

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H2-1(10)6	1973	12	104

LIST OF GUARD RAILS

LOCATION		Item No. 606.416 Guard Rail Type 4F	Item No. 606.417 Guard Rail Type 4G
Road	Station to Station	Lin. Ft.	Lin. Ft.
H-2	127+78 to 128+00 Lt.	22	
"	128+00 to 128+68 Lt.		68
"	130+22 to 130+47 Lt.	25	
"	130+47 to 140+25 Lt.		78
"	140+25 to 140+62 Lt.	37	
"	127+28 to 127+50 Rt.	22	
"	127+50 to 128+68 Rt.		118
"	130+22 to 130+47 Rt.	25	
"	130+47 to 130+75 Rt.		28
"	130+75 to 140+12 Rt.	37	
TOTAL		168	202

CHAIN LINK GATES
6-FEET HIGH x 12-FEET WIDE

LOCATION			Item No. 607.250
Road	Station	% From E	Each
Waikalani	12 + 04.03	45' Rt.	1
"	12 + 04.03	30' Lt.	1
TOTAL			2

LIST OF REFERENCE SURVEY MONUMENTS

LOCATION				Item No. 613.02
Road	Station	% From E		Quantity (Each)
H-2	128+25	10.5' Lt.	61' Lt.	4
H-2	130+70	10' Lt.	59' Lt.	4
TOTAL				8

LIST OF CHAIN LINK FENCE WITH TOPRAIL

LOCATION			Item No. 607.0102
Road	Station to Station	Side	Lin. Ft.
H-2	128+74 to 134+08	Rt.	534
"	130+00 to 134+43	Lt.	443
"	134+84 to 135+24	Rt.	40
"	135+18 to 135+68	Lt.	50
Waikalani	10+00 to 11+08	Lt.	108
"	10+00 to 11+08	Rt.	108
"	12+10 to 13+25	Lt.	115
"	12+10 to 13+25	Rt.	115
TOTAL			1,693

LIST OF BENCH MARKS
(EXISTING)

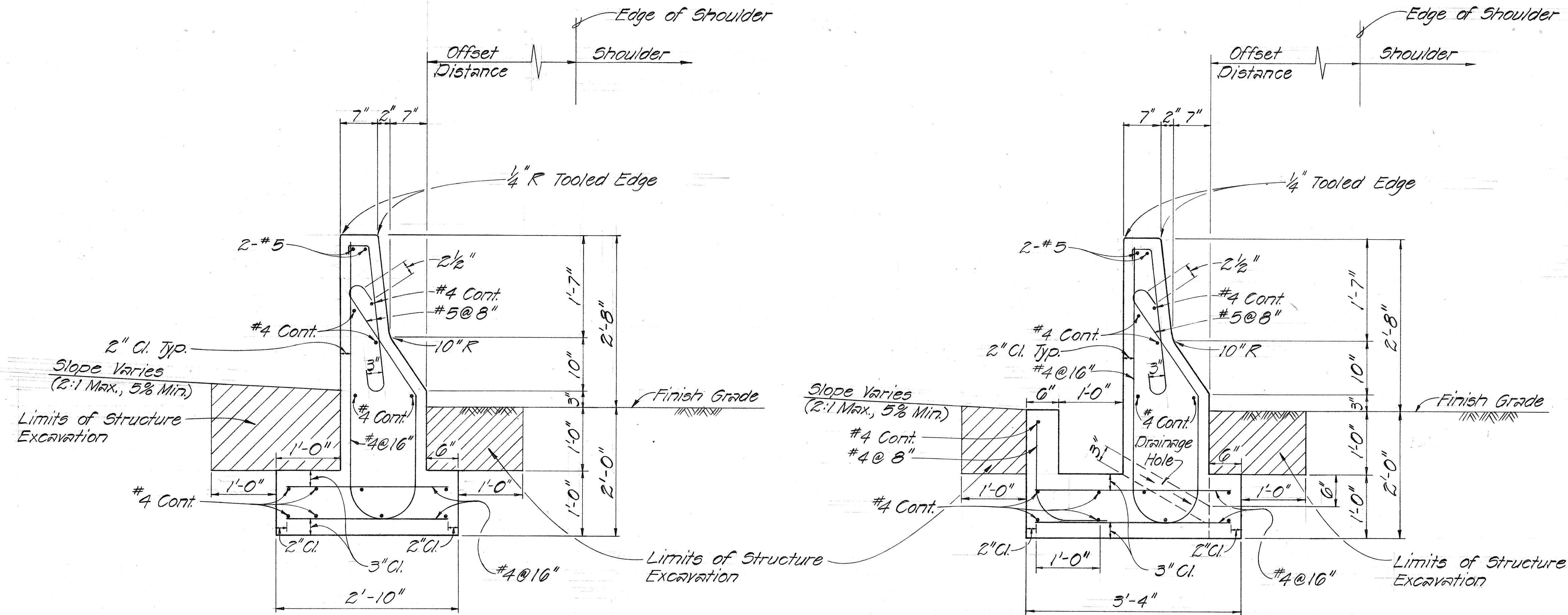
LOCATION		% From E	Type	Elev.
Road	Station			
H-2	126+06	443' Lt.	B.M.*1 (35-2-14 Disk)	802.38
H-2	134+65±	104.5' Rt.	B.M.*2 Exist. C&C Street Survey Mon. on Waikalani	645.26

RECONSTRUCTED STREET SURVEY MONUMENT

LOCATION		Item No. 614.03
Road	Station	
Waikalani Dr. Ext.	12 + 04.03	1

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
LIST OF GUARD RAILS,
CHAIN LINK FENCE & GATES,
MONUMENTS & BENCH MARKS
INTERSTATE ROUTE H-2
WAIKAKALAUA STREAM BRIDGE
F.A.I. PROJ. NO. I-H2-1(10)6
Date: May, 1973
SHEET No. 1 OF 16 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H2-1(10)6	1973	13	104



- NOTE:
- For additional details see sht. nos. 0, 8, 14, 15, & 21
 - Concrete Guardrails, Type 4F & 4G will be paid for under Item No. 606.416 & 606.417 respectively and shall conform to the applicable requirements of Section 606 of the Standard Specifications.
 - For the location and details of underground facilities in the immediate area of the Concrete Guardrails, the Contractor shall refer to sht. nos. 31 to 44.
 - The drainage hole shall be constructed as required. See sht. no. 35 of the drainage plans.

DETAIL SECTION
CONCRETE GUARD RAIL - TYPE 4F
Scale: 1"=1'-0"

DETAIL SECTION
CONCRETE GUARD RAIL - TYPE 4G WITH CONG. DITCH
Scale: 1"=1'-0"

OFFSET TABLE

WEST ABUTMENT				EAST ABUTMENT			
INBOUND RIGHT		OUTBOUND LEFT		INBOUND RIGHT		OUTBOUND LEFT	
# Station	% Rt. From Edge of Shldr.	# Station	% Lt. From Edge of Shldr.	# Station	% Rt. From Edge of Shldr.	# Station	% Lt. From Edge of Shldr.
128+78	+25'-1.42'	128+78	+25'-1.42'	130+12	+25'-1.42'	130+12	+25'-1.42'
128+53	+52'-1.62'	128+53	+88'-2.05'	130+37	+88'-2.05'	130+37	+52'-1.62'
128+28	2-36'-2.53'	128+28	3-75'-3.92'	130+62	3-75'-3.92'	130+62	2-36'-2.53'
128+03	3-75'-3.92'	128+03	6-88'-7.05'	130+87	6-88'-7.05'	130+87	3-75'-3.92'
127+78	5-69'-5.86'	127+78	11-25'-11.42'	140+12	11-25'-11.42'	140+12	5-69'-5.86'
127+53	8-10'-8.36'					140+37	8-10'-8.36'
127+28	11-25'-11.42'					140+62	11-25'-11.42'

NOTE:
Guard Rail offsetted 0.17
to meet bridge wing wall.

ESTIMATED QUANTITIES

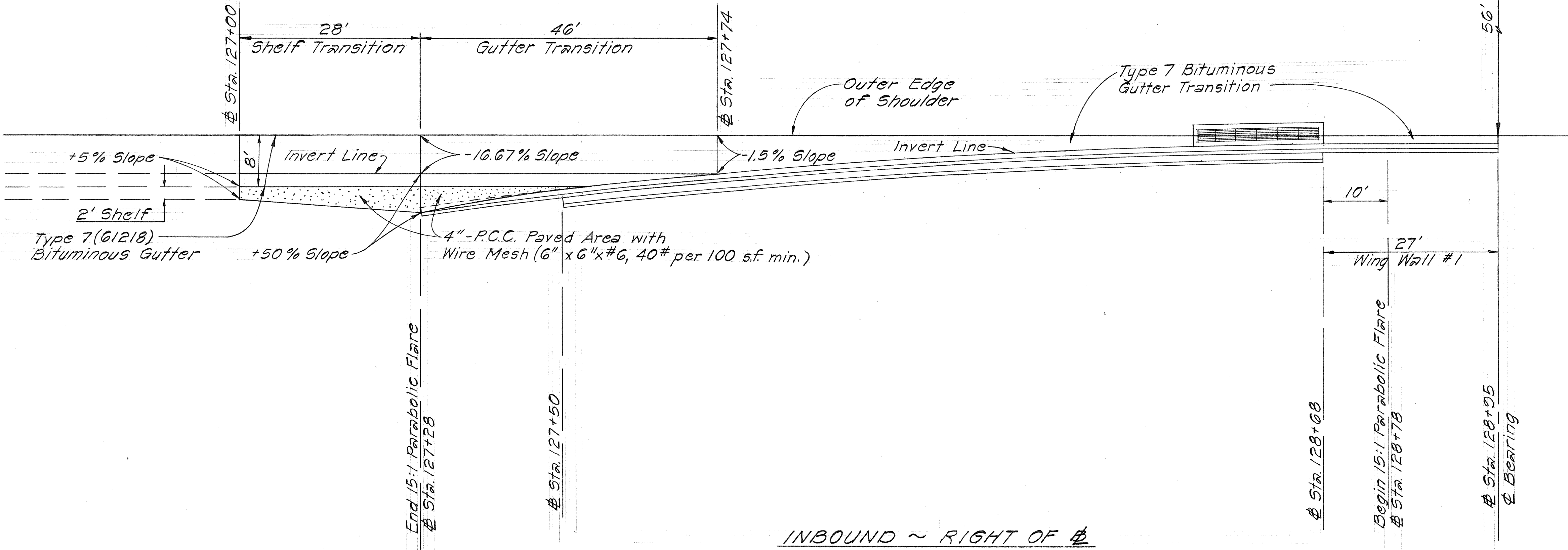
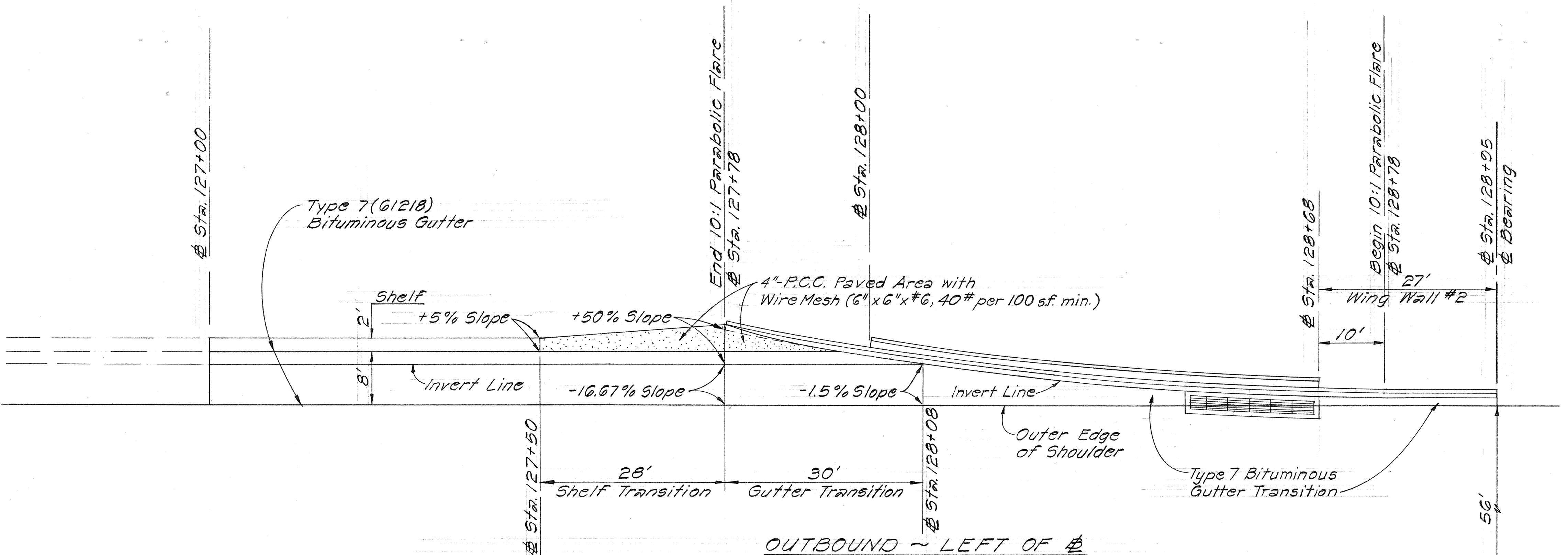
LOCATION		ITEM NO. 606.416 GUARD RAIL - TYPE 4F			ITEM NO. 606.417 GUARD RAIL - TYPE 4G		
# Station		Concrete (C.Y.)	Reinf. Steel (Lb.)	Structure Exc. (C.Y.)	Concrete (C.Y.)	Reinf. Steel (Lb.)	Structure Exc. (C.Y.)
WEST ABUT.	O.B. Lt. 127+78 to 128+68	5.23	603	0.24	19.12	2,387	21.81
	I.B. Rt. 127+28 to 128+68	5.23	603	0.24	33.17	4,142	37.85
EAST ABUT.	O.B. Lt. 130+22 to 140+62	14.74	1,952	17.59	21.93	2,738	25.02
	I.B. Rt. 130+22 to 140+12	14.74	1,952	17.59	7.87	983	8.98
TOTAL		39.94	5,230	47.66	82.09	10,250	93.66

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
CONCRETE GUARDRAIL, TYPE 4F & 4G
DETAIL SECTIONS, OFFSETS &
ESTIMATED QUANTITIES
INTERSTATE ROUTE H-2
WAIKAKALAUA STREAM BRIDGE
F.A.I. Proj. No. I-H2-1(10)6
Scale: As Shown Date: May 1973
SHEET No. 2 OF 16 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H2-1(10)-6	1973	14	104

CONSTRUCTION NOTES:

- East Abutment similar except opposite sides of Baseline.
- For X-Sectional details refer to sht no. 15.
- For profile of top of concrete guardrail refer to sht no. 15.
- For plan location refer to sht. no. 6 & 8.
- The 4" P.C.C. Paved Area will be paid for under Item No. 608.13 and shall conform to the applicable requirements of Section 608-Sidewalks, of the Standard Specifications. (Wire Mesh is incidental to Item No. 608.13).
- Parabolic Flare of Concrete Guardrail - West Abutment
 - Outbound - Left of Φ , 10:1 Parabolic Flare
Begin @ Φ Sta. 128+78
End @ Φ Sta. 127+78
 - Inbound - Right of Φ , 15:1 Parabolic Flare
Begin @ Φ Sta. 128+78
End @ Φ Sta. 127+28
- Parabolic Flare of Concrete Guardrail - East Abutment
 - Inbound - Right of Φ , 10:1 Parabolic Flare
Begin @ Φ Sta. 139+12
End @ Φ Sta. 140+12
 - Outbound - Left of Φ , 15:1 Parabolic Flare
Begin @ Φ Sta. 139+12
End @ Φ Sta. 140+62
- The Type 7 Bituminous Gutter Transition will be paid under Item No. 609.704 and shall conform to the applicable requirements of Section 609 of the Special Provisions.



TYPICAL PLAN DETAILS ~ TRANSITIONS FOR WEST ABUTMENT
Scale: 1"=10'

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GUTTER & SHELF TRANSITION
TYPICAL PLAN DETAILS
INTERSTATE ROUTE H-2
WAIKAKALAUA STREAM BRIDGE
F.A.I. Proj. No. I-H2-1(10)-6

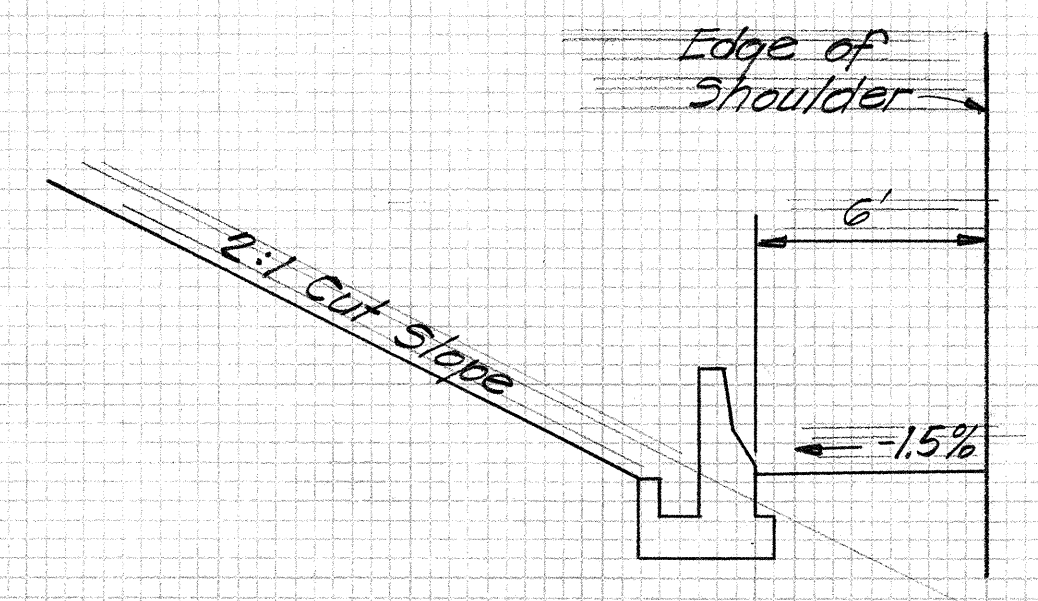
Scale: 1"=10' Date: May, 1973
SHEET No. 3 OF 16 SHEETS

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

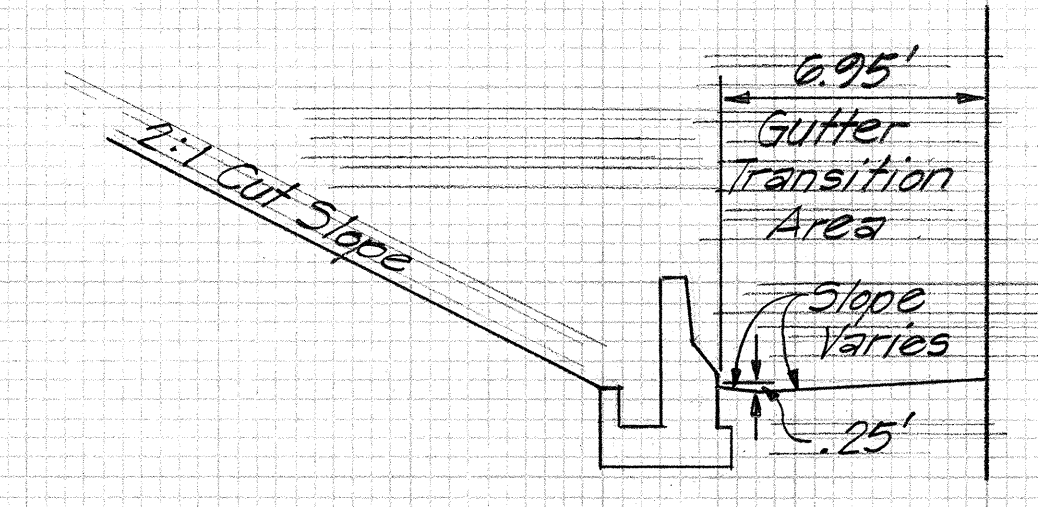
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H2-1(10):6	1973	15	104

DATE	
BY	
REVIEWED	
APPROVED	
NOTED	
NO.	

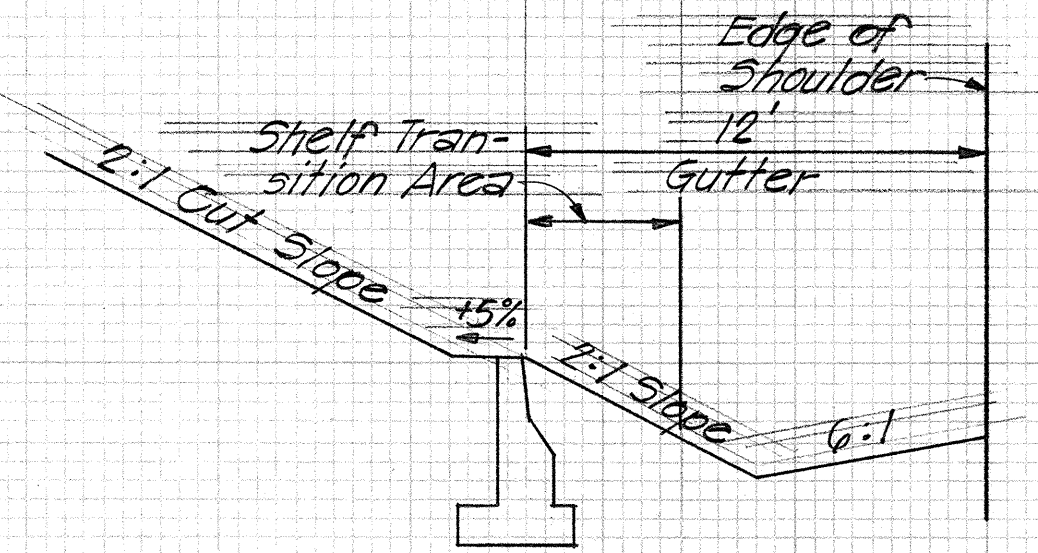
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BY	
REVIEWED	
APPROVED	
NOTED	
NO.	



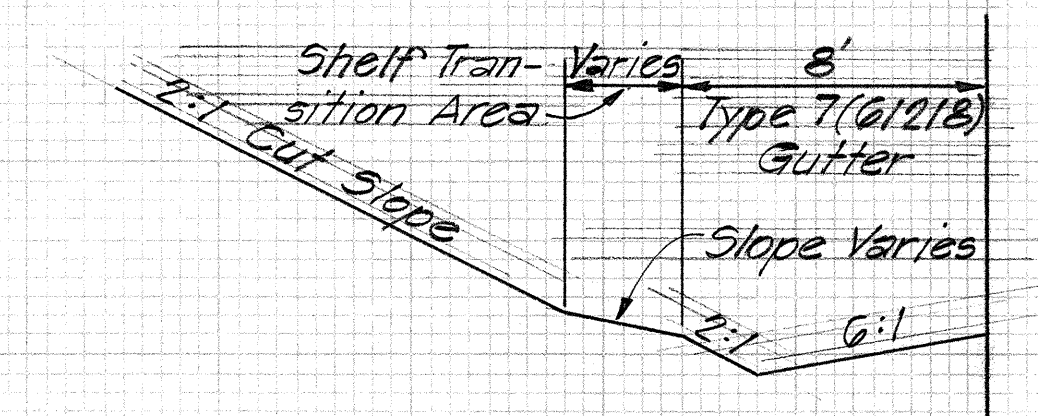
STA. 128+08
END TRANSITION OF GUTTER AREA



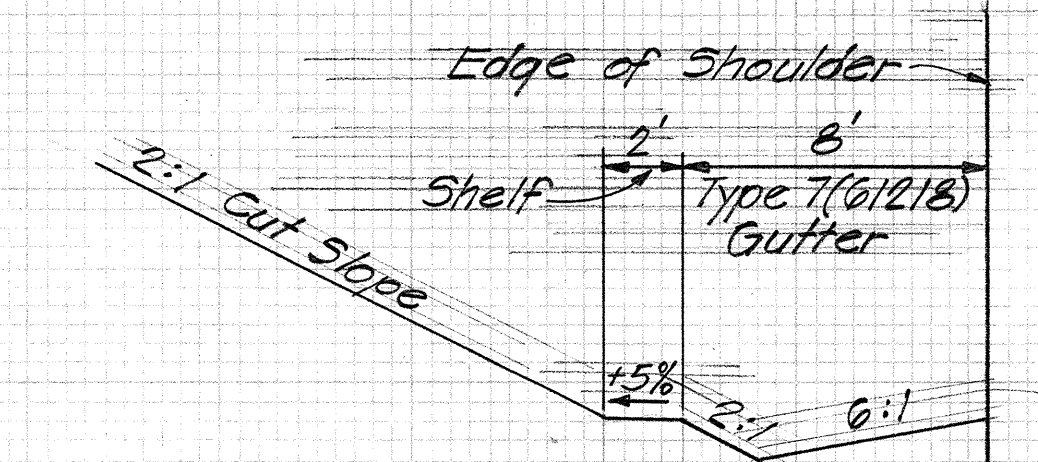
STA. 128+00



STA. 127+78
END SHELF TRANSITION
BEG. TRANSITION OF GUTTER AREA



STA. 127+64

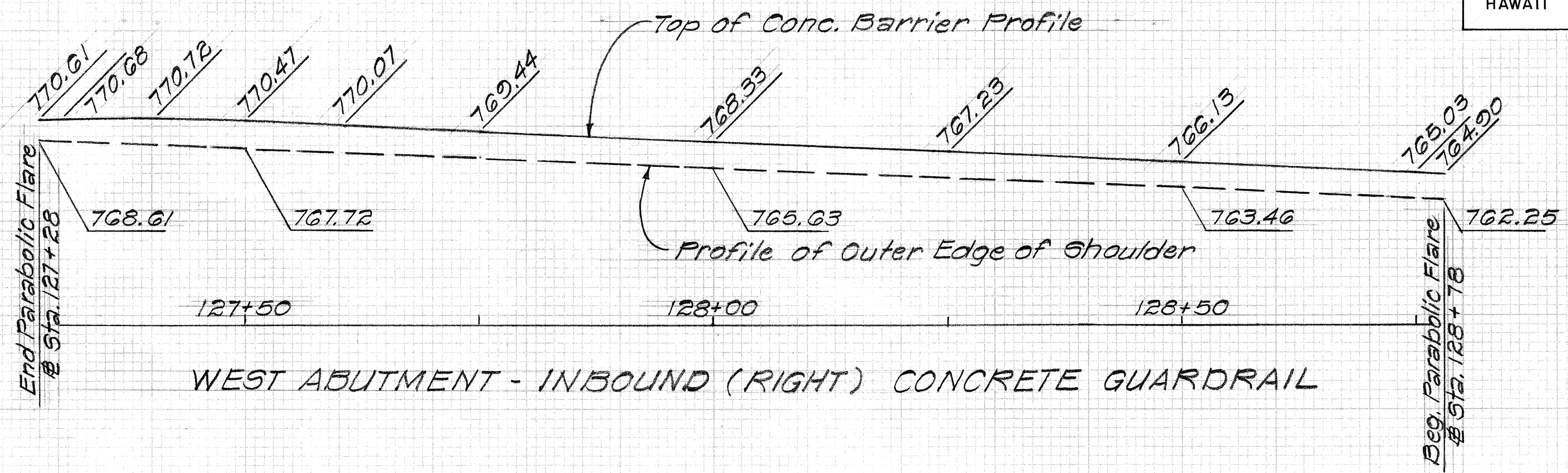


STA. 127+50
BEGIN SHELF TRANSITION

TYPICAL DETAIL SECTION FOR
CONCRETE GUARDRAIL END
Scale: 1"=5'

770

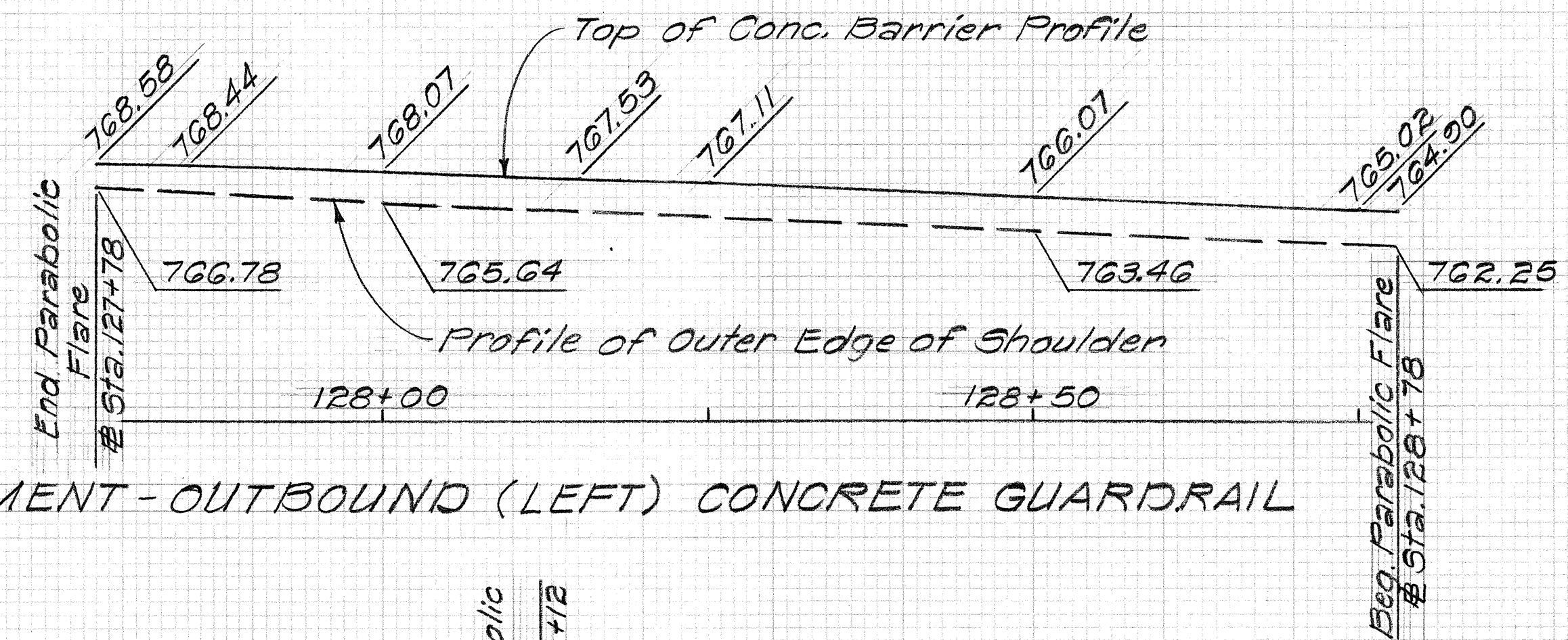
760



WEST ABUTMENT - INBOUND (RIGHT) CONCRETE GUARDRAIL

770

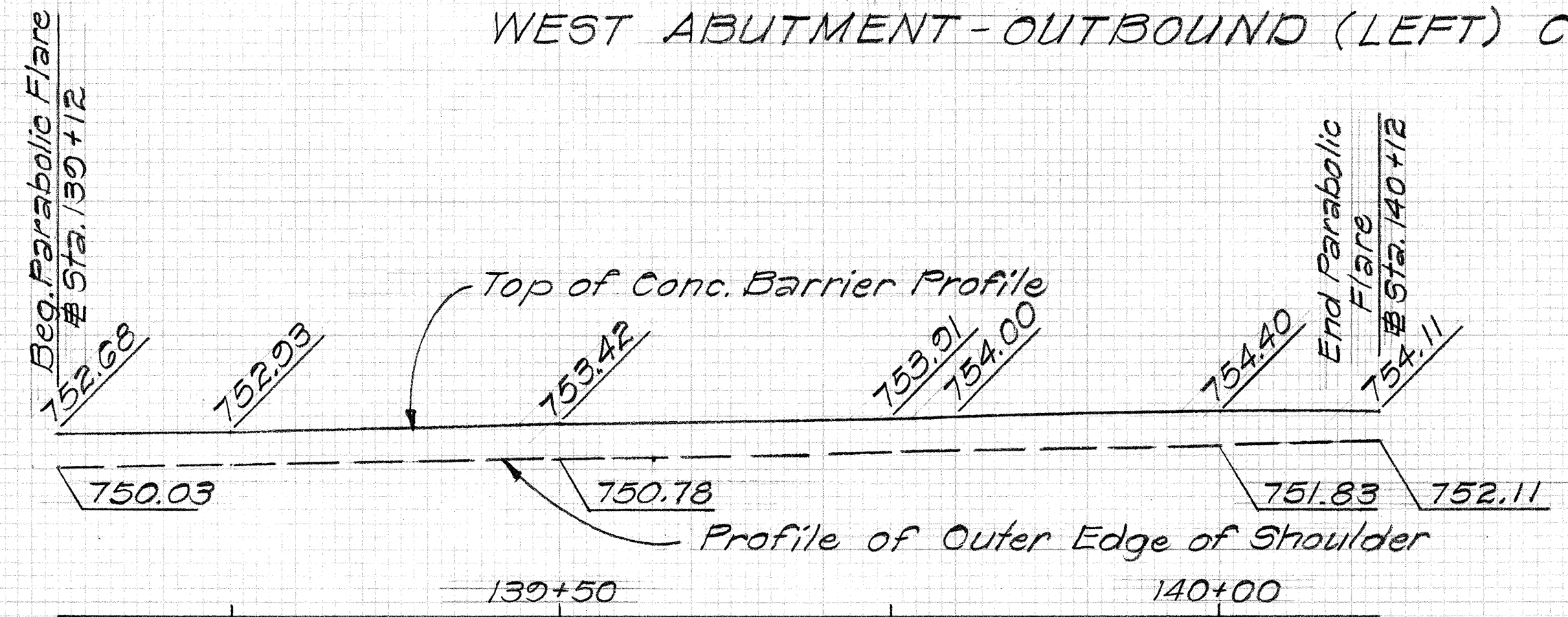
760



WEST ABUTMENT - OUTBOUND (LEFT) CONCRETE GUARDRAIL

760

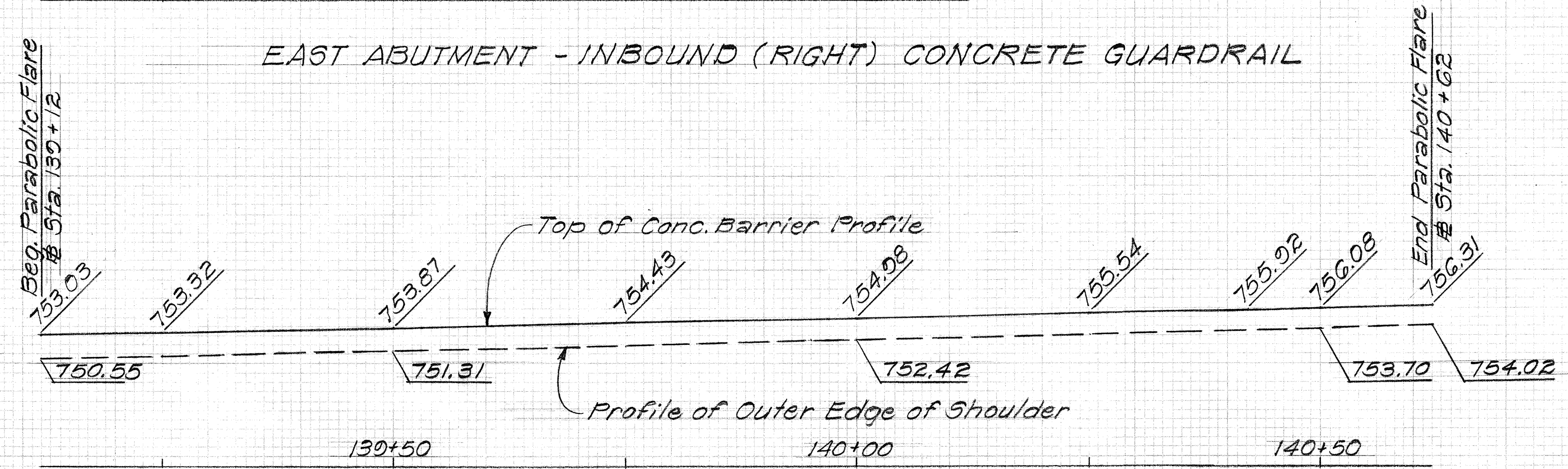
750



EAST ABUTMENT - INBOUND (RIGHT) CONCRETE GUARDRAIL

760

750



EAST ABUTMENT - OUTBOUND (LEFT) CONCRETE GUARDRAIL

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

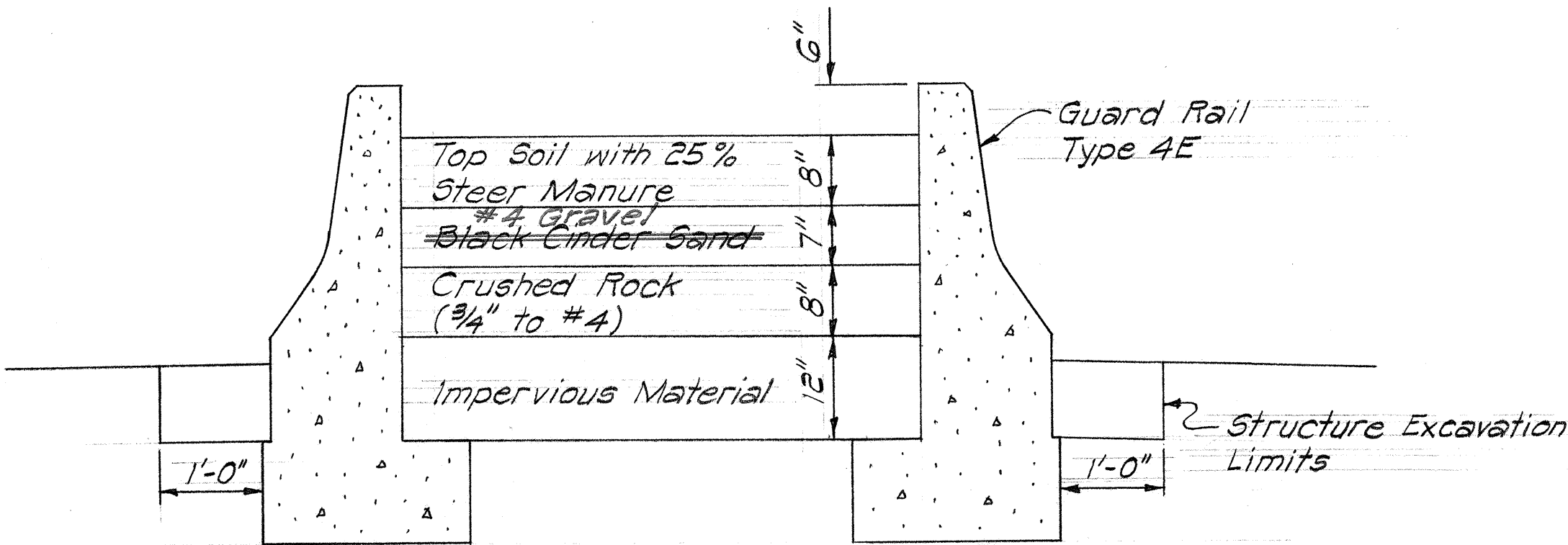
TYPICAL DETAIL SECTION AND
PROFILE FOR CONC. GUARDRAIL

INTERSTATE ROUTE H-2
WAIKAKALAUA STREAM BRIDGE
F.A.I. PROJ. NO. I-H2-1(10):6
Scale: As Shown Date: June, 1973
SHEET No. 4 OF 16 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H2-1(10):6	1973	16	104

CONSTRUCTION NOTES:

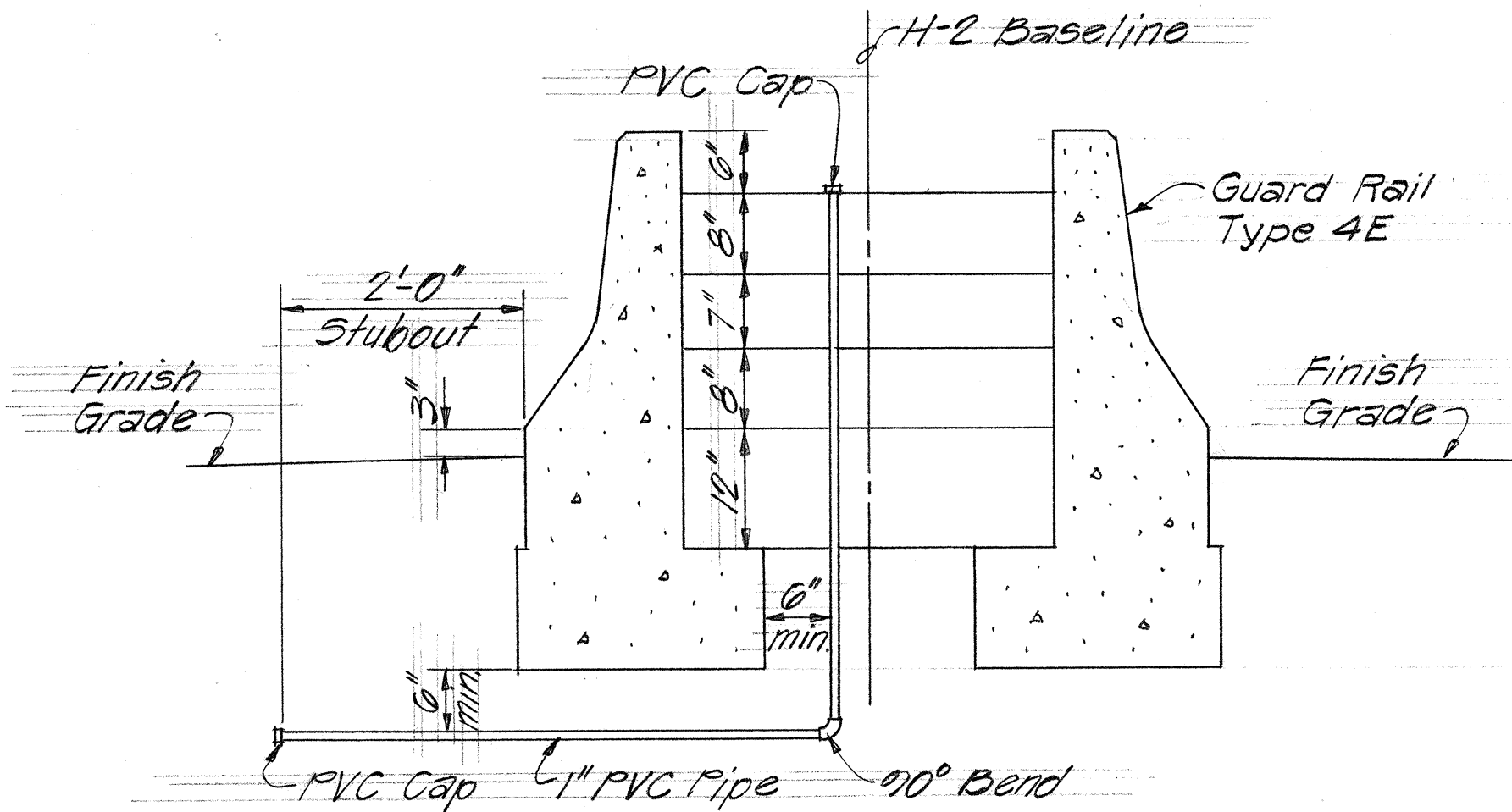
1. The impervious material, crushed rock (¾" to #4), black cinder sand, and top soil shall be approved by the Engineer before placement into the Planter Boxes.
2. The earth fill, impervious material and the foundation for the planter box and reinforced concrete sidewalk shall be compacted to the satisfaction of the Engineer.
3. 4" - P.C.C. Paved Area will be paid for under Item No. G08.13 and shall conform to the applicable provisions of Section G08 - Sidewalks, of the Standard Specifications. (Wire Mesh is incidental to Item No. G08.13)
4. Item No. G06.418 Guard Rail, Type 4E - Planter Box Tapered Section shall be deemed full compensation for the structure excavation, guard rail type 4E, earth mound, impervious material, crushed rock (¾" to #4), black cinder sand, top soil, and for furnishing all labor, materials, tools, equipment and incidentals for doing all the work as called for in the plans.
5. Concrete for the planter box tapered section shall conform to the applicable requirements of Section 503 - Concrete Structures, of the Special Provisions and Standard Specifications.
6. Reinforcing steel for the planter box tapered section shall conform to the requirements of Section G02 - Reinforcing Steel of the Special Provisions and Standard Specifications.
7. The earth mound shall be constructed and compacted to the satisfaction of the Engineer and shall be considered incidental to the various items of work.
8. The 4" drain holes shall be constructed 10' o.c. on the inbound side of the planter box. Cut drain at front face to match flush with guard rail face. All cost concerning the 4" drains will be considered incidental to Item No. G06.418 - Guard Rail, Type 4E - Planter Box Tapered Section.
9. The 1-inch PVC pipes for future sprinkler system will be paid for under Item No. G16.122 and shall conform to the applicable requirements of Section G16 Sprinkler System, of the Special Provisions and Standard Specifications.
10. The 2'-0" stubout end location of the 1-inch PVC pipe shall be marked in such a manner that the capped end can be located in the future construction of the sprinkler system. The cost incurred to complete this work will be considered incidental to Item No. G16.122.



FILL MATERIALS FOR PLANTER BOX

Scale: ¾" = 1'-0"

ESTIMATED QUANTITIES FOR ITEM NO. G06.418		
8" Top Soil with 25% Steer Manure	140	Cu. Yd.
7" Black Cinder Sand #4 Gravel	132	Cu. Yd.
8" Crushed Rock (¾" to #4)	140	Cu. Yd.
12" Impervious Material	210	Cu. Yd.
Structure Excavation	435	Cu. Yd.
Guard Rail, Type 4E	734	Lin. Ft.
Embankment Material for Earth Mounds	96	Cu. Yd.



PIPE IN PLANTER BOX

Scale: ¾" = 1'-0"

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

GUARD RAIL, TYPE 4E-

PLANTER BOX TAPERED SECTION

INTERSTATE ROUTE H-2

WAIKAKALAAU STREAM BRIDGE

F.A.I. Proj. No. I-H2-1(10):6

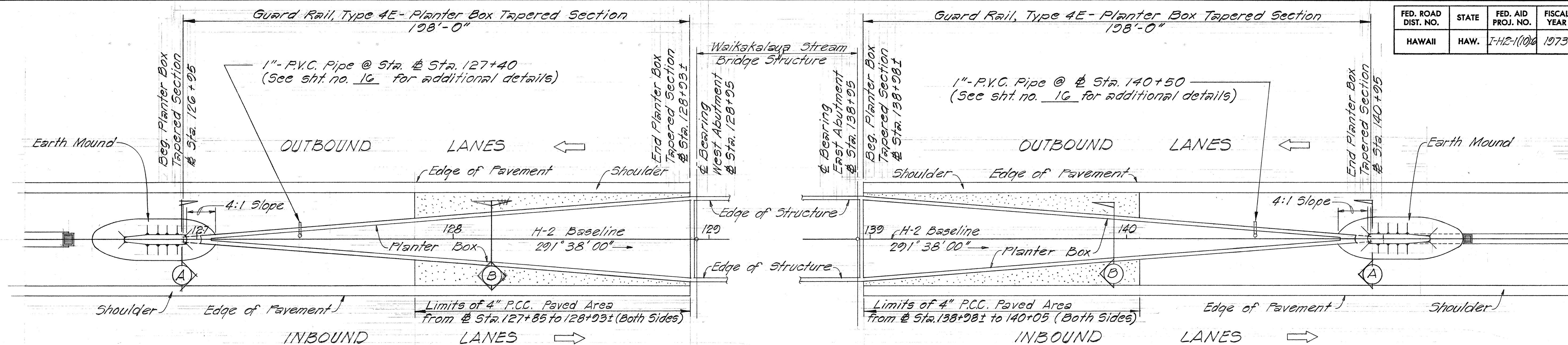
Scale: As Shown

Date: May, 1973

SHEET No. 5 OF 16 SHEETS

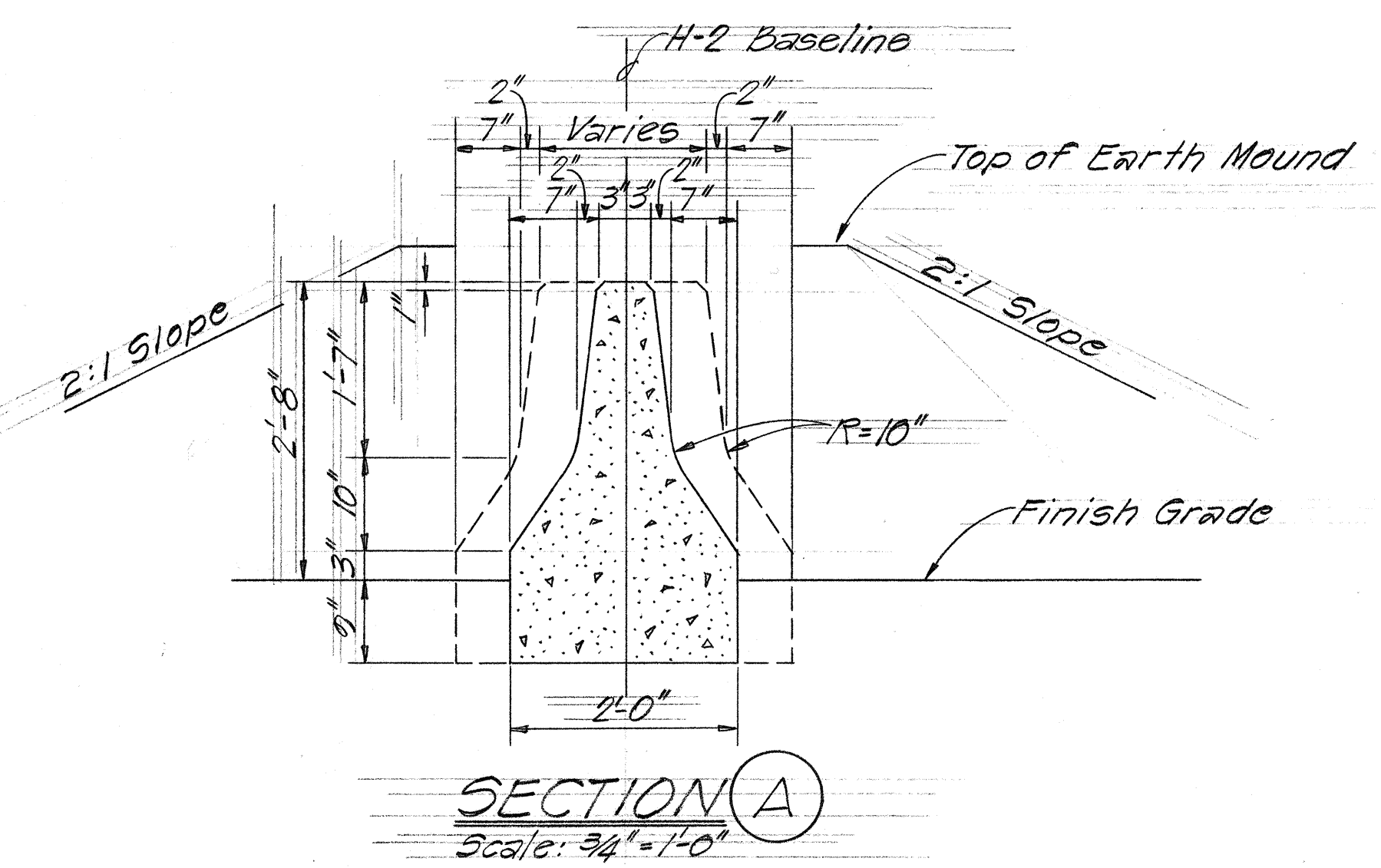
SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
EXAMINED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H2-1(10)6	1973	17	104

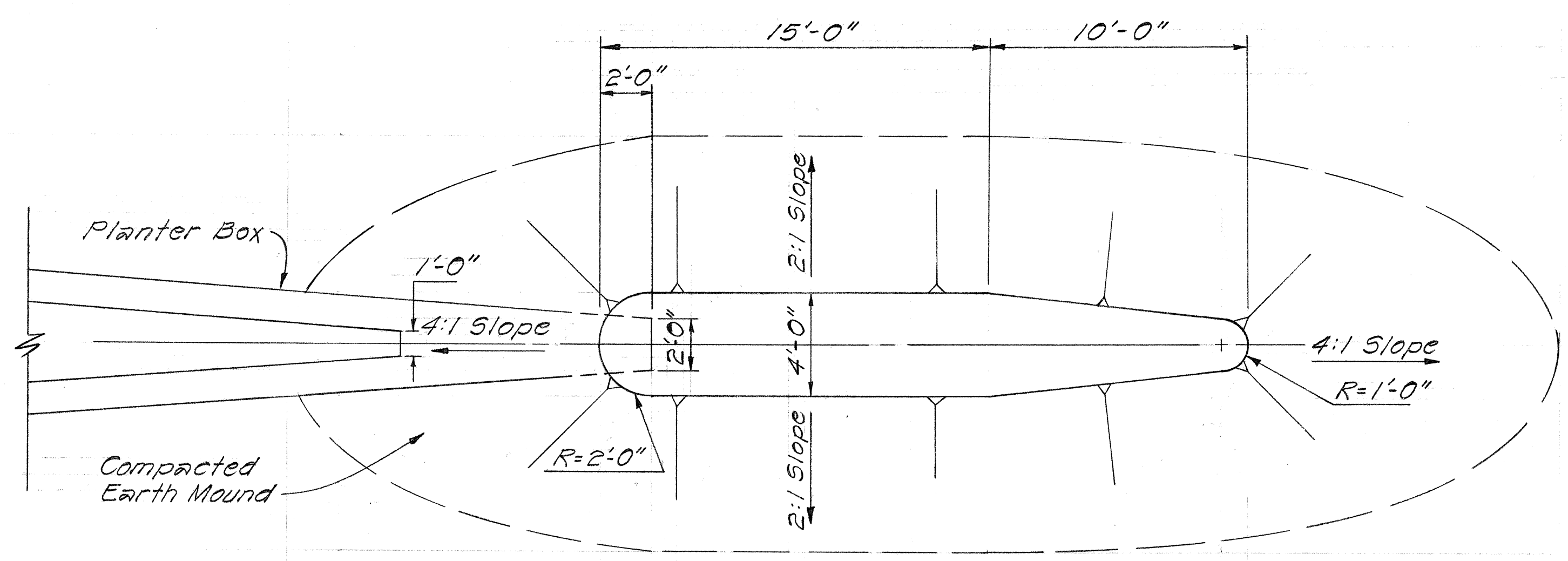


LAYOUT PLAN
Scale: 1" = 20'

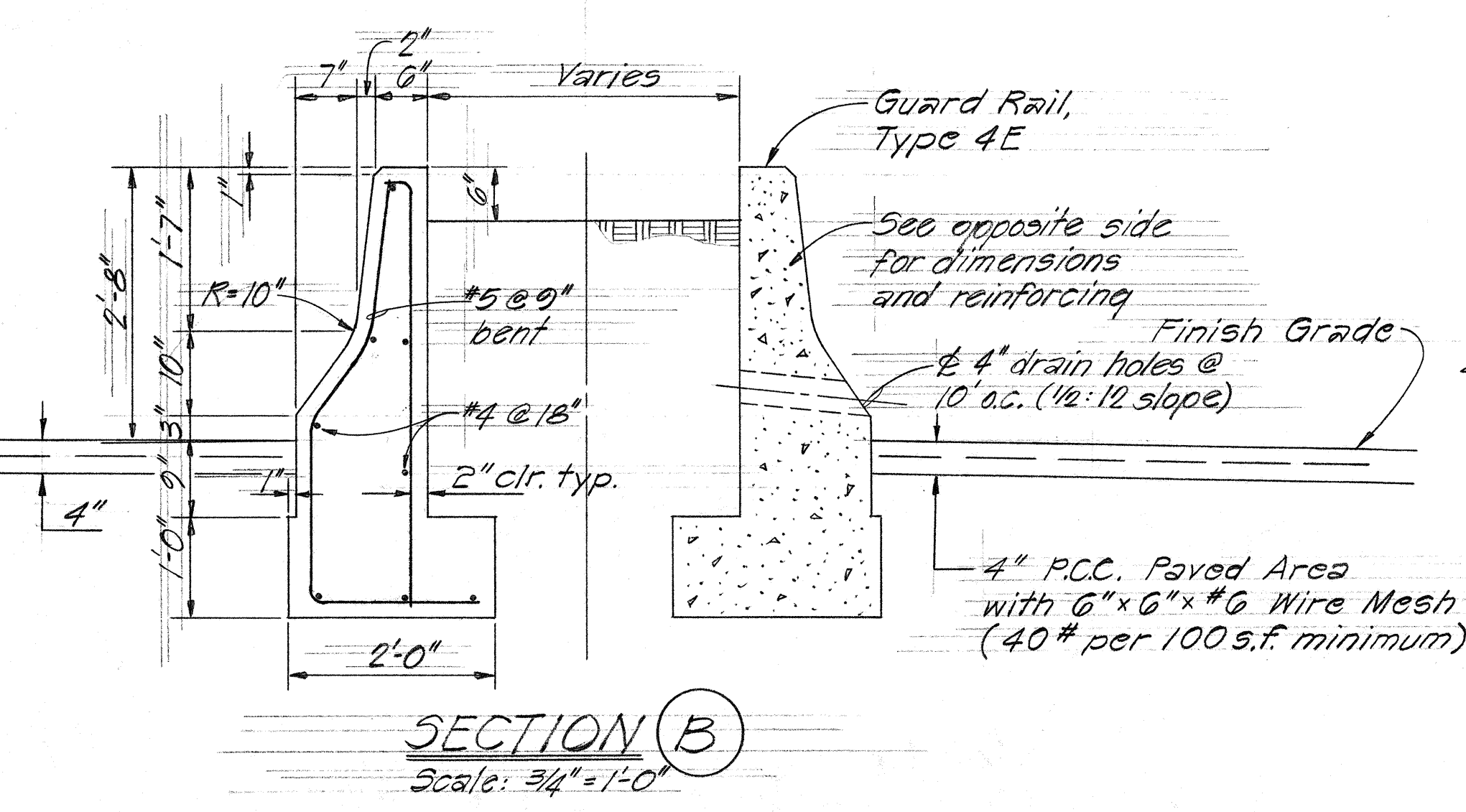
NOTE:
1. Refer to sht. no. 16 for Construction Notes.
2. For the location and details of underground facilities in the immediate area of the Planter Box Tapered Section, the Contractor shall refer to sht. nos. 31 to 41.



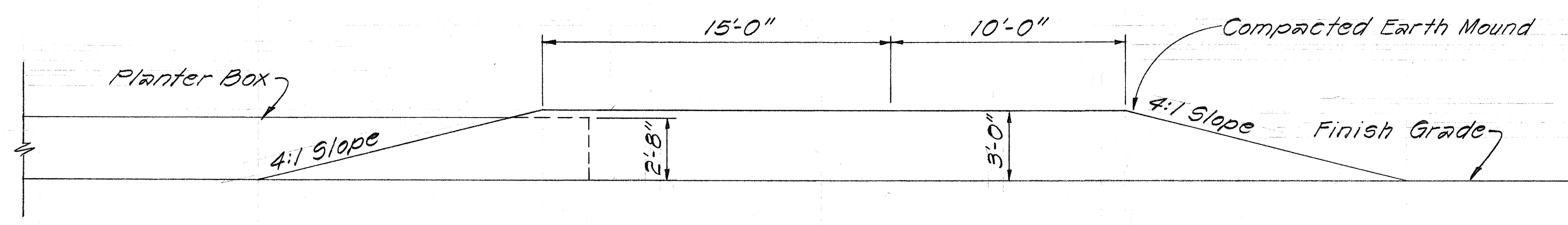
SECTION (A)
Scale: 3/4" = 1'-0"



PLAN



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



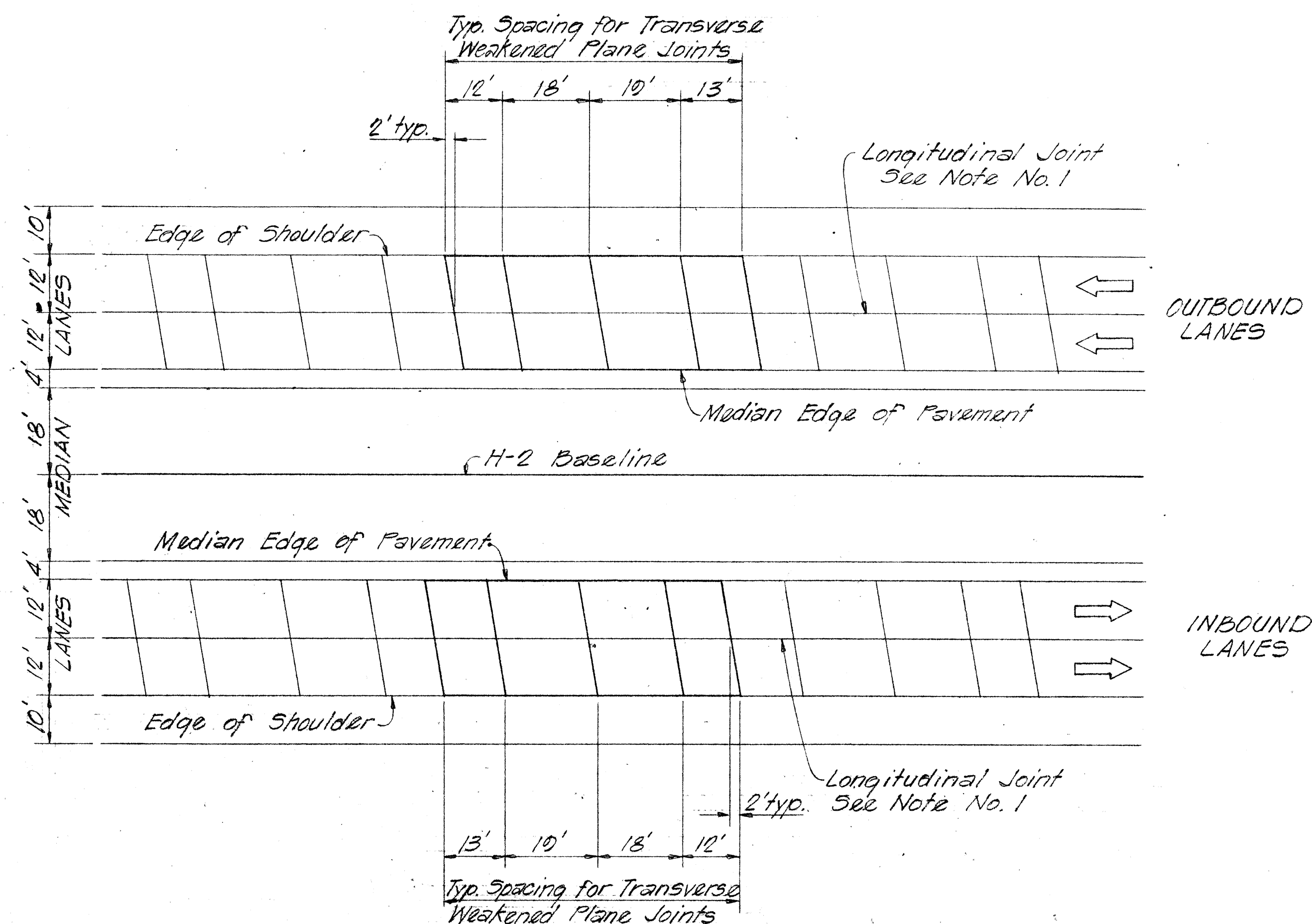
ELEVATION

EARTH MOUND DETAIL
Scale: 1/4" = 1'-0"

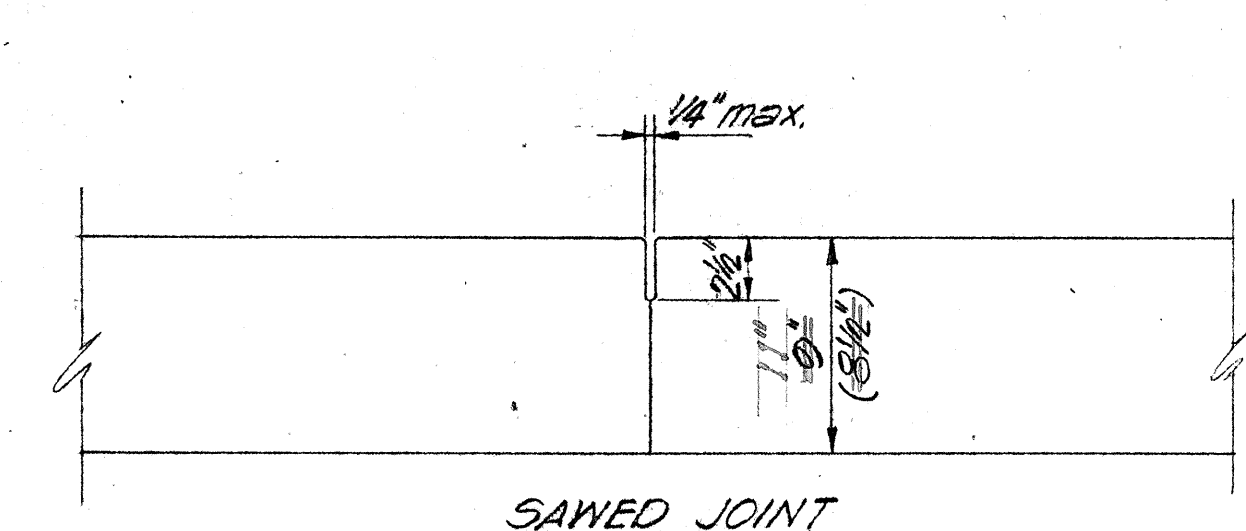
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**GUARD RAIL, TYPE 4E
PLANTER BOX TAPERED SECTION**
INTERSTATE ROUTE H-2
WAIKAKALAUA STREAM BRIDGE
F.A.I. Proj. No. I-H2-1(10):6
Scale: As Shown Date: May, 1973
SHEET No. 6 OF 16 SHEETS

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

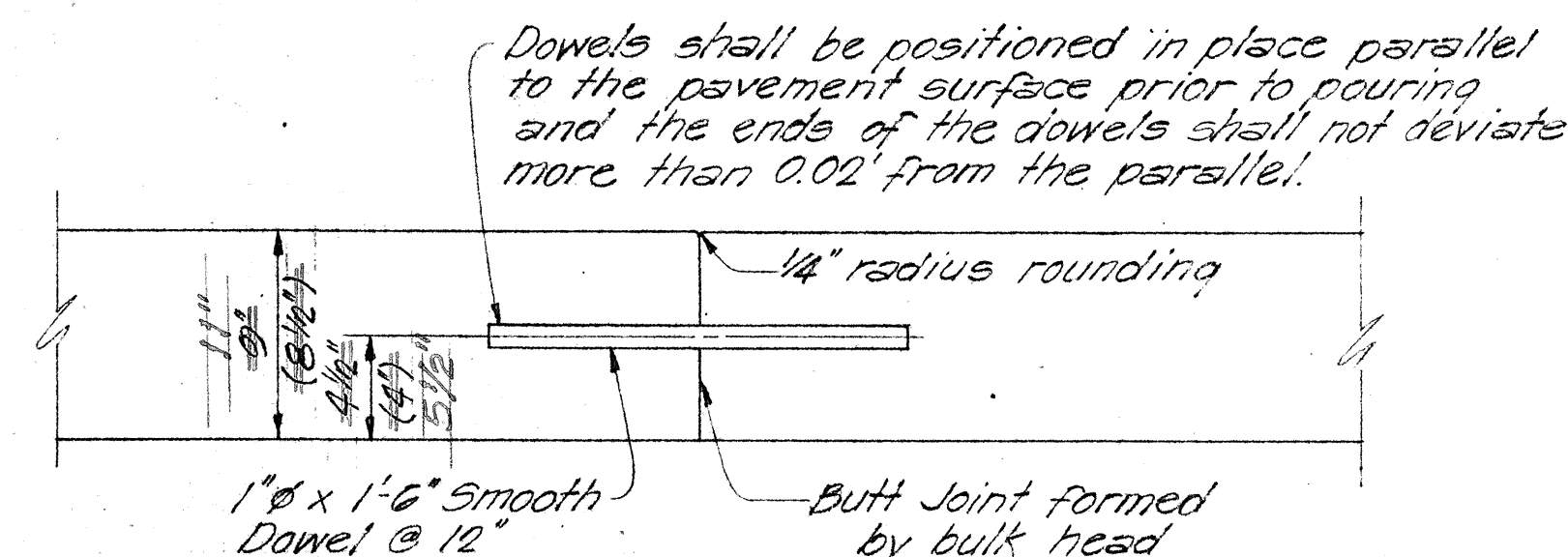
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	FAH2-1101-6	1973	18	104



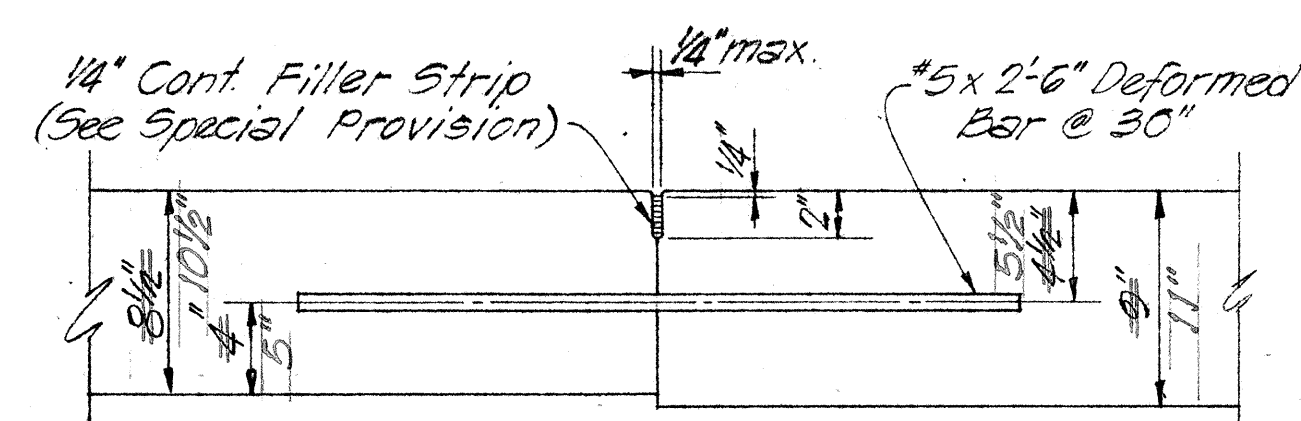
TYPICAL JOINT LOCATION AND LAYOUT PLAN
Scale: 1" = 10'



TRANSVERSE WEAKENED PLANE (CONTRACTION) JOINT
Scale: 1 1/2" = 1'-0"

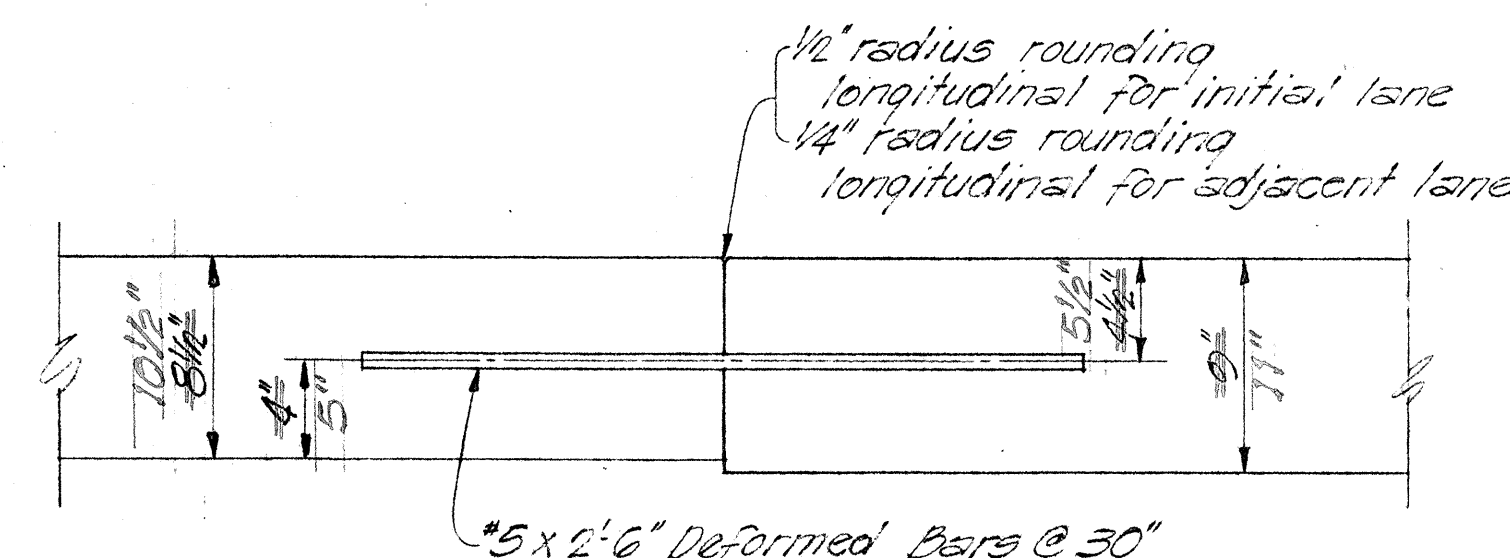


TRANSVERSE CONSTRUCTION (CONTACT) JOINT
Scale: 1 1/2" = 1'-0"



PREFORMED FILLER JOINT

LONGITUDINAL WEAKENED PLANE (CONTRACTION) JOINT
Scale: 1 1/2" = 1'-0"



LONGITUDINAL CONSTRUCTION (CONTACT) JOINT
Scale: 1 1/2" = 1'-0"

CONSTRUCTION NOTES

- 1- The longitudinal weakened plane joint detail shall be applicable at the intermediate traffic lane edge when two or more lanes are paved in one continuous pour. The straight tie bars shall be placed mechanically to the depth shown on the detail. All other longitudinal joints shall be constructed in accordance with the contact joint detail shown on this plan.
- 2- Transverse weakened plane joints shall be sawed diagonally as shown, unless otherwise directed by the Engineer. Under typical conditions transverse weakened plane joints shall be rotated counterclockwise about the inside edge of pavement with an offset of 12' for every 12' of lane width from the perpendicular to the baseline.
- 3- Transverse weakened plane joints shall be spaced at successive intervals of 13', 10', 18', and 12' in the direction of traffic. Repeat for the remaining joints.
- 4- Transverse contact joints shall be located at a minimum distance of 5' from the nearest planned transverse weakened plane joint.
- 5- At the outer edge of the P.C.C. pavement, 1/2" radius rounding shall be utilized longitudinally.
- 6- For Approach Slab Details refer to sheet no. 19.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

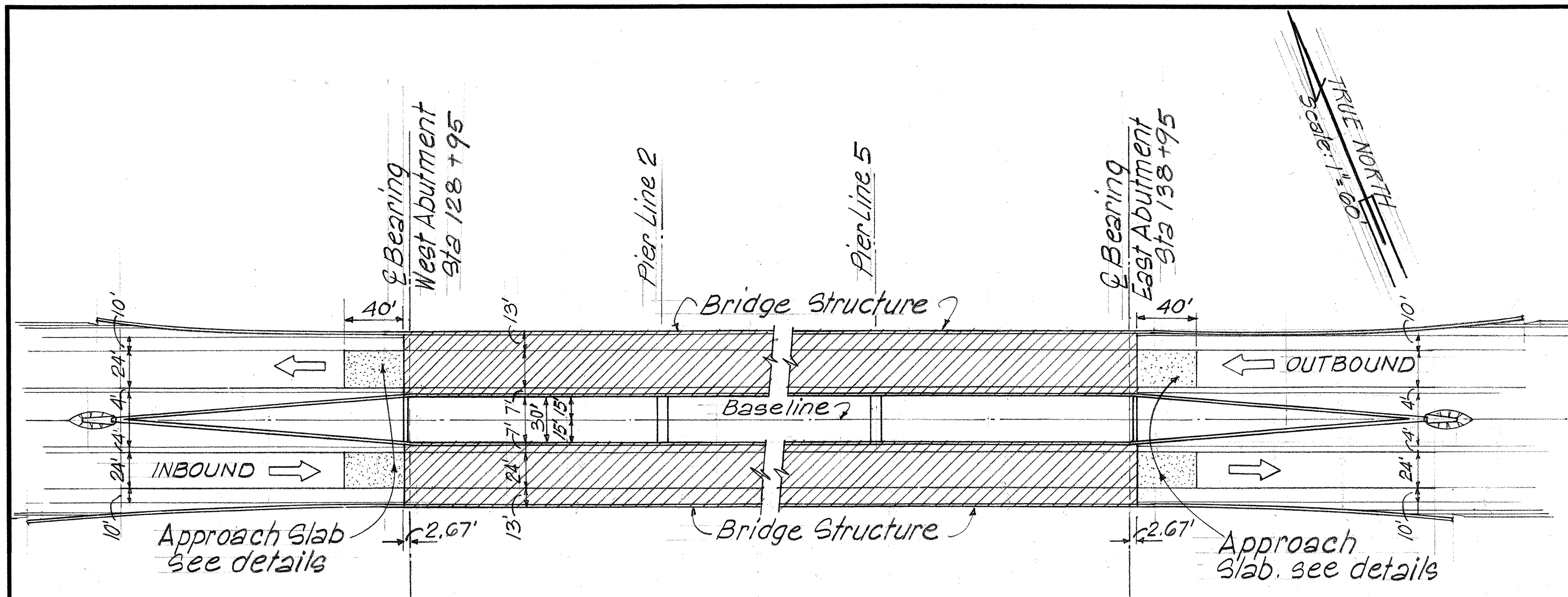
PCC CONSTRUCTION DETAILS

INTERSTATE ROUTE H-2
WAIKAKAUA STREAM BRIDGE
FAI Proj No. I-H2-1101-6

Scale: As Shown Date: May, 1973

SHEET No. 7 OF 16 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-42-1(10):6	1973	19	104



APPROACH SLAB LOCATION PLAN
Scale: 1"=60'

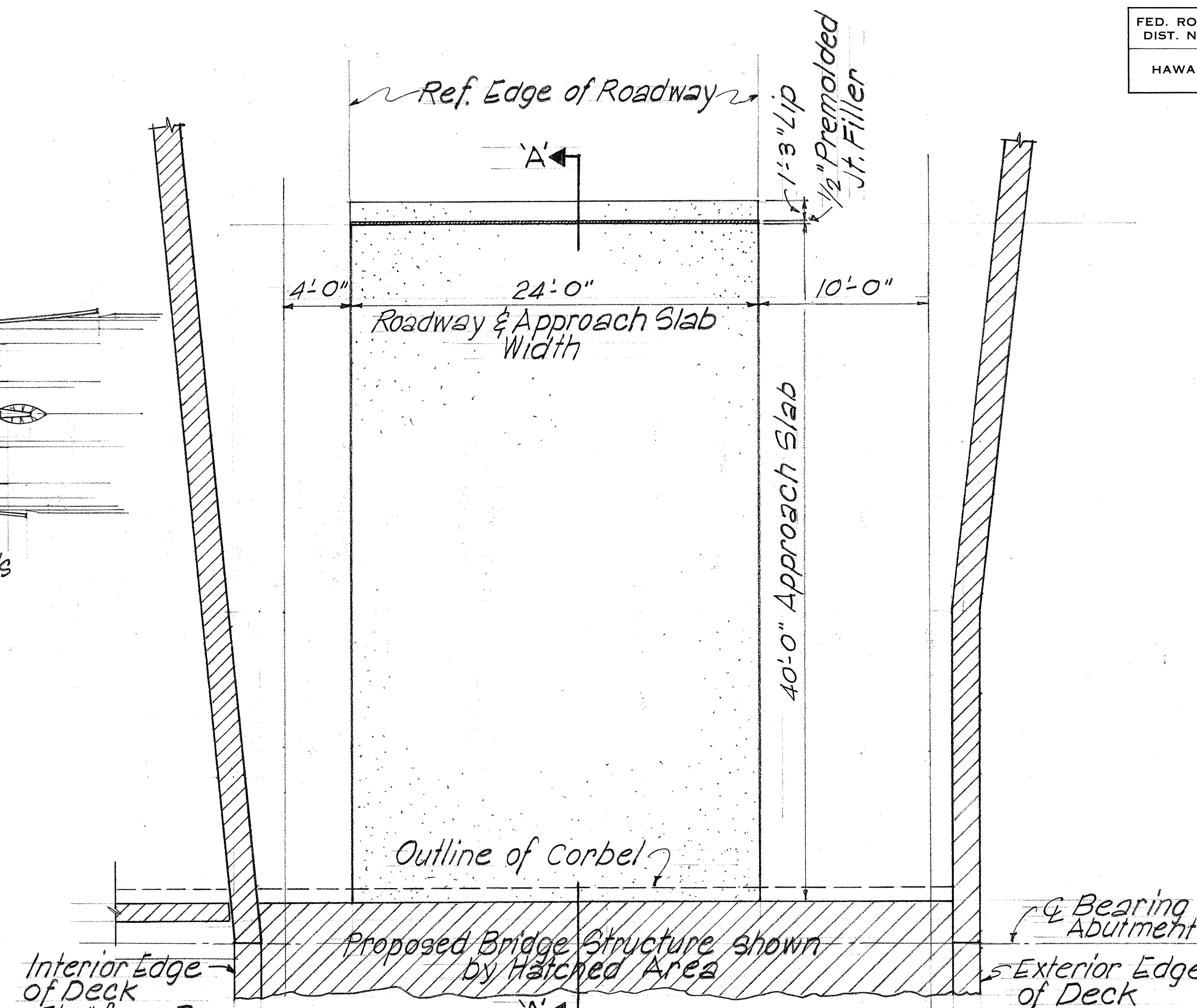
ESTIMATED QUANTITIES		
STRUCTURE	ITEM No. 503.072- CONC. IN APPROACH SLAB-(L.S.)	ITEM No. 602.011- REINF. STEEL IN APPR. SLAB-(L.S.)
INBOUND LANE	58 Cu. yds	16,838 lbs
OUTBOUND LANE	58 Cu. yds	16,838 lbs
TOTAL	116 Cu. yds.	33,676 lbs.

NOTE:

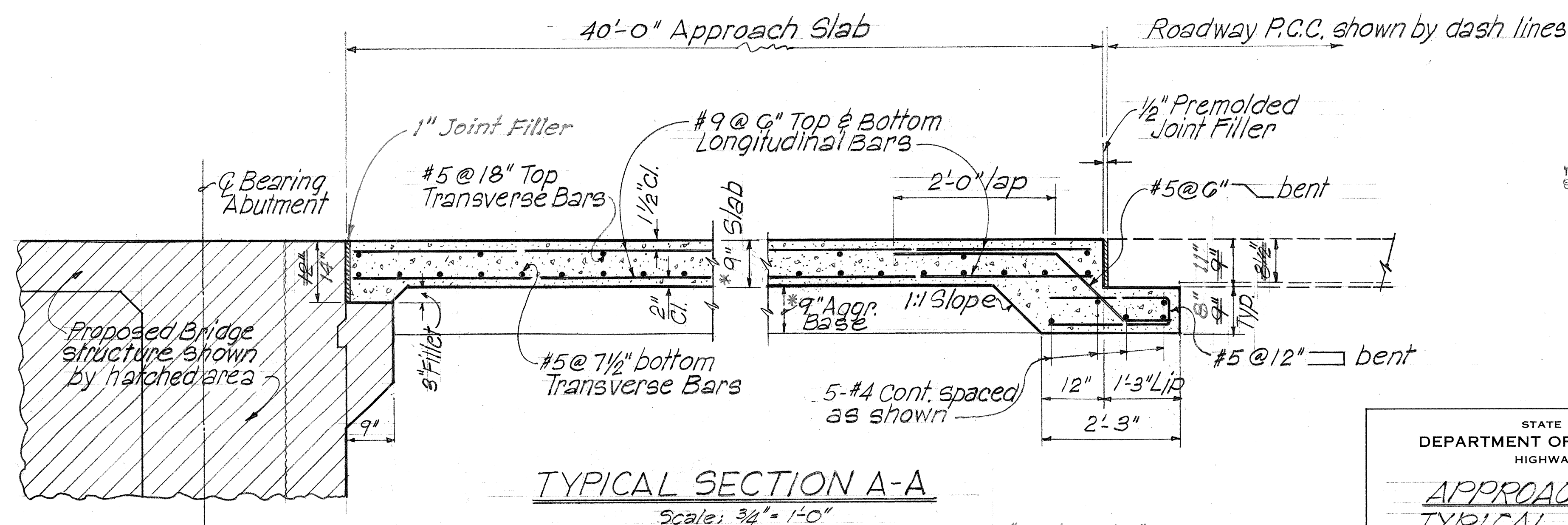
The 9-inch thick Aggregate Base will be paid for under Item No. 304.02, and shall conform to the applicable requirements of Section 304 of the Special Provisions.

ESTIMATED QUANTITY:

Item No. 304.02 Aggregate Base 102 Cu. Yd.



TYP. PLAN - APPROACH SLAB AT I.B. or O.B. LANE
Scale: 3/16"=1'-0"

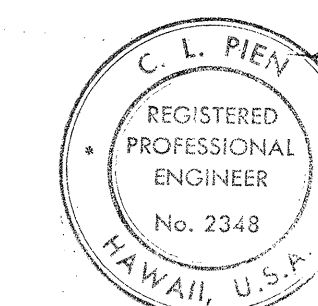


TYPICAL SECTION A-A
Scale: 3/4"=1'-0"

APPROACH SLAB DETAILS
Scale as Noted

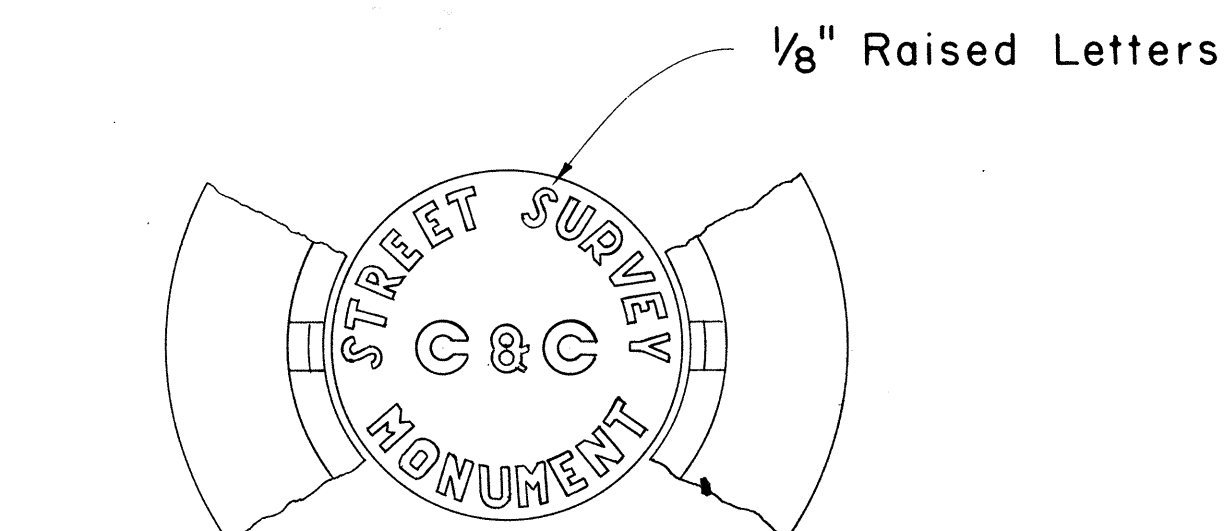
* 11" Slab and 7" Aggr. Subbase for Approach Slab of Outbound Lanes at East Abutment.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

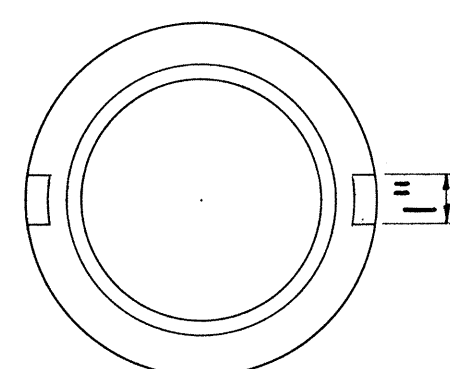


STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**APPROACH SLAB
TYPICAL DETAILS**
INTERSTATE ROUTE H-2
WAIKAKALAUA STREAM BRIDGE
F.A.I. PROJ. NO. I-42-1(10):6
Scale: As Shown Date: May 1973
SHEET No. 8 OF 16 SHEETS

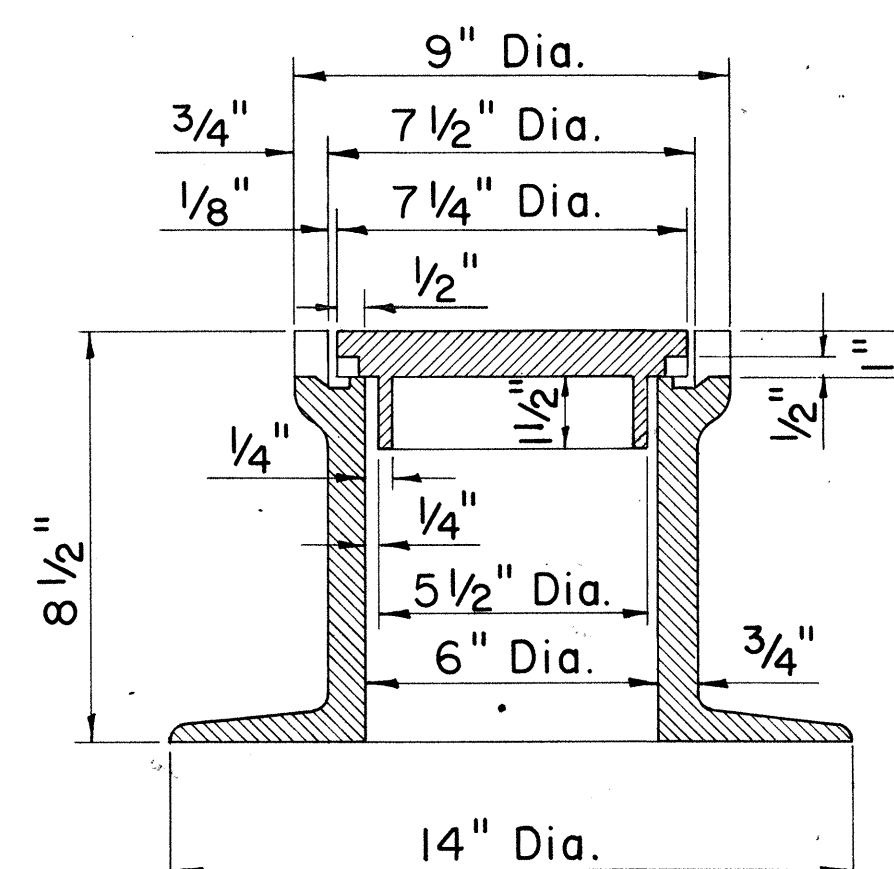
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H2-1(10):6	1973	20	104



TOP VIEW OF COVER
AND PORTION OF FRAME

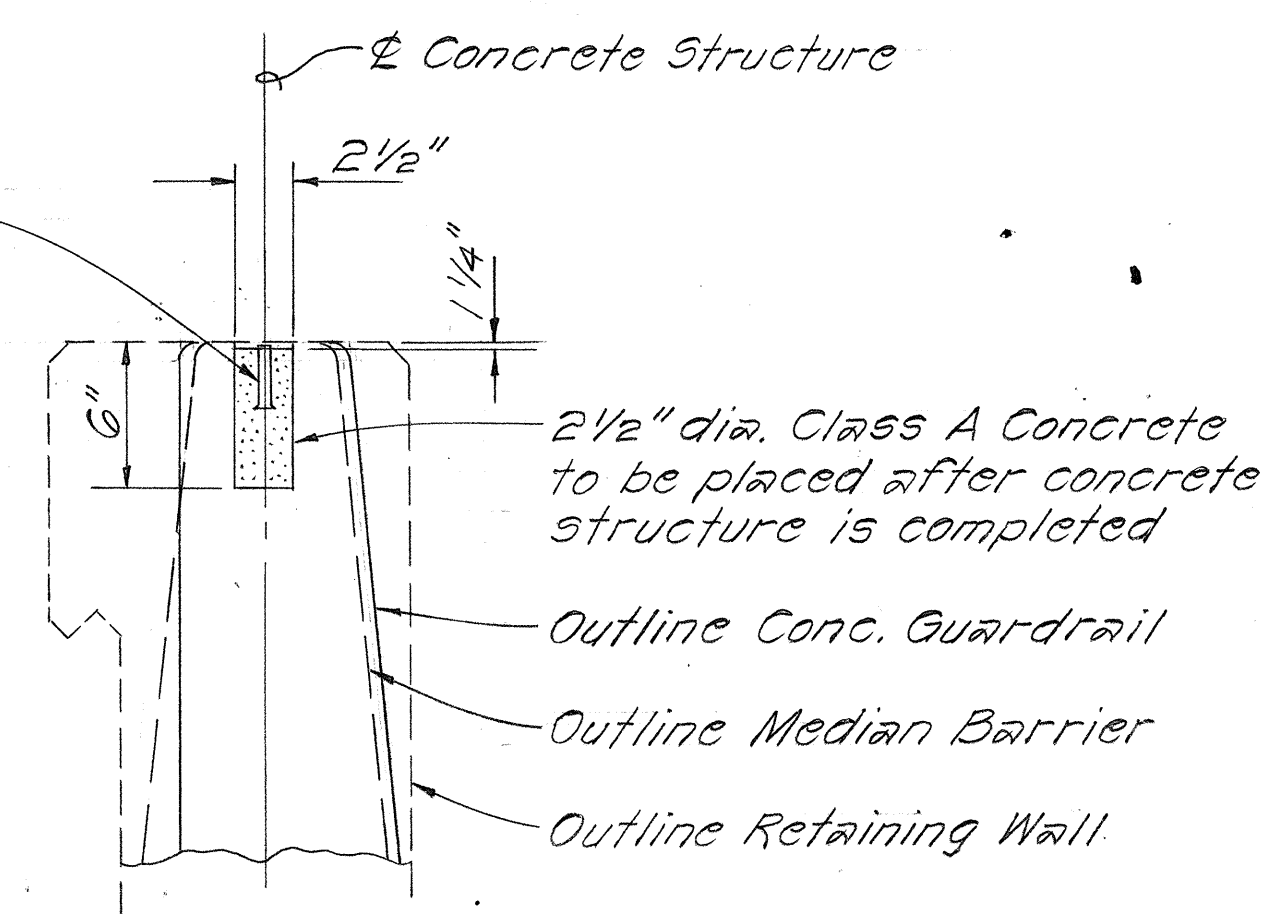


BOTTOM OF COVER



SECTIONAL VIEW OF
FRAME AND COVER

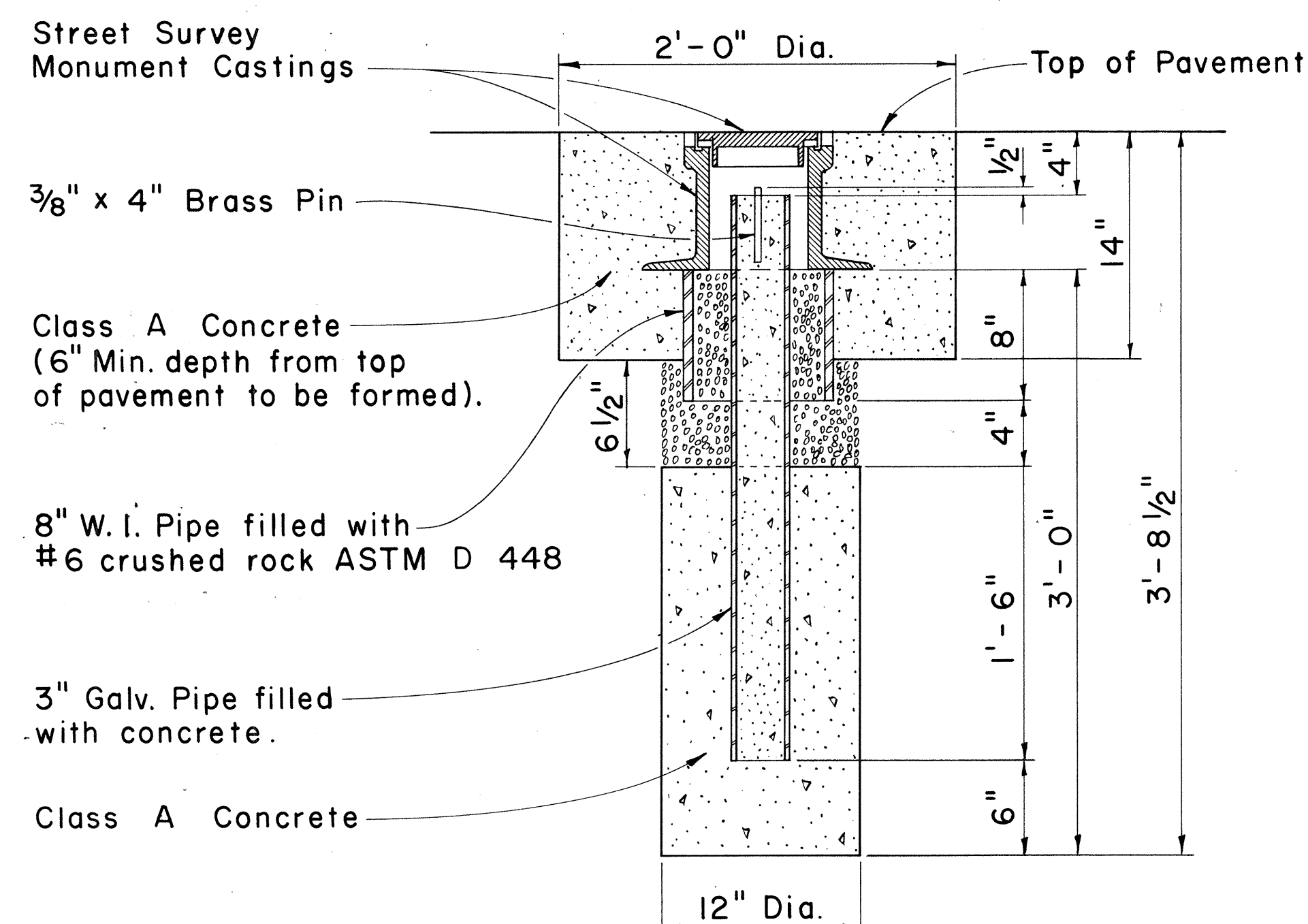
1/2" x 2 1/2" Brass Plug
feathered at bottom
to be set after Class
A Conc. is compacted



DETAIL FOR Φ AND REFERENCE
SURVEY MONUMENT ON CONC. STRUCTURE
Scale: 1 1/2" = 1'-0"

STREET SURVEY MONUMENT CASTINGS

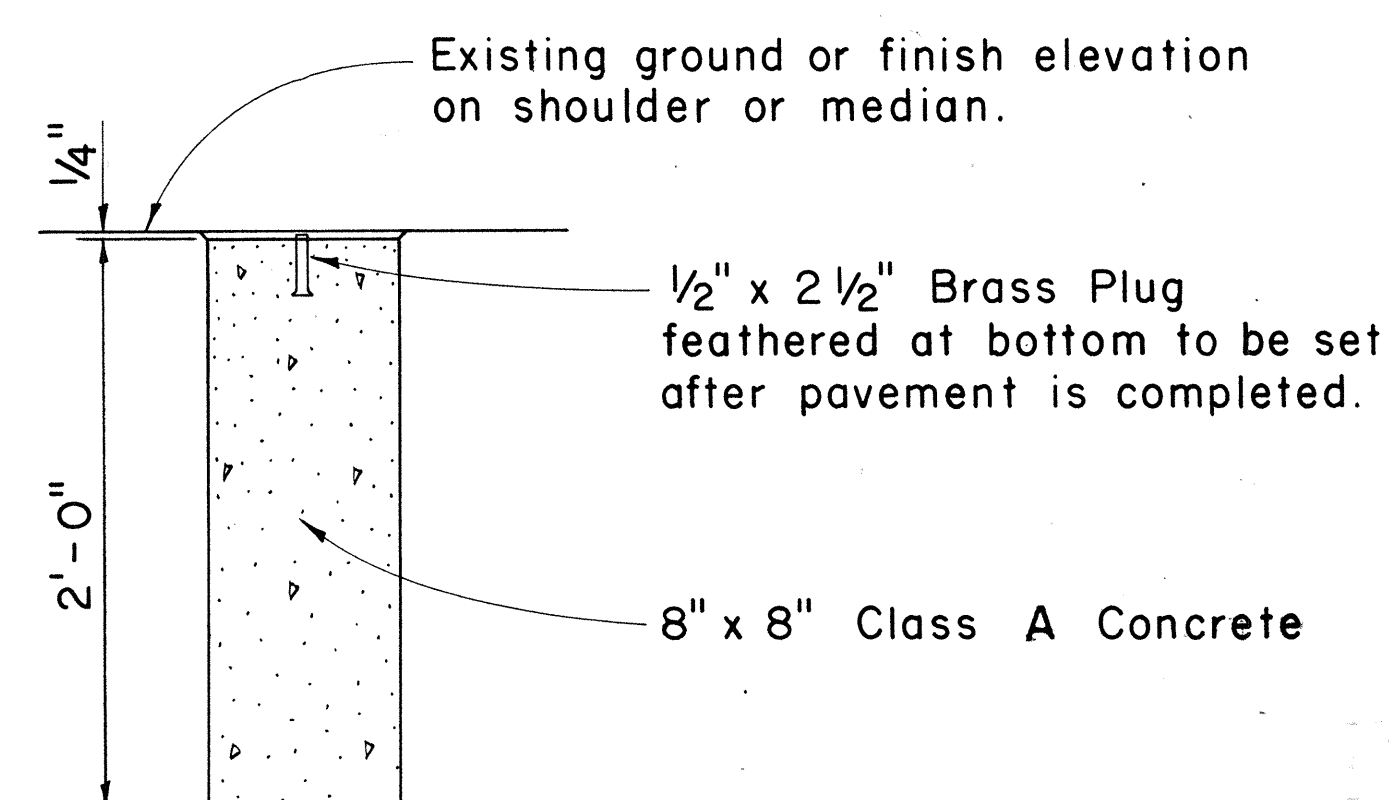
Scale: 3" = 1'-0"



NOTE:
Where the excavation extends into solid rock the depth may be decreased if approved by the Engineer.

STREET SURVEY MONUMENT

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



DETAIL FOR Φ AND REFERENCE
SURVEY MONUMENT

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

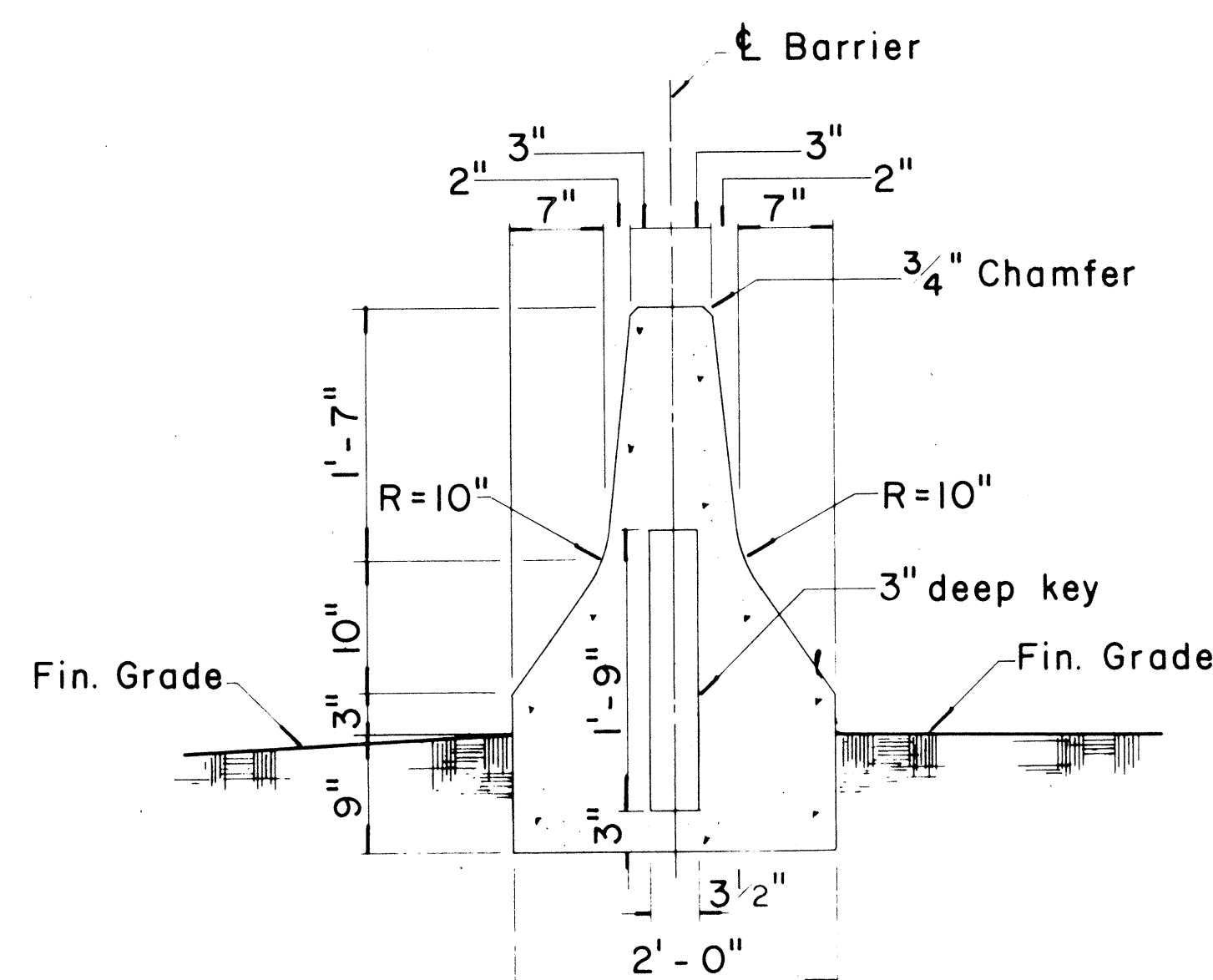
TYPICAL DETAILS

INTERSTATE ROUTE H-2
WAIKAKALAUA STREAM BRIDGE
F.A.I. Proj. No. I-H2-1(10):6

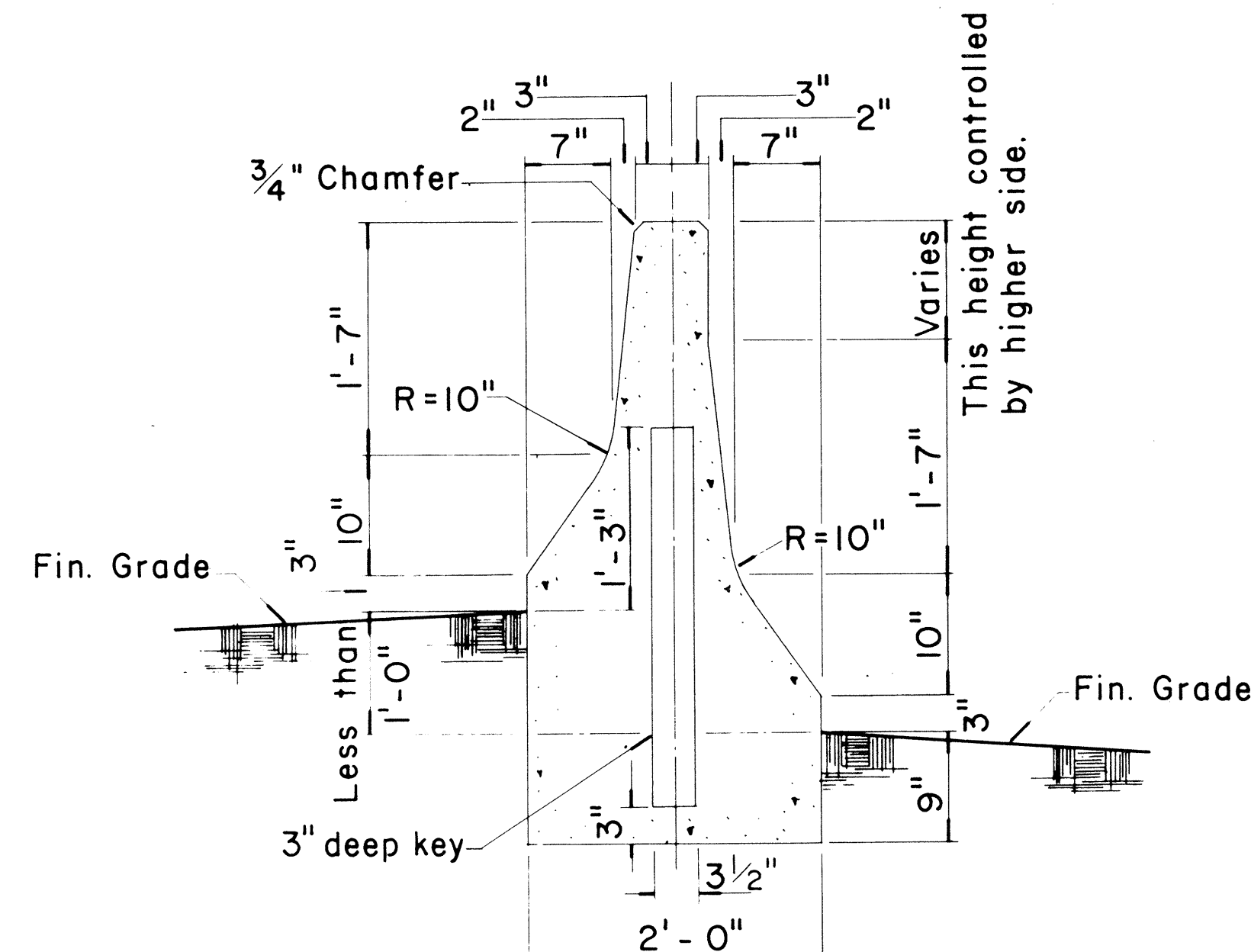
Scale: As Shown Date: June, 1973

SHEET No. 9 OF 16 SHEETS

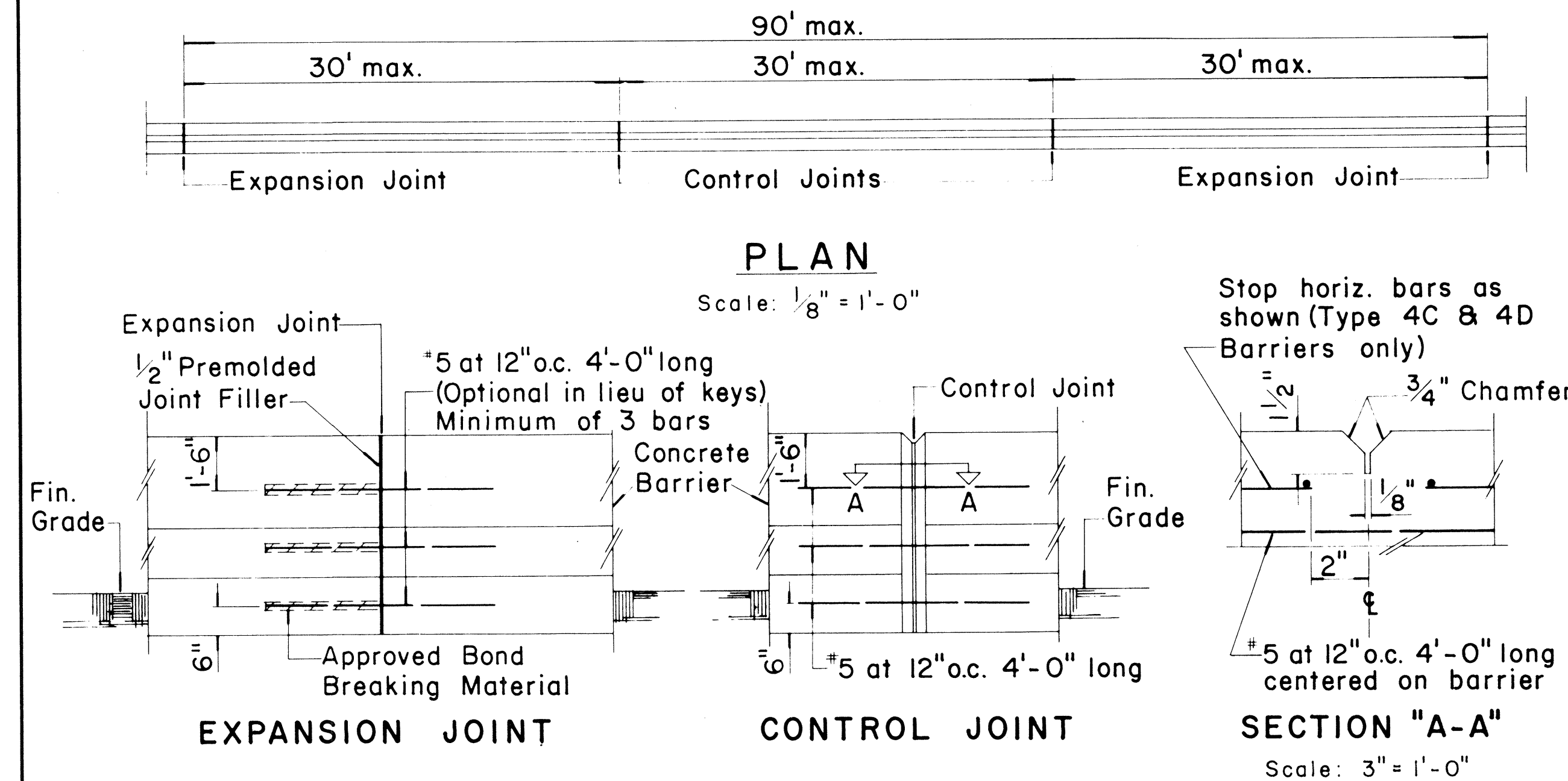
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H2-1(10)6	1973	21	104



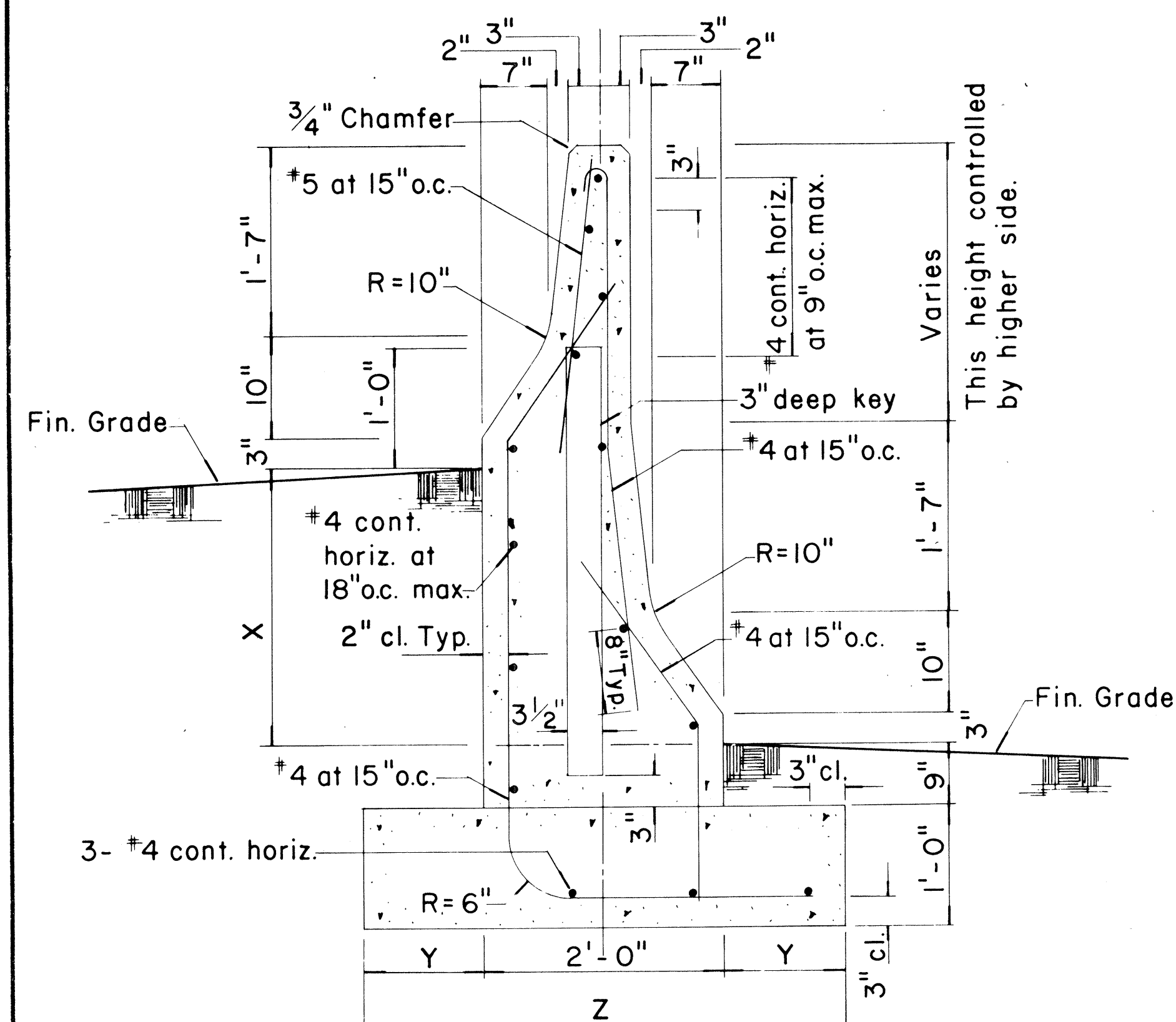
TYPE 4A
Scale: 1" = 1'-0"



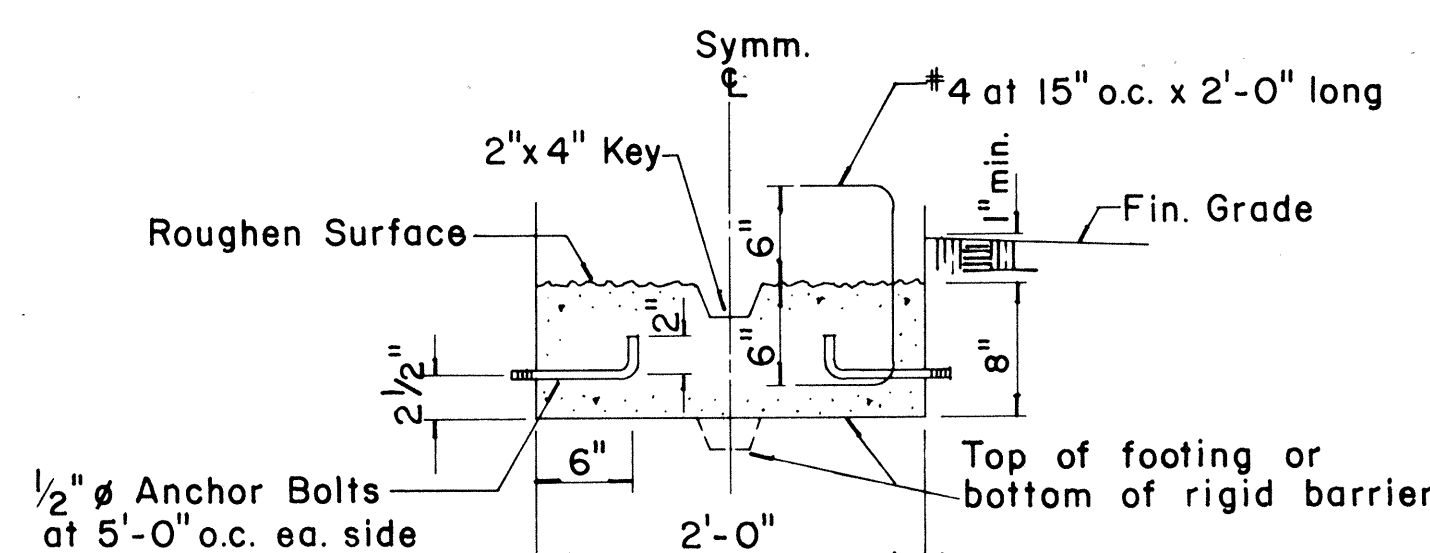
TYPE 4B
Scale: 1" = 1'-0"



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



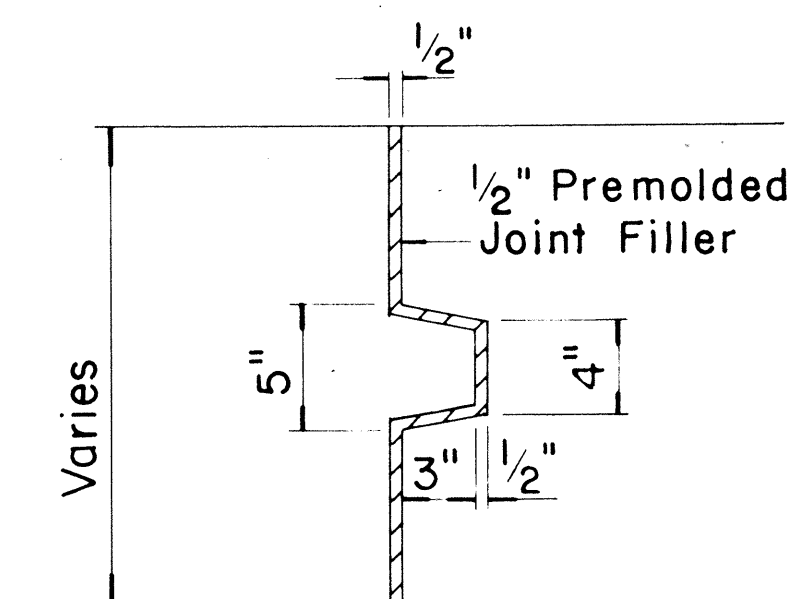
TYPE 4C & TYPE 4D
Scale: 1" = 1'-0"



OPTIONAL CONSTRUCTION JOINT DETAILS
Scale: 1" = 1'-0"

NOTE:
The intent of the optional construction joint details for the Type 4 Rigid Barrier Guard Rail is to provide a method of securing the forms and preventing uplift so that the barrier will have a uniform and presentable appearance. The contractor may submit an alternate method of constructing the barrier for the approval of the Engineer and for use on a trial basis. Any unsatisfactory work shall be removed or corrected as directed by the Engineer and at the Contractor's expense.

- GENERAL NOTES**
- Precast Rigid Barrier Guard Rail may be installed as an option to cast-in-place Type 4 Rigid Barrier Guard Rail. Contractor shall submit shop drawings to Engineer for approval.
 - Expansion Joints shall be constructed at ninety-foot (90 ft.) maximum intervals and at existing expansion joints of structures. (Use 1/2" premolded joint filler, incidental to Type 4 Rigid Barrier Guard Rail). Control Joints shall be placed between expansion joints at 30' maximum. Shear keys shall be required at all construction joints.
 - The exterior surface and vertical alignment of the Type 4 Rigid Barrier Guard Rail shall be constructed to give a uniform and presentable appearance. Variation of more than 1/4" in 20' max. and 1/2" in 40' or more will be considered objectionable. The Engineer shall determine the acceptability of the work. During the course of the work, samples may be tested and measurements made to establish whether or not the specified values or dimensions are being met. If the specified values or dimensions are not being met, the Engineer shall determine the degree of the non-conformance, the effect on the serviceability of the project, whether the work be accepted and remain in place and, if so, the amount to be paid for such work, or whether the work shall be removed and replaced or otherwise corrected at the Contractor's expense.



SECTION THRU KEY AT EXPANSION JOINT
Scale: 1 1/2" = 1'-0"

TYPE	DIFFERENCE IN FIN. GRADE		FOOTING	
	X		Y	Z
4C	1'-0" min., 2'-4" max.		1'-0"	4'-0"
4D	Greater than 2'-4", 4'-4" max.		1'-3"	4'-6"

NOTE:
Except where noted all dimensions shall be the same for Type 4C and Type 4D.

NO.	REVISION	APPROVED BY	DATE
1	Supersede Sht. DT 521 Approved 12-30-69	W.T.	2/10/72

APPROVAL RECOMMENDED:
Eishi Tanaka 2/10/72
 TRAFFIC ENGINEER DATE

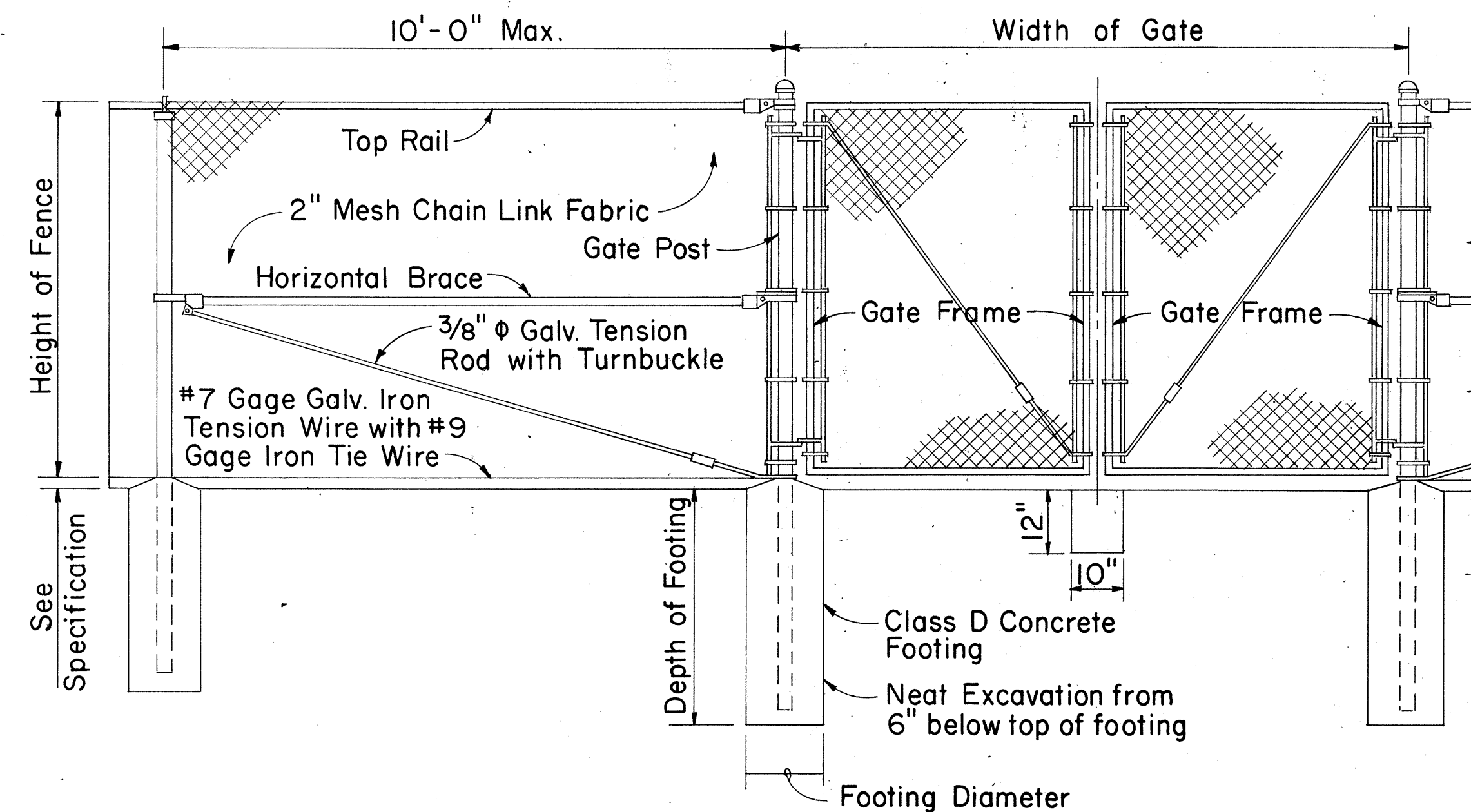
APPROVED:
Hubert Zalski 2/10/72
 ASSISTANT CHIEF, ENGINEERING DATE

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

STANDARD DETAILS
GUARD RAIL TYPE 4
(RIGID BARRIER)

Scale: As Shown
 SHEET No. 10 OF 10 SHEETS DT 521

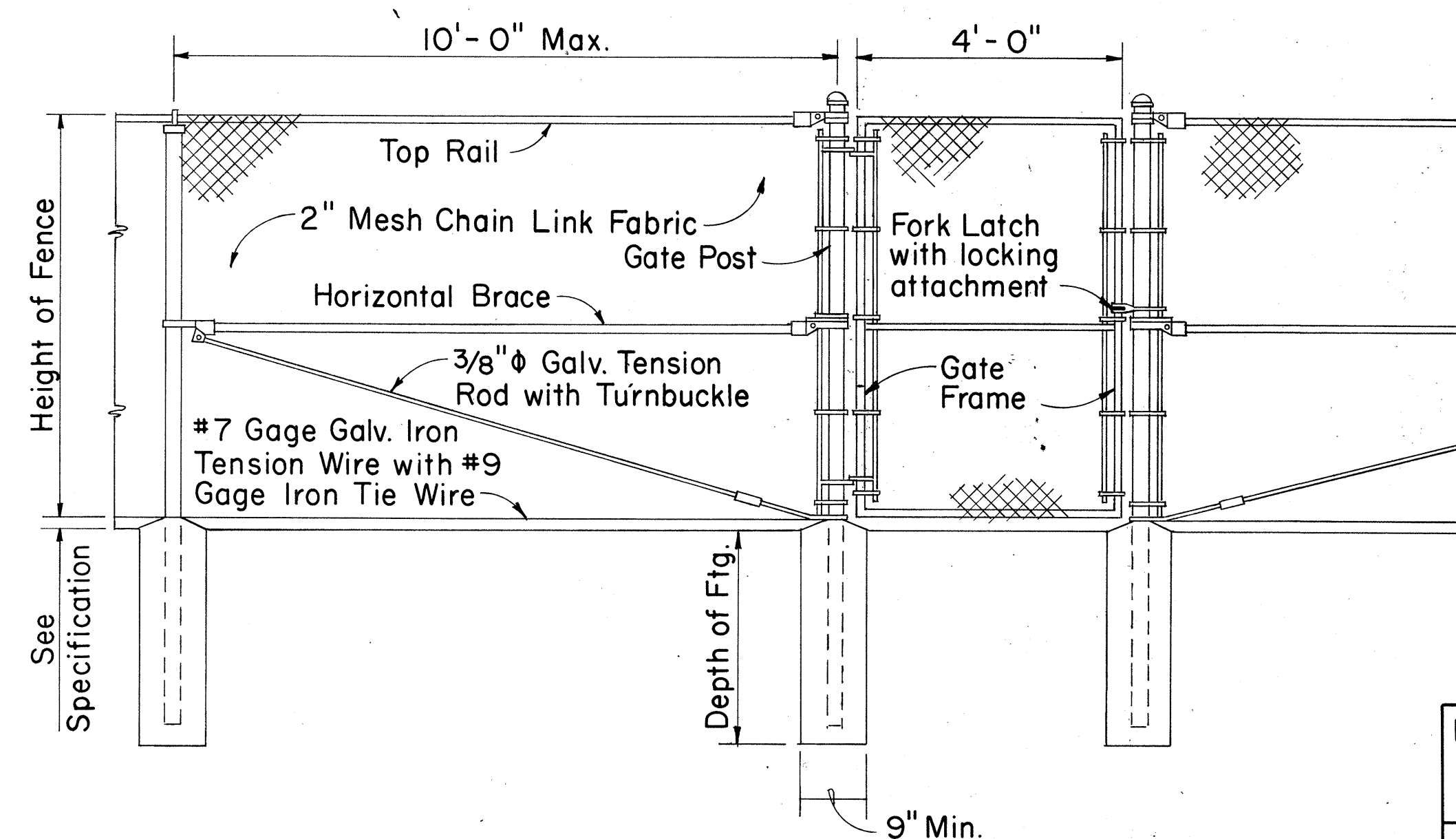
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1H2-11(10)16	1973	22	104



LINE POST GATE POST GATE POST

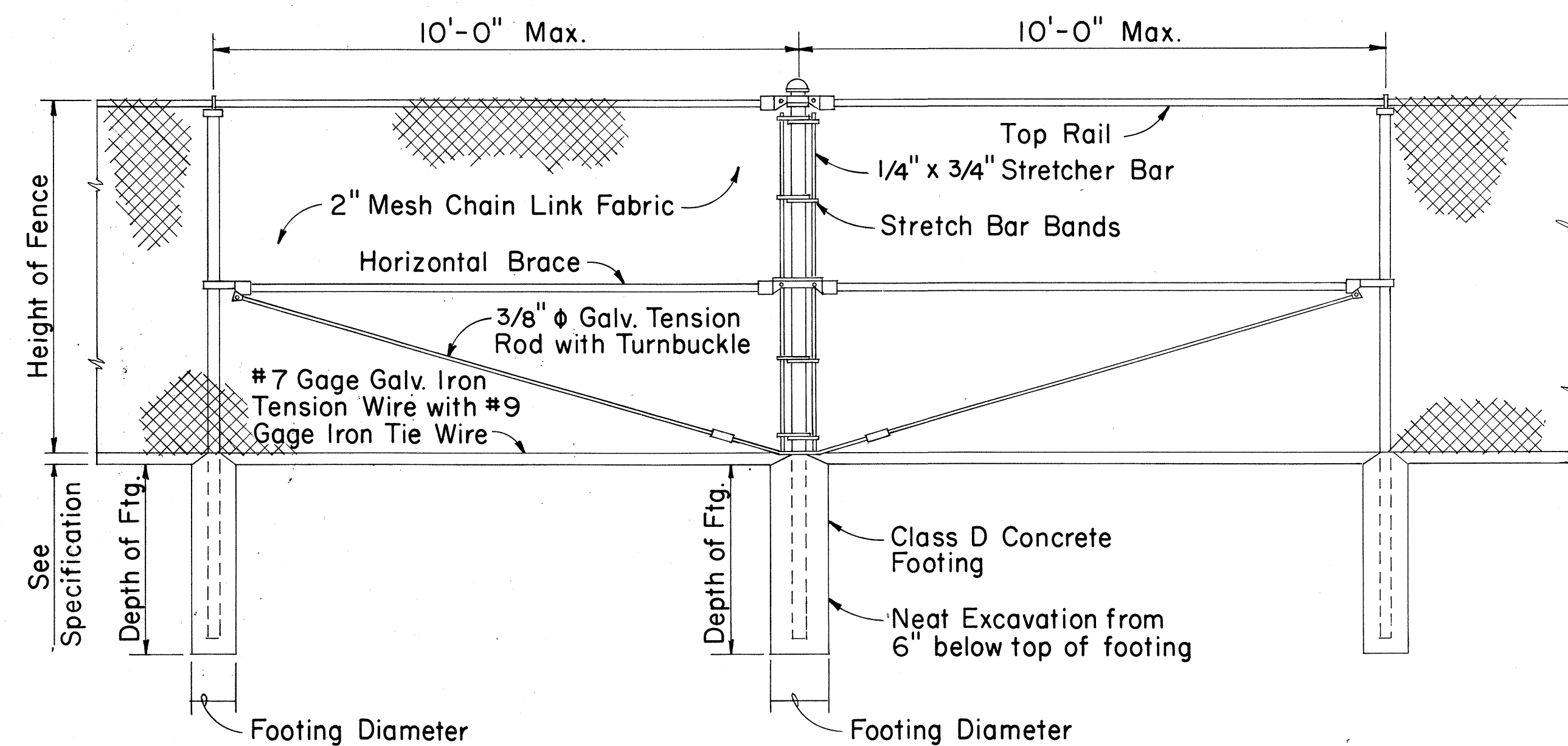
DETAIL OF CHAIN LINK GATE

- NOTE: 1. Gate fork latch and lock, flush plate and anchor, and plunger shall be installed with Gates, and shall be considered as incidental to Chain Link Fence Gate.
2. Gate frames shall be mitered and welded at corners.
3. Fence detail not shown shall be in accordance with the Standard Specifications.



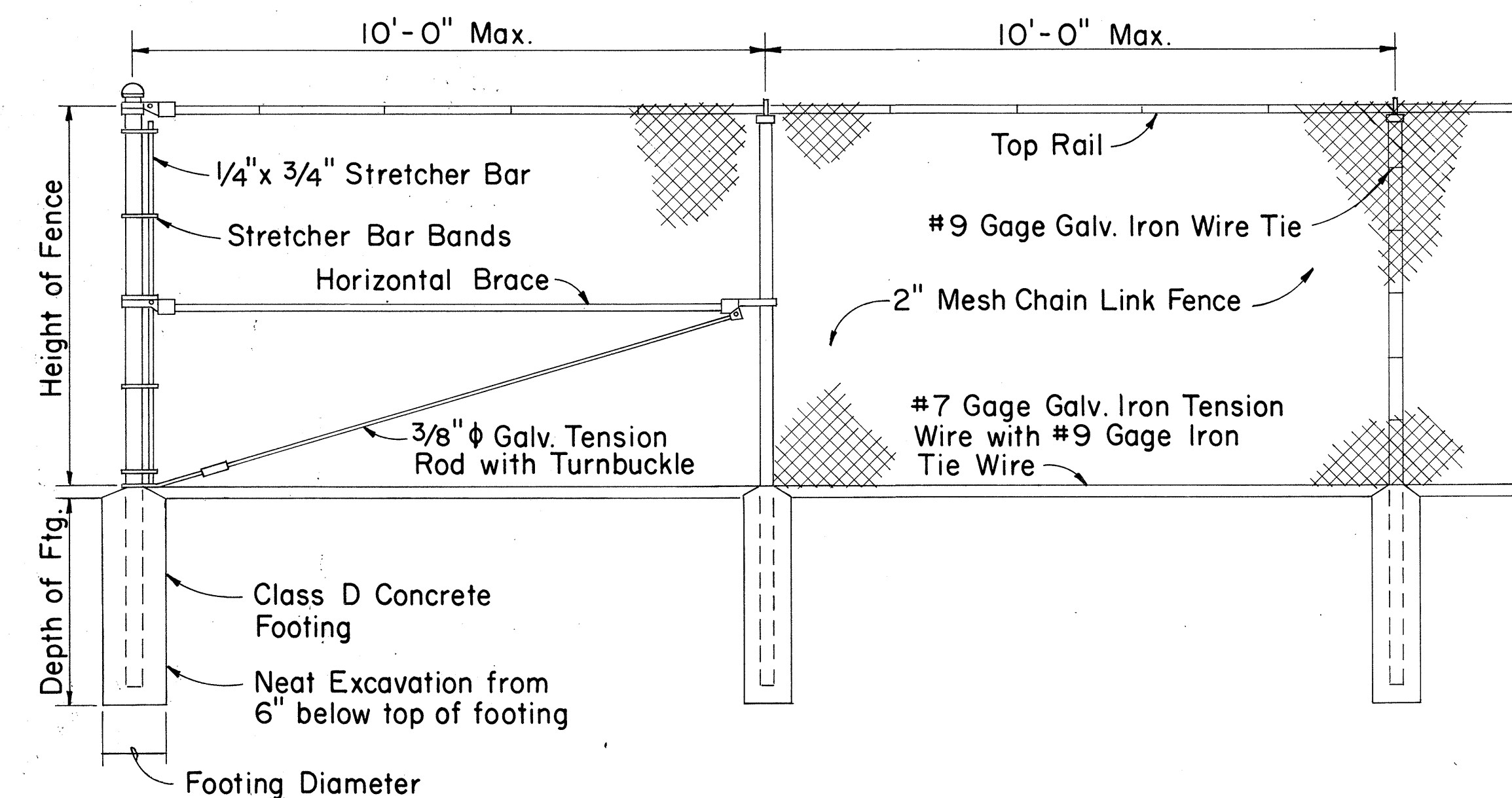
LINE POST GATE POST GATE POST

DETAIL OF 4 FT. CHAIN LINK GATE



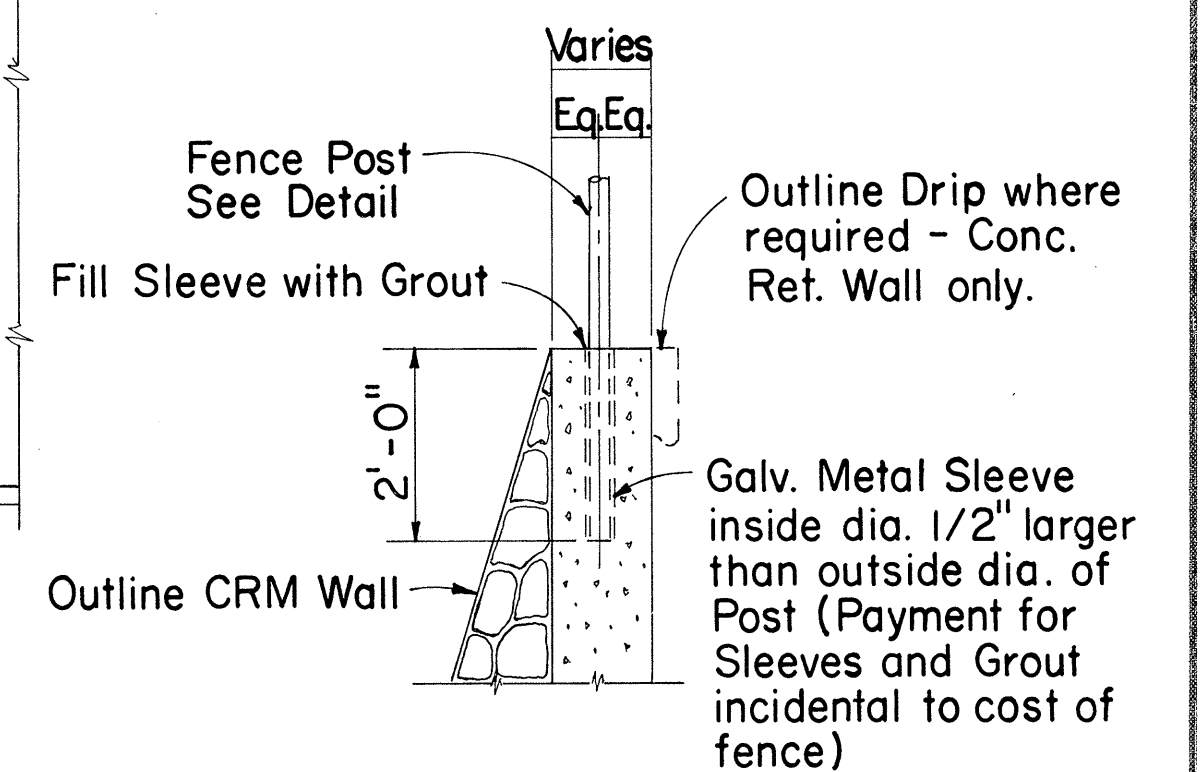
LINE POST PULL POST LINE POST

TYPICAL SECTION (WITH CONCRETE FOOTING)



END POST LINE POST LINE POST

CHAIN LINK FENCE DETAILS



TYPICAL SECTION (ON CRM & CONC. RET. WALL)

APPROVAL, RECOMMENDED:
M. H. H. H. 12-4-69
HIGHWAY DESIGN ENGINEER DATE

APPROVED:
A. R. R. R. 12-10-69
ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

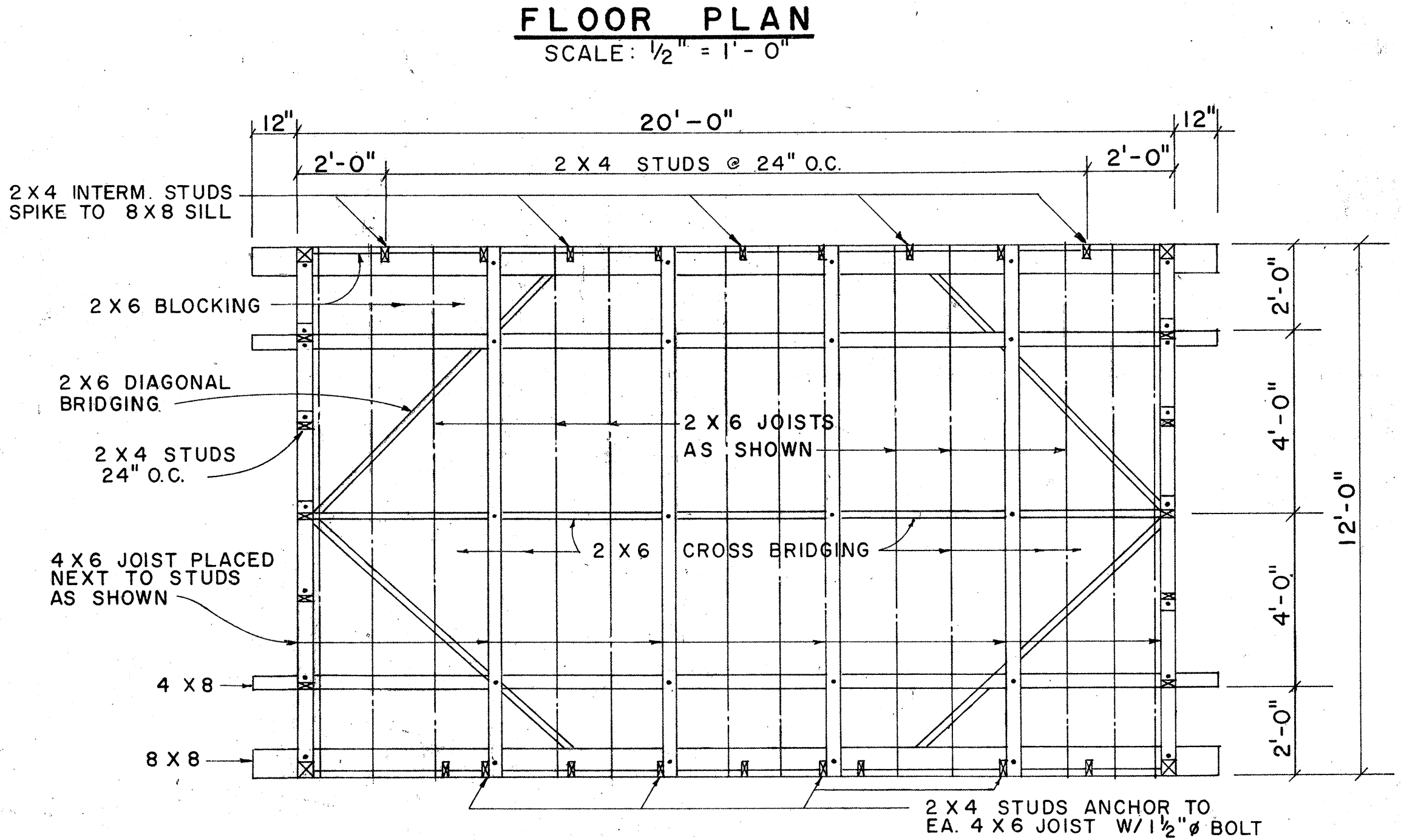
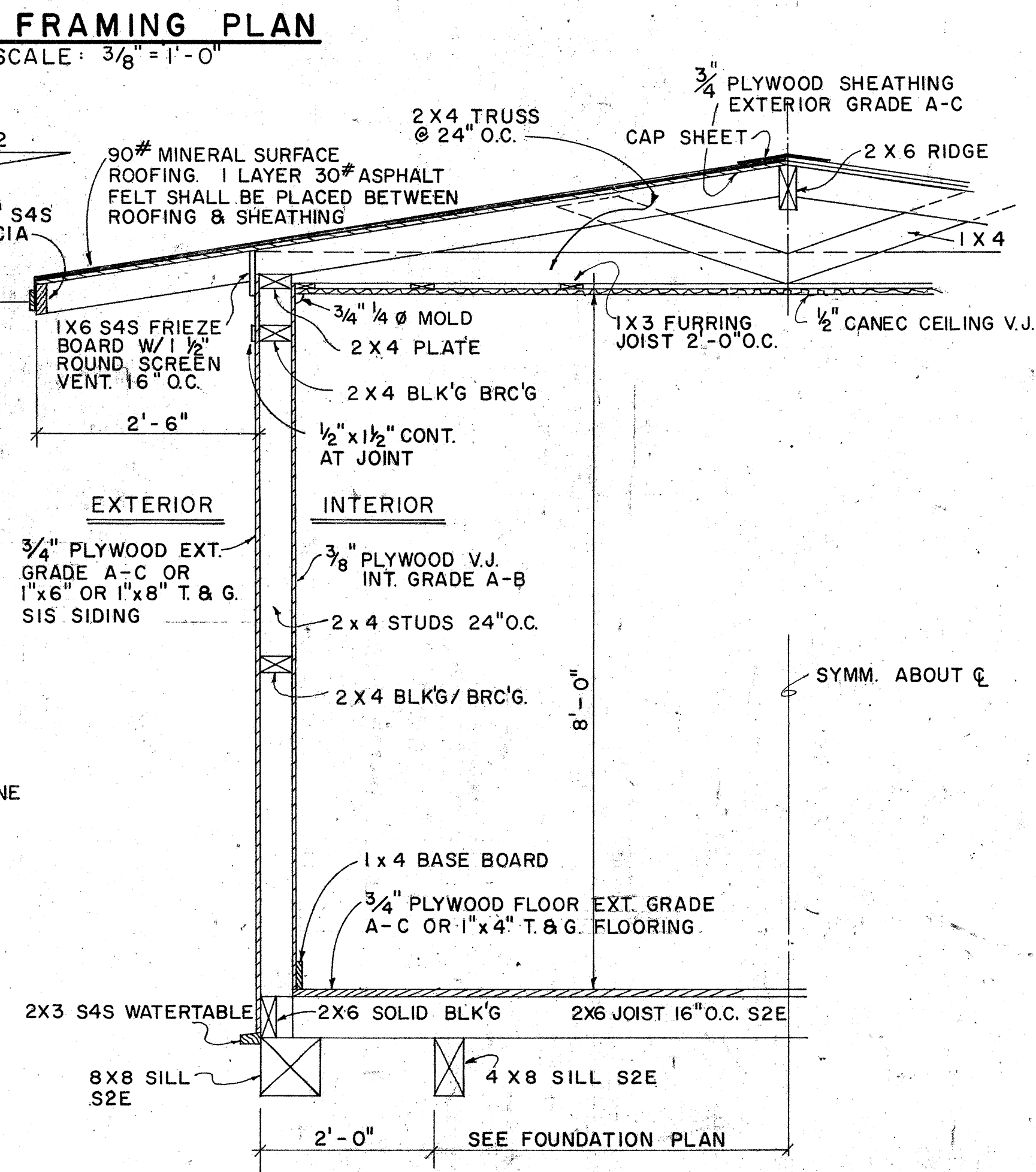
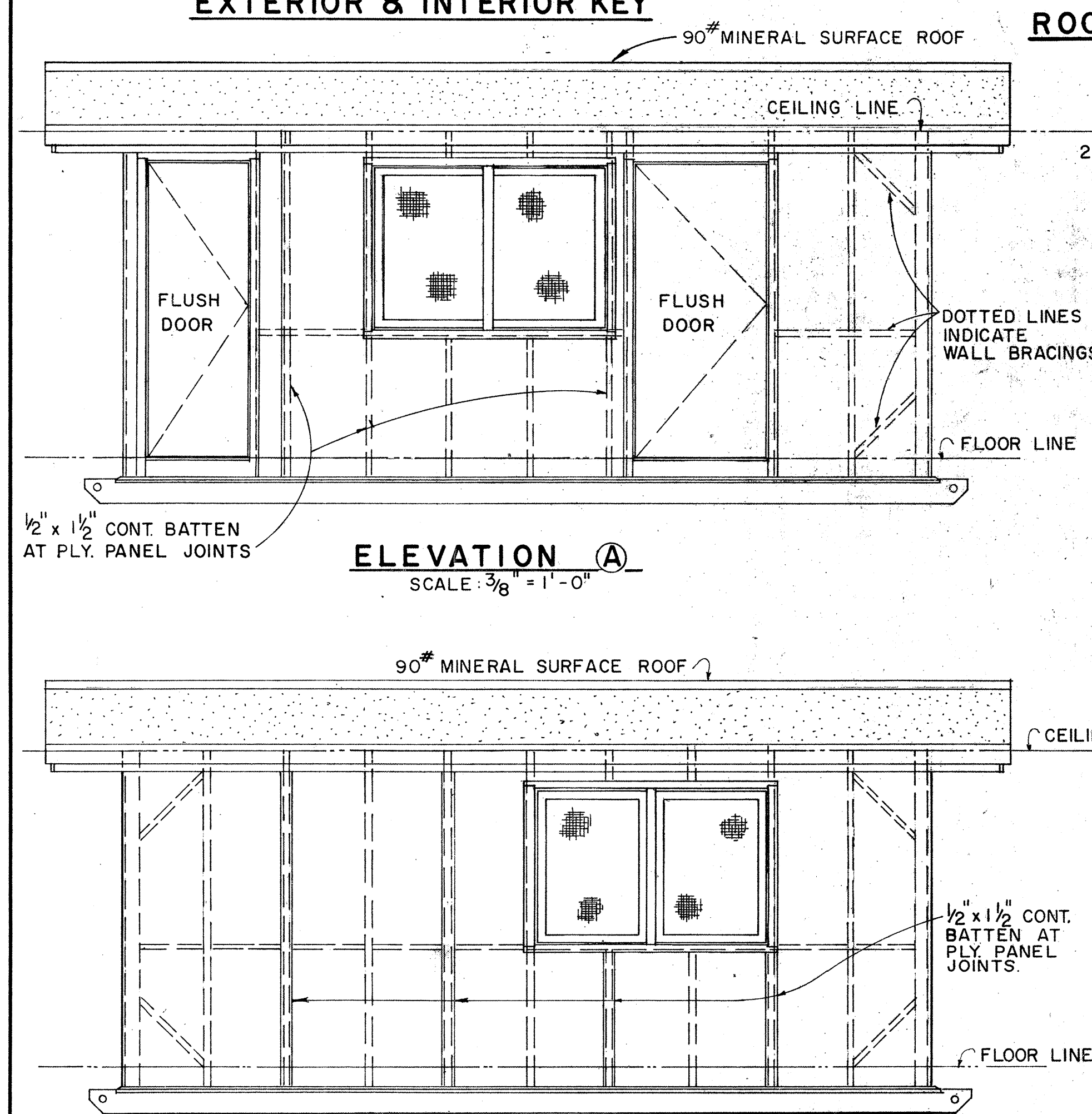
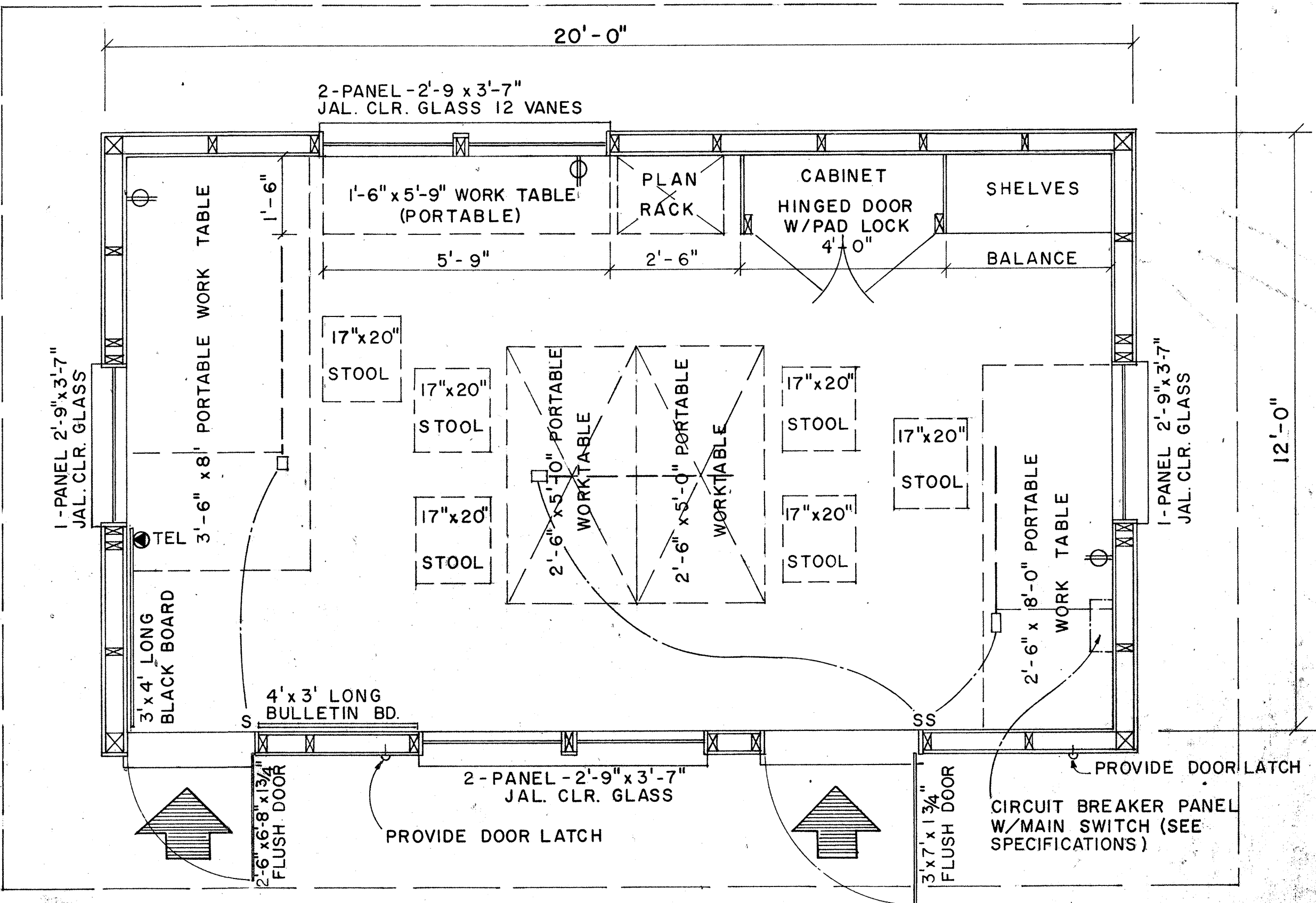
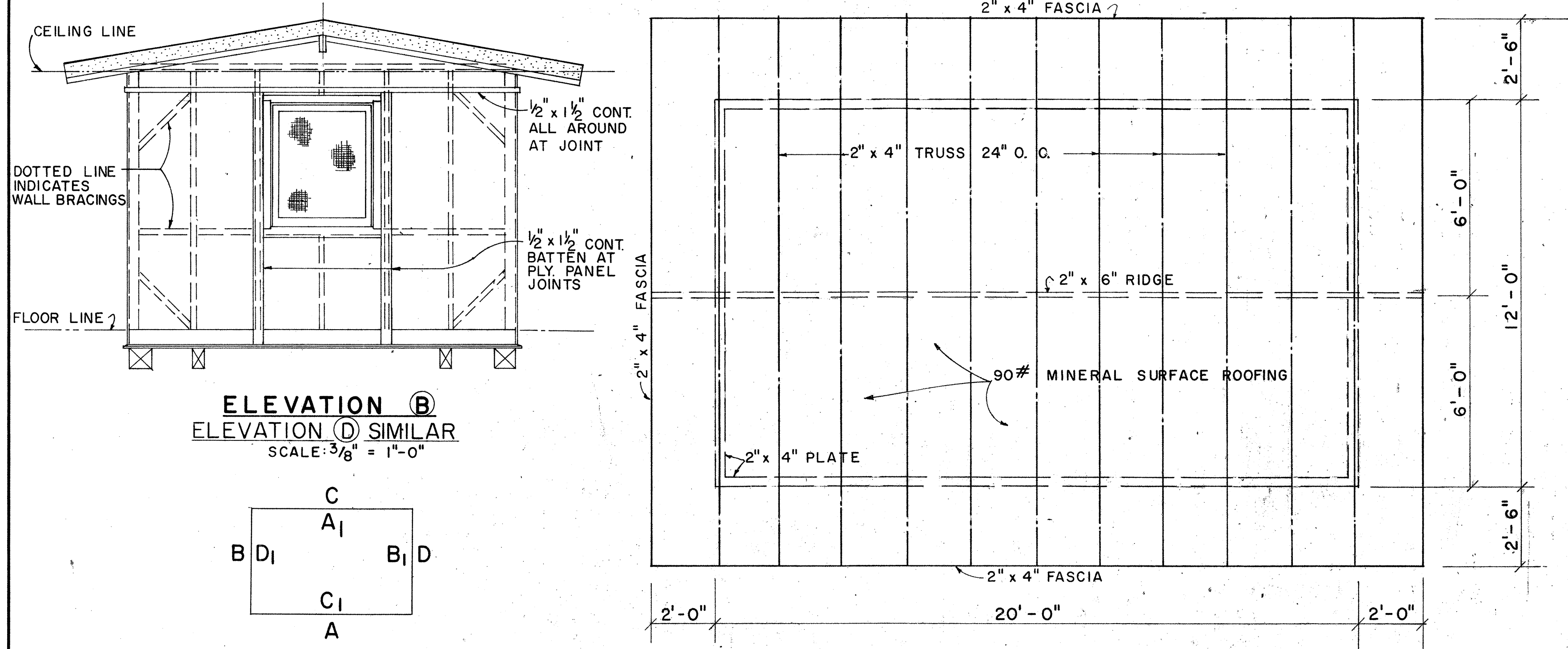
STANDARD DETAILS

CHAIN LINK FENCE
(WITH TOPRAIL)

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

SHEET No. 11 OF 16 SHEETS DD 607.1

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAWAII	1H2-1(10)G	1973	23	104



APPROVAL RECOMMENDED:
M. J. Jones 12-4-69
HIGHWAY DESIGN ENGINEER DATE

APPROVED:
John J. Jones 12-10-69
ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION

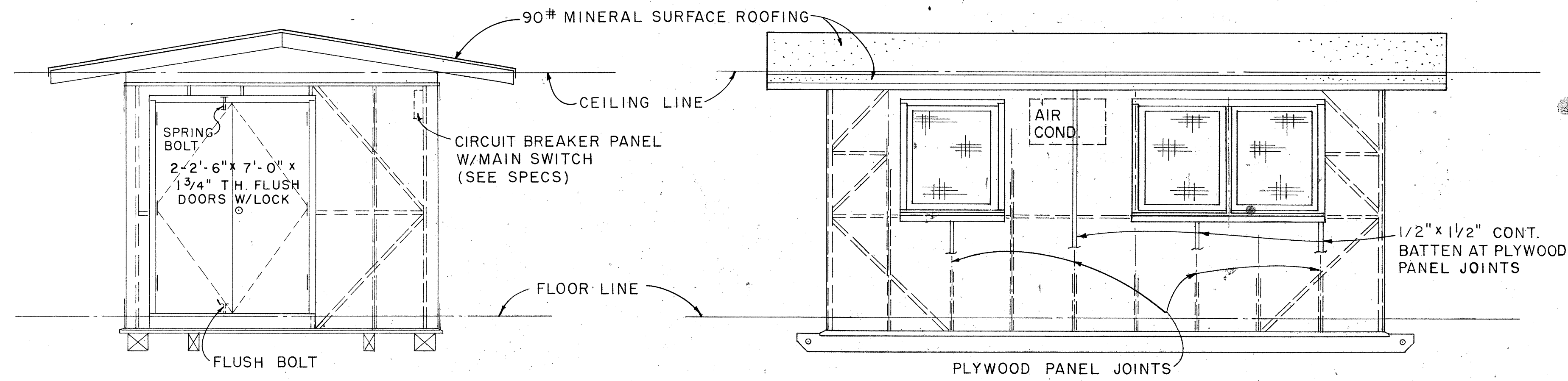
FIELD OFFICE

Scale: As Noted
SHEET NO 12 OF 16 SHEETS DD 636.1

23

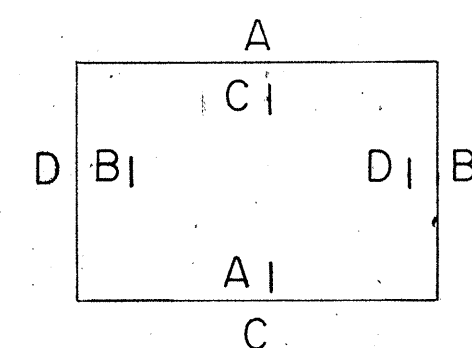
SURVEY PLOTTED BY: _____
 DATE: _____
 ORIGINAL PLAN: _____
 TRACED BY: _____
 CHECKED BY: _____
 QUANTITIES BY: _____
 NO. _____
 No. _____

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	EH2(10)6	1973	25	104

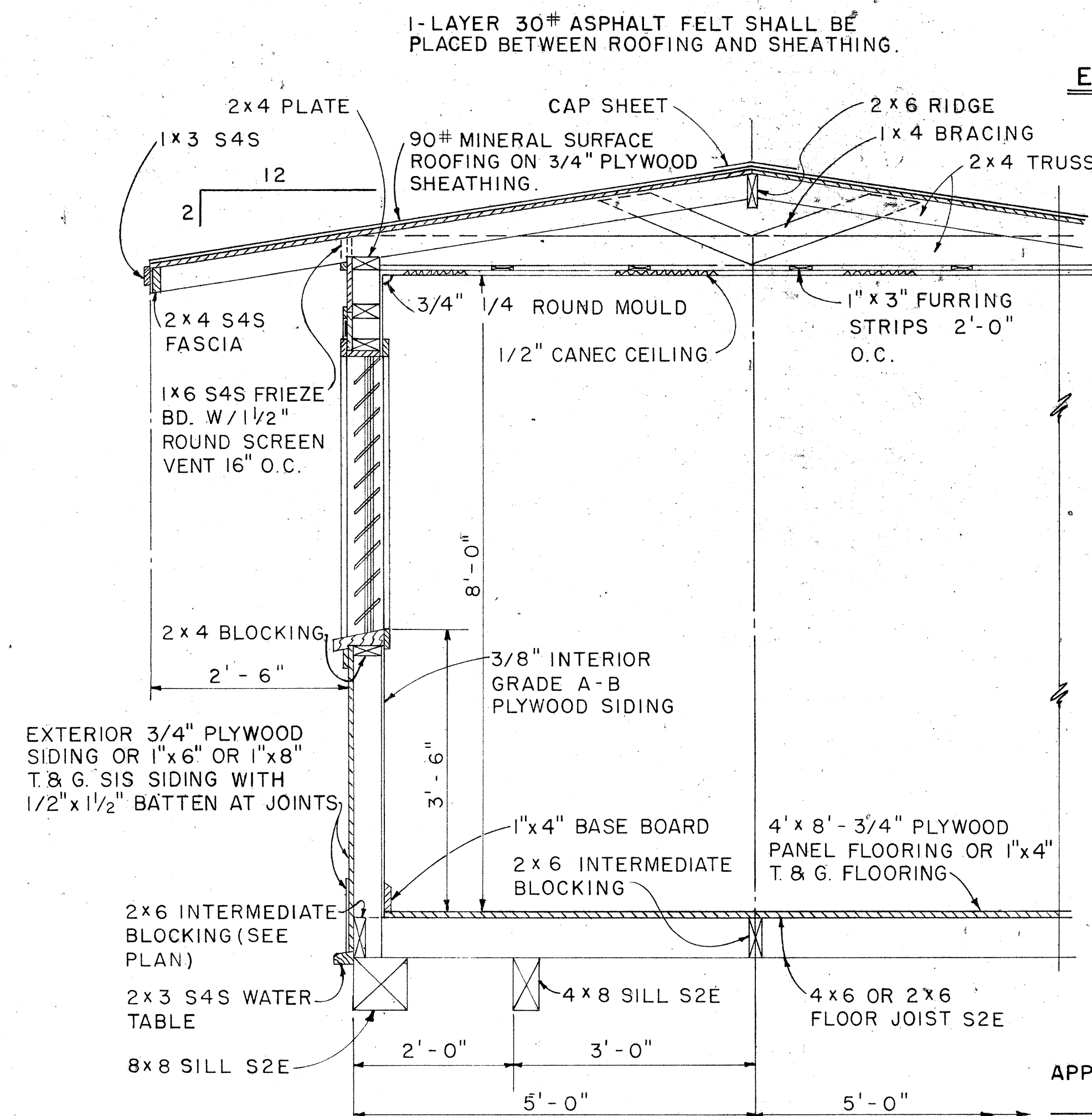


ELEVATION B
SCALE: 3/8" = 1'-0"

ELEVATION A
SCALE: 3/8" = 1'-0"



EXTERIOR & INTERIOR KEY

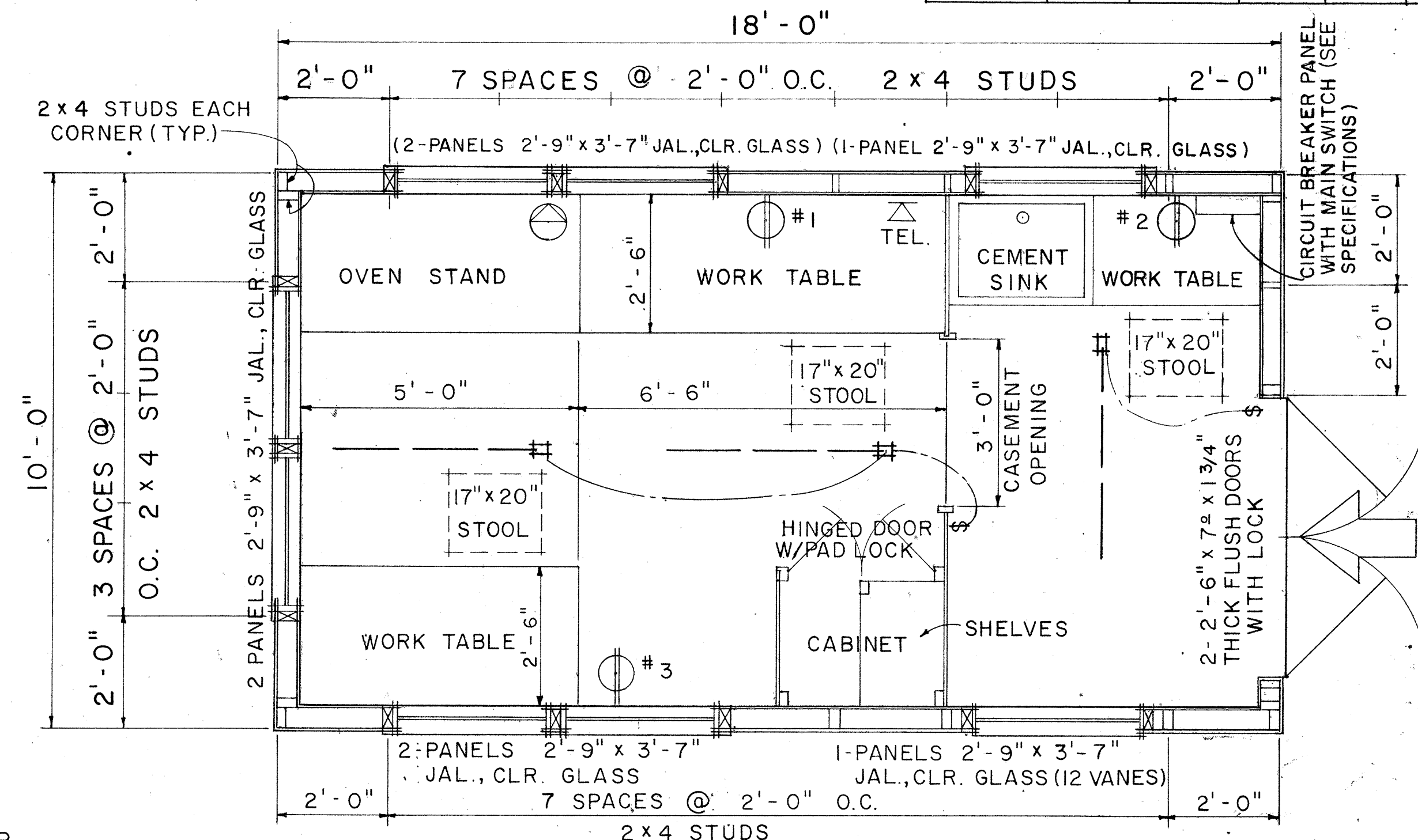


NOTE:
ALL 3/4" PLYWOOD SHALL BE EXTERIOR GRADE A-C OR BETTER.

TYPICAL SECTION
SCALE: 3/4" = 1'-0"

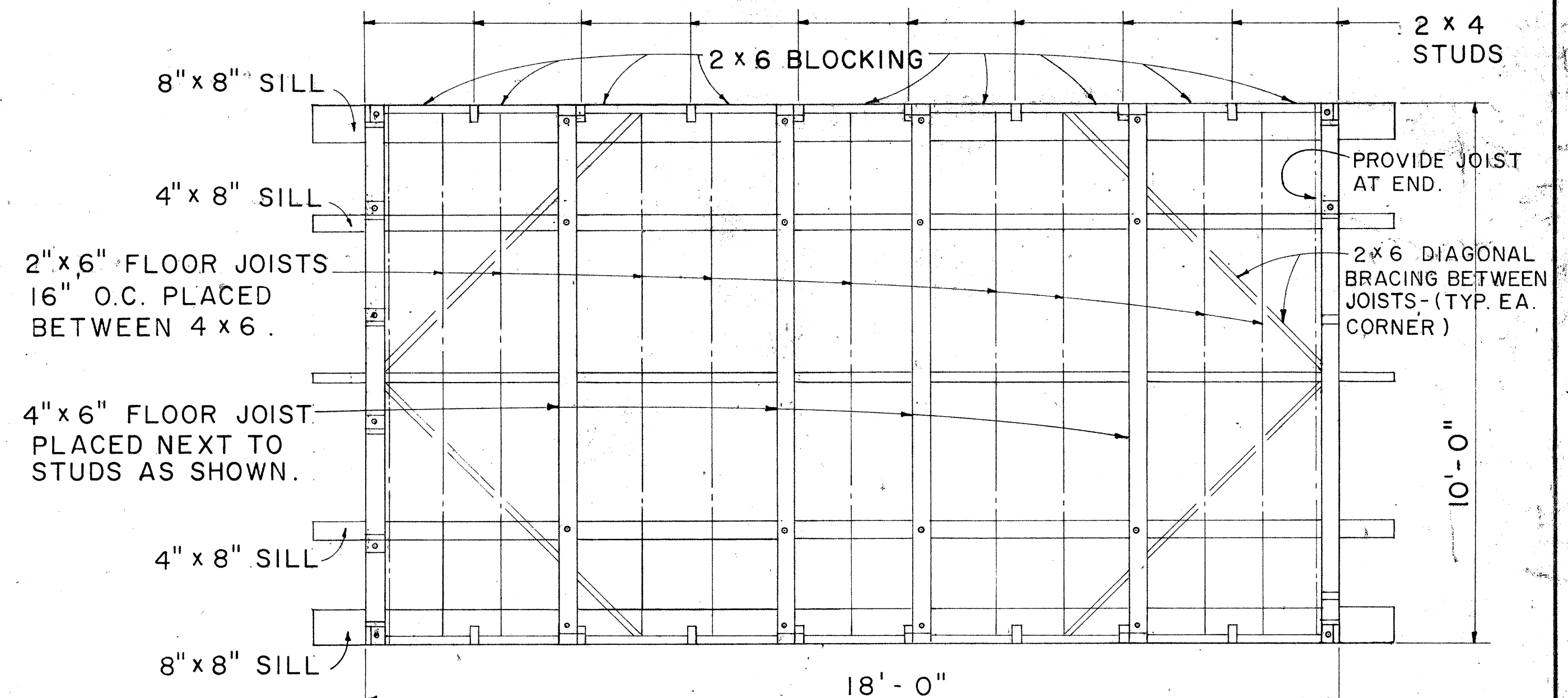
APPROVAL RECOMMENDED:
HIGHWAY DESIGN ENGINEER
DATE 12-4-69

APPROVED:
ASSISTANT CHIEF, ENGINEERING
DATE 12-10-69



FLOOR PLAN
SCALE: 1/2" = 1'-0"

NOTE:
1. FLUORESCENT FIXTURE SHALL BE 48", 2 LAMP, 40 WATT, RAPID START.
2. TELEPHONE AND WALL OUTLET 4'-0" ABOVE FLOOR.



FLOOR FRAMING PLAN
SCALE: 1/2" = 1'-0"

NO.	REVISION	APPROVED BY	DATE

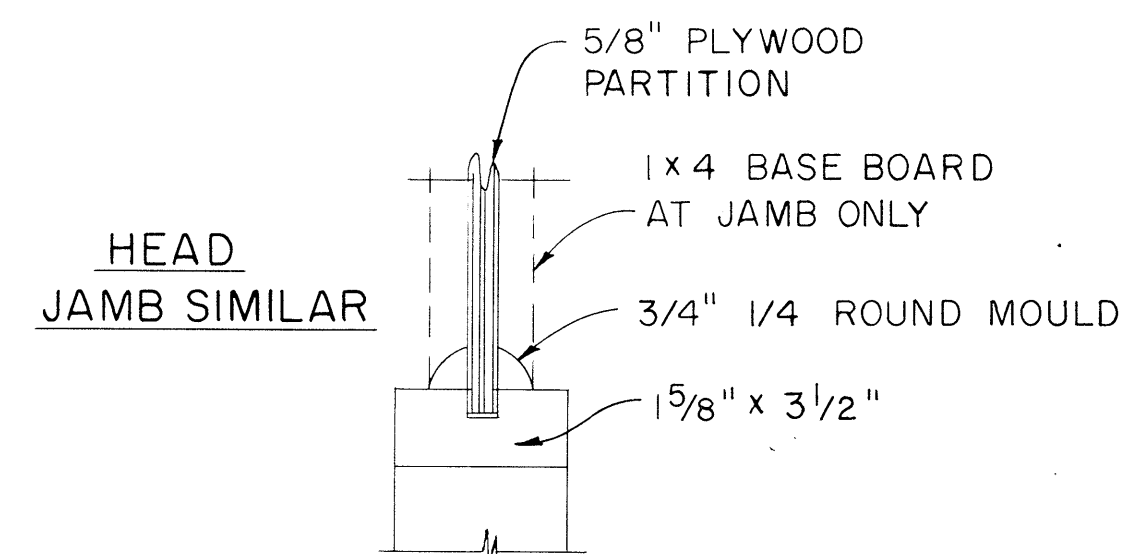
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PROJECT SITE LABORATORY

Scale: As Noted

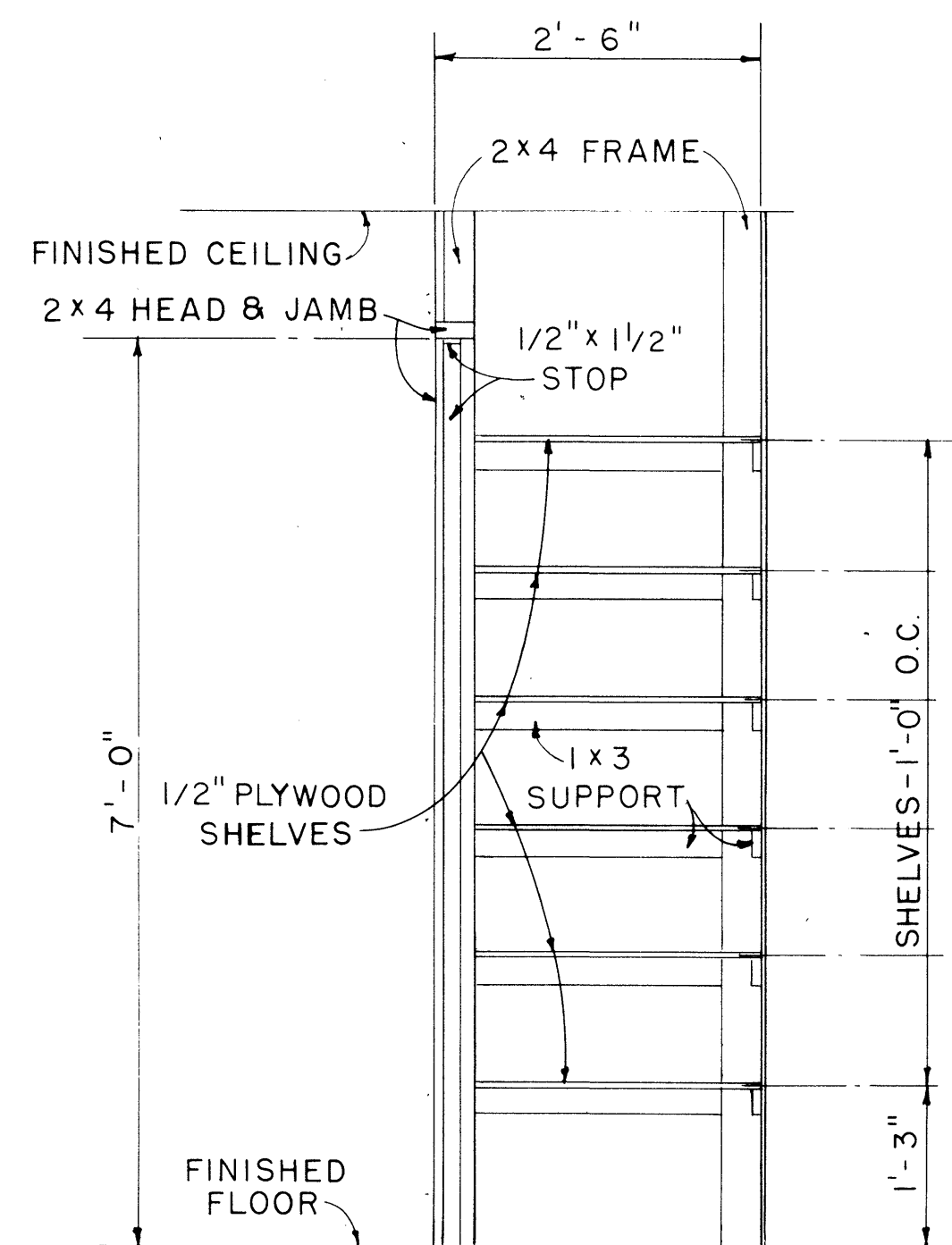
SHEET No. 14 OF 16 SHEETS DD 636.3

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1-42-11(10)6	1973	20	104



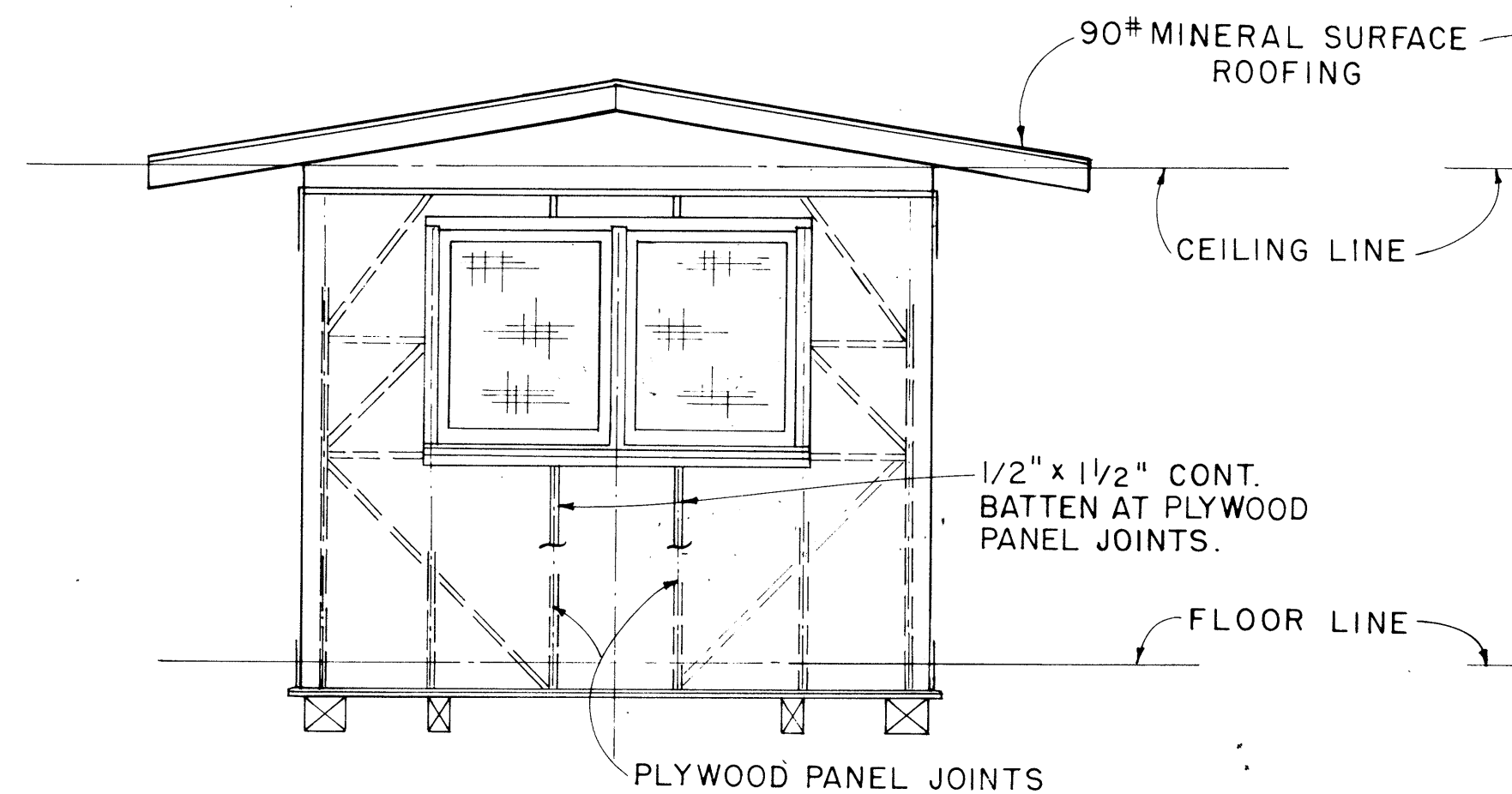
CASEMENT DETAIL

SCALE: 3" = 1'-0"



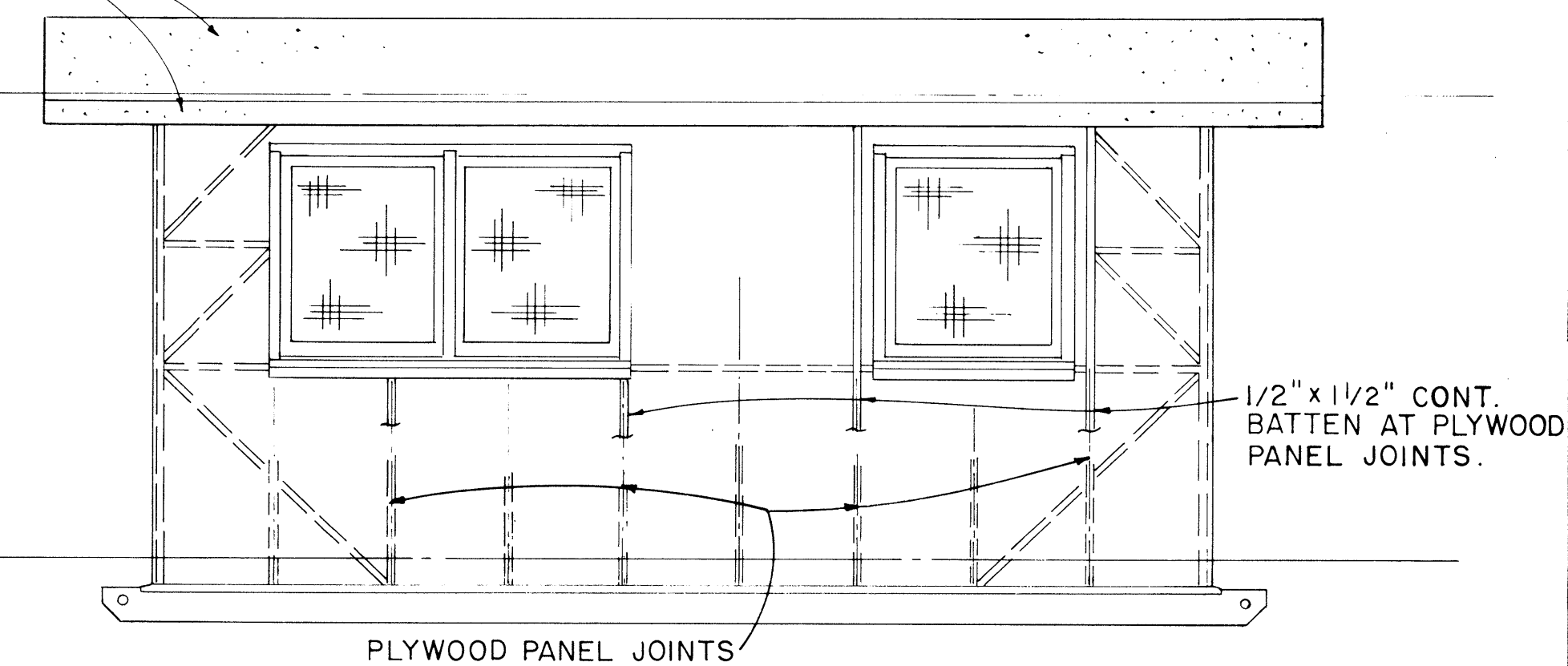
CABINET DETAIL

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



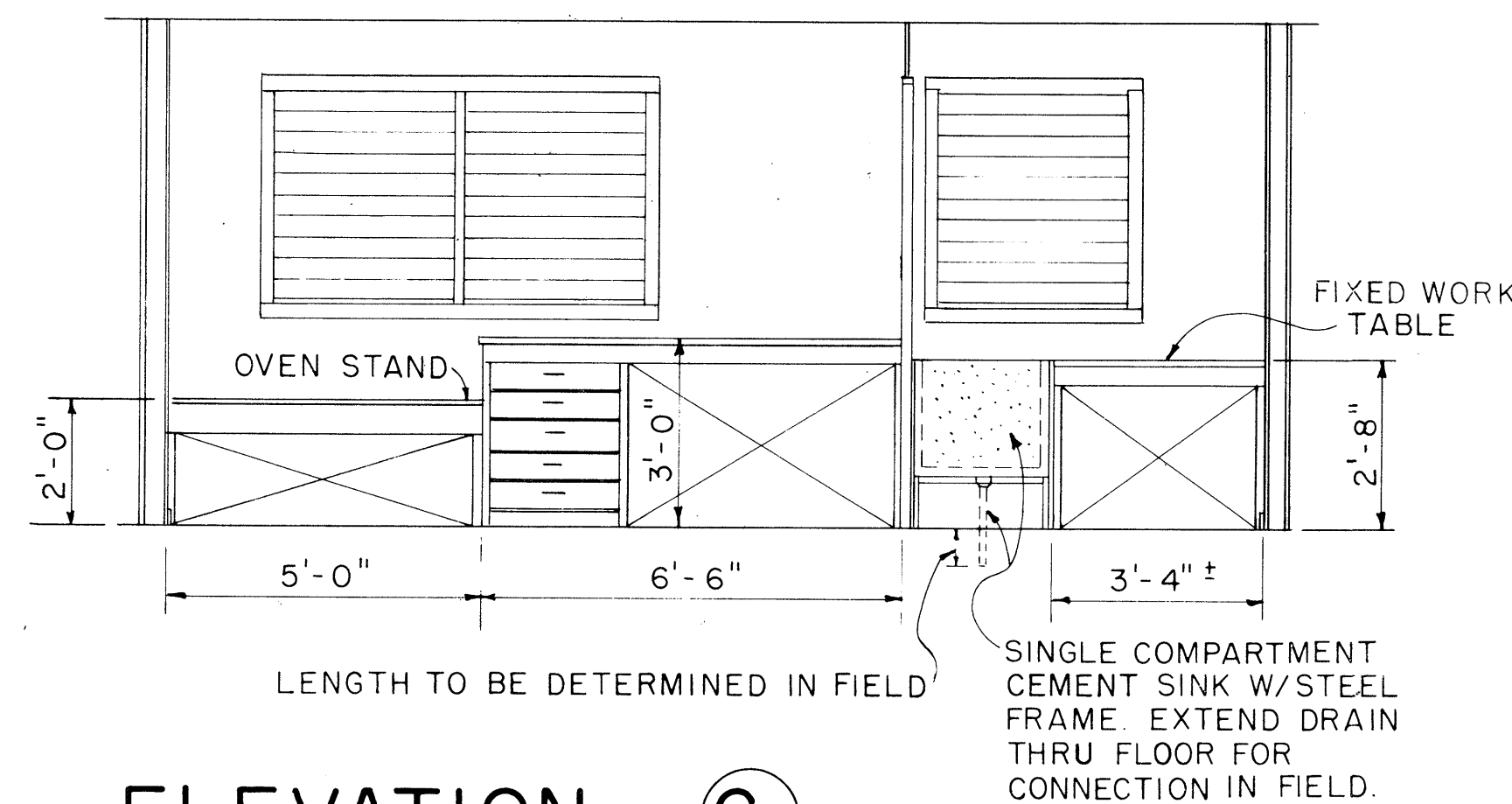
ELEVATION D

SCALE: 3/8" = 1'-0"



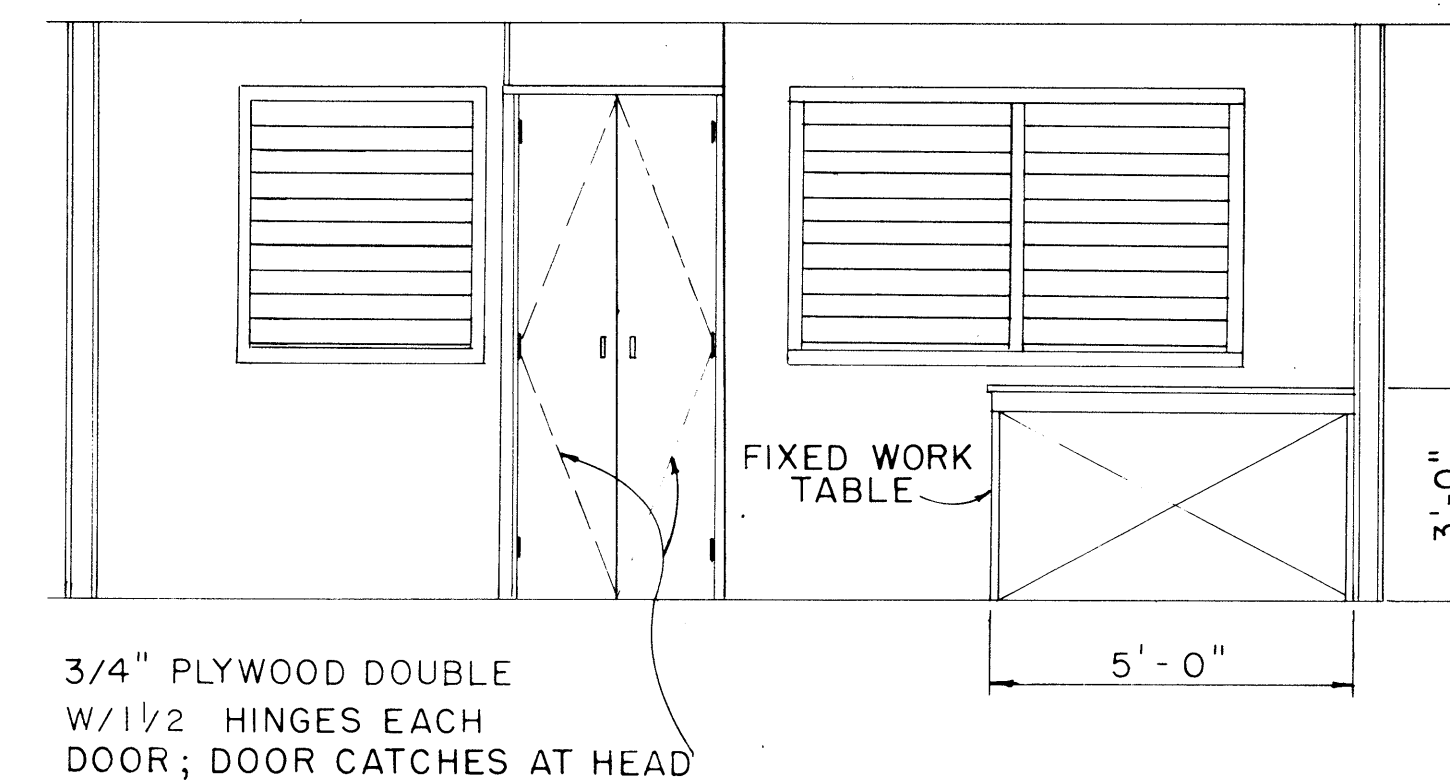
ELEVATION C

SCALE: 3/8" = 1'-0"



ELEVATION C1

SCALE: 3/8" = 1'-0"



ELEVATION A1

SCALE: 3/8" = 1'-0"

APPROVAL RECOMMENDED:

HIGHWAY DESIGN ENGINEER
12-4-69
DATE

APPROVED:

ASSISTANT CHIEF, ENGINEERING
12-10-69
DATE

NO.	REVISION	APPROVED BY	DATE

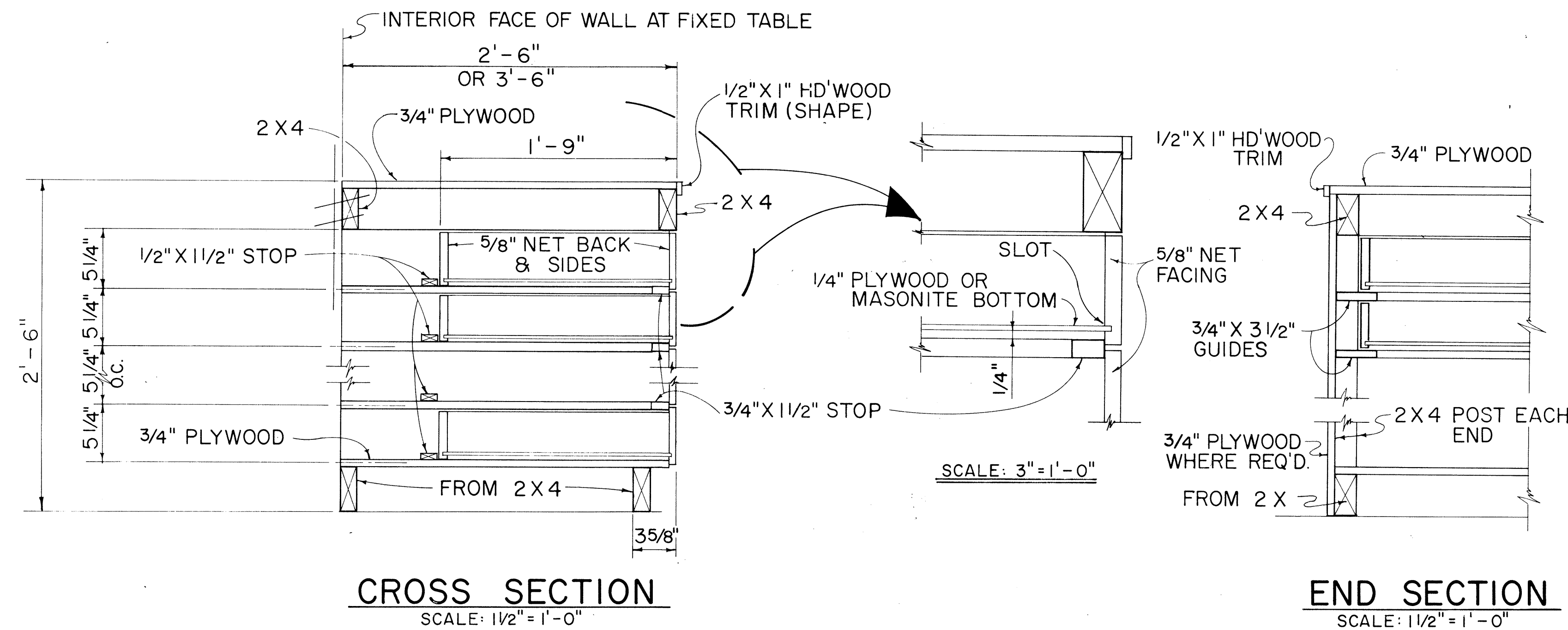
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PROJECT SITE LABORATORY

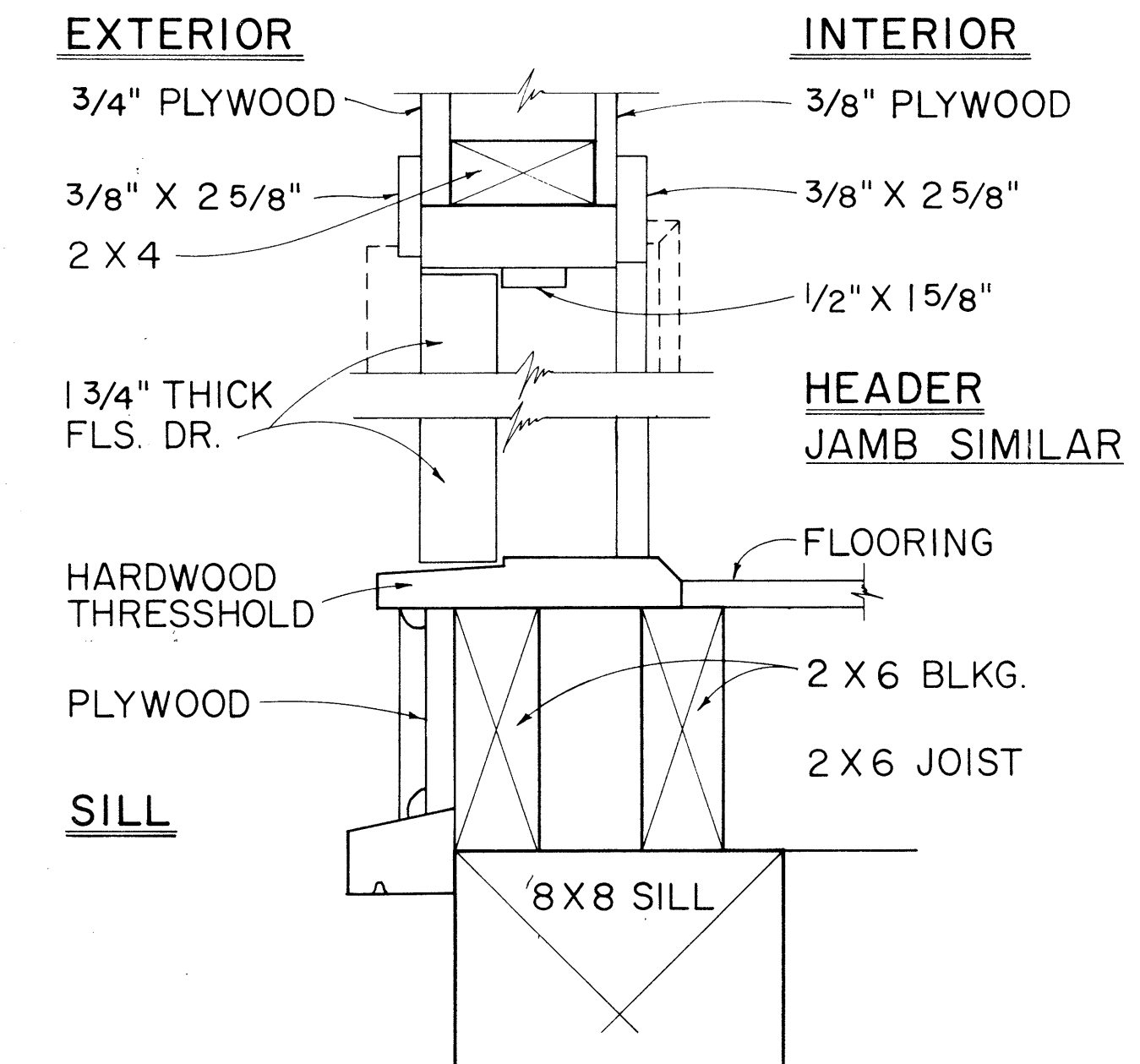
Scale: As Noted
SHEET No. 15 OF 16 SHEETS DD 636.4

SURVEY PLOTTED BY	DATE
DESIGNED BY	
TRACED BY	
NOTE BOOK	
NO.	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAWAII	HA21(0)6	1973	27	104

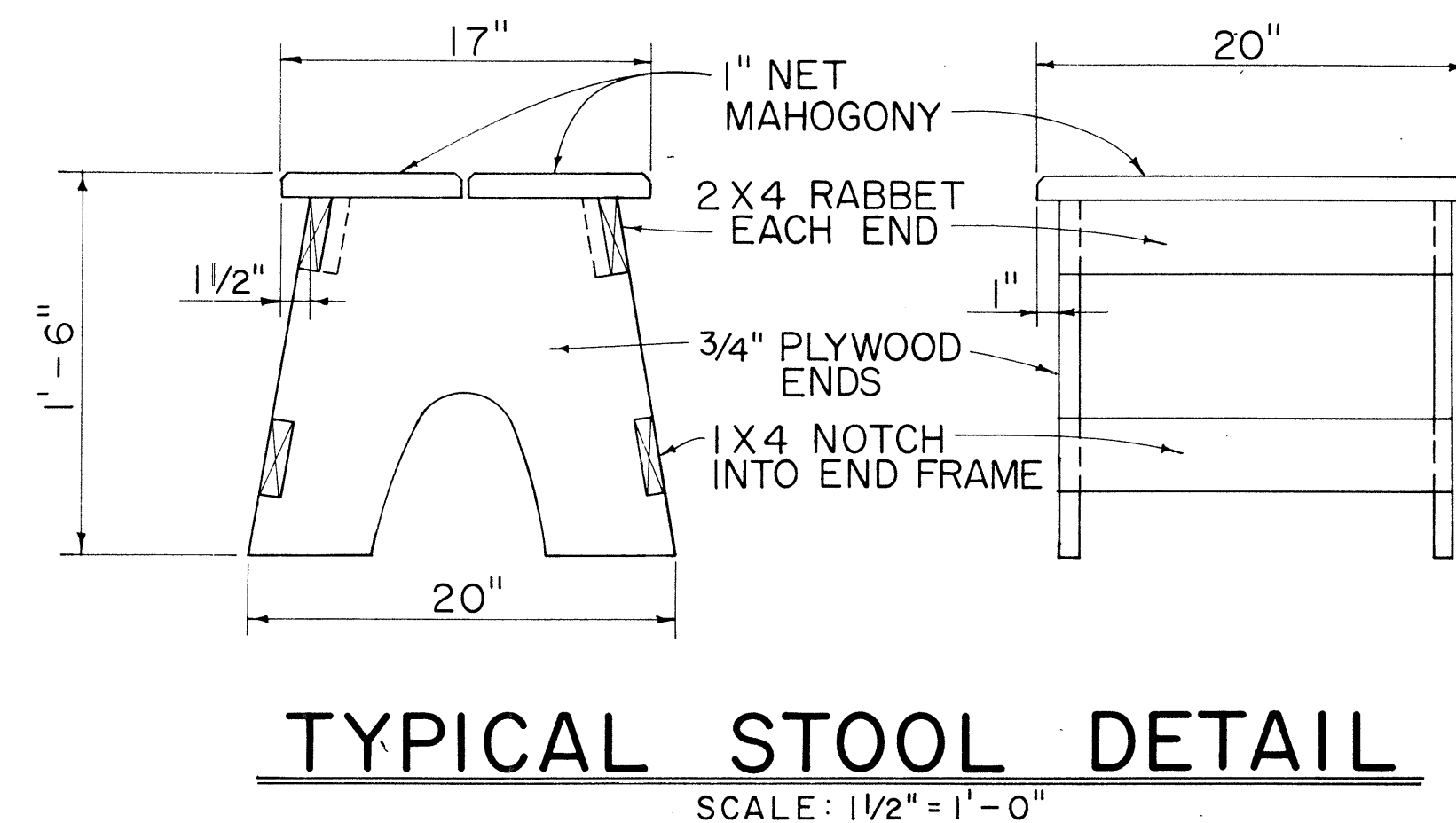


TYPICAL WORK TABLE DRAWER DETAIL



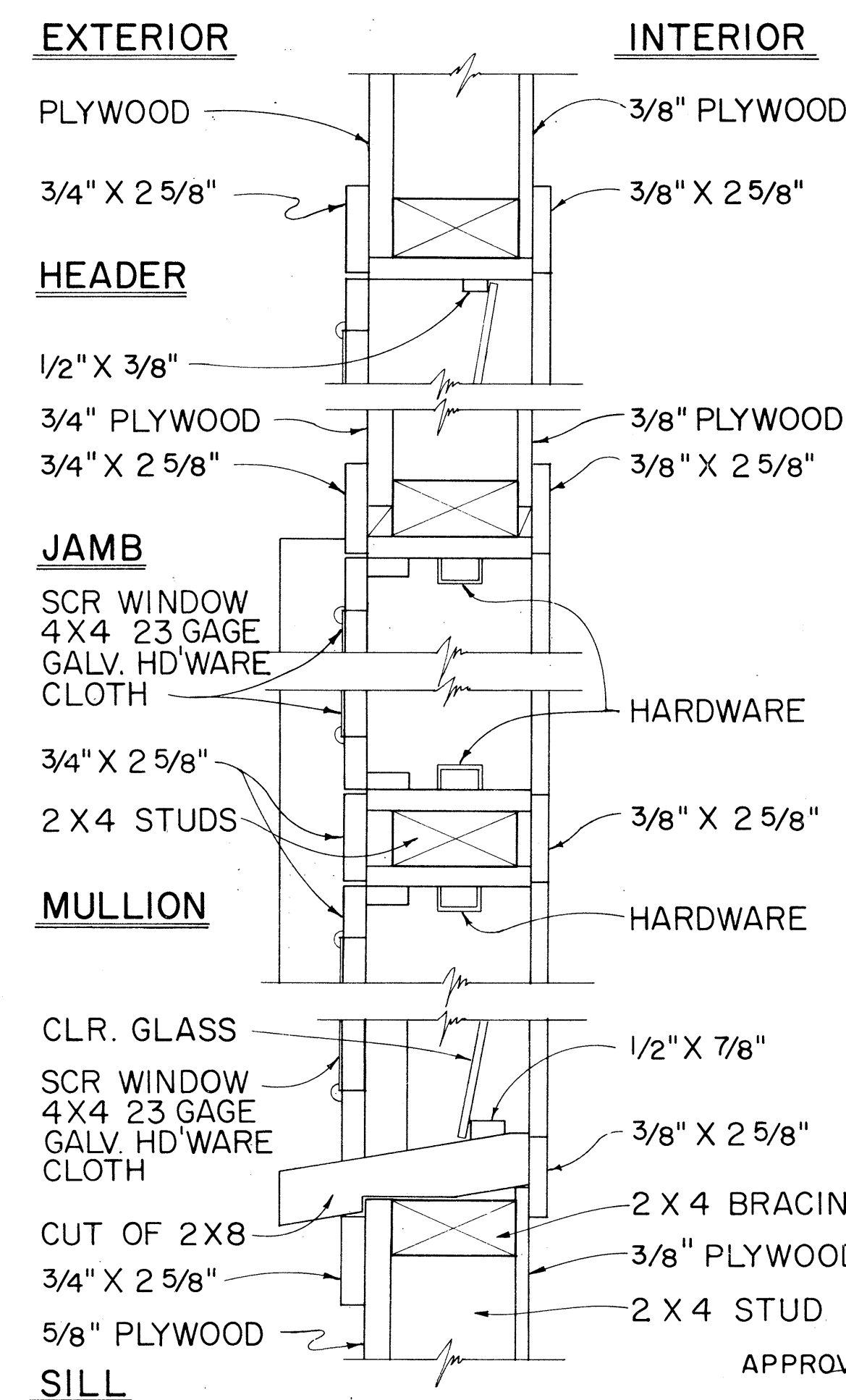
TYP. SWING OUT DOOR

TYPICAL SINGLE OR DOUBLE EXTERIOR DOOR DETAIL



TYPICAL STOOL DETAIL

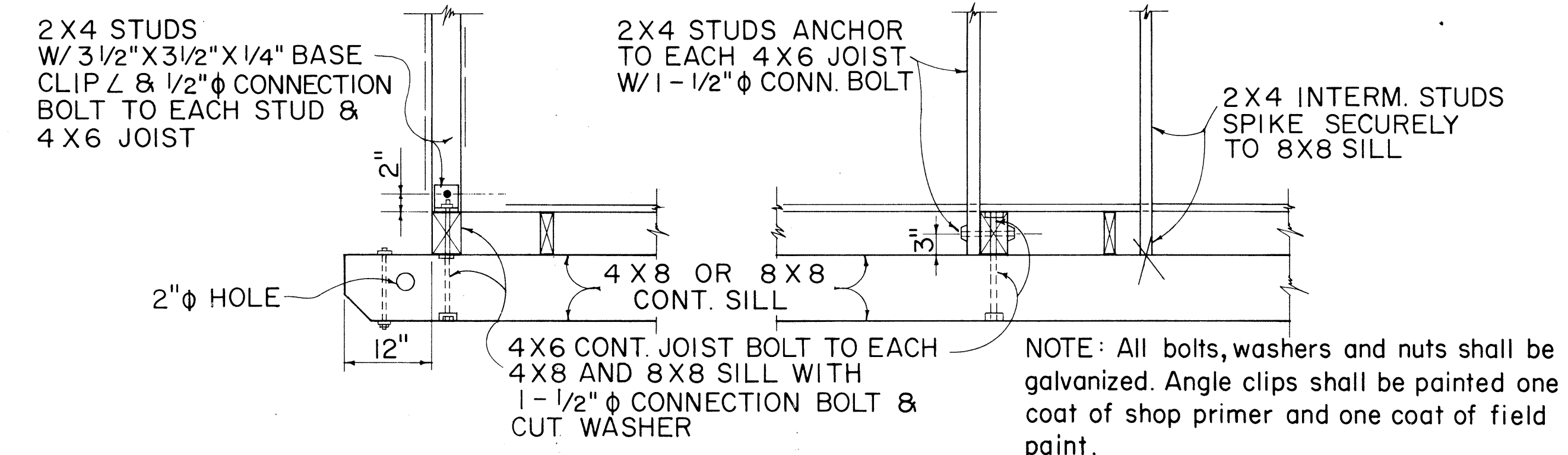
NOTE: CONTRACTOR MAY WITH THE APPROVAL OF THE ENGINEER FURNISH THE FIELD OFFICE OR PROJECT SITE LABORATORY WITH STOOLS OTHER THAN THE TYPE SHOWN IN THE DETAIL.



TYPICAL DETAIL JALOUSIES WINDOWS
SCALE: 3" = 1'-0"

APPROVAL RECOMMENDED:
M. J. [Signature] 12-4-69
HIGHWAY DESIGN ENGINEER DATE

APPROVED:
[Signature] 12-10-69
ASSISTANT CHIEF, ENGINEERING DATE



AT ENDS OF BLDG. ALONG SIDES OF BLDG.

TYPICAL 2 X 4 STUD & 4 X 6 FLOOR JOIST BASE CONNECTION DETAILS

NO.	REVISION	APPROVED BY	DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

FIELD OFFICE
&
PROJECT SITE LABORATORY

Scale: As Noted

SHEET No. 16 OF 16 SHEETS DD 636.5