

US Army Corps of Engineers  
PORTLAND DISTRICT

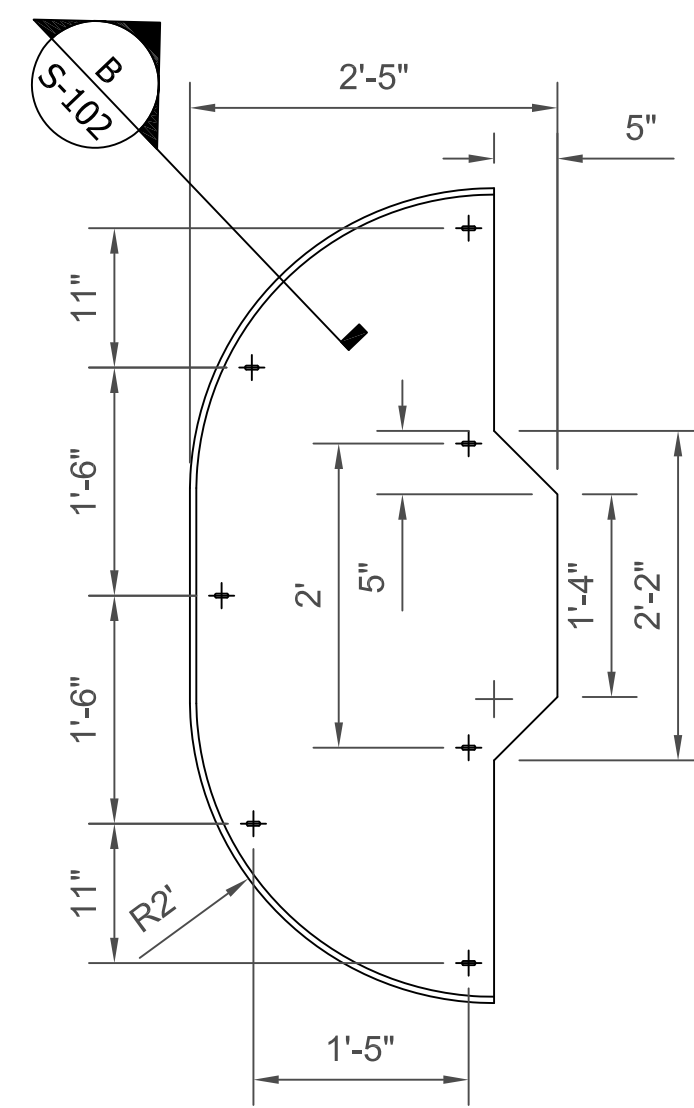
DATE:	SOLICITATION NO.:
DESIGNED BY: ROBERT YALOWSKI	CONTRACT NO.:
DRAWN BY: GREGG W. MOY	DRAWING NUMBER: JDF-1.107.01/001
CHECKED BY: MATTHEW D. HANSON	FILE NAME: BDF-1.107.G-001.dwg
PLOT SCALE: 1" = 500'	SIZE: 11x17
ANSI D	

**U.S. ARMY CORPS OF ENGINEERS  
PORTLAND DISTRICT  
PORTLAND, OREGON**

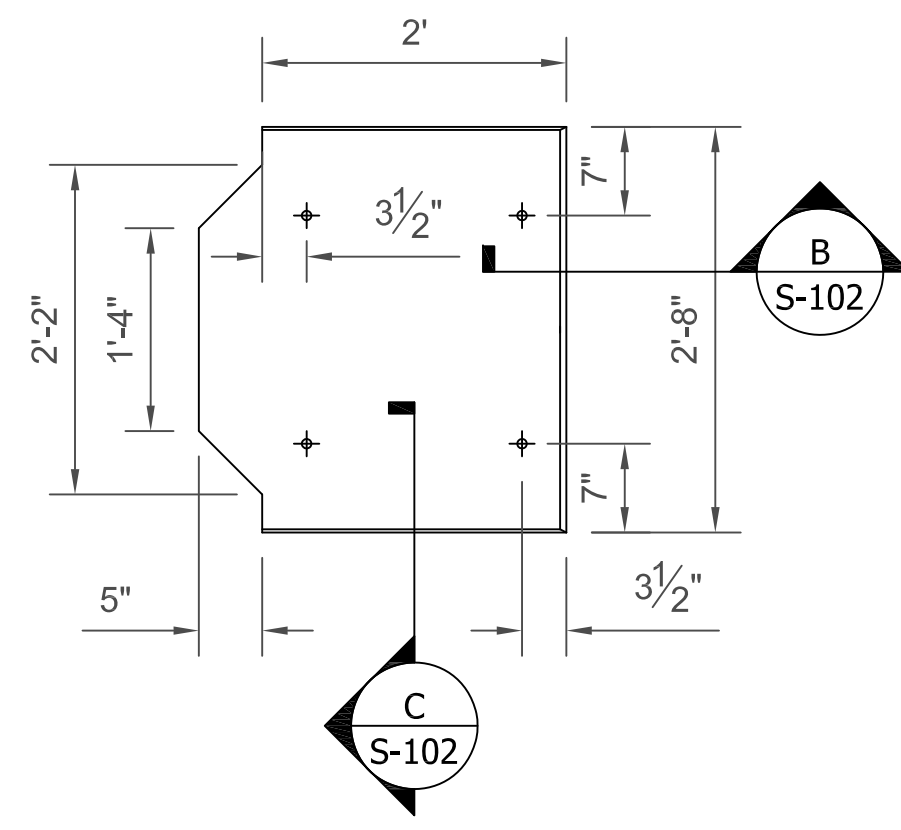
**BONNEVILLE LOCK AND DAM  
FISHWAY ENTRANCE  
LAMPREY PASSAGE MODIFICATION**

**SHEET IDENTIFICATION  
G-001**

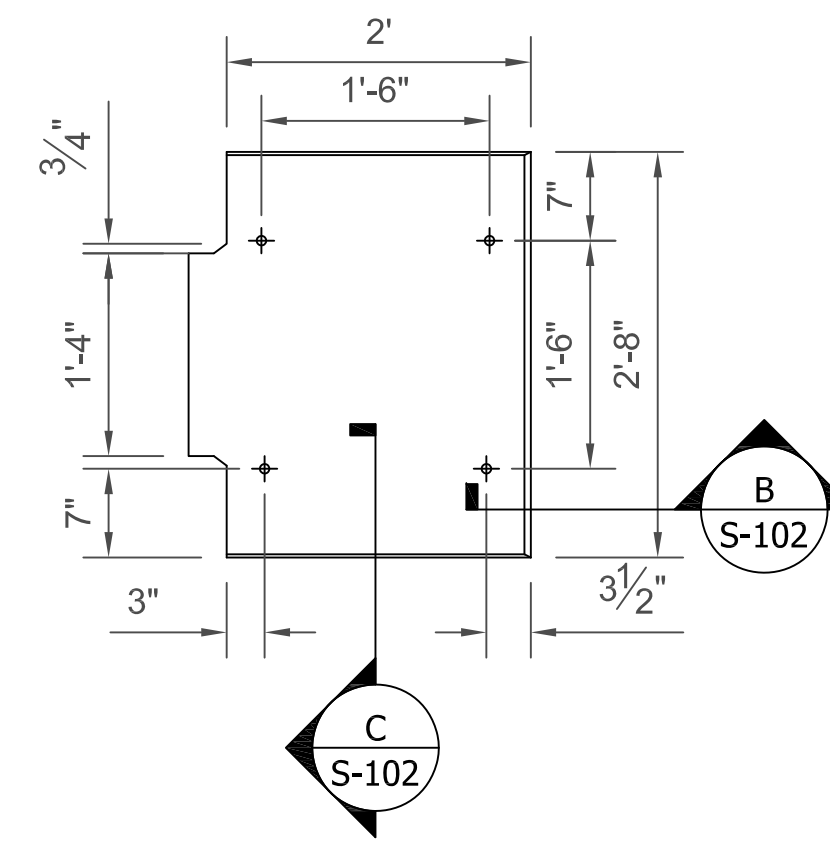




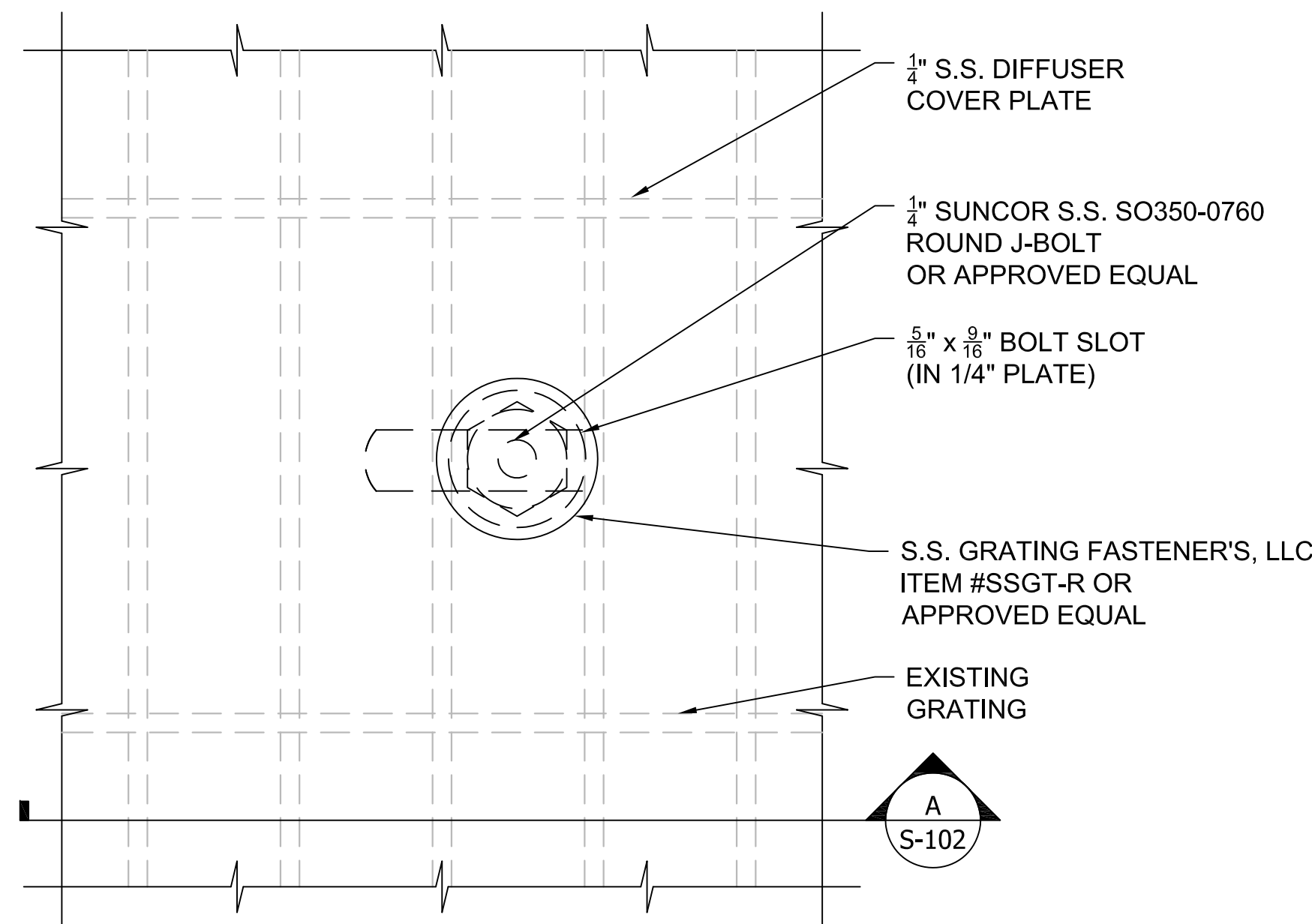
1 DETAIL - PLATING TYPE "F"  
SCALE: 3/4" = 1'-0"



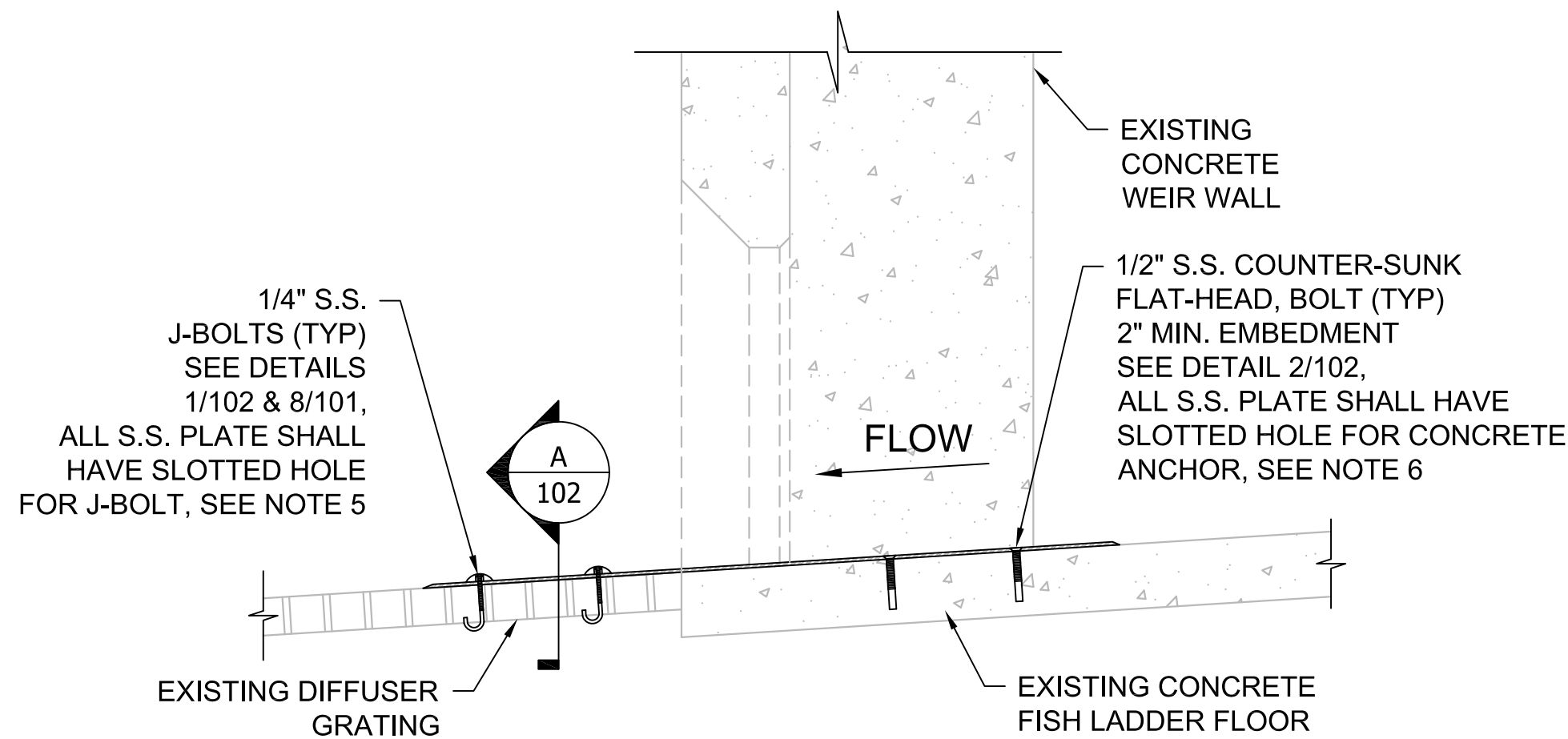
2 DETAIL - PLATING TYPE "E"  
SCALE: 3/4" = 1'-0"



3 DETAIL - PLATING TYPE "G"  
SCALE: 3/4" = 1'-0"



6 DETAIL - J-BOLT GRATING CLIP, TYP  
SCALE: 6" = 1'-0"



A THE DALLES - SECTION - PLATES AND ANCHORS TO GRATING  
SCALE: 1" = 1'-0"

NOTES:

1. DIFFUSER COMPONENTS AND APPURTENANCES ONLY PARTIALLY SHOWN FOR CLARIFY.
2. GRIND ALL EXPOSED CORNERS AND SHARP EDGES SMOOTH. SEE METALS SPECIFICATION FOR MORE INFORMATION.
3. THE EXISTING DIFFUSER COVER PLATES SHALL BE REPLACED AND INSTALLED WITH NEW DIFFUSER PLATING AS SHOWN. REFER TO INFORMATIONAL DRAWINGS FOR MORE DETAIL.
4. THE CONTRACTOR SHALL APPLY DEVOE BAR-RUST TM235 EPOXY OR APPROVED EQUAL TO ALL SURFACES AND UNDERSIDE OF STAINLESS PLATING WHERE NEW STAINLESS STEEL DIFFUSER PLATING AND ASSOCIATED FASTENERS COME INTO DIRECT CONTACT WITH EXISTING METALS. EPOXY COATING SHALL APPLIED PER MANUFACTURE'S INSTRUCTIONS AND NOT ON THE EXISTING GRATING SURFACE.
5. USE SO350-0760 SUNCOR STAINLESS ROUND J-BOLTS, NUTS, AND GRATING CLIPS SHALL ALL BE AISI 300 SERIES STAINLESS STEEL (ALL FASTENER'S AND RELATED HARDWARE) OR APPROVED EQUAL. ALL J-BOLTS SLOTS SHALL BE 5/16" x 9/16" WITH LONG-SIDE ORIENTED PARALLEL TO THE FLOW DIRECTION.
6. SECURE DIFFUSER COVER PLATES TO CONCRETE FISHWAY FLOOR WITH 1/2" ROUND AISI 304 S.S. COUNTER SUNK FLAT-HEAD, MAX SPACING: 18" AND HILTI HDI S.S. DROP IN ANCHOR OR APPROVED EQUAL. ALL COUNTER SUNK FLAT-HEAD SLOTS SHALL BE 9/16"x11/16".
7. POSITION AND EDGE DISTANCE OF J-BOLTS MAY VARY TO ACCOMMODATE EXISTING DIFFUSER GRATING GEOMETRY. FIELD REAMING OF HOLES MAY BE REQUIRED.
8. ORIFICE PLATING TO BE CUT FROM FULL SIZE PLATE. NO SPLICING OF S.S. PLATE IS ALLOWED. DIMENSIONS SHOWN PROVIDE A 1/4" GAP BETWEEN THE PLATE AND THE DIMENSIONS SHOWN ON THE EXISTING DRAWINGS. CONTRACTOR SHALL INFORM THE GOVERNMENT OF NECESSARY PLATE MODIFICATIONS AS FIELD FITTING MAY BE REQUIRED.
9. WHEN PLATES ARE IN CONTACT WITH CONCRETE, USE DETAIL 2/102 FOR CONNECTION.
10. ALL PLATING SHALL BE 1/4" THICK S.S., UNLESS OTHERWISE NOTED.
11. IT IS ACCEPTABLE TO SHIM FISH LADDER CONCRETE FLOOR TO HAVE A SMOOTH SURFACE TO INSTALL THE PLATES.
12. ALL ORIFICE PLATES SHALL BE INSTALLED WITH NO GAP UP TO A MAXIMUM OF 1/4" AT THE ORIFICE CENTERLINE. ALL THE CENTERLINE JOINTS AND GAP BETWEEN THE ORIFICE WALL AND PLATE SHALL BE FILLED WITH SPLASH ZONE EPOXY OR APPROVED EQUAL.
13. MINIMUM EDGE DISTANCE OF 2 INCHES TO THE PLATE IS REQUIRED FOR ALL BOLT FASTENER'S UNLESS OTHERWISE NOTED.
14. THE EXPOSED HEAD OF J-BOLTS SHALL BE COVER WITH SPLASH ZONE EPOXY OR APPROVED EQUAL.
15. CONTRACTOR REQUIRED TO REMOVE THE EXISTING PLATES FROM WEIRE NUMBER 8-19. CONTRACTOR SHALL VERIFY EXISTING PLATES PRIOR TO REMOVAL.

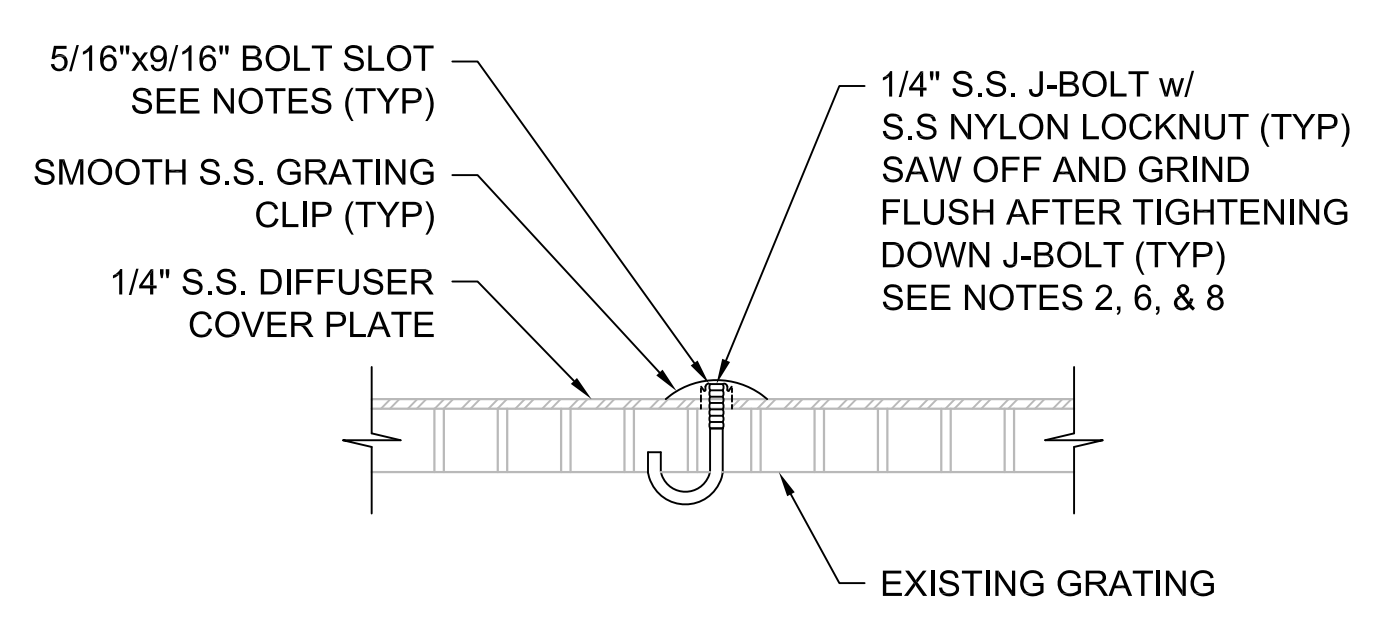
 US Army Corps of Engineers PORTLAND DISTRICT	
	DATE
	APPR.
DESCRIPTION	
MARK	

DESIGNED BY: AZADYAZDANI	DATE: 08/02/14	SOLICITATION NO.:
U.S. ARMY CORPS OF ENGINEERS PORTLAND DISTRICT PORTLAND, OREGON	CREATED BY: GREGG W. COLEMAN	CONTRACT NO.:
SUBMITTED BY: MATTHEW D. HANSON	FILE NAME: BDF-1.107_S-101-S-102.dwg	PLOT SCALE: PLOT DATE:
SIZE: 1:1	ANSD	DRAWING NUMBER: BDF-1.107_02/01

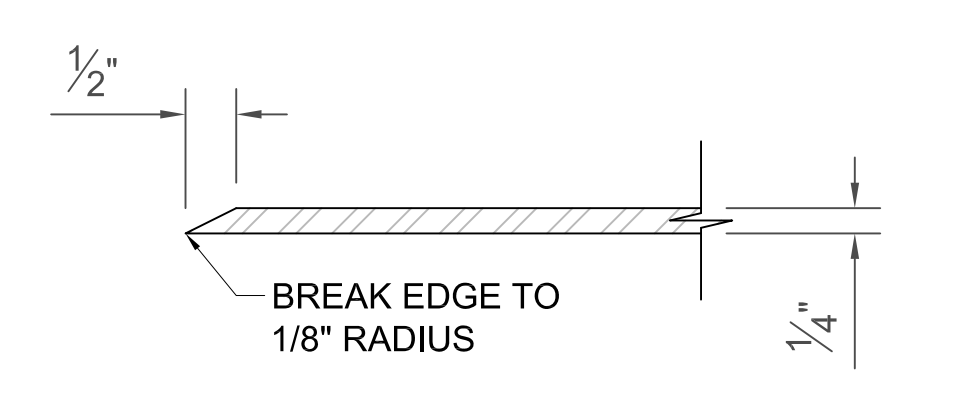
**BONNEVILLE LOCK AND DAM**  
**FISHWAY ENTRANCE**  
**LAMPREY PASSAGE MODIFICATION**  
 PLATE DETAILS SHEET 1

SHEET  
 IDENTIFICATION  
**S-101**

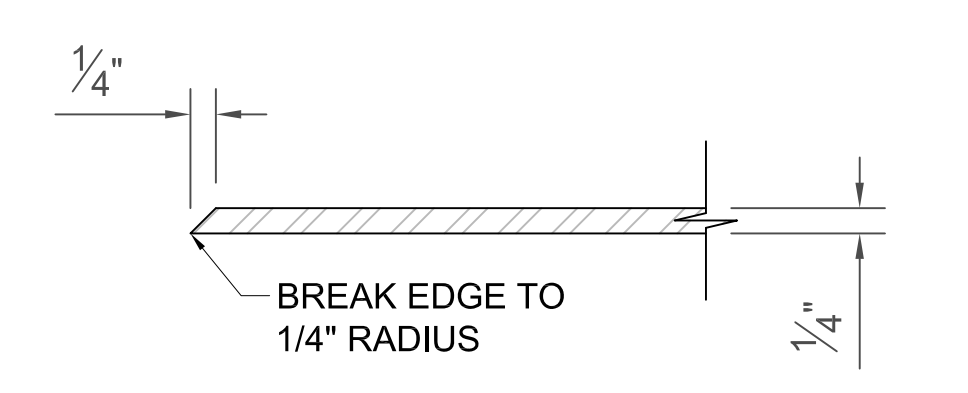
MARK	DATE	APPR.



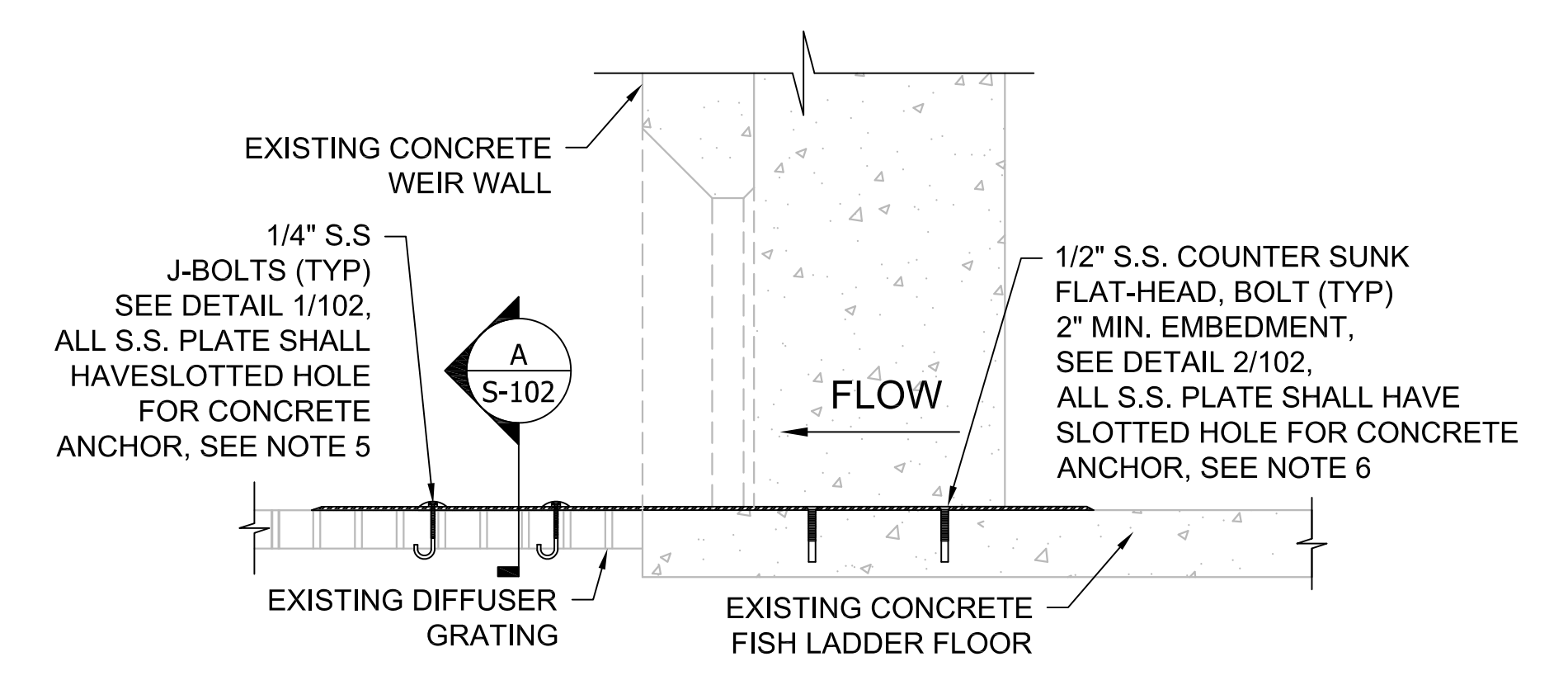
**A SECTION - J-BOLT GRATING CLIP**  
SCALE: 6" = 1'-0"



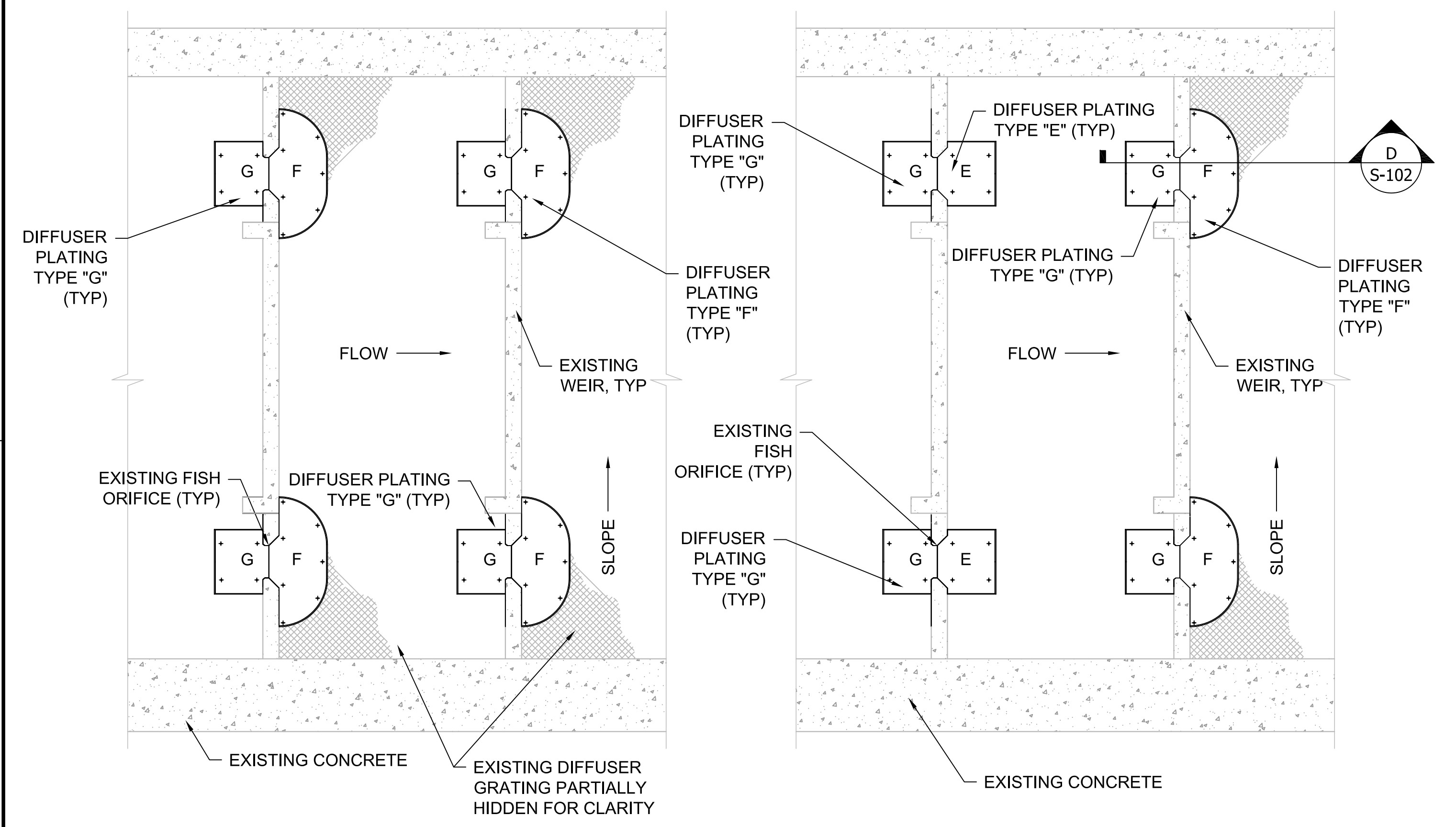
**B SECTION - PLATE**  
SCALE: 6" = 1'-0"



**C SECTION - PLATE**  
SCALE: 6" = 1'-0"

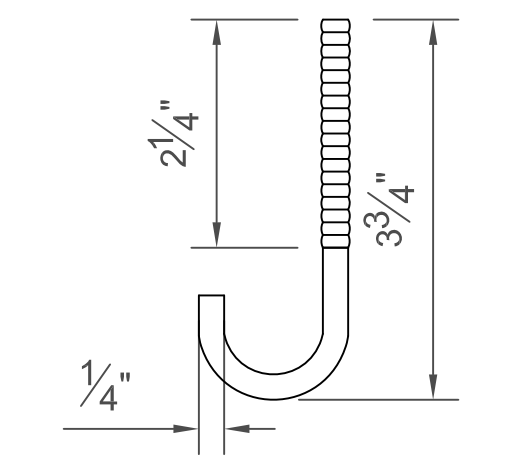


**D SECTION - PLATES AND ANCHORS TO GRATING**  
SCALE: 1" = 1'-0"

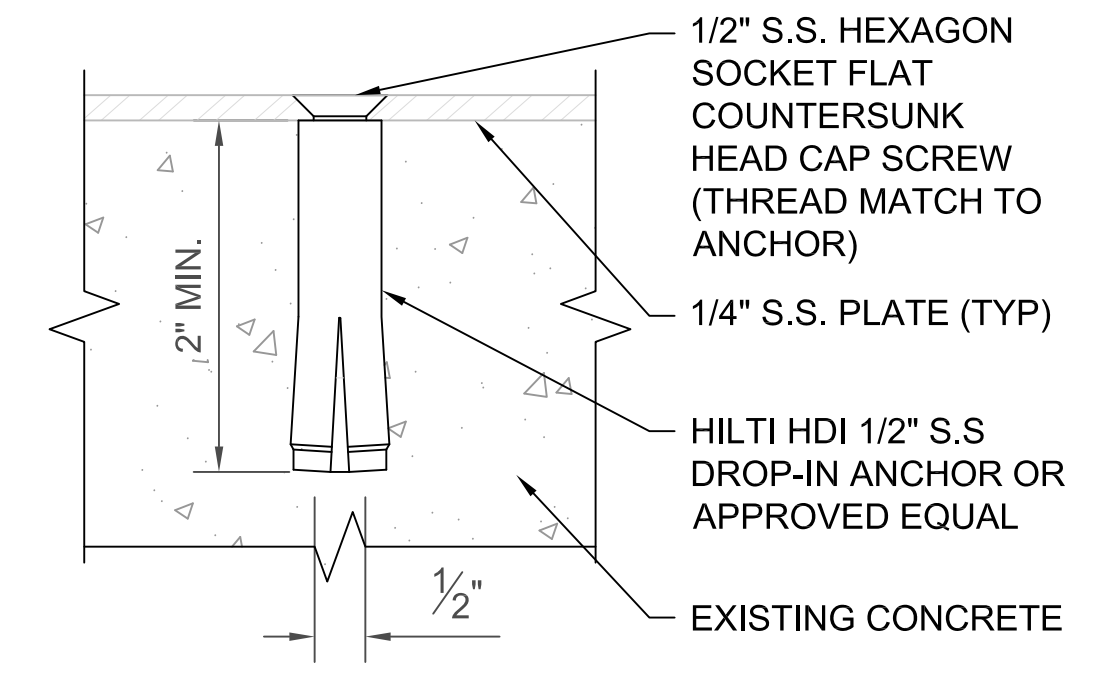


**3 BONNEVILLE LOCK & DAM - DIFFUSER PLAN w/ GRATING**  
SCALE: 1/4" = 1'-0"

**4 BONNEVILLE LOCK & DAM - DIFFUSER PLAN w/ GRATING**  
SCALE: 1/4" = 1'-0"



**1 TYPICAL J-BOLT DETAIL**  
SCALE: 6" = 1'-0"



**2 TYPICAL CONCRETE ANCHOR DETAIL**  
SCALE: 6" = 1'-0"

NOTES:  
-SEE SHEET S-101

DESIGNED BY:	ADARBYAZDANI	DATE:	08/02/14
U.S. ARMY CORPS OF ENGINEERS	GREDDACW	SUBMITTED BY:	MATTHEW D. HANSON
PORTLAND DISTRICT	GREDDACW	PLOT SCALE:	1:1
PORTLAND, OREGON	GREDDACW	FILE NAME:	ANSD
		CONTRACT NO.:	BDP-F-1,107-S-101-S-102.dwg
		DRAWING NUMBER:	BDP-F-1,107-02/102

BONNEVILLE LOCK AND DAM  
FISHWAY ENTRANCE  
LAMPREY PASSAGE MODIFICATION  
PLATE DETAILS SHEET 2

SHEET IDENTIFICATION  
**S-102**