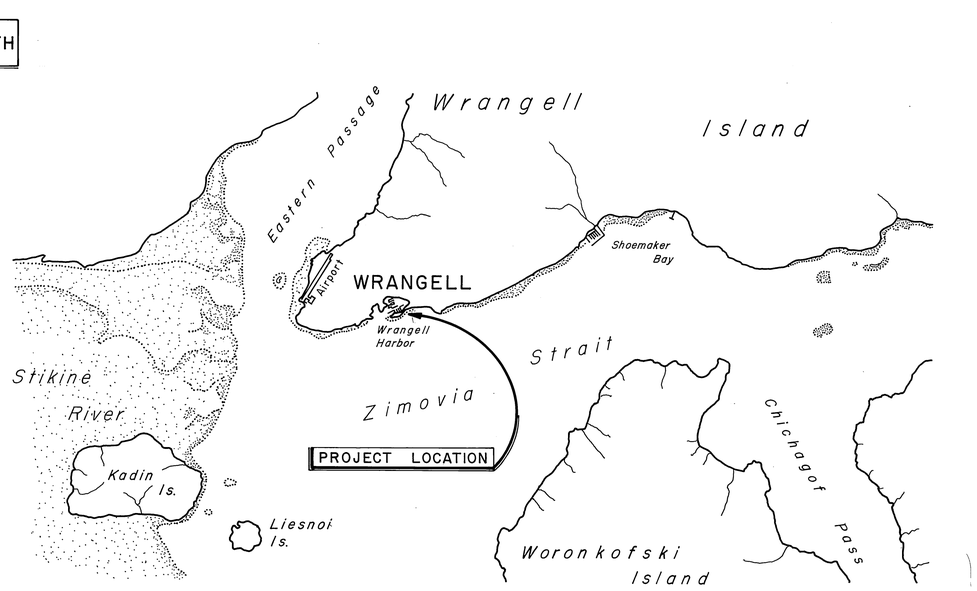
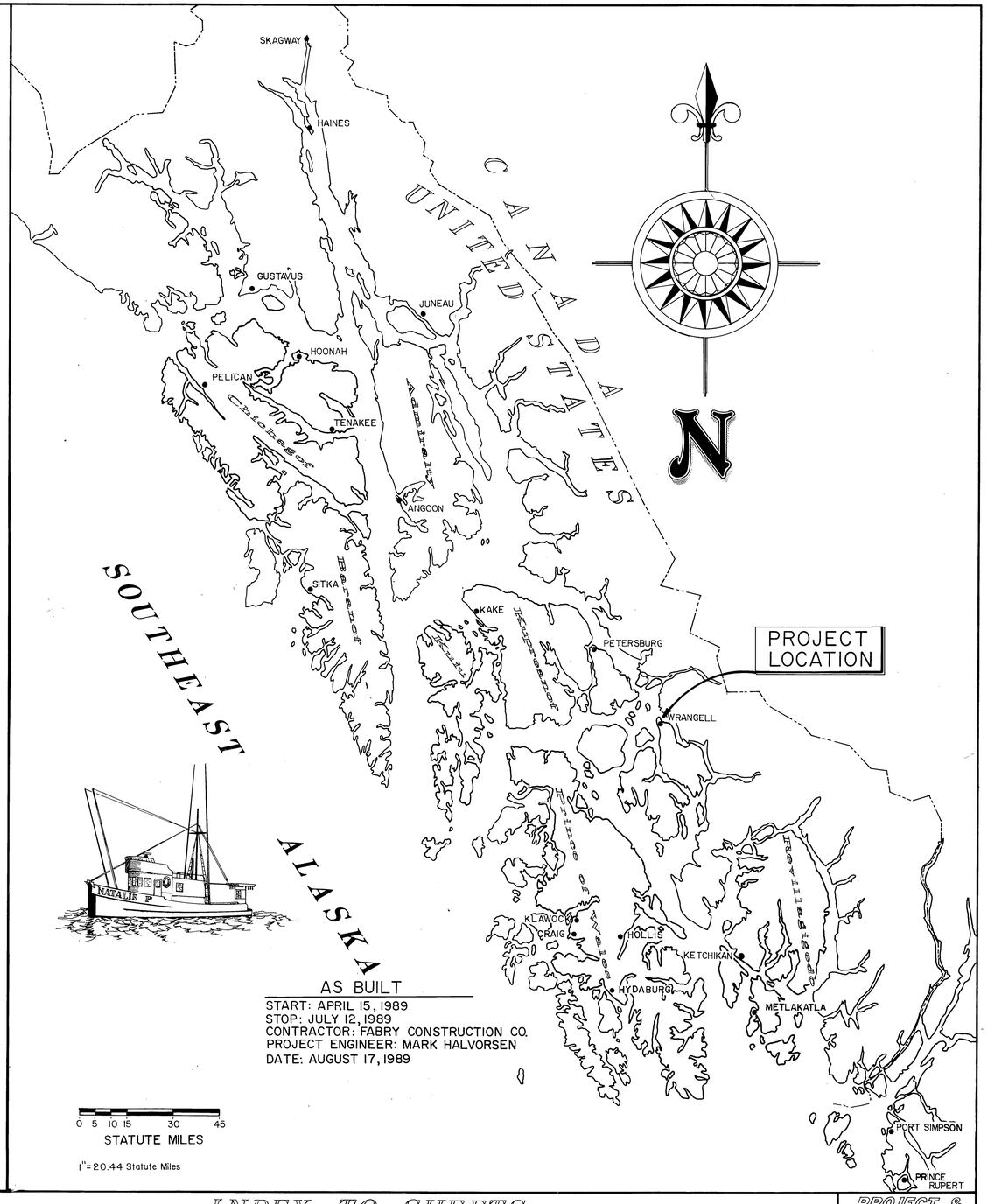
WRANGELL
HARBOR REHABILITATION
PROJECT NO. 69721



VICINITY MAP

0 1/2 1 2 3 4
SCALE IN NAUTICAL MILES



AS BUILT

START: APRIL 15, 1989
STOP: JULY 12, 1989
CONTRACTOR: FABRY CONSTRUCTION CO.
PROJECT ENGINEER: MARK HALVORSEN
DATE: AUGUST 17, 1989

0 5 10 15 30 45
STATUTE MILES

1"=20.44 Statute Miles

STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & CONSTRUCTION

APPROVED

Director S.E. D.&C. — 8/10/88 Date

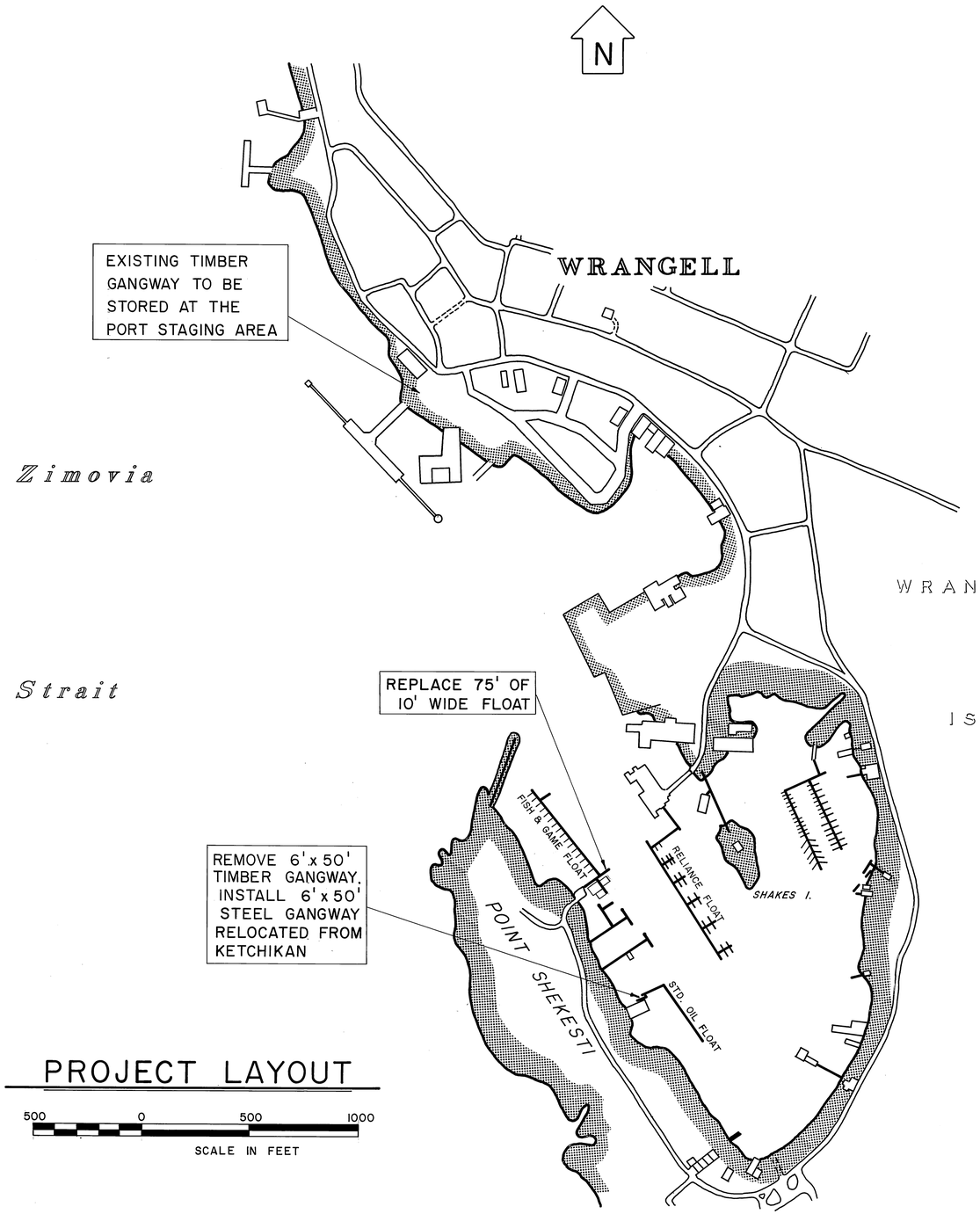
Recommend for Approval

Design Chief — 8/10/88 Date

SHEET 1 of 7

INDEX TO SHEETS

PROJECT & FILE NO.



PROJECT LAYOUT

500 0 500 1000

SCALE IN FEET

WORK SUMMARY

1. FISH & GAME FLOAT
   - A. Remove 10'x 75'± length of existing float and 4 existing timber piles.
   - B. Construct 10'x 75' length of new float.
   - C. Install 3 new steel piles.
     - a. Piles to be 12 3/4" ø x 1/2" wall x 65' long.
     - b. Cutoff elevation = +30' (match existing).
     - c. Minimum penetration = 15'.
     - d. Piles to have APF O-14000 or equal open end cutting shoes.
2. STANDARD OIL FLOAT
   - A. Replace existing 6'x 50' timber gangway with a 6'x 50' steel gangway relocated from Ketchikan Airport.
   - B. Store existing timber gangway at the Port staging area.
3. RELIANCE FLOAT
   - A. Furnish treated timber bracing and bolts to the harbormaster for his use.

AS BUILT
MARK HALVORSEN 8/17/1989

STAMP

STATE OF ALASKA 49th
Jack Daniel Beedle CE-5309
REGISTERED PROFESSIONAL ENGINEER
8-11-88

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

WRANGELL ALASKA

PROJECT LAYOUT

DESIGNED	JDB	CHECKED	TS	DRAWN	TS	DATE	JUNE 1988
PROJECT NUMBER	69721			SHEET	2	OF	7

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N

U.S. Forest Service Facilities

Timber Approach

10' x 125' Timber Float

6' x 60' Steel Gangway

Type W cable

25'-0" | 25'-0" | 25'-0" | 25'-0" | 25'-0" — Splice Locations c-c

55'-0"

40'-0"

See Hinge Connection Details on sht. 5

Relocate Electrical Panel and cables on new float. See panel details, this sheet.
ELECTRIC PANEL LOCATED ORIGINALLY WHERE SHOWN. DIDN'T NEED TO MOVE IT.

Type W cable

10' x 487'-6" Timber Float

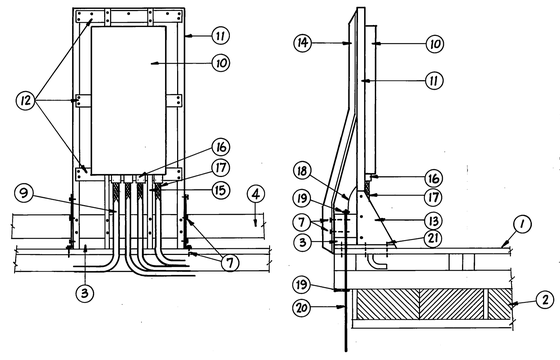
-18

-15

-10

Shaded float to be replaced.
Shaded piles to be removed.
New piles shall be located on the north side of the new float.
See new float details on sht. 4.

1	Float
2	Flotation Material
3	4 x 8 Spacer
4	8 x 8 Tie Down Rail
5	8 x 10 Pedestal
6	Powerhead w/ Meter Base, Circuit Breaker & Receptacle
7	5/8" Bolts Galvanized
8	Pedestal Base.
9	Type W Cable
10	Panel Board
11	2½" x 2½" x ¼" Angle Steel Stand
12	4" x ¼" Flat Steel Plate
13	Gusset. ¼" Flat Steel Plate
14	2½" x 2½" x ¼" Angle Steel Brace
15	1½" x 1½" Channel Erector
16	Cable Connector
17	Wire Mesh Grip
18	# 2/0 Insulated Grounding Conductor
19	Ground Clamp
20	¾" x 8'-0" Ground Rod
21	Space Fasteners



EXISTING ELECTRICAL PANEL DETAILS

FISH & GAME FLOAT
EXISTING LAYOUT

8 4 0 8 16 24
SCALE IN FEET

AS BUILT
MARK HALVORSEN
8/17/89

TIDAL DATA

EHW	22.0
EHT	19.7
MHHW	15.7
MHW	14.8
MTL	8.2
MLLW	0.0
ELW	-4.5

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49th
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CE - 5309
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WRANGELL ALASKA

EXISTING F & G FLOAT

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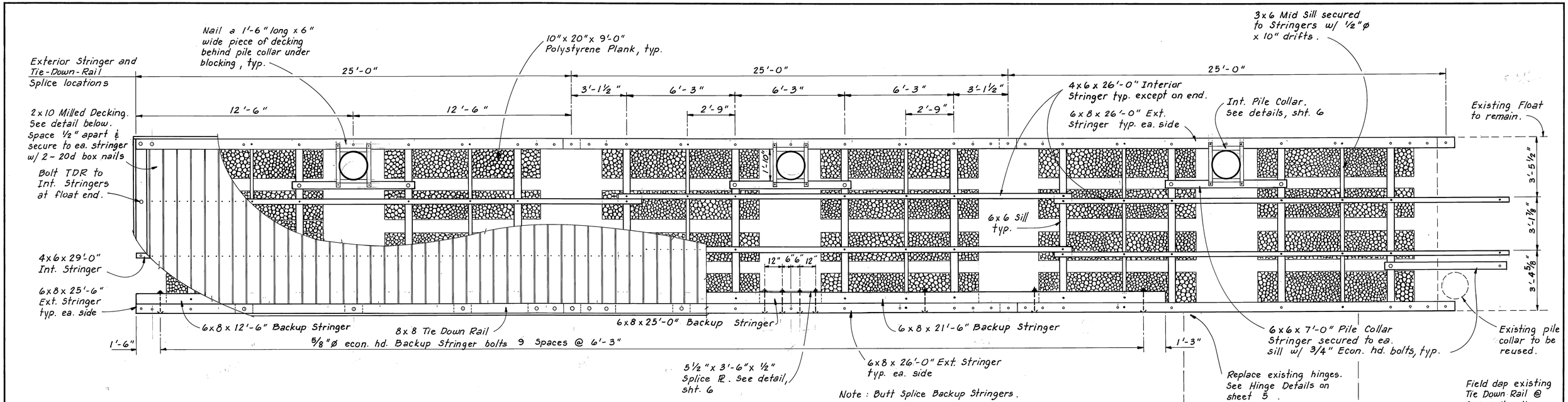
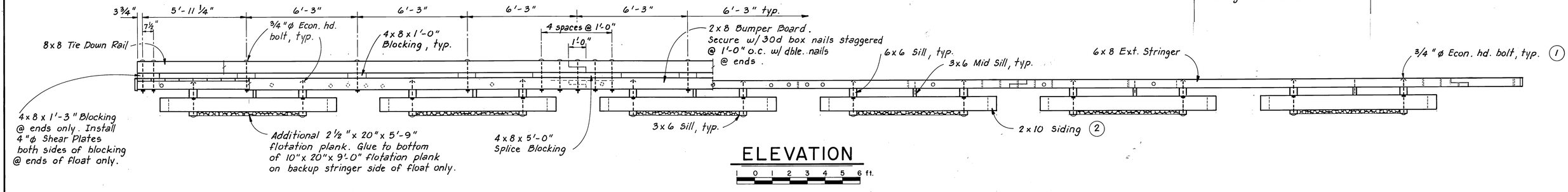


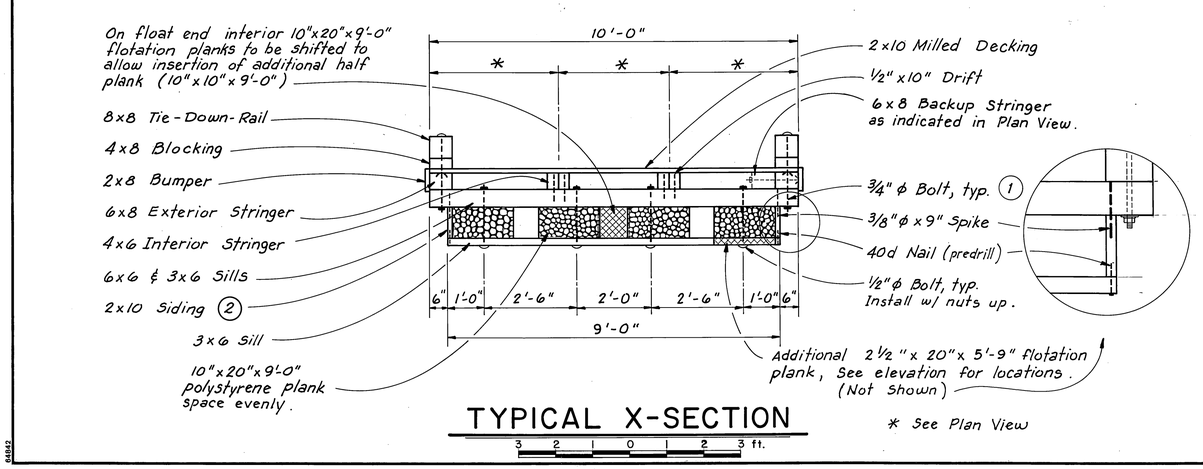
PLAN

3 2 1 0 1 2 3 ft.



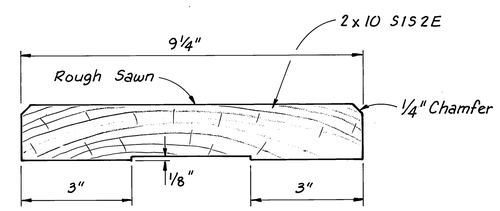
ELEVATION

0 1 2 3 4 5 6 ft.



TYPICAL X-SECTION

3 2 1 0 1 2 3 ft.



MILLED DECKING DETAIL

3 2 1 0 1 2 3 in.

Milled side shall be towards the inside of tree.

AS BUILT
MARK HALVORSEN 8/17/89

(1) Countersink all bolt heads facing decking 3/8".

(2) 2x10 Siding is a 2x12 (S4S) cut to 1 1/2" x 10 1/4".

(3) All timber to be S-4-S except decking (Milled S1S2E) and 2x10 Siding.

(4) All bolts are 3/4"ø economy head type w/lugs unless noted otherwise.

(5) Countersink all bolt heads facing bumper board 3/8".

(6) Shop drill all holes prior to treatment except 5/8"ø holes for pile collars.

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WRANGELL ALASKA

10' WIDE FLOAT

DESIGNED JDB	CHECKED	DRAWN TS	DATE JUNE 1988
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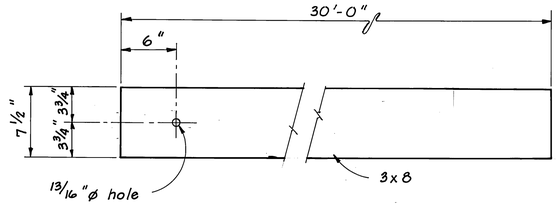
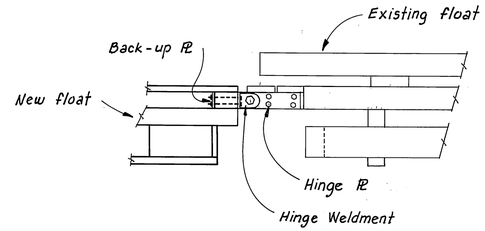


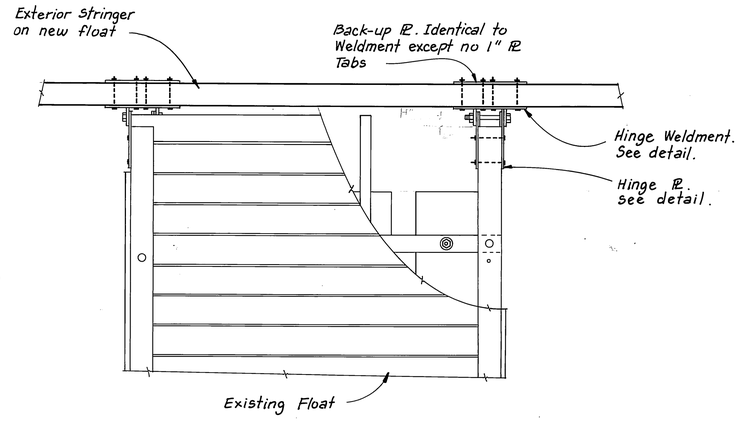
CROSS BRACING DETAIL

0 ft.

(20 REQ'D.)



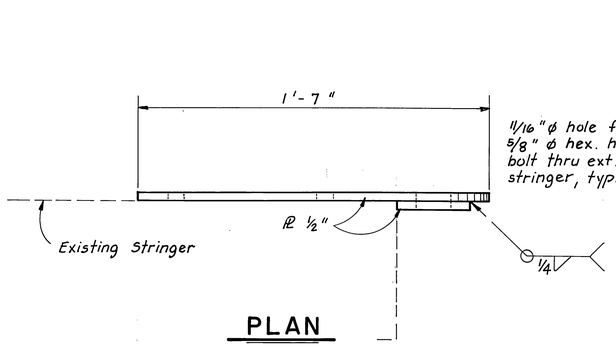
PROFILE



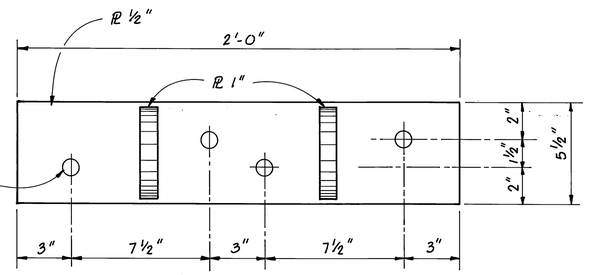
PLAN

HINGE CONNECTION DETAILS

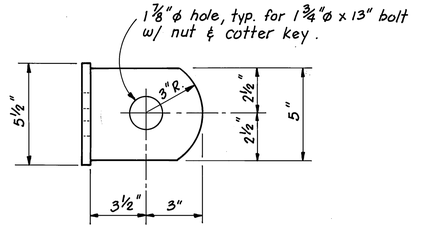
3 2½ 1 0 1 2 3 ft.



PLAN



ELEVATION

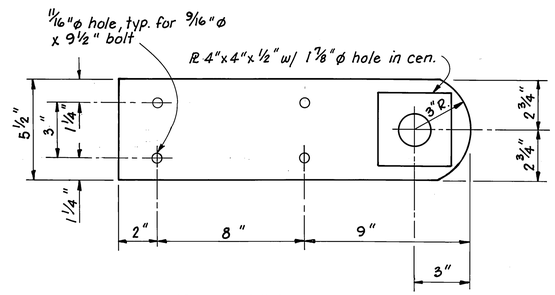


PROFILE

HINGE WELDMENT DETAILS

6 4 2 0 2 4 6 in.

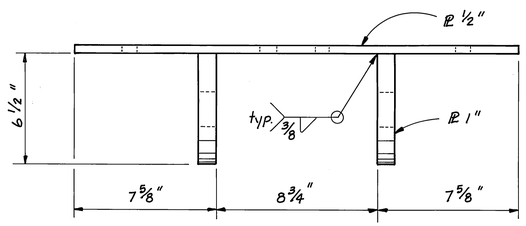
(2 WELDMENTS & 2 BACK-UP PLATES REQ'D.)



ELEVATION
HINGE PLATE DETAILS

(4 REQ'D. - 2 AS SHOWN, 2 OPP. HAND)

6 4 2 0 2 4 6 in.



PLAN

AS BUILT
MARK HALVORSEN
8/17/89

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STATE OF ALASKA
49th
Jack Daniel Beedle
CE - 5309
REGISTERED PROFESSIONAL ENGINEER
8-11-88

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DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

WRANGELL ALASKA

BRACING AND HINGE DETAILS

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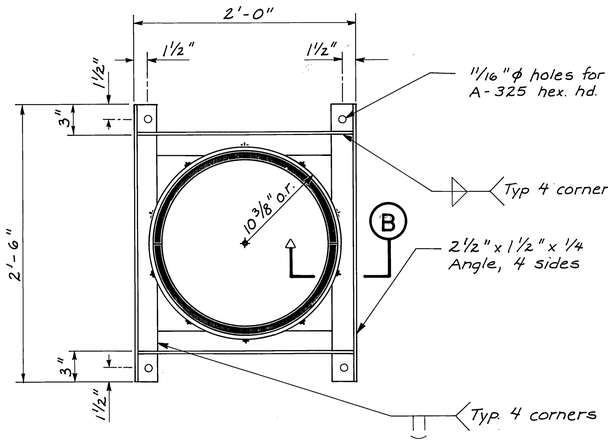
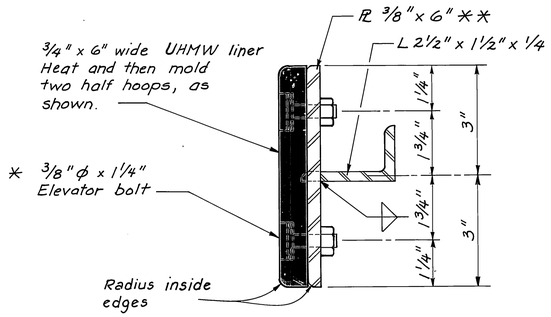


INTERIOR PILE COLLAR (3 Req'd.)

0 2 ft.

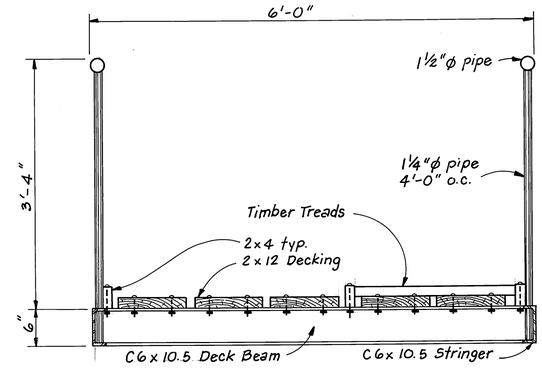
* Countersink Elevator Bolt 3/8". Space 5 bolts per half collar alternately high and low. Space bolts evenly to allow for rotating the UHMW liner.

** All welds on inside of steel ring shall be ground smooth.



SECTION B

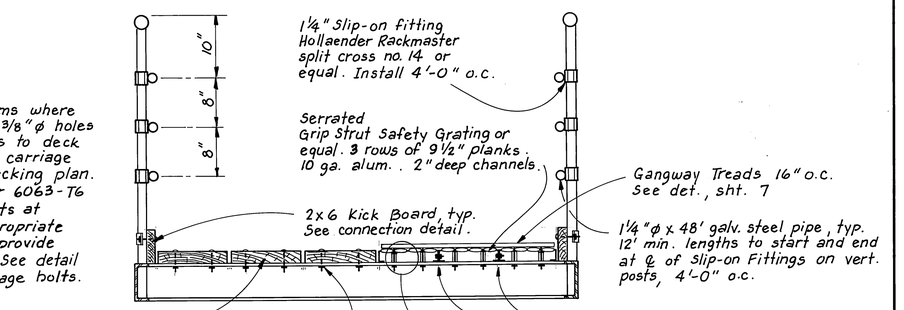
2 1 0 1 2 in.



EXISTING GANGWAY X-SECTION

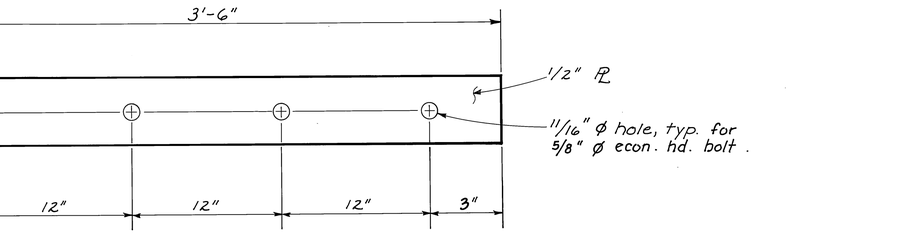
2 1 0 1 2 ft.

NOTE: Use existing holes in C6 x 10.5 deck beams where possible. Where necessary field drill 3/8" ϕ holes in deck beams. Secure grating planks to deck beams w/ diamond anchors & 5/16" ϕ carriage hd. bolts w/ square shanks. See decking plan. Field cut ½" ϕ sched. 80 6061-T6 or 6063-T6 Alum. pipe sleeves for all carriage bolts at grating plank splices. Cut sleeves appropriate length to resist plank deflection and provide a uniform transition between planks. See detail below. Use lock nuts on 5/16" ϕ carriage bolts.



REFURBISHED GANGWAY X-SECT.

2 1 0 1 2 ft.



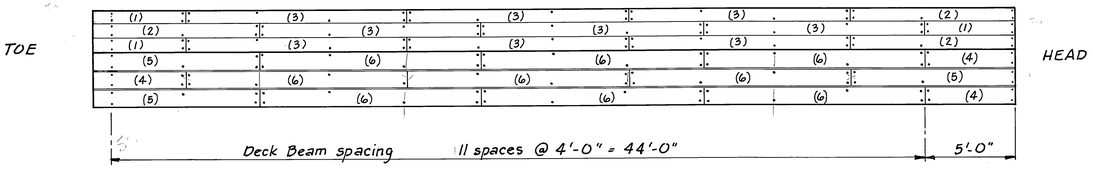
BACKUP STRINGER SPLICE PLATE

0 1 ft.

(2 REQ'D.)

KEY

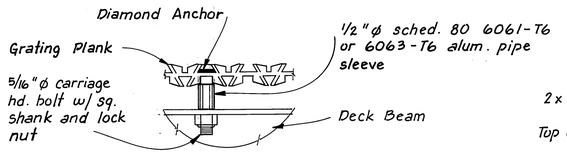
(1) 9½" x 5'-0" Grating Plank ●
(2) 9½" x 9'-0" Grating Plank ↓
(3) 9½" x 12'-0" Grating Plank ↓
(4) 2 x 12 x 5'-0" Timber Plank *
(5) 2 x 12 x 9'-0" Timber Plank *
(6) 2 x 12 x 12'-0" Timber Plank *



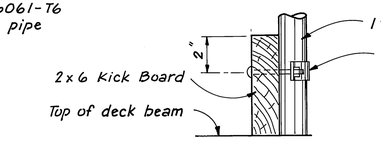
DECKING PLAN

6 4 2 0 2 4 6 ft.

● Grating plank shall be cut in the middle of diamonds on butt joint end.
↓ Grating plank shall be cut in the middle of diamonds on both ends.
* 2 x 12 Decking shall be full 2" in thickness.



SLEEVE DETAIL



KICK BOARD CONNECTION DETAIL

6 3 0 3 6 in.

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8/17/89

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WRANGELL ALASKA

MISCELLANEOUS DETAILS

DESIGNED	TS	CHECKED	JDB	DRAWN	RKS	DATE	JUNE 1988
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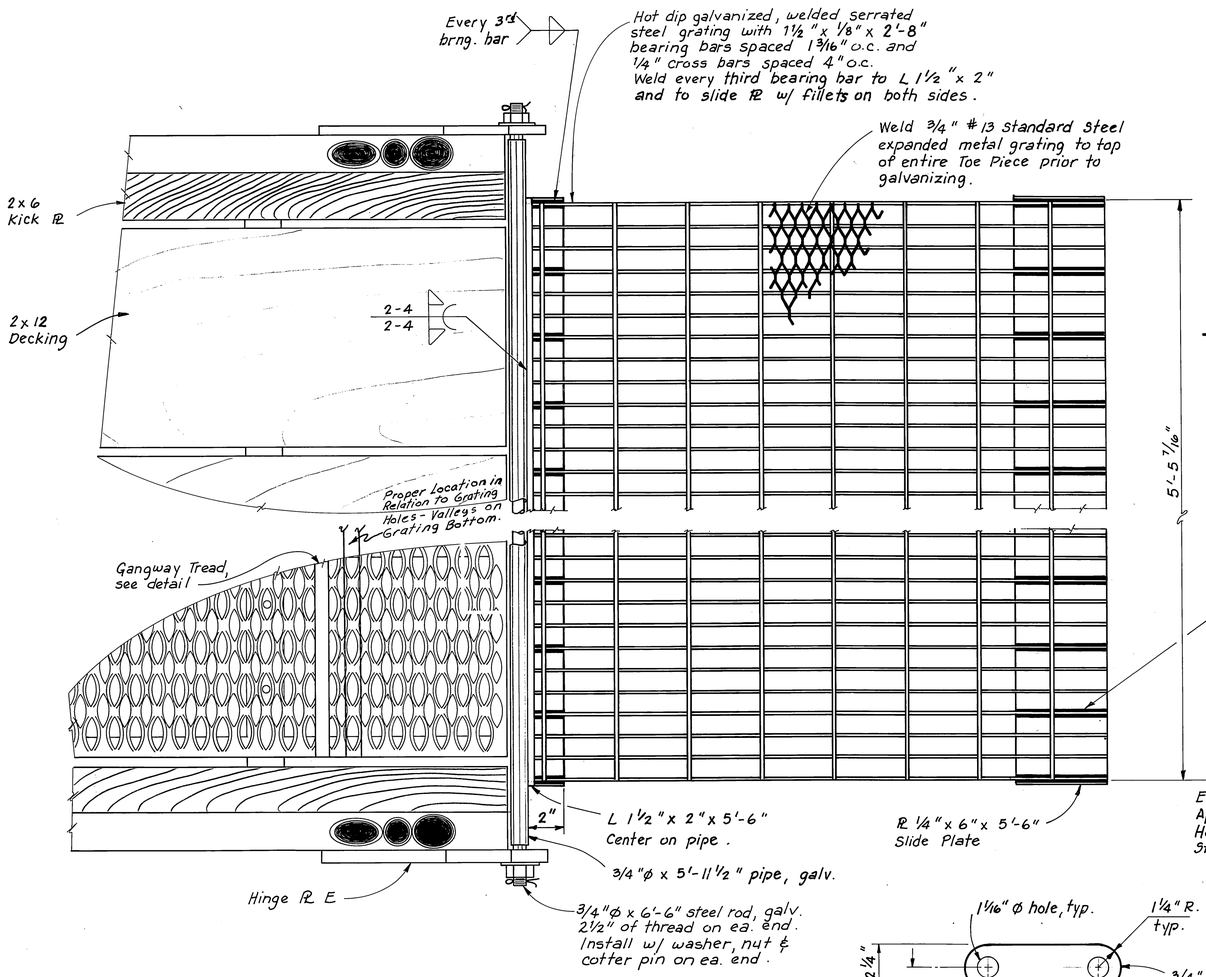
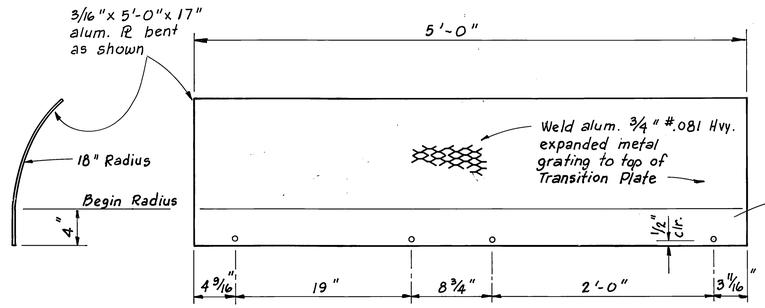
NOTE : Hot dip galvanize Toe Transition Piece after fabrication.



PLAN

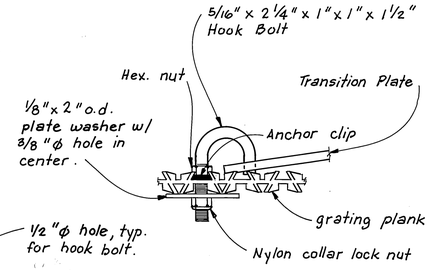


PROFILE

PLAN

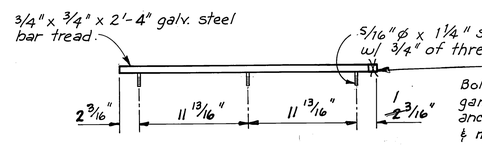
TRANSITION PLATE

12 0 3 6 9 12 in.



HOOK BOLT

0 3 6 9 12 in.



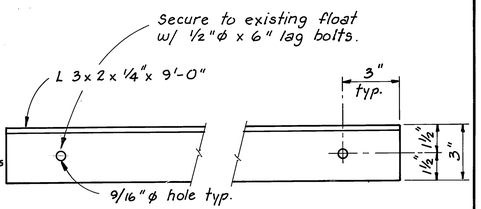
Bolt treads to gangway using anchoring clips & nylon collar lock nuts.

GANGWAY TREAD DETAIL

12 9 6 3 0 3 6 9 12 in.

37 REQ'D.

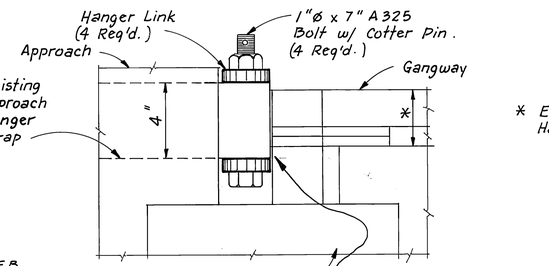
Cut 1" off end of each tread + Shifted treads so the grating valleys in grating under treads were on grating bottom Sodiamond clip washers could be used properly - as Shown on PLAN VIEW Tread sits on top of grating w/valley on top - Necessary to cut 1" off tread so didn't overhang wooden decking when tread studs shifted to fit holes in grating in new locations. See PLAN VIEW for proper location so diamond clips work properly.



GUIDE RAIL

0 3 6 9 12 in.

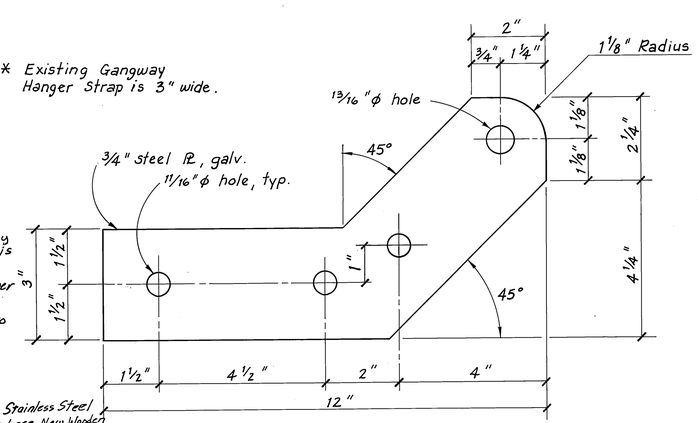
(2 REQ'D.)



* Existing Gangway Hanger Strap is 3" wide.

Note: Centerline Gangway Hinge Connection Plate is approx. 2" wider than Centerline Approach Hanger Straps - Enough slack in hanger links on bolts to make up connection.

PLAN VIEW



HINGE ℞ E

0 1 2 3 4 in.

(2 Req'd.)

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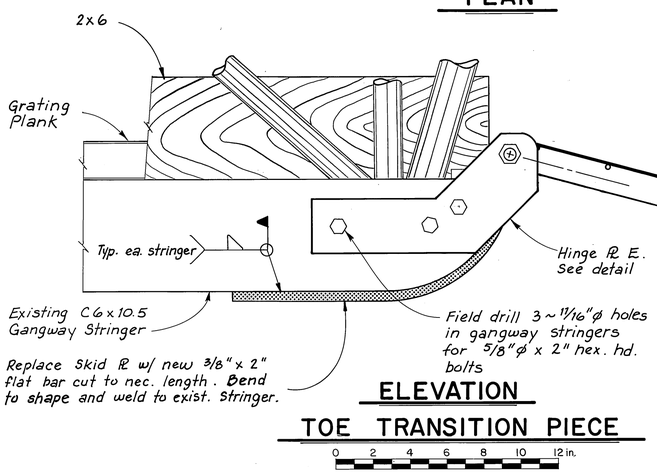
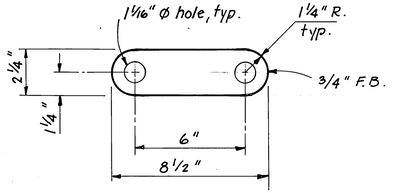
8/17/89



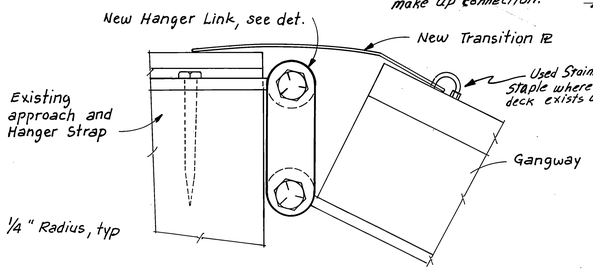
ELEVATION
TOE TRANSITION PIECE

0 2 4 6 8 10 12 in.

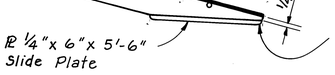


HANGER LINK

(4 REQ'D.)



ELEVATION
GANGWAY CONNECTION DETAILS



NOTE : Rigid conduit carrying electrical cable, is mounted to the outside face of the timber gangway beam with unistrut channel and pipe clamps in six (6) places. Drill holes in C6x10.5 side channel of steel gangway and reinstall Unistrut channels, pipe clamps and rigid conduit carrying electrical cable. WELDED UNISTRUT TO SIDE OF GANGWAY CHANNELS.

STAMP

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WRANGELL ALASKA

GANGWAY TOE TRANSITION PIECE

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