

**DIVISION OF STATE LANDS  
FISH HABITAT ENHANCEMENT  
GENERAL AUTHORIZATION FORM**

APPLICATION No. \_\_\_\_\_ (DSL will assign)

1. APPLICANT (conducting the Work) Metro – Smith and Bybee Lakes Wildlife Area

Address 600 NE Grand Ave. Contact Person Elaine Stewart

Portland, OR 97232-2736 Phone Number 503-797-1515

2. TYPE OF PROJECT NUMBER @ CUBIC YARDS EACH TOTAL CUBIC YARDS

TYPE OF PROJECT	NUMBER	@ CUBIC YARDS EACH	TOTAL CUBIC YARDS
Fish Rocks			
Deflectors			
Fish Passage (Check Dams/Weirs)	1	698	698
Gravel Blanket	1	179	179
Pool/Pond Construction			
Barrier Removal (Culvert/Tidegates)	1	1068	1068
Woody Material			
Channel Construction (Back/Sidechannel)			

3. PROJECT DESCRIPTION: Provide on separate sheets a short summary of the scope of the project, and describe what the project will accomplish for fish habitat enhancement. Include legible drawing(s) of the proposed work, with typical cross-sections and overhead views (or longitudinal views) of the project. Also note the location of spoils disposal, if any, on projects that entail excavation. For alcove or off-channel pond construction projects, provide a grading plan or cross-section showing the slope of the proposed work.

4. PROJECT LOCATION: (Attach a legible 8.5"x11" or 8.5"x14" map or aerial photograph that shows the project location)

(Driving Directions) Columbia Blvd. 4.5 miles west of I-5 in Portland, OR; access via St. Johns Landfill.

Name of Stream North Slough (tributary of Columbia Slough) River Mile 1 (Col. Slough) Project Length 73 ft.

Drainage Basin Willamette River County Multnomah

Township 2N Range 1W & 1E Section 36

5. ODFW REVIEW: I have evaluated the above project and find it will be constructed in a way that minimizes impact to aquatic resource values. The recommended in-water work period is

June 15 to September 15

Jim Much  
ODFW Biologist Signature

3/7/02  
Date

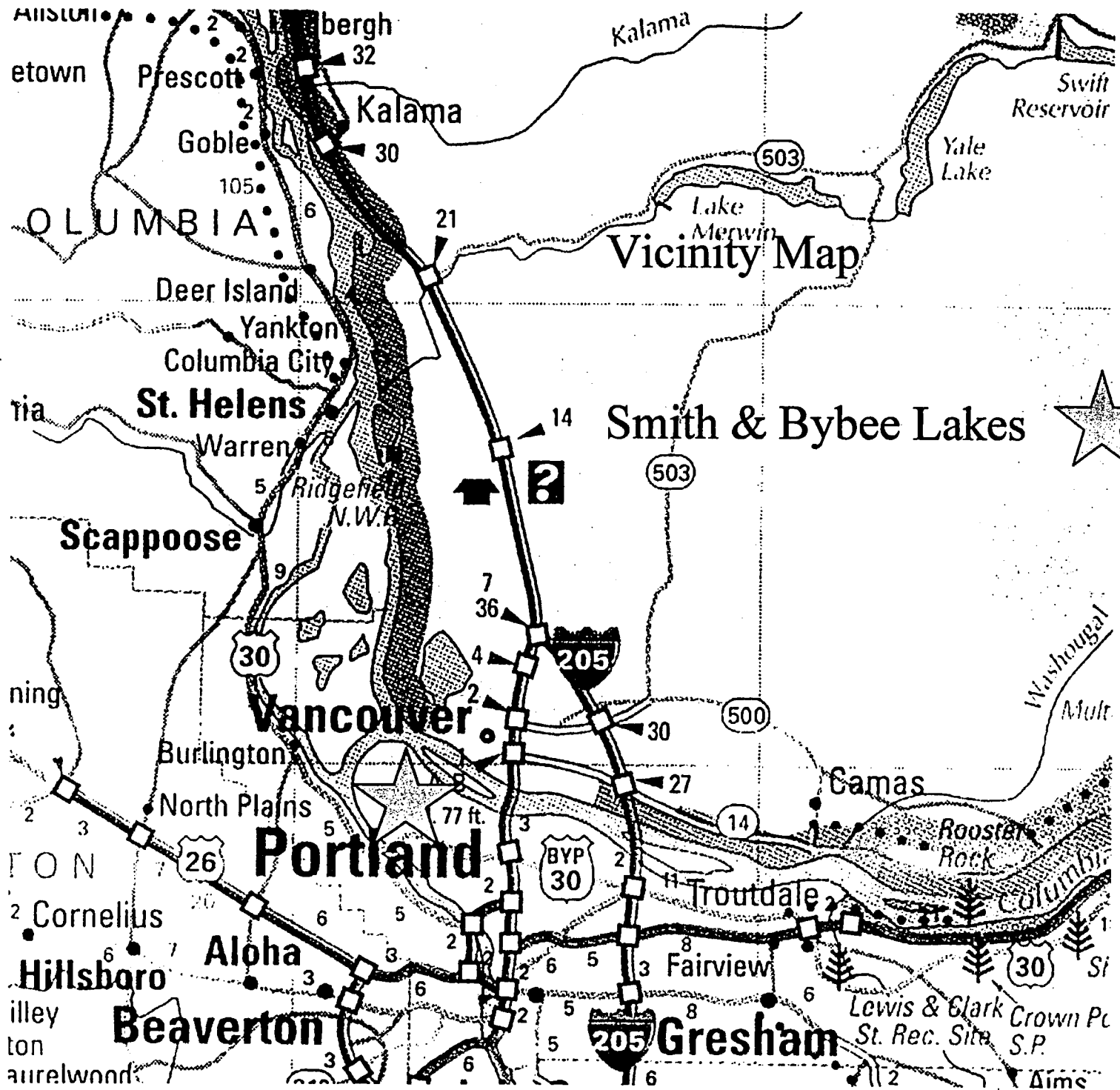
I certify that I will complete the project according to the rules for the General Authorization for Fish Habitat Enhancement and the attached plan and drawings.

[Signature]  
Applicant Signature

## **Project Description**

The purpose of this project is to remove an existing dam and tidegate system that has isolated Smith and Bybee lakes from the North Slough and Columbia Slough. This blockage transformed nearly 2,000 acres of seasonal emergent and forested wetlands into permanent lakes. The new structure will enhance the historic functions and values of Smith and Bybee lakes and provide fish access to and passage from these valuable rearing habitats.

The project includes the removal of the existing dam and tidegate (1,068 cubic yards of material including pipe) and the installation of 4 box culverts (889 cubic yards including compacted fill). Material removed from the channel will be disposed of in an approved upland site (with the exception of 191 cubic yards that will be used to backfill the new box culverts). The box culverts will be designed to include stoplog channels to facilitate adaptive wetland management during spring months. One of the box culverts will be a 5-foot wide pool-chute style fishway to provide fish passage during periods of water management.



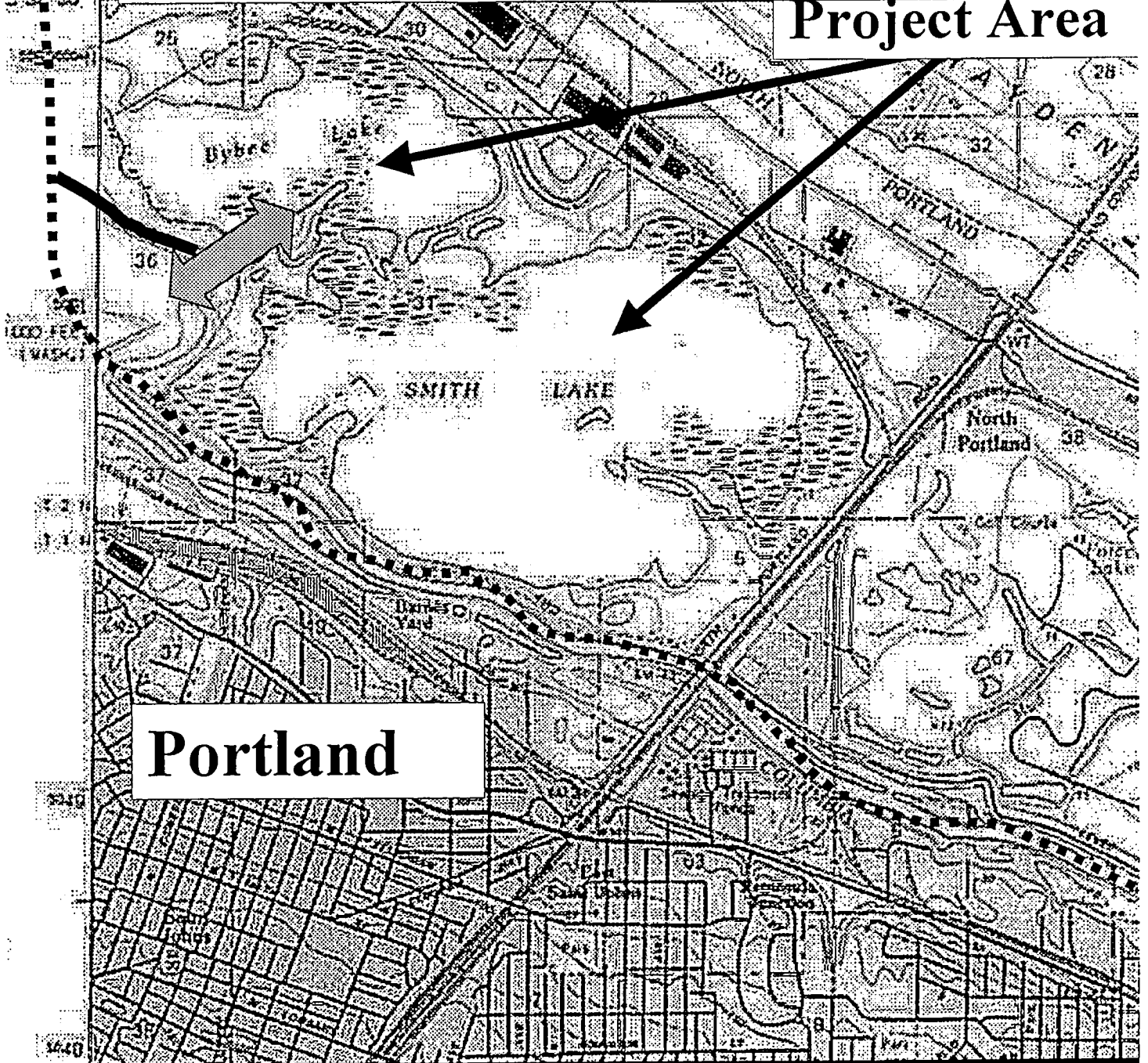
Vicinity Map

Smith & Bybee Lakes

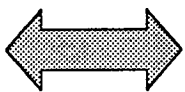


# Smith and Bybee Lakes Restoration Plan Map

Project Area



Portland



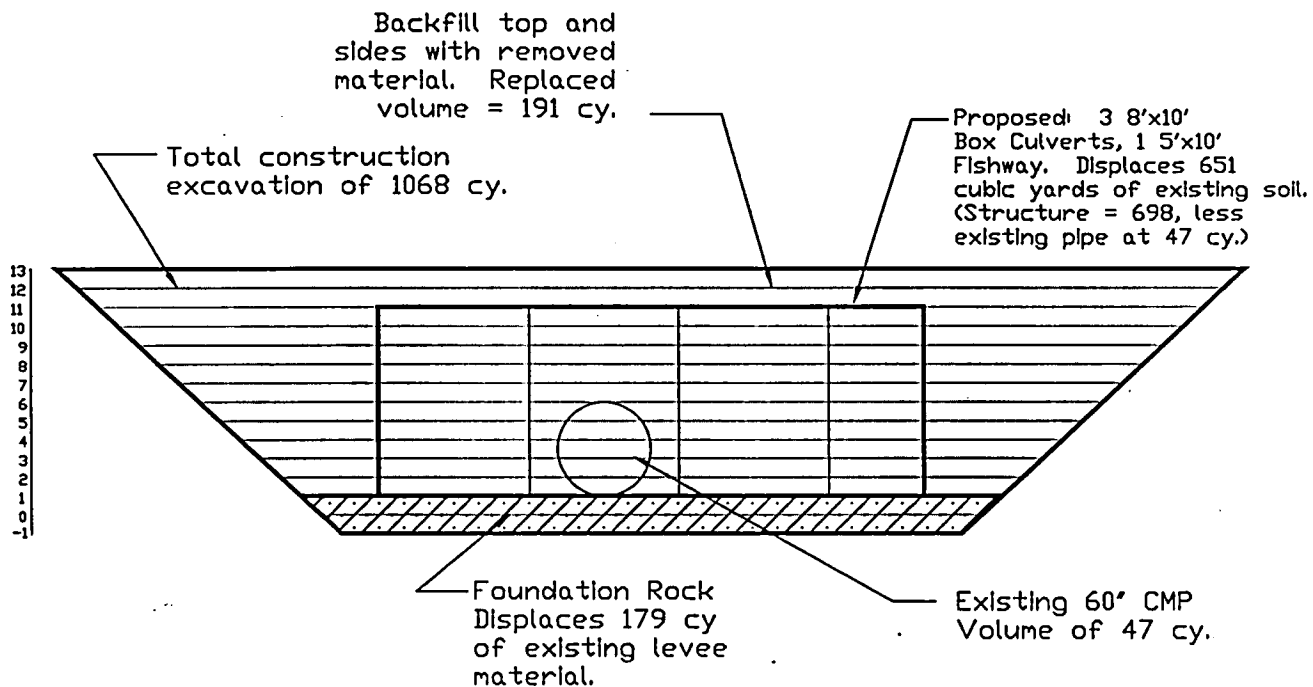
New Water Control Structure/Connection  
to North Slough and Columbia Slough



Columbia Slough

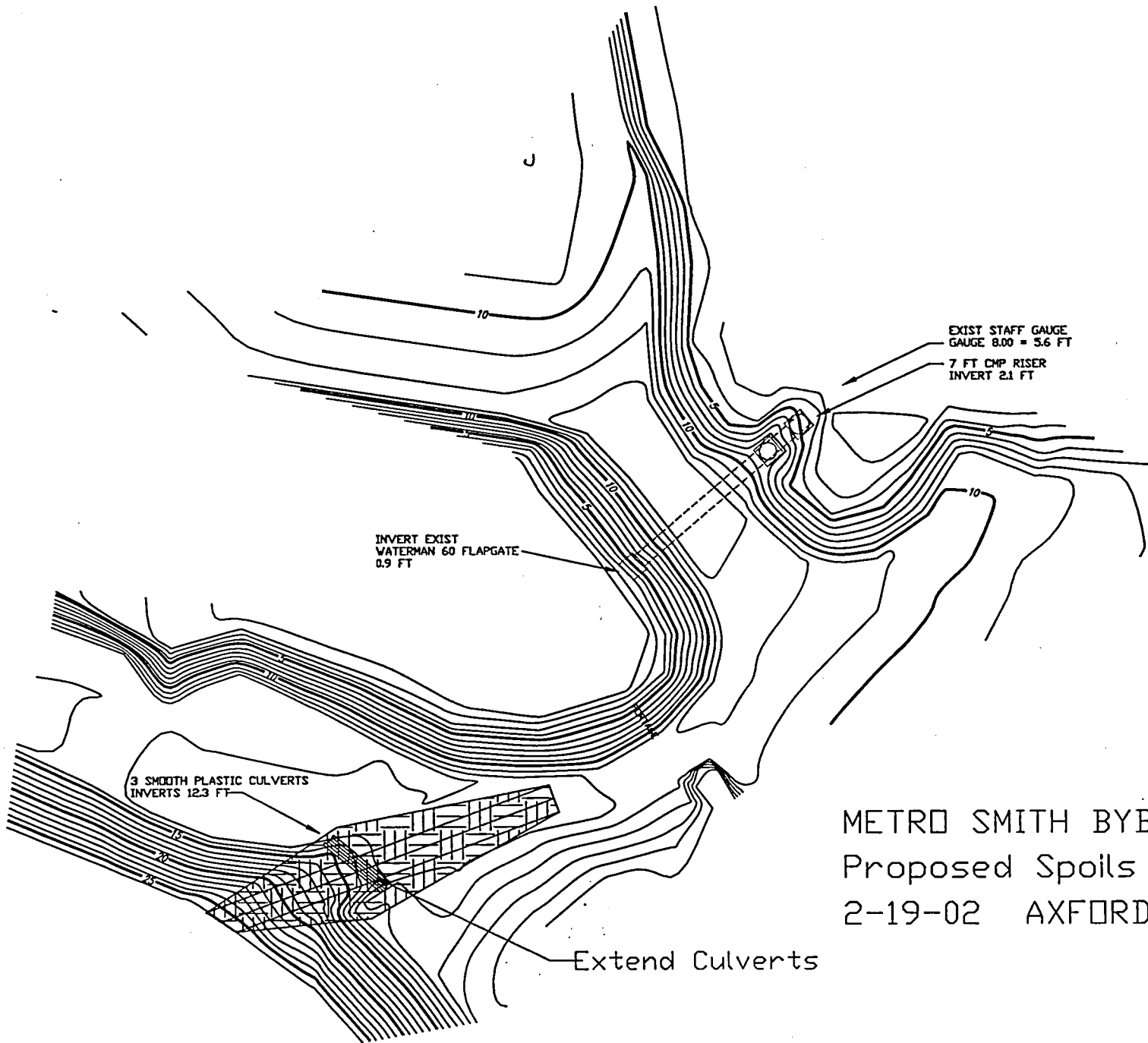


North Slough



Material Balance:  
 Total excavation: 1115 cy - 47 cy (ex. pipe) = 1068 cy  
 Backfill: 1068 - 698 (structure) - 179 (rock) = 191 cy  
 877 cy balance as spoil

Smith Bybee Structure Replacement  
 Estimated Volumes  
 2-19-02 Axford



EXIST STAFF GAUGE  
GAUGE 8.00 = 5.6 FT  
7 FT CMP RISER  
INVERT 2.1 FT

INVERT EXIST  
WATERMAN 60 FLAPGATE  
0.9 FT

3 SMOOTH PLASTIC CULVERTS  
INVERTS 12.3 FT

Extend Culverts



METRO SMITH BYBEE LAKES  
Proposed Spoils Area  
2-19-02 AXFORD

(3) 8'x10' PRECAST  
CONCRETE BOX  
CULVERTS.

LOW  
WATER

8'

HIGH  
WATER

STOP LOG ASSEMBLY  
MOUNTED TO THE  
INLET OF THE BOX  
CULVERTS. TOP  
ELEVATION 11.0 FEET MSL

NATIVE MATERIALS

CROSS SECTION A-A

(1) 8'x5' PRECAST  
CONCRETE BOX  
CULVERT. INSTALL  
FISH LADDER.

LOW  
WATER

8'

HIGH  
WATER

NOTE  
EXISTING STRUCTURE  
TO BE REMOVED.

NATIVE MATERIALS

CROSS SECTION B-B

NOTE  
EXISTING STRUCTURE  
TO BE REMOVED.

STOP LOG ASSEMBLY  
MOUNTED TO THE  
INLET OF THE BOX  
CULVERTS.

(3) 8'x10' PRECAST  
CONCRETE BOX  
CULVERTS

5'

(1) 8'x5' PRECAST  
CONCRETE BOX  
CULVERT  
WITH FISH LADDER

10'

10'

HIGH  
WATER

LOW  
WATER

END SECTION C-C

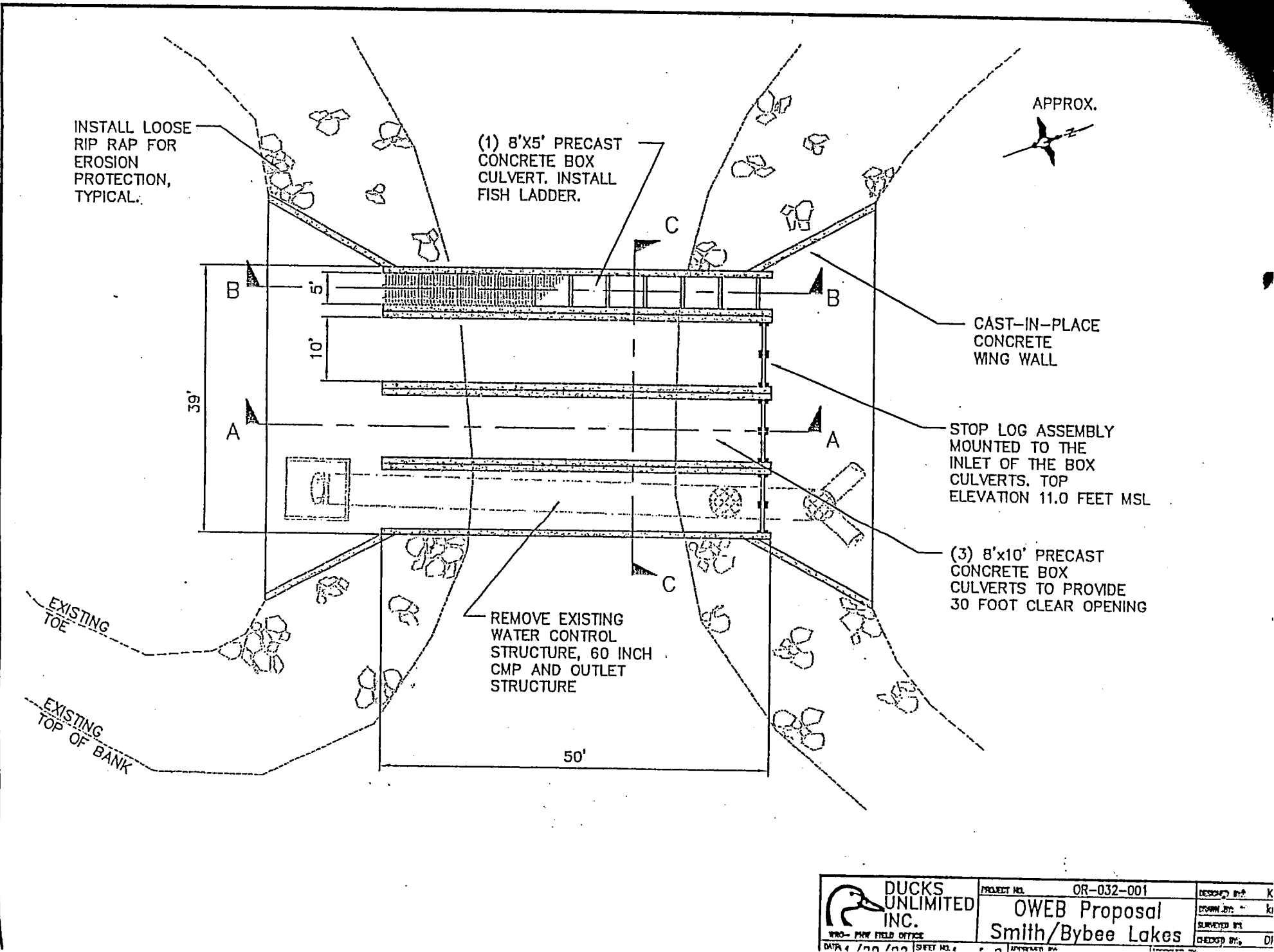


DUCKS  
UNLIMITED  
INC.

PROJECT NO. OR-032-001

OWEB Proposal

Small text at the bottom right of the page.



INSTALL LOOSE RIP RAP FOR EROSION PROTECTION, TYPICAL.

(1) 8'x5' PRECAST CONCRETE BOX CULVERT. INSTALL FISH LADDER.

APPROX.



CAST-IN-PLACE CONCRETE WING WALL


STOP LOG ASSEMBLY MOUNTED TO THE INLET OF THE BOX CULVERTS. TOP ELEVATION 11.0 FEET MSL

(3) 8'x10' PRECAST CONCRETE BOX CULVERTS TO PROVIDE 30 FOOT CLEAR OPENING

REMOVE EXISTING WATER CONTROL STRUCTURE, 60 INCH CMP AND OUTLET STRUCTURE

EXISTING TOE

EXISTING TOP OF BANK

 WFO - PHW FIELD OFFICE DATE: 1/20/00 (SHEET NO. 2)	PROJECT NO.	OR-032-001	DESIGNED BY:	K
	OWEB Proposal		DRAWN BY:	kl
	Smith/Bybee Lakes		SURVEYED BY:	DI
		CHECKED BY:	DI	





**METRO**

March 8, 2002

Mr. Kirk Jarvie  
State of Oregon  
Division of State Lands  
775 Summer Street NE, Suite 100  
Salem, OR 97301-1279

RE: Division of State Lands General Authorization application for Fish  
Habitat Enhancement at Smith and Bybee Lakes Wildlife Area

Dear Mr. Jarvie;

Enclosed is a Division of State Lands (DSL) General Authorization for Fish Habitat Enhancement application for a new water control structure at Smith and Bybee Lakes Wildlife Area in Portland, Oregon. Metro Regional Parks and Greenspaces and Ducks Unlimited prepared the application and drawings. A Biological Assessment (BA) has been prepared and submitted to NMFS by the U.S. Fish and Wildlife Service. For more information on the BA, please contact Pat Oman at NMFS (503) 231-2313 or Chuck Lobdell at Ducks Unlimited (360-885-2011).

A joint permit application has been submitted to the Army Corps of Engineers.

Metro looks forward to working with DSL on this valuable habitat restoration project. Feel free to contact me at (503) 797-1515 if you require additional information or have questions.

Sincerely,

Elaine Stewart  
Smith and Bybee Lakes Wildlife Area Manager  
Regional Parks and Greenspaces

cc: Charles Ciecko, Metro  
Enc.