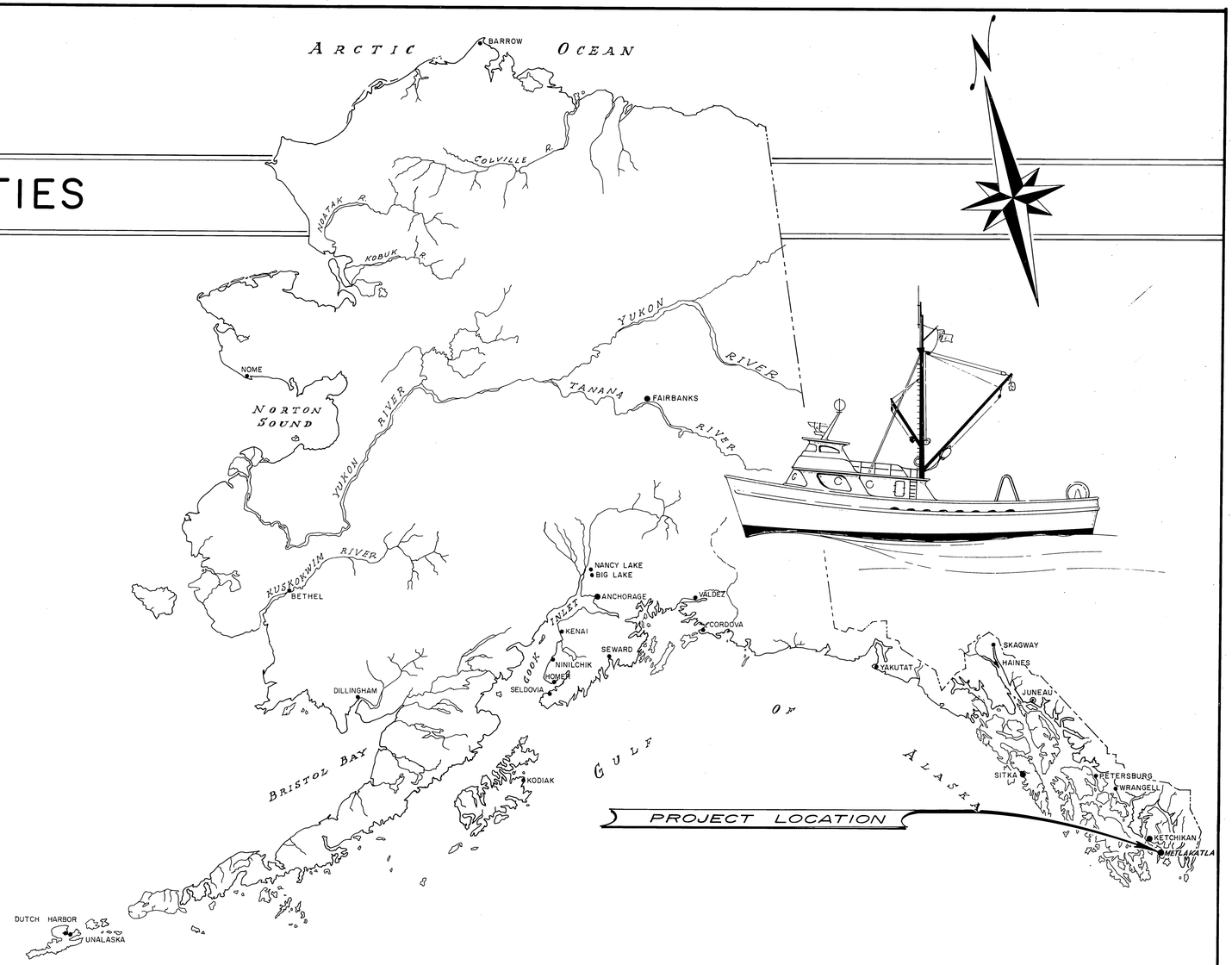
METLAKATLA FLOAT FACILITIES

PROJECT NO. 3-73120



WORK SUMMARY

Major elements of this project are: Removal of existing facilities including 4500 S.F. of timber floats, 27 timber piles, and a 7'x 50' timber gangway; furnishing and installing 450 L.F. of 8'-wide concrete mooring floats; furnishing and driving approx. 662 L.F. of new timber float piles; furnishing and installing a new 6'x 50' steel gangway.

As Constructed

STATE OF ALASKA — DEPARTMENT OF PUBLIC WORKS

DIVISION OF WATER & HARBORS

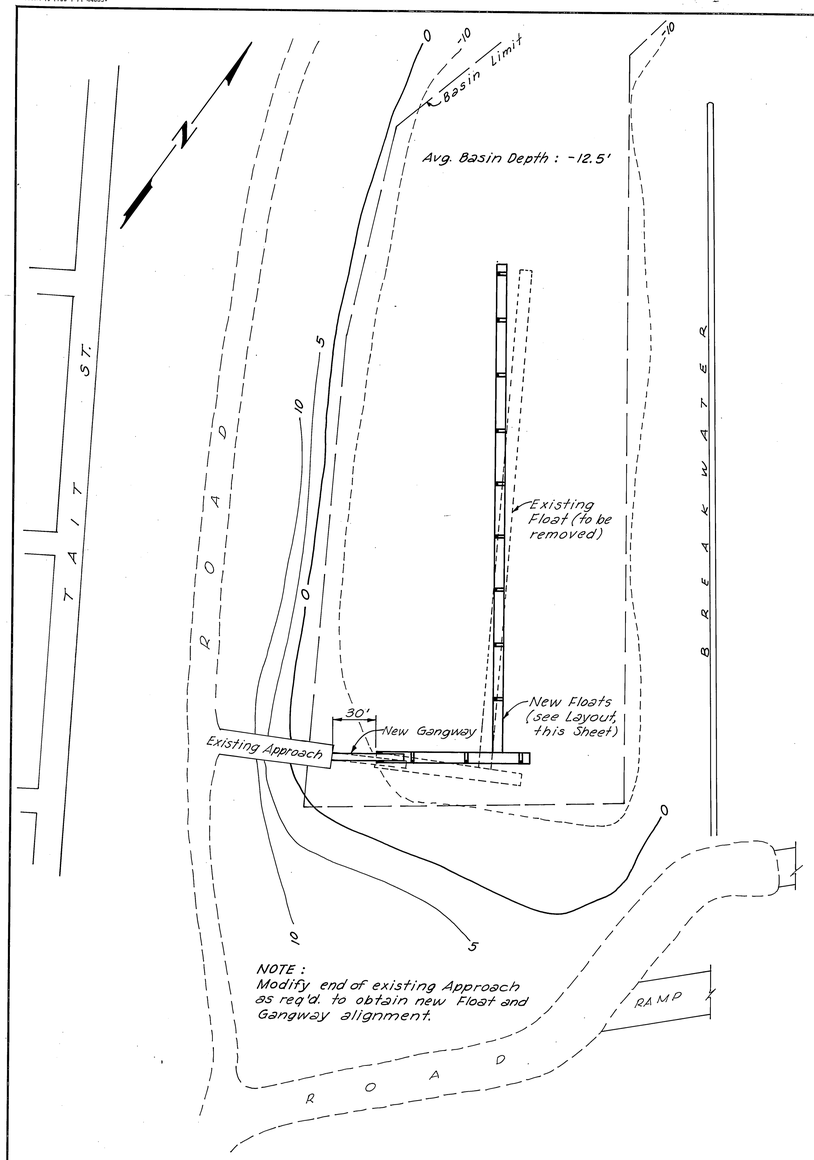
INDEX TO SHEETS

1	TITLE & LOCATION
2	PROJECT LAYOUT
3	TYPICAL FLOAT DETAILS
4	MISC. LAYOUTS & DETAILS
5	TYP. STEEL GANGWAY

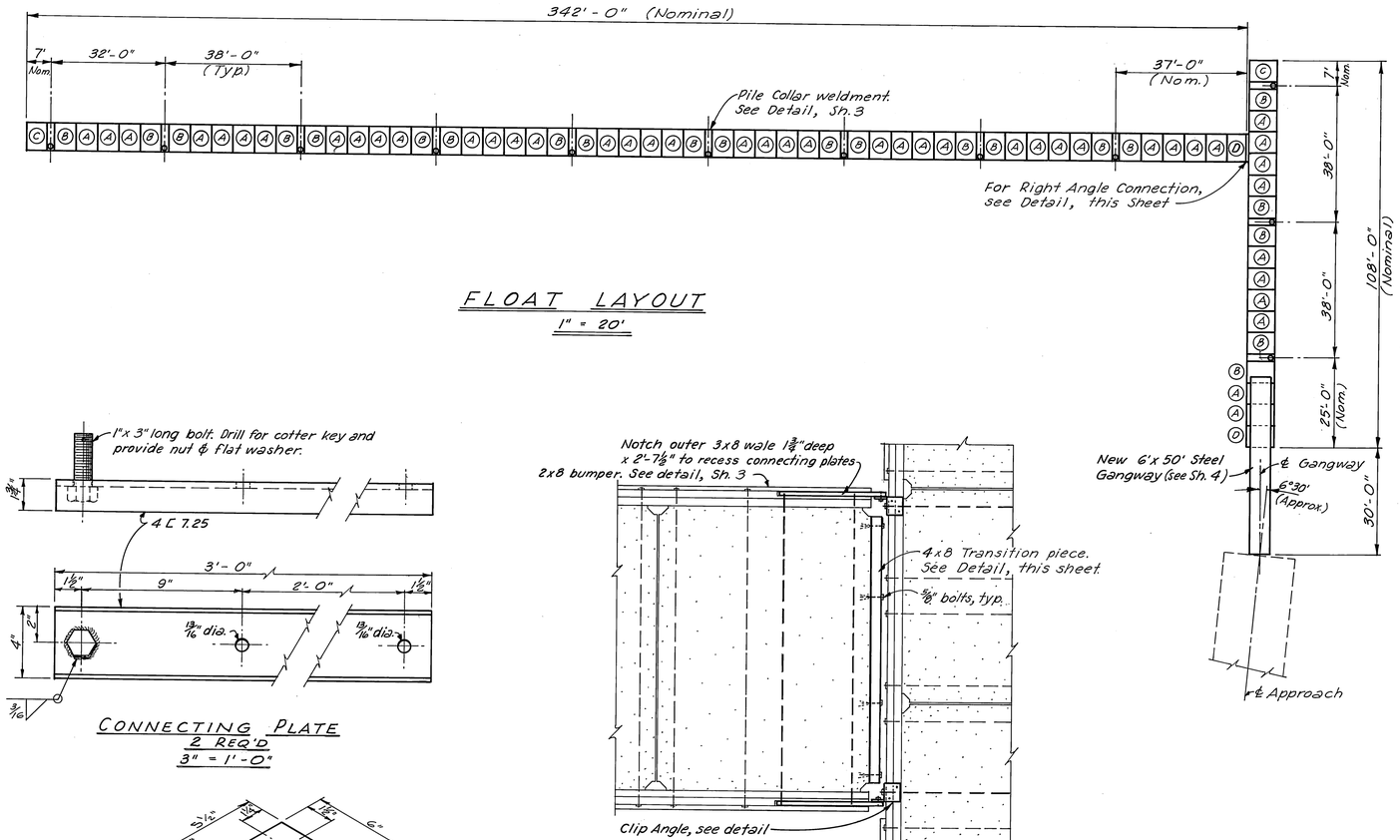
APPROVED

DIRECTOR

DATE



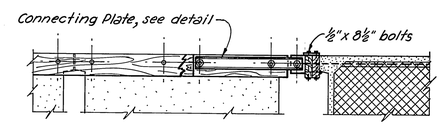
PROJECT LAYOUT
1" = 50'



FLOAT LAYOUT
1" = 20'

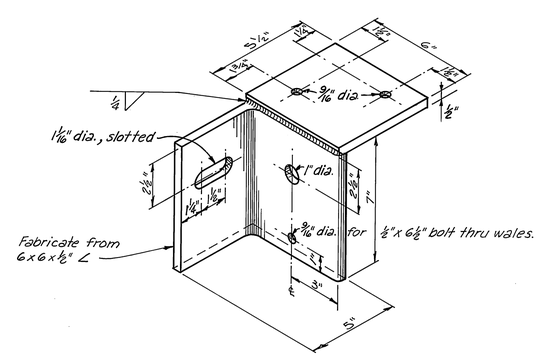
CONNECTING PLATE
2 REQ'D
3" = 1'-0"

PLAN

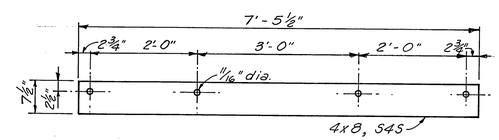


ELEVATION

RIGHT ANGLE CONNECTION
½" = 1'-0"



CLIP ANGLE
1 AS SHOWN, 1 OPP. HAND
3" = 1'-0"



RIGHT ANGLE TRANSITION PIECE
¾" = 1'-0"

Notes:
1. Float piles to be driven butt down to 15' penetration or refusal (see Specs).
2. Pile cutoff Elev. = +28'.
3. All hardware shall be hot dip galvanized. A malleable iron washer shall be placed between all nut & wood surfaces.
4. All bolts to be economy head type, except as noted. Bolt holes to be 1/16" oversize.
5. All pressure treated materials shall be cut to size prior to treatment.
6. All timber materials to be Dense No 1 Douglas Fir.
7. All "Nominal" dimensions on Float Layout are from face to face of concrete, or face of concrete to centerlines.

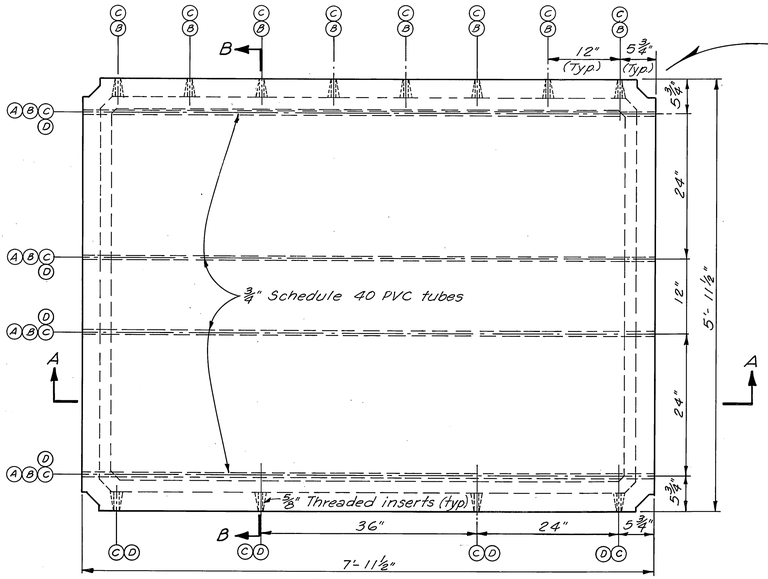
DO NOT SCALE THIS DRAWING – USE DIMENSIONS

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

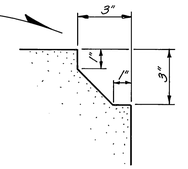
PROJECT LAYOUT
FLOAT LAYOUT & DETAILS

SCALE As noted	SURVEYED —	APPROVED
DESIGNED JET	DRAWN JET	Don Statter, DIRECTOR
CHECKED JDB	DATE 1-30-73	
PROJECT NUMBER 3-73120		SHEET 2 OF 5

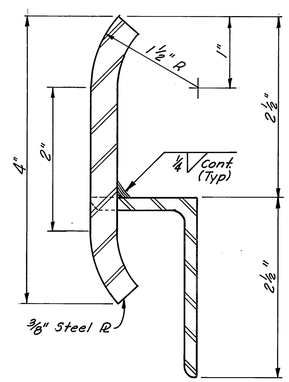
K&E 19 1153 1-71 44039



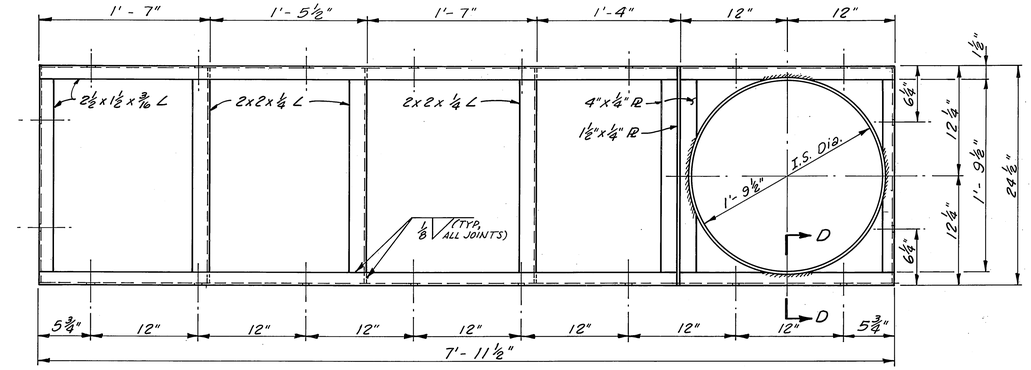
PLAN
1" = 1'-0"



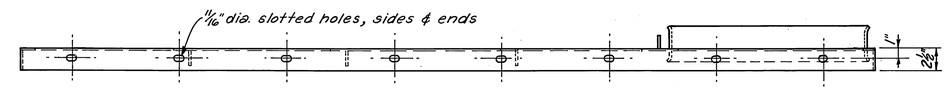
CORNER DETAIL



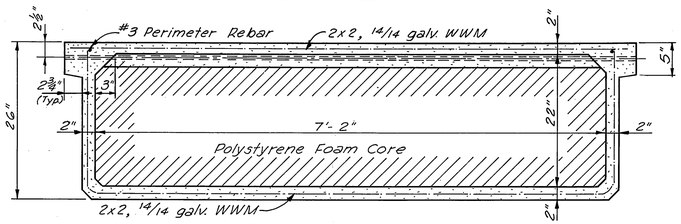
SECTION D-D
FULL SIZE



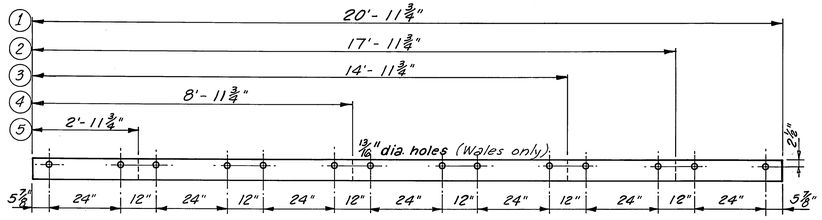
PLAN

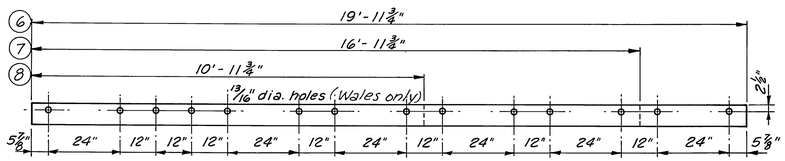


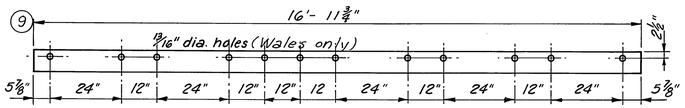
ELEVATION
PILE COLLAR WELDMENT DETAIL
1½" = 1'-0"

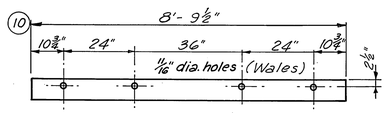


SECTION A-A
1" = 1'-0"



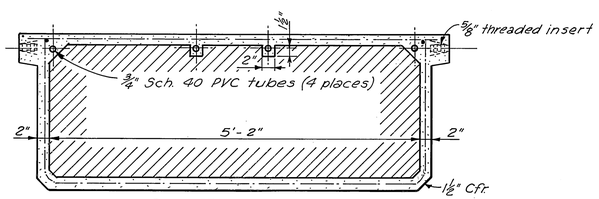




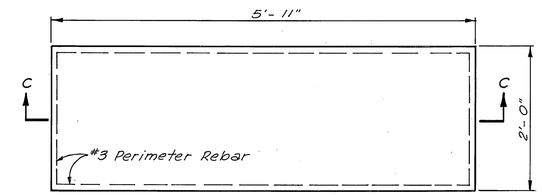


Note: For Bumper hole sizes, see Counterboring Detail.

WALE & BUMPER DRILLING LAYOUTS
SEE TABLE FOR NUMBER REQUIRED
½" = 1'-0"

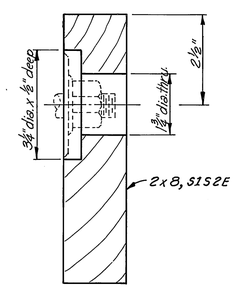


SECTION B-B
1" = 1'-0"

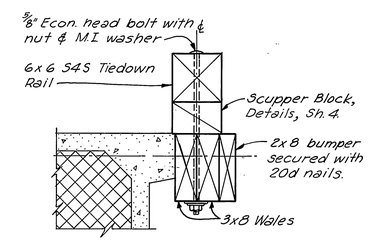


PLAN

SECTION C-C
CONC. SLAB FOR PILE COLLAR WELDMENT
1" = 1'-0"



BUMPER COUNTERBORING DETAIL
HALF SIZE

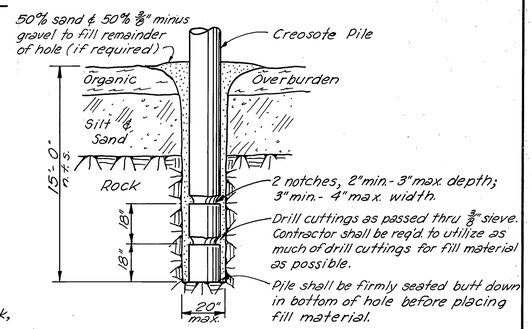


TIEDOWN RAIL ~ TYPICAL SECTION
1½" = 1'-0"

NOTE: Bumper members MK. 6, 7 & 9 are not interchangeable and must be c'bored for right & left sides of float, half of total number for each side.

WALES & BUMPERS

MK.	NUMBER REQUIRED 3X8 WALE	NUMBER REQUIRED 2X8 BUMPER
1	4	2
2	40	19
3	2	1
4	2	2
5	4	2
6	44	21
7	-0-	1
8	2	-0-
9	2	2
10	3	3



TYPICAL PILE HOLE DRILLING DETAIL
⅜" = 1'-0"

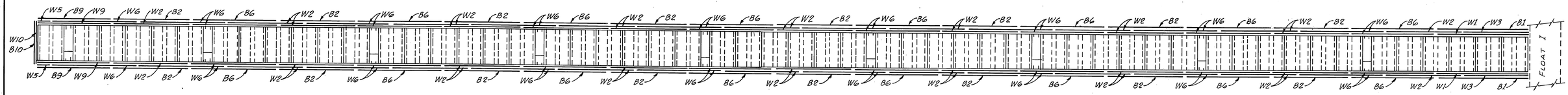
NOTES:
1. Floats to be cast lightweight concrete, 100#/ft³ max., w/min. comp. strength of 3000psi @ 7 days.
2. Inner core shall be 1.1#/ft³ polystyrene foam in accordance with ASTM D-1621-59T.
3. Portland cement shall comply w/ASTM C-150 for Type III.
4. Expanded shale shall comply with ASTM C-330.
5. Galv. Welded Wire Mesh shall comply w/ASTM A-185.
6. Freeboard shall be 15" with all dead load applied.
7. All timber materials shall be Dense Nº 1 Douglas fir, pressure treated with Pentachlorophenol to 0.6#/f³ retention.

DO NOT SCALE THIS DRAWING – USE DIMENSIONS

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

TYPICAL FLOAT DETAILS

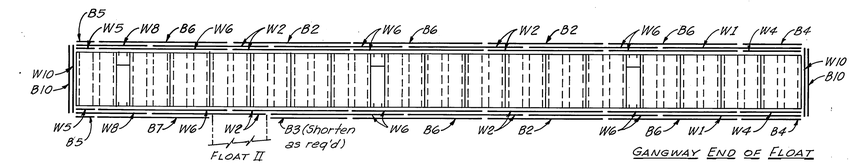
SCALE As noted	SURVEYED ~	APPROVED
DESIGNED ~	DRAWN JET	Don Statter, DIRECTOR
CHECKED JDB	DATE 1-30-73	
PROJECT NUMBER 3-73120		SHEET 3 OF 5



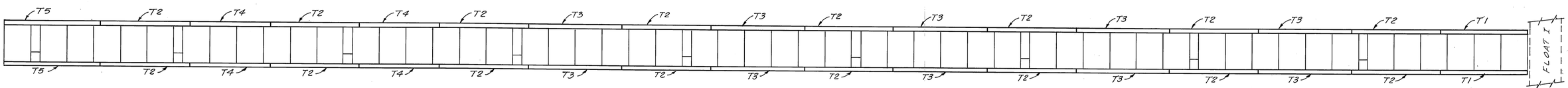
FLOAT II

WALE & BUMPER LAYOUT

NO SCALE



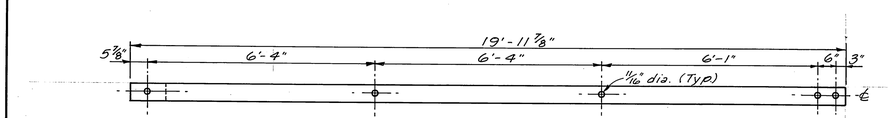
FLOAT I



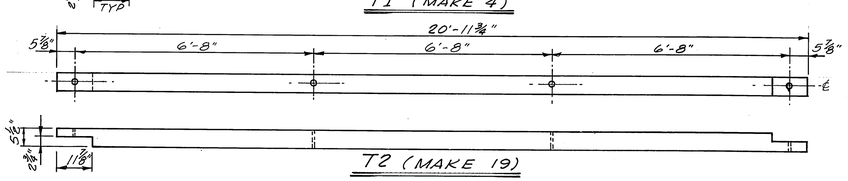
FLOAT II

TIEDOWN RAIL LAYOUT

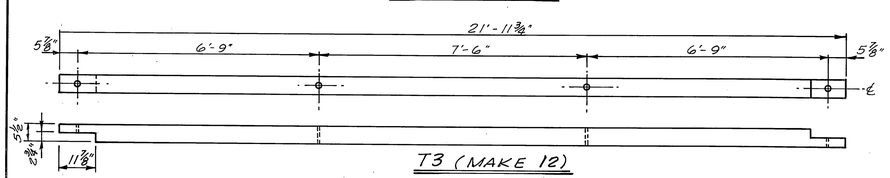
NO SCALE



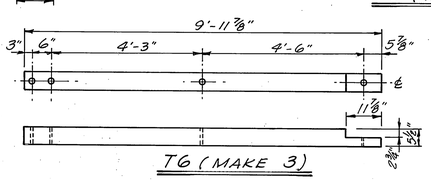
T1 (MAKE 4)



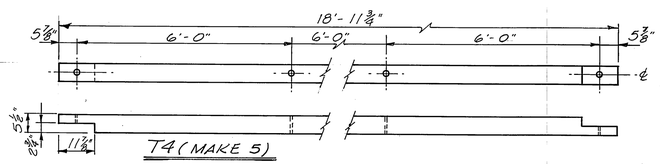
T2 (MAKE 19)



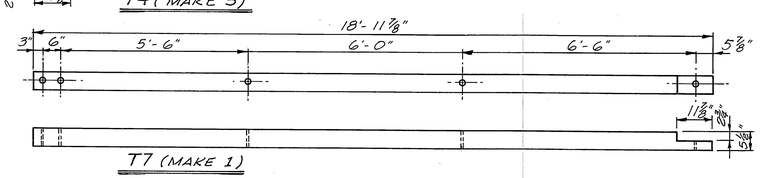
T3 (MAKE 12)



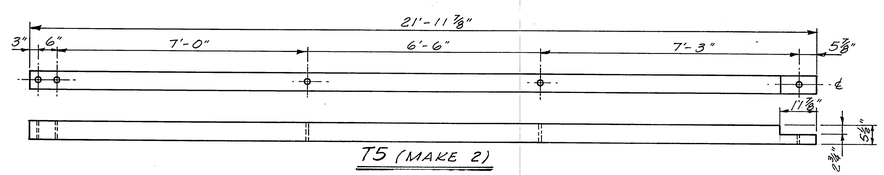
T6 (MAKE 3)



T4 (MAKE 5)



T7 (MAKE 1)

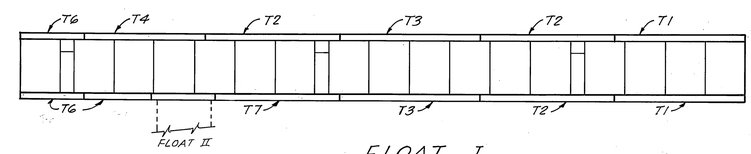


T5 (MAKE 2)

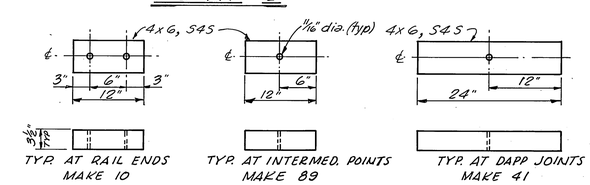
TIEDOWN RAIL DETAILS

1/2" = 1'-0"

NOTE:
All Tiedown Rails to be 6x6, S4S.
All holes to be 11/16" dia., shop drilled.



FLOAT I



SCUPPER BLOCK DETAILS

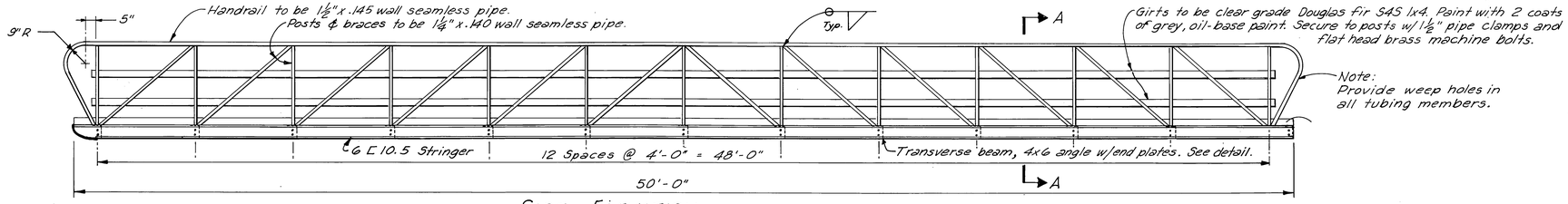
1" = 1'-0"

DO NOT SCALE THIS DRAWING – USE DIMENSIONS

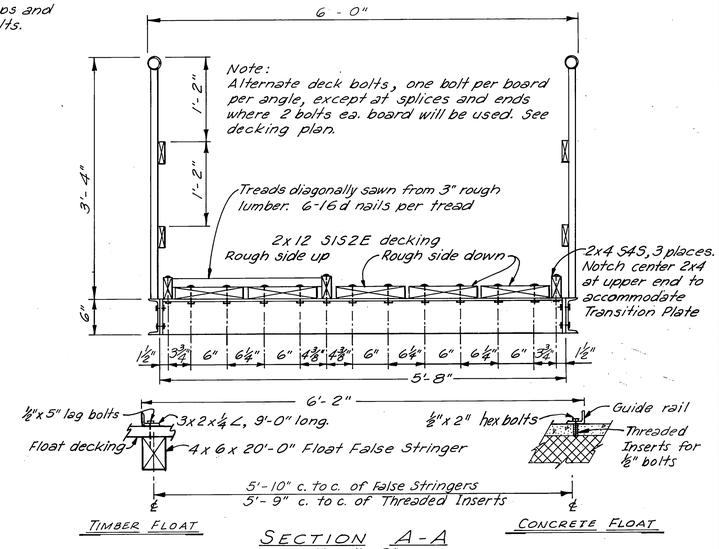
STATE OF ALASKA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF WATER AND HARBORS

WALE & BUMPER LAYOUT
TIEDOWN RAIL LAYOUT
TIEDOWN RAIL DETAILS

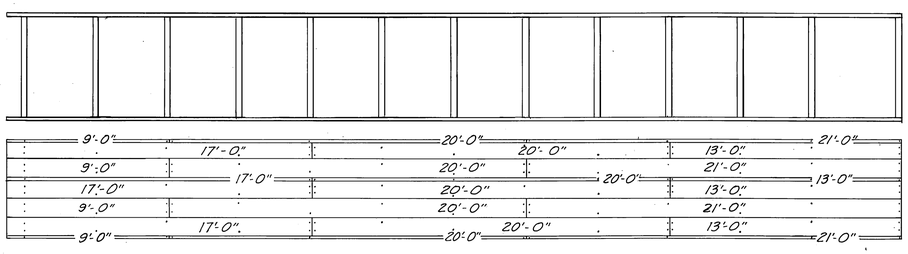
SCALE As shown	SURVEYED —	APPROVED
DESIGNED JET	DRAWN JET	Don Statter, DIRECTOR
CHECKED JDB	DATE 1-30-73	
PROJECT NUMBER 3-73120		SHEET 4 OF 5



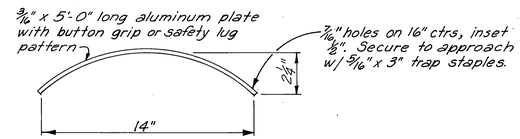
SIDE ELEVATION
3/8" = 1'-0"



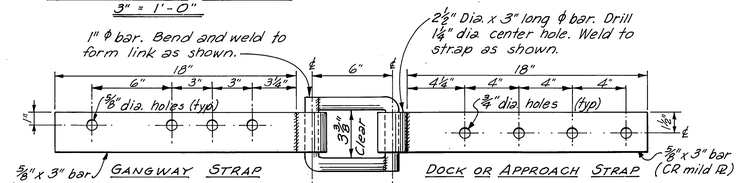
SECTION A-A
1" = 1'-0"



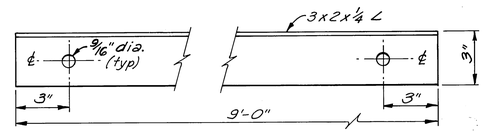
DECKING SPLICE LAYOUT
¼" = 1'-0"



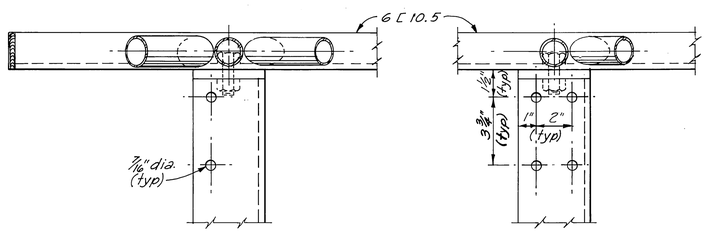
TRANSITION PLATE
3" = 1'-0"



HANGER STRAP ASSEMBLY
No Scale

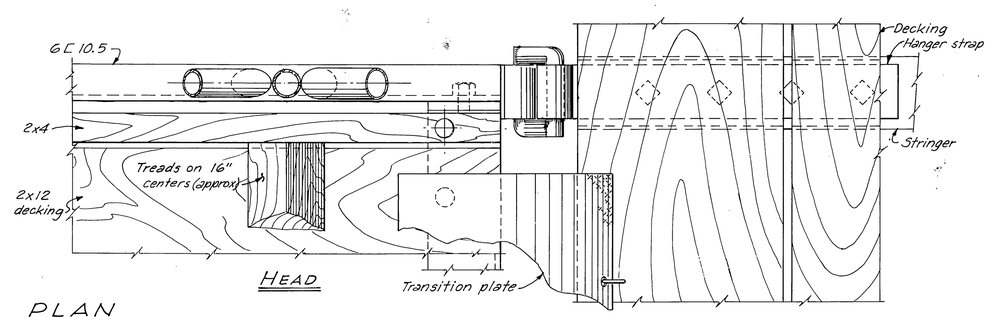


GUIDE RAIL
3" = 1'-0"



TOE

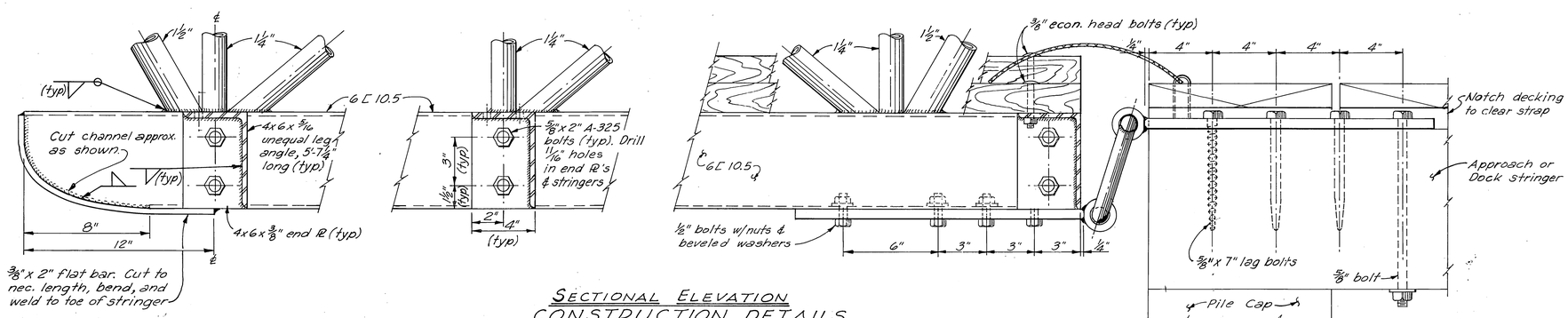
TYP @ DECKING SPLICE



PLAN

HEAD

DOCK OR APPROACH



SECTIONAL ELEVATION
CONSTRUCTION DETAILS
3" = 1'-0"

NOTES:

1. All seamless pipe shall conform to ASTM A-53.
2. All channels, angles & plates shall conform to ASTM A-36.
3. Trusses shall be shop fabricated & assembled including hangers.
4. Splices shall be held to a minimum and, where necessary, shall be made in a manner that will not reduce the strength of the truss.
5. No tubing or channel splices will be permitted within the middle half of the truss structure.
6. Trusses & transverse beams shall be hot dipped galvanized after fabrication and in accordance with ASTM A-123, A-384, A-385 & A-386.
7. All steel hardware & fasteners shall be hot dipped galvanized in accordance with ASTM A-153.
8. Decking & deck spacers shall be Select Structural No. 1 Douglas fir, Pentachlorophenol pressure treated to 0.5 lb. cu. ft. retention, and shall be field drilled to match shop drilled holes in transverse members.

Revised 4-7-71. Removed Tension Wires. JET

DO NOT SCALE THIS DRAWING – USE DIMENSIONS

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

TYPICAL STEEL GANGWAY CONSTRUCTION DETAILS

SCALE As shown	SURVEYED –	APPROVED
DESIGNED JT/RB	DRAWN JET	Don Statter, DIRECTOR
CHECKED DSM	DATE Dec. 1970	
PROJECT NUMBER 3-73120		SHEET 5 OF 5