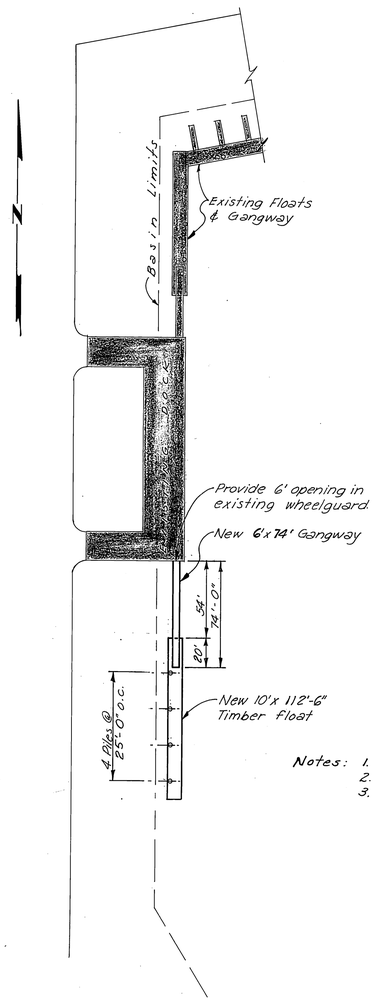
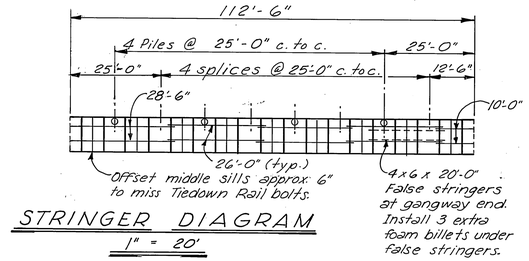
K&E 19 1153 1-75 MC 3361•



Notes:
1. Top of pile cut-off elev. +22±.
2. Basin dredged to elev. -12±.
3. Penetration req'd 15 feet.

PROJECT LAYOUT

1" = 50'



STRINGER DIAGRAM

1" = 20'

As Constructed

DO NOT SCALE THIS DRAWING – USE DIMENSIONS

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

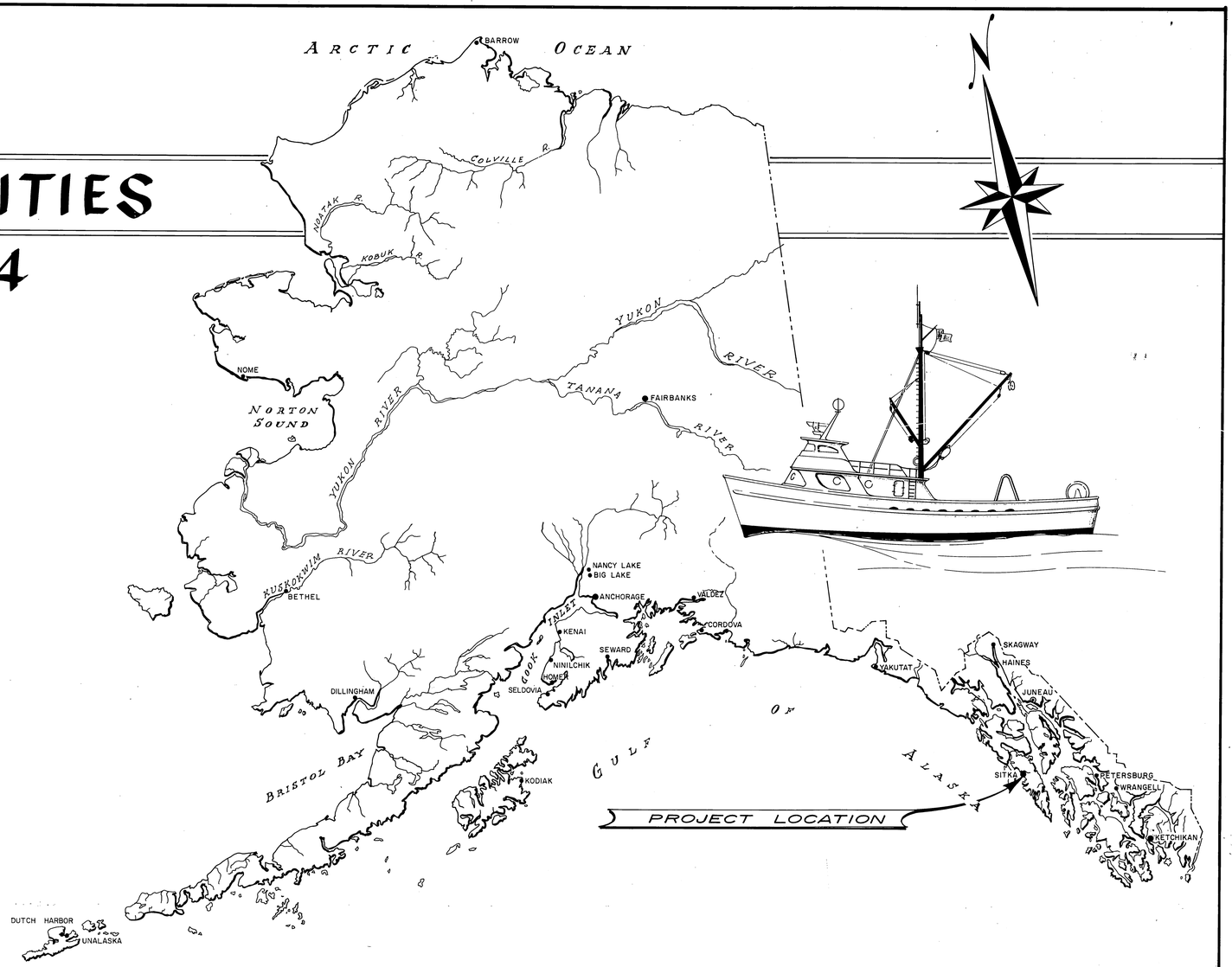
SITKA ~ CRESCENT HARBOR
PROJECT LAYOUT
STRINGER DIAGRAM

SCALE As shown	SURVEYED ~	APPROVED
DESIGNED ~	DRAWN JT	Don Statter, DIRECTOR
CHECKED	DATE	
PROJECT NUMBER 3-76164 - C.O. 1	SHEET 1 OF 3	

SITKA

THOMSEN HARBOR FACILITIES

PROJECT NO. 3-76164



WORK SUMMARY

This project consists of: Removal of existing float system; furnishing and installing 26,000 Sq. ft. of new timber floats, 4105 Lin. ft. of new timber float piles, and a new 6'x 50' steel gangway; Reconstruction of the existing 6'x 100' timber approach structure.

As Constructed

As Constructed

STATE OF ALASKA — DEPARTMENT OF PUBLIC WORKS

DIVISION OF WATER & HARBORS

INDEX TO SHEETS

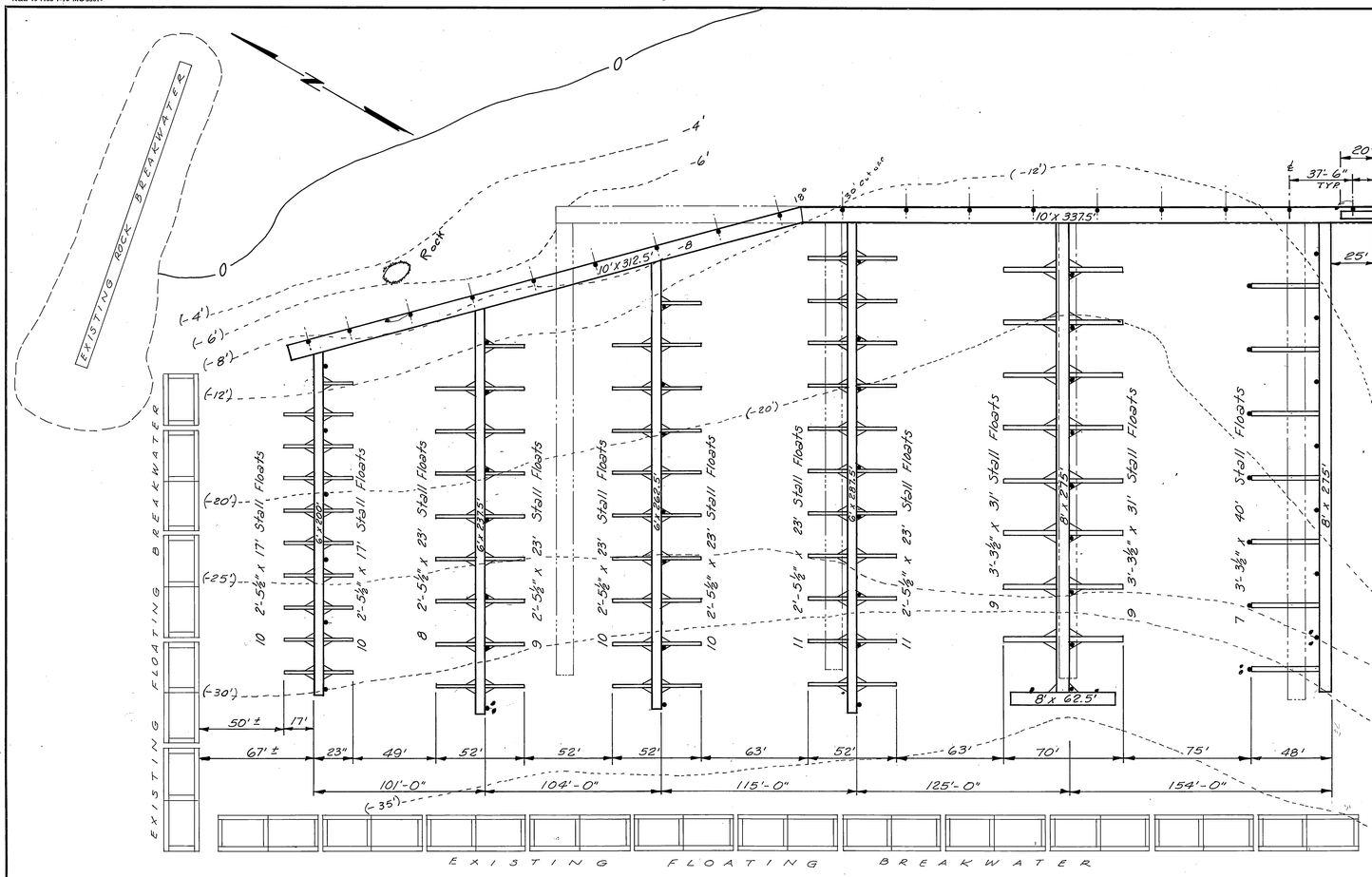
APPROVED

Wm Starkey

DIRECTOR

DATE 5/14/76

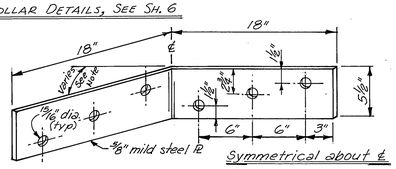
SHEET 1 OF 11



PROJECT LAYOUT
1" = 40'

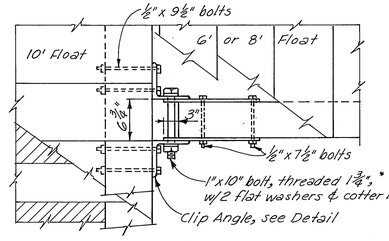
NOTE: For pile collar details, see Sh. 6

DETAIL C
½" = 1'-0"

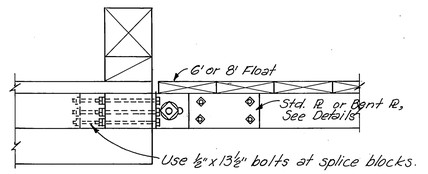


NOTE: For variable angle: 45°, make 4; 90°, make 2.

RIGGING FLOAT CONNECTION ANGLE PLATES
(See Detail C) 1½" = 1'-0"

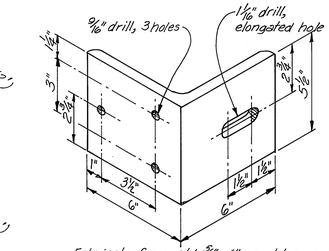


PLAN



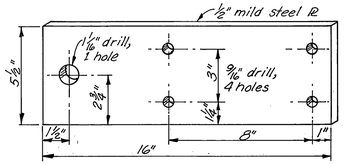
ELEVATION

DETAIL B ~ HINGE CONNECTIONS
TYPICAL FOR RIGHT ANGLE FLOAT CONNECTIONS
SIMILAR FOR 75° ANGLED FLOATS
1" = 1'-0"

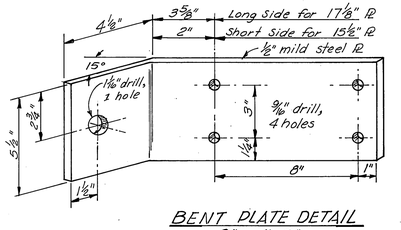


Fabricate from std. ⅝"x 6" equal leg angle

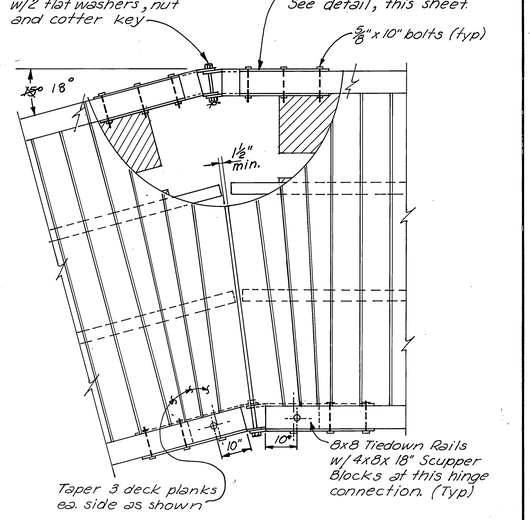
CLIP ANGLE DETAIL
3" = 1'-0"



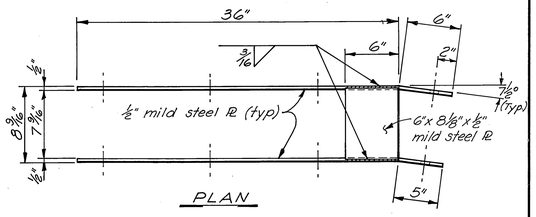
STANDARD PLATE DETAIL
3" = 1'-0"



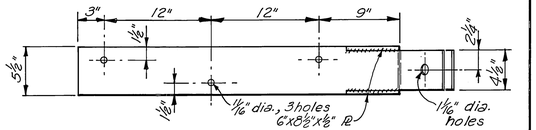
BENT PLATE DETAIL
3" = 1'-0"
(USE WITH 75° ANGLED FLOATS)



DETAIL A
½" = 1'-0"



PLAN



ELEVATION

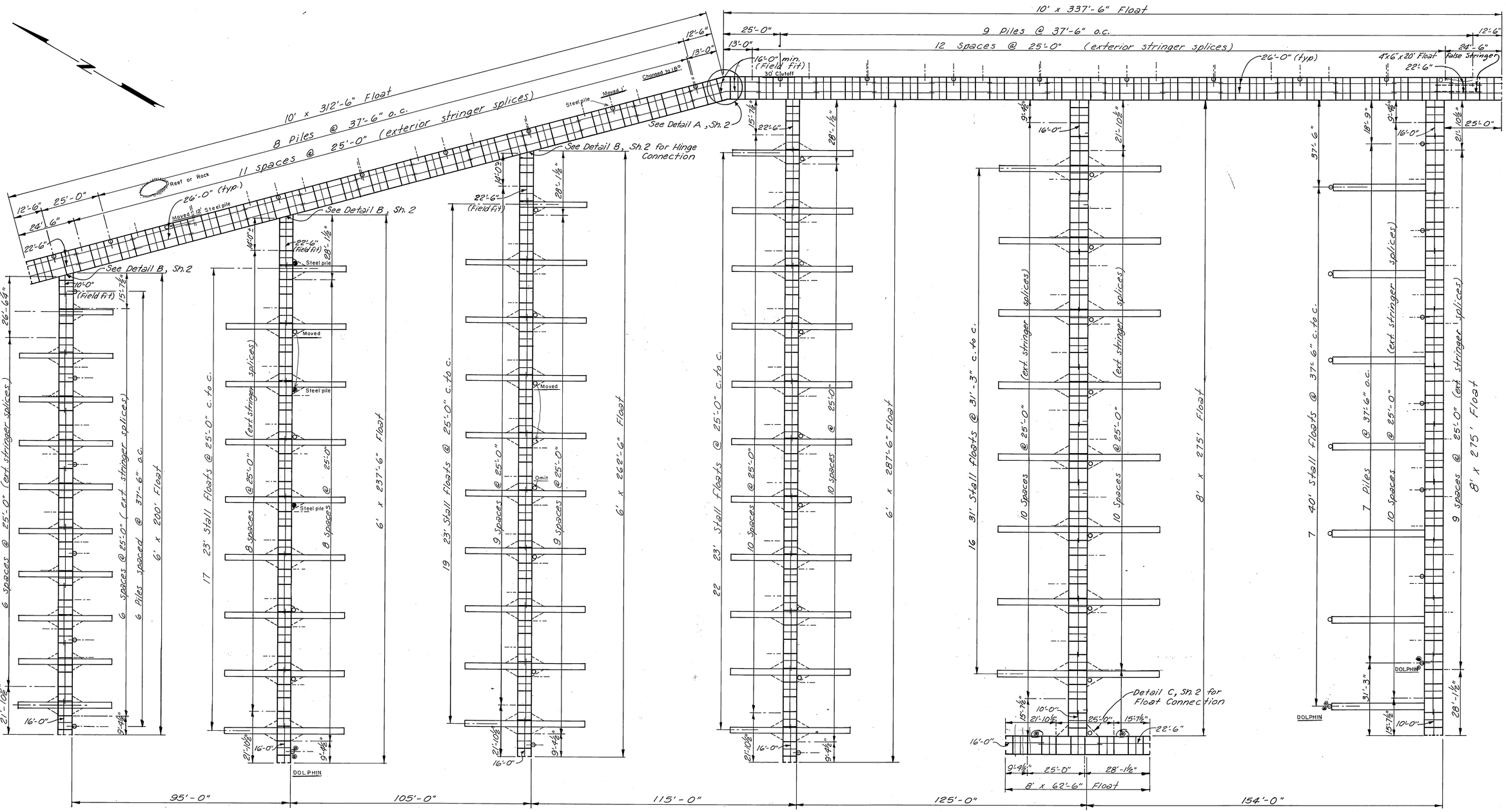
HINGE CONNECTION WELDMENT
1½" = 1'-0"

DO NOT SCALE THIS DRAWING – USE DIMENSIONS

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

PROJECT LAYOUT MISCELLANEOUS DETAILS

SCALE As shown	SURVEYED ~	APPROVED
DESIGNED	DRAWN JT	Don Statter
CHECKED	DATE	DIRECTOR
PROJECT NUMBER 3~76164	SHEET 2 OF 11	



NOTES:

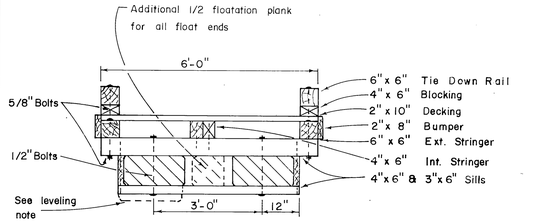
1. All exterior stringers to be spliced at the locations indicated and staggered as shown, except on 10' Float where splice locations are typical for both sides. Distances are c.to c. of dapp joints or to butt at float end.
2. Interior stringer dimensions are full length, 26' except as noted.
3. Tiedown rails to be spliced at same locations as exterior stringer splices (10' Float, 8'x 62'-6" Float & 8'x 275' Float w/40' stalls, only.)
4. Omit tiedown rails at finger float locations. Provide TDR at float end.
5. Piles to be Class A creosote, driven butt down to 15' penetration or refusal. Pile cutoff elevation = +22' MLLW.

DO NOT SCALE THIS DRAWING – USE DIMENSIONS

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

STRINGER LAYOUT DIAGRAMS

SCALE 1" = 20'	SURVEYED ~	APPROVED
DESIGNED JT	DRAWN JT	Don Statter
CHECKED	DATE	DIRECTOR
PROJECT NUMBER 3-76164		SHEET 3 OF 11

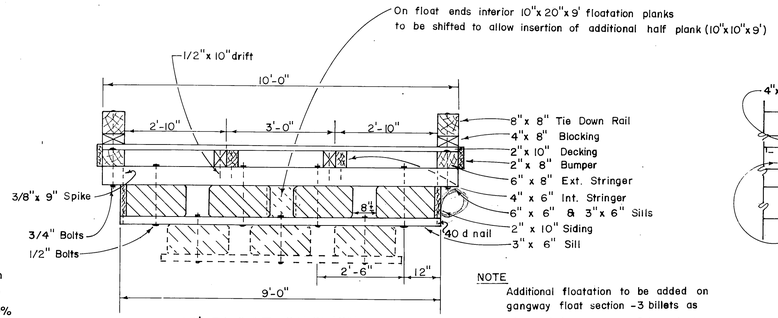


6' FLOAT SECTION

1/2"= 1'-0"

NOTE

6' Float construction shall conform to 10' float constr. except as noted.



10' FLOAT SECTION

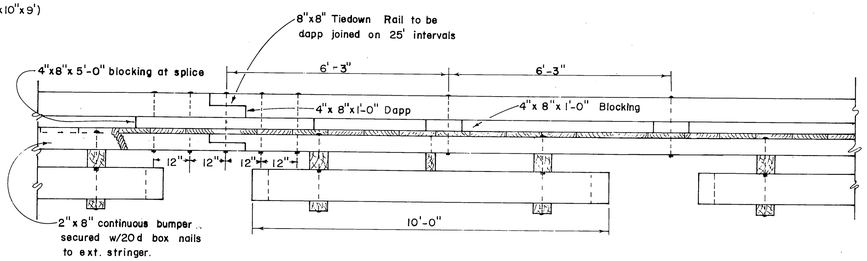
1/2"= 1'-0"

NOTE

Additional floatation to be added on gangway float section -3 billets as shown timber gangway - 2 for steel gangway.

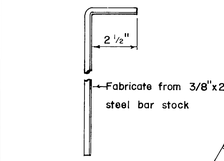
Leveling note

5"x 20"x 4' to 5' leveling floatation shall be installed as directed by the Engr. (required on approx. 20% of the stall floats including 6' stall floats). Place floatation between lower sill members with the outer edge bearing on siding members (cut side up). Pin floatation together with 3/8" x 20" "ell" pin (see detail, this sheet), 3 places, approx. equally spaced.



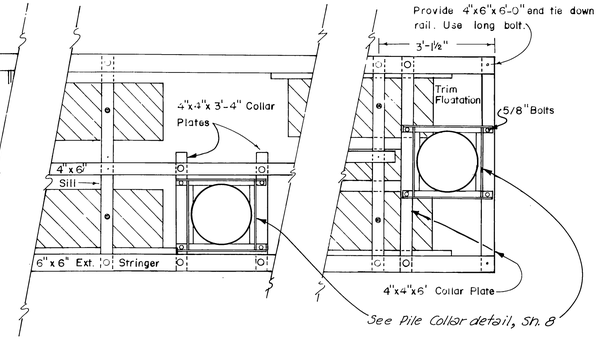
ELEVATION

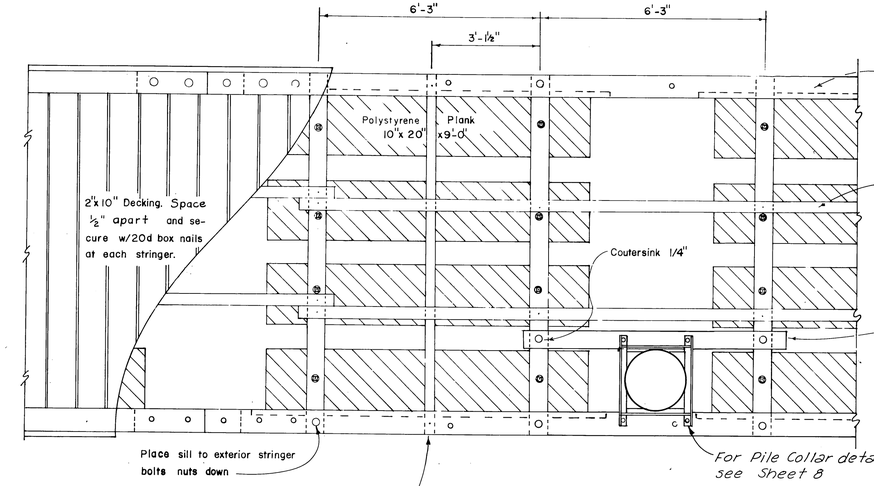
1/2"= 1'-0"



FLOTATION PIN DETAIL

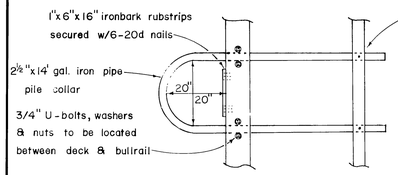
Scale 3" = 1'-0"





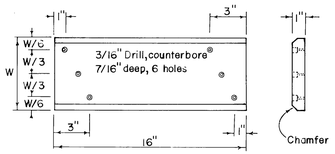
PLAN VIEW 10' FLOAT

1/2"= 1'-0"



PIPE PILE COLLAR DETAIL

1/2"= 1'-0"



W = 4'-6' float & 4' stall float
6"-all others

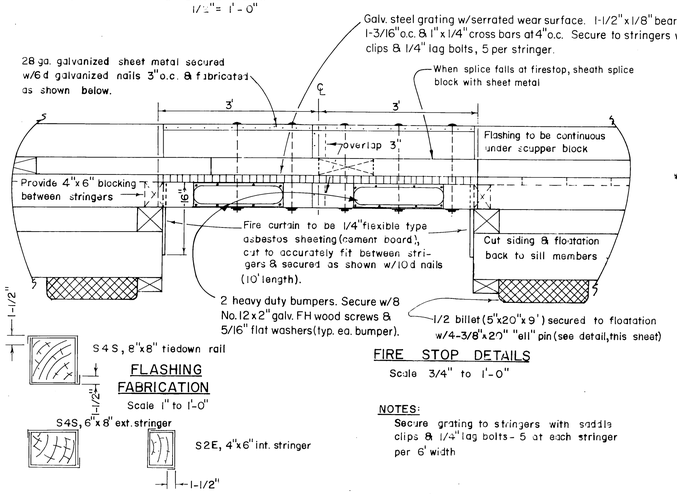
IRONBARK RUB STRIP

1" = 6"

CONNECTION & COLLAR DETAIL

6' STALL FLOAT

1/2"= 1'-0"



FLASHING FABRICATION

Scale 1" = 1'-0"

FIRE STOP DETAILS

Scale 3/4" = 1'-0"

NOTES:

Secure grating to stringers with saddle clips & 1/4" lag bolts - 5 at each stringer per 6' width

* Exact width to conform to width of floatation material

MATERIALS		
ITEM	DRESSING	TREATMENT
3"x6"-4"x6" & 6"x6" upper sill	S-1-E 1/8" off	10 lbs. ret. (LP-55)
2"x 10" Siding	2"x 10½"	" " "
3"x6" Lower Sill	Rough	" " "
4"x 4" & 3"x6" Collar Plates	Rough	" " "
4"x6" Collar Members	S-2-E	" " "
4"x6" Interior Stringers	" "	8 lbs ret. (LP-5)
6"x6" & 6"x8" Ext. Stringers	S-4-S	" " "
2"x 8" Bumpers	" " "	0.5lb. Penta
6"x6" Collar Stringers	" " "	8lb. ret. (LP-5)
2"x 10" Decking	Milled	0.5lb. Penta.
4"x6" & 4"x8" Blocking	S-4-S	" "
6"x6" & 8"x8" Rail	" " "	" "

All material to be Dense No. 1 grade Douglas Fir

All piling will be Class A creosoted to 20 lbs. retention (MP-2)

PRE-DRILLED BOLT HOLES

COLLAR MEMBERS - all holes

SILLS - holes for floatation plank bolts

STRINGERS - 1. holes for stringer to sill bolts

TIE DOWN RAIL - all holes

PILE COLLAR STRINGER - 10' FLOAT - all holes

FIELD DRILLED BOLT HOLES

SILLS - 1. holes for stringer to sill bolts
2. pile collar stringer to sill

PILE COLLAR INT. STRINGER - 6' FLOAT - all holes

RAIL BLOCKING - all holes

COLLAR PLATES - all holes

EXT. STRINGER - 1. holes for tiedown rail bolts
2. " " pile collar plate bolt

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 of the 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. Tie down rails shall extend across all float ends except under gangway. All bolt heads facing decking shall be countersunk 1/4" previous to treatment. Field drill all drift bolt 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 members).

No.	Revision	Date	By
1	Changed treatment for Bumpers, Decking, Blocking & Tie-down rails to 0.5lb. Penta. Spaced deck planks ½"	7-29-71	JET

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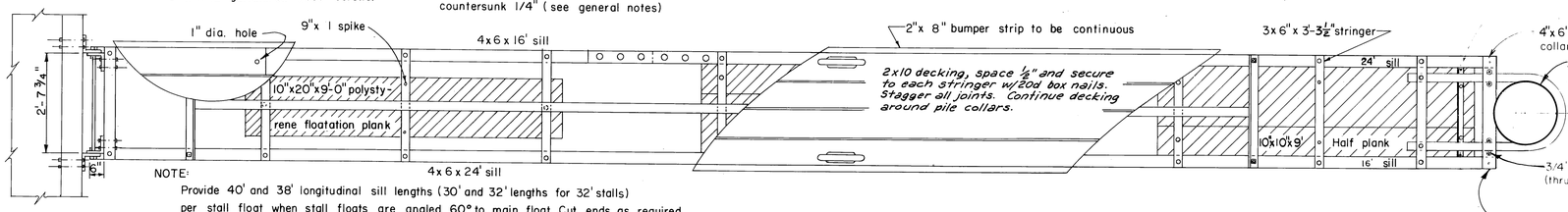
STATE OF ALASKA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF WATER AND HARBORS

TYPICAL FLOATS

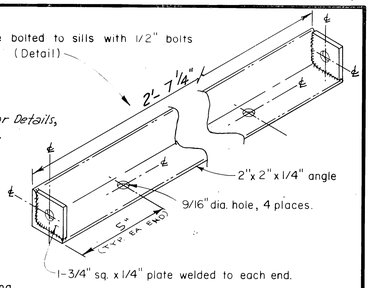
SCALE As shown	SURVEYED —	APPROVED
DESIGNED DW/DS	DRAWN MH/JET	Don Statter
CHECKED DS	DATE 4-68	DIRECTOR
PROJECT NUMBER 3-76164	SHEET 4 OF 11	

Provide 2 access hatches over stabilizer bar adjustment bolts as shown — secure w/4 – 3" x #12 galvanized wood screws.

Floatation planks to be secured using 1/2" bolts. Drill sill (floatation plank) holes 1/8" oversize. All stringer bolt holes facing decking shall be countersunk 1/4" (see general notes)

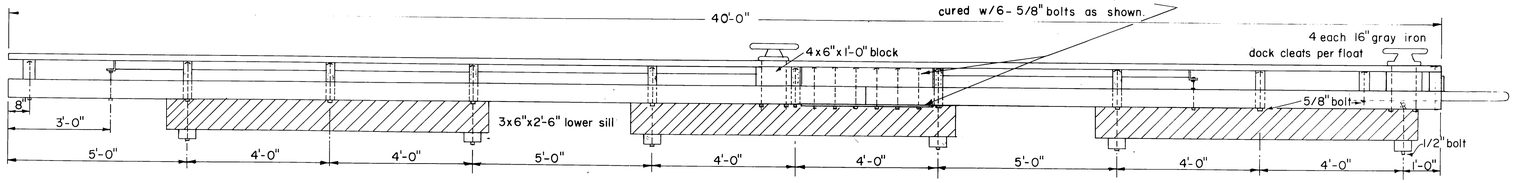


NOTE:
Provide 40' and 38' longitudinal sill lengths (30' and 32' lengths for 32' stalls) per stall float when stall floats are angled 60° to main float. Cut ends as required.

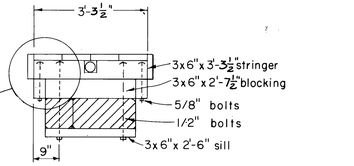


FLOAT END ANGLE
3"= 1'-0"

Splice sills with 4x6"x 3'-8" splice block & 3/8 x 4"x 3'-8" steel plate secured w/6 - 5/8" bolts as shown.

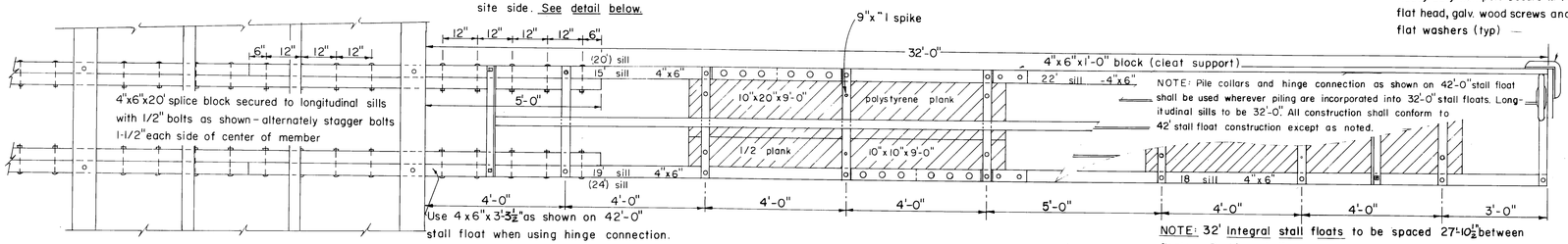


3'-3½" x 40'-0" STALL FLOAT
1/2" = 1'-0"



TYPICAL
3'-3½" FLOAT SECTION

Where 3'-3½"x 32' stall floats are on one side of float extend longitudinal stall float sills to opposite side. See detail below.

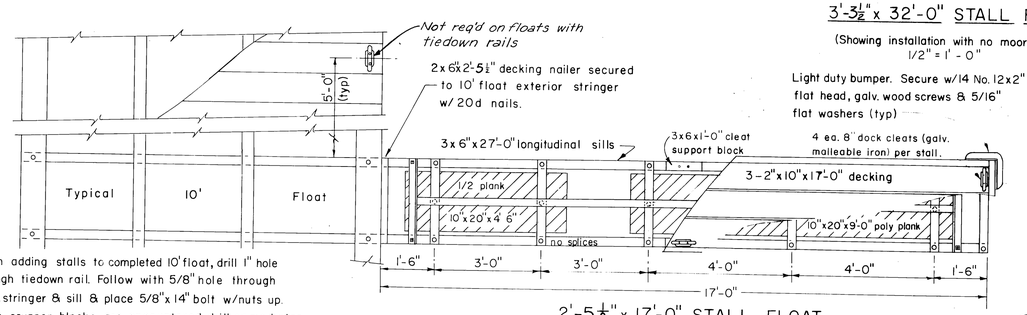


Heavy duty bumper. Secure w/14 No.12 x 2" flat head, galv. wood screws and 5/16" flat washers (typ)

NOTE: Pile collars and hinge connection as shown on 42'-0" stall float shall be used wherever piling are incorporated into 32'-0" stall floats. Longitudinal sills to be 32'-0". All construction shall conform to 42' stall float construction except as noted.

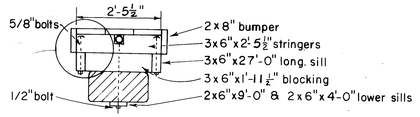
3'-3½" x 32'-0" STALL FLOAT
(Showing installation with no mooring piling)
1/2" = 1'-0"

NOTE: 32' integral stall floats to be spaced 27'-10½" between floats. Decking shall span between stall & 10' float - stagger splices.
Longitudinal sills may be provided in continuous lengths (no splices).

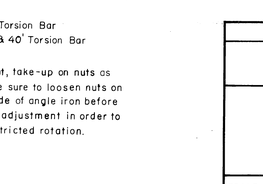


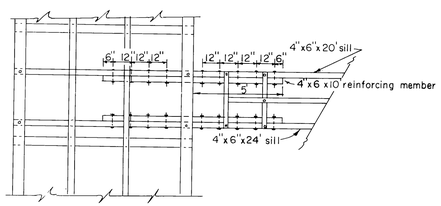
When adding stalls to completed 10' float, drill 1" hole through tiedown rail. Follow with 5/8" hole through deck, stringer & sill & place 5/8"x 14" bolt w/nuts up. When scupper blocks are encountered, drill same holes & place 5/8"x 25" bolt w/nuts down.

2'-5½" x 17'-0" STALL FLOAT
1/2" = 1'-0"

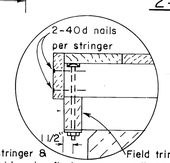


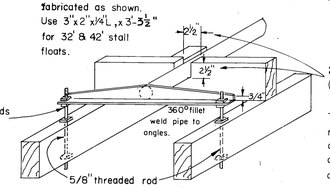
TYPICAL
2'-5½" FLOAT SECTION





3'-3½" x 32' STALL FLOAT DETAIL
ONE SIDE INSTALLATION
1/4" = 1'-0"





2" Std. Wall Gal. pipe torsion bar, 15 long for 17' stall float.
2½" pipe, 25' long for 32' stall float
30' " " 42' " "

2½" for 17' Torsion Bar
(3") for 32' & 40' Torsion Bar

To level float, take-up on nuts as required. Be sure to loosen nuts on opposite side of angle iron before attempting adjustment in order to allow unrestricted rotation.

STALL FLOAT STABILIZER DETAILS
Scale 1" = 1'-0"

MATERIALS		
ITEM	DRESSING	TREATMENT
PILING - CLASS "A"		20" Ret (MP-2)
3x6" LOWER SILLS	S-2-E	10 " (LP-55)
3x6" STRINGERS	"	8 " (LP-5)
3x6" COLLARS	"	" "
3x6" BLOCKING	"	10 " (LP-55)
4x6" SPLICE BLOCKS	"	8 " (LP-5)
4x6" & 3x6 LONGIT. SILLS	"	10 "
2x8" BUMPERS	S-1-S-2-E	0.5lb. Penta
2x10" DECKING	Milled	" "

ALL TIMBER MATERIAL TO BE DENSE NO. 1 GRADE DOUGLAS FIR

GENERAL NOTES

All hardware to be hot dip galvinized. A malleable washer shall be placed between all nut and wood surfaces. All bolts to be of economy headed type. Bolt holes to be drilled 1/16" oversize except sill bolt holes for floatation planks 1/8" oversized. Spike holes to be drilled 1/16" undersized. All drill holes shall be treated with hot creosote oil. All pressure treated creosote material shall be cut to size prior to treatment. All bolts to be 5/8" except 1/2" floatation plank bolts. Omit tie down rails where stall floats join 10' floats, add blocking and bolt tie down rail to exterior stringer. All bolt holes to be predrilled except holes in splice block (integral stall float installation). Field drill all 9" spike holes. 5/8" bolt holes countersunk 5/16" deep x 2-1/4" diameter 1/2" bolt holes countersunk 1/4" deep x 2" diameter.

DO NOT SCALE THIS DRAWING – USE DIMENSIONS

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

TIMBER STALL FLOATS

SCALE As noted	SURVEYED —	APPROVED	
DESIGNED DS	DRAWN MH/JET		Don Statter
CHECKED DS	DATE 8-66		DIRECTOR
PROJECT NUMBER 3-76164		SHEET 5 OF 11	

No.	Revision	Date	By
1	Changed treatment for decking to 0.5lb. Penta. Spaced deck planks ⅛". Changed float width.	7-29-71	JET

Omit decking as shown when pile collar is installed at these locations.

NOTE: FOR PILE COLLAR LOCATIONS, SEE LAYOUT, SHEET 3

Heavy duty bumper. Secure w/14 N°12x2" galv. flat head wood screws & 5/16" flat washers (typical)

Access hatches to stabilizer. Planks cut at center of stringers, w/finger hole near one end

Deck planks to be full width between float bracing

2x10 decking. Space ½" between planks & secure with 20d box nails at each stringer

2"x 8" bumper strip to be continous

6 each 16" grey iron cleats per stall float, or at 12'-6" centers both sides of 8' float when it is installed without stall floats.

4"x 6"x 6'-0" splice block secured w/6-1/2" bolts at dapp joint

3/4" U-bolts

Provide additional drill holes in pile collar to accomodate staggered stringers

5/8" bolts

2½" x 14' iron pipe pile collar (See Detail, Sh. 8)

5/8" bolt (at sill nearest collar only)

3"x 6" sill (for additional floatation support) secured w/ 9"x 3/8" spikes. Not required where stall float sills provide floatation support

10"x 20"x 9'-0" floatation plank

polystyrene (Typical)

2/1 plank

10"x 10"x 9'-0"

10"x 20"x 4'-6"

NOTE: Full sized floatation planks shall be used when 8' float is installed without stall floats.

3"x 6" interior stringers to be lapp joined on 25' sill intervals and secured to sill w/9"x 3/8" spikes

Stall float longitudinal sills shall be connected to the 8'-0" float sill & splice block with 3-5/8" bolts each.

6"x 6" exterior stringers to be dapp joined on 25' intervals. Stagger all splices. End stringers to be in 9'-4½", 15'-7½", 21'-10½" or 28'-1½" lengths as measured from butt end to center of dapp joint. (See Stringer Layout Diagram)

4"x 6"x 8' sills

3x6x8 splice block

6" 1'-0" 1'-0"

27'-11½" to conform to 6'-3" sill spacing

PLAN
TYPICAL 8' FLOAT
1/2" = 1'-0"

6'-3" 6'-3" 6'-3" 2" 2" 12" 12" 3"

3"x 6"x 1'-0" dapp joint

6"x 6" exterior stringers

2"x 8" continous bumper secured, w/20d box nails

pile collar

Flotation plank

2"x 6" lower sill (typical)

1'-4½"

9'-0"

ELEVATION
TYPICAL 8' FLOAT
1/2" = 1'-0"

8'-0" 4'-0"

1/2" bolts
9"x 3/8" spikes
5/8" bolts
floatation planks

2"x 10" decking
2"x 8" bumper
6"x 6" exterior stringers
4"x 6" splice blocks
3"x 6" interior stringers
4"x 6" sills
2"x 6" sill

1/2" bolts 10" 7'-0"

NOTE: Full sized floatation planks shall be used when 8' float is installed without stall floats.

SECTION
TYPICAL 8' FLOAT
1/2" = 1'-0"

8' FLOAT BOLT HOLES

PRE-DRILL

SILLS - holes for floatation plank bolts
STRINGERS - 1. holes for stringer to sill bolts
2. splice block holes

FIELD DRILL

SILLS holes for stringer to sill bolts
STRINGERS - 1. pile collar holes
2. holes for exterior stringers to longitudinal stall float sill bolts
SPLICE BLOCKS - all holes

STALL FLOAT BOLT HOLES

PRE DRILL

STRINGERS - all holes
BLOCKING - all holes
LONGITUDINAL SILLS - 1. stringer to sill holes
2. splice block holes

FIELD DRILL

LONGITUDINAL SILLS - holes for 8' float exterior stringer bolts and float stabilizer
SPLICE BLOCK & BRACES - all holes
field drill all 9" spike holes

NOTE: Install 6 grey iron cleats at 2'-6" centers along 8' float (both sides) when it is installed without stall floats.

Galv. steel grating w/serrated wear surface. 1½"x ⅛" bearing bars at 1 7/16" o.c. & 1"x ¼" cross bars at 4" o.c. Secure to stringers w/saddle clips & ¼" lag bolts, 5 per stringer

28 ga. galvanized sheet metal, secured w/6d galvanized nails 3" o.c. and fabricated as shown below

3' 3' overlap 3"

Provide 2"x 6" blocking between stringers

Remove float bumpers at flashing

Fire curtain to be 1/4" flexible type asbestos sheeting (cement board) cut to accurately fit between stringers and secured as shown w/10d nails

Cut floatation back to sill members

1/2 billet (5"x 20"x 7") secured to floatation w/4-1/2"x 14" dowels (both sides)

S4S 6"x 6" exterior stringer

S2E 3"x 6" interior stringer

1/2"

Flashing Fabrication
SCALE 1" = 1'-0"

DETAILS
FIRE STOP
1/2" = 1'-0"

3"x 2"x ¼" L x 3'-3⅜" angle iron

2½" std. wall Gal. pipe torsion bar, 2'5" long

3" 3" 3"

3"x 6" stringer

11/16" Ø hole in 2" from each end, ctr.

360° fillet weld pipe to angles

5/8" threaded rod

¾"

6"x 6" sill

To level float, take up on nuts as required. Be sure to loosen nuts on opposite side of angle iron before attempting adjustment in order to allow unrestricted rotation.

DETAILS
STALL FLOAT STABILIZER
1" = 1'-0"

MATERIALS		
ITEM	DRESSING	TREATMENT
PILING		20 lb. ret. (MP-2)
3"x 6" & 4"x 6" UPPER SILLS	S-1-E 1/8" off	10 " (LP-55)
2"x 6" LOWER SILLS	ROUGH	" " "
3"x 6"x 8' SPLICE BLKS.	S-2-E	8lb " (LP-5)
4"x 6" LONGITUDINAL STALL FLOAT SILLS	S-2-E	" " "
3"x 6" BLOCKING	S-2-E	" " "
6"x 6" EXT. STRINGERS	S-4-S	" " "
3"x 6" INT. STRINGERS	S-2-E	" " "
2"x 10" DECKING	Milled	0.5 lb. Penta
2"x 8" BUMPERS	S-4-S	" "
4"x 6" SPLICE BLOCKS	S-2-E	8lb. ret. (LP-5)

All timber material to be DENSE NO. 1 GRADE DOUGLAS FIR.

Splice sills with 4"x 6"x 3-8" splice block and 3/8"x 4"x 3-8" steel plate secured with 6-5/8" bolts as shown

4"x 6"x 1'-0" block

3"x 6" stringers (typical)

4"x 6" end stringer

4"x 6" longitudinal sills

10"x 20"x 9' polystyrene floatation plank

2"x 6" lower sills

ELEVATION
3'-3½" x 31' STALL FLOAT
1/2" = 1'-0"

3'-3½"

5/8" bolts

2"x 8" bumper

3"x 6"x 3'-3½" stringer

4"x 6" blocking 2'-7"

4"x 6" sill

2"x 6"x 2'-6" sill

9" 1/2" bolts

TYPICAL SECTION
3'-3½" STALL FLOAT
1/2" = 1'-0"

3/8"x 3"x 18" steel splice plate

See Collar detail, Sh. 8

3"x 6"x 9' brace field cut to fit

4'-1"

30°

31'-0"

9"x 3/8" spikes, typical to hold blocking

4"x 6"x 1'-0" cleat support block

4"x 6"x 15' sill

1/2 plank

10"x 20"x 9'-0"

polystyrene plank

2-1/2" torsion bar

10"x 20"x 4'-6"

1/2 plank

10"x 10"x 9'-0"

4"x 6"x 19' sill

4"x 6"x 17' sill

3'-3½"

stringer

3"x 6"

2'-1½" 2'-10½" 2'-0" 2'-0" 4'-0" 4'-0" 4'-0" 4'-0" 4'-0" 2'-0"

3x6 x 8'-2½" stringer (field cut to fit)

Toenail to side brace, 2 nails ea. end

PLAN
3'-3½" x 31' STALL FLOAT
1/2" = 1'-0"

2-40d nails per stringer.

2"

Assemble stringer & sills with outside edge flush.

Field trim ends of blocking to fit between sills if req'd

NOTES

All hardware to be hot dip Galvanized. A malleable washer shall be placed between all nut and wood surfaces. All bolts to be of the economy head type. Bolt holes to be drilled 1/16" oversize, except holes for floatation planks 1/8" oversize, 9" spike holes to be drilled 1/16" undersize. All drill holes shall be treated with hot creosote oil. All pressure treated creosote material shall be cut to size prior to treatment. All bolts to be 5/8" except floatation plank bolts and exterior stringer splice block bolts. 5/8" bolt holes facing decking to be countersunk 1/4" deep by 2-1/8" diameter - 1/2" bolt holes 1/4"x 1-3/4" prior to treatment. Connect 8' float to main float with hinge connection as shown on connection detail sheet. A barrier of 6 mill polyethylene shall be placed between the contact surfaces of all creosote timber and floatation material.

DO NOT SCALE THIS DRAWING – USE DIMENSIONS

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

TYPICAL 8' FLOAT WITH INTEGRAL STALLS

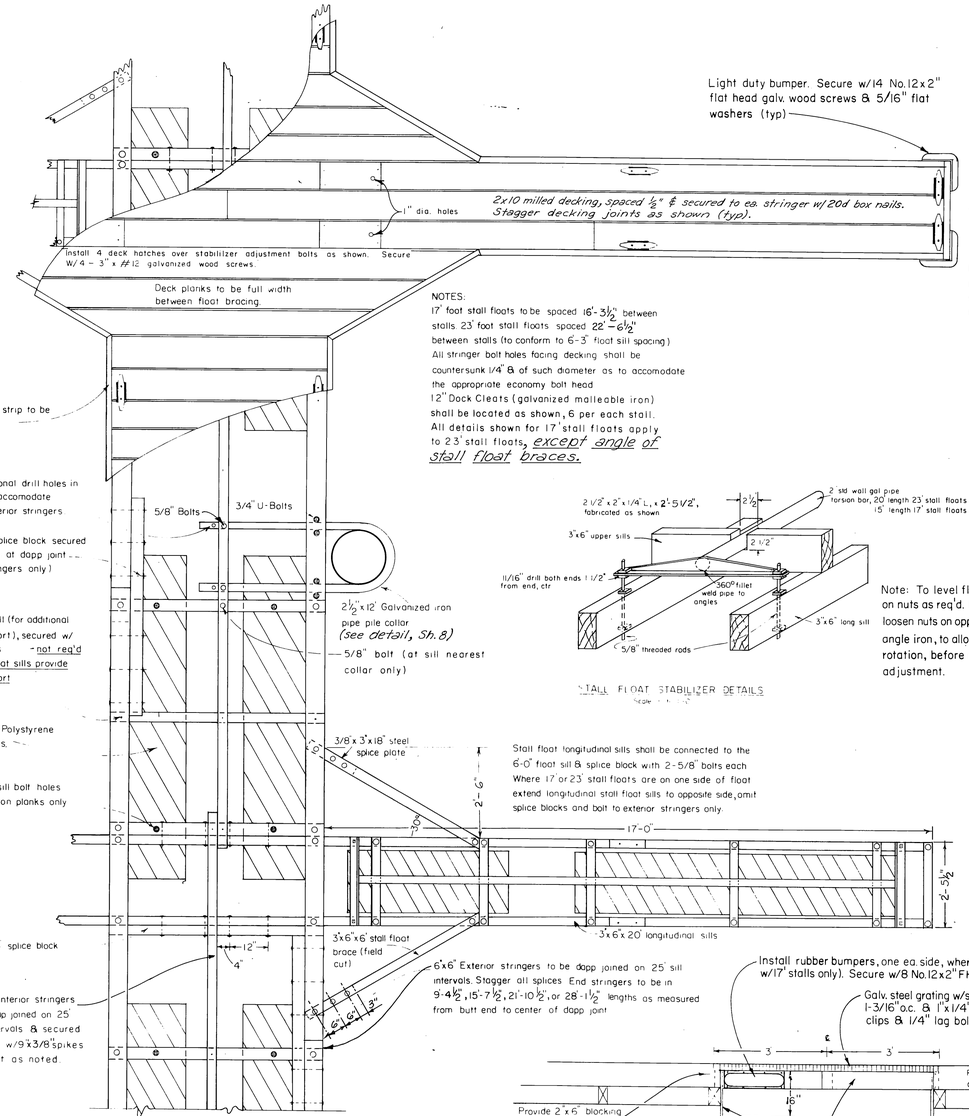
No.	Revision	Date	By
1	Changed treatment for Decking & Bumpers to 0.5 lb. Penta. Spaced deck planks ½", changed float width.	7-29-71	JET

SCALE As noted — SURVEYED —
DESIGNED — — DRAWN E.S.
CHECKED D.W. — DATE Feb. '68

APPROVED
Don Statter
DIRECTOR

PROJECT NUMBER 3-76164

SHEET 6 OF 11



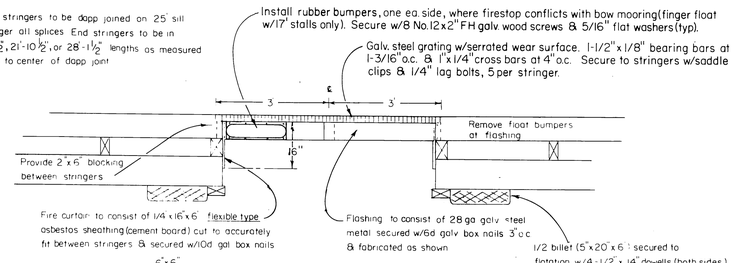
PLAN VIEW
17' STALL FLOAT ASSEMBLED

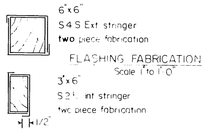
NOTES:
17' foot stall floats to be spaced 16'-3½" between stalls. 23' foot stall floats spaced 22'-6½" between stalls (to conform to 6'-3" float sill spacing)
All stringer bolt holes facing decking shall be countersunk 1/4" ϕ of such diameter as to accomodate the appropriate economy bolt head.
12" Dock Cleats (galvanized malleable iron) shall be located as shown, 6 per each stall.
All details shown for 17' stall floats apply to 23' stall floats, except angle of stall float braces.

STALL FLOAT STABILIZER DETAILS
Scale 1" = 1'-0"

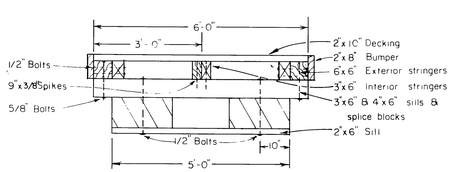
Note: To level float, take up on nuts as req'd. Be sure to loosen nuts on opposite end of angle iron, to allow unrestricted rotation, before attempting adjustment.

Stall float longitudinal sills shall be connected to the 6-0" float sill & splice block with 2-5/8" bolts each. Where 17' or 23' stall floats are on one side of float extend longitudinal stall float sills to opposite side, omit splice blocks and bolt to exterior stringers only.

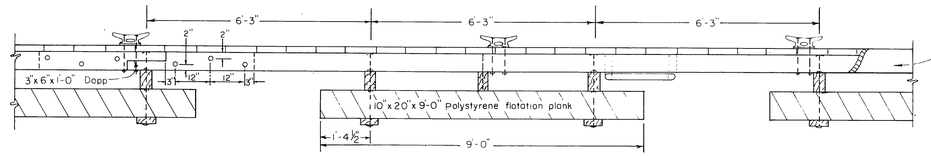




FIRE STOP DETAILS
Scale 1/2" = 1'-0"

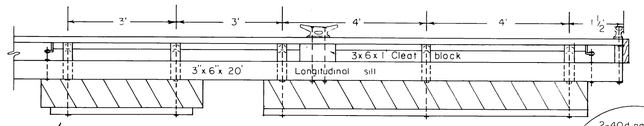


6' FLOAT SECTION

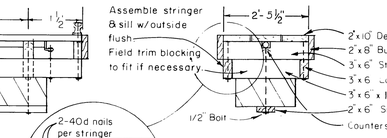


6' FLOAT ELEVATION

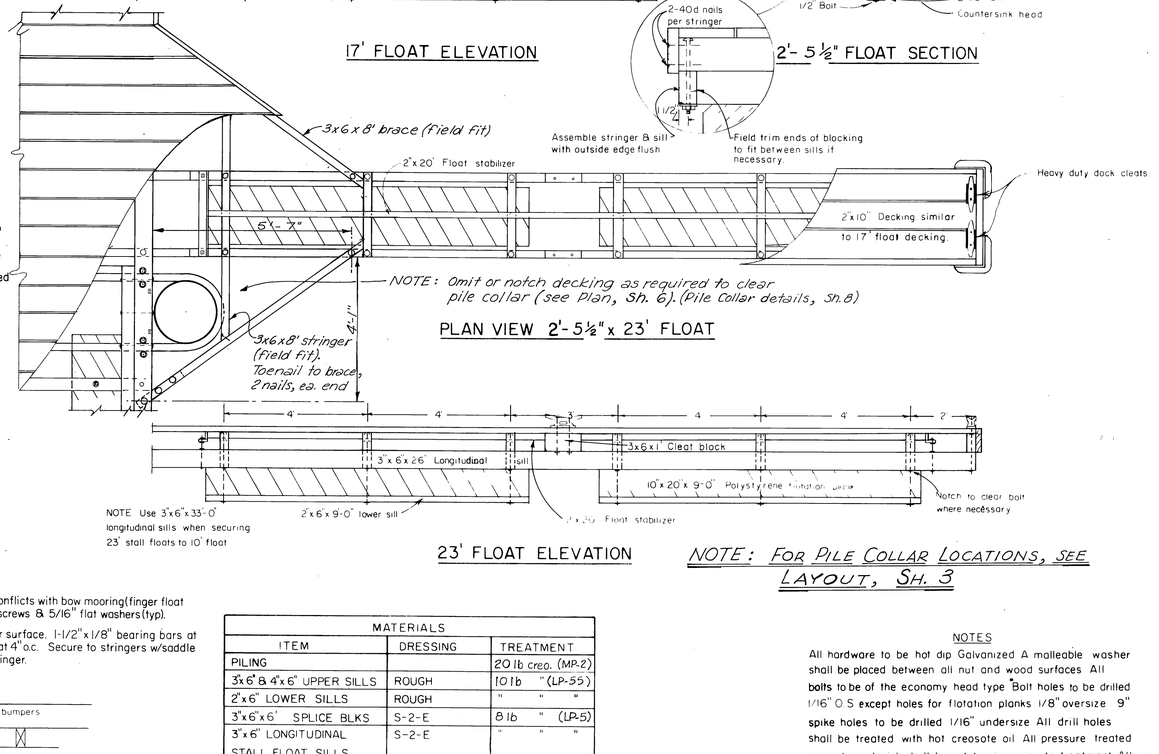
NOTE. Use 3"x 6"x 27' Longitudinal sills when securing 17' stall floats to 10' wide float.



17' FLOAT ELEVATION



2'-5½" FLOAT SECTION



PLAN VIEW 2'-5½" x 23' FLOAT

NOTE. Use 3"x6"x 33'-0" longitudinal sills when securing 23' stall floats to 10' float

23' FLOAT ELEVATION

NOTE: FOR PILE COLLAR LOCATIONS, SEE LAYOUT, SH. 3

MATERIALS		
ITEM	DRESSING	TREATMENT
PILING		20 lb creo. (MP-2)
3"x6" & 4"x6" UPPER SILLS	ROUGH	10 lb " (LP-55)
2"x6" LOWER SILLS	ROUGH	" " "
3"x6"x6' SPLICE BLKS	S-2-E	8 lb " (LP-5)
3"x6" LONGITUDINAL STALL FLOAT SILLS	S-2-E	" " "
3"x6" BLOCKING	S-2-E	" " "
6"x6" EXT. STRINGERS	S-4-S	" " "
3"x6" INT. STRINGERS	S-2-E	" " "
2"x10" DECKING	Milled	0.5 lb. Penta.
2"x8" BUMPERS	S-4-S	" "
4"x6" SPLICE BLOCKS	S-2-E	8 lb. creo. (LP-5)

6' FLOAT BOLT HOLES
PRE-DRILL
SILLS - holes for flotation plank bolts
STRINGERS - 1 holes for stringers to sill bolts
2 splice block holes
FIELD-DRILL
SILLS - holes for stringer to sill bolts
STRINGERS - 1. pile collar holes
2 holes for exterior stringers to longitudinal stall float sill bolts
SPLICE BLOCKS - all holes

STALL FLOAT BOLT HOLES
PRE-DRILL
STRINGERS - all holes
BLOCKING - all holes
LONGITUDINAL SILLS - 1 stringer to sill holes
2 splice block holes
FIELD DRILL
LONGITUDINAL SILLS - holes for 6' float exterior stringer bolts & float stabilizer
SPLICE BLOCK & BRACES - all holes
Field drill all 9" spike holes

NOTES
All hardware to be hot dip Galvanized A malleable washer shall be placed between all nut and wood surfaces. All bolts to be of the economy head type. Bolt holes to be drilled 1/16" O.S. except holes for flotation planks 1/8" oversize. 9" spike holes to be drilled 1/16" undersize. All drill holes shall be treated with hot creosote oil. All pressure treated creosote material shall be cut to size prior to treatment. All bolts to be 5/8" except flotation plank bolts and exterior stringer splice block bolts 5/8" bolt holes facing decking to be countersunk 1/4" deep by 2-1/8" diameter - 1/2" bolt holes 1/4"x 1-3/4" prior to treatment. Connect 6' float to main float with hinge connection as shown on connection detail sheet. A barrier of 6 mil polyethylene shall be placed between the contact surfaces of all creo. timber and flotation material.

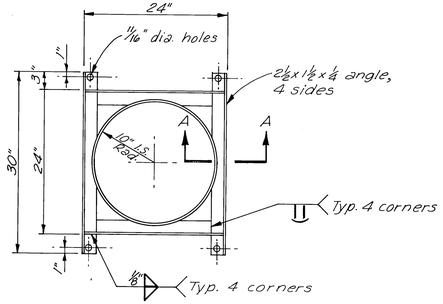
No.	Revision	Date	By
1	Changed treatment for Decking & Bumpers to 0.5lb. Penta. Spaced deck planks ⅛". Changed float width.	7-29-71	JET

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

TYPICAL 6' FLOAT w/INTEGRAL STALLS

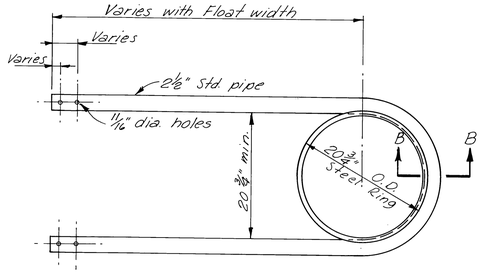
SCALE: 1/2" = 1'-0"
DATE: AUGUST 1966
PROJECT NO. 3-76164
APPROVED DON D. STATTER DIRECTOR
DESIGNED BY: D.S. | DRAWN BY C.D. | CHECKED BY D.S.

R&E 19 1153 1-75 MC 3361-



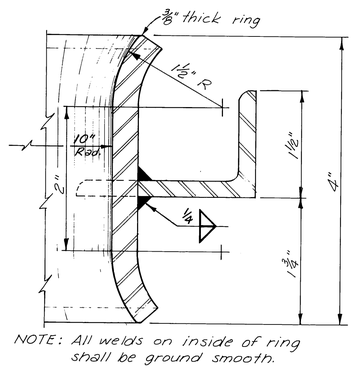
PLAN

1" = 1'-0"



PLAN

1" = 1'-0"

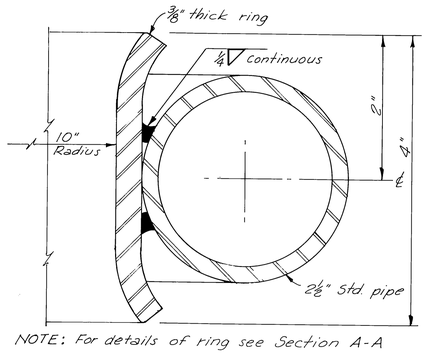


NOTE: All welds on inside of ring shall be ground smooth.

SECTION A-A

Full Size

INTERNAL PILE COLLAR



NOTE: For details of ring see Section A-A

SECTION B-B

Full Size

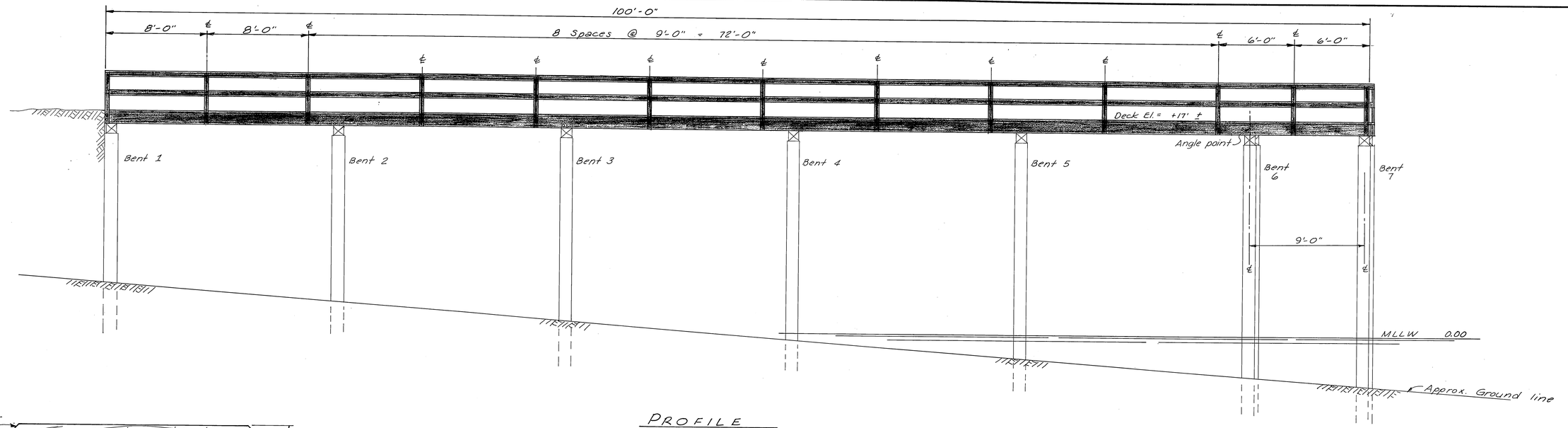
STEEL PIPE PILE COLLAR

DO NOT SCALE THIS DRAWING – USE DIMENSIONS

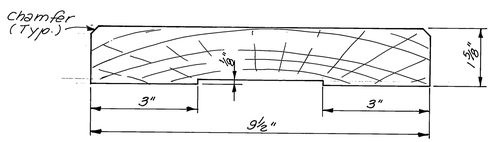
STATE OF ALASKA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF WATER AND HARBORS

MISCELLANEOUS DETAILS

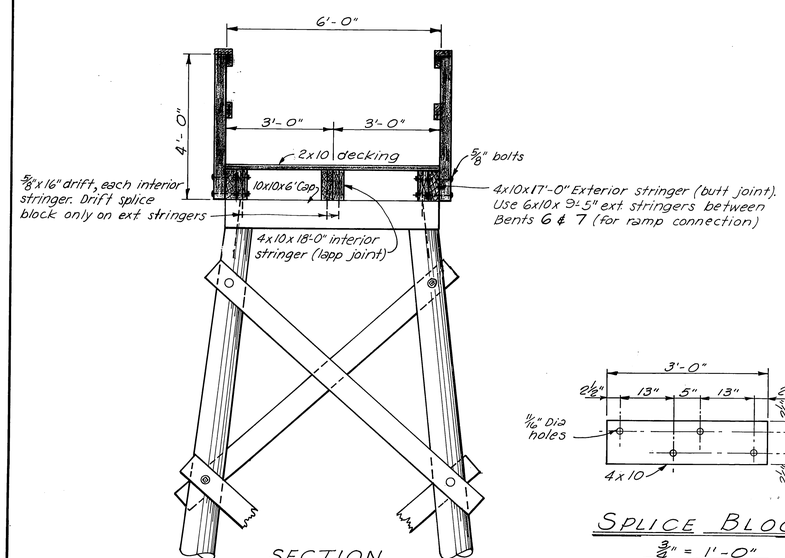
SCALE As shown	SURVEYED ~	APPROVED
DESIGNED ~	DRAWN JT	Don Statter
CHECKED	DATE 5-4-76	DIRECTOR
PROJECT NUMBER 3-76164	SHEET 8 OF 11	



PROFILE
1/4" = 1'-0"

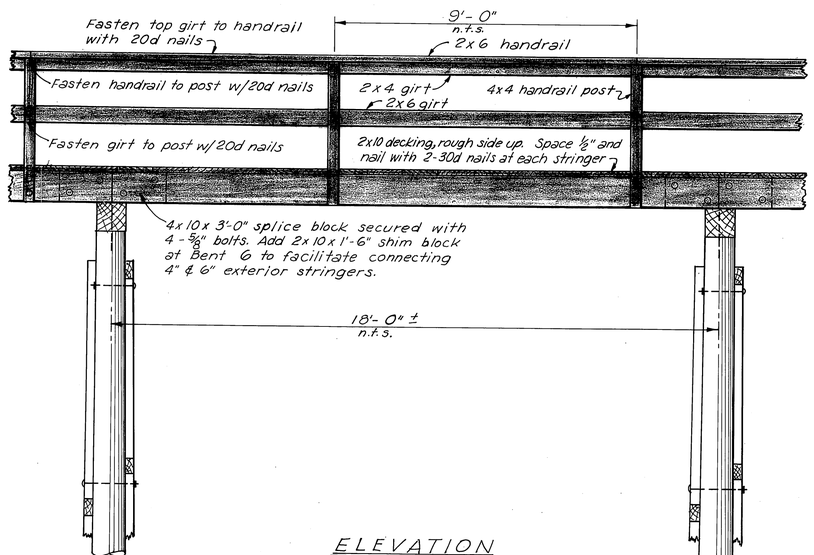


MILLED DECKING DETAIL
HALF SIZE



SECTION
1/2" = 1'-0"

SPLICE BLOCK
3/4" = 1'-0"



ELEVATION
1/2" = 1'-0"

SPECIAL NOTES:

1. All stringers shall be of sufficient length to allow for unequal bent spacing.
2. Field fit stringers at angle point. Salvage existing steel splice plates for re-use on new splices.
3. All members to be replaced shown shaded.

NOTES:

1. All hardware to be hot dip galvanized. A malleable iron washer shall be placed between all nut and wood surfaces.
2. All bolts to be of the economy head type. Bolt holes to be 1/16" oversize.
3. Drift holes to be 1/16" undersize.
4. All pressure treated materials to be cut to size prior to treatment.
5. Drift holes in stringers & splice blocks, and bolt holes in exterior stringers for splice block, shall be drilled prior to treatment. All other holes may be field drilled.
6. All field cuts or field drilled holes shall be treated with hot creosote oil or Pentachlorophenol.

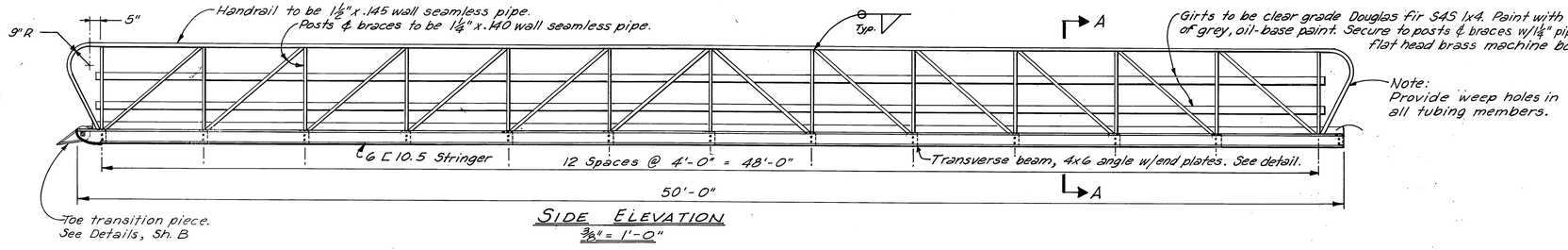
MATERIALS		
ITEM	DRESSING	TREATMENT
~~Piles~~		~~12 lb. Creo.~~
~~Bracing~~	~~Rough~~	" "
~~Caps~~	~~S4S~~	~~8 lb. Creo.~~
Stringers	S2E	8-lb. creo. (I.P.S.)
Splice Block	"	" "
Decking	Milled	W.R. Penta (or equal)
Handrail	S4S	" " "
Handrail Post	"	" " "
Girts	"	" " "

DO NOT SCALE THIS DRAWING – USE DIMENSIONS

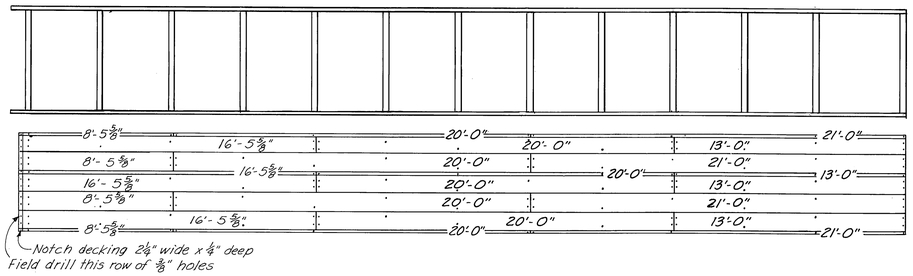
STATE OF ALASKA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF WATER AND HARBORS

EXISTING 6' APPROACH RECONSTRUCTION DETAILS

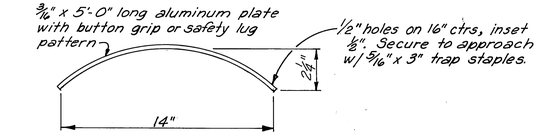
SCALE As shown	SURVEYED ~	APPROVED
DESIGNED ~	DRAWN JT	Don Statter
CHECKED	DATE	DIRECTOR
PROJECT NUMBER 3-76164	SHEET 9 OF 11	



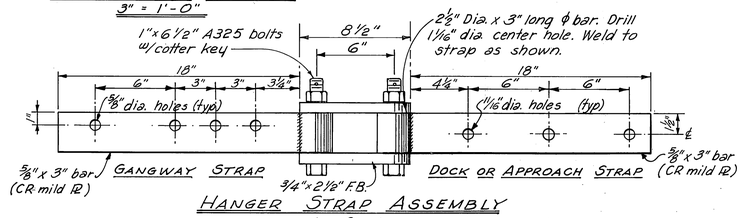
SIDE ELEVATION
3/8" = 1'-0"



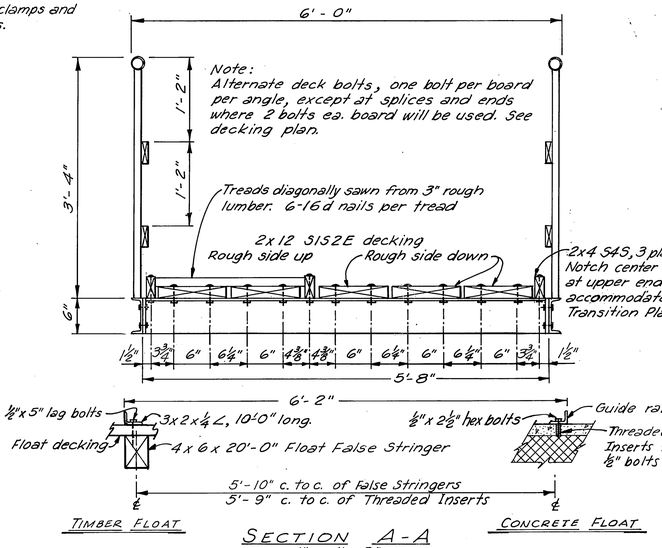
DECKING SPLICE LAYOUT
¼" = 1'-0"



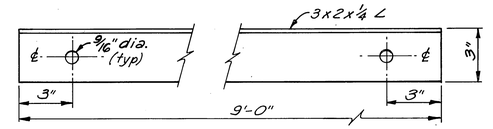
TRANSITION PLATE
3" = 1'-0"



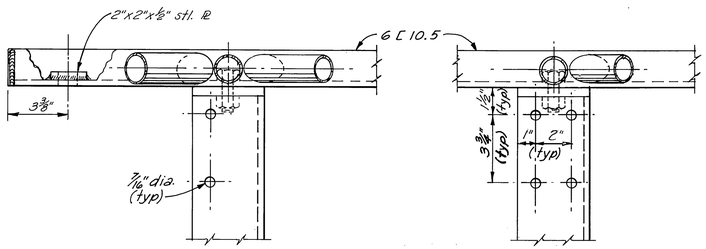
HANGER STRAP ASSEMBLY
No Scale



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



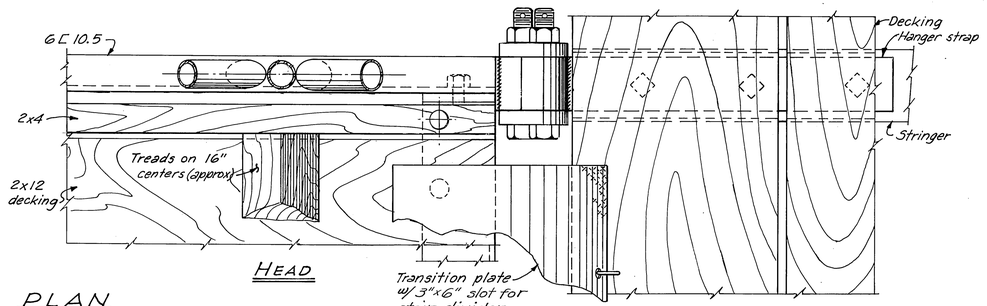
GUIDE RAIL
3" = 1'-0"



TOE

NOTE: FOR TOE TRANSITION PIECE, SEE SH. B

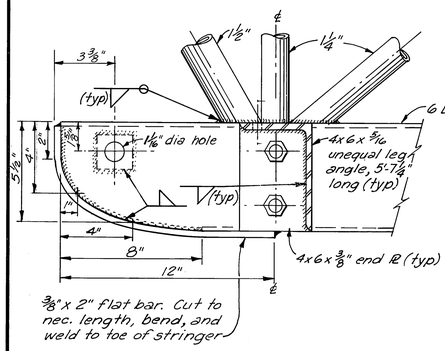
TYP @ DECKING SPLICE

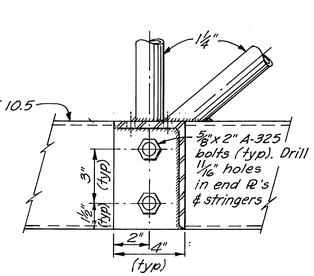


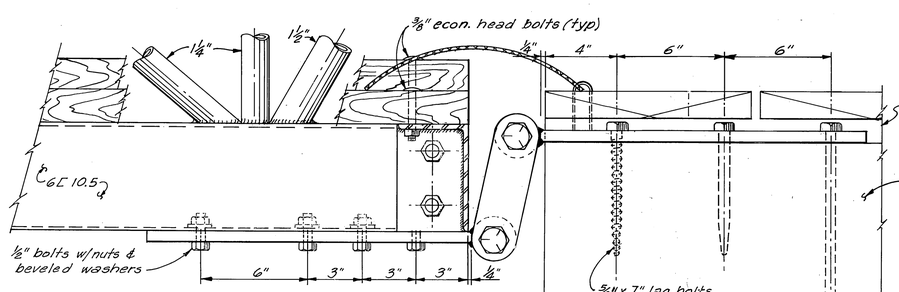
HEAD

PLAN

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 Dense No.1 grade Douglas fir, W.P. Penta or equivalent pressure treated to 0.5 lb cu.ft. retention, and shall be field drilled to match shop drilled holes in transverse members.

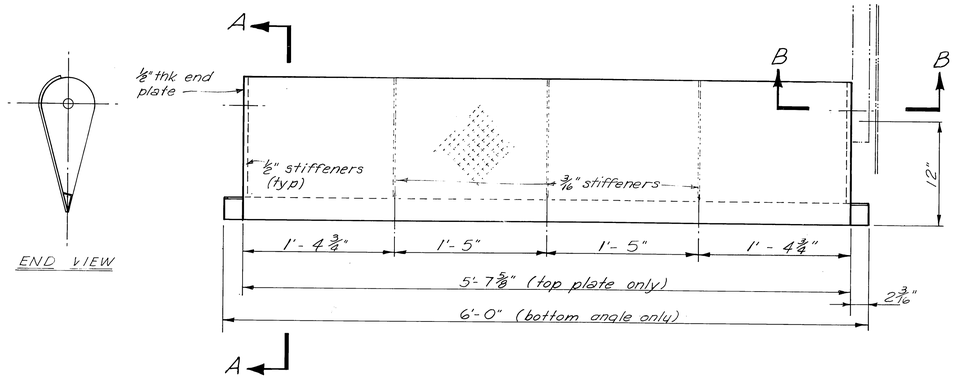
Revised 3-12-73 Hanger linkage
Lumber grade
Penta. retent
Misc. holes, no. & size ELS
Revised 4-7-71. Removed Tension Wires. JET

DO NOT SCALE THIS DRAWING — USE DIMENSIONS

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

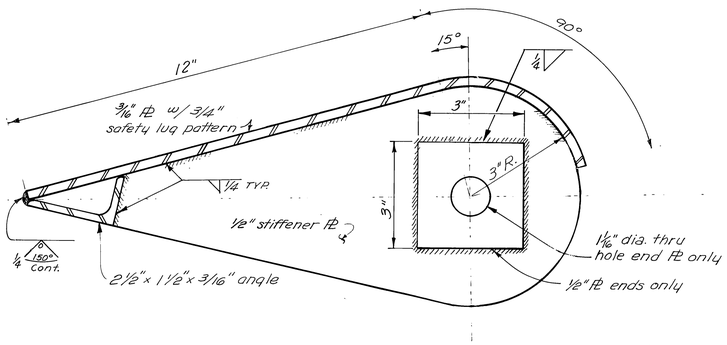
TYPICAL STEEL GANGWAY CONSTRUCTION DETAILS (SHEET A)

SCALE As shown	SURVEYED —	APPROVED
DESIGNED JT/RB	DRAWN JET	Don Statter
CHECKED DSM	DATE Dec. 1970	DIRECTOR
PROJECT NUMBER 3-76164		SHEET 10 OF 11

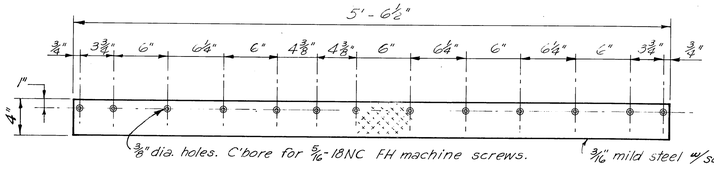


END VIEW

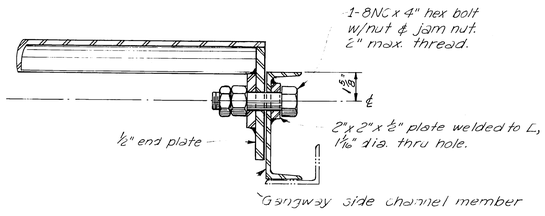
PLAN VIEW
1½" = 1'-0"



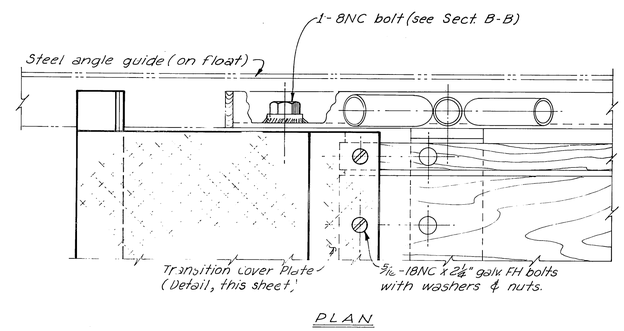
SECTION A-A
SYMMETRICAL ABT. HORIZ. ℄
HALF SIZE



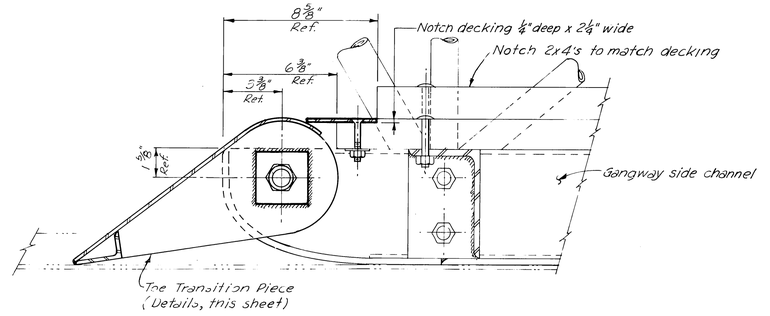
TRANSITION COVER PLATE
1½" = 1'-0"



SECTION B-B
3" = 1'-0"
(TYP. EA. END)



PLAN



SECTIONAL ELEVATION

ASSEMBLY DETAIL
3" = 1'-0"

NOTES:
For notes pertaining to fabrication and galvanizing, see Sheet A

Revised 1-28-75 Removed 6" pipe ELS

DO NOT SCALE THIS DRAWING – USE DIMENSIONS

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

TYPICAL STEEL GANGWAY TRANSITION PIECE DETAILS (SHEET B)

SCALE As shown	SURVEYED —	APPROVED
DESIGNED JET	DRAWN JET	Don Statter
CHECKED DSM	DATE 2-11-74	DIRECTOR
PROJECT NUMBER 3-76164	SHEET 11 OF 11	