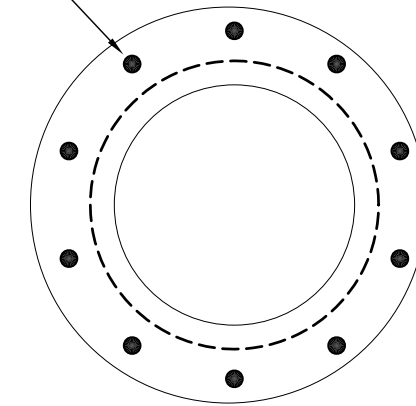


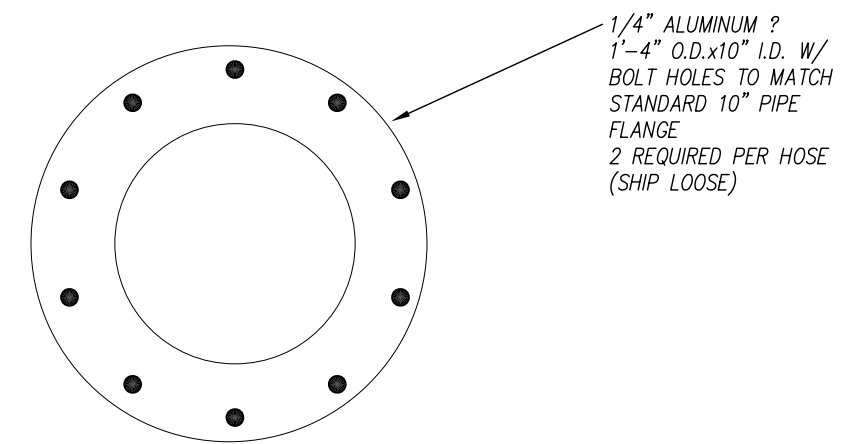
BOLT HOLES TO MATCH  
STANDARD 10" PIPE  
FLANGE



FLEXIBLE POLYURETHANE HOSE  
SCALE; 1 1/2" = 1'-0"

NOTE:  
FOR POLYURETHANE FORMULA INFORMATION  
REFER TO:  
NMFS FORMULA  
GRIFFITH POLYMERS, INC.  
10500 MANHASSET DRIVE  
TUALITIN, OREGON 97062  
503.612.0999

END VIEW  
SCALE; 1 1/2" = 1'-0"



RING WASHER DETAIL  
SCALE; 1 1/2" = 1'-0"

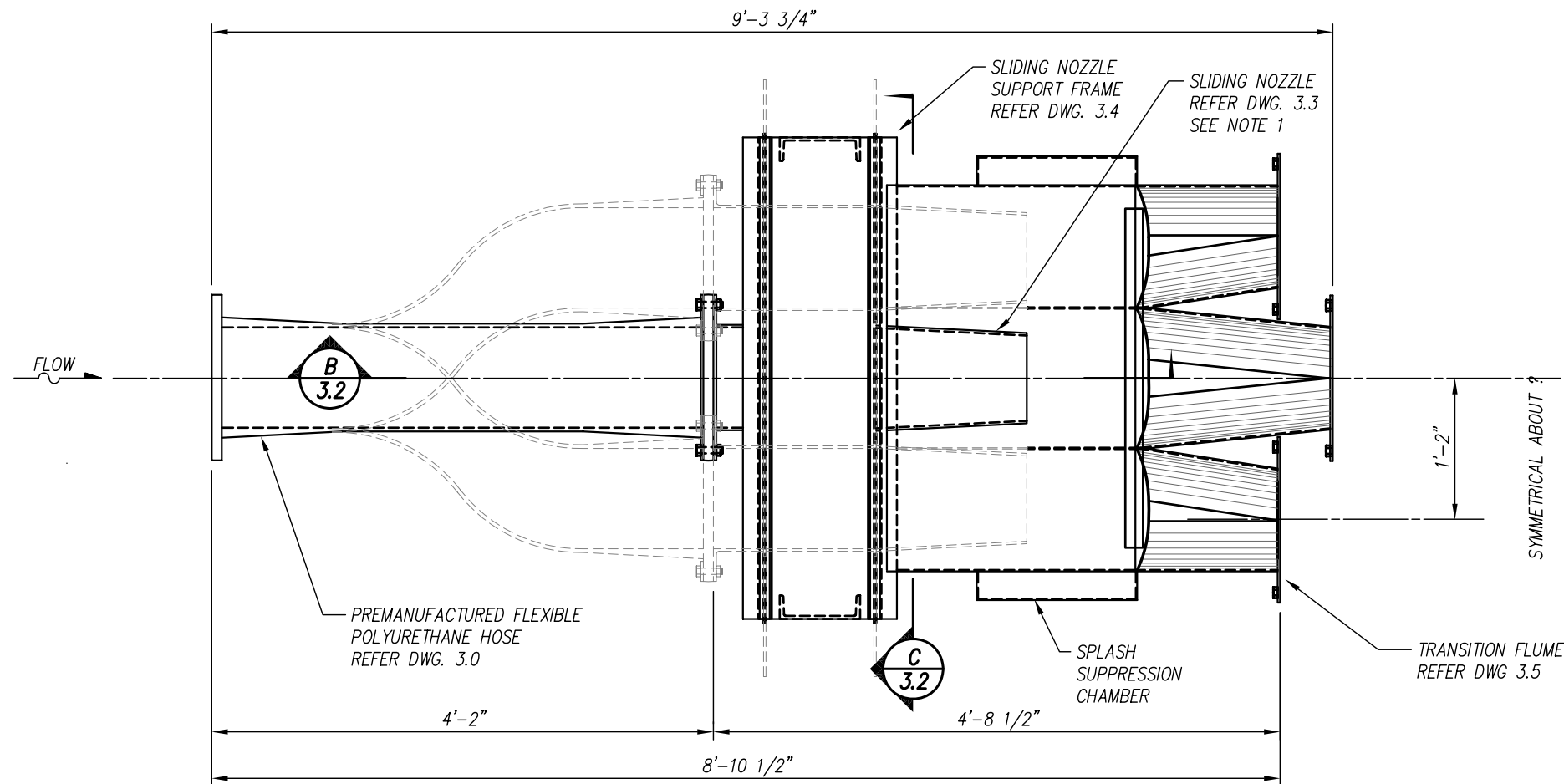
**HARBOR CONSULTING ENGINEERS**  
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SEATTLE WASHINGTON 98102  
PHONE: (206) 709-2397

DRAWN:	REV.	DATE	DESCRIPTION
CHECKED: J. HUTCHINS			
JOB NUMBER: 96030.40			
CADD FILE NAME: SS3-0.DWG			

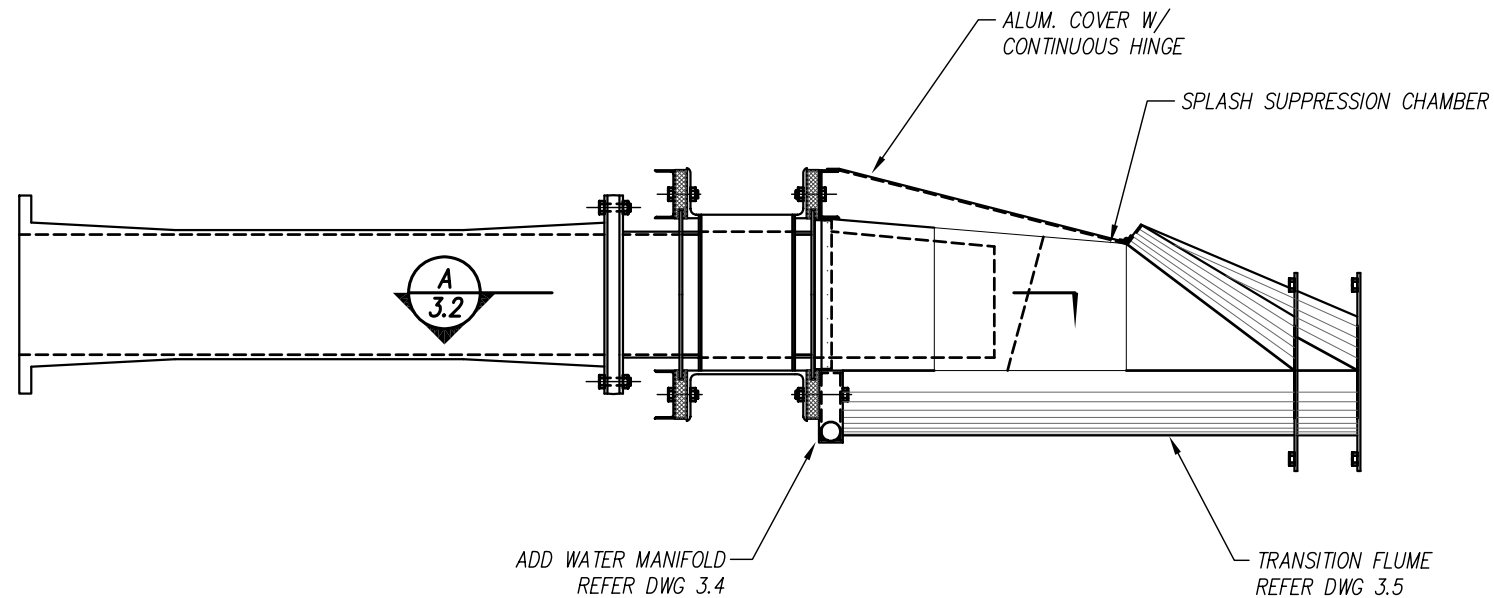


FISH DIVERSION EQUIPMENT FOR THE COLUMBIA RIVER BASIN  
10" THREE-WAY SIDE-TO-SIDE FISH DIVERTER  
FLEXIBLE HOSE  
SECTIONS & DETAILS

DATE: 8/31/97
DRAWING NUMBER: 3.0
SHT. 1 OF 7



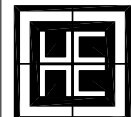
PLAN - 10" THREE-WAY SIDE-TO-SIDE DIVERTER  
SCALE: 3/4" = 1'-0"



SIDE ELEVATION  
SCALE: 3/4" = 1'-0"

GENERAL NOTES:

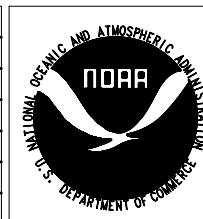
ALL MATERIAL SHALL BE TYPE 6061 STRUCTURAL ALUMINUM UNLESS NOTED OTHERWISE.  
ALL BOLTS SHALL BE GRADE 5, SIZE AS NOTED ON DRAWINGS, TYPICAL, UNLESS NOTED OTHERWISE.



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JOB NUMBER:  
96030.40  
CADD FILE NAME:  
SS3-1.DWG

REV.	DATE	DESCRIPTION



**NATIONAL OCEANIC and ATMOSPHERIC ADMINISTRATION**

FISH DIVERSION EQUIPMENT FOR THE COLUMBIA RIVER BASIN  
10" THREE-WAY SIDE-TO-SIDE FISH DIVERTER  
PLAN, ELEVATIONS & NOTES

DATE:	8/31/97
DRAWING NUMBER	3.1
SHT.	2 OF 7

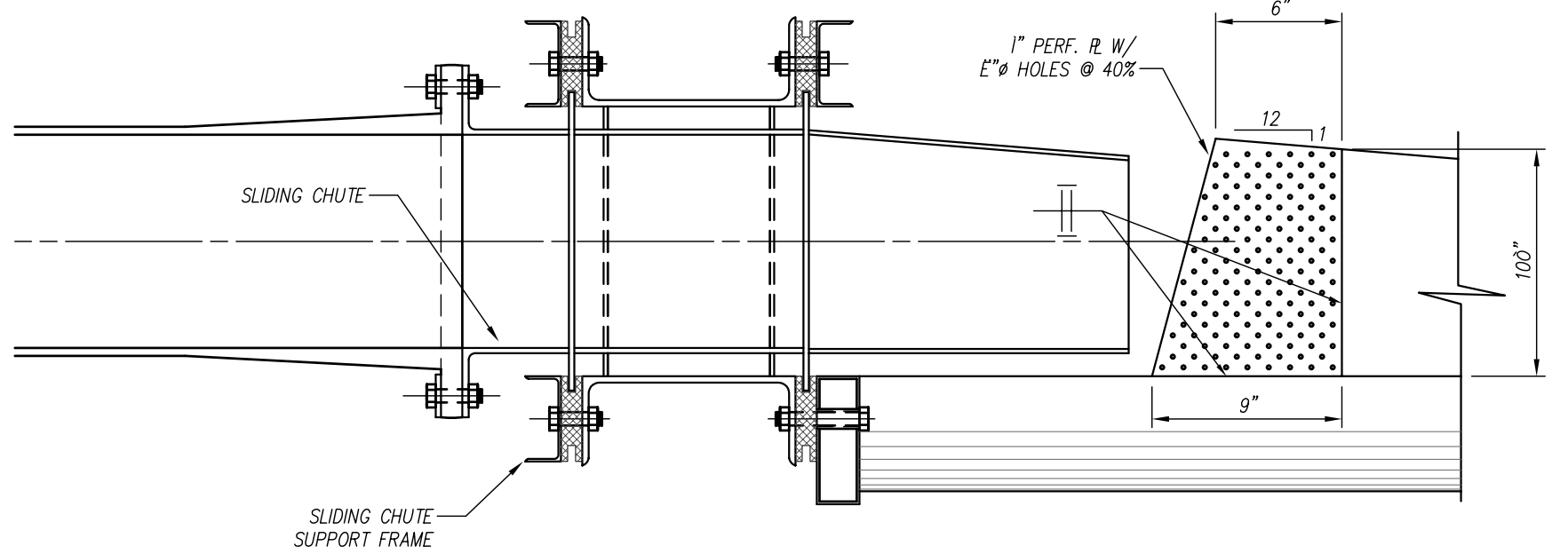
NOTE:  
TRANSITION FLUME NOT  
SHOWN FOR CLARITY

SLIDING CHUTE  
REFER DWG 2.3

SLIDING CHUTE  
SUPPORT FRAME  
REFER DWG 2.4

SECTION  
SCALE: 1 1/2" = 1'-0"

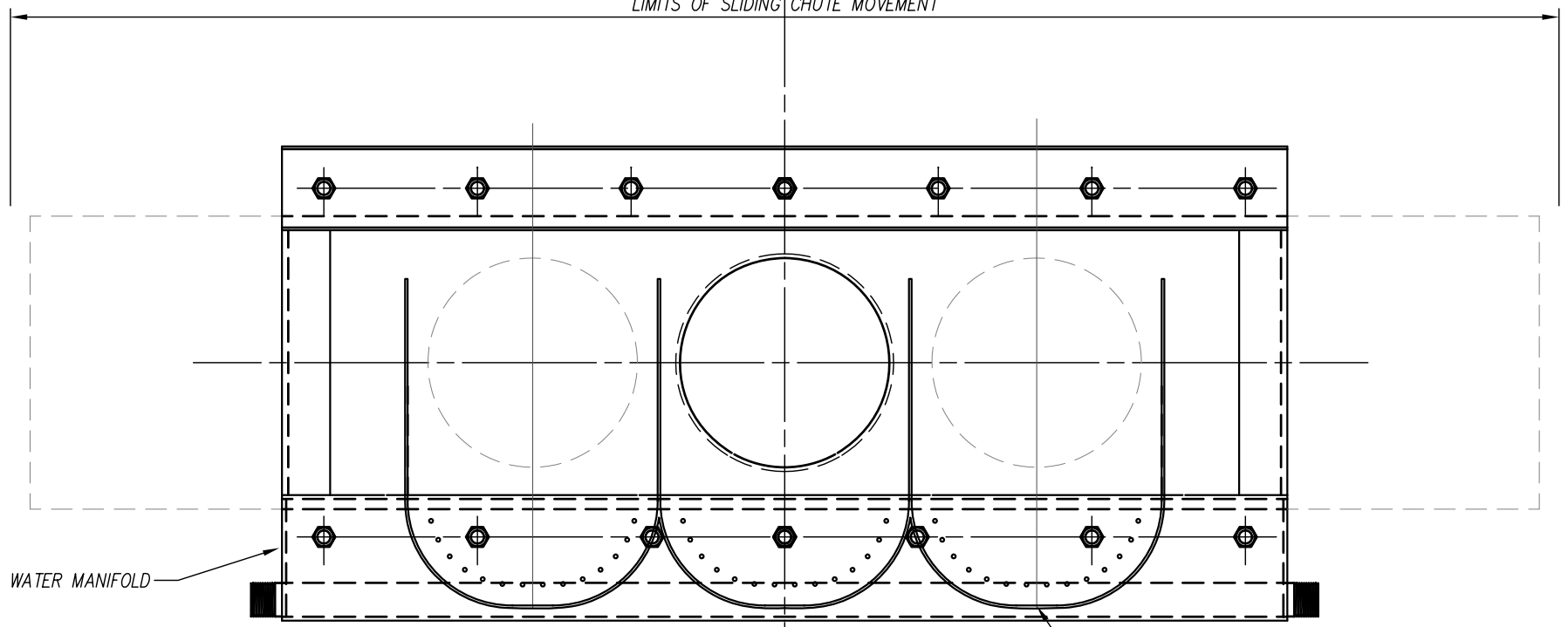
A  
2.1



SECTION  
SCALE: 1 1/2" = 1'-0"

B  
2.1

LIMITS OF SLIDING CHUTE MOVEMENT



ADD WATER MANIFOLD

TRANSITION FLUME

SECTION  
SCALE: 1 1/2" = 1'-0"

C  
2.1



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DRAWN:  
CHECKED:  
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JOB NUMBER:  
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CADD FILE NAME:  
SS3-2.DWG

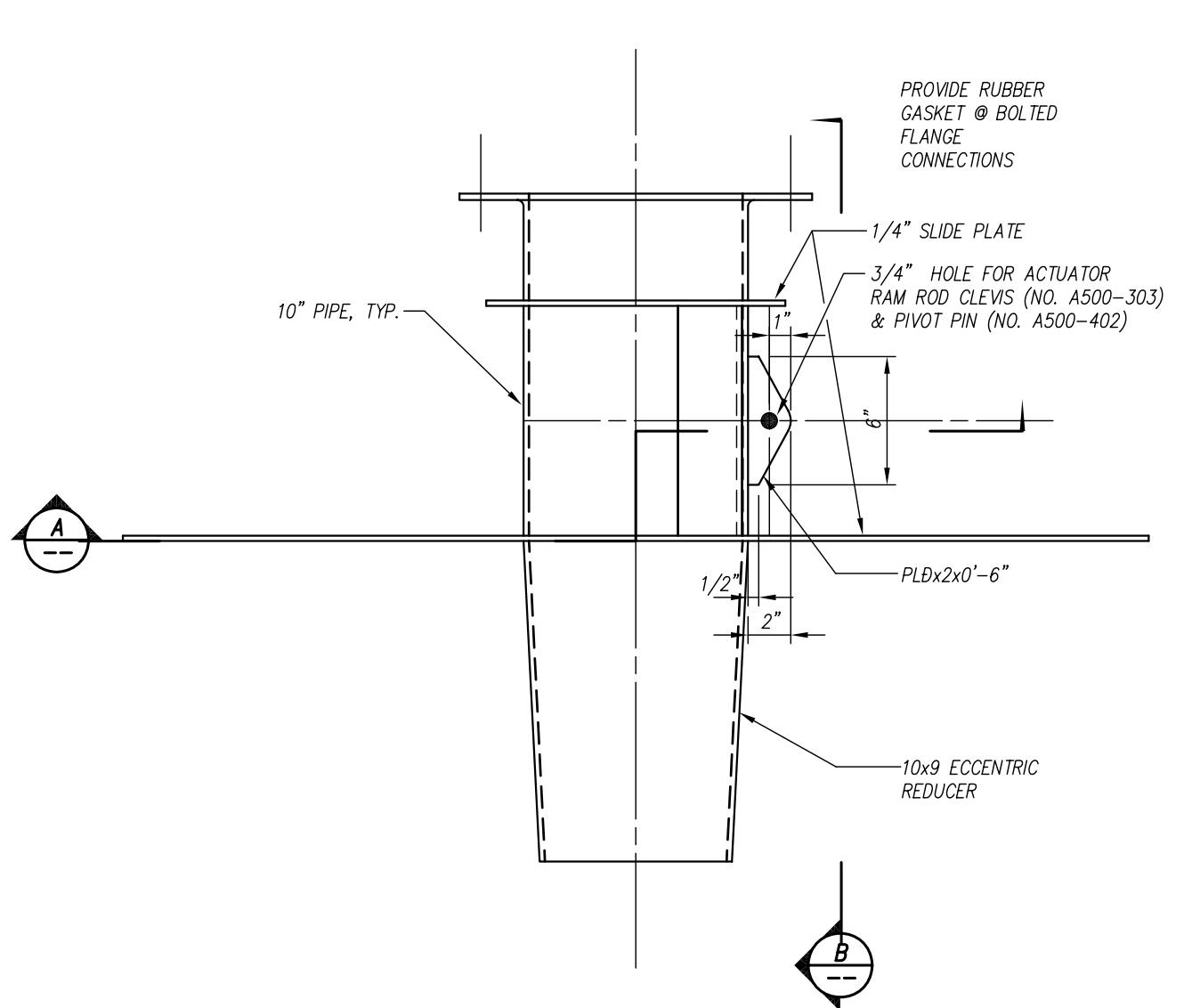
REV.	DATE	DESCRIPTION



**NATIONAL OCEANIC and ATMOSPHERIC ADMINISTRATION**  
U.S. DEPARTMENT OF COMMERCE

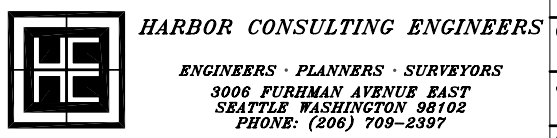
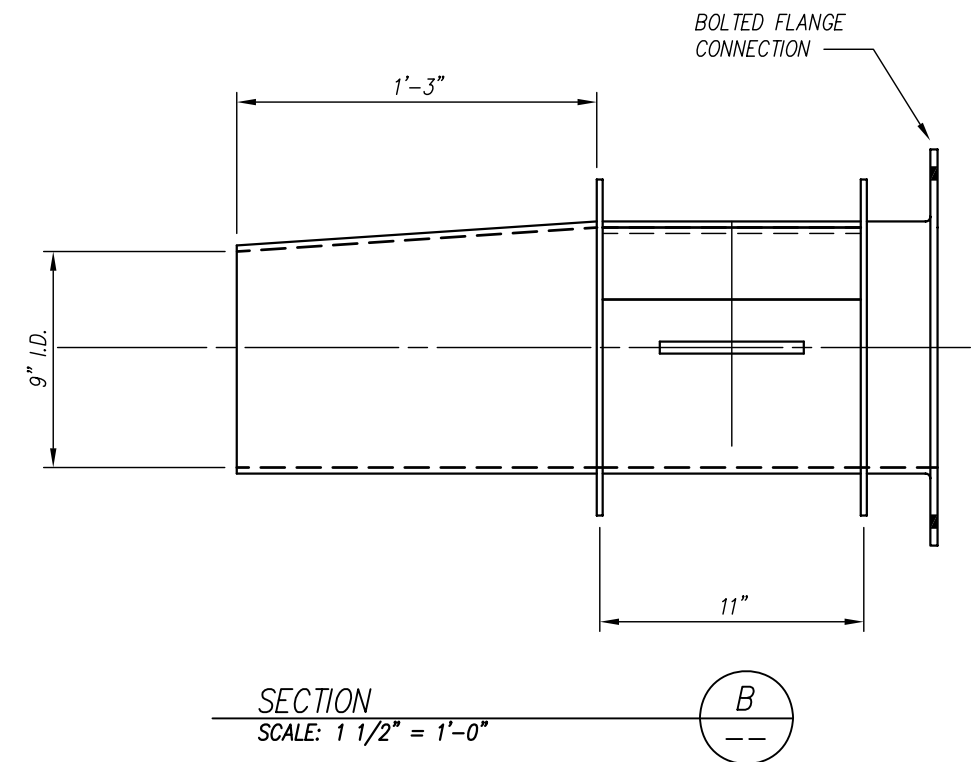
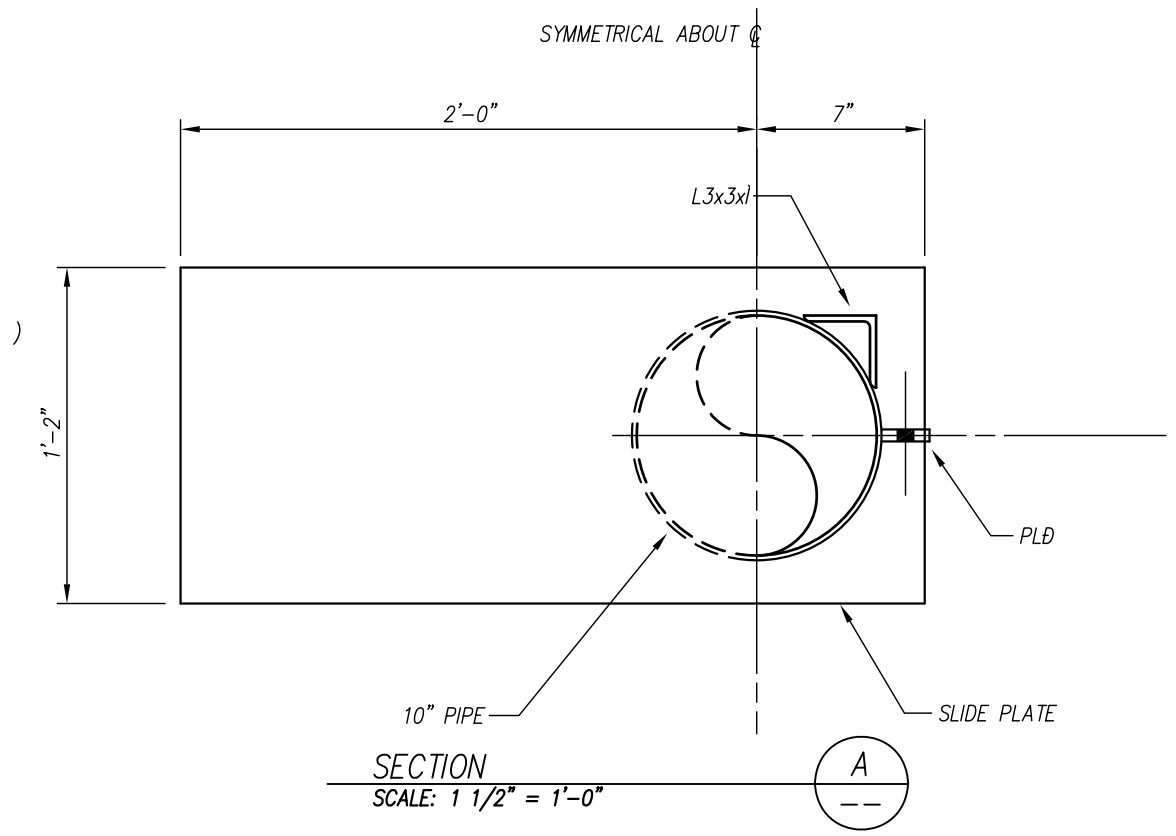
FISH DIVERSION EQUIPMENT FOR THE COLUMBIA RIVER BASIN  
10" THREE-WAY SIDE-TO-SIDE FISH DIVERTER  
SECTIONS & DETAILS

DATE: 8/31/97  
DRAWING NUMBER: 3.2  
SHT. 3 OF 7



PLAN DETAIL - 10" SLIDING NOZZLE  
SCALE: 1 1/2" = 1'-0"

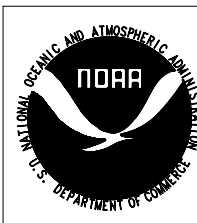
NOTE:  
ALL PART NUMBERS CALLED OUT ARE SUPPLIED BY:  
B-W CONTROLS, INC  
15020 10th AVE. S.W.  
SEATTLE, WASHINGTON  
98166



DRAWN:  
CHECKED:  
JOB NUMBER:  
CADD FILE NAME:

J. HUTCHINS  
96030.40  
SS3-3.DWG

REV.	DATE	DESCRIPTION

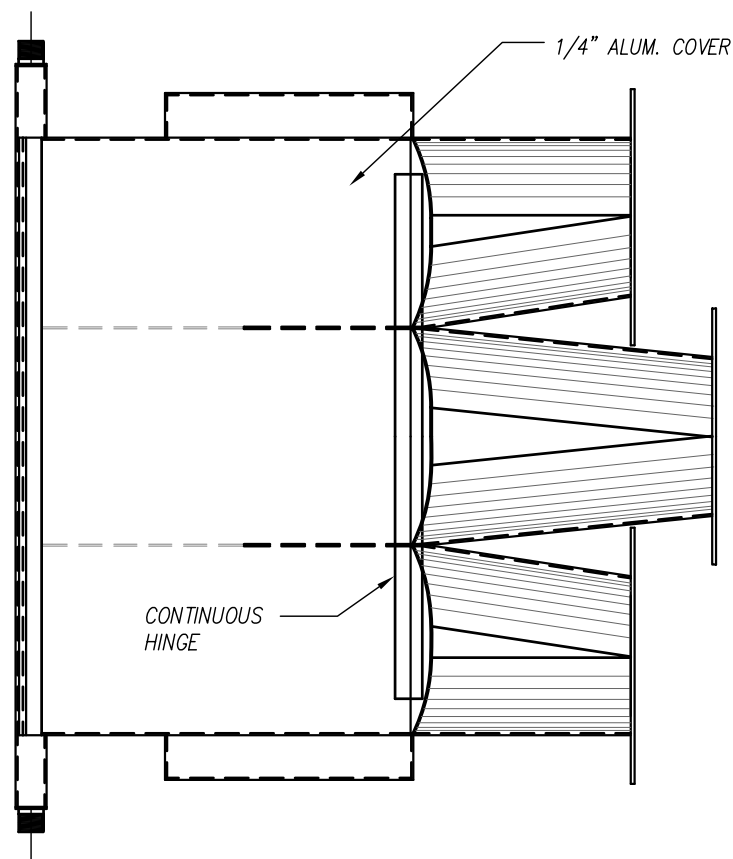


**NATIONAL OCEANIC and ATMOSPHERIC ADMINISTRATION**

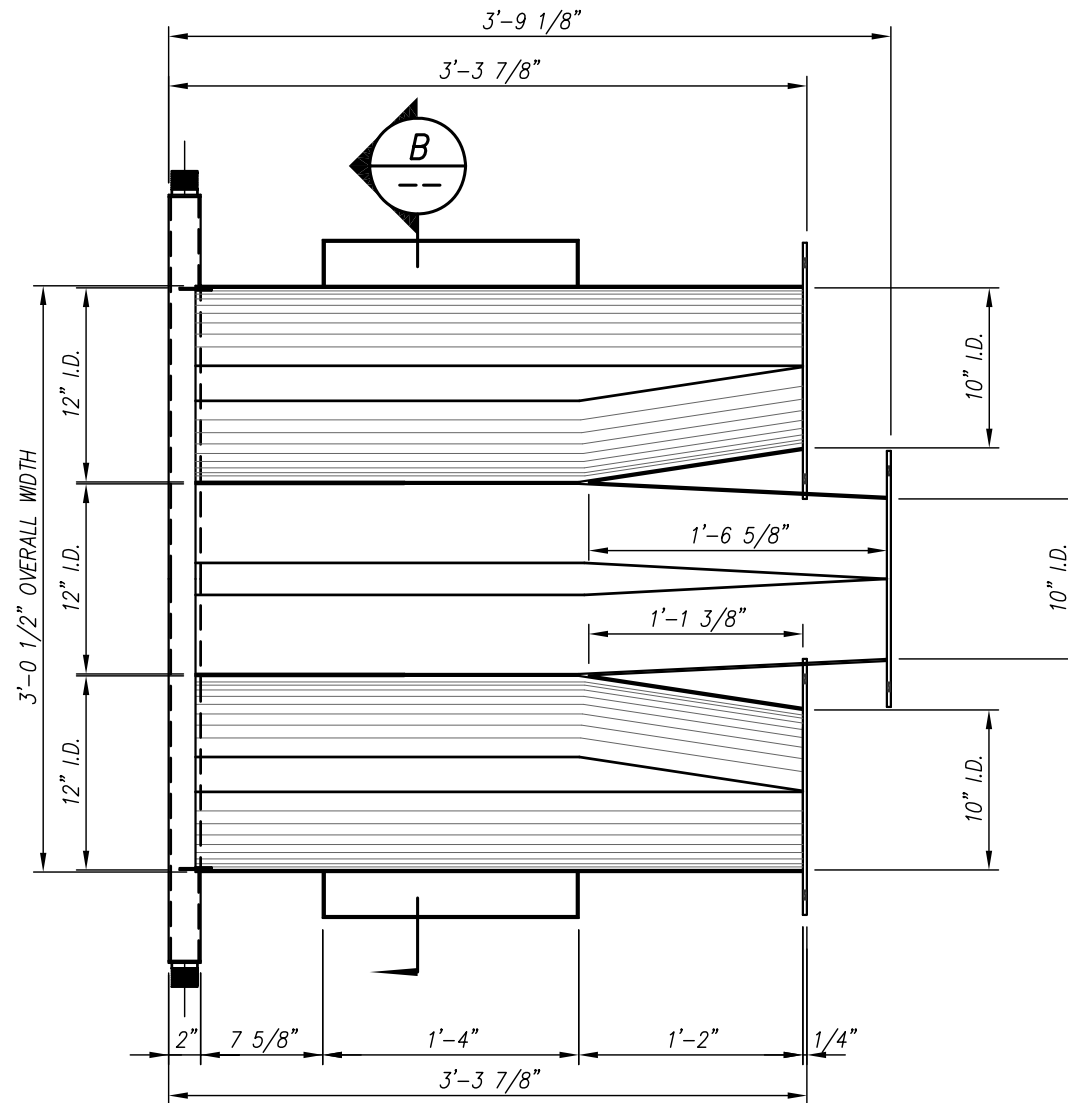
FISH DIVERSION EQUIPMENT FOR THE COLUMBIA RIVER BASIN  
10" THREE-WAY SIDE-TO-SIDE FISH DIVERTER  
SLIDING NOZZLE  
PLAN & SECTIONS

DATE: 8/31/97  
DRAWING NUMBER: 3.3  
SHT. 4 OF 7



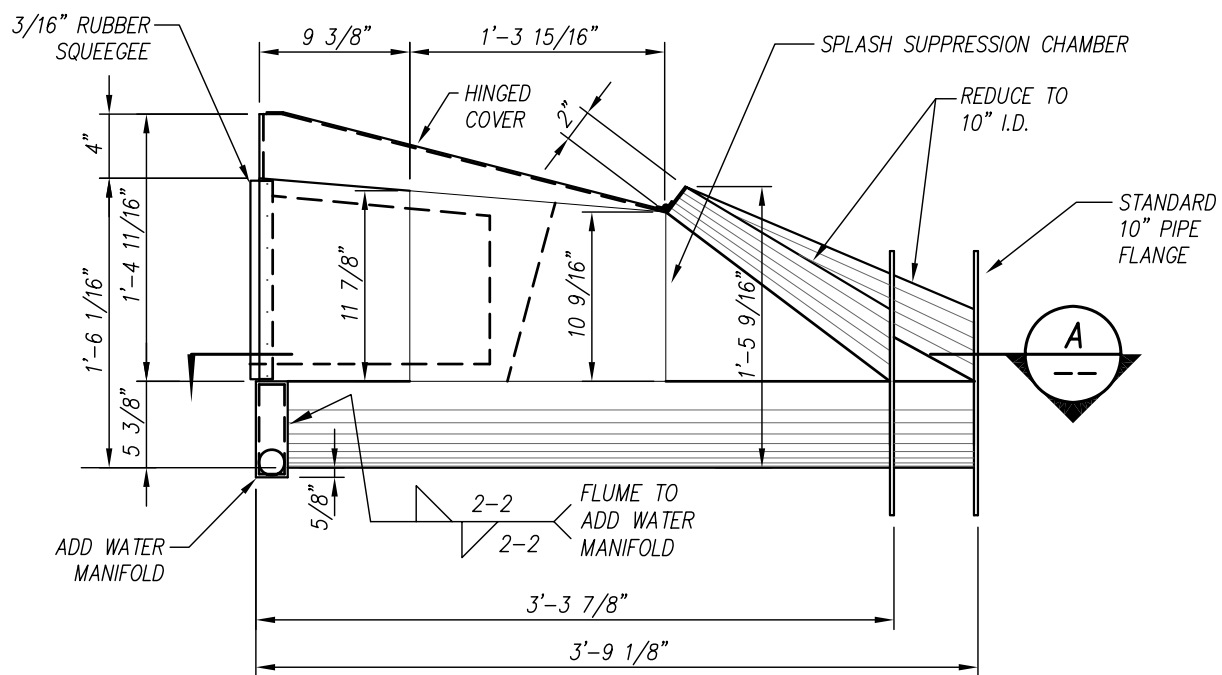


TOP VIEW  
SCALE: 1" = 1'-0"

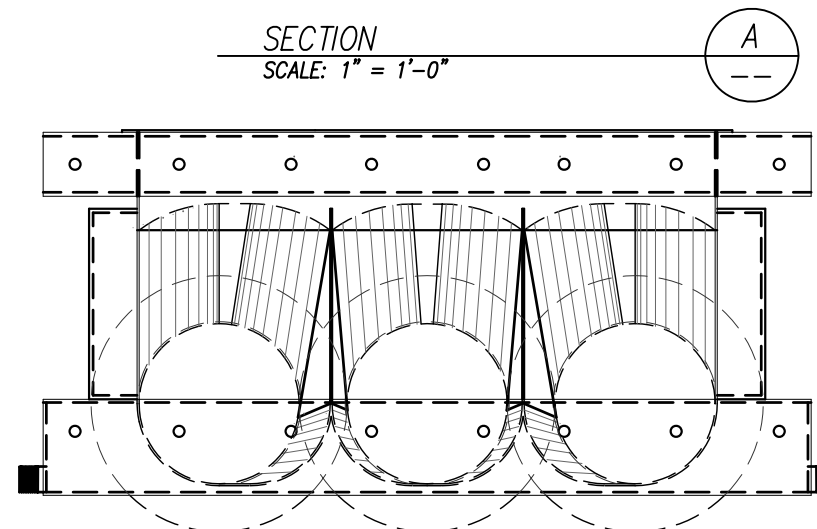


SECTION A  
SCALE: 1" = 1'-0"

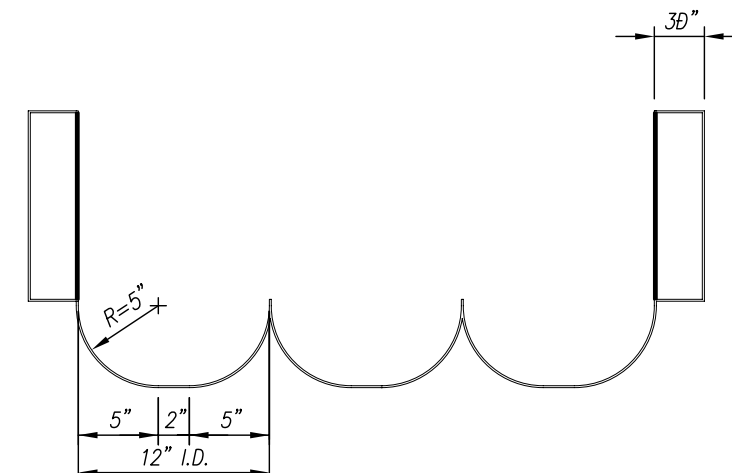
NOTE:  
ALL MATERIAL SHALL BE 1/8"  
ALUMINUM PLATE, TYP. UNO



SIDE ELEVATION  
SCALE: 1" = 1'-0"



END VIEW  
SCALE: 1" = 1'-0"

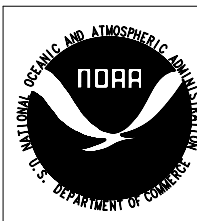


SECTION B  
SCALE: 1" = 1'-0"



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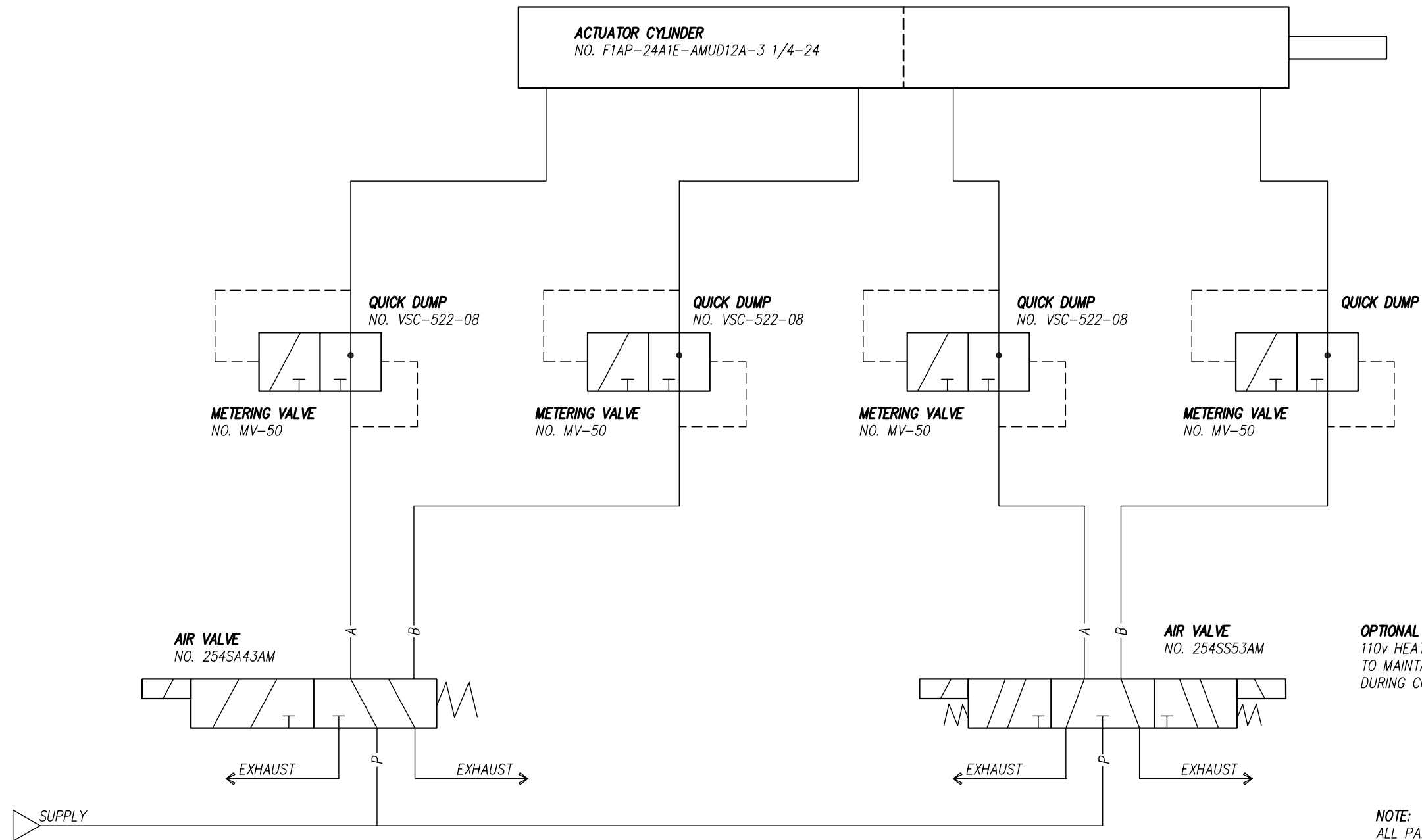
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CHECKED: J. HUTCHINS			
JOB NUMBER: 96030.40			
CADD FILE NAME: SS3-5.DWG			



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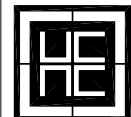
FISH DIVERSION EQUIPMENT FOR THE COLUMBIA RIVER BASIN  
10" THREE-WAY SIDE-TO-SIDE FISH DIVERTER  
TRANSITION FLUME  
PLANS SECTIONS & DETAILS

DATE:	8/31/97
DRAWING NUMBER	3.5
SHT.	6 OF 7



**OPTIONAL EQUIPMENT**  
 110v HEATER GASKET  
 TO MAINTAIN VALVE OPERATION  
 DURING COLD WEATHER CONDITIONS

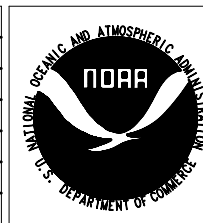
**NOTE:**  
 ALL PART NUMBERS  
 SUPPLIED BY:  
 B-W CONTROLS, INC.  
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 CHECKED:  
 J. HUTCHINS  
 JOB NUMBER:  
 96030.40  
 CADD FILE NAME:  
 SS3-6.DWG

REV.	DATE	DESCRIPTION



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FISH DIVERSION EQUIPMENT FOR THE COLUMBIA RIVER BASIN  
 10" THREE-WAY SIDE-TO-SIDE FISH DIVERTER  
 ELECTRICAL SCHEMATIC

DATE:	8/31/97
DRAWING NUMBER	3.6
SHT.	7 OF 7