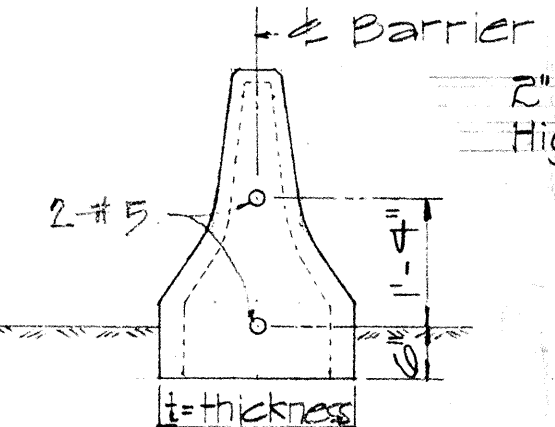
ENLARGED PLAN
 Scale: 1/2" = 1'-0"



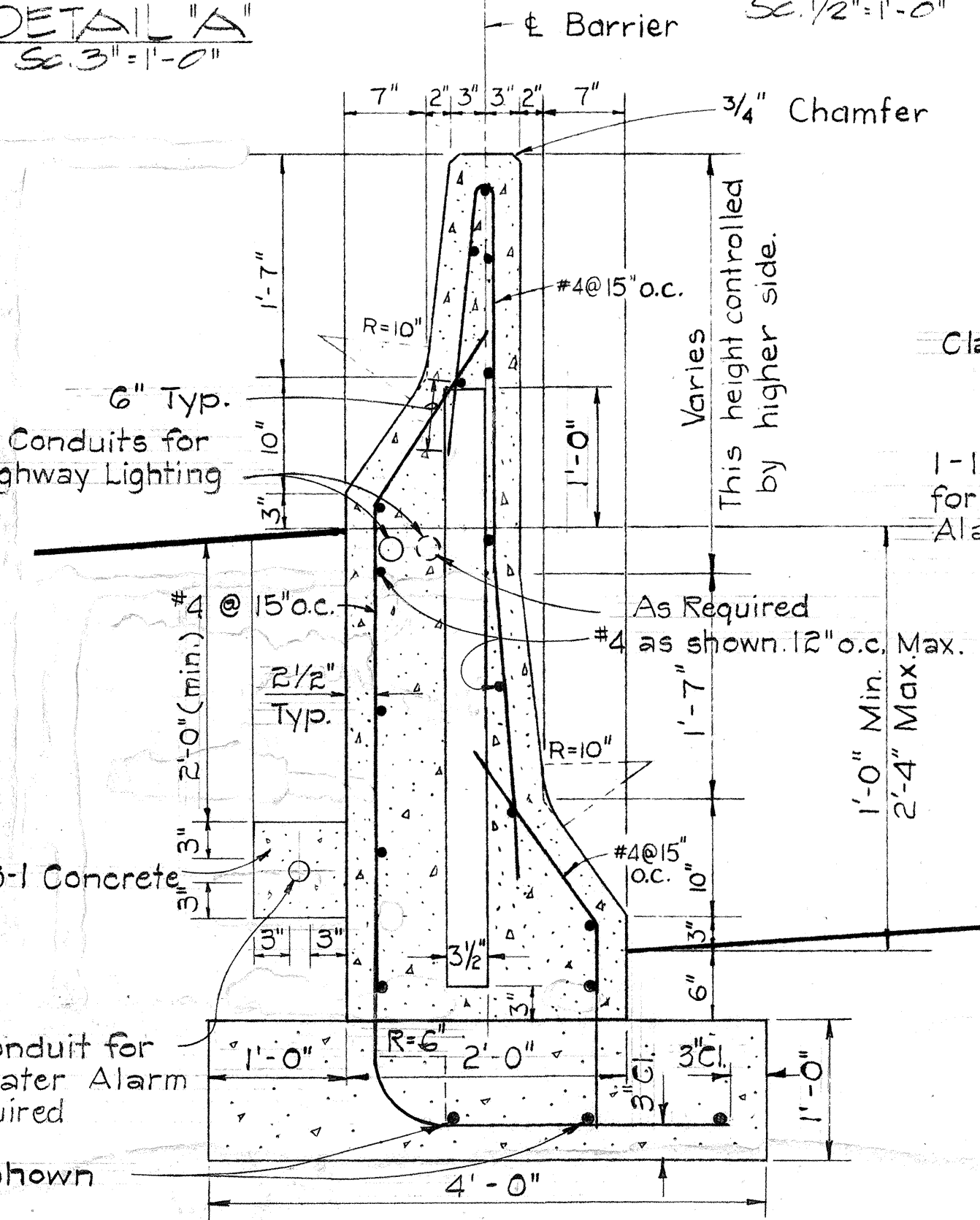
TYPICAL SECTION
 SCALE: 1" = 1'-0"



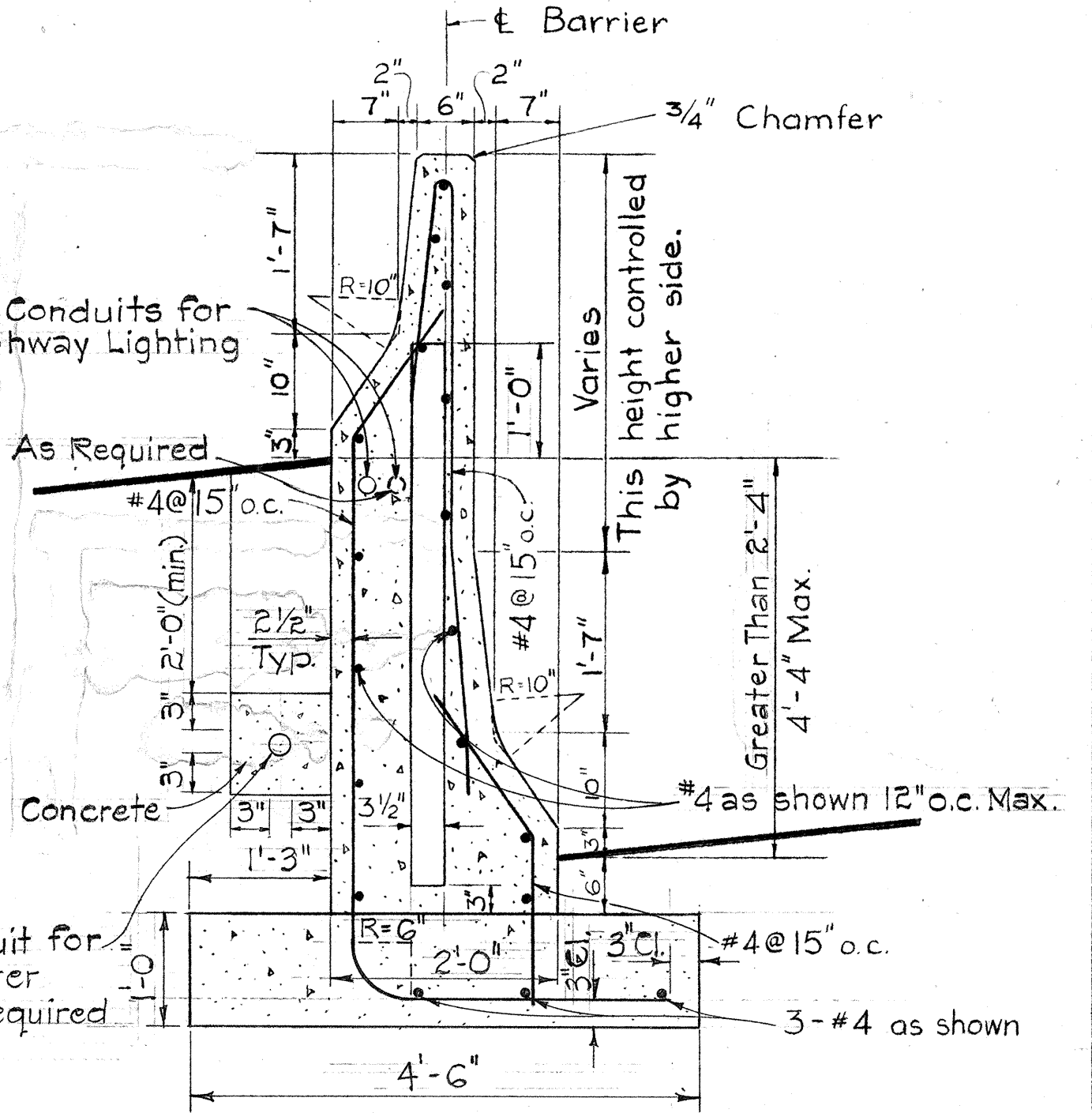
DETAILS OF
 ALTERNATE
 CONST. JOINT



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



TYPE "B" CONCRETE BARRIER
 (AT SUPERELEVATED SECTIONS WITH GRADE DIFFERENTIAL)
 SCALE: 1" = 1'-0"



TYPE "C" CONCRETE BARRIER
 (AT SUPERELEVATED SECTIONS
 WITH GRADE DIFFERENTIAL)
 SCALE: 3/4" = 1'-0"

THIS SHEET SUPERSEDES
 ORIGINAL SHEET NO. 10

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

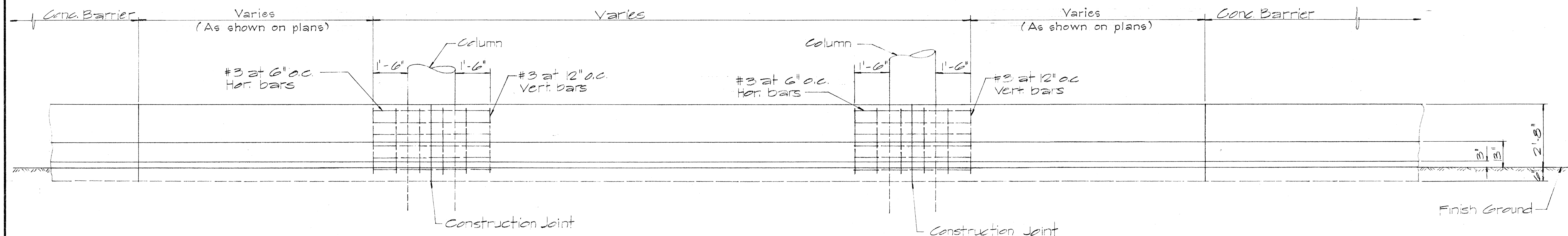
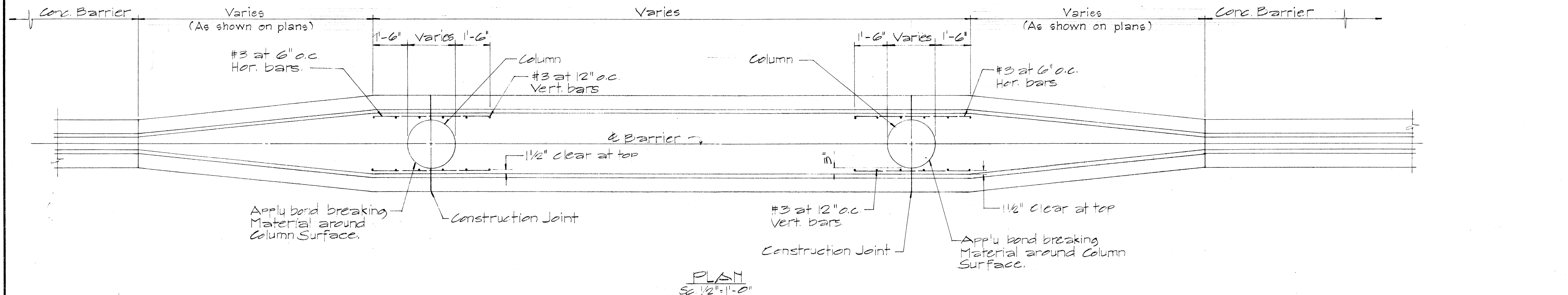
STANDARD DETAILS
 CONCRETE MEDIAN BARRIER

SCALE: AS SHOWN SEPT. 1968

SHEET NO. 2 OF 5 SHEETS DT 506

DATE	
DESIGNED BY	
TRACED BY	
NOTED BY	
CHECKED BY	
ORIGINAL	
PLAN	
NOTE BOOK	
No.	

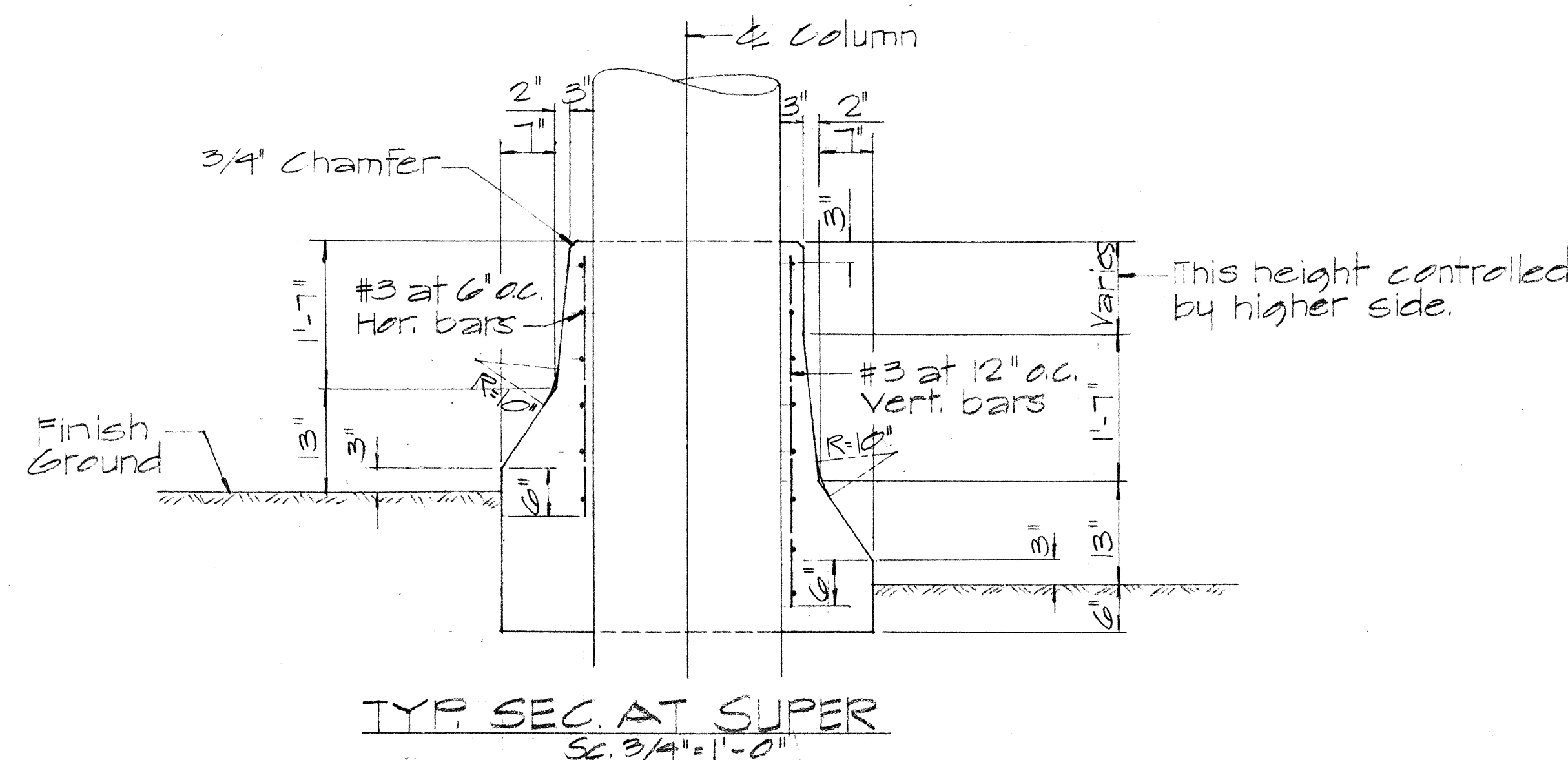
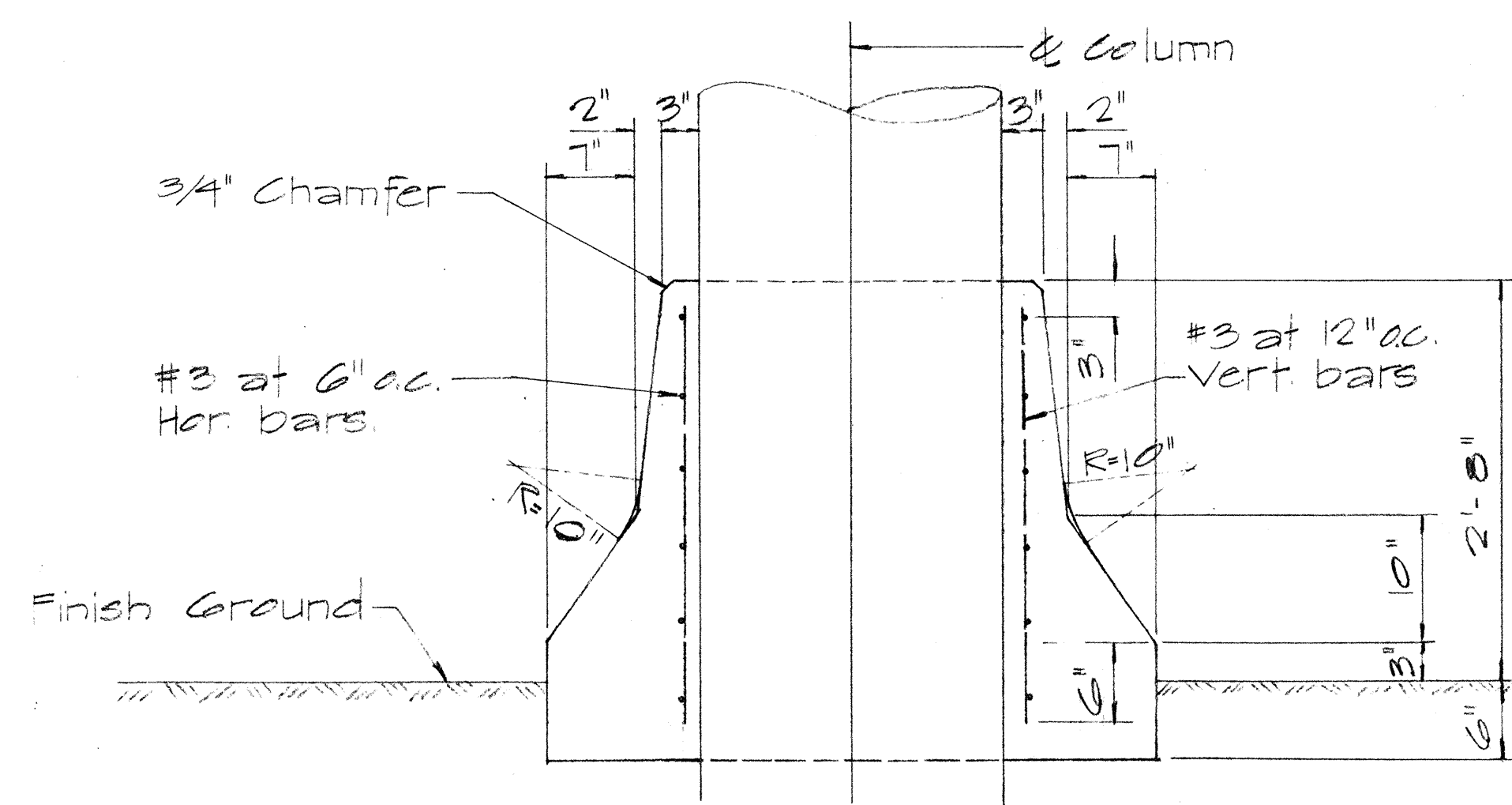
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1-H-1(53)23	1969	11	30



NOTE :

For hole spacing details see sheet nos. 9 and 14.

DATE	_____
DESIGNED BY	_____
TRACED BY	_____
DESIGNED BY	_____
NOTE BOOK	_____
CHECKED BY	_____



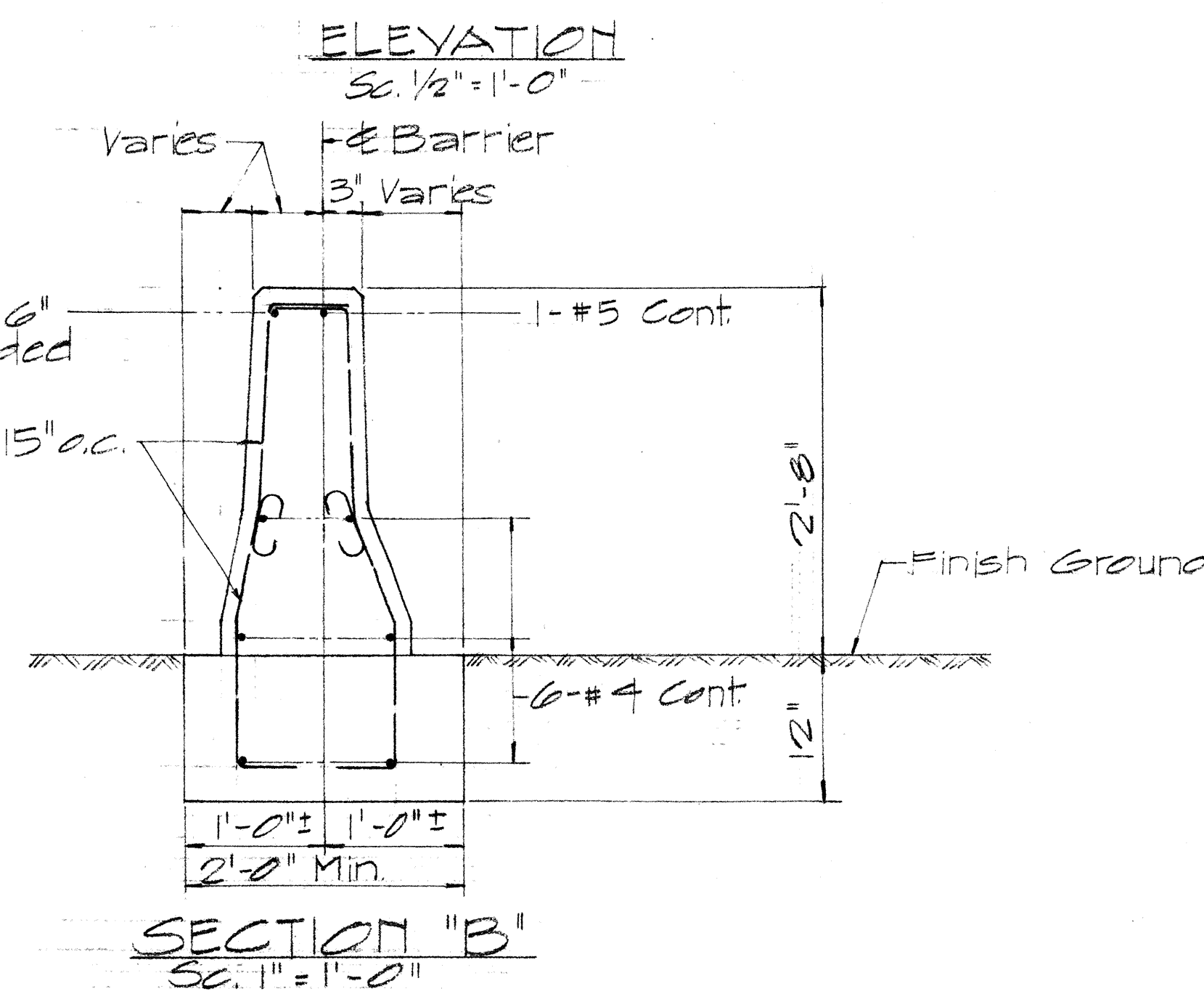
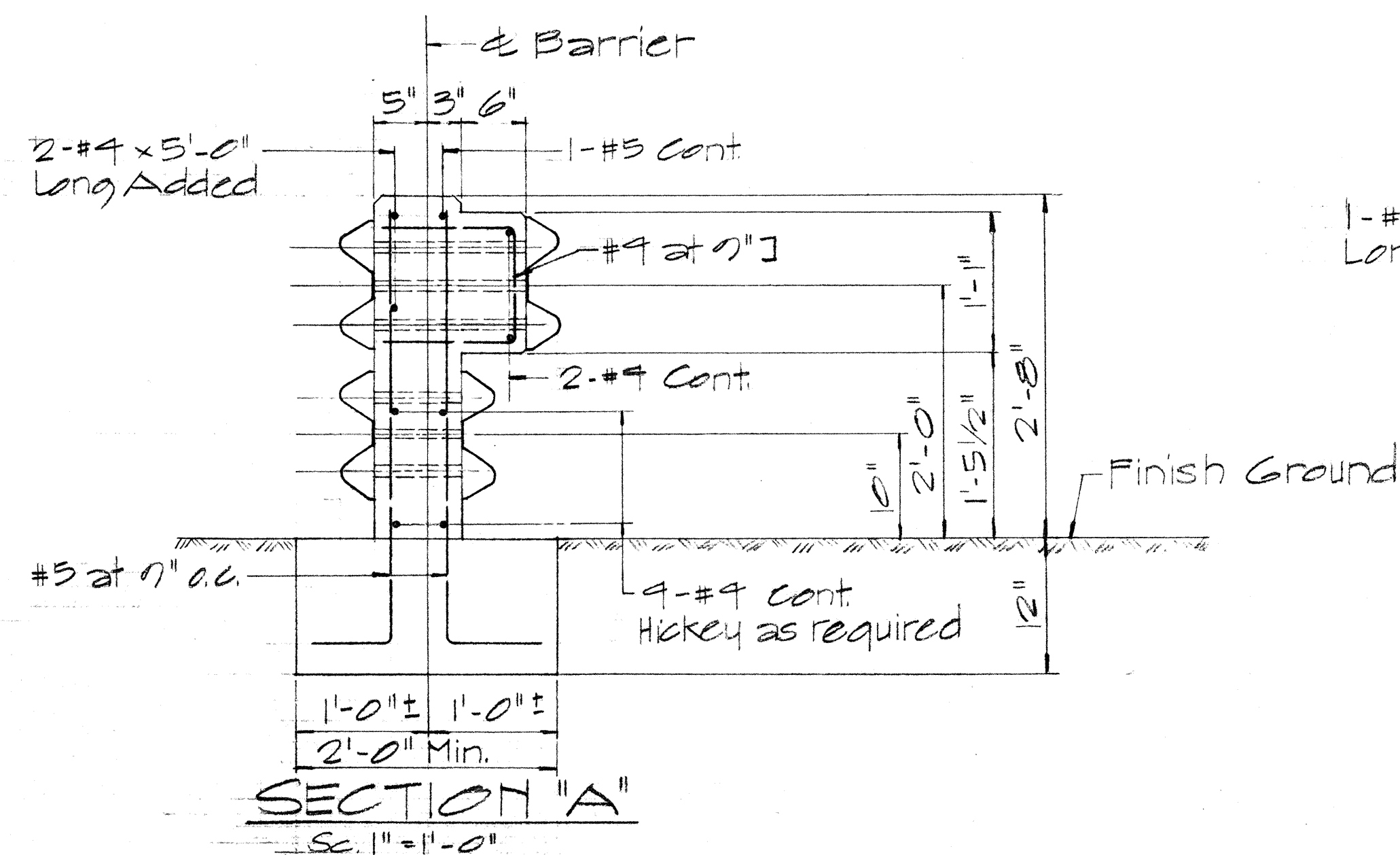
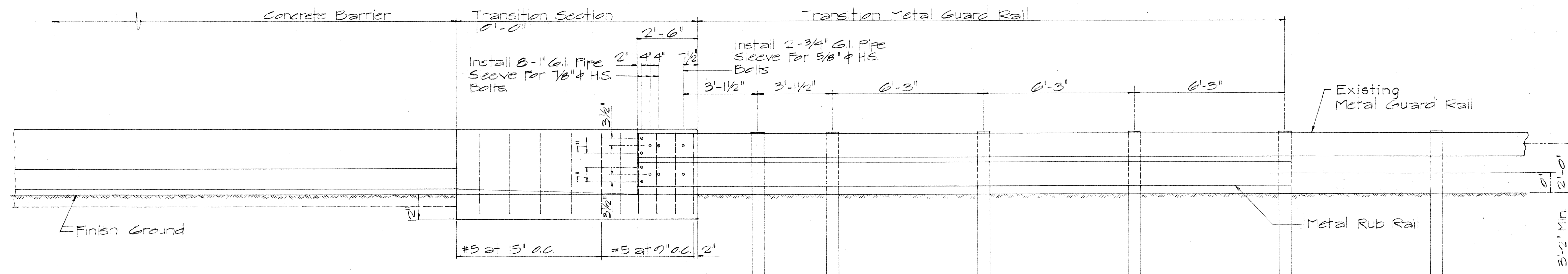
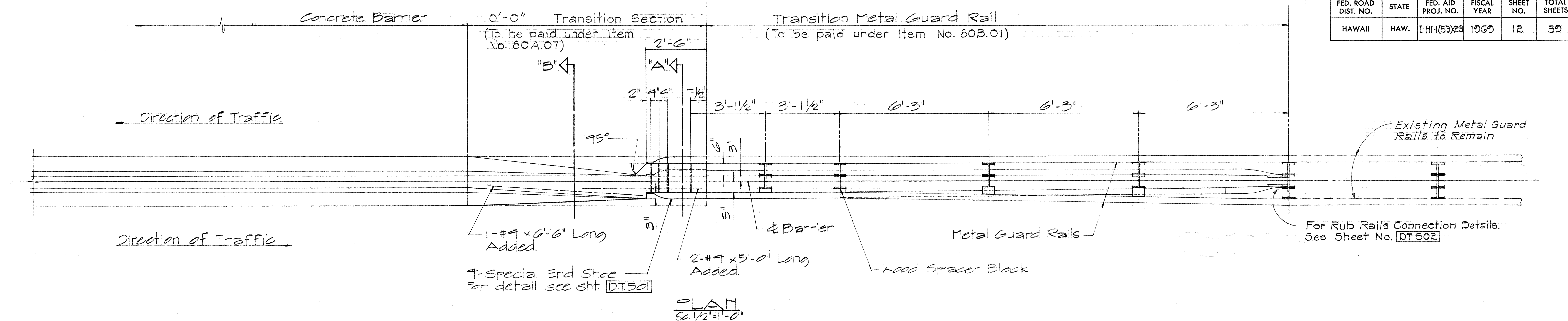
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAIL
CONCRETE BARRIER
TRANSITION

Scale As Noted Feb. 1969

SHEET No. 3 OF 5 SHEETS DT 512

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1-H-1(53)23	1960	12	30



NOTE:
For anchoring metal guard rail elements to concrete barrier, the Contractor shall furnish and install reinforcing steel, bolts of appropriate lengths and size with appropriate washers, nuts, wooden blocks, special end shoes, and pipe sleeves. (Payments shall be incidental to concrete barrier).

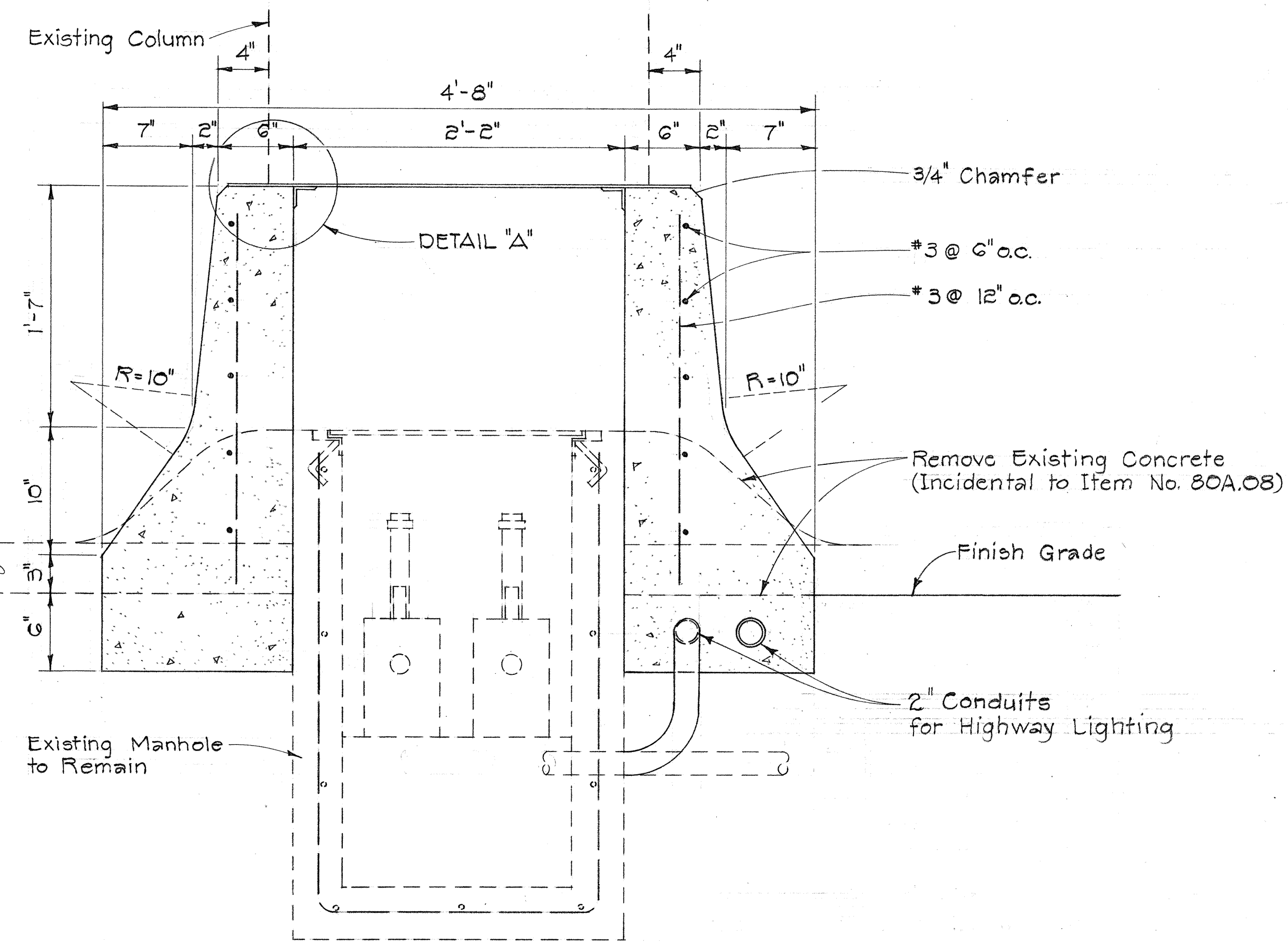
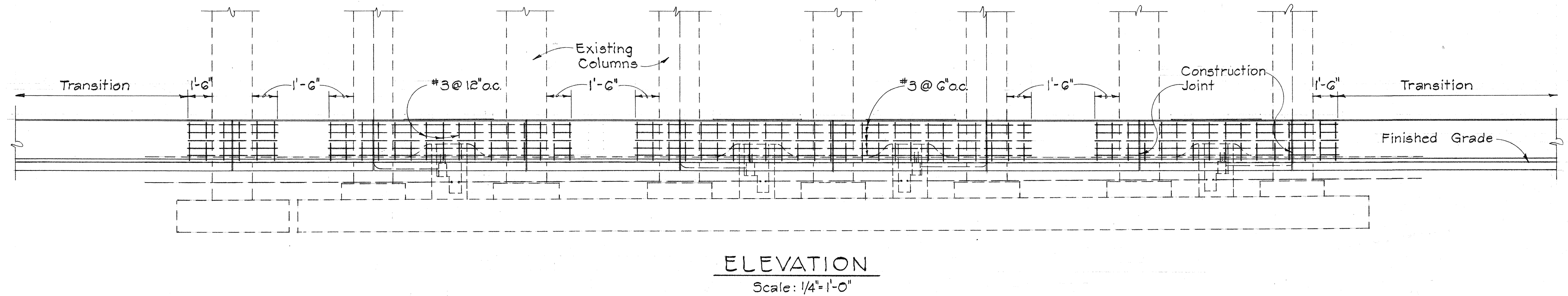
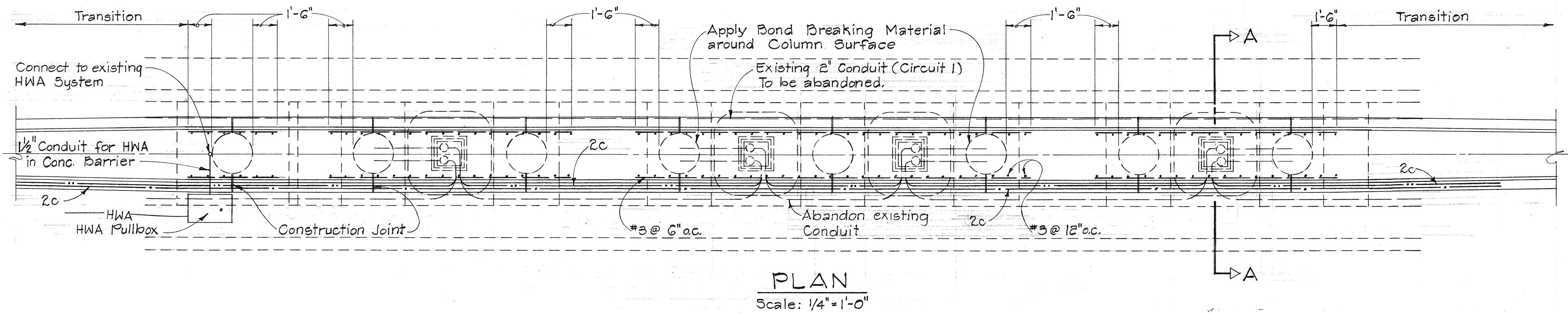
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAIL
METAL GUARD RAIL
CONNECTION TO CONC.
BARRIER

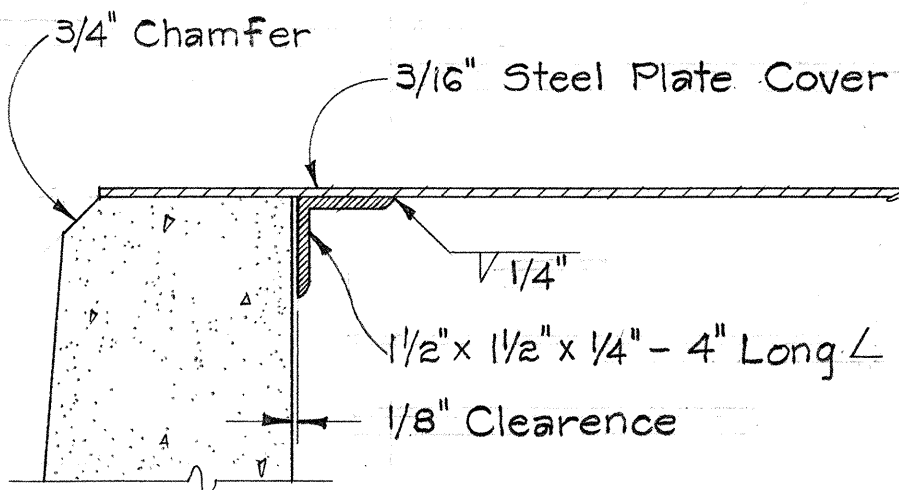
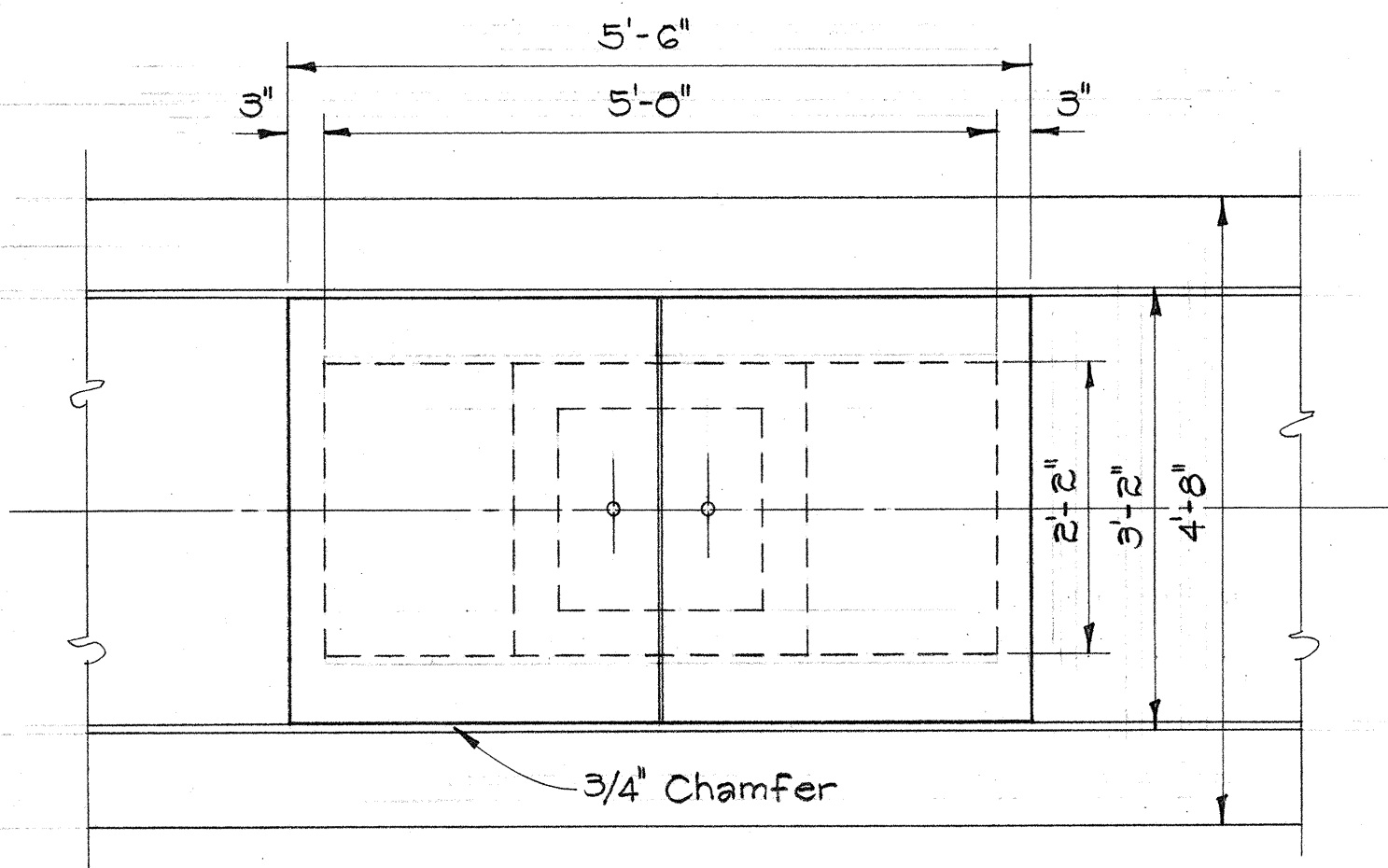
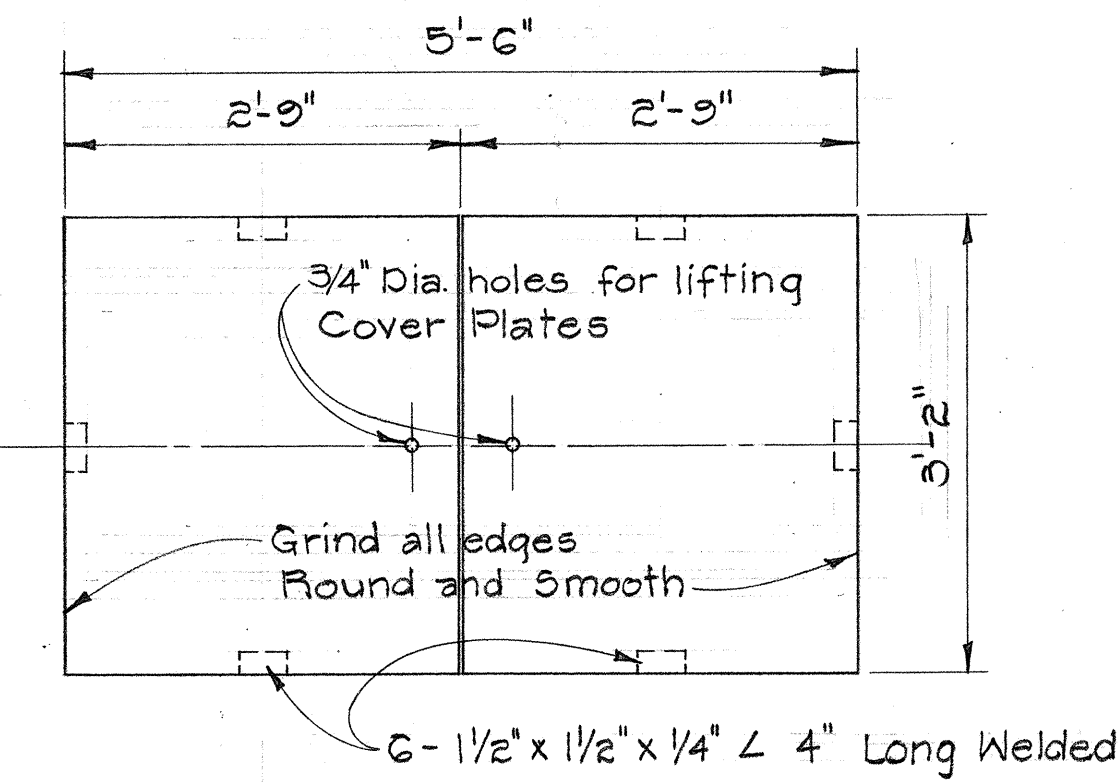
Scale As Noted Feb. 1960

SHEET No. 4 OF 5 SHEETS DT 513

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(53):23	1968	13	39



NOTE:
"Concrete Barrier at Punahou Separation" shall consist of constructing the Concrete Barrier, concrete barrier pullboxes, galvanizing, and all materials and appurtenances necessary to complete the work. (Incidental to Item no. 80A.08)



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
CONCRETE BARRIER DETAILS
AT PUNAHOU SEPARATION
INTERSTATE ROUTE H-1
MEDIAN IMPROVEMENTS
F.A.I. Proj. No. I-HI-1(53):23
Scale: As Shown Date: October 1968
SHEET No. 5 OF 5 SHEETS

DATE	_____
DESIGNED BY	_____
CHECKED BY	_____
NOTED BY	_____
QUANTITIES BY	_____
NO.	_____