



US Army Corps  
of Engineers  
Seattle District



WASHINGTON STATE  
DEPARTMENT OF  
ECOLOGY

# Joint Public Notice

RECEIVED

AUG 29 2008

Washington State  
Department of Ecology

## 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) 764-6906  
Attn: Jim Green, Project Manager

WA Department of Ecology  
SEA Program  
300 Desmond Drive Southeast  
Olympia, WA 98503-7600  
Telephone (360) 407-6068  
Attn: SEA Program, Federal Permit  
Coordinator

Public Notice Date: August 29, 2008  
Expiration Date: September 28, 2008

Reference No.: NWS-2008-313-SO  
Name: Jones, Doug

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 United States as described below and shown on the enclosed drawings.

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

APPLICANT: Doug Jones  
Post Office Box 4602  
Wenatchee, Washington 98807  
Telephone: (509) 662-8255

ENTERED

AGENT: Berglund, Schmidt & Associates, Inc.  
216 East 1<sup>st</sup> Street  
Aberdeen, Washington 98520  
ATTN: Mr. Hari Sharma  
Telephone: (360) 532-7630

LOCATION: In wetlands adjacent to the Pacific Ocean near Grayland, Grays Harbor County, Washington.

WORK: Place fill material into 0.26 of an acre of interdunal wetlands for construction of an access road to upland portions of the property.

PURPOSE: The purpose of the project is to allow for future development of family cabins and/or RV hookups on the upland portions of the property.

MITIGATION: To mitigate for the loss of 0.26 acres of (describe) wetlands, the applicant is proposing to preserve 1.88 acres of onsite wetlands and create 0.53 acres of wetlands. Soils would be excavated to the elevation of the existing wetlands. The mitigation area will be planted with similar plant species that occur on the subject property and invasive weeds would be eliminated. Habitat features would also be created by placing large woody

debris into the created wetland to improve wildlife habitat functions. Five bird houses and five bat boxes would also be installed within the wetland area. A box culvert would be installed to allow for water exchange from one side of the new access road to the other.

**ENDANGERED SPECIES:** The Endangered Species Act (ESA) requires federal agencies to consult with the National Marine Fisheries Service (NMFS) and/or U.S. Fish and Wildlife Service (USFWS) pursuant to Section 7 of 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 U.S. Army Corps of Engineers (Corps) has determined that the proposed action will not adversely affect designated EFH for federally managed fisheries in Washington waters. No further EFH consultation is necessary.

**CULTURAL RESOURCES:** The District Engineer has reviewed the latest published version of the National Register of Historic Places, lists of properties determined eligible and other sources of information. There are no recorded historic properties within the permit area. The proposed work is of such a limited nature and extent that little likelihood exists for the project to impinge upon an unrecorded historic property. The District Engineer invites responses to this public notice from Native American Nations or tribal governments; Federal, State, and local agencies; historical and archeological societies; and other parties likely to have knowledge of or concerns with historic properties in the area. This public notice initiates consultation under Section 106 of the National Historic Preservation Act with any Tribe that has information or concerns with historic properties in the proposed permit area.

**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.

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.

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 is the subject of Shorelines Substantial Development Permit application being processed by Grays Harbor 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 it would be in the public interest to authorize this proposal. 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 commentator'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.

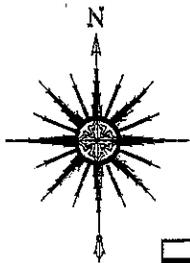
Corps comments: All e-mail comments should be sent to [james.d.green@usace.army.mil](mailto:james.d.green@usace.army.mil). Conventional mail comments should be sent to U.S. Army Corps of Engineers, Regulatory Branch, Attn: Mr. Jim Green, Post Office Box 3755, Seattle, Washington, 98124-3755.

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 and/or Coastal Zone Management consistency concurrence, may do so by submitting written comments to the following address: Department of Ecology, Attn: SEA program – Federal Permit Coordinator, P.O. Box 47600, Olympia, Washington, 98503-7600, or e-mail to [ecyrefedpermit@ecy.wa.gov](mailto:ecyrefedpermit@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: Doug Jones - Ref No. NWS-2008-313-SO

Encl: Figures (9 drawing sheets)

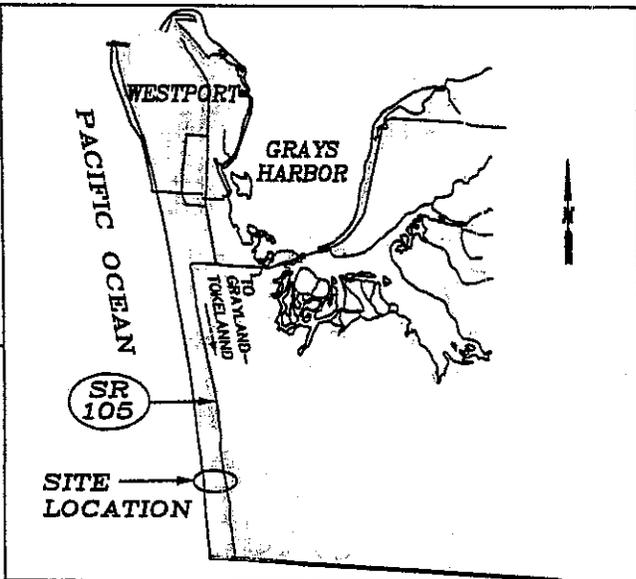
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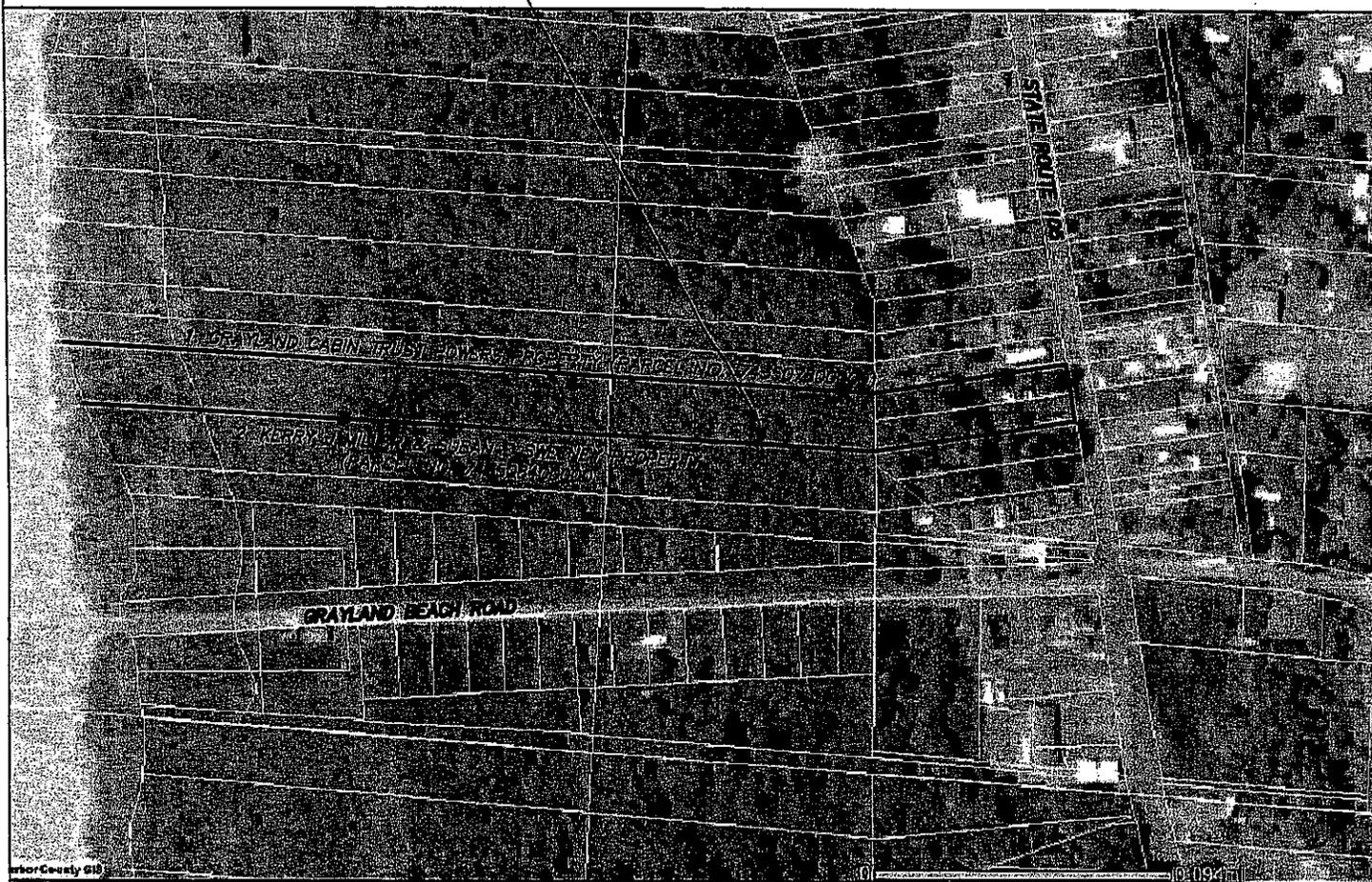
VICINITY MAP

LOCATION:  
N 46° 48' 38", W 124° 05' 39"  
SEC. 06, T. 15N, R. 11W, W.M.

SCALE: 1"=300 FEET



SITE LOCATION  
1743 STATE ROUTE 105  
GRAYLAND, WA 98547



NWS-2008-313-50

PURPOSE: PRIVATE DRIVEWAY  
CONSTRUCTION

NAME: DOUGLAS & JILL JONES

PROPOSED: FILL 0.26 ACRES & BOX  
CULVERT ADDITIONS

DATUM: N.A.

REFERENCE #:

IN: PALUSTRINE FORESTED WETLANDS  
NEAR THE PACIFIC OCEAN

ADJACENT PROPERTY OWNERS.  
1. GRAYLAND CABIN TRUST POWERS  
2. KERRY J. MILLER & SUSAN E.  
SWEENEY

SITE LOCATION ADDRESS:  
1743 STATE ROUTE 105  
GRAYLAND, WA 98547

NEAR: GRAYLAND  
COUNTY: GRAYS HARBOR STATE: WA  
SHEET: 1 OF 9  
DATE: 07/08/08

PLAN VIEW

SCALE: 1"=200 FEET



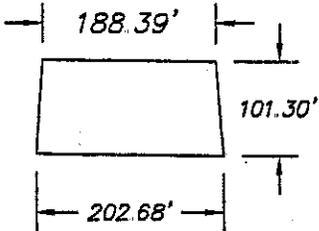
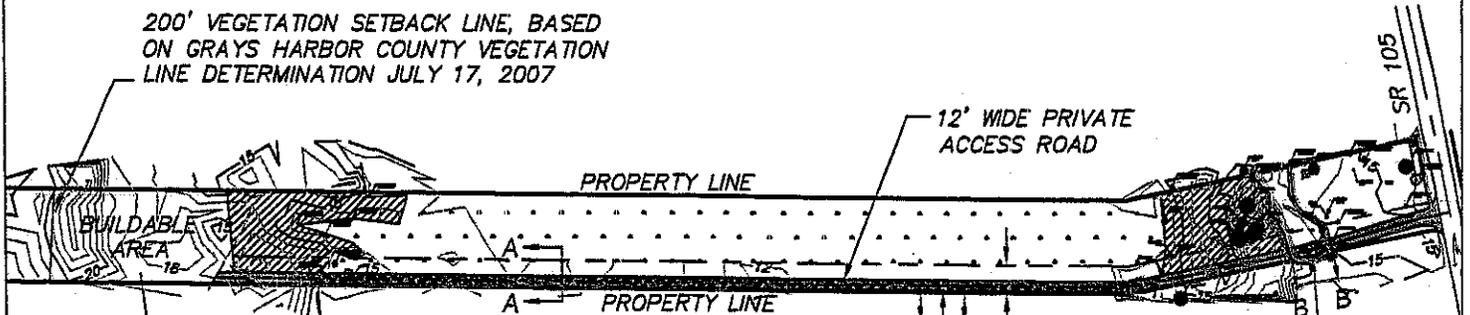
VERTICAL DATUM  
ASSUMED 100.00'

11992 ft<sup>2</sup>  
0.275 Acres

11002 ft<sup>2</sup>  
0.253 Acres

WETLAND MITIGATION AREAS  
22994 ft<sup>2</sup> Total  
0.528 Acres Total

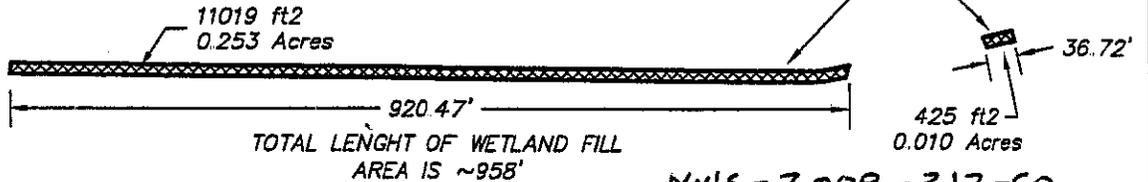
200' VEGETATION SETBACK LINE, BASED  
ON GRAYS HARBOR COUNTY VEGETATION  
LINE DETERMINATION JULY 17, 2007



BUILDABLE AREA  
19791 ft<sup>2</sup> (Total)  
0.454 Acres (Total)

6'x3' BOX CULVERT TO BE  
LOCATED AT THE LOWEST  
ELEVATION OF WETLAND TO  
ALLOW FOR WATER FLOW FROM  
ONE SIDE OF NEW ACCESS ROAD  
TO THE OTHER

WETLAND FILL AREAS  
11444 ft<sup>2</sup> Total  
0.263 Acres Total



NWIS-2008-313-50

PURPOSE: PRIVATE DRIVEWAY  
CONSTRUCTION

NAME: DOUGLAS & JILL JONES

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CULVERT ADDITION

DATUM: N.A.

REFERENCE #:

IN: PALUSTRINE FORESTED WETLANDS  
NEAR THE PACIFIC OCEAN

ADJACENT PROPERTY OWNERS.  
1. GRAYLAND CABIN TRUST POWERS  
2. KERRY J. MILLER & SUSAN E.  
SWEENEY

SITE LOCATION ADDRESS:  
1743 STATE ROUTE 105  
GRAYLAND, WA 98547

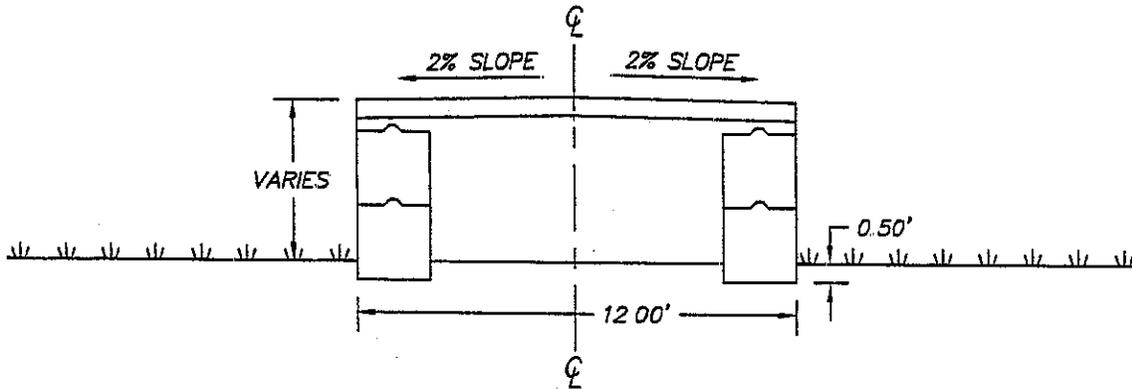
NEAR: GRAYLAND  
COUNTY: GRAYS HARBOR STATE: WA  
SHEET: 2 OF 9  
DATE: 07/08/08

CROSS-SECTIONS

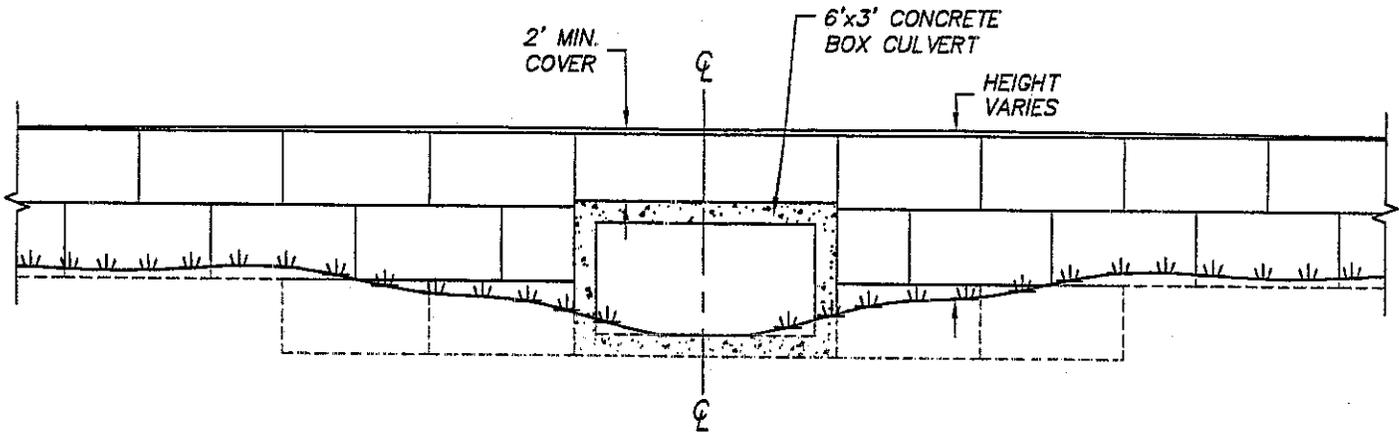


VERTICAL DATUM  
ASSUMED 100.00'

SCALE: 1"=40 FEET



ROAD CROSS-SECTION A-A



CULVERT CROSS-SECTION B-B

NWS-2008-313-S0

PURPOSE: PRIVATE DRIVEWAY  
CONSTRUCTION

DATUM: N.A.

ADJACENT PROPERTY OWNERS.  
1. GRAYLAND CABIN TRUST POWERS  
2. KERRY J. MILLER & SUSAN E.  
SWEENEY

NAME: DOUGLAS & JILL JONES

REFERENCE #:

SITE LOCATION ADDRESS:  
1743 STATE ROUTE 105  
GRAYLAND, WA 98547

PROPOSED: FILL 0.26 ACRES & BOX  
CULVERT ADDITIONS

IN: PALUSTRINE FORESTED WETLANDS  
NEAR THE PACIFIC OCEAN

NEAR: GRAYLAND

COUNTY: GRAYS HARBOR STATE: WA

SHEET: 3 OF 9

DATE: 07/08/08

CONCEPTUAL MITIGATION PLAN

PE Consultants LLC has prepared summary of the mitigation plan on the 3.5-acre subject property (# 743508000000) located at 1743 State Route 105, Grayland, Grays Harbor County, Washington, Section 6, Township 15 North, Range 11 West, Willamette Meridian.

**PROJECT DESCRIPTION**

The project consists of an access road construction to a building site on the western portion of the subject property. The road will measure 12-feet in width. The project engineer has calculated the area of wetland impacts associated with the access road construction. Unavoidable impacts will include the fill of 11,444 sf of wetlands in association with the construction of the access road (Table 1). Wetland preservation is proposed to the greatest extent practicable totaling 81,723 s. f. Wetland mitigation will occur at a 2:1 replacement to loss ratio totaling 22,994 sf in size. Wetland mitigation consists of wetland creation. Soils will be excavated to the elevation of the existing wetlands. Spoils from the wetland creation areas will either be used in the on-site road construction or be hauled off-site to a pre-determined authorized location. The wetland mitigation area will be planted with similar plant species that occur on the subject property. Habitat features, such as large woody debris, will be placed in the created wetland to enhance habitat functions.

NWS-2008-313-50

PURPOSE: PRIVATE DRIVEWAY  
CONSTRUCTION

DATUM: N.A.

ADJACENT PROPERTY OWNERS.  
1. GRAYLAND CABIN TRUST POWERS  
2. KERRY J. MILLER & SUSAN E.  
SWEENEY

NAME: DOUGLAS & JILL JONES

REFERENCE #:

SITE LOCATION ADDRESS:  
1743 STATE ROUTE 105  
GRAYLAND, WA 98547

PROPOSED: FILL 0.26 ACRES & BOX  
CULVERT ADDITIONS

IN: PALUSTRINE FORESTED WETLANDS  
NEAR THE PACIFIC OCEAN

NEAR: GRAYLAND

COUNTY: GRAYS HARBOR STATE: WA

SHEET: 4 OF 9

DATE: 07/08/08

CONCEPTUAL MITIGATION PLAN

**Table 1. Impacts and Preferred Proposed Mitigation Strategy**

Wetland	Area on site	Impacts	Preservation	Mitigation
A	89,825 sf	11,019 sf	78,806 sf	Create 22,994 sf of wetlands at a 2:1 replacement to loss ratio
B	3,342 sf	425 sf	2,917 sf	
Total	93167	11,444	81,723 sf	
Wetland mitigation will involve the creation of high quality wetlands at a 2:1 replacement to loss ratio. Soils will be excavated to the elevation of the existing wetlands. Spoils from the wetland creation areas will either be used in the on-site road construction or be hauled off-site to a pre-determined authorized location. The wetland mitigation area will be planted with similar plant species that occur on the subject property. Habitat features, such as large woody debris, will be placed in the created wetland to enhance habitat functions.				

**WETLAND MITIGATION PLAN**

This plan includes the: 1) creation of a high quality wetland at a 2:1 replacement ratio, 2) enhancement of the created wetland through eliminating invasive weeds and planting native vegetation, 3) preservation of the remaining wetlands on the subject property (See Table 1).

Wetland functions are expected to improve with the installation of a 5 bird houses and 5 bat boxes within the wetland area. Habitat diversity would be improved through the installation of habitat features in the wetland that include placing a select number of downed logs over 12-inches in diameter on the forest floor, and/or by moving additional wood and downed woody debris into the created wetland to improve wildlife habitat functions.

No cutting of forests will occur to create wetlands in the mitigation areas. Mitigation areas primarily consist of a shrub-shrub vegetation community with some trees. All trees 6 inches in diameter or greater will be preserved within the wetland creation areas. Soils will be preserved within a radius around these trees to 6 feet beyond the drip line of the canopy, preserving root capacity.

NWS - 2008-313-50

PURPOSE: PRIVATE DRIVEWAY CONSTRUCTION

DATUM: N.A.

ADJACENT PROPERTY OWNERS.  
1. GRAYLAND CABIN TRUST POWERS  
2. KERRY J. MILLER & SUSAN E. SWEENEY

NAME: DOUGLAS & JILL JONES

REFERENCE #:

SITE LOCATION ADDRESS:  
1743 STATE ROUTE 105  
GRAYLAND, WA 98547

PROPOSED: FILL 0.26 ACRES & BOX CULVERT ADDITIONS

IN: PALUSTRINE FORESTED WETLANDS NEAR THE PACIFIC OCEAN

NEAR: GRAYLAND  
COUNTY: GRAYS HARBOR STATE: WA  
SHEET: 5 OF 9  
DATE: 07/08/08

CONCEPTUAL MITIGATION PLAN

**Wetland Creation**

High quality wetlands will be created at a 2:1 replacement ratio to form one large wetland habitat from two separated wetlands. The created wetland area will equal 22,994 sf in size. Soils will be excavated to a grade comparable to the existing wetlands. Invasive weeds will be eliminated. Native plant species will be installed throughout the created wetland system to provide the maximum habitat diversity.

Wetland functions would be improved through the following strategy in the created wetland:

- Remove exotic invasive plants in the created wetland through manual removal.
- Maintain and augment wetland hydrology through linking two wetlands forming one larger wetland system.
- Plant a variety of native plants in the wetland, including shrubs, trees, and herbaceous vegetation to improve the quality and function of the wetland.
- Install 5 birdhouses and 5 bat boxes in the wetland to encourage wildlife habitation, improve aesthetic qualities of the site, and to provide a method of insect control.
- Place large woody debris in the wetland to enhance habitat structural diversity.

The proposed enhancement and mitigation plan will greatly increase the habitat and hydrologic value. This mitigation plan compensates for wetland impacts by increasing the retention capacity and enhancing the habitat in wetlands at a 2:1 replacement ratio.

Wetland functions are expected to improve with the installation of a birdhouse and a bat box within the wetland and wetland buffer area. Habitat diversity would improve through the installation of habitat features in the wetland and the buffer that include placing a select number of downed logs over 12-inches in diameter on the forest floor, and/or by moving additional wood and downed woody debris into the created wetland and wetland buffer to improve wildlife habitat functions.

Soils in the wetland creation areas will be excavated to the elevation of the existing wetlands, thus providing hydrology for the new wetland areas. The mitigation wetland must meet the technical criteria for wetland hydrology, seasonal inundation, and/or saturation to the surface for a consecutive number of days greater than or equal to 12.5 percent of the growing season. Areas that are seasonally inundated and/or saturated to the surface for a consecutive number of days between 5 percent and 12.5 percent of the growing season may also be wetlands. If the wetland creation areas do not meet these conditions, additional excavation or the placing of a bentonite mat will occur to retain wetland hydrology.

No cutting of forests will occur to create wetlands in the mitigation areas. Mitigation areas primarily consist of a shrub-shrub vegetation community with some trees. All trees 6 inches in diameter or greater will be preserved within the wetland creation areas. Soils will be preserved within a radius around these trees to 6 feet beyond the drip line of the canopy, preserving root capacity.

NWIS-2008-313-50

PURPOSE: PRIVATE DRIVEWAY CONSTRUCTION	NAME: DOUGLAS & JILL JONES	PROPOSED: FILL 0.26 ACRES & BOX CULVERT ADDITIONS
DATUM: N.A.	REFERENCE #:	IN: PALUSTRINE FORESTED WETLANDS NEAR THE PACIFIC OCEAN
ADJACENT PROPERTY OWNERS. 1. GRAYLAND CABIN TRUST POWERS 2. KERRY J. MILLER & SUSAN E. SWEENEY	SITE LOCATION ADDRESS: 1743 STATE ROUTE 105 GRAYLAND, WA 98547	NEAR: GRAYLAND COUNTY: GRAYS HARBOR STATE: WA SHEET: 6 OF 9 DATE: 07/08/08

CONCEPTUAL MITIGATION PLAN

**Planting Plan**

Planting Plan

Planting details are summarized in Tables 2 & 3. The cost for plant stock covering the created mitigation wetland will cost an estimated \$675.29. The plant species in the wetland will consist of native hydrophytic plant species.

**Wetland Creation & Enhancement**

The current wetland hydrology is supplied from local precipitation and groundwater. The hydrology of the created wetland will be the same as the existing wetland. The proposed enhancement and mitigation plan will greatly increase the habitat and hydrologic value of on-site wetlands by increasing the number of plant species, eliminating invasive weeds, and providing greater structural diversity. This mitigation plan compensates for wetland impacts by increasing the retention capacity and enhancing the habitat in wetlands at a 2:1 mitigation ratio.

This mitigation plan will provide a visual screen between the existing wetlands and proposed land use. Wetland functions are expected to improve with the installation of habitat features, such as large woody debris and 5 bird houses and 5 bat boxes within the wetland and wetland buffer area. Habitat diversity would be improved through the installation of habitat features in the wetland that include placing a select number of downed logs over 12-inches in diameter on the forest floor, and/or by moving additional wood and downed woody debris into the created wetland to improve wildlife habitat functions.

Soils in the wetland creation areas will be excavated to the elevation of the existing wetlands, thus providing hydrology for the new wetland areas. The mitigation wetland must meet the technical criteria for wetland hydrology, seasonal inundation, and/or saturation to the surface for a consecutive number of days greater than or equal to 12.5 percent of the growing season. Areas that are seasonally inundated and/or saturated to the surface for a consecutive number of days between 5 percent and 12.5 percent of the growing season may also be wetlands. We recommend monitoring wetland hydrology. Hydrology may be monitored through the use of one or a combination of the following: groundwater wells. If the wetland creation areas do not meet these conditions, additional excavation or the placing of a bentonite mat is recommended to retain wetland hydrology.

**SUMMARY AND CONCLUSION**

The proposed development project consists of the construction of an access road to a building site located on the western portion of the subject property. The road would extend from the eastern road frontage with State Route 105 to buildable area located on the western portion of the property. Unavoidable wetland fill will occur in order to construct the road. Filled wetlands will be replaced at a 2:1 ratio. The two wetland creation areas will be enhanced to provide high habitat value and structural diversity.

No net loss of wetlands or wetland functions are anticipated as a result of this proposed land use.

NWS-2008-313-50

PURPOSE: PRIVATE DRIVEWAY CONSTRUCTION	NAME: DOUGLAS & JILL JONES	PROPOSED: FILL 0.26 ACRES & BOX CULVERT ADDITIONS
DATUM: N.A.	REFERENCE #:	IN: PALUSTRINE FORESTED WETLANDS NEAR THE PACIFIC OCEAN
ADJACENT PROPERTY OWNERS. 1. GRAYLAND CABIN TRUST POWERS 2. KERRY J. MILLER & SUSAN E. SWEENEY	SITE LOCATION ADDRESS: 1743 STATE ROUTE 105 GRAYLAND, WA 98547	NEAR: GRAYLAND COUNTY: GRAYS HARBOR STATE: WA SHEET: 7 OF 9 DATE: 07/08/08

CONCEPTUAL MITIGATION PLAN

**Table 2. Planting Schedule for Wetland A Mitigation Area**

Jones Wetland A Mitigation Planting Plan			
	Area	Density	Plants
Trees	11,992	0.006887052	83
Shrubs	11,992	0.011478421	138
Herbs	11,992	0.018365473	220
Total # plants			440

Plant species	Number	Container
Trees		
Oregon Ash	28	bare root
Red Alder	28	bare root
Western red cedar	27	bare root
Total	83	

Plant species	Number	Container
Shrubs		
Clustered rose	13	bare root
Black twinberry	13	bare root
Pacific ninebark	13	bare root
Nootka Rose	13	bare root
Douglas spirea	13	bare root
Salmonberry	13	bare root
Hazelnut	12	bare root
Red-osier dogwood	12	bare root
Pacific crabapple	12	bare root
Bristly Gooseberry	12	bare root
Evergreen Huckleberry	12	bare root
Total	138	

Plant species	Number	Container
Herbs		
Small-fruited bullrush	36	bare root
soft rush	36	bare root
Western buttercup	36	bare root
Deer Fern	36	bare root
Slough sedge	38	bare root
Lady-fern	38	bare root
Total	220	

Planting Density	#/Acre	#/sf
trees	300	0.006887052
Shrubs	500	0.011478421
Herbs	800	0.018365473

	Est. cost per plant	# Plants	Total Cost
Trees	0.8	83	\$ 66.07
Shrubs	0.8	138	\$ 110.12
Herbs	0.8	220	\$ 176.19
Total			\$ 352.38

<b>Total Cost of Plants:</b>	<b>\$ 352.38</b>
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NWS-2008-313-50

PURPOSE: PRIVATE DRIVEWAY CONSTRUCTION

NAME: DOUGLAS & JILL JONES

PROPOSED: FILL 0.26 ACRES & BOX CULVERT ADDITIONS

DATUM: N.A.

REFERENCE #:

IN: PALUSTRINE FORESTED WETLANDS NEAR THE PACIFIC OCEAN

ADJACENT PROPERTY OWNERS.  
 1. GRAYLAND CABIN TRUST POWERS  
 2. KERRY J. MILLER & SUSAN E. SWEENEY

SITE LOCATION ADDRESS:  
 1743 STATE ROUTE 105  
 GRAYLAND, WA 98547

NEAR: GRAYLAND  
 COUNTY: GRAYS HARBOR STATE: WA  
 SHEET: 8 OF 9  
 DATE: 07/08/08

**CONCEPTUAL MITIGATION PLAN**

**Table 3. Planting Schedule for Wetland A/B Mitigation Area**

Jones Wetland A/B Mitigation Planting Plan			
	Area	Density	Plants
Trees	11,002	0.006887052	76
Shrubs	11,002	0.011478421	126
Herbs	11,002	0.018365473	202
<b>Total # plants</b>			<b>404</b>

Plant species	Number	Container
Trees Oregon Ash		26 bare root
Red Alder		25 bare root
Western red cedar		25 bare root
<b>Total</b>	<b>76</b>	

Plant species	Number	Container
Shrubs Clustered rose		11 bare root
Black twinberry		11 bare root
Pacific ninebark		11 bare root
Nootka Rose		11 bare root
Douglas spirea		11 bare root
Salmonberry		11 bare root
Hazelnut		12 bare root
Red-osier dogwood		12 bare root
Pacific crabapple		12 bare root
Bristly Gooseberry		12 bare root
Evergreen huckleberry		12 bare root
<b>Total</b>	<b>126</b>	

Plant species	Number	Container
Herbs Small-fruited bullrush		34 bare root
soft rush		34 bare root
Western buttercup		34 bare root
Deer Fern		34 bare root
Slough sedge		33 bare root
Lady-fern		33 bare root
<b>Total</b>	<b>202</b>	

Planting Density	#/Acre	#/sf
Trees	300	0.006887052
Shrubs	500	0.011478421
Herbs	800	0.018365473

	Est. cost per plant	# Plants	Total Cost
Trees	0.8	76	\$ 60.62
Shrubs	0.8	126	\$ 101.03
Herbs	0.8	202	\$ 161.65
<b>Total</b>			<b>\$ 323.29</b>

<b>Total Cost of Plants</b>	<b>\$ 323.29</b>
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*NWS-2008-313-50*

PURPOSE: PRIVATE DRIVEWAY CONSTRUCTION

DATUM: N.A.

ADJACENT PROPERTY OWNERS.  
1. GRAYLAND CABIN TRUST POWERS  
2. KERRY J. MILLER & SUSAN E SWEENEY

NAME: DOUGLAS & JILL JONES

REFERENCE #:

SITE LOCATION ADDRESS:  
1743 STATE ROUTE 105  
GRAYLAND, WA 98547

PROPOSED: FILL 0.26 ACRES & BOX CULVERT ADDITIONS

IN: PALUSTRINE FORESTED WETLANDS NEAR THE PACIFIC OCEAN

NEAR: GRAYLAND

COUNTY: GRAYS HARBOR STATE: WA

SHEET: 9 OF 9

DATE: 07/08/08

