

GENERAL NOTES

DESIGN SPECIFICATIONS:

DESIGN IS IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 1961 EDITION.

DESIGN LOADS:

H20-S16-44 AS DEFINED IN DESIGN SPECIFICATIONS.

DESIGN STRESSES

$f_c = 3000 \text{ PSI}$
 $f_t = 1200 \text{ PSI}$
 $f_s = 20,000 \text{ PSI-TENSION}$

CONCRETE:

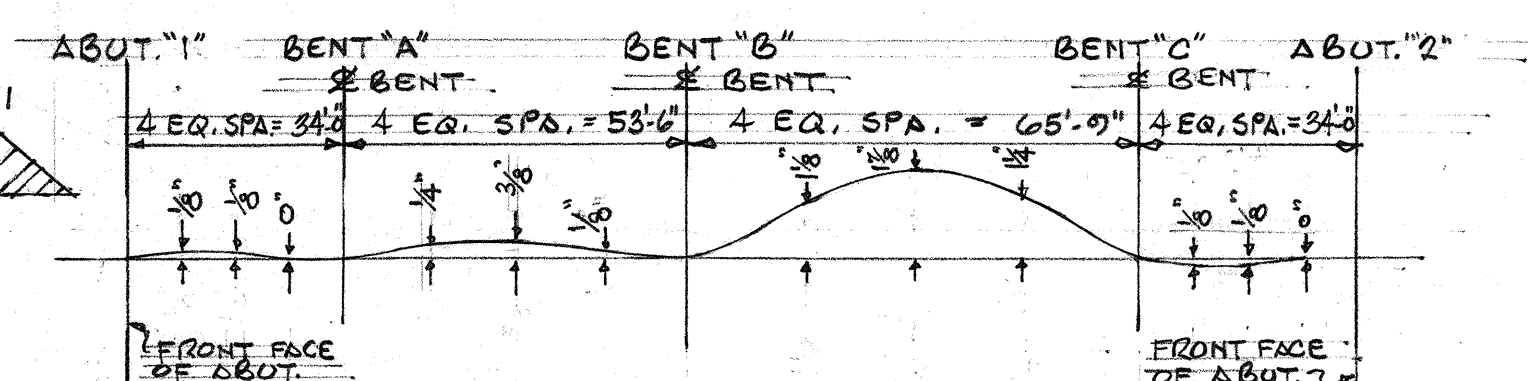
1. ALL CONCRETE SHALL BE CLASS A-1 UNLESS OTHERWISE NOTED.
2. COVER FOR REINFORCING BARS SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED:
 1 1/2" FOR SLABS, STIRRUPS ON SIDES OF BEAMS, AND WALLS NOT EXPOSED TO GROUND.
 2" FOR FORMED WALLS EXPOSED TO GROUND.
 2 1/2" FOR MAIN REINFORCING OF COLUMNS AND BEAMS.
3. REINFORCING BARS SHALL BE DETAILED IN ACCORDANCE WITH ACI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE HIGHWAY STRUCTURES UNLESS OTHERWISE NOTED.
4. REINFORCING BARS SHALL BE SECURELY TIED AT ALL INTERSECTIONS AND SPLICES SHALL BE HELD IN PLACE DURING POURING TO MAINTAIN THEIR PROPER LOCATION AS SHOWN ON PLANS.

CONSTRUCTION METHODS:

1. CONCRETE IN ABUTMENTS AND WING WALLS SHALL REACH A STRENGTH OF 3000 PSI BEFORE COMMENCING FILL. THE FILL SHALL BE PLACED UNIFORMLY AND SIMULTANEOUSLY ON EACH SIDE OF THE ABUTMENT AND WING WALL STEMS.
2. ALL ABUTMENTS AND WING WALLS SHALL BE COMPLETED AND ALL FILL AS SHOWN IN FILL CONSTRUCTION DIAGRAM BELOW SHALL BE PLACED AND COMPACTED BEFORE DECK SLAB IS POURED.
3. ALL FOOTING EXCAVATION SHALL BE TO NEAT LINES, AND THE CONCRETE SHALL BE POURED AGAINST UNDISTURBED MATERIAL. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR ANY EXTRA CONCRETE THAT IS REQUIRED DUE TO EXCAVATION BEYOND THE DIMENSIONS INDICATED ON THE PLANS.
4. OVER EXCAVATION UNDER ANY FOOTING SHALL BE BACKFILLED WITH CLASS D-1 CONCRETE AT THE CONTRACTOR'S EXPENSE.
5. BRIDGE STRUCTURE TO BE CONSTRUCTED ON CURVE, TOP OF CONCRETE DECK TO FOLLOW THE ROADWAY FINISH HORIZONTAL AND VERTICAL GRADE LINES.
6. FORMS: FORMS FOR ALL EXPOSED SURFACE OF SEPARATION STRUCTURES INCLUDING RETAINING WALLS EXCEPT ROUND COLUMNS SHALL BE PLYWOOD FORMS FOR ROUND COLUMNS SHALL BE MADE OF MATERIAL THAT RESULTS IN A SMOOTH FINISH AND TRUE DIMENSIONS AS SHOWN IN THE PLANS.
7. FINISH: SEE SPECIAL PROVISIONS.

CAMBER:

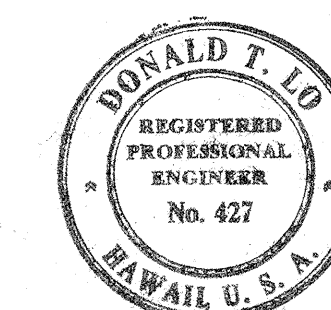
OBTAIN CAMBER BY FORMING AND SHORING CONCRETE SURFACES ABOVE PROFILE GRADES AMOUNT SHOWN IN CAMBER DIAGRAM.



CAMBER DIAGRAM

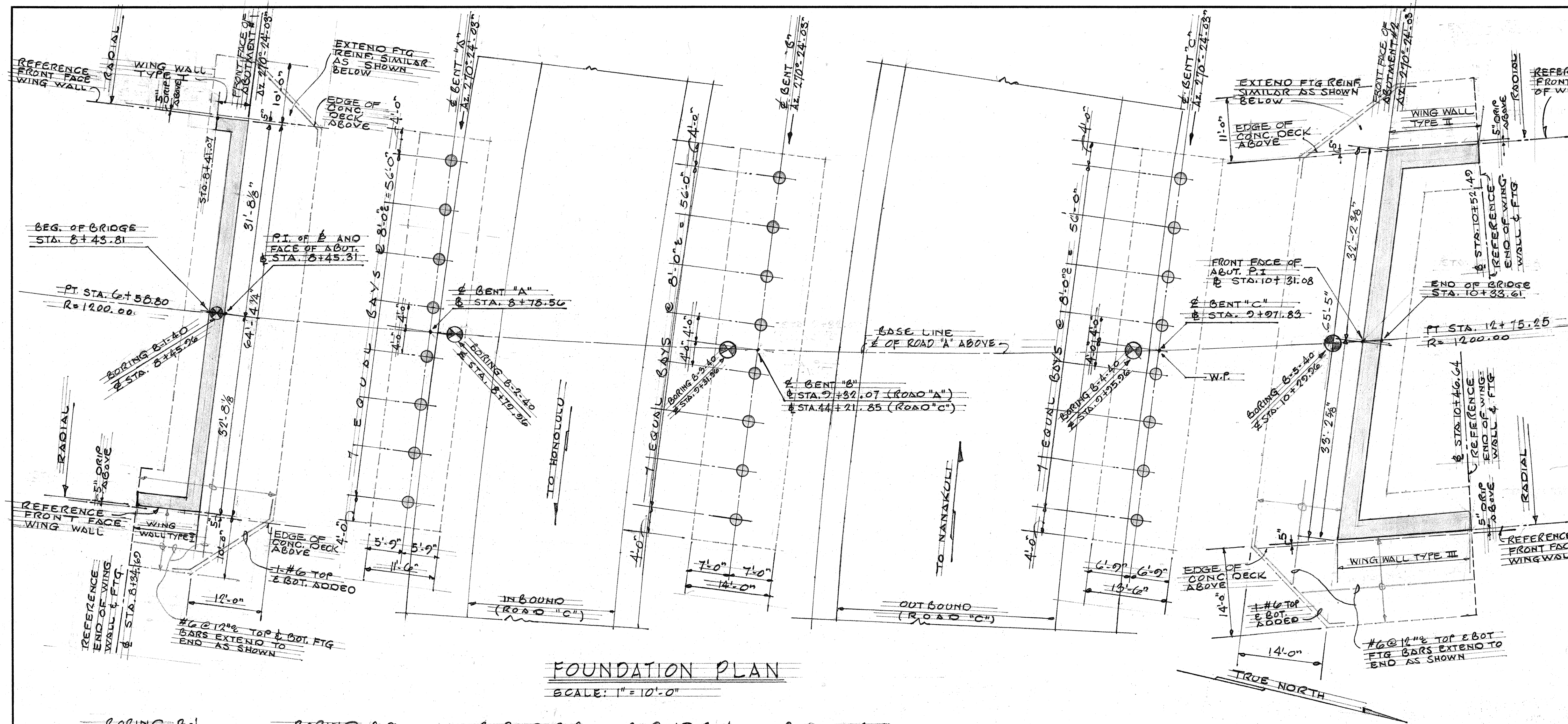
ESTIMATED QUANTITIES

CLASS A-1 CONCRETE	2358 C.Y.
REINFORCING STEEL	526,000 LBS.
STRUCTURAL EXCAVATION	1770 C.Y.
METAL BRIDGE RAILING	417 L.F.
FILTER MATERIAL	25 C.Y.
CONCRETE END POST.	12 LIN. FT.

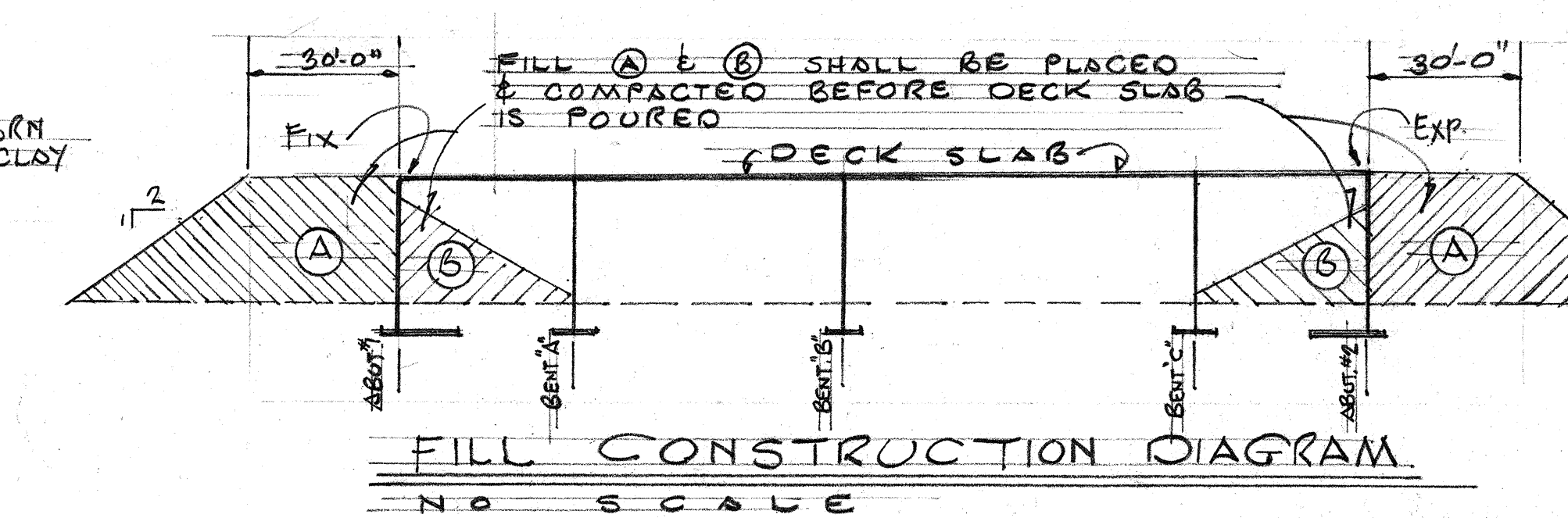
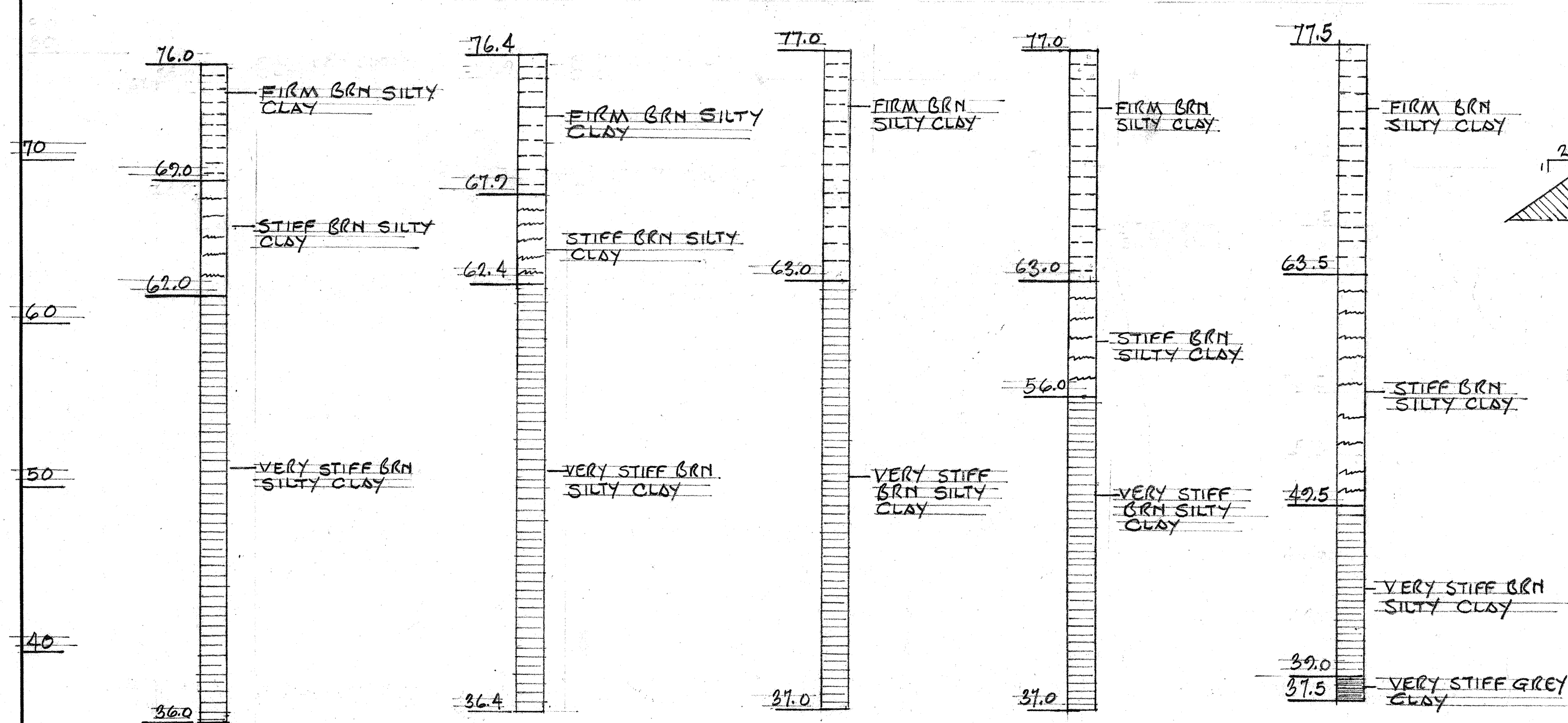


THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
 Donald T. Ito
 ENGINEER

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
PALILAI INTERCHANGE STRUCTURE
 STA. 8+43.81 TO STA. 10+33.61
 PALILAI INTERCHANGE
 F.A.I. Proj. No. I-H-1(20)
 Scale: As Noted Date: July 1964
 SHEET No. 1 OF 8 SHEETS



BORING B-1 BORING B-2 BORING B-3 BORING B-4 BORING B-5



AVERAGE UNIT SOIL PRESSURE UNDER FOUNDATION-PSF					
LOADING CONDITION	LOCATION				
	ABUT. "1"	BENT "A"	BENT "B"	BENT "C"	ABUT. "2"
DL	3148	2990	3180	3005	3184
DL+LL+I	3540	3540	3750	3605	3530

DATE: _____
 SURVEY PLOTTED BY: _____
 DRAWN BY: _____
 DESIGNED 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-HI-1(20)	1965	20	55

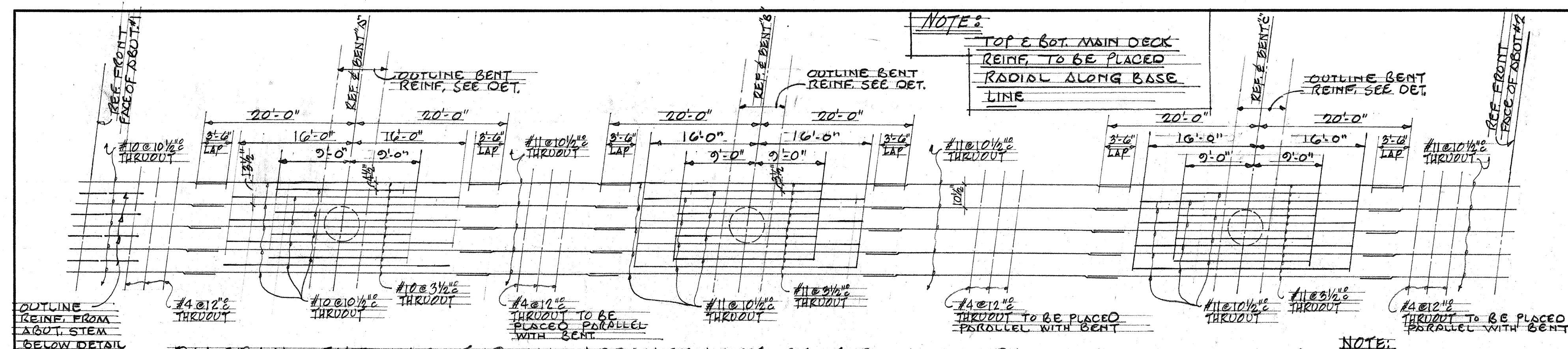


DIAGRAM SHOWING TYPICAL ARRANGEMENT OF TOP LAYER DECK REINFORCEMENT

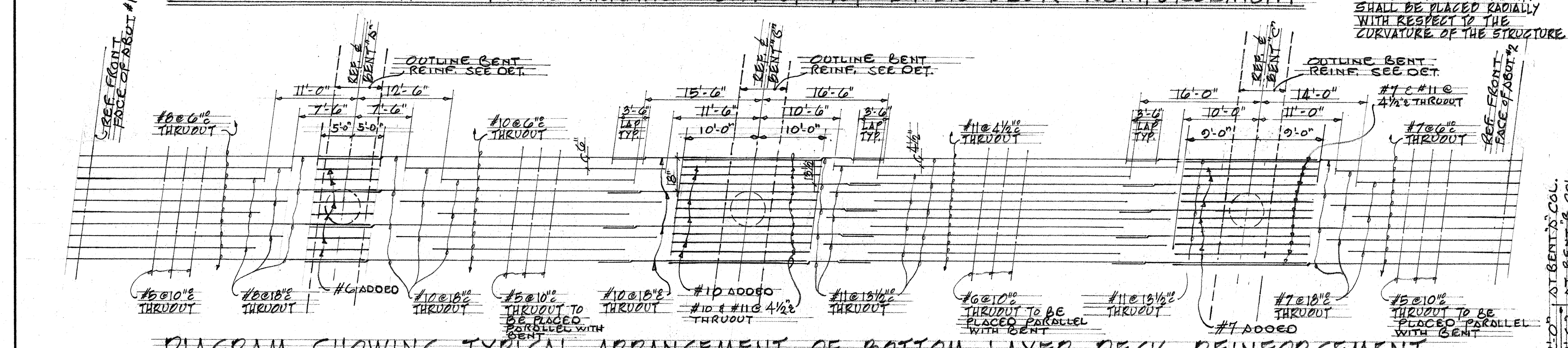
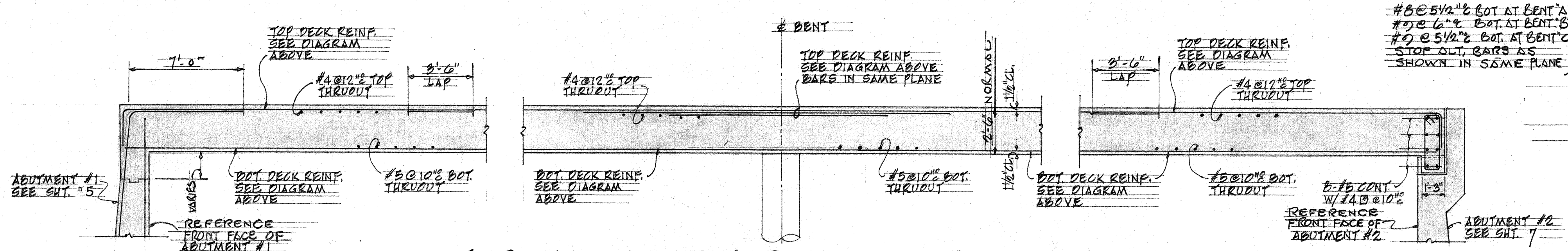
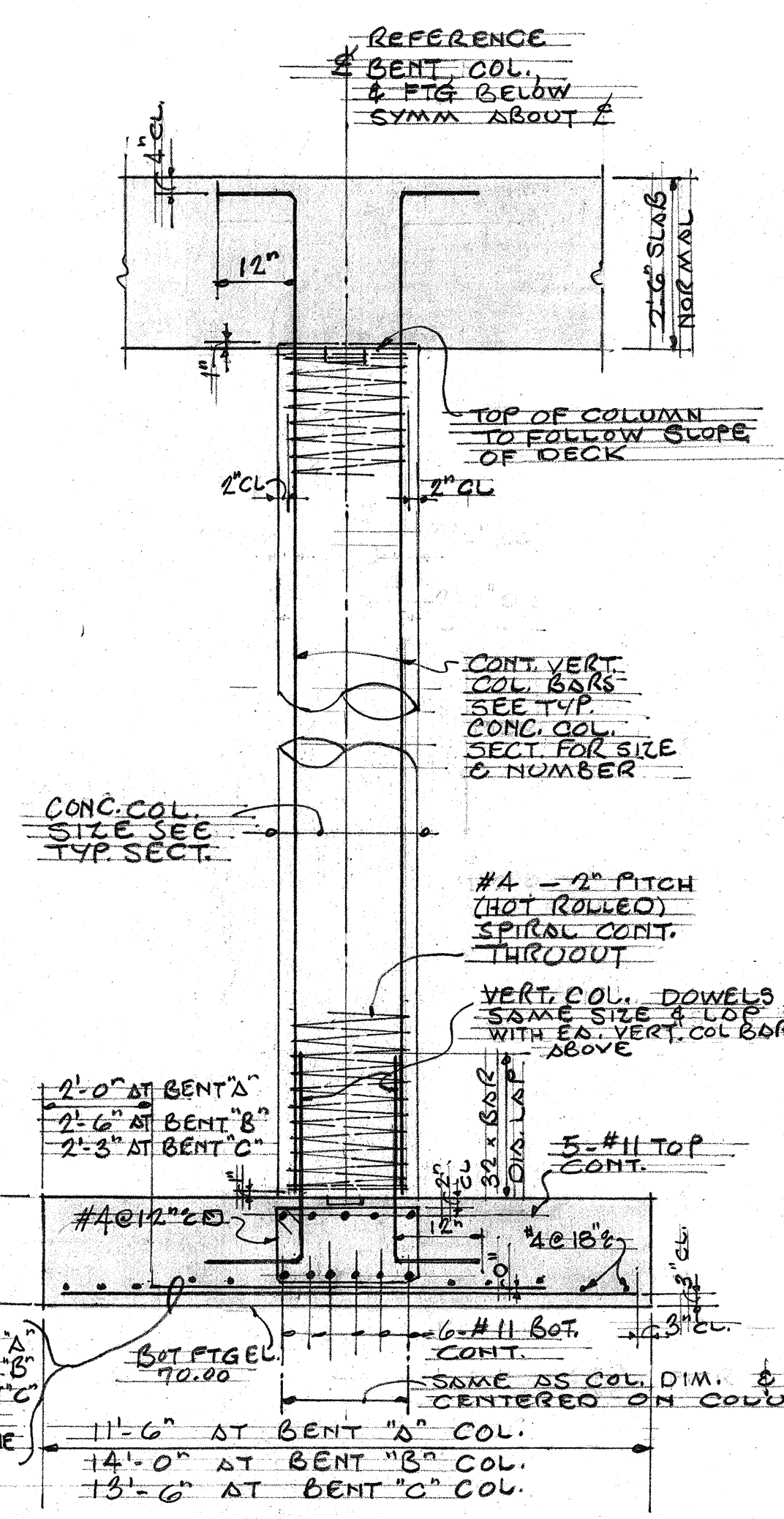


DIAGRAM SHOWING TYPICAL ARRANGEMENT OF BOTTOM LAYER DECK REINFORCEMENT



TYPICAL LONGITUDINAL SLAB SECTIONS



TYPICAL CONC. COL. DETAIL

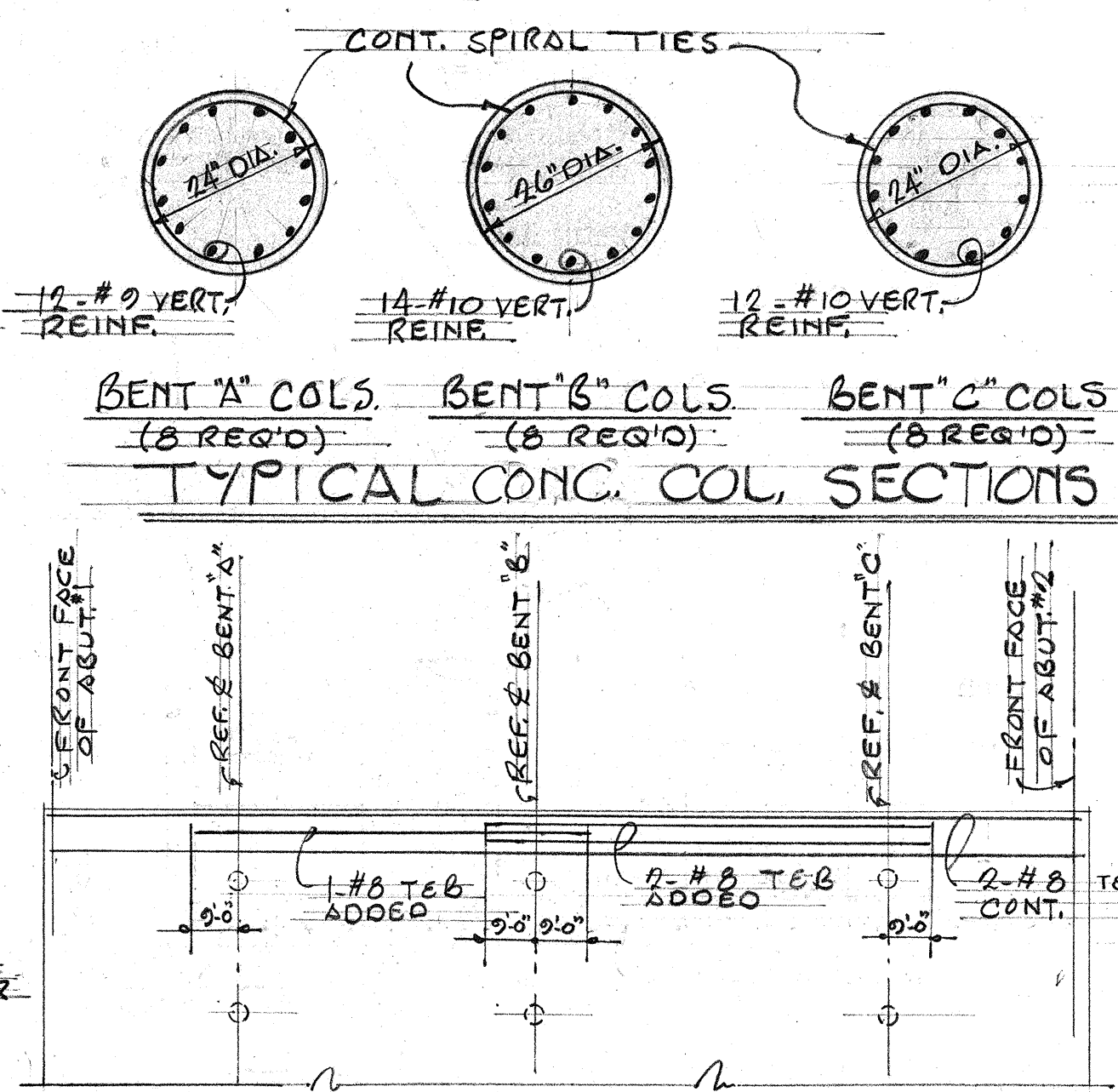
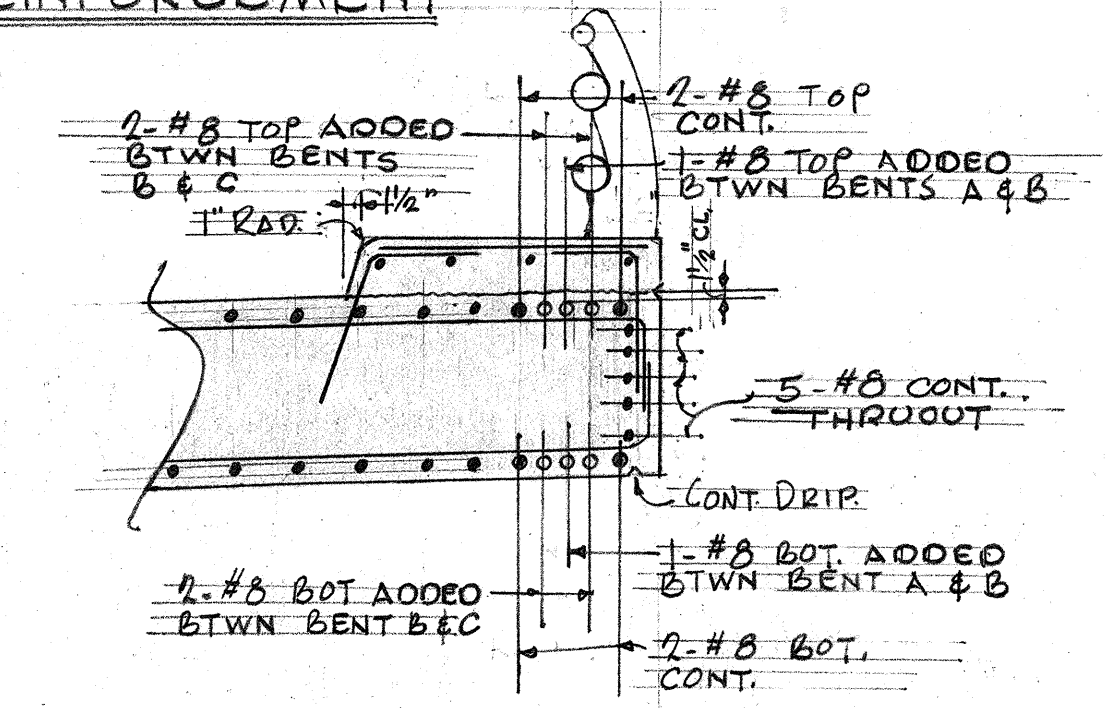
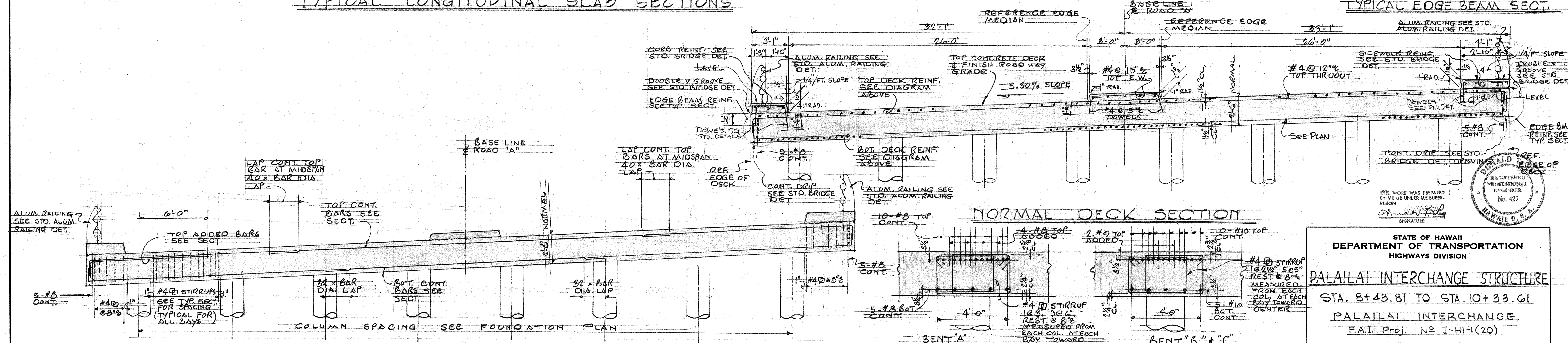


DIAGRAM SHOWING TYPICAL ARRANGEMENT OF TOP & BOT. LAYER EDGE BEAM REINFORCEMENT



TYPICAL EDGE BEAM SECT.



TYPICAL REINFORCEMENT DETAILS OF BENTS "A", "B" & "C"

BENT A BOY TOWARD BENT B
CENTER

TYPICAL SECTIONS THRU BENT

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PALAILAI INTERCHANGE STRUCTURE

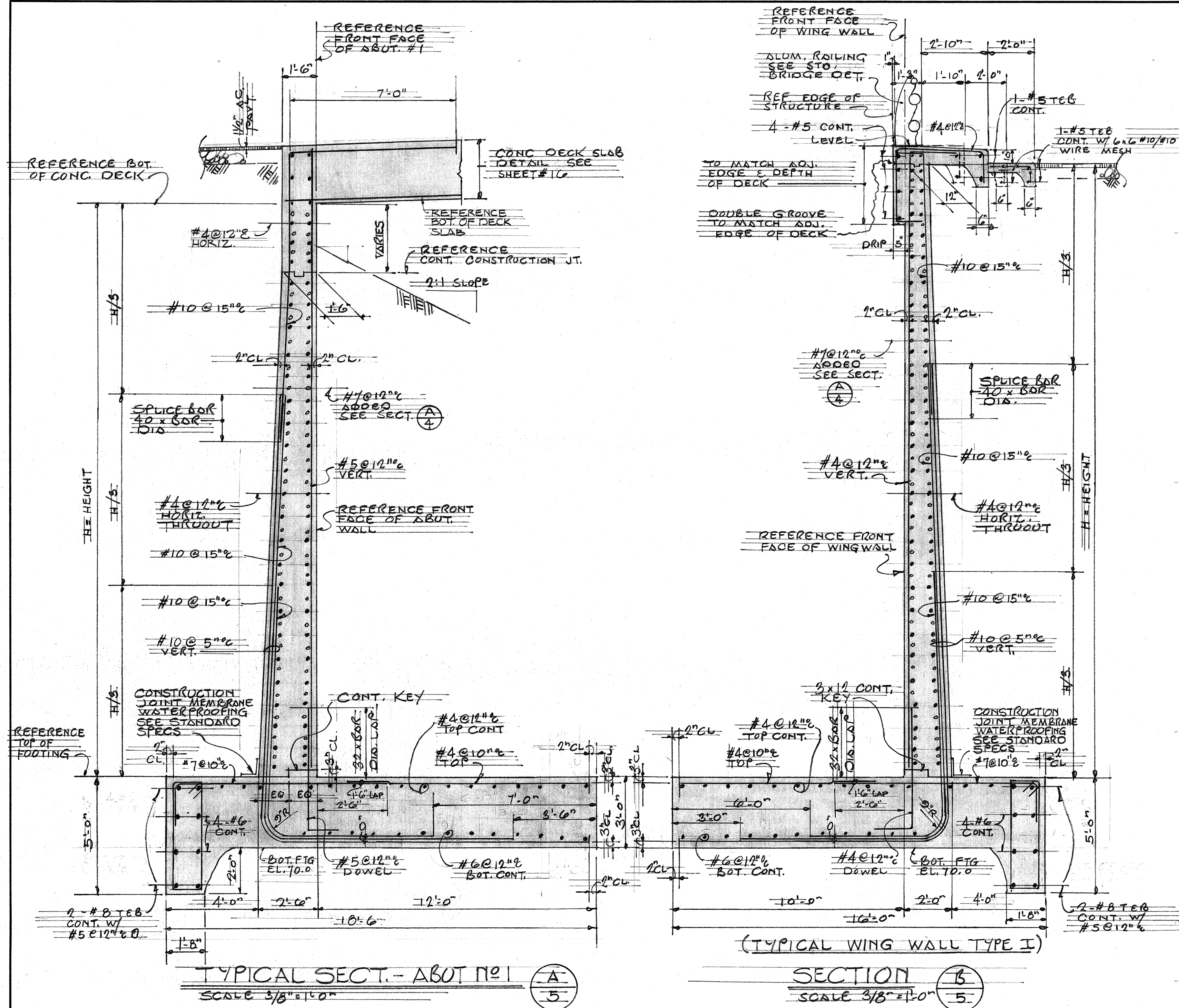
STA. 8+43.81 TO STA. 10+33.61

PALAILAI INTERCHANGE
F.A.I. Proj. No I-HI-1(20)

July 1964

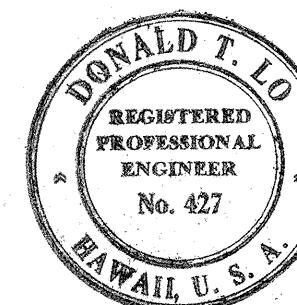
SHEET No. 3 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(20)	1965	42	55



SURVEY PLATTED BY	DATE
DRAWN BY	
CHECKED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	
No.	

THIS WORK WAS PREPARED
BY ME OR UNDER MY SUPER-
VISION
SIGNATURE



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PALAILAI INTERCHANGE STRUCTURE

STA. 8+43.81 TO STA. 10+33.61

PALAILAI INTERCHANGE
F.A.I. Proj. No. I-HI-1(20)

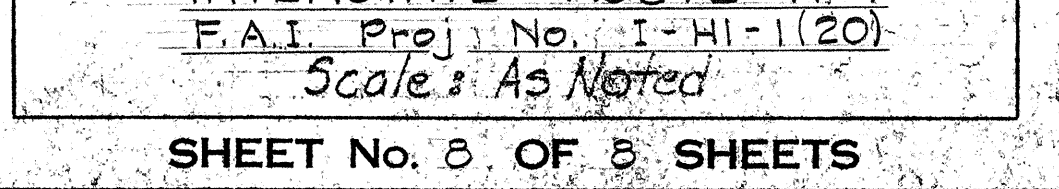
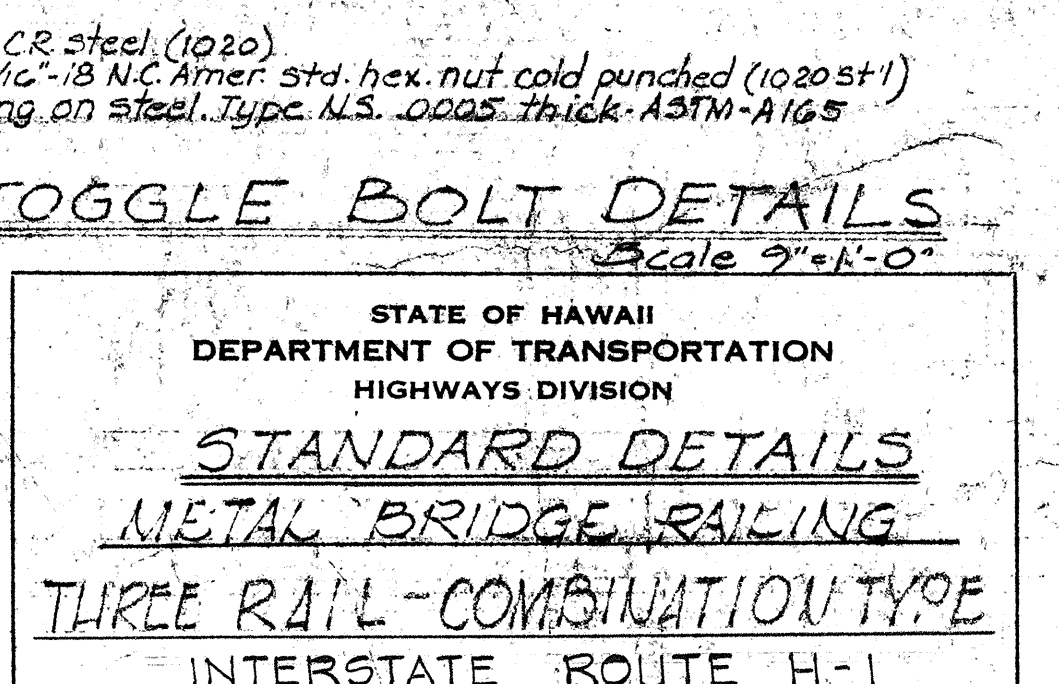
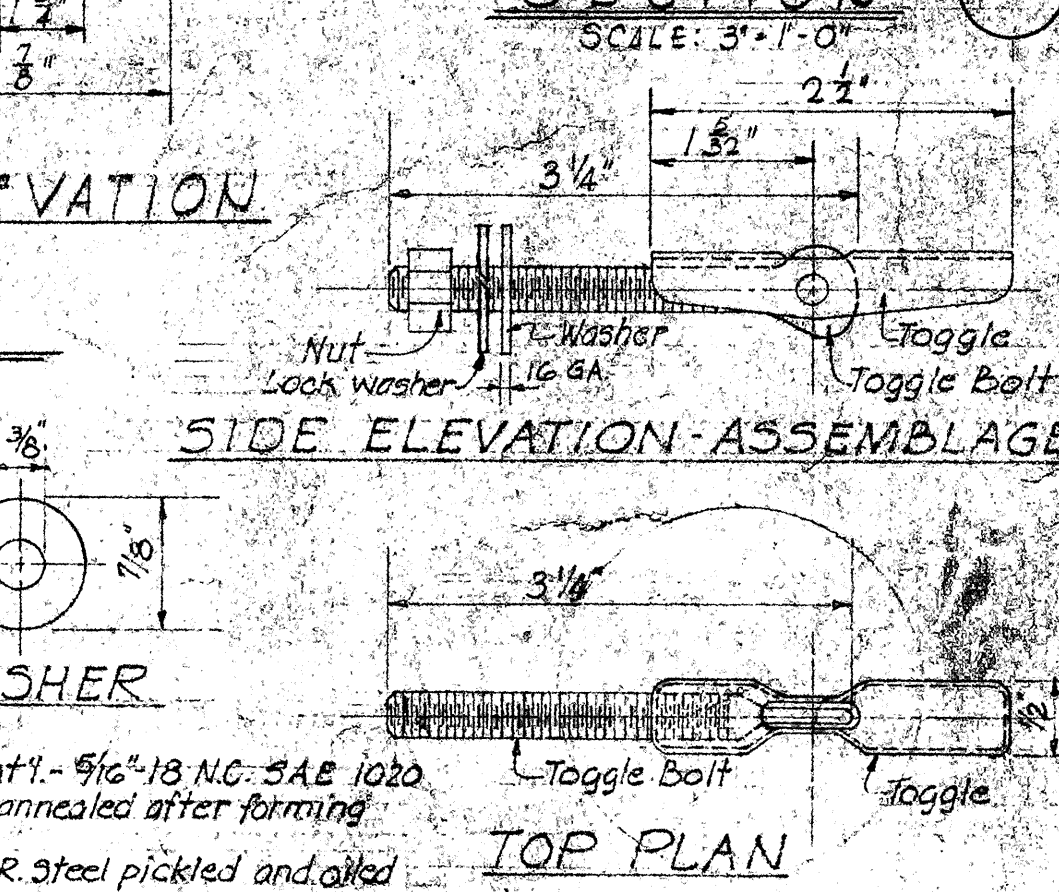
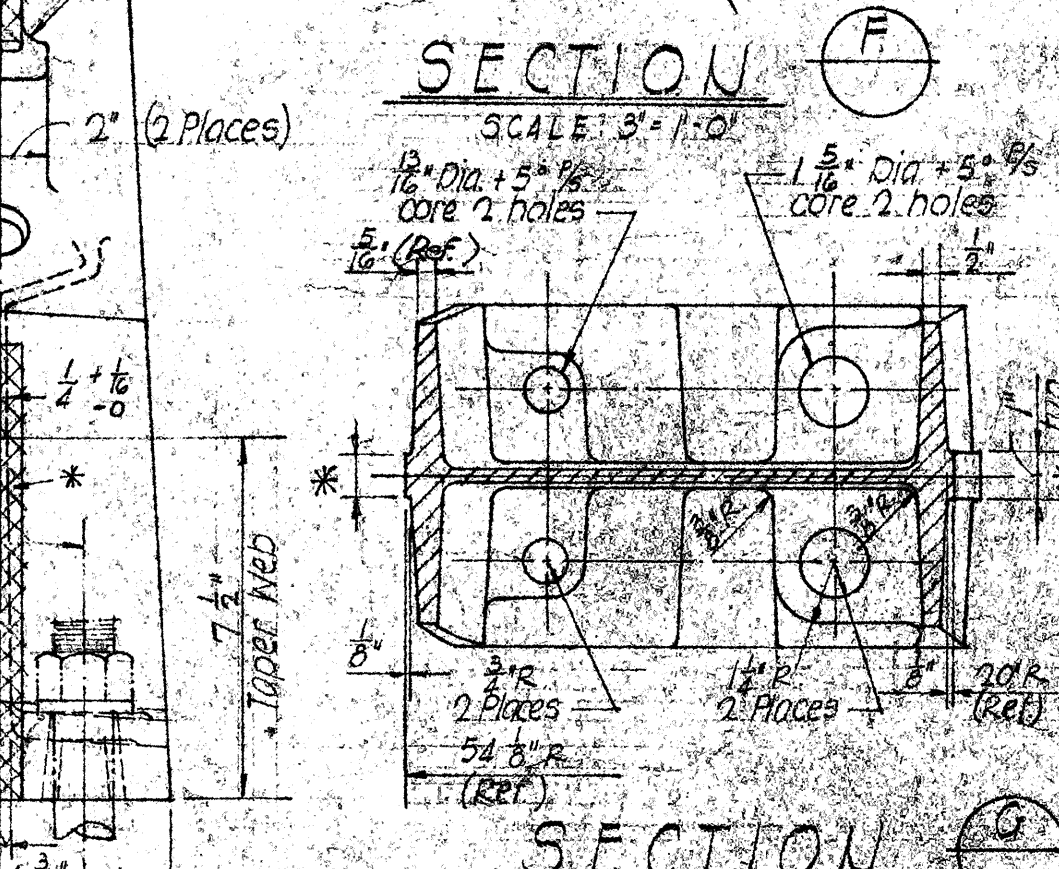
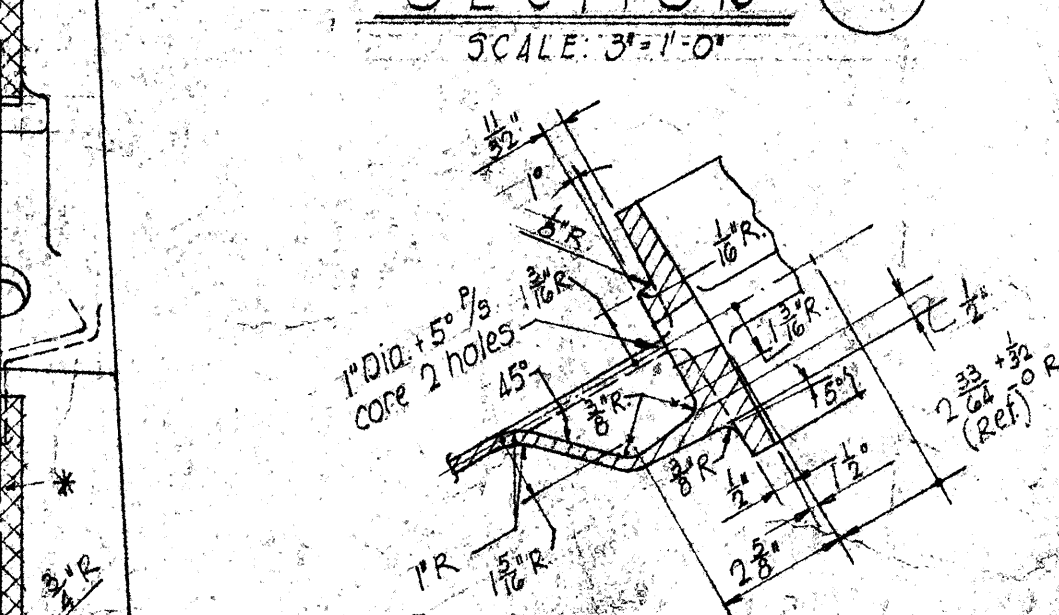
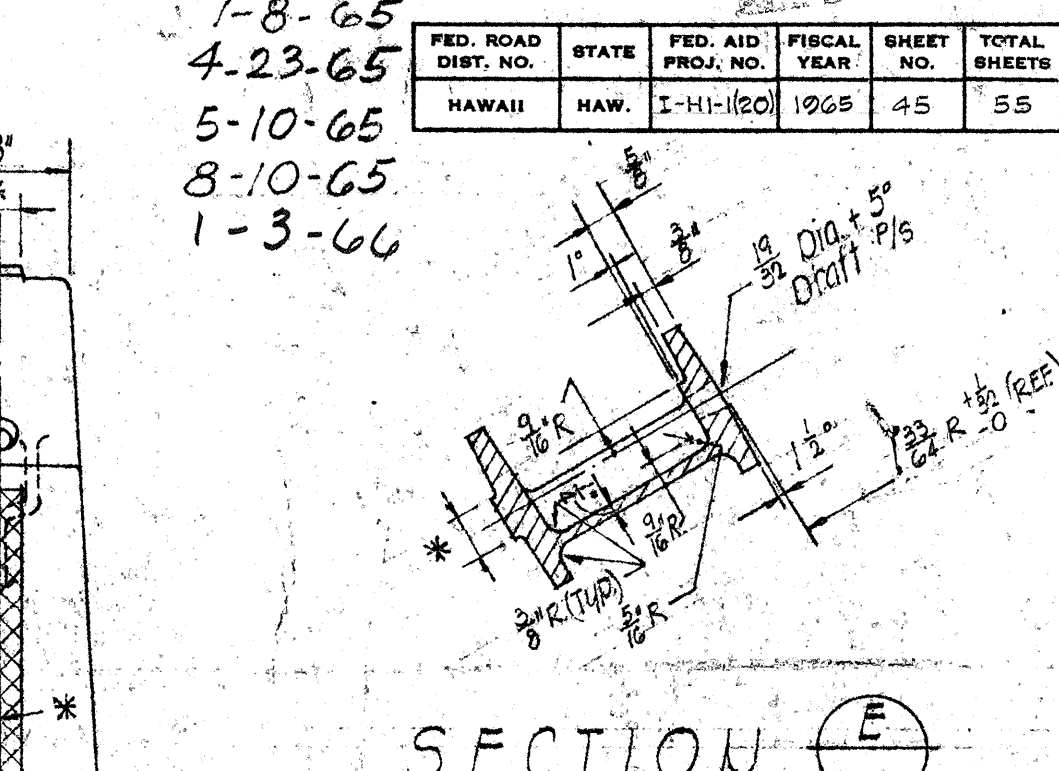
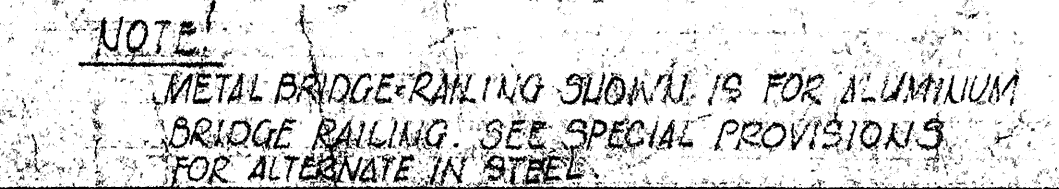
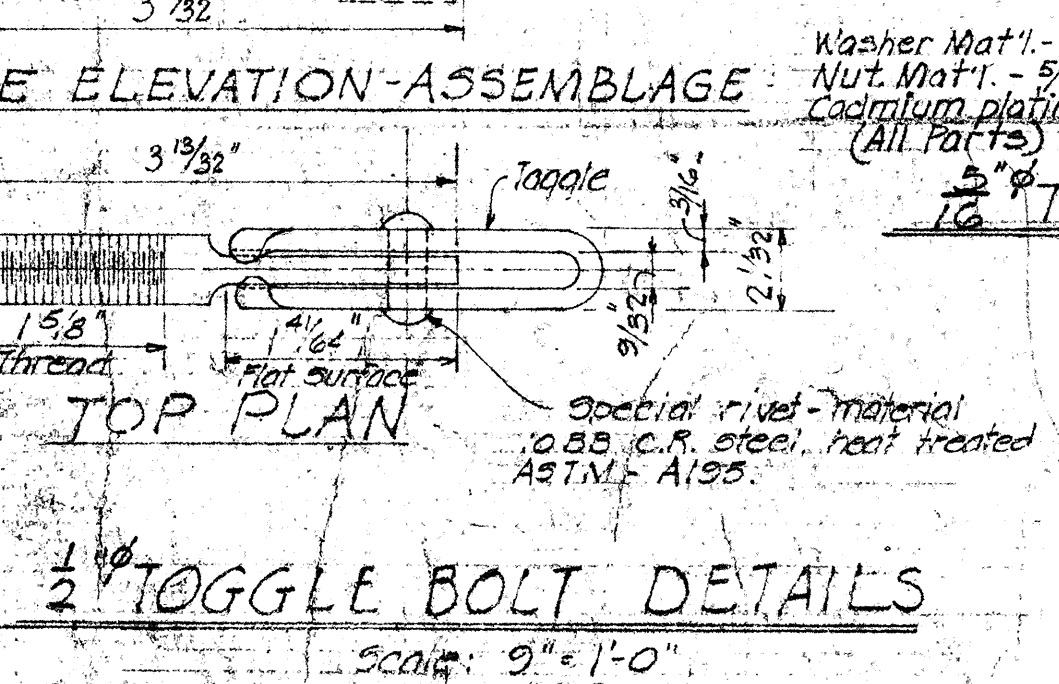
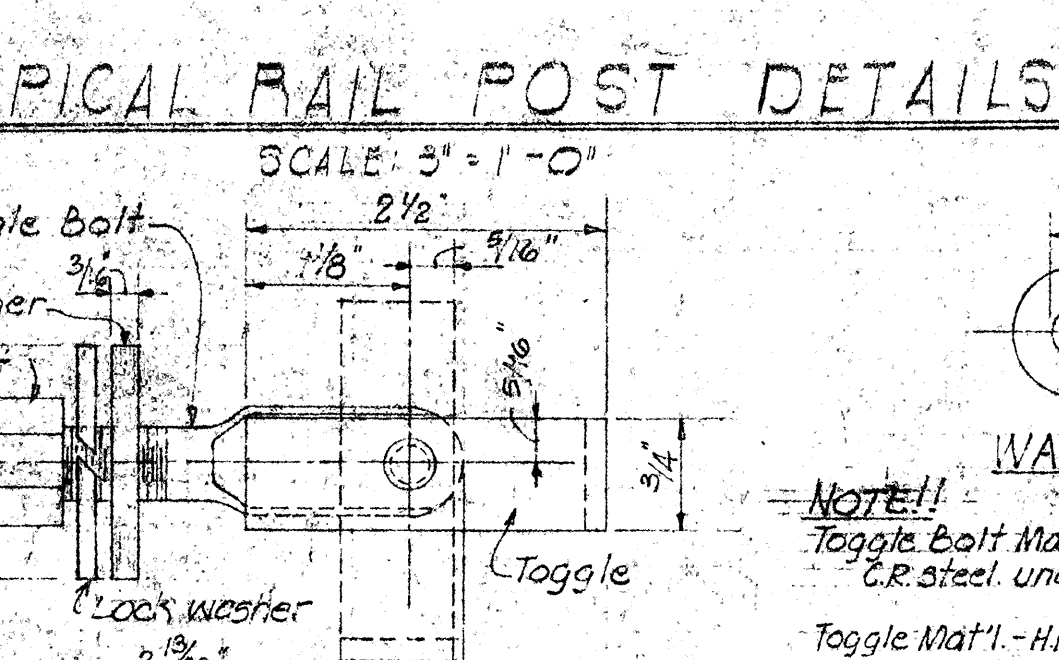
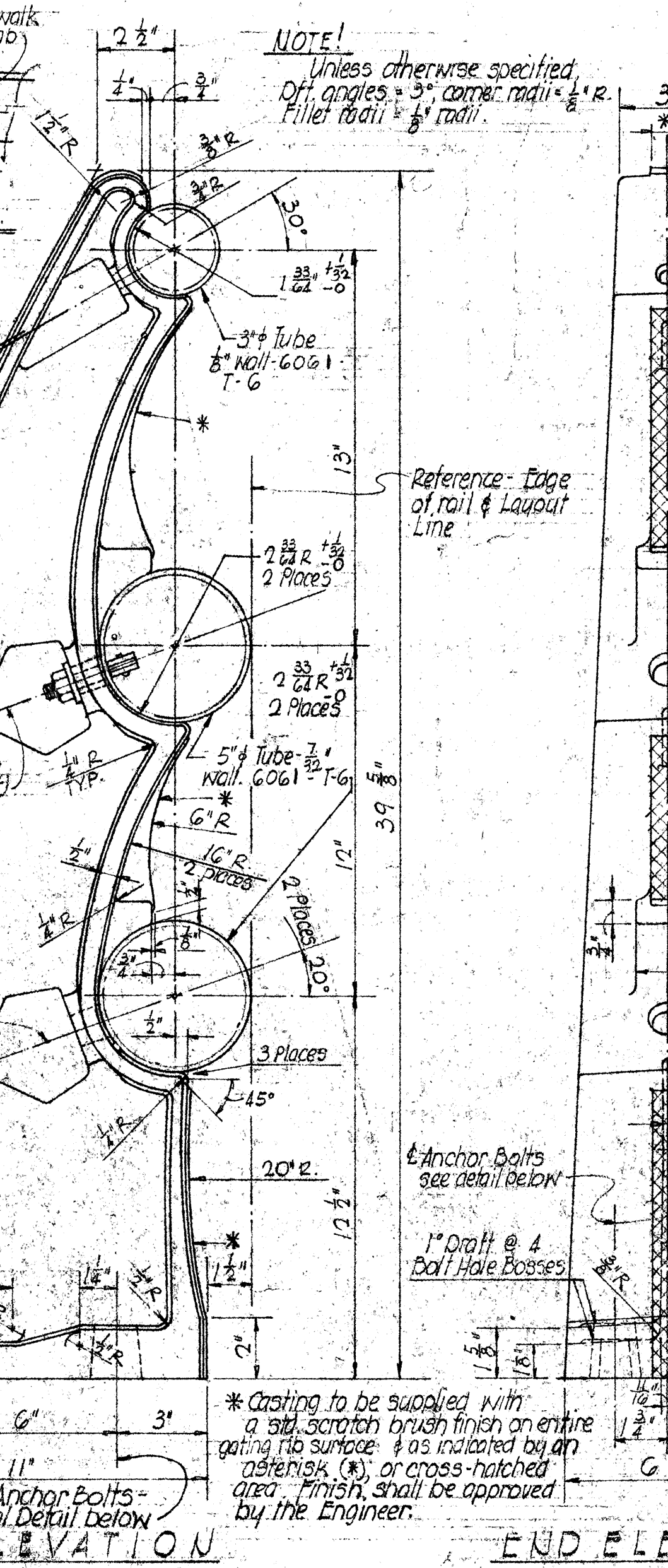
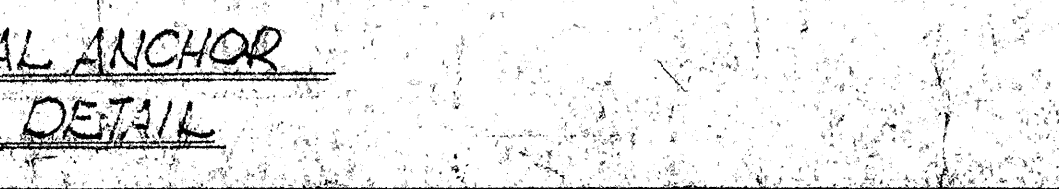
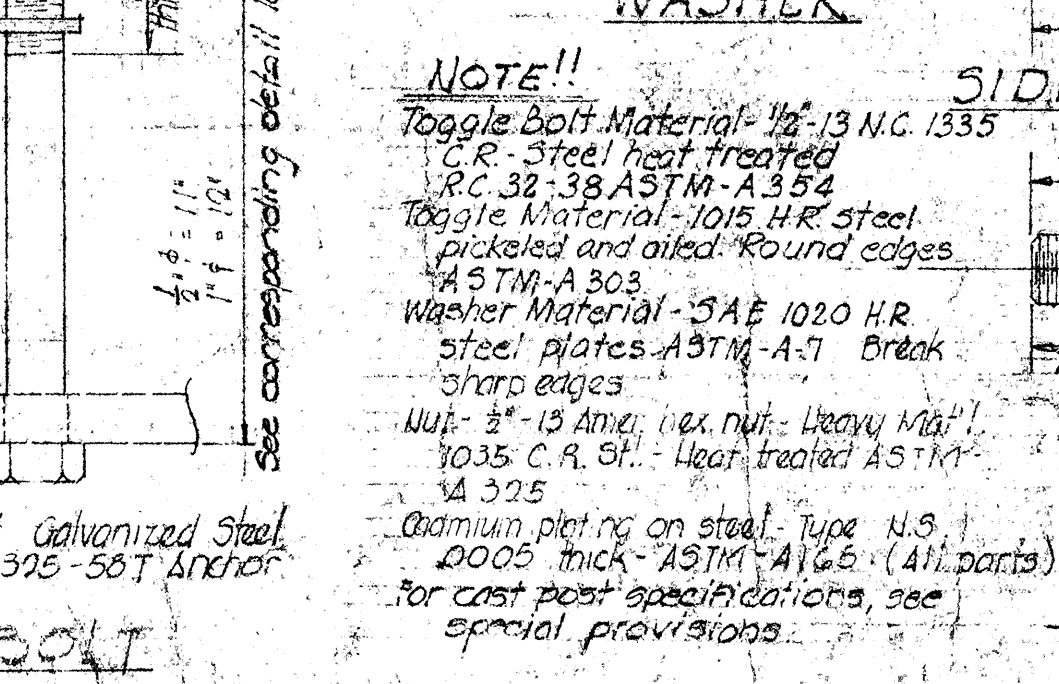
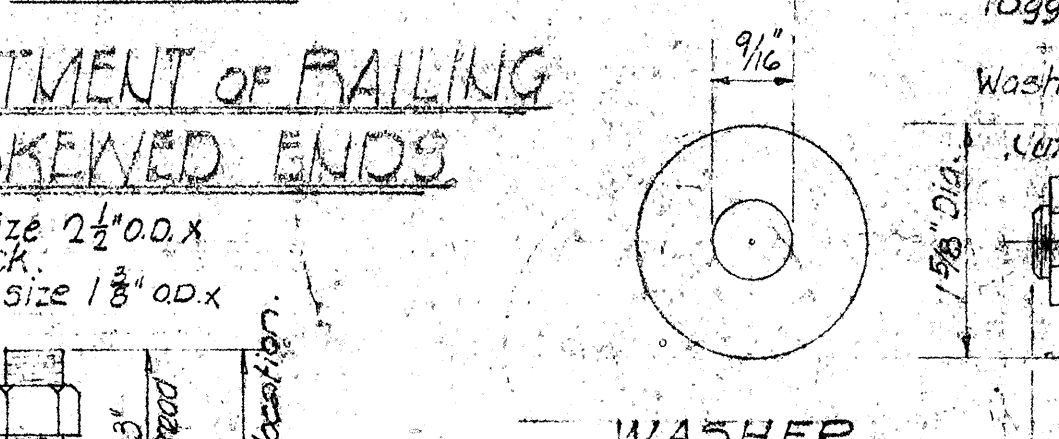
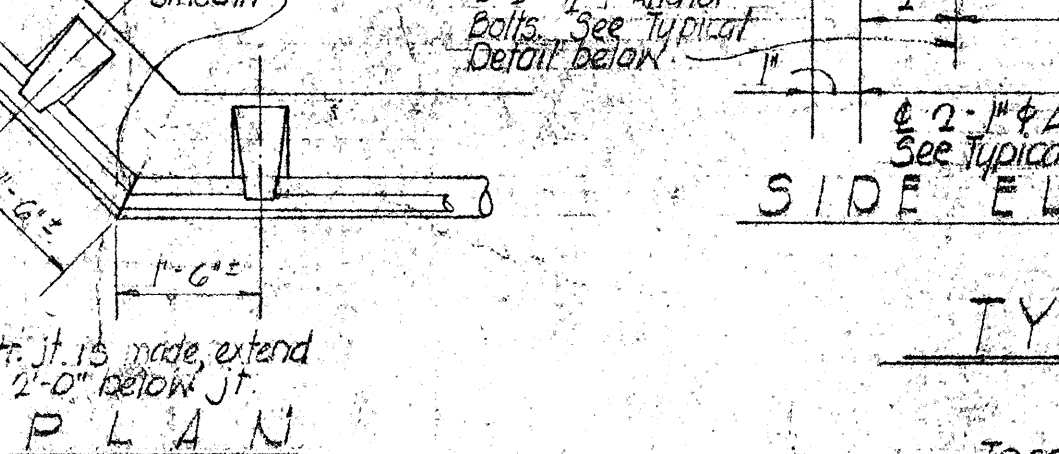
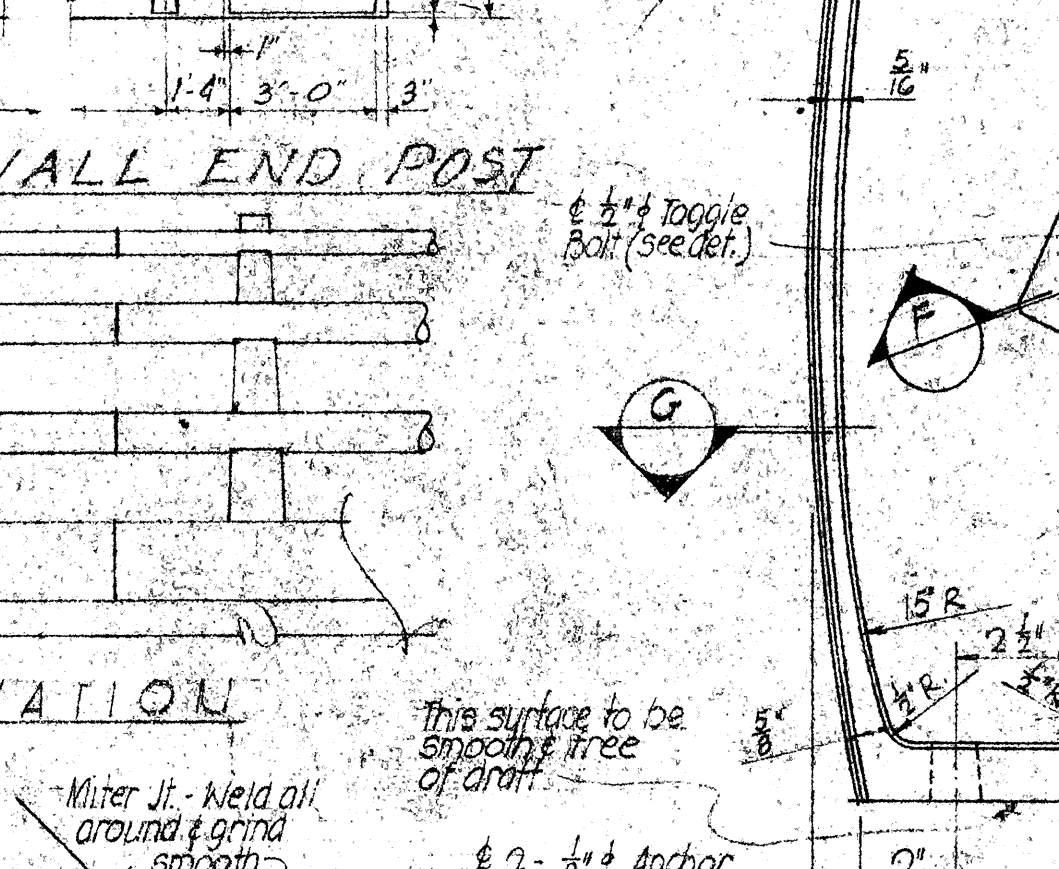
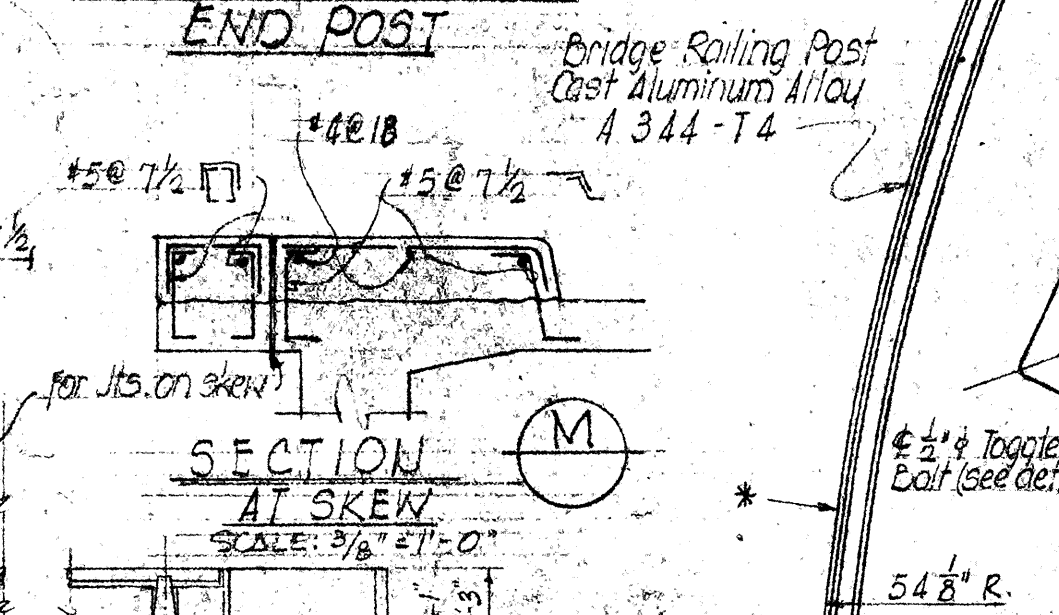
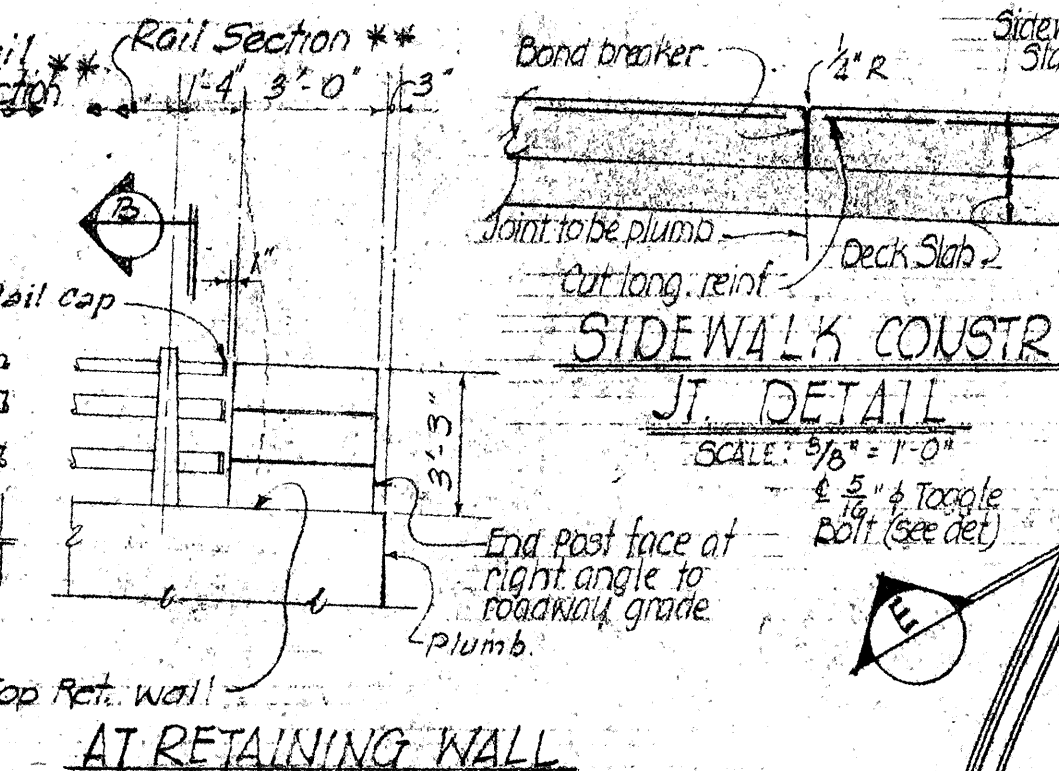
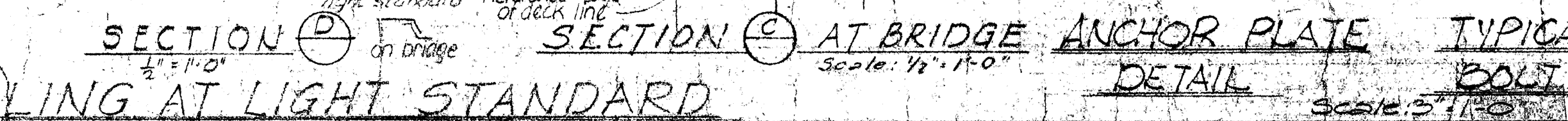
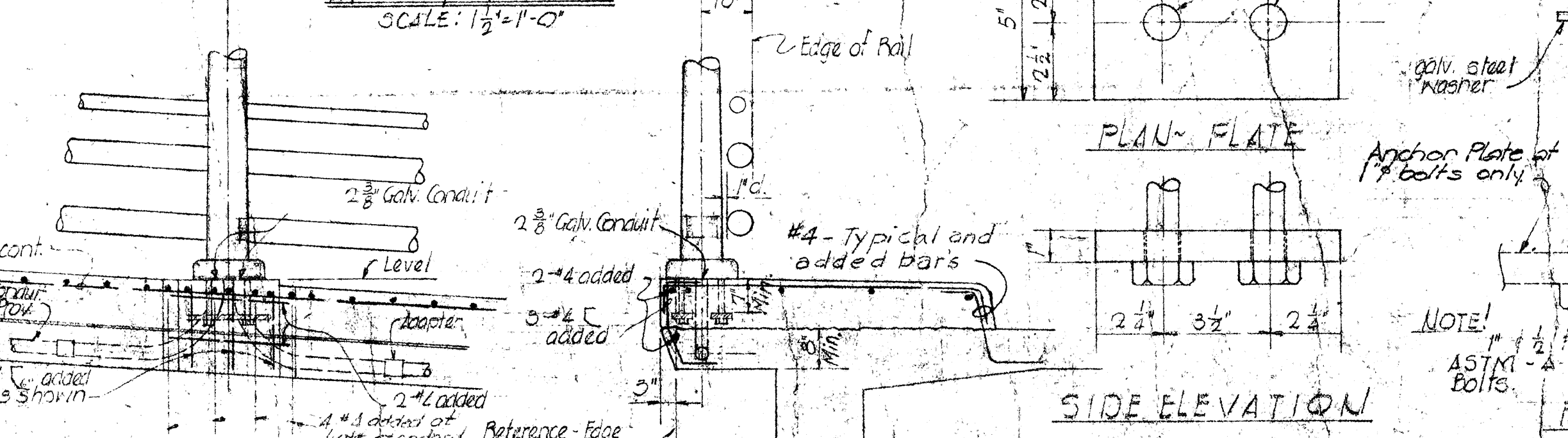
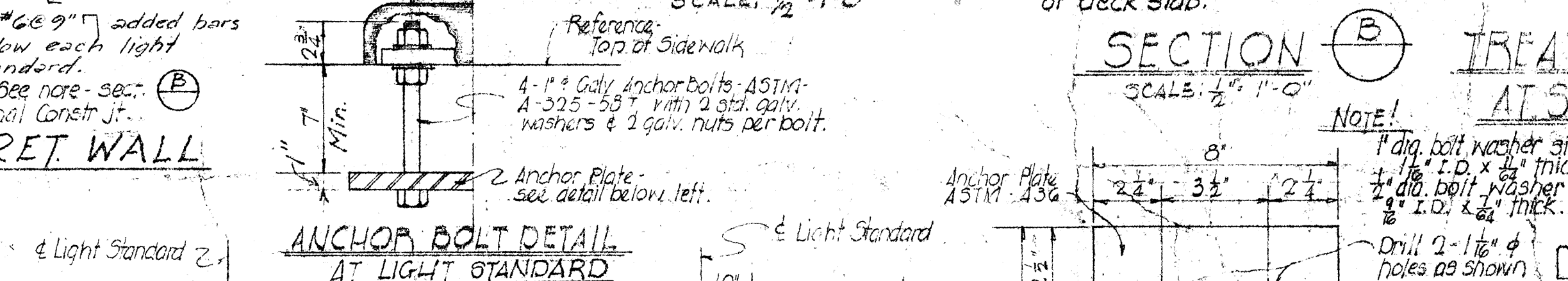
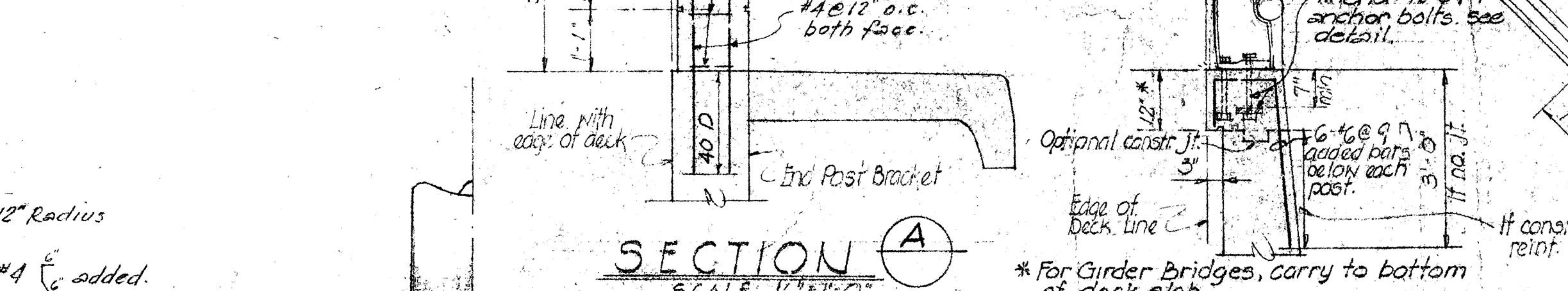
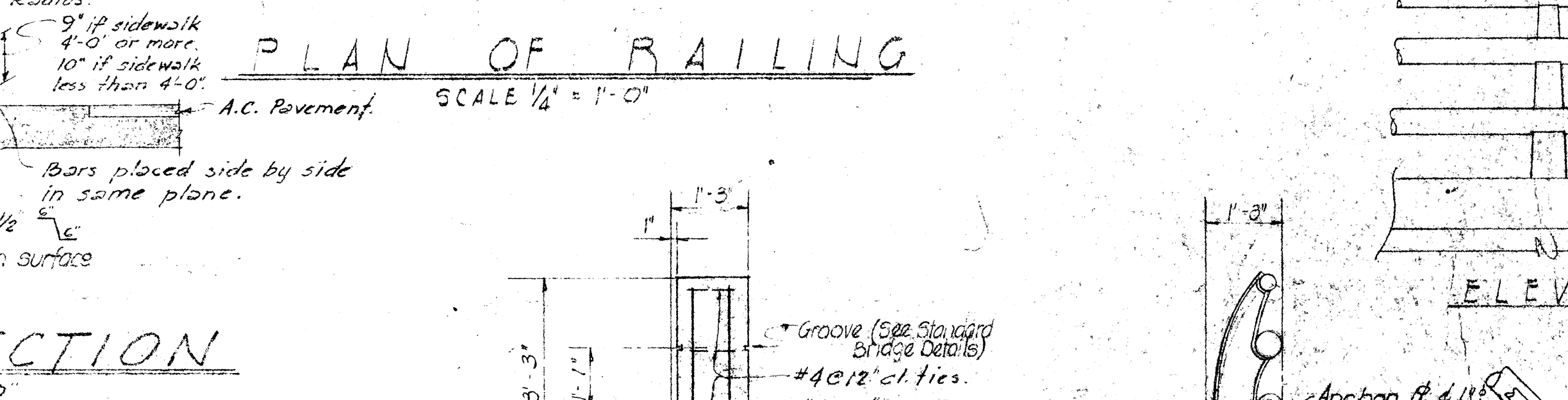
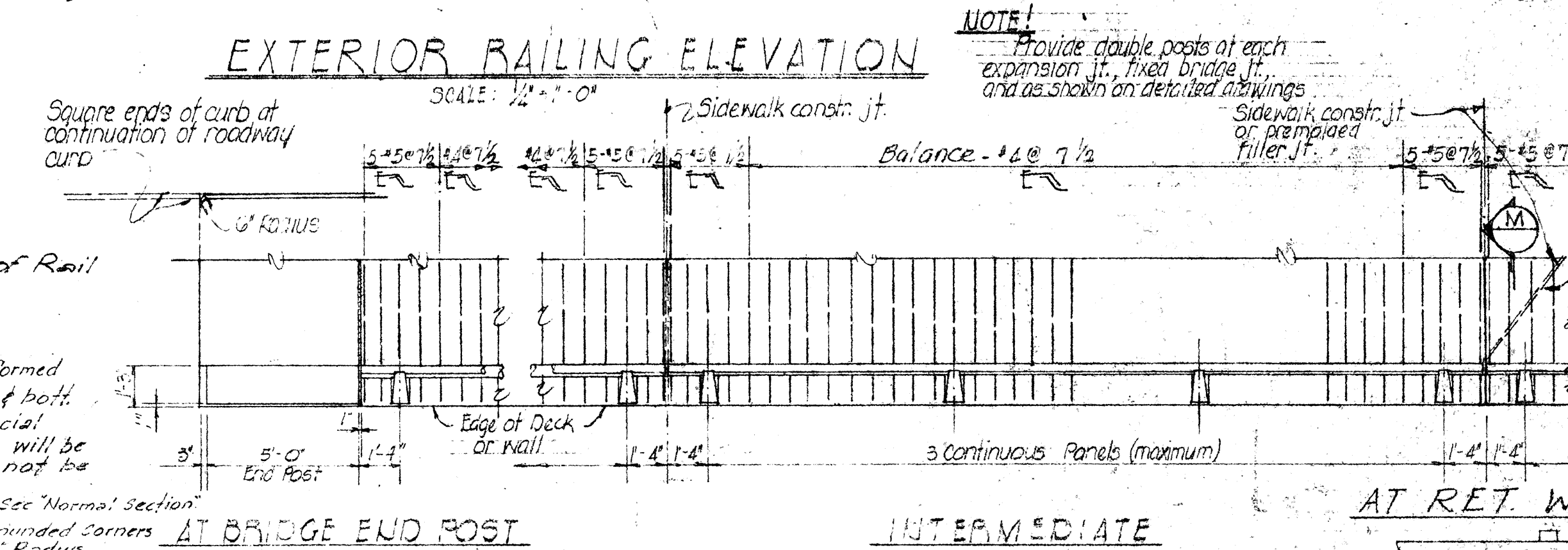
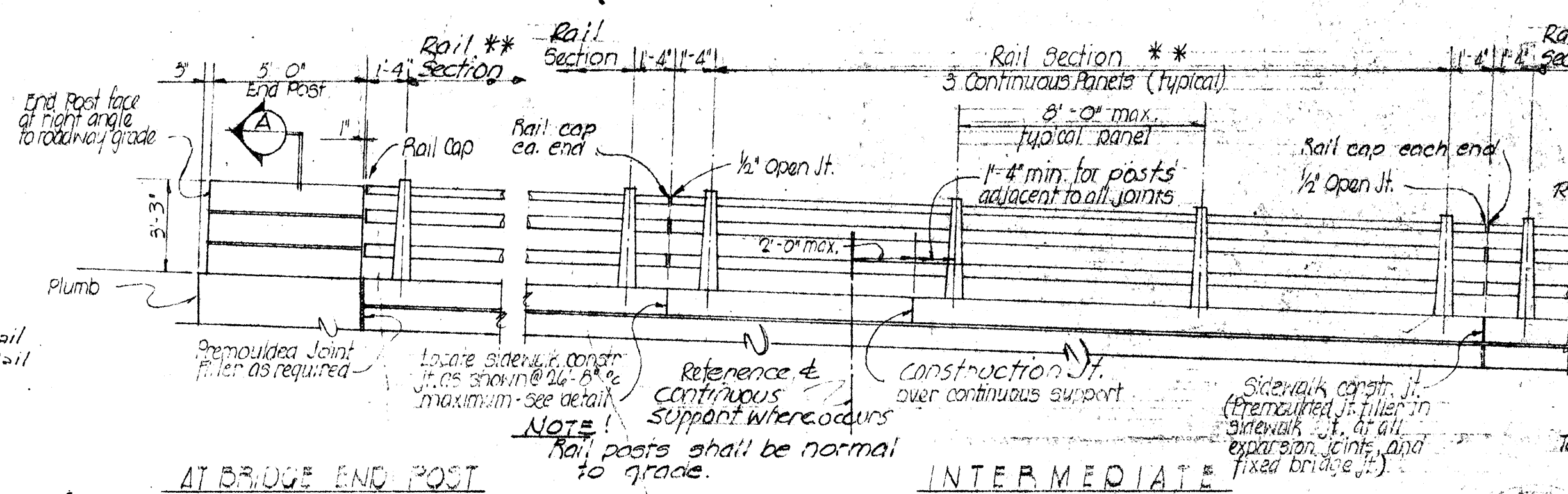
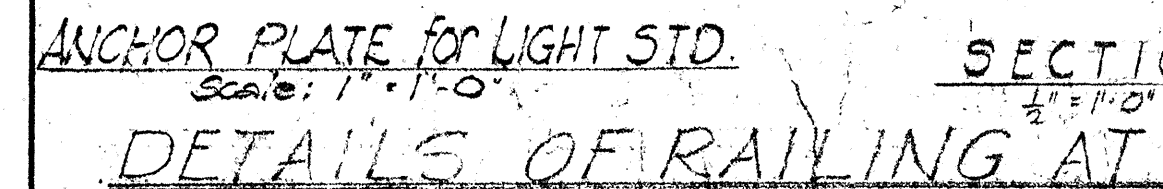
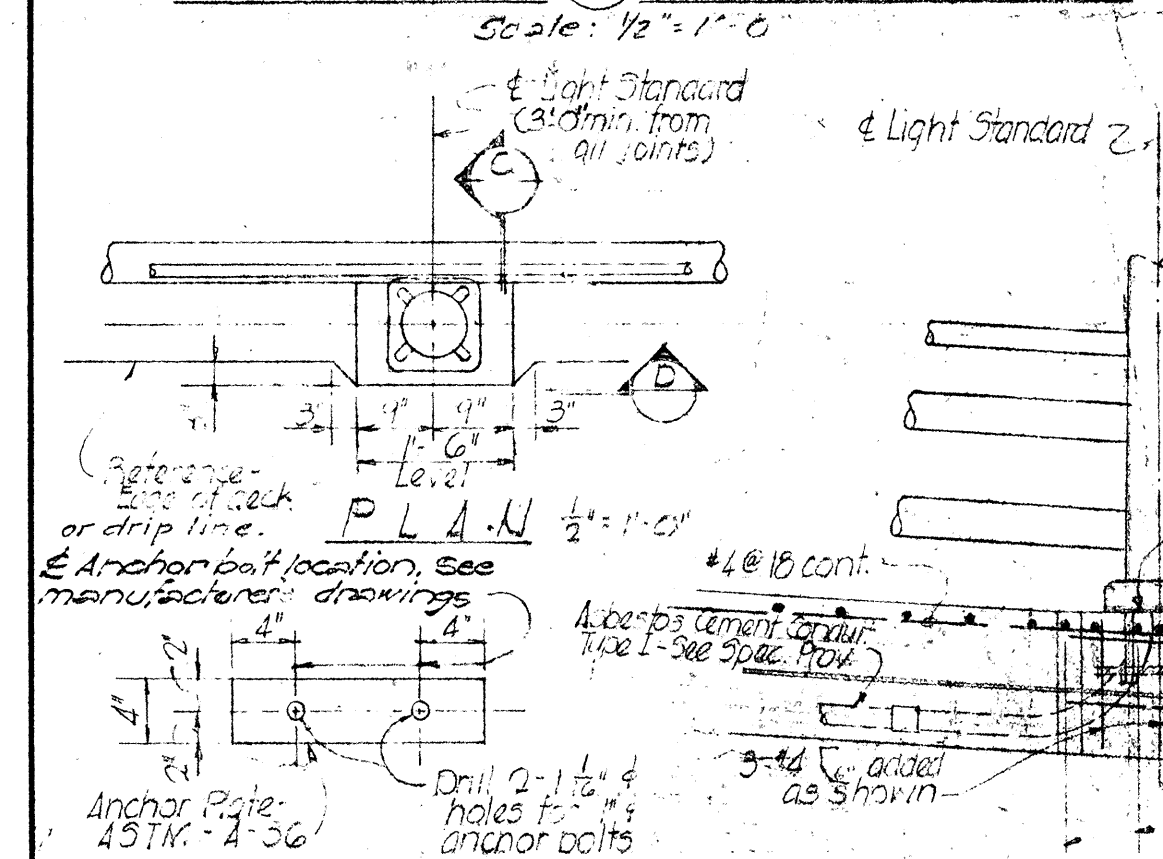
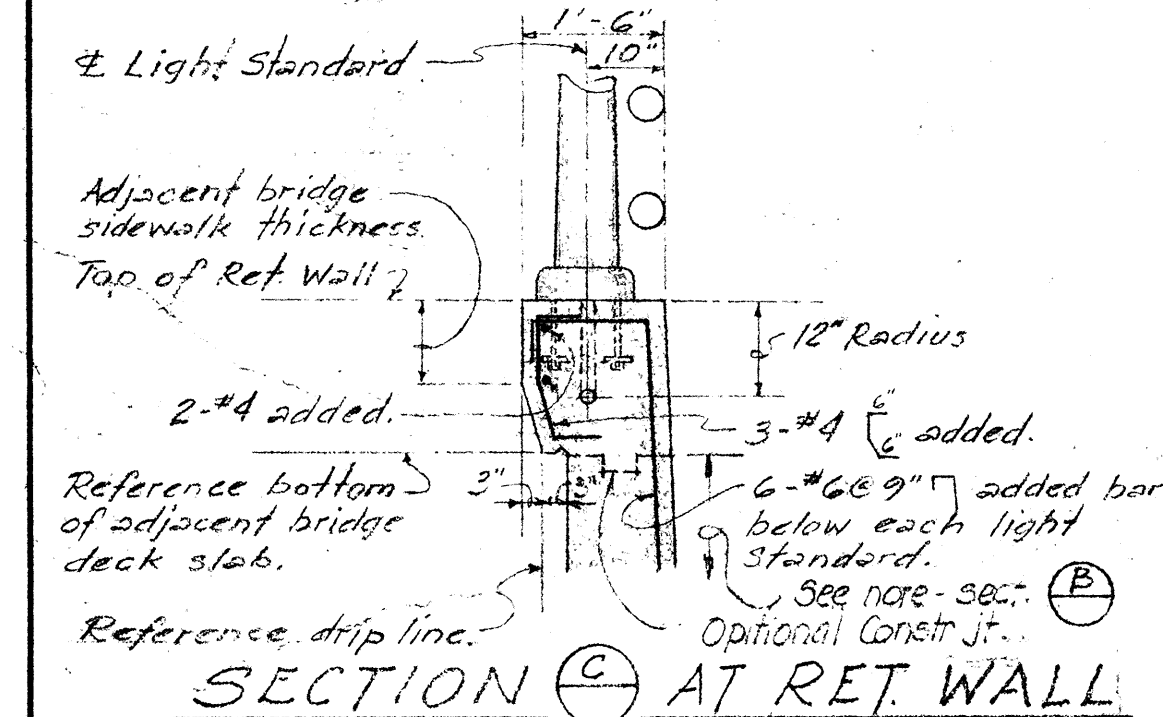
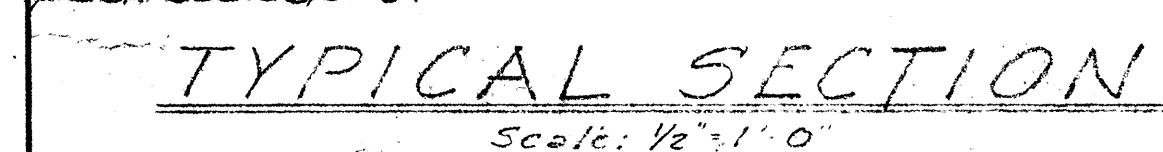
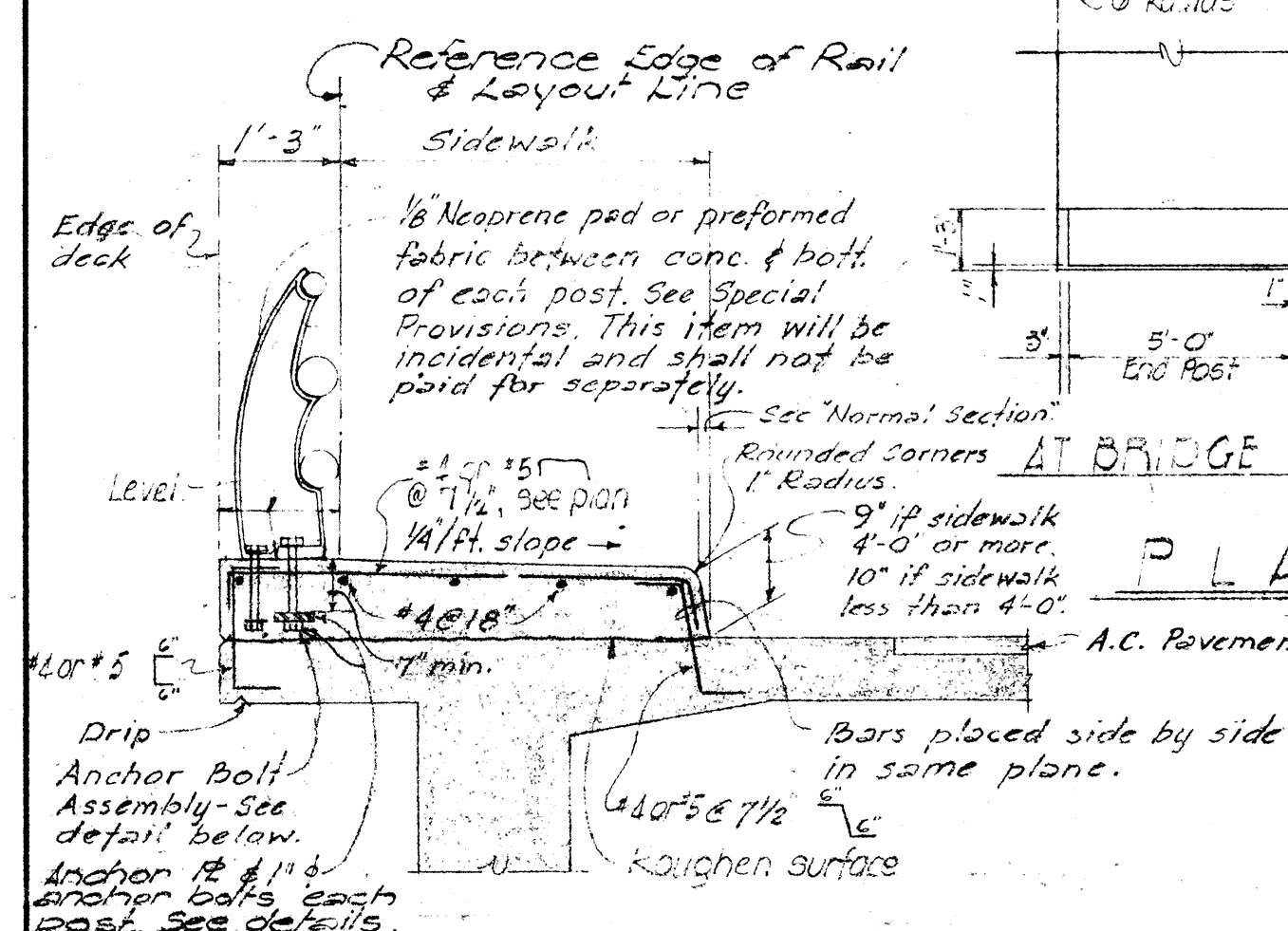
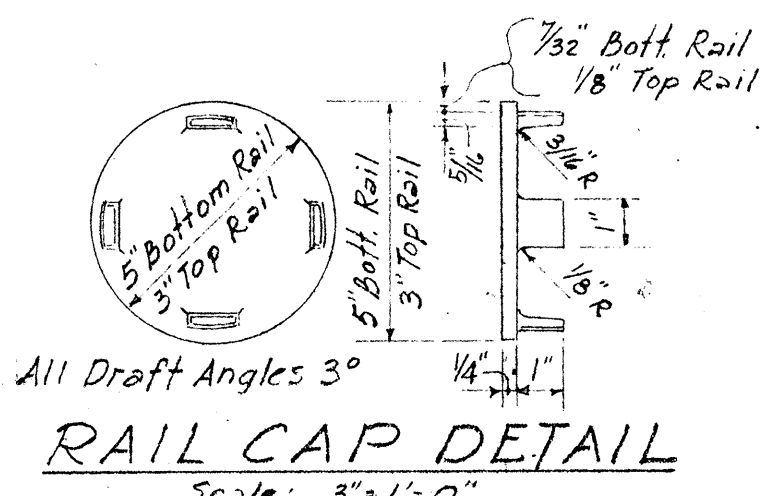
Scale: 3/8" = 1'-0" July 1964

SHEET No. 5 OF 8 SHEETS

412. 204

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

The contractor shall lay out the railing to provide 3 continuous panels whenever possible. 2 or 4 continuous panels will be permitted to complete the layout when 3 continuous panels cannot be made. Single panels will not be permitted.



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-41-(20)	1965	45	55

1-8-65
4-23-65
5-10-65
8-10-65
1-3-66

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAIL
METAL BRIDGE RAILING

REF RAIL-COMBINATION

INTERSTATE ROUTE H.

Scale: As Noted

SHEET No. 8 OF 8 SHEET

2115