



DETERMINATION OF NONSIGNIFICANCE (DNS)

TITLE OF PROPOSAL: Horse Creek Mitigation

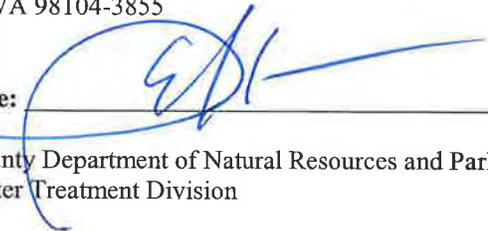
DESCRIPTION OF PROPOSAL: In 2008 an inadvertent air release from tunnel boring work during the construction of the conveyance system for the Brightwater Regional Wastewater Treatment System resulted in sediment deposition in the upper reach of Horse Creek. As mitigation for impacts due to this sediment deposition King County is proposing to enhance the stream and riparian functions within Horse Creek. The proposed mitigation measures include placement of large woody debris in the creek, planting of native vegetation in the riparian corridor of the creek and suppression of invasive weeds. These activities will provide diversity and complexity to the stream channel and provide cover for aquatic species.

LOCATION OF PROPOSAL, INCLUDING STREET ADDRESS, IF ANY: The portion of Horse Creek proposed for enhancement is located on property owned by the Collage Condominiums at 19505 93rd Place NE in Bothell, Washington. The property is immediately east of State Route 527, a two-lane state highway, approximately two miles north of its intersection with State Route 522 in Section 6, Township 26 North, Range 5 East.

Responsible Official: Pam Elardo, P.E.

Position/Title: Director, King County Wastewater Treatment Division

Address: 201 South Jackson Street, MS KSC-NR-0501
Seattle, WA 98104-3855

Date: May 26, 2011 **Signature:** 

Proponent and Lead Agency: King County Department of Natural Resources and Parks
Wastewater Treatment Division

Contact Person: Katherine Fischer, Water Quality Planner
King County Wastewater Treatment Division
201 South Jackson Street, MS KSC-NR-0505
Seattle, WA 98104
phone: 206-263-3197; e-mail: katherine.fischer@kingcounty.gov

Issue Date: June 1, 2011

The State Environmental Policy Act (SEPA) lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

This Determination of Nonsignificance (DNS) is issued under WAC 197-11-340 (2); the lead agency will not act on this proposal for 17 days from the issue date. **Comments must be submitted by June 17, 2011.** Submit comments to Wesley Sprague, Supervisor, Community Services and Environmental Planning, King County Wastewater Treatment Division, 201 South Jackson Street, MS KSC-NR-0505, Seattle, WA 98104-3855.

The King County Wastewater Treatment Division has submitted an application for a permit, thus there is no administrative appeal of this DNS pursuant to RCW 43.21C.075, WAC 197-11-680, KCC 20.44.120 and King County Public Rule 7-4-1. The public rule may be viewed at <http://www.kingcounty.gov/operations/policies/rules/utilities/put741pr.aspx>, or contact Katherine Fischer at 206-263-3197 or katherine.fischer@kingcounty.gov to obtain a copy of the rule.

[Statutory authority: RCW 43.21C.110. 84-05-020 (Order DE 83-39), §197-11-970, filed 2/10/84, effective 4/4/84.]

ENVIRONMENTAL CHECKLIST

A. BACKGROUND

1. Name of proposed project, if applicable:

Horse Creek Mitigation

2. Name of applicant:

King County Department of Natural Resources and Parks
Wastewater Treatment Division

3. Address and phone number of applicant and contact person:

King County Wastewater Treatment Division
201 South Jackson Street, KSC-NR-0505
Seattle, WA 98104

CONTACT: Katherine Fischer, Telephone: 206-263-3197

4. Date checklist prepared:

May 11, 2011

5. Agency requesting checklist:

King County Department of Natural Resources and Parks
Wastewater Treatment Division

6. Proposed timing or schedule (including phasing, if applicable):

The proposed project will occur in two phases. The first phase is placement of the large woody debris. This will occur during the fish window for Horse Creek, between June 15, 2011 and September 30, 2011, and will take approximately 4 days. Phase 2 involves planting of native vegetation within the riparian corridor of Horse Creek. This phase will occur between October 2011 and January 2012 and will take approximately 3 days.

7. Do you have any plans for future additions, expansions, or further activity related to or connected with this proposal? If yes, explain.

No.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

None.

9. **Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.**

No.

10. **List any government approvals or permits that will be needed for your proposal, if known.**

US Army Corps of Engineers – Nationwide Permit
Washington Department of Fish and Wildlife – Hydraulic Project Approval

11. **Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description).**

In 2008 an inadvertent air release from tunnel boring work during the construction of the conveyance system for the Brightwater Regional Wastewater Treatment System resulted in sediment deposition in the upper reach of Horse Creek. As mitigation for impacts due to this sediment deposition King County is proposing to enhance the stream and riparian functions within Horse Creek.

The proposed mitigation measures include placement of large woody debris in the creek, planting of native vegetation in the riparian corridor of the creek and suppression of invasive weeds. These activities will provide diversity and complexity to the stream channel and provide cover for aquatic species.

Twelve logs with root wads will be placed by hand within the creek channel. The logs will be 9-15 inches in diameter and 10-18 feet in length. The root wads will be placed in the active creek channel and the bole will be placed on the bank and secured with Duckbill earth anchors. The remainder of the project will involve planting of native vegetation in two planting schemes within the riparian corridor of the creek.

12. **Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.**

The portion of Horse Creek proposed for enhancement is located on property owned by the Collage Condominiums at 19505 93rd Place NE in Bothell, Washington. The property is immediately east of State Route 527, a 2-lane state highway, approximately 2 miles north of its intersection with State Route 522 in Section 6, Township 26 North, Range 5 East.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (circle one): Flat, rolling, hilly, steep slopes, mountainous, other _____.

b. What is the steepest slope on the site? (approximate percent slope)?

The proposed project area is generally flat. Steep slopes are located to the east and west of Horse Creek.

c. What general types of soils are found on the site? (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

Alluvial sandy gravelly soil.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

No.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

No filling or grading is proposed.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Placement of the large woody debris will disturb a minor amount of soil since no mechanical grading or excavation is involved. The logs will be placed on the ground surface and will not be embedded into the creek bank. Any excavation involved in placement of the logs would be minor (less than one cubic yard total), and would be done by hand labor.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

N/A.

- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:**

The work is proposed to be completed by hand to minimize disturbance. Any area disturbed during construction will be covered with wood chip mulch. Delivery of the wood and plants to a staging area will occur by truck on paved areas. Wood and plants will be hand carried to the project site.

2. Air

- a. What types of emissions to the air would result from the proposal (i.e., dust, automobile emissions, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.**

Trucks delivering wood, plants and mulch to the site, and vehicles bringing workers to the site would generate fossil fuel emissions (a greenhouse gas checklist is attached).

- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.**

No.

- c. Proposed measures to reduce or control emissions or other impacts to air, if any:**

None proposed.

3. Water

- a. Surface:**

- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, or wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.**

The proposed mitigation project would occur within the stream channel and riparian corridor of Horse Creek. Horse Creek is a tributary of the Sammamish River, which flows into Lake Washington.

- 2) **Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.**

Yes the planting of native vegetation and placement of large woody debris described in Section A.11 will occur within 200 feet of Horse Creek.

- 3) **Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.**

None.

- 4) **Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.**

Flows in Horse Creek will be diverted around the work area during placement of the large woody debris with the use of sandbags to isolate the work area from the stream flow. This diversion of stream flows will occur within the existing creek bed.

- 5) **Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.**

No.

- 6) **Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.**

No.

b. Ground:

- 1) **Will ground water be withdrawn, or will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.**

No.

- 2) **Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals...; agricultural; etc.). Describe the general size of the system, the number of such systems,**

the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

None.

c. Water Runoff (including storm water):

- 1) Describe source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.**

Runoff during implementation of the mitigation project would flow into Horse Creek or infiltrate into the ground as it currently does.

- 2) Could waste materials enter ground or surface waters? If so, generally describe.**

No.

d. Proposed measures to reduce or control surface, ground and runoff impacts, if any:

None proposed.

4. Plants

a. Check or circle types of vegetation found on the site:

- deciduous tree: alder, maple, aspen, other
 evergreen tree: fir, cedar, pine, other
 shrubs
 grass
 pasture
 crop or grain
 wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
 water plants: water lily, eelgrass, milfoil, other
 other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

The project will include suppression of some invasive plant species at the project site. Any native vegetation disturbed during placement of the large woody

debris will be replanted with native vegetation following completion of the project.

- c. **List threatened or endangered species known to be on or near the site.**

None.

- d. **Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:**

Approximately 5,000 square feet of the riparian corridor of Horse Creek will be planted with native vegetation. Adjacent to the west side of the creek, native trees and shrubs will be installed in a strip 25 feet wide by 200 feet long (see attached figure). A total of 555 trees and shrubs will be planted in this strip. The site will be monitored and maintained for 5 years following completion, as required by project permits.

5. Animals

- a. **Circle any birds and animals which have been observed on or near the site or are known to be on or near the site:**

birds: hawk, heron, eagle, songbirds, other: _____

mammals: deer, bear, elk, beaver, other: _____

fish: bass, salmon, trout, herring, shellfish, other: non-native fish species.

- b. **List any threatened or endangered species known to be on or near the site.**

There are no threatened or endangered species in Horse Creek. Several listed species are present in the Sammamish River approximately 1.2 miles downstream of the project area.

- c. **Is the site part of a migration route? If so, explain.**

The entire Puget Sound area is part of the Pacific flyway.

- d. **Proposed measures to preserve or enhance wildlife, if any:**

The addition of wood debris and native plantings at the site will improve habitat and provide cover for insects, amphibians and non-native fish species.

6. Energy and Natural Resources

- a. **What kinds of energy (electric, natural gas, oil, woodstove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.**

None.

- b. **Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.**

No.

- c. **What kind of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:**

None.

7. Environmental Health

- a. **Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.**

No.

- 1) **Describe special emergency services that might be required.**

None.

- 2) **Proposed measures to reduce or control environmental health hazards, if any:**

None proposed.

b. Noise

- 1) **What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?**

None.

- 2) **What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.**

Placement of the large woody debris will involve the use of a truck to deliver wood and mulch to the site. Work would occur during daytime hours.

3) Proposed measures to reduce or control noise impacts, if any:

None proposed.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties?

The proposed mitigation area is in an existing stream channel and associated riparian corridor on private property. To the west is the condominium complex that owns the subject property. Immediately east is SR 527.

b. Has the site been used for agriculture? If so, describe.

No.

c. Describe any structures on the site.

None.

d. Will any structures be demolished? If so, what?

No.

e. What is the current zoning classification of the site?

Land in the project area is zoned R 5400a, R 5400d and Office Professional.

f. What is the current comprehensive plan designation of the site?

The comprehensive plan designation is residential and office professional.

g. If applicable, what is the current shoreline master program designation of the site?

N/A.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

Yes, the proposed project area is located within the stream channel and riparian corridor of Horse Creek. This area is also a designated Native Growth Protection Area associated with the condominium development to the west.

- i. Approximately how many people would reside or work in the completed project?**

None.

- j. Approximately how many people would the completed project displace?**

None.

- k. Proposed measures to avoid or reduce displacement impacts, if any:**

N/A.

- l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:**

The proposed project will improve the quality of habitat in and adjacent to Horse Creek.

9. Housing

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.**

None.

- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.**

None.

- c. Proposed measures to reduce or control housing impacts, if any:**

N/A.

10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennae; what is the principal exterior building material(s) proposed?**

N/A.

- b. What views in the immediate vicinity would be altered or blocked?**

None.

- c. Proposed measures to reduce or control aesthetic impacts, if any:**

None proposed.

11. Light and Glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?**

None.

- b. Could light and glare from the finished project be a safety hazard or interfere with views?**

No.

- c. What existing off-site sources of light or glare may affect your proposal?**

None.

- d. Proposed measures to reduce or control light and glare impacts, if any:**

N/A.

12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity?**

There is an elevated boardwalk that is adjacent to and crosses Horse Creek in this area.

- b. Would the proposed project displace any existing recreational uses? If so, describe.**

No.

- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:**

None proposed.

13. Historic and Cultural Preservation

- a. Are there any places or objects listed on, or proposed for, national, state or local preservation registers known to be on or next to the site? If so, generally describe.**

No.

- b. Generally describe any landmarks or evidence of historic, archaeological, scientific or cultural importance known to be on or next to the site.**

None known.

- c. Proposed measures to reduce or control impacts, if any:**

None proposed.

14. Transportation

- a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.**

Access to the site would be via the condominium property to the west.

- b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?**

Public transit operates on SR 527 adjacent to the project site.

- c. How many parking spaces would the completed project have? How many would the project eliminate?**

None.

- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).**

No.

- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.**

No.

- f. **How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.**

During the 7 day construction period up to four trips per day would be generated by vehicles delivering materials and bringing workers to the site. Following completion of the project WTD staff would visit the site several times per year to perform monitoring and maintenance activities.

- g. **Proposed measures to reduce or control transportation impacts, if any:**

None proposed.

15. Public Services

- a. **Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.**

No.

- b. **Proposed measures to reduce or control direct impacts on public services, if any:**

N/A.

16. Utilities

- a. **Circle the utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.**

None.

- b. **Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.**

None.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: Wesley Sprague

Date Submitted: 5/23/11

King County Greenhouse Gas Emissions Worksheet—Horse Creek Mitigation Project

Section I: Buildings

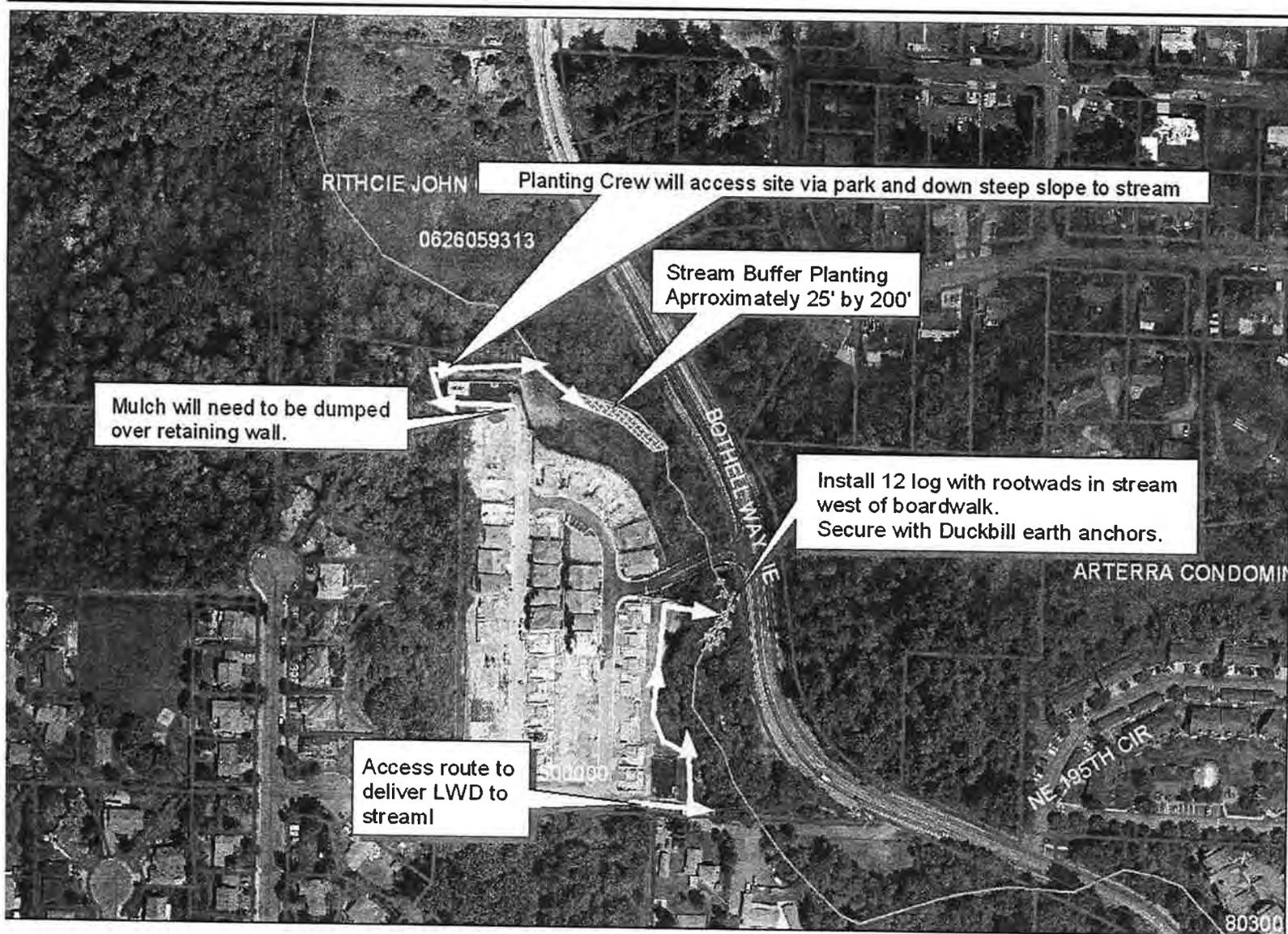
Type (Residential) or Principal Activity (Commercial)	# Units	Square Feet (in thousands of square feet)	Emissions Per Unit or Per Thousand Square Feet (MTCO _{2e})			Lifespan Emissions (MTCO _{2e})
			Embodied	Energy	Transportation	
Single-Family Home.....	0		98	672	792	0
Multi-Family Unit in Large Building	0		33	357	766	0
Multi-Family Unit in Small Building	0		54	681	766	0
Mobile Home.....	0		41	475	709	0
Education		0.0	39	646	361	0
Food Sales		0.0	39	1,541	282	0
Food Service		0.0	39	1,994	561	0
Health Care Inpatient		0.0	39	1,938	582	0
Health Care Outpatient		0.0	39	737	571	0
Lodging		0.0	39	777	117	0
Retail (Other Than Mall).....		0.0	39	577	247	0
Office		0.0	39	723	588	0
Public Assembly		0.0	39	733	150	0
Public Order and Safety		0.0	39	899	374	0
Religious Worship		0.0	39	339	129	0
Service		0.0	39	599	266	0
Warehouse and Storage		0.0	39	352	181	0
Other		0.0	39	1,278	257	0
Vacant		0.0	39	162	47	0

Section II: Pavement.....

Pavement.....		0.00				0
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Total Project Emissions:

0



Legend

- ▲ Access 2.dwg
- ▲ Lwd.dwg
- ▲ 14ft Plating Patch plan.dwg
- ▲ Vectors_200.dwg
- ▲ K1200.dwg
- ▲ Parcel_data.dwg
- ▲ DT_address.dwg
- ▲ Major_roads.dwg
- ▲ Open_water_of_King_County_and_portions_of_adjacent_counties

N

August 18, 2009

0 60 120 180 240 300 Feet

The information included on this map has been compiled by King County staff from a variety of sources and is subject to change without notice. King County makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a survey product. King County shall not be liable for any general, special, indirect, incidental, or consequential damages including, but not limited to, lost revenues or lost profits resulting from the use or misuse of the information contained on this map. Any sale of this map or information on this map is prohibited except by written permission of King County.

Horse Creek WTD Mitigation

Conceptual Plan