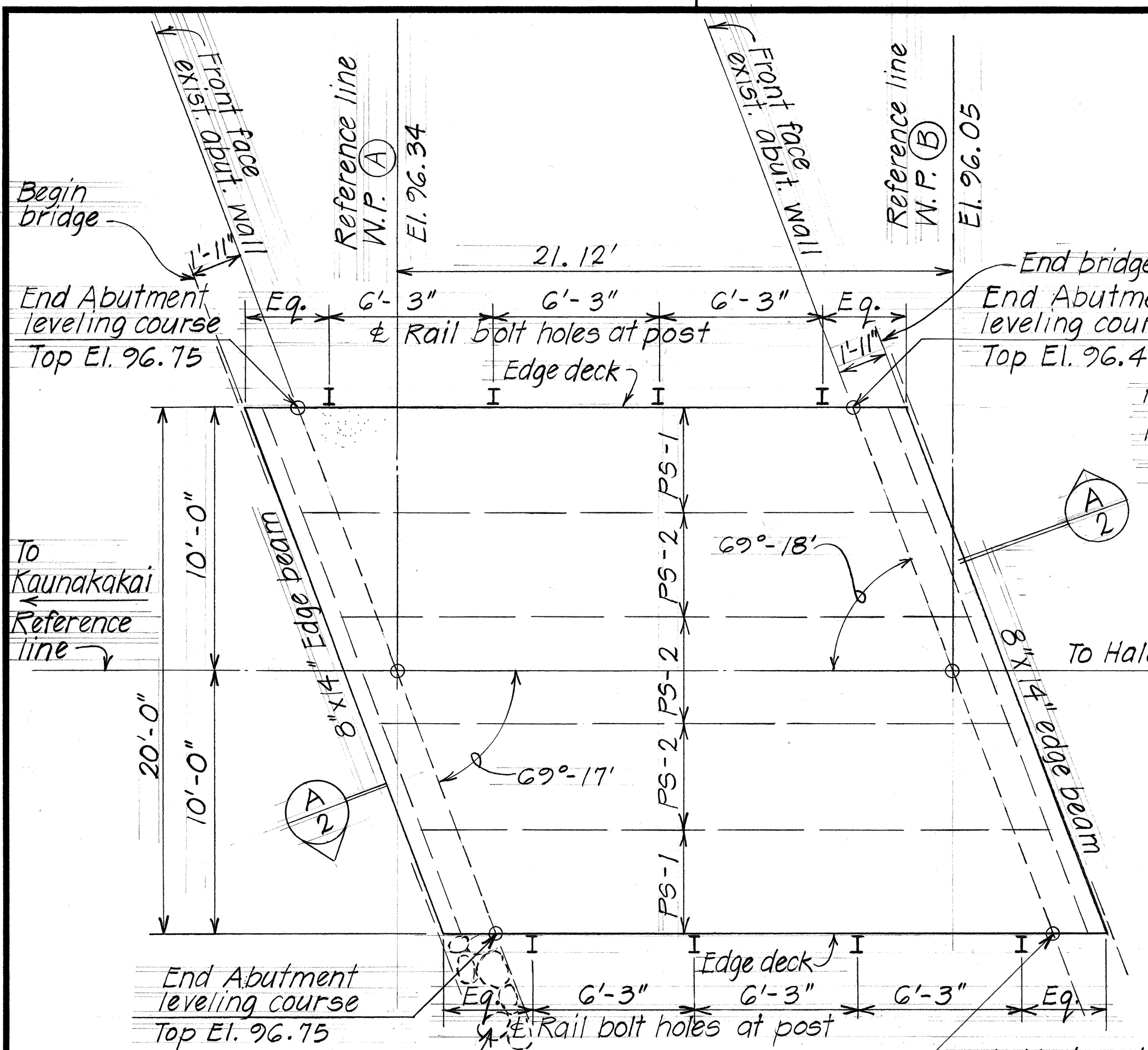
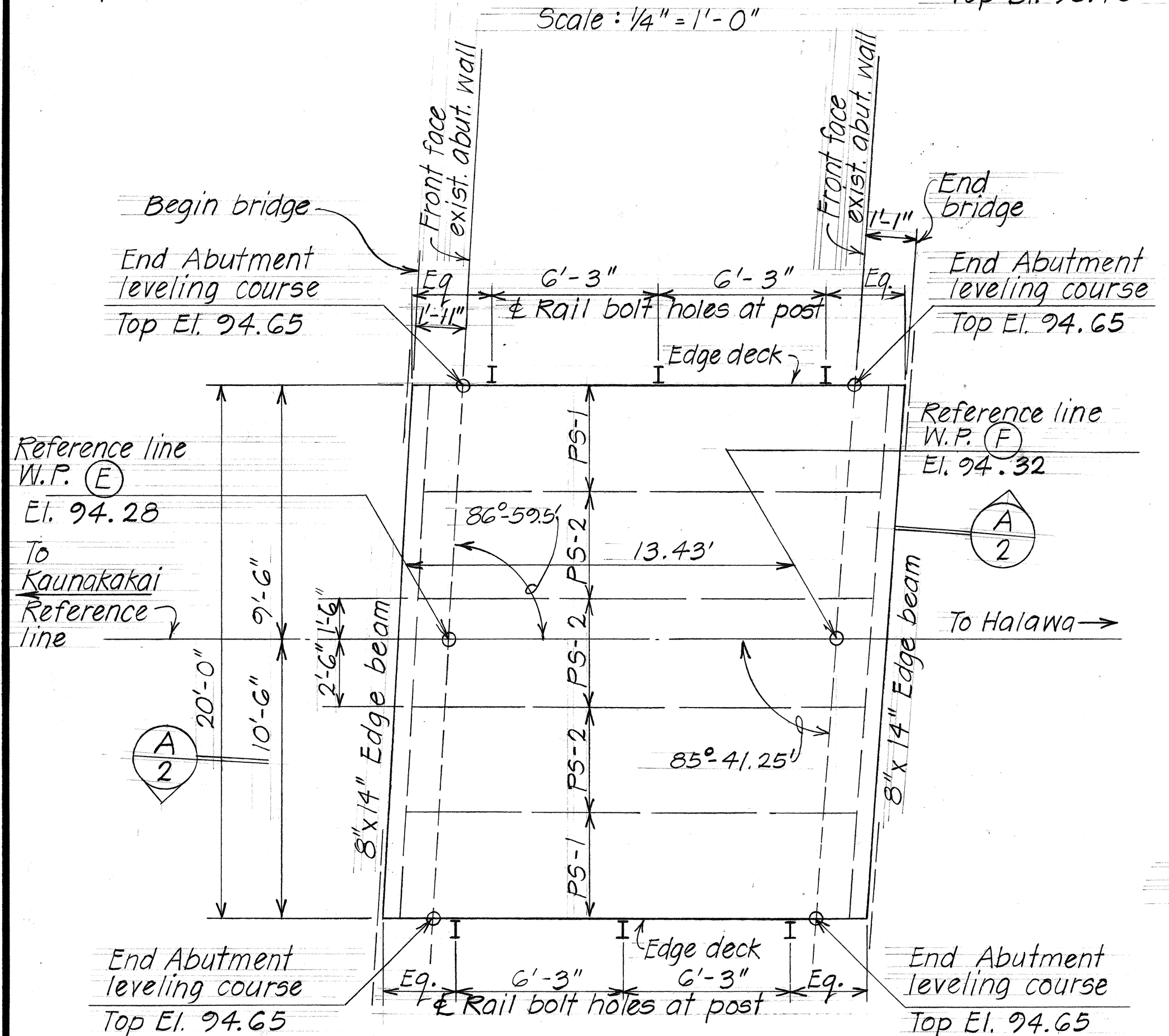


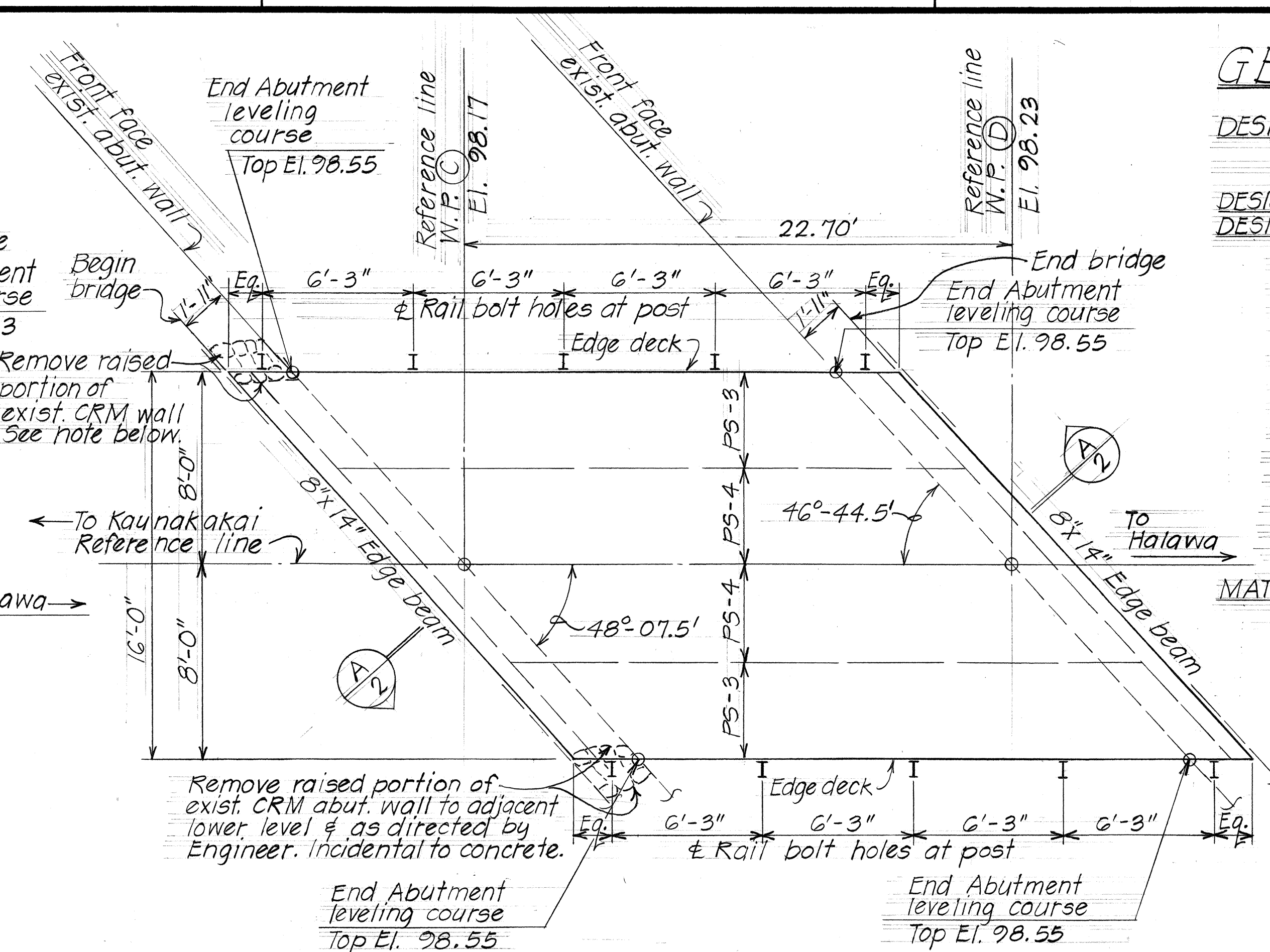
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ORIGINAL PLAN	
NOTE BOOK	
No.	



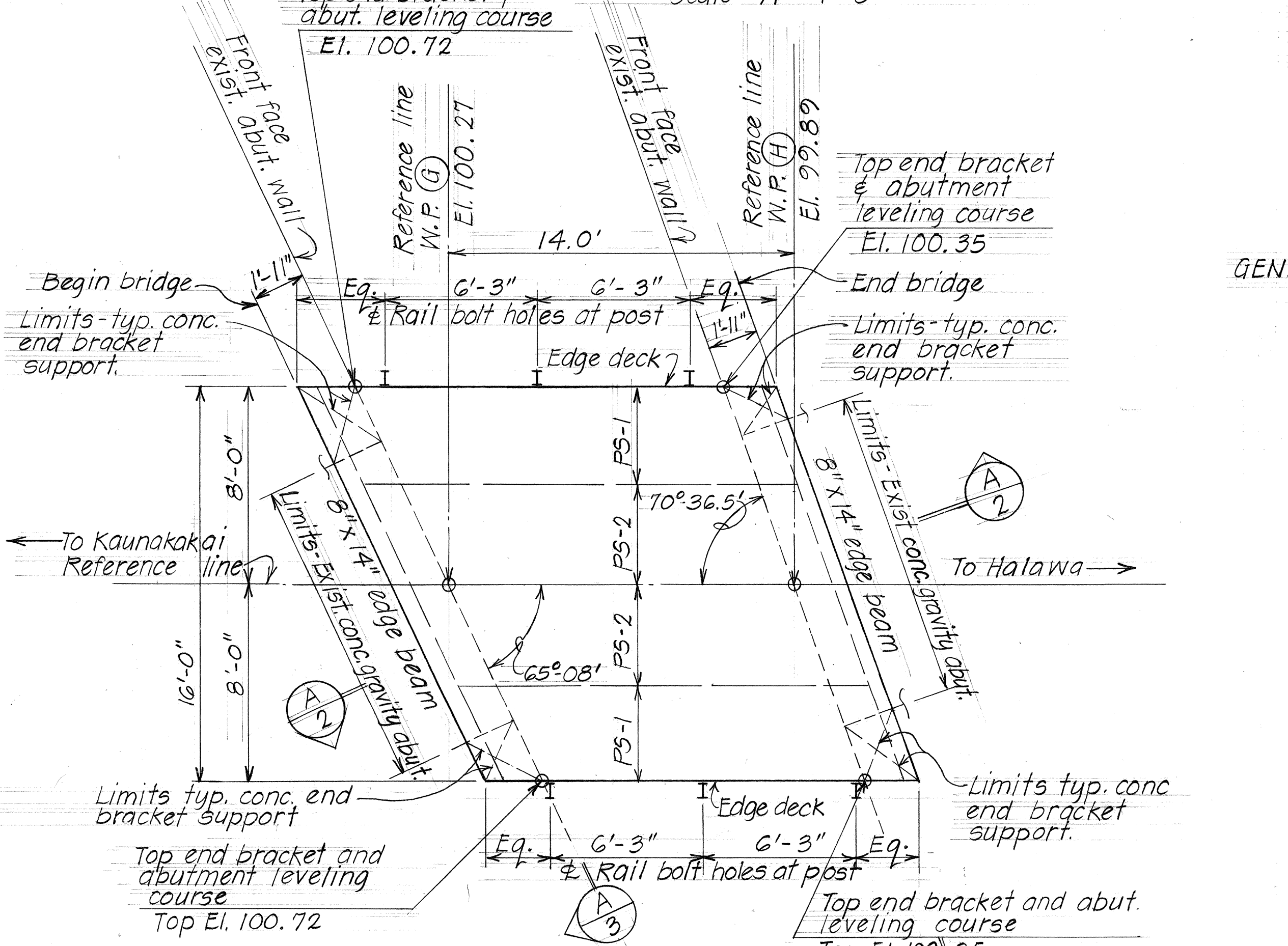
OHIA BRIDGE
Scale: 1/4" = 1'-0"



KUPEKE BRIDGE
Scale: 1/4" = 1'-0"



KALUAHA BRIDGE
Scale: 1/4" = 1'-0"



HONOMONI BRIDGE
Scale: 1/4" = 1'-0"

GENERAL NOTES

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	05-0900(10)	1978	7	23

DESIGN SPECIFICATIONS AASHTO

Standard Specifications for Highway Bridges (11th Edition) with subsequent interim Specifications.

DESIGN LOADS: HS-20-44

DESIGN STRESSES:

- Reinforced Concrete Beams & Topping. See AASHTO Specifications & Special Provisions except as otherwise noted.
Class A Concrete: $f'_c = 3,000$ psi | $n = 9$
 $f_c = 1,200$ psi | $f_s = \text{ASTM A615, Grade 40}$
- Prestressed Concrete Slab Panels.
 $f'_c = 6,000$ psi | $1/2"$ dia. wire strands (270K)
 $f_{ci} = 4,000$ psi | Tensioning load = 31,000 lbs. per strand
Design load = 22,000 lbs. per strand. Design load is based on a projected loss of 45,000 psi from initial pull. Forms must be removed & the slabs inspected before the strands are cut.
- All structural steel plates and members shall conform to ASTM A36 and hot dipped galvanized after fabrication.
All anchor bolts shall conform to ASTM A-307.
- Welded wire fabric reinforcing steel shall conform to ASTM A185.

MATERIALS:

- Except as otherwise noted on plans:
 - Cast-in-place concrete topping, beams and leveling course to be Class A concrete.
 - Concrete for precast prestressed concrete slab panels - see Standard Specifications and as noted under Design Stresses.
 - Except for prestressed strands and welded wire fabric, all other reinforcing steel shall be Grade 40.
 - Welded wire fabric in concrete topping shall be incidental to concrete.
- Concrete in precast prestressed slab panels shall have a cement content of not less than 7.0 sacks, no more than 8.50 sacks per cu. yd.
- See Specifications for admixture in concrete.
- All grout to be non-metallic, non-shrink grout. See Special Provisions. Incidental to concrete.

CONSTRUCTION METHODS:

- See Standard Specifications for Road & Bridge Construction, 1976 Edition and Special Provisions.
- Chip & remove loose material, clean & repair top of existing abutment wall to receive leveling course and as directed by Engineer - all work incidental to concrete.
Top surface of concrete leveling course to receive hard trowel finish.
Top of leveling course to receive slush grout immediately prior to placing of prestressed concrete slab panels.
- For concrete finish see Specifications.
- Roughen top surfaces of prestressed concrete slab panel. See Special Provisions (Construction joint).

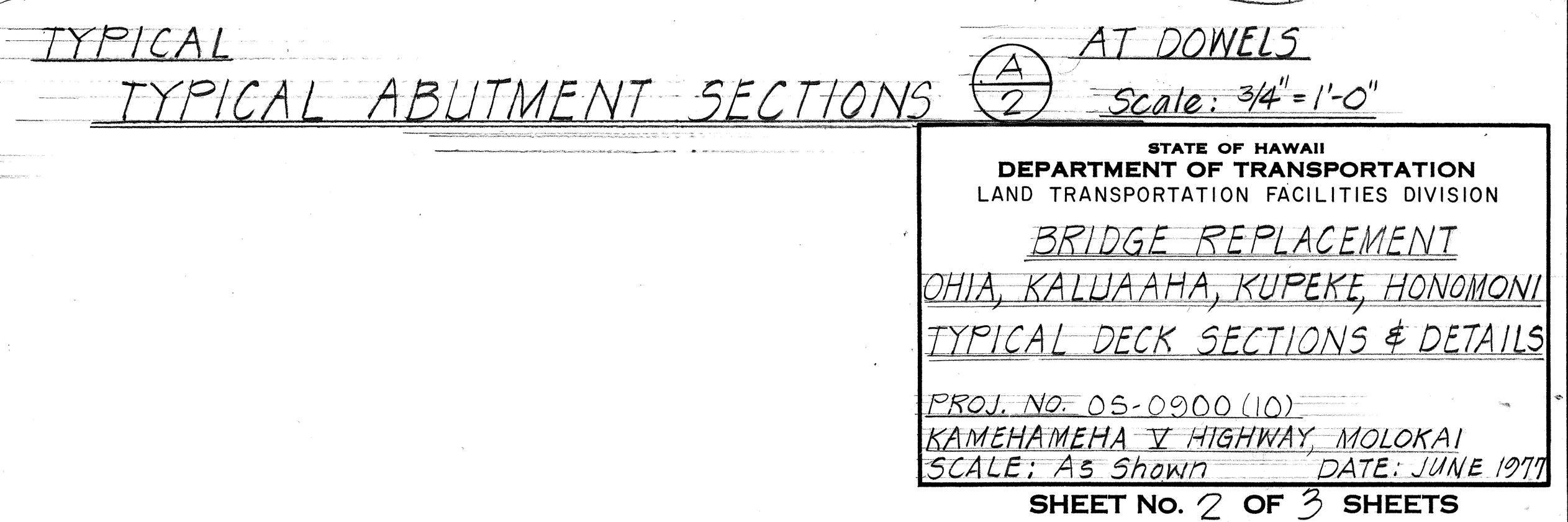
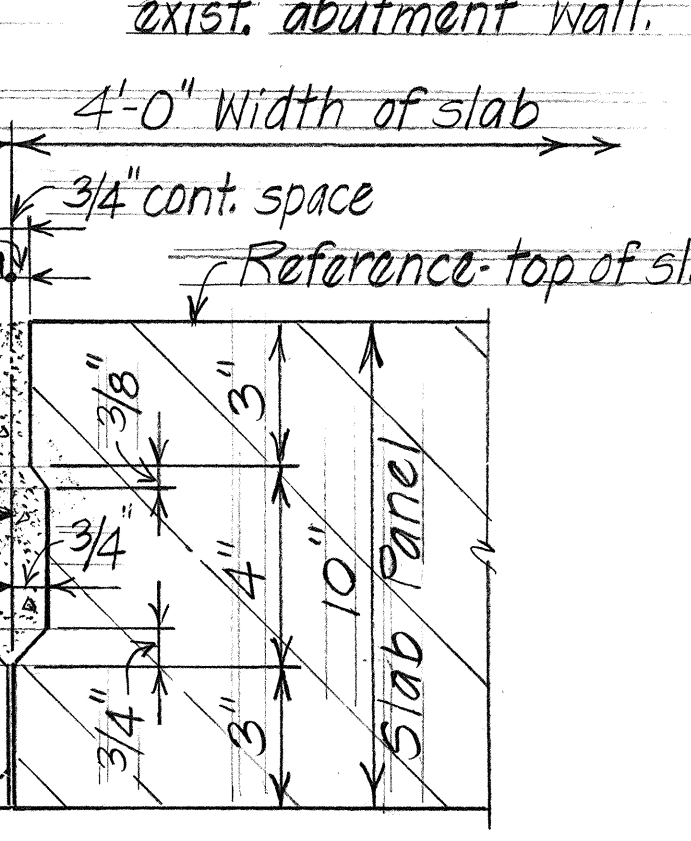
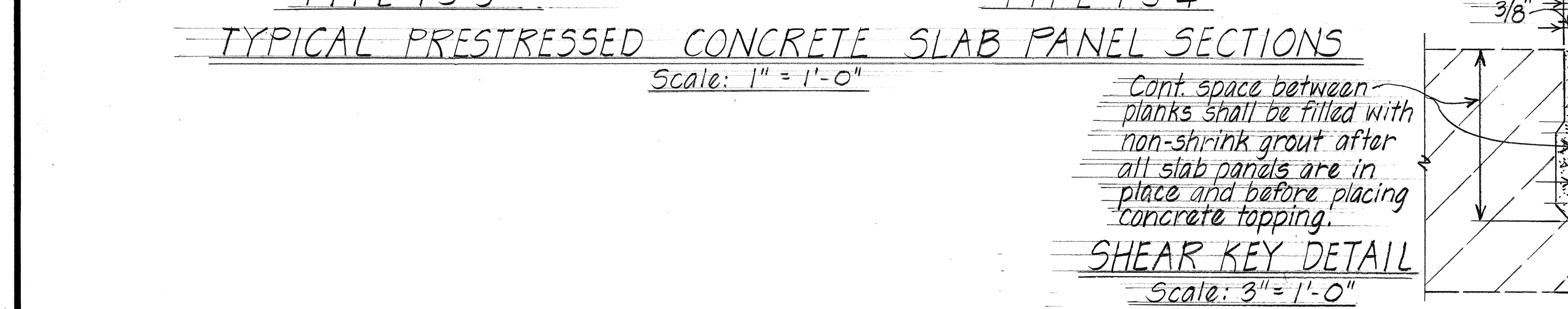
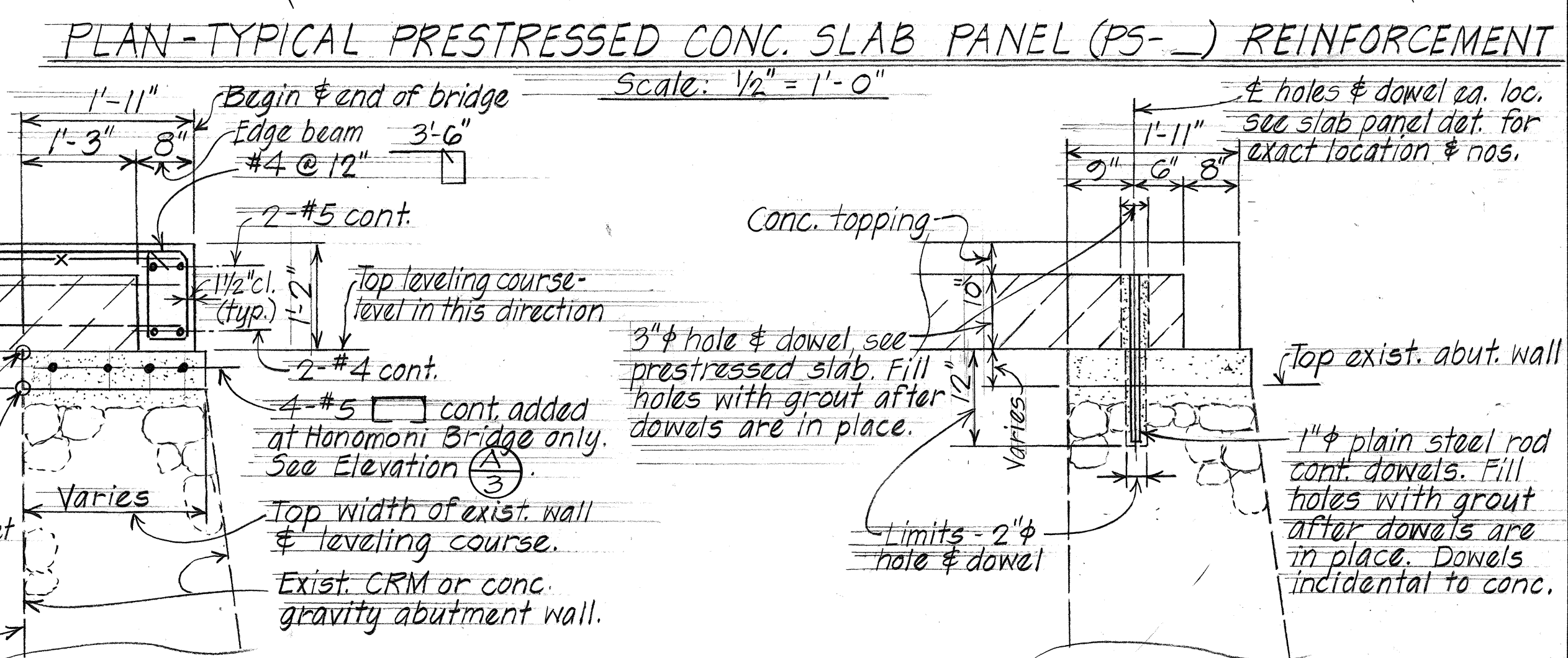
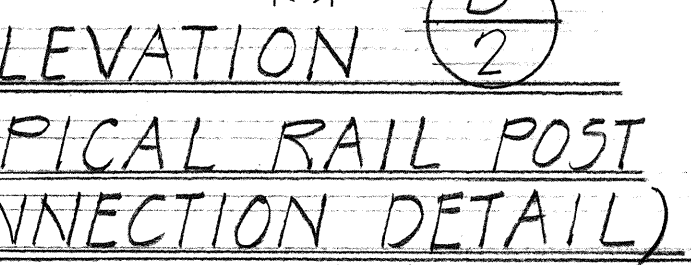
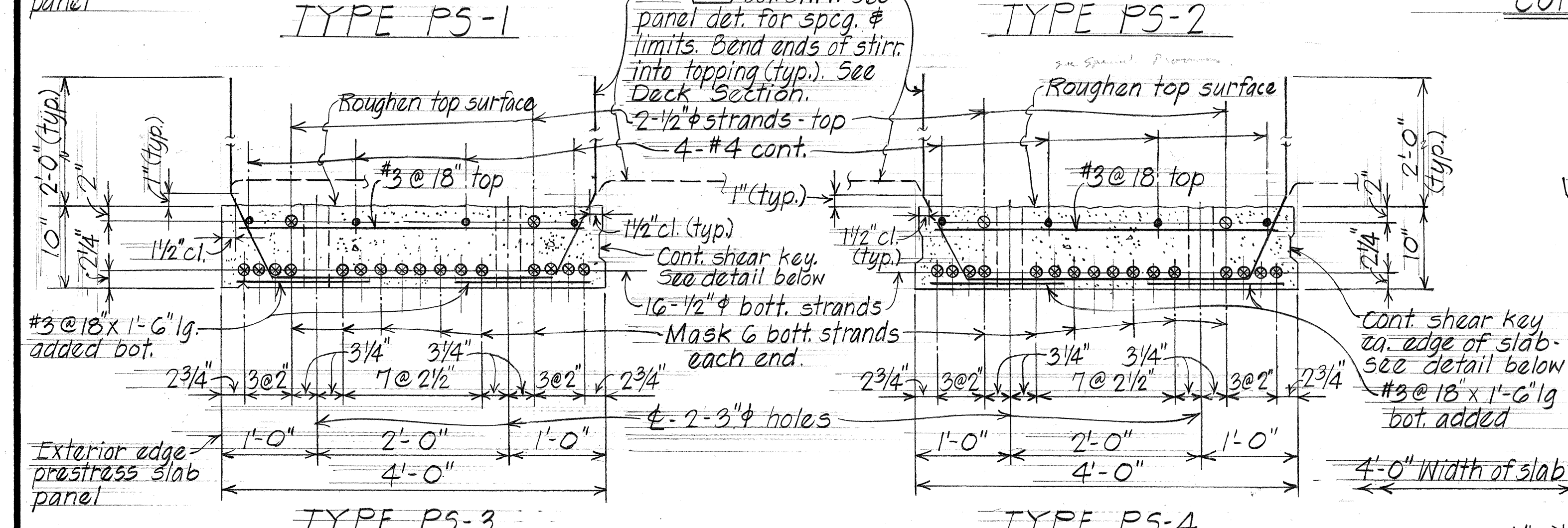
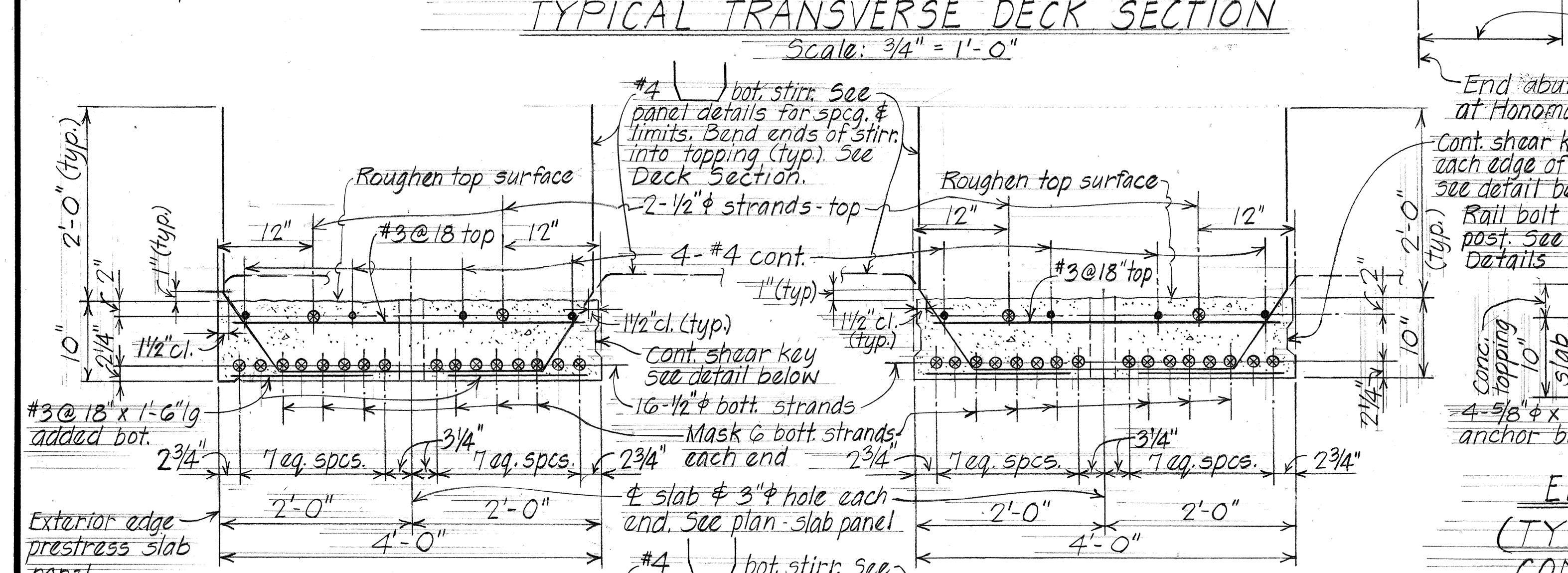
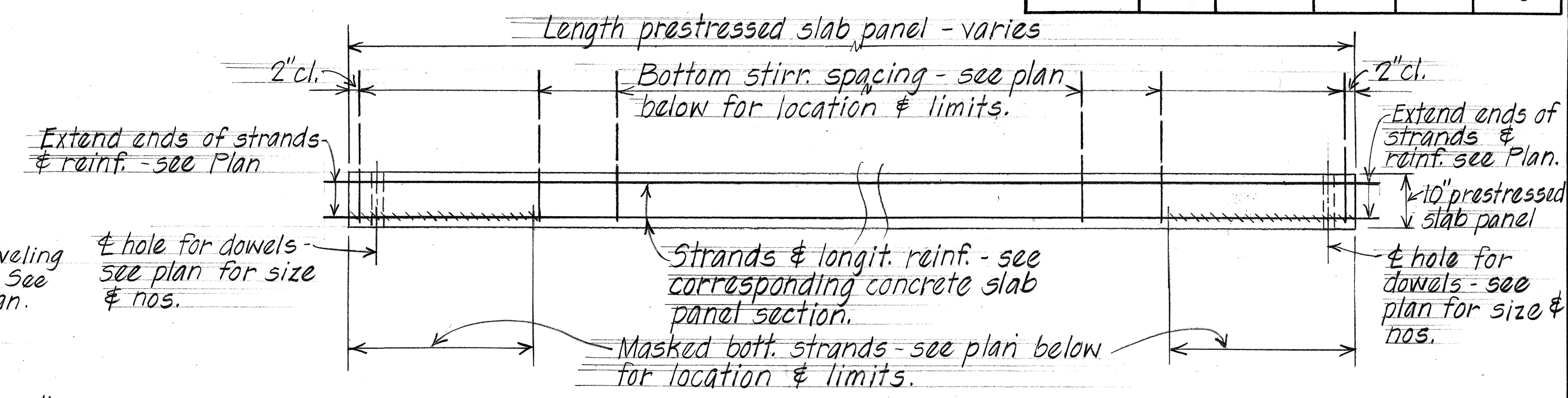
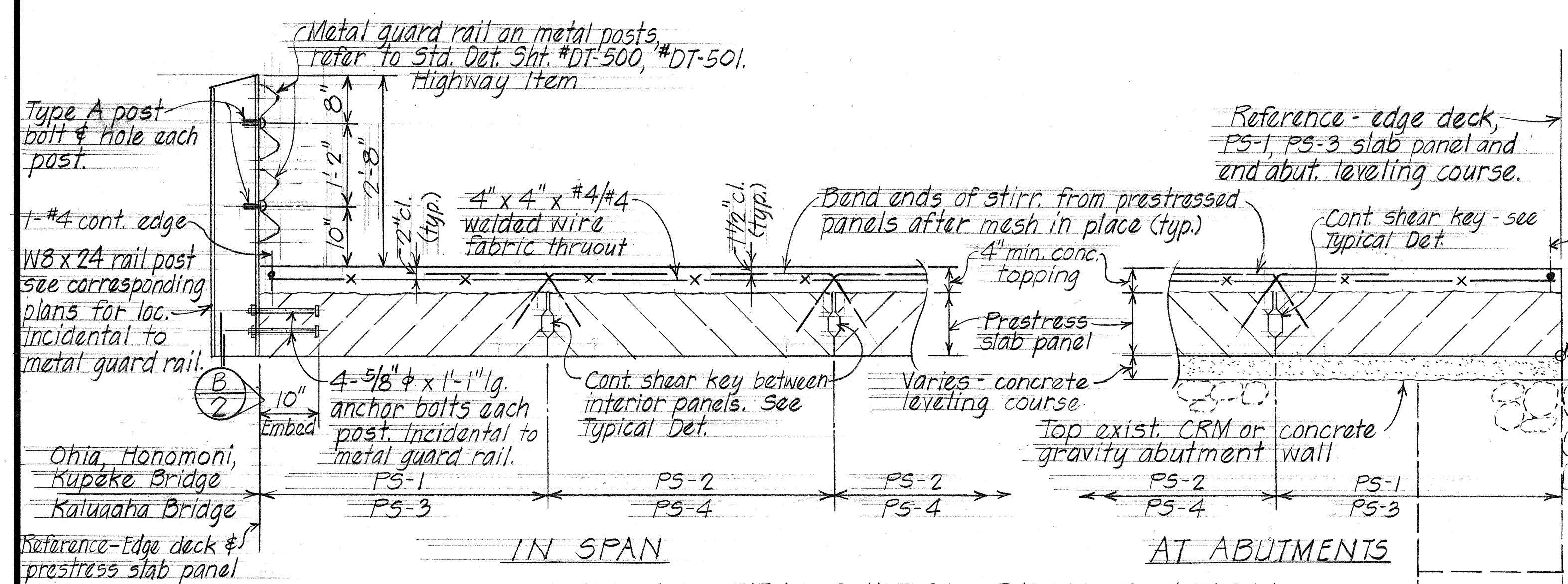
GENERAL:

- All items noted incidental will not be paid for separately.
- The Contractor shall verify all dimensions in field before commencing with work.
- The Contractor shall verify the location of all existing utility lines near bridge and notify their respective owners before commencing with work.
- Removal of existing timber bridges and shorings shall be included as part of Item No. 202.04 of the Standard Specifications for Road and Bridge Construction.
- Minimum required excavation to top of existing abutment walls shall be incidental to pay item- Removal of Existing Timber Bridge Structures.
- For estimated quantities see sheet 3.

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION LAND TRANSPORTATION FACILITIES DIVISION	
BRIDGE REPLACEMENT OHIA, KALUAHA, KUPEKE, HONOMONI	
DECK LAYOUT PLAN & NOTES	
PROJ. No. 05-0900(10) KAMEHAMEHA II HIGHWAY, MOLOKAI	
Scale: As Noted	Date: JUNE 1977
SHEET NO. 1 OF 3 SHEETS	

DELETED 4/20/78 ADD. No. 1

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	05-0900(10)	1978	8	23



DATE	6/17
DESIGNED BY	AL YOUNG
CHECKED BY	AL YOUNG
NOTED BY	AL YOUNG
QUANTITIES BY	AL YOUNG
CHECKED BY	AL YOUNG
ORIGINAL PLAN	
NOTE BOOK	
NO.	

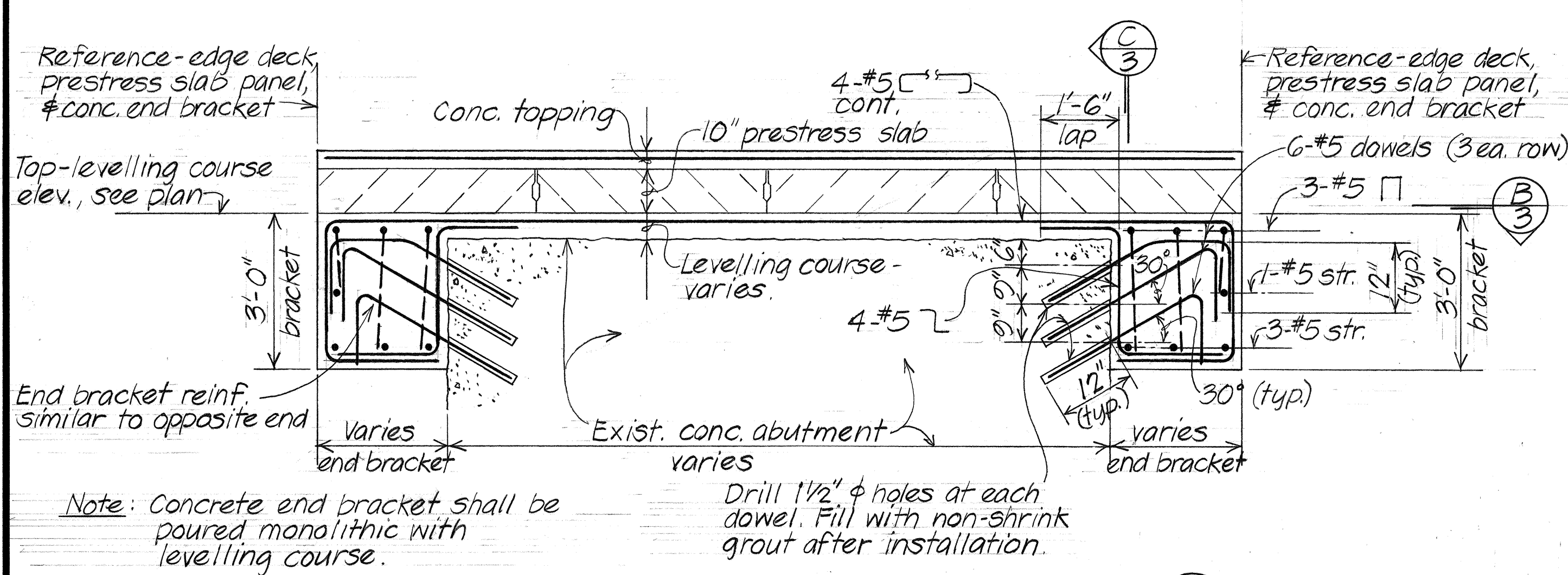
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

BRIDGE REPLACEMENT
OHIA, KALUAHA, KUPEKE, HONOMONI
TYPICAL DECK SECTIONS & DETAILS

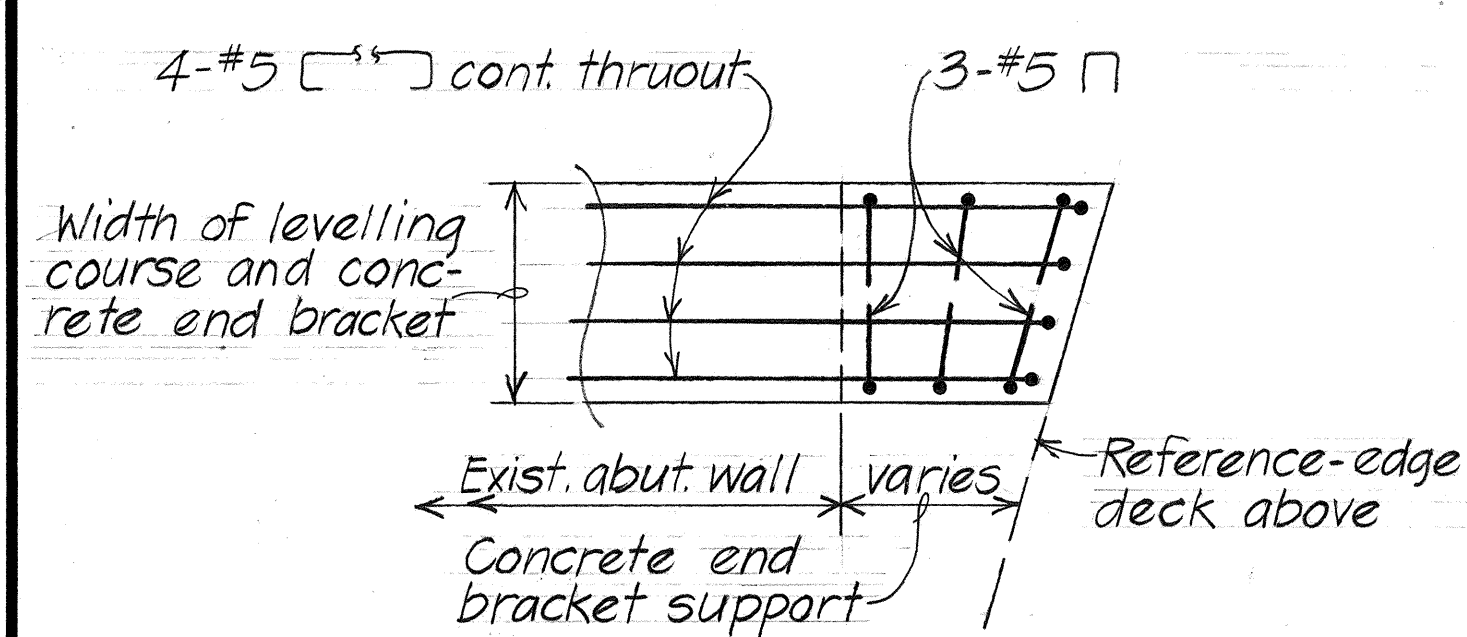
PROJ. NO. 05-0900 (10)
KAMEHAMEHA V HIGHWAY, MOLOKAI
SCALE: AS SHOWN DATE: JUNE 1979

SHEET NO. 2 OF 3 SHEETS

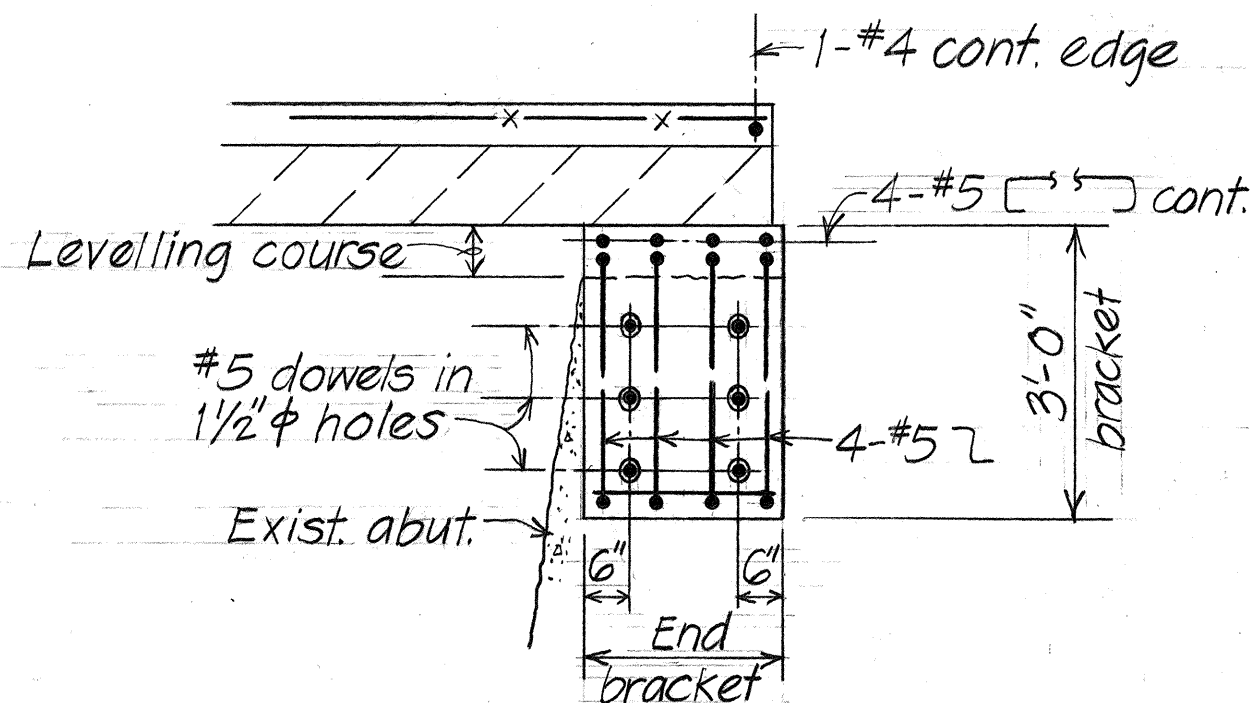
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	05-0900(10)	1978	9	23



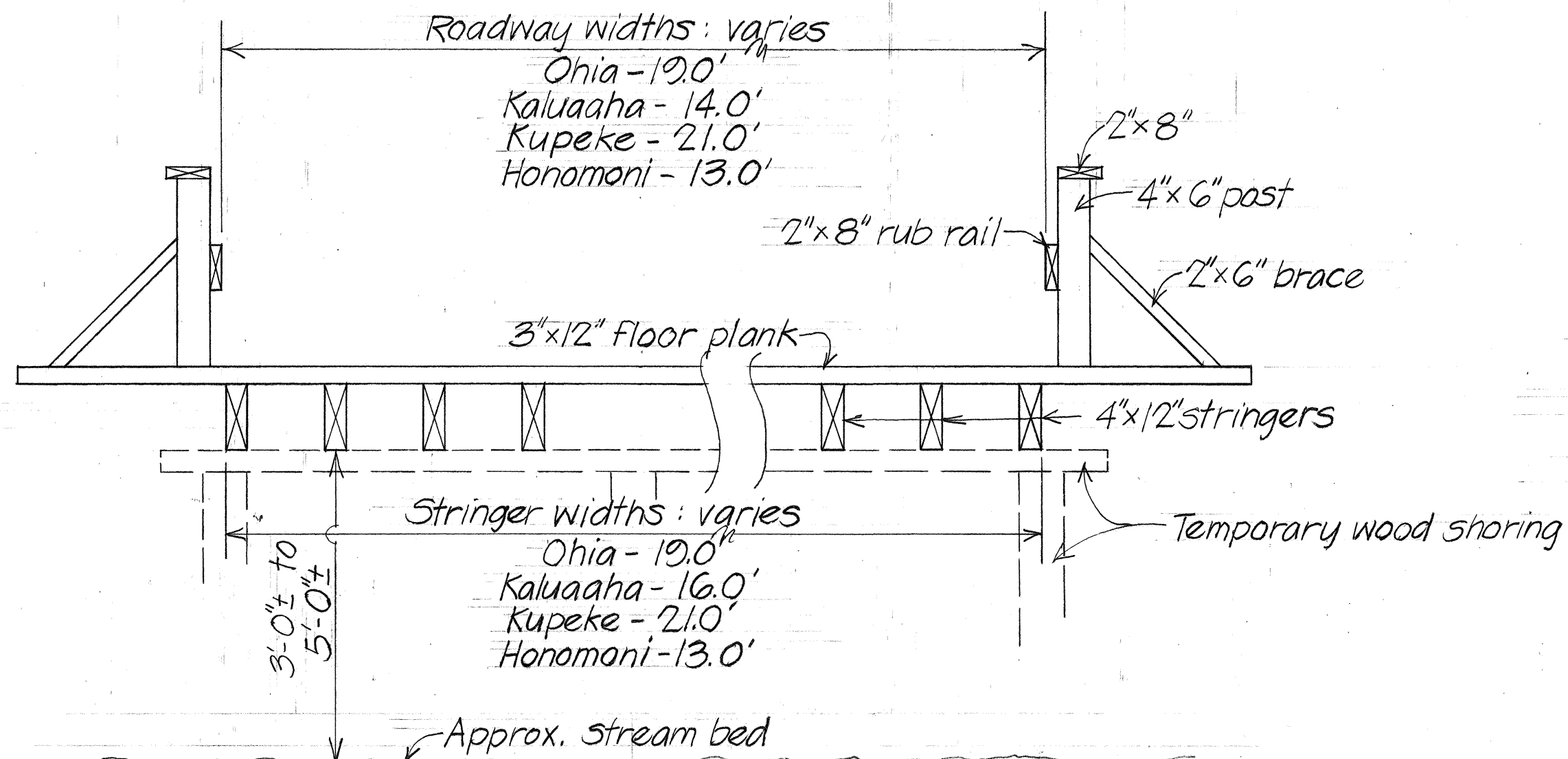
TYPICAL ABUTMENT ELEVATION (A/3)
(HONOMONI BRIDGE)
Scale: 1/2" = 1'-0"



SECTION (B/3)
Not to scale



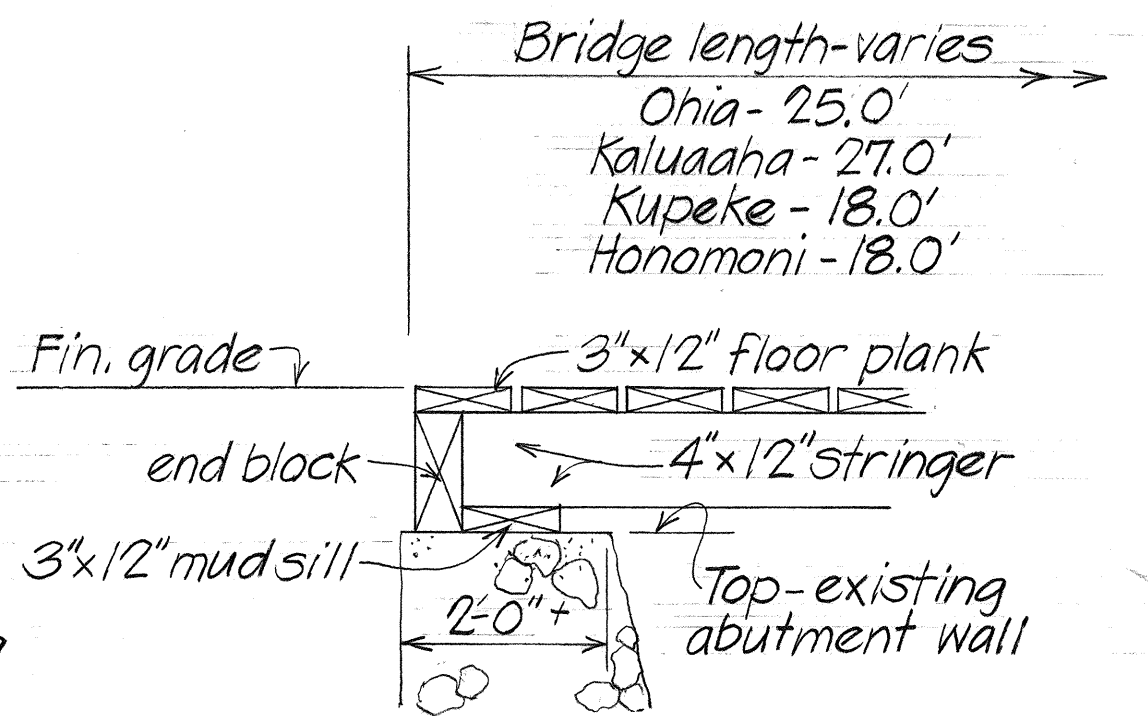
SECTION (C/3)
Not to scale



TYPICAL BRIDGE CROSS SECTION

TYPICAL EXIST. TIMBER BRIDGE SECTIONS & DETAILS

NOTE: Existing timber bridge details are general information for guidance only. Exact details of construction, connections, and limits shall be verified in the field by the Contractor to determine the scope of work for bid item: Removal of Existing Timber Structures.



TYPICAL END BRIDGE AT ABUTMENT WALL

ESTIMATED QUANTITIES

ITEM No	ITEM	UNIT	QUANTITY
503.1092	Concrete	Lump Sum	(30 cu.)
602.0091	* Reinforcing Steel	Lump Sum	(2,000 lbs)
504.7400	Prestressed Concrete Slab Panel	Lump Sum	(400 l.f.)
202.0440	Removal of Existing Timber Structures	Lump Sum	(Lump Sum)
647.05	Repairs to CRM Abutment Wall	Lump Sum	(8.5 cu.)

* Other than in prestress-precast slab panel and welded wire fabric.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

BRIDGE REPLACEMENT
OHIA, KALUAHA, KUPEKE, HONOMONI
MISCELLANEOUS DETAILS
PROJ. No. 05-0900 (10)
KAMEHAMEHA V HIGHWAY, MOLOKAI
Scale: As noted Date: June 1977

SURVEY PLOTTED BY	DATE
DRAWN BY G. Lindholm	June 1977
TRACED BY	
QUANTITIES BY G. Lindholm & L. Brakels	June 1977
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	