



US Army Corps  
of Engineers  
Seattle District



# Joint Public Notice

## Application for a Department of the Army Permit and a Washington Department of Ecology Water Quality Certification and/or Coastal Zone Management Consistency Concurrence

### US Army Corps of Engineers

Regulatory Branch  
Post Office Box 3755  
Seattle, WA 98124-3755  
Telephone: (206) 316-3047  
ATTN: Mr. Steve Manlow,  
Project Manager

### WA Department of Ecology

SEA Program  
Post Office Box 47600  
Olympia, WA 98504-7600  
Telephone: (360) 407-6068  
ATTN: SEA Program,  
Federal Permit Coordinator

**Public Notice Date:** January 23, 2015

**Expiration Date:** February 22, 2015

**Reference No.:** NWS-2012-1123

**Name:** New Columbia (Round Lake  
Conservation Bank)

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Interested parties are hereby notified that the U.S. Army Corps of Engineers (Corps) and the Washington Department of Ecology (Ecology) have received an application to perform work in waters of the U.S. as described below and shown on the enclosed drawings dated September 25, 2014.

The Corps will review the work in accordance with Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Ecology will review the work pursuant to Section 401 of the CWA, with applicable provisions of State water pollution control laws.

**APPLICANT:** New Columbia Garden Company, Inc.  
12112 Northwest Lower River Road  
Vancouver, Washington 98660  
Attention: Mr. Richard Fazio  
Telephone: (360) 693-4216

**AGENT:** Henderson Environmental Design-Build Professionals  
200 North State Street, Suite 103  
Lake Oswego, Oregon 97034  
Attention: Mr. David Gorman  
Telephone: (503) 699-8999

**LOCATION:** The project is located in wetlands that drain to the Columbia River and within the Columbia River at 15017 Lower River Road near the City of Vancouver, Clark County, Washington.

**WORK:** The proposed work is to construct an Endangered Species Act (ESA) conservation bank on 260 acres within the floodplain of the Columbia River. Primary project elements include breaching the Lower River Road dike at two locations to establish hydrological connections to the Columbia River and constructing meandering channels to provide fish passage into and between Post Office Lake, Round Lake, and adjacent wetlands. The project would require excavation of 20,484 cubic yards of material from within 3.21 acres of wetlands and may result in the draining of an additional 8.15 acres of wetlands. Approximately 695 cubic yards of the excavated material will be used to fill constructed agricultural ditches and excess material will be deposited on four acres of onsite uplands. The project goal is to establish an additional 51 acres of wetlands by creating hydrological connections to the Columbia River. Work also includes planting vegetation on 257.46 acres of the site.

**NWS-2012-1123, New Columbia Garden Company, Inc.**

PURPOSE: The project purpose is to establish a conservation bank that offers sale of credits to offset impacts to ESA-listed species.

Dredged Material Testing: Prior to completing its review, the Corps will determine whether proposed dredged material must be tested according to the procedures specified by the Dredged Material Management Program (DMMP). The DMMP evaluation may include both chemical and biological testing of sediments. The sediment testing data will be available at the Corps, Seattle District, Dredged Material Management Office.

ADDITIONAL INFORMATION: The wetland boundaries and location of the ordinary high water mark shown on the project drawings have been field-verified by the U.S. Army Corps of Engineers (Corps).

MITIGATION: The applicant is proposing to increase the acreage of wetlands on the project site by establishing a hydrological connection to the Columbia River. The applicant is therefore not proposing compensatory mitigation for direct or indirect impacts to waters of the U.S.

ENDANGERED SPECIES: The ESA requires federal agencies to consult with the National Marine Fisheries Service (NMFS) and/or U.S. Fish and Wildlife Service pursuant to Section 7 of the ESA on all actions that may affect a species listed (or proposed for listing) under the ESA as threatened or endangered or any designated critical habitat. After receipt of comments from this public notice, the U.S. Army Corps of Engineers will evaluate the potential impacts to proposed and/or listed species and their designated critical habitat.

ESSENTIAL FISH HABITAT: The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996, requires all Federal agencies to consult with the NMFS on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH). The proposed action would impact EFH in the project area. If the Corps determines that the proposed action may adversely affect EFH for federally managed fisheries in Washington waters, the Corps will initiate EFH consultation with the NMFS. The Corps' final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the NMFS.

CULTURAL RESOURCES: The Corps has reviewed the latest published version of the National Register of Historic Places, Washington Information System for Architectural and Archaeological Records Data and other sources of information. Historic properties are recorded near the proposed project. The Corps invites responses to this public notice from Native American Tribes or tribal governments; Federal, State, and local agencies; historical and archeological societies; and other parties likely to have knowledge of or concerns regarding historic properties and sites of religious and cultural significance at or near the project area. After receipt of comments from this public notice, the Corps will evaluate potential impacts and consult with the State Historic Preservation Officer and Native American Tribes in accordance with Section 106 of the National Historic Preservation Act, as appropriate.

PUBLIC HEARING: Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing.

EVALUATION – CORPS: The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people.

**NWS-2012-1123, New Columbia Garden Company, Inc.**

The Corps is soliciting comments from the public; Native American Nations or tribal governments; Federal, State, and local agencies and officials; and other interested parties in order to consider and evaluate the impacts of this activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition or deny a permit for the work. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the activity.

The described discharge will be evaluated for compliance with guidelines promulgated by the Environmental Protection Agency under authority of Section 404(b)(1) of the CWA. These guidelines require an alternatives analysis for any proposed discharge of dredged or fill material into waters of the United States.

SOURCE OF FILL MATERIAL: The source of the fill material will be from onsite excavation within uplands and wetlands.

EVALUATION – ECOLOGY: Ecology is soliciting comments from the public; Federal, Native American Nations or tribal governments, State, and local agencies and officials; and other interested parties in order to consider and evaluate the impacts of this activity. Ecology will be considering all comments to determine whether to certify or deny certification for the proposed project.

ADDITIONAL EVALUATION: This proposal may be the subject of a Shorelines Substantial Development Permit that would be processed by Clark County.

COMMENT AND REVIEW PERIOD: Conventional mail or e-mail comments on this public notice will be accepted and made part of the record and will be considered in determining whether authorizing the work would not be contrary to the public interest. In order to be accepted, e-mail comments must originate from the author's e-mail account and must include on the subject line of the e-mail message the permit applicant's name and reference number as shown below. Either conventional mail or e-mail comments must include the permit applicant's name and reference number, as shown below, and the commenter's name, address, and phone number. All comments whether conventional mail or e-mail must reach this office, no later than the expiration date of this public notice to ensure consideration.

CORPS COMMENTS: All e-mail comments should be sent to [steven.w.manlow@usace.army.mil](mailto:steven.w.manlow@usace.army.mil). Conventional mail comments should be sent to: U.S. Army Corps of Engineers, Regulatory Branch, Attention: Mr. Steve Manlow, P.O. Box 3755, Seattle, Washington 98124-3755. All comments received will become part of the administrative record and are subject to public release under the Freedom of Information Act including any personally identifiable information such as names, phone numbers, and addresses.

ECOLOGY COMMENTS: Any person desiring to present views on the project pertaining to a request for water quality certification under Section 401 of the CWA may do so by submitting written comments to the following address: Washington State Department of Ecology, Attention: Federal Permit Coordinator, P.O. Box 47600, Olympia, Washington 98504-7600, or e-mail to [ecyrefedpermits@ecy.wa.gov](mailto:ecyrefedpermits@ecy.wa.gov).

To ensure proper consideration of all comments, responders must include the following name and reference number in the text of their comments: New Columbia Garden Company, Inc.; NWS-2012-1123

Encl: Figures (17)

# ROUND LAKE CONSERVATION BANK VANCOUVER, WASHINGTON

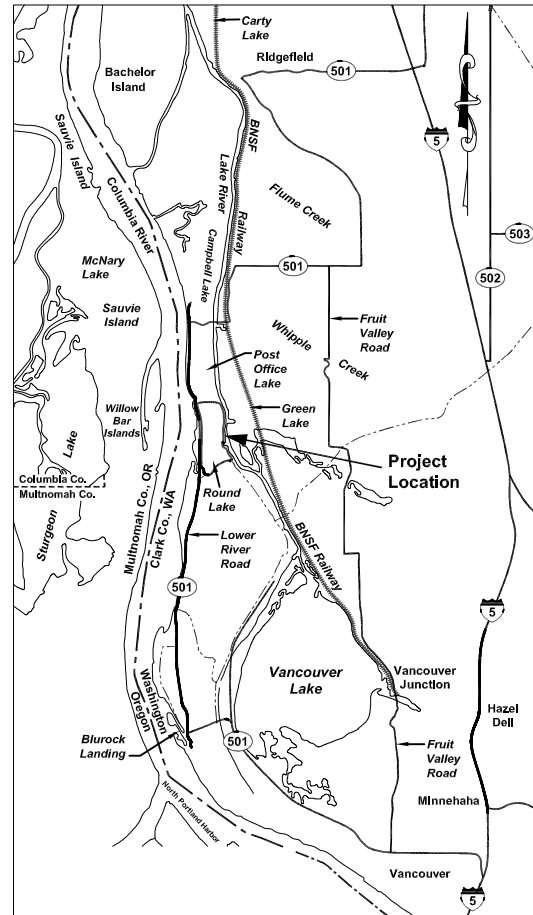


OWNER: ANDERSEN FAZIO  
 TOWNSHIP: 3N 3N  
 RANGE: R1WWM R1WWM  
 SECTION: 24 13  
 PARCEL #: 191279000 191177000  
 AREA: 56.9 acres 236.15 acres

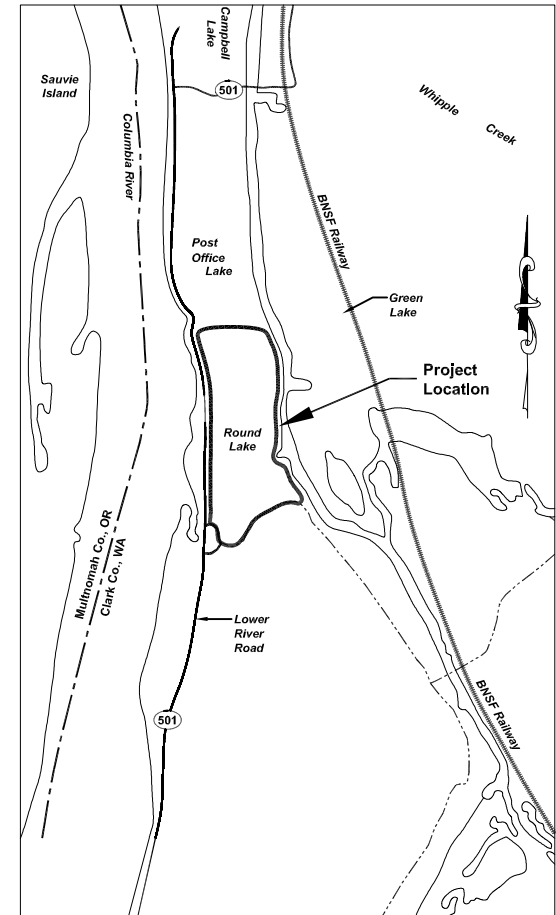
USACE Reference Number: NWS-2013-1123  
 Applicant Name: Richard Fazio  
 Proposed Project: Round Lake Conservation Bank  
 Location: 15017 Northwest Lower River Road  
 Vancouver, Washington, 98660  
 Adjacent Property Owners:  
 1) USFWS Ridgefield Refuge  
 2) Washington State  
 Lat/Lon: NE Corner: 45.741192 N, -122.748430 W  
 SW Corner: 45.729112 N, -122.753273 W  
 In: Columbia River, Category II and III PEM Wetlands  
 Near/At: Vancouver, Washington  
 County: Clark  
 State: Washington

## VICINITY MAPS

NOT TO SCALE



NOT TO SCALE



DATUM: NAVD88 & NAD83/WGS84

**HENDERSON**  
 Environmental Design-Build Professionals  
 200 N STATE STREET, SUITE 103 PH (503) 699-8999  
 LAKE OSWEGO, OR 97034 OR CCB# 142914  
 www.HENDERSONDESIGN-BUILD.com WA CCB# HENDELS954QH

ROUND LAKE CONSERVATION BANK  
 VANCOUVER, WASHINGTON

COVER SHEET,  
 VICINITY MAPS, GENERAL INFO

Reference Number: NWS-2013-1123  
 Applicant Name: Richard Fazio  
 Proposed Project: Round Lake  
 Conservation Bank

Location: 15017 Northwest Lower River Rd  
 Vancouver, Washington, 98660

Survey Source:  
 Statewide Land Surveying, Inc.  
 227 N. Main Avenue  
 Gresham, Oregon 97030

DESIGN: DG DRAWN: MM CHECKED: DG DATE: 09/25/14 REVISION: 2

PROJECT NUMBER: FAZIO-ANDERSON JV 13-1

THIS BOX 1" AT FULLSIZE

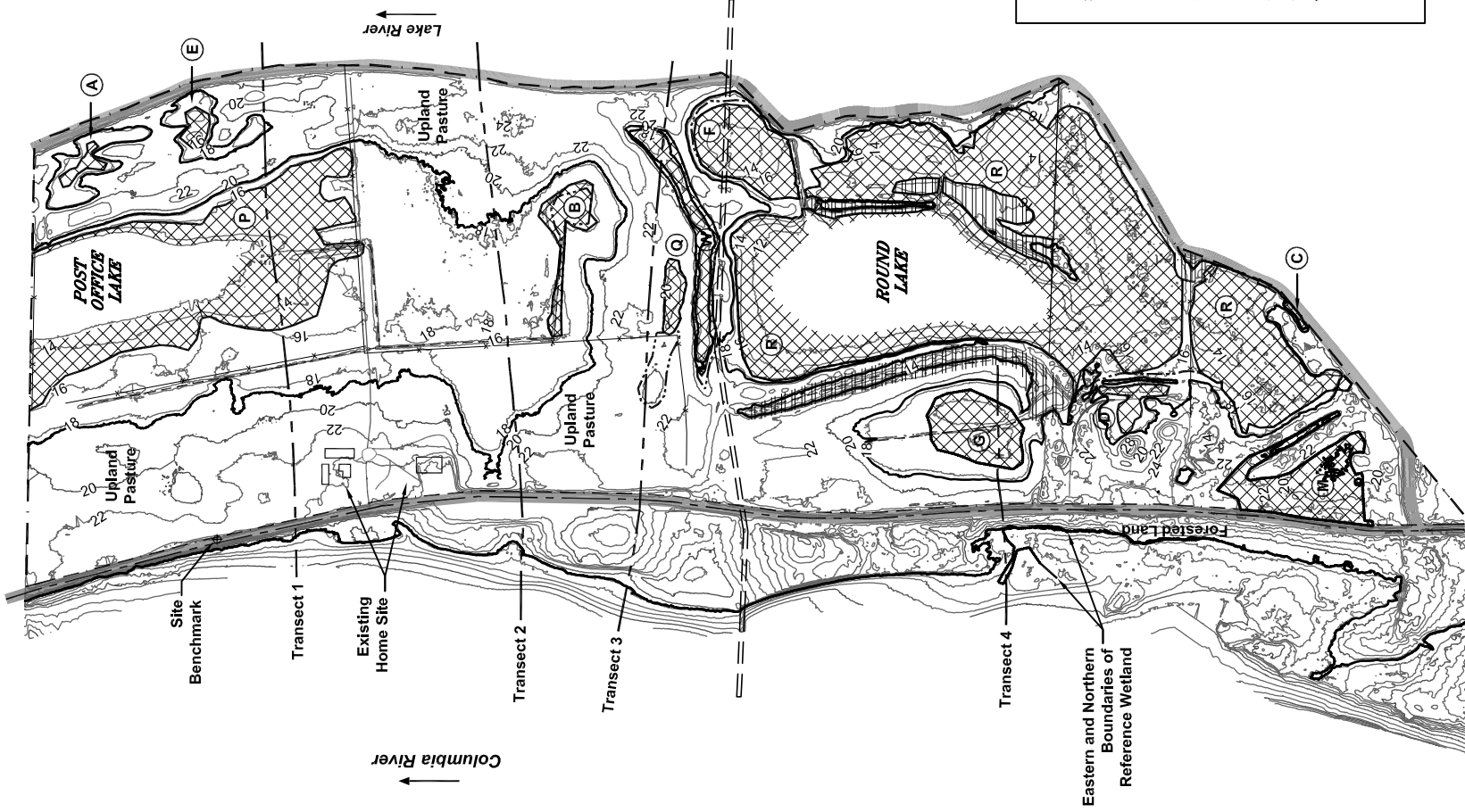
**JARPA  
 FIGURES**

SHEET NUMBER

01

SHT 01 OF 17





LEGEND	
--- Study Area Boundary	--- Sewer Line Easement
--- Wetland Boundary, 2014/2012	--- Wetland Boundary, 2012
--- Lower River Road C	--- Existing Ditch
--- Fence	--- Existing Access Road
--- Dike	--- Minor Contour - 2'
--- Major Contour - 10'	--- OHWM - 18.5'
--- Wetland Area Label	--- Wetlands
--- Upland Scrub Shrub	



THIS BOX 1" AT FULLSIZE



JARPA  
FIGURES

DATUM: NAVD88 & NAD83/WGS84

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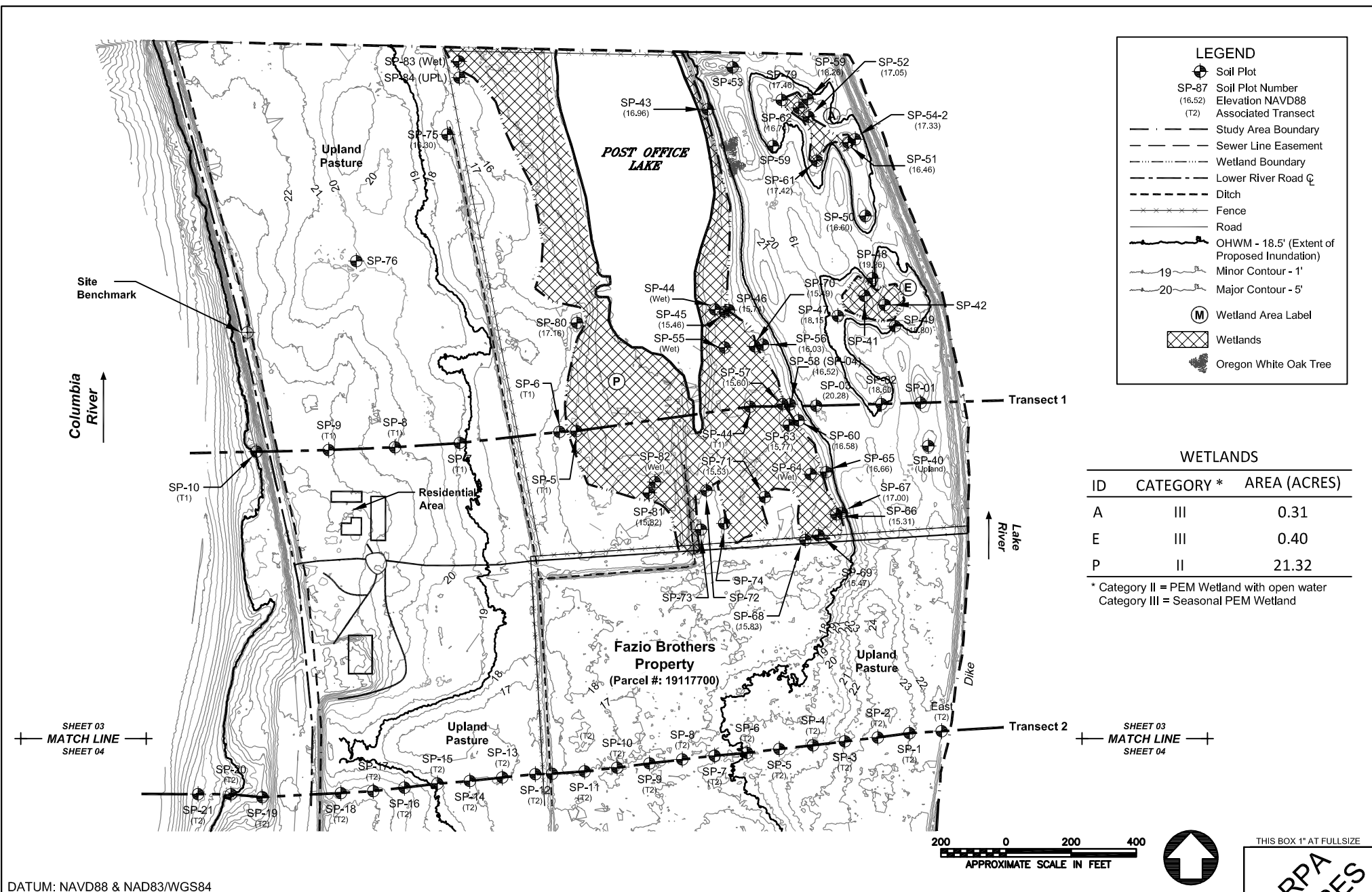
ROUND LAKE CONSERVATION BANK  
VANCOUVER, WASHINGTON

**EXISTING CONDITIONS  
FULL VIEW**

Reference Number: NWS-2013-1123  
Applicant Name: Richard Fazio  
Proposed Project: Round Lake Conservation Bank  
Location: 15017 Northwest Lower River Rd  
Vancouver, Washington, 98660

DESIGN: DG DRAWN: MM CHECKED: DG DATE: 09/25/14 REVISION: 2  
PROJECT NUMBER: FAZIO-ANDERSON JV 13-1

SHEET NUMBER  
02  
SHT 02 OF 17



DATUM: NAVD88 & NAD83/WGS84

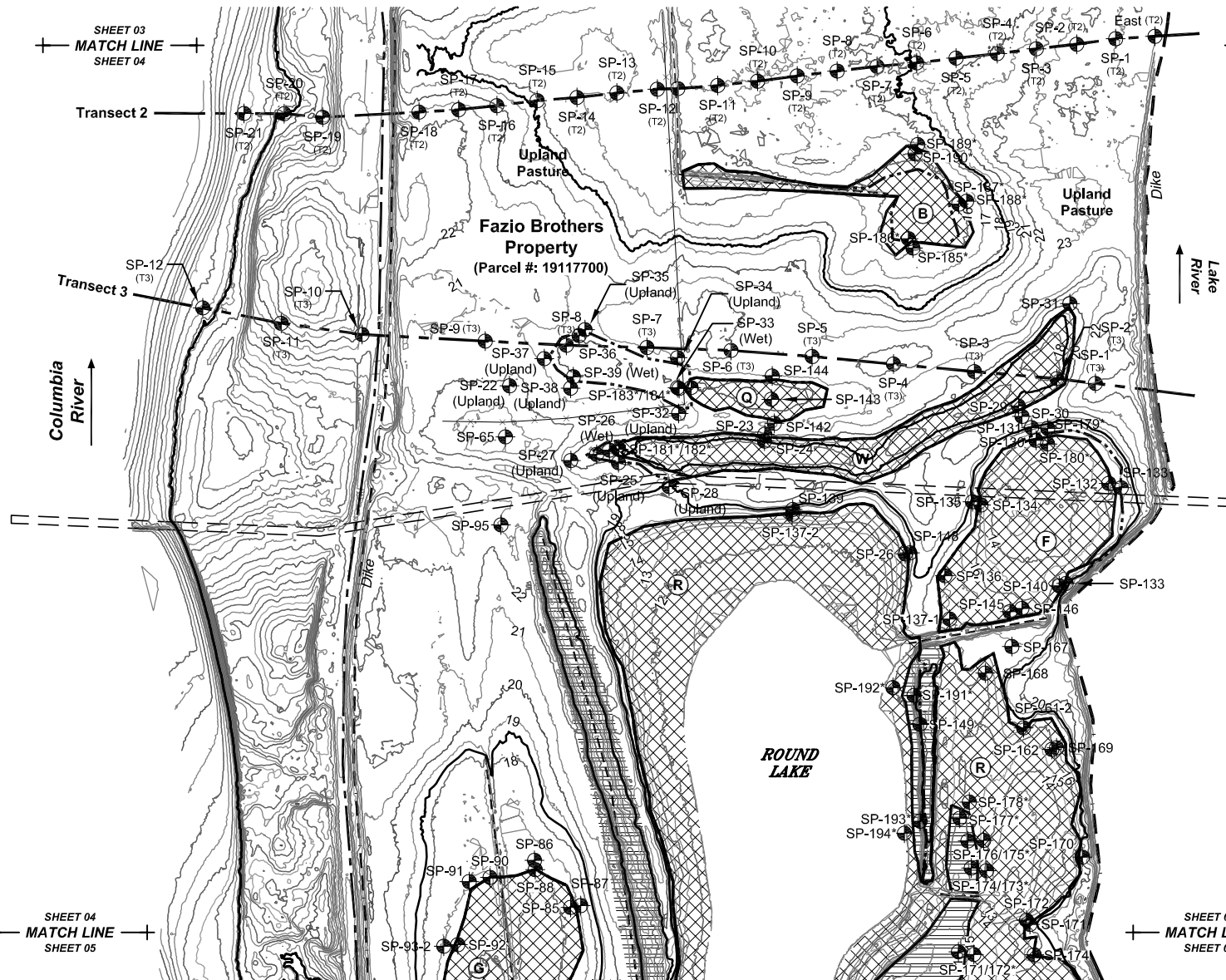
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www.HENDERSONDESIGN-BUILD.com

PH (503) 699-8999  
OR CCB# 142914  
WA CCB# HENDELS954QH





**LEGEND**

- Soil Plot
- SP-87 Soil Plot Number
- SP-87\* Taken June 2014
- (16,52) Elevation NAVD88
- (T2) Associated Transect
- Study Area Boundary
- Sewer Line Easement
- Wetland Boundary, 2014/2012
- Wetland Boundary, 2012
- Lower River Road C
- Ditch
- Fence
- Road
- OHWM - 18.5' (Extent of Proposed Inundation)
- Minor Contour - 1'
- Major Contour - 5'
- (M) Wetland Area Label
- Wetlands
- Upland Scrub Shrub

WETLANDS		
ID	CATEGORY *	AREA (ACRES)
B	III	1.33
F	III	3.30
G	III	2.78
Q	III	0.62
R	II	50.63
W	III	2.63

\* Category II = PEM Wetland with open water  
Category III = Seasonal PEM Wetland



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**JARPA  
FIGURES**

SHEET NUMBER

**04**

SHT 04 OF 17

DATUM: NAVD88 & NAD83/WGS84

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ROUND LAKE CONSERVATION BANK  
VANCOUVER, WASHINGTON

EXISTING CONDITIONS  
PLAN VIEW  
2 OF 3

Reference Number: NWS-2013-1123

Applicant Name: Richard Fazio

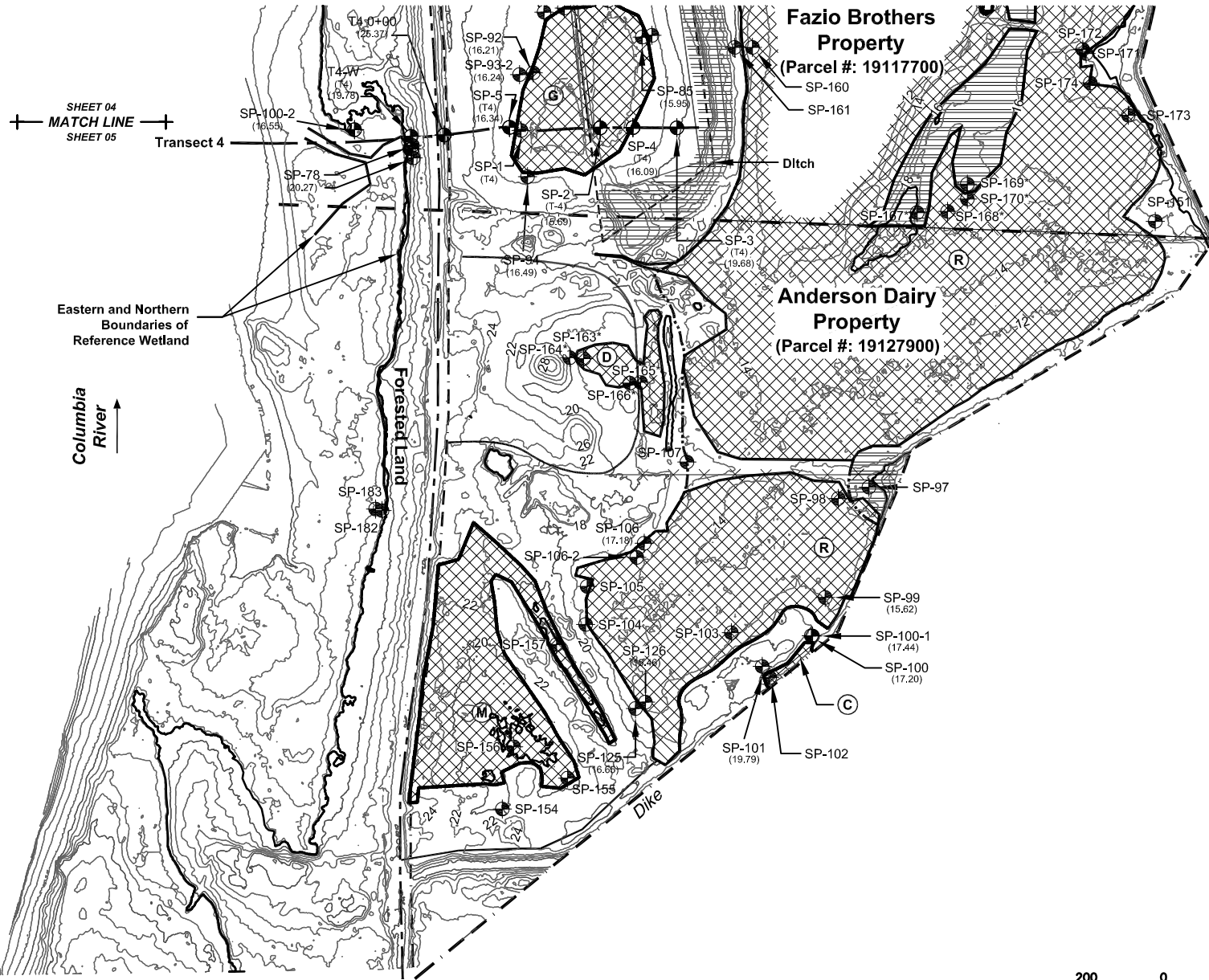
Proposed Project: Round Lake  
Conservation Bank

Location: 15017 Northwest Lower River Rd  
Vancouver, Washington, 98660

Survey Source:  
Statewide Land Surveying, Inc.  
227 N. Main Avenue  
Gresham, Oregon 97030

DESIGN: DG DRAWN: MM CHECKED: DG DATE: 09/25/14 REVISION: 2

PROJECT NUMBER: FAZIO-ANDERSON JV 13-1



ID	CATEGORY *	AREA (ACRES)
C	III	0.10
D	III	0.66
G	III	2.78
M	III	4.00
R	II	50.63

\* Category II = PEM Wetland with open water  
Category III = Seasonal PEM Wetland

LEGEND	
	Soil Plot
	SP-87 Soil Plot Number
	SP-87* Taken on 06/19/14 (16.52) Elevation NAVD88
	(T2) Associated Transect
	Study Area Boundary
	Parcel Boundary
	Wetland Boundary 2014/2012
	Wetland Boundary 2012
	Lower River Road CL
	Ditch
	Fence
	Road
	OHWM - 18.5' (Extent of Proposed Inundation)
	Minor Contour - 2'
	Major Contour - 10'
	(M) Wetland Area Label
	Wetlands
	Upland Scrub Shrub



THIS BOX 1" AT FULL SIZE

DATUM: NAVD88 & NAD83/WGS84

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ROUND LAKE CONSERVATION BANK  
VANCOUVER, WASHINGTON

**EXISTING CONDITIONS  
DIVIDED PLAN VIEW  
3 OF 3**

Reference Number: NWS-2013-1123  
Applicant Name: Richard Fazio  
Proposed Project: Round Lake  
Conservation Bank  
Location: 15017 Northwest Lower River Rd  
Vancouver, Washington, 98660

Survey Source:  
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227 N. Main Avenue  
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DESIGN: DG DRAWN: MM CHECKED: DG DATE: 09/25/14 REVISION: 2  
PROJECT NUMBER: FAZIO-ANDERSON JV 13-1

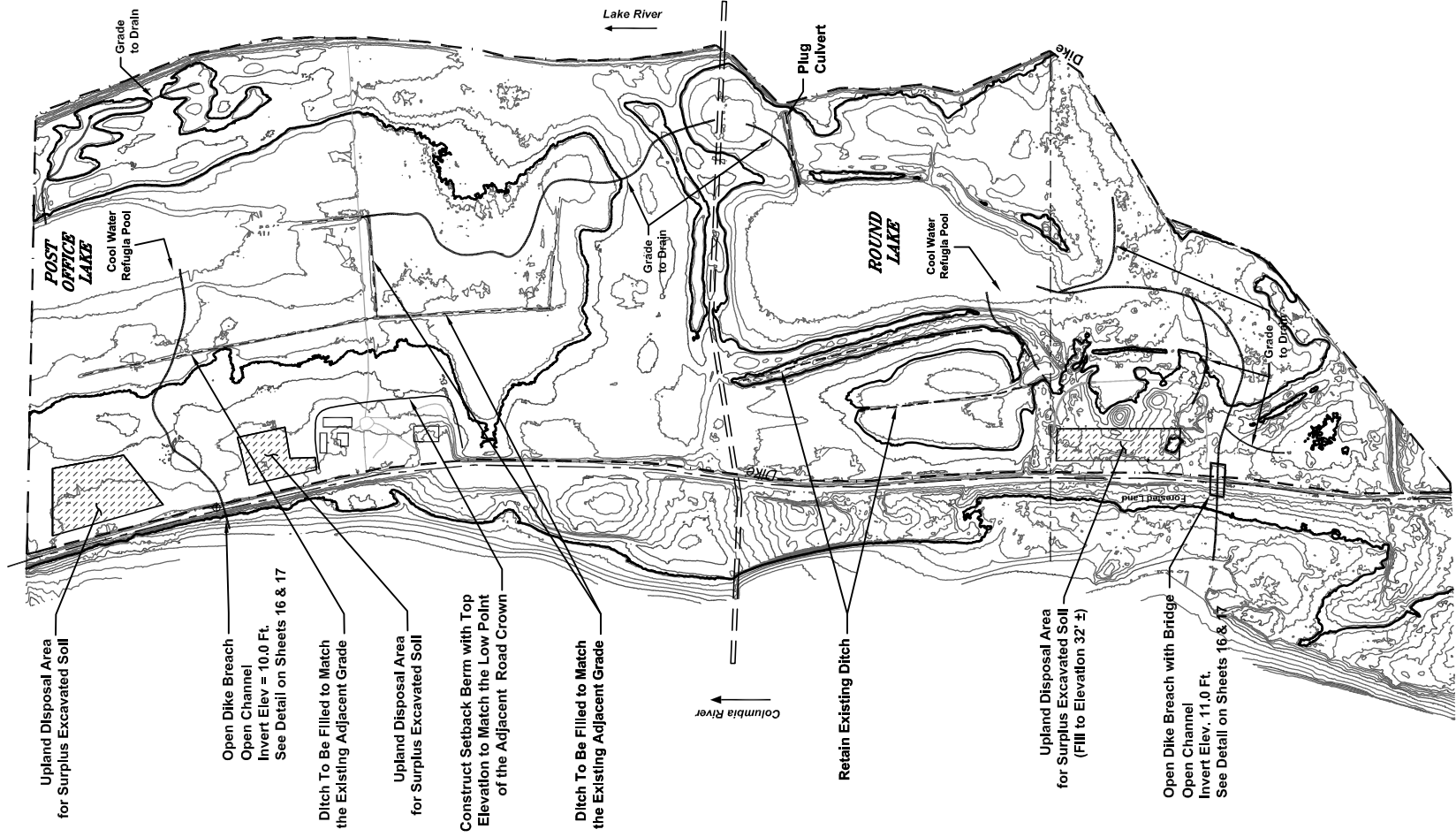
**JARPA  
FIGURES**

SHEET NUMBER

**05**

SHT 05 OF 17

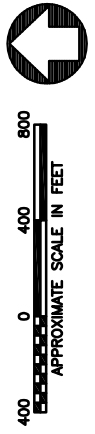




LEGEND

- Project Area Boundary
- Taxlot Line (Fazio/Andersen)
- Sewer Line Easement
- Proposed Channel
- Existing Ditch
- Lower River Road C
- Unpaved Road
- OHW - 18.5' (extent of proposed inundation)
- Minor Contour - 2'
- Major Contour - 10'
- Upland Disposal Area

- NOTES:
- Total Fill: Ditches = 500 linear feet, (0.230 acres), approximately 685 cubic yards.
  - Mixed Upland Forest will be inundated during 10-year and larger events.



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JARPA  
FIGURES

SHEET NUMBER  
06  
SHT. 06 OF 17

DATUM: NAVD88 & NAD83/WGS84

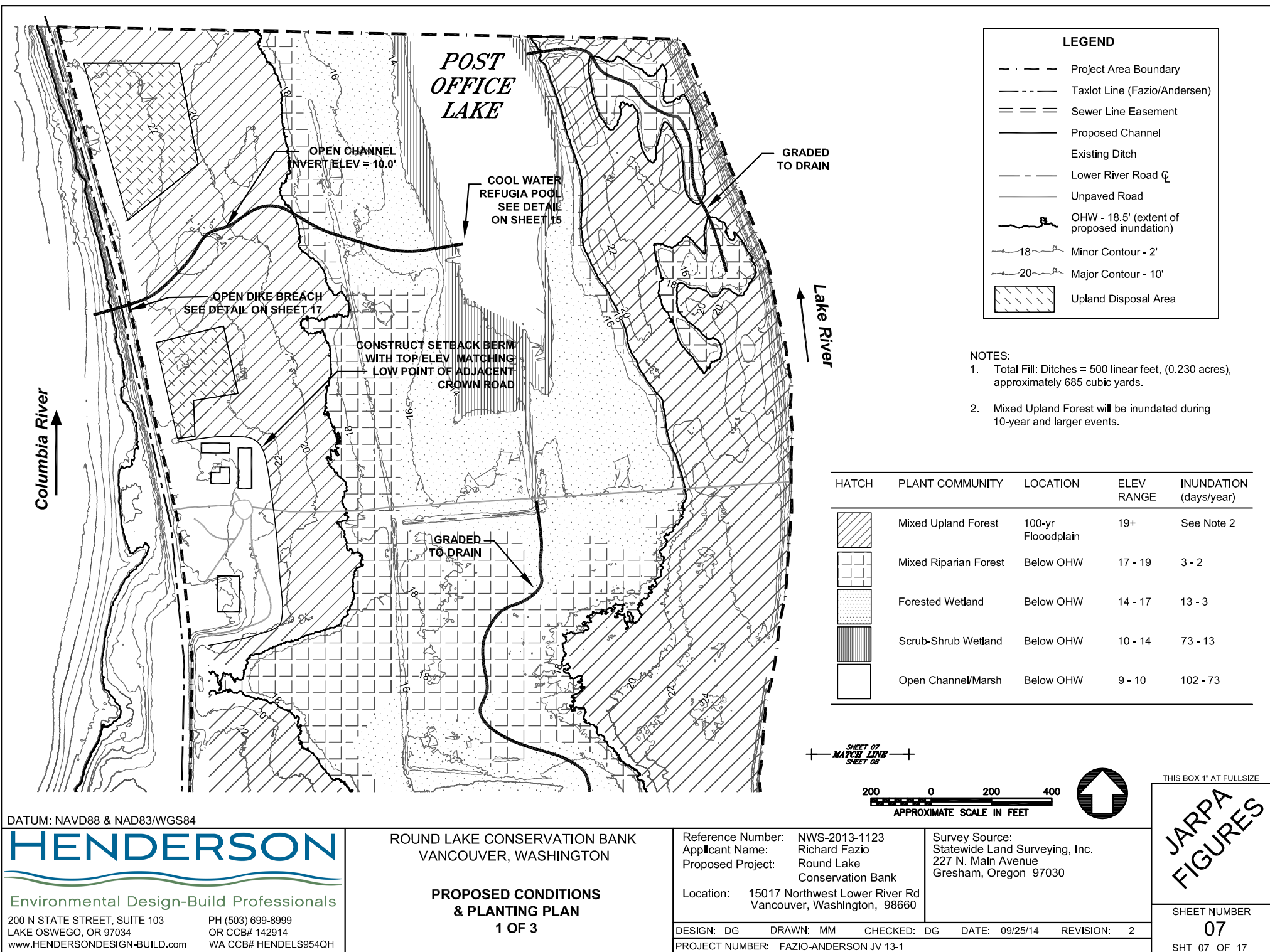
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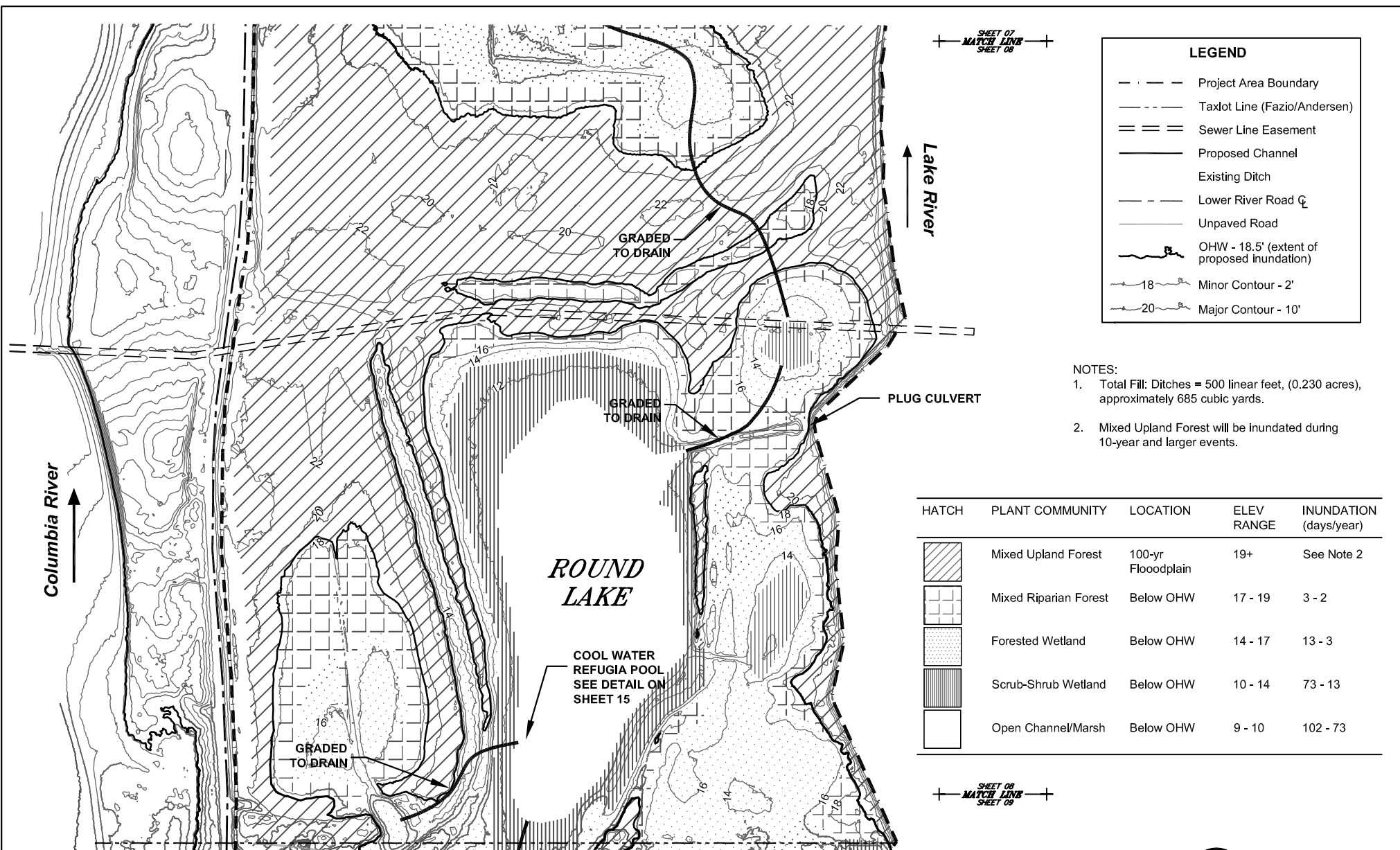
ROUND LAKE CONSERVATION BANK  
VANCOUVER, WASHINGTON

PROPOSED CONDITIONS  
PLAN VIEW

Reference Number: NWS-2013-123  
Applicant Name: Richard Fazio  
Proposed Project: Round Lake Conservation Bank  
Location: 15017 Northwest Lower River Rd  
Vancouver, Washington, 98660

DESIGN: DG	DRAWN: MM	CHECKED: DG	DATE: 09/25/14	REVISION: 2
PROJECT NUMBER: FAZIO-ANDERSON JV 13-1				





DATUM: NAVD88 & NAD83/WGS84

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ROUND LAKE CONSERVATION BANK  
VANCOUVER, WASHINGTON

**PROPOSED CONDITIONS  
& PLANTING PLAN**  
2 OF 3

Reference Number: NWS-2013-1123  
Applicant Name: Richard Fazio  
Proposed Project: Round Lake  
Conservation Bank

Location: 15017 Northwest Lower River Rd  
Vancouver, Washington, 98660

Survey Source:  
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DESIGN: DG DRAWN: MM CHECKED: DG DATE: 09/25/14 REVISION: 2

PROJECT NUMBER: FAZIO-ANDERSON JV 13-1



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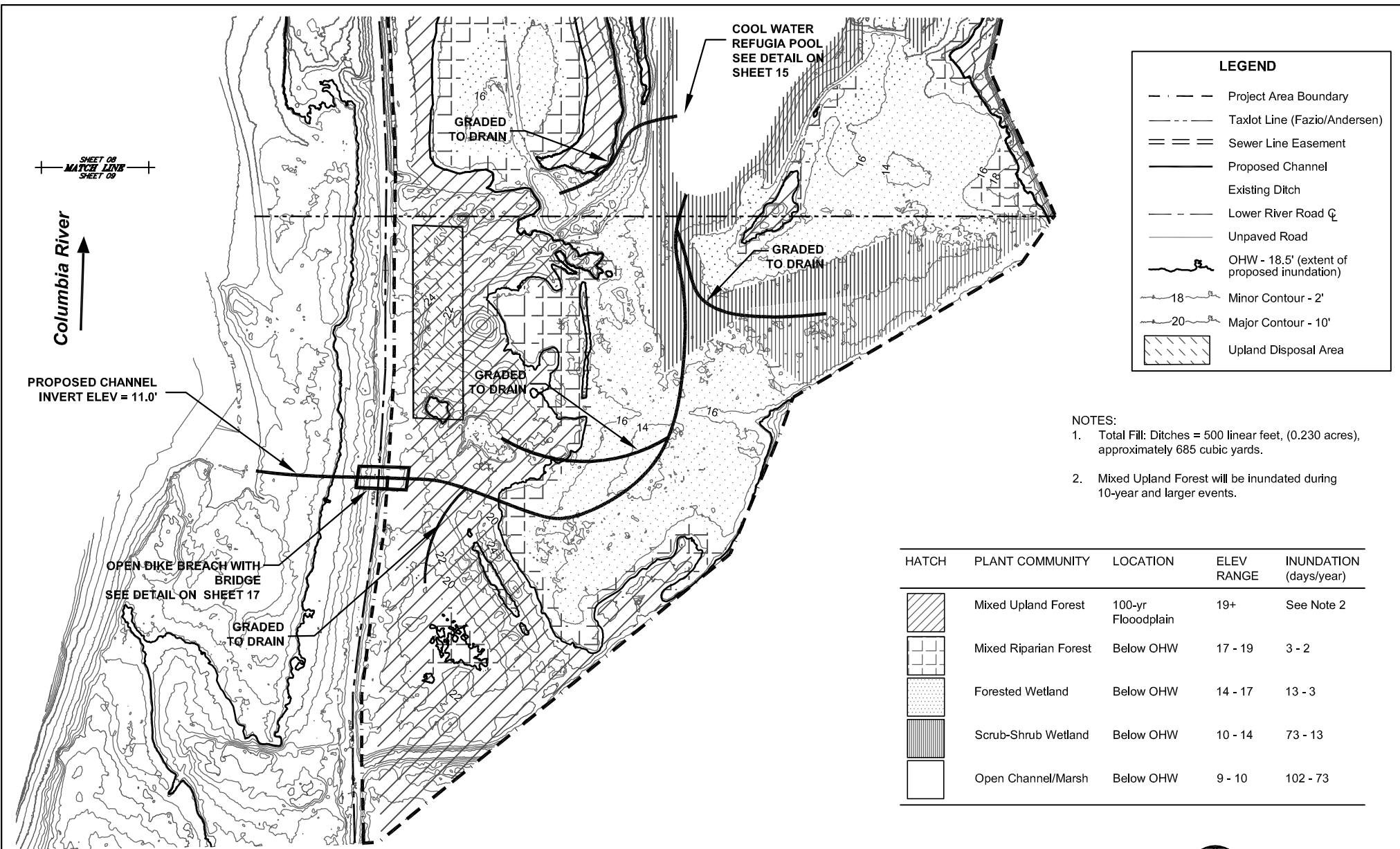
**JARPA  
FIGURES**

SHEET NUMBER

**08**

SHT 08 OF 17





DATUM: NAVD88 & NAD83/WGS84

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ROUND LAKE CONSERVATION BANK  
VANCOUVER, WASHINGTON

**PROPOSED CONDITIONS  
& PLANTING PLAN**  
3 OF 3

Reference Number: NWS-2013-1123  
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**JARPA  
FIGURES**

SHEET NUMBER  
**09**  
SHT 09 OF 17



Community Type	Elevation Range @ NAVD88 (Feet)	Range of Annual Inundation (Days)	Area of Inundation (Acres)	Latin Name	Common Name	Indicator Status	Form	Average Spacing <sup>1</sup> (ft. on cntr.)	Pounds /Acre	Percent <sup>2</sup> Composition	Plant Total by Species
Open Channel/Marsh (OCM)	9-10	102-72	5.76								
				<i>Eleocharis palustris</i>	common spikerush	OBL	Herb	1.5		35%	40,320
				<i>Sagittaria latifolia</i>	Wapato	OBL	Herb	1.5		2%	2,304
				<i>Carex sp.</i>	sedges	OBL - FACW	Herb	1.5		45%	51,840
				<i>Salix sessifolia</i>	sandbar willow	FACW	Shrub	6.0		4%	276
				<i>Cornus sericea</i>	Red-osier dogwood	FACW	Shrub	6.0		4%	276
				<i>Spiraea douglasii</i>	Spiraea	FACW	Shrub	6.0		10%	691
										100%	

Shrub-Scrub Wetland (SSW)	10-14	72-13	17.2	<i>Alnus rubra</i>	Red alder	FAC	Tree	4.7		3%	1,032
				<i>Fraxinus latifolia</i>	Oregon ash	FAC	Tree	4.7		3%	1,032
				<i>Populus trichocarpa</i>	Black cottonwood	FAC	Tree	4.7		4%	1,376
				<i>Salix lasiandra</i>	Pacific willow	FACW+	Tree	4.7		10%	3,440
				<i>Salix sitchensis</i>	Sitka willow	FACW	Tree	4.7		10%	3,440
				<i>Salix sessifolia</i>	sandbar willow	FACW	Shrub	4.7		5%	1,720
				<i>Cornus sericea</i>	Red-osier dogwood	FACW	Shrub	4.7		15%	5,160
				<i>Physocarpus capitatus</i>	Pacific ninebark	FACW-	Shrub	4.7		15%	5,160
				<i>Rosa pisocarpa</i>	Swamp rose	FAC	Shrub	4.7		15%	5,160
				<i>Spiraea douglasii</i>	Spiraea	FACW	Shrub	4.7		20%	6,880
				<i>Beckmania syzigachne</i>	Slough grass	OBL	Grass		10		
				<i>Deschampsia cespitosa</i>	Tufted hairgrass	FACW	Grass		5		
										100%	

1. Spacing is approximate. Plants should be planted in gently curving (not straight) rows following contours or stream meanders.

2. Species composition and tree to shrub ratio may be changed, but shrubs should represent 60-80% of stems and the total must equal 100%.

DATUM: NAVD88 & NAD83/WGS84

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ROUND LAKE CONSERVATION BANK  
VANCOUVER, WASHINGTON

**PLANT LIST  
1 OF 3**

Reference Number: NWS-2013-1123  
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**JARPA  
FIGURES**

SHEET NUMBER

10

SHT 10 OF 17

Community Type	Elevation Range @ NAVD88 (Feet)	Range of Annual Inundation (Days)	Area of Inundation (Acres)	Latin Name	Common Name	Indicator Status	Form	Average Spacing <sup>1</sup> (ft. on cntr.)	Pounds /Acre	Percent Composition <sup>2</sup>	Plant Total by Species
Forested Wetland (FW) below OHW	14-17	13-3	57.1	<i>Alnus rubra</i>	Red alder	FAC	Tree	4.3		7%	9,593
				<i>Fraxinus latifolia</i>	Oregon ash	FACW	Tree	4.3		8%	10,963
				<i>Populus trichocarpa</i>	Black cottonwood	FAC	Tree	4.3		7%	9,593
				<i>Thuja plicata</i>	Western red cedar	FAC	Tree	4.3		2%	2,741
				<i>Salix lasiandra</i>	Pacific willow	FACW+	Tree	4.3		12%	16,445
				<i>Cornus sericea</i>	Red-osier dogwood	FACW	Shrub	4.3		16%	21,926
				<i>Physocarpus capitatus</i>	Pacific ninebark	FACW-	Shrub	4.3		12%	16,445
				<i>Rosa pisocarpa</i>	Swamp rose	FAC	Shrub	4.3		8%	10,963
				<i>Rubus parviflorus</i>	Thimbleberry	FAC-	Shrub	4.3		8%	10,963
				<i>Spiraea douglasii</i>	Spiraea	FACW	Shrub	4.3		20%	27,408
				<i>Agrostis exarata</i>	Spike bentgrass	NI	Grass		5		
				<i>Deschampsia elongata</i>	Slender hairgrass	FACW	Grass		5		
										100%	

Mixed Riparian Forest (MRF) below OHW	17-18.5	3-1	51.5	<i>Acer macrophyllum</i>	Big leaf maple	FACU	Tree	5.4		10%	7,725
				<i>Alnus rubra</i>	Red alder	FAC	Tree	5.4		14%	10,815
				<i>Populus trichocarpa</i>	Black cottonwood	FAC	Tree	5.4		18%	13,905
				<i>Salix scouleriana</i>	Scouler's willow	FAC	Tree	5.4		12%	9,270
				<i>Salix sitchensis</i>	Sitka willow	FACW	Tree	5.4		2%	1,545
				<i>Thuja plicata</i>	Western red cedar	FAC	Tree	5.4		4%	3,090
				<i>Physocarpus capitatus</i>	Pacific ninebark	FACW-	Shrub	5.4		5%	3,863
				<i>Rosa pisocarpa</i>	Swamp rose	FAC	Shrub	5.4		10%	7,725
				<i>Rubus spectabilis</i>	Salmonberry	FAC+	Shrub	5.4		10%	7,725
				<i>Rubus parviflorus</i>	Thimbleberry	FAC-	Shrub	5.4		15%	11,588
				<i>Agrostis exarata</i>	Spike bentgrass	NI	Grass		5		
				<i>Deschampsia elongata</i>	Slender hairgrass	FACW	Grass		5		

1. Spacing is approximate. Plants should be planted in gently curving (not straight) rows following contours or stream meanders.

2. Species composition and tree to shrub ratio may be changed, but shrubs should represent 60-80% of stems and the total must equal 100%.

DATUM: NAVD88 & NAD83/WGS84

ROUND LAKE CONSERVATION BANK  
VANCOUVER, WASHINGTON

**PLANT LIST  
2 OF 3**

Reference Number: NWS-2013-1123  
Applicant Name: Richard Fazio  
Proposed Project: Round Lake Conservation Bank  
Location: 15017 Northwest Lower River Rd  
Vancouver, Washington, 98660

Survey Source:  
Statewide Land Surveying, Inc.  
227 N. Main Avenue  
Gresham, Oregon 97030

DESIGN: DG DRAWN: MM CHECKED: DG DATE: 09/25/14 REVISION: 2  
PROJECT NUMBER: FAZIO-ANDERSON JV 13-1

THIS BOX 1" AT FULLSIZE

**JARPA  
FIGURES**

SHEET NUMBER

**11**

SHT 11 OF 17

Community Type	Elevation Range @ NAVD88 (Feet)	Range of Annual Inundation (Days)	Area of Inundation (Acres)	Latin Name	Common Name	Indicator Status	Form	Average Spacing <sup>1</sup> (ft. on cntr.)	Pounds /Acre	Percent <sup>2</sup> Composition	Plant Total by Species
Mixed Upland Forest (MUF) within 100-Year Floodplain	18.5+	0	125.90	<i>Amelanchier alnifolia</i>	Serviceberry	FACU	Tree	4.7		6%	15,108
				<i>Pinus ponderosa</i>	Willamette ponderosa pine	FACU-	Tree	4.7		4%	10,072
				<i>Quercus garryana</i>	Oregon white oak	NI	Tree	4.7		20%	50,360
				<i>Pseudotsuga menziesii</i>	Douglas fir	FACU	Tree	4.7		12%	
				<i>Rhamnus purshiana</i>	Cascara	FAC-	Tree	4.7		8%	20,144
				<i>Holodiscus discolor</i>	Oceanspray		Shrub	4.7		8%	20,144
				<i>Mahonia aquifolium</i>	Tall Oregon grape	NI	Shrub	4.7		6%	15,108
				<i>Oemleria cerasiformis</i>	Indian plum	FACU	Shrub	4.7		8%	20,144
				<i>Rosa pisocarpa</i>	Swamp rose	FAC	Shrub	4.7		6%	15,108
				<i>Rubus parviflorus</i>	Thimbleberry	FAC-	Shrub	4.7		4%	10,072
				<i>Sambucus racemosa</i>	Red elderberry	FACU	Shrub	4.7		6%	15,108
				<i>Symphoricarpos albus</i>	Snowberry	FACU	Shrub	4.7		12%	30,216
				<i>Bromus sitkensis</i>	Sitka brome	NI	Grass		15		
				<i>Danthonia californica</i>	California oatgrass	FACU	Grass		15		
				<i>Elymus glaucus</i>	Blue wildrye	FACU	Grass		15		
				<i>Hordeum brachyantherum</i>	Meadow Barley	NI	Grass		15		
										100%	

1. Spacing is approximate. Plants should be planted in gently curving (not straight) rows following contours or stream meanders.

2. Species composition and tree to shrub ratio may be changed, but shrubs should represent 60-80% of stems and the total must equal 100%.

## PLANTING OVERVIEW

Community Type	Area (acres)	Tree-Shrub Density (Average per acre)	Herb Density (Average per acre)	Trees	Shrubs	Herbs	Community Subtotal	Grass Seed <sup>3</sup> (lbs)
Open Channel/Marsh	5.76	1200	20000	0	1,244	94,464	95,708	S
Shrub-Scrub Wetland	17.2	2000	0	10,320	24,080	0	34,400	258
Forested Wetland <OHW	57.1	2400	0	49,334	87,706	0	137,040	571
Mixed Riparian Forest <OHW	51.5	1500	0	46,350	30,900	0	77,250	515
Mixed Upland Forest w/in FP	125.9	2000	0	95,684	125,900	0	221,584	7554
<b>Total</b>	<b>257.46</b>			<b>201688</b>	<b>269830</b>	<b>94464</b>	<b>565982</b>	<b>8898</b>

3. Grass seed is to establish and maintain cover for improved weed control. Seeding may not be necessary on some portions of the site.

DATUM: NAVD88 & NAD83/WGS84



ROUND LAKE CONSERVATION BANK  
VANCOUVER, WASHINGTON

### PLANT LIST 3 OF 3 & PLANTING OVERVIEW

Reference Number: NWS-2013-1123  
Applicant Name: Richard Fazio  
Proposed Project: Round Lake Conservation Bank  
Location: 15017 Northwest Lower River Rd  
Vancouver, Washington, 98660

Survey Source:  
Statewide Land Surveying, Inc.  
227 N. Main Avenue  
Gresham, Oregon 97030

DESIGN: DG DRAWN: MM CHECKED: DG DATE: 09/25/14 REVISION: 2  
PROJECT NUMBER: FAZIO-ANDERSON JV 13-1

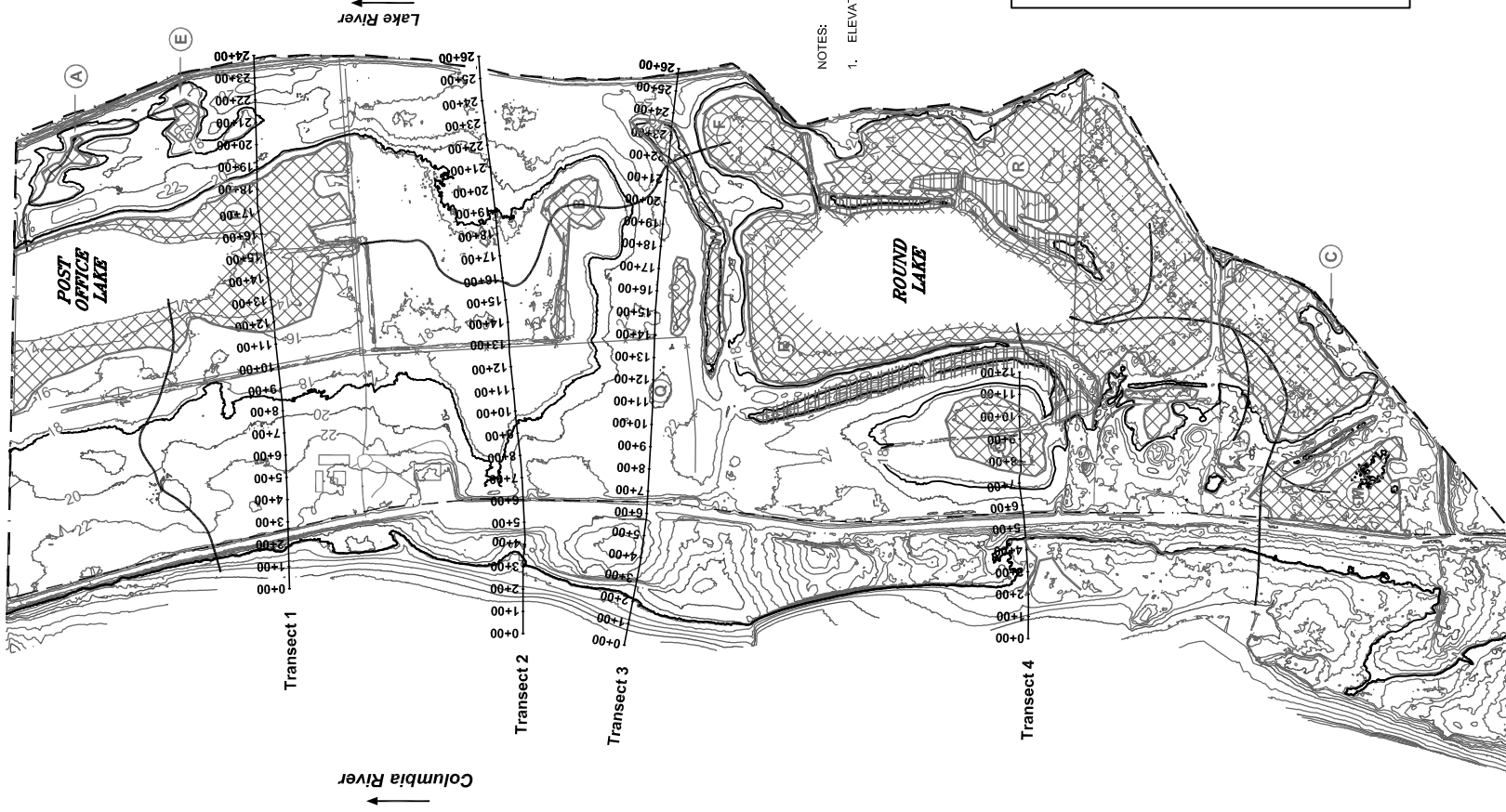
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JARPA  
FIGURES

SHEET NUMBER

12

SHT 12 OF 17



NOTES:

1. ELEVATION VIEWS OF TRANSECTS ON SHEET C4.2

LEGEND

Study Area Boundary

Wetland Boundary

Existing Ditch

Fence

Existing Access Road

Proposed Channel

Minor Contour - 2'

Major Contour - 10'

OHWM - 18.5'

Wetland Area Label

Wetlands

Upland Shrub Scrub

THIS BOX 1" AT FULL SIZE



JARPA  
FIGURES

SHEET NUMBER  
13  
SHT 13 OF 17

DATUM: NAVD88 & NAD83/WGS84

**HENDERSON**

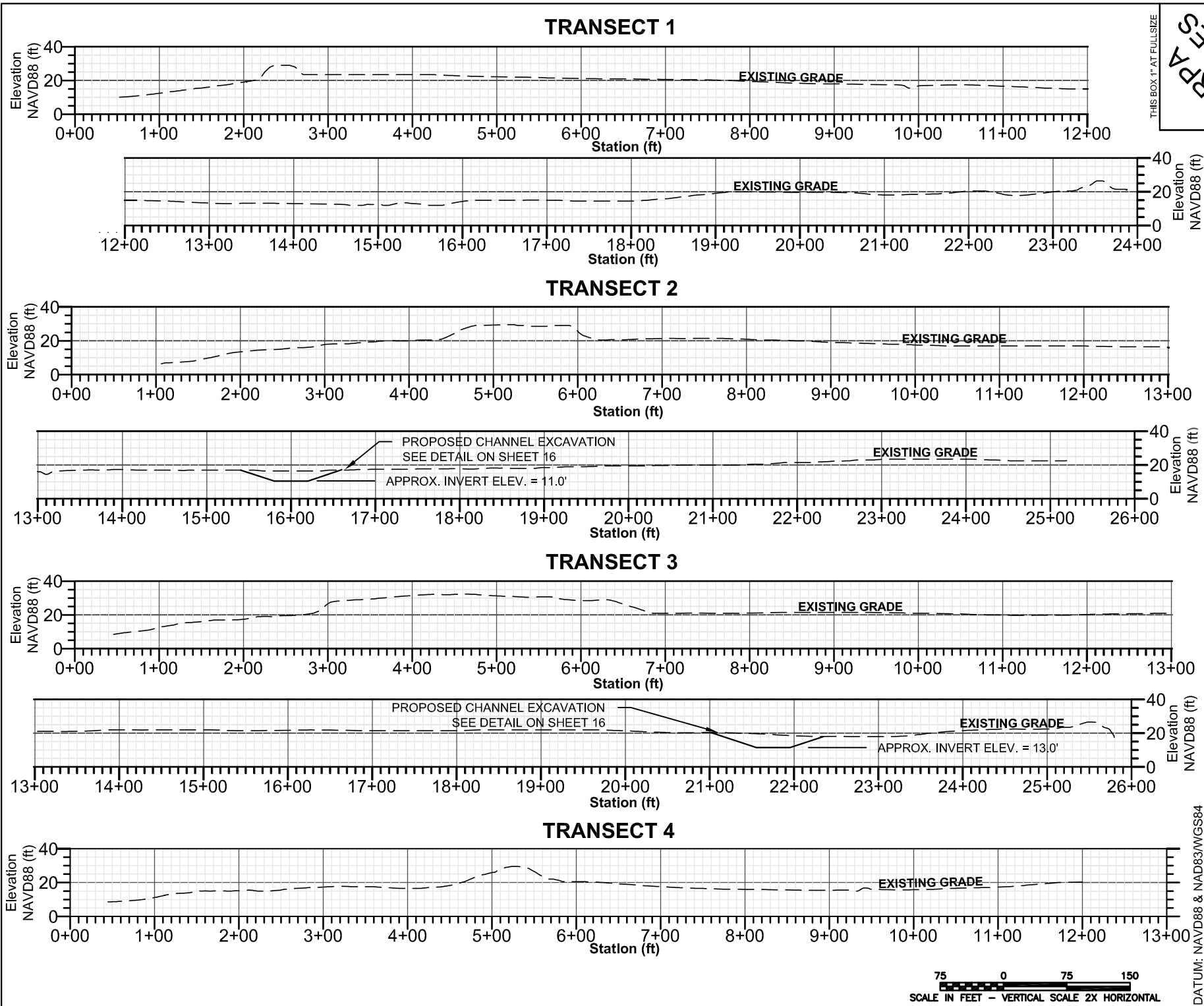
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ROUND LAKE CONSERVATION BANK  
VANCOUVER, WASHINGTON

CROSS SECTION LOCATIONS  
PLAN VIEW

Reference Number: NWS-2013-1123  
Applicant Name: Richard Fazio  
Proposed Project: Round Lake Conservation Bank  
Location: 15017 Northwest Lower River Rd  
Vancouver, Washington, 98660

DESIGN: DG DRAWN: MM CHECKED: DG DATE: 07/30/14 REVISION: 2  
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**JARPA  
FIGURES**

SHEET NUMBER  
**14**  
SHT 14 OF 17

Reference Number: NWS-2013-1123	Applicant Name: Richard Fazio	Proposed Project: Round Lake Conservation Bank	Location: 15017 Northwest Lower River Rd Vancouver, Washington, 98660
DESIGN: DG	DRAWN: MM	CHECKED: DG	DATE: 09/25/14
PROJECT NUMBER: FAZIO-ANDERSON JV 13-1		REVISION: 2	

**TRANSECTS 1 - 4  
ELEVATION VIEW**

ROUND LAKE CONSERVATION BANK  
VANCOUVER, WASHINGTON

**HENDERSON**

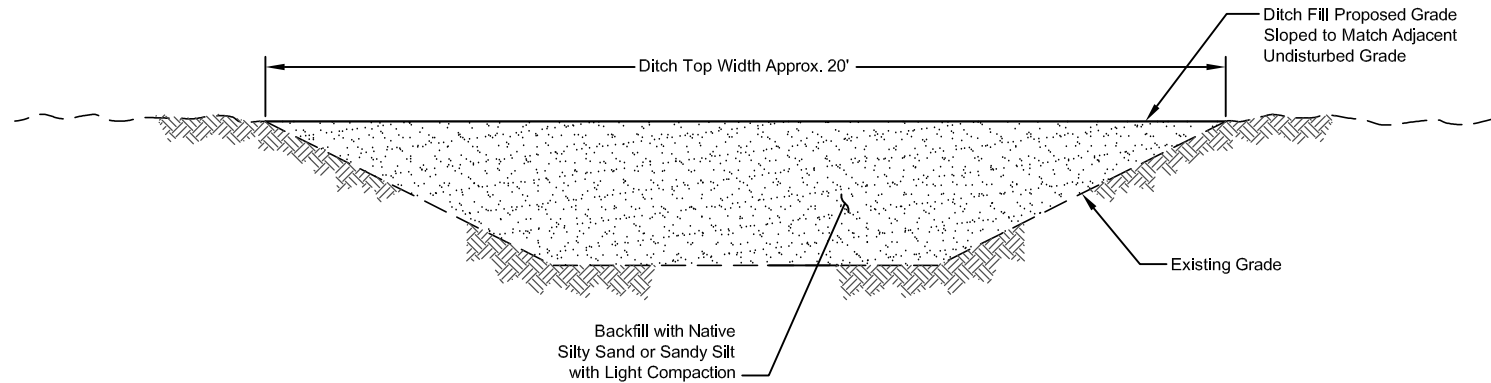
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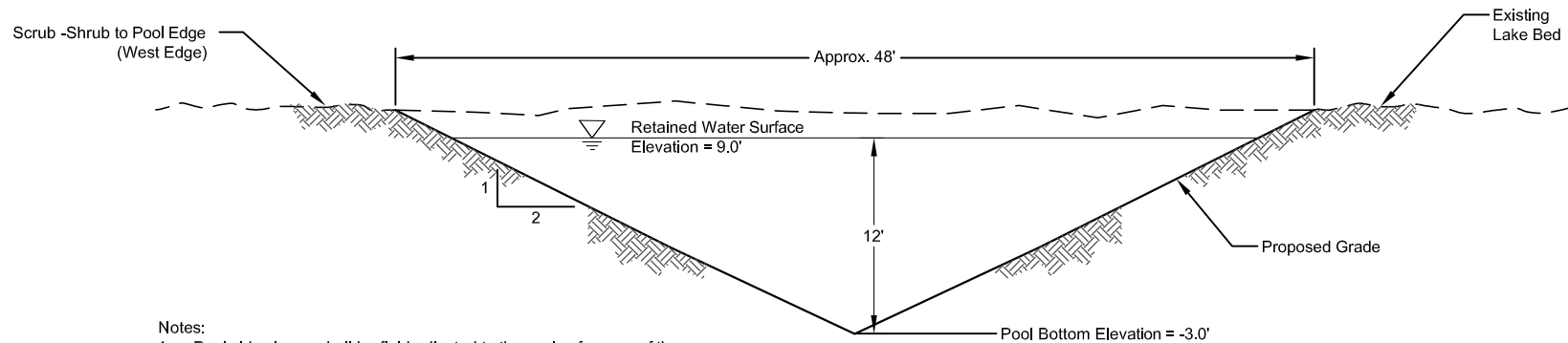
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OR CCB# 142914  
WA CCB# HENDELS954QH

75 0 75 150  
SCALE IN FEET - VERTICAL SCALE 2X HORIZONTAL

DATUM: NAVD88 & NAD83/WGS84



**DITCH FILL - TYPICAL SECTION**  
Not to Scale



**Notes:**

1. Pool side slopes shall be field adjusted to the angle of repose of the saturated native material.
2. Section is shown for the Columbia River water surface elevation below 9.0'.
3. Pool length is approximately 200 feet.

**COOL WATER REFUGIA POOL - TYPICAL SECTION**  
Not to Scale

DATUM: NAVD88 & NAD83/WGS84

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ROUND LAKE CONSERVATION BANK  
VANCOUVER, WASHINGTON

**DETAILS 1:  
DITCH FILL AND  
COOL WATER REFUGIA POOL**

Reference Number: NWS-2013-1123  
Applicant Name: Richard Fazio  
Proposed Project: Round Lake  
Conservation Bank  
Location: 15017 Northwest Lower River Rd  
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Survey Source:  
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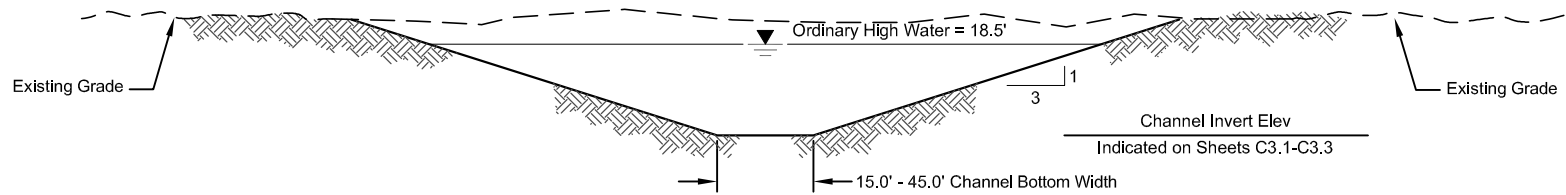
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**JARPA  
FIGURES**

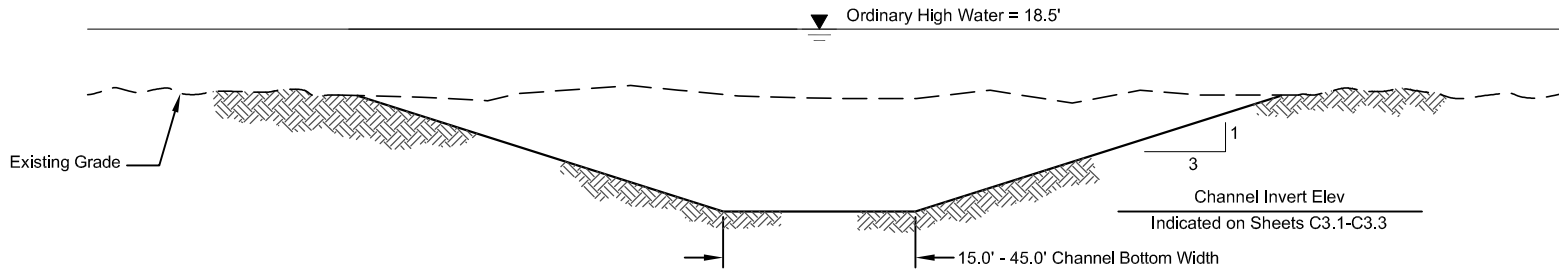
SHEET NUMBER

**15**

SHT 15 OF 17



**Open Channel - Existing Grade Above Ordinary High Water**  
**Typical Elevation View**  
**Not to Scale**



**Open Channel - Existing Grade Below Ordinary High Water**  
**Typical Elevation View**  
**Not to Scale**

DATUM: NAVD88 & NAD83/WGS84

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ROUND LAKE CONSERVATION BANK  
VANCOUVER, WASHINGTON

**DETAILS 2:  
OPEN CHANNEL EXCAVATION**

Reference Number: NWS-2013-1123  
 Applicant Name: Richard Fazio  
 Proposed Project: Round Lake Conservation Bank  
 Location: 15017 Northwest Lower River Rd  
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Survey Source:  
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 227 N. Main Avenue  
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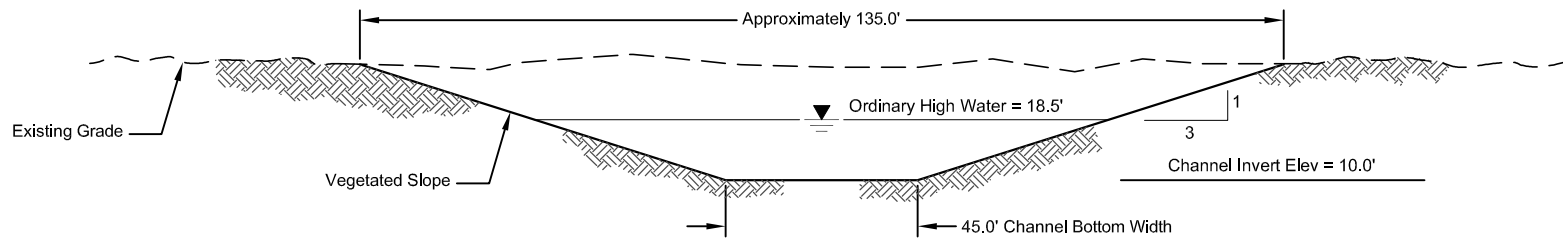
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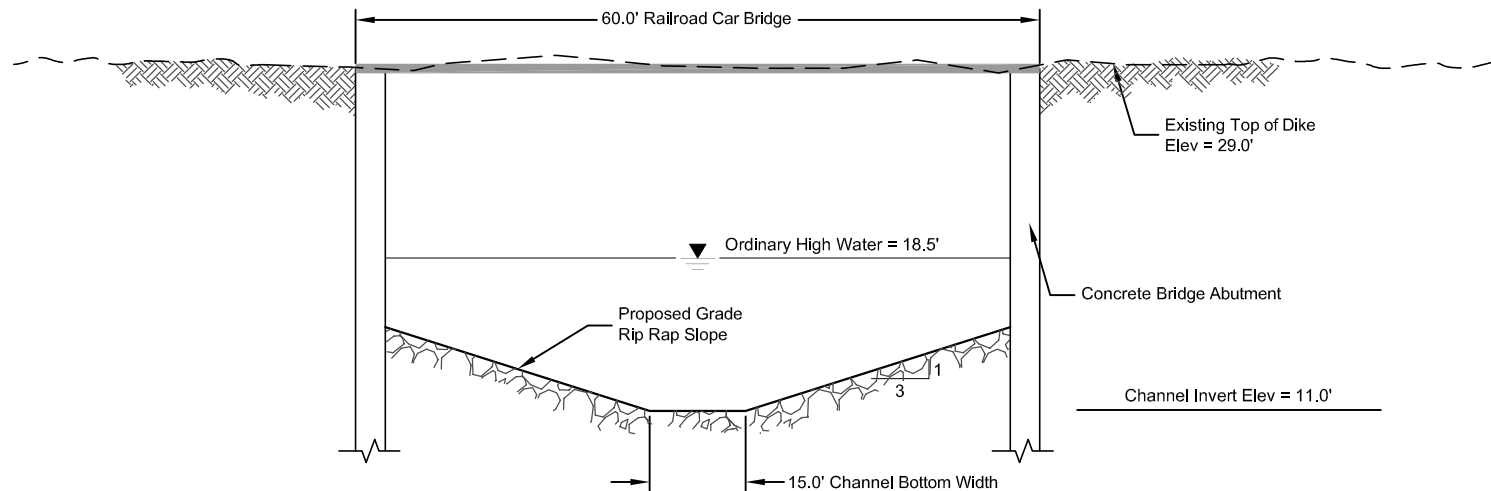
**JARPA  
FIGURES**

SHEET NUMBER  
**16**  
 SHT 16 OF 17





**North Dike Breach - Elevation View**  
Not to Scale



**South Dike Breach - Elevation View**  
Not to Scale

DATUM: NAVD88 & NAD83/WGS84

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ROUND LAKE CONSERVATION BANK  
VANCOUVER, WASHINGTON

**DETAILS 3:  
DIKE BREACHES**

Reference Number: NWS-2013-1123  
Applicant Name: Richard Fazio  
Proposed Project: Round Lake  
Conservation Bank  
Location: 15017 Northwest Lower River Rd  
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Survey Source:  
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**JARPA  
FIGURES**

SHEET NUMBER

**17**

SHT 17 OF 17