

ITEM NO.	ITEM	PAY UNIT	ESTIMATED QUANTITIES
110	Mobilization & Demobilization	L.S.	All Req'd✓
111(1)	Erosion & Polution Control, Administration	L.S.	All Req'd✓
111(2)	Erosion & Polution Control NONE REQUIRED	C.S.	All Req'd✓
120(1)	DBE Adjustment	C.S.	All Req'd✓
201	Removal Of Structures & Obstructions	L.S.	All Req'd✓
302	Fender System Upgrade, Dolphin "C"	L.S.	All Req'd✓

Specifications:

Design:

Dolphin: Marine Facilities Design Standards.

Design Loads:

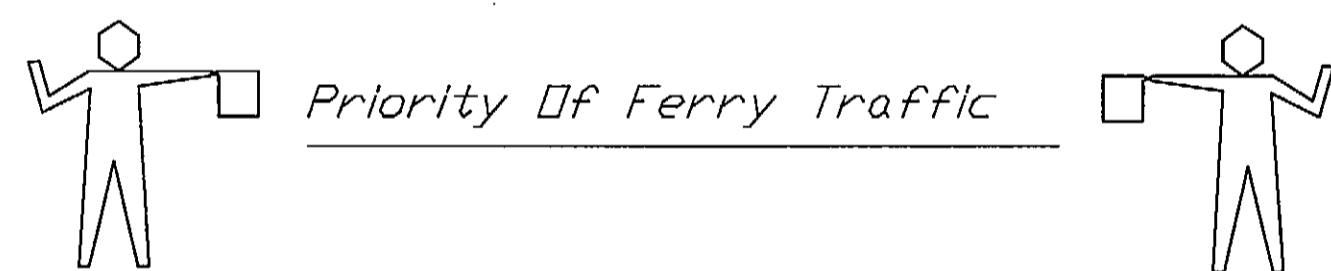
Dolphin: Berthing E=150 ft-kips
Wind Load=300 kips

Materials:

Tube A500 Gr. B
Pile A252 Gr. 2, A501 or A53, Gr. B, type E or S
Pipe A53, Gr. B, type E or S
All other steel shall be A36, unless specified otherwise

Protective Coatings:

Fender System Steel: Galvanized after fabrication.
Rails and Misc. Steel: Galvanized after fabrication.



1. Once the Contractor begins improvements the following will remain in force until the project is completed.

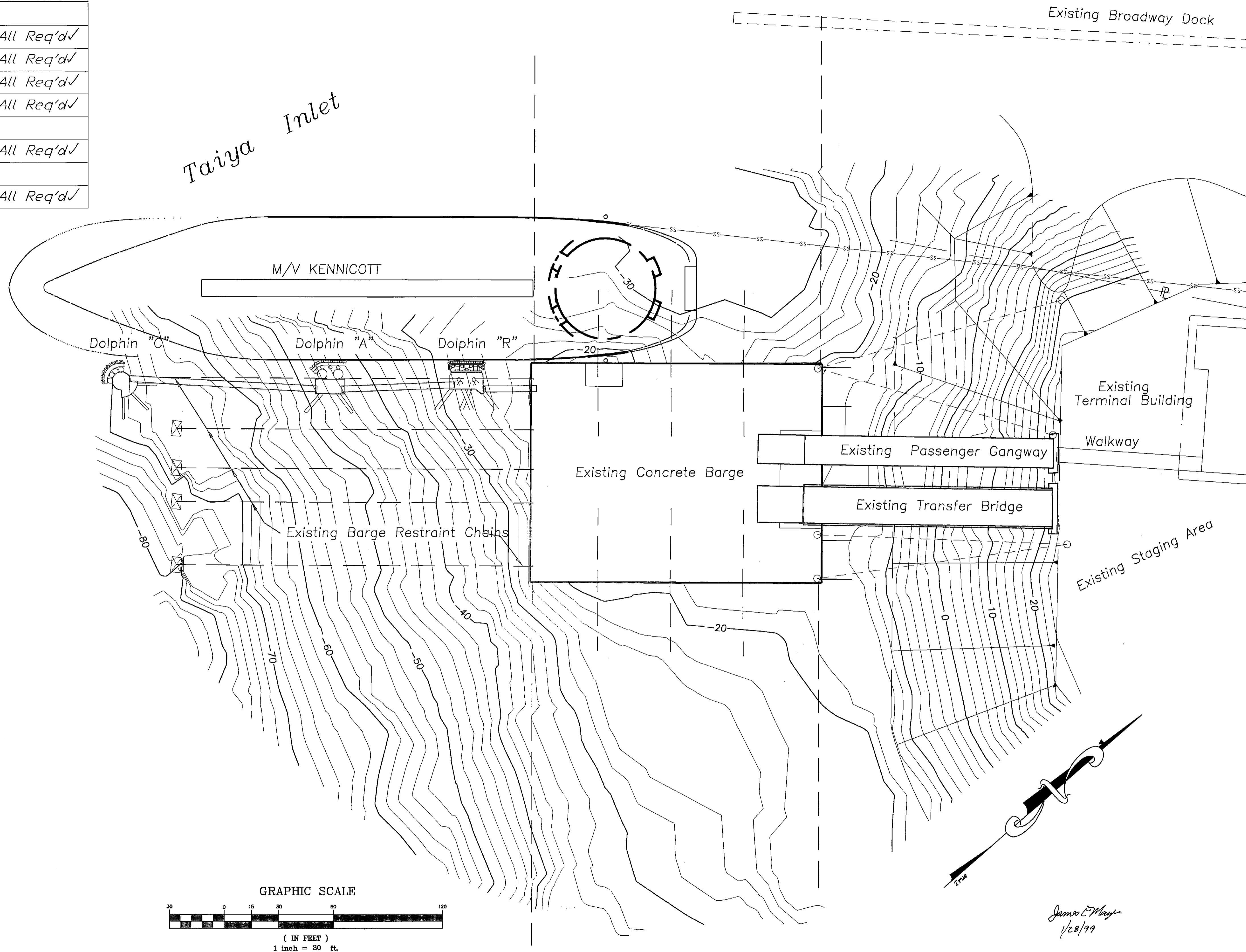
A. The Contractor shall conduct his operations so as not to interfere with normal scheduled ferry access or vehicular traffic to and from the existing ferry facilities.

B. Ferry traffic shall have priority over construction activities and it shall be the Contractor's responsibility to coordinate his activities with ferry arrivals and departures.

C. Terminal personnel will stage traffic, and operate the transfer equipment.

D. Contractor shall provide safe access and lighting for terminal personnel to tie up points as required throughout the contract.

2. The Contractor shall not stockpile any materials in the existing staging area without approval of the Engineer.



NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

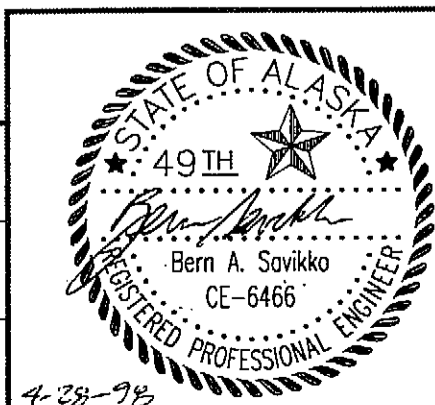
PATH:	DATE:	DESCRIPTION OF CHANGE:
P:\SKG\75275\MF\SKG-LI3B		
RECORD OF REVISIONS		

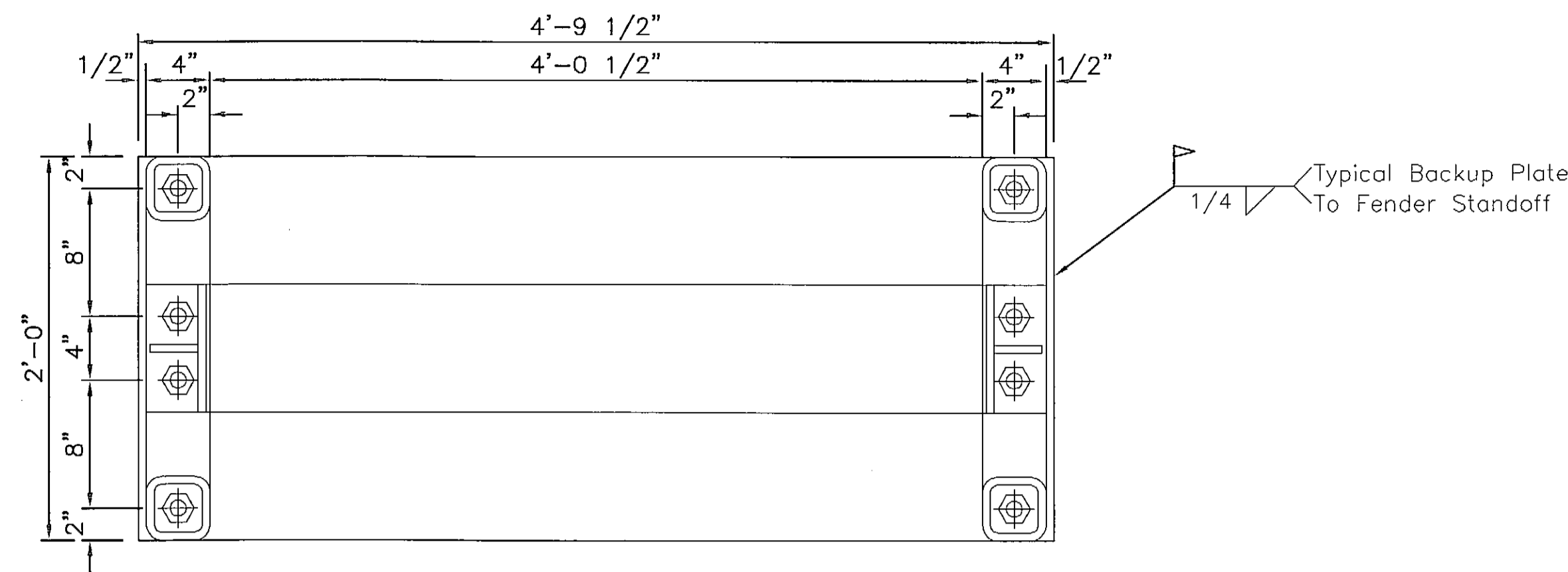
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

SKAGWAY

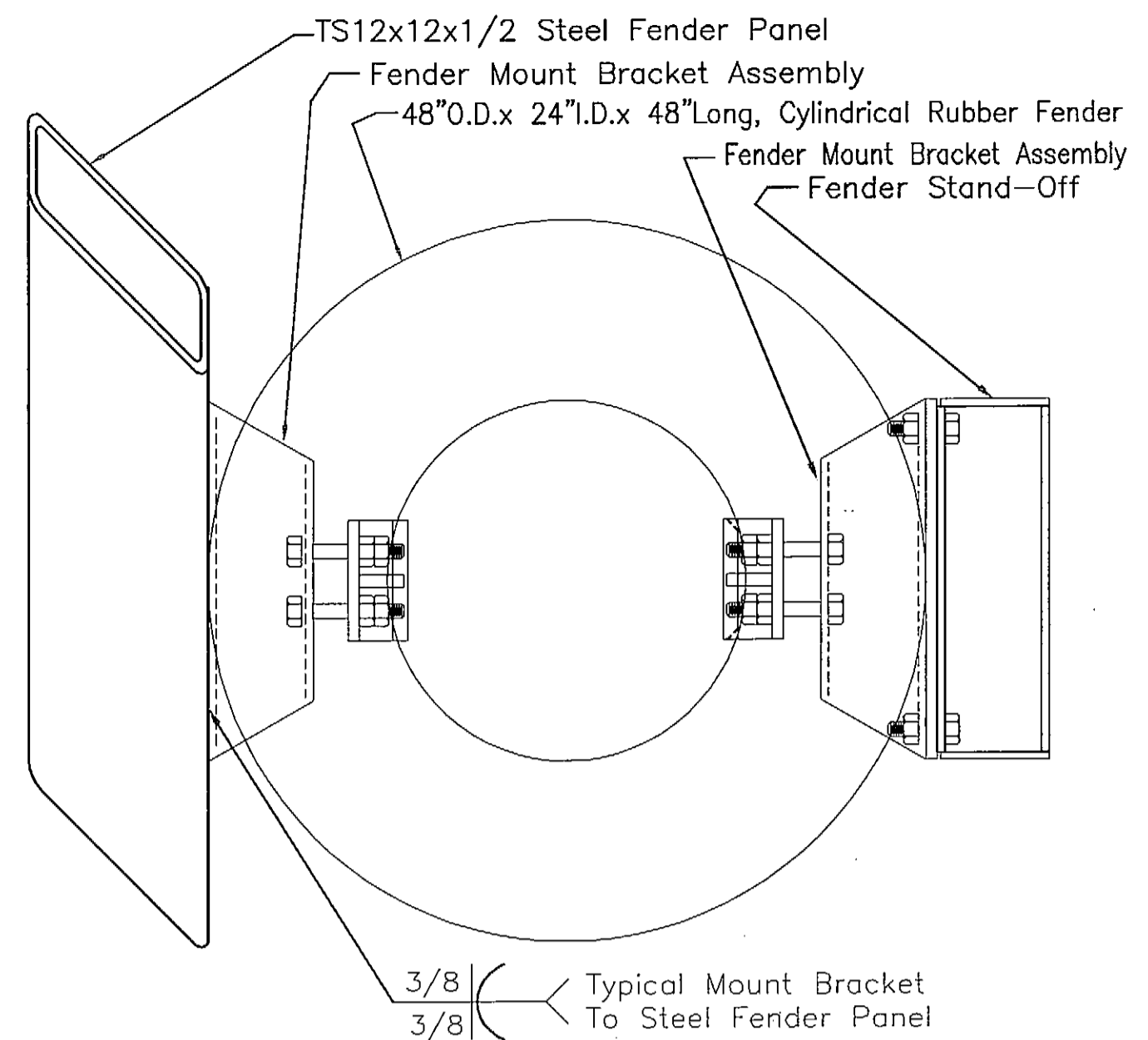
ALASKA
SKAGWAY FERRY TERMINAL
QUANTITIES, GENERAL NOTES, & LAYOUT

DESIGNED BY: BAS/BN	PROJECT NO. 67543
DRAWN BY: STAFF	DATE: APRIL 1998
CHECKED BY: BAS	SHEET 2 OF 7

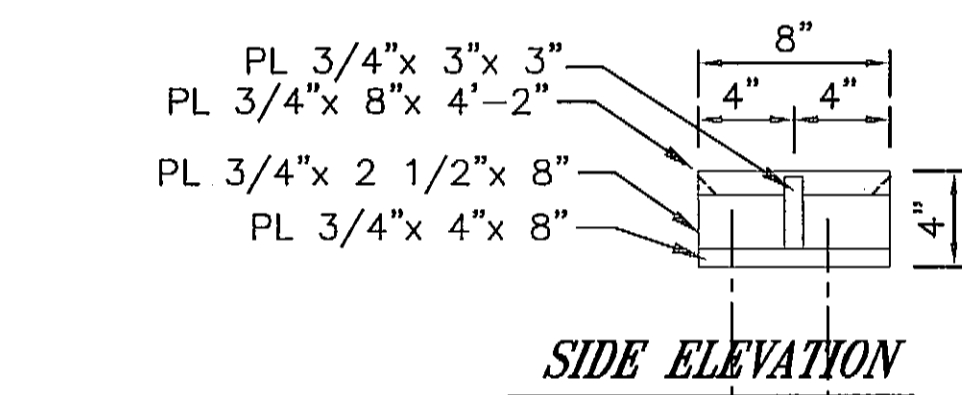




TYPICAL FENDER MOUNT BRACKET, FRONT VIEW

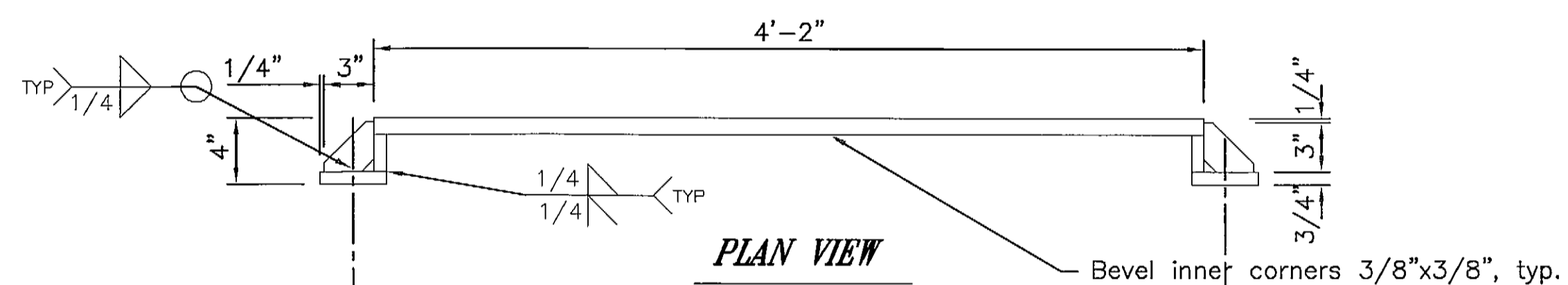


TYPICAL FENDER MOUNT BRACKET ASSEMBLY, ELEVATION VIEW

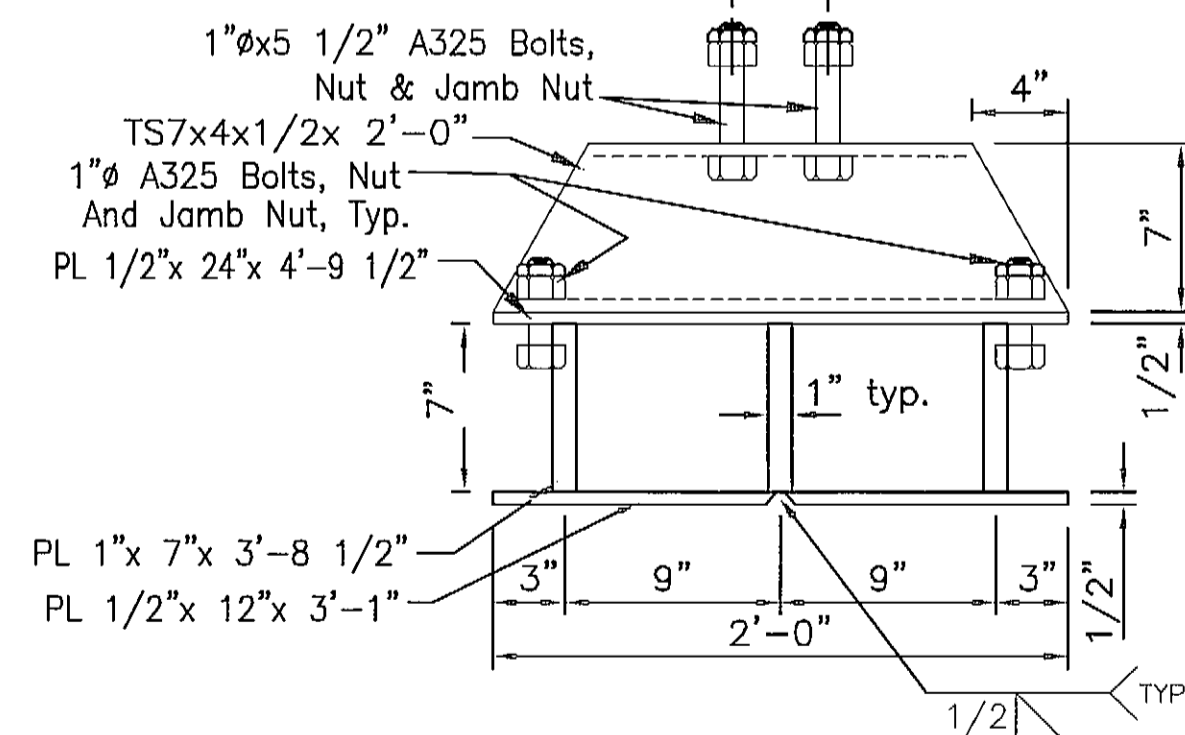


SIDE ELEVATION

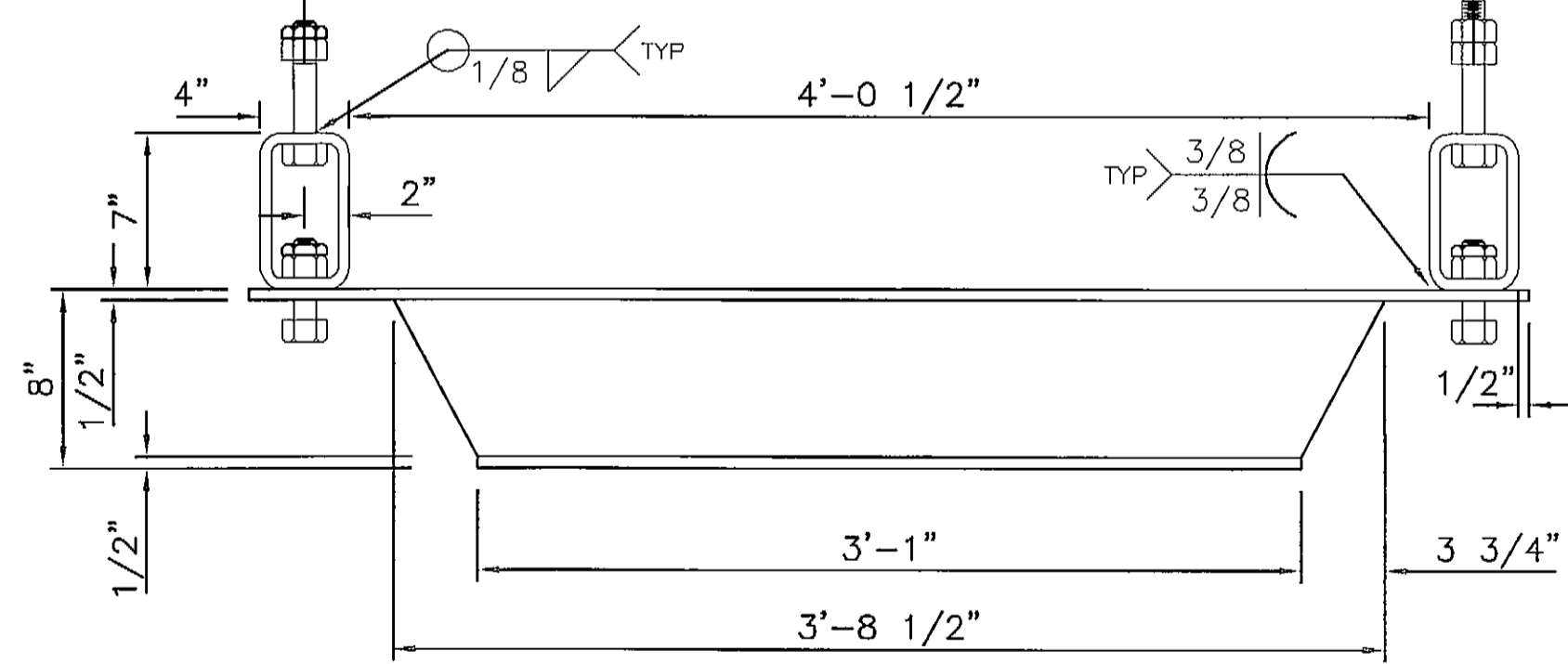
TYPICAL FENDER RETAINER



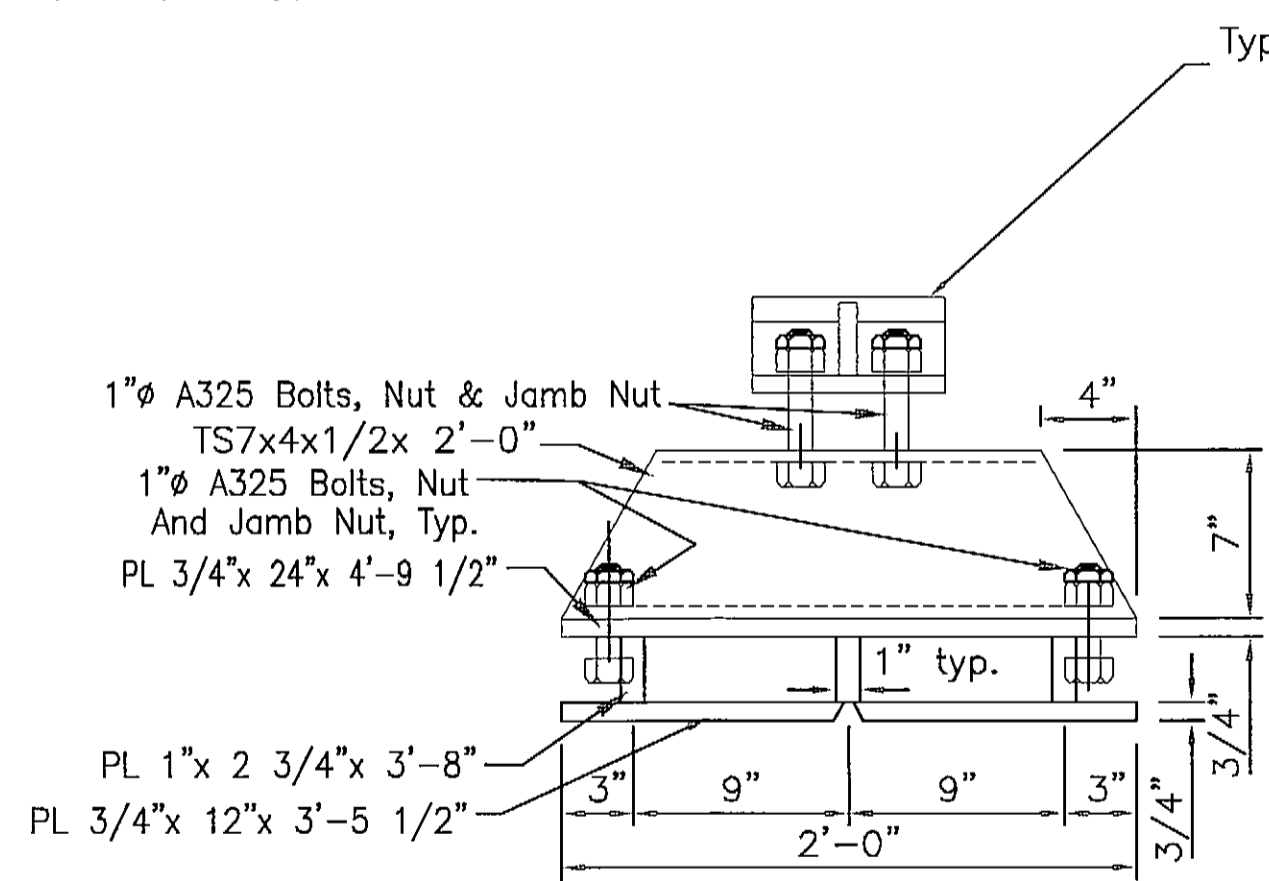
PLAN VIEW



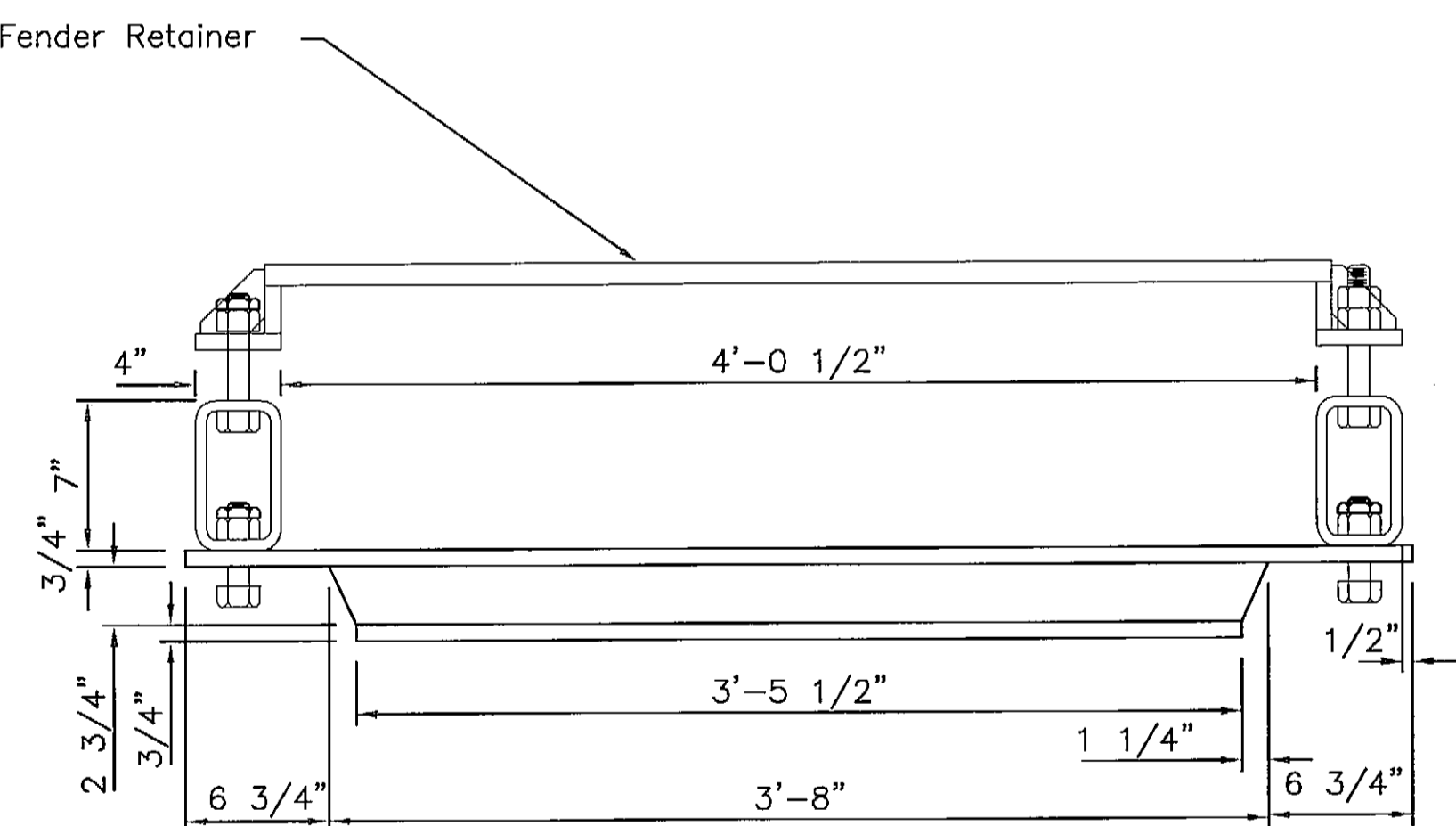
FENDER MOUNT BRACKET, SIDE VIEW



FENDER MOUNT BRACKET, PLAN VIEW



FENDER MOUNT BRACKET, SIDE VIEW



FENDER MOUNT BRACKET, PLAN VIEW

EXTERIOR FENDER BRACKET DETAILS
(with 1/2" PLs)

INTERIOR FENDER BRACKET DETAILS
(with 3/4" PLs)

James P. Olson
1/28/99

PATH: P:\SKY\67543\MF\SHEET5.DWG		
BY:	DATE:	DESCRIPTION OF CHANGE:
RECORD OF REVISIONS		

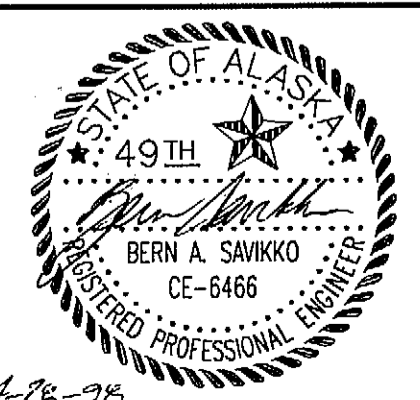
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

SKAGWAY

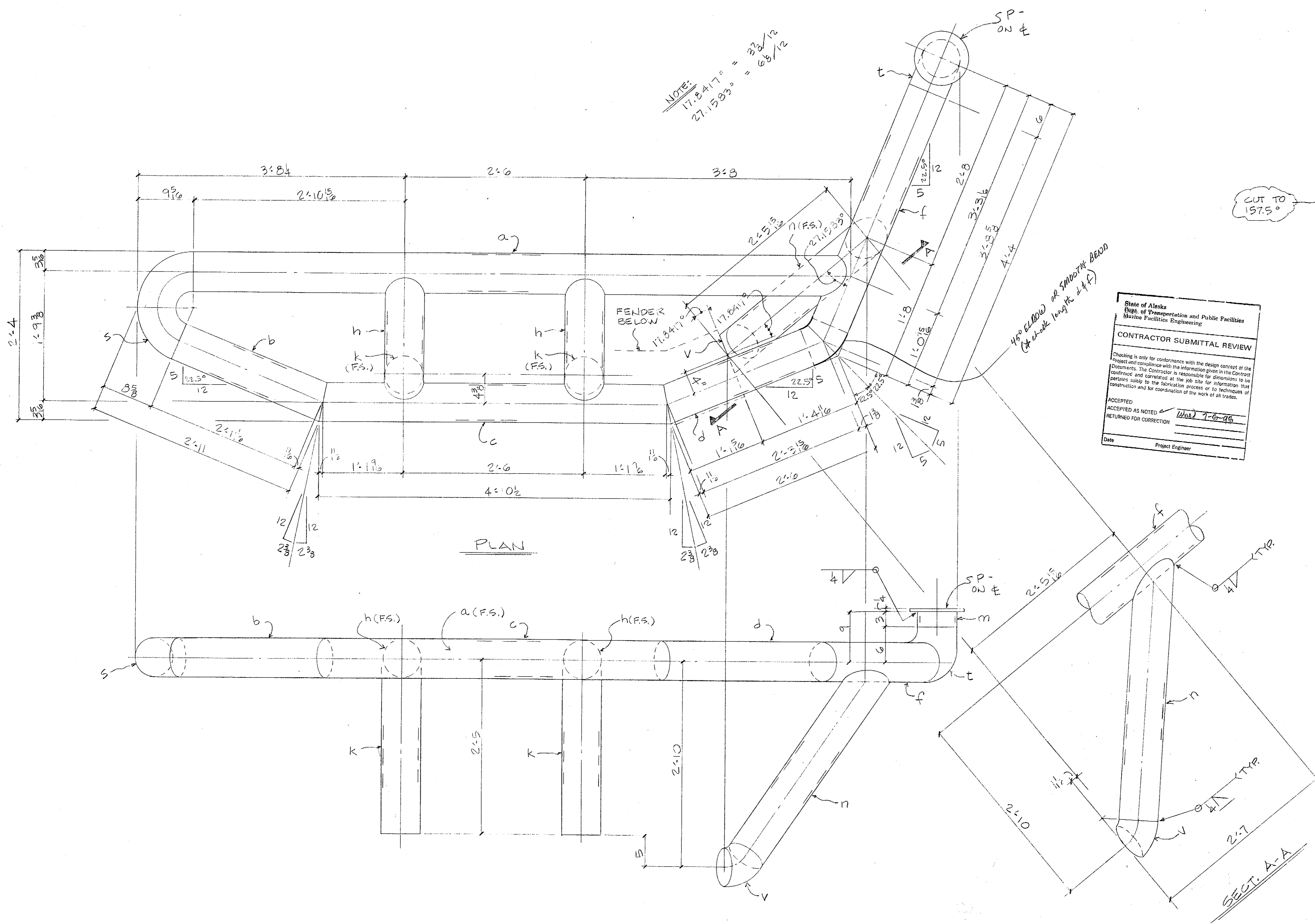
SKAGWAY FERRY TERMINAL
DOLPHIN UPGRADE
ALASKA
FED. NO. NH-097-1(4) ~ PROJECT NO. 67543
FENDER BRACKET DETAILS

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

DESIGNED BY: BAS/BN	PROJECT NO. 67543
DRAWN BY: BAS/BN	DATE: APRIL, 1998
CHECKED BY: BAS	SHEET 5 OF 7



NOTE:
 $17.8417^\circ = 33\frac{1}{2}$
 $27.1583^\circ = 66\frac{1}{2}$



State of Alaska
 Dept. of Transportation and Public Facilities
 Marine Facilities Engineering

CONTRACTOR SUBMITTAL REVIEW

Checking is only for conformance with the design concept of the proposal and compliance with the information given in the Contract Documents. The Contractor is responsible for information that pertains solely to the fabrication process or to techniques of construction and for coordination of the work of all trades.

ACCEPTED AS NOTED
 RETURNED FOR CORRECTION *WMA 7-6-96*

Date _____ Project Engineer _____

BILL OF MATERIAL						
NO TO SHIP	SHIP MARK	NO PCS	PC MK	SECTION	LENGTH	RE MARKS
					FT	
ONE	1A			HAWSER PIPE 6" STD.		
1	a					
1	b					
1	c					
1	d					
2	e					
2	f					
1	g					
1	h					
1	i					
1	j					
1	k					
1	l					
1	m					
1	n					
1	o					
1	p					
1	q					
1	r					
1	s					
1	t					
1	u					
1	v					

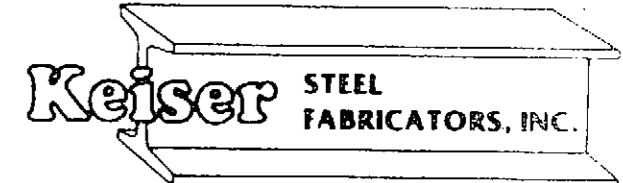
CUT TO 157.5°

45° ELBOW OR SIMILAR READD
 (At 45° angle 1/2" x 1/2")

ONE ~ HAWSER RAIL ~ 1A
 (SOUTH FENDER)

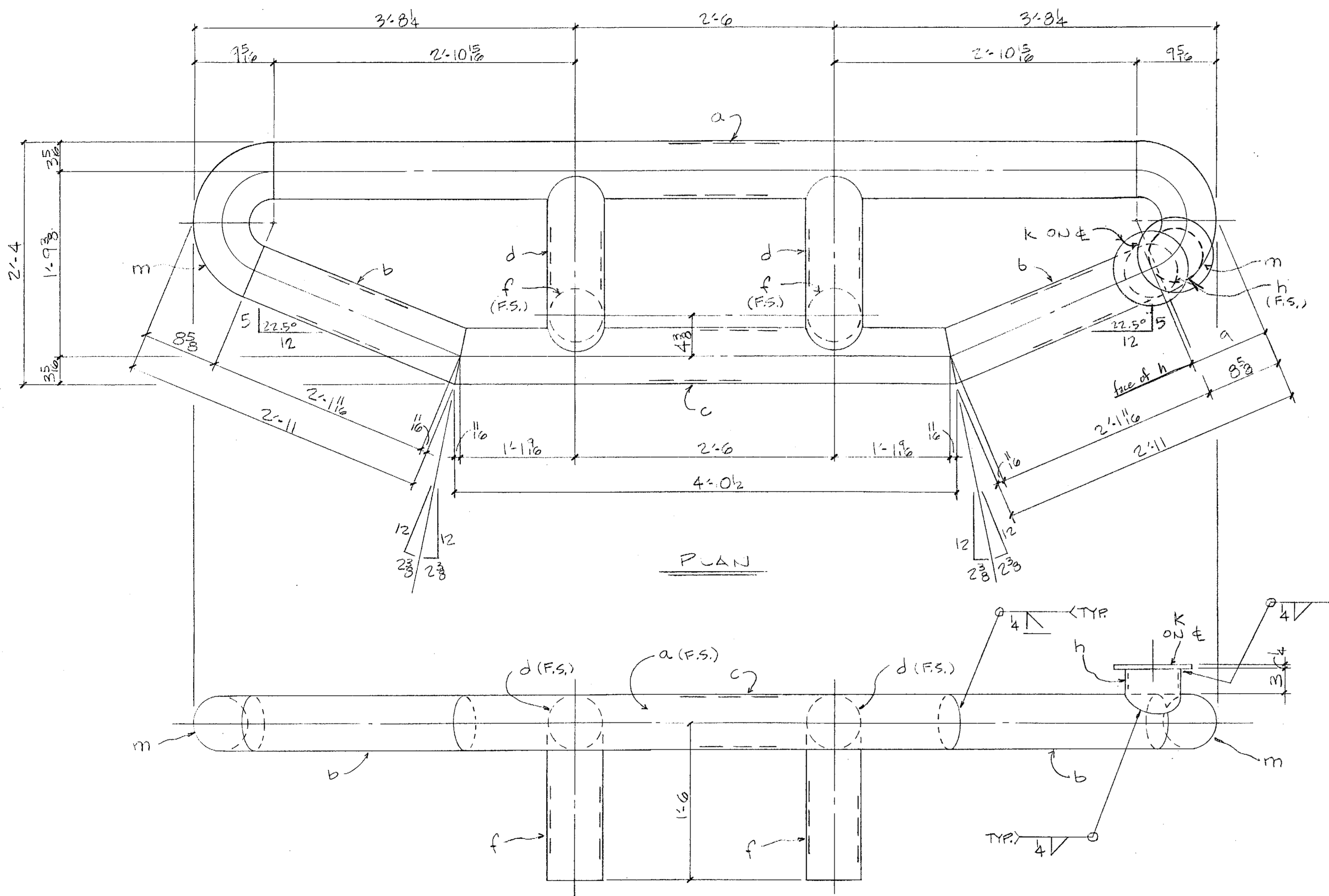
ADD VENT HOLES FOR GALVANIZING AS REQD.

MAT'L SPEC _____
 OPEN HOLES _____ EXCEPT AS NOTED
 END & EDGE DIST _____ EXCEPT AS NOTED
 PAINT GALV.
 SHIP TO _____
 ERECTION BY _____



22620 85th PL., S. - KENT, WA. 98031 - (253) 852-1910
 FAX: (253) 852-8398

DATE:	APPROVED:	DRAWN BY:
HAWSER RAIL		
SKAGWAY FERRY TALK		
IMPROVEMENTS		
CONTRACTOR:	JOB NO:	DRAWING NO:
WESTERN MARINE	703	



ONE ~ HAWSER RAIL ~ 2A
(MIDDLE FENDER)

CUT TO 157.5°

State of Alaska
Dept. of Transportation and Public Facilities
Marine Facilities Engineering

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ACCEPTED _____
ACCEPTED AS NOTED Wm 7-6-98
RETURNED FOR CORRECTION _____

Date _____ Project Engineer _____

ADD VENT HOLES FOR GALVANIZING AS REQD.

BILL OF MATERIAL							
NO TO SHIP	SHIP MARK	NO PCS	PC MK	SECTION	LENGTH		REMARKS
					FT	IN	
ONE 2A				HAWSER RAIL			
1	a			PIPE 6" STD.	6.375		50.2 E.
2	b				2.25		51 E, B1 E.
1	c				4.10		2 E.
2	d				1.9		
2	f				1.6		50.1 E.
1	h				0.6		
1	k			2 1/2 x 8 1/2 P			
2	m			180° 6" STD.			SHOULDER RAIL, ELEV W

MAT'L SPEC: _____
OPEN HOLES: _____ EXCEPT AS NOTED
END & EDGE DIST: _____ EXCEPT AS NOTED
PAINT: GALV.
SHIP TO: _____
ERECTION BY: _____

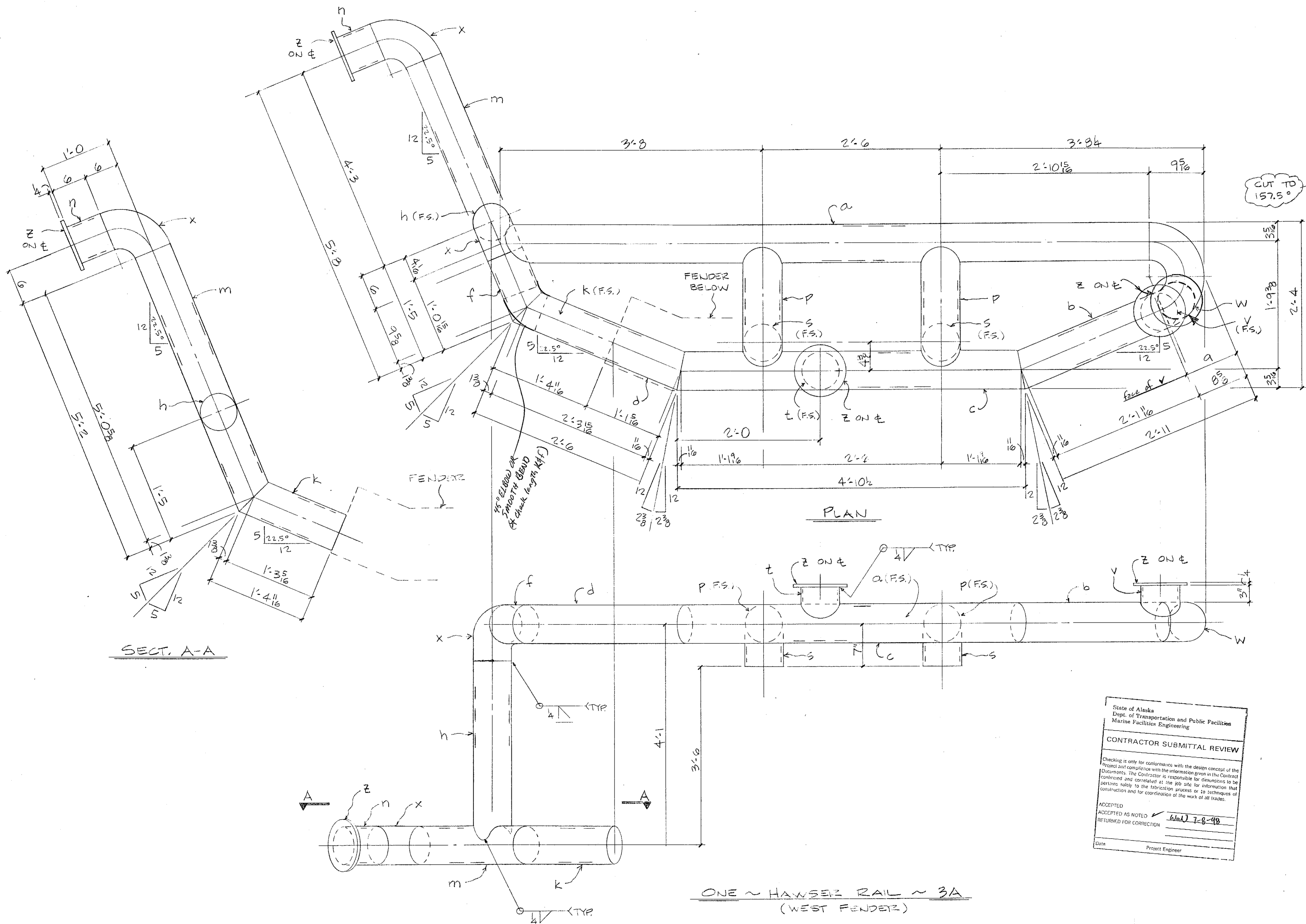
Keiser STEEL FABRICATORS, INC.

22620 85th PL., S., KENT, WA. 98031 . (253) 852-1910
FAX: (253) 852-8398

DATE: _____ APPROVED: _____ DRAWN BY: MS
CHK'D BY: M

HAWSER RAIL
SKAGWAY FERRY TERMINAL
IMPROVEMENTS

CONTRACTOR: WESTERN MARINE JOB NO: 98-33 DRAWING NO: 2 REV: _____



BILL OF MATERIAL

NO TO SHIP	SHIP MARK	NO PCS	PC MK	SECTION	LENGTH		REMARKS
					FT	IN	
ONE 3A				HAWSER RAIL			
1	a			PIPE 6" STD.	9	1 1/2	SQ. I.E.
1	b				2	2 3/8	S.I.E., B.I.E.
1	c				4	10 1/2	BEV. 2 E.
1	d				2	6	
1	f				2	11	S.I.E., B.I.E.
1	h				3	7	
1	k				1	4 1/8	
1	m				5	2	
1	n				0	6	SQ. 2 E.
2	p				1	9 1/2	
2	s				0	7 1/2	SQ. I.E.
1	t				0	6 1/2	
1	v				0	6 1/2	
1	w			180°-6" STD.			SHORT RAD. ELBOW
2	x			90°			
3	z			PL 4" x 8 1/2"			

State of Alaska
Dept. of Transportation and Public Facilities
Marine Facilities Engineering

CONTRACTOR SUBMITTAL REVIEW

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ACCEPTED
ACCEPTED AS NOTED
RETURNED FOR CORRECTION

DATE: 4/11/78
Project Engineer

MAT'L SPEC. _____
OPEN HOLES _____ EXCEPT AS NOTED
END & EDGE DIST _____ EXCEPT AS NOTED
PAINT GAUL
SHIP TO _____
ERECTION BY _____

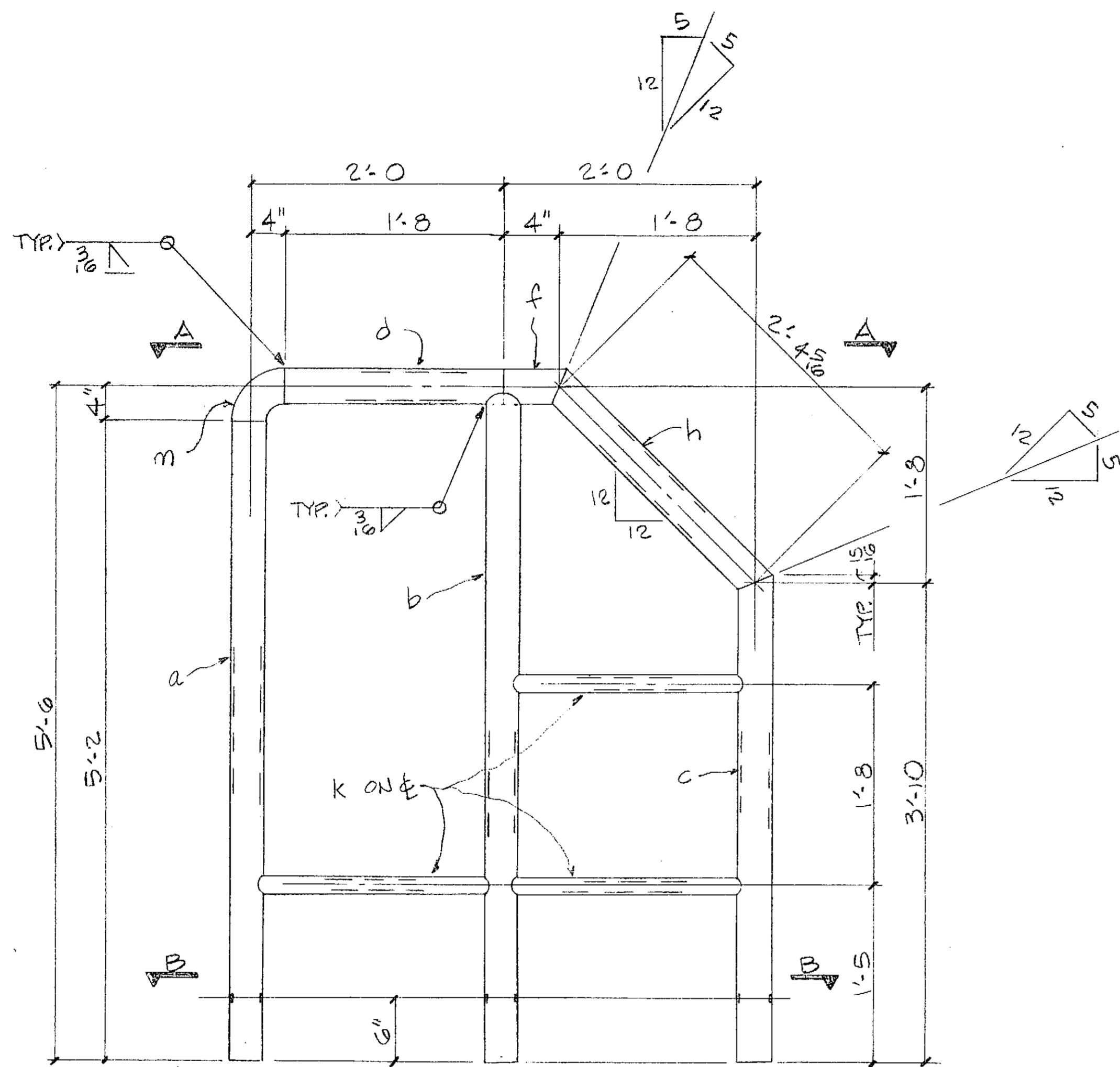


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FAX: (253) 852-8398

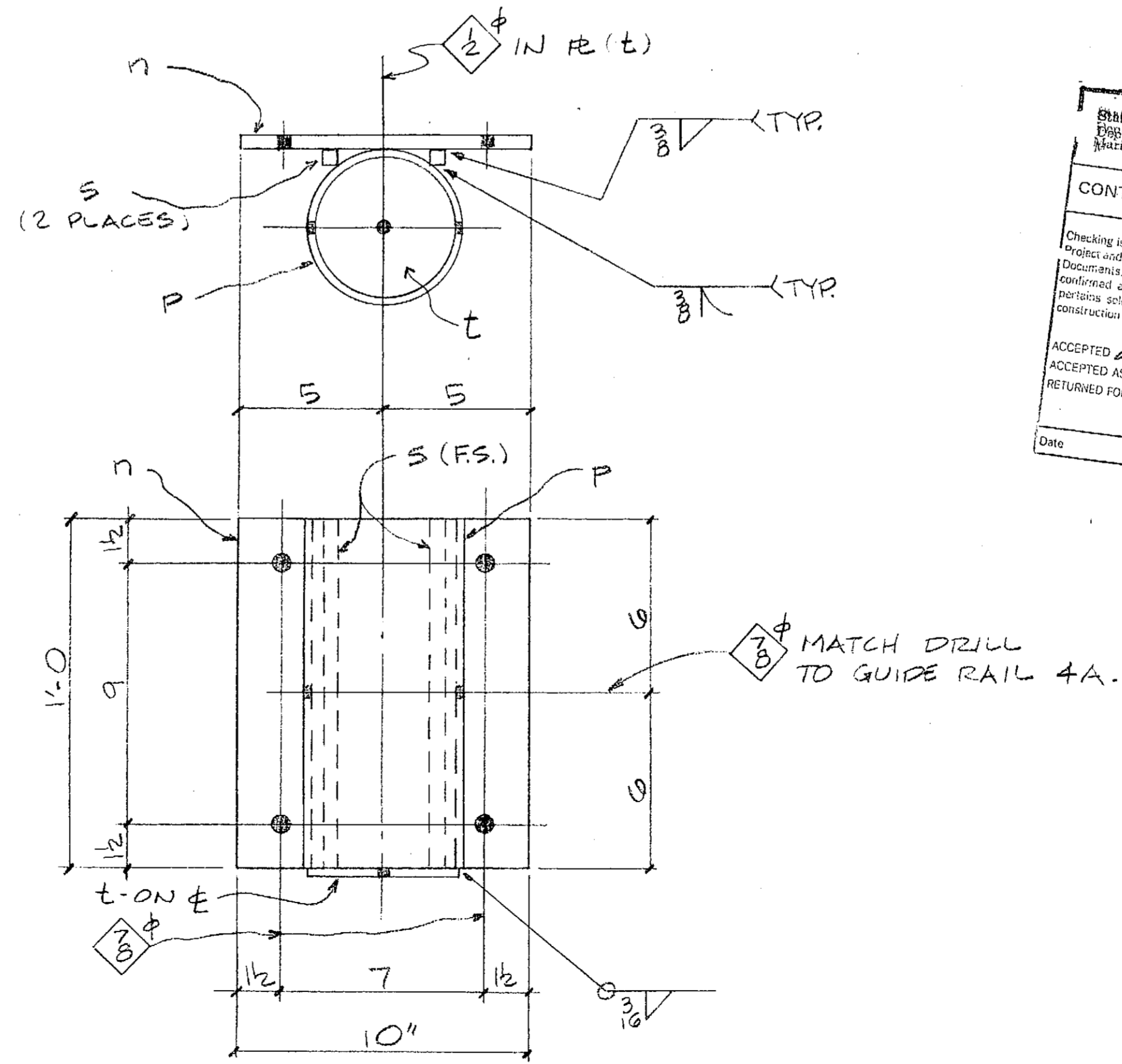
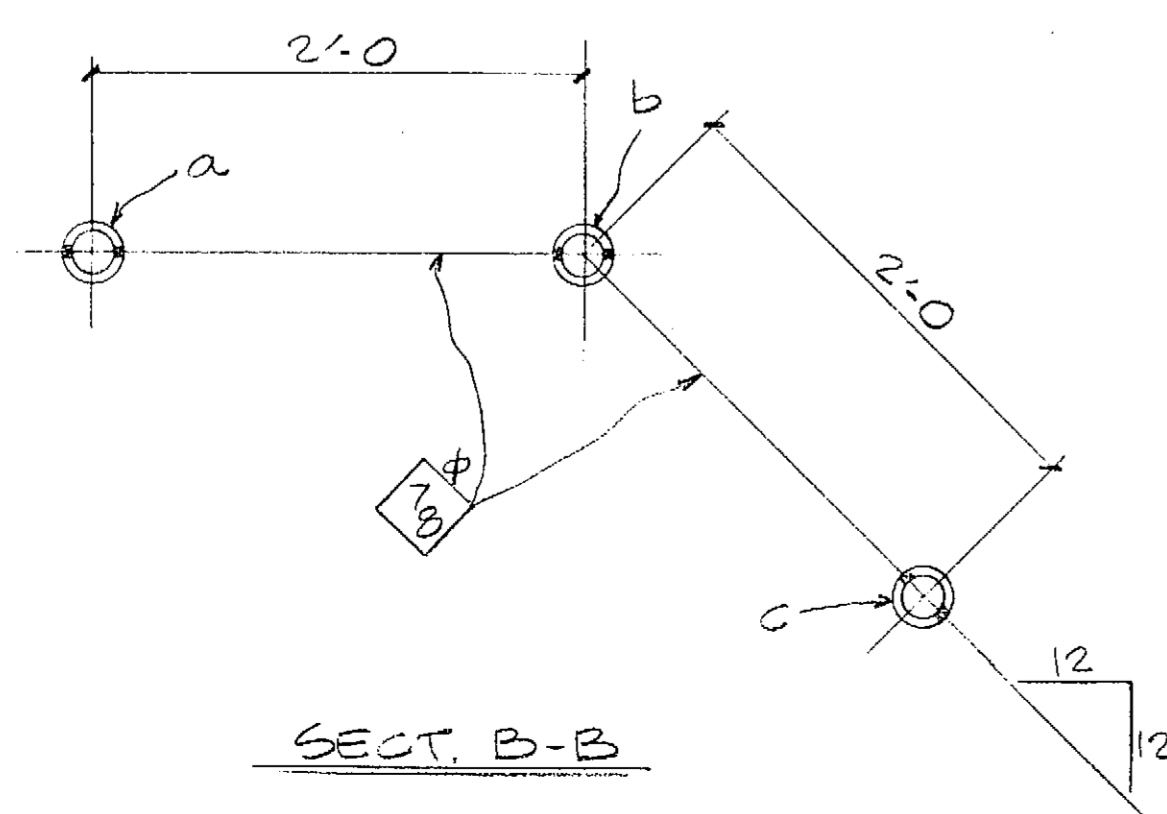
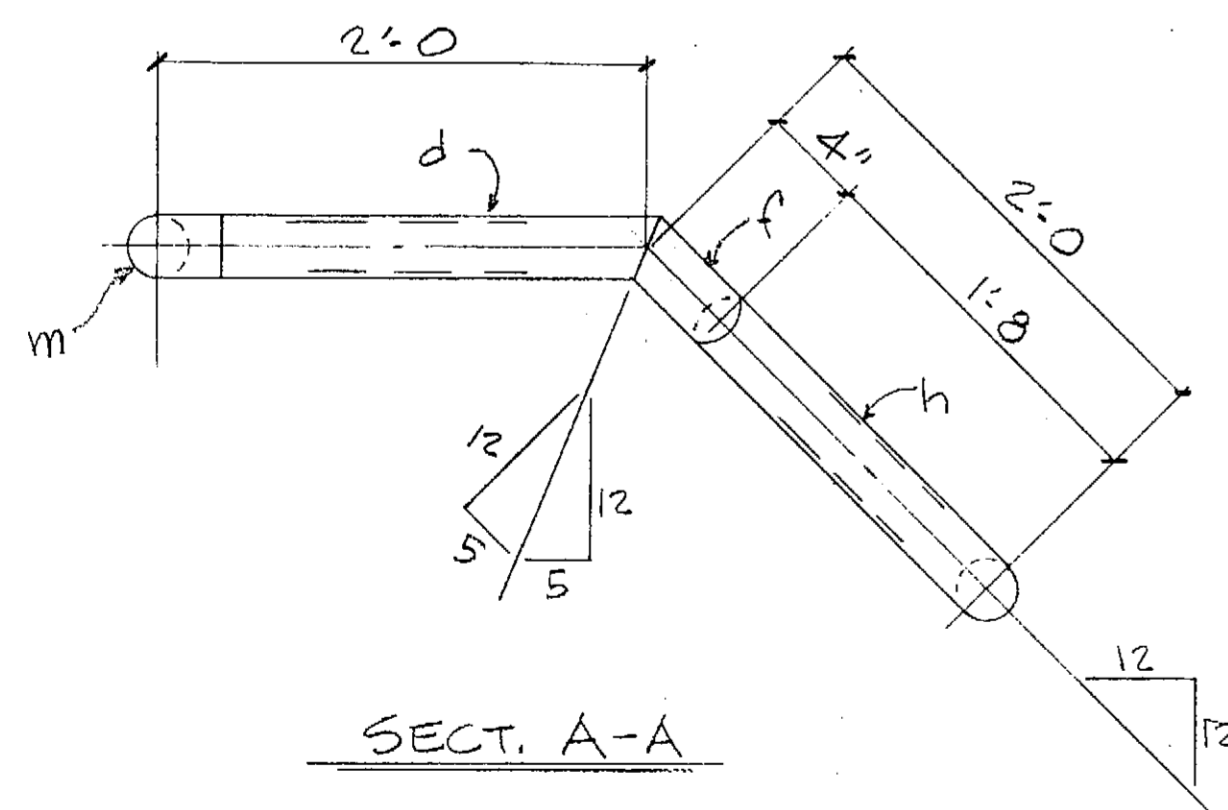
DATE:	APPROVED:	DRAWN BY: <u>BJ</u>
		CHK'D BY: <u>M</u>
HAWSER RAIL		
SLAGWAY FERRY TERMINAL		
IMPROVEMENTS		
CONTRACTOR:	JOB NO:	DRAWING NO:
WESTERN MARINE	98-38	3

ADD VENT HOLES FOR GALVANIZING AS REQD.

ONE ~ HAWSER RAIL ~ 3A
(WEST FENDERS)



ONE ~ GUIDE RAIL ~ 4A
"SHOWN DEVELOPED"



3 ~ SOCKET ~ 4B

ADD VENT HOLES FOR GALVANIZING AS REQ'D.

State of Alaska
Dept. of Transportation and Public Facilities
Electric Facilities Engineering

CONTRACTOR SUBMITTAL REVIEW

Checking is only for conformance with the design concept of the Project and conformance with the information given in the Contract Documents. The Contractor is responsible for dimensions to be performed and corrected at the job site for information that construction and for coordination of the work of all trades.

ACCEPTED Wahl 7-9-98
ACCEPTED AS NOTED _____
RETURNED FOR CORRECTION _____

DATE _____ Project Engineer

BILL OF MATERIAL

NO TO SHIP	SHIP MARK	NO PC'S	PC MK	SECTION	LENGTH		REMARKS
					FT	IN	
ONE 4A							
1	a			GUIDE RAIL	5	2	SQ. 2 E.
1	b			PIPE 4" STD.	5	6	SQ. 1 E.
1	c				3	10	S.I.E., B.I.E.
1	d				1	8	↓ ↓
1	f				0	5	BEV. 2 E.
1	h				2	6	↓ ↓
3	k			PIPE 1/2" STD.	2	0	
1	m			90°-4" STD. SOCKET			RAD. ELBOW

3 4B							
3	n			SOCKET			
3	p			FL 2x10	1	0	
6	s			PIPE 5"x5"	1	0	
3	t			BAR 2x2	1	0	
				FL 4x5" P			0

FIELD BOLTS

3	3/4" A307	0 6 1/2"	W/JWT
12	3/4" TH308	0 8"	W/J3W

MATL SPEC. _____
OPEN HOLES _____ EXCEPT AS NOTED
END & EDGE DIST _____ EXCEPT AS NOTED
PAINT GRALV.
SHIP TO _____
ERECTION BY _____

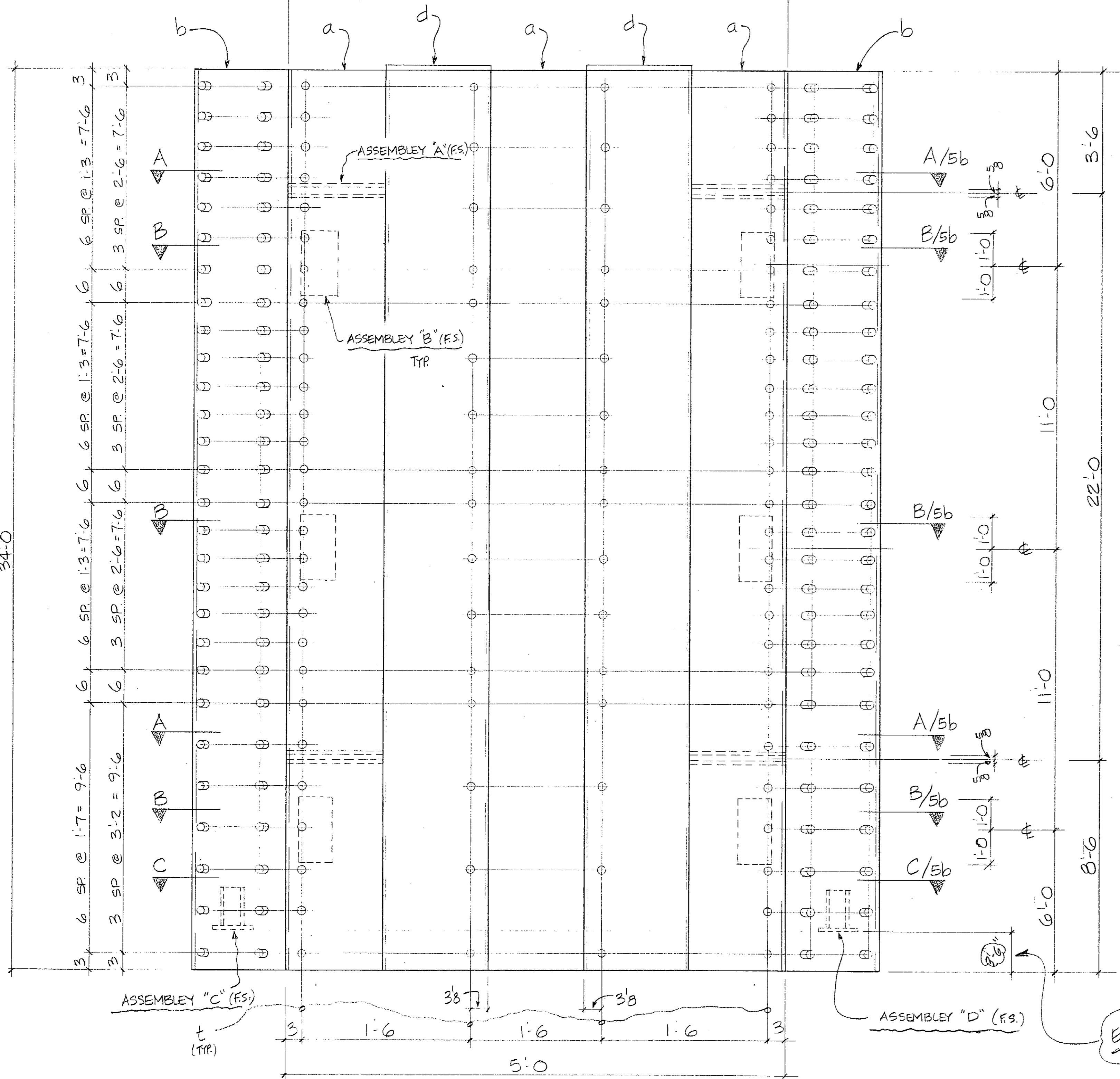
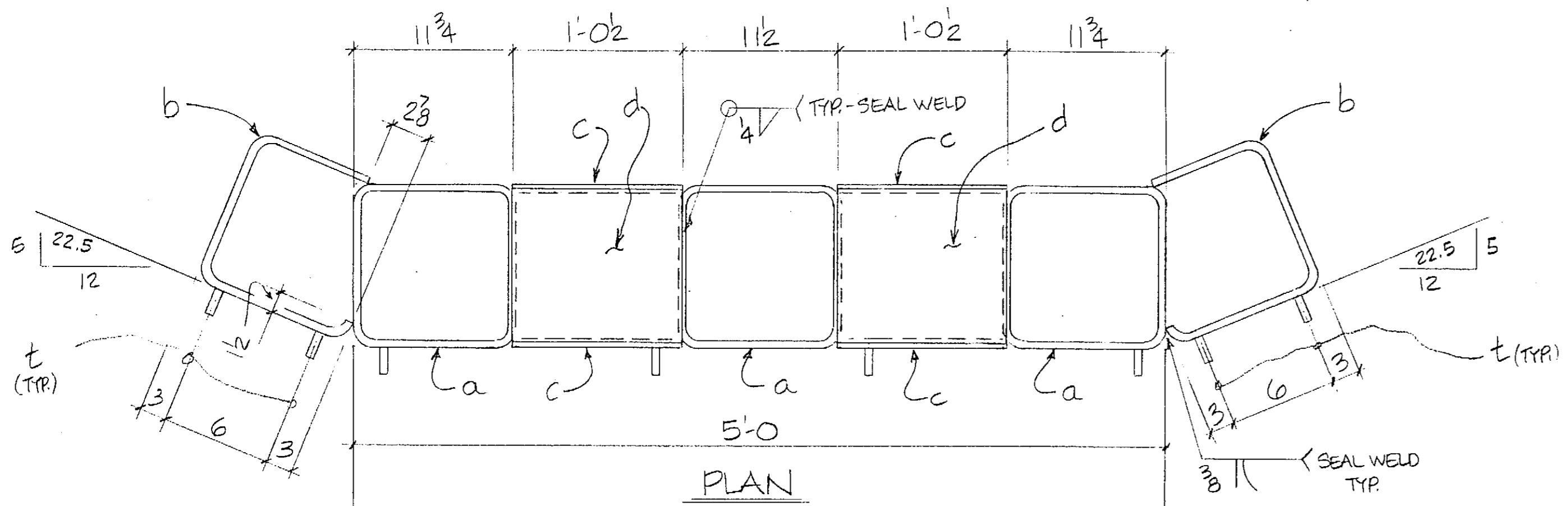


22620 85th PL., S., KENT, WA. 98031 . (253) 852-1910
FAX: (253) 852-8398

APPROVED: _____ DRAWN BY BJ
DATE: _____ CHK'D BY JM

GUIDE RAIL AND SOCKET
SKAGWAY FERRY TERMINAL
IMPROVEMENTS

CONTRACTOR: WESTERN MARINE JOB NO: 98-33 DRAWING NO: 4 REV: _____



3-FENDER PANEL - 5A (GALV.)

SHOP - VERIFY
124" WIDTH

ENG - PLEASE
SUPPLY

SHOP ~
1.) WORK THIS DWG W/ DWG. 5b.
2.) ADD VENT HOLES TO SUIT GALV.

BILL OF MATERIAL

NO TO SHIP	SHIP MARK	NO PC'S	PC MK	SECTION	LENGTH		REMARKS
					FT	IN	
3	5A			FENDER PANELS			GALV.
9	a			T3/2 x 12 x 1/2	34	0	
6	b				34	0	COPE
12	c			R 5/8 x 124	34	0	
6	d			R 1/2 x 11 1/2	1	0 1/2	
24	f			R 3/4 x 5	1	0	SHAPE
12	h			R 1/2 x 14	0	9 3/8	
18	k			T 7 x 4 x 1/2	2	0	BEV. ZE
36	m			1" A325 BOLT	0	5 1/2	W/ NUT & JAM NUT
6	n			R 1/2 x 8 1/4	0	9 1/4	SHAPE
12	p			R 3/4 x 6	0	9	
6	s			R 1/2 x 14	0	9	
600	t			1/2" THD STUD	0	1"	1" LENGTH AFTER WELD ~ W/ JAM NUT & 2" O.D. WASHER

State of Alaska
Dept. of Transportation and Public Facilities
Marine Facilities Engineering

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ACCEPTED AS NOTED: WMA 7-8-98
RETURNED FOR CORRECTION: _____
Date: _____ Project Engineer

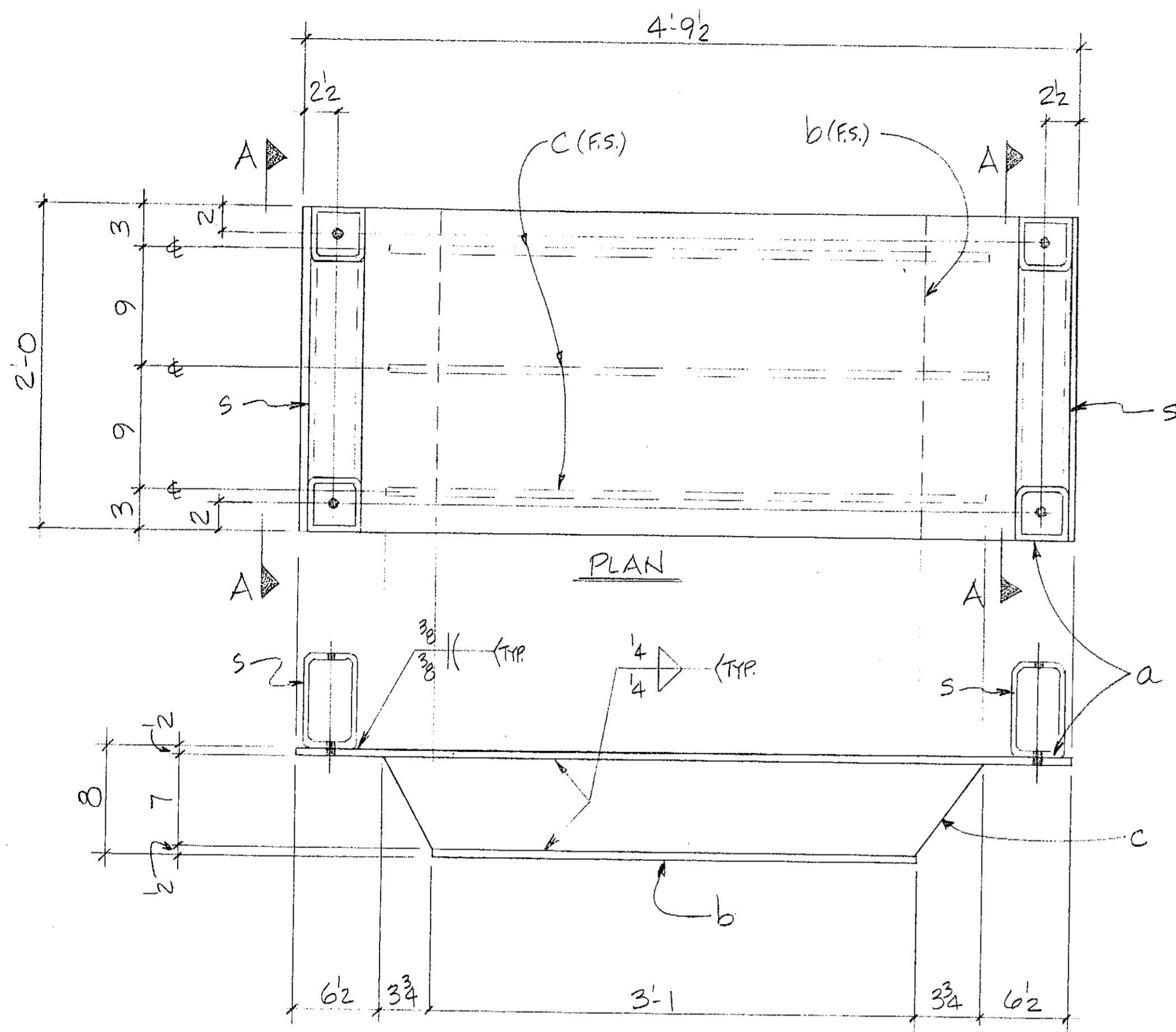
MAT'L SPEC: _____
OPEN HOLES: _____ EXCEPT AS NOTED
END & EDGE DIST: _____ EXCEPT AS NOTED
PAINT: GALVANIZE
SHIP TO: _____
ERECTION BY: _____



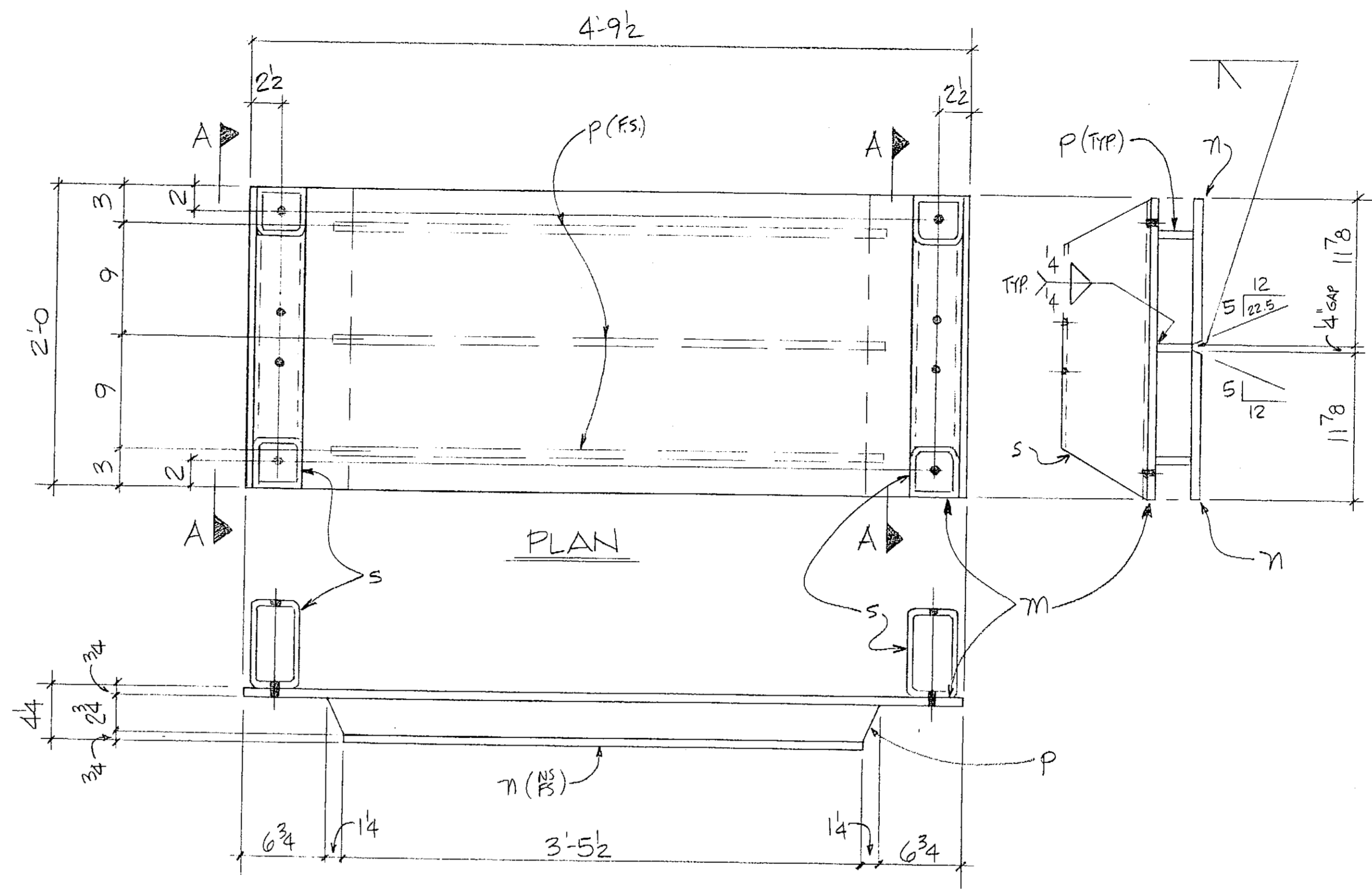
22620 85th PL., S., KENT, WA. 98031 . (253) 852-1910
FAX: (253) 852-8398

DATE:	APPROVED:	DRAWN BY: <u>PM</u>
		CHEK'D BY: <u>M</u>
FENDER PANELS SKAGWAY FERRY TERMINAL IMPROVEMENTS		
CONTRACTOR: WESTERN MARINE	JOB NO: 98-38	DRAWING NO: 5a

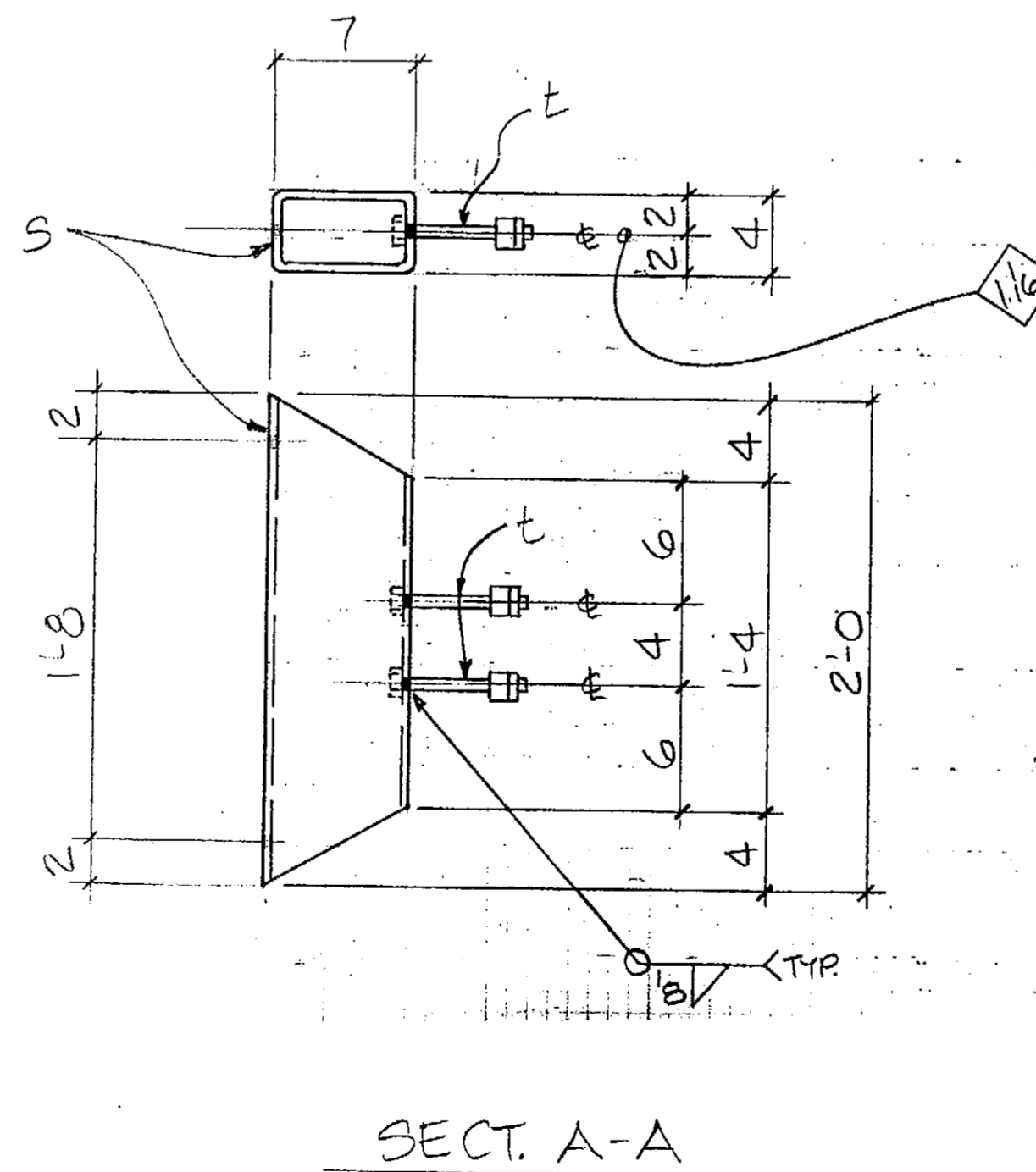
WMA 7-7-98
1142A
REVISIONS



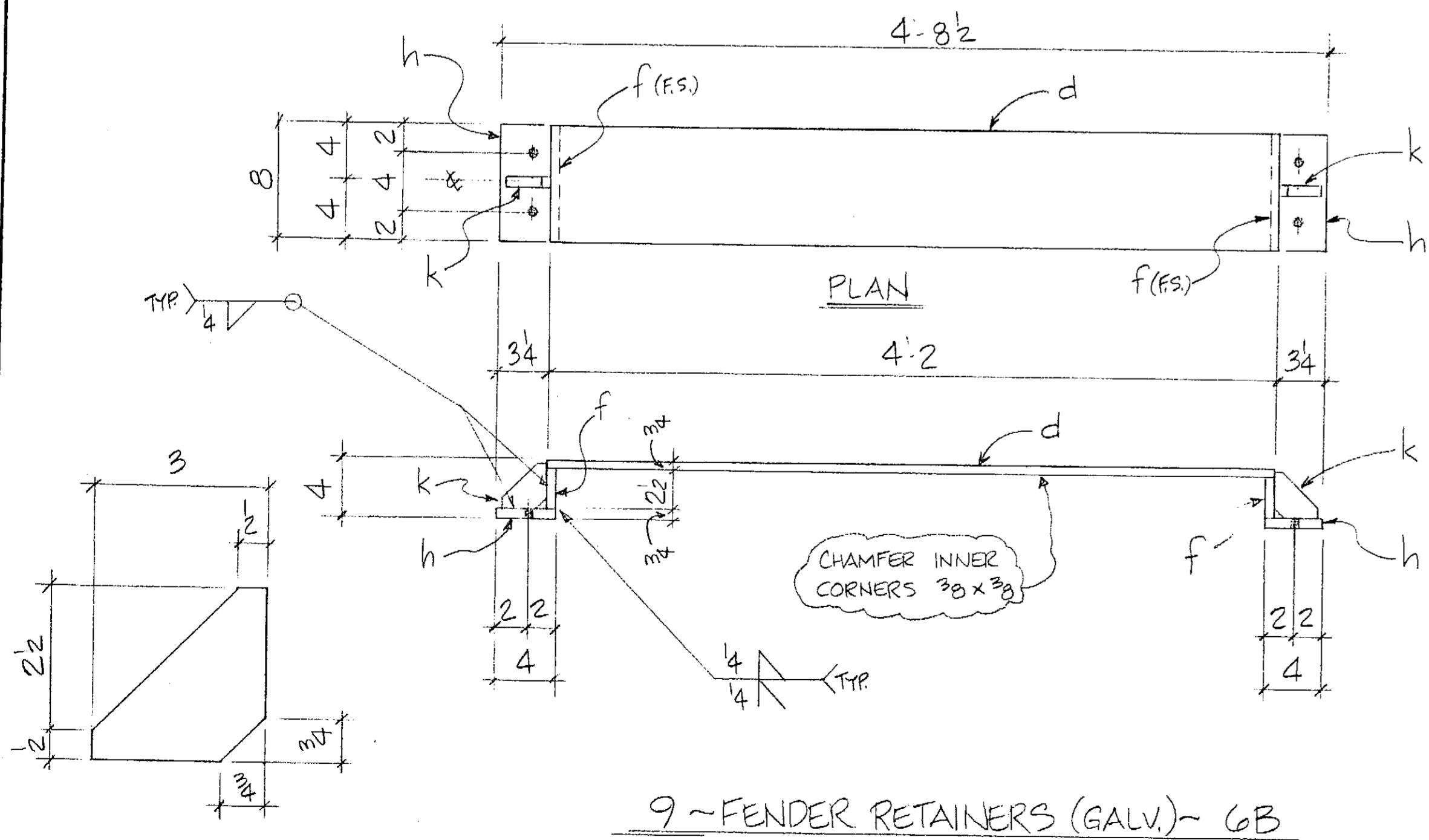
6 ~ FENDER BRACKET (GALV.) ~ GA
(EXTERIOR)



3 ~ FENDER BRACKETS (GALV.) ~ GC
(INTERIOR)



SECT. A-A



9 ~ FENDER RETAINERS (GALV.) ~ GB

BILL OF MATERIAL

NO TO SHIP	SHIP MARK	NO PCS	PC MK	SECTION	LENGTH		REMARKS
					FT	IN	
6	GA			FENDER BRACKET			GALV.
		6	a	PL 2 x 24	4	9 1/2	
		6	b			3	
		18	c	PL 1 x 7	3	8 1/2	SHAPE
		12	s	TS 7 x 4 x 1/2	2	0	BEV. 2E
		24	t	1\"/>			

9	GB			FENDER RETAINER			GALV.
		9	d	PL 3/4 x 8	4	2	
		18	f	PL 3/4 x 2 1/2	0	8	
		18	h	PL 3/4 x 4	0	8	
		18	k	PL 3/4 x 3	0	3	SHAPE

3	GC			FENDER BRACKET			GALV.
		3	m	PL 3/4 x 24	4	9 1/2	
		6	n	PL 3/4 x 11 1/8	3	5 1/2	BEV. EDGE
		9	p	PL 1\"/>			

State of Alaska
Dept. of Transportation and Public Facilities
Marine Facilities Engineering

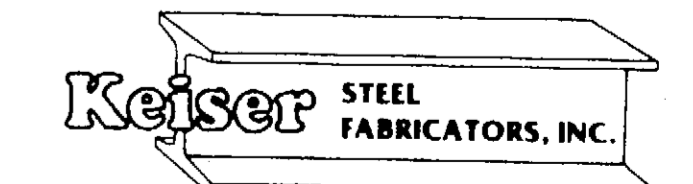
CONTRACTOR SUBMITTAL REVIEW

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ACCEPTED (WLN) 7-8-99
ACCEPTED AS NOTED
WORKED FOR CORRECTION

Date _____
Project Engineer _____

MAT'L SPEC: _____
OPEN HOLES: 1/16\"/>

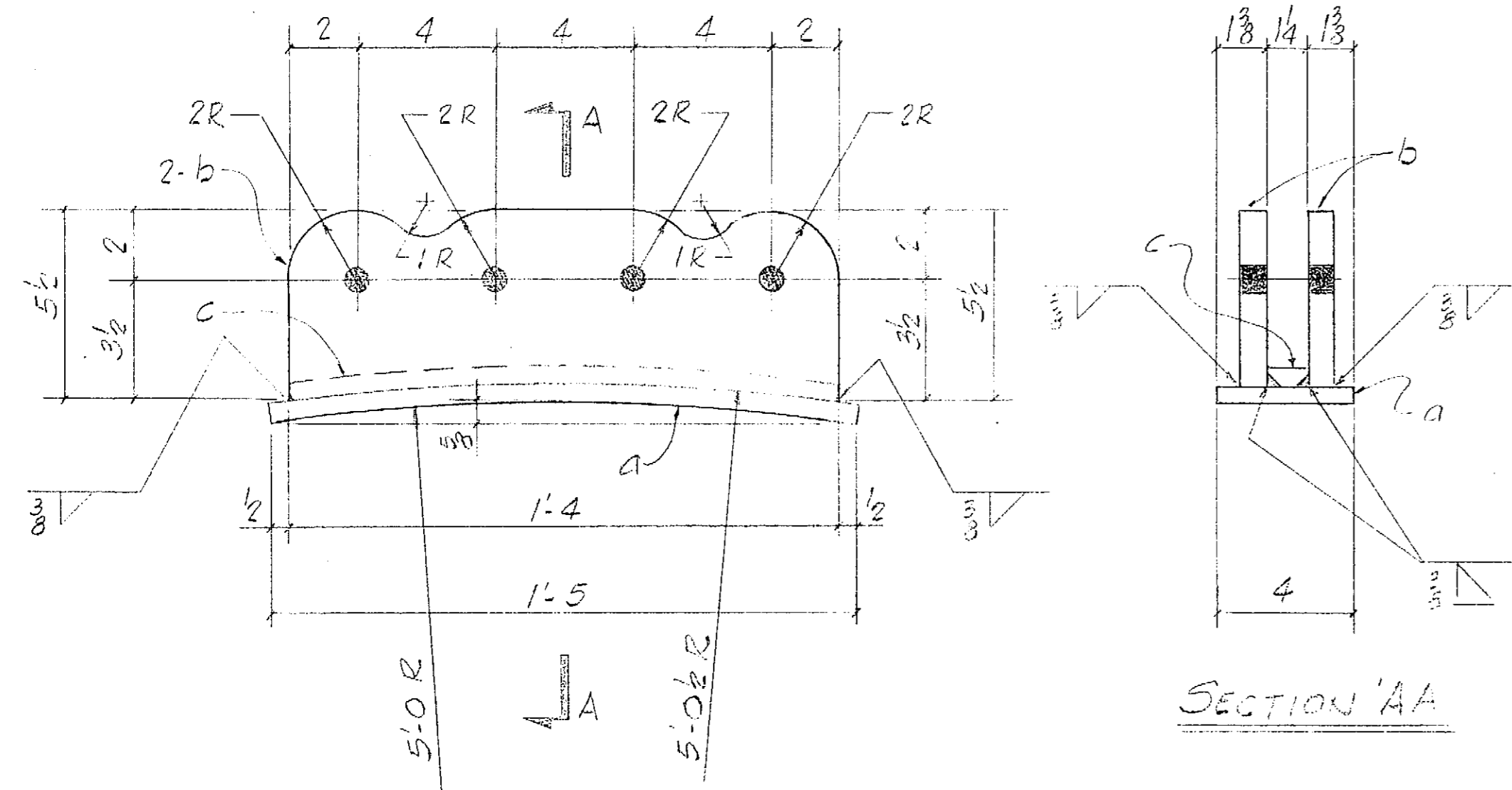


22620 85th PL., S. KENT, WA. 98031. (253) 852-1910
FAX: (253) 852-8398

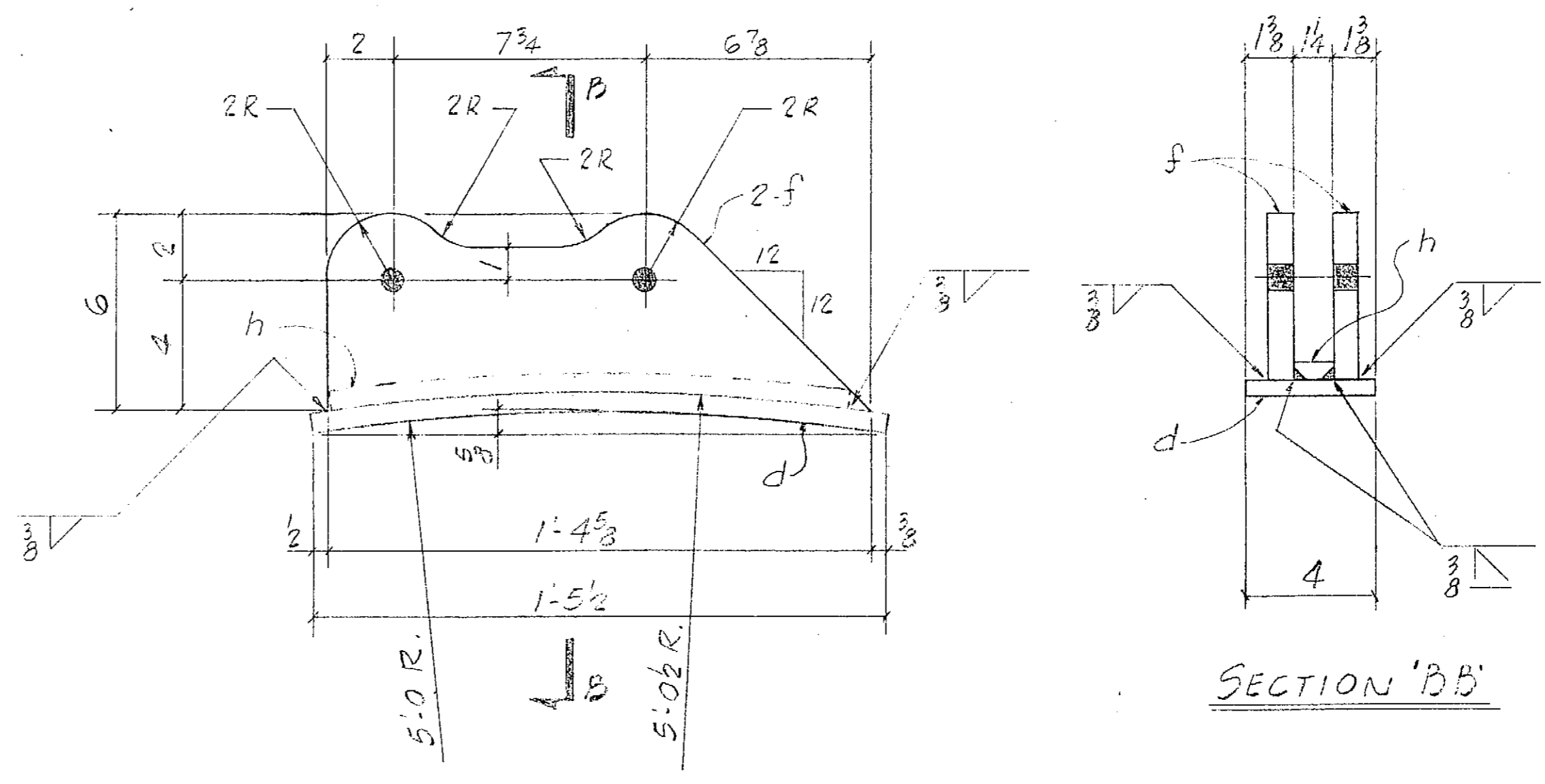
DATE:	APPROVED:	DRAWN BY: <i>DM</i>
		CHECKED BY:
FENDER BRACKETS SKAGWAY FERRY TERMINAL IMPROVEMENTS		
CONTRACTOR: WESTERN MARINE	JOB NO: 98-38	DRAWING NO: 6
		REV

BILL OF MATERIAL

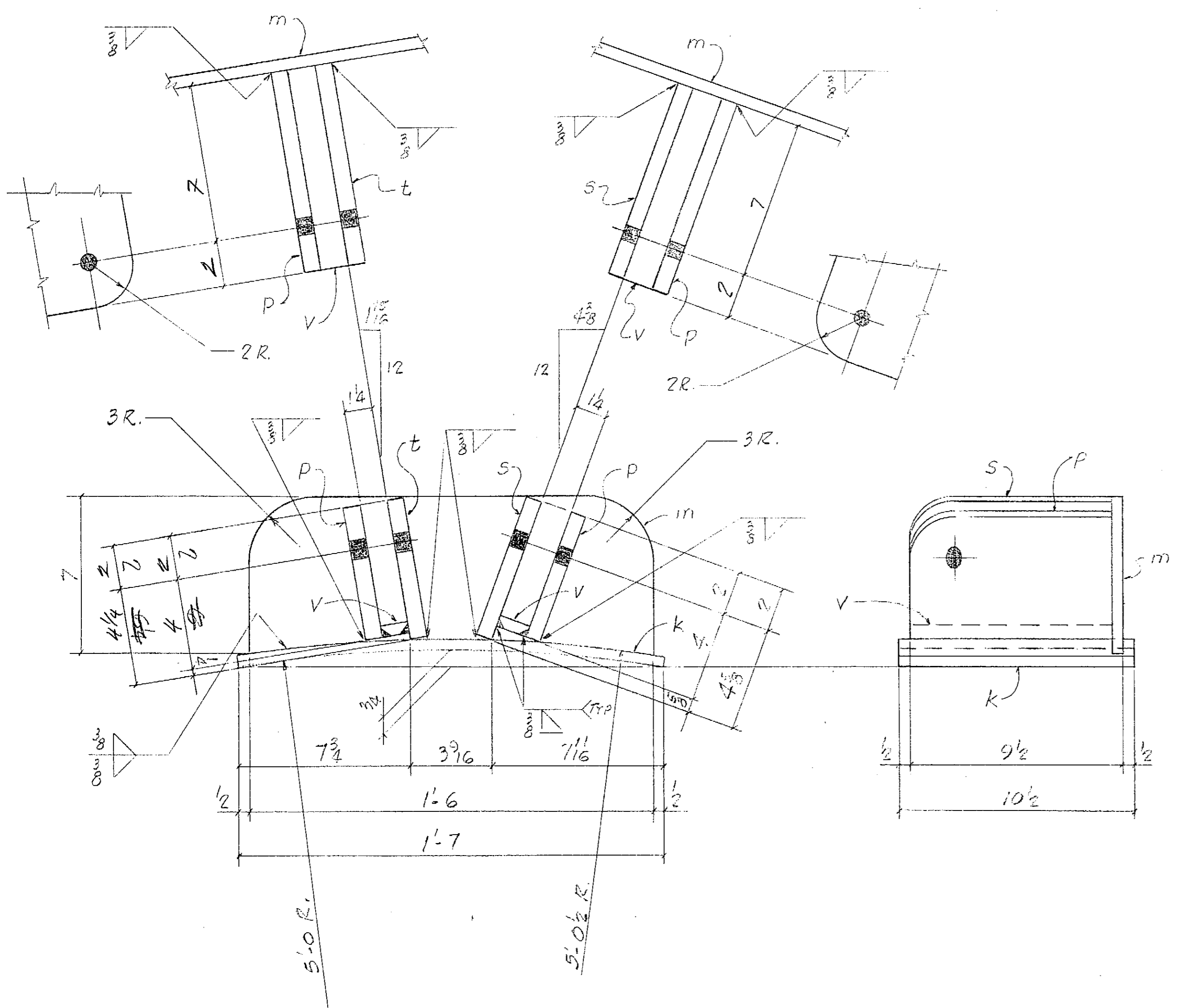
NO TO SHIP	SHIP MARK	NO PCS	PC MK	SECTION	LENGTH		REMARKS
					FT	IN	
4	8A			DOUBLE PAD EYE - INNER			GALV.
		4	a	1/2 x 4	1	5	ROLL
		8	b	3/4 x 5 1/2	1	4	Ⓣ
		4	c	1/2 x 14	1	4	ROLL
4	8B			DOUBLE PAD EYE - OUTER			GALV.
		4	d	1/2 x 4	1	5 1/2	ROLL
		8	f	3/4 x 6	1	4 3/8	Ⓣ
		4	h	1/2 x 14	1	4	ROLL
ONE	8C			SUPPORT PAD EYE - TOP INNER - GALV.			
ONE	8D			do do do do do do			
		2	k	1/2 x 10 1/2	1	7	ROLL
		2	m	1/2 x 7	1	6	Ⓣ
		4	p	3/4 x 6	0	9	Ⓣ
		2	s	3/4 x 6 3/8	0	9	Ⓣ
		2	t	3/4 x 6 1/2	0	9	Ⓣ
		4	v	3/4 x 14	0	9	
ONE	8F			SUPPORT PAD EYE - TOP OUTER - GALV.			
ONE	8G			do do do do do do			
		2	w	1/2 x 10 1/2	0	10 3/8	ROLL
		2	x	1/2 x 8	0	11 1/4	Ⓣ
		2	y	3/4 x 7 1/2	0	9	Ⓣ
		2	z	3/4 x 14	0	9	
		2	p	1/2			



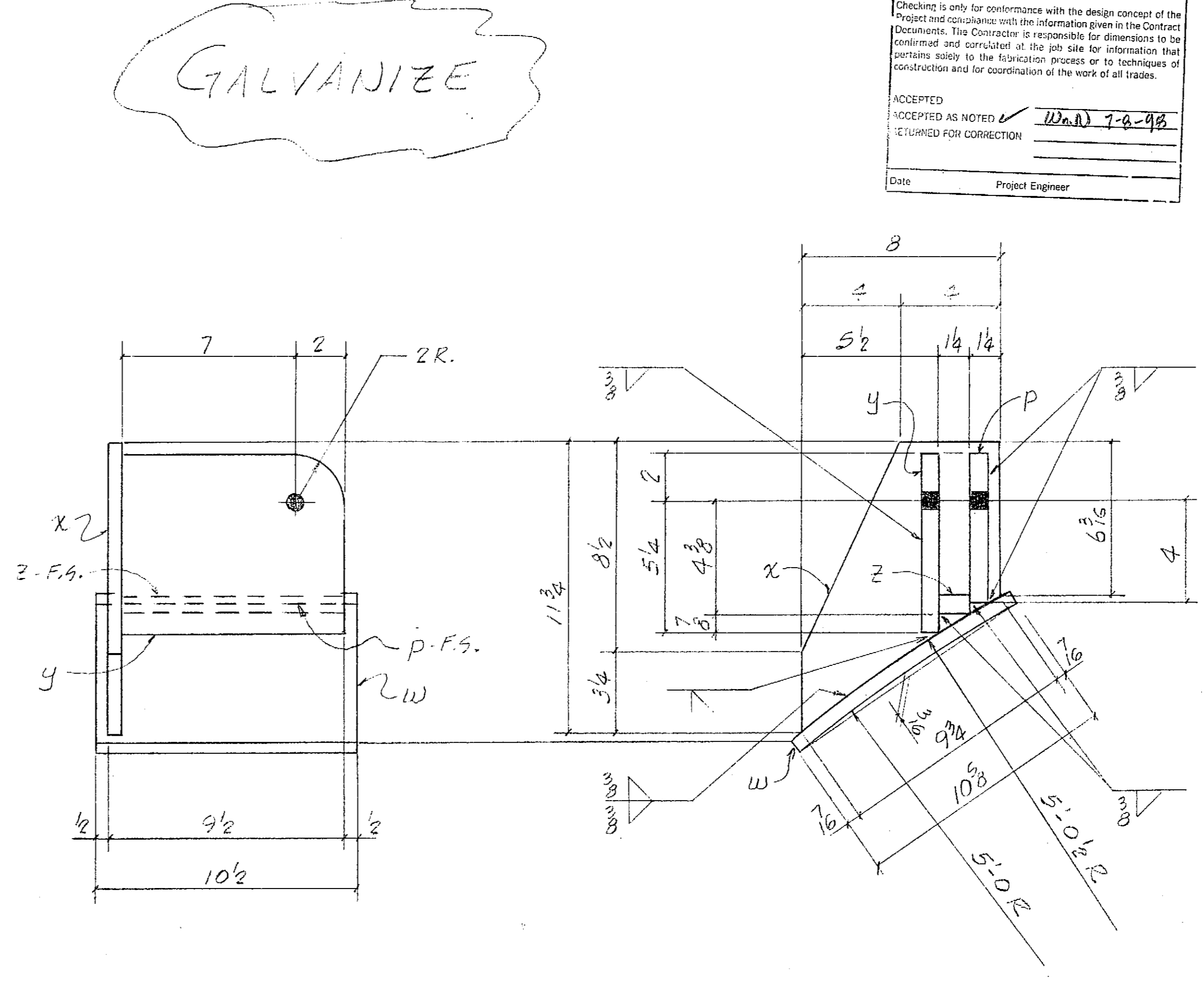
4 - DOUBLE PAD EYE (INNER) - 8A



4 - DOUBLE PAD EYE (OUTER) - 8B



ONE - SUPPORT PAD EYE (TOP INNER) - 8C
ONE - SUPPORT PAD EYE (TOP INNER) - 8D - OPPOSITE HAND



ONE - SUPPORT PAD EYE (TOP OUTER) - 8F
ONE - SUPPORT PAD EYE (TOP OUTER) - 8G - OPPOSITE HAND

GALVANIZE

State of Alaska
Dept. of Transportation and Public Facilities
Marine Facilities Engineering

CONTRACTOR SUBMITTAL REVIEW

Checking is only for conformance with the design concept of the Project and compliance with the information given in the Contract Documents. The Contractor is responsible for dimensions to be confirmed and consulted at the job site for information that pertains safety to the fabrication process or to techniques of construction and for coordination of the work of all trades.

ACCEPTED
ACCEPTED AS NOTED *W.A.N. 7-6-98*
RETURNED FOR CORRECTION

Date: _____ Project Engineer

MAT'L SPEC: _____
OPEN HOLES: 1/4" EXCEPT AS NOTED
END & EDGE DIST: NOTED EXCEPT AS NOTED
PAINT: GALVANIZED
SHIP TO: _____
ERECTION BY: _____

Keiser STEEL FABRICATORS, INC.

22620 85th PL., S. KENT, WA. 98031 (253) 852-1910
FAX: (253) 852-8398

APPROVED: _____ DRAWN BY: *Q*
DATE: _____ CHECK'D BY: _____

PAD EYE DETAILS
SKAGWAY FERRY TERMINAL
IMPROVEMENTS

CONTRACTOR: WESTERN MARINE JOB NO: 98-38 DRAWING NO: 8 REV: _____