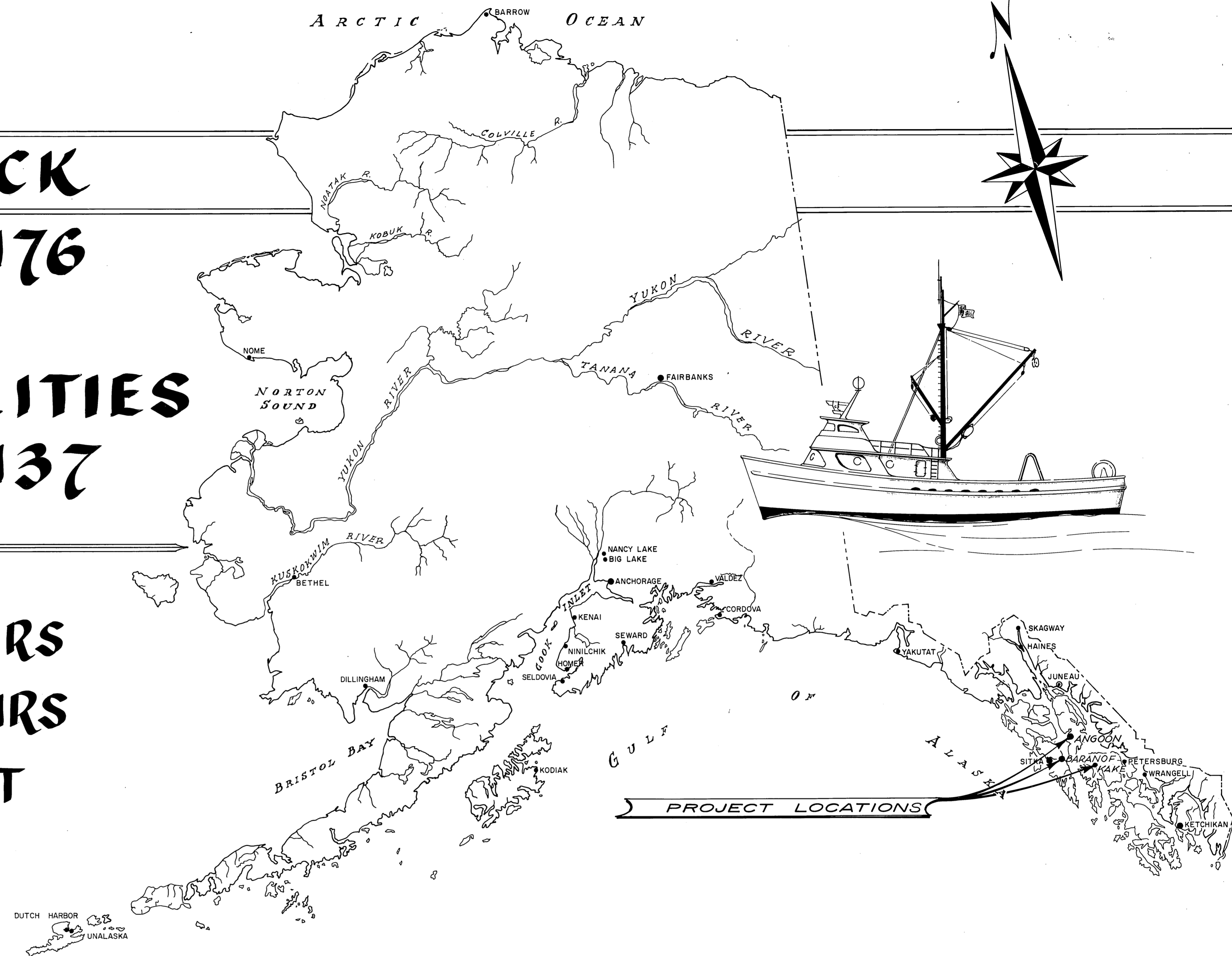


ANGOON APPROACH AND DOCK PROJECT NO. 3-76176

BARANOF FLOAT FACILITIES PROJECT NO. 3-76137

ANGOON SEAPLANE FLOAT REPAIRS BARANOF SEAPLANE FLOAT REPAIRS KAKE - NEW SEAPLANE FLOAT PROJECT NO. 6-76172



WORK SUMMARY

The basic project consists of: Pulling and disposing of 19 timber piles, furnishing and driving 20 new timber piles, removing and disposing of 412.5 lin. ft. of 10'-wide timber float, constructing and installing 5234 sq. ft. of new timber float, reconstructing 3288 sq. ft. of float superstructure; reconstructing 8241 sq. ft. of dock and trestle, replacing one dock fender pile system, reconstructing 510 sq. ft. of timber approach, relocating one seaplane float, and furnishing 2 signs.

Alternate bid items include: Constructing one timber boat grid and furnishing and installing one steel gangway.

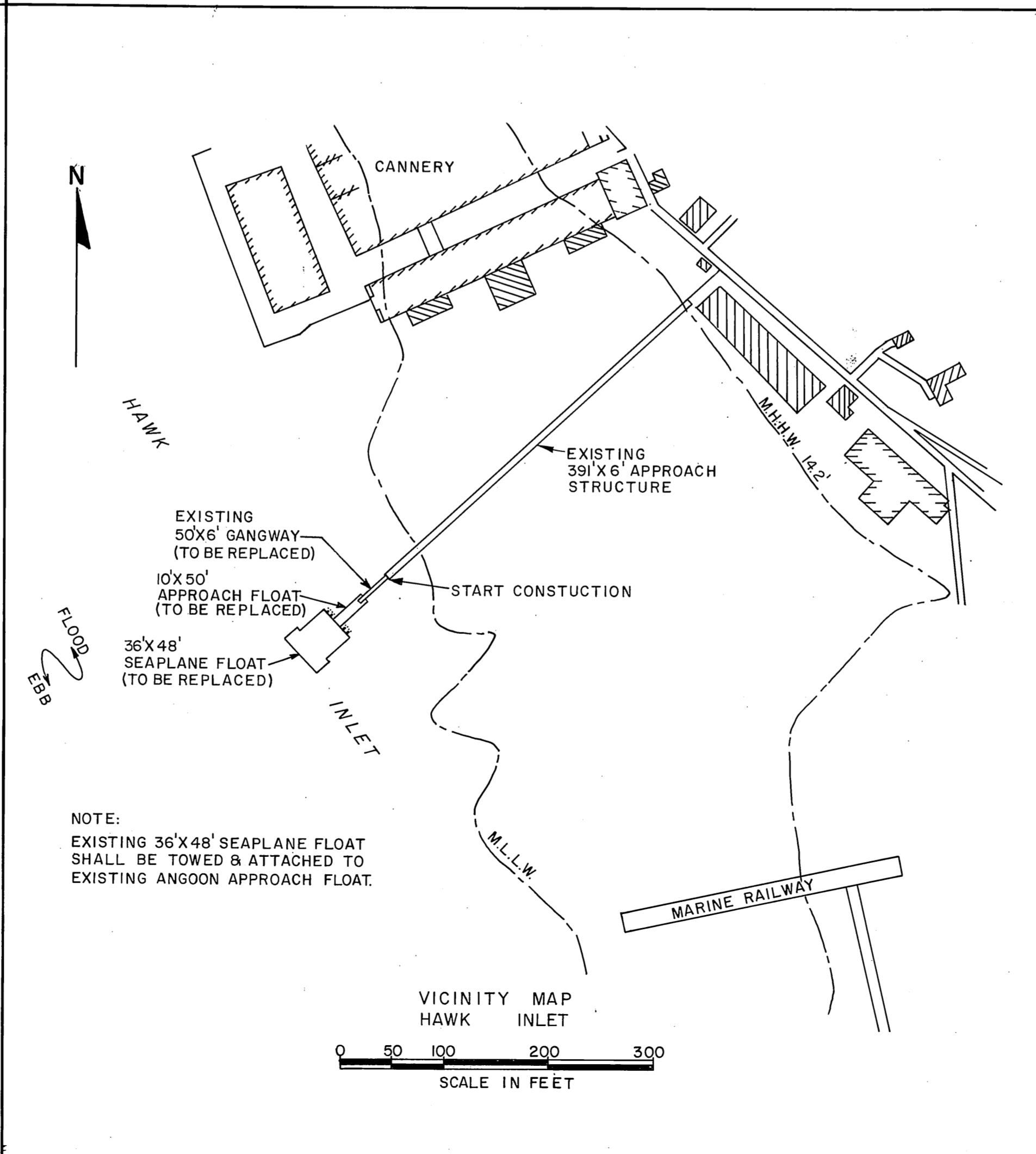
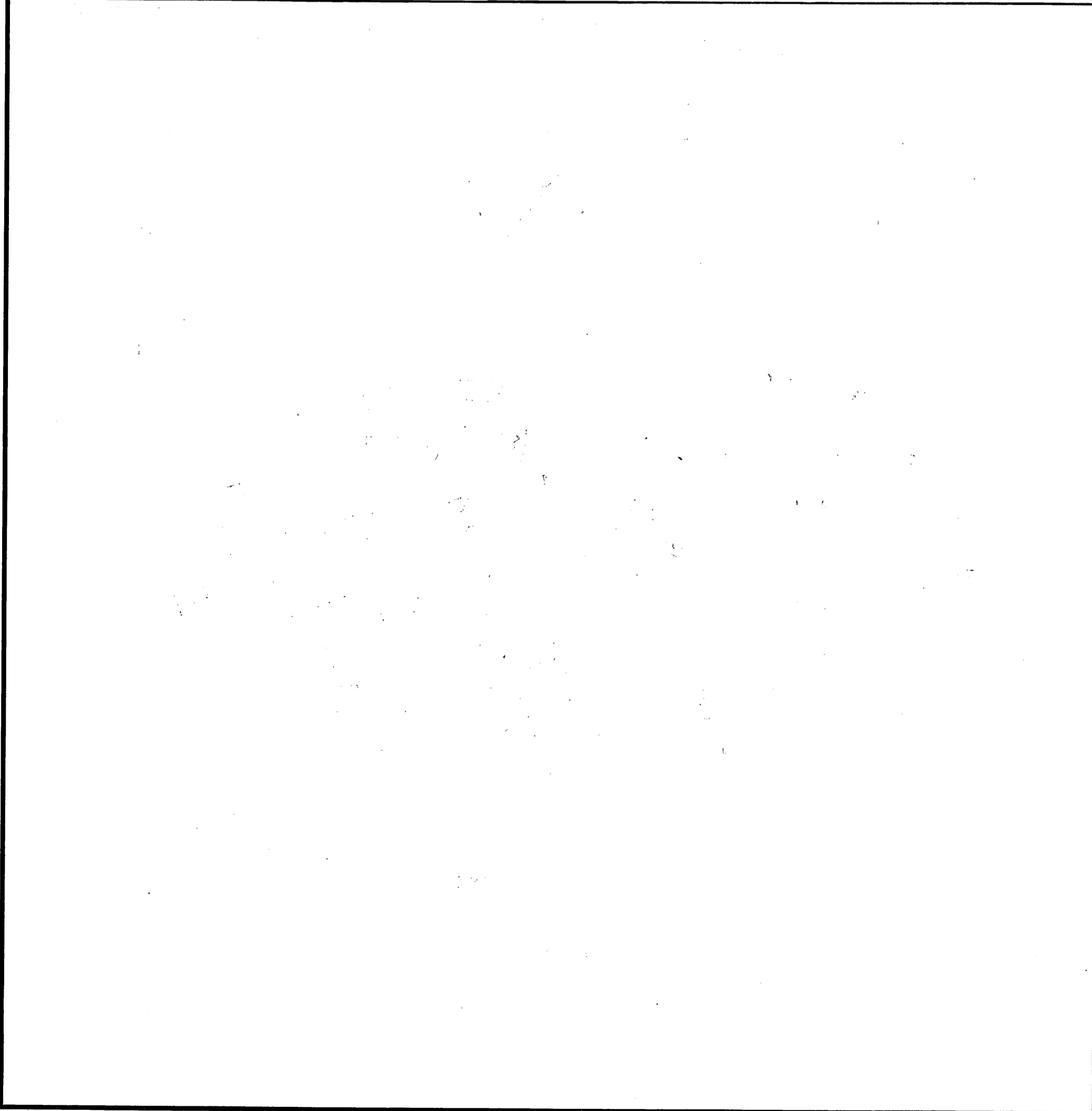
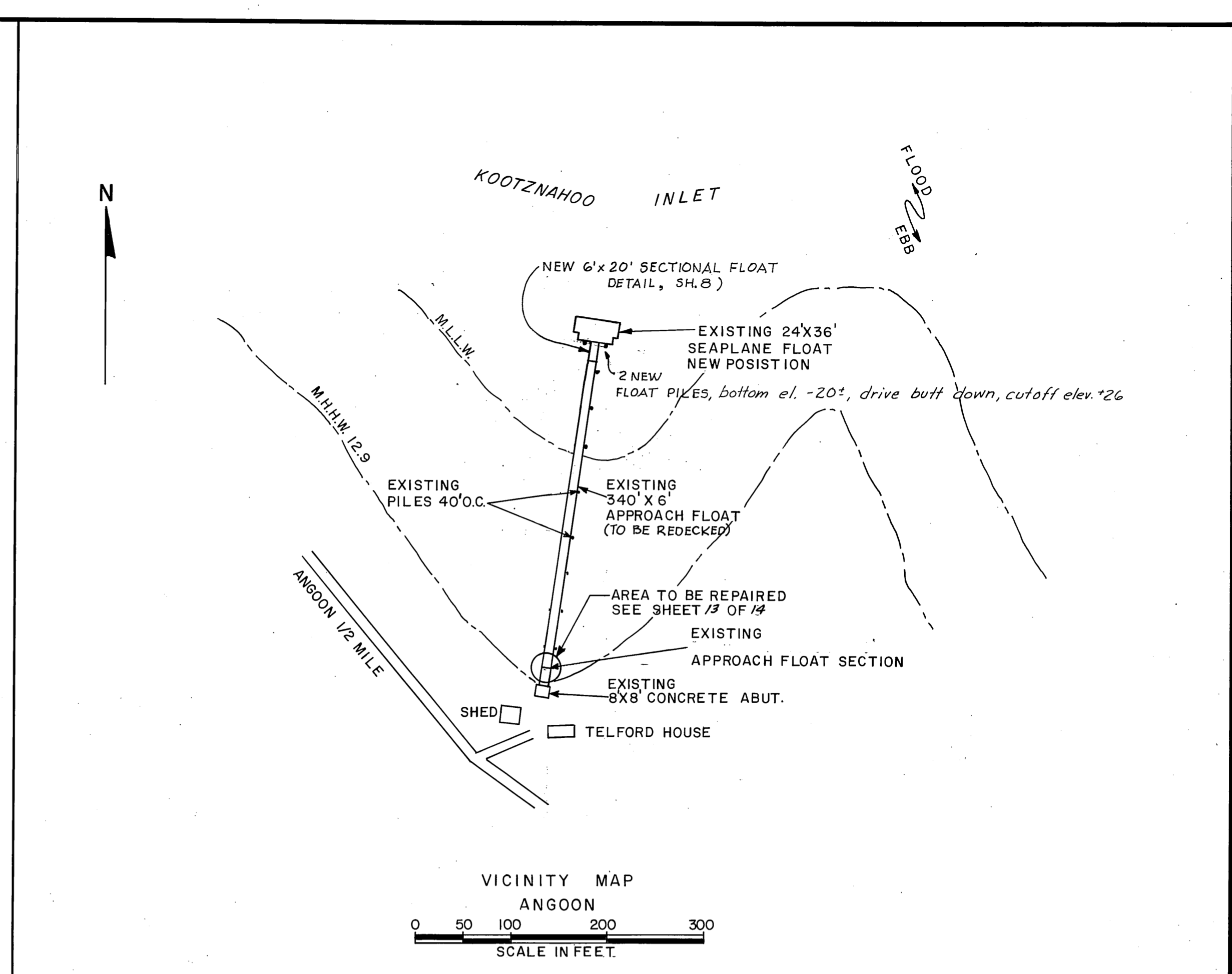
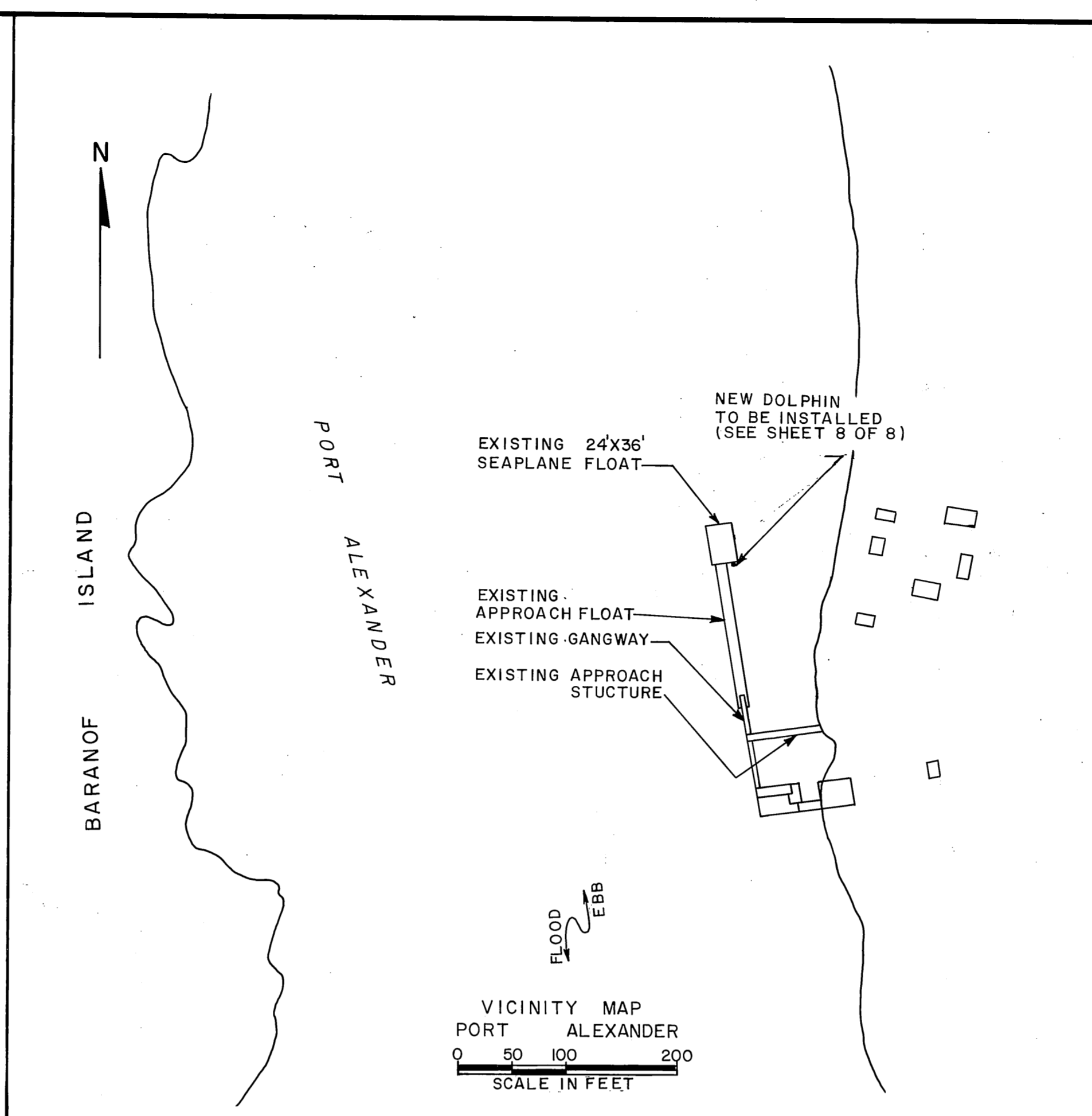
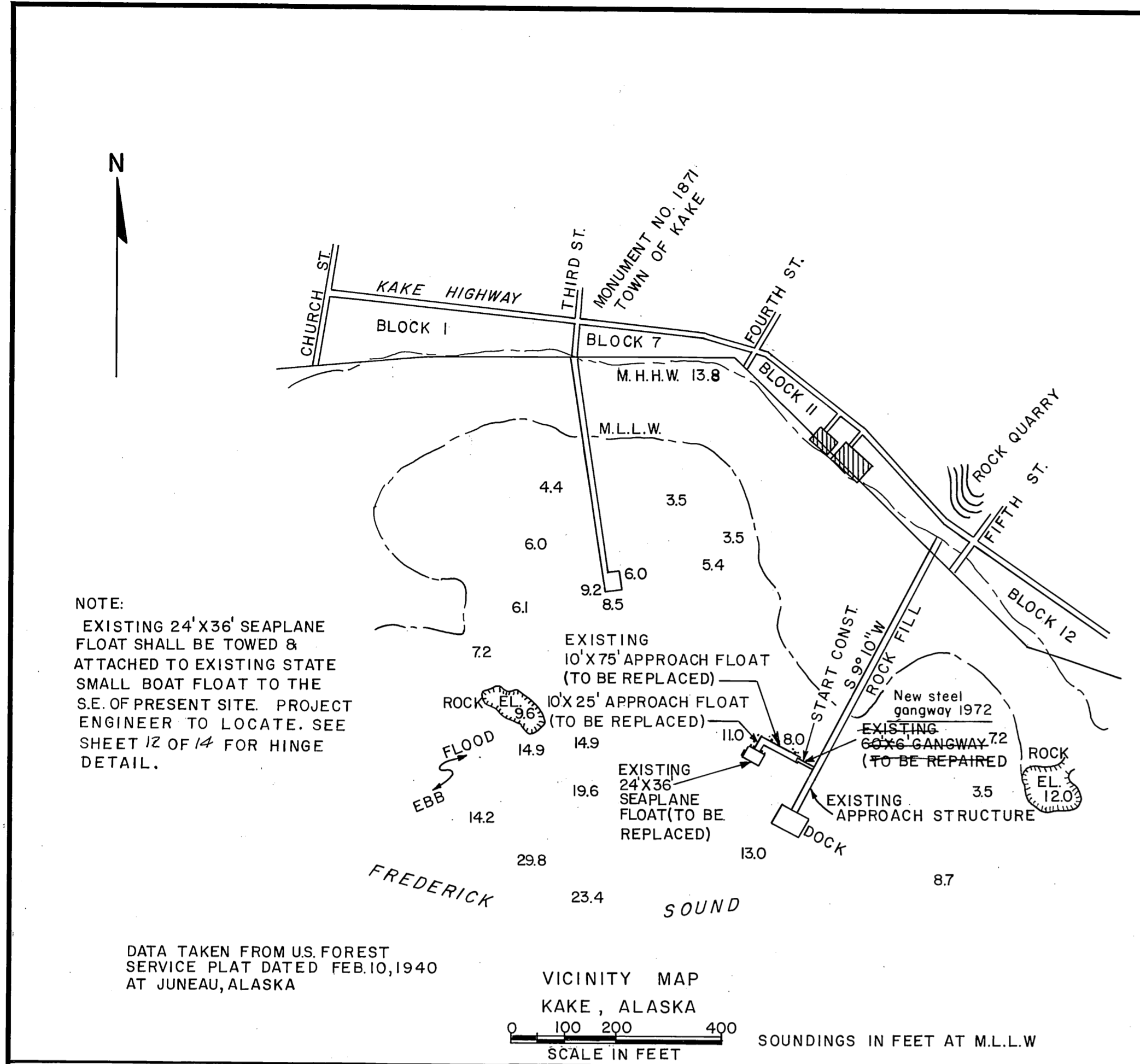
INDEX TO SHEETS

1	TITLE & PROJECT LOCATIONS	8	TYPICAL 6' FLOAT
2	BARANOF-ANGOON STRINGER DIAGRAM	9	TYPICAL GANGWAY - SH. "A"
3	AVIATION PROJECT LAYOUTS	10	TYPICAL GANGWAY - SH. "B"
4	ANGOON APPROACH	11	TYP. 24'x36' SEAPLANE FLOAT
5	ANGOON DOCK	12	SEAPLANE FACILITIES - SECTIONS & DETAILS
6	BARANOF APPROACH & GRID	13	SEAPLANE FLOAT DETAILS
7	TYPICAL 10' FLOAT	14	ANGOON SEAPLANE FLOAT CONFIGURATION

STATE OF ALASKA — DEPARTMENT OF PUBLIC WORKS
DIVISION OF WATER & HARBORS

APPROVED

DIRECTOR
DATE -----
SHEET 1 OF 14

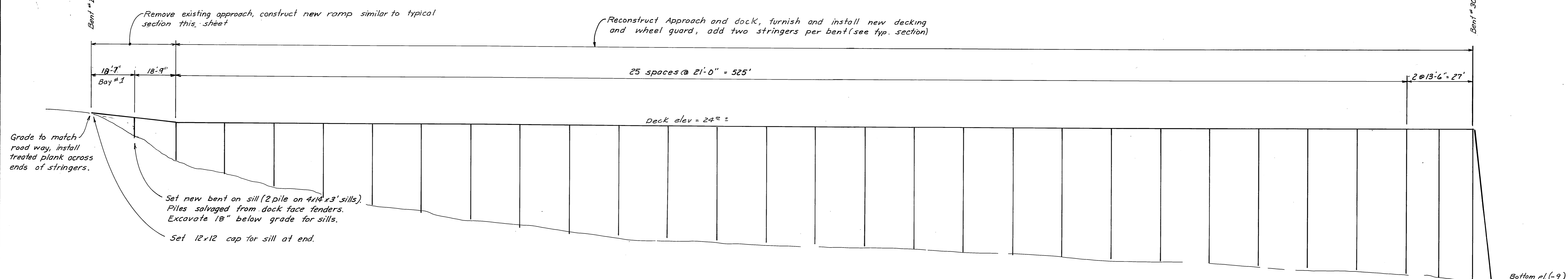


STATE OF ALASKA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF AVIATION

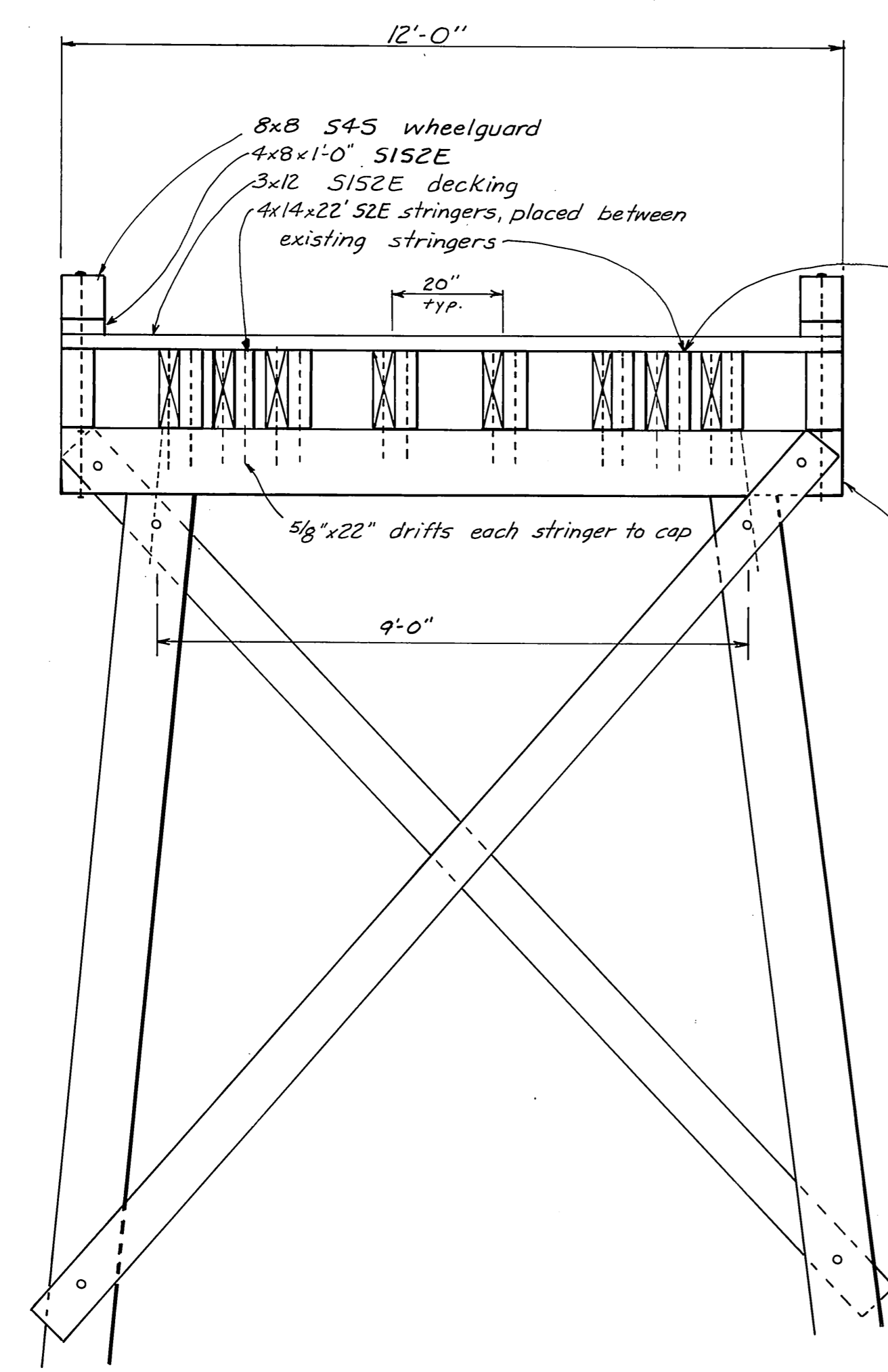
KAKE-HAWK INLET- ANGOON- PORT ALEXANDER
SEAPLANE FACILITIES
SITE PLANS

APPROVED	JAMES J. RHODE CHIEF DESIGN ENGINEER		
APPROVED	WILLIAM KOESTER SECONDARY AIRPORTS ENGINEER		
BY	DATE	CHANGE	SCALE
			AS SHOWN
REVISIONS		DESIGNED R.L.S.	DRAWN D.T.
		CHECKED	DATE 5/20/75

SHEET 3 OF 14



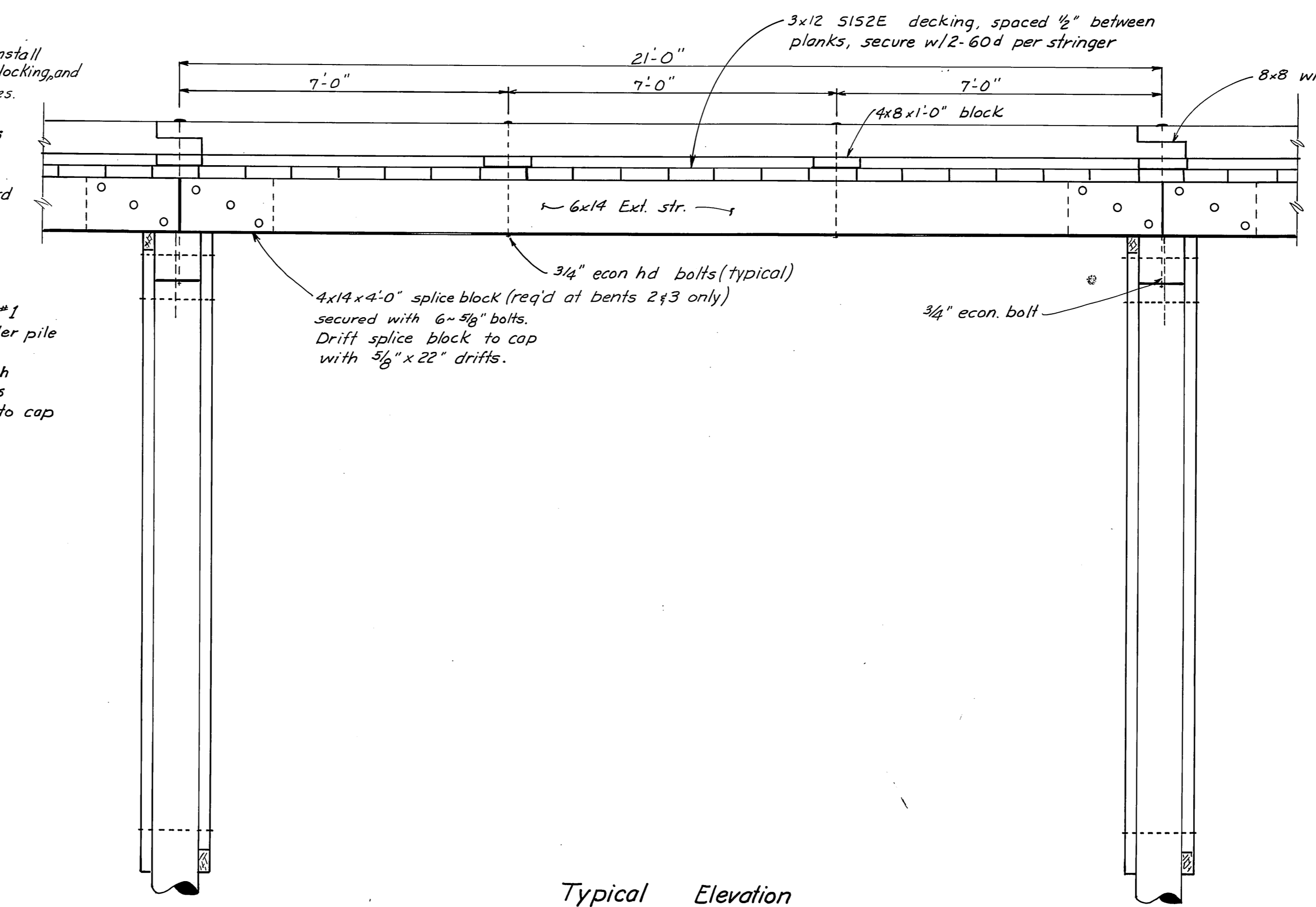
Profile
H: 1"=20' V: 1"=10'



Typical Section
1/2" = 1'-0"

Bay #1 & 2 furnish and install new stringers, decking, blocking, and wheelguard, caps and piles.
Bay #1 & 27 furnish and install 2 additional stringers as shown. Furnish and install new decking blocking and wheelguard

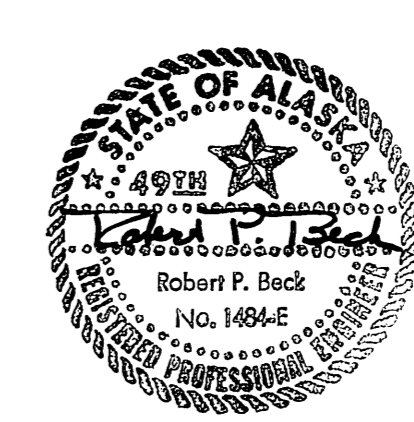
Cap on grade @ Bent #1
Cap on salvaged tender pile at Bent #2.
Provide 3x8x12' rough bracing and 3/4" bolts for Bent #2. Brace to cap bolts not required



Typical Elevation
1/2" = 1'-0"

Material				
Item	Grade	Dressing	Treatment	Species
Piling	Class 'A'		12# creos.	Douglas Fir
Bracing	Sel. Str.	Rough	8# creos	"
Caps	"	S4S	8# creos.	"
Stringers	"	S2E	" "	"
Splice block	"	"	" "	"
Scupper block	Sel. Str.	S1S2E	" "	"
Wheelguard	Sel. Str.	S4S	" "	"
Decking	"	S1S2E	" "	"
Chocking	"	S4S	" "	"

All hardware to be galvanized. Malleable iron washers between nut and wood surfaces. All bolts to be economy head. Drill for bolts 1/16" oversize, drill for drifts 1/16" undersize. All field drilled holes to be treated with hot creosote oil.

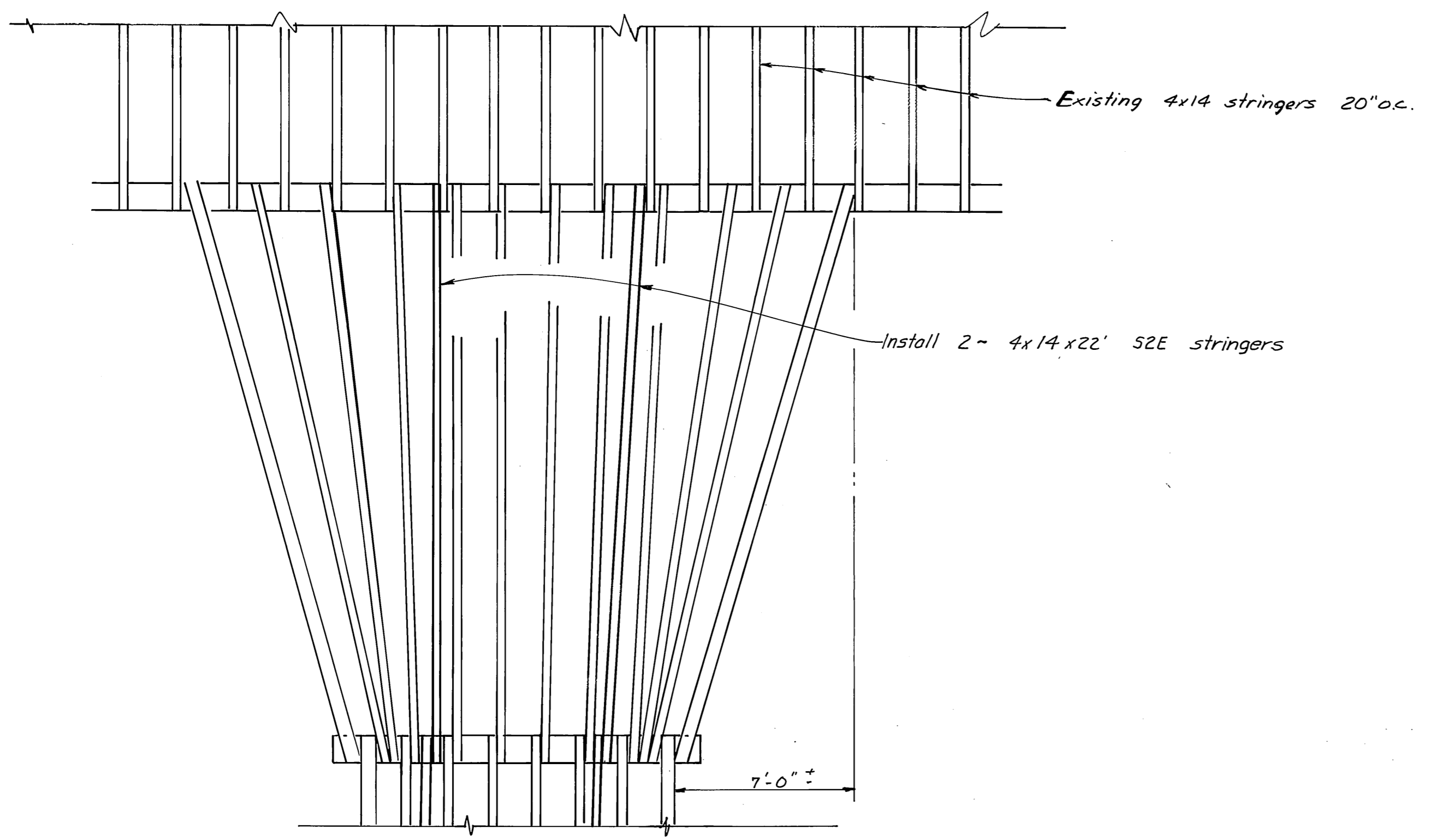


DO NOT SCALE THIS DRAWING - USE DIMENSIONS

STATE OF ALASKA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF WATER AND HARBORS

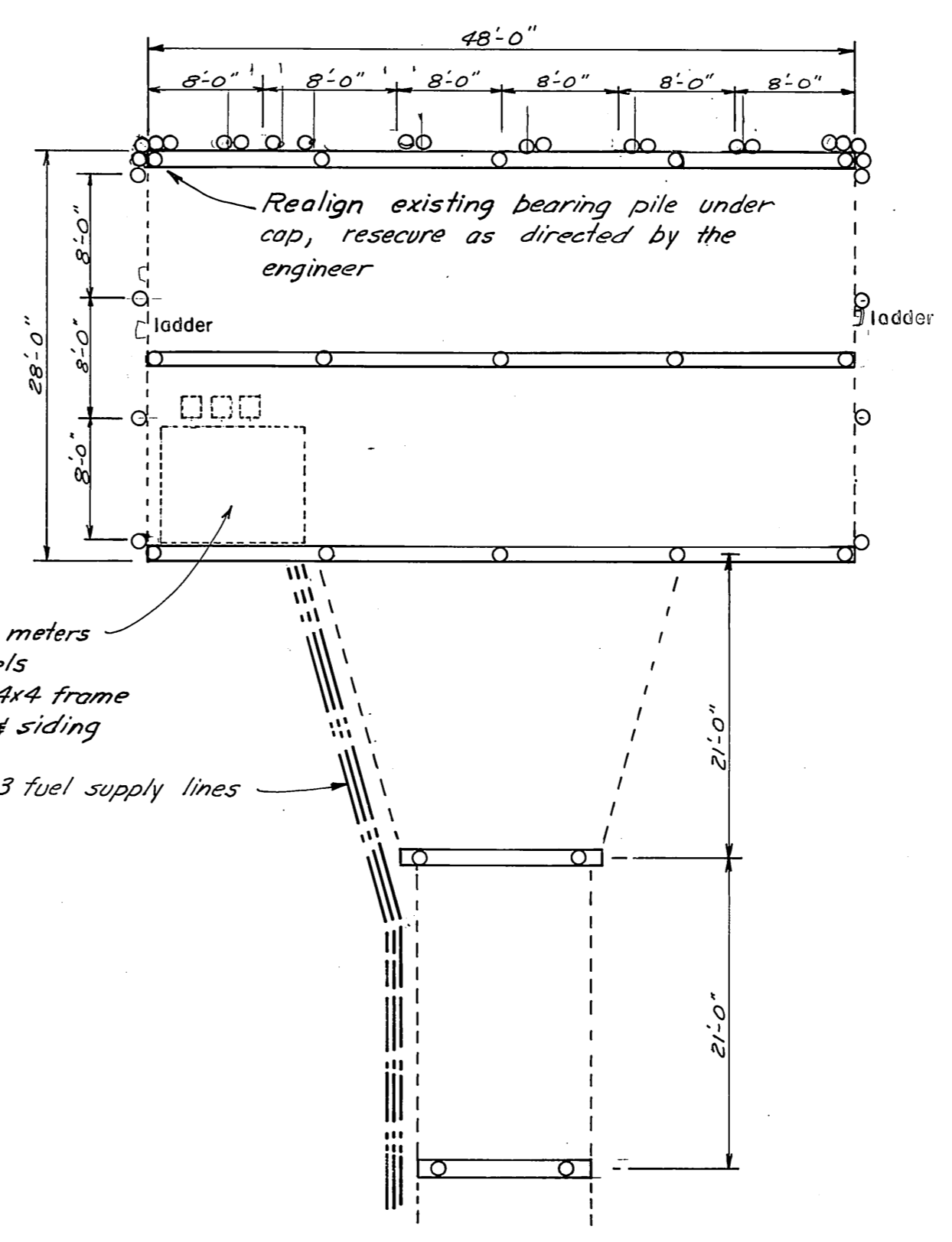
Angoon Approach - Reconstruction

SCALE: As noted	SURVEYED: HM/RB	APPROVED:
DESIGNED: HM	DRAWN: HM	Don Statter DIRECTOR
CHECKED: RB	DATE: Aug 1975	
PROJECT NUMBER: 3-76/76	SHEET 4 OF 14	



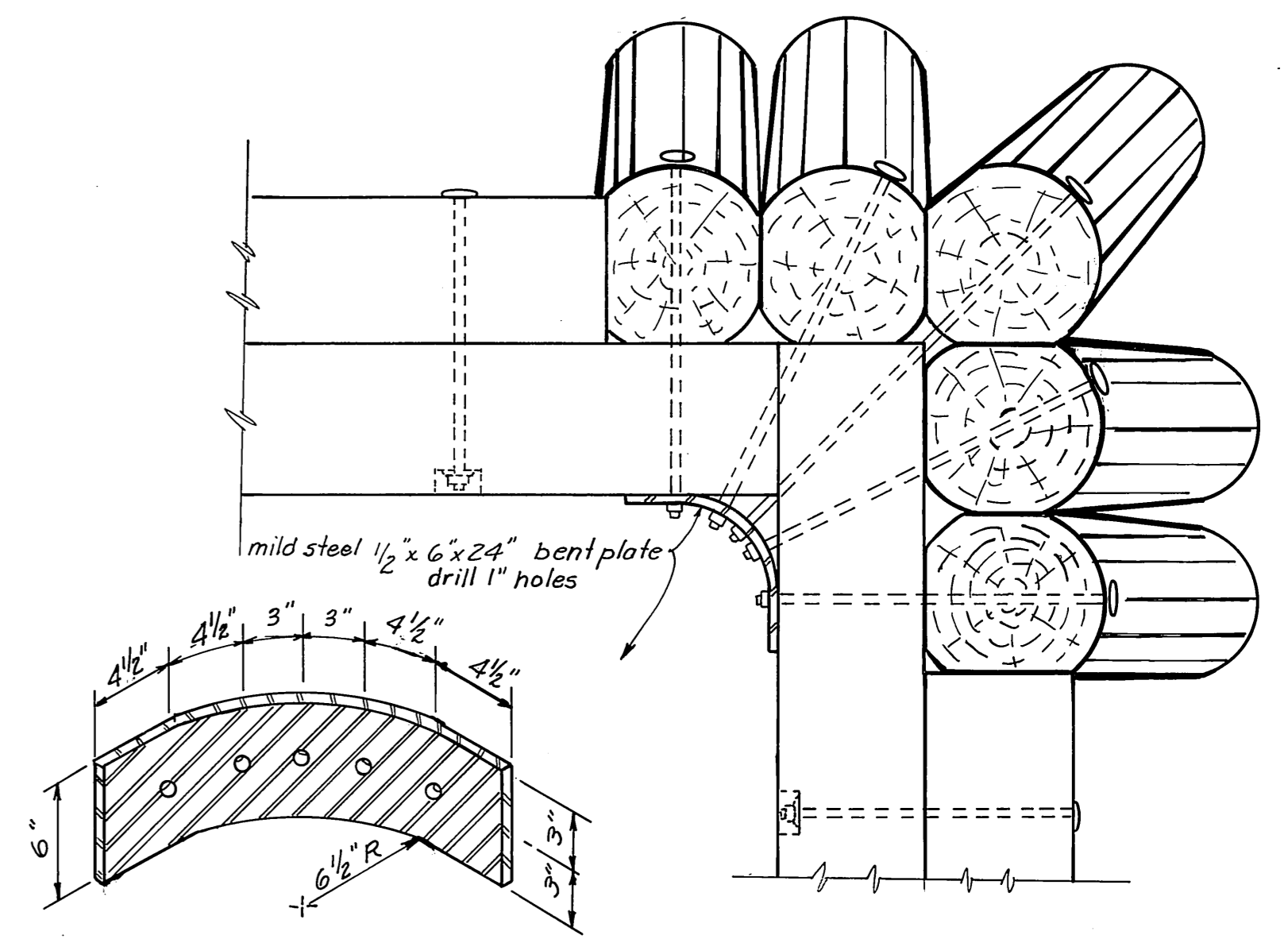
Approach Flare Detail
1/4" = 1'-0"

The contractor shall repair incidental damage to fuel lines, and shed caused by his operations. Replace decking under shed

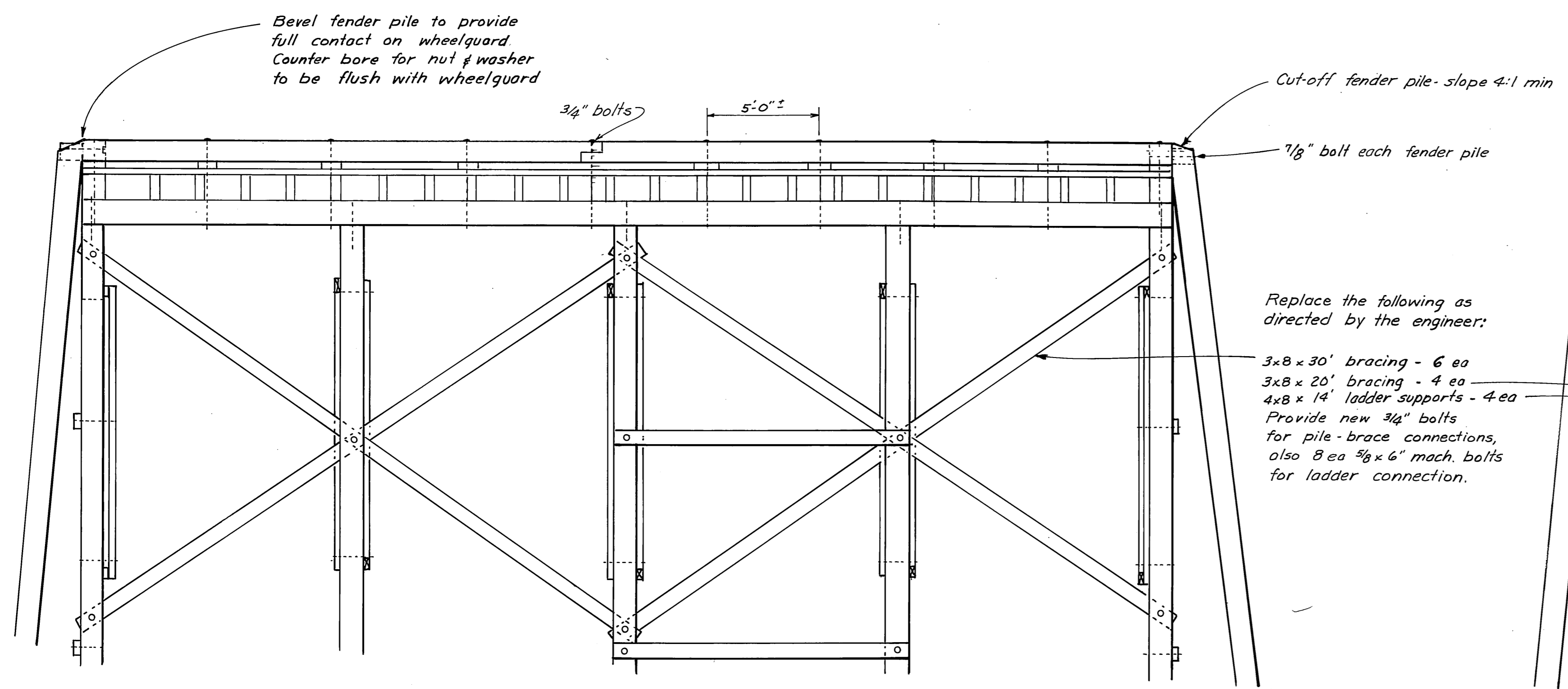


Fender Pile - Plan
1" = 10'

Remove existing decking, wheelguards, chocking and 11 fender pile. Salvaged fender pile to be used for piling under ramp, Bent # 2. Furnish and install new creosote treated decking, blocking, chocking wheelguard and 21 fender pile. Pile to be driven tip down, 10' penetration.

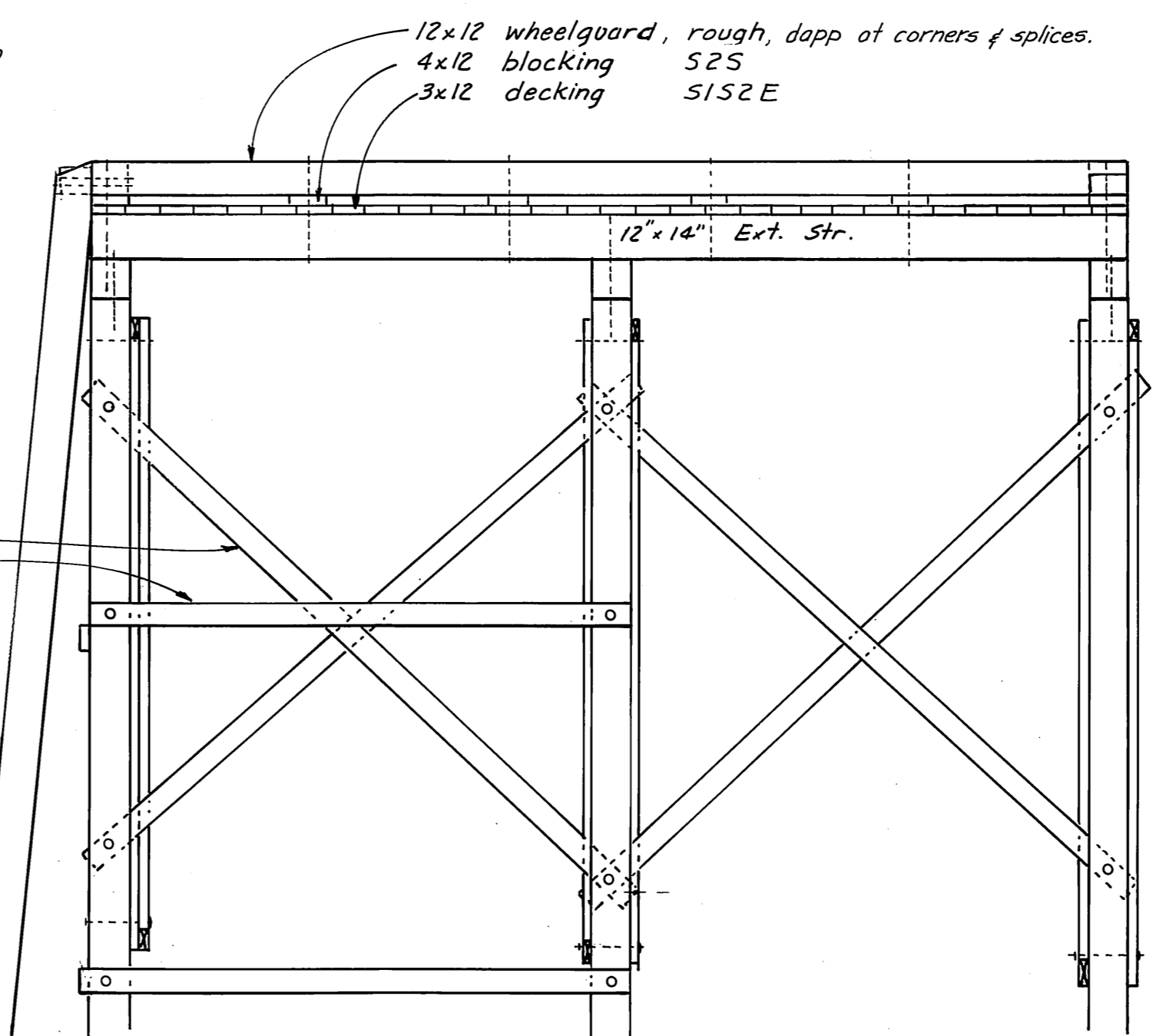


Corner Detail (2 req'd)
1" = 1'-0"

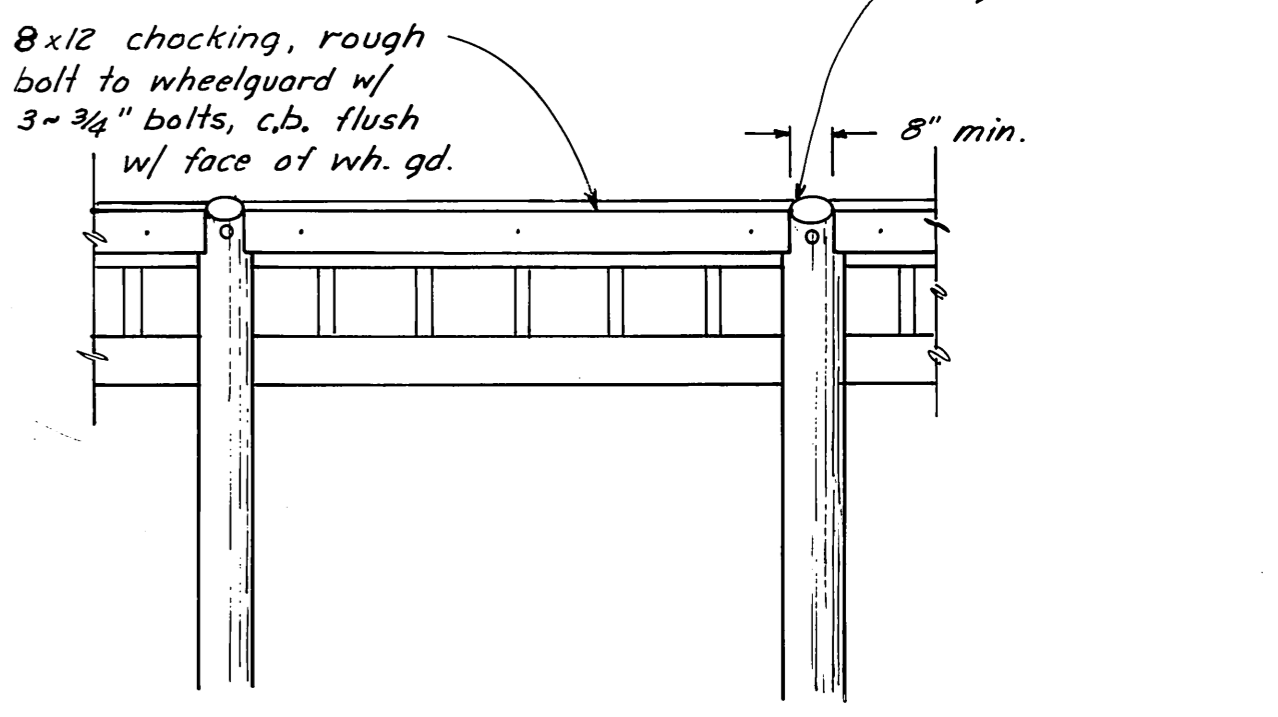


Elevation - Dock Face
1/4" = 1'-0"

Replace the following as directed by the engineer:
3x8 x 30' bracing - 6 ea
3x8 x 20' bracing - 4 ea
4x8 x 14' ladder supports - 4 ea
Provide new 3/4" bolts for pile-brace connections, also 8 ea 5/8 x 6" mach. bolts for ladder connection.

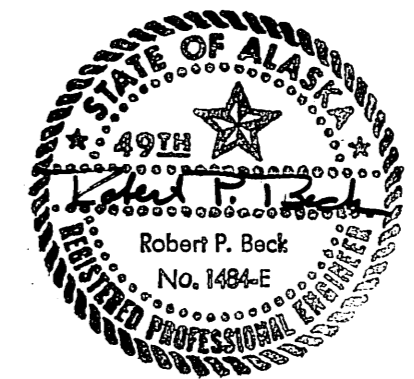


Elevation - Dock End
1/4" = 1'-0"

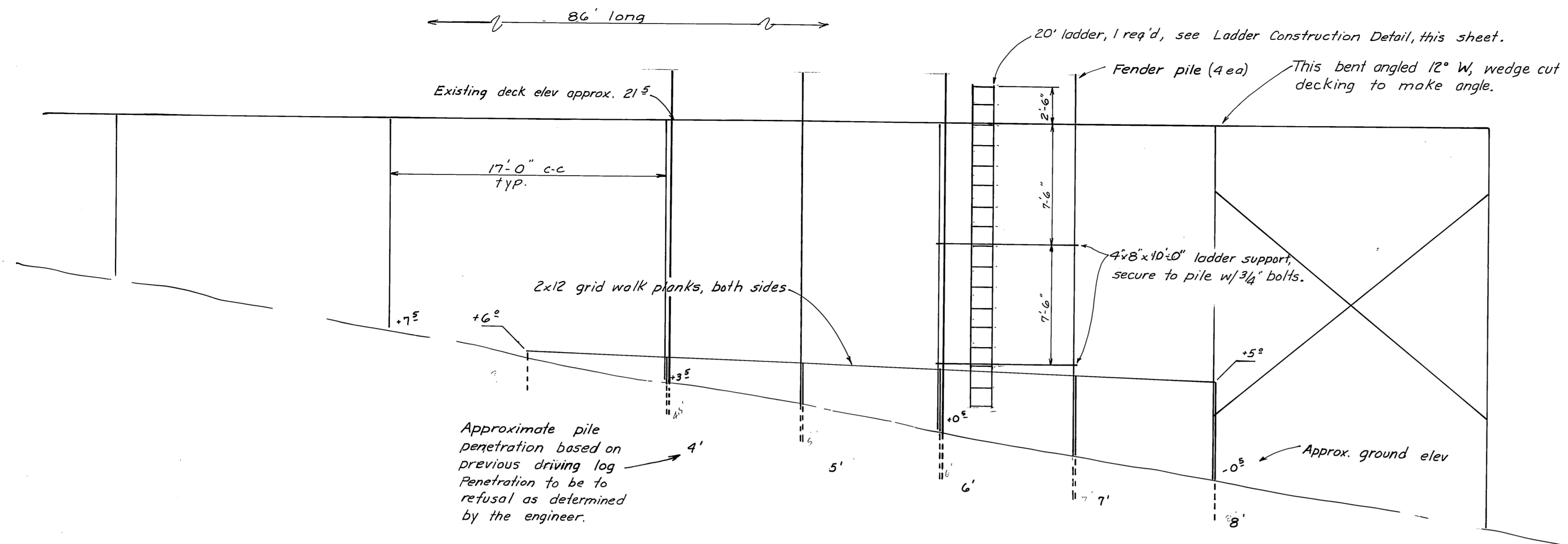


Elevation - fender pile
1/4" = 1'-0"

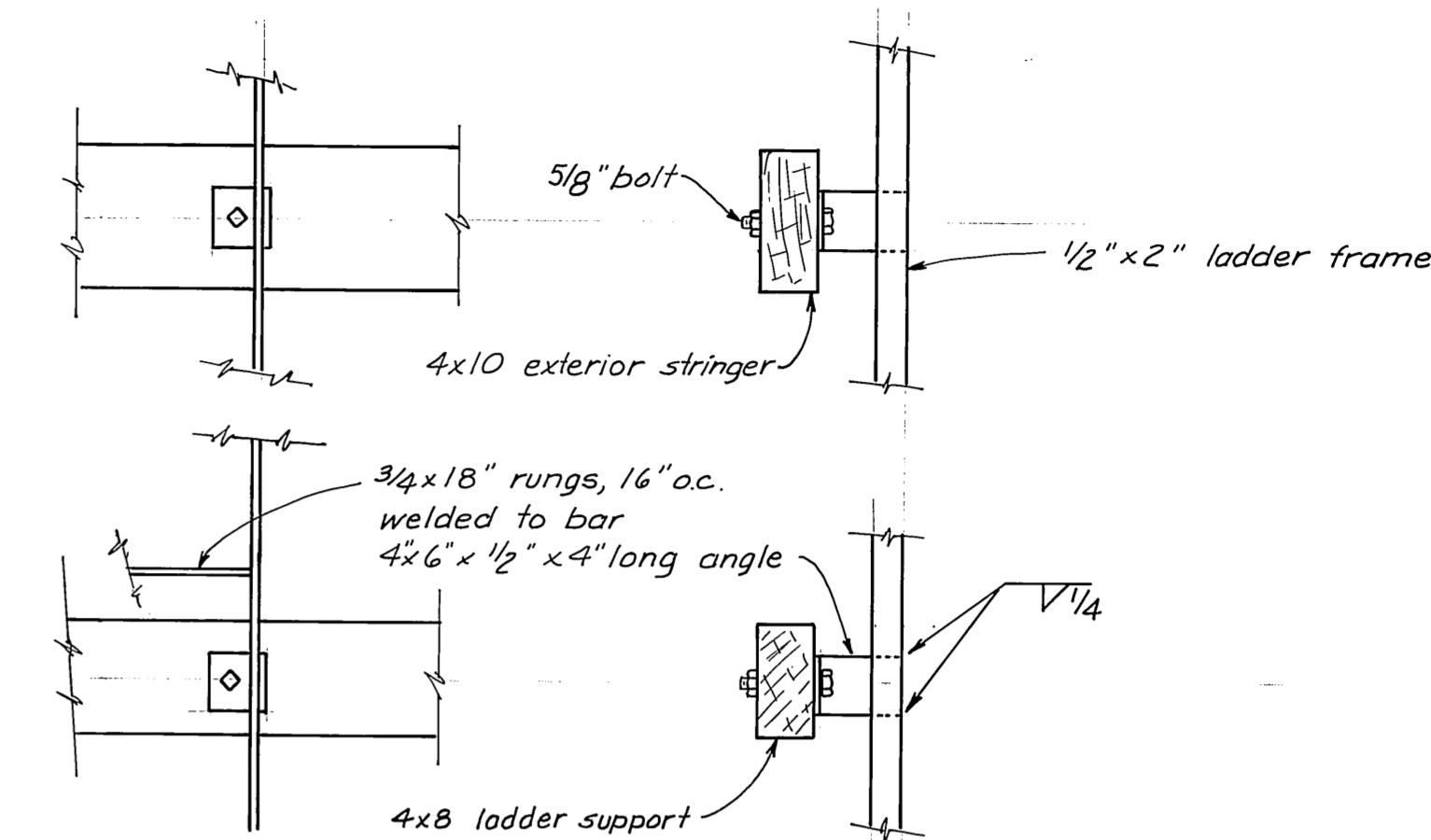
Note: 1. Reuse of hardware subject to approval by project engineer.



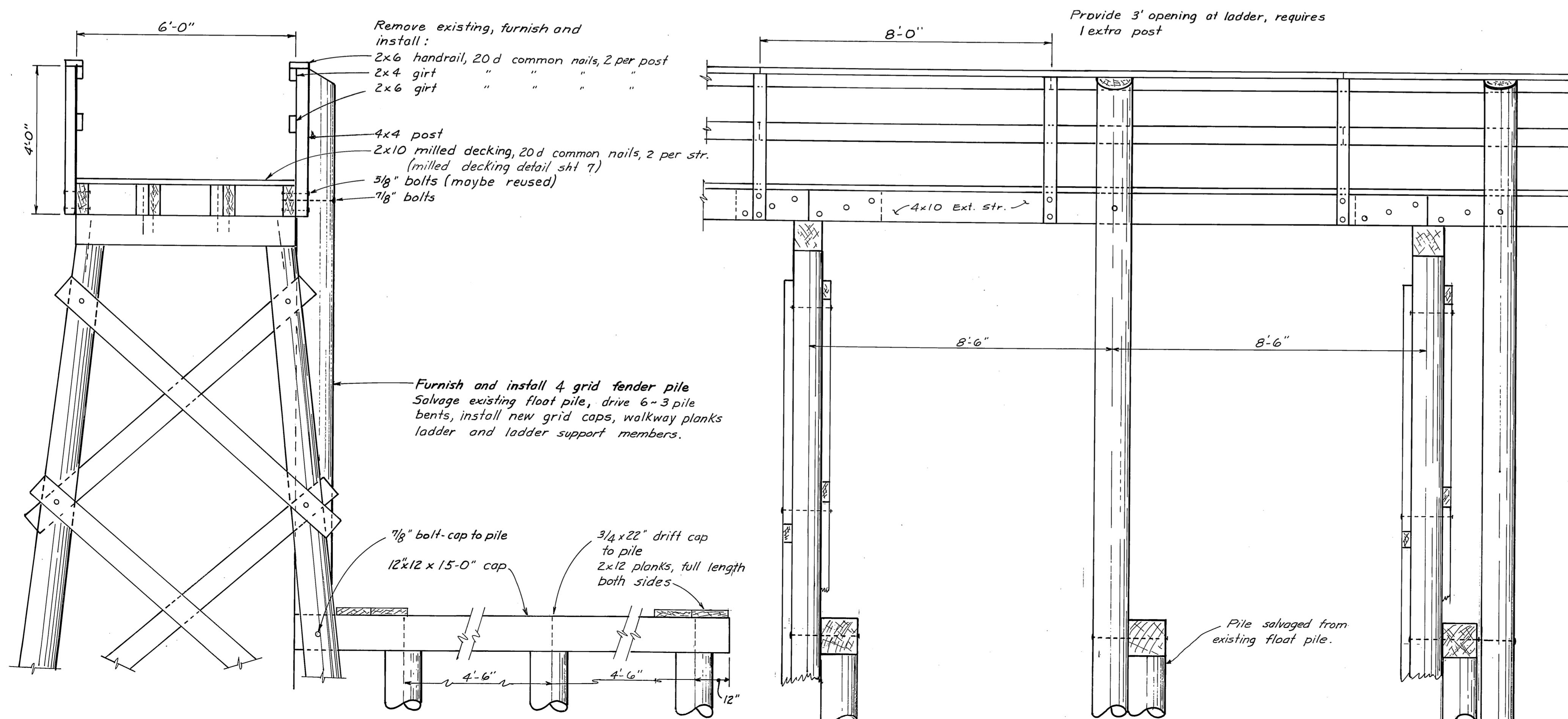
DO NOT SCALE THIS DRAWING - USE DIMENSIONS		
STATE OF ALASKA DEPARTMENT OF PUBLIC WORKS DIVISION OF WATER AND HARBORS		
Angoon Dock - Reconstruction		
SCALE <i>As Noted</i>	SURVEYED <i>RB/HM</i>	APPROVED
DESIGNED _____	DRAWN <i>HM</i>	<i>Don Statter</i> DIRECTOR
CHECKED _____	DATE <i>Aug. 15, 1975</i>	
PROJECT NUMBER <i>3-76176</i>	SHEET <i>5</i> OF <i>14</i>	



Grid Profile
1" = 5'



Ladder Construction Details
1" = 1'-0"

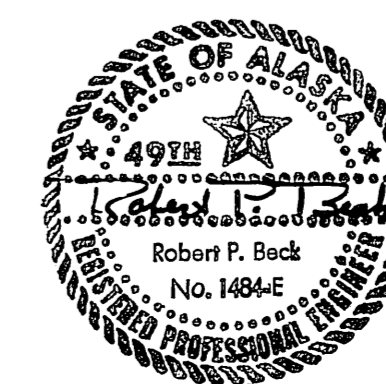


Approach & Grid Section
1/2" = 1'-0"

Elevation
1/2" = 1'-0"

MATERIAL			
ITEM	SIZE	DRESS.	TREATMENT
Piling (grid)	salvaged float pile		
Grid planks	2x12	Rough	8" creo
Caps (grid)	12x12	Rough	12" creo.
Ladder Support	4x8	Rough	8" creo.
Decking	2x10	milled	Penta
Handrail Posts	4x4	S4S	"
Handrail	2x6	S4S	"
Girts	2x4	S4S	"
Girts	2x6	S4S	"

Handrails and girts to be 16' min. length, stagger splices

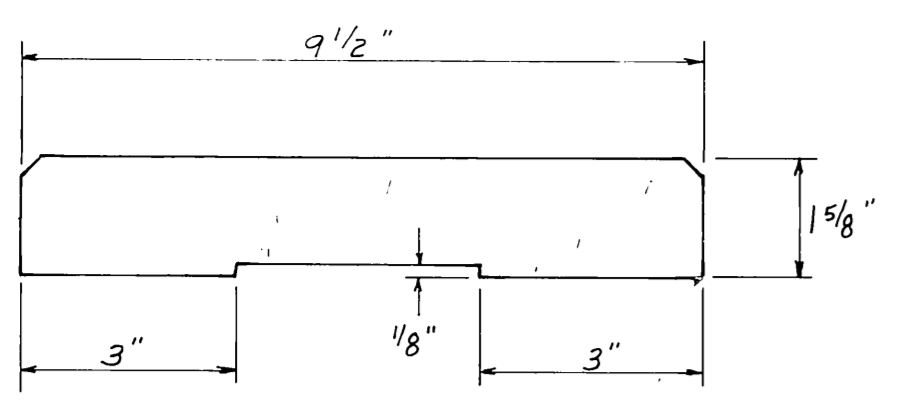


DO NOT SCALE THIS DRAWING - USE DIMENSIONS

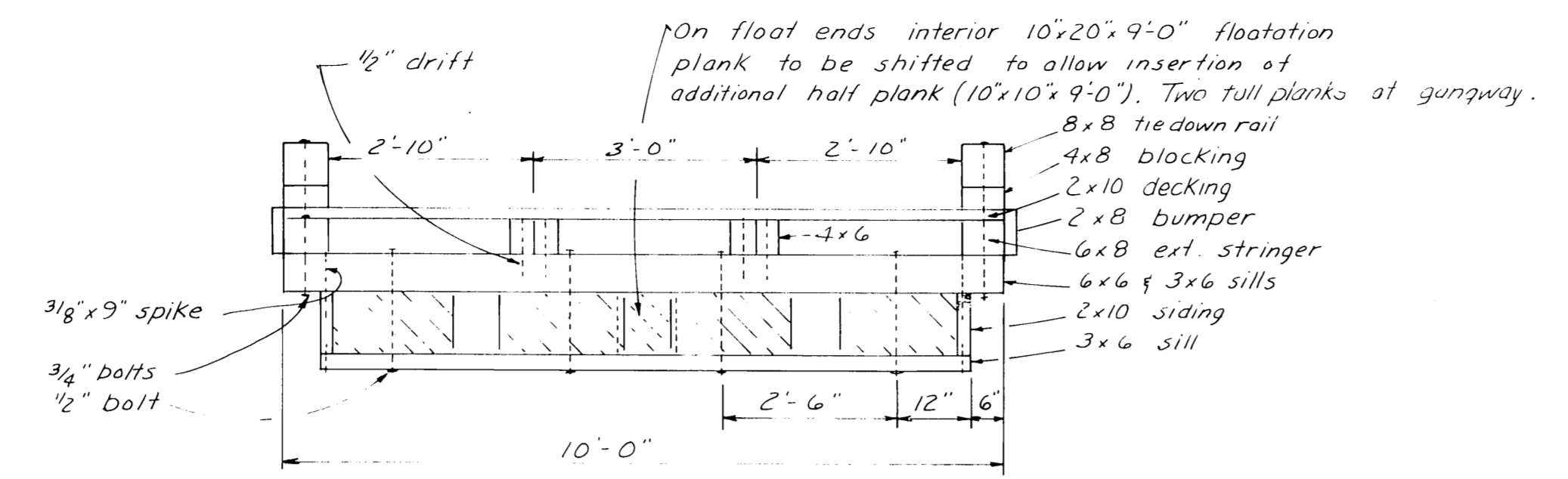
STATE OF ALASKA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF WATER AND HARBORS

Baranof
Approach and Grid Details

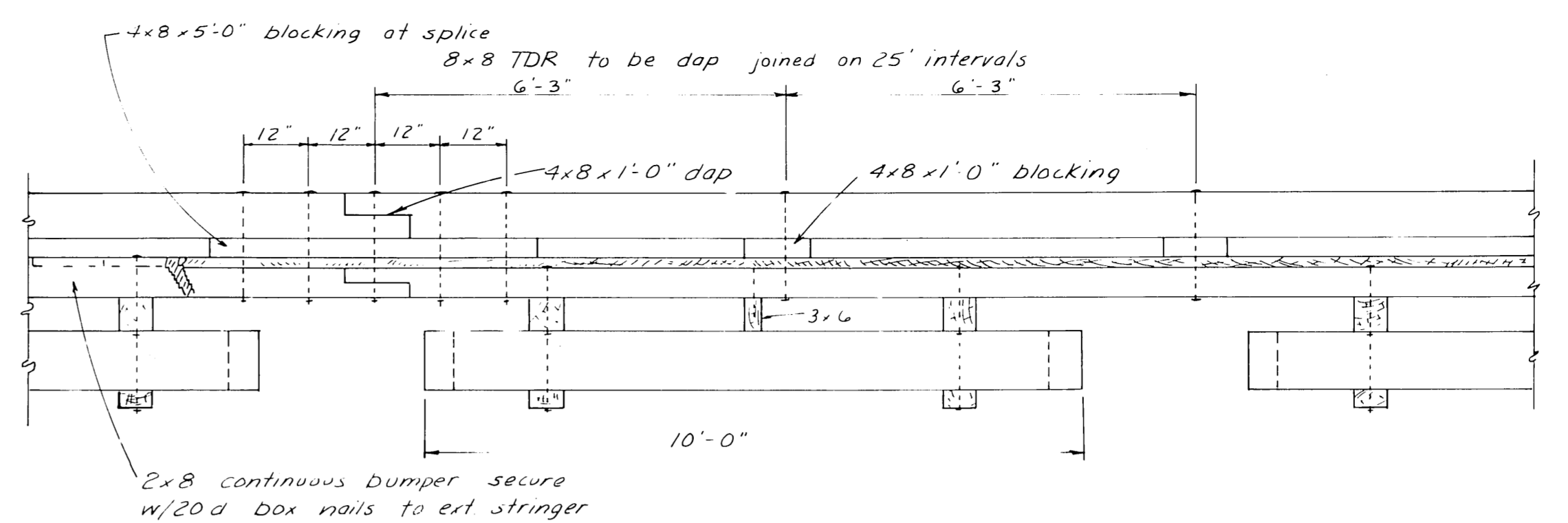
SCALE As noted	SURVEYED RB/HM	APPROVED
DESIGNED HM	DRAWN HM	Don Statter
CHECKED	DATE Aug 1975	DIRECTOR
PROJECT NUMBER 3-76137	SHEET 6 OF 14	



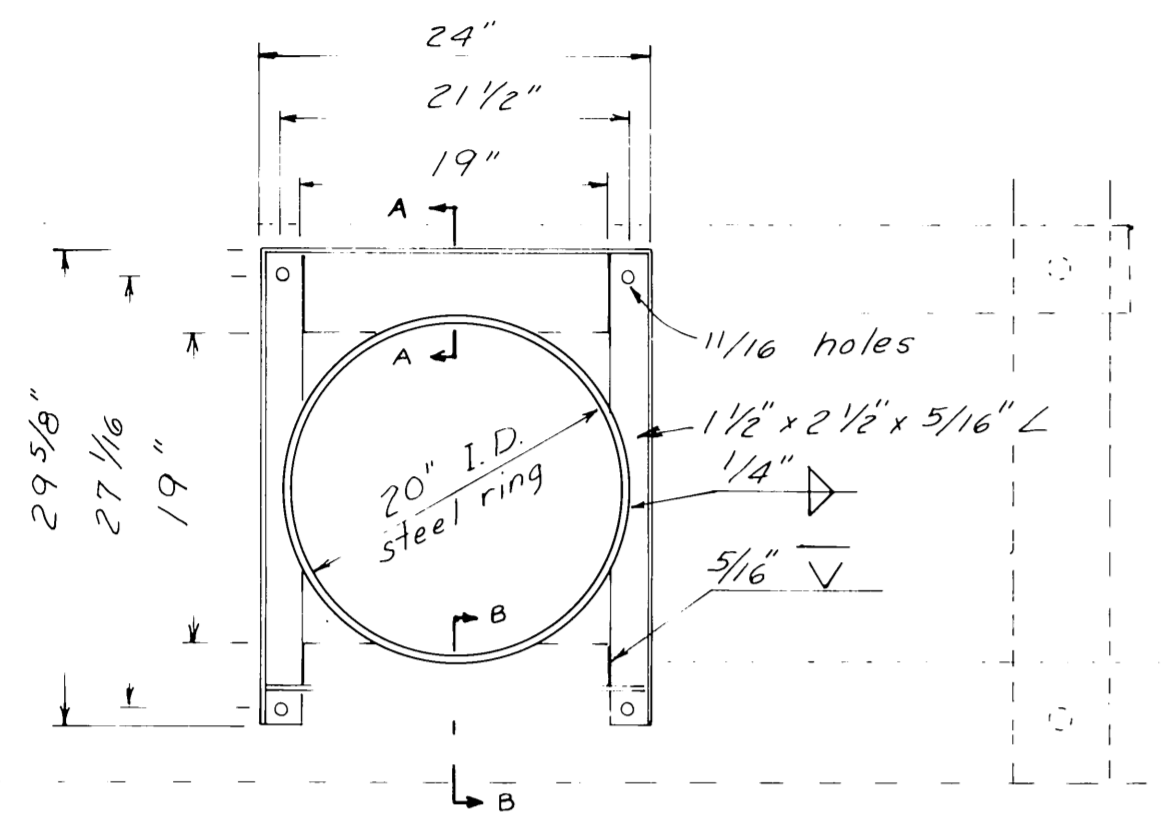
Milled Decking Detail
3/8" = 1" (3/8 size)



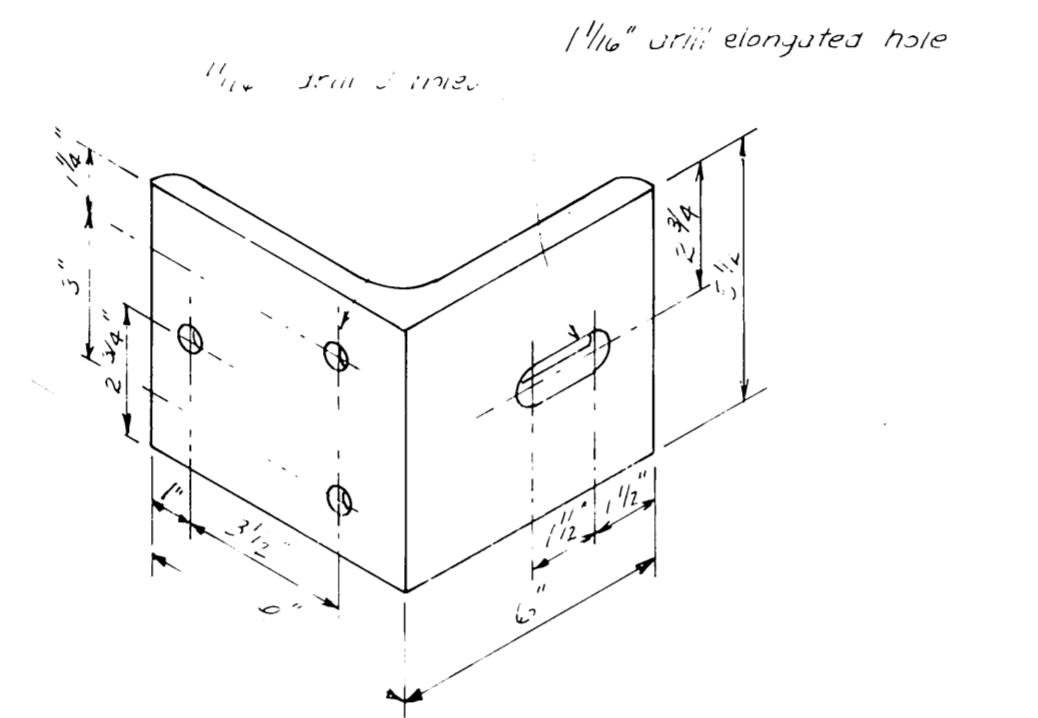
Section
1/2" = 1'-0"



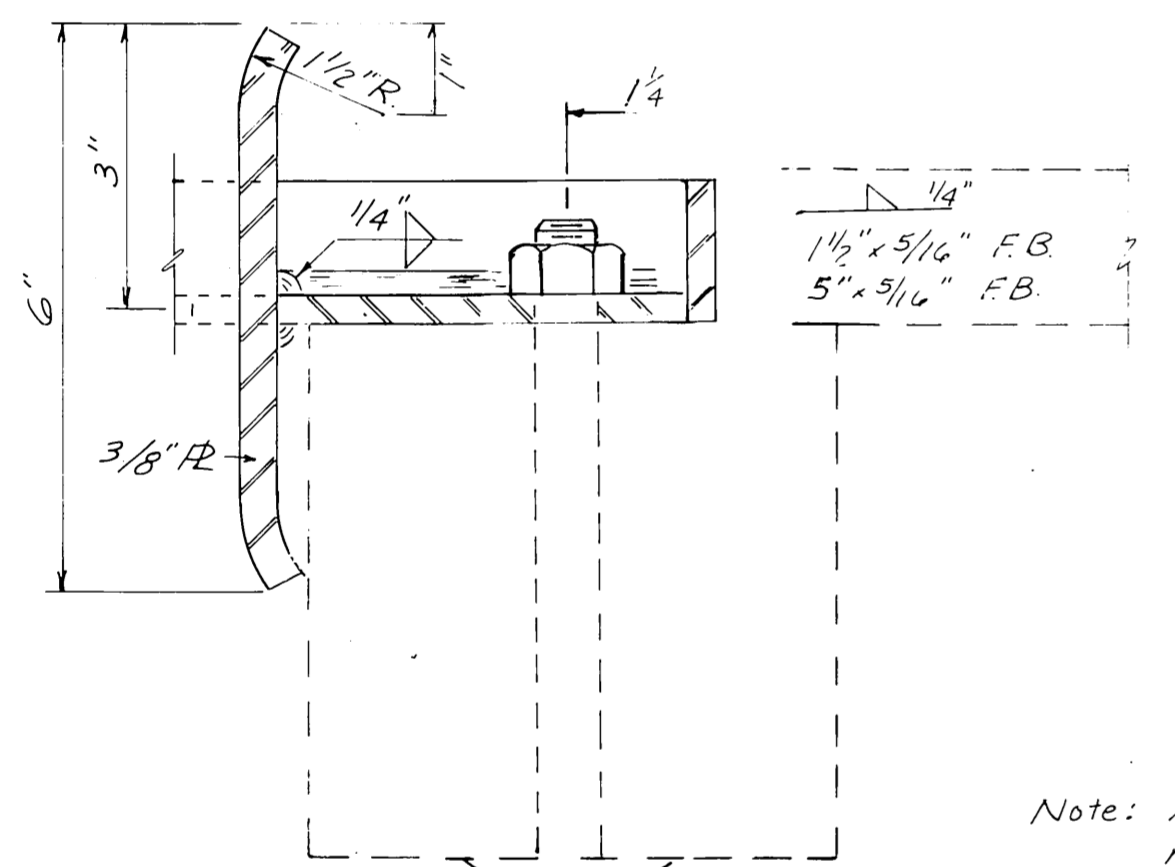
Elevation
1/2" = 1'-0"



Plan
1" = 1'-0" NOTE: All welds on inside face of steel ring shall be ground smooth.

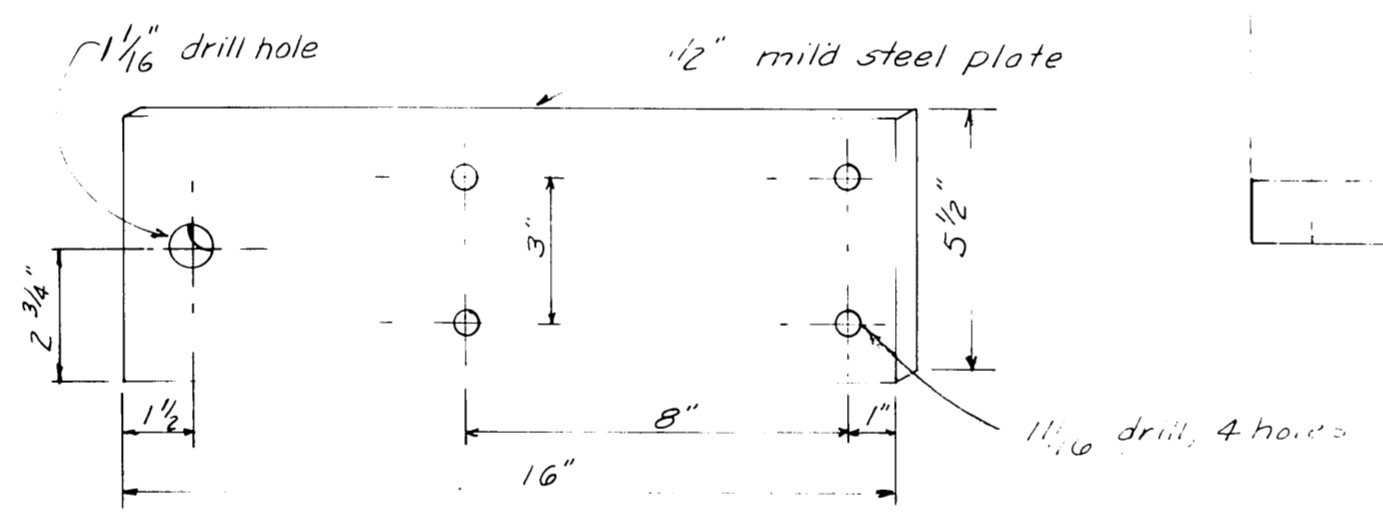


ANGLE CLIP

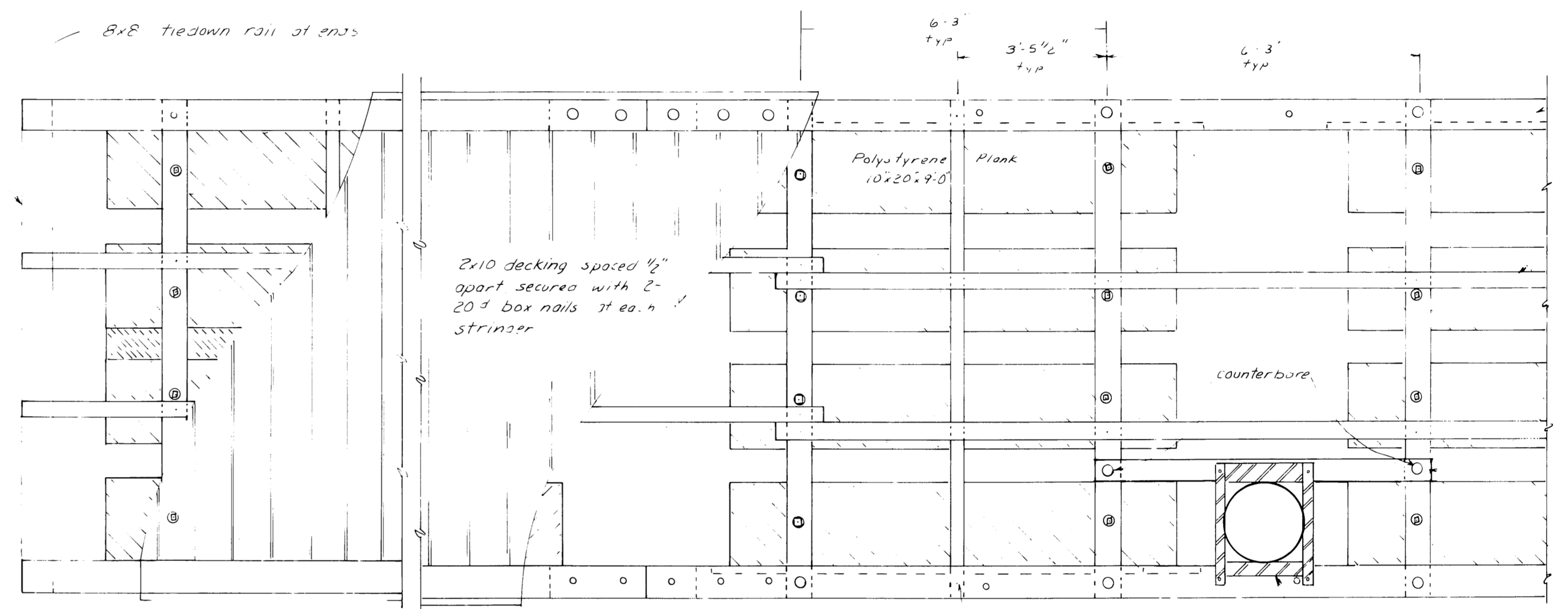


Section A-A
half-size

Note: All material to be mild steel, hot dipped galvanized after fabrication



Standard plate



Plan - 10' Float
1/2" = 1'-0"

6x8 exterior stringers to be dapped and joined on 25'-0" intervals (see stringer diagram)

4x6 interior stringers to be lap joined in 26" lengths. Secure to each sill with 1/2" x 10" drifts

6x6 x 7 collar member secure to each sill w/ 5/8" bolts

Steel pile collar, see detail this sheet.

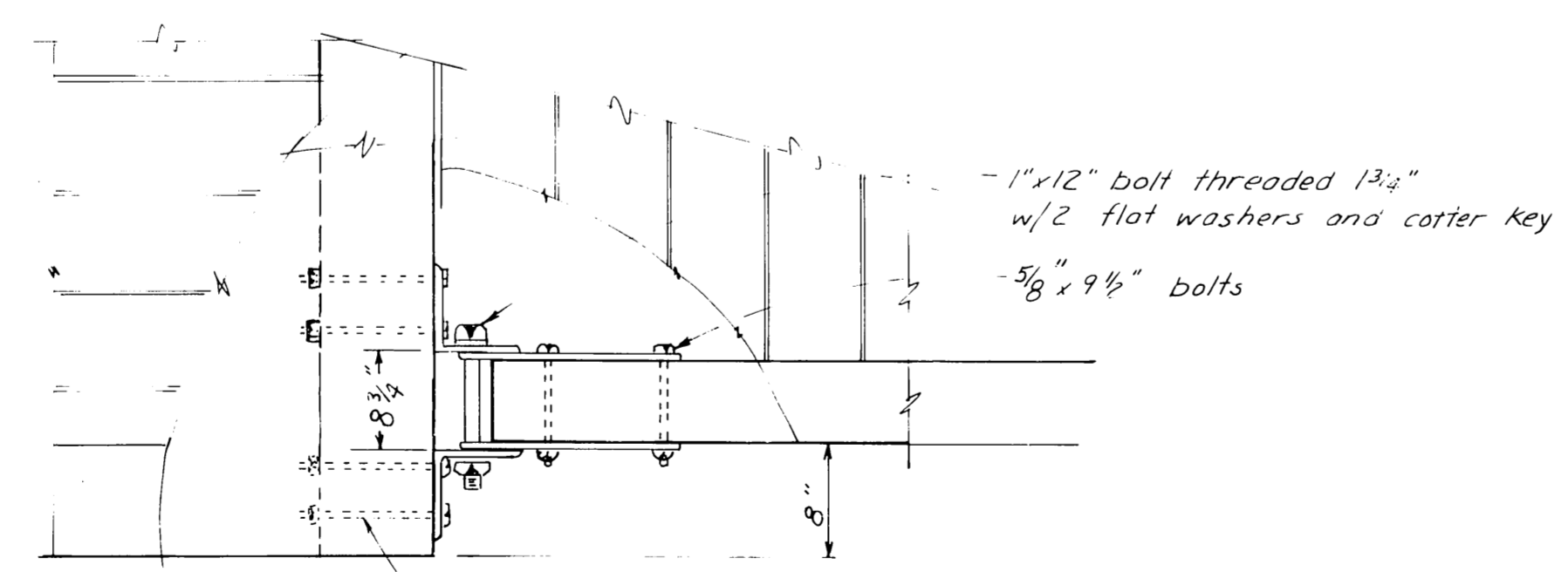
ITEM	DRESSING	TREATMENT
3x6 - 6x6 upper sill	S 1 E 1/2 off	12 lbs ret.
2x10 siding	2 x 10 1/2	" "
3x6 lower sill	rough	" "
4x6 interior stringers	S 2 E	8 lbs ret.
6x6 collar member	S 2 E	" "
6x6 exterior stringer	S 4 S	" "
2x8 bumpers	" "	WR. Pent (equal)
2x10 decking	milled	" "
4x8 blocking	S 4 S	" "
8x8 tiedown rail	" "	" "

All material to be select structural grade douglas fir, F.O.H.C. All piling will be class A creosoted to 12 lbs. retention. All 12 lb ret. creosoted treatment to be full cell. All 8 lb " " " empty cell.

- Pre-drill bolt holes -
 Collar member - all holes
 Sills - holes for floatation plank bolts
 Stringers - holes for stringer to sill bolts
 Tie down rail - all holes
- Field drill bolt holes
 Sills - holes for stringer to sill bolts
 - pile collar member to sill bolts
 Rail blocking - all holes
 Exterior stringer - holes for tiedown rail bolts

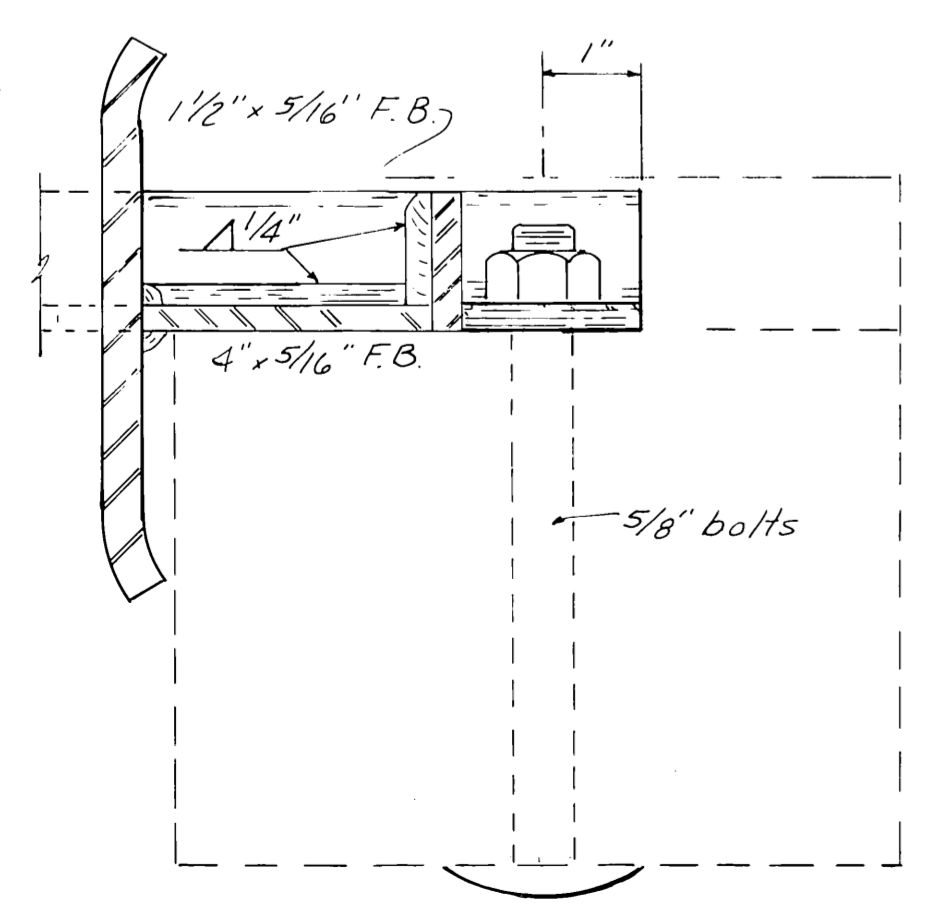
Notes:

All hardware to be hot dipped galvanized. A malleable iron washer shall be placed between all nut and wood surfaces. All bolts to be economy headed type. Bolt holes to be drilled 1/16" oversize except sill bolt holes for floatation planks 1/8" oversize. Drift holes to be drilled 1/16" undersize. All field drill holes shall be treated with hot creosote oil. All pressure treated creosote material shall be cut to size prior to treatment. Tiedown rails shall extend across float ends except under gangway. All bolt heads facing decking shall be counter sunk 1/4" prior to treatment. Field drill all drift holes. A barrier of 6 mil black polyethylene shall be placed between the contact surfaces of all creosote timber and floatation material (except float siding member).



Right Angle Connection

Float Connection Details
Scale: 1" = 1'-0"



Section B-B
half size

Steel Pile Collar Details

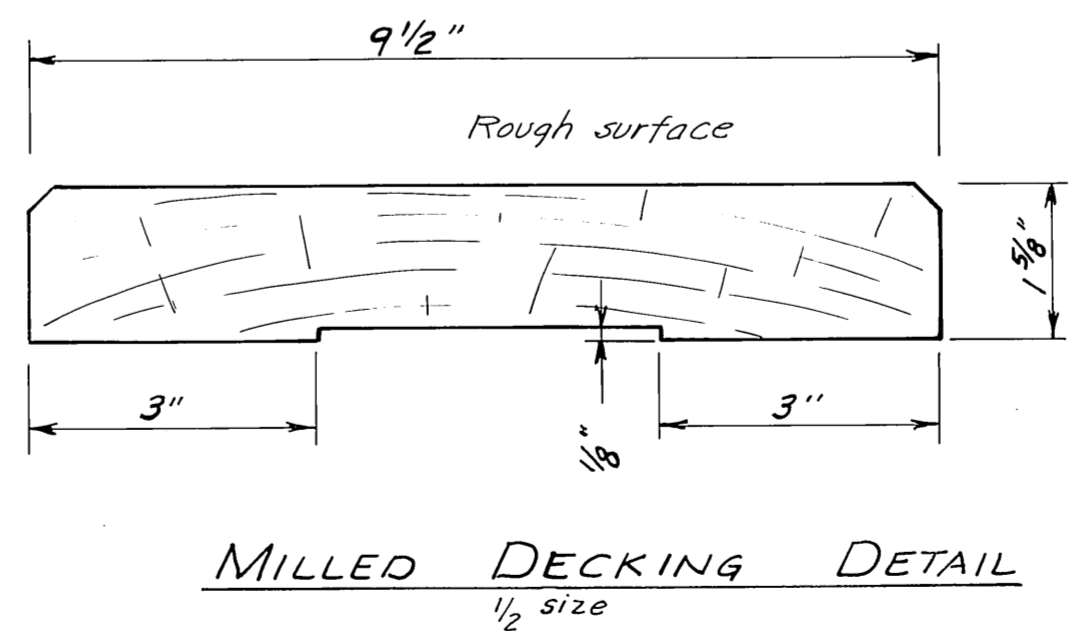
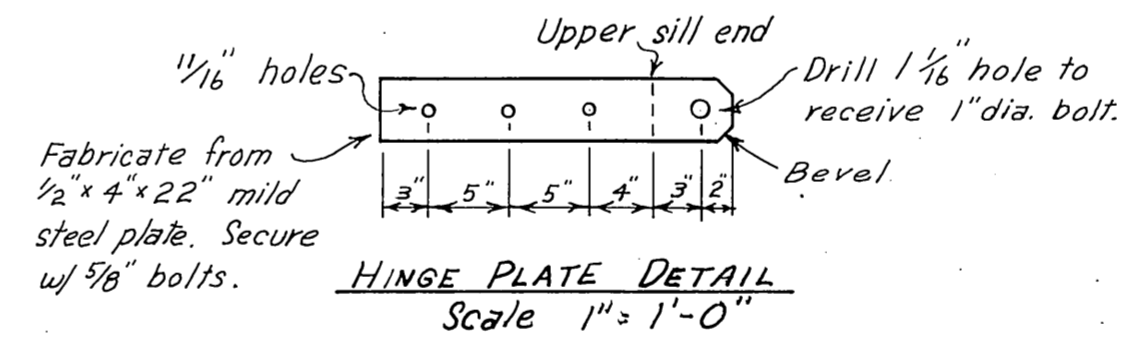
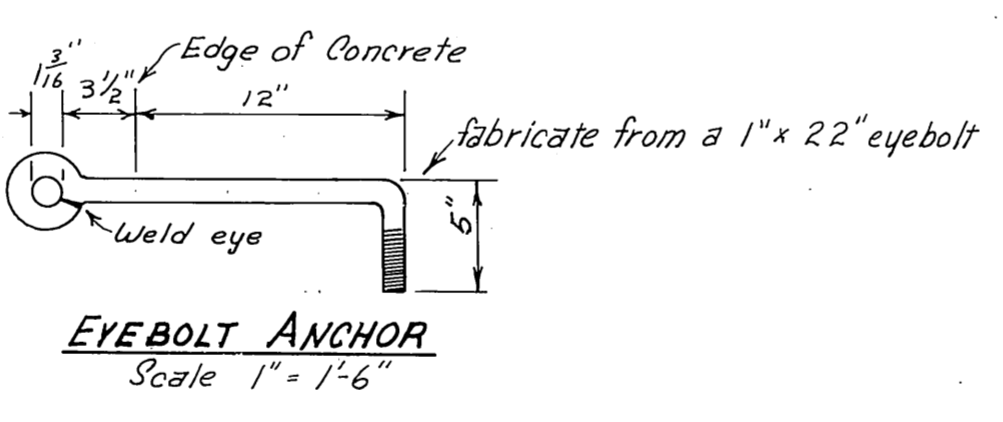
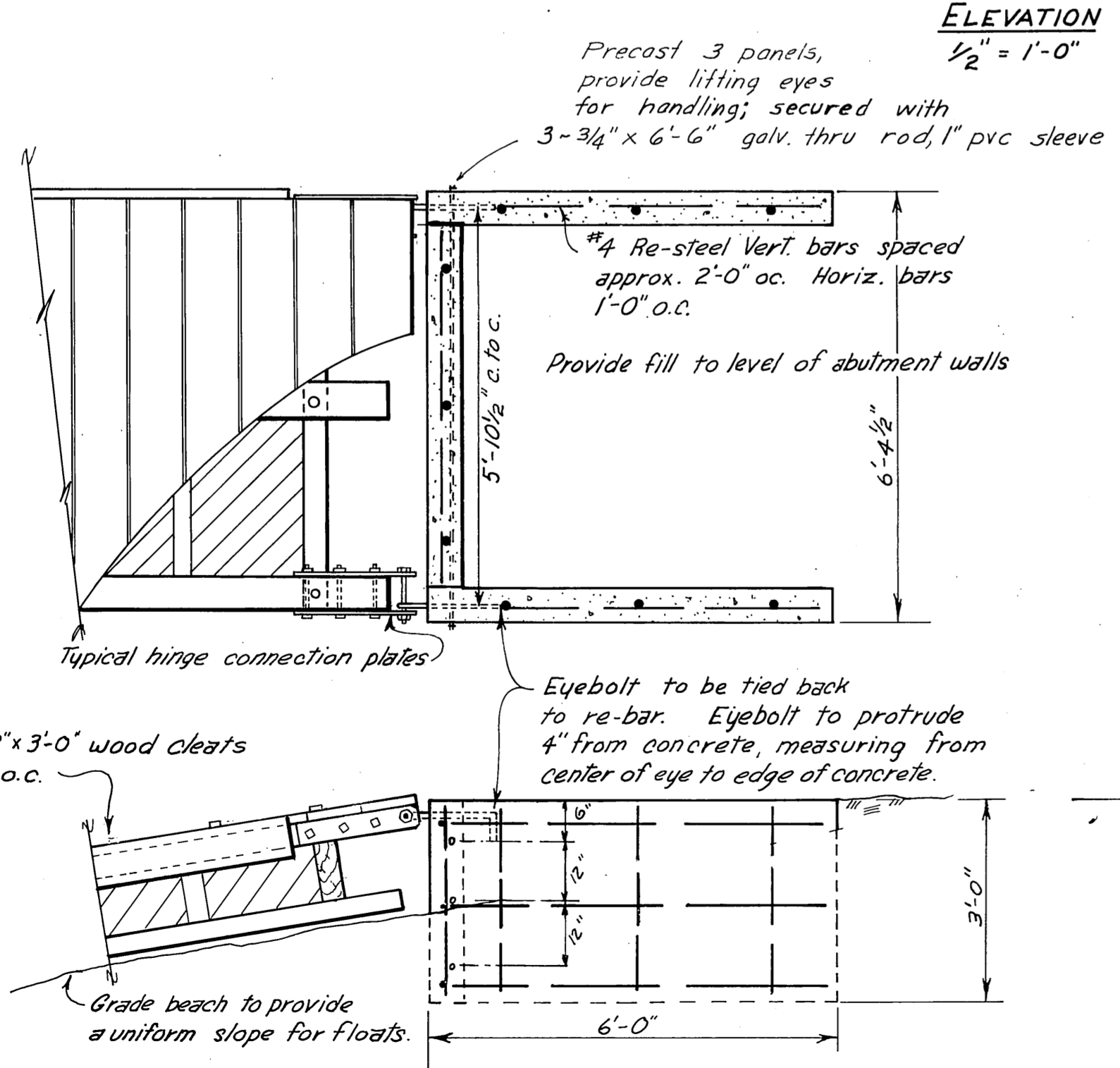
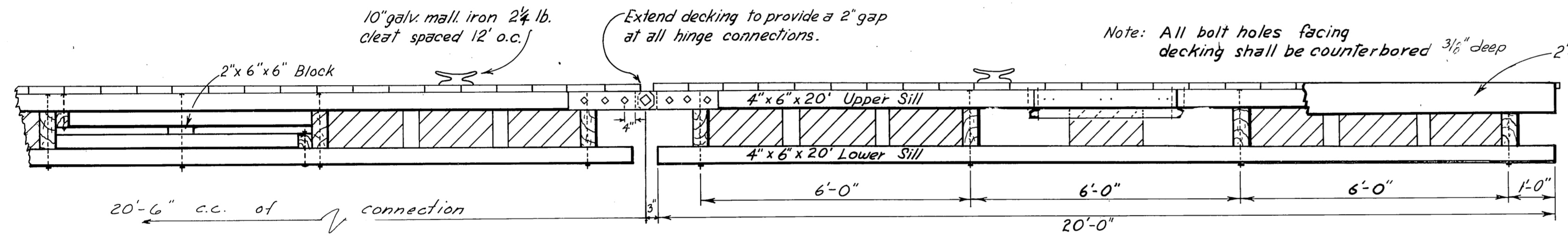
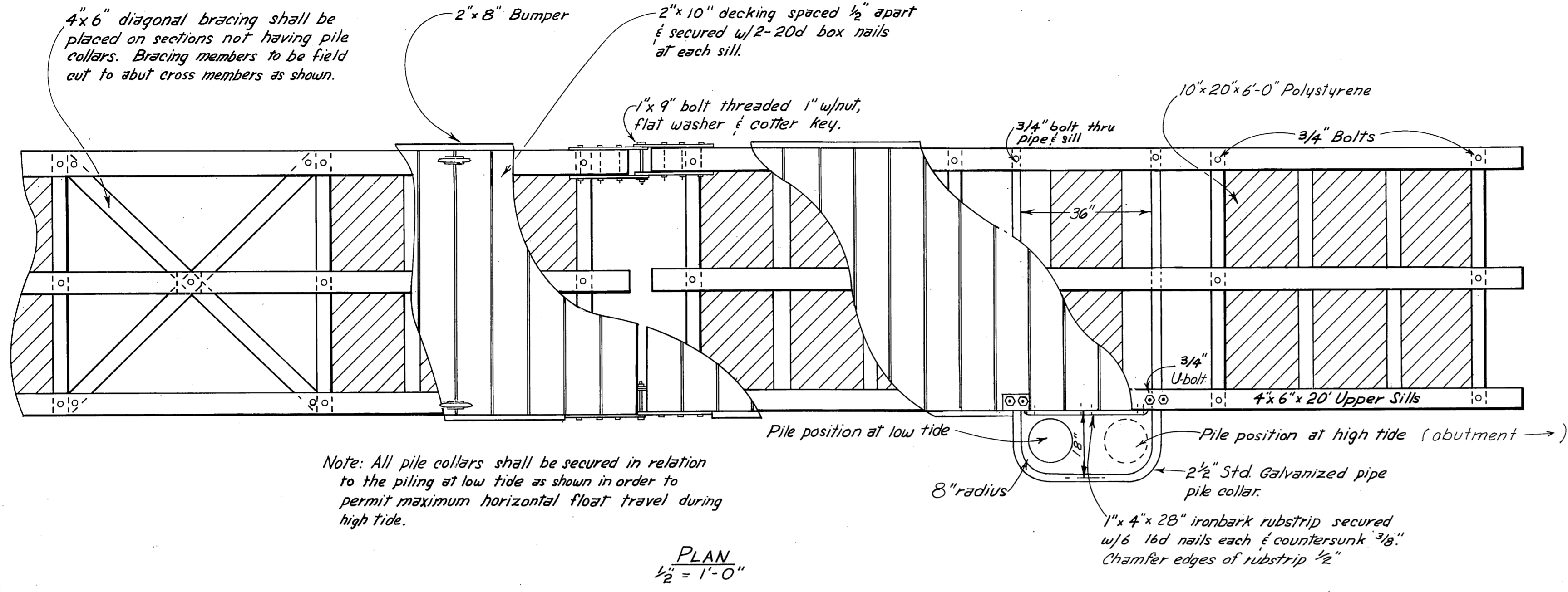


DO NOT SCALE THIS DRAWING USE DIMENSIONS

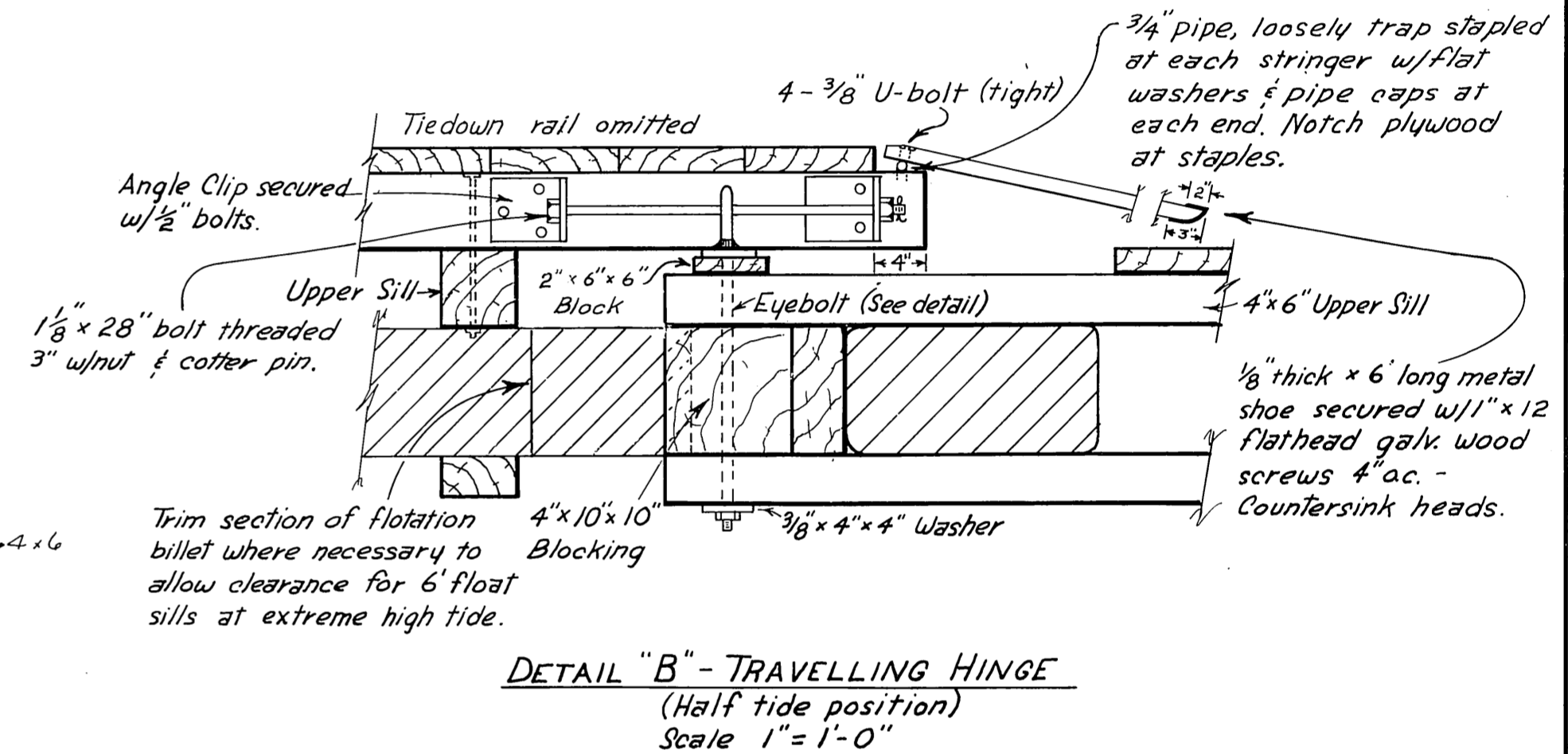
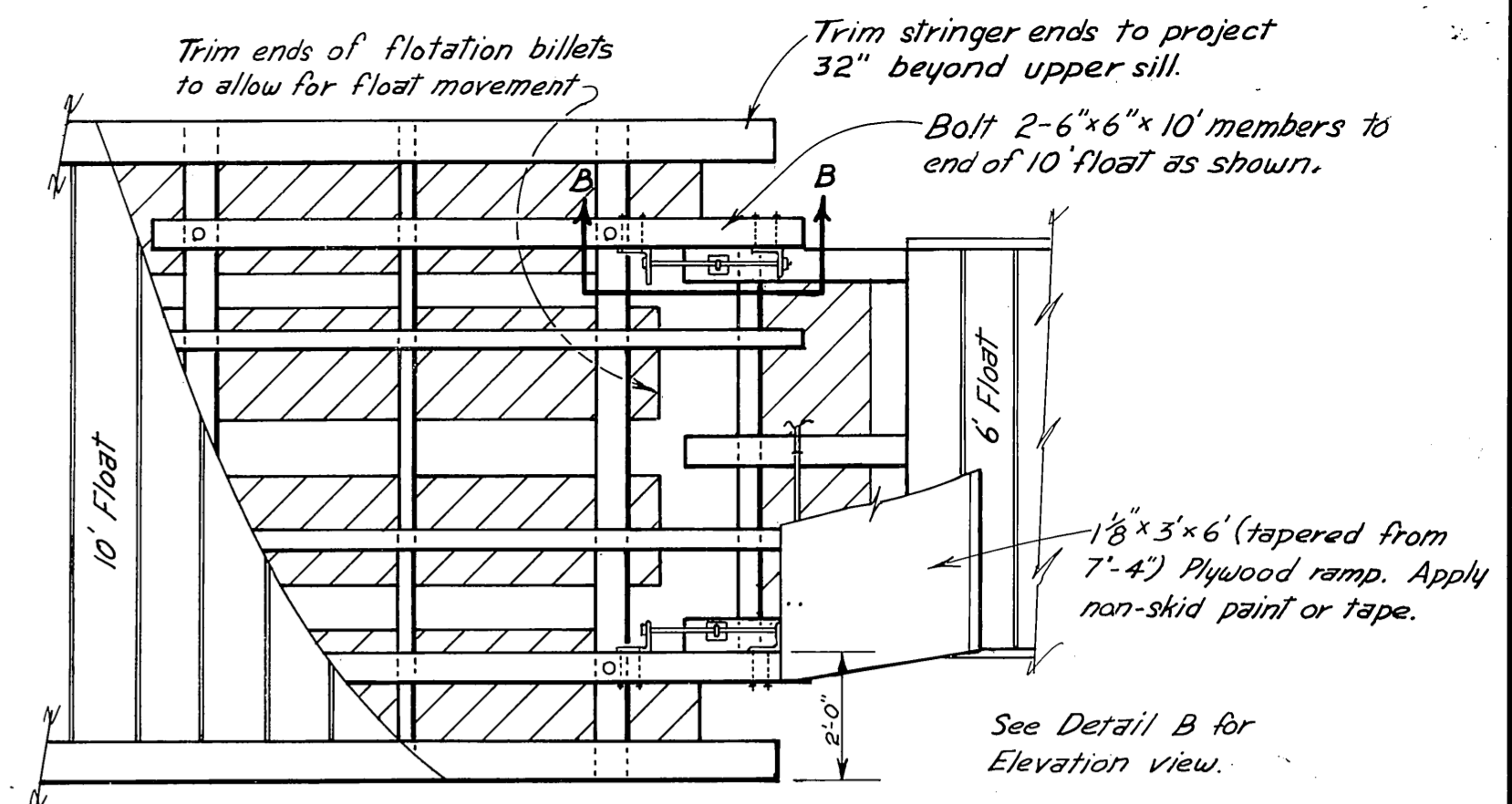
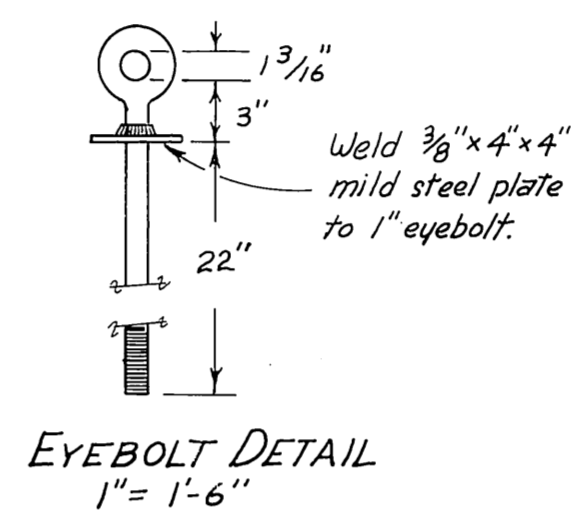
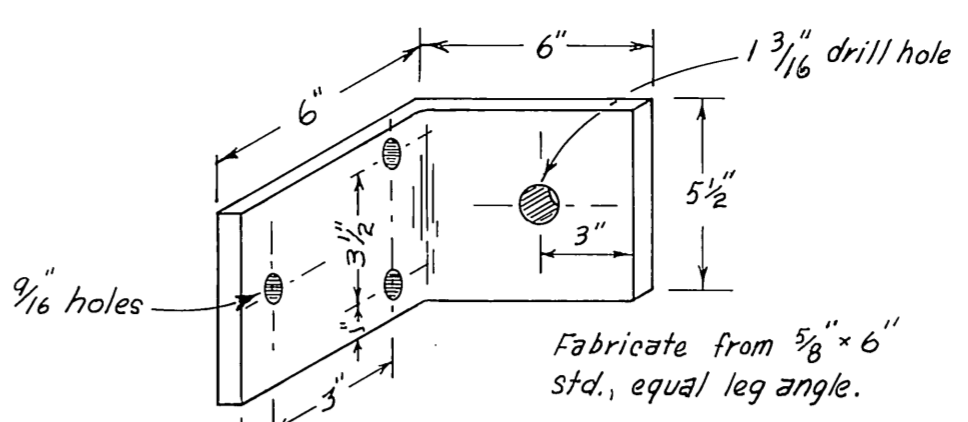
STATE OF ALASKA
 DEPARTMENT OF PUBLIC WORKS
 DIVISION OF WATER AND HARBORS

BARONOF KAKE
 10' FLOAT DETAILS

SCALE As noted	SURVEYED	APPROVED
DESIGNED DW/DS	DRAWN HM	Don Statter DIRECTOR
CHECKED	DATE Jan 75	
PROJECT NUMBER 3-76137, 6-76172	SHEET 7 OF 14	



- Note: 1. Add 4x4 rail to 6' wide float. See det. sht 13.
2. 10" cleats not required.
3. Pile collar not required, make 1 each 6x20' section with 4x6 diagonal bracing as shown in Plan detail above.
4. Furnish and install new 2x8 bumper, 2x10 milled decking to existing 6x340' float at Angoon.



Pre drill bolt holes - Sills-upper and lower
Field drill bolt holes - Diagonal bracing
Cross members

All hardware shall be hot dipped galvanized. A malleable iron washer shall be placed between all nut and wood surfaces. Bolt drill holes are to be 1/16" oversize. Layer of 6 mill block polyethylene shall be placed between surfaces of foam and creosote treatment.

MATERIALS

ITEM	DRESSING	TREATMENT
4x6" Sills	Rough	12# Creo.
4x10" Cross Members	Rough	" "
4x6" Diagonal Brace	Rough	" "
2x10" Decking	Milled	0.5" Penta
2x8" Bumpers	S-I-S-2-E	0.5" Penta

All lumber to be Select Structural Douglas Fir.
All bolts to be 3/4" unless otherwise noted.
All sills, stringers and Cross members to be F.O.H.C.

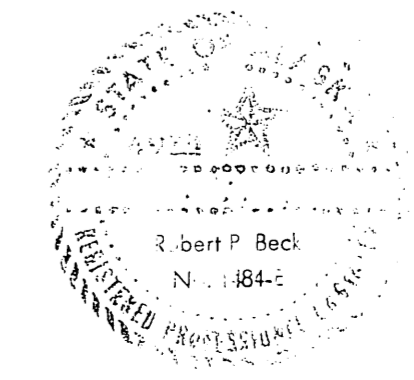
DO NOT SCALE THIS DRAWING - USE DIMENSIONS

STATE OF ALASKA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF WATER AND HARBORS

ANGOON

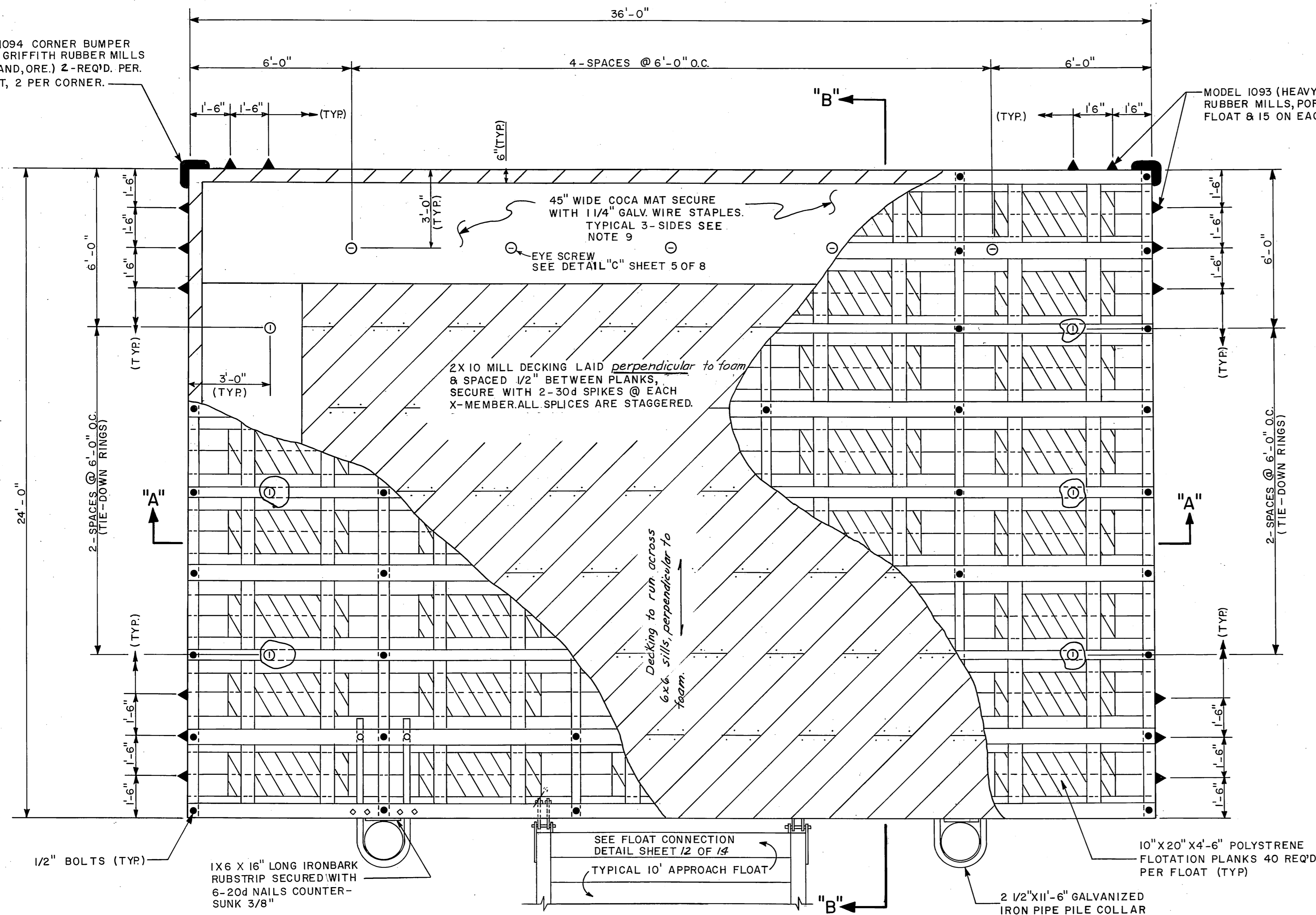
6' SECTIONAL FLOAT

SCALE: As Shown	SURVEYED:	APPROVED:
DESIGNED: DSM	DRAWN: C.E.D.	Don Statter
CHECKED: DSM	DATE: Aug. 1971	DIRECTOR
PROJECT NUMBER: 6-76172	SHEET 8 OF 14	



MODEL 1094 CORNER BUMPER (MFG. BY GRIFFITH RUBBER MILLS, PORTLAND, ORE.) 2 - REQ'D. PER PROJECT, 2 PER CORNER.

MODEL 1093 (HEAVY) RUBBER BUMPER (MFG. BY GRIFFITH RUBBER MILLS, PORTLAND, ORE.) 24 ON FRONT FACE OF FLOAT & 15 ON EACH SIDE.



LUMBER LIST			
ITEM	GRADE	DRESSING	CREOSOTE TREAT.
6 X 6 STRINGER-UPPER	Select Struct.	S4S	12 LBS RET.
6 X 8 STRINGER-UPPER	"	S2S	12 LBS RET.
4 X 6 STRINGER-UPPER	"	S2E	12 LBS RET.
4 X 10 JOISTS	"	ROUGH	12 LBS RET.
4 X 8 STRINGER-LOWER	"	ROUGH	12 LBS RET.
8 X 8 BEAM	"	ROUGH	12 LBS RET.
4 X 4 SILL	"	ROUGH	12 LBS RET.
1 X 10 MEMBERS	Construction	ROUGH	8 LBS RET.
2 X 6 MEMBERS	Construction	ROUGH	8 LBS RET.
MISC. NAILING STRIPS (2 X 4)	Construction	ROUGH	8 LBS RET.
2 X 10 SKIRTING	Select Struct.	ROUGH	0.5" penta
2 X 10 MILL DECKING	Select Struct.	S1S2E	0.5" penta

for decking detail see typical 10' float detail sheet

NOTES:

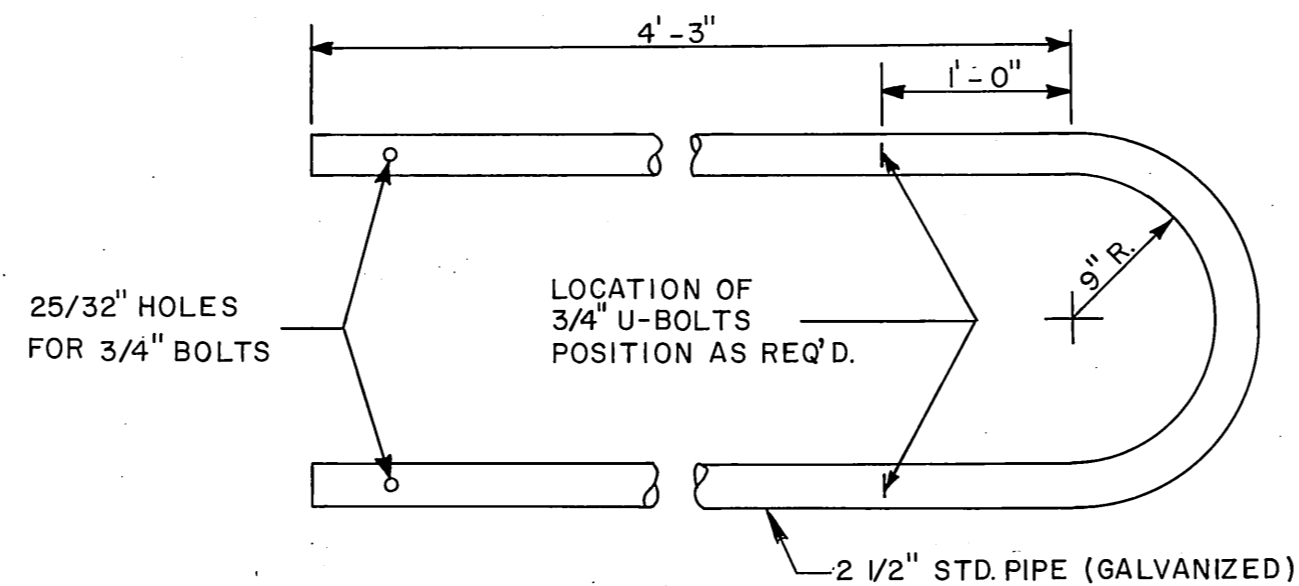
- 6" X 6" X 36'-0", 6" X 8" X 36'-0" & 4" X 6" X 36'-0" UPPER STRINGERS. 4" X 6" X 36'-0", 4" X 8" X 36'-0" & 4" X 8" X 36'-0" LOWER STRINGERS. 4" X 10" X 24'-0" JOISTS. ALL MEMBERS FULL LENGTH-NO SPLICES
- ALL HARDWARE IS HOT DIPPED GALVANIZED. A MALLEABLE WASHER TO BE PLACED BETWEEN ALL NUT & WOOD SURFACES. ALL BOLTS ARE CARRIAGE BOLTS UNLESS NOTED.
- BOLT HOLES TO BE DRILLED 1/32" LARGER THAN BOLT DIAMETER.
- ALL LOAD CARRYING MAIN MEMBERS-(UPPER & LOWER STRINGERS, JOISTS, ETC.) TO BE CUT TO SIZE & HOLES DRILLED BEFORE PRESSURE TREATED WITH CREOSOTE. SECONDARY MEMBERS-(DECKING, 1 X 10'S FOR FLOTATION PLANK PROTECTION ETC.) MAY BE TREATED WITH HOT CREOSOTE AT THE BOLT HOLE & ENDS. AFTER CUTTING AND DRILLING.
- ACTUAL FIELD MEASUREMENT OF THE POLYSTYRENE FLOTATION PLANKS MIGHT REVEAL A THICKNESS GREATER THAN 10'. TO COMPENSATE FOR THIS THE 2" X 4" X 1'-0" CLEAT MAY VARY
- THE BOLT HOLES IN THE RAMP MAY BE FIELD DRILLED TO INSURE PROPER FIT.
- ALL BOLT THREADS SHALL BE DISTORTED BY CENTER PUNCHING AT THE BOLT-NUT JUNCTION.
- COUNTERSINK ALL BOLT HEADS FACING DECKING.
- COCA MAT REQUIRED IS 84 LINEAR FEET. THIS ITEM WILL BE INCIDENTAL TO COST OF FLOATS, NO SEPARATE PAYMENT WILL BE MADE.

NOTE:

- LOCATION OF APPROACH FLOAT TO SEAPLANE FLOAT CONNECTION SAME AT BOTH HAWK INLET & KAKE.
- 6X6X36' MEMBERS, 6X8X36' UPPER SILLS & 4X8X36' LOWER SILLS TO BE FULL LENGTH NO SPLICES, 4X6 MEMBERS MAY BE DAPPED OR LAP JOINTED.
- PILE COLLAR SHOWN THIS SHEET TO BE USED AT HAWK INLET, KAKE AND PORT ALEXANDER, FOR ATTACHMENT BETWEEN SEAPLANE FLOATS AND DOLPHINS.

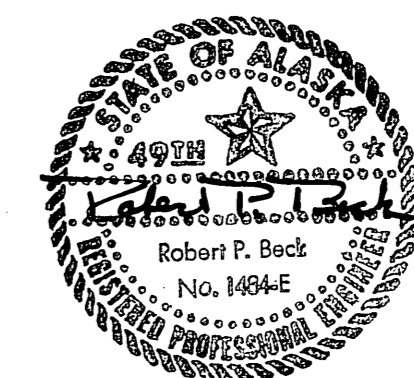
PLAN VIEW

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



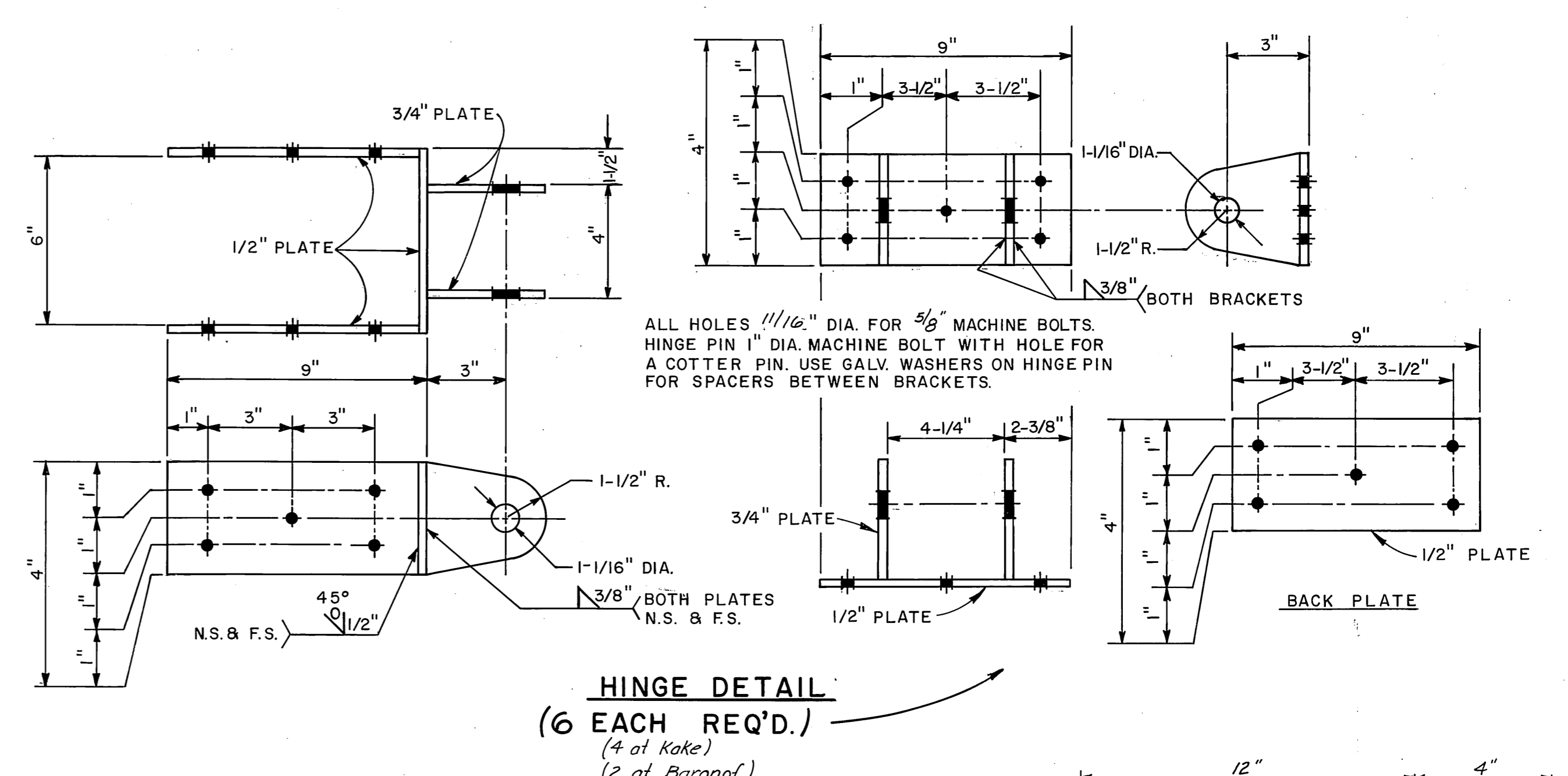
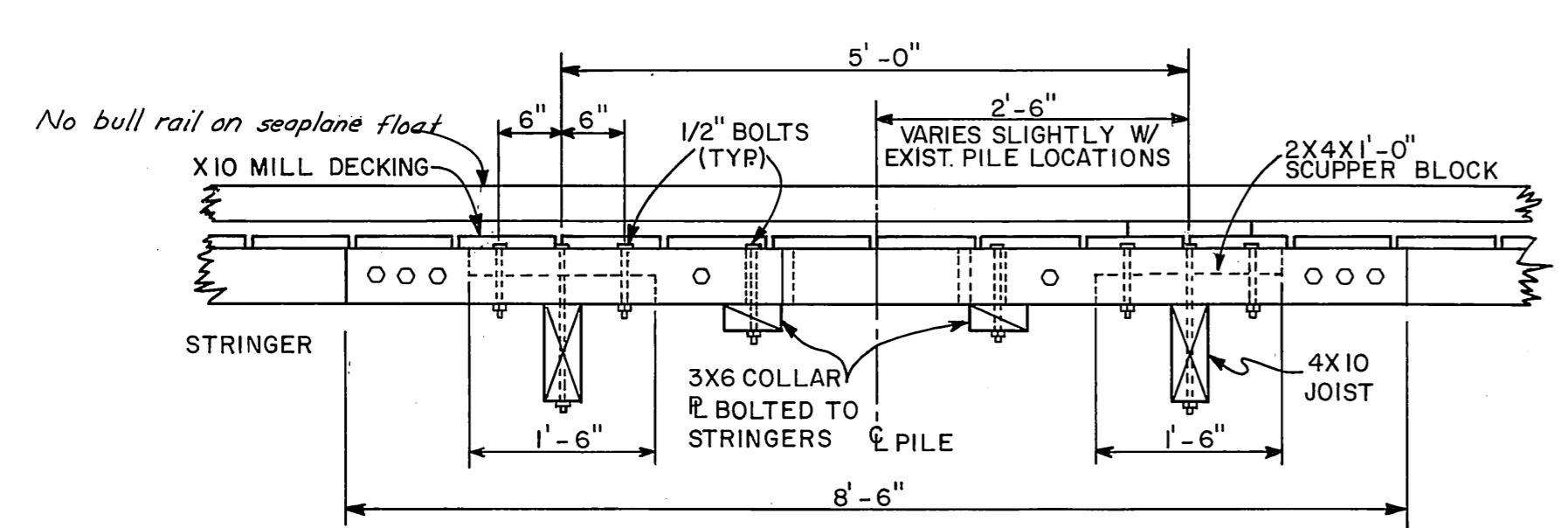
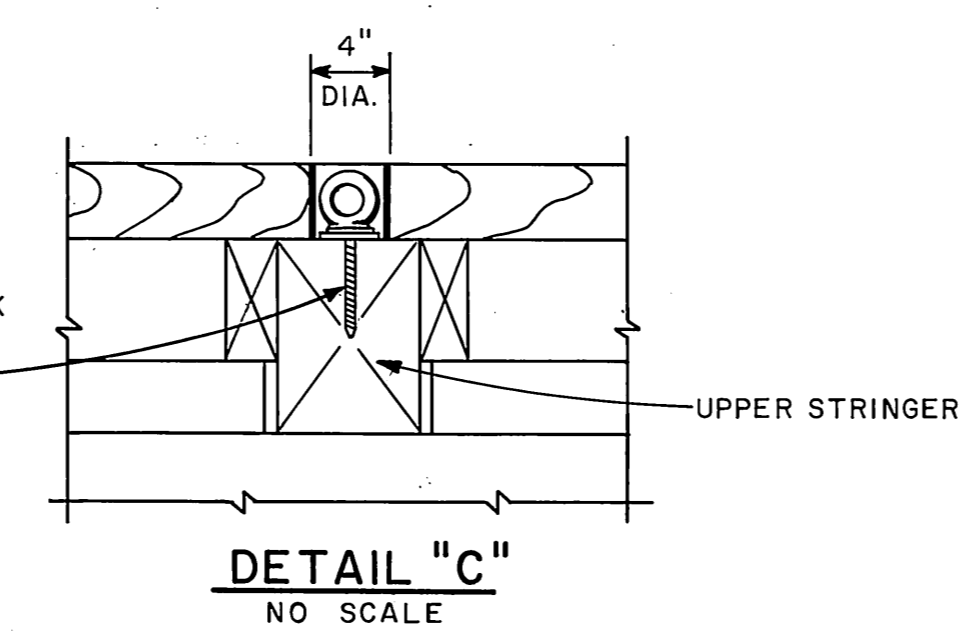
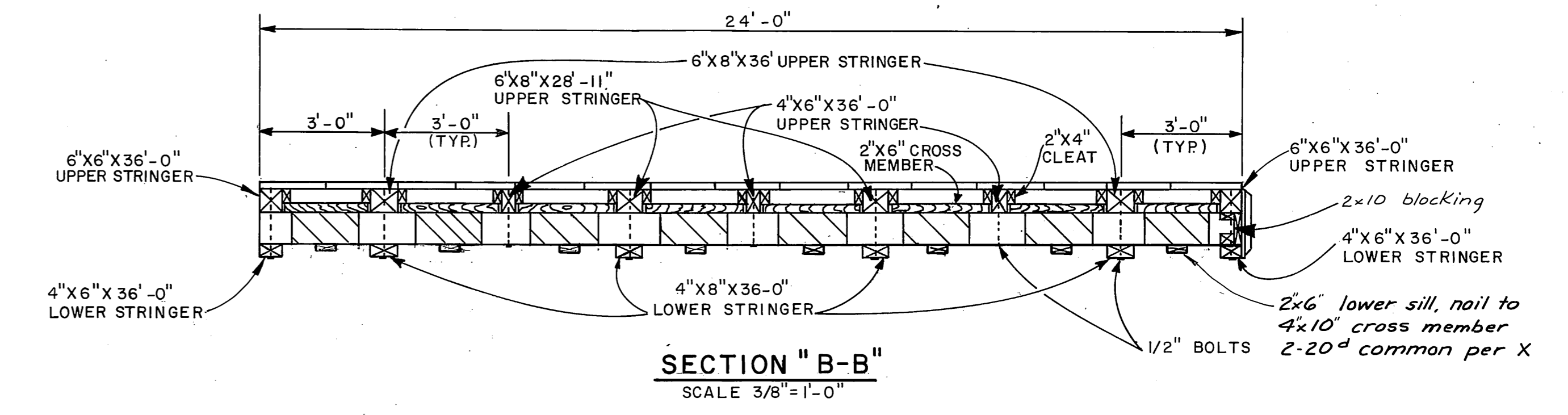
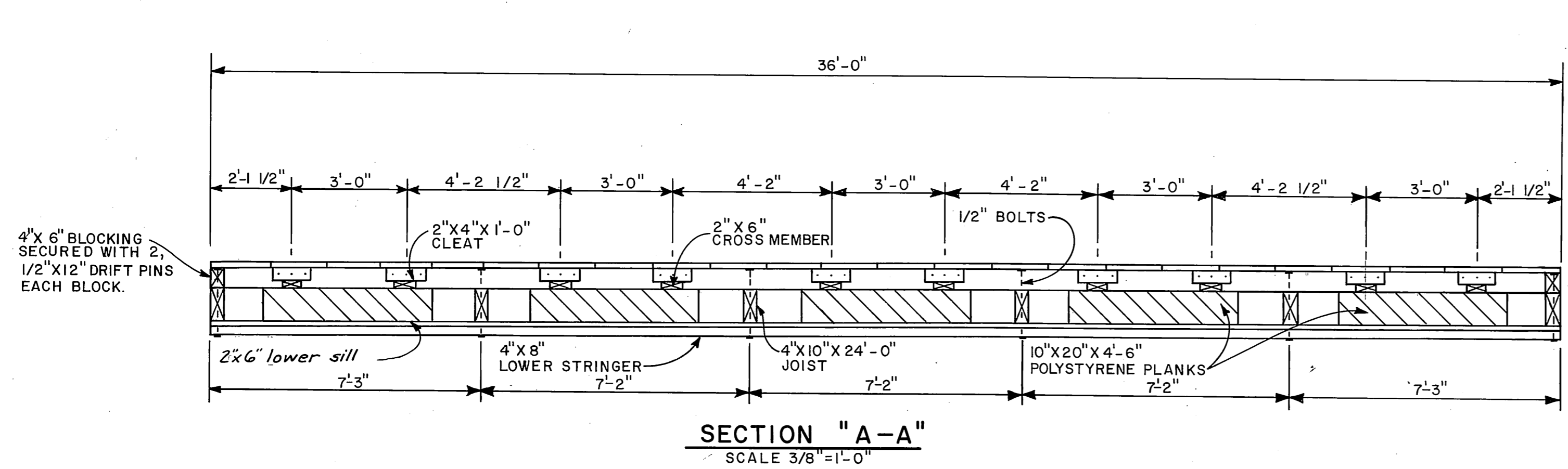
TYPICAL IRON PIPE PILE COLLAR

SCALE: 1"=1'-0"



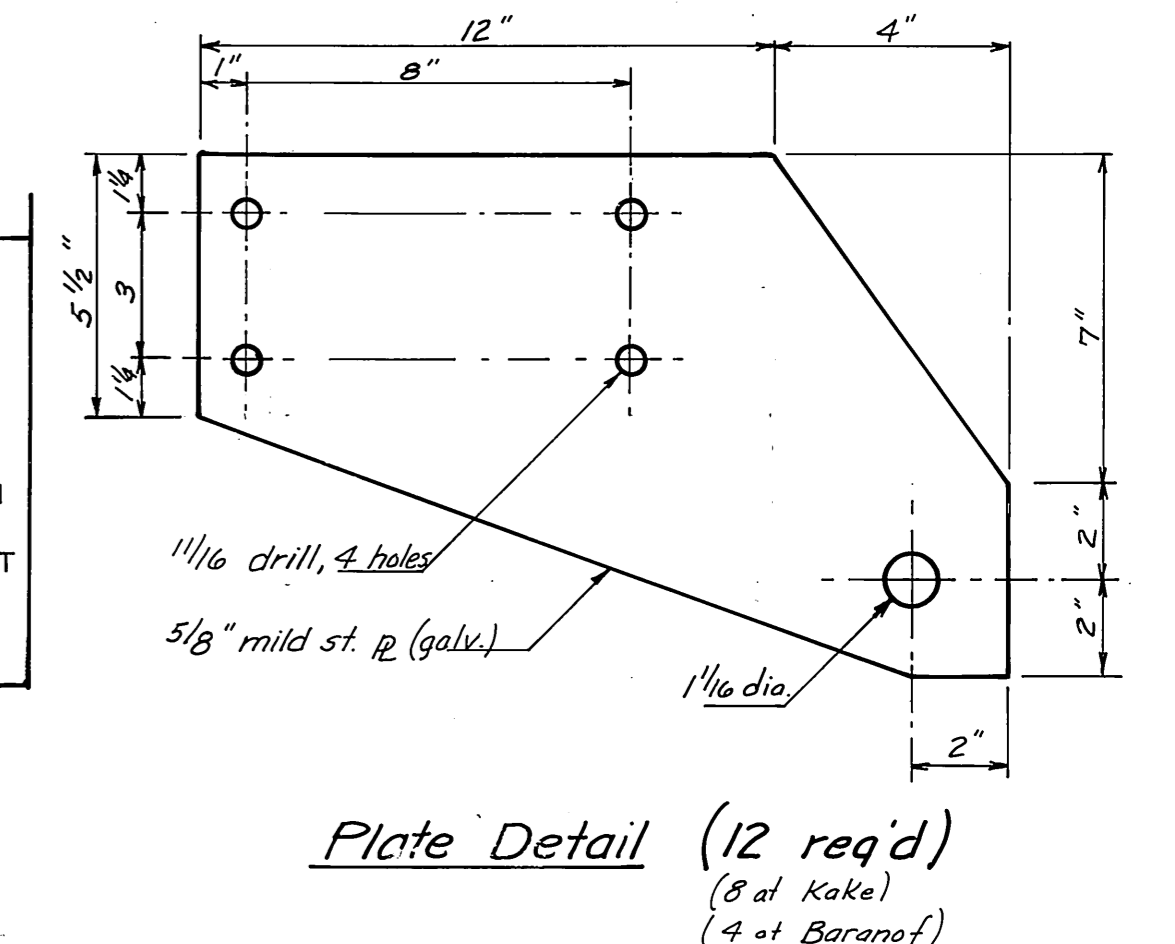
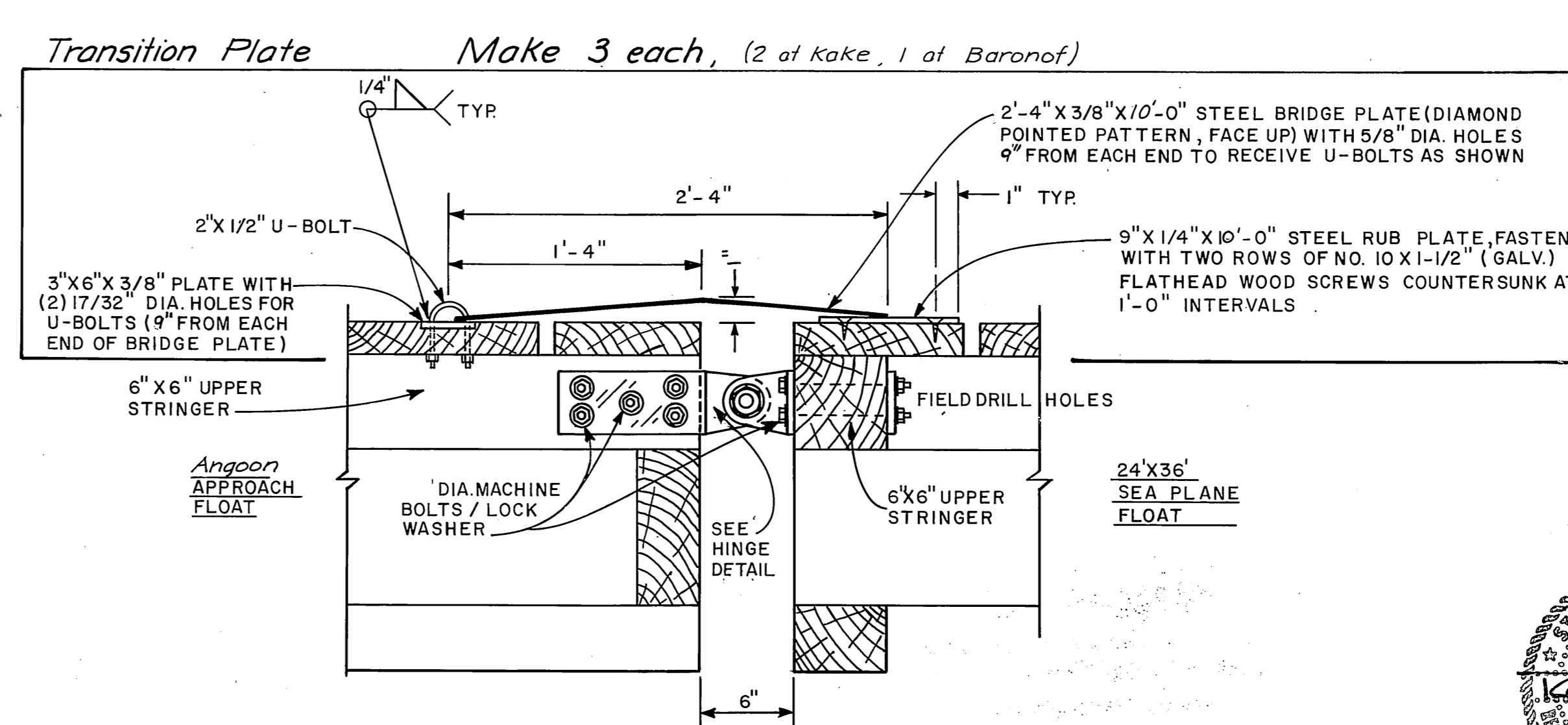
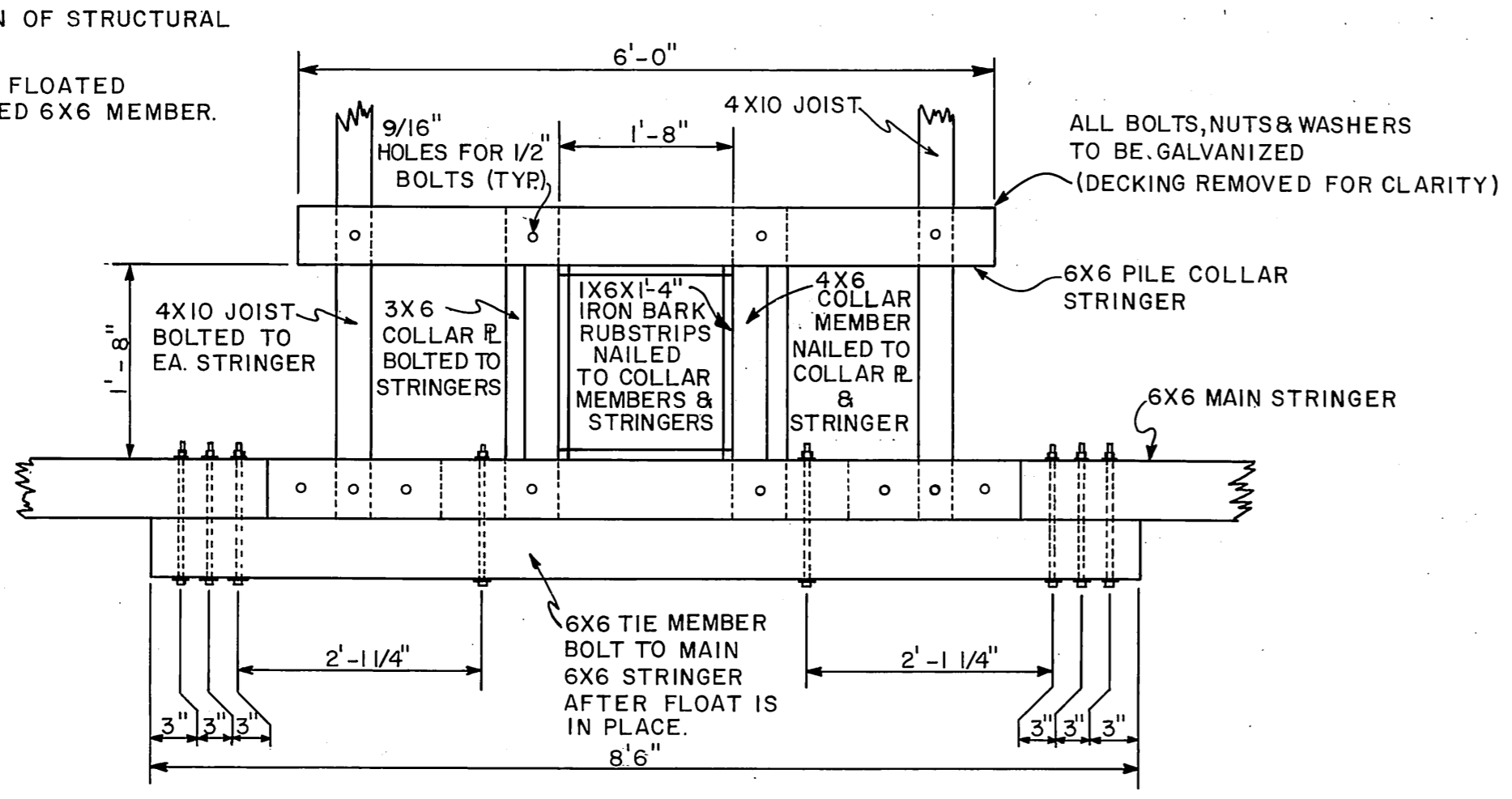
STATE OF ALASKA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF AVIATION
KAKE - HAWK INLET - ANCOON - PORT ALEXANDER
SEAPLANE FACILITIES
TYPICAL 24' X 36' SEAPLANE FLOAT

APPROVED	JAMES J. RHODE, P.E. CHIEF DESIGN ENGINEER
APPROVED	WILLIAM KOESTER, P.E. SECONDARY AIRPORTS ENGINEER
HM 9/5/75	Project location, Mat'l list
BY DATE	CHANGE
SCALE	AS SHOWN
DESIGNED R.L.S.	DRAWN D.T.
CHECKED	DATE 5/20/75
REVISIONS	
SHEET 11 OF 14	



NOTE:

1. PILE COLLAR LOCATIONS TO BE AS PER EXISTING PILE LOCATIONS AT BOTH KAKE & HAWK INLET.
2. MAIN 6X6 STRINGER TO BE DAPPED DURING PREFABRICATION OF STRUCTURAL MEMBERS.
3. APPROACH FLOAT TO BE FLOATED BEFORE REMOVING DAPPED 6X6 MEMBER.



Angoon only, relocated hardware
HINGE CONNECTION BETWEEN APPROACH & SEAPLANE FLOAT
 SCALE 1-1/2"=1'-0"



STATE OF ALASKA DEPARTMENT OF PUBLIC WORKS DIVISION OF AVIATION	
KAKE-HAWK INLET-ANGOON-PORT ALEXANDER	
SEAPLANE FACILITIES SECTIONS & DETAILS FOR TYPICAL 24' X 36' SEAPLANE FLOAT	
APPROVED	JAMES J. RHODE, P.E. CHIEF DESIGN ENGINEER
APPROVED	WILLIAM KOESTER, P.E. SECONDARY AIRPORTS ENGINEER
BY	DATE
HA	9/8/65
BY	DATE
AS SHOWN	REVISIONS

6/14/75