APPENDIX B

The Corp. Of The Mun. Of Sioux Lookout

CONTRACT NUMBER: RFP R029-2018

FLOATING DOCK SYSTEM
SIOUX LOOKOUT WATERFRONT

DRAWINGS INDEX

Design Brief

Design Loads

Vertical Loads
The dock floatation is designed to support the dead weight of the dock and accessories, plus an additional live load of 100 kg/square meter.

The deck and structural components shall support dead load plus a concentrated vertical live load of 300 kg located anywhere on the deck surface.

Freeboard
Under dead load only the freeboard shall be between of 20" - 24". The approximate actual freeboard under dead load only will be 560 mm (22 in). Under dead load, including that of the ramp, the main dock will not list or pitch more than 25 mm on the overall length or width of each unit.
Where the ramp rests on the floating structure, extra compatible floatation will be added to keep level under dead load.

Stability
The dock frame is designed for torsional stability against concentrated vertical load.
The docks will withstand the referenced live loading distributed over half the width of the docks without tilting more than 10%.

All docks and dock connections are designed to withstand an impact load of 3,600 lbs at a location creating the largest moment to connections.

Gaps between adjacent float units shall not be wider than 20 mm. Where this is unavoidable, cover plates will be provided.

Lateral/horizontal Loading

Wind
The docks are designed to withstand a uniform wind speed of 20 m/s.

Waves
The floating dock system is designed to withstand the loads generated by 0.75 m waves.

Ice and Snow
The floating units and mooring system are designed to withstand ice loading from freezing and thawing of the lake and ground snow loads as per the Ontario Building Code 2012.

Impact
Finger docks are designed to withstand the berthing and mooring loads from a typical vessel moving at 1 m/s and striking the end of the finger at 10 degrees off center line. Typical vessel sizes summarized below:

Steel Pipe Floating Units

Spiral welded steel pipe, 24" diameter x 0.188" wall. All steel welding to meet CWB Standards - CSA W47.1.

Flotation pipes run full length and are closed off with fully welded 6.4 mm end plates. All welds leak tested with soap solution at 25 psi.

Coatings and Corrosion Protection

-All steel surfaces sandblasted to SSPC-SP6 (commercial blast)
-Blasting carried out in indoor blast booth using steel grit blast media
oAll blast media to be reclaimed and recycled
oAll exhaust air properly filtered prior to being released
-Amerlock 2 epoxy coating applied to all steel surfaces
oCoating applied to 12.0 mils DFT
-Coating applied in climate controlled indoor paint booth

Magnesium sacrifical anodes are to be bolt-mounted to each float pipe for additional corrosion protection.
Anodes are to be inspected annually and replaced if required.

Moorings

Minimum 4 ton concrete anchor blocks

Seaflex Flexible mooring rodes
- 4 strand Seaflex with safety backup
- Polyester rope from Seflex to dock system
- Rope runs through bell flange and to top of pocket and is secured using a rope attachment supplied by Seaflex

Hinge Connections

Silent hinge construction HD tapered clevis and pin system with vulcanized rubber bushing. Connections between adjacent dock units are designed to support a shear force greater than 20T in vertical and horizontal directions.

Mooring Cleats

Three cleats shall be provided on each side of all finger docks.
One cleat shall be provided on the main dock for each boat.
Cleats to be 10" long (254mm),composed of A357.2SR cast aluminum alloy, and thru bolted with 1/2" HDG bolts (2 per cleat).

Fasteners

(a) Dock Structure - 3/4" A325 bolts as required.
(b) Decking Fasteners - #8 epoxy coated screws designed for use in treated lumber.
(c) 4x4 Sleepers and 2x8 Skirts - 1/2" HDG bolts
(d) Ramp mounts - 3/4" HDG threaded rod with minimum 8" embedment in concrete, glued in place with AC100 Gold epoxy.

Decking

Main docks, finger docks are all decked with 2x6 pressure treated decking (max gap 5mm).
Twin PT 2x8 skirt boards all around bolted to steel substructure. All cuts treated with end-cut preservative.
Gangway to be decked in ThruFlow.
All docks to be supplied with continuous white vinyl dock edging and corner bumpers from Dock Edge.
- White "Single P" profile, Part # DE1001F, fastened with #10 SS screws

Access Gangways/Ramps

Gangway Uniform Load: 4.8 kPa (100 psf)
Dock Concentrated Load: 2.4 kN (deck surface capacity of dock which supports the gangway)
Dock which supports the gangway has a third pipe floatation unit sized so that the dock remains level under dead load of the gangway and has no excessive deflection under live load.

Gangway ramp to measure 6' x 50' long.

Gangway frame trusses are made of aluminum alloy 6061-T6 or equivalent and have a minimum yield strength of 240 MPa in the pre welded condition and 110 MPa in heat affected zone. The top of the truss is at a height of 1070 mm above the ramp deck surface. There is an intermediate handrail at 914 mm (36 in.) above the ramp deck surface on both sides. All gangways have a curb 150 mm high on both sides. The decking is ThruFlow plastic grating panels with an anti-slip surface with a high mechanical resistance in accordance with AODA regulations.

The top of the truss is designed to withstand a horizontal load of 1.0 kN/m in either direction. All welding is done using MIG or TIG processes. All welding operations are performed by qualified welders according to CWB Standards - CSA W47.2. The ramp is attached to shore with a pivoting trunion assembly and the other end rests on the dock on rollers. The connections are designed so they function at all times while at any water level between the min and max design level.

Service Trays

All main docks have a service tray running full length to accommodate water piping and electrical cables as required.

Lighting

Dock is to be equipped with five RA-20 solar streetlights installed on 12' welded aluminum poles.
Poles to be supplied with base plates to be bolt-mounted to deck of dock.

NOTES:

1. WELDING:
STEEL - CSA W47.1
ALUMINUM - CSA W47.2
UNLESS OTHERWISE SHOWN, WELD SIZE SHALL BE EQUIVALENT TO THICKNESS OF MEMBERS BEING JOINED.
2. ALL ALUMINUM STRUCTURAL MEMBERS ARE 6061-T6
ALL STEEL STRUCTURAL MEMBERS ARE 44W
3. UNLESS OTHERWISE SPECIFIED BOM IS STEEL
4. SPECIFIED LOADS:

ENGINEER'S SEAL

LICENSED PROFESSIONAL ENGINEER
D. P. KROPF
100168735
Sept. 25/19
PROVINCE OF ONTARIO

NOTES

A DETAIL NUMBER
B SHEET NUMBER - WHERE DETAIL REQUIRED
C SHEET NUMBER - WHERE DETAIL LOCATED

TITLE
SCALE:

File Name: *SIOUX LOOKOUT DRAWING PACKAGE*	DRAWING: SIOUX LOOKOUT DRAWING PACKAGE
Location: *SIOUX LOOKOUT ONTARIO*	DATE: AUG 21-19
CUSTOMER: *SIOUX LOOKOUT*	DRAWN BY: DPK

KROPF CONOLIFT AQUACULTURE MARINE INDUSTRIAL INC

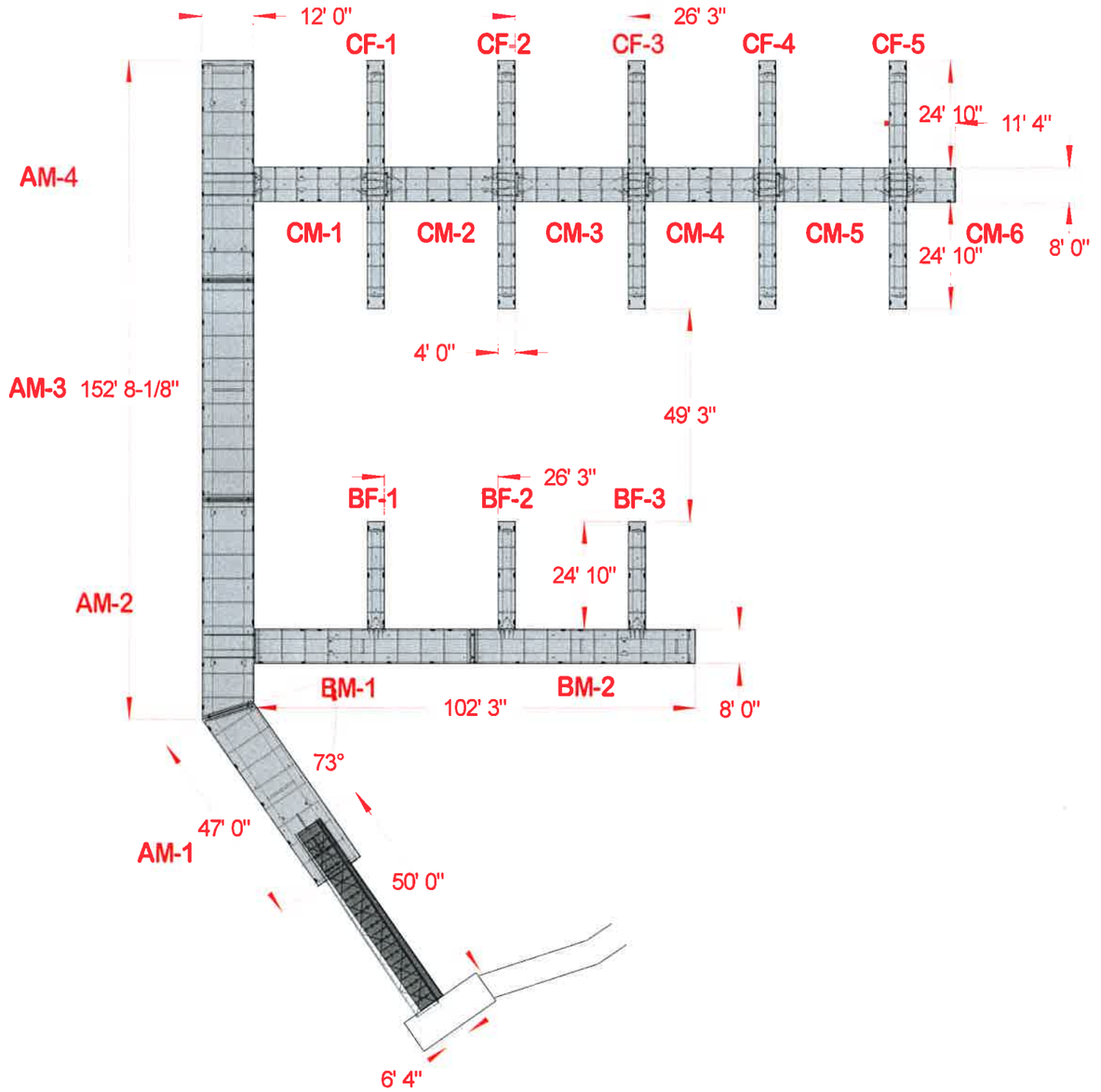
JOB NUMBER: D72273

SHEET NUMBER: 1 | 24

Wednesday, September 25, 2019

Slip Length	Qty
24' 10"	29
+ Tie Along	

Alternate Bid



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See Sheet 1

ENGINEER'S SEAL

LICENSED PROFESSIONAL ENGINEER
D. P. KROPF
100168735
Sept. 24/19
PROVINCE OF ONTARIO

NOTES

A
B C
TITLE
SCALE:

A DETAIL NUMBER
B SHEET NUMBER - WHERE DETAIL REQUIRED
C SHEET NUMBER - WHERE DETAIL LOCATED

File Name: Proposal B Dec 17-18	DRAWING: Proposed Dock Layout Option "B"
Location: Sioux Lookout	DATE: Dec 17-18
CUSTOMER: Sioux Lookout Waterfront	DRAWN BY: MS

KROPF CONOLIFT AQUACULTURE MARINE INDUSTRIAL INC

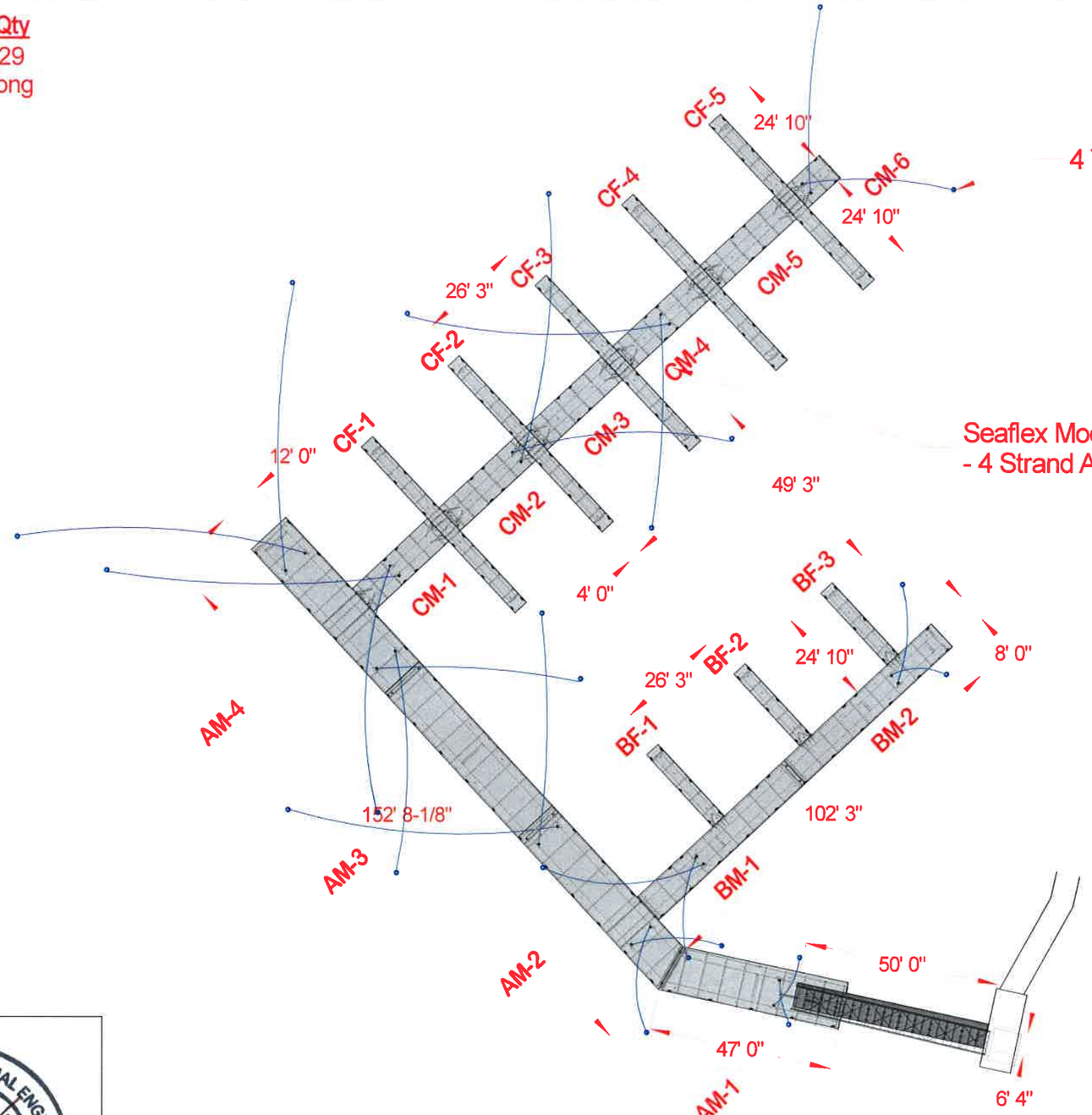
JOB NUMBER: D72273

SHEET NUMBER: 2 | 24

Wednesday, September 18, 2019

Slip Length	Qty
24' 10"	29
+ Tie Along	

Alternate Bid



4 Ton Concrete Anchor

Seaflex Mooring Rode
- 4 Strand Assembly With Backup

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See Sheet 1

ENGINEER'S SEAL

LICENSED PROFESSIONAL ENGINEER
D. P. KROPF
100168735
Sept. 25/19
PROVINCE OF ONTARIO

NOTES

A
B C
TITLE
SCALE:

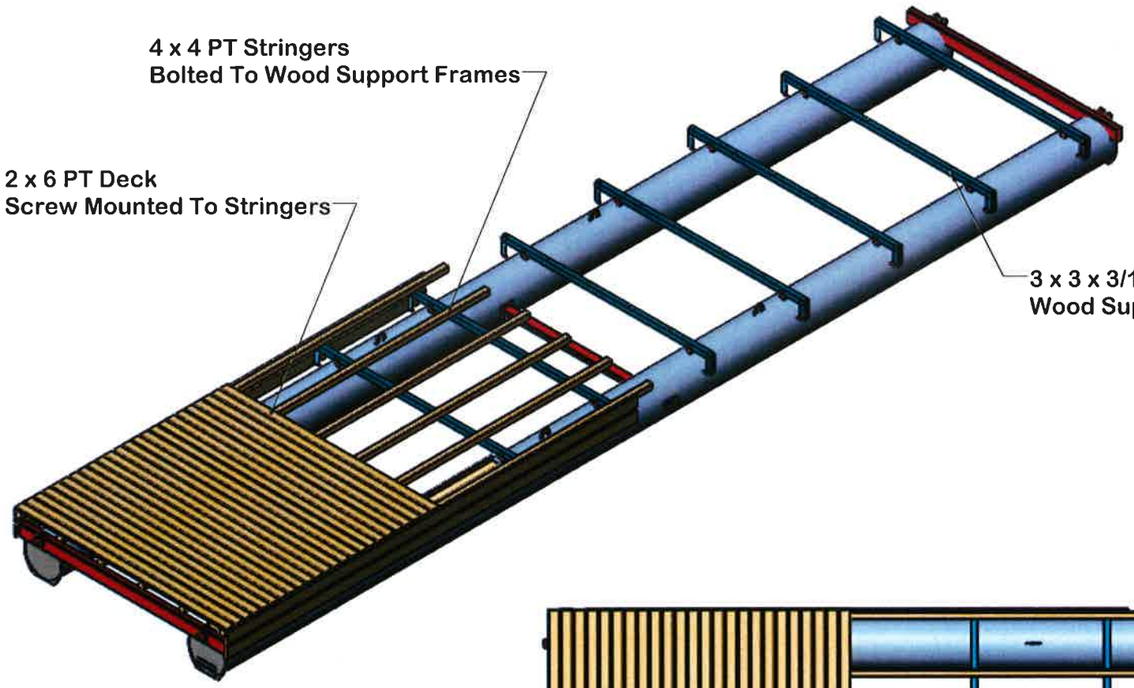
A DETAIL NUMBER
B SHEET NUMBER - WHERE DETAIL REQUIRED
C SHEET NUMBER - WHERE DETAIL LOCATED

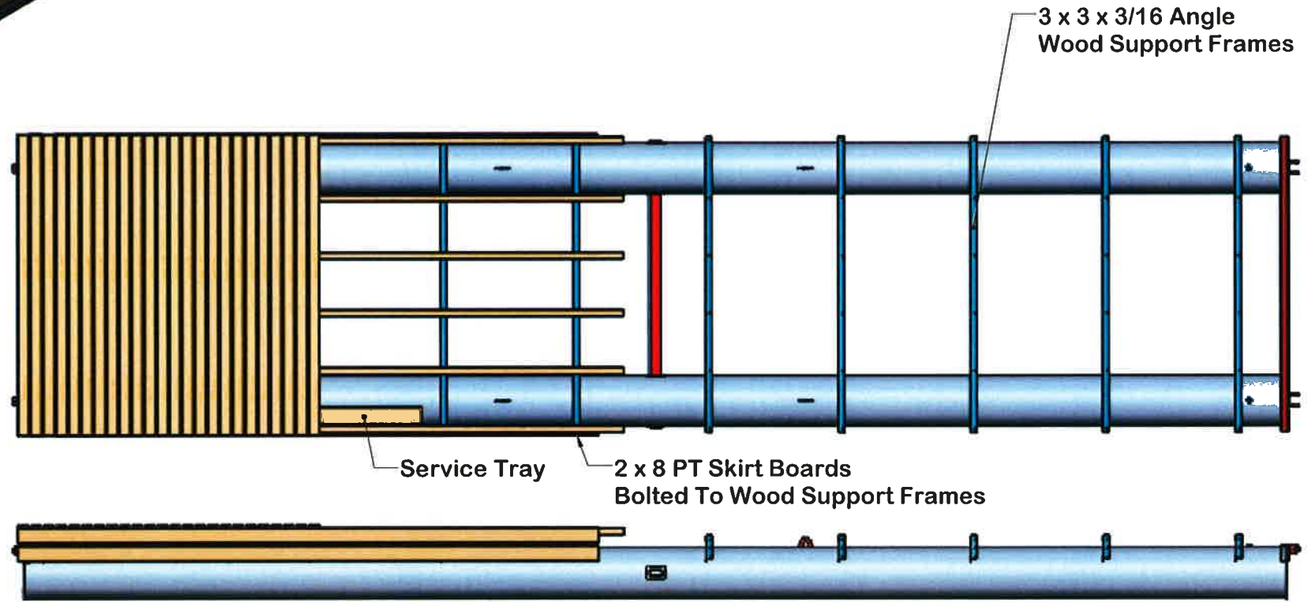
File Name	DRAWING
Anchor Plan	Proposed Dock Layout Option "B"
Location: Sioux Lookout	DATE: Dec 17-18
CUSTOMER: Sioux Lookout Waterfront	DRAWN BY: MS

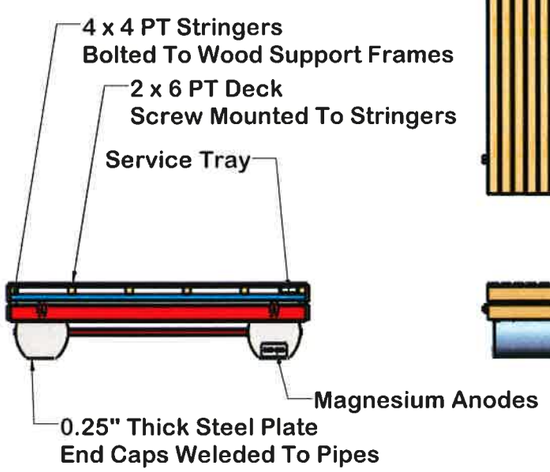
KROPF CONOLIFT AQUACULTURE MARINE INDUSTRIAL INC

JOB NUMBER D72273

SHEET NUMBER 3 24







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   See Sheet 1

ENGINEER'S SEAL

LICENSED PROFESSIONAL ENGINEER
D. P. KROPF
100168735
Sept. 25/19
PROVINCE OF ONTARIO

A / B C TITLE
SCALE:
A DETAIL NUMBER
B SHEET NUMBER - WHERE DETAIL REQUIRED
C SHEET NUMBER - WHERE DETAIL LOCATED

PART NUMBER

MODEL
Main Walkway

CUSTOMER
Sioux Lookout

DRAWINGS
Typical Double Tube Main Decking

DRAWN BY:	DRAWN DATE	SCALE
MS	**Aug 12-19**	
CHECKED BY:	REVISION DATE:	

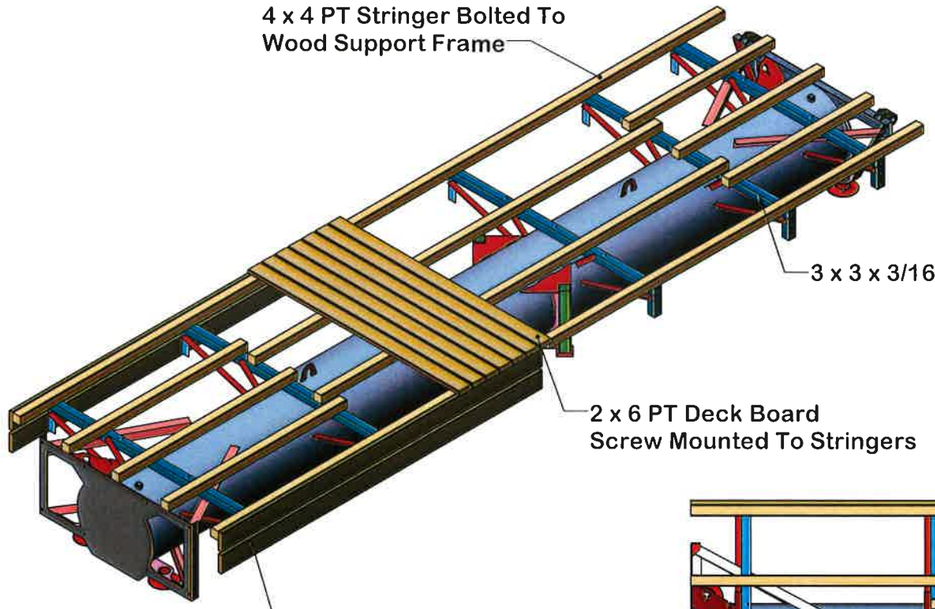
REV DESCRIPTION:

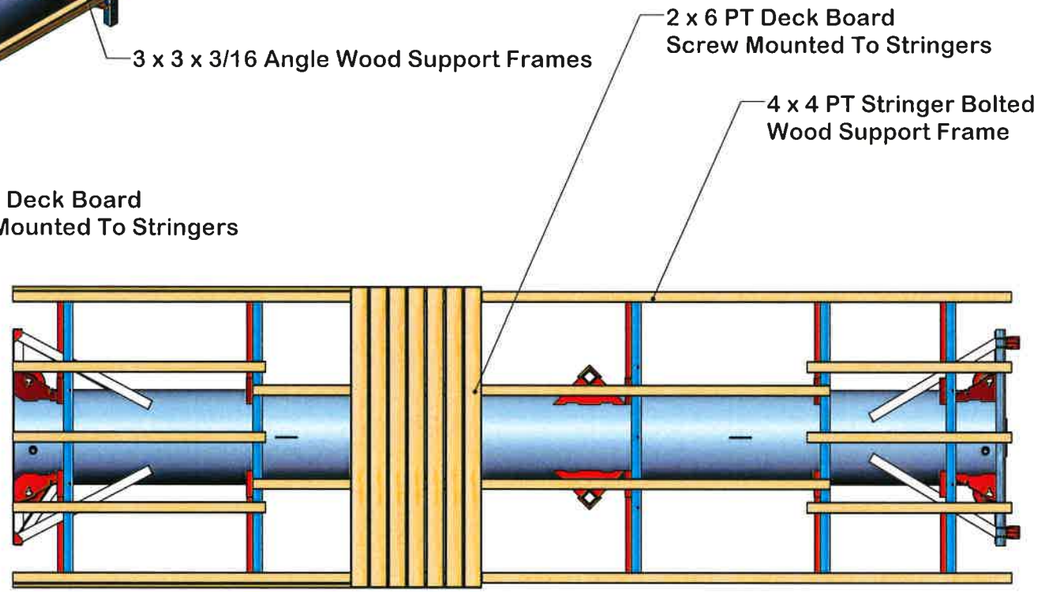
KROPF INDUSTRIAL INC — CONOLIFT AQUACULTURE MARINE

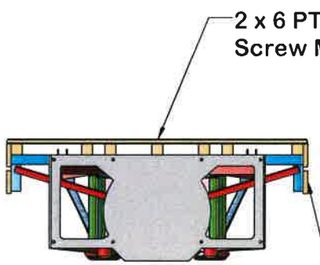
JOB NUMBER
D72273

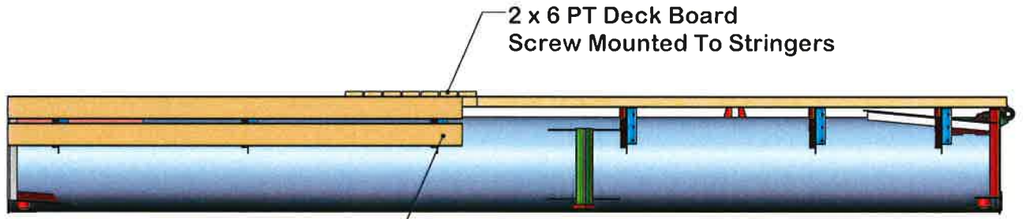
SHEET NUMBER
OF
4 | **24**

Thursday, September 19, 2019









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   See Sheet 1

ENGINEER'S SEAL

LICENSED PROFESSIONAL ENGINEER
D. P. KROPF
100168735
Sept. 25/19
PROVINCE OF ONTARIO

A
B C TITLE
SCALE:

A DETAIL NUMBER
B SHEET NUMBER - WHERE DETAIL REQUIRED
C SHEET NUMBER - WHERE DETAIL LOCATED

PART NUMBER

MODEL
Middle Main

CUSTOMER
Sioux Lookout

DRAWINGS
Typical Single Tube Main Decking

DRAWN BY:	DRAWN DATE	SCALE
MS	**Aug 20-19**	
CHECKED BY:	REVISION DATE:	

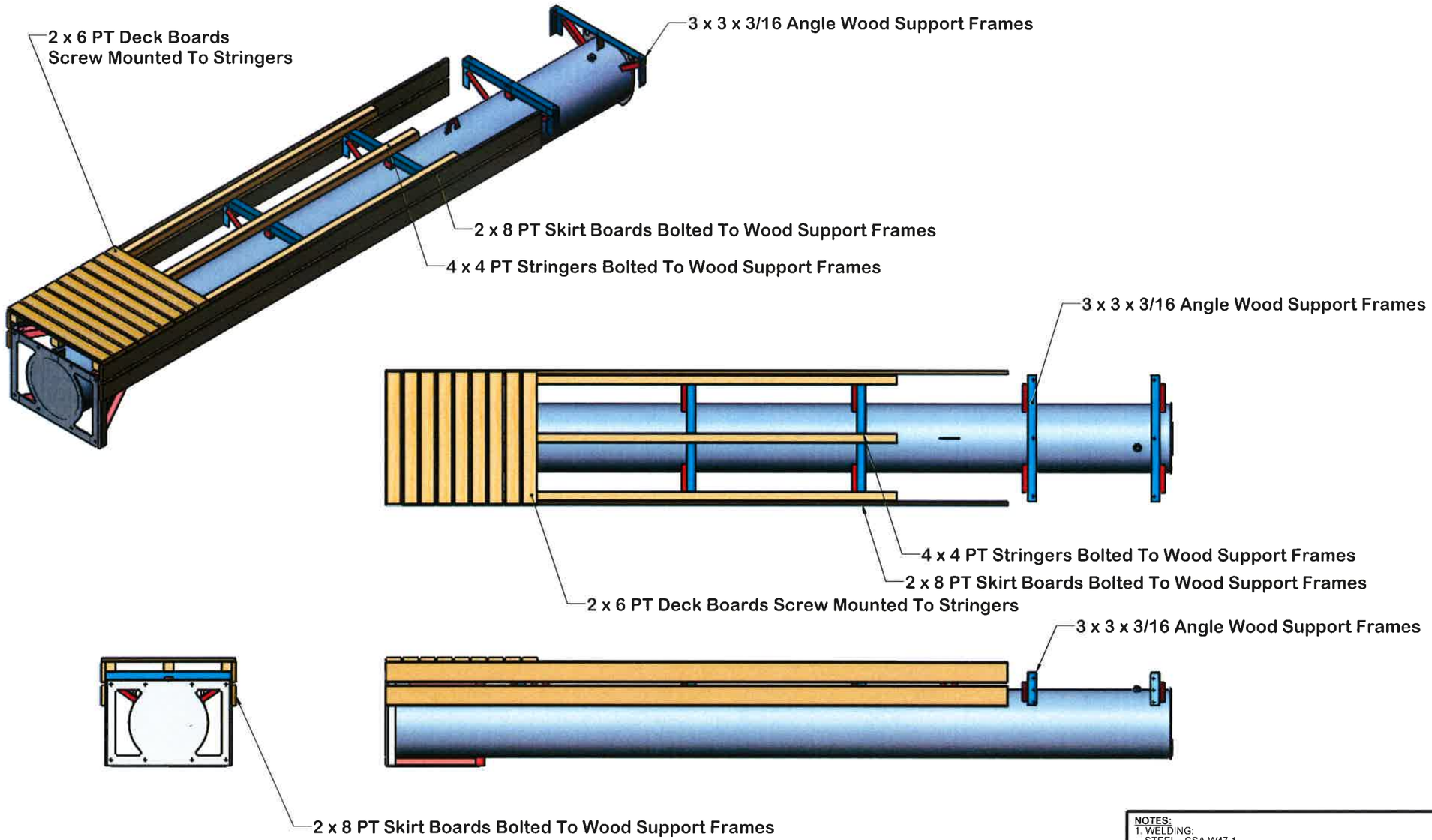
REV DESCRIPTION:

KROPF CONOUFT AQUACULTURE MARINE
INDUSTRIAL INC

JOB NUMBER
D72273

SHEET NUMBER
5 OF 24

Thursday, September 19, 2019



ENGINEER'S SEAL

LICENSED PROFESSIONAL ENGINEER
D. P. KROPF
100168735
Sept. 25/19
PROVINCE OF ONTARIO

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   See Sheet 1

A
B C TITLE
SCALE:

A DETAIL NUMBER
B SHEET NUMBER - WHERE DETAIL REQUIRED
C SHEET NUMBER - WHERE DETAIL LOCATED

PART NUMBER

MODEL
P Finger

CUSTOMER
Sioux Lookout

DRAWINGS
Typical Perimeter Finger Decking

DRAWN BY:	DRAWN DATE	SCALE
MS	**Aug 12-19**	
CHECKED BY:	REVISION DATE:	

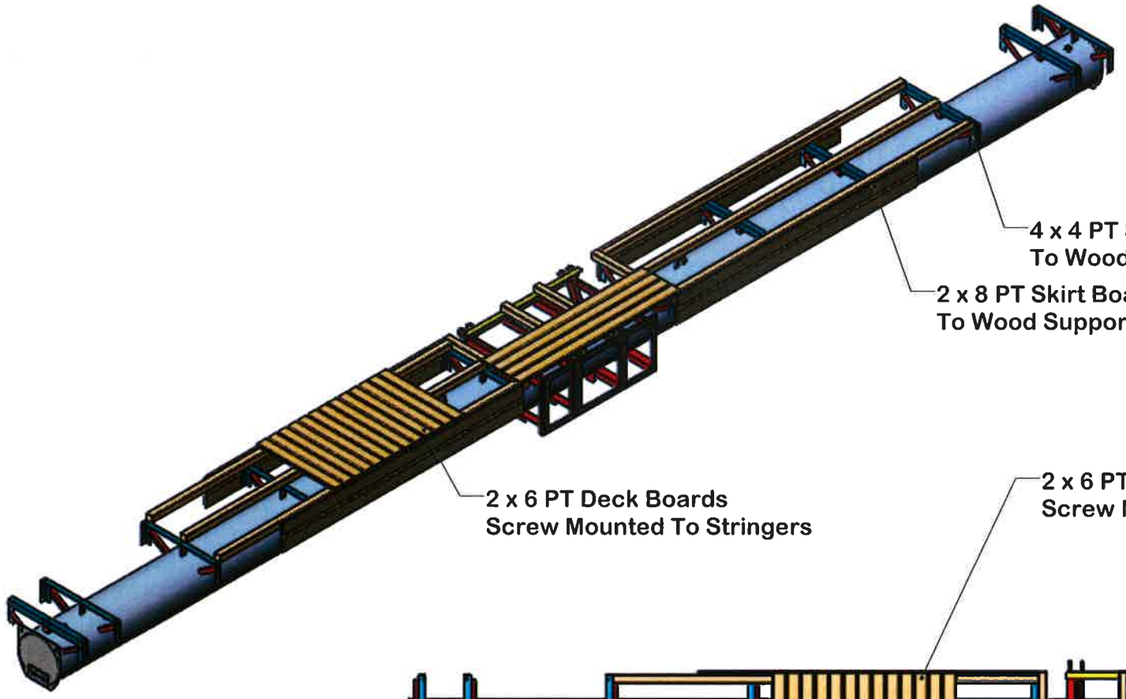
REV DESCRIPTION:

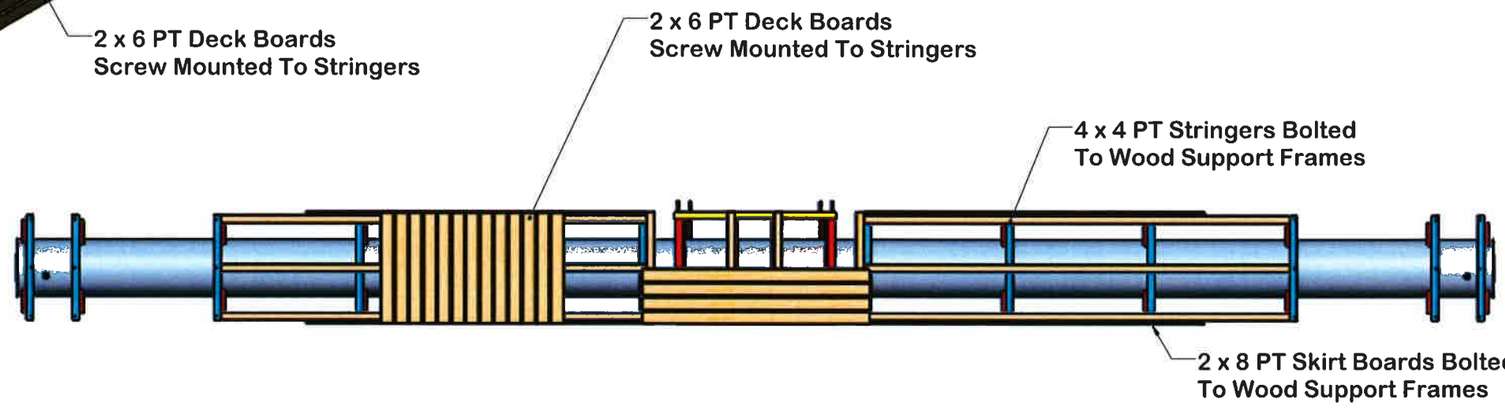
KROPF CONOLIFT AQUACULTURE MARINE INDUSTRIAL INC

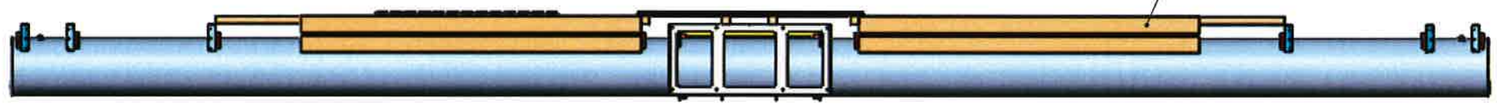
JOB NUMBER
D72273

SHEET NUMBER
OF
6 | **24**

Thursday, September 19, 2019







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   See Sheet 1

ENGINEER'S SEAL

LICENSED PROFESSIONAL ENGINEER
D. P. KROPF
100168735
Sept. 25/19
PROVINCE OF ONTARIO

A
B C
TITLE
SCALE:

A DETAIL NUMBER
B SHEET NUMBER - WHERE DETAIL REQUIRED
C SHEET NUMBER - WHERE DETAIL LOCATED

PART NUMBER

MODEL
Tee Finger

CUSTOMER
Sioux Lookout

DRAWINGS
Typical Tee Finger Decking

DRAWN BY:	DRAWN DATE	SCALE
MS	**Aug 20-19**	
CHECKED BY:	REVISION DATE:	

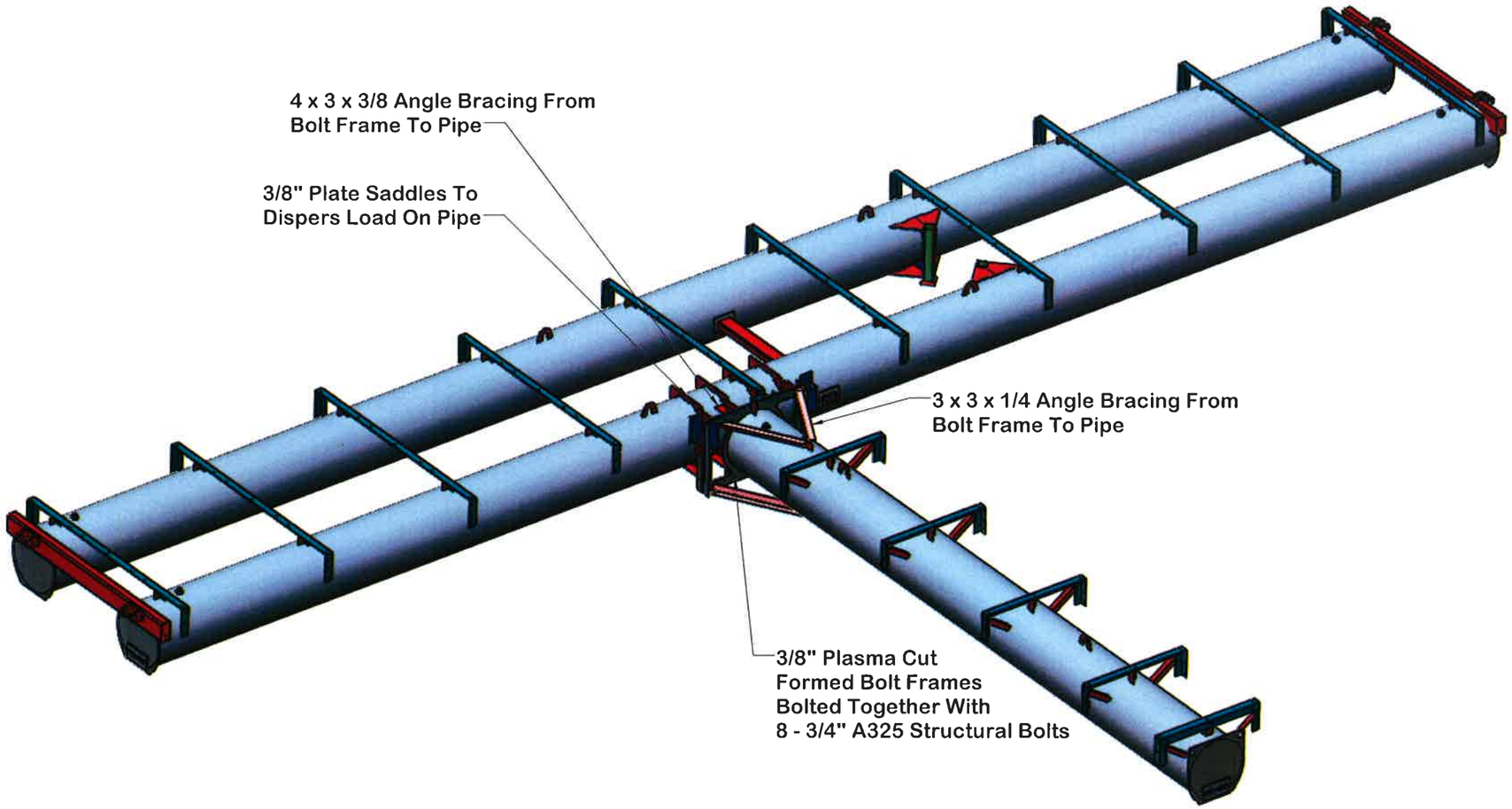
REV DESCRIPTION:

KROPF CONOLIFT AQUACULTURE MARINE INDUSTRIAL INC

JOB NUMBER
D72273

SHEET NUMBER
7 OF **24**

Thursday, September 19, 2019



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ENGINEER'S SEAL

LICENSED PROFESSIONAL ENGINEER
D. P. KROPF
100168735
Sept. 25/19
PROVINCE OF ONTARIO

A
B C TITLE
SCALE:

A DETAIL NUMBER
B SHEET NUMBER - WHERE DETAIL REQUIRED
C SHEET NUMBER - WHERE DETAIL LOCATED

PART NUMBER

MODEL
Sioux Lookout Layout

CUSTOMER
Sioux Lookout

DRAWINGS
Typical B Main And Finger Connection Detail

DRAWN BY:	DRAWN DATE	SCALE
MS	**Aug 12-19**	
CHECKED BY:	REVISION DATE:	

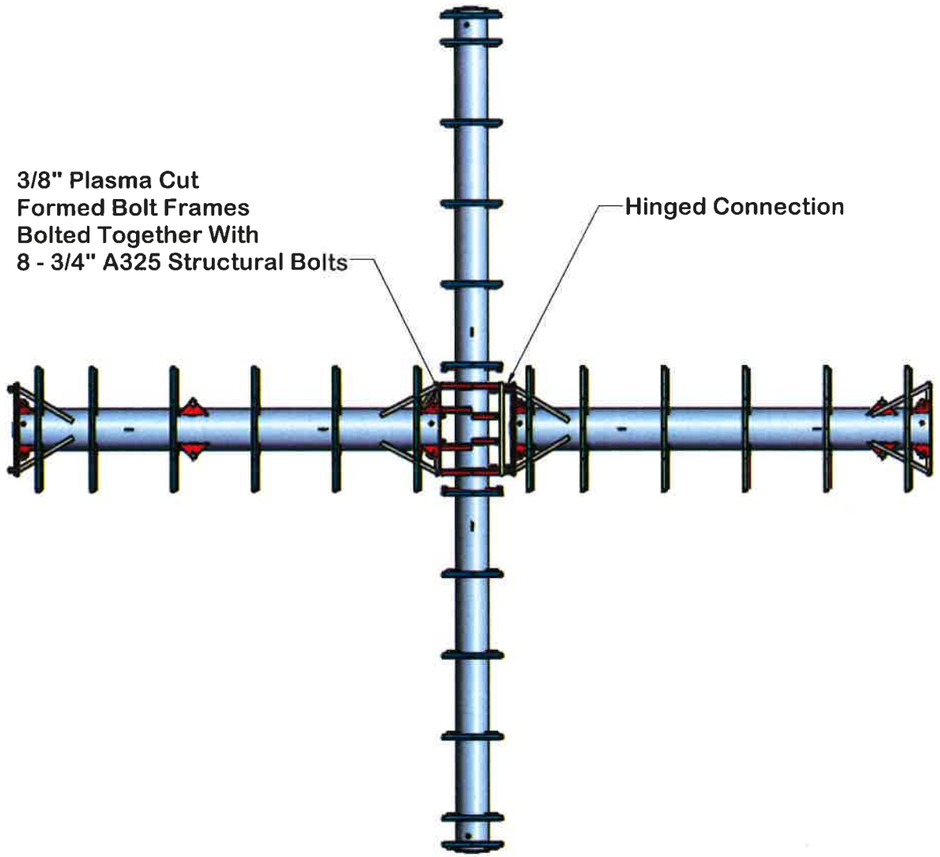
REV DESCRIPTION:

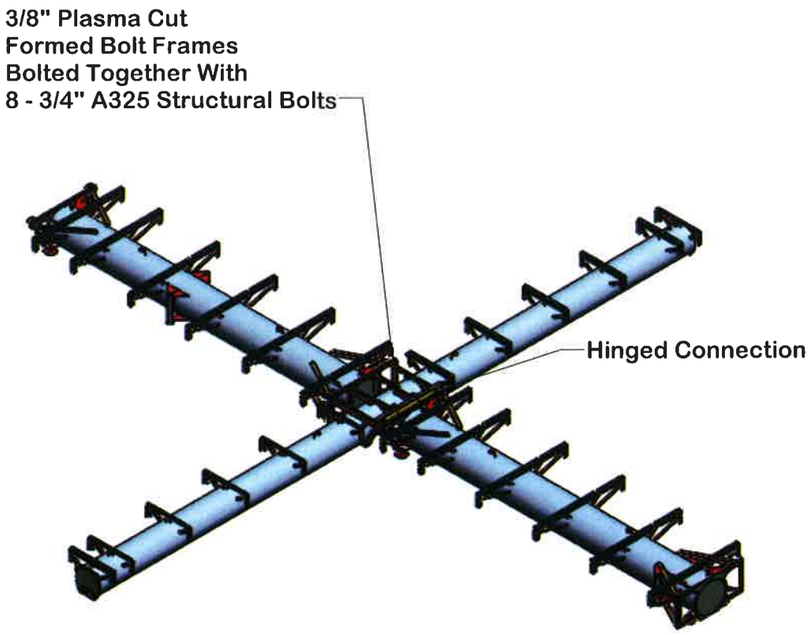
KROPF CONDUIT AQUACULTURE MARINE INDUSTRIAL INC

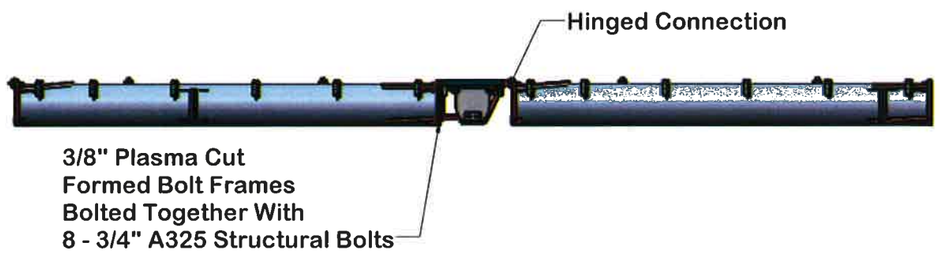
JOB NUMBER
D72273

SHEET NUMBER
OF
8 24

Monday, September 23, 2019







ENGINEER'S SEAL

LICENSED PROFESSIONAL ENGINEER
D. P. KROPF
100168735
Sept. 23/19
PROVINCE OF ONTARIO

A
B C
TITLE
SCALE:

A DETAIL NUMBER
B SHEET NUMBER - WHERE DETAIL REQUIRED
C SHEET NUMBER - WHERE DETAIL LOCATED

PART NUMBER

MODEL
Sioux Lookout Layout

CUSTOMER
Sioux Lookout

DRAWINGS
Typical C Main And Finger Connection Detail

DRAWN BY:	DRAWN DATE	SCALE
MS	Aug 12-19	
CHECKED BY:	REVISION DATE:	

REV DESCRIPTION:

NOTES:
1. WELDING:
STEEL - CSA W47.1
ALUMINUM - CSA W47.2
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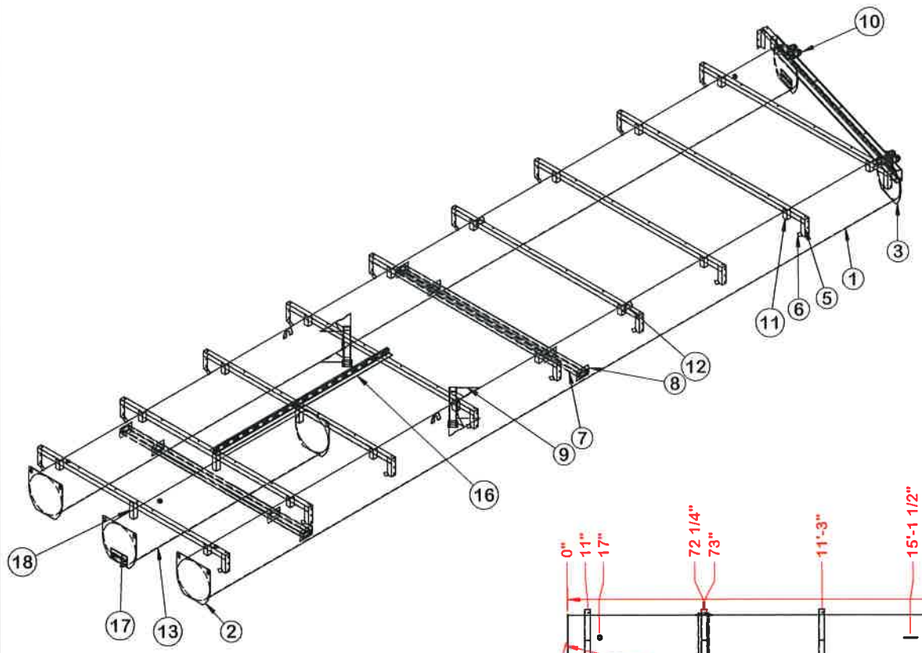
4. SPECIFIED LOADS:
See Sheet 1

KROPF CONOLIFT AQUACULTURE MARINE INDUSTRIAL INC

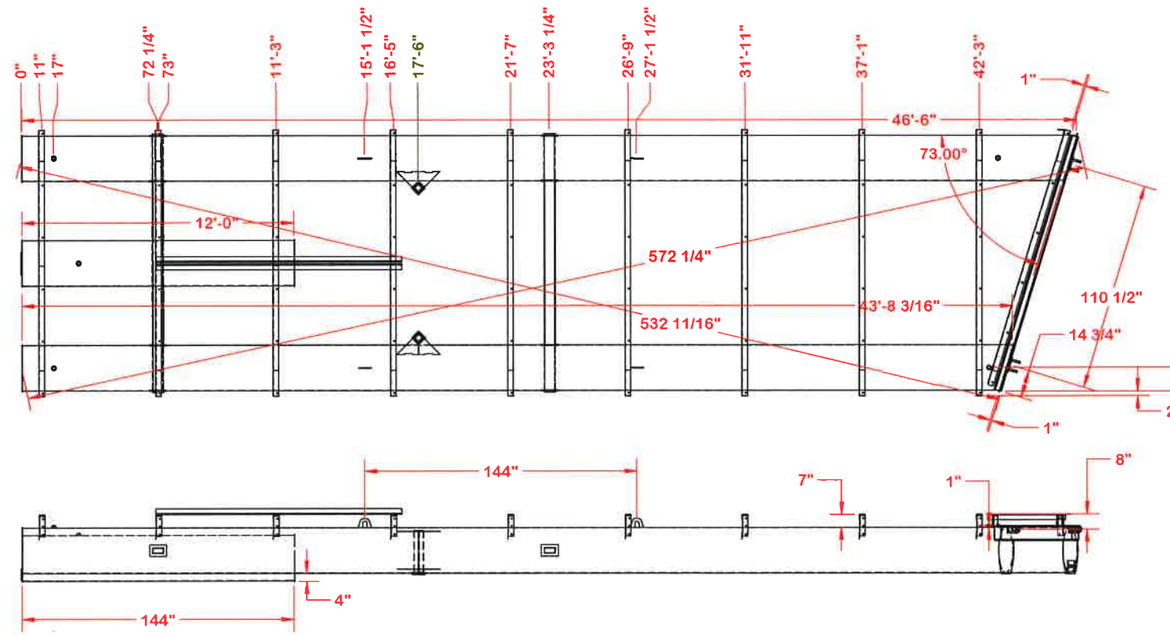
JOB NUMBER
D72273

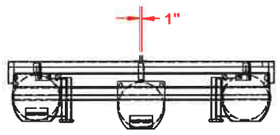
SHEET NUMBER
9 OF 24

Monday, September 23, 2019



ITEM NO.	Expanded/QTY.	PART NUMBER	DESCRIPTION	Width	Thickness	Height	Mat'l Desc	Length
1	2	46' 6 Pipe	24" Pipe	24"	3/16"		Pipe	46'-6"
2	2	24 End Cap W Lift Eyes	End Cap		1/4"		Plate	
3	2	24 Hinge Cap Angled 10 Deg	Hinge Cap		1/4"		Plate	
4	4	2 Air Bung	2" Air Bung Assy					
5	9	12' WF	12' WF					
6	18	Wood Frame Brace 3"	Wood Frame Brace	2"	3/16"		Plate	3"
7	2	12' Dock Crosser	Crosser HSS	6"	1/4"	3"	HSS	136 1/2"
8	8	6 x 9 Saddle PL	6 x 9 Saddle PL		1/4"	6"	Plate	9"
9	2	Sioux Achor Tube Assy	Anchor Tube Assy					
10	1	12' Hinge	12' Hinge Ear Assy					
11	20	6" Angle	Angle	3"	3/16"	3"	Angle	6"
12	4	Lift Lugs	Lift Lug		3/8"		PL	
13	1	12' Extra Float	5' Extra Float					
14	1	12' WF Base	WF Base Angle	3"	3/16"	3"	Angle	140 1/2"
15	1	Double 2 x 8 Skirt	Skirt Angle	3"	3/16"	3"	Angle	11 1/4"
16	2	130 Angle	Angle	3"	1/4"	3"	Angle	130"
17	2	Anode	Anode				Magnesium	
18	3	10" Angle	Angle	3"	3/16"	3"	Angle	10"





ENGINEER'S SEAL

LICENSED PROFESSIONAL ENGINEER
D. P. KROPF
100168735
Sept. 25/19
PROVINCE OF ONTARIO

22" DH
10395 Lbs Decked

NOTES:
1. WELDING:
   STEEL - CSA W47.1
   ALUMINUM - CSA W47.2
   UNLESS OTHERWISE SHOWN, WELD SIZE SHALL BE EQUIVALENT TO THICKNESS OF MEMBERS BEING JOINED.
2. ALL ALUMINUM STRUCTURAL MEMBERS ARE 6061-T6
   ALL STEEL STRUCTURAL MEMBERS ARE 44W
3. UNLESS OTHERWISE SPECIFIED BOM IS STEEL
4. SPECIFIED LOADS:
   See Sheet 1

A / B C TITLE
SCALE:

A DETAIL NUMBER
B SHEET NUMBER - WHERE DETAIL REQUIRED
C SHEET NUMBER - WHERE DETAIL LOCATED

PART NUMBER

MODEL: **Main Walkway**

CUSTOMER: **Sioux Lookout**

DRAWINGS: **AM-1**

DRAWN BY: **MS** | DRAWN DATE: **Aug 12-19** | SCALE

CHECKED BY: | REVISION DATE:

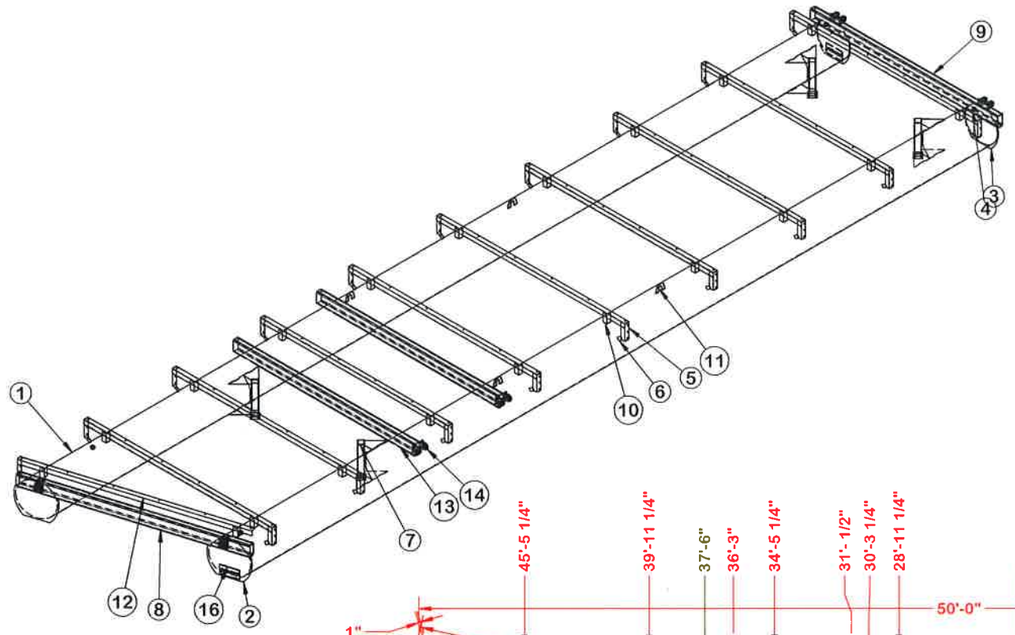
REV DESCRIPTION:

KROPF INDUSTRIAL INC — CONOLIFT AQUACULTURE MARINE

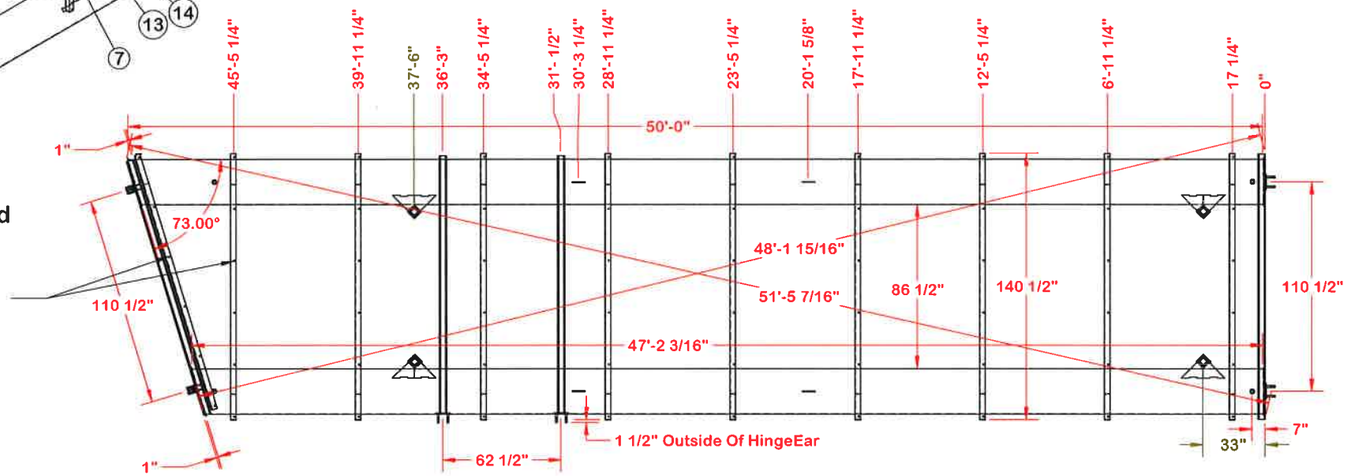
JOB NUMBER: **D72273**

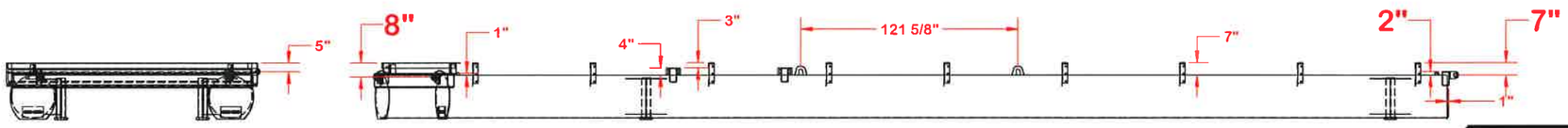
SHEET NUMBER: **10** OF **24**

Wednesday, September 18, 2019



ITEM NO.	Expanded/QTY.	PART NUMBER	DESCRIPTION	Width	Thickness	Height	Mat'l Desc	Length
1	2	50' Pipe	24" Pipe	24"	3/16"		Pipe	50'-0"
2	2	24 Hinge Cap Angled 10 Deg	Hinge Cap		1/4"		Plate	
3	2	24 Hinge Cap	Hinge Cap		1/4"		Plate	
4	4	2 Air Bung	2" Air Bung Assy					
5	9	12' WF	12' WF					
6	18	Wood Frame Brace 3"	Wood Frame Brace	2"	3/16"		Plate	3"
7	4	Sioux Achor Tube Assy	Anchor Tube Assy					
8	1	12' Hinge Assy	12' Hinge Assy					
9	1	12' Hinge	12' Hinge Ear Assy					
10	20	6" Angle	Angle	3"	3/16"	3"	Angle	6"
11	4	Lift Lugs	Lift Lug		3/8"		PL	
12	1	12' WF Base	WF Base Angle	3"	3/16"	3"	Angle	140 1/2"
13	2	135.75	Hinge HSS	8"	3/8"	4"	HSS	135 3/4"
14	2	Hinge Ear Assy	Hinge Ear Assy					
15	1	Double 2 x 8 Skirt	Skirt Angle	3"	3/16"	3"	Angle	11 1/4"
16	2	Anode	Anode				Magnesium	





Torch Holes On End Angle To Line Up With Holes On Wood Frames

22" DH
10966 Lbs Decked

NOTES:
1. WELDING:
   STEEL - CSA W47.1
   ALUMINUM - CSA W47.2
   UNLESS OTHERWISE SHOWN, WELD SIZE SHALL BE EQUIVALENT TO THICKNESS OF MEMBERS BEING JOINED.
2. ALL ALUMINUM STRUCTURAL MEMBERS ARE 6061-T6
   ALL STEEL STRUCTURAL MEMBERS ARE 44W
3. UNLESS OTHERWISE SPECIFIED BOM IS STEEL
4. SPECIFIED LOADS:
   See Sheet 1

ENGINEER'S SEAL

LICENSED PROFESSIONAL ENGINEER
D. P. KROPF
100168735
Sept. 29/19
PROVINCE OF ONTARIO

A
B C TITLE
SCALE:

A DETAIL NUMBER
B SHEET NUMBER - WHERE DETAIL REQUIRED
C SHEET NUMBER - WHERE DETAIL LOCATED

PART NUMBER

MODEL
Main Walkway

CUSTOMER
Sioux Lookout

DRAWINGS
AM-2

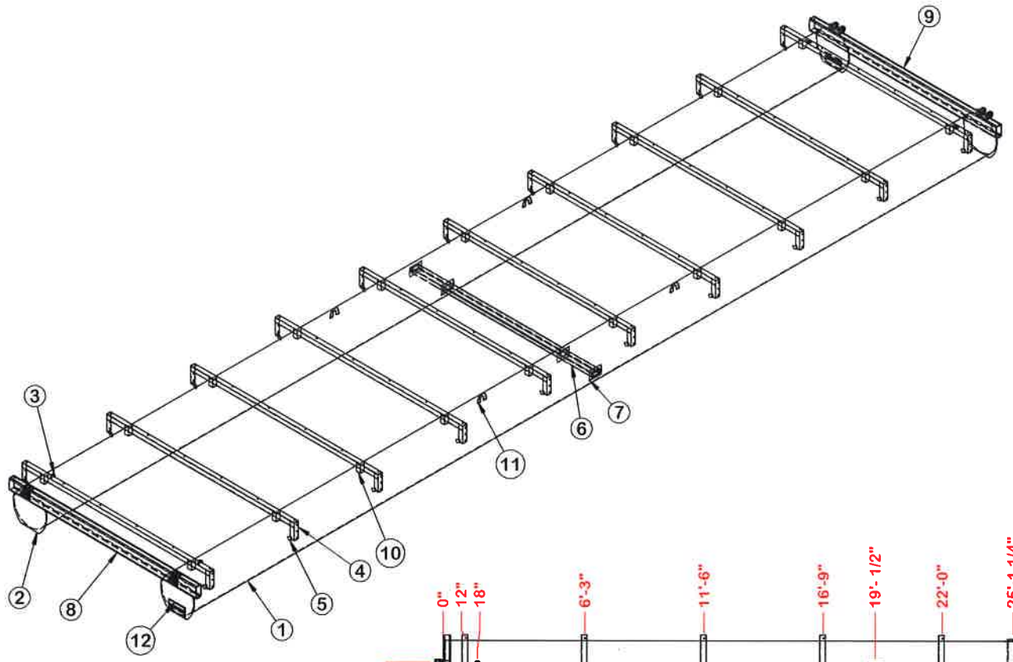
DRAWN BY: **MS**
DRAWN DATE **Aug 12-19**
SCALE
CHECKED BY:
REVISION DATE:
REV DESCRIPTION:

KROPF CONOLIFT AQUACULTURE MARINE
INDUSTRIAL INC

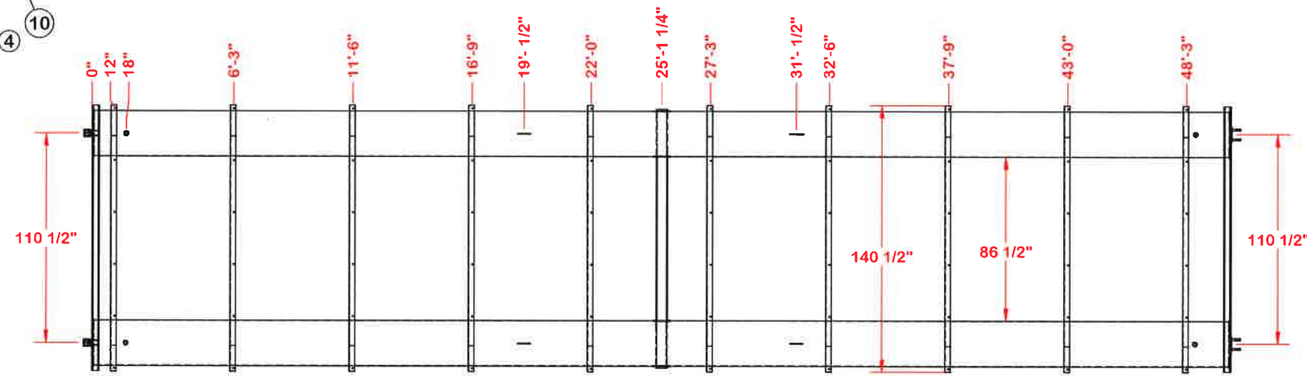
JOB NUMBER
D72273

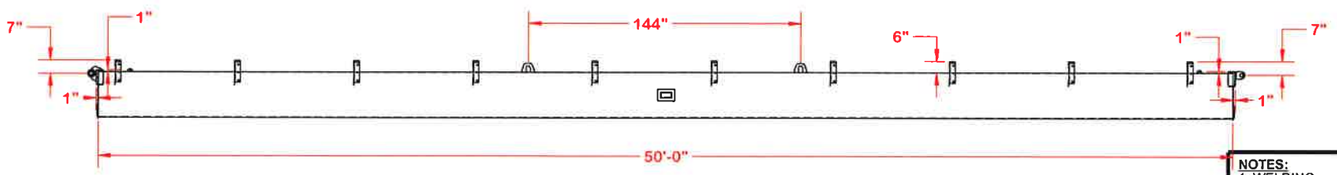
SHEET NUMBER
OF
11 | 24

Wednesday, September 18, 2019



ITEM NO.	Expanded/QTY.	PART NUMBER	DESCRIPTION	Width	Thickness	Height	Mat'l Desc	Length
1	2	50' Pipe	24" Pipe	24"	3/16"		Pipe	50'-0"
2	4	24 Hinge Cap	Hinge Cap		1/4"		Plate	
3	4	2 Air Bung	2" Air Bung Assy					
4	10	12' WF	12' WF					
5	20	Wood Frame Brace 3"	Wood Frame Brace	2"	3/16"		Plate	3"
6	1	12' Dock Crosser	Crosser HSS	6"	1/4"	3"	HSS	136 1/2"
7	4	6 x 9 Saddle PL	6 x 9 Saddle PL		1/4"	6"	Plate	9"
8	1	12' Hinge Assy	12' Hinge Assy					
9	1	12' Hinge	12' Hinge Ear Assy					
10	20	5" Angle	Angle	3"	3/16"	3"	Angle	5"
11	4	Lift Lugs	Lift Lug		3/8"		PL	
12	2	Anode	Anode				Magnesium	





22" DH
10430 Lbs Decked

NOTES:
1. WELDING:
   STEEL - CSA W47.1
   ALUMINUM - CSA W47.2
   UNLESS OTHERWISE SHOWN, WELD SIZE SHALL BE EQUIVALENT TO THICKNESS OF MEMBERS BEING JOINED.
2. ALL ALUMINUM STRUCTURAL MEMBERS ARE 6061-T6
   ALL STEEL STRUCTURAL MEMBERS ARE 44W
3. UNLESS OTHERWISE SPECIFIED BOM IS STEEL
4. SPECIFIED LOADS:
   See Sheet 1

ENGINEER'S SEAL

LICENSED PROFESSIONAL ENGINEER
D. P. KROPF
100168735
Sept. 25/19
PROVINCE OF ONTARIO

A DETAIL NUMBER
B SHEET NUMBER - WHERE DETAIL REQUIRED
C SHEET NUMBER - WHERE DETAIL LOCATED

TITLE
SCALE:

PART NUMBER

MODEL
Main Walkway

CUSTOMER
Sioux Lookout

DRAWINGS
AM-3

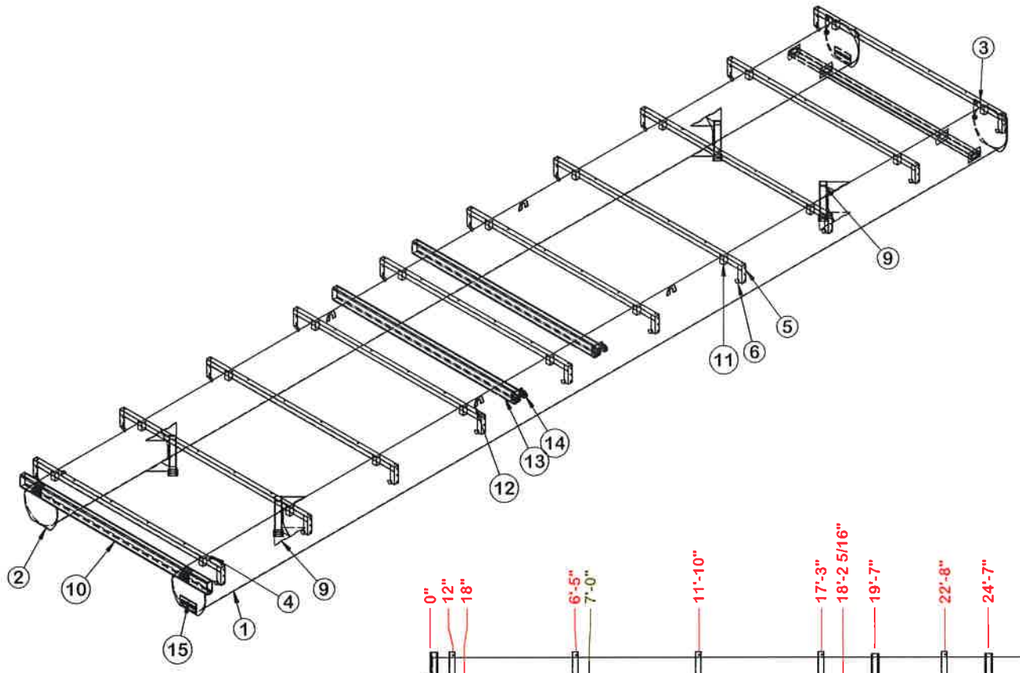
DRAWN BY: **MS**
DRAWN DATE **Aug 12-19**
SCALE
CHECKED BY:
REVISION DATE:
REV DESCRIPTION:

KROPF INDUSTRIAL INC
CONOLIFT AQUACULTURE MARINE

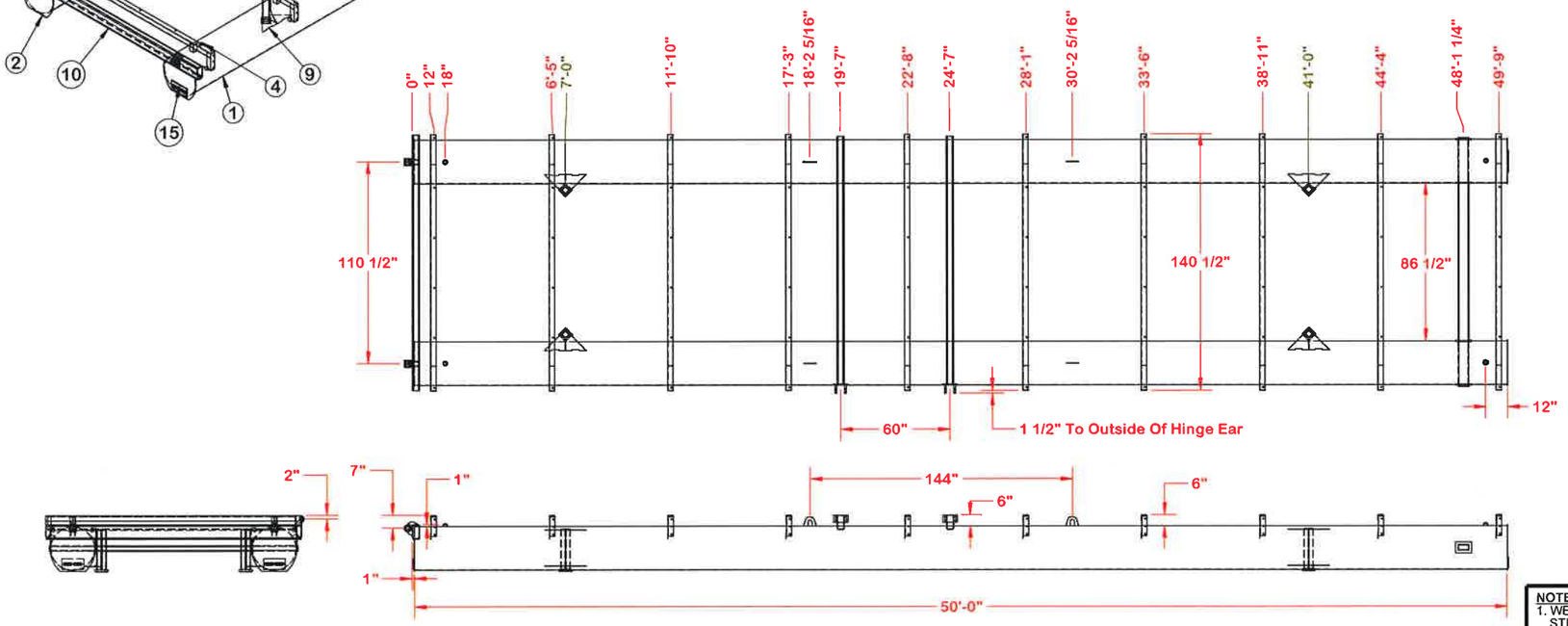
JOB NUMBER
D72273

SHEET NUMBER
12 OF 24

Wednesday, September 18, 2019



ITEM NO.	Expanded/QTY.	PART NUMBER	DESCRIPTION	Width	Thickness	Height	Mat'l Desc	Length
1	2	50' Pipe	24" Pipe	24"	3/16"		Pipe	50'-0"
2	2	24 Hinge Cap	Hinge Cap		1/4"		Plate	
3	2	24 End Cap W Lift Eyes	End Cap		1/4"		Plate	
4	4	2 Air Bung	2" Air Bung Assy					
5	10	12' WF	12' WF					
6	20	Wood Frame Brace 3"	Wood Frame Brace	2"	3/16"		Plate	3"
7	1	12' Dock Crosser	Crosser HSS	6"	1/4"	3"	HSS	136 1/2"
8	4	6 x 9 Saddle PL	6 x 9 Saddle PL		1/4"	6"	Plate	9"
9	4	Sioux Achor Tube Assy	Anchor Tube Assy					
10	1	12' Hinge Assy	12' Hinge Assy					
11	20	5" Angle	Angle	3"	3/16"	3"	Angle	5"
12	4	Lift Lugs	Lift Lug		3/8"		PL	
13	2	135.75	Hinge HSS	8"	3/8"	4"	HSS	135 3/4"
14	2	Hinge Ear Assy	Hinge Ear Assy					
15	2	Anode	Anode				Magnesium	



NOTES:
1. WELDING:
   STEEL - CSA W47.1
   ALUMINUM - CSA W47.2
   UNLESS OTHERWISE SHOWN, WELD SIZE SHALL BE EQUIVALENT TO THICKNESS OF MEMBERS BEING JOINED.
2. ALL ALUMINUM STRUCTURAL MEMBERS ARE 6061-T6
   ALL STEEL STRUCTURAL MEMBERS ARE 44W
3. UNLESS OTHERWISE SPECIFIED BOM IS STEEL
4. SPECIFIED LOADS:
   See Sheet 1

ENGINEER'S SEAL

LICENSED PROFESSIONAL ENGINEER
D. P. KROPF
100168735
Sept. 25/19
PROVINCE OF ONTARIO

22" DH
10960 Lbs Decked

A
B C
TITLE
SCALE:

A DETAIL NUMBER
B SHEET NUMBER - WHERE DETAIL REQUIRED
C SHEET NUMBER - WHERE DETAIL LOCATED

PART NUMBER

MODEL
Main Walkway

CUSTOMER
Sioux Lookout

DRAWINGS
AM-4

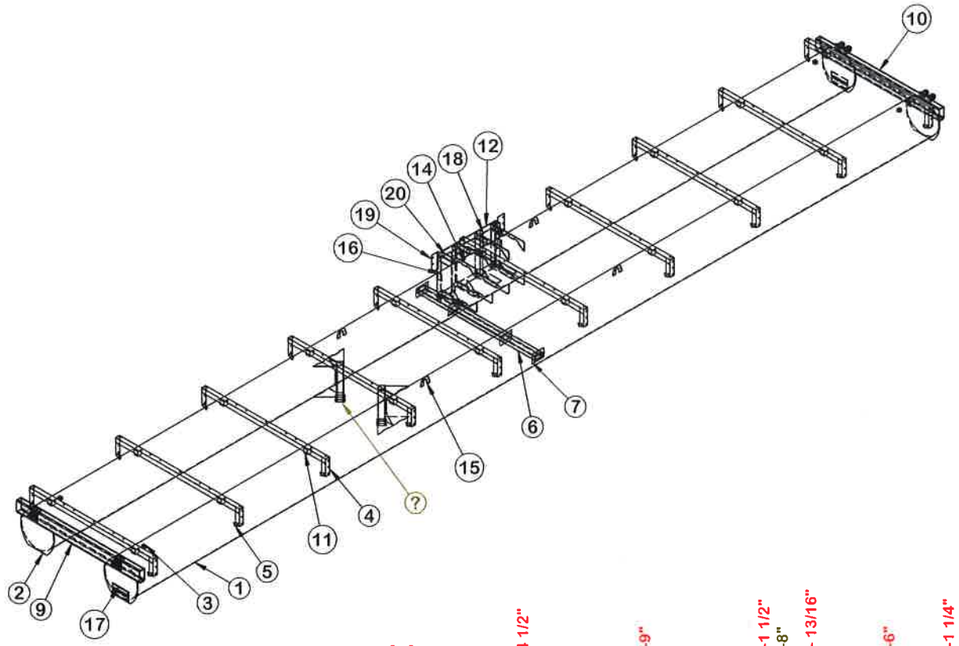
DRAWN BY: **MS**
DRAWN DATE **Aug 12-19**
SCALE
CHECKED BY:
REVISION DATE:
REV DESCRIPTION:

KROPF CONOLIFT AQUACULTURE MARINE INDUSTRIAL INC

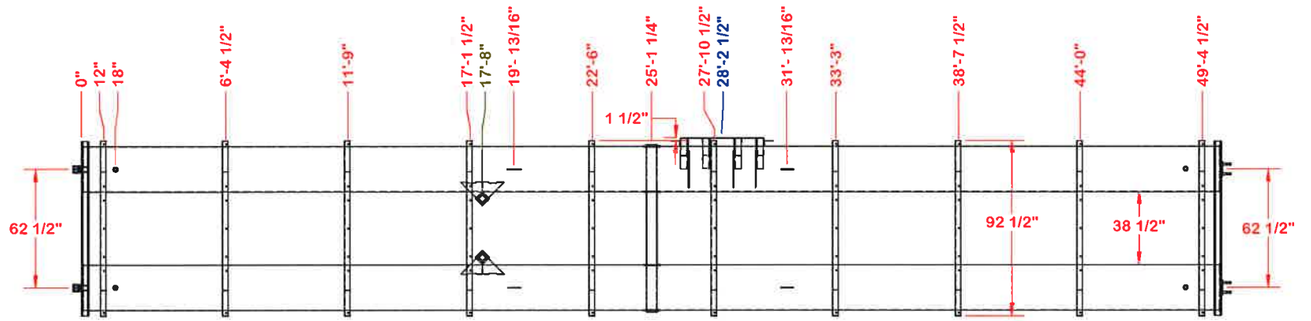
JOB NUMBER
D72273

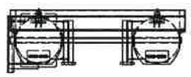
SHEET NUMBER
OF
13 | **24**

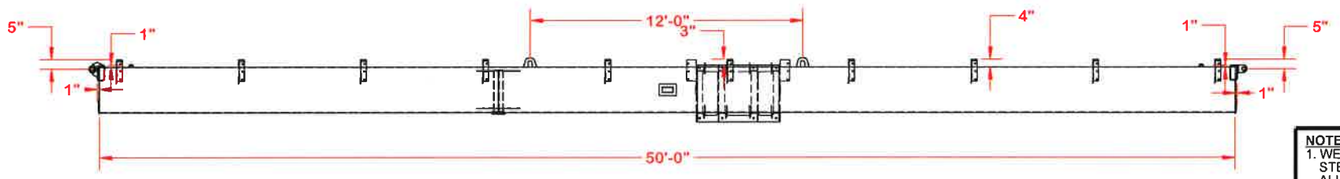
Wednesday, September 18, 2019



ITEM NO.	Expanded/QTY.	PART NUMBER	DESCRIPTION	Width	Thickness	Height	Mat'l Desc	Length
1	2	50' Pipe	24" Pipe	24"	3/16"		Pipe	50'-0"
2	4	24 Hinge Cap	Hinge Cap		1/4"		Plate	
3	4	2 Air Bung	2" Air Bung Assy					
4	10	8' WF	FRAME WOOD 8					
5	20	Wood Frame Brace 3"	Wood Frame Brace	2"	3/16"		Plate	3"
6	1	8' Dock Crosser	Crosser HSS	6"	1/4"	3"	HSS	88 1/2"
7	4	6 x 9 Saddle PL	6 x 9 Saddle PL		1/4"	6"	Plate	9"
8	2	Sioux Achor Tube Assy	Anchor Tube Assy					
9	1	8' Hinge Assy	8' Hinge Assy					
10	1	8' Dock	8' Hinge Ear Assy					
11	20	3" Angle	Angle	3"	3/16"	3"	Angle	3"
12	1	4' Plate Main BF	4' Plate BF	44 1/2"	3/8"	30"	PL	
13	4	16 Angle	BF Standoff Angle	4"	3/8"	3"	Angle	16"
14	8	BF Saddle	BF Saddle 24" Pipe	19"	3/8"	5 3/4"	PL	
15	4	Lift Lugs	Lift Lug		3/8"		PL	
16	2	Bolt Frame Standoff Tab	Bolt Frame Standoff Tab	3"	1/4"	4"		
17	2	Anode	Anode				Magnesium	
18	2	30" Finger PL BF Stiffener		2"	1/4"		FB	30"
19	2	Standard Decking	Skirt Board Plate	5"	3/16"	11 1/4"	Plate	
20	4	9 Angle	BF Standoff Angle	4"	3/8"	3"	Angle	9"







ENGINEER'S SEAL

LICENSED PROFESSIONAL ENGINEER
D. P. KROPF
100168735
Province of Ontario
Sept. 25/19

22" DH
9207 Lbs Decked

NOTES:
1. WELDING:
   STEEL - CSA W47.1
   ALUMINUM - CSA W47.2
   UNLESS OTHERWISE SHOWN, WELD SIZE SHALL BE EQUIVALENT TO THICKNESS OF MEMBERS BEING JOINED.
2. ALL ALUMINUM STRUCTURAL MEMBERS ARE 6061-T6
   ALL STEEL STRUCTURAL MEMBERS ARE 44W
3. UNLESS OTHERWISE SPECIFIED BOM IS STEEL
4. SPECIFIED LOADS:
   See Sheet 1

A B C TITLE
SCALE:

A DETAIL NUMBER
B SHEET NUMBER - WHERE DETAIL REQUIRED
C SHEET NUMBER - WHERE DETAIL LOCATED

PART NUMBER

MODEL
P Main

CUSTOMER
Sioux Lookout

DRAWINGS
BM-1

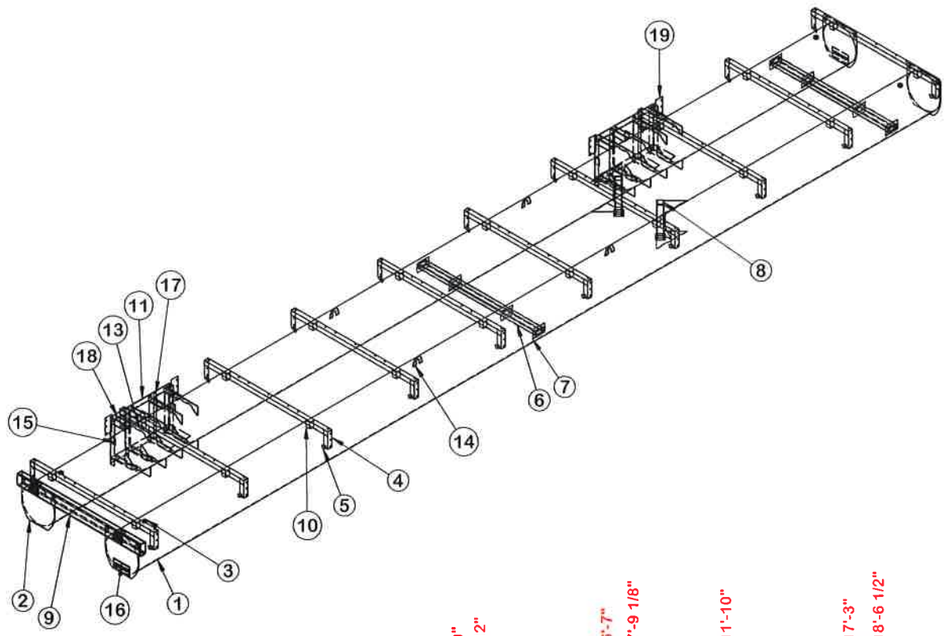
DRAWN BY: **MS**
DRAWN DATE **Aug 12-19**
SCALE
CHECKED BY:
REVISION DATE:
REV DESCRIPTION:

KROPF INDUSTRIAL INC — CONOLIFT AQUACULTURE MARINE

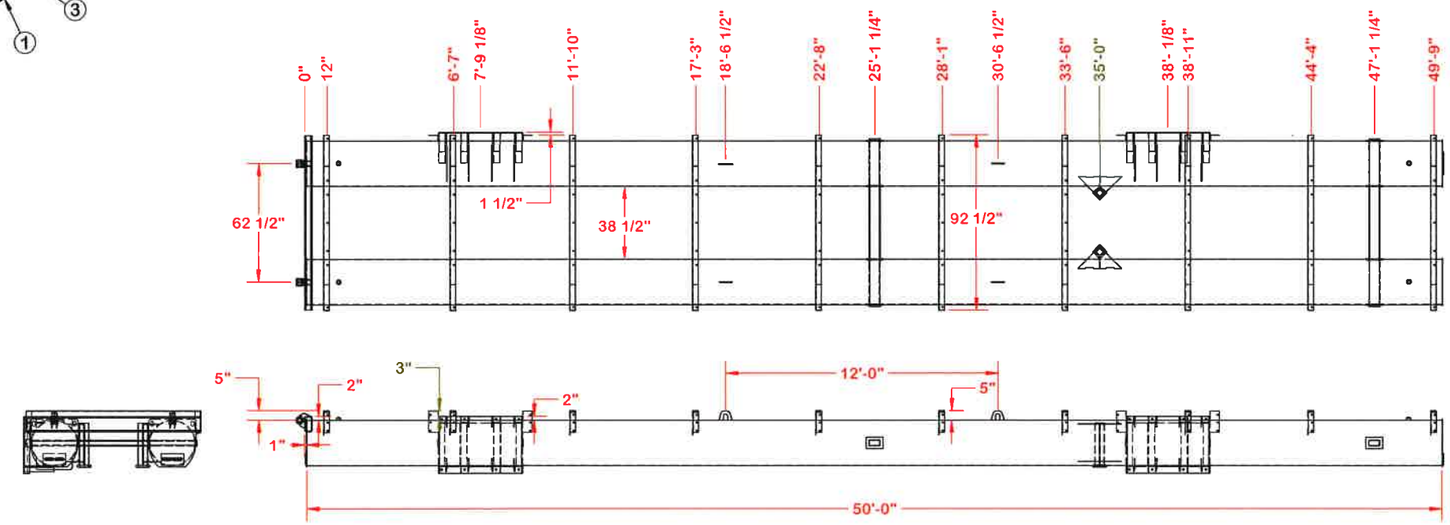
JOB NUMBER
D72273

SHEET NUMBER
OF
14 | **24**

Wednesday, September 18, 2019



ITEM NO.	Expanded/QTY.	PART NUMBER	DESCRIPTION	Width	Thickness	Height	Mat'l Desc	Length
1	2	50' Pipe	24" Pipe	24"	3/16"		Pipe	50'-0"
2	4	24 End Cap W Lift Eyes	End Cap		1/4"		Plate	
3	4	2 Air Bung	2" Air Bung Assy					
4	10	8' WF	FRAME WOOD 8					
5	20	Wood Frame Brace 3"	Wood Frame Brace	2"	3/16"		Plate	3"
6	2	8' Dock Crosser	Crosser HSS	6"	1/4"	3"	HSS	88 1/2"
7	8	6 x 9 Saddle PL	6 x 9 Saddle PL		1/4"	6"	Plate	9"
8	2	Sioux Achor Tube Assy	Anchor Tube Assy					
9	1	8' Hinge Assy	8' Hinge Assy					
10	20	4" Angle	Angle	3"	3/16"	3"	Angle	4"
11	2	4' Plate Main BF	4' Plate BF	44 1/2"	3/8"	30"	PL	
12	8	16 Angle	BF Standoff Angle	4"	3/8"	3"	Angle	16"
13	16	BF Saddle	BF Saddle 24" Pipe	19"	3/8"	5 3/4"	PL	
14	4	Lift Lugs	Lift Lug		3/8"		PL	
15	4	Bolt Frame Standoff Tab	Bolt Frame Standoff Tab	3"	1/4"	4"		
16	2	Anode	Anode				Magnesium	
17	4	30" Finger PL BF Stiffener		2"	1/4"		FB	30"
18	8	10 Angle	BF Standoff Angle	4"	3/8"	3"	Angle	10"
19	4	Standard Decking	Skirt Board Plate	5"	3/16"	11 1/4"	Plate	



ENGINEER'S SEAL

LICENSED PROFESSIONAL ENGINEER
D. P. KROPF
100168735
Sept. 25/19
PROVINCE OF ONTARIO

22" DH
9330 Lbs Decked

NOTES:
1. WELDING:
   STEEL - CSA W47.1
   ALUMINUM - CSA W47.2
   UNLESS OTHERWISE SHOWN, WELD SIZE SHALL BE EQUIVALENT TO THICKNESS OF MEMBERS BEING JOINED.
2. ALL ALUMINUM STRUCTURAL MEMBERS ARE 6061-T6
   ALL STEEL STRUCTURAL MEMBERS ARE 44W
3. UNLESS OTHERWISE SPECIFIED BOM IS STEEL
4. SPECIFIED LOADS:
   See Sheet 1

A B C TITLE
SCALE:

A DETAIL NUMBER
B SHEET NUMBER - WHERE DETAIL REQUIRED
C SHEET NUMBER - WHERE DETAIL LOCATED

PART NUMBER

MODEL
P Main

CUSTOMER
Sioux Lookout

DRAWINGS
BM-2

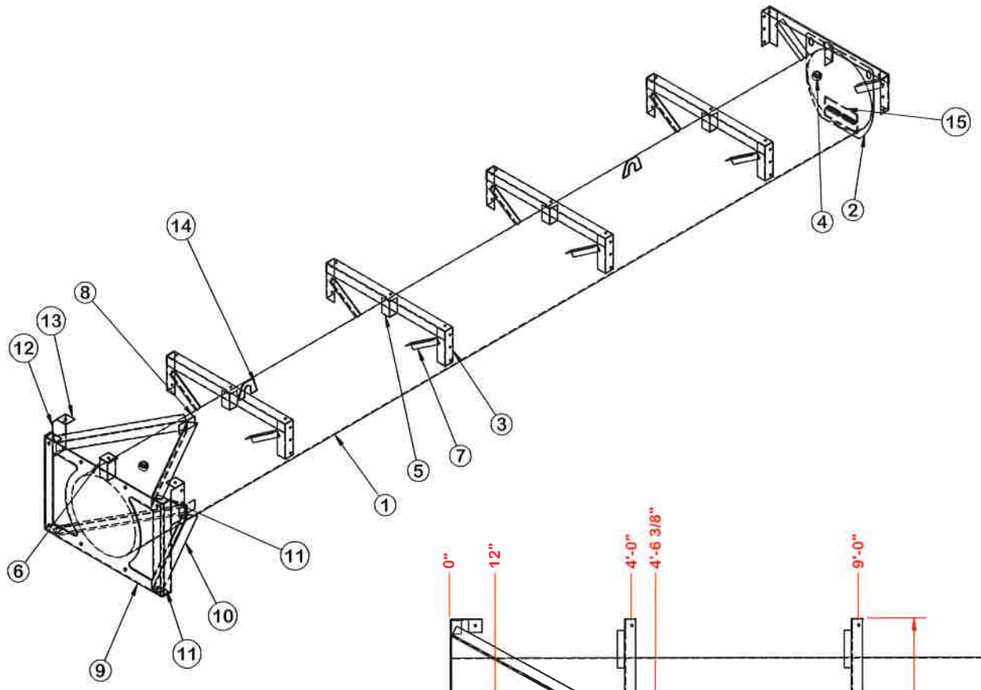
DRAWN BY: **MS**
DRAWN DATE **Aug 12-19**
SCALE
CHECKED BY:
REVISION DATE:
REV DESCRIPTION:

KROPF CONOLIFT AQUACULTURE MARINE INDUSTRIAL INC

JOB NUMBER
D72273

SHEET NUMBER
OF
15 | **24**

Wednesday, September 18, 2019

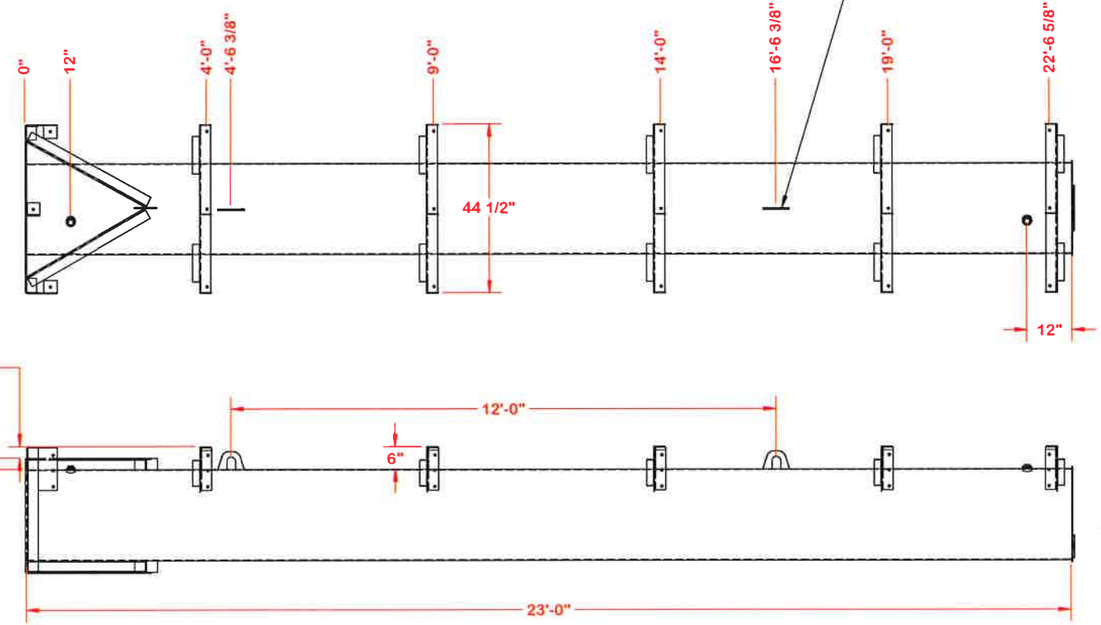


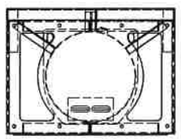
ITEM NO.	Expanded/QTY.	PART NUMBER	DESCRIPTION	Width	Thickness	Height	Mat'l Desc	Length
1	1	23' Pipe	24" Pipe	24"	3/16"		Pipe	23'-0"
2	1	24 End Cap W Lift Eyes	End Cap		1/4"		Plate	
3	5	4' WF	FRAME WOOD 4					
4	2	2 Air Bung	2" Air Bung Assy					
5	5	5" Angle	Angle	3"	3/16"	3"	Angle	5"
6	1	6" Angle	Angle	3"	3/16"	3"	Angle	6"
7	10	12 Angle	Wood Frame Brace	2"	1/8"	2"	Angle	12"
8	2	BF Brace Spreader	BF Brace Spreader	3"	1/4"		FB	6"
9	1	4' Plate BF	4' Plate BF	44 1/2"	3/8"	30"		
10	4	36 Angle	Brace Angle	3"	1/4"	3"	Angle	36"
11	4	Frame Brace Long	Plate	2 5/8"	1/4"			3 5/8"
12	2	Standard Decking	Skirt Board Plate	5"	3/16"	11 1/4"	Plate	
13	3	Stringer Plate	Stringer Plate	3 1/2"	3/16"		PL	3 1/2"
14	2	Lift Lugs	Lift Lug		3/8"		PL	
15	1	Anode	Anode				Magnesium	

3 pcs

BF-1
BF-2
BF-3

Offset Lift Lugs To Either Side Of Stringer





22" DH
2367 Lbs Decked

NOTES:
1. WELDING:
   STEEL - CSA W47.1
   ALUMINUM - CSA W47.2
   UNLESS OTHERWISE SHOWN, WELD SIZE SHALL BE EQUIVALENT TO THICKNESS OF MEMBERS BEING JOINED.
2. ALL ALUMINUM STRUCTURAL MEMBERS ARE 6061-T6
   ALL STEEL STRUCTURAL MEMBERS ARE 44W
3. UNLESS OTHERWISE SPECIFIED BOM IS STEEL
4. SPECIFIED LOADS:
   See Sheet 1

ENGINEER'S SEAL

LICENSED PROFESSIONAL ENGINEER
D. P. KROPF
100168735
Sept. 25/19
PROVINCE OF ONTARIO

A
B C TITLE
SCALE:

A DETAIL NUMBER
B SHEET NUMBER - WHERE DETAIL REQUIRED
C SHEET NUMBER - WHERE DETAIL LOCATED

PART NUMBER

MODEL
P Finger

CUSTOMER
Sioux Lookout

DRAWINGS
BF-1- 3

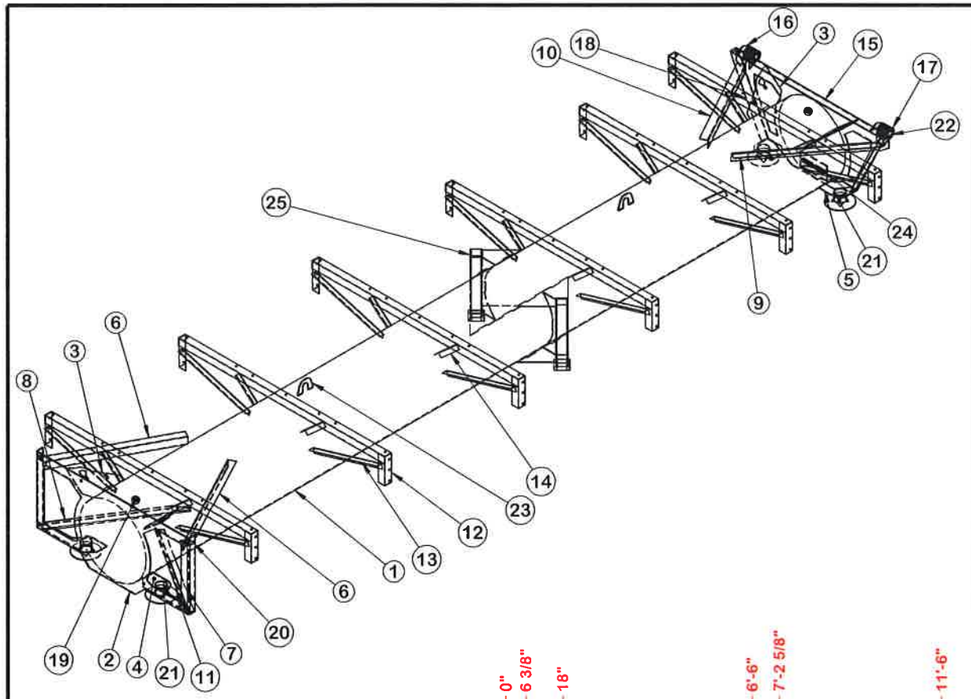
DRAWN BY: **MS**
DRAWN DATE: **Aug 12-19**
SCALE
CHECKED BY:
REVISION DATE:
REV DESCRIPTION:

KROPF CONOLIFT AQUACULTURE MARINE
INDUSTRIAL INC

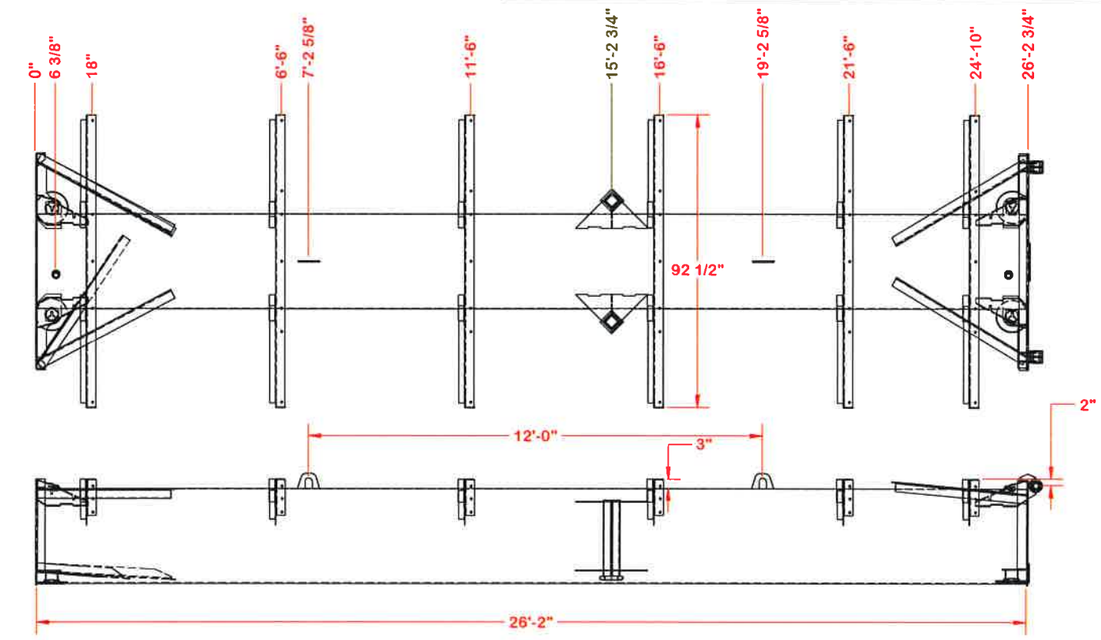
JOB NUMBER
D72273

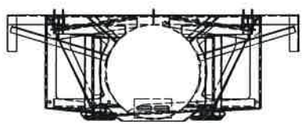
SHEET NUMBER
OF
16 | 24

Thursday, September 19, 2019



ITEM NO.	Expanded/QTY.	PART NUMBER	DESCRIPTION	Width	Thickness	Height	Mat'l Desc	Length
1	1	26' 2 Pipe 30	Pipe	30"	3/16"		Pipe	26'-2"
2	1	Plate 30 BF	Plate BF	73 3/8"	3/8"	33 1/2"		
3	4	BF-HF Brace-Chain PL .625 Slot	BF-HF Brace-Chain PL .625 Slot	16 5/16"	3/8"	12 1/8"	PL	
4	2	Btm FB Gus 30						
5	2	PL HF Gus						
6	2	BF-HF Brace 48	BF-HF Brace	3"	1/4"	3"		48"
7	1	PL BF 1 Brace 48.75	BF-HF Brace	3"	1/4"	3"		48 3/4"
8	1	PL BF 2 Brace 48.75	BF-HF Brace	3"	1/4"	3"		48 3/4"
9	1	PL HF 1 Brace 48.75	BF-HF Brace	3"	1/4"	3"		48 3/4"
10	1	PL HF 2 Brace	BF-HF Brace	3"	1/4"	3"		48 3/4"
11	4	Chian Tube Guide Flange No Holes	Chain Tube Guide Flange		1/4"		PL	
12	6	8' WF	FRAME WOOD 8					
13	12	32 Angle	Wood Frame Brace	2"	1/8"	2"	Angle	32"
14	12	11 Angle	Wood Frame Brace	2"	1/8"	2"	Angle	11"
15	1	PL 30 HF		68 1/2"	3/8"	35 15/16"		
16	4	CDSM Mt For HSS						
17	2	Default	4 x 3 CDSM					3 7/8"
18	2	Hinge PL 30 Brace		3"	1/4"			31"
19	2	2 Air Bung	2" Air Bung Assy					
20	2	PL BF Brace Tab	PL BF Brace Tab	4"	3/8"		PL	2 1/2"
21	4	Guide Flange Extention Pipe	Guide Flange Extention Pipe	4"	1/4"		Pipe	3"
22	2	Torsion Hinge Insert	Rubber Bushing Vulcanized To Inner Sleave					
23	2	Lift Lugs	Lift Lug		3/8"		PL	
24	1	Anode	Anode				Magnesium	
25	2	Sioux Lookout Achor Tube Assy 30	Anchor Tube Assy 30					





ENGINEER'S SEAL

LICENSED PROFESSIONAL ENGINEER
D. P. KROPF
100168735
Sept. 25/19
PROVINCE OF ONTARIO

22" DH
4155 Lbs Decked

NOTES:
1. WELDING:
   STEEL – CSA W47.1
   ALUMINUM - CSA W47.2
   UNLESS OTHERWISE SHOWN, WELD SIZE SHALL BE EQUIVALENT TO THICKNESS OF MEMBERS BEING JOINED.
2. ALL ALUMINUM STRUCTURAL MEMBERS ARE 6061-T6
   ALL STEEL STRUCTURAL MEMBERS ARE 44W
3. UNLESS OTHERWISE SPECIFIED BOM IS STEEL
4. SPECIFIED LOADS:
   See Sheet 1

A DETAIL NUMBER
B SHEET NUMBER - WHERE DETAIL REQUIRED
C SHEET NUMBER - WHERE DETAIL LOCATED

TITLE
SCALE:

PART NUMBER

MODEL
Middle Main

CUSTOMER
Sioux Lookout

DRAWINGS
CM-1

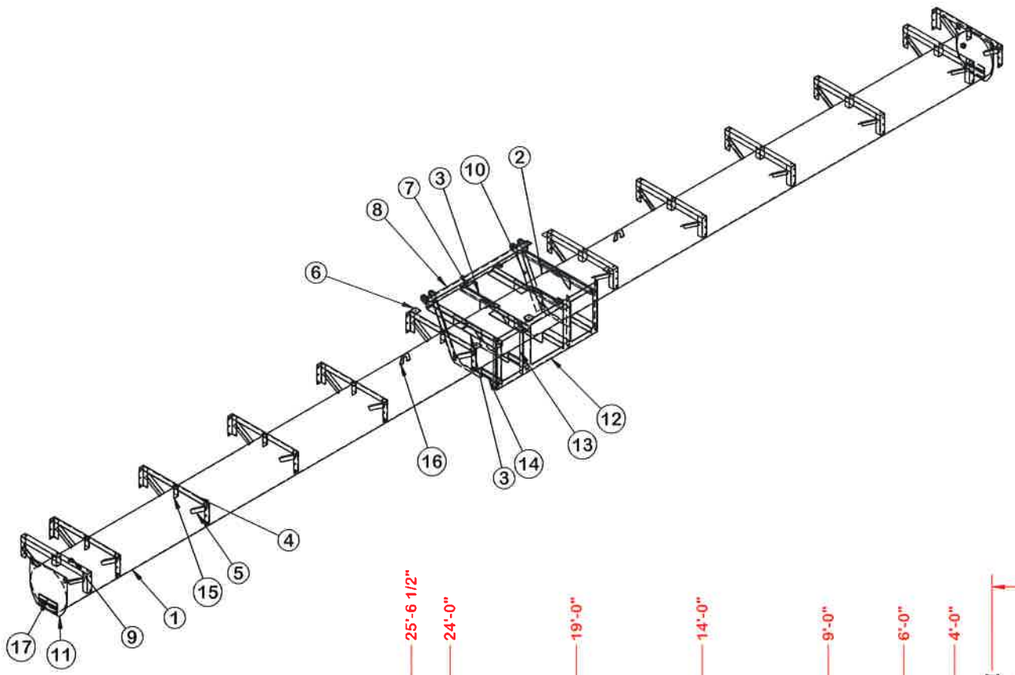
DRAWN BY: **MS**
DRAWN DATE **Aug 20-19**
SCALE
CHECKED BY:
REVISION DATE:
REV DESCRIPTION:

KROPF INDUSTRIAL INC — CONOLIFT AQUACULTURE MARINE

JOB NUMBER
D72273

SHEET NUMBER
17 OF **24**

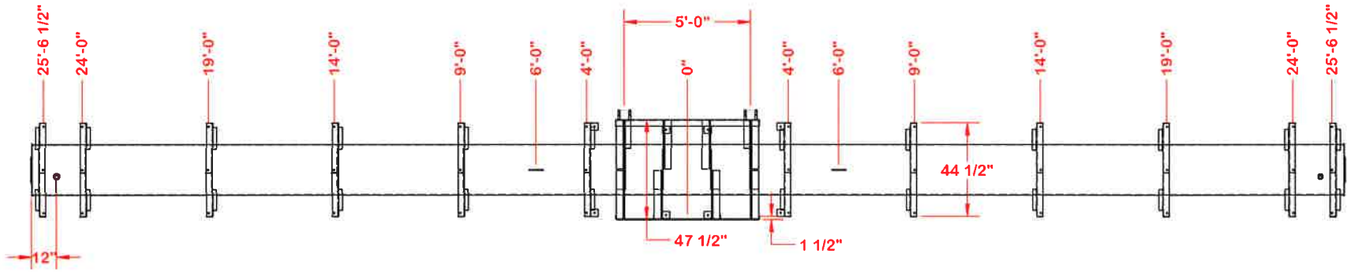
Thursday, September 19, 2019

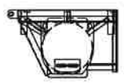


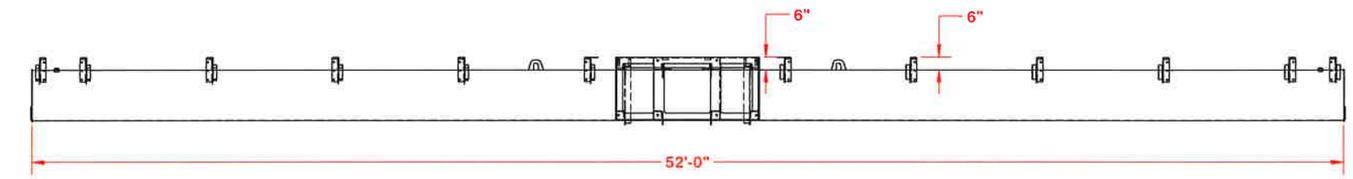
4 pcs

CF-1
CF-2
CF-3
CF-4

ITEM NO.		PART NUMBER	DESCRIPTION	Width	Thickness	Height	Mat'l Desc	Length
1	1	52' Pipe	24" Pipe	24"	3/16"		Pipe	52'-0"
2	8	BF Saddle	BF Saddle 24" Pipe	19"	3/8"	5 3/4"	PL	
3	8	23 Angle	BF Standoff Angle	4"	3/8"	3"	Angle	23"
4	12	4' WF	FRAME WOOD 4					
5	24	12 Angle	Wood Frame Brace	2"	1/8"	2"	Angle	12"
6	8	Stringer Plate	Stringer Plate	3 1/2"	3/16"		PL	3 1/2"
7	4	1" Angle	Angle	3"	3/16"	3"	Angle	1"
8	1	6' HF	Hinge Frame R1					
9	2	2 Air Bung	2" Air Bung Assy					
10	2	30" Angle	Angle	3"	3/16"	3"	Angle	30"
11	2	24 End Cap W Lift Eyes	End Cap		1/4"		Plate	
12	1	Finger 30 Plate BF	Finger 30 Plate BF	71 3/8"	3/8"	29 1/2"		
13	2	29.5 FB		2"	1/4"		FB	29 1/2"
14	4	14 Angle	BF Standoff Angle	4"	3/8"	3"	Angle	14"
15	12	5" Angle	Angle	3"	3/16"	3"	Angle	5"
16	2	Lift Lugs	Lift Lug		3/8"		PL	
17	2	Anode	Anode				Magnesium	







22" DH
5379 Lbs Decked

NOTES:
1. WELDING:
   STEEL - CSA W47.1
   ALUMINUM - CSA W47.2
   UNLESS OTHERWISE SHOWN, WELD SIZE SHALL BE EQUIVALENT TO THICKNESS OF MEMBERS BEING JOINED.
2. ALL ALUMINUM STRUCTURAL MEMBERS ARE 6061-T6
   ALL STEEL STRUCTURAL MEMBERS ARE 44W
3. UNLESS OTHERWISE SPECIFIED BOM IS STEEL
4. SPECIFIED LOADS:
   See Sheet 1

ENGINEER'S SEAL

LICENSED PROFESSIONAL ENGINEER
D. P. KROPF
100168735
Province of Ontario
Sept. 25/19

A / B C — TITLE
SCALE:

A DETAIL NUMBER
B SHEET NUMBER - WHERE DETAIL REQUIRED
C SHEET NUMBER - WHERE DETAIL LOCATED

PART NUMBER

MODEL
Tee Finger

CUSTOMER
Sioux Lookout

DRAWINGS
CF-1

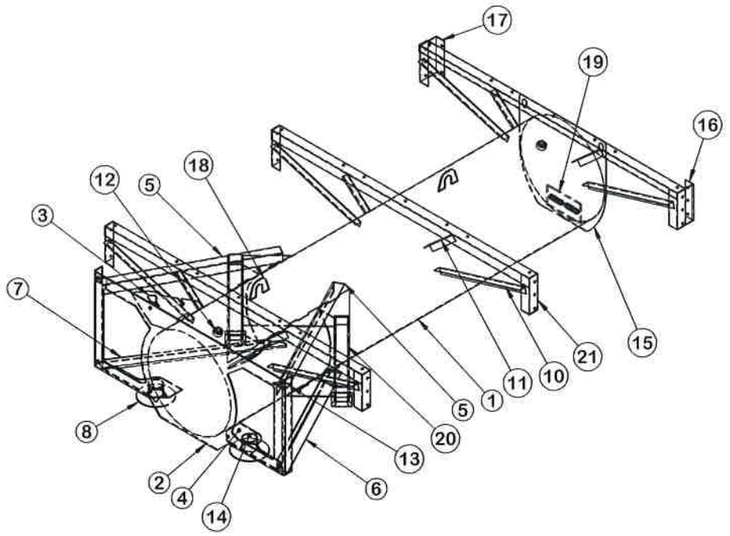
DRAWN BY: **MS**
DRAWN DATE **Aug 20-19**
SCALE
CHECKED BY:
REVISION DATE:
REV DESCRIPTION:

KROPF INDUSTRIAL INC — CONOLIFT AQUACULTURE MARINE

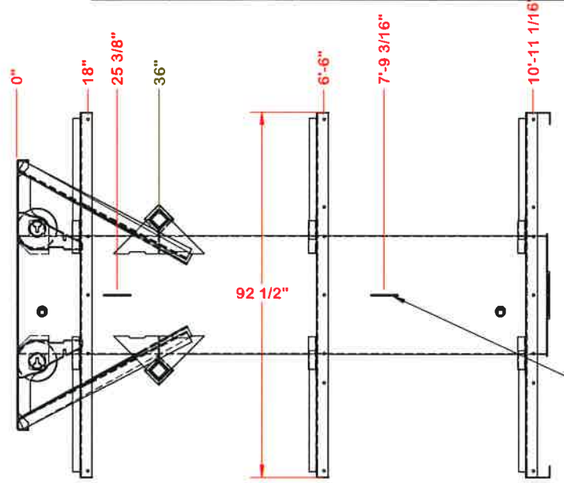
JOB NUMBER
D72273

SHEET NUMBER
18 OF 24

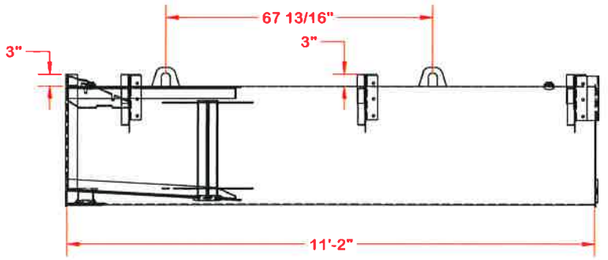
Wednesday, September 18, 2019

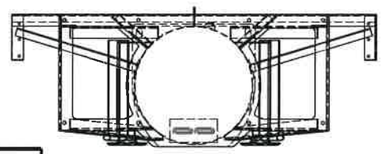


ITEM NO.	Expanded/QTY.	PART NUMBER	DESCRIPTION	Width	Thickness	Height	Mat'l Desc	Length
1	1	11' 2 Pipe 30	Pipe	30"	3/16"		Pipe	11'-2"
2	1	Plate 30 BF	Plate BF	73 3/8"	3/8"	33 1/2"		
3	2	BF-HF Brace-Chain PL .625 Slot	BF-HF Brace-Chain PL .625 Slot	16 5/16"	3/8"	12 1/8"	PL	
4	2	Btm FB Gus 30						
5	2	BF-HF Brace 48	BF-HF Brace	3"	1/4"	3"		48"
6	1	PL BF 1 Brace 48.75	BF-HF Brace	3"	1/4"	3"		48 3/4"
7	1	PL BF 2 Brace 48.75	BF-HF Brace	3"	1/4"	3"		48 3/4"
8	2	Chian Tube Guide Flange No Holes	Chain Tube Guide Flange		1/4"		PL	
9	1	8' WF	FRAME WOOD 8					
10	6	32 Angle	Wood Frame Brace	2"	1/8"	2"	Angle	32"
11	6	11 Angle	Wood Frame Brace	2"	1/8"	2"	Angle	11"
12	2	2 Air Bung	2" Air Bung Assy					
13	2	PL BF Brace Tab	PL BF Brace Tab	4"	3/8"		PL	2 1/2"
14	2	Guide Flange Extention Pipe	Guide Flange Extention Pipe	4"	1/4"		Pipe	3"
15	1	30 End Cap	30 End Cap	31"	1/4"	31"	PL	
16	1	Double 2 x 8 Skirt	Skirt Angle	3"	3/16"	3"	Angle	11 1/4"
17	1	Double 2 x 8 Skirt	Skirt Angle	3"	3/16"	3"	Angle	11 1/4"
18	2	Lift Lugs	Lift Lug		3/8"		PL	
19	1	Anode	Anode				Magnesium	
20	2	Sioux Lookout Achor Tube Assy 30	Anchor Tube Assy 30					
21	2	8' WF	FRAME WOOD 8					



Offset Lift Lugs To Either Side Of Center Stringer





22" DH
2031 Lbs Decked

NOTES:
1. WELDING:
   STEEL - CSA W47.1
   ALUMINUM - CSA W47.2
   UNLESS OTHERWISE SHOWN, WELD SIZE SHALL BE EQUIVALENT TO THICKNESS OF MEMBERS BEING JOINED.
2. ALL ALUMINUM STRUCTURAL MEMBERS ARE 6061-T6
   ALL STEEL STRUCTURAL MEMBERS ARE 44W
3. UNLESS OTHERWISE SPECIFIED BOM IS STEEL
4. SPECIFIED LOADS:
   See Sheet 1

ENGINEER'S SEAL

LICENSED PROFESSIONAL ENGINEER
D. P. KROPF
100168735
Sept. 25/19
PROVINCE OF ONTARIO

A B C TITLE
SCALE:

A DETAIL NUMBER
B SHEET NUMBER - WHERE DETAIL REQUIRED
C SHEET NUMBER - WHERE DETAIL LOCATED

PART NUMBER

MODEL
CM-6

CUSTOMER
Sioux Lookout

DRAWINGS
CM-6

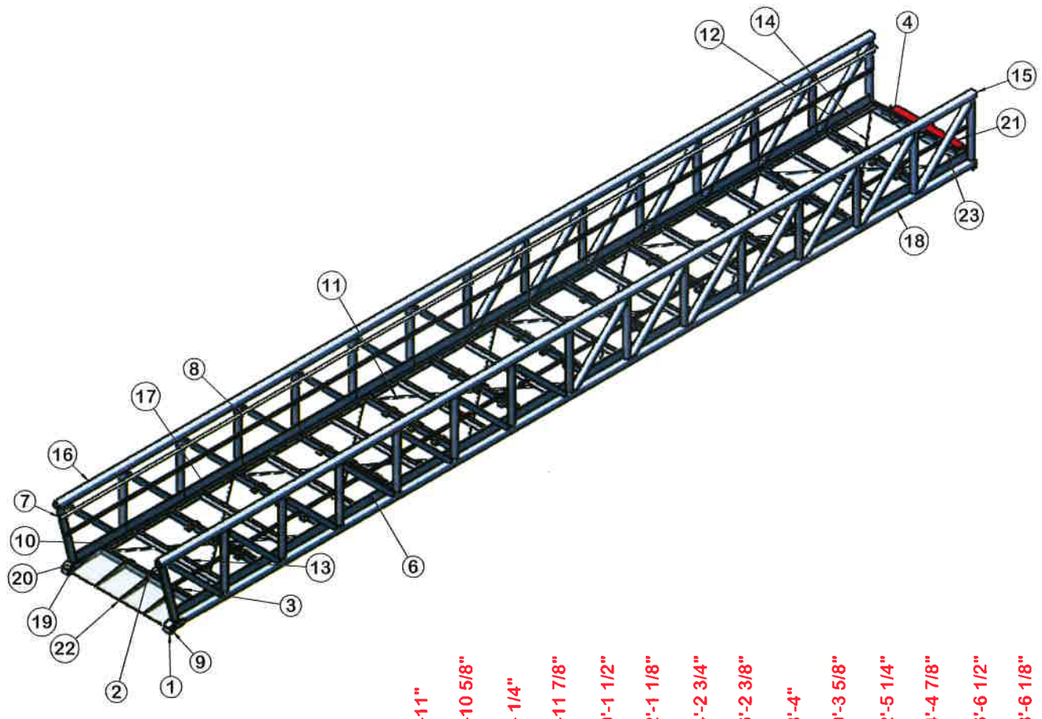
DRAWN BY: **MS**
DRAWN DATE **Aug 20-19**
SCALE
CHECKED BY:
REVISION DATE:
REV DESCRIPTION:

KROPF INDUSTRIAL INC — CONOLIFT AQUACULTURE MARINE

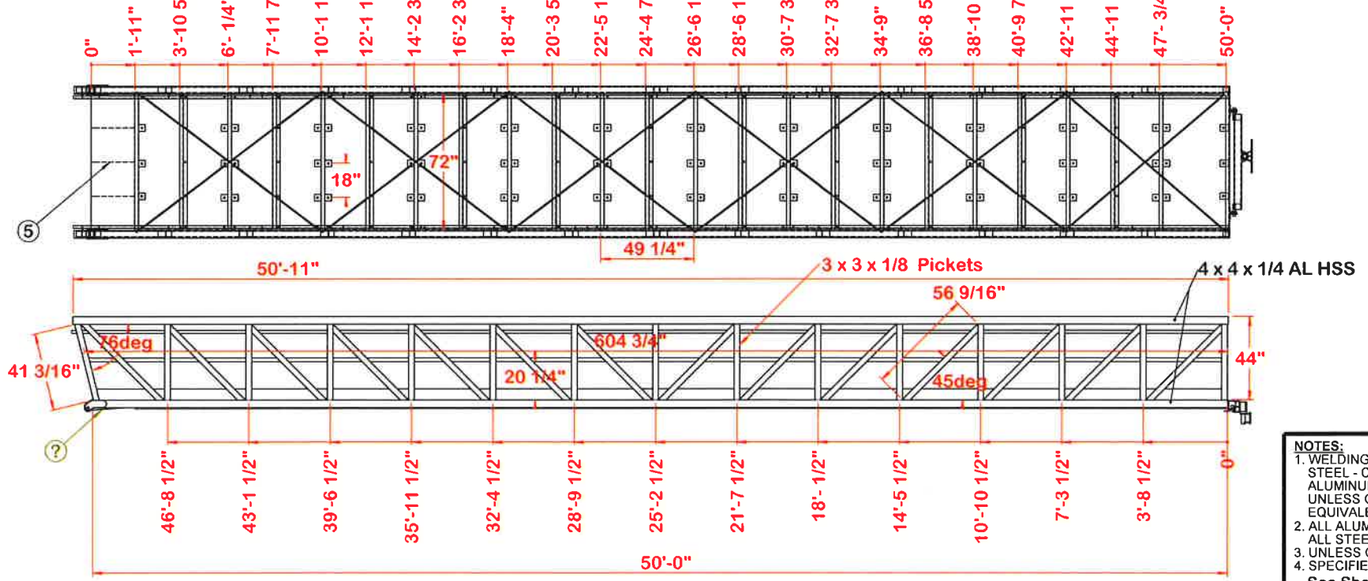
JOB NUMBER
D72273

SHEET NUMBER
OF
19 | **24**

Wednesday, September 18, 2019



ITEM NO.	Expanded/QTY.	PART NUMBER	Width	Thickness	Height	Mat'l Desc	Length
1	2	4" Ramp Wheel 2019	4"			UHMW	4"
2	12	72 2 x 4 HSS	2"	1/8"	4"		72"
3	69	2019 Stringer Support	3 1/2"	3/16"		AL PL	3 1/2"
4	3	Rock Mt Ramp Stringer Support	3 1/2"	3/16"		AL PL	4 1/2"
5	3	2019 Bevel Support	23 1/4"	3/16"	3 1/2"	AL PL	
6	2	2019 Railing Toe Rail		1/4"	6"	AL PL	49'-7 1/8"
7	2	50' Pipe	1 1/2"				50'-11"
8	54	2019 Lower Railing Mt		3/8"			~4 1/2"
9	2	2019 Ramp Wheel Axle					
10	44	21.625 Angle	2 1/2"	3/16"	1 1/2"	Angle	21 5/8"
11	10	123 RD		1/2"		AL RD	123"
12	2	114 RD		1/2"		AL RD	114"
13	11	72 2 x 2 L	2"	1/4"	2"		72"
14	2	34.625 Angle	2 1/2"	3/16"	1 1/2"	Angle	34 5/8"
15	1	Railing For 42' Ramp L					
16	1	Railing For 42' Ramp R					
17	11	2 x 2 x .1875 AL HSS	2"	3/16"	2"	AL HSS	72"
18	2	4 x 4 x .25 AL HSS	4"	1/4"	4"	HSS	600"
19	4	Wheel Side Plate	11 3/8"	1/2"	5 3/8"	PL	
20	2	Wheel Top Plate	4 3/8"	3/8"	4 3/8"	PL	
21	1	Shore Mt					
22	1	6' No Pin	72"	3/16"		AL PL	24"
23	1	6 x 2 x .3125 Channel				CH	80"



NOTES:
1. WELDING:
   STEEL - CSA W47.1
   ALUMINUM - CSA W47.2
   UNLESS OTHERWISE SHOWN, WELD SIZE SHALL BE EQUIVALENT TO THICKNESS OF MEMBERS BEING JOINED.
2. ALL ALUMINUM STRUCTURAL MEMBERS ARE 6061-T6
   ALL STEEL STRUCTURAL MEMBERS ARE 44W
3. UNLESS OTHERWISE SPECIFIED BOM IS STEEL
4. SPECIFIED LOADS:
   See Sheet 1

ENGINEER'S SEAL

LICENSED PROFESSIONAL ENGINEER
D. P. KROPF
100168735
Sept. 25/19
PROVINCE OF ONTARIO

A
B C
TITLE
SCALE:

A DETAIL NUMBER
B SHEET NUMBER - WHERE DETAIL REQUIRED
C SHEET NUMBER - WHERE DETAIL LOCATED

PART NUMBER

MODEL
50' Ramp

CUSTOMER
Sioux Lookout

DRAWINGS
Sioux 50 Ramp 2019

DRAWN BY:	DRAWN DATE	SCALE
MS	April 24-19	
CHECKED BY:	REVISION DATE:	

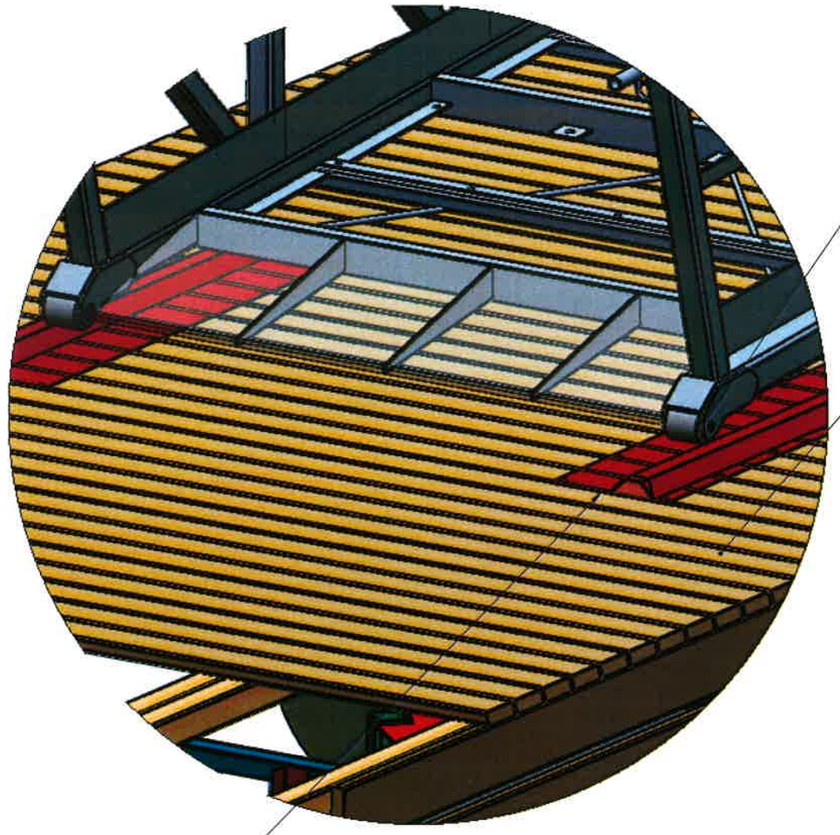
REV DESCRIPTION:

KROPF CONOLIFT AQUACULTURE MARINE INDUSTRIAL INC

JOB NUMBER
D72273

SHEET NUMBER
20 OF 24

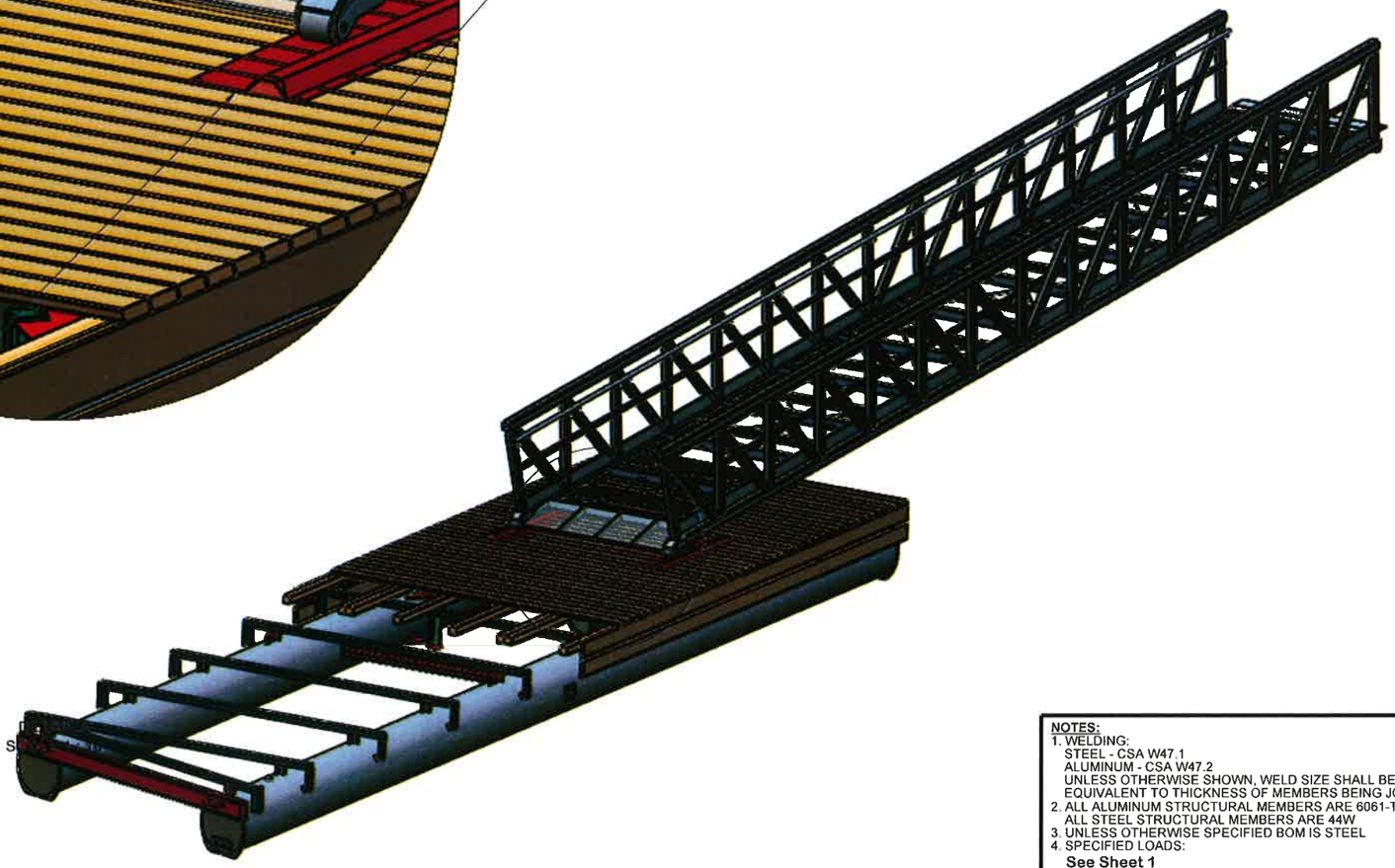
Wednesday, September 25, 2019



UHMW Wheels Roll On Deck

Extra Float Tank For Weight Of Ramp

Wheel Guides For Ramp



NOTES:
1. WELDING:
   STEEL - CSA W47.1
   ALUMINUM - CSA W47.2
   UNLESS OTHERWISE SHOWN, WELD SIZE SHALL BE EQUIVALENT TO THICKNESS OF MEMBERS BEING JOINED.
2. ALL ALUMINUM STRUCTURAL MEMBERS ARE 6061-T6
   ALL STEEL STRUCTURAL MEMBERS ARE 44W
3. UNLESS OTHERWISE SPECIFIED BOM IS STEEL
4. SPECIFIED LOADS:
   See Sheet 1

ENGINEER'S SEAL

LICENSED PROFESSIONAL ENGINEER
D. P. KROPF
100168735
Sept. 25/19
PROVINCE OF ONTARIO

A
B C TITLE
SCALE:

A DETAIL NUMBER
B SHEET NUMBER - WHERE DETAIL REQUIRED
C SHEET NUMBER - WHERE DETAIL LOCATED

PART NUMBER

MODEL
Sioux Lookout Layout

CUSTOMER
Sioux Lookout

DRAWINGS
Ramp To Dock Detail

DRAWN BY:	DRAWN DATE	SCALE
MS	**Aug 12-19**	
CHECKED BY:	REVISION DATE:	

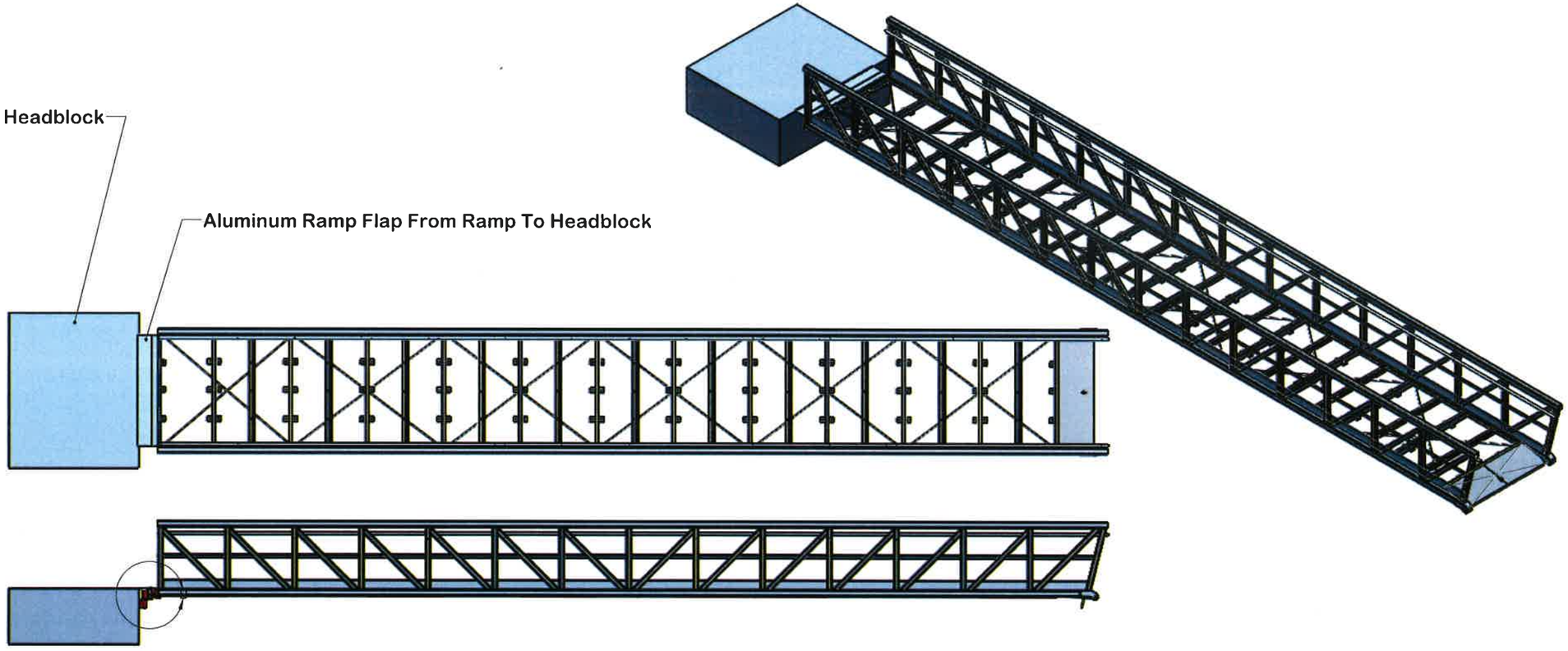
REV DESCRIPTION:

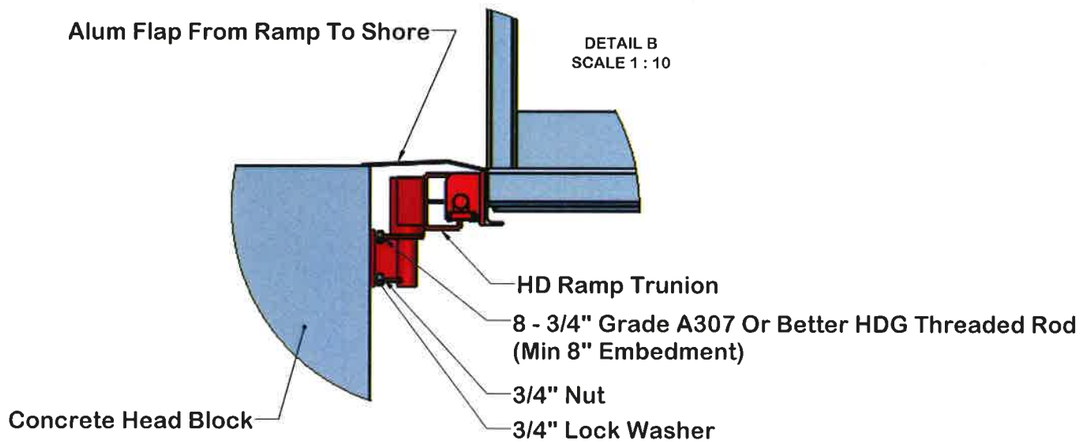
KROPF CONOLIFT AQUACULTURE MARINE INDUSTRIAL INC

JOB NUMBER
D72273

SHEET NUMBER
OF
21 | **24**

Wednesday, September 25, 2019





DETAIL B
SCALE 1 : 10

NOTES:
1. WELDING:
   STEEL - CSA W47.1
   ALUMINUM - CSA W47.2
   UNLESS OTHERWISE SHOWN, WELD SIZE SHALL BE EQUIVALENT TO THICKNESS OF MEMBERS BEING JOINED.
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3. UNLESS OTHERWISE SPECIFIED BOM IS STEEL
4. SPECIFIED LOADS:
   See Sheet 1

ENGINEER'S SEAL

LICENSED PROFESSIONAL ENGINEER
D. P. KROPF
100168735
Sept 25/19
PROVINCE OF ONTARIO

A DETAIL NUMBER
B SHEET NUMBER - WHERE DETAIL REQUIRED
C SHEET NUMBER - WHERE DETAIL LOCATED

TITLE
SCALE:

PART NUMBER

MODEL
Sioux Lookout Layout

CUSTOMER
Sioux Lookout

DRAWINGS
Ramp To Shore Detail

DRAWN BY:	DRAWN DATE	SCALE
MS	**Aug 12-19**	
CHECKED BY:	REVISION DATE:	

REV DESCRIPTION:

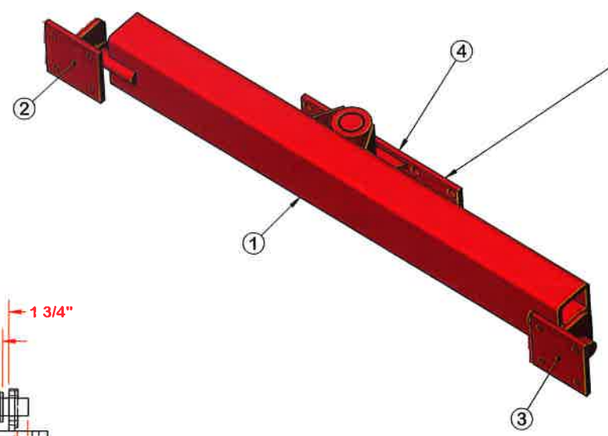
KROPF CONOLIFT AQUACULTURE MARINE INDUSTRIAL INC

JOB NUMBER
D72273

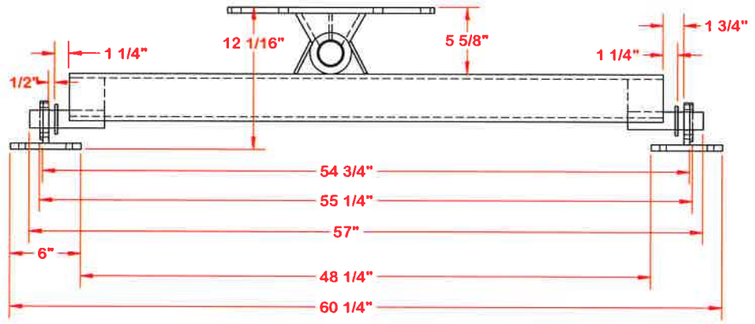
SHEET NUMBER
22 OF **24**

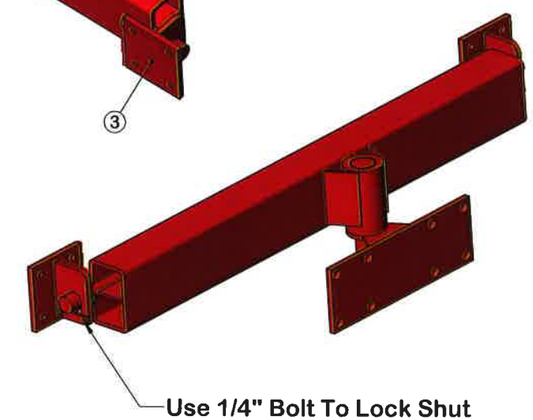
Monday, September 23, 2019

ITEM NO.	Expanded/QTY.	PART NUMBER	DESCRIPTION	Width	Thickness	Height	Mat'l Desc	Length
1	1	HD Mt	Shore Pivot					
2	1	Sioux Ramp Hook Assy	Sioux Ramp Hook Assy					
3	1	Sioux Ramp Hook Assy	Sioux Ramp Hook Assy					
4	1	Concrete Mt	Pivot Shore Mt					

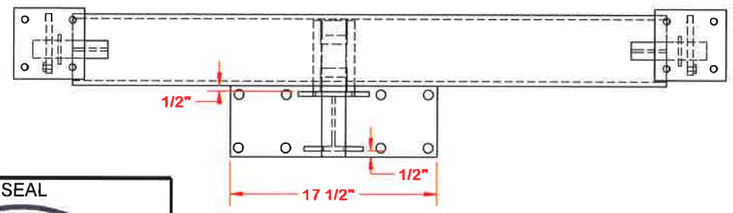


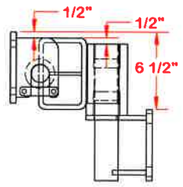
Welded To Steel Sheet Pile
Or Anchored To Concrete With
3/4" HDG Anchor Bolts With A
Minimum 8" Embedment





Use 1/4" Bolt To Lock Shut





NOTES:
1. WELDING:
   STEEL - CSA W47.1
   ALUMINUM - CSA W47.2
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4. SPECIFIED LOADS:
   See Sheet 1

ENGINEER'S SEAL

LICENSED PROFESSIONAL ENGINEER
D. P. KROPF
100168735
Sept. 25/19
PROVINCE OF ONTARIO

A DETAIL NUMBER
B SHEET NUMBER - WHERE DETAIL REQUIRED
C SHEET NUMBER - WHERE DETAIL LOCATED

TITLE
SCALE:

PART NUMBER

MODEL
Crib Mt

CUSTOMER
Sioux Lookout

DRAWINGS
Sioux HD Ramp Mt

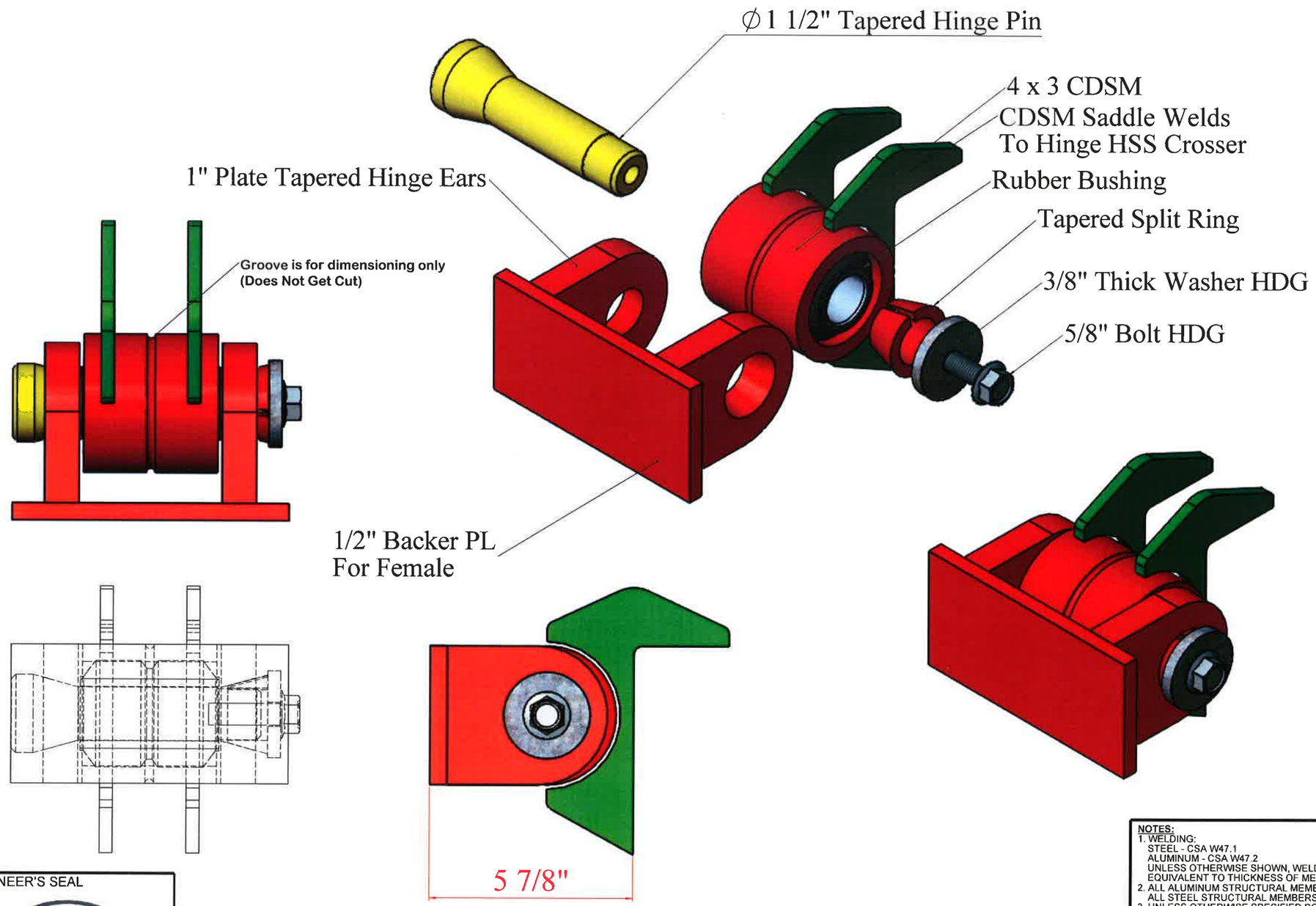
DRAWN BY: **MS**
DRAWN DATE **Sept 16-19**
SCALE
CHECKED BY:
REVISION DATE:
REV DESCRIPTION:

KROPF CONDUIT AQUACULTURE MARINE
INDUSTRIAL INC

JOB NUMBER
D72273

SHEET NUMBER
OF
23 | **24**

Thursday, September 19, 2019



NOTES:
1. WELDING:
   STEEL - CSA W47.1
   ALUMINUM - CSA W47.2
   UNLESS OTHERWISE SHOWN, WELD SIZE SHALL BE EQUIVALENT TO THICKNESS OF MEMBERS BEING JOINED.
2. ALL ALUMINUM STRUCTURAL MEMBERS ARE 6061-T6
   ALL STEEL STRUCTURAL MEMBERS ARE 44W
3. UNLESS OTHERWISE SPECIFIED BOM IS STEEL
4. SPECIFIED LOADS: SEE SHEET 1

ENGINEER'S SEAL

LICENSED PROFESSIONAL ENGINEER
D. P. KROPF
100168735
Sept. 29/19
PROVINCE OF ONTARIO

A DETAIL NUMBER
B SHEET NUMBER - WHERE DETAIL REQUIRED
C SHEET NUMBER - WHERE DETAIL LOCATED

TITLE
SCALE:

PART NUMBER

MODEL
Typical Silent & Wear Proof Hinge Assy

CUSTOMER
Hinge Assembly

DRAWINGS
Typical Hinge Assy Detail

DRAWN BY:	DRAWN DATE	SCALE
MS	Sept 29-04	
CHECKED BY:	REVISION DATE:	
JK	Sept 29-04 April 12-16	

REV DESCRIPTION:

KROPF CONDUIT AQUACULTURE MARINE INDUSTRIAL INC

JOB NUMBER

SHEET NUMBER 24 OF 24

Wednesday, September 18, 2019