

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.		1969	39	73

PROJECT 900 B-02-68 UNIT 1

ESTIMATED QUANTITIES

ITEMS	QUANTITY
REMOVING OF PORTION EXISTING BRIDGE & STREAM CHANNEL - LUMP SUM	4.5 C.Y.
STRUCTURE EXCAVATION	164 C.Y.
TACK COAT	78 GAL.
A.C. PAVEMENT	28 TONS
CLASS A-1 CONC. FOR BRIDGE FOOTG-LUMP SUM	37 C.Y.
CLASS A-1 CONC. FOR BRIDGE EXCLUDING FOOTINGS-LUMP SUM	118 C.Y.
REINFORCING STEEL LUMP SUM	25,500 LB.
FURNISHING TYPE I PRESTRESSED CONC. PILES	1400 L.F.
DRIVING " " " "	1330 L.F.
BUILD-UP OR EXTENSION OF " " " "	F.A.
FILTER MATERIALS	16 C.Y.
METAL BRIDGE RAILING	90 L.F.
CONC. BRIDGE PARAPET INCLUDING END POSTS	110 L.F.
CLASS D-1 CONCRETE FILL @ ABUTMENTS	33 C.Y.
PRESTRESSED TEES-LUMP SUM	710 L.F.

SITE PLAN

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

NOTES:

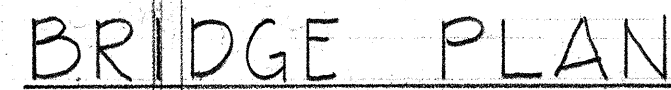
1. FOR BALANCE OF UTILITIES SEE SH'T. NO. 7.
2. FOR LIMITS OF NEW GUARD RAIL, SEE SH'T 7.

PROFILE

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

PROJECT 900 B-02-68 UNIT 1

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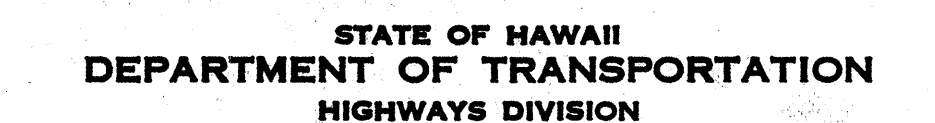


DOWNSTREAM ELEVATION

LONGITUDINAL SECTION

TYPICAL CROSS-SECTION

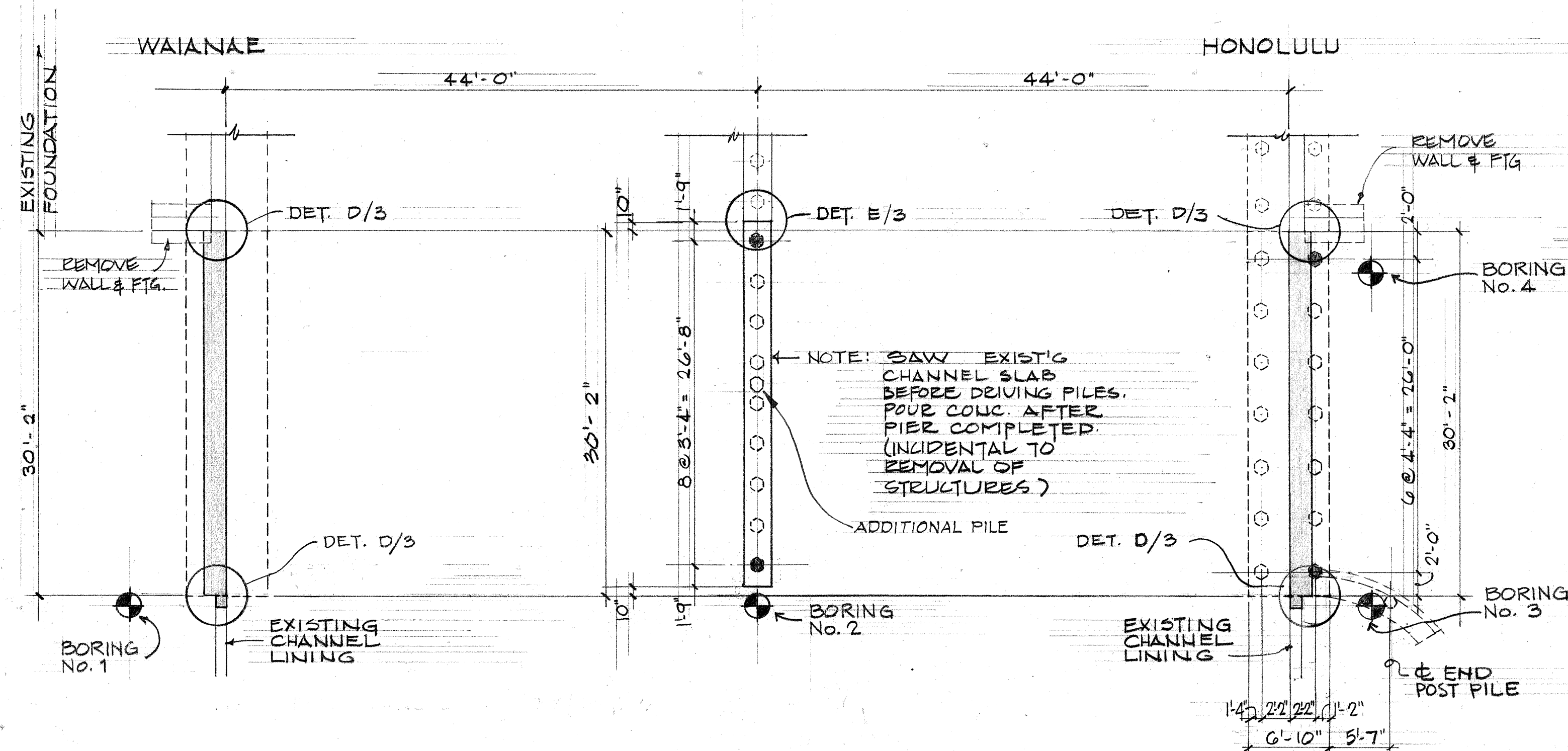
1. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS & DIMENSIONS.
2. ALL DETAILS, ELEVATIONS & DIMENSIONS SHOWN ON DRAWINGS SHALL BE ADJUSTED TO MATCH EXISTING CONDITIONS.



SHEET No. 2 OF 7 SHEETS

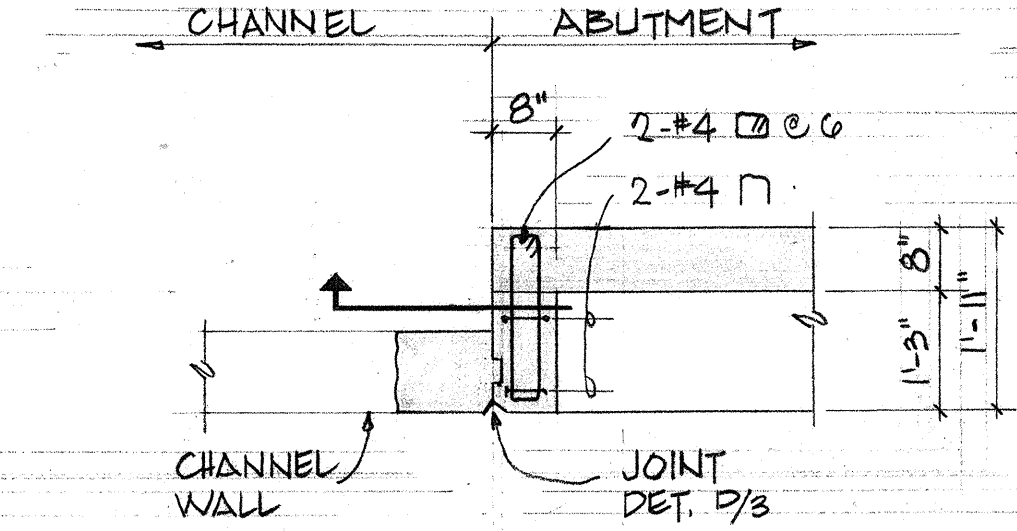
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.		1969	41	73

PROJECT 900 B-02-68 UNIT 1

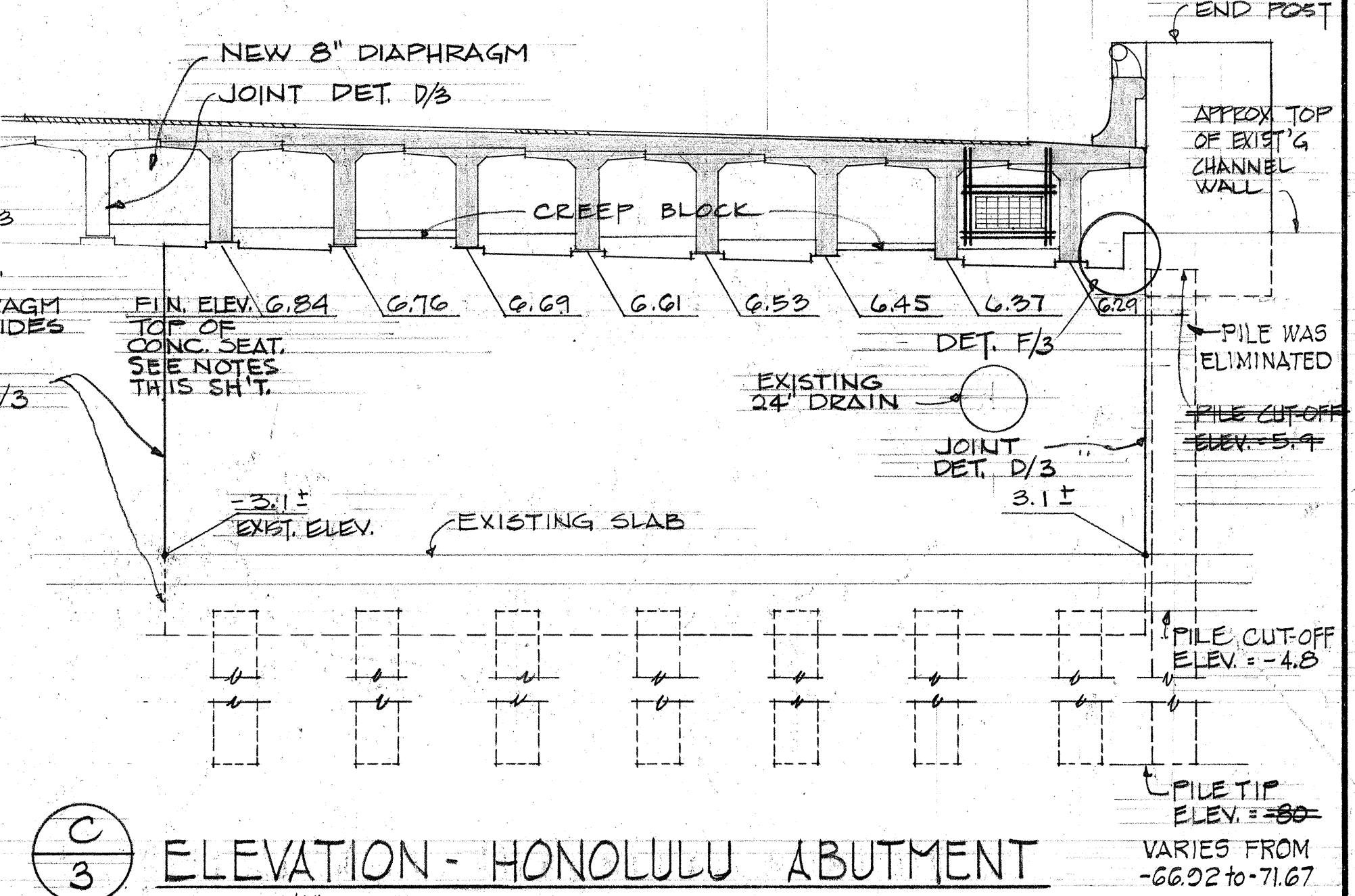
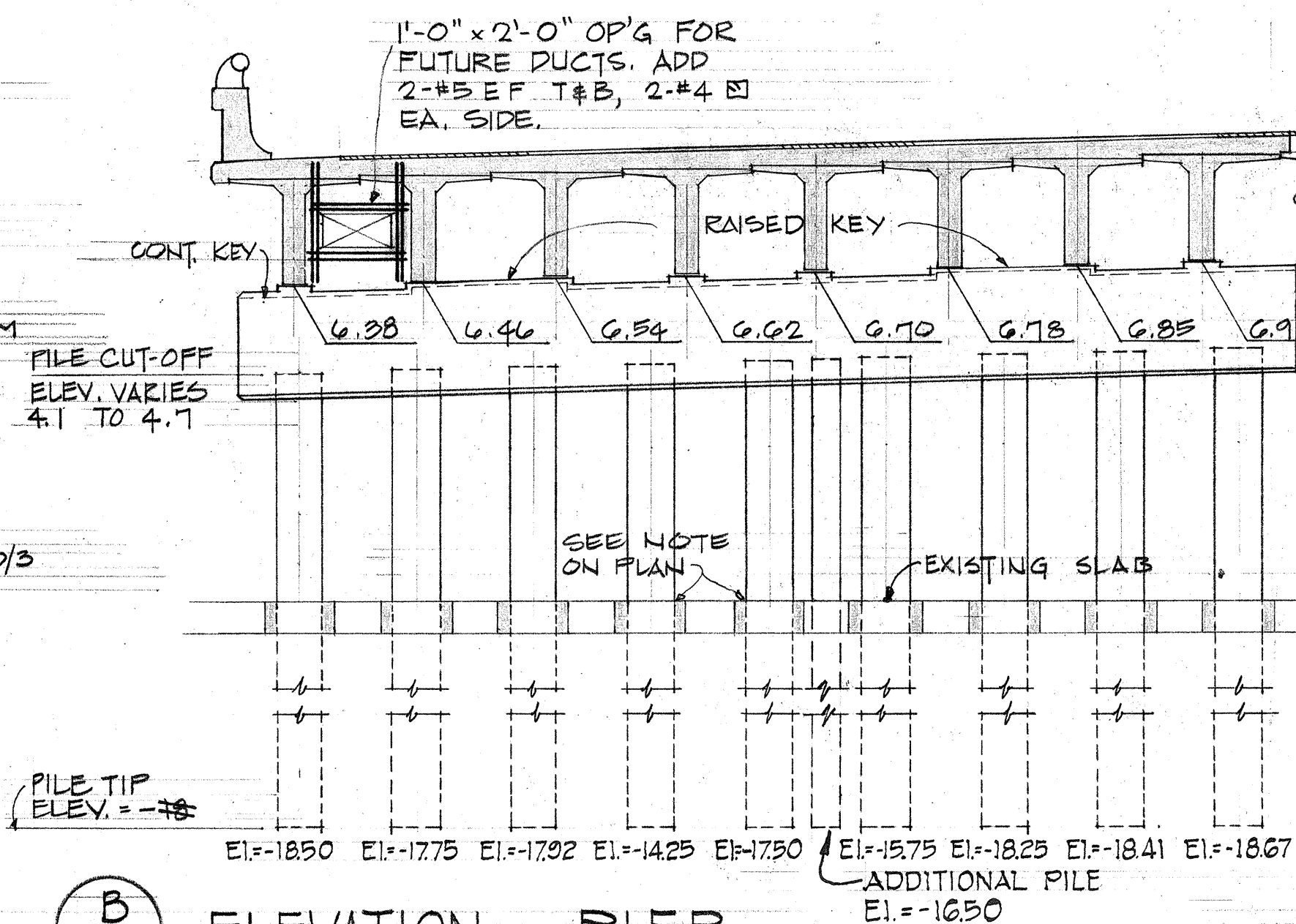
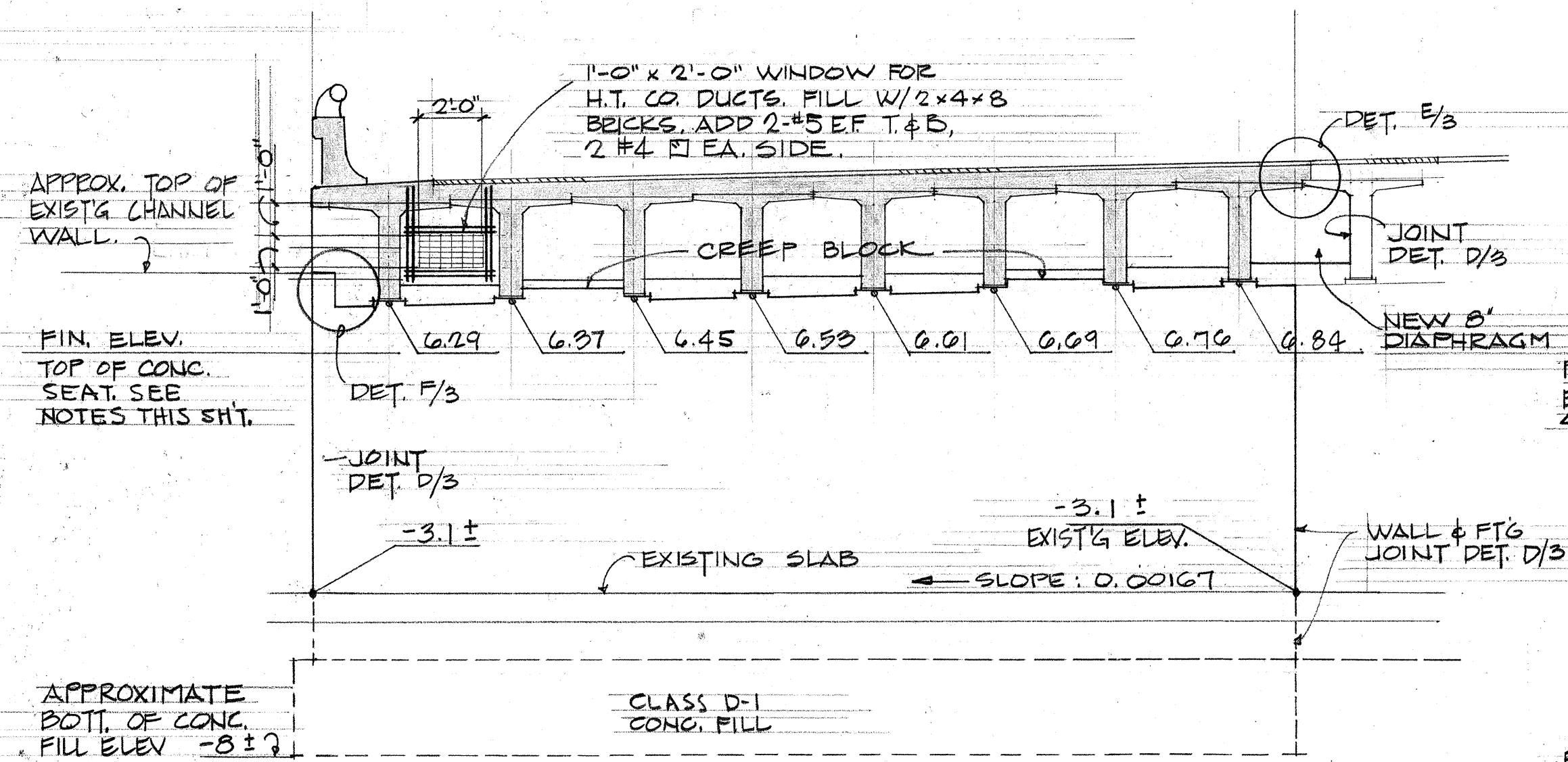
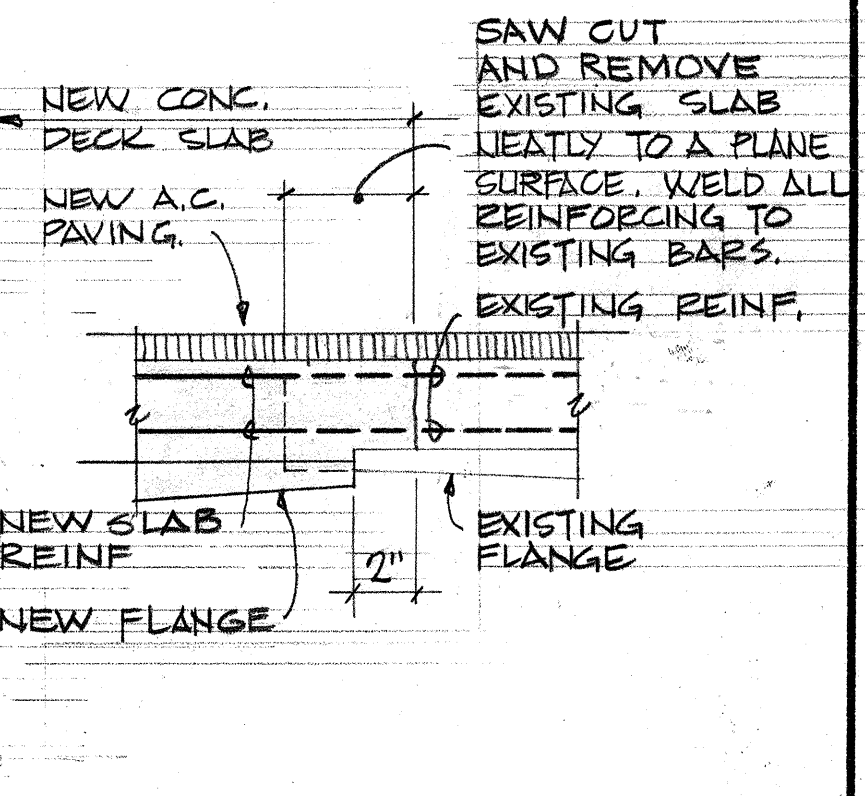
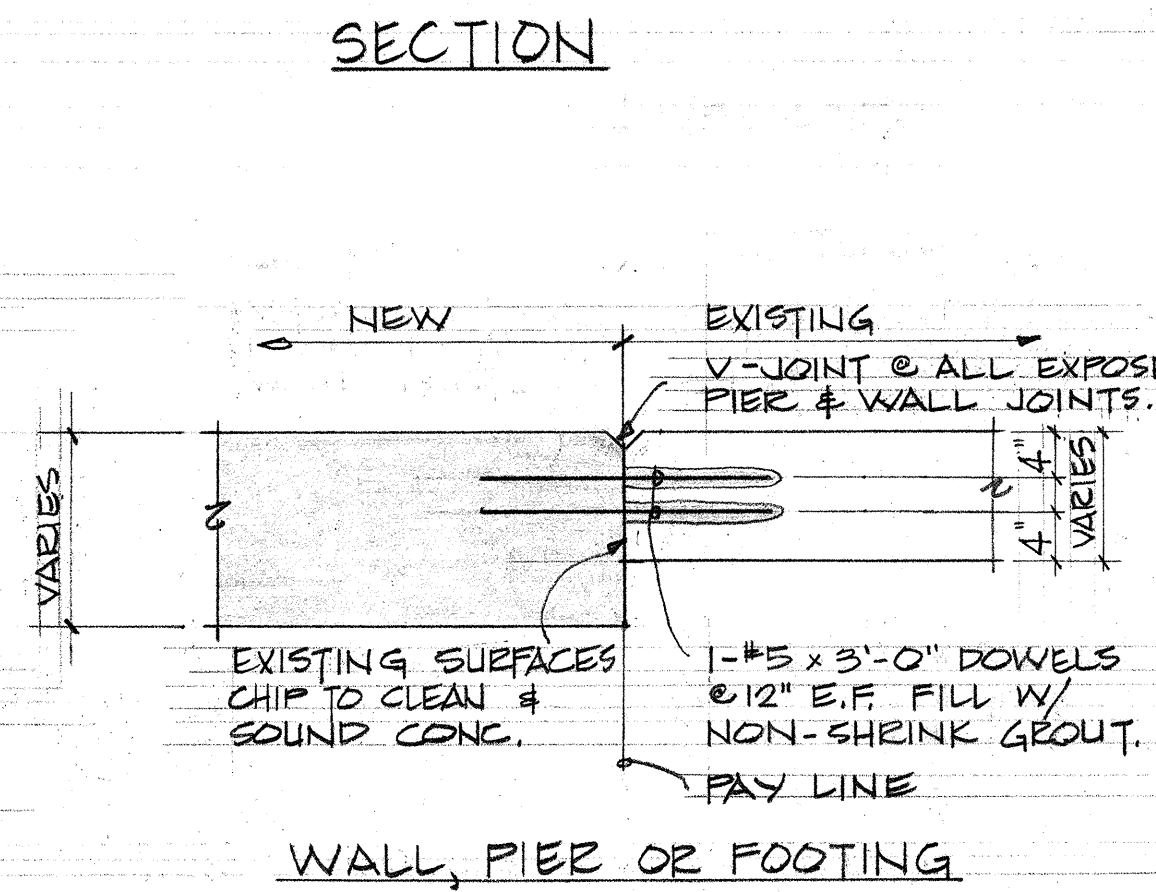
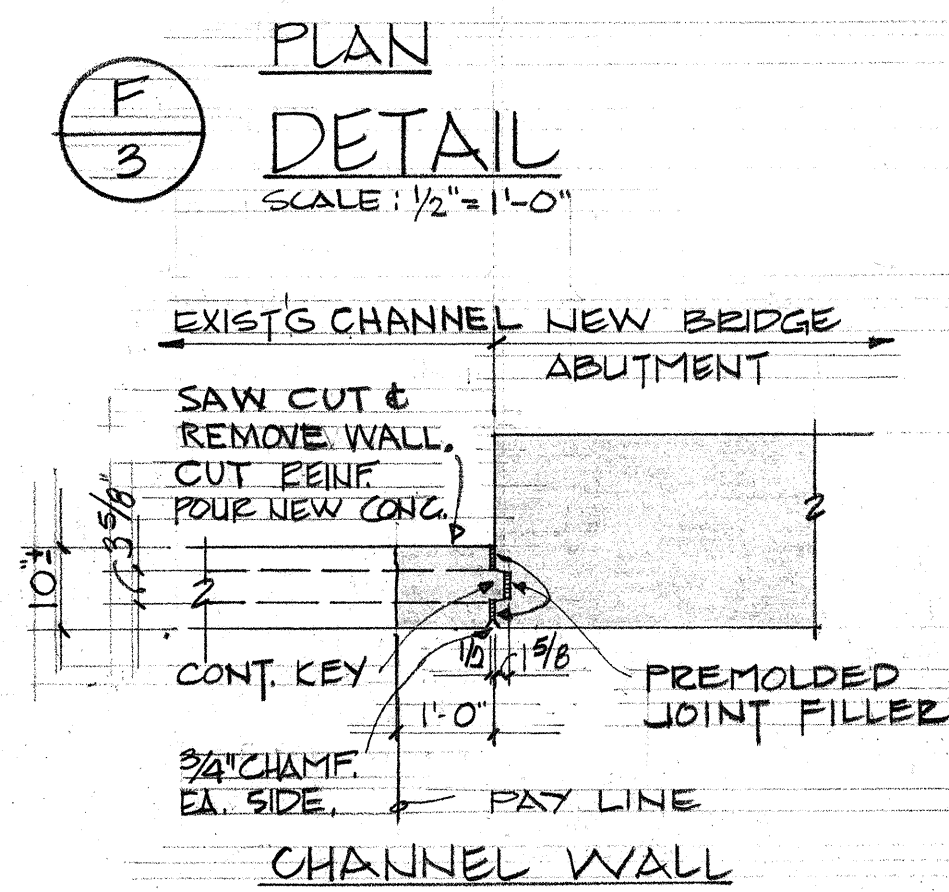


NOTES & LEGEND

- FOR BORING LOGS SEE SH. 6.
- BORING LOCATION
- TEST PILES
- FOR CONSTRUCTION JOINT DETAILS SEE 1/4.

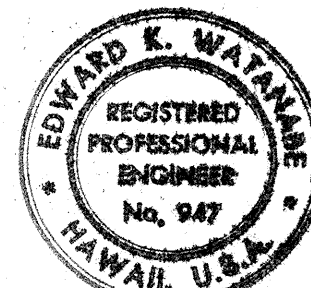


SECTION



NOTES:

- SEAT ELEVATIONS SHALL BE ADJUSTED AS REQUIRED TO FIT CAMBER OF PRESTRESSED TEES SO FINISH DECK MATCHES EXISTING BRIDGE ELEVATIONS.
- WHERE SLAB THICKNESSES ARE GREATER THAN 6" DUE TO THE CAMBER OF THE "T'S" AND THE DEAD LOAD DEFLECTION OF THE DECK SLAB, THE EXTRA CONCRETE REQ'D ABOVE 6" SHALL BE INCIDENTAL TO THE 6" DECK SLAB.
- CAMBER DECK 1/8" FOR SLAB DEAD LOAD DEFLECTION.



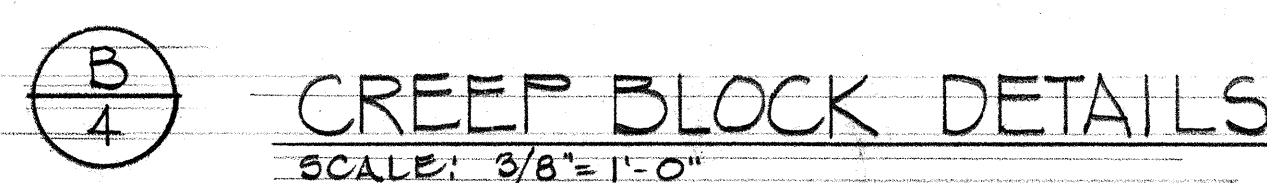
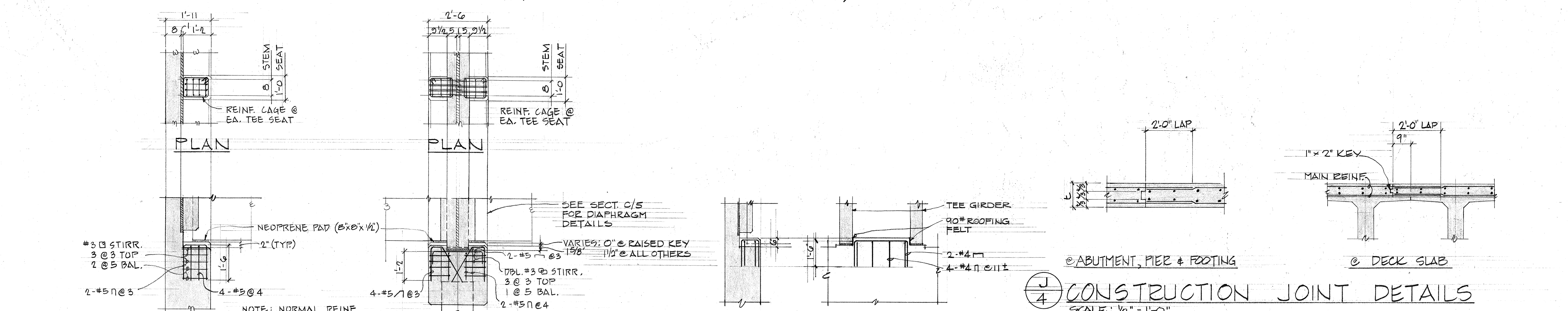
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
WATER LUNA ASSOCIATES, INC.
E.K. Watanabe

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ULEHAWA BRIDGE WIDENING
FOUNDATION PLAN, ABUT. & PIER ELEVATIONS
FARRINGTON HIGHWAY WIDENING
PROJECT 900B-02-68
UNIT 1

SCALE: AS NOTED
SHEET No. 3 OF 7 SHEETS

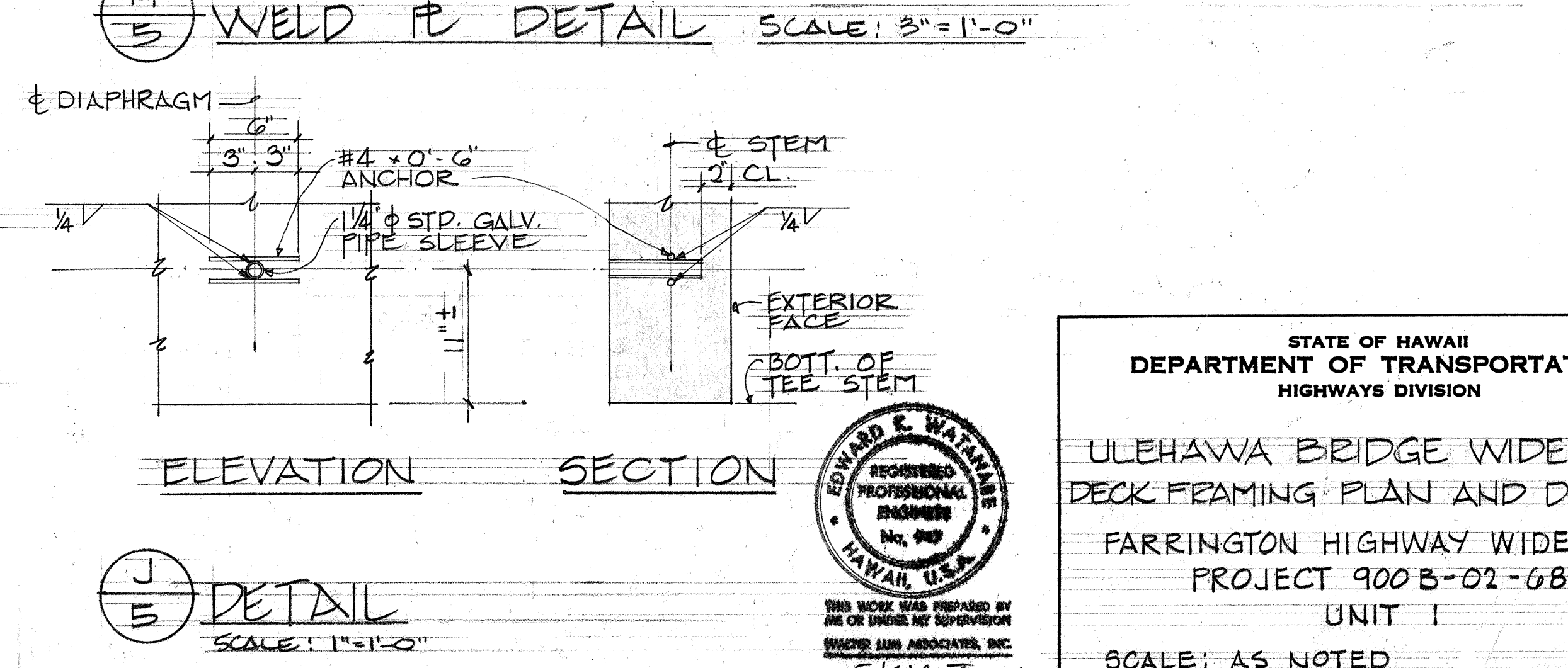
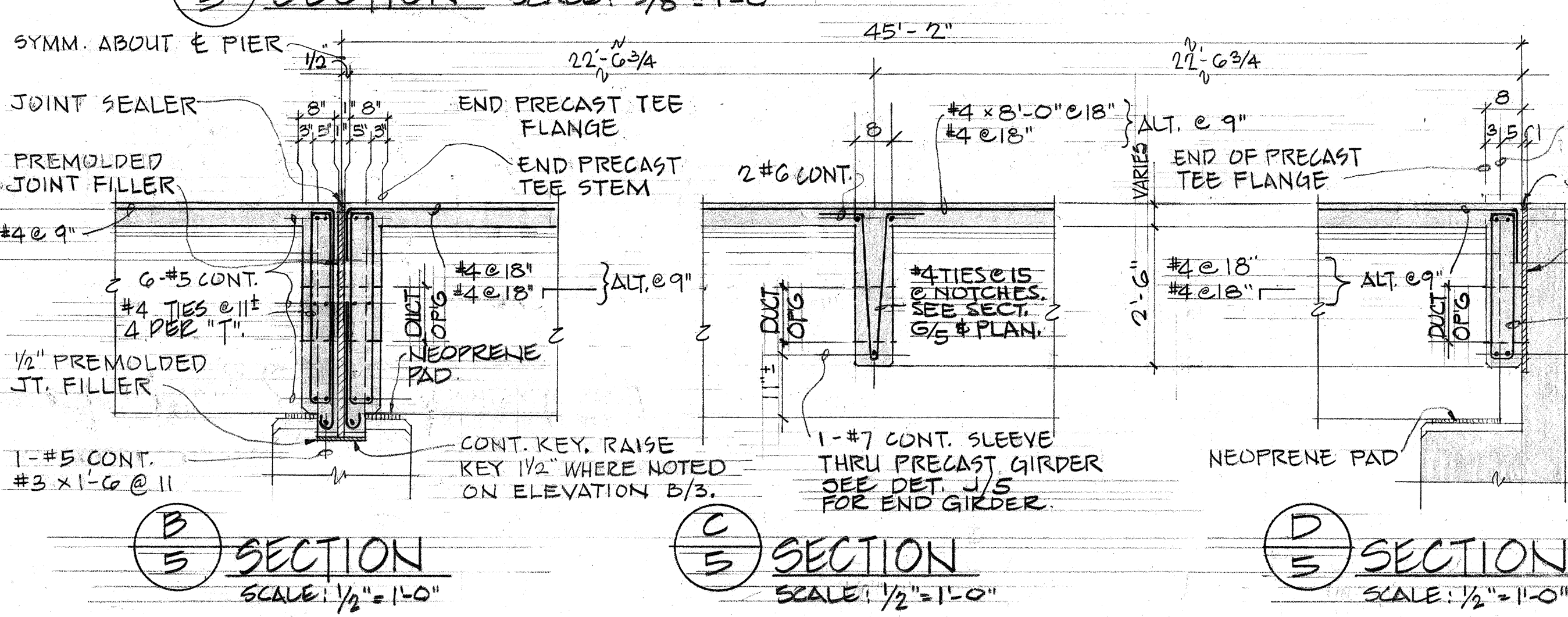
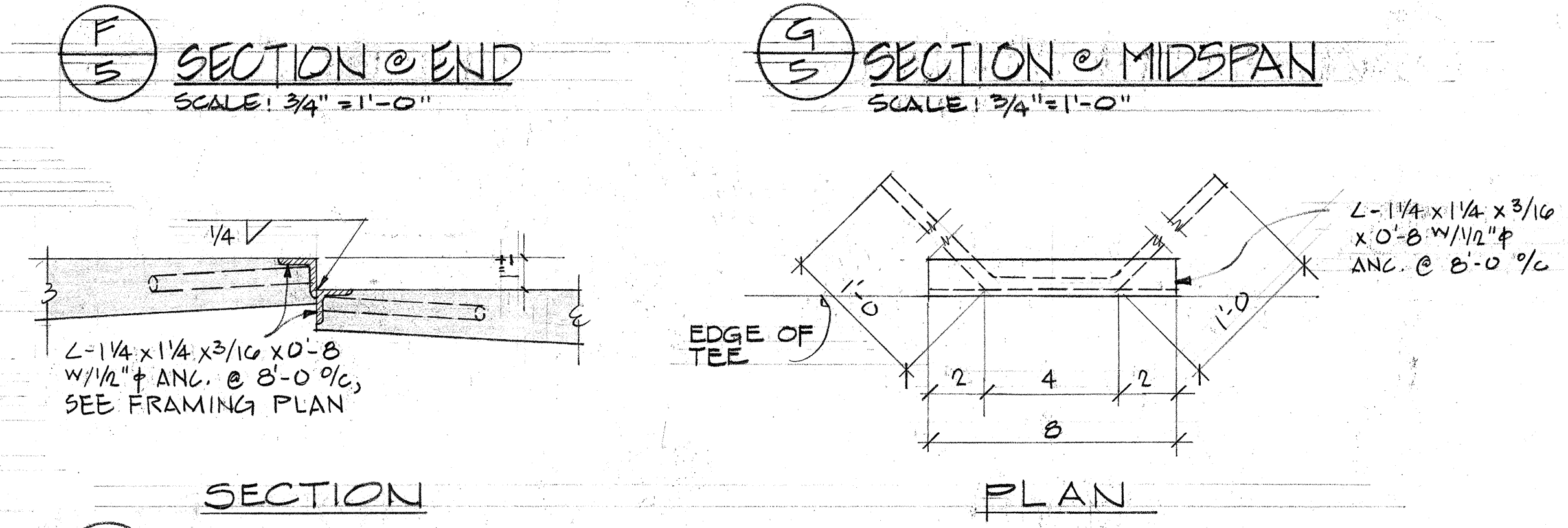
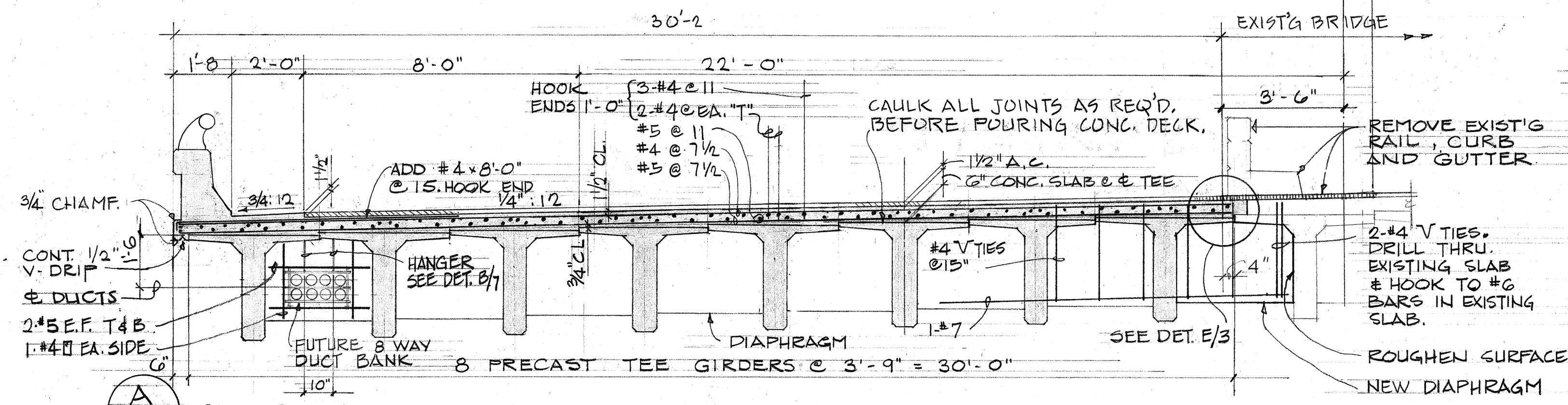
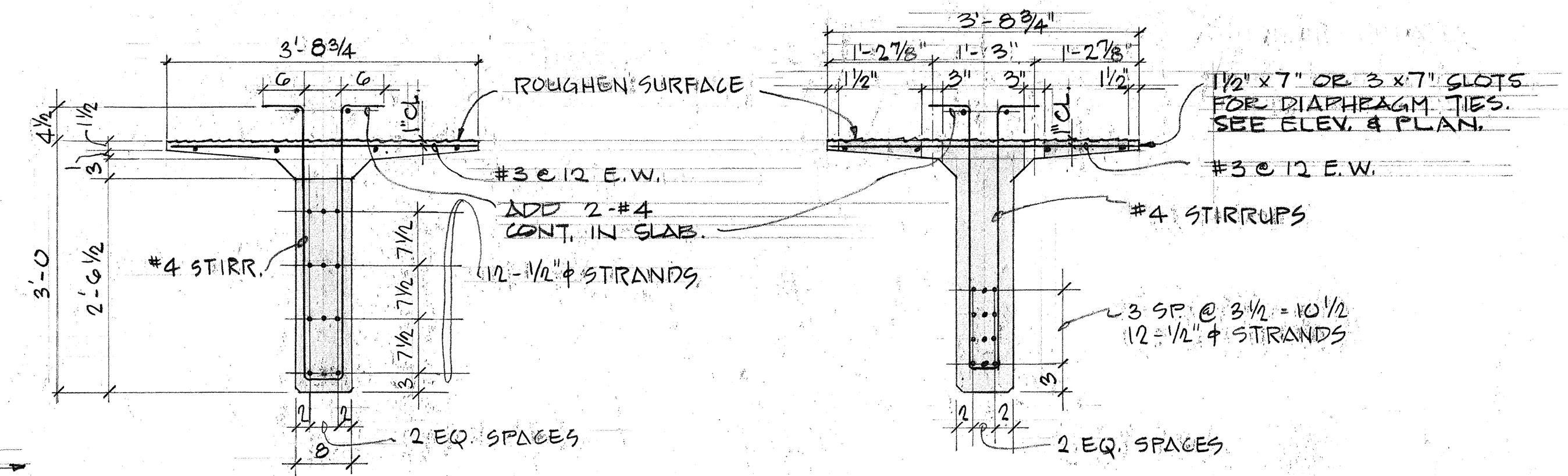
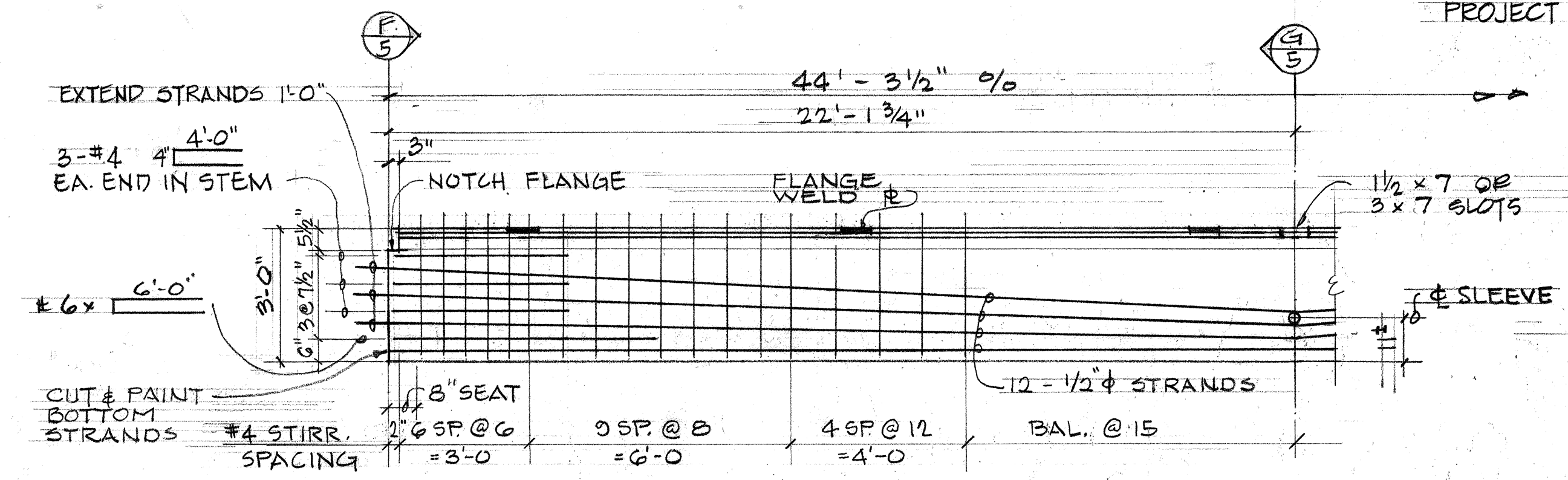
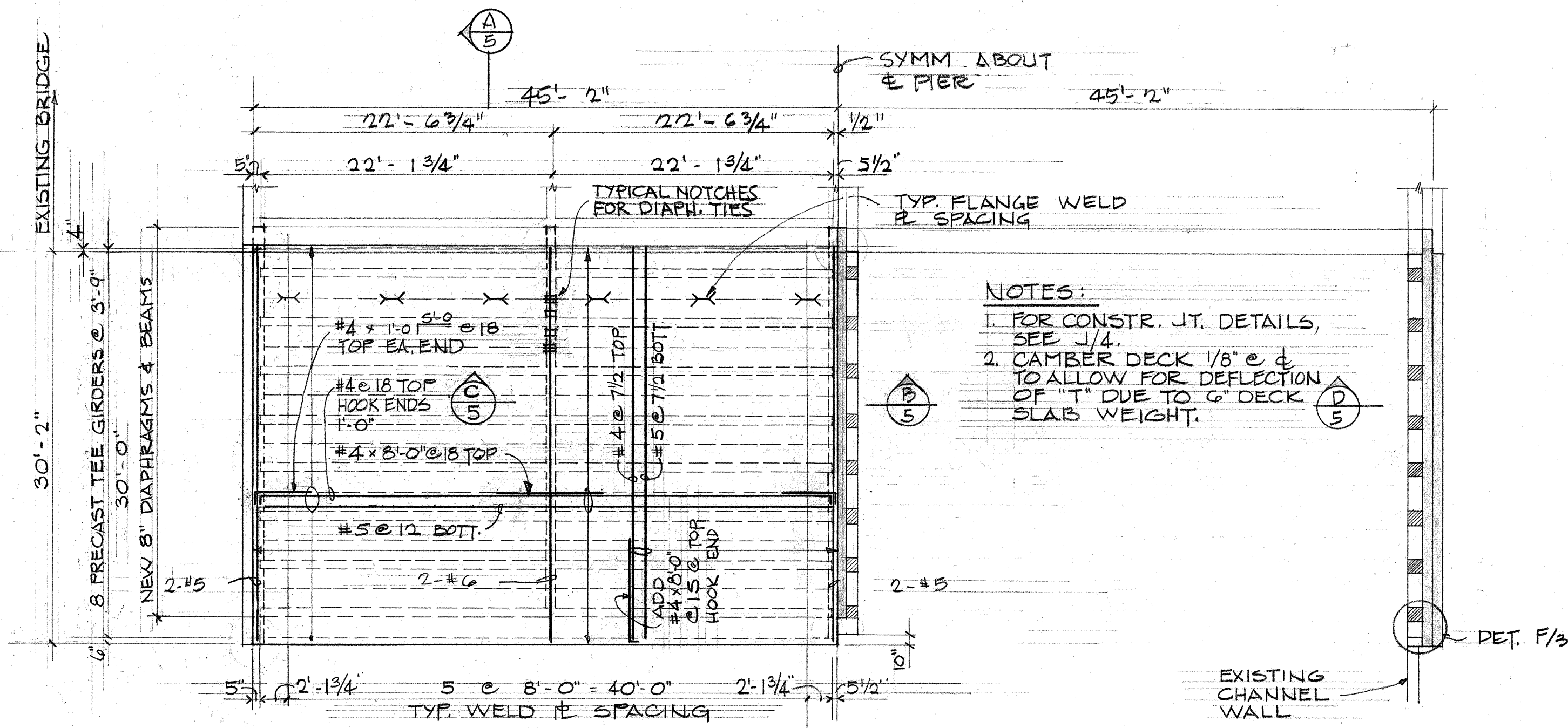
PROJECT 900 B-02-68 UNIT 1



THIS WORK WAS PREPARED
BY ME OR UNDER MY SUPERVISION
WALTER LIND ASSOCIATES, INC.
E. K. Matson

SCALE: AS NOTED

SHEET No. 4 OF 7 SHEETS



DATE: _____
DRAWN BY: _____
CHECKED BY: _____
DESIGNED BY: _____
NOTE BOOK: _____

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

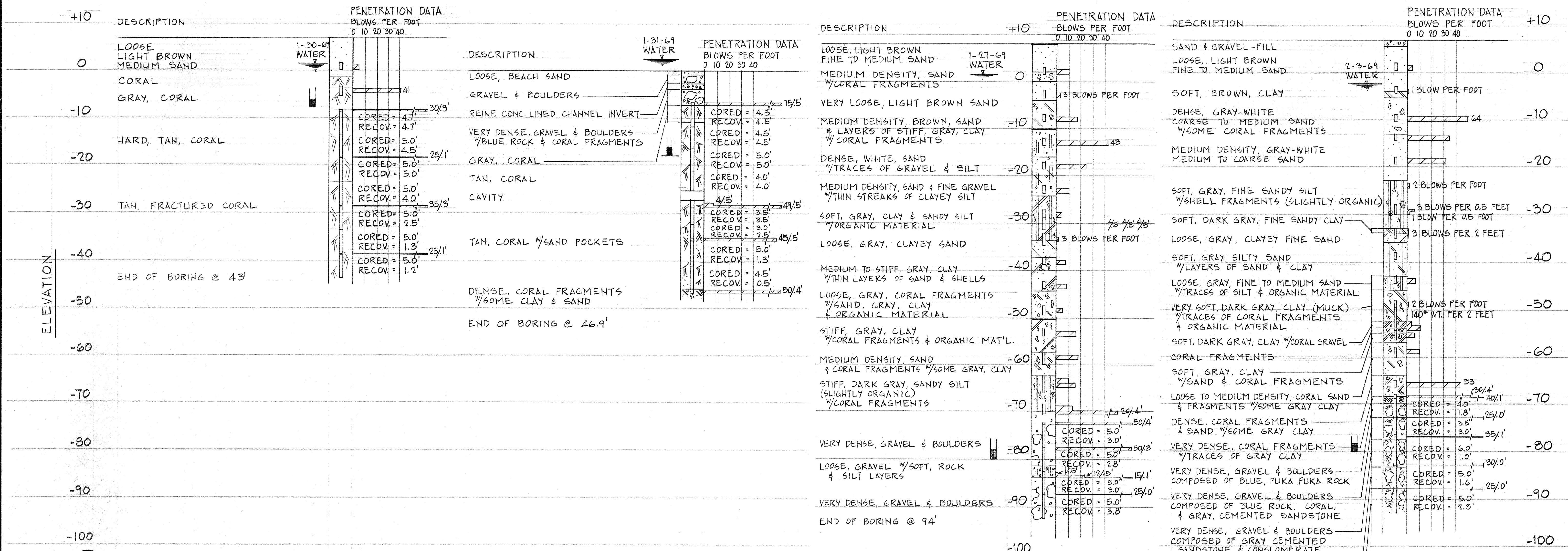
ULEHAWA BRIDGE WIDENING
DECK FRAMING PLAN AND DETAILS
FARRINGTON HIGHWAY WIDENING
PROJECT 900 B-02-68
UNIT 1
SCALE: AS NOTED
SHEET No. 5 OF 7 SHEETS

BORING No. 1

BORING No. 2

BORING No. 3

BORING No. 4



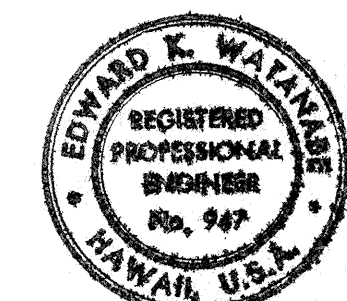
NOTE:

BORING LOGS TAKEN FROM REPORT PREPARED BY WALTER LUM ASSOCIATES, INC. "FARRINGTON HIGHWAY WIDENING, ULEHAWA BRIDGE," DATED FEBRUARY 17, 1969

LEGEND:

ESTIMATED PILE TIP ELEV. OR BEARING STRATUM ELEV. FOR SPREAD FOOTING.

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
NOTED BY	
CHECKED BY	
NO.	



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
WALTER LUM ASSOCIATES, INC.
E.K. Walmsley

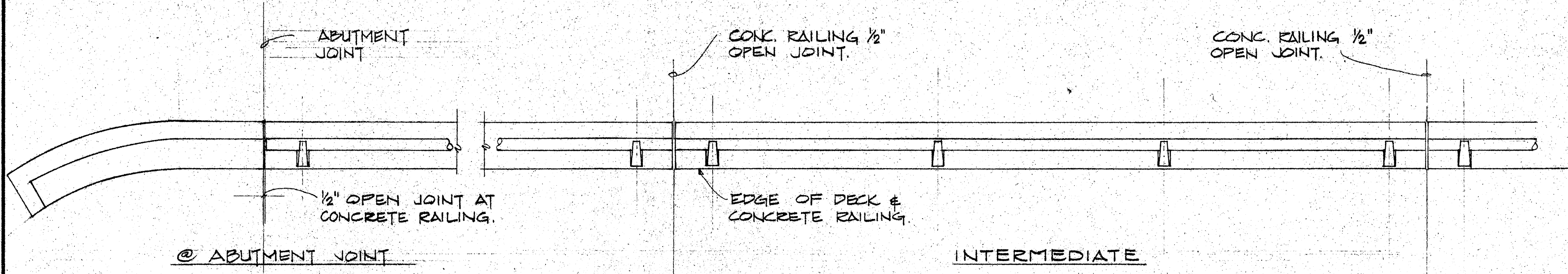
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ULEHAWA BRIDGE WIDENING
BORING LOGS

FARRINGTON HIGHWAY WIDENING
PROJECT 900 B-02-68
UNIT 1

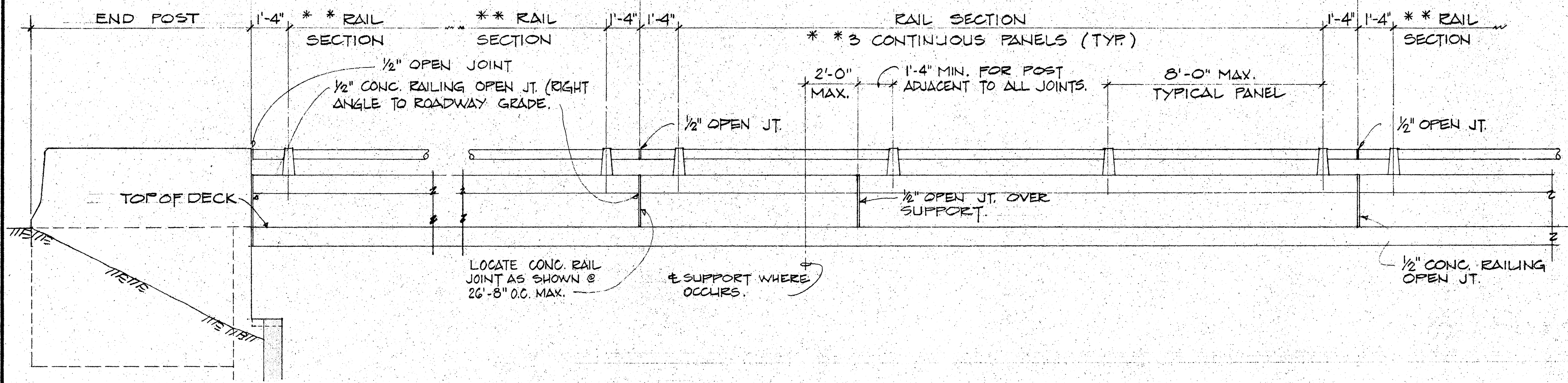
SCALE: AS NOTED

SHEET No. 6 OF 7 SHEETS



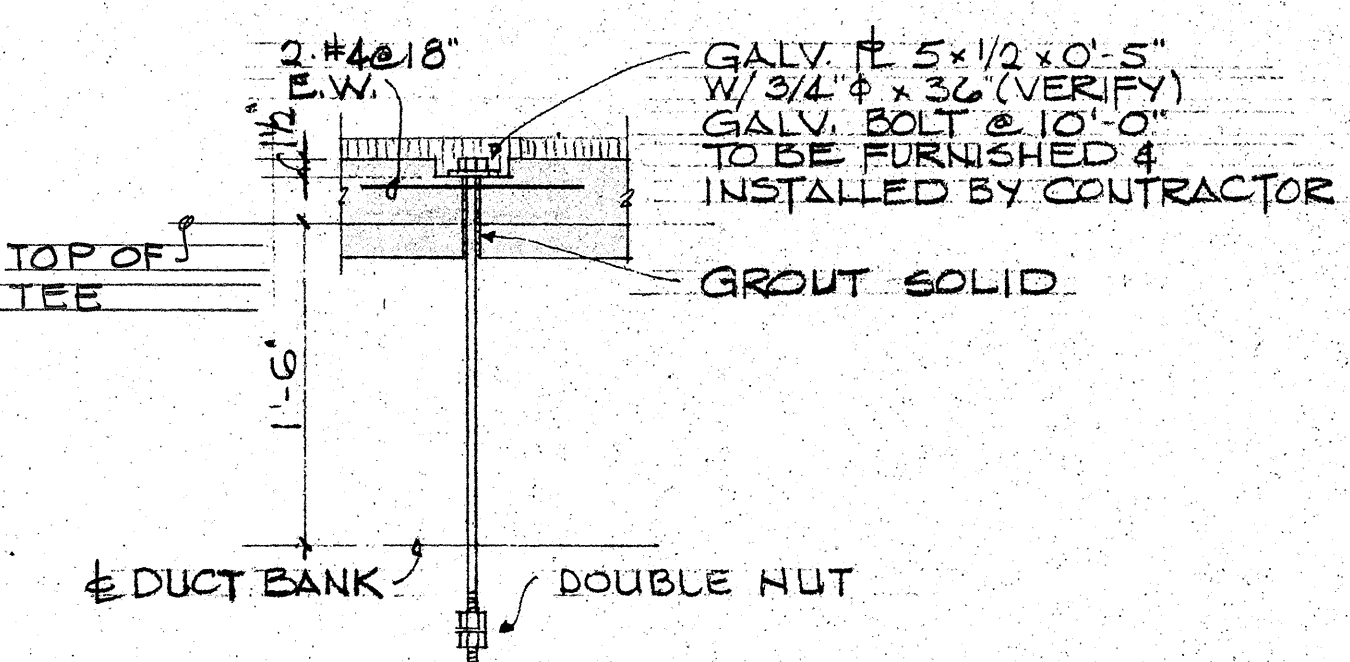
RAILING PLAN
SCALE: 3/8" = 1'-0"

**** NOTE:** THE CONTRACTOR SHALL LAY OUT THE RAILING TO PROVIDE 3 CONT. PANELS WHENEVER POSSIBLE. 2 OR 4 CONT. PANELS WILL BE PERMITTED TO COMPLETE THE LAYOUT WHEN 3 CONT. PANELS CANNOT BE MADE. SINGLE PANELS WILL NOT BE PERMITTED. RAIL POSTS SHALL BE NORMAL TO GRADE. PROVIDE DOUBLE POSTS AT EACH EXPANSION JT, FIXED BRIDGE JT, AND AS SHOWN ON DETAILED DWGS.

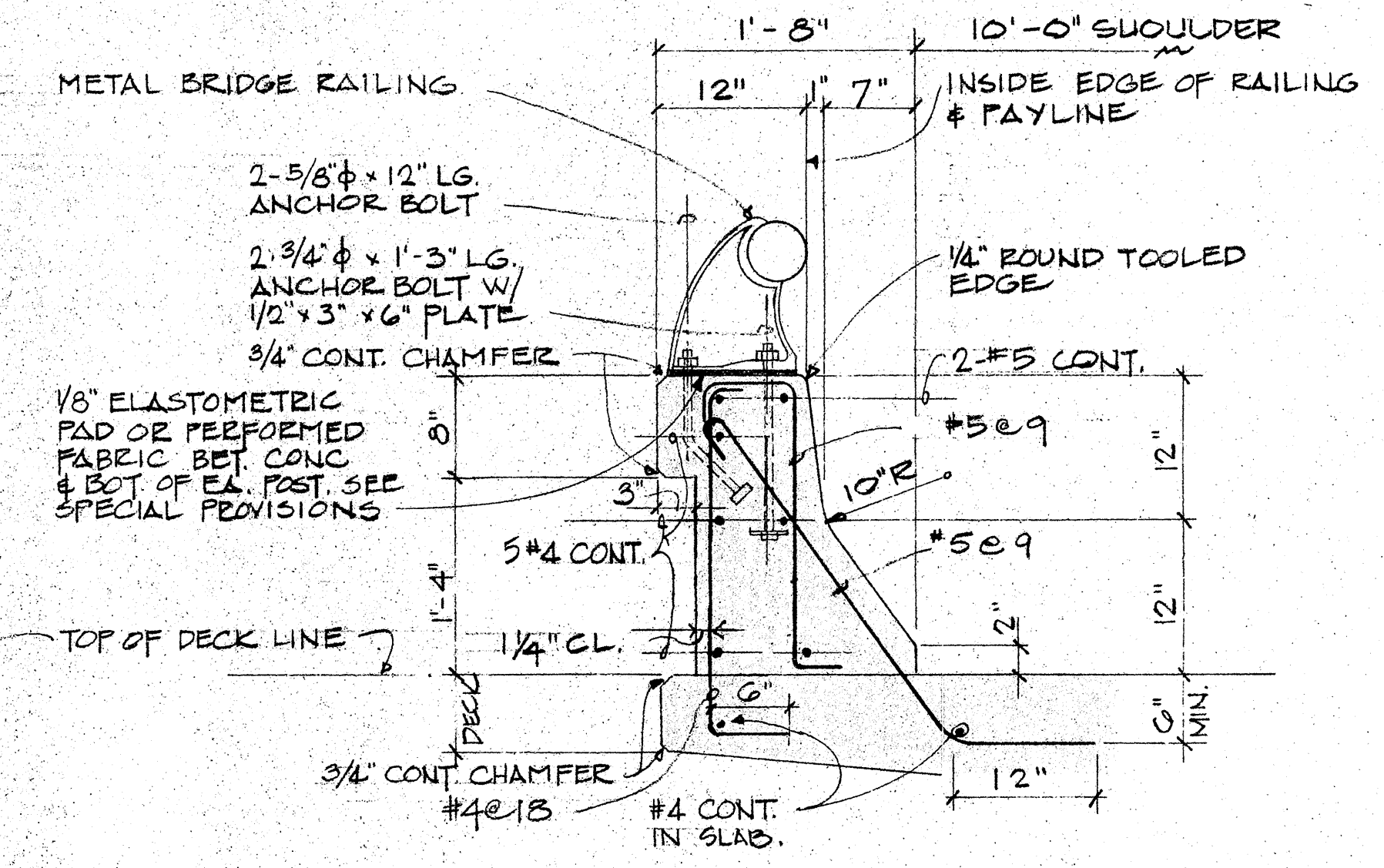


EXTERIOR RAILING ELEVATION
SCALE: 3/8" = 1'-0"

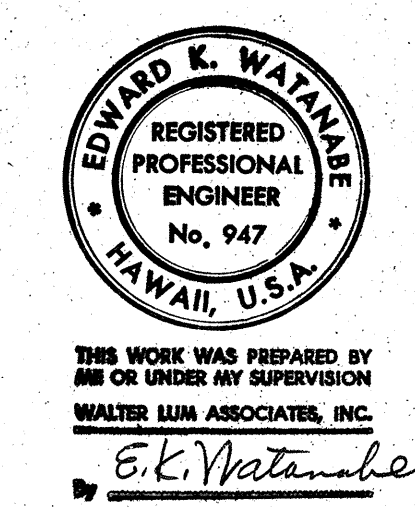
RAILING DETAILS



TELEPHONE DUCT HANGER



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



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**ULEHAWA BRIDGE WIDENING
RAILING DETAILS**

FARRINGTON HIGHWAY WIDENING
PROJECT 900 B-02-68
UNIT 1

SCALE: AS NOTED

SHEET No. 7 OF 7 SHEETS