

**USACE Portland District (NWP) FFDRWG Update Form**  
**June 1, 2016**

**PROJECT INFORMATION**

Project Title	Lamprey Minor Fishway Modifications
SCT Reference Number	
Project Manager (PM)	Mike Turaski (NWP, 503-808-4704)
Technical Lead (TL) Minor Modifications	Sarah Knowles (NWP, 503-808-4980)
Biologist/Coordination	Ricardo Walker (NWP, 503-808-4709)

**PROJECT DESCRIPTION**

The scope of this project includes relatively small-scale modifications to adult fish ladders to improve lamprey passage conditions at Bonneville, The Dalles, and John Day Dams. Examples of such modifications include floor diffuser plating, rounding corners, and modifications to entrance weir crests. This is a multi-year, phased project. Generally, the PDT will focus on modifying a single ladder per year:

- Bonneville (BON) WA Shore Ladder: Lower ladder diffuser plating and entrance weir improvements to include lamprey orifices (includes closure device, and video monitoring mounts), rest boxes, and entrance weir improvements (completed; IWW 16/17).
- **BON Bradford Island Ladder: Orifice ramps through weirs 54-67 as needed and lamprey orifices through serpentine weirs (out for solicitation June 2017; Install IWW 17/18). Wetted wall installation.**
- The Dalles (TDA) East Ladder: Entrance weir improvements (IWW 17/18).
- TDA North Ladder: Lower ladder diffuser plating/ramping and entrance weir improvements (design late FY17; install IWW 18/19).

**SCHEDULE, PROGRESS, AND KEY ISSUES (List)**

1. The Washington shore minor modifications completed IWW 16/17.
2. Proposed Bradford Island minor modifications:
  - Lamprey orifices, orifice ramps, rest boxes, wetted wall and video mounting infrastructure.
  - Out for solicitation June 2017 with a tentative award of August 2017 and install winter maintenance period 17/18.

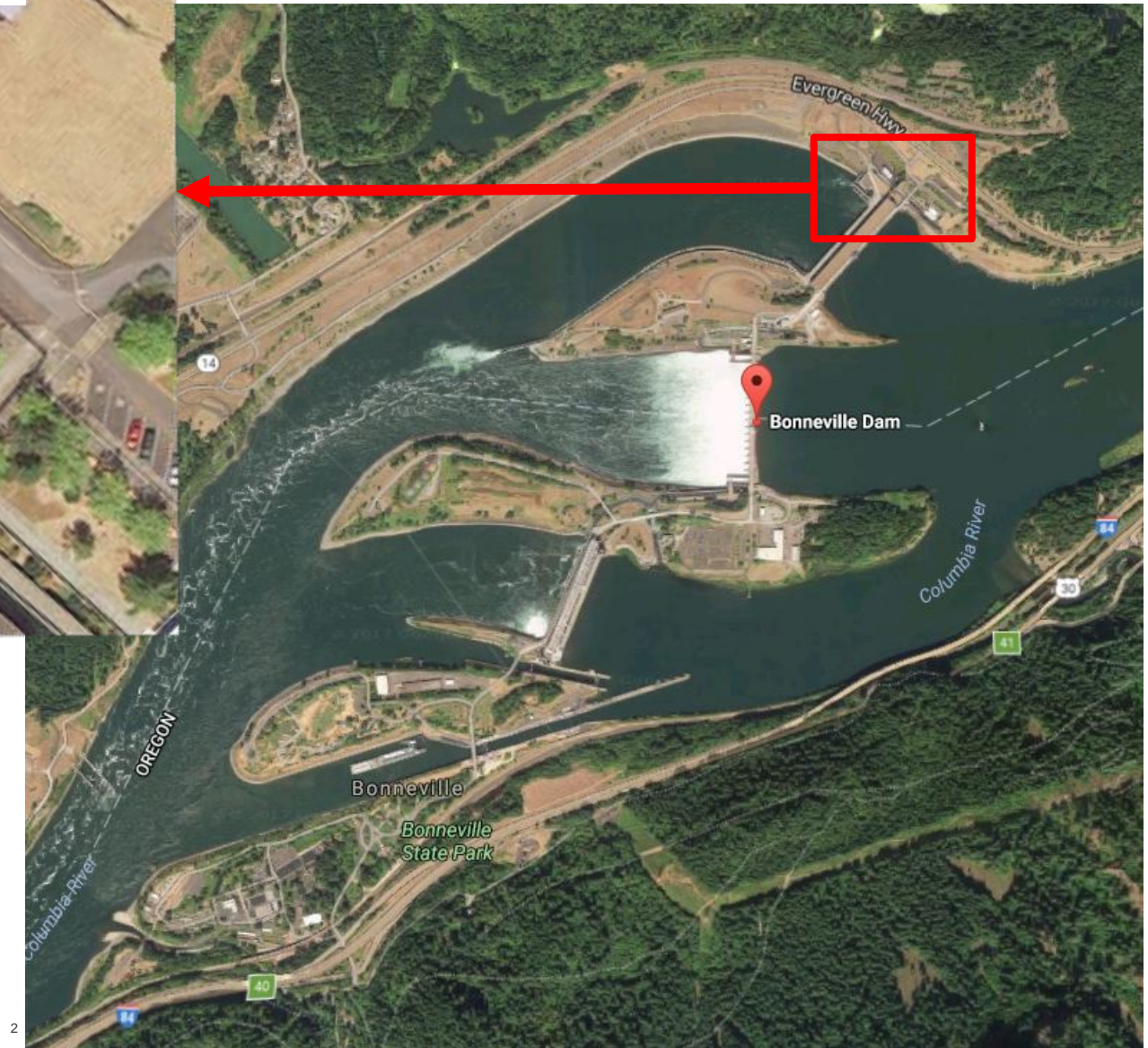
3. Weir cap modification plan.

Weir Caps	Design	Fabrication	Current Schedule for Installation	Earliest Possible Installation
BON WA Shore	Complete	Complete	2018-19 (FY19)	2018-19 (FY19)
	TBD based on FY17 fund availability. Fabricate in FY17 would enable FY18 install.			
TDA East, west and south entrances (5 weirs)			2018-19 (FY19, post CRFM)	2017-18 (FY18)
TDA East, east entrance (3 weirs)			2018-19 (FY19, post CRFM)	2018-19 (FY19, post CRFM) Conflict w AWS work in FY18
TDA North (1 weir)			2018-19 (FY19, post CRFM)	2017-18 (FY18)

4. Upper AFF lamprey trap design

**FFDRWG REVIEW NEEDED AT MEETING? (If YES, list discussion topics below)**

Yes, preliminary lamprey trap design and location.





D

C

B

A

D

C

B

A

A4-11

Adult Fish Facility

Lamprey Trap Location

Washington Shore Fish Ladder



Adult Fish Collection and Monitoring Facility (AFCMF)

AFCMF office. Relocate existing air conditioning unit. See DWG. BDF-3-18/4.

Bulkhead slot #5. Install new bulkhead door. See specifications.

Exit chamber. Install new sliding device. See DWG. BDF-3-18/2,3.

Slot #10

Slot #8

Exit fish ladder

Entrance fish ladder

Main fish ladder

Weir 37

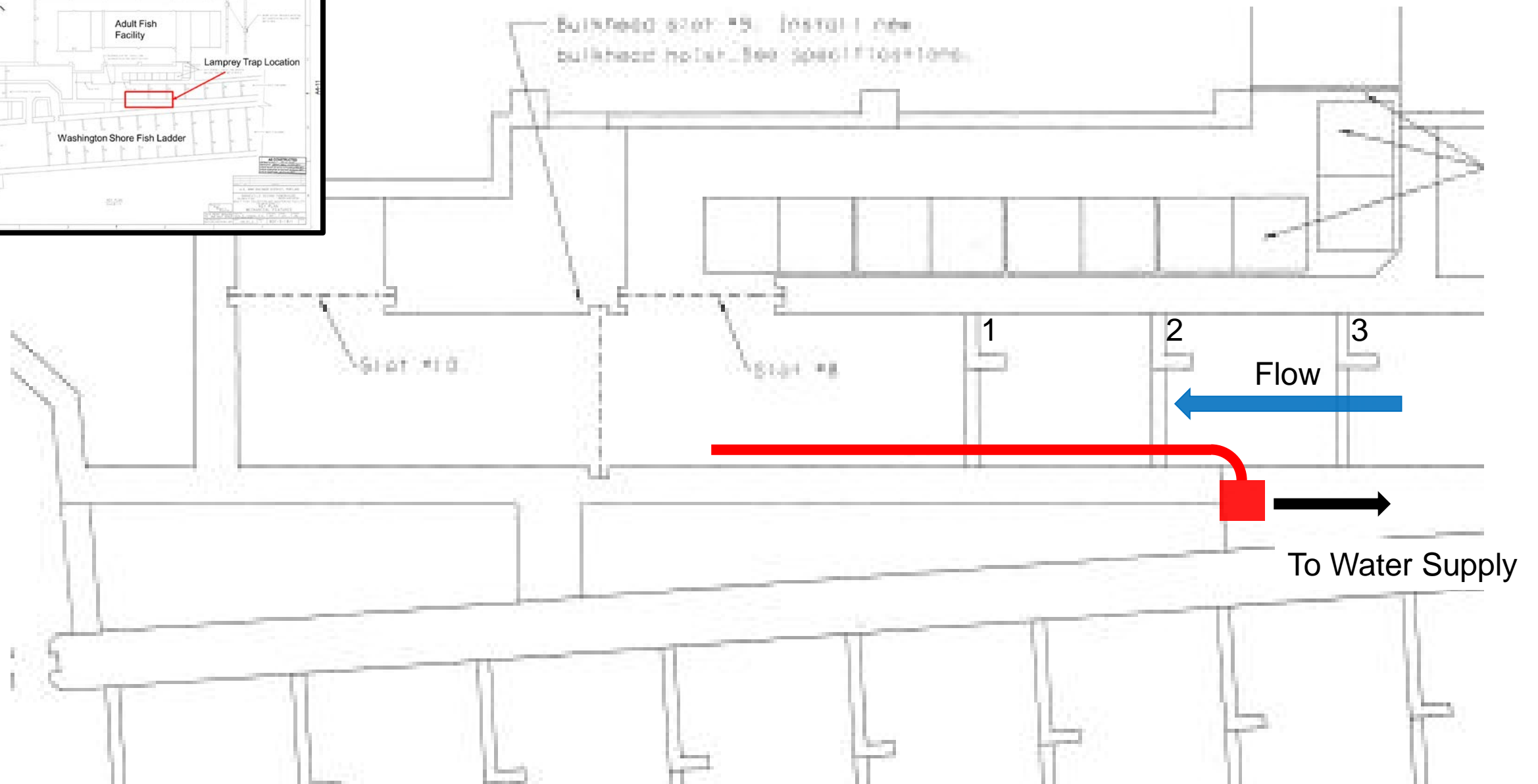
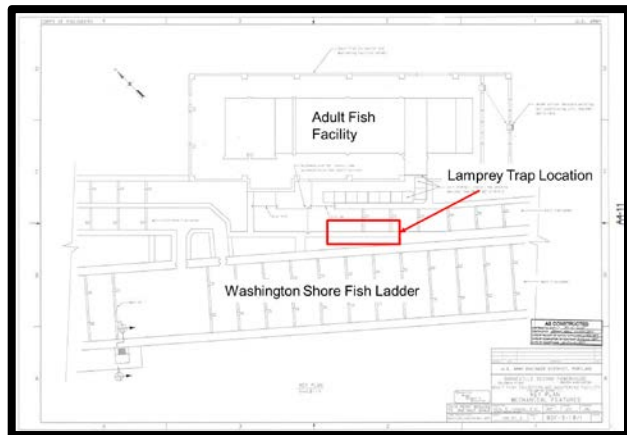
KEY PLAN  
SCALE 2" = 1'-0"

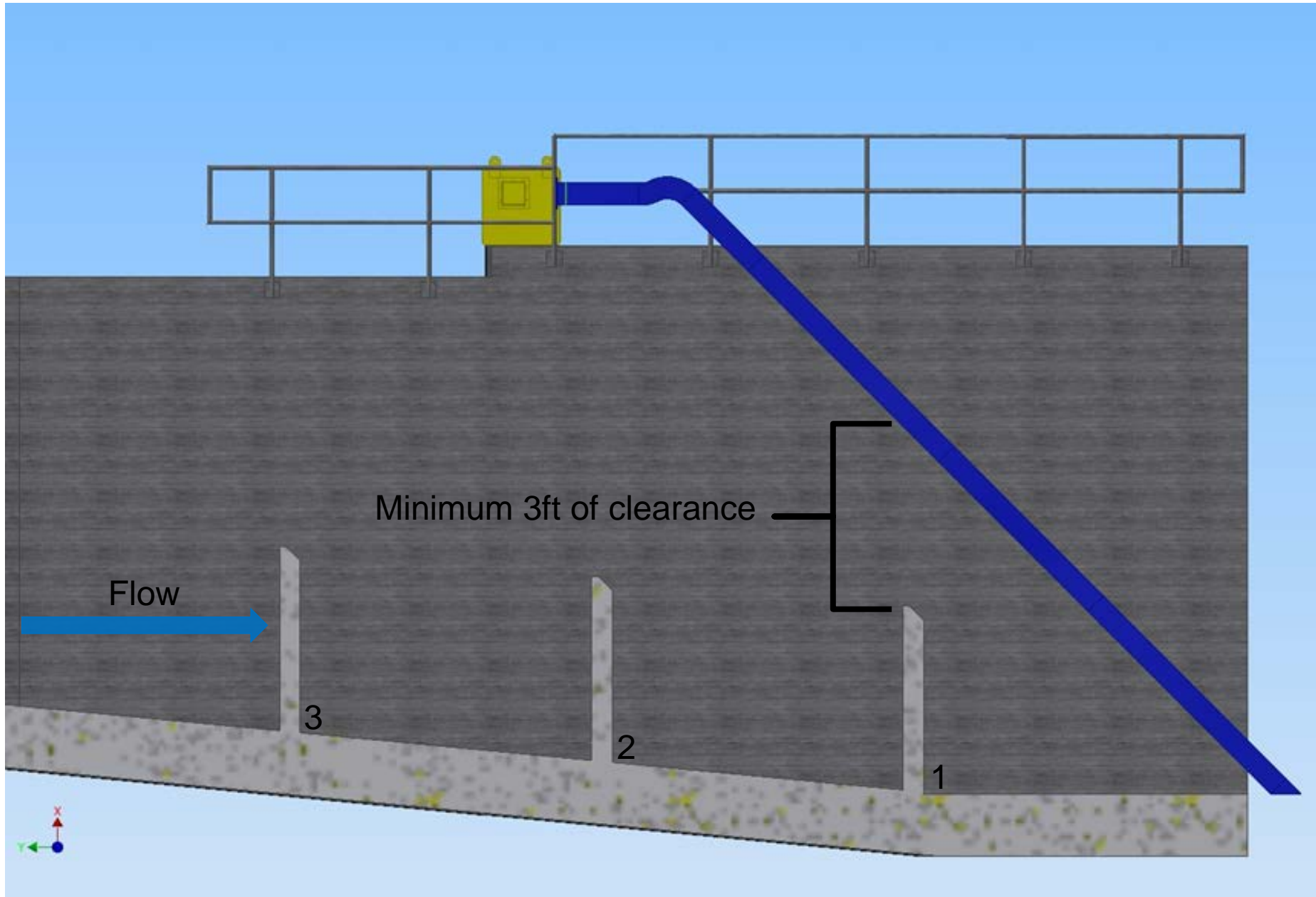
AS CONSTRUCTED

CONTRACT NO. DCMV-77-01-00007  
CONTRACTOR ASPCO, INC., BUREAU, WASH.  
DATE OF RECEIPT OF NOTICE TO PROCEED 10/1/77  
DATE OF COMPLETION OF CONTRACT 10/1/77  
DATE OF ACCEPTANCE 10/1/77

U.S. ARMY ENGINEER DISTRICT, PORTLAND			
BONNEVILLE SECOND POWERHOUSE			
COLUMBIA RIVER OREGON-WASHINGTON			
ADULT FISH COLLECTION AND MONITORING FACILITY			
FOLLOW-ON PHASE III			
KEY PLAN			
MECHANICAL FEATURES			
DESIGNED BY	DATE	CHECKED BY	DATE
NEAL R. HANSON, P.E.	1986 OCT. 8	SPR	1986 OCT. 8
PROJECT ENGINEER		APP	
9542(100, 0A2)(31) 8X1-80F		BDF-3-18/1	

THIS PRINT REDUCED TO ONE-HALF SCALE  
DATE: 1986 OCT. 8  
SHEET: 3  
PLATE





- 18 inch fixed ramp
- Increase in average velocity from 0.8 ft/s to 1.0 ft/s (channel ladder velocity criteria 1.5 – 4 ft/s)

Missing from drawing

- Water supply pipe / hose (source AFF truck fill)
- Potential diffuser in floor of rest box
- Knee brace supports for the flume
- Flume to include a “jog” to avoid interference with the handrails