

US Army Corps
of Engineers
Portland District

ADVERTISE

BONNEVILLE LOCK AND DAM WASHINGTON SHORE FISH LADDER FY2019 FISH ACCORDS LAMPREY PASSAGE

THIS PROJECT WAS DESIGNED BY THE PORTLAND DISTRICT OF THE U.S. ARMY CORPS OF ENGINEERS. THE INITIALS OR SIGNATURES AND REGISTRATION DESIGNATIONS OF INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER 1110-1-8152.

SOULDERS.RYA
N.D.1385465714

Digitally signed by
SOULDERS.RYAN.D.1385465714
Date: 2024.04.12 11:59:00 -07'00'

RYAN D. SOUDERS, P.E.
CHIEF, DESIGN BRANCH

CASWELL.LARRY.DALE.
JR.1052433432
2024.04.25 19:53:23
-07'00'

LARRY D. CASWELL, JR. PE, PMP
COLONEL, U.S. ARMY
DISTRICT COMMANDER

MAGEE.MICHAEL.
SCOTT.1191861481

Digitally signed by
MAGEE.MICHAEL.SCOTT.11918
61481
Date: 2024.04.15 12:46:39 -07'00'

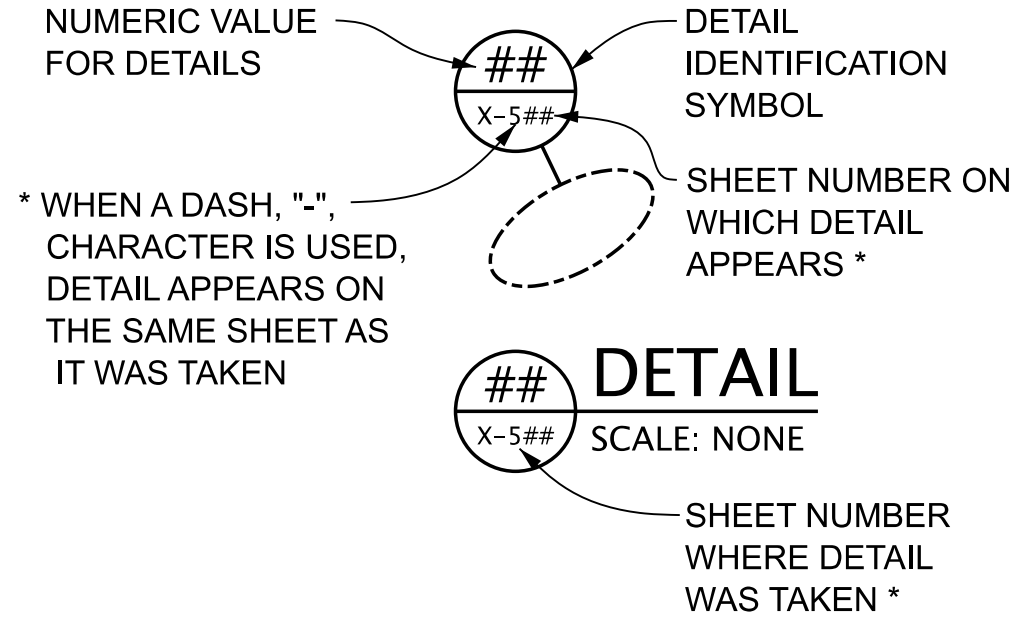
PATRICK L. DUYCK, P.E.
CHIEF, ENGINEERING & CONSTRUCTION DIVISION

DATE: 08 APR 2024

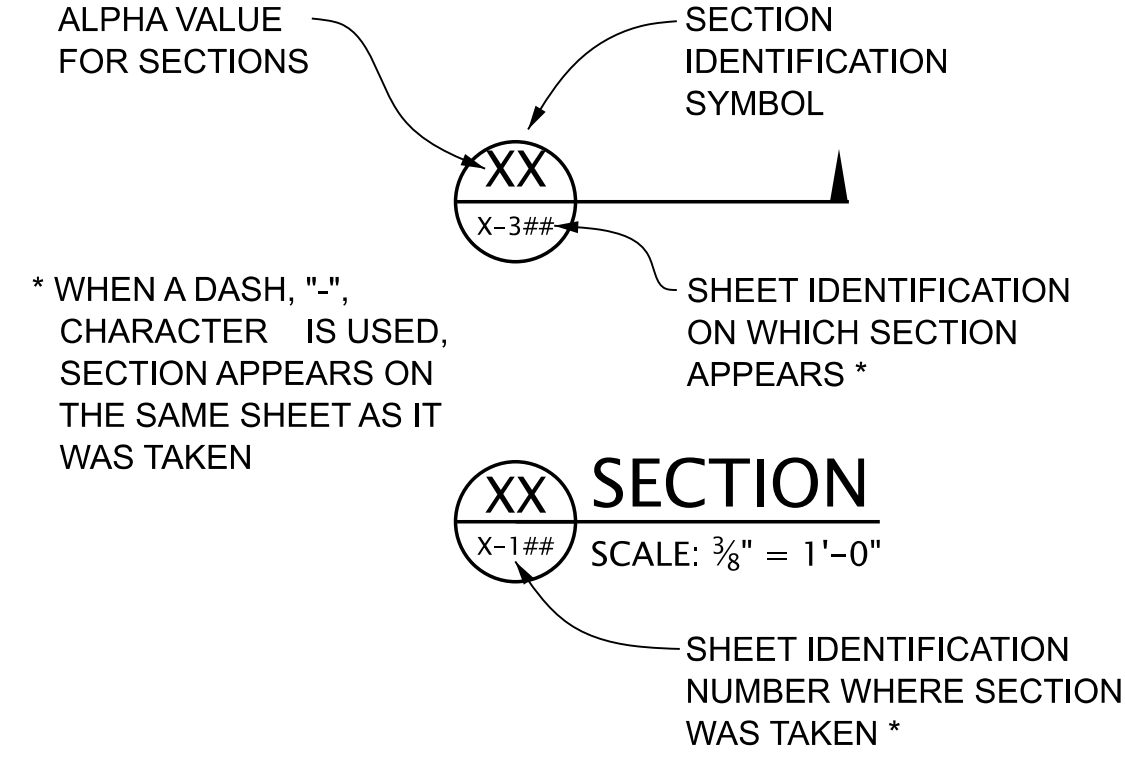
SOLICITATION NUMBER: W9127N24R0003

LEGEND:

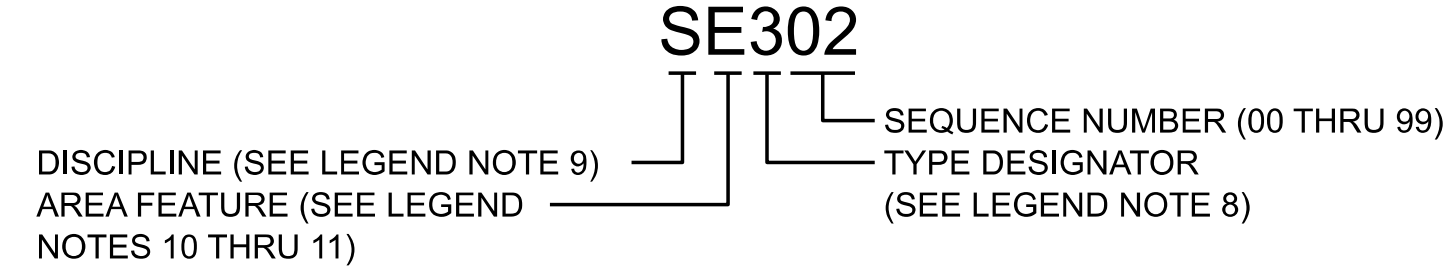
1. DETAILING CONVENTION SHALL BE INTERPRETED AS SHOWN BELOW:



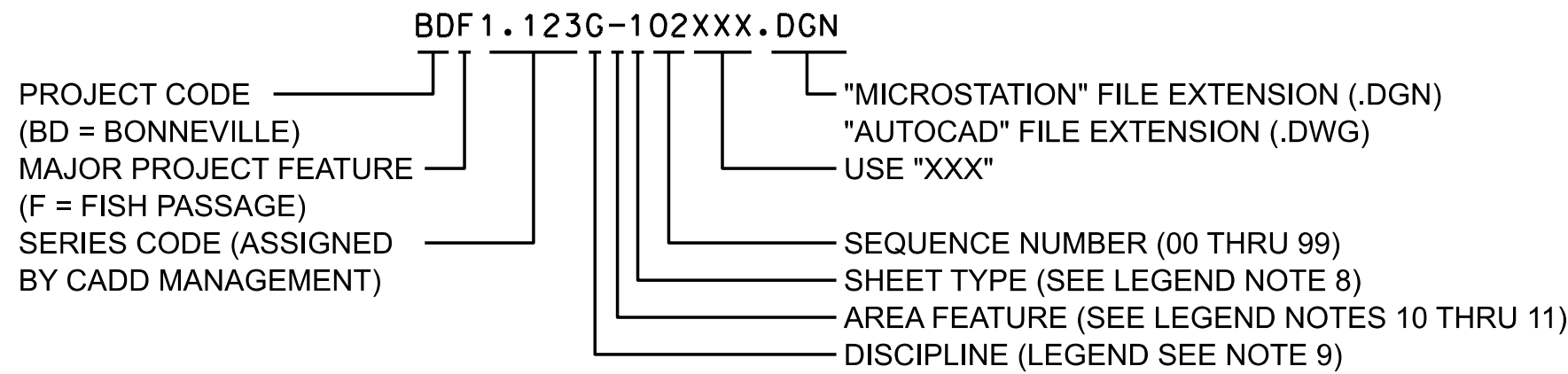
2. SECTIONING CONVENTION SHALL BE INTERPRETED AS SHOWN BELOW:



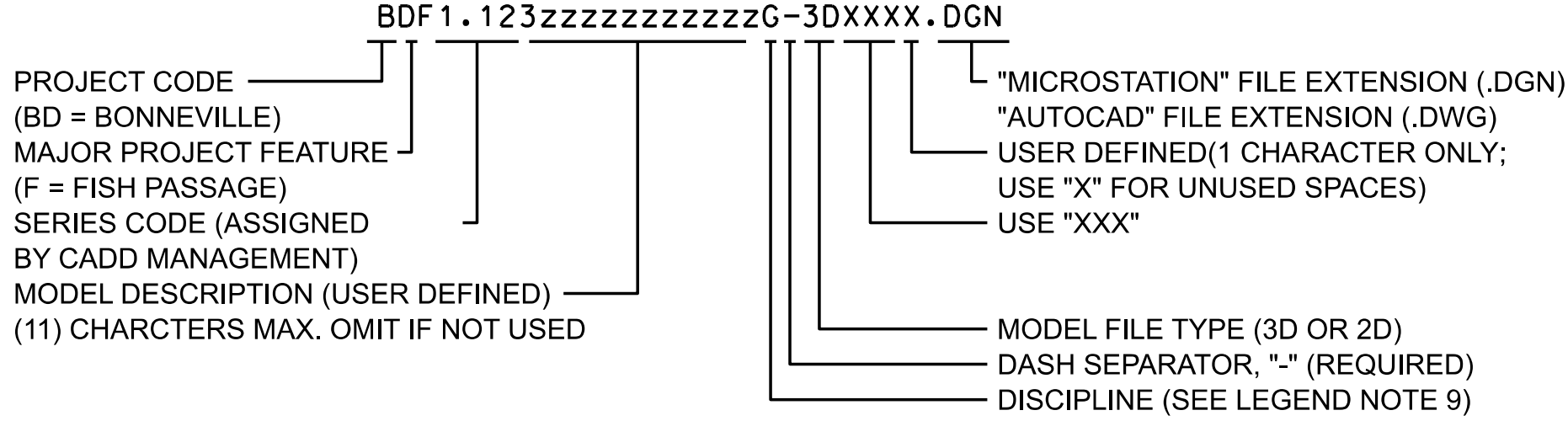
3. SHEET IDENTIFICATION CONVENTION SHALL BE INTERPRETED AS SHOWN BELOW, EXCEPT AS NOTED IN LEGEND NOTE 4 ON THIS SHEET:



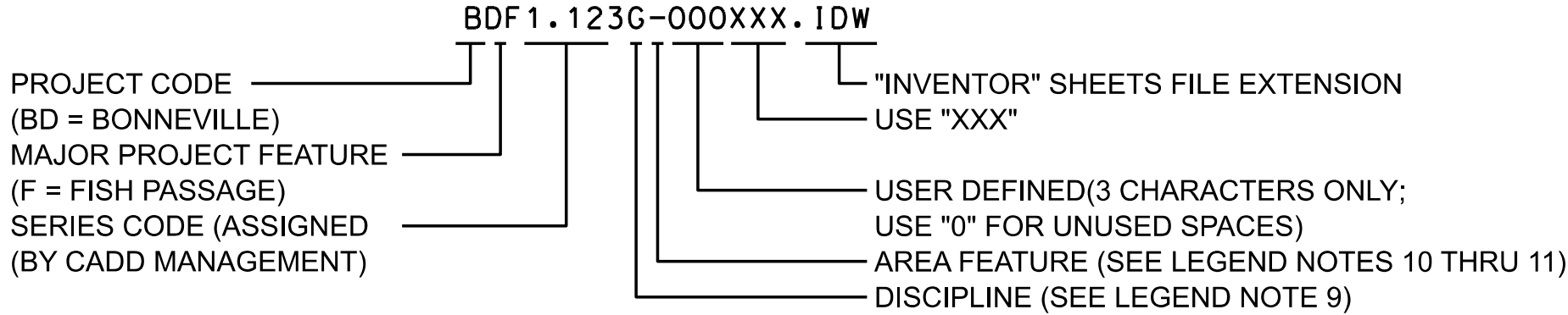
4. "MICROSTATION" / "AUTOCAD" SHEET FILE NAME CONVENTION SHALL BE INTERPRETED AS SHOWN BELOW:



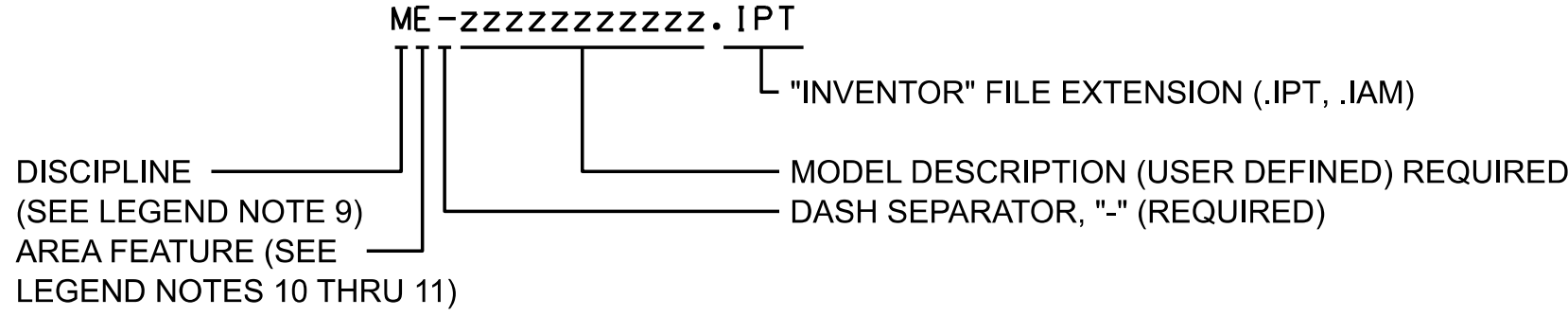
5. "MICROSTATION" / "AUTOCAD" MODEL FILE NAME CONVENTION SHALL BE INTERPRETED AS SHOWN BELOW:



6. "INVENTOR" SHEETS FILE NAME CONVENTION SHALL BE INTERPRETED AS SHOWN BELOW:



7. "INVENTOR" MODEL FILE NAME CONVENTION SHALL BE INTERPRETED AS SHOWN BELOW:



8. TYPE DESIGNATOR FOR SHEET IDENTIFICATION SHALL BE AS SHOWN BELOW:

- | | | |
|---|---------|------------------------------|
| 0 | DENOTES | GENERAL |
| 1 | DENOTES | PLANS |
| 2 | DENOTES | ELEVATIONS |
| 3 | DENOTES | SECTIONS |
| 4 | DENOTES | ENLARGED VIEWS |
| 5 | DENOTES | DETAILS |
| 6 | DENOTES | SCHEDULES AND SCHEMATICS |
| 7 | DENOTES | REINFORCEMENT (USER DEFINED) |
| 8 | DENOTES | USER DEFINED |

9. ENGINEERING DISCIPLINE DESIGNATOR FOR SHEET IDENTIFICATION SHALL BE AS SHOWN BELOW:

- | | | |
|---|---------|------------|
| G | DENOTES | GENERAL |
| S | DENOTES | STRUCTURAL |
| E | DENOTES | ELECTRICAL |

10. STRUCTURAL AREA FEATURE DESIGNATOR FOR "S" SHEETS IDENTIFICATION SHALL BE AS SHOWN BELOW:

- | | | |
|---|---------|--|
| - | DENOTES | STRUCTURAL GENERAL FEATURES (OR "ALL SHEETS ARE STRUCTURAL") |
| D | DENOTES | LADDER CONTROL SECTION DEMOLITION |
| G | DENOTES | LADDER CONTROL SECTION MODIFICATIONS |

11. ELECTRICAL AREA FEATURE DESIGNATOR FOR "E" SHEETS IDENTIFICATION SHALL BE AS SHOWN BELOW:

- | | | |
|---|---------|---|
| - | DENOTES | GENERAL FEATURES (OR "ALL SHEETS ARE ELECTRICAL") |
|---|---------|---|

NOTES:

1. THIS DRAWING PACKAGE IS INTENDED TO BE PRINTED IN COLOR.



US Army Corps
of Engineers®
PORTLAND DISTRICT

ADVERTISE

DESIGNED BY: J. PRCSH	CHECKED BY: C. WHITE	DATE: 04/05/2024
U.S. ARMY CORPS OF ENGINEERS PORTLAND DISTRICT PORTLAND, OREGON	SUBMITTED BY: MATTHEW D. HANSON, P.E.	CONTRACT NO.: W017-AR-0000
	PLOT SCALE: 1:1	DRAWING NUMBER: BDF1.123G-003xxx.dgn
	FILE NAME: ANSI D	

BONNEVILLE LOCK AND DAM
WASHINGTON SHORE FISH LADDER
FY2019 FISH ACCORDS
LAMPREY PASSAGE
CONTROL SECTION MODIFICATIONS
GENERAL NOTES AND SYMBOLS

SHEET
IDENTIFICATION
G-003

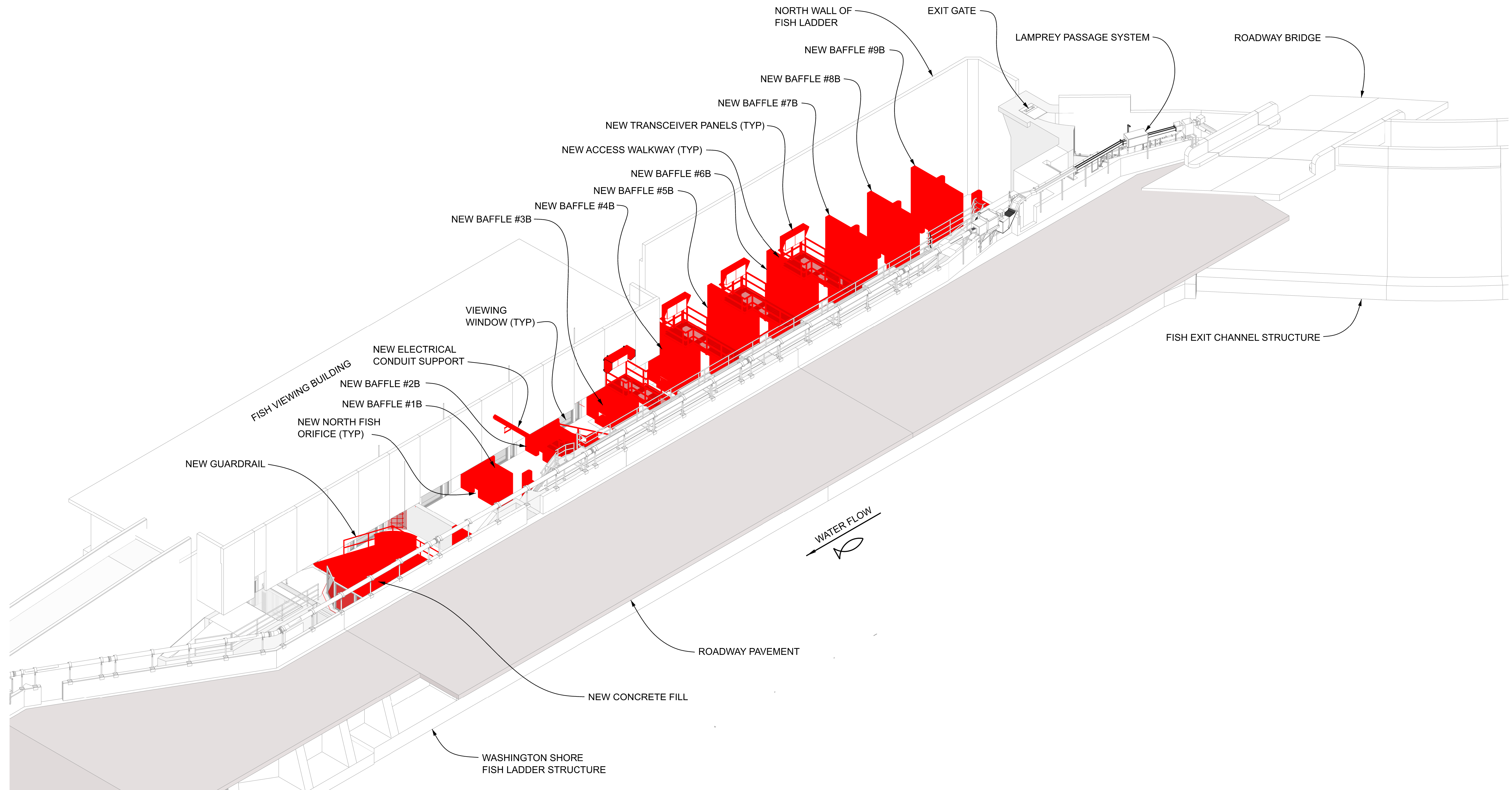
1. ALL FEATURES SHOWN ARE EXISTING UNLESS INDICATED OTHERWISE. NEW FEATURES SHOWN IN RED.
2. SEE SHEET G-001 AND G-002 FOR DRAWING INDEX.
3. SEE SHEET G-003 FOR GENERAL NOTES AND SYMBOLS.



PORTLAND DISTRICT	CHECKED BY:	SOLICITATION NO.:
PORTLAND, OREGON	DRAWN BY: A WHITE	1491272406035
	SUBMITTED BY:	CONTRACT NO.:
	MATHEW D. HANSON, P.E.	
	1:1	DRAWING NUMBER:
	FILE NAME:	
	SIZE:	
	ANSI D	BDF1.1235-007XX.dgn

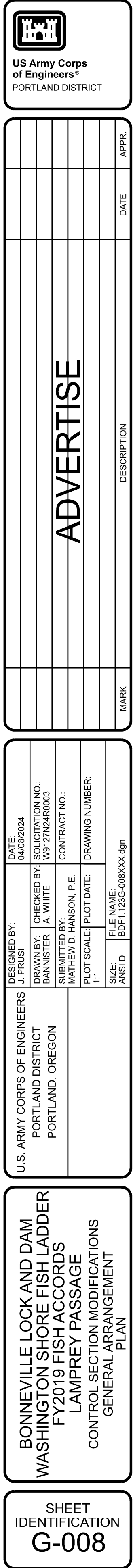
BONNEVILLE LOCK AND DAM
 WASHINGTON SHORE FISH LADDER
 FY2019 FISH ACCORDS
 LAMPREY PASSAGE
 CONTROL SECTION MODIFICATIONS
 GENERAL ARRANGEMENT
 ISOMETRIC

SHEET
IDENTIFICATION
G-007



ISOMETRIC – FISH LADDER CONTROL SECTION MODIFICATIONS

SCALE: NONE



D

C

B

A

DENOTES NEW GROUT

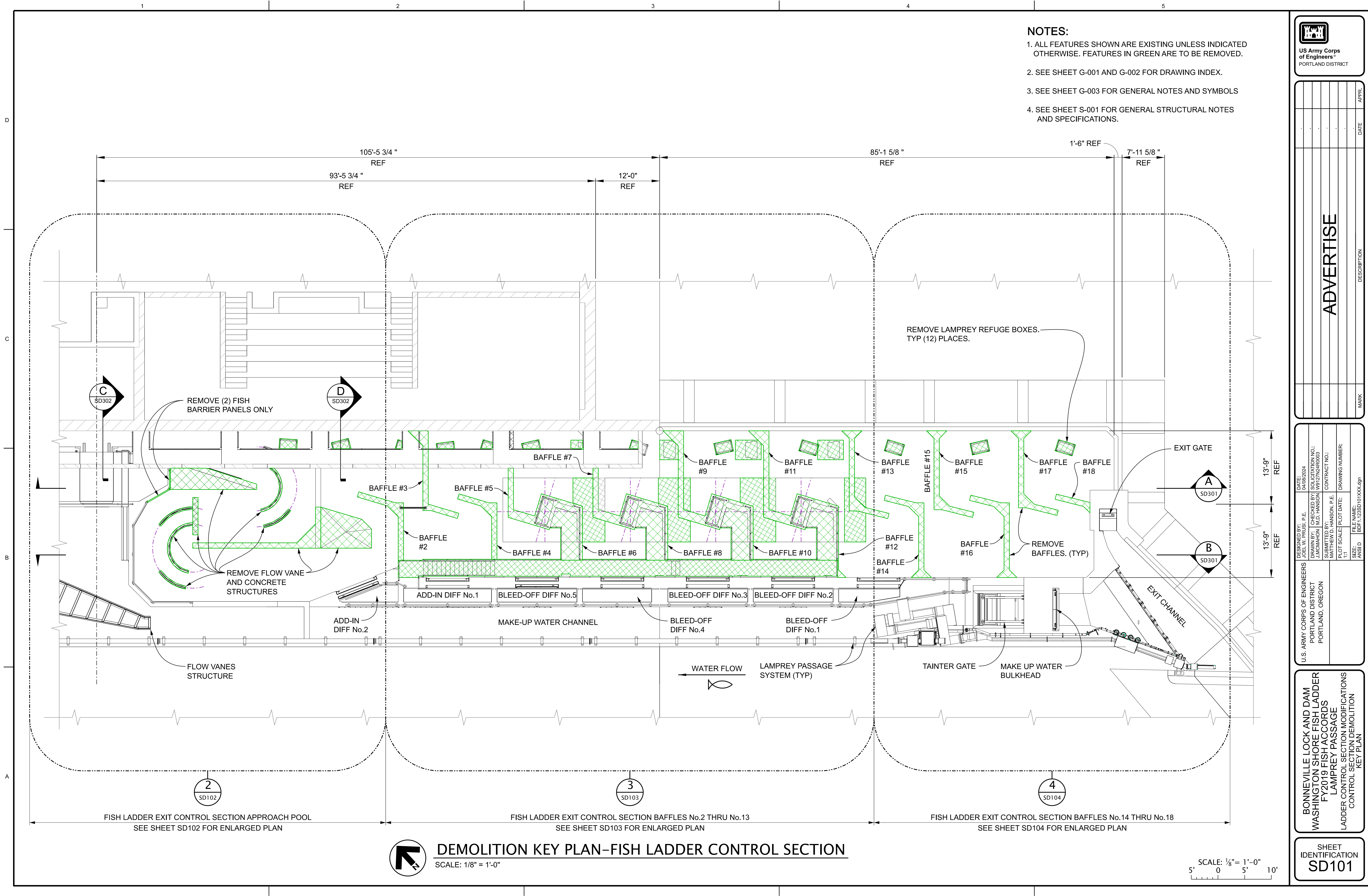


ADVERTISE

U.S. ARMY CORPS OF ENGINEERS	DESIGNED BY: JOEL W. PRUSI, P.E.	DATE: 04/08/2024
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BONNEVILLE LOCK AND DAM
WASHINGTON SHORE FISH LADDER
FY2019 FISH ACCORDS
LAMPREY PASSAGE
LADDER CONTROL SECTION MODIFICATIONS
GENERAL STRUCTURAL NOTES AND
SPECIFICATIONS

SHEET
IDENTIFICATION
S-001

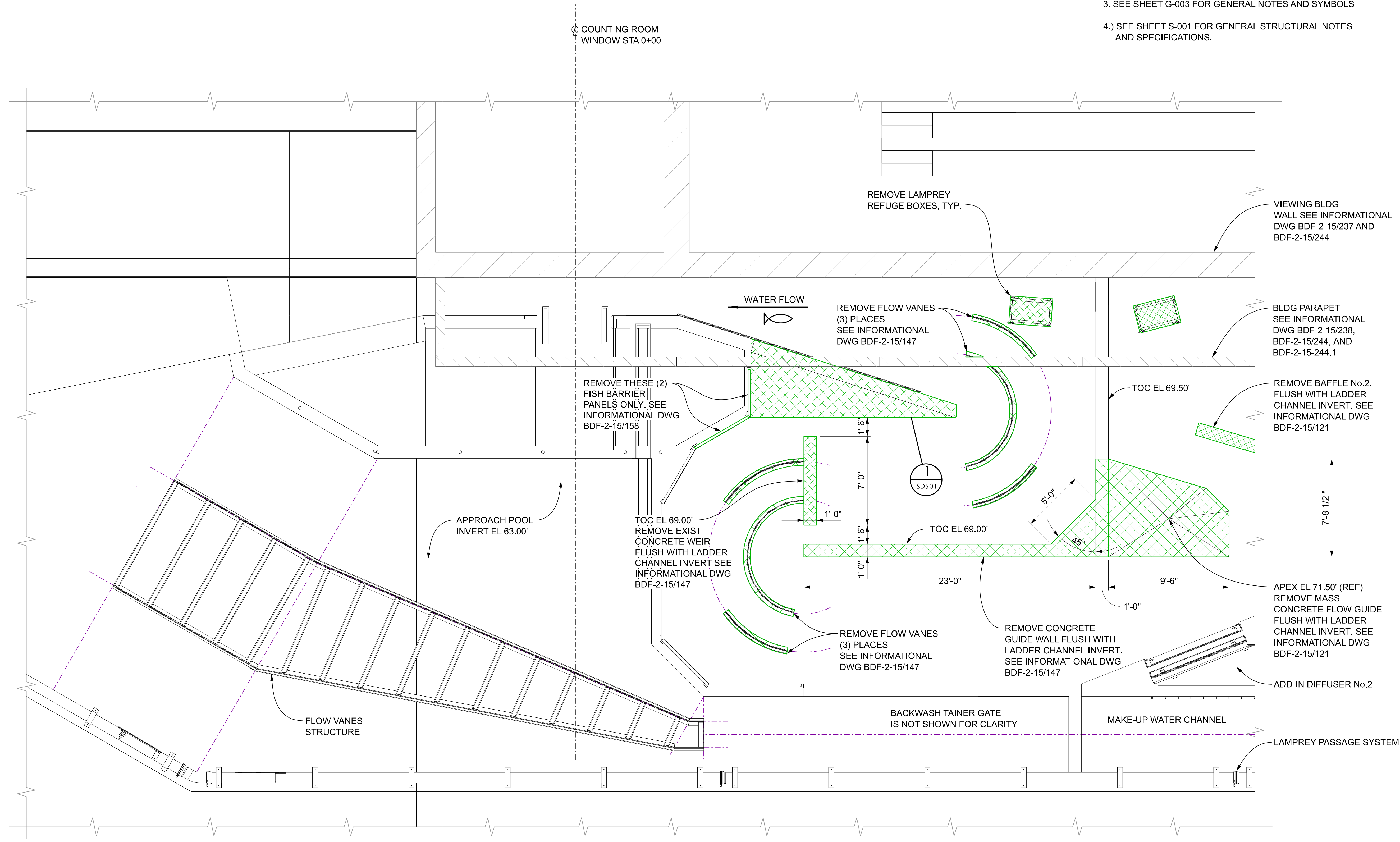


U.S. ARMY CORPS OF ENGINEERS PORTLAND DISTRICT PORTLAND, OREGON	JOEL W. FRANSI, P.E.		04/08/2024
	D. J. WILSON J. MICHAELSON M.D. HANSON W91ZTN624R0003		CHECKED BY: SOLICITATION NO.: SUBMITTED BY:
	MATTHEW D. HANSON, P.E. CONTRACT NO.:		DRAWING NUMBER:
	PLOT SCALE: 1"=1' PLOT DATE:		FILE NAME: BDF1.123SD102XXX.dgn

BONNEVILLE LOCK AND DAM
WASHINGTON SHORE FISH LADDER
FY2019 FISH ACCORDS
LAMPREY PASSAGE
LADDER CONTROL SECTION MODIFICATIONS
CONTROL SECTION DEMOLITION
PLAN AT APPROACH POOL

SHEET
IDENTIFICATION
SD102

- ## NOTES:
1. ALL FEATURES SHOWN ARE EXISTING UNLESS INDICATED OTHERWISE. FEATURES IN GREEN ARE TO BE REMOVED.
 2. SEE SHEET G-001 AND G-002 FOR DRAWING INDEX.
 3. SEE SHEET G-003 FOR GENERAL NOTES AND SYMBOLS
 - 4.) SEE SHEET S-001 FOR GENERAL STRUCTURAL NOTES AND SPECIFICATIONS.



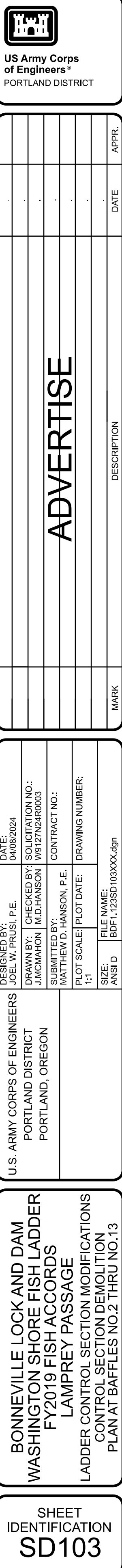
2
SD101

ENLARGED DEMOLITION PLAN – LADDER CONTROL SECTION APPROACH POOL

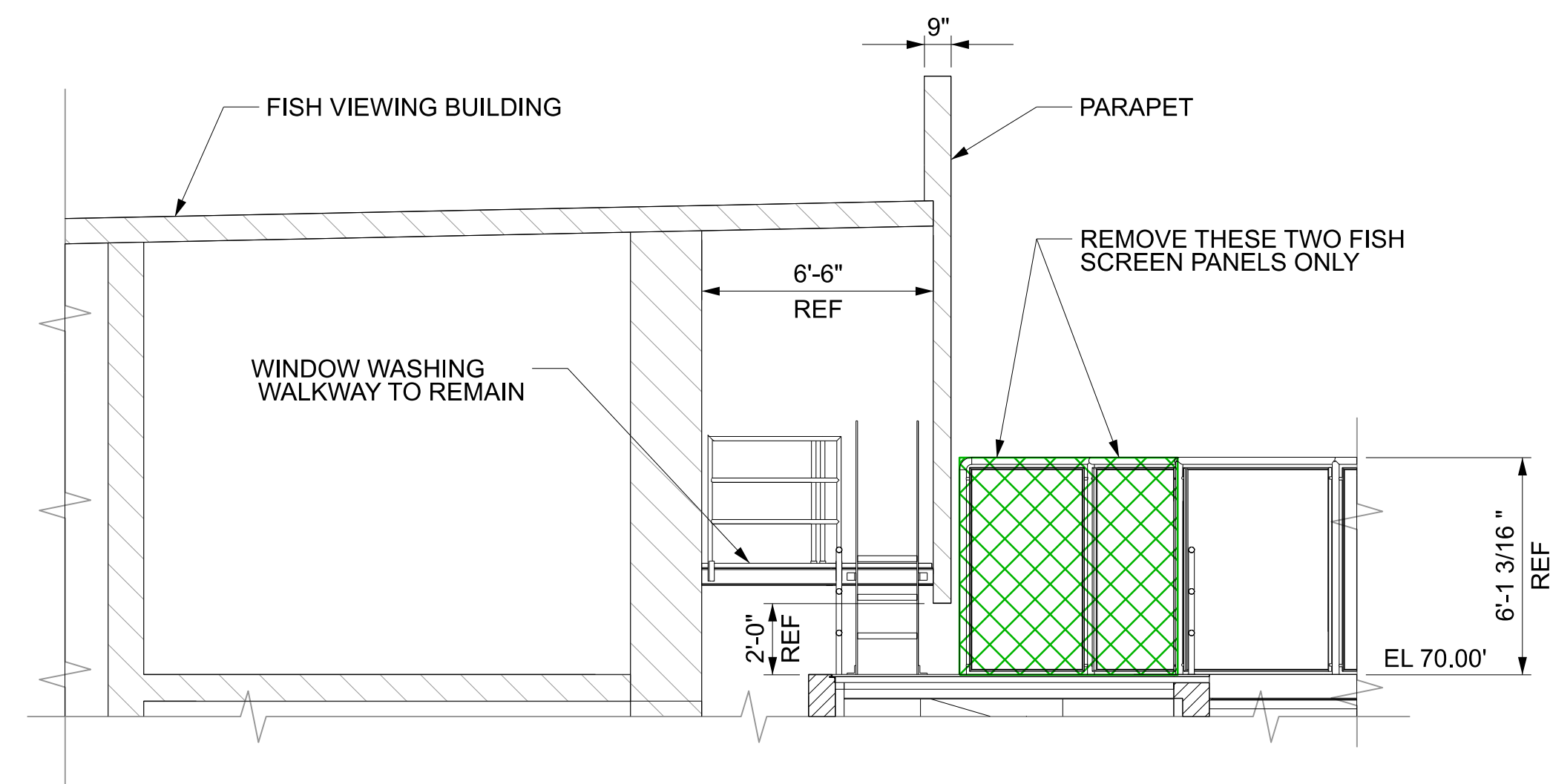
SCALE: 1/4" = 1'-0"

SEE INFORMATIONAL DWG BDF-2-15/121

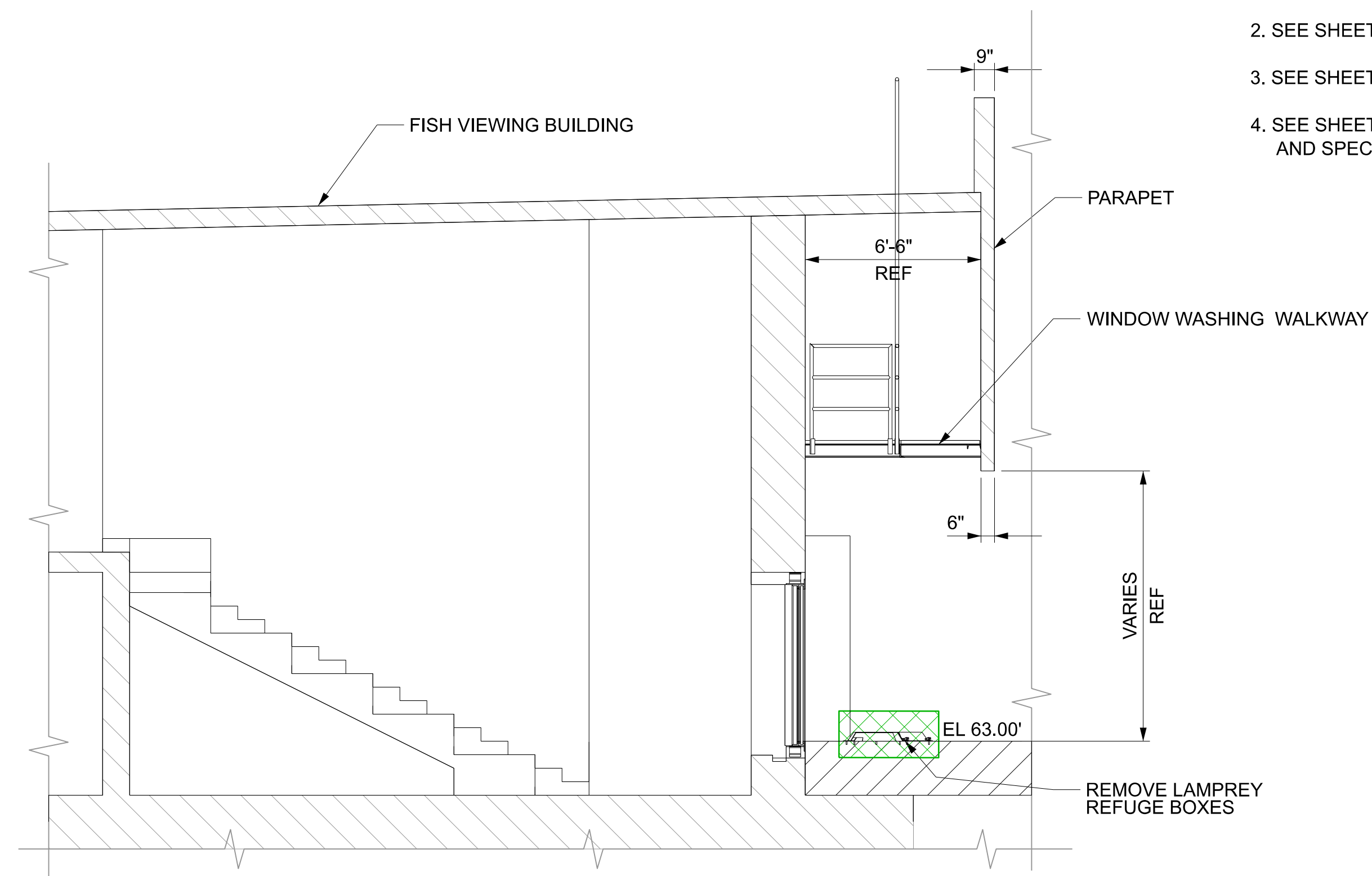
SCALE: $\frac{1}{4}" = 1'-0"$



A



 SECTION - LOOKING EAST COUNTING STATION
SD101 SCALE: 1/4" = 1'-0"



D SECTION – LOOKING EAST THRU VIEWING WINDOW
SD101 SCALE: 1/4" = 1'-0"

NOTES:

1. ALL FEATURES SHOWN ARE EXISTING UNLESS INDICATED OTHERWISE. FEATURES IN GREEN ARE TO BE REMOVED.
2. SEE SHEET G-001 AND G-002 FOR DRAWING INDEX.
3. SEE SHEET G-003 FOR GENERAL NOTES AND SYMBOLS
4. SEE SHEET S-001 FOR GENERAL STRUCTURAL NOTES AND SPECIFICATIONS.



ADVERTISE

U.S. ARMY CORPS OF ENGINEERS PORTLAND DISTRICT PORTLAND, OREGON	DESIGNED BY:	P.E.	CHECKED BY:	P.E.	DATE:	05/20/2024
	DRAWN BY: J.M.CRAW-FON		CHECKED BY: M.D.HANSON		SOLICITATION NO: W9127N-24-R0003	
	SUBMITTED BY: WYNTHREW D. HANSON, P.E.		CONTRACT NO.:			
	SCALE: 1"=10'		DRAWING NUMBER:			
	SHEET 11		FILE NAME:			

BONNEVILLE LOCK AND DAM
WASHINGTON SHORE FISH LADDER
FY2019 FISH ACCORDS
LAMPREY PASSAGE
LADDER CONTROL SECTION MODIFICATIONS
CONTROL SECTION DEMOLITION

SHEET
IDENTIFICATION
SD302

SCALE: $\frac{1}{4}" = 1'-0"$

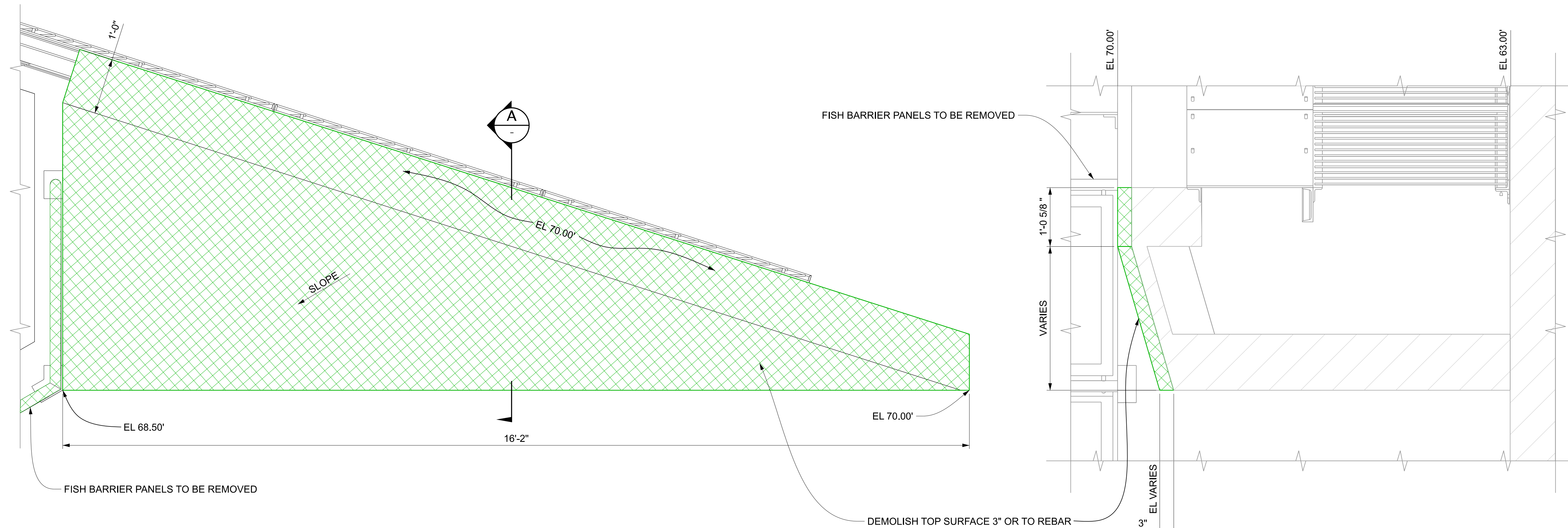
1. ALL FEATURES SHOWN ARE EXISTING UNLESS INDICATED OTHERWISE. FEATURES IN GREEN ARE TO BE REMOVED.
2. SEE SHEET G-001 AND G-002 FOR DRAWING INDEX.
3. SEE SHEET G-003 FOR GENERAL NOTES AND SYMBOLS
- 4.) SEE SHEET S-001 FOR GENERAL STRUCTURAL NOTES AND SPECIFICATIONS.



PORTLAND DISTRICT PORTLAND, OREGON	DRAWN BY: J. CHECKER, B.K. L.W. PRUSI M.J.D. HANSON CONTRACT NO.: W9127N24R0003 SUBMITTED BY: MATTHEW D. HANSON, P.E. PLOT SCALE: 1" = 100' PLOT DATE: 11/13/11 DRAWING NUMBER: 111	SOLUTION NO.: W9127N24R0003 FILE NAME: B09F-1123D5601XXX.dgn SIZE: ANS I ANS D
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WASHINGTON SHORE FISH LADDER
BONNEVILLE LOCK AND DAM
FY2019 FISH ACCORDS
LAMPREY PASSAGE
LADDER CONTROL SECTION MODIFICATIONS
CONTROL SECTION DEMOLITION
DETAIL OF BYPASS LEAD

SHEET
IDENTIFICATION
SD501



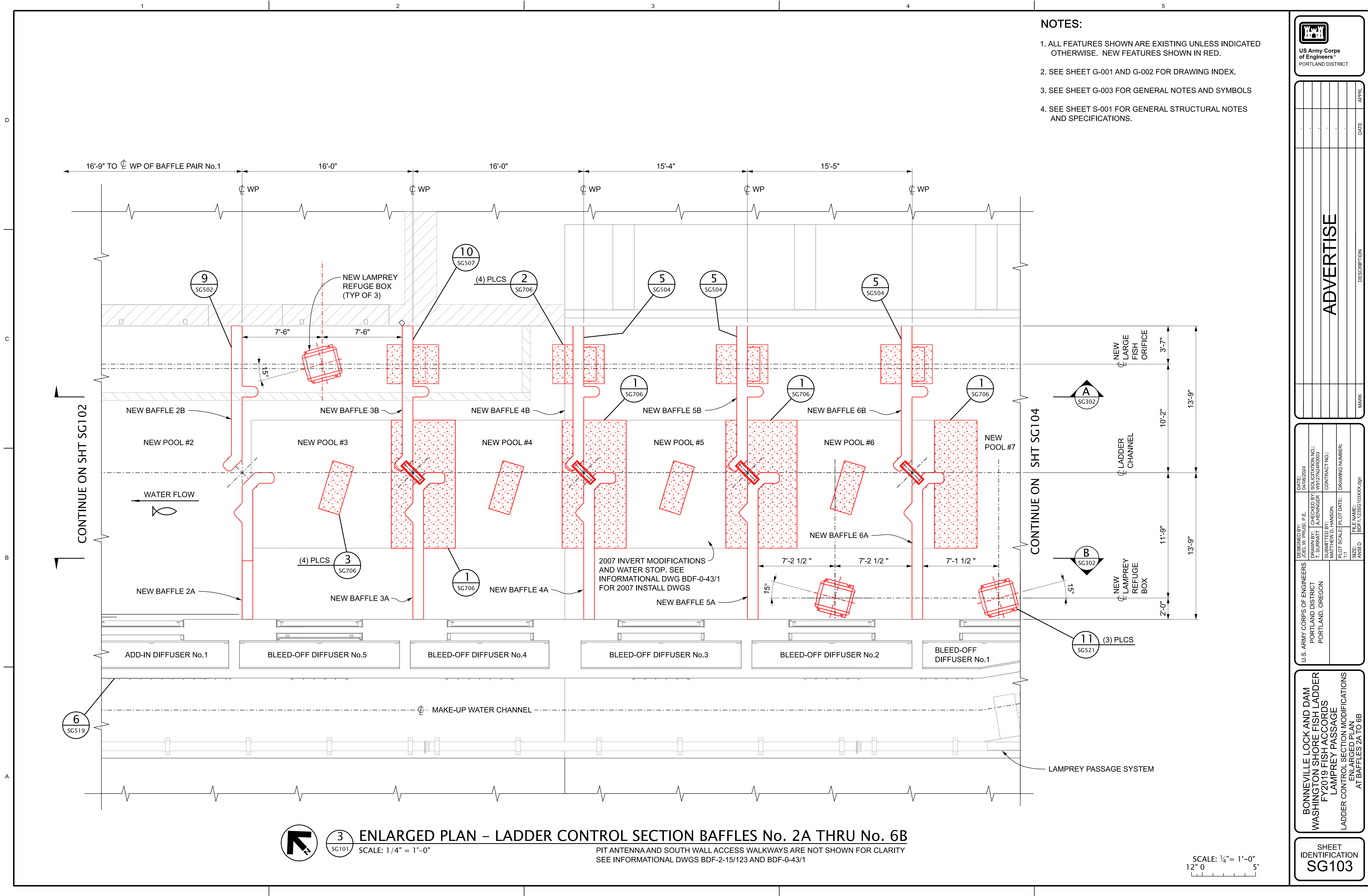
SECTION LOOKING D/S

SCALE: 1" = 1'-0"

ENLARGED DEMOLITION PLAN – BYPASS LEAD

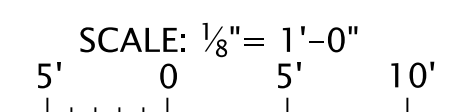
SEE INFORMATIONAL DWG BDF-2-15/121

SCALE: 1" = 1'-0"



POOL	WS EL (FT)	DEPTH (FT)
10	76.5	13.5
9	75.7	12.7
8	74.7	11.7
7	73.8	10.8
6	72.9	9.9
5	71.7	8.7
4	70.9	7.9
3	70.0	7.0
2	69.2	6.2
1	68.6	5.6

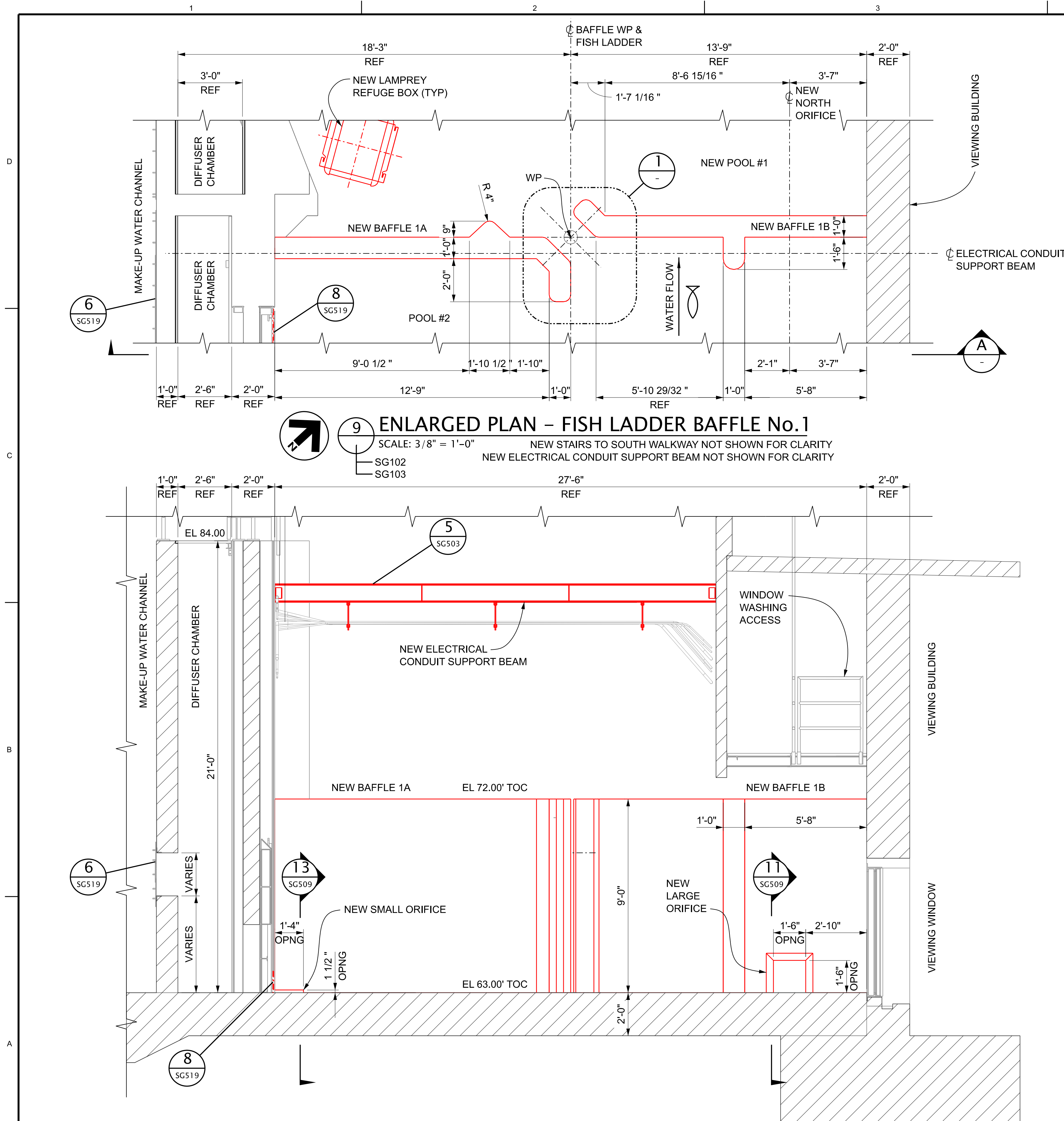
1. ALL FEATURES SHOWN ARE EXISTING UNLESS INDICATED OTHERWISE. NEW FEATURES SHOWN IN RED.
2. SEE SHEET G-001 AND G-002 FOR DRAWING INDEX.
3. SEE SHEET G-003 FOR GENERAL NOTES AND SYMBOLS
4. SEE SHEET S-001 FOR GENERAL STRUCTURAL NOTES AND SPECIFICATIONS.
5. WATER SURFACES SHOWN ARE FOR THE MAXIMUM FOREBAY ELEVATION OF 77.0'



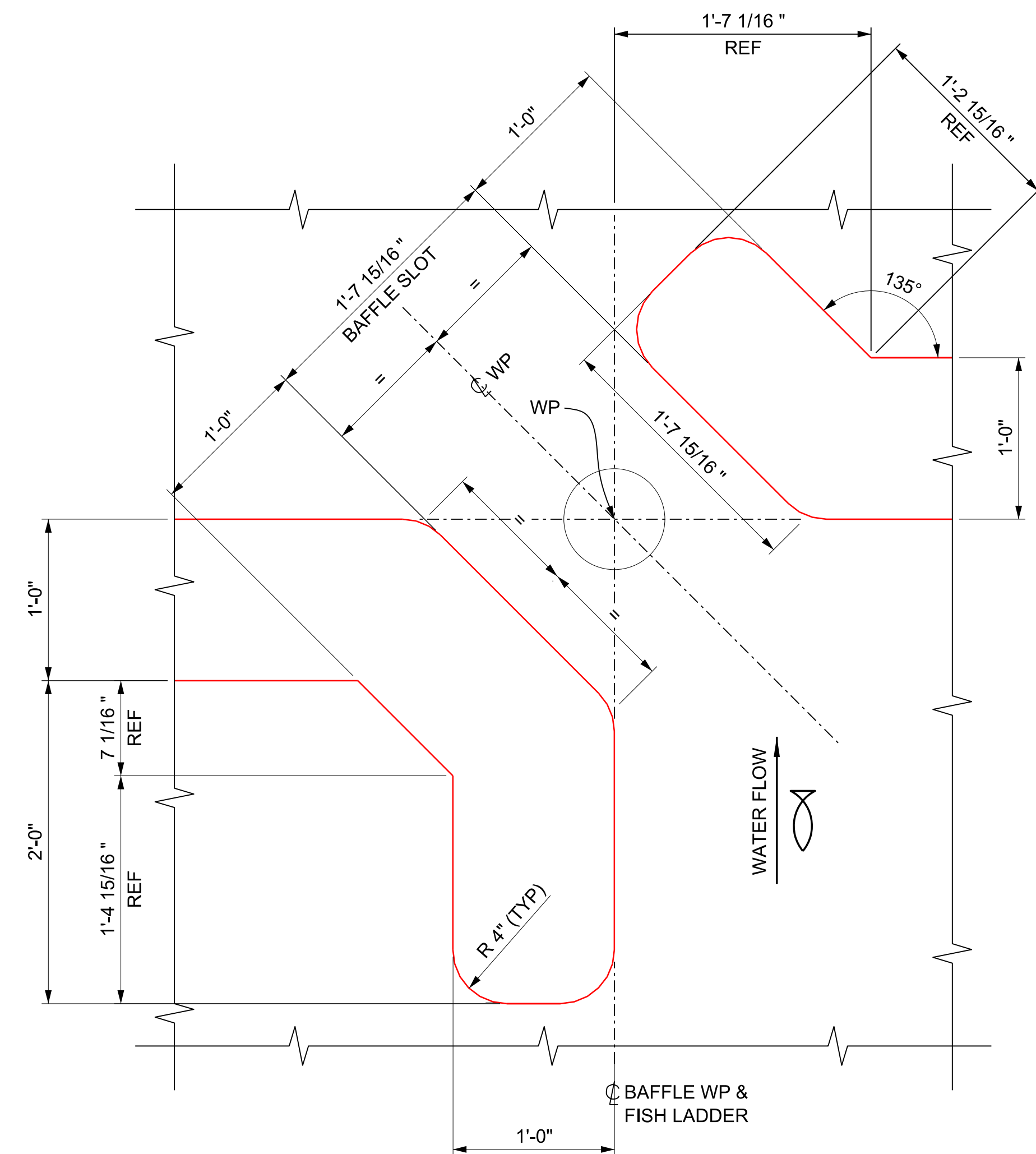
U.S. ARMY CORPS OF ENGINEERS PORTLAND DISTRICT PORTLAND, OREGON	DESIGNED BY:	JOEL W. PRUSI, P.E.	DATE:	04/08/2024
	DRAWN BY:	CHECKED BY:	SOLICITATION NO.:	
	SUBMITTED BY:	REVIEWER:	CONTRACT NO.:	
	MATTHEW D. HANSON, P.E.		DRAWING NUMBER:	
	PLOT SCALE:	PLOT DATE:		
	1:1			
	FILE NAME:			
	ANSI	BDF_125SG302XXX.dgn		

BONNEVILLE LOCK AND DAM
WASHINGTON SHORE FISH LADDER
FY2019 FISH ACCORDS
LAMPREY PASSAGE
LADDER CONTROL SECTION MODIFICATIONS
GENERAL ARRANGEMENT
SECTIONS - SHEET NO.1

SHEET
IDENTIFICATION
SG302



A ELEVATION LOOKING DOWNSTREAM AT BAFFLE No.1
 SCALE: 3/8" = 1'-0" STAIRS TO SOUTH WALKWAY NOT SHOWN FOR CLARITY



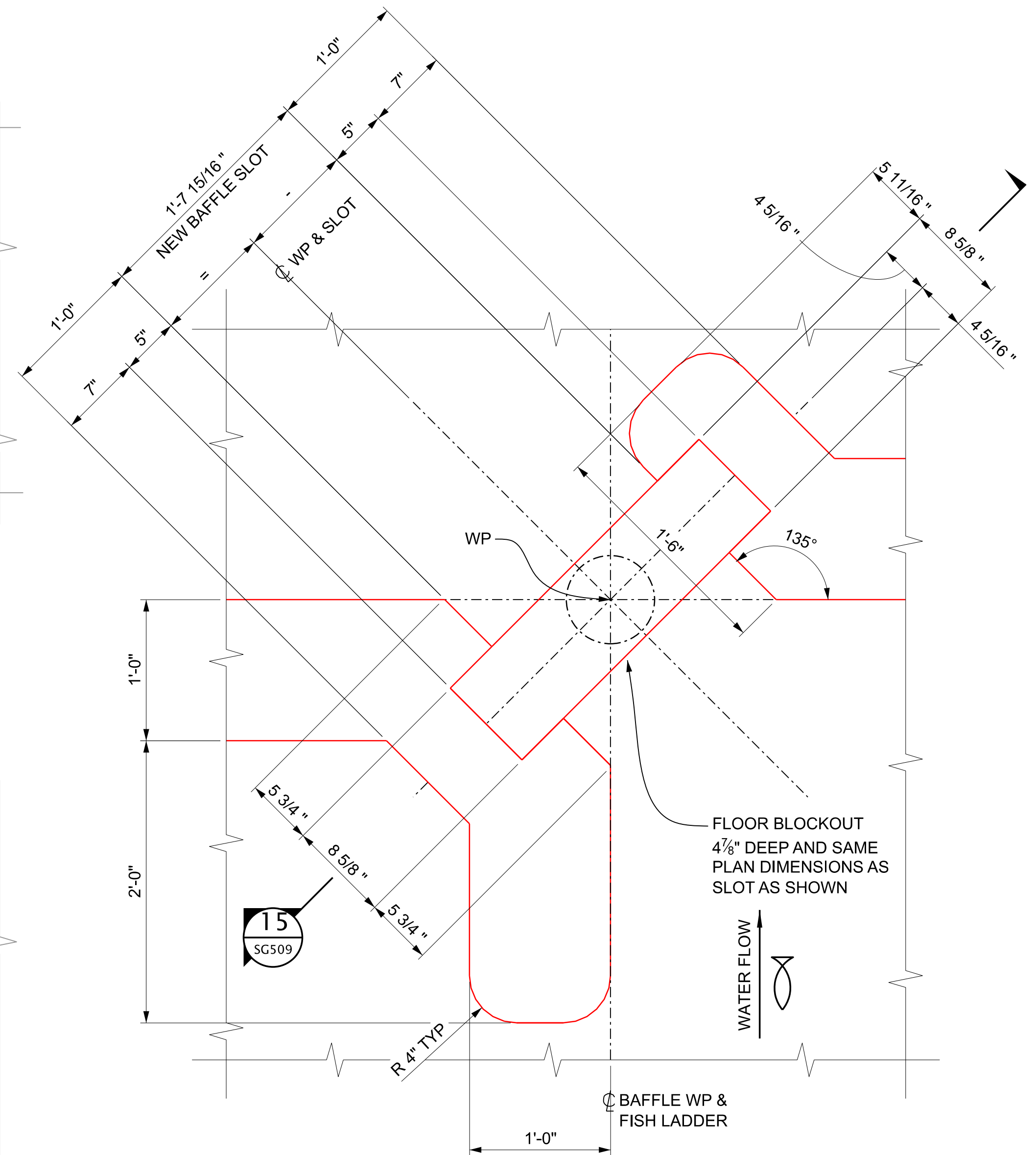
1 DETAIL - BAFFLE No.1 SLOT
 SCALE: 1 1/2" = 1'-0"

NOTES:

1. ALL FEATURES SHOWN ARE EXISTING UNLESS INDICATED OTHERWISE. NEW FEATURES SHOWN IN RED.
2. SEE SHEET G-001 AND G-002 FOR DRAWING INDEX.
3. SEE SHEET G-003 FOR GENERAL NOTES AND SYMBOLS
4. SEE SHEET S-001 FOR GENERAL STRUCTURAL NOTES AND SPECIFICATIONS.
5. SEE SHEET SG701 FOR REINFORCEMENT



 US Army Corps of Engineers PORTLAND DISTRICT	
ADVERTISE	
DESIGNED BY: JOEL W. FRUSH, P.E. CHECKED BY: JACOBSON SUBMITTED BY: JACOBSON PLOT SCALE: 1/2" = 1'-0" SIZE: 11x17 FILE NAME: BDF1123SG502XXX.dgn	DATE: 04/05/2024 CHECKED BY: JACOBSON CONTRACT NO.: DRAWING NUMBER: APPR. DATE DESCRIPTION MARK
U.S. ARMY CORPS OF ENGINEERS PORTLAND DISTRICT PORTLAND, OREGON	
BONNEVILLE LOCK AND DAM WASHINGTON SHORE FISH LADDER FY2019 FISH ACCORDS LAMPREY PASSAGE LADDER CONTROL SECTION MODIFICATIONS NEW BAFFLE PAIR NO.1 PLAN, ELEVATION, AND DETAILS	
SHEET IDENTIFICATION SG502	

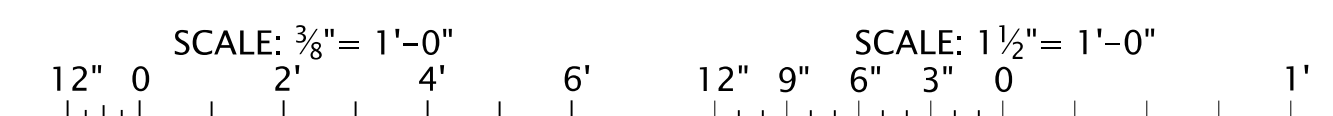


1 **DETAIL – PIT ANTENNA GUIDE SLOT**
SCALE: 1 1/2" = 1'-0" BAFFLES No. 4, 5, 6 SIMILAR



1. ALL FEATURES SHOWN ARE EXISTING UNLESS INDICATED OTHERWISE. NEW FEATURES SHOWN IN RED.
2. SEE SHEET G-001 AND G-002 FOR DRAWING INDEX.
3. SEE SHEET G-003 FOR GENERAL NOTES AND SYMBOLS
4. SEE SHEET S-001 FOR GENERAL STRUCTURAL NOTES AND SPECIFICATIONS.
5. SEE SHEET SG504 FOR NEW PIT ANTENNA BAFFLES GENERAL NOTES.

(A) ELEVATION LOOKING DOWNSTREAM AT BAFFLE No.3
SCALE: 3/8" = 1'-0"

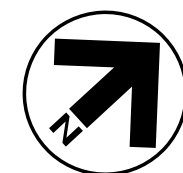
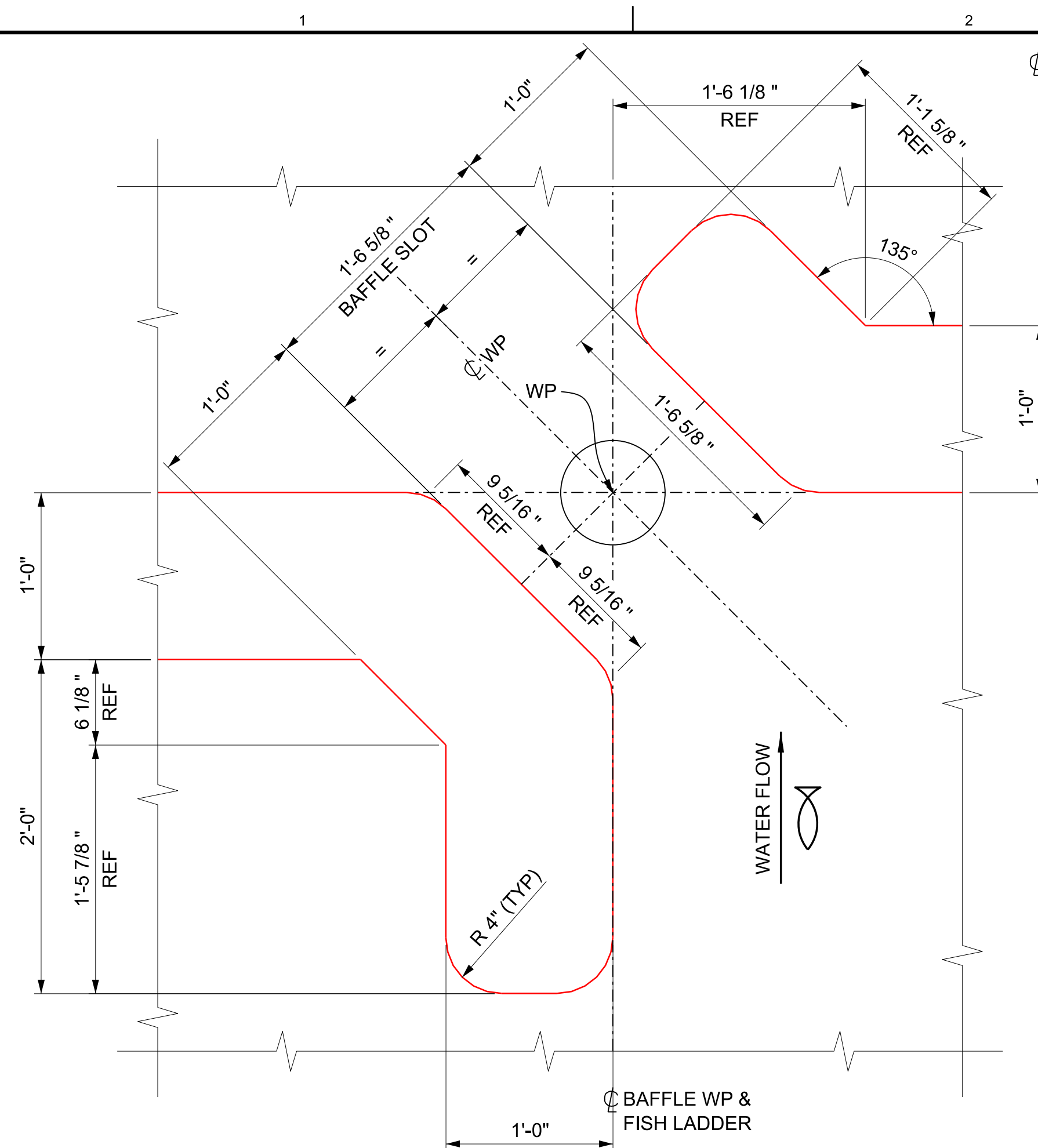


ADVERTISE

PORTLAND DISTRICT PORTLAND, OREGON	DRAWN BY: CHECKED BY: J. CAMERON J. HENNINGER SUBMITTED BY: MATTHEW D. HANSON, P.E.	CONTRACT NO.:	DRAWING NUMBER:
			11

WASHINGTON SHORE FISH LADDER
BONNEVILLE LOCK AND DAM
FY2019 FISH ACCORDS
LAMPREY PASSAGE
LADDER CONTROL SECTION MODIFICATIONS
NEW BAFFLE PAIR NO.3
PLAN, ELEVATION, AND DETAILS

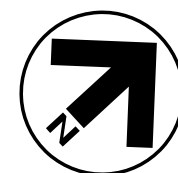
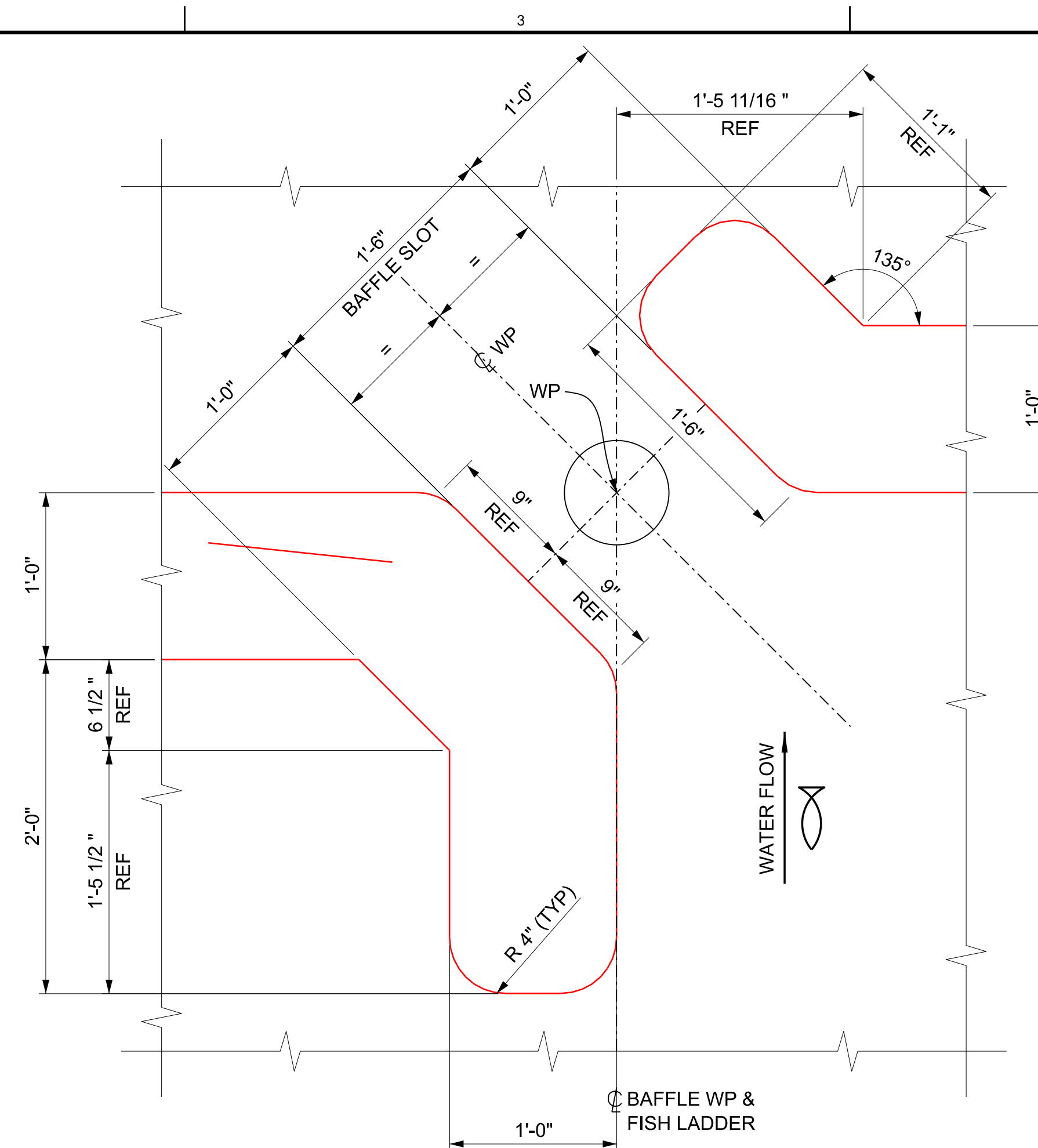
SHEET
IDENTIFICATION
SG507



8
SG505

DETAIL – BAFFLE No.8 SLOT

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



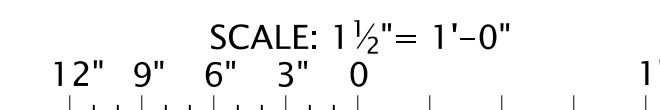
9
SG505

DETAIL – BAFFLE No.9 SLOT

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

NOTES:

1. ALL FEATURES SHOWN ARE NEW UNLESS INDICATED OTHERWISE. NEW FEATURES SHOWN IN RED.
2. SEE SHEET G-001 AND G-002 FOR DRAWING INDEX.
3. SEE SHEET G-003 FOR GENERAL NOTES AND SYMBOLS
4. SEE SHEET S-001 FOR GENERAL STRUCTURAL NOTES AND SPECIFICATIONS.
5. SEE SHEET SG701 FOR REINFORCEMENT.



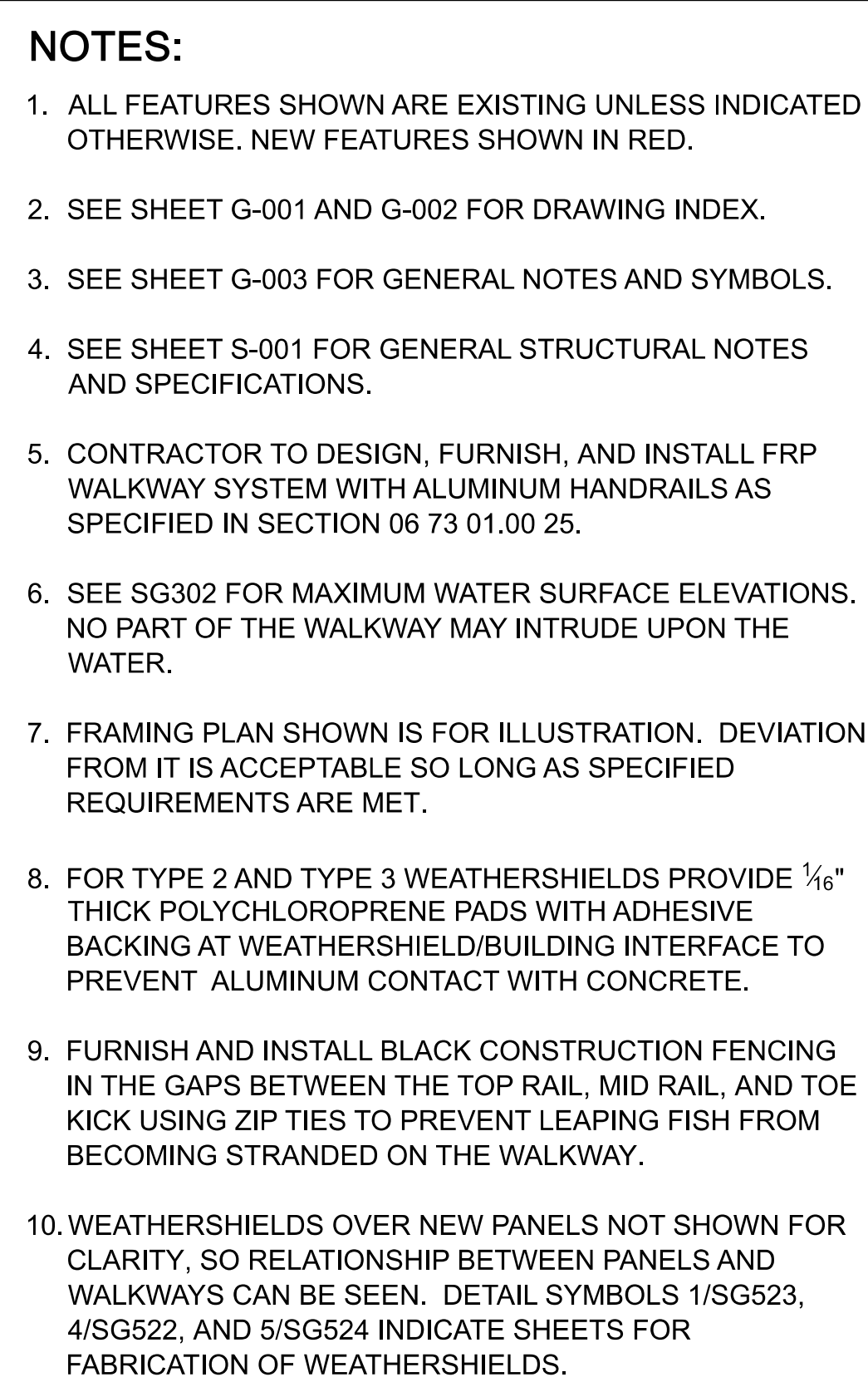
**US Army Corps
of Engineers®**
PORTLAND DISTRICT

[illegible]

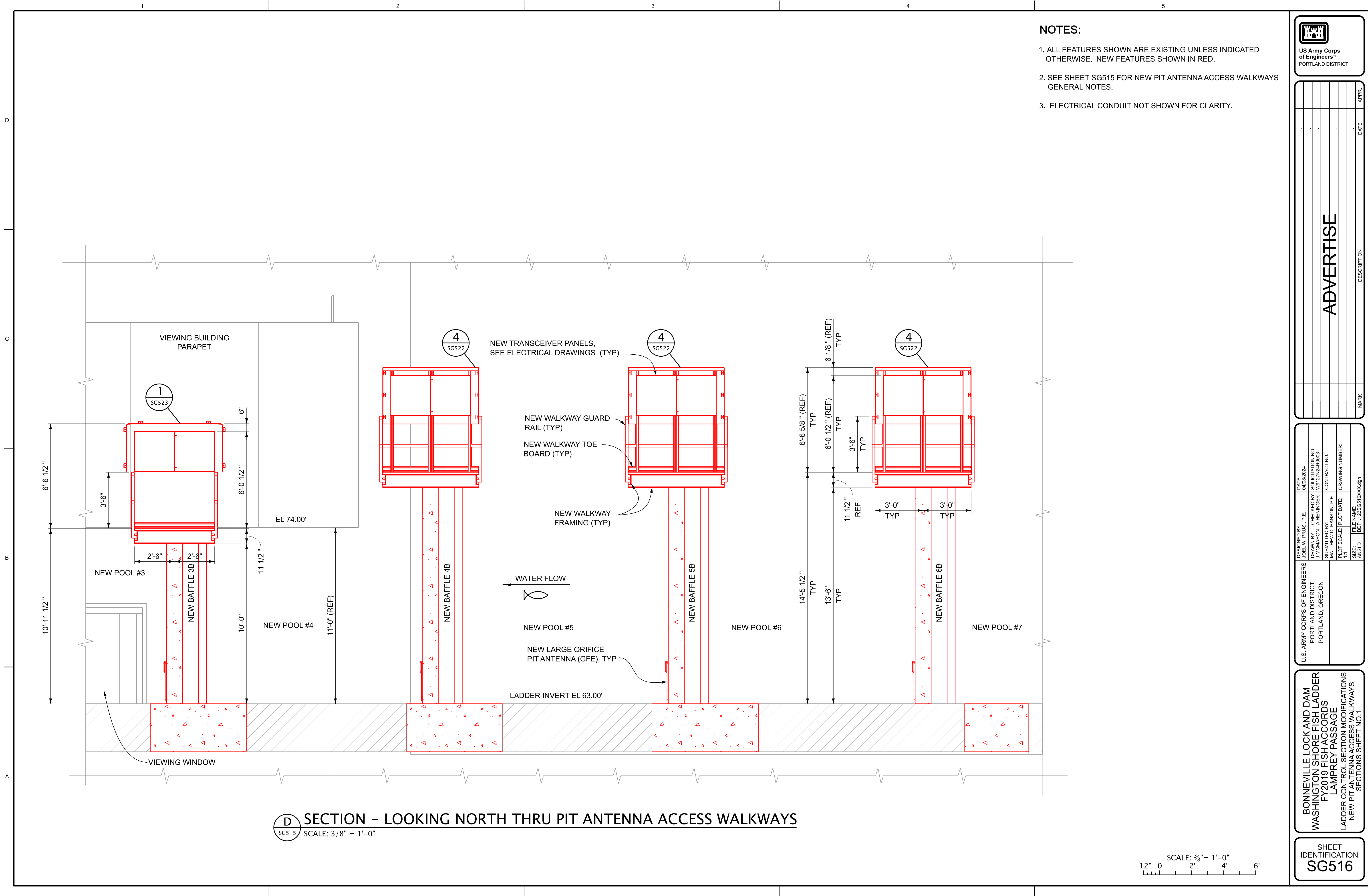
U.S. ARMY CORPS OF ENGINEERS PORTLAND DISTRICT PORTLAND, OREGON	DRAWN BY: J.MCMAHON CHECKED BY: A.JENNINGSON SUBMITTED BY: J.MCMAHON DATE: 04/08/2024	SOLICITATION NO.: W9127N2-08R0003 CONTRACT NO.: DRAWING NUMBER: 1:1 PILOT SCALE: 1:1 FILE NAME: B0171255600XXXX.dgn
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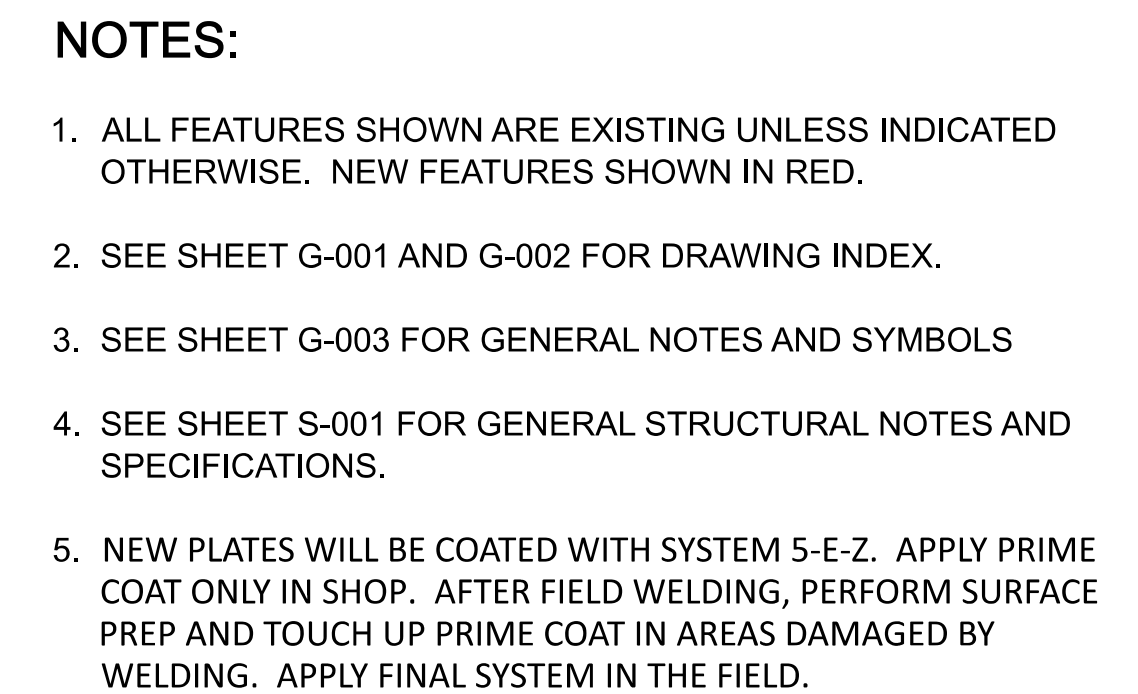
BONNEVILLE LOCK AND DAM
WASHINGTON SHORE FISH LADDER
FY2019 FISH ACCORDS
LAMPREY PASSAGE
LADDER CONTROL SECTION MODIFICATIONS
NEW BAFFLE DETAILS
SHEET 1

SHEET
IDENTIFICATION
SG508



SHEET
IDENTIFICATION
SG515





SCALE: 1" = 1'-0"

ADD-IN EMBEDDED
DIFFUSER SCREEN SLOT

3/8" PLATE

1'-0"

EL 63.00'

SCALE: 1" = 1'-0"



LAMPREY TRAVEL PLATE AT ADD-IN DIFFUSER No.2 IS SIMILAR



PORTLAND DISTRICT PORTLAND, OREGON	DRAWN BY: CHECKER, B.K. JACOBSON, A. CONTRACT NO.: W0127N24R0003 SUBMITTED BY: MATTHEW D. HANSON, P.E. PLOT SCALE: PLOT DATE: 1:1 DRAWING NUMBER: 1:1	SIZE: ANSI D	FILE NAME: B0F:1225G519XX.dgn
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WASHINGTON SHORE FISH LADDER
BONNEVILLE LOCK AND DAM
FY2019 FISH ACCORDS
LAMPREY PASSAGE
LADDER CONTROL SECTION MODIFICATIONS
ADD-IN DIFFUSERS MODIFICATIONS
SECTIONS AND DETAILS

SHEET
IDENTIFICATION
SG519



A



A



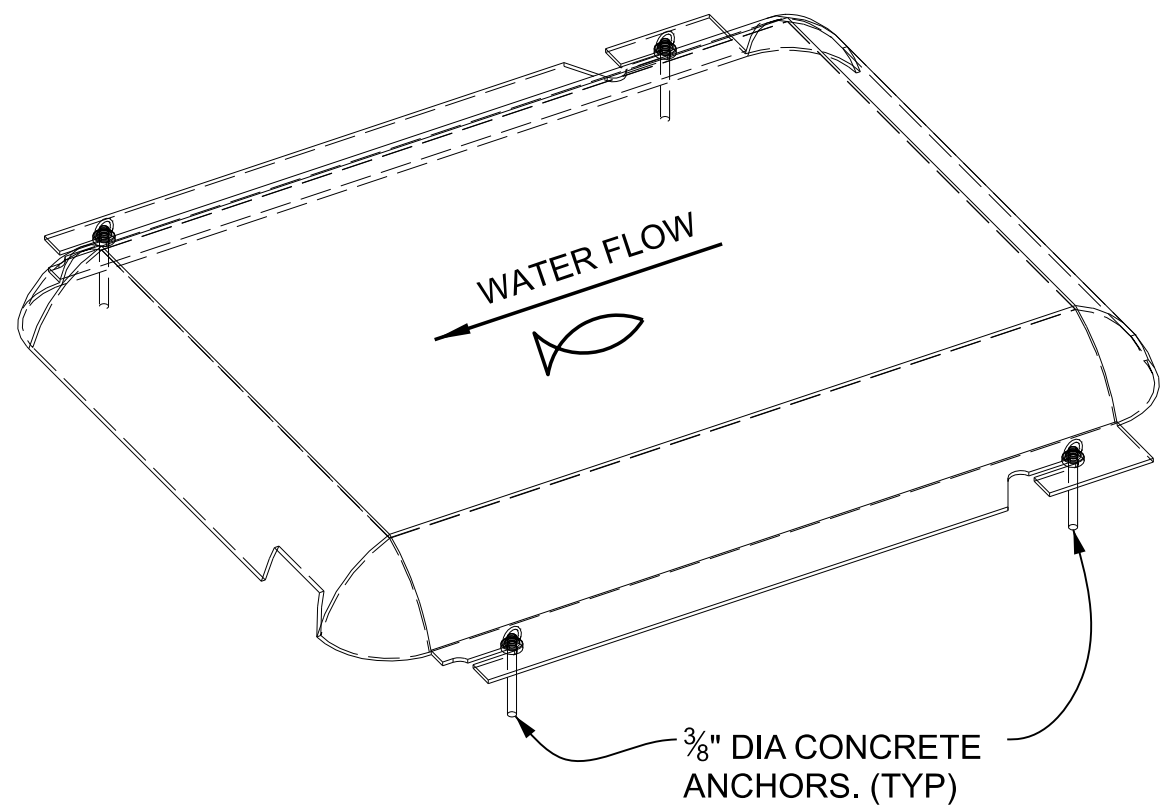
A



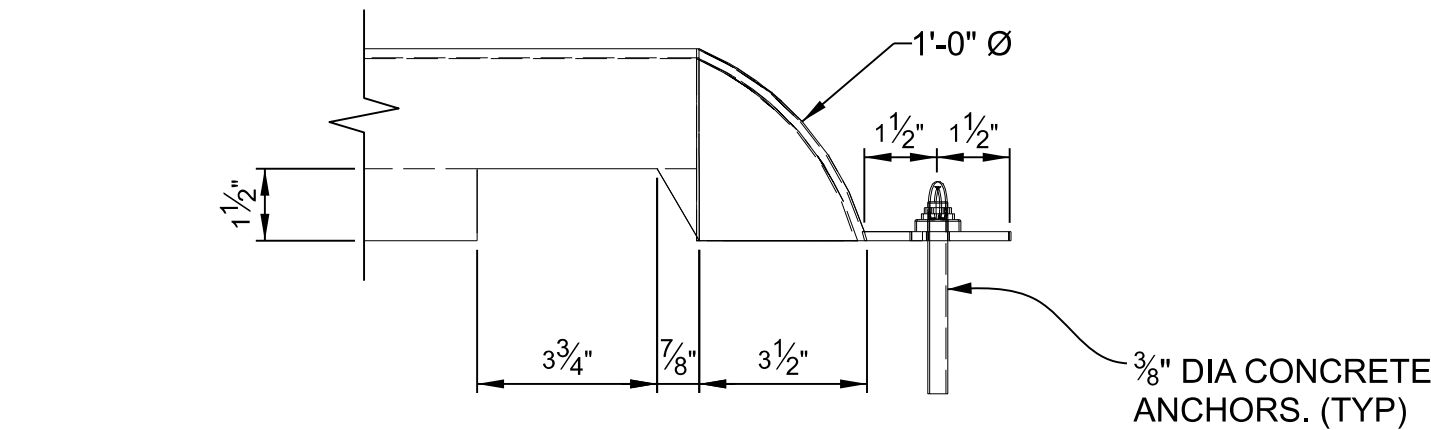
A

- SCALE: $\frac{3}{4}" = 1'-0"$ SCALE: $3" = 1'-0"$

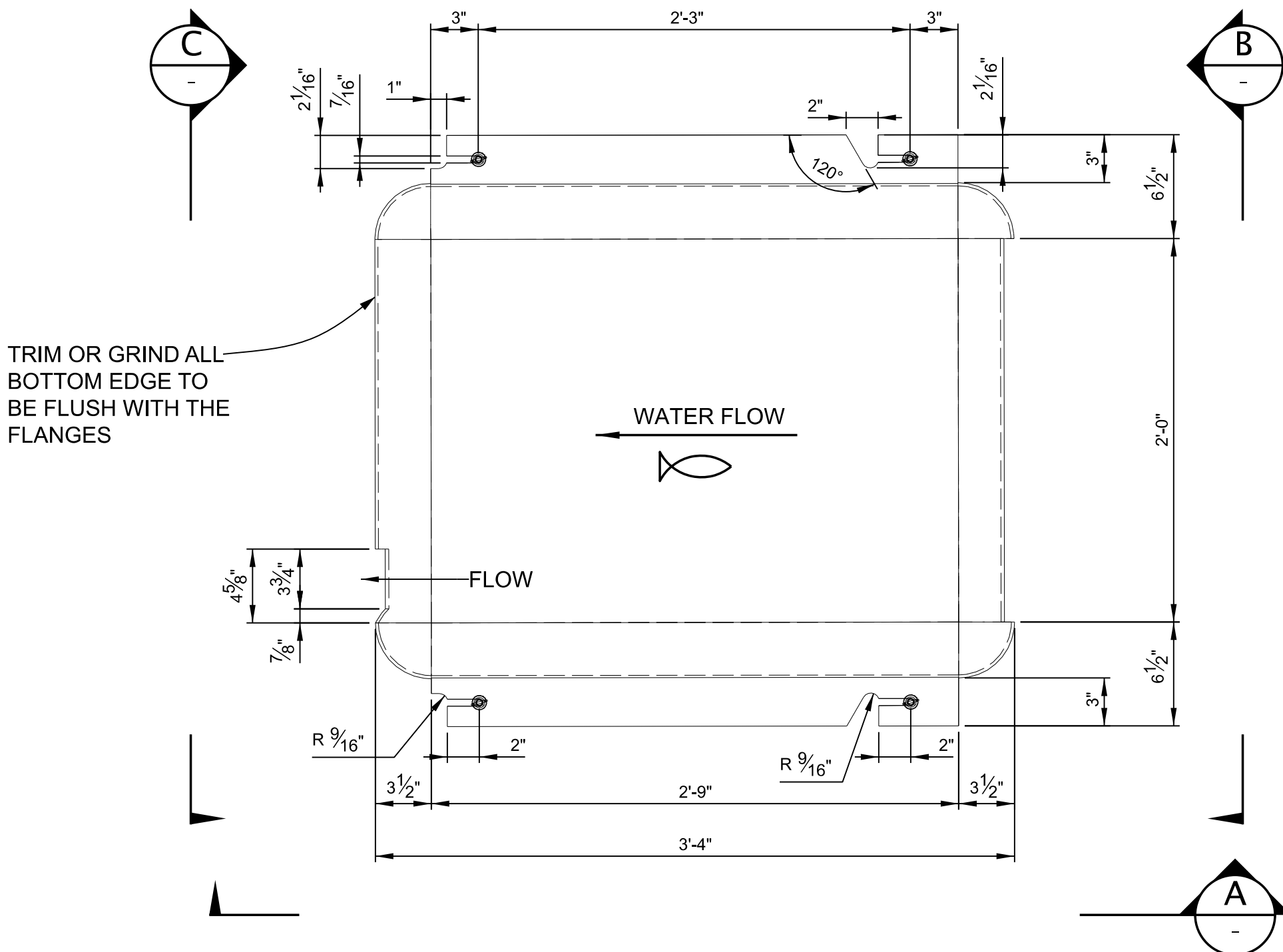




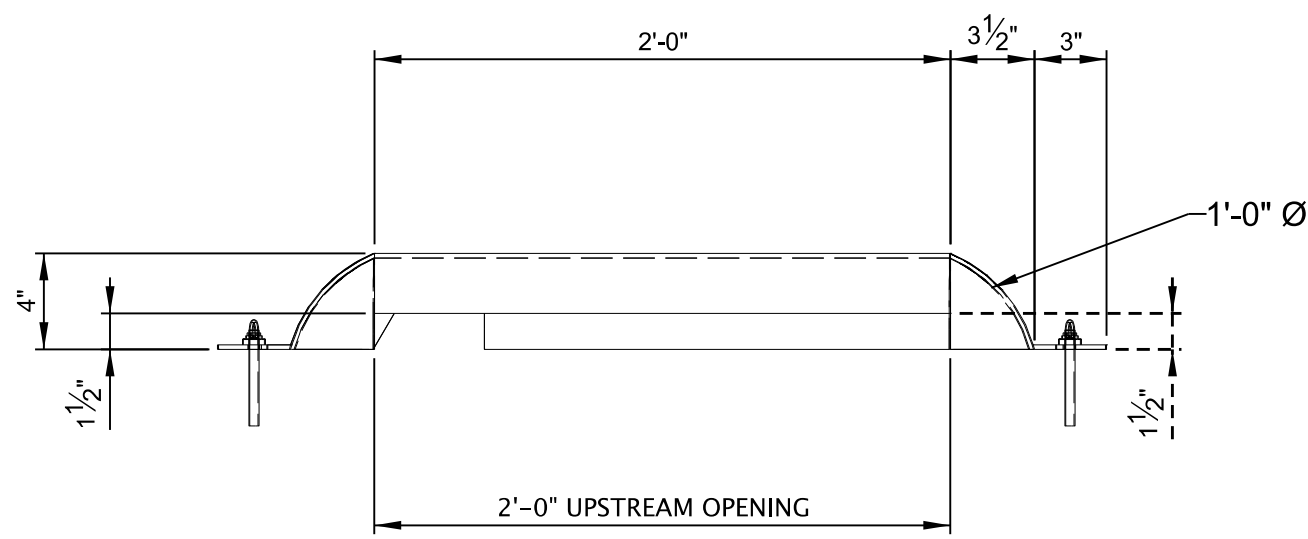
REFUGE BOX ISOMETRIC
SCALE: NONE



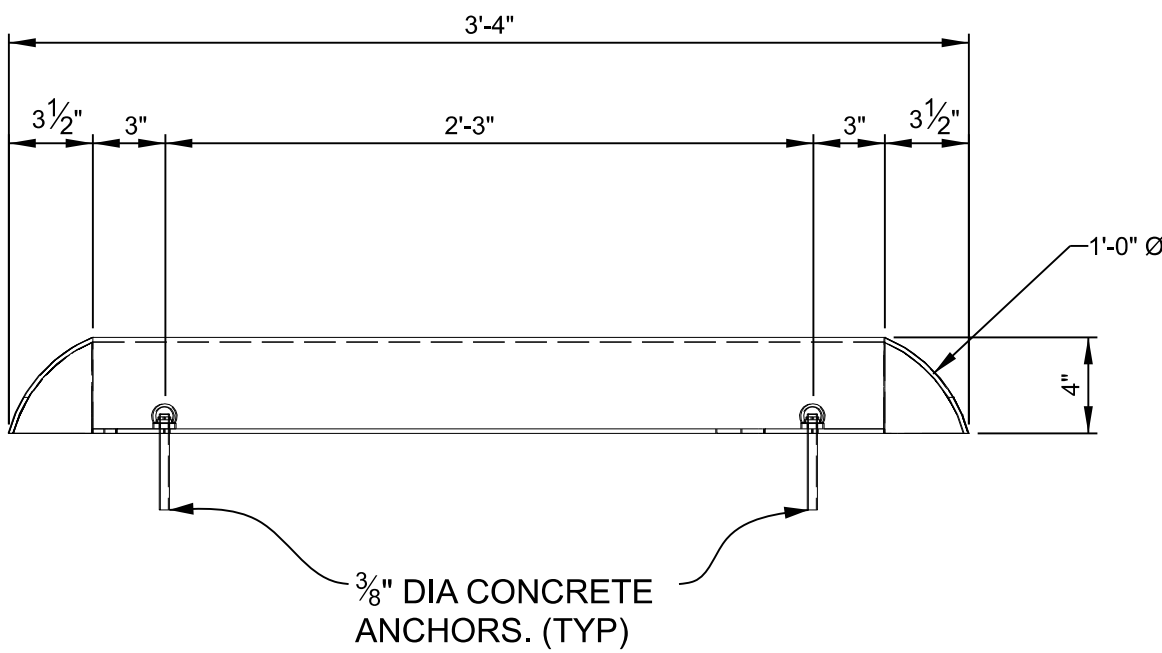
1 DETAIL – REFUGE BOX DOWNSTREAM OPENING
SCALE: 3" = 1'-0"



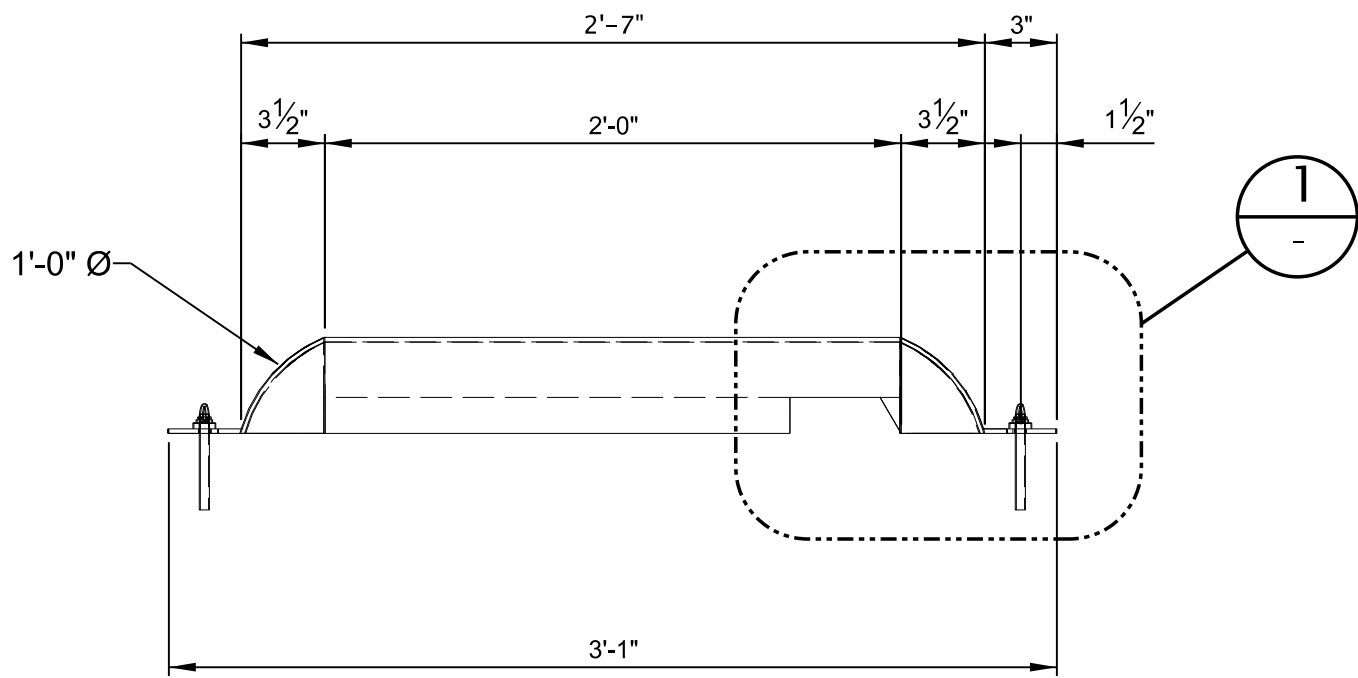
11 DETAIL – LAMPREY REFUGE BOX PLAN
SCALE: 1 1/2" = 1'-0" (7) REQ'D SEE NOTE 9
SG102
SG103
SG104



B ELEVATION – REFUGE BOX UPSTREAM FACE
SCALE: 1 1/2" = 1'-0"



A ELEVATION – REFUGE BOX SIDE
SCALE: 1 1/2" = 1'-0"



C ELEVATION – REFUGE BOX DOWNSTREAM FACE
SCALE: 1 1/2" = 1'-0"

NOTES:

- ALL FEATURES SHOWN ARE NEW UNLESS INDICATED OTHERWISE.
- MATERIAL IS ASTM B209 5052-H32 3/16" PLATE UNO.
- BREAK ALL EDGES AND CORNERS TO 1/16" RADIUS MINIMUM.
- REFUGE BOX SHALL SIT FLUSH WITH THE FLOOR.
- ANCHOR TO CONCRETE WITH 3/8" DIA. SS EXPANSION ANCHORS WITH 2 1/4" EFFECTIVE DEPTH. ANCHORS DO NOT NEED TO BE CERTIFIED FOR CRACKED CONCRETE. USE CAP (ACORN) NUT TO SECURE FIXTURE. SELECT CAP NUT AND ANCHOR LENGTH TO ENSURE PROPER BOLT GRIP SO THE ANCHOR CAN BE TORQUED AS NEEDED.
- MINIMUM BEND RADIUS IS TWICE THE PLATE THICKNESS.
- EXISTING CONCRETE FLOOR NOT SHOWN.
- PROVIDE 1/16" THICK POLYCHLOROPRENE PADS WITH ADHESIVE BACKING AT ENTIRE BOTTOM SURFACE OF FLANGES TO PREVENT ALUMINUM CONTACT WITH CONCRETE.
- SEE SHEETS SG101 THRU SG104 FOR LOCATIONS OF REFUGE BOXES.

US Army Corps
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PORTLAND DISTRICT

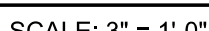
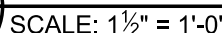
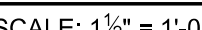
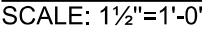
ADVERTISE

DATE	06/05/2024
DESIGNED BY:	JOEL W. FRUSH, P.E.
CHECKED BY:	CHRISTOPHER J. HENNINGER
SUBMITTED BY:	MATTHEW D. HANSON, P.E.
CONTRACT NO.:	
DRAWING NUMBER:	
FILE NAME:	BDT1123SG521XXX.dgn
SIZE:	ANSI D

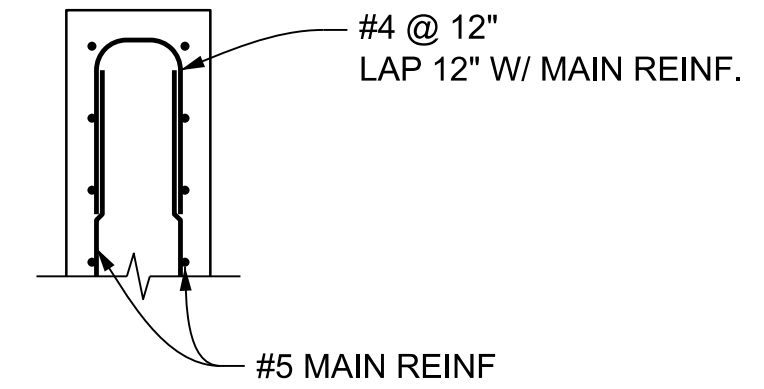
U.S. ARMY CORPS OF ENGINEERS
PORTLAND DISTRICT
PORTLAND, OREGON

BONNEVILLE LOCK AND DAM
WASHINGTON SHORE FISH LADDER
FY2019 FISH ACCORDS
LAMPREY PASSAGE
LADDER CONTROL SECTION MODIFICATIONS
NEW LAMPREY REFUGE BOX
PLAN, ELEVATIONS AND DETAILS

SHEET
IDENTIFICATION
SG521



- SCALE: $1\frac{1}{2}" = 1'-0"$ SCALE: $3" = 1'-0"$



#5 MAIN REINF

#4 @ 12"
2 EA ALL THREE EDGES OF LG ORIFICE
LAP 12" W/ MAIN REINF.

#5 MAIN REINF

#4 @ 12"

2 TOP EDGE OF SM ORIFICE
LAP 12" W/ MAIN REINF.

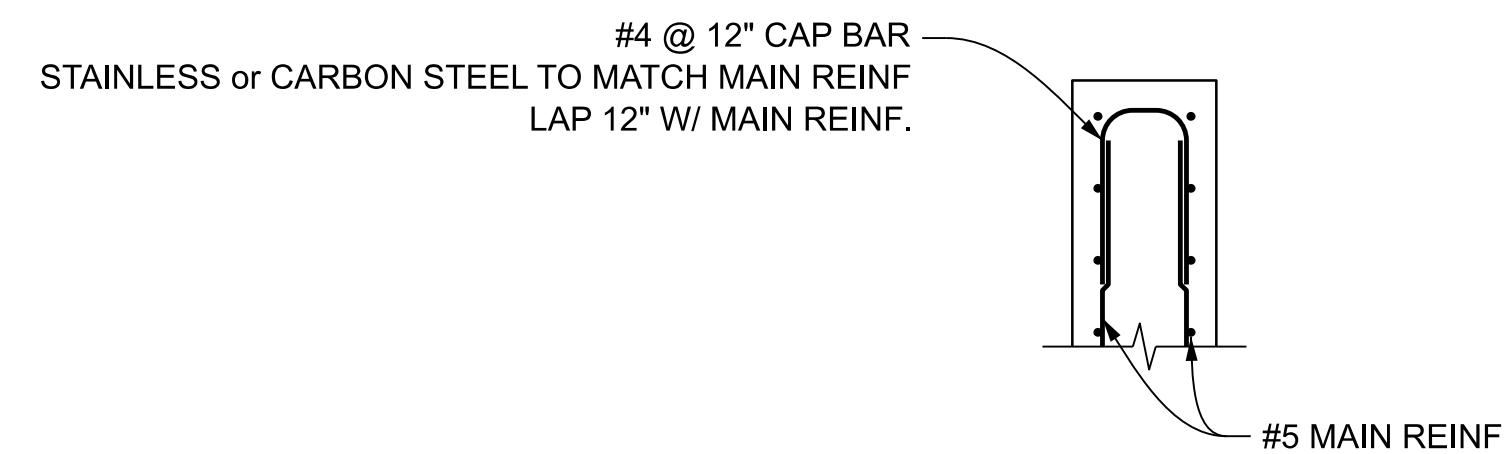
NOTES:

1. ALL REINFORCEMENT THIS SHEET IS NEW.
2. SEE SHEET G-001 AND G-002 FOR DRAWING INDEX.
3. SEE SHEET G-003 FOR GENERAL NOTES AND SYMBOLS
4. CONCRETE OUTLINES ON SG502, SG505-SG508.
5. ALL REINFORCEMENT THIS SHEET IS CARBON STEEL.
6. ALL CLEAR COVER THIS SHEET 2-1/2".
7. ALL LAP SPLICES FOR THIS SHEET 1'-11" UNO.
8. REINFORCEMENT FOR BAFFLES 7-9 SHOWN; REINFORCEMENT FOR BAFFLES 1-2 SIMILAR BELOW EL. 72.00'. PLACE #4 CAP BARS ON TOP OF 1-2 AS ON BAFFLES 7-9



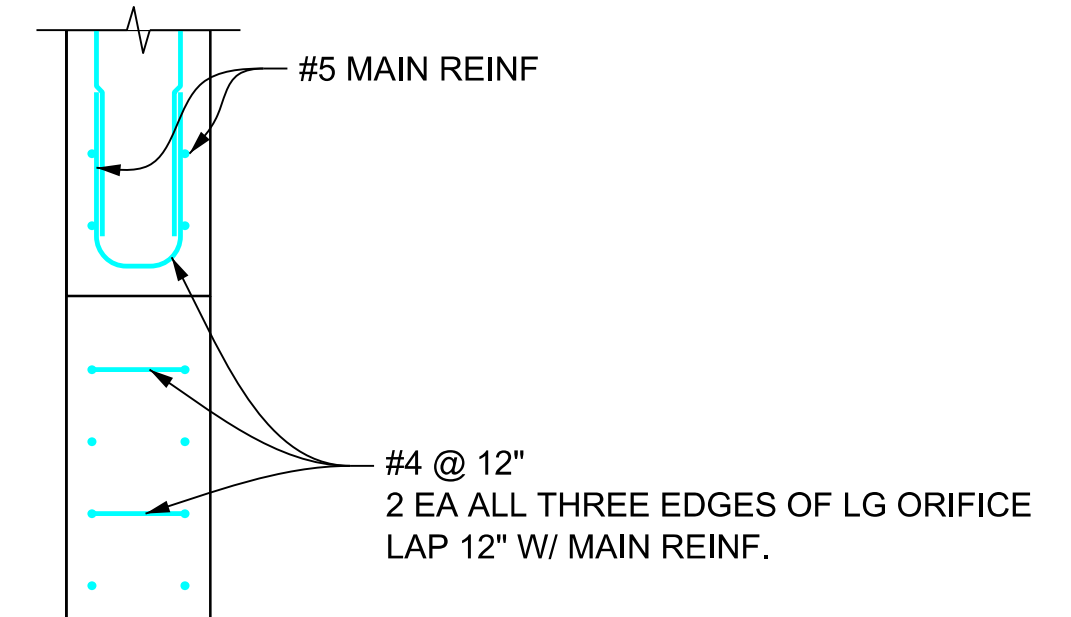
- ## NOTES:
1. ALL REINFORCEMENT THIS SHEET IS NEW.
 2. SEE SHEET G-001 AND G-002 FOR DRAWING INDEX.
 3. SEE SHEET G-003 FOR GENERAL NOTES AND SYMBOLS
 4. CONCRETE OUTLINES ON SG502, SG505-SG508.
 5. ALL REINFORCEMENT THIS SHEET IS CARBON STEEL.
 6. ALL CLEAR COVER THIS SHEET 2-1/2".
 7. ALL LAP SPLICES FOR THIS SHEET 1'-11" UNO.
 8. REINFORCEMENT FOR BAFFLES 7-9 SHOWN; REINFORCEMENT FOR BAFFLES 1-2 SIMILAR BELOW EL. 72.00'. PLACE #4 CAP BARS ON TOP OF 1-2 AS ON BAFFLES 7-9





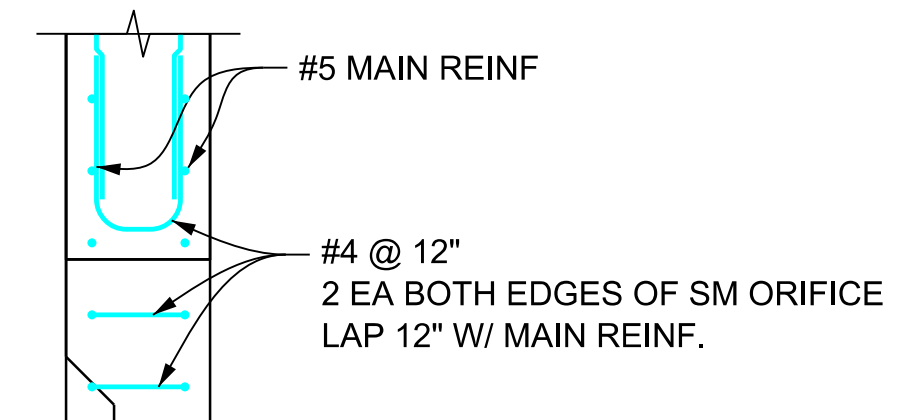
D **DETAIL @ TOP OF BAFFLE**

SCALE: $3/4" = 1'-0"$



C DETAIL @ LARGE ORIFICE

SCALE: $3/4" = 1'-0"$



DETAIL @ SMALL ORIFICE

SCALE: $3/4" = 1'-0"$

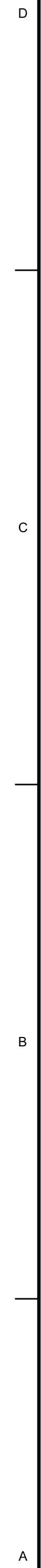
NOTES:

1. ALL REINFORCEMENT THIS SHEET IS NEW.
2. SEE SHEET G-001 AND G-002 FOR DRAWING INDEX.
3. SEE SHEET G-003 FOR GENERAL NOTES AND SYMBOLS
4. CONCRETE OUTLINES ON SG504, SG507, SG509
5. CARBON STEEL REBAR IS BLACK, SHOWN THUS: _____
STAINLESS REBAR (SS) IS CYAN, SHOWN THUS: _____
6. ALL CLEAR COVER THIS SHEET 2-1/2", EXCEPT 1-1/2" AROUND SLOT.
7. AREAS NEAR SLOT ANTENNA AND LG ORIFICE ANTENNA MUST NOT CONTAIN MAGNETIC MATERIAL. STAINLESS REBAR IS USED WHERE IT CROSSES TO THIS AREA.
8. DOWELS IN AREA WITH NEW INVERT CONCRETE (BAFFLES 3-5) MUST BE CAST-IN-PLACE. NO POST-INSTALLED REINFORCEMENT IS PERMITTED IN THIS AREA UNTIL NEW CONCRETE IS AT LEAST 21 DAYS OLD, REGARDLESS OF ANY EARLY STRENGTH GAIN.
9. ALL LAP SPLICES FOR THIS SHEET 1'-11" UNO.
10. REINFORCEMENT FOR BAFFLES 4-6 SHOWN; REINFORCEMENT FOR BAFFLE 3 SIMILAR BELOW EL. 73.00'. PLACE #4 CAP BARS ON TOP OF 3 AS ON BAFFLES 4-6.



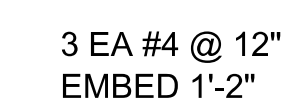
DETAIL – REINFORCEMENT AROUND SLOT

12" 0 2' 4' 6' SCALE: $\frac{3}{8}" = 1'-0"$ 12" 6" 0 1' 2' SCALE: $\frac{3}{4}" = 1'-0"$

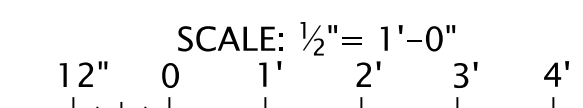


3 ENLARGED
SG102 SCALE: 1/2" = 1'-0"

1. ALL REINFORCEMENT THIS SHEET IS NEW.
2. SEE SHEET G-001 AND G-002 FOR DRAWING INDEX.
3. SEE SHEET G-003 FOR GENERAL NOTES AND SYMBOLS
4. SEE SHEET S-001 FOR GENERAL STRUCTURAL NOTES AND SPECIFICATIONS.
5. SEE SHEET SG102 FOR CONCRETE OUTLINE
6. LAP SPLICE ALL #4 BARS ON THIS SHEET 1'-9"
7. CLEAR COVER OVER ALL BARS IS 3" UNO.



4 NEW CHAM
SG102 SCALE: 1-1/2" = 1'-0"

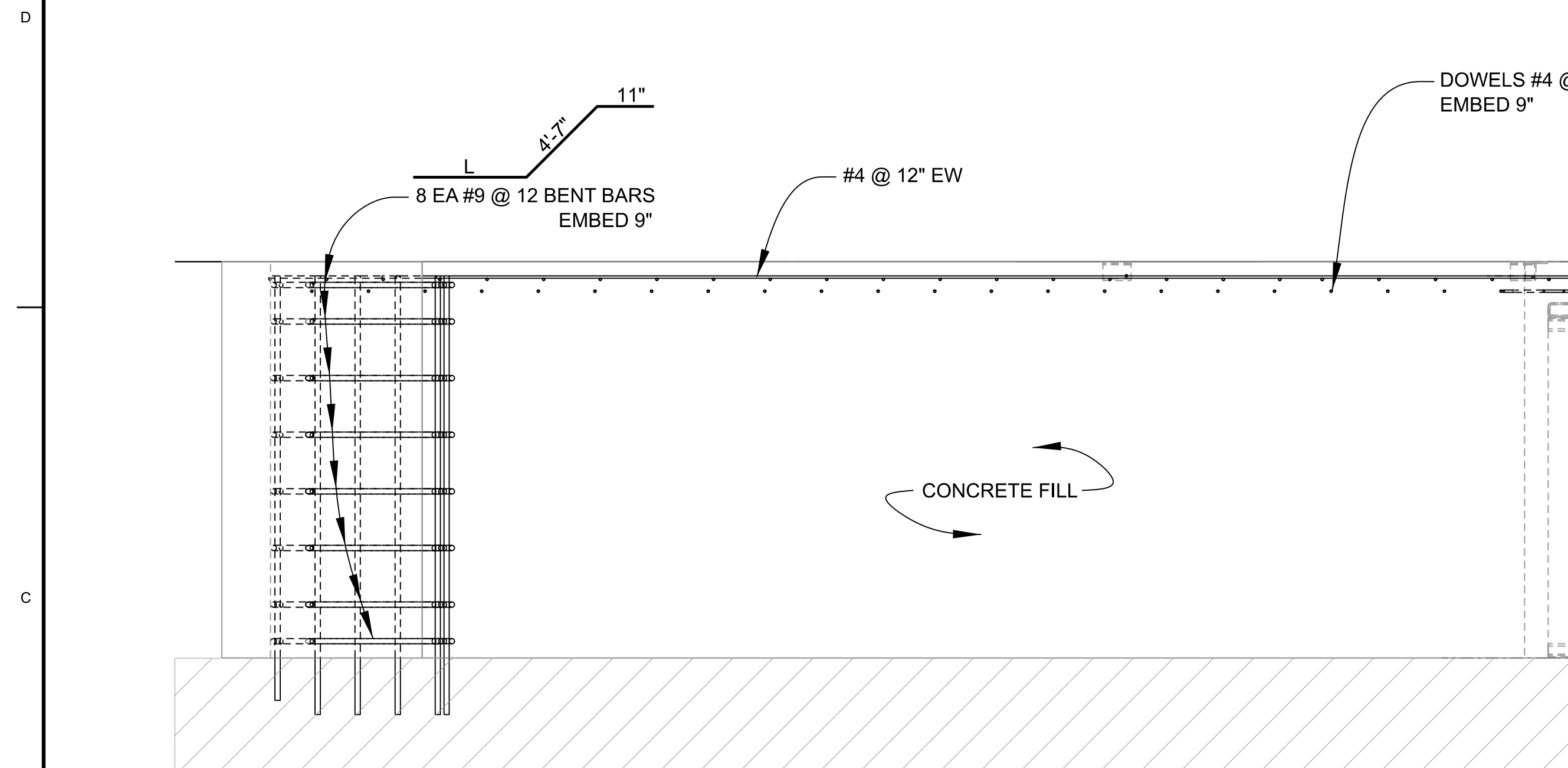


ADVERTISE

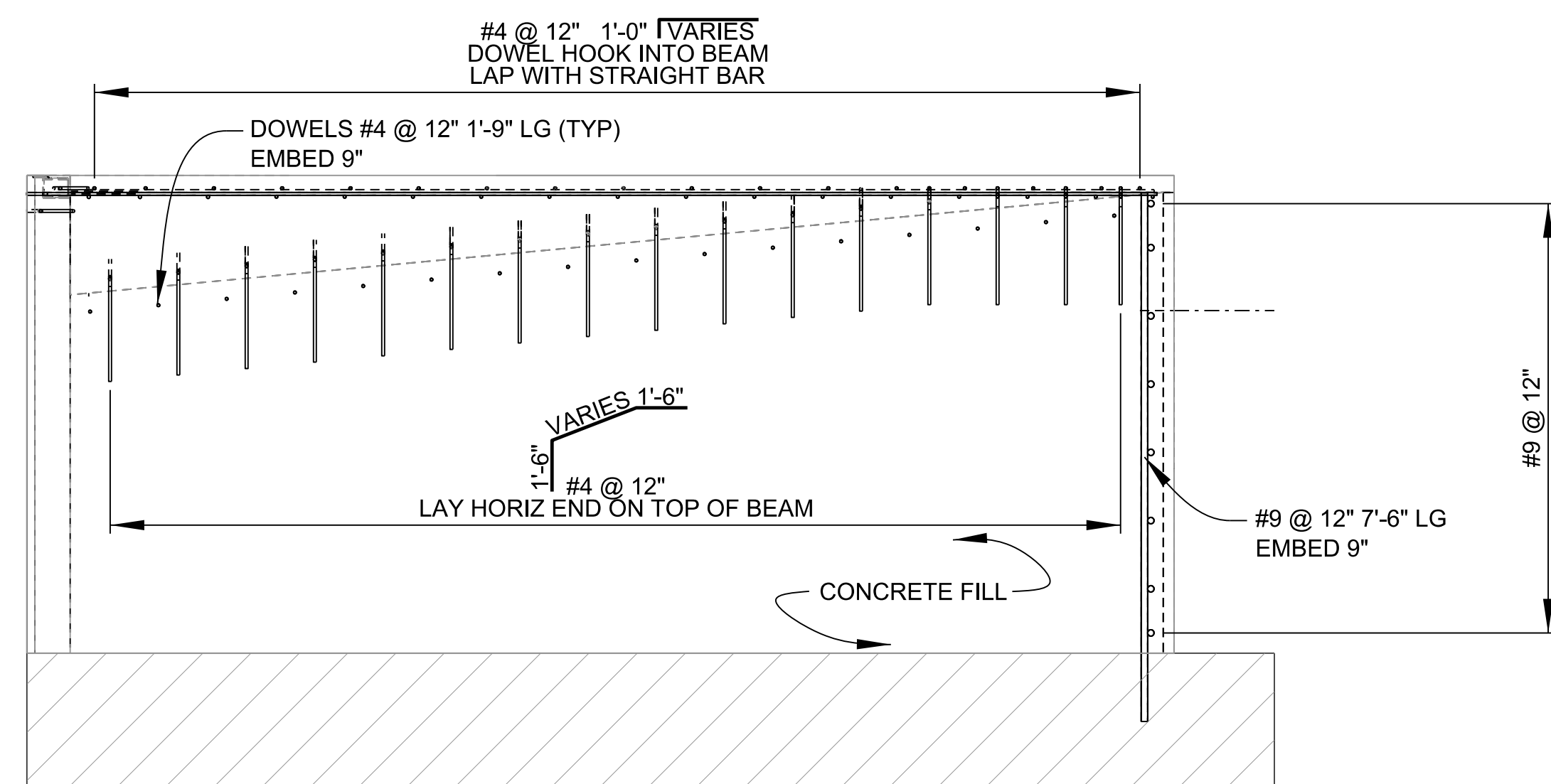
U.S. ARMY CORPS OF ENGINEERS PORTLAND DISTRICT PORTLAND, OREGON	DRAWN BY: JIMCAHON A. HENINGER		SOLICITATION NO: W912N224R0003	
	CHECKED BY: MATTHEW D. HANSON P.E.		CONTRACT NO:	
	SUBMITTED BY:		DRAWING NUMBER:	
	PLOT SCALE: PLOT DATE:		FILE NAME:	
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	SIZE: ANSI D			

BONNEVILLE LOCK AND DAM
WASHINGTON SHORE FISH LADDER
FY2019 FISH ACCORDS
LAMPREY PASSAGE
LADDER CONTROL SECTION MODIFICATIONS
NEW CONCRETE FILL REINFORCING
PLAN

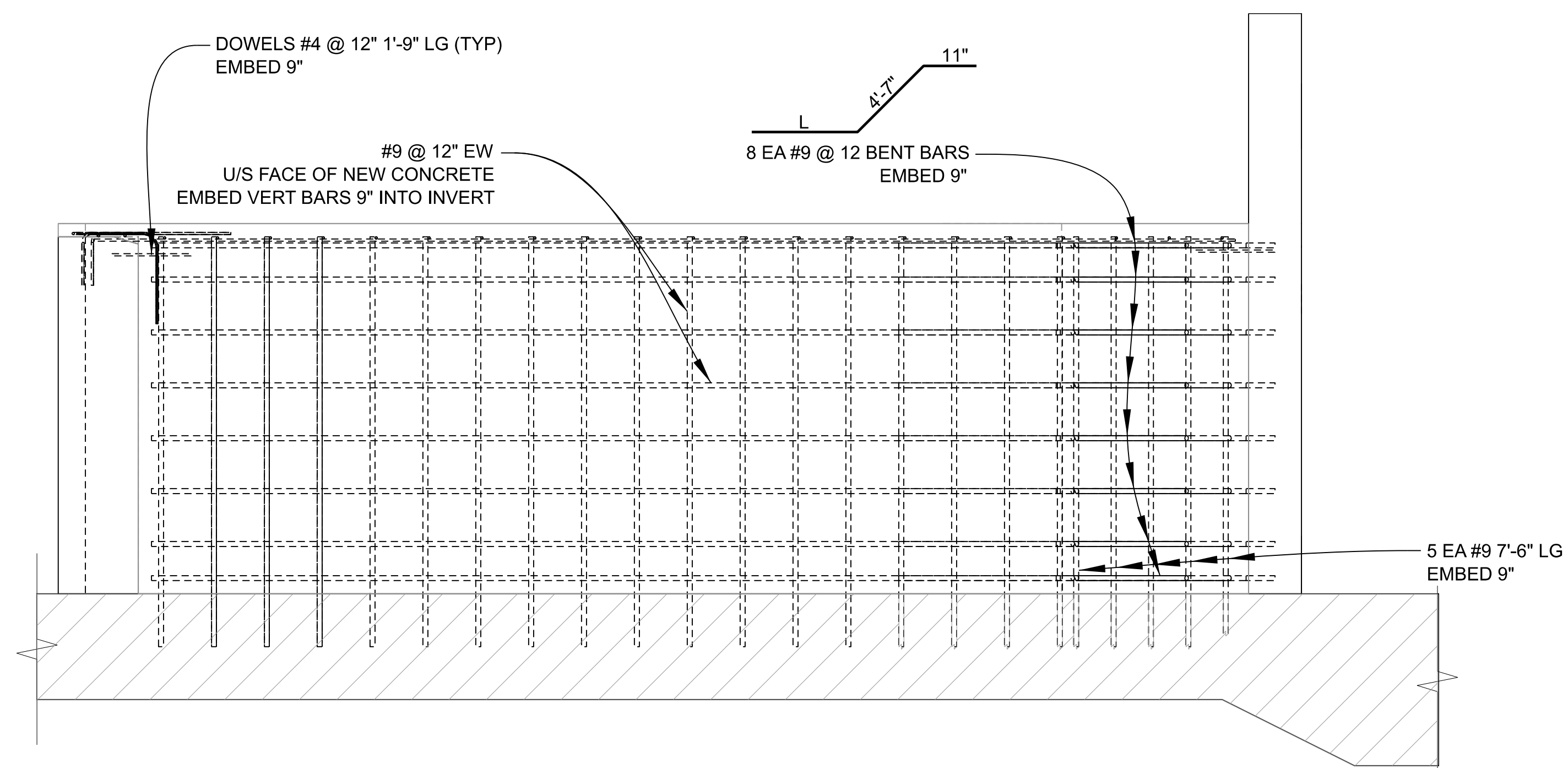
SHEET
IDENTIFICATION
SG703



D SECTION LOOKING SOUTH THRU CONCRETE FILL
SG703 SCALE: 1/2" = 1'-0"



SECTION LOOKING NORTH THRU CONCRETE FILL



A SECTION LOOKING UPSTREAM AT CONCRETE FILL EAST FACE
SG703 SCALE: 1/2" = 1'-0"

NOTES:

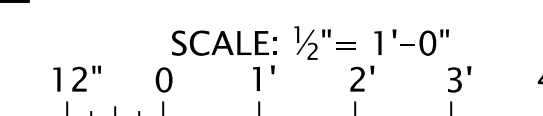
1. ALL REINFORCEMENT THIS SHEET IS NEW.
2. SEE SHEET G-001 AND G-002 FOR DRAWING INDEX.
3. SEE SHEET G-003 FOR GENERAL NOTES AND SYMBOLS
4. SEE SHEET S-001 FOR GENERAL STRUCTURAL NOTES AND SPECIFICATIONS.
5. SEE SHEET SG102 FOR CONCRETE OUTLINE.
6. ALL COVER THIS SHEET 3" UNO.
7. DOWEL ALL BARS 9" INTO WALLS AND INVERT.

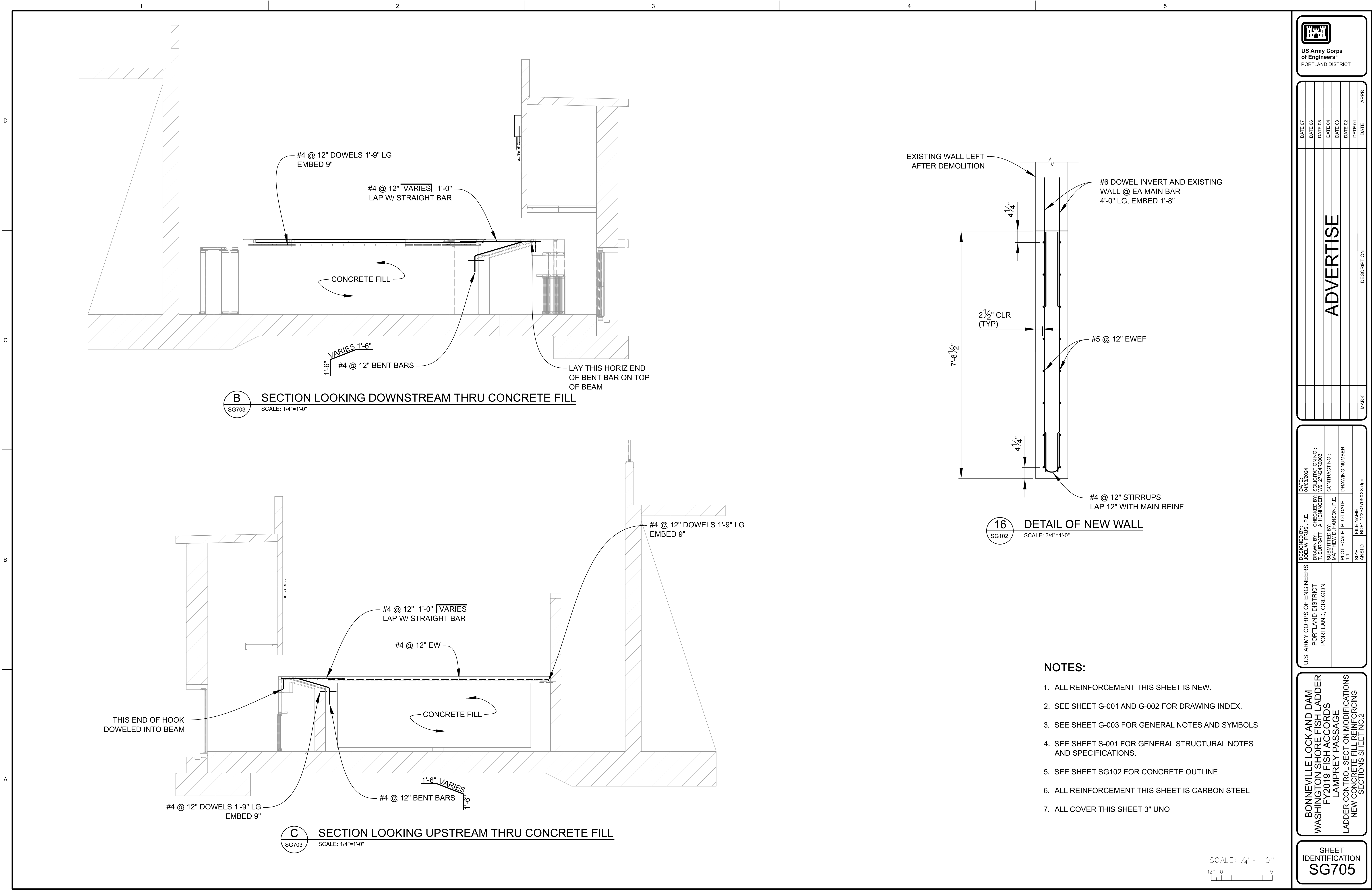
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U.S. ARMY CORPS OF ENGINEERS		DESIGNED BY:	DATE:
PORTLAND DISTRICT		DRAWN BY:	SOLUTION NO.:
PORTLAND, OREGON		SUPERVISOR:	PROJECT NO.:
		CONTRACT NO.:	
		PLANT NAME:	
		FILE NAME:	
		SIZE:	
		ANSI:	
		PLAT SCALE:	
		PLOT DATE:	
		DRAWING NUMBER:	

BONNEVILLE LOCK AND DAM
WASHINGTON SHORE FISH LADDER
FY2019 FISH ACCORDS
LAMPREY PASSAGE
LADDER CONTROL SECTION MODIFICATIONS
NEW CONCRETE FILL REINFORCING
SECTIONS SHEET NO.1

SHEET
IDENTIFICATION
SG704





US Army Corps
of Engineers®
PORTLAND DISTRICT

DATE 07	DATE 06	DATE 05	DATE 04	DATE 03	DATE 02	DATE 01	DATE	APPR.
ADVERTISE								
								MARK

DATE	DESCRIPTION
06/05/2024	DESIGNED BY: JOEL W. FRUSH, P.E.
	CHECKED BY: G. HEINER
	DRAWN BY: SURABH
	SUBMITTED BY: MATTHEW D. HANSON, P.E.
	PLOT SCALE: 1/4"=1'-0"
	FILE NAME: BDF1123SG705XXX.dgn
	SIZE: ANSI D

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

BONNEVILLE LOCK AND DAM
WASHINGTON SHORE FISH LADDER
FY2019 FISH ACCORDS
LAMPREY PASSAGE
LADDER CONTROL SECTION MODIFICATIONS
NEW CONCRETE FILL REINFORCING
SECTIONS SHEET NO.2

SHEET
IDENTIFICATION
SG705

US Army Corps of Engineers
PORTLAND DISTRICT

DATE: 04/05/2024	DESIGNED BY: B. BANNER	CHECKED BY: J. ROO	DATE: 04/05/2024
BY: J. ROO	BY: J. ROO	BY: J. ROO	BY: J. ROO
CONTRACT NO.:	DRAWING NUMBER:	FILE NAME:	SIZE: 11x17
CONTRACT NO.:	DRAWING NUMBER:	FILE NAME:	SIZE: 11x17

DESIGNED BY: B. BANNER
CHECKED BY: J. ROO
DATE: 04/05/2024

CONTRACT NO.:

DRAWING NUMBER:

FILE NAME:

SIZE: 11x17

BONNEVILLE LOCK AND DAM
WASHINGTON SHORE FISH LADDER
FY2019 FISH ACCORDS
LAMPREY PASSAGE
ELECTRICAL
GENERAL NOTES, LEGEND,
AND ABBREVIATIONS

SHEET IDENTIFICATION
E-001



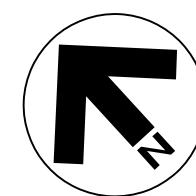
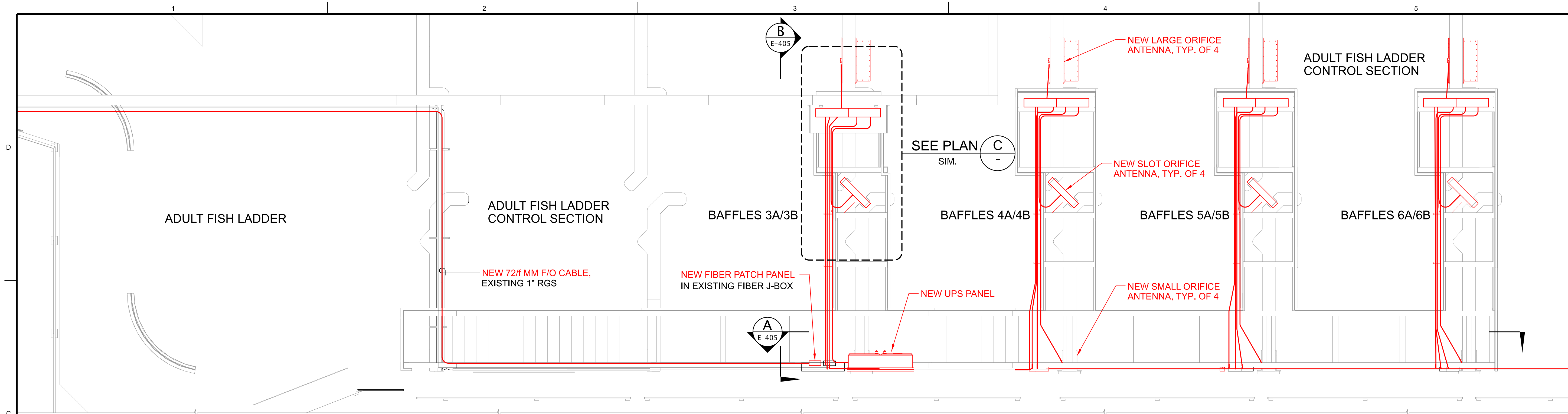
SCALE: $\frac{3}{16}" = 1'-0"$

SCALE: $\frac{3}{16}" = 1'-0"$

BDF-6-35/11 ADULT FISH LADDER - SECTION VIEWS

CLF1.104 E-407 PIT TAG SYSTEM - SECTIONS AND ELEVATIONS, SHEET 1

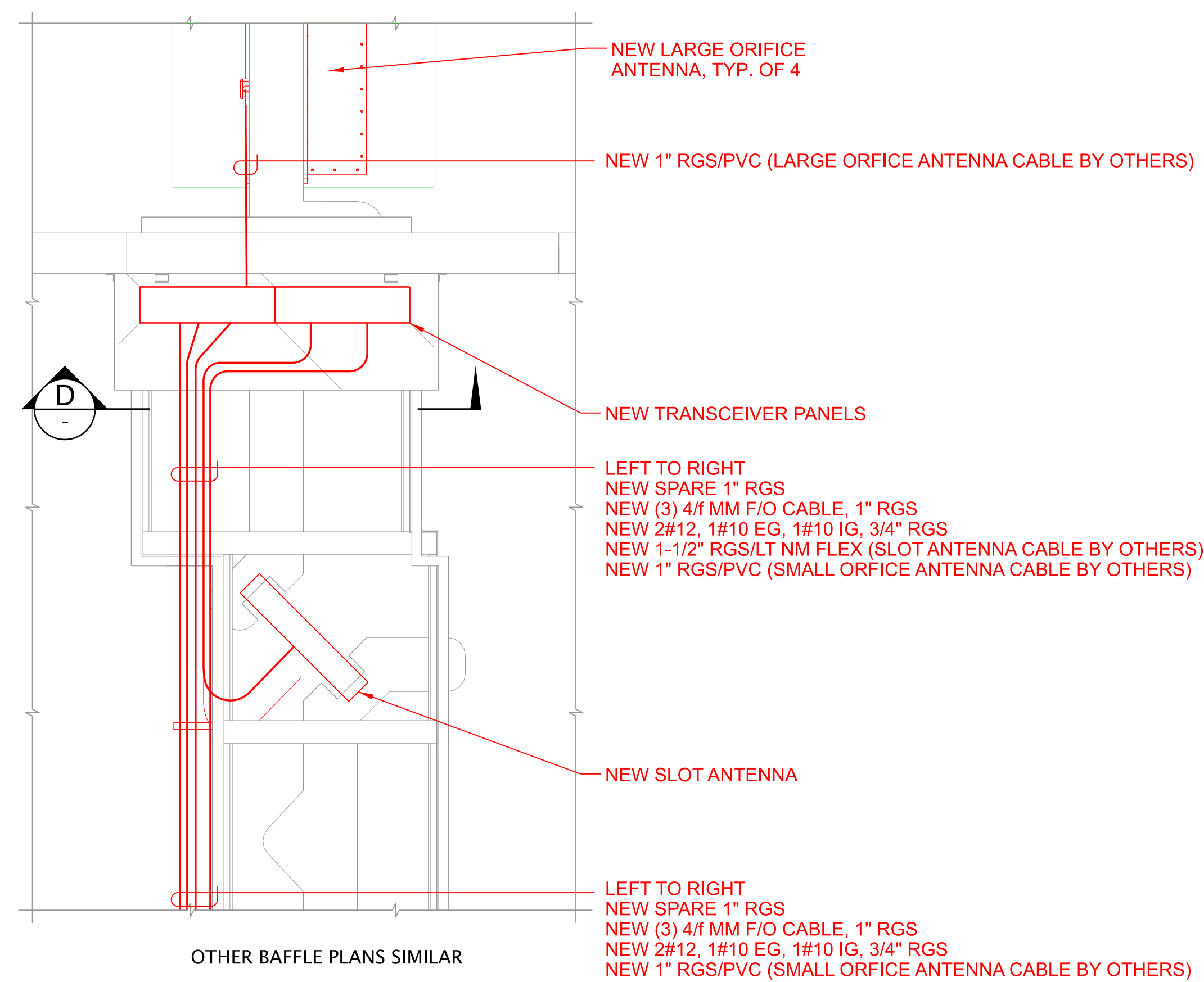
1. ALL ITEMS ARE EXISTING UNLESS INDICATED OTHERWISE.
2. ITEMS IN GREEN TO BE REMOVED UNLESS NOTED OTHERWISE.
3. POWER CIRCUIT TO BE REUSED.
4. REMOVE AND RELOCATE BOXES AND RECEPTACLES AS INDICATED ON SHEET E-405.
5. PORTIONS OF CONDUITS ARE TO BE REMOVED AND NEW PORTIONS TO BE PROVIDED AS SHOWN ON SHEET E-405.
6. CUT EXISTING F/O CABLES AT EXISTING F/O J-BOX ON VISITOR CENTER WALL AND PULL BACK TO PULL BOX. THESE CABLES TO BE REUSED. SEE SHEET E-405 FOR RE-INSTALLATION. REMOVE REMAINING F/O CABLE BACK TO THE AFF FIBER PATCH PANEL.



3
E-102

LADDER CONTROL SECTION PLAN

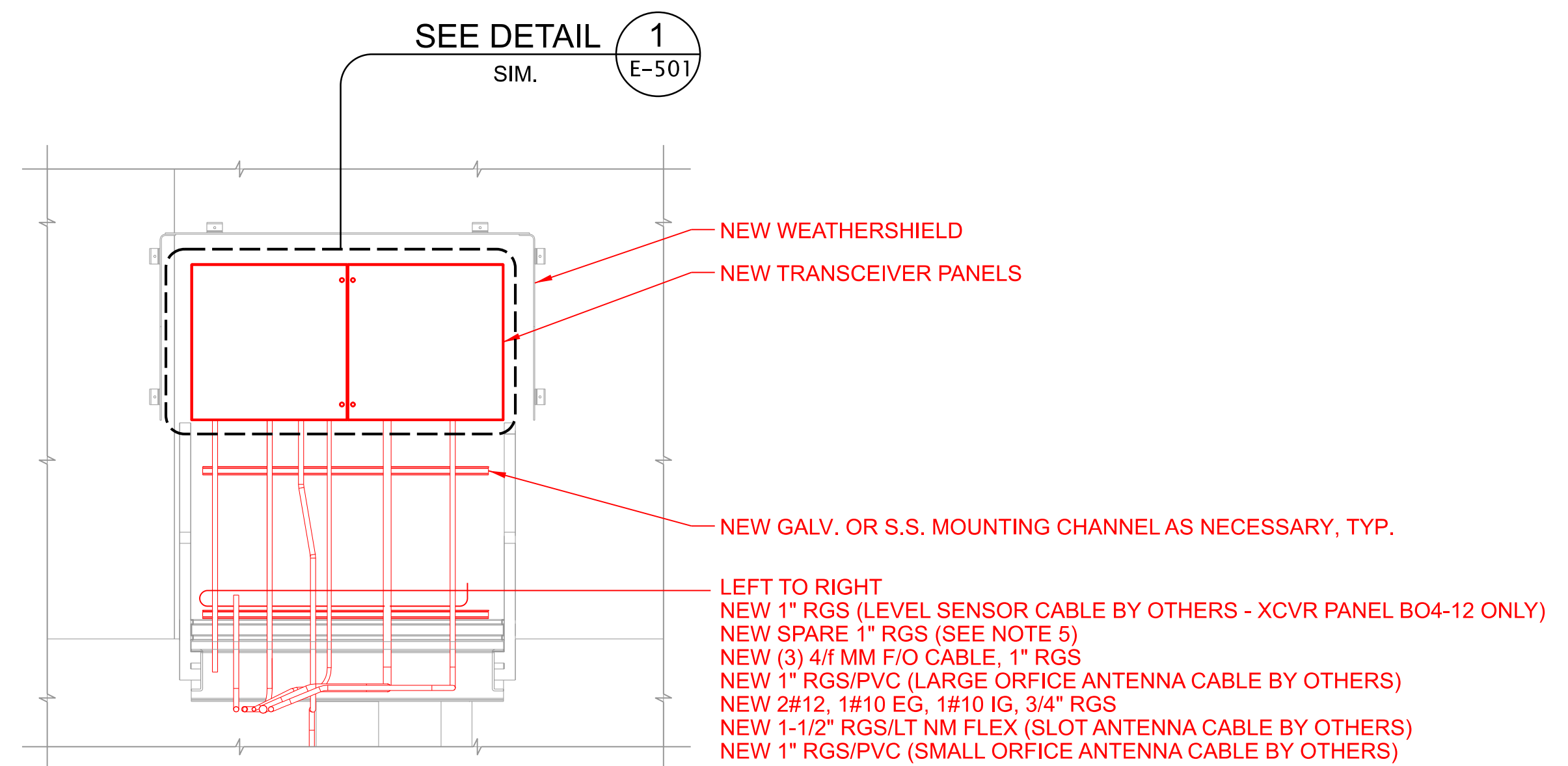
SCALE: 1/4" = 1'-0"



C
-

PLAN

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



D
-

SECTION

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

SCALE: 1/4" = 1'-0"
12" 0 5'

SCALE: 1/2" = 1'-0"
12" 0 1' 2' 3' 4'

NOTES:

- ALL ITEMS ARE EXISTING UNLESS INDICATED OTHERWISE.
- ITEMS IN RED ARE NEW.
- POWER CIRCUIT TO TRANSCEIVER POWER DISTRIBUTION PANEL TO BE REUSED.
- CONDUITS TO NEW TRANSCEIVER PANELS AND ANTENNAS TO BE ROUTED UNDER NEW WALKWAYS. PROVIDE COVERS (GUARDS) OVER MOUNTING HARDWARE FOR NEW CONDUITS TO ELIMINATE HARM TO FISH IF CONTACTED. SEE TYP. DETAILS, SHEET E-504.
- STUB SPARE CONDUITS UP MIN. OF 12" ABOVE WALKWAYS AND CAP WITH RGS COUPLING AND THREADED PLUG.



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PORTLAND DISTRICT

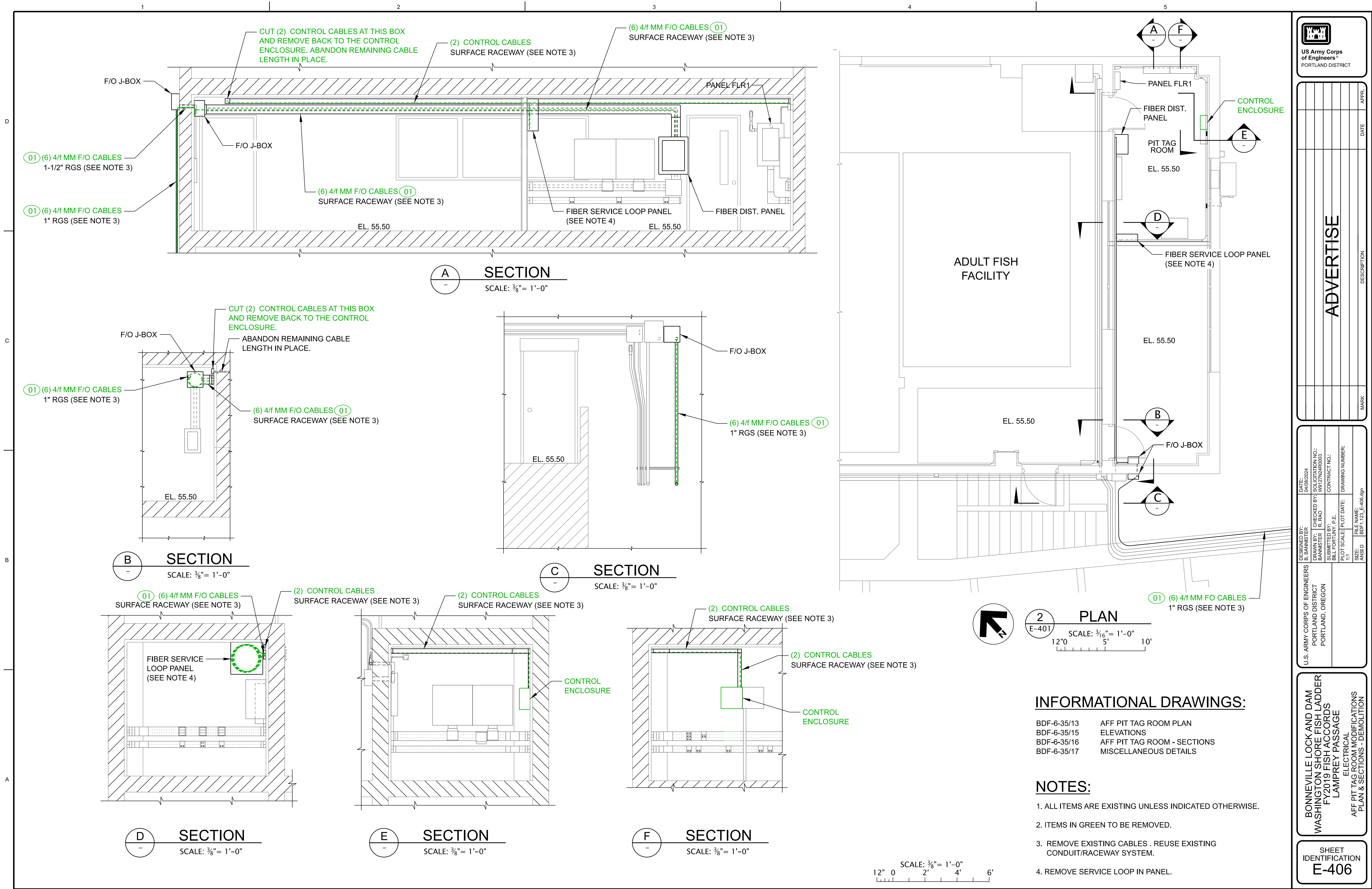
ADVERTISE

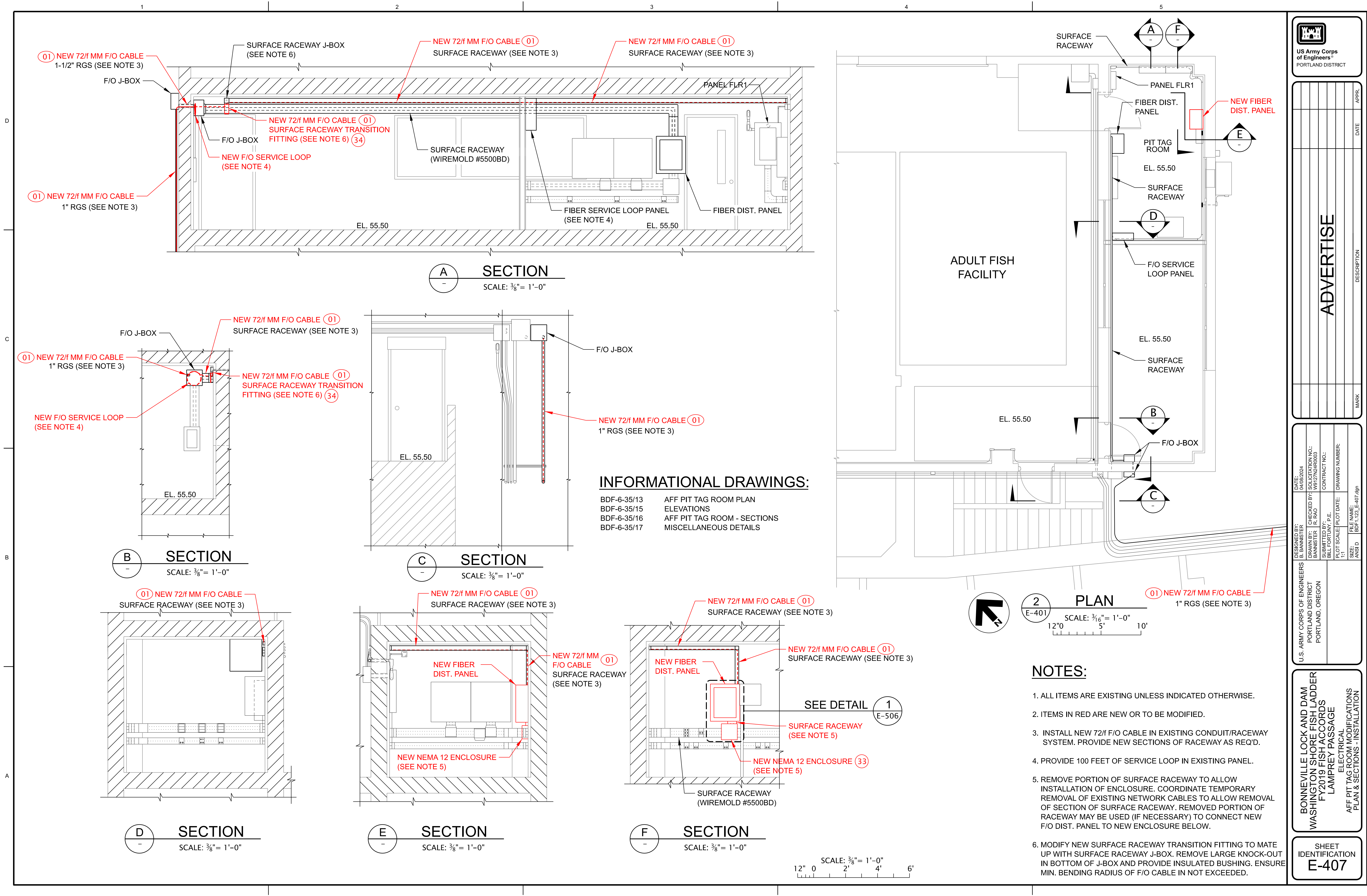
DATE APPR. MARK

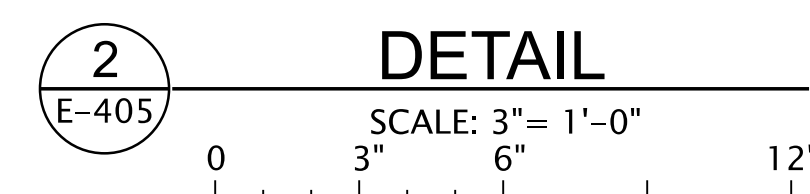
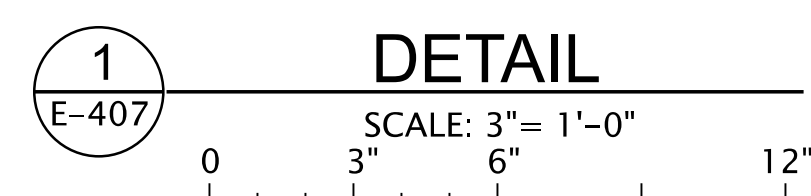
DESIGNED BY: B. BANNER
CHECKED BY: B. BANNER
SUBMITTED BY: B. BANNER
BILL OF MATERIALS: B. BANNER
PLOT SCALE: 1/2" = 1'-0"
FILE NAME: BDF1123_E-404.dgn
DATE: 04/05/2024
PROJECT NO.: 10010000000000000000
CONTRACT NO.:
DRAWING NUMBER:

U.S. ARMY CORPS OF ENGINEERS
PORTLAND DISTRICT
PORTLAND, OREGON
BONNEVILLE LOCK AND DAM
WASHINGTON SHORE FISH LADDER
FY2019 FISH ACCORDS
LAMPREY PASSAGE
ELECTRICAL
ADULT FISH LADDER CONTROL SECTION
PLAN - NEW BAFFLES AND ANTENNAS

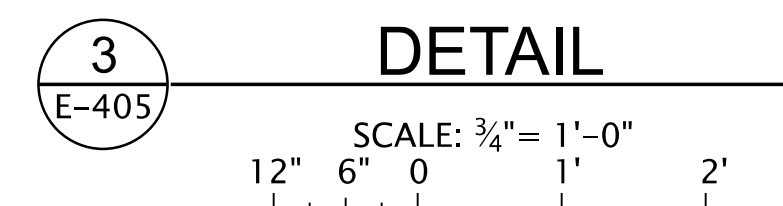
SHEET
IDENTIFICATION
E-404





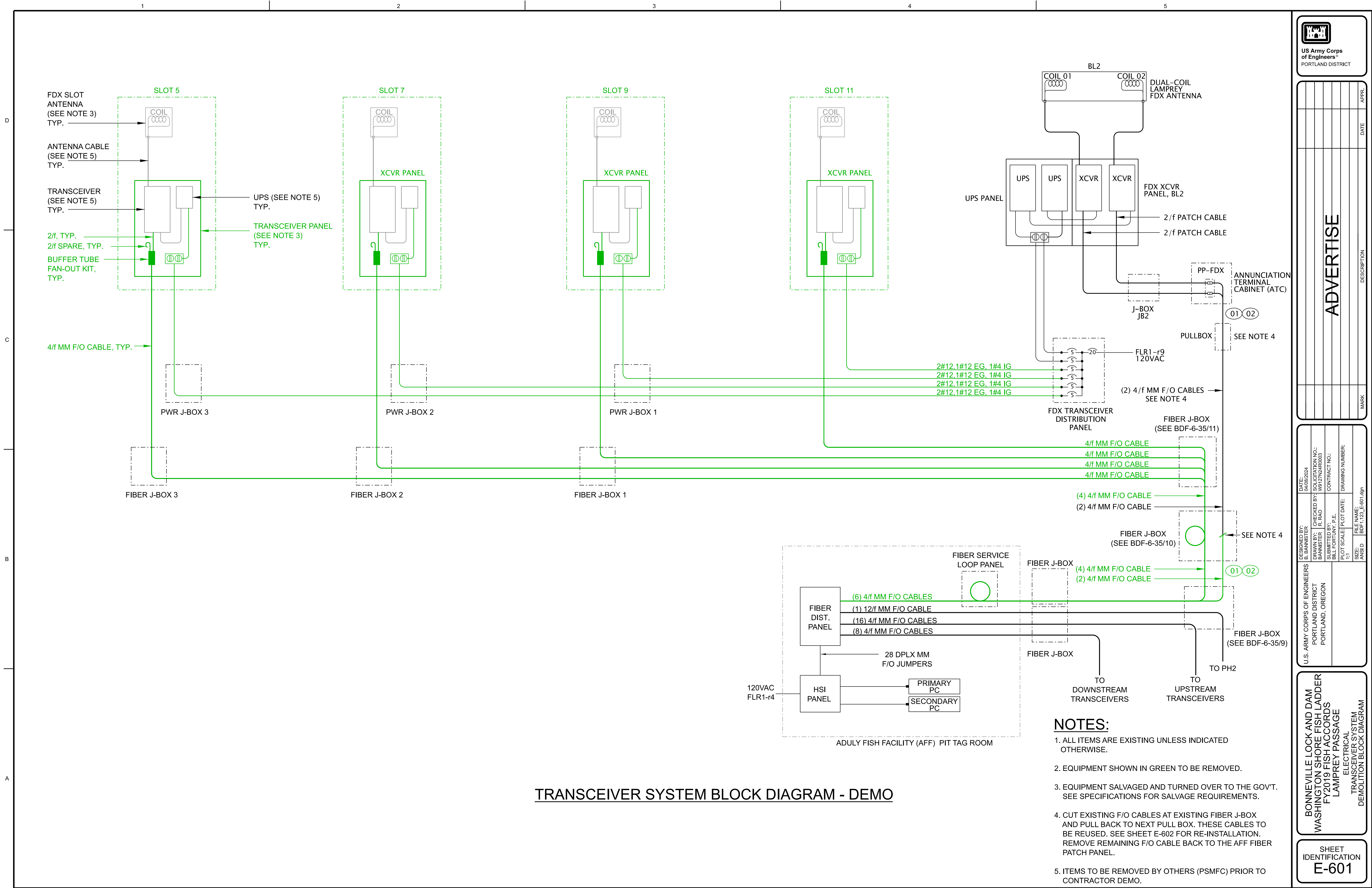


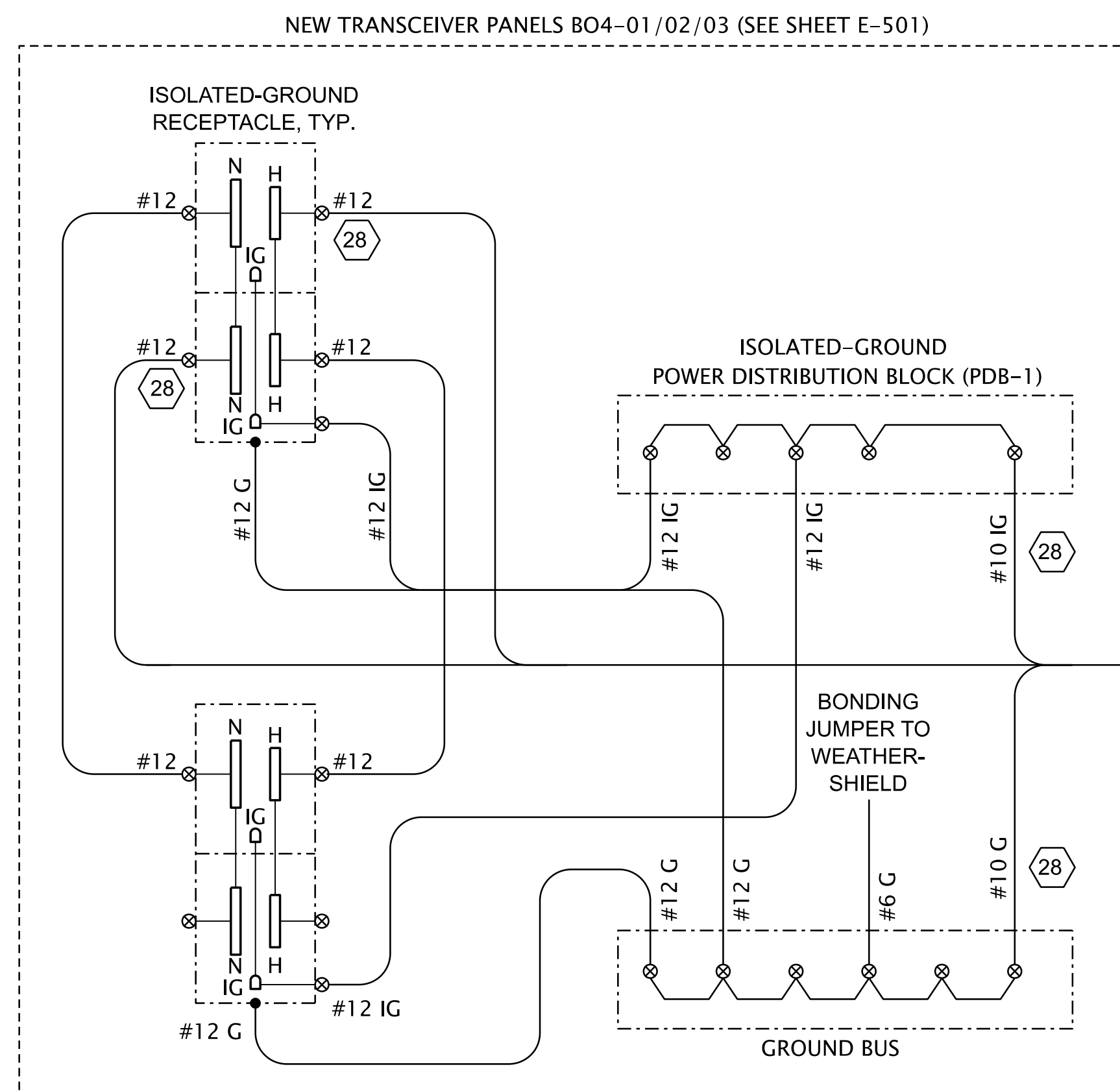
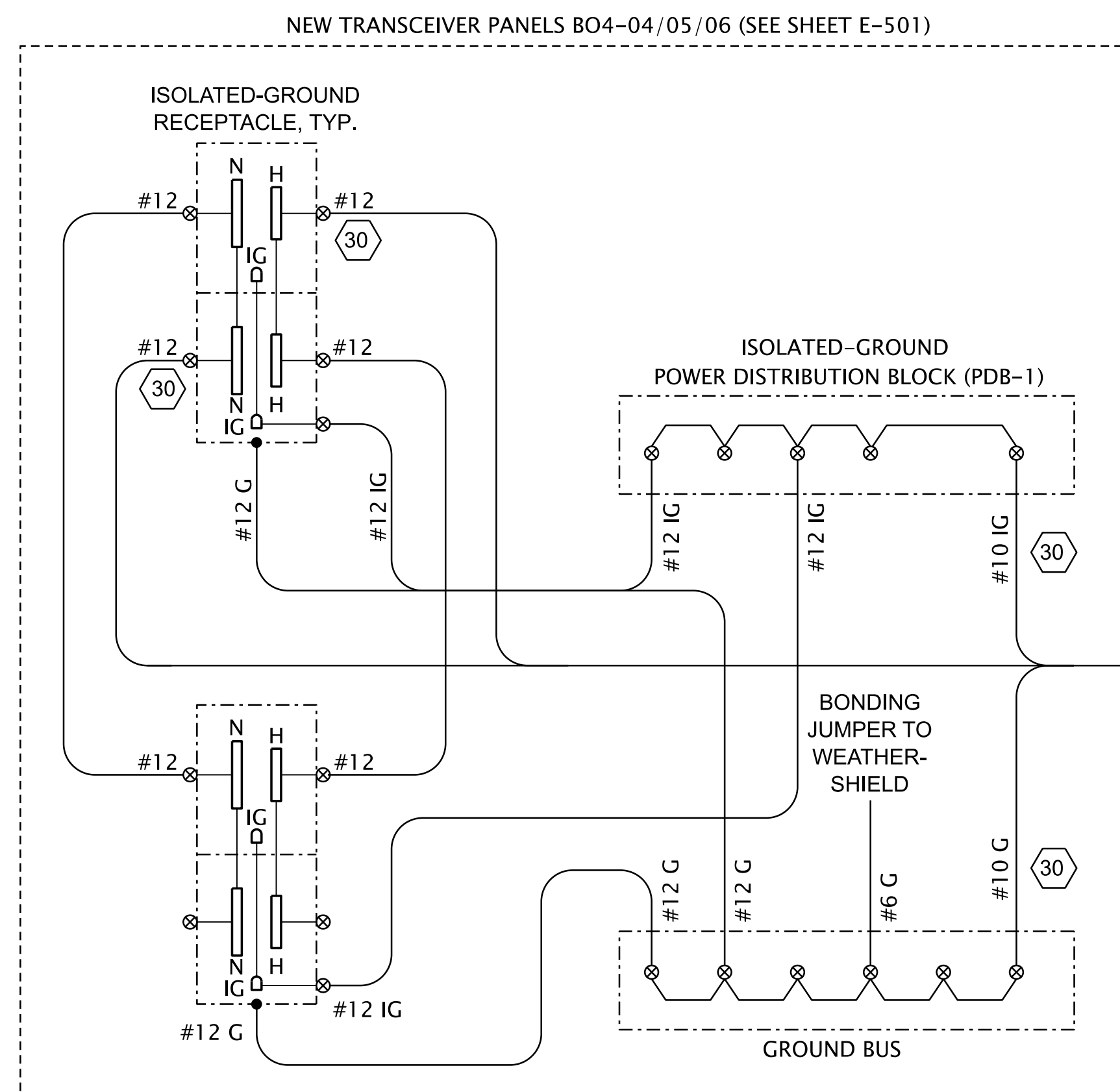
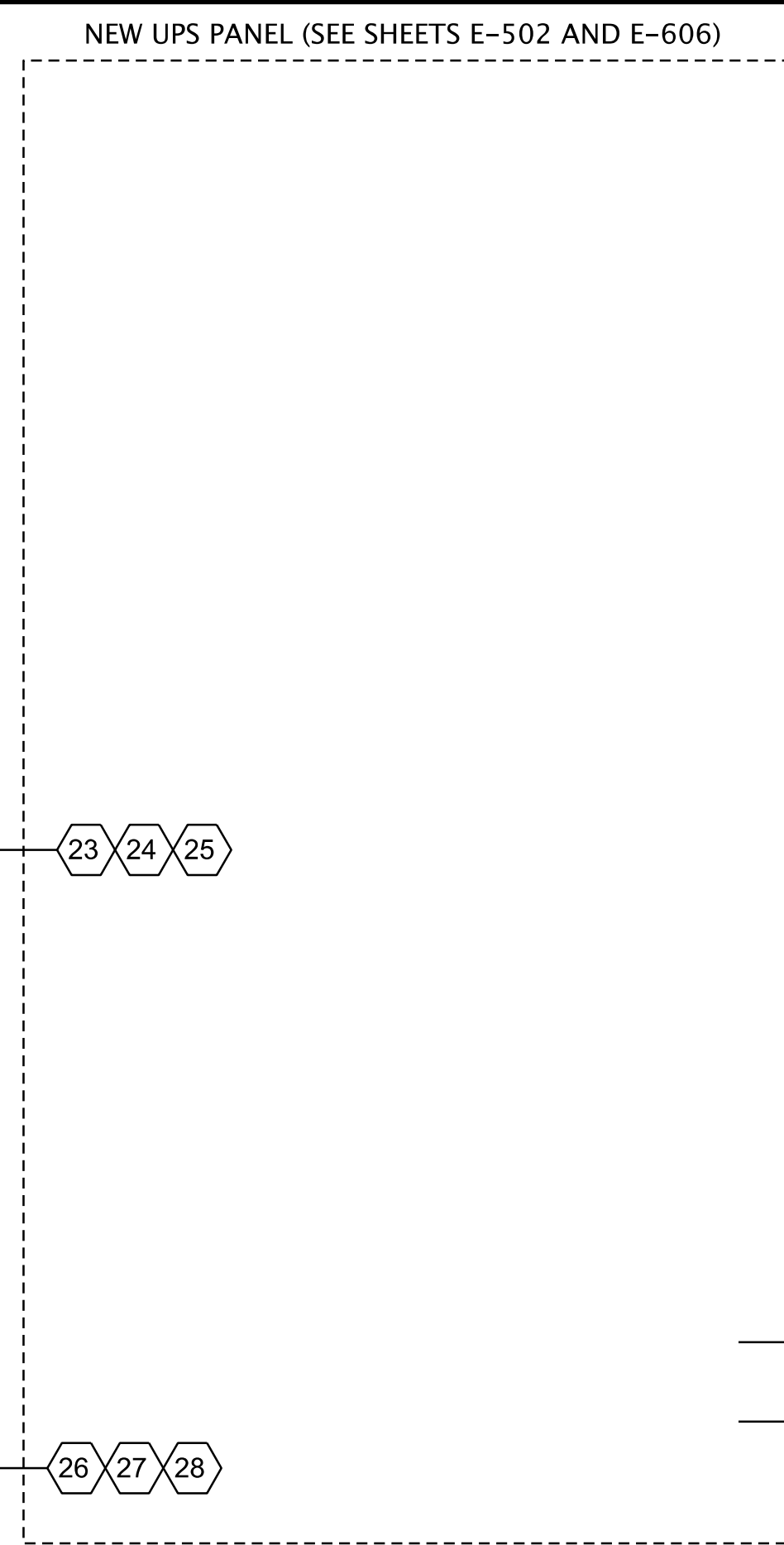
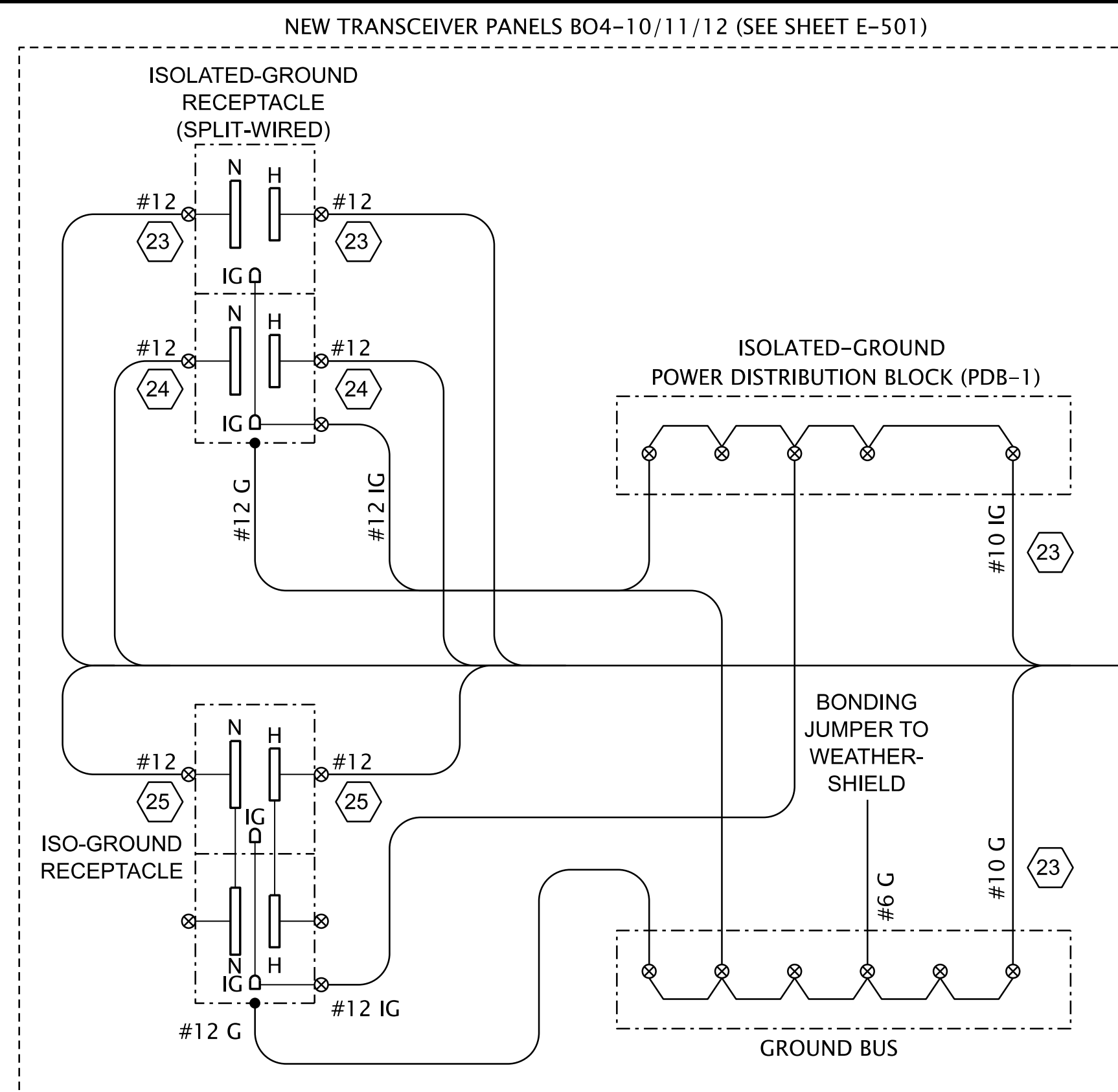
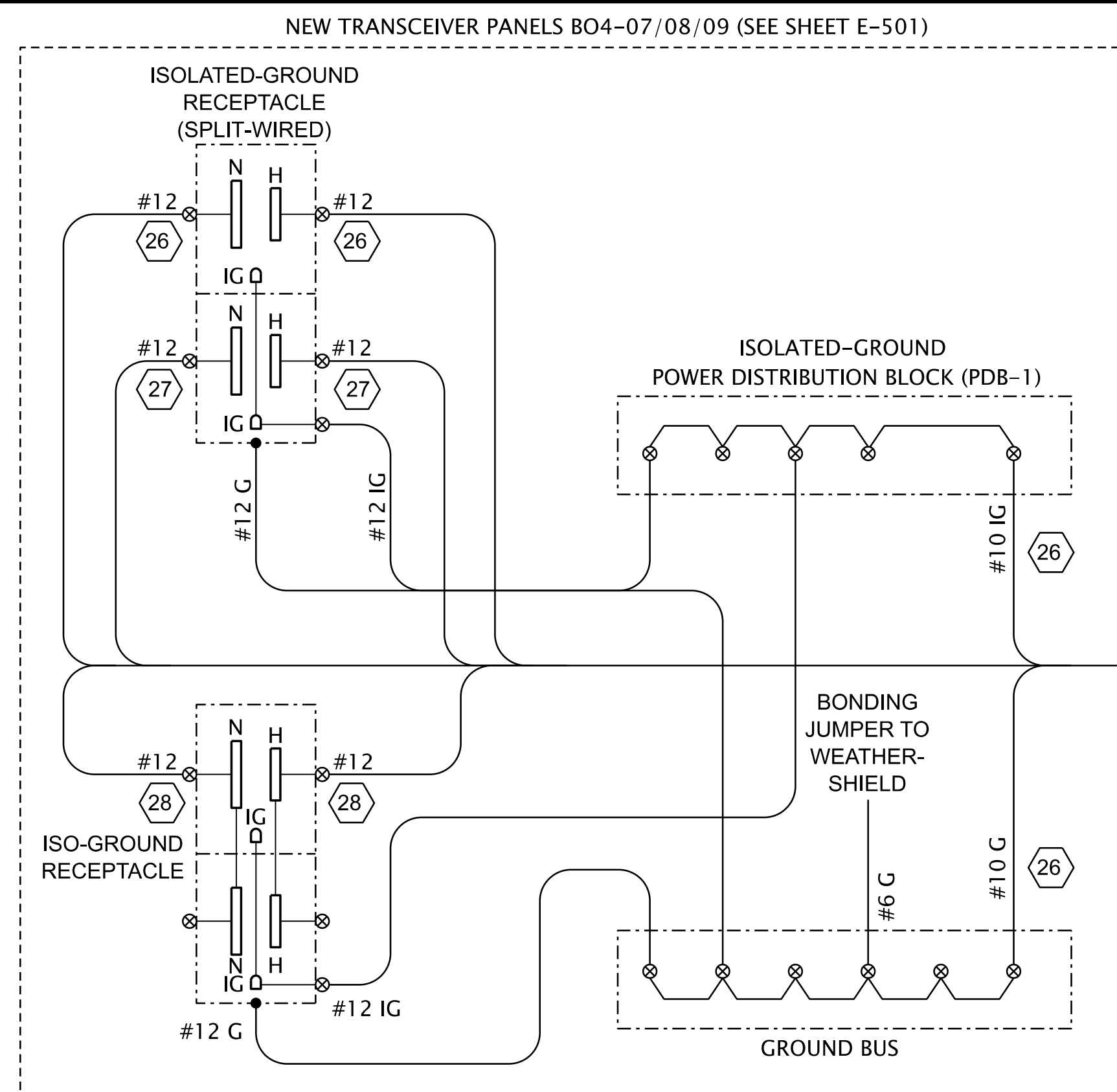
1. ALL ITEMS SHOWN ARE EXISTING UNLESS INDICATED OTHERWISE. ITEMS IN RED ARE NEW.
2. HOLES IN FIBER DISTRIBUTION PANEL MAY NOT BE NECESSARY WHEN GLAND PLATES ARE INCLUDED WITH PANEL.
3. PROVIDE MOUNTING CHANNELS WITH DEPTH NECESSARY TO ENSURE CLEARANCE BEHIND UPS PANEL FOR NEW AND EXISTING CONDUITS. ENSURE MOUNTING CHANNELS MEET LOADING AND SEISMIC REQUIREMENTS. NOTE: PORTION OF MOUNTING CHANNELS WILL EXTEND OVER GATE SLOT.
4. SEE SHEETS E-701 AND E-702 FOR CONDUIT & CABLE SCHEDULES.
5. SEE SHEET E-703 FOR MATERIAL LIST.

[illegible]

BONNEVILLE LOCK AND DAM
WASHINGTON SHORE FISH LADDER
FY2019 FISH ACCORDS
LAMPREY PASSAGE
ELECTRICAL
MISCELLANEOUS DETAILS

SHEET
IDENTIFICATION
E-506





- ## NOTES

1. ALL ITEMS SHOWN ARE NEW UNLESS INDICATED OTHERWISE.
2. SEE SHEET E-001 FOR SYMBOLS AND LEGEND.
3. RECONNECT EXISTING WIRE AS INDICATED.
4. ISOLATED GROUND AND EQUIPMENT GROUND ARE BONDED AT THE SOURCE PANEL (FLR1). THE ISOLATED GROUND MUST NOT BE BONDED TO THE EQUIPMENT GROUND AT ANY OTHER POINT.
5. SEE SHEETS E-701 AND E-702 FOR CONDUIT & CABLE SCHEDULES.
6. SEE INFORMATIONAL DRAWINGS FOR EXISTING WIRING DIAGRAM.



**U.S. Army Corps
Engineers®**
PORTLAND DISTRICT

ADVERTISE

PORTLAND DISTRICT PORTLAND, OREGON	DRAWN BY: J. BANNER CHECKED BY: R. RAO SUBMITTED BY: B. FORTUNY P.E. CONTRACT NO.: SOLUTION NO.: W9127N24R0003 PLOT SCALE: 1" = 1' PLOT DATE: 4/9/2024 DRAWING NUMBER: FILE NAME: B09F122_E-603.DGN
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WASHINGTON SHORE FISH LADDER
BONNEVILLE LOCK AND DAM
FY2019 FISH ACCORDS
LAMPREY PASSAGE
ELECTRICAL
TRANSCIEVER SYSTEM
WIRING DIAGRAM - MODIFICATIONS

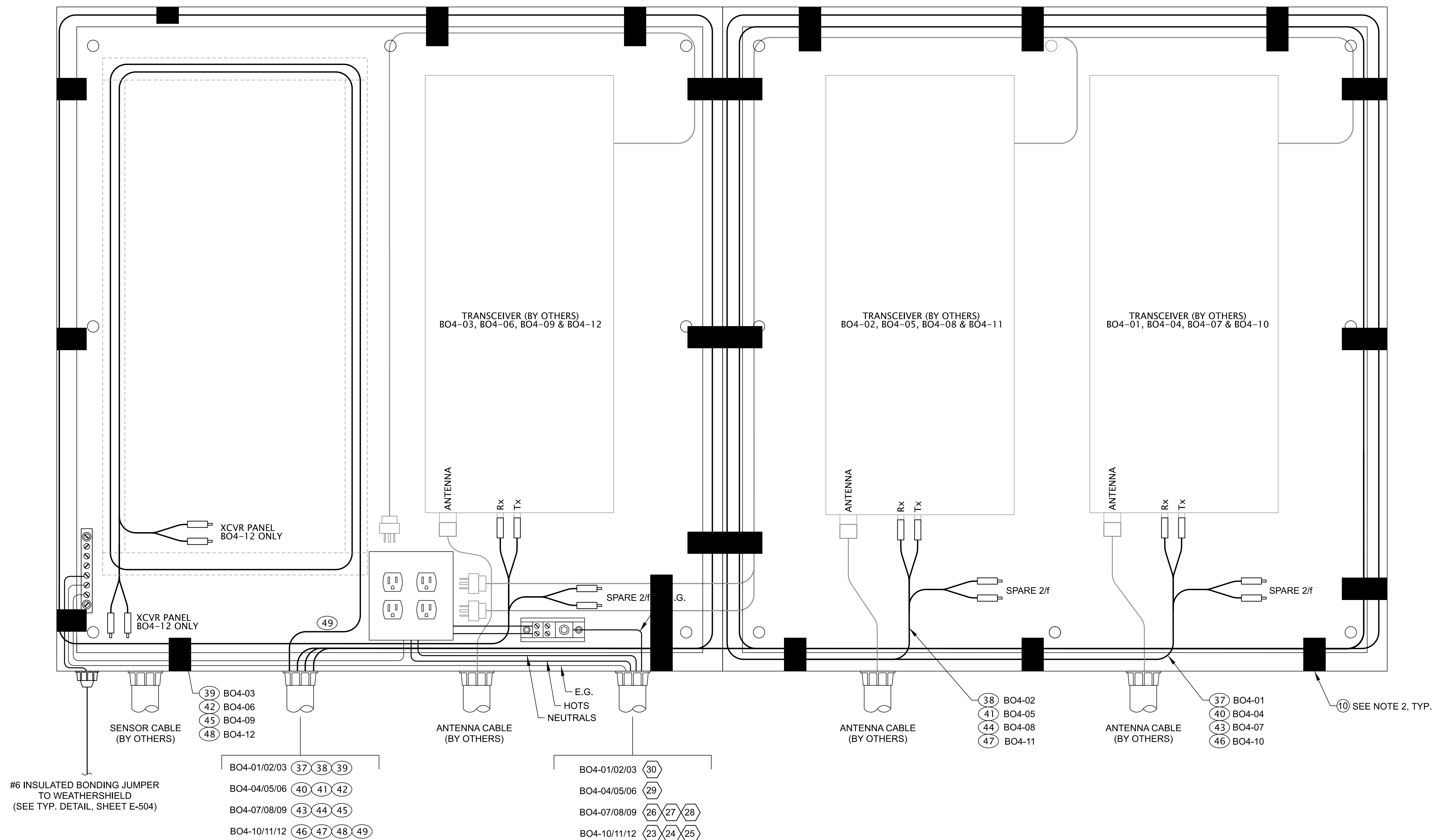
SHEET
IDENTIFICATION
E-603

[illegible]

U.S. ARMY CORPS OF ENGINEERS PORTLAND DISTRICT PORTLAND, OREGON	DRAWN BY: B. BANISTER		SOLICITATION NO.: W812N2NR0003	
	CHECKED BY: R. RAO		DATE: 04/08/2024	
	SUBMITTED BY: B. FORTYNY P.E.		CONTRACT NO.:	
	PLOT SCALE: 1"=40'		DRAWING NUMBER:	
	SIZE: ANSI	FILE NAME: BDF_123_E-605.DGN		

BONNEVILLE LOCK AND DAM
WASHINGTON SHORE FISH LADDER
FY2019 FISH ACCORDS
LAMPREY PASSAGE
ELECTRICAL
NEW TRANSCIEIVER PANELS
WIRING DIAGRAM

SHEET
IDENTIFICATION
E-605



TYP. TRANSCEIVER PANEL – WIRING DIAGRAM

NOTES

1. ALL ITEMS SHOWN ARE NEW UNLESS INDICATED OTHERWISE.
2. VELCO STRAPS AROUND PANEL INTERIOR PERIMETER TO SECURE WIRE/CABLES (INSTALLED BY OTHERS).
3. ALL FIBER CABLES TO BE TERMINATED WITH ST CONNECTORS.
4. SEE SHEET E-001 FOR SYMBOLS AND LEGEND.
5. SEE SHEETS E-701 AND E-702 FOR CONDUIT & CABLE SCHEDULES.
6. SEE SHEET E-703 FOR MATERIAL LIST.

CONDUIT				CABLE				DESCRIPTION					
CKT	NUMBER	SIZE	TYPE	NUMBER	NO. COND.	SIZE	INS	RATED VOLTAGE	FUNCTION	FROM	TO	ROUTE	REMARKS
01	LQ-DSM2-q1-MPC	1-1/4"	RGS	LQ-DSM2-q1-MPC	-	3#2, 1#6 EGC	600V	480VAC	POWER	PANEL LQ_DSM2	MPC	EXP/BURIED	VIA JB7, JB6 & JB5
02	MPC-r1-LPSWSCC1	3/4"	RGS	MPC-r1-MCP1	-	3#8, 1#10 EGC	600V	208VAC	POWER	MINI-POWER CENTER	SUPPLY PUMPS CONTROLLER NO. 1	EXPOSED	
03	MPC-r3-LPSWSCC2	3/4"	RGS	MPC-r3-MCP1	-	3#8, 1#10 EGC	600V	208VAC	POWER		SUPPLY PUMPS CONTROLLER NO. 2	EXPOSED	
04	-	-	-	RECWS1-r1-M1	4/c	#10	600V	208VAC	POWER	WATER SUPPLY 1 PUMP 1 RECEPT	WATER SUPPLY 1 PUMP 1	EXPOSED	SOOW CORD WITH MATING PLUG
05	-	-	-	RECWS1-r2-M2	4/c	#10	600V	208VAC	POWER	WATER SUPPLY 1 PUMP 2 RECEPT	WATER SUPPLY 1 PUMP 2	EXPOSED	SOOW CORD WITH MATING PLUG
06	-	-	-	RECWS2-r1-M1	4/c	#10	600V	208VAC	POWER	WATER SUPPLY 2 PUMP 1 RECEPT	WATER SUPPLY 2 PUMP 1	EXPOSED	SOOW CORD WITH MATING PLUG
07	-	-	-	RECWS2-r2-M2	4/c	#10	600V	208VAC	POWER	WATER SUPPLY 2 PUMP 2 RECEPT	WATER SUPPLY 2 PUMP 2	EXPOSED	SOOW CORD WITH MATING PLUG
08	MPC-r7-LCDP1	3/4"	RGS	MPC-r7-LCDP1	-	2#12, 1#12 EGC	600V	120VAC	POWER	MINI-POWER CENTER	LAMPREY COUNTER DISPLAY PANEL 1	EXPOSED	
09	MPC-r7-LCDP2	3/4"	RGS	MPC-r7-LCDP2	-	2#12, 1#12 EGC	600V	120VAC	POWER	MINI-POWER CENTER	LAMPREY COUNTER DISPLAY PANEL 2	EXPOSED	
10	MPC-r6-HTDP	3/4"	RGS	MPC-r6-HTDP	-	2#12, 1#12 EGC	600V	120VAC	POWER	MINI-POWER CENTER	XCVR DISTRIBUTION PANEL	EXPOSED	
11	HTDP-r1.1	1"	RGS	HTDP-r1-HDX1	-	2#12, 1#12 EGC	600V	120VAC	POWER	XCVR DISTRIBUTION PANEL	HDX PANEL 1 (PIT1)	EXPOSED	
13				HTDP-r3-HDX3	-	2#10, 1#12 EGC	600V	120VAC	POWER		HDX PANEL 3 (PIT3)		
14				HTDP-r4-HDX4	-	2#10, 1#12 EGC	600V	120VAC	POWER		HDX PANEL 4 (PIT4)		
15				HTDP-r5-HDX5	-	2#10, 1#12 EGC	600V	120VAC	POWER		HDX PANEL 5 (PIT5)		
16				HTDP-r6-HDX6	-	2#12, 1#12 EGC	600V	120VAC	POWER		HDX PANEL 6 (PIT6)		
11	HTDP-r1.2	1"	RGS	HTDP-r1-HDX1	-	2#12, 1#12 EGC	600V	120VAC	POWER	XCVR DISTRIBUTION PANEL	HDX PANEL 1 (PIT1)	EXPOSED	
13				HTDP-r3-HDX3	-	2#10, 1#12 EGC	600V	120VAC	POWER		HDX PANEL 3 (PIT3)		
14				HTDP-r4-HDX4	-	2#10, 1#12 EGC	600V	120VAC	POWER		HDX PANEL 4 (PIT4)		
15				HTDP-r5-HDX5	-	2#10, 1#12 EGC	600V	120VAC	POWER		HDX PANEL 5 (PIT5)		
13	HTDP-r1.3	3/4"	RGS	HTDP-r3-HDX3	-	2#10, 1#12 EGC	600V	120VAC	POWER	XCVR DISTRIBUTION PANEL	HDX PANEL 3 (PIT3)	EXPOSED	
14				HTDP-r4-HDX4	-	2#10, 1#12 EGC	600V	120VAC	POWER		HDX PANEL 4 (PIT4)		
15				HTDP-r5-HDX5	-	2#10, 1#12 EGC	600V	120VAC	POWER		HDX PANEL 5 (PIT5)		
13	HTDP-r1.4	3/4"	RGS	HTDP-r3-HDX3	-	2#10, 1#12 EGC	600V	120VAC	POWER	XCVR DISTRIBUTION PANEL	HDX PANEL 3 (PIT3)	EXPOSED	
14				HTDP-r4-HDX4	-	2#10, 1#12 EGC	600V	120VAC	POWER		HDX PANEL 4 (PIT4)		
11	HTDP-r1-HDX1	3/4"	RGS	HTDP-r1-HDX1	-	2#12, 1#12 EGC	600V	120VAC	POWER	XCVR DISTRIBUTION PANEL	HDX PANEL 1 (PIT1)	EXPOSED	
12	HTDP-r2-HDX2	3/4"	RGS	HTDP-r2-HDX2	-	2#12, 1#12 EGC	600V	120VAC	POWER	XCVR DISTRIBUTION PANEL	HDX PANEL 2 (PIT2)	EXPOSED	
13	HTDP-r3-HDX3	3/4"	RGS	HTDP-r3-HDX3	-	2#10, 1#12 EGC	600V	120VAC	POWER	XCVR DISTRIBUTION PANEL	HDX PANEL 3 (PIT3)	EXPOSED	
14	HTDP-r4-HDX4	3/4"	RGS	HTDP-r4-HDX4	-	2#10, 1#12 EGC	600V	120VAC	POWER	XCVR DISTRIBUTION PANEL	HDX PANEL 4 (PIT4)	EXPOSED	
15	HTDP-r5-HDX5	3/4"	RGS	HTDP-r5-HDX5	-	2#10, 1#12 EGC	600V	120VAC	POWER	XCVR DISTRIBUTION PANEL	HDX PANEL 5 (PIT5)	EXPOSED	
16	HTDP-r6-HDX6	3/4"	RGS	HTDP-r6-HDX6	-	2#12, 1#12 EGC	600V	120VAC	POWER	XCVR DISTRIBUTION PANEL	HDX PANEL 6 (PIT6)	EXPOSED	
17	FTDP-r1-UPS	1"	RGS	FTDP-r5-FDX1	-	2#12	600V	120VAC	POWER	FDX TRANSCEIVER DISTRIBUTION PANEL	FDX UPS PANEL	EXPOSED	PLUS 1#12 EGC & 1#4 IG
18				FTDP-r6-FDX2	-	2#12							
19	LR2-DSM2-r10-RIO	1"	RGS	LR2-DSM2-r10-RIO	4/c	#12 TRAY CABLE (SEE REMARKS)	600V	120VAC	POWER	PANEL LR2-DSM2	REMOTE I/O PANEL	EXP/TRAY	
20	LR1-DSM2-r11	3/4"	RGS	LR1-DSM2-r11	-	2#10, 1#12 EGC	600V	120VAC	POWER	PANEL LR1-DSM2	MAINTENANCE RECEPTACLES	EXP/BURIED	
21	FTDP-r1-UPS	3/4"	RGS	FTDP-r1-UPS	-	2#12, 1#10 EGC, 1#10 IG	600V	120VAC	POWER	FDX TRANSCEIVER DISTRIBUTION PANEL	NEW UPS PANEL	EXPOSED	NEW CONDUIT
22				FTDP-r2-UPS	-	2#12, 1#10 EGC, 1#10 IG							
23	UPS-r1-BO4-07/08/09	3/4"	RGS	UPS-r1-BO4.07	-	2#12, 1#10 EGC, 1#10 IG	600V	120VAC	POWER	NEW UPS PANEL	NEW TRANSCEIVER PANELS BO4-07/08/09	EXPOSED	NEW CONDUIT
24				UPS-r2-BO4.08	-	2#12							
25				UPS-r3-BO4.09	-	2#12							
26	UPS-r2-BO4-10/11/12	3/4"	RGS	UPS-r4-BO4.10	-	2#12, 1#10 EGC, 1#10 IG	600V	120VAC	POWER	NEW UPS PANEL	NEW TRANSCEIVER PANELS BO4-10/11/12	EXPOSED	NEW CONDUIT
27				UPS-r5-BO4.11	-	2#12							
28				UPS-r6-BO4.12	-	2#12							
29	FTDP-r1-PJB1	1-1/2"	RGS	FTDP-r3-BO4.01-03	-	2#12, 1#10 EGC, 1#10 IG	600V	120VAC	POWER	FDX TRANSCEIVER DISTRIBUTION PANEL	POWER J-BOX (PJB1)	EXPOSED	NEW AND EXISTING CONDUIT
30				FTDP-r4-BO4.04-06	-	2#12, 1#10 EGC, 1#10 IG							
29	PJB1-r2-PJB2	1"	RGS	FTDP-r3-BO4.01-03	-	2#12, 1#10 EGC, 1#10 IG	600V	120VAC	POWER	POWER J-BOX (PJB1)	POWER J-BOX (PJB2)	EXPOSED	NEW AND EXISTING CONDUIT
30				FTDP-r4-BO4.04-06	-	2#12, 1#10 EGC, 1#10 IG							
30	PJB2-r1-BO4-04/05/06	3/4"	RGS	FTDP-r4-BO4.04-06	-	2#12, 1#10 EGC, 1#10 IG	600V	120VAC	POWER	POWER J-BOX (PJB2)	NEW TRANSCEIVER PANELS BO4-04/05/06	EXPOSED	NEW CONDUIT
29	PJB2-r3-PJB3	1"	RGS	FTDP-r3-BO4.01-03	-	2#12, 1#10 EGC, 1#10 IG	600V	120VAC	POWER	POWER J-BOX (PJB2)	POWER J-BOX (PJB3)	EXPOSED	EXISTING CONDUIT
29	PJB3-r1-BO4-01/02/03	3/4"	RGS	FTDP-r3-BO4.01-03	-	2#12, 1#10 EGC, 1#10 IG	600V	120VAC	POWER	POWER J-BOX (PJB3)	NEW TRANSCEIVER PANELS BO4-01/02/03	EXPOSED	NEW CONDUIT



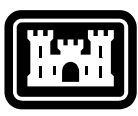
ADVERTISE

BONNEVILLE LOCK AND DAM
WASHINGTON SHORE FISH LADDER
FY2019 FISH ACCORDS
LAMPREY PASSAGE
ELECTRICAL
CONDUIT AND CABLE SCHEDULE
POWER

INFORMATIONAL DRAWINGS:

NOTES:

1										2				3				4	
CONDUIT					CABLE					DESCRIPTION									
CKT	NUMBER	SIZE	TYPE		NUMBER	NO. COND.	SIZE	INS	RATED VOLTAGE	FUNCTION	FROM	TO	ROUTE	REMARKS					
D	01	AFF-c1-FJB	1"	RGS	PPAFF-721/MM-FPP	721/	62.5um	-	-	COMM/DATA	AFF PATCH PANEL	FIBER J-BOX (FJB)	EXPOSED	NEW F/O CABLE FOR PIT TAG DATA COMM					
	01				PPAFF-41/MM-FDX1	41/	62.5um	-	-					MM F/O PATCH CABLE (FDX XCVR 1), REMOVE PORTION BTWN AFF PATCH PANEL & FIBER J-BOX. REUSE PORTION BTWN ANNUN TERM CAB & FIBER J-BOX					
	02				PPAFF-41/MM-FDX2	41/	62.5um	-	-					MM F/O PATCH CABLE (FDX XCVR 2), REMOVE PORTION BTWN AFF PATCH PANEL & FIBER J-BOX. REUSE PORTION BTWN ANNUN TERM CAB & FIBER J-BOX					
	03				LDLP-u1-LCDP1	1 PR	STP#16	300V	24VDC					LAMPREY COUNTER DISPLAY PANEL 1					
	04				LDLP-u2-LCDP2	1 PR	STP#16	300V	24VDC					LAMPREY COUNTER DISPLAY PANEL 2					
	32				LDLP-N1-CAM1	4 PR	#23	300V	24VDC					CAT6 (24VDC PoE), CAMERA (CAM1)					
	33				LDLP-N2-CAM2	4 PR	#23	300V	24VDC					CAT6 (24VDC PoE), CAMERA (CAM2)					
	34				PPFDX21/MM-FDX1	21/	MM F/O PATCH CABLE	-	-					MM F/O PATCH CABLE (FDX XCVR 1)					
	35				PPFDX21/MM-FDX2	21/	MM F/O PATCH CABLE	-	-					MM F/O PATCH CABLE (FDX XCVR 2)					
	03				LDLP-u1-LCDP1	1 PR	STP#16	300V	24VDC					LAMPREY COUNTER DISPLAY PANEL 1					
	32				LDLP-N1-CAM1	4 PR	#23	300V	24VDC					CAT6 (24VDC PoE), CAMERA (CAM1) BY OTHERS					
	34				PPFDX21/MM-FDX1	21/	MM F/O PATCH CABLE	-	-	COMM/DATA	J-BOX (JB1)	FDX TRANSCEIVER PANEL (BL2)	EXPOSED	MM F/O PATCH CABLE (FDX XCVR 1)					
	35				PPFDX21/MM-FDX2	21/	MM F/O PATCH CABLE	-	-					MM F/O PATCH CABLE (FDX XCVR 2)					
	03				LDLP-u1-LCDP1	1 PR	STP#16	300V	24VDC					LAMPREY COUNTER DISPLAY PANEL 1					
C	04				LDLP-u2-LCDP2	1 PR	STP#16	300V	24VDC	COMM/DATA	FIBER J-BOX	LAMPREY DATA LOGGER PANEL	EXPOSED/ CONCEALED	LAMPREY COUNTER DISPLAY PANEL 2					
	32				LDLP-N1-CAM1	4 PR	#23	300V	24VDC					CAT6 (24VDC PoE)					
	33				LDLP-N2-CAM2	4 PR	#23	300V	24VDC					CAT6 (24VDC PoE)					
	03				LDLP-u1-LCDP1	1 PR	STP#16	300V	24VDC	COMM/DATA	J-BOX (JB2)	LAMPREY COUNTER DISPLAY PANEL 1	EXPOSED	CAT6 (24VDC PoE)					
	32				LDLP-N1-CAM1	4 PR	#23	300V	24VDC										
	04				LDLP-u2-LCDP2	1 PR	STP#16	300V	24VDC	COMM/DATA	J-BOX (JB1)	LAMPREY COUNTER DISPLAY PANEL 2	EXPOSED	CAT6 (24VDC PoE)					
	33				LDLP-N2-CAM2	4 PR	#23	300V	24VDC										
	04				LDLP-u2-LCDP2	1 PR	STP#16	300V	24VDC	COMM/DATA	J-BOX (JB1)	ANNUN TERMINAL CABINET	EXPOSED	LAMPREY COUNTER DISPLAY PANEL 2					
	13				RIO-u1-ATC	-	20#12, 1#12 EG	600V	120VAC	ANNUN	J-BOX (JB1)	ANNUN TERMINAL CABINET	EXPOSED	LPS ANNUN VIA JB7, JB6, JB5 & JB1 (9#12 SPARE)					
	05				LDLP-N2-CAM2	4 PR	#23	300V	24VDC	COMM/DATA					CAT6 (24VDC PoE)				
	06				BL2-c1-COIL1	3/4"	LT	BL2-c1-COIL1	-	-	COMM/DATA	FDX TRANSCEIVER PANEL	FDX ANTENNA (BL2 - COIL 1)	EXPOSED					
	06				BL2-c2-COIL 2	3/4"	LT	BL2-c2-COIL 2	-	-	COMM/DATA		FDX ANTENNA (BL2 - COIL 2)	EXPOSED					
	07				HDX1-c1-PIT1	3/4"	LT	HDX1-c1-PIT1	-	-	COMM/DATA	HDX TRANSCEIVER PANEL (PIT1)	HDX ANTENNA 1	EXPOSED					
	08				HDX2-c1-PIT2	3/4"	LT	HDX2-c1-PIT2	-	-	COMM/DATA	HDX TRANSCEIVER PANEL (PIT2)	HDX ANTENNA 2	EXPOSED					
09				HDX3-c1-PIT3	3/4"	LT	HDX3-c1-PIT3	-	-	COMM/DATA	HDX TRANSCEIVER PANEL (PIT3)	HDX ANTENNA 3	EXPOSED						
10				HDX4-c1-PIT4	3/4"	LT	HDX1-c1-PIT4	-	-	COMM/DATA	HDX TRANSCEIVER PANEL (PIT4)	HDX ANTENNA 4	EXPOSED						
11				HDX5-c1-PIT5	3/4"	LT	HDX4-c1-PIT4	-	-	COMM/DATA	HDX TRANSCEIVER PANEL (PIT5)	HDX ANTENNA 5	EXPOSED						
12				HDX6-c1-PIT6	3/4"	LT	HDX5-c1-PIT5	-	-	COMM/DATA	HDX TRANSCEIVER PANEL (PIT6)	HDX ANTENNA 6	EXPOSED						
13				RIO-u1-JB2	1-1/4"	RGS	RIO-u1-ATC	-	20#12, 1#12 EG	600V	120VAC	ANNUN	REMOTE I/O PANEL	J-BOX (JB2)	EXP/BURIED	LPS ANNUN VIA JB7, JB6, JB5 & JB2 (9#12 SPARE)			
14								-	-	-				NOT USED					
B	15				ATC-u1-LPSWSCC1	-	3#14, 1#14 EG	600V	120VAC	ANNUN	ANNUN TERMINAL CABINET	SUPPLY PUMPS CONTROLLER NO. 1	EXPOSED	MOTOR OVERLOAD ANNUNCIATION (WS1 - PUMP 1/PUMP 2))					
	16				ATC-u2-LPSWSCC2	-	3#14, 1#14 EG				ANNUN TERMINAL CABINET	SUPPLY PUMPS CONTROLLER NO. 2	EXPOSED	MOTOR OVERLOAD ANNUNCIATION (WS2 - PUMP 1/PUMP 2))					
	17				JB6-s1-ATC	1"	RGS	-	-	SPARE	J-BOX (JB6)	ANNUN TERMINAL CABINET	EXPOSED	TO ANNUN TERM CAB VIA JB-5					
	18								-	-	-				NOT USED				
	19				ATC-u1-FS1.1	-	2#14, 1#14 EG								LOW FLOW ANNUNCIATION (WS1 - PUMP 1)				
	20				ATC-u2-FS1.2	-	2#14, 1#14 EG								LOW FLOW ANNUNCIATION (WS1 - PUMP 2)				
	21				ATC-u3-FS2.1	-	2#14, 1#14 EG								LOW FLOW ANNUNCIATION (WS2 - PUMP 1)				
	22				ATC-u4-FS2.2	-	2#14, 1#14 EG								LOW FLOW ANNUNCIATION (WS2 - PUMP 2)				
	19				ATC-u1-FS1.1	-	2#14, 1#14 EG								LOW FLOW ANNUNCIATION (WS1 - PUMP 1)				
	20				ATC-u2-FS1.2	-	2#14, 1#14 EG								LOW FLOW ANNUNCIATION (WS1 - PUMP 2)				
	23				JB4-u3-FS1.1	1/2"	LT	ATC-u1-FS1.1	3/c	#24	-	120VAC	ANNUN	J-BOX (JB4)	FLOW SWITCH 1 (WS1)	EXPOSED	SWITCH MANUFACTURER CABLE		
	24				JB4-u4-FS1.2	1/2"	LT	ATC-u2-FS1.2	3/c	#24	-	120VAC	ANNUN	J-BOX (JB4)	FLOW SWITCH 2 (WS1)	EXPOSED	SWITCH MANUFACTURER CABLE		
	25				JB3-u4-FS2.1	1/2"	LT	ATC-u3-FS2.1	3/c	#24	-	120VAC	ANNUN	J-BOX (JB3)	FLOW SWITCH 1 (WS2)	EXPOSED	SWITCH MANUFACTURER CABLE		
	26				JB3-u5-FS2.2	1/2"	LT	ATC-u4-FS2.2	3/c	#24	-	120VAC	ANNUN	NEW J-BOX (JB3)	FLOW SWITCH 2 (WS2)	EXPOSED	SWITCH MANUFACTURER CABLE		
27				BL2-u1-PIT2	3/4"	RGS	-	-	-	SPARE	FDX TRANSCEIVER PANEL (BL2)	HDX TRANSCEIVER PANEL (PIT2)	EXPOSED	SYNC (SPARE CONDUIT FOR FUTURE USE)					
28				BL2-u2-PIT6	3/4"	RGS	-	-	-	SPARE	FDX TRANSCEIVER PANEL (BL2)	HDX TRANSCEIVER PANEL (PIT6)	EXPOSED	SYNC (SPARE CONDUIT FOR FUTURE USE)					
29								-	-	-				NOT USED					
A	30				LCDP1-u1-LC1	1/2"	LT	LCDP1-u1-LC1	3/c	#24	-	24VDC	COMM/DATA	LAMPREY COUNTER DISPLAY PANEL 1	LAMPREY COUNTER 1 (PROX. SWITCH)	EXPOSED	SENSOR MANUFACTURER CABLE		
	30				LCDP1-u1-LC1	3/4"	RGS/LT	LCDP1-u1-LC1	3/c	#24	-	24VDC	COMM/DATA	LAMPREY COUNTER 1 (PROX. SWITCH)	LAMPREY COUNTER 1 (PROX. SWITCH)	EXPOSED	SENSOR MANUFACTURER CABLE		
	32				LDLP-N1-CAM1	4 PR	#23	300V	24VDC	COMM/DATA	LAMPREY COUNTER DISPLAY PANEL 1	VIDEO CAMERA 1	EXPOSED	CAT6 (24VDC PoE)					
	31				LCDP2-u1-LC2	3/4"	LT	LCDP2-u1-LC2	3/c	#24	-	24VDC	COMM/DATA	LAMPREY COUNTER DISPLAY PANEL 2	LAMPREY COUNTER 2 (PROX. SWITCH)	EXPOSED	SENSOR MANUFACTURER CABLE		
	31				LCDP2-u1-LC2	3/4"	RGS/LT	LCDP2-u1-LC2	3/c	#24	-	24VDC	COMM/DATA	LAMPREY COUNTER 2 (PROX. SWITCH)	LAMPREY COUNTER 2 (PROX. SWITCH)	EXPOSED	SENSOR MANUFACTURER CABLE		
	33				LDLP-N2-CAM2	4 PR	#23	300V	24VDC	COMM/DATA	LAMPREY COUNTER DISPLAY PANEL 2	VIDEO CAMERA 2	EXPOSED	CAT6 (24VDC PoE)					
	32				LDLP-N1-CAM1	4 PR	#23	300V	24VDC	COMM/DATA	LAMPREY COUNTER DISPLAY PANEL 1	VIDEO CAMERA 1	EXPOSED	CAT6 (24VDC PoE)					
	33				LDLP-N2-CAM2	4 PR	#23	300V	24VDC	COMM/DATA	LAMPREY COUNTER DISPLAY PANEL 2	VIDEO CAMERA 2	EXPOSED	CAT6 (24VDC PoE)					
	01				FJB-c1-FJB1	1"	RGS	PPAFF-41/MM-FDX1	41/	62.5um	-	-	COMM/DATA	FIBER J-BOX	FIBER J-BOX (FJB1)	EXPOSED	NEW CONDUIT (MM F/O PATCH CABLE (FDX XCVR 1), REUSED PORTION OF 41/ CABLE, RENUMBER AS CKT 50: FPP-41/MM-FDX1)		
	02							PPAFF-41/MM-FDX2	41/	62.5um	-	-					(MM F/O PATCH CABLE (FDX XCVR 2), REUSED PORTION OF 41/ CABLE, RENUMBER AS CKT 51: FPP-41/MM-FDX2)		
	35				FPP-c1-UPS	1"	RGS	FPP-21/MM-UPS1	21/	MM F/O PATCH CABLE	-	-	COMM/DATA	NEW F/O PATCH PANEL (FPP)	NEW UPS PANEL	EXPOSED	NEW CONDUIT		
	36							FPP-21/MM-UPS2	21/	MM F/O PATCH CABLE	-	-							
	01							FPP-41/MM-FDX1	41/	62.5um	-	-	COMM/DATA						
	02							FPP-41/MM-FDX2	41/	62.5um	-	-							
37							FPP-41/MM-B04.01	41/	MM F/O	-	-								
38							FPP-41/MM-B04.02	41/	MM F/O	-	-								
39							FPP-41/MM-B04.03	41/	MM F/O	-	-								
40							FPP-41/MM-B04.04	41/	MM F/O	-	-								
41							FPP-41/MM-B04.05	41/	MM F/O	-	-								
42							FPP-41/MM-B04.06	41/	MM F/O	-	-								
43							FPP-41/MM-B04.07	41/	MM F/O	-	-								
44							FPP-41/MM-B04.08	41/	MM F/O	-	-								
45							FPP-41/MM-B04.09	41/	MM F/O	-	-								
46							FPP-41/MM-B04.10	41/	MM F/O	-	-								
47							FPP-41/MM-B04.11	41/	MM F/O	-	-								
48							FPP-41/MM-B04.12	41/	MM F/O	-	-								
49							FPP-41/MM-B04.12.1	41/	MM F/O	-	-								
43							FPP-41/MM-B04.07	41/	MM F/O	-	-								
44							FPP-41/MM-B04.08	41/	MM F/O	-	-	COMM/DATA	FIBER J-BOX (FJB1)	NEW TRANSCEIVER PANELS B04-07/08/09	EXPOSED	NEW CONDUIT			
45							FPP-41/MM-B04.09	41/	MM F/O	-	-								
37							FPP-41/MM-B04.01	41/	MM F/O	-	-								
38							FPP-41/MM-B04.02	41/	MM F/O	-	-								
39							FPP-41/MM-B04.03	41/	MM F/O	-	-	COMM/DATA	FIBER J-BOX (FJB1)	FIBER J-BOX (FJB2)	EXPOSED	NEW CONDUIT			
40							FPP-41/MM-B04.04	41/	MM F/O	-	-								
41							FPP-41/MM-B04.05	41/	MM F/O	-	-								
42							FPP-41/MM-B04.06	41/	MM F/O	-	-								
40							FPP-41/MM-B04.04	41/	MM F/O	-	-								
41							FPP-41/MM-B04.05	41/	MM F/O	-	-	COMM/DATA	FIBER J-BOX (FJB2)	NEW TRANSCEIVER PANELS B04-04/05/06	EXPOSED	NEW CONDUIT			
42							FPP-41/MM-B04.06	41/	MM F/O	-	-								
37							FPP-41/MM-B04.01	41/	MM F/O	-	-								
38							FPP-41/MM-B04.02	41/	MM F/O	-	-	COMM/DATA	FIBER J-BOX (FJB2)	FIBER J-BOX (FJB3)	EXPOSED	EXISTING CONDUIT			
39							FPP-41/MM-B04.03	41/	MM F/O	-	-								
37							FPP-41/MM-B04.01	41/	MM F/O	-	-								
38							FPP-41/MM-B04.02	41/	MM F/O	-	-	COMM/DATA	FIBER J-BOX (FJB3)	NEW TRANSCEIVER PANELS B04-01/02/03	EXPOSED	NEW CONDUIT			
39							FPP-41/MM-B04.03	41/	MM F/O	-	-								



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PORTLAND DISTRICT

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U.S. ARMY CORPS OF ENGINEERS PORTLAND DISTRICT PORTLAND, OREGON	DRAWN BY: BANNISTER CHECKED BY: R. RAO SOLICITATION NO.: W9127N24R0003 DATE: 04/06/2024 SUBMITTED BY: BIL FORTNEY, P.E. CONTRACT NO.: PLOT SCALE: 1"=10'-0" DRAWING NUMBER: 111 SIZE: ANSI D FILE NAME: B0F1123_E-702.dgn
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BONNEVILLE LOCK AND DAM
WASHINGTON SHORE FISH LADDER
FY2019 FISH ACCORDS
LAMPREY PASSAGE
ELECTRICAL
CONDUIT AND CABLE SCHEDULE
CONTROL/COMMUNICATION

SHEET
IDENTIFICATION
E-702

INFORMATIONAL DRAWINGS:

CLF1.104_E-702 PIT TAG SYSTEM - CONDUIT AND CABLE SCHEDULE - CONTROL

NOTES:

1. ALL ITEMS SHOWN ARE EXISTING UNLESS INDICATED OTHERWISE.
2. ITEMS SHOWN IN GREEN ARE TO BE REMOVED OR MODIFIED.
3. ITEMS SHOWN IN RED ARE NEW.

D

C

B

A

MATERIALS LIST					
ITEM	QUANTITY	UNIT	DEVICE I.D.	DESCRIPTION	REMARKS
01	1	EA	UPS PANEL	60"X36"X12" 2-DOOR ENCLOSURE , 3-POINT LATCH, NEMA 4XSS	
02	1	EA	UPS PANEL	60"X36" PAINTED STEEL BACK PANEL	
03	10	EA	XCVR/UPS PANELS	SS PANEL VENT/DRAIN:	
04	8	EA	XCVR PANELS	30"X30"X8" HINGED ENCLOSURE, QTR-TURN LATCHES, STAINLESS STEEL, NEMA 4X, S.S. MOUNTING BRACKET KIT	
05	8	EA	XCVR PANELS	30 x 30 CONCEPT PAINTED STEEL BACK PANEL	
06	4	EA	XCVR PANELS	TWO ISOLATED-GROUND RECEPTACLES, 20A, 125VAC, SPEC-GRADE, STEEL 2-GANG BOX, S.S. COVER PLATE	
07	1	EA	FIBER DIST. PANEL	24" X 24" X 18" DOUBLE-HINGED, SWING-OUT 19" RACK, WALL-MOUNTABLE, 12-UNIT CAPACITY, GLASS-FRONT DOOR, NEMA 250 TYPE 1, BLACK	INCLUDE NECESSARY RACK ANGLES AND GLAND PLATES ON TOP AND BOTTOM
08	AS REQ'D	EA	XCVR/UPS PANELS	COPPER GROUND BUS BAR, 9 PORTS, CONDUCTOR RANGE #4-#14	
09	4	EA	XCVR PANELS (ISO-GND)	COMPACT DISTRIBUTION BLOCK, 1-POLE, TINNED COPPER BLOCK, 600V	
10	2	EA	XCVR PANELS	1" X 4" BLACK ADHESIVE-BACK VELCRO STRAPS, 50-COUNT	PROVIDE TO GOV'T FOR INSTALLATION BY OTHERS
11	AS REQ'D	EA	UPS PANEL	DIN RAIL ISOLATION BARRIER (STANDOFF)	SEE NOTE 2, SHEET E-503
12	12	EA	FOPP, FDP	PRE-TERMINATED F/O PIGTAIL, 62.5/125um MM OM1, 12-FIBER, ST CONNECTORS, ORANGE JACKET, 3m LONG (OPTIONAL)	FOR TERMINATION OF NEW 72-FIBER CABLE (MAY BE USED IN LIEU OF INDIVIDUAL ST CONNECTORS)
13	26	EA	FOPP, XCVR PNL	PRE-TERMINATED F/O PIGTAIL, 62.5/125um MM OM1, 6-FIBER, ST CONNECTORS, ORANGE JACKET, 3m LONG (OPTIONAL)	FOR TERMINATION OF NEW 4-FIBER CABLES (MAY BE USED IN LIEU OF INDIVIDUAL ST CONNECTORS)
14	12	EA	FIBER DIST. PANEL	ST-STYLE ADAPTER PANELS, 6-PORT	FOR USE WITH CLOSET CONNECTOR HOUSING IN FIBER DIST. PANEL
15	1	EA	F/O PATCH PANEL	LOCKABLE MODULAR F/O WALL CABINET, 12 ADAPTER PLATE COMPATIBLE, 72-PORT	PROVIDE BACK PANEL FOR PATCH PANEL ENCLOSURE IF NECESSARY
16	24	EA	F/O PATCH PANEL	FIBER ADAPTER PANELS, 3 DUPLEX ST STYLE (72 PORTS TOTAL)	
17	AS REQ'D	LF	UPS PANEL	1.5X3 NARROW SLOT NON-METALLIC WIRE DUCT AND COVER	
18	AS REQ'D	LF	UPS PANEL	2X3 NARROW SLOT NON-METALLIC WIRE DUCT AND COVER	
19	22	EA	UPS PANEL	TERMINAL BLOCK END ANCHOR	
20	4	EA	FIBER DIST/UPS PANELS	MEDIA CONVERTER, 120VAC, MM FIBER TO ETHERNET, FIBER ST PORTS	INSTALL 2 IN UPS PANEL AS SHOWN, PROVIDE 2 IN THE FIBER DIST. PANEL FOR INSTALLATION BY OTHERS
21	14	EA	UPS PANEL	FEED-THROUGH, SCREW-TYPE TERMINAL BLOCK	
22	14	EA	UPS PANEL	FEED-THROUGH, SCREW-TYPE GROUNDING TERMINAL BLOCK, GREEN	
23	4	EA	UPS PANEL	FEED-THROUGH, SCREW-TYPE GROUNDING TERMINAL BLOCK, GREEN/YELLOW	ISOLATED-GROUND TERMINALS
24	AS REQ'D	LF	UPS PANEL	STEEL DIN RAIL	
25	8	EA	UPS PANEL	TERMINAL BLOCK GROUP MARKING CARRIER	
26	2	EA	UPS PANEL	MAINTENANCE RECEPTACLE, ISOLATED-GROUND TYPE, 120VAC, 15A, DIN RAIL MOUNTED	
27	8	EA	UPS PANEL	SUPPLEMENTARY PROTECTORS, 120VAC, 5A	
28	AS REQ'D	EA	FIBER DIST. PANEL	CIRCULAR RECLOSEABLE STORAGE RING, INSIDE PLANT, 11.5"	FOR FIBER SERVICE LOOP AND OTHER LOCATIONS AS NEEDED FOR SERVICE LOOPS
29	1	EA	FIBER DIST. PANEL	CLOSET CONNECTOR HOUSING, 19" RACK-MOUNT	FOR USE IN FIBER DIST. PANEL, INCLUDE ALL NECESSARY HARDWARE TO RACK-MOUNT
30	AS REQ'D	EA		EQUIPMENT LABEL	SEE TYP. DETAIL, SHEET E-504
31	AS REQ'D	EA		COMPONENT/DEVICE LABEL	SEE TYP. DETAIL, SHEET E-504
32	AS REQ'D	EA		WARNING LABEL	SEE TYP. DETAIL, SHEET E-504
33	1	EA		12" X 12" X 8" D, HINGED NEMA 12 ENCLOSURE, QTR-TURN LATCH, WALL-MOUNT	
34	1	EA		NONMETALLIC SURFACE RACEWAY TRANSITION FITTING	COMPATIBLE WITH WIREMOLD 5500 SERIES SURFACE RACEWAY
35				NOT USED	

NOTES:

1. ALL ITEMS SHOWN ARE NEW UNLESS INDICATED OTHERWISE.



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ADVERTISE

U.S. ARMY CORPS OF ENGINEERS PORTLAND DISTRICT PORTLAND, OREGON	DESIGNED BY: B. BANNISTER	DATE: 04/05/2024
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	SUBMITTED BY: B. BANNISTER	CONTRACT NO.:
	BILL OF MATERIALS: P.E.	DRAWING NUMBER:
PLOT SCALE: 1"=10'		FILE NAME:
SIZE: 11x17		BDP11123_E-703.dgn

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E-703