



2009

WASHINGTON STATE Joint Aquatic Resources Permit Application (JARPA) Form [\[help\]](#)



US Army Corps
of Engineers
Seattle District

AGENCY USE ONLY

Date received: _____

Agency reference #: _____

Tax Parcel #(s): _____

Use black or blue ink to enter answers in white spaces below, or fill in electronically by clicking on fields

Part 1–Project Identification

Unique project information that makes it easy to identify. [\[help\]](#)

1a. Unique Project Identifier Number (UPI #) [\[help\]](#)

- Don't have one yet? Get one at <http://www.epermitting.wa.gov> or call the Washington Governor's Office of Regulatory Assistance at (800) 917-0043.

1b. Project Name (Examples: Smith's Dock or Seabrook Lane Development) [\[help\]](#)

South Park Bridge Project (CIP 300197)

Part 2–Applicant

The person or organization legally responsible for the project. [\[help\]](#)

2a. Name (Last, First, Middle) and Organization (if applicable)

King County Road Department of Transportation, Road Services Division, Attn: Jim Sussex, Engineer III

2b. Mailing Address (Street or PO Box)

201 S. Jackson St, M.S. KSC-TR-0231

2c. City, State, Zip

Seattle WA 98104-3856

2d. Phone (1)

(206) 296-8737

2e. Phone (2)

()

2f. Fax

(206) 296-0567

2g. E-mail

jim.sussex@kingcounty.gov

Part 3–Authorized Agent or Contact

Person authorized to represent the applicant about the project. (Note: Authorized agent(s) must sign 11b. of this application.) [\[help\]](#)

3a. Name (Last, First, Middle) and Organization (if applicable)

NA

3b. Mailing Address (Street or PO Box)

3c. City, State, Zip

3d. Phone (1)

()

3e. Phone (2)

()

3f. Fax

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3g. E-mail

Other publicly owned (federal, state, county, city, special districts like schools, ports, etc.)

5h. Contact information for all adjoining property owners, lessees, etc. (If you need more space, use [JARPA Attachment C.](#)) [\[help\]](#)

Name	Mailing Address	Tax Parcel # (if known)
The Boeing Company	PO BOX 3707 M/C 20-00 Seattle WA 98124	2185000005
JRD KING LLC	605 1 st Ave #600 Seattle WA 98104	2185000860
South Park Marine LTD	8604 Dallas Ave S Seattle WA, 98006	2185600070
Port of Seattle	PO Box 1209 Seattle, WA 98111	Duwamish Waterway

5i. Is any part of the project area within a 100-year flood plain? [\[help\]](#)

Yes No Don't know

5j. Briefly describe the vegetation and habitat conditions on the property. [\[help\]](#)

The vegetation and natural habitat in the project area has been completely altered by existing development. Habitat features are limited to heavily armored, man-made riverbanks that have limited amounts of riparian vegetation (primarily grasses). There is no other vegetation on the north side of the project area (Boeing's paved facilities), and the upland vegetation and habitat conditions on the south (South Park neighborhood) side of the project area are limited to residential landscaping and street trees.

5k. Describe how the property is currently used. [\[help\]](#)

The South Park Bridge spans a section of the Duwamish Waterway at approximately river mile 3.9 that is heavily developed, with the Boeing Company industrial facilities along the right bank and mixed commercial and residential properties along the left bank. These heavily developed adjacent land uses are representative of the surrounding land uses on the respective sides of the Duwamish Waterway. The South Park Bridge spans the man-made channel of the Duwamish Waterway, which is managed as a navigable waterway for industrial, commercial, and recreational purposes. The bridge is part of a principal arterial linking key travel routes between the Duwamish industrial corridor, the South Park community, and surrounding areas of Seattle and other regional cities.

5l. Describe how the adjacent properties are currently used. [\[help\]](#)

Land-uses in the project area are a mixture of residential, retail commercial, and industrial uses. The Boeing Company's Plant 2 (Boeing Plant 2) encompasses the north side of the Duwamish Waterway primarily for industrial/manufacturing uses. On the south side, retail commercial and light industrial land uses are located on 14th Avenue South, and along the south bank of the Duwamish Waterway upstream of the South Park Bridge. Most of the buildings located on 14th Avenue S. have no front setbacks and extend all the way to the sidewalk. Areas to east and west of the buildings along 14th Ave. S. are generally comprised of single-family residences.

boat ramp adjacent to the east side (upstream) of the existing bridge is for private access and no alterations to that boat access are proposed as part of this project.

Public access to the waterfront will be improved with landscaped open space and pedestrian access leading to a viewing platform over the shoreline of the Duwamish Waterway.

After the new bridge and approaches are constructed, traffic will be shifted onto the new alignment and the existing bridge and approaches will be closed for demolition. Demolition will involve removing the remainder of the existing pier protection system, construction of another set of temporary construction work trestles, removal of the bridge superstructure, removal of the existing bridge piers, and removal of the bridge approaches.

Construction impacts

The principal in-water impacts during construction will result from the need to drive 2-foot (.61 meters) diameter pipe piles for the temporary construction trestles, and the sheet piling needed to construct cofferdams in which the new bridge foundations will be built. A second temporary construction trestle will be required to access the existing in-water bridge piers around which cofferdams will be constructed for demolition of the existing bridge. These pile driving activities will occur at the beginning of the construction process for the new bridge during the 2010 fish window, and at the end of the project schedule during the 2012 fish window for demolition and removal of the existing bridge. Shoreline reconfiguration and restoration will occur within and adjacent to the Duwamish Waterway. Other construction activities will generally be carried out within cofferdams, on construction trestles, from barges and boats as necessary, and above the waterway as the new bridge superstructure is constructed.

6b. Indicate the project category. (Check all that apply.) [help]

- Commercial
 Residential
 Institutional
 Transportation
 Recreational
 Maintenance
 Environmental Enhancement

6c. Indicate the major elements of your project. (Check all that apply.) [help]

<input type="checkbox"/> Aquaculture	<input type="checkbox"/> Culvert	<input type="checkbox"/> Float	<input type="checkbox"/> Road
<input checked="" type="checkbox"/> Bank Stabilization	<input type="checkbox"/> Dam / Weir	<input type="checkbox"/> Geotechnical Survey	<input type="checkbox"/> Scientific Measurement Device
<input type="checkbox"/> Boat House	<input type="checkbox"/> Dike / Levee / Jetty	<input type="checkbox"/> Land Clearing	<input type="checkbox"/> Stairs
<input type="checkbox"/> Boat Launch	<input type="checkbox"/> Ditch	<input type="checkbox"/> Marina / Moorage	<input checked="" type="checkbox"/> Stormwater facility
<input type="checkbox"/> Boat Lift	<input type="checkbox"/> Dock / Pier	<input type="checkbox"/> Mining	<input type="checkbox"/> Swimming Pool
<input checked="" type="checkbox"/> Bridge	<input type="checkbox"/> Dredging	<input type="checkbox"/> Outfall Structure	<input type="checkbox"/> Utility Line
<input type="checkbox"/> Bulkhead	<input type="checkbox"/> Fence	<input checked="" type="checkbox"/> Piling	
<input type="checkbox"/> Buoy	<input type="checkbox"/> Ferry Terminal	<input type="checkbox"/> Retaining Wall (upland)	
<input type="checkbox"/> Channel Modification	<input type="checkbox"/> Fishway		

Other: _____

6d. Describe how you plan to construct each project element checked in 6c. Include specific construction methods and equipment to be used. [help]

- Identify where each element will occur in relation to the nearest waterbody.

adjacent to both the north and south portions of the bridge. The trestles will be built from the north and south shorelines extending into the Duwamish Waterway. Handrails and kickboards are typically placed along work platforms during construction for worker safety and to prevent materials from sliding over the edge. As with pile installation, a sand blanket will be applied to minimize re-suspension of potentially contaminated sediment during pile removal. Based on current project construction schedule, the steel piles associated with the temporary work trestle will be installed and remain in water for a maximum duration of 15 months. The installation and removal of construction work trestles will occur within the in-water construction window.

The in-water work window for the project is between August 1 and February 15. On-site construction and demolition activities are expected to occur over approximately a 34-month period estimated to start in April 2010 and end in March 2013.

Water quality monitoring will be provided throughout the construction process in accordance with applicable regulations, permit conditions, and the terms and conditions of the Biological Opinions from the National Marine Fisheries Service and the U.S. Fish and Wildlife Service.

6e. What are the start and end dates for project construction? (month/year) [\[help\]](#)

- If the project will be constructed in phases or stages, use [JARPA Attachment D](#) to list the start and end dates of each phase or stage.

Start date: April, 2010

End date: December, 2012

See JARPA Attachment D

6f. Describe the purpose of the work and why you want or need to perform it. [\[help\]](#)

The purpose of the proposed work is to replace the existing South Park Bridge with a new bridge that meets current design standards. The new bridge needs to be built because the existing 78-year-old bridge is severely deteriorated structure. King County will need to close the bridge in the interest of public safety if the proposed replacement bridge cannot be built.

The bridge is part of a regional principal roadway network linking key travel routes in the south Seattle area and through the South Park community. The South Park Bridge and 14th/16th Avenue South connect East Marginal Way South to the north and State Route (SR) 99 to the south of the South Park community. The bridge is an important route for commercial truck traffic in the surrounding area, as well as public transit that serves the South Park community. Consequently, building a replacement bridge and maintaining this important the important transportation link that the existing bridge provides is a high priority.

6g. Fair market value of the project, including materials, labor, machine rentals, etc. [\[help\]](#)

The estimated construction cost for the bridge is approximately \$118,800,000.

6h. Will any portion of the project receive federal funding? [\[help\]](#)

- If yes, list each agency providing funds.

Yes No Don't know

Federal funding is being provided by the Federal Highway Administration (FHWA) for the project.

Part 7–Wetlands: Impacts and Mitigation

- Check here if there are wetlands or wetland buffers on or adjacent to the project area.
(If there are none, skip to Part 8.)

7a. Describe how the project has been designed to avoid and minimize adverse impacts to wetlands. [\[help\]](#)

Not applicable

7j. Summarize what the compensatory mitigation plan is meant to accomplish, and describe how a watershed approach was used to design the plan. [\[help\]](#)

Part 8—Waterbodies (other than wetlands): Impacts and Mitigation

In Part 8, "waterbodies" refers to non-wetland waterbodies. (See Part 7 for information related to wetlands.) [\[help\]](#)

Check here if there are waterbodies on or adjacent to the project area. (If there are none, skip to Part 9.)

8a. Describe how the project is designed to avoid and minimize adverse impacts to the aquatic environment. [\[help\]](#)

Not applicable

Impact:

The in-water installation of the temporary work trestles, permanent pier protection piles, and permanent bridge piers will result in a permanent net loss of 7,290 square feet (677 square meters) and temporary loss of 2,205 square feet (204 square meters) of migration habitat in the Duwamish River. Some additional scour may occur along nearshore areas.

Impacts to aquatic species, particularly ESA-listed and proposed fish species, will be minimized with the following measures:

1. To reduce the habitat impacts due to temporary piles, project construction will be expedited (i.e., consecutive construction of temporary trestles) so that temporary piles will be left in the Duwamish River for the minimum amount of time feasible.
2. About 352 creosote-treated piles that serve as pier protection for the existing bridge will be removed and replaced with steel piles, resulting in long-term improvements to water quality.
3. Removal of the existing approach bridge piers will remove approximately 671 square feet of concrete structures from intertidal areas of the Duwamish River used by migrating salmonids.
4. The project-wide mitigation plan will include shoreline enhancement (including removal of bank armoring, creation of new intertidal zone, and riparian planting) and will at least partially offset affected habitat functions and values within the Duwamish Basin.

Impact:

Installation and removal of approximately 366 temporary piles (construction access trestles) and installation of 179 permanent piles (new protection piers) with an impact pile driver and construction of an associated temporary work platform within the MHHW of the Duwamish River may have adverse acoustic effects on aquatic life and result in the temporary displacement of aquatic species and habitat.

Impacts to listed and proposed fish species will be minimized by:

1. Timing the in-water work to the portion of the year when protected fish species, particularly juveniles, are least likely to be present (August 1 to February 15) and limiting the duration of in-water work to the extent feasible.
2. Applying in-water sound attenuation measures during in-water impact pile driving to attenuate noise levels

8b. Will your project impact a waterbody or the area around a waterbody? [\[help\]](#)

Yes No

8c. Summarize impact(s) to each waterbody in the table below. [\[help\]](#)

Activity causing impact (clear, dredge, fill, pile drive, etc.)	Waterbody name	Impact location ¹	Duration of impact ²	Amount of material to be placed in or removed from waterbody	Area (sq. ft. or linear ft.) of waterbody directly affected
Bascule pier construction	Duwamish	Below MHHW w/in 100 yr flood plain	Permanent		6,728 square feet (624 square meters)
Pier protection piles	Duwamish	Below MHHW w/in 100 yr flood plain	Permanent		562 square feet (52 square meters)
Temporary Construction Trestle Piles	Duwamish	Below MHHW w/in 100 yr flood plain	one year		1,643 square feet (204 square meters)
Temporary Construction Cofferdams	Duwamish	Below MHHW w/in 100 yr flood plain	one year		140 square feet (13 square meters)
Temporary Demolition Trestle Piles	Duwamish	Below MHHW w/in 100 yr flood plain	15 months		562 square feet (52 meters)
Sand/gravel Island for Caisson	Duwamish	""	5-6 Months	+11000 cy	
Sand Blanket for Trestles and protection pier	Duwamish	""	Permanent	+1041 cy	
Dredge form Caisson	Duwamish	""	Permanent	- 30500 cy	
Riverbank restoration	Duwamish	""	Permanent	- 5472 cy + 1737 cy	

¹ Indicate whether the impact will occur in or adjacent to the waterbody. If adjacent, provide the distance between the impact and the waterbody and indicate whether the impact will occur within the 100-year flood plain.

² Indicate the time (in months or years, as appropriate) the waterbody will be measurably impacted by the work. Enter "permanent" if applicable.

8d. Have you prepared a mitigation plan to compensate for the project's adverse impacts to non-wetland waterbodies? [\[help\]](#)

- If yes, submit the plan with the JARPA package.

Yes No Not applicable

8e. Summarize what the compensatory mitigation plan is meant to accomplish. Describe how a watershed approach was used to design the plan.

- If you already completed 7j., you do not need to restate your answer here. [\[help\]](#)

Activities requiring fill will include; temporary fill associated with the sand/gravel island cason, permanent fill from the sand blanket associated with the temporary work trestles, and permanent fill associated with the riverbank restoration.

Temporary fill quantities for backfill within the two cofferdams for new bridge construction will be approximately 11,000 cubic yards. The backfill material will be determined by the contractor. This backfill activity would occur in October 2010 and involve removing material from a barge or trucks with a clamshell and a crane and depositing the material into the two cofferdams. Following caisson foundation construction, residual backfill material within the cofferdams would be removed down to the level of the surrounding riverbed prior to removing the cofferdams (approximately February 2011).

Permanent fill from the residual sand blanket material will equal approximately 1,041 cubic yards of approved capping material. The sand blanket will be placed on the river bottom prior to pile driving for construction of the temporary work trestles and cofferdams. The sand blanket will minimize the potential resuspension of riverbed sediments during pile driving and removal activities. At a minimum, the sand blanket will cover an area at least three feet beyond any area where piles and related sound attenuation piles are installed or positioned. This would occur in August and Septemer of 2010.

Riverbank restoration activities will require over excavation of existing riverbanks, which are very steep and armored. Riverbanks slops will be laid back to allow more intertidal habitat. Fill will consist of soil amendmments, streambed gravel, boulders, and large woody debris. Fill equals approximately 1,737 cubic yards of materials. This would occur in August 2012.

8g. For all excavating or dredging activities identified in 8c., describe the method for excavating or dredging, type and amount of material you will remove, and where the material will be disposed. [\[help\]](#)

Excavation activities associated with the caisson construction process would result in the removal of approximately 30,500 cubic yards of riverbed material. Material would be removed form the within the two caisson structures as they are built in stages and lowered down to their respective depths. This construction process will occur within the cofferdams, so it will be isoated from water column.

The top 10 to 14 feet of riverbed sediments removed from within the cofferdams have levels of contamination that require disposal as a hazardous material. Prior testing and consultation with appropriate agencies has confirmed that the remaining material excavated from below 10 to 14 feet is suitable for open water disposal. Suitable material will be loaded onto barges and taken to an approved site in Elliot Bay for open water disposal. Material will be removed using a crane with a clamshell and deposited on a barge. Containment BMPs will be used to prevent excavated material from entering the water column as it is transferred from within the cofferdam to the trucks or barges that will transport it to other appropriate locations.

Riverbank restoration during the latter stages of the project will require excavation along the shorlines on each side of the bridge that will extend waterward of the MHW line. Approximately 5,472 cubic yards of existing material will be removed to reconfigure the riverbanks in order will be laid back and create additional intertidal habitat. Materials will be removed using an excavator and a dump truck. The riverbank material will be hauled to an approved disposal site.

Part 9–Additional Information

Any additional information you can provide helps the reviewer(s) understand your project.

9a. If you have already worked with any government agencies on this project, list them below. [\[help\]](#)

Agency Name	Contact Name	Phone	Most Recent Date of Contact
King County DDES	Ron Anslie, Clearing and Grading	(206) 296-7412	10/21/09
	Kimberly Claussin, Shorelines	206-296-7167	
	Jamie Hartley, Critical	206-296-6736	

9g. What is the Washington Department of Natural Resources Water Type? [\[help\]](#)

- Go to http://www.dnr.wa.gov/BusinessPermits/Topics/ForestPracticesApplications/Pages/fp_watertyping.aspx for the Forest Practices Water Typing System.

S F Np Ns

9h. Will this project be designed to meet the Washington Department of Ecology's most current stormwater manual? [\[help\]](#)

- If no, provide the name of the manual your project is designed to meet.

Yes No

Name of manual: 2009 King County Surface Water Design Manual

9i. If you know what the property was used for in the past, describe below. [\[help\]](#)

The existing South Park Bridge was constructed over the Duwamish Waterway between 1929 and 1931. The Duwamish Waterway (constructed between 1913 and 1920) is a channelized section of what had previously been land area between the meandering lower Duwamish River. Since the existing bridge was constructed, adjacent land use on the north side of the bridge have been dominated by the Boeing Company facilities, with adjacent properties on the South Park side of the bridge consisting of mixed commercial, retail and residential uses that have varied over time. An earlier spanning the Duwamish Waterway along the same corridor was constructed in 1914. The location of this older wooden bridge was immediately west of the current bridge alignment such that the southern terminus of the previous bridge connected to the old brick road remnant along 14th Avenue South that can still be seen between the Duwamish Waterway and Dallas Avenue S.

9j. Has a cultural resource (archaeological) survey been performed on the project area? [\[help\]](#)

- If yes, attach it to your JARPA package.

Yes No

9k. Name each species listed under the federal Endangered Species Act that occurs in the vicinity of the project area or might be affected by the proposed work. [\[help\]](#)

Within the Duwamish River area affected by the project, listed fish species include Puget Sound Chinook salmon, bull trout, and steelhead trout; all listed as threatened species under the Endangered Species Act.

9l. Name each species or habitat on the Washington Department of Fish and Wildlife's Priority Habitats and Species List that might be affected by the proposed work. [\[help\]](#)

According to the Washington Department of Fish and Wildlife's Priority Habitats and Species (PHS) list, the Duwamish River is identified as a PHS area. Habitat in the area is identified as an estuarine. Priority Fish Presence includes; resident cutthroat, Coho salmon, fall chinook, fall chum, bull trout, pink salmon, Sockeye salmon, summer and winter steelhead.

Part 10—Identify the Permits You Are Applying For

Use the resources and checklist below to identify the permits you are applying for.

- Online Project Questionnaire at <http://apps.ecy.wa.gov/opus/>.
- Governor's Office of Regulatory Assistance at (800) 917-0043 or help@ora.wa.gov.

10a. Compliance with the State Environmental Policy Act (SEPA). (Check all that apply.) [\[help\]](#)

11a. Applicant Signature (required) [\[help\]](#)

I certify that to the best of my knowledge and belief, the information provided in this application is true, complete, and accurate. I also certify that I have the authority to carry out the proposed activities, and I agree to start work only after I have received all necessary permits.

I hereby authorize the agent named in Part 3 of this application to act on my behalf in matters related to this application _____ (initial)

By initialing here, I state that I have the authority to grant access to the property. I also give my consent to the permitting agencies entering the property where the project is located to inspect the project site or any work related to the project. JD (initial)

James D. Dwyer
Applicant

12/09/2009
Date

11b. Authorized Agent Signature [\[help\]](#)

I certify that to the best of my knowledge and belief, the information provided in this application is true, complete, and accurate. I also certify that I have the authority to carry out the proposed activities and I agree to start work only after all necessary permits have been issued.

Authorized Agent

Date

11c. Property Owner Signature (if not applicant) [\[help\]](#)

I consent to the permitting agencies entering the property where the project is located to inspect the project site or any work. These inspections shall occur at reasonable times and, if practical, with prior notice to the landowner.

C. Blomberg
Property Owner

12-9-09
Date

18 U.S.C §1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly falsifies, conceals, or covers up by any trick, scheme, or device a material fact or makes any false, fictitious, or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious, or fraudulent statement or entry, shall be fined not more than \$10,000 or imprisoned not more than 5 years or both.

If you require this document in another format, contact The Governor's Office of Regulatory Assistance (ORA). People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call (877) 833-6341.
ORA publication number: ENV-019-09