



King County

Department of
Natural Resources and Parks
Solid Waste Division

KING COUNTY SEPA ENVIRONMENTAL CHECKLIST FACTORIA RECYCLING AND TRANSFER STATION REPLACEMENT PROJECT

Final
February 2012

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KING COUNTY SEPA ENVIRONMENTAL CHECKLIST

FACTORIA RECYCLING AND TRANSFER STATION

REPLACEMENT PROJECT

Final
February 2012

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Acronyms and Abbreviations

ACM	asbestos-containing materials
APE	Area of Potential Effect
BA	Biological Assessment
BMPs	Best Management Practices
BP	British Petroleum
BLA	Boundary Line Adjustment
CFR	Code of Federal Regulations
cfs	cubic feet per second
CO	carbon monoxide
CO ₂	carbon dioxide
CRA	Cultural Resources Assessment
CWA	Clean Water Act
DAHP	Washington State Department of Archaeology and Historic Preservation
dBA	“A” weighted decibel scale for noise levels
DBH	diameter at breast height
Ecology	Washington State Department of Ecology
EDR	Environmental Data Resources
EIS	Environmental Impact Statement
ESA	Environmental Site Assessment
Factoria RTS	Factoria Recycling and Transfer Station Replacement Project
GHG	greenhouse gas
Ha	Alluvium
HDR	HDR Engineering, Inc.
Hf	man-made fill
HGM	Hydrogeomorphic
HHW	Household Hazardous Waste
IBC	International Building Code
IFC	International Fire Code

KCSWD	King County Solid Waste Division
kV	Kilovolt
LBP	lead-based paint
LEED	Leadership in Energy and Environmental Design
Leq	equivalent sound level
LI	Light Industrial
LID	Low Impact Development
LOS	Level of Service
MTCO ₂ e	metric tons of carbon dioxide equivalent
NFIP	National Flood Insurance Program
NMFS	National Marine Fisheries
NPDES	National Pollutant Discharge Elimination System
OSHA	Occupational Safety and Health Administration
PEM	palustrine emergent
PFO	palustrine forested
PHS	Priority Habitat and Species
ppm	parts per million
PSCAA	Puget Sound Clean Air Agency
PSE	Puget Sound Energy
PSS	palustrine, scrub-shrub
PM	Particulate Matter
Qpnf	Fluvial Deposits
Qva	Advance Outwash
Qvro	Recessional Outwash
RCW	Revised Code of Washington
RPW	Relatively Permanent Water
SEPA	State Environmental Policy Act
SHPO	State Historic Preservation Officer
SPCC	Spill Prevention Control and Countermeasures (Plan)

SWPPP	Stormwater Pollution and Prevention Plan
TCLP	Toxicity Characteristic Leaching Procedure
TESC	Temporary Erosion and Sediment Control (Plan)
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
V/C	volume-to-capacity
WAC	Washington Administrative Code
WDFW	Washington State Department of Fish and Wildlife
WDNR	Washington State Department of Natural Resources
WRIA	Water Resource Inventory Area

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WAC 197-11-960 Environmental Checklist

Purpose of Checklist:

The State Environmental Policy Act (SEPA), Chapter 43.21 Revised Code of Washington (RCW), requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purposes of this checklist are to provide information to help the agency, citizens, and other reviewers identify potential impacts from the proposal; to reduce or avoid adverse impacts from the proposal, where possible; and to help the agency decide whether an EIS is required.

A. Background

1. Name of proposed project, if applicable:

Factoria Recycling and Transfer Station (Factoria RTS) Replacement Project

2. Name of applicant:

King County Department of Natural Resources and Parks, Solid Waste Division (KCSWD)

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

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4. Date checklist prepared:

February 2012

5. Agency requesting checklist:

King County Department of Natural Resources and Parks, Solid Waste Division (KCSWD)

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

Construction of the Factoria RTS would commence in early 2014 and be completed with facilities operational in 2016. A key goal for the Factoria RTS project is to maintain operation of the existing transfer station during construction of the new facility. As a result, the existing facility

would remain in place and construction would occur in phases to minimize disruption to facility operations. The Factoria RTS would be constructed in four separate phases, as described below.

Phase 1

- Remove and salvage or recycle existing warehouse buildings.
- Begin clear and grade activities and prepare the site for construction.

Phase 2

- Bring up the grade on the northwest side of the site.
- Construct the container-chassis maneuvering and parking areas, and the retaining walls along the container-chassis access drive and along the west side of the property.
- Construct the internal drive aisle to connect the lower container chassis area to the upper tipping floor level of the building and build as close to the existing transfer station area as possible.
- Construct as much of the Factoria RTS as far east as possible. A temporary shoring wall may be built on the east end to protect the existing operations.
- Construct the administration building.
- Install the compactor.
- Obtain an Operating Permit and an Occupancy Permit for the Factoria RTS transfer building and administration area.

Phase 3

- Remove and recycle or salvage the existing transfer facility.
- Install retaining walls on the south and east sides of the site and then lower the site grades.

Phase 4

- Remove the temporary shoring wall.
- Construct the HHW facility and the canopy over the drive area.
- Install the fueling facility.
- Obtain an Occupancy Permit for the recycling and HHW facilities.
- Open the entire campus for business.

Additional project information is found on the project website:

<http://your.kingcounty.gov/solidwaste/facilities/factoria-replacement-project.asp>

7. **Do you have any plans for future additions, expansion or further activity related to or connected with this proposal?** ☐ Yes ☒ No

There are no plans for future additions or expansions other than those described above for the four construction phases.

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

The following studies were used in support of the current proposal and they are incorporated by reference below:

- *Wetland and Stream Assessment Report* (HDR 2012)
- *Traffic Impact Analysis* (HDR 2012)
- *Visual Quality Impact Assessment* (Hough Beck & Baird 2012)
- *Noise Technical Memorandum* (HDR 2012)
- *Air Quality Technical Memorandum* (HDR 2012)
- *Archaeological Assessment* (DAR 2010)

9. **Do you know whether applications are pending for government approvals of other proposals directly affecting the property covered by your proposal?** ☒ Yes ☐ No

Yes, a proposed Boundary Line Adjustment (BLA) is currently pending approval with the City of Bellevue and is under review. The proposal would add approximately 4.7 acres to the Factoria RTS property along the southern property line. No other applications or approvals directly affecting the property are currently pending for government approval.

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

Table 1 shows the permits and approvals that would be needed for the Factoria RTS.

Table 1. Permits and Approvals for the Factoria RTS

Permit/Approval Type	Agency
<i>Federal and State Permits and Approvals</i>	
Nationwide Section 404 Permit for compliance with the Clean Water Act (CWA)	U.S. Army Corps of Engineers (USACE)
Biological Assessment (BA) for compliance with Section 7 of the Endangered Species Act	U.S. Fish and Wildlife Service (USFWS)/National Marine Fisheries (NMFS)
Cultural Resources Assessment (CRA) for compliance with Section 106 of the National Historic Preservation Act	USACE and Washington State Department of Archaeology and Historic Preservation (DAHP)
Section 401 Certification for compliance with the CWA	Washington State Department of Ecology (Ecology)
National Pollutant Discharge Elimination System (NPDES) Construction Stormwater General Permit and Coverage	Ecology/U.S. Environmental Protection Agency
<i>Local Permits and Approvals</i>	
State Environmental Policy Act (SEPA) Expanded Environmental Checklist and Mitigated Determination of Nonsignificance (MDNS)	King County
Pre-Application Meeting	City of Bellevue
Conditional Use Permit	City of Bellevue
Boundary Line Adjustment	City of Bellevue
Critical Areas Land Use Permit	City of Bellevue
Right-of-Way Use Permit	City of Bellevue
Clearing and Grading Permit	City of Bellevue
Design Review	City of Bellevue
Building Permits ¹	City of Bellevue
Utility Developer Extension Permits ²	City of Bellevue
Demolition Permit	City of Bellevue
Right-of-Way Consent	BP/Olympic Pipeline
Right-of-Way Consent	Puget Sound Energy

1. Not intended to include all necessary facility construction permits and approvals such as electrical, plumbing, mechanical, fire, structural, etc.

2. Includes water, sewer, and storm drainage review.

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.)**

Background

The KCSWD is in the process of designing for the replacement of the Factoria RTS to modernize the facility to become a solid waste processing, recycling, and transfer station. Currently, it is one of eight existing transfer stations owned and operated by KCSWD where solid waste is collected and transferred into large tractor-trailers for transport to the Cedar Hills Regional Landfill.

The Final 2001 Comprehensive Solid Waste Management Plan along with the 2006 Solid Waste Transfer and Waste Management Plan demonstrate the need for a major overhaul of the County's aging transfer system infrastructure. These plans were adopted by the King County Council, and affirmed the need to replace the Factoria Station. The existing facility was constructed in the 1960s and does not meet several service needs including room for collecting recyclable materials, minimum roof clearance needed by modern, larger garbage collection vehicles, and the ability to compact waste.

The new station will address those service needs and be built to meet current building and environmental standards and to accommodate projected future growth in the region. At the same time, operational improvements would be provided for enhanced compaction of solid waste to reduce the number of facility transfer hauler trips to and from the site. The number of facility transfer hauler trips would initially be reduced after the compaction improvements were completed; however, as the tonnage of waste processed increases in the future, the number of transfer hauler trips would slightly increase.

Proposed Facility Improvements

The proposed Factoria RTS (see Figure 1, Project Vicinity Map) would be situated on light-industrial zoned property that is constrained by steep topography, wetlands, streams, and a large utility corridor easement occupied by British Petroleum (BP)/Olympic Pipeline and Puget Sound Energy (PSE) distribution lines and PSE overhead power lines. Southeast 32nd Street dead-ends at the Factoria RTS entrance, where a small scalehouse is located to weigh vehicles upon entering and exiting the site. KCSWD intends to maintain operation of the existing transfer station during construction of its replacement on adjacent property. To help facilitate that goal, King County purchased adjacent property northwest of the site that contains two warehouse buildings (Figure 1), which would be removed. With the incorporation of property assumed through the BLA, the size of the new Factoria RTS site would total approximately 15.6 acres.

The Factoria RTS Site Plan, Figure 2, provides a detailed illustration of the proposed facility improvements and uses. Major features planned for the Factoria RTS are summarized below:

- An enclosed solid waste transfer building, with adequate roof clearance, that would minimize noise, dust and odors.
- New recyclables collection and processing areas for items such as yard waste, clean wood, appliances, and scrap metal.
- More efficient household hazardous waste collection with expanded handling and processing capabilities.
- A pre-load solid waste compactor, with space for a future second compactor, that would allow more garbage to be loaded into container-chassis transfer vehicles, thereby decreasing the number of truck trips needed to and from the station.
- Sustainable building design features that would improve energy efficiency and result in lower life cycle costs than a conventional building design.

Other planned features for the Factoria RTS include:

- A new administration building featuring transfer station operator workspace, office space, mechanical and electrical rooms, and restroom/locker room space.
- Retaining walls (temporary and permanent) to stabilize slopes for facility expansion and to allow flexibility for locating building and drive aisles that are suitable for a transfer station.
- Space on the floor for 3 days worth of emergency waste storage.
- Scalehouse improvements; reuse existing scale plaza and scalehouse facilities (one inbound and one outbound scale) and construct new exterior façade.
- On-site maintenance shop and equipment storage area.
- On-site fueling facility.
- Yard space for transfer trailer storage (covered and uncovered).
- Utility relocations required to accommodate development (City of Bellevue water and sanitary sewer main lines, PSE electrical transmission and distribution poles).
- Perimeter fencing, lighting, and signage.
- Separation of commercial garbage trucks, self-haul users, and County transfer trailer vehicle interactions on-site.
- Separated traffic circulation and access (internal road network, SE 32nd Street, SE 30th Street).
- Vehicle parking (e.g., visitor, administration building, helper, and staff).
- Sustainable building design features (e.g., Leadership in Energy and Environmental Design [LEED], Salmon-Safe, and Low Impact Development [LID]) that would improve energy efficiency and result in lower life cycle costs than a conventional building design.
- Natural resources mitigation for unavoidable impacts to critical areas as required by federal, state, and local requirements.

The new Factoria RTS building would be centrally located on the site. The recycling area and HHW building would be on the east side of the transfer building; the customer entrance, scale plaza, and access roads would be to the south; and the container chassis storage yard would be in the northwest corner. The administrative building would be on the south side of the transfer building. The wetland and stream currently located in the northeast corner of the site would be preserved and enhanced as part of the project.

- 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 or sites. 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 to this checklist.**

The new facility will be built at the existing site and on adjoining property acquired for the project (see Figure 1, Project Vicinity Map). It will be located at 13800 Southeast 32nd Street, approximately one-quarter mile north of Interstate 90 and one-half mile east of Interstate 405 in King County, Washington. The existing facility is located in the light industrial area between Southeast 30th Street and Southeast 32nd Street in the City of Bellevue, Washington within Section 10, Township 24 North, and Range 5 East.

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Figure 1. Project Vicinity Map

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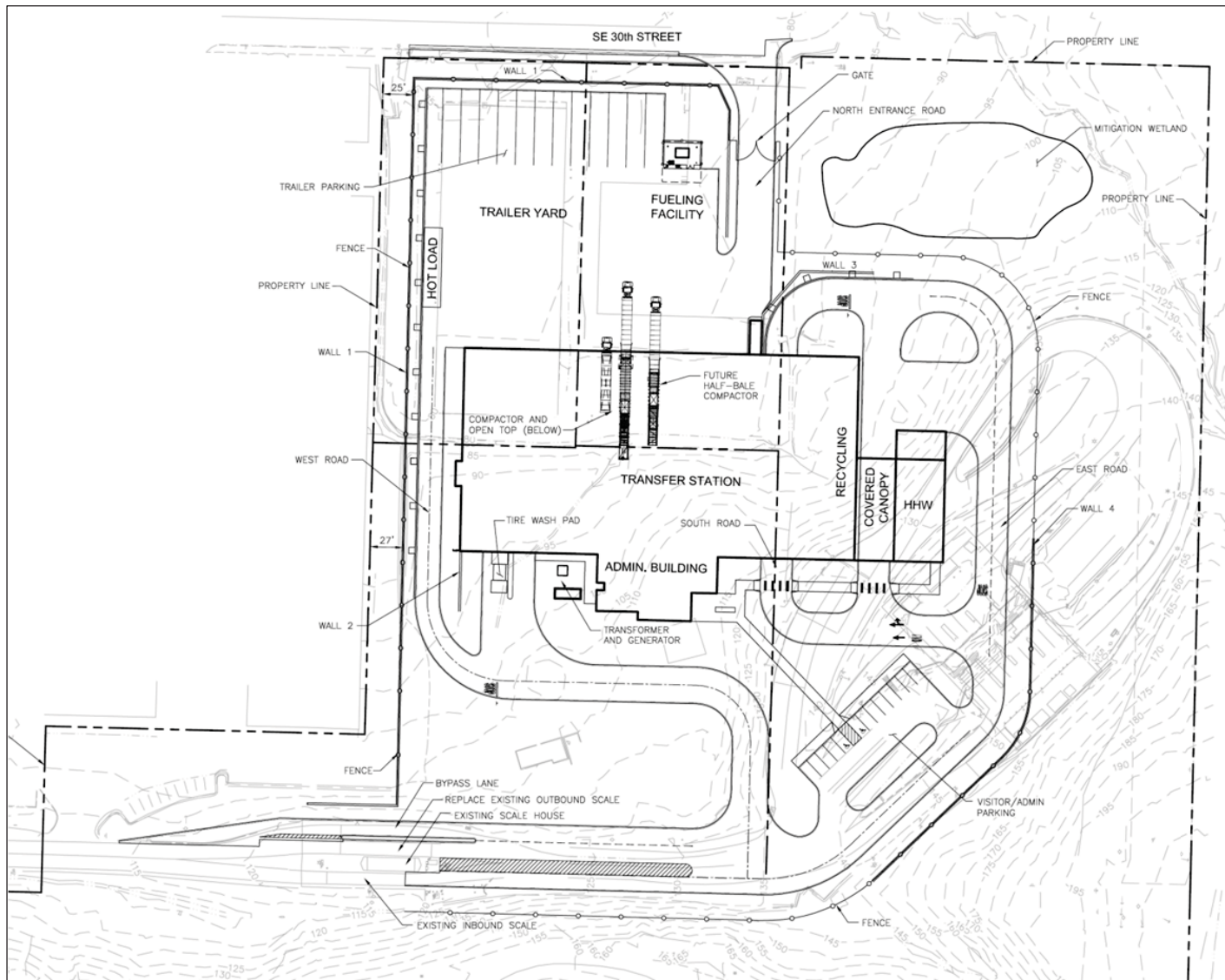


Figure 2. Site Plan

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B. Environmental Elements

Responses to the questions below consider the cumulative effects of the proposed project in combination with potential impacts of other known projects in the site vicinity. Other known current and future projects in the site vicinity were identified by reviewing the City of Bellevue's Capital Investment Program (2011-2016) and current and planned projects for the Woodridge Neighborhood (HDR 2011e). Where cumulative effects are not addressed for the environmental elements in the SEPA checklist, no significant adverse impacts would be anticipated.

1. Earth

1a. General Description of the site (check one).

- ☒ Flat
- ☐ Rolling
- ☒ Hilly
- ☒ Steep slopes
- ☐ Mountainous
- ☐ Other:

1b. What is the steepest slope on the site (approximate percent of slope)?

The site topography consists of a series of slopes and man-made terraces that slope downward to the northwest with an overall grade change of about 100 feet. The steepest slope on the project site is estimated to be a 30 to 40 percent slope.

1c. What general types of soil are found on the site (i.e., clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

The current and previous field explorations at the site encountered man-made fill (Hf) underlain by layers of silt, sand, and glacially-overridden sand deposits. A summary discussion of the primary soil units found on the site is provided below:

- Holocene Fill (Hf): Existing fill deposits at the site range from silty sands to sandy spits to relatively clean sandy gravel. Most of these man-made fill deposits are associated with re-grading and road construction for the existing transfer station and surrounding warehouses.
- Alluvium (Ha): Alluvial deposits generally consist of loose to medium dense sand with scattered fine gravel.
- Recessional Outwash (Qvro): Similar to river deposits, these glaciofluvial soils typically consist of loose to dense, clean to silty sand with varying amounts of gravel.
- Advance Outwash (Qva): These sediments typically consist of dense to very dense stratified sand and gravel.

- Fluvial Deposits (Qpnf): The nonglacial fluvial deposits consist of clean to silty, fine to medium sand with lenses or layers of slightly silty, gravelly sand and sandy gravel with a trace of silt. This unit may contain cobbles and boulders, and in some cases, may be in concentrated layers representing channel deposits (Shannon & Wilson 2010).

1d. Are there surface indications or history of unstable soils in the immediate vicinity?
☒ Yes ☐ No If so, describe.

Very loose to medium dense saturated soil was observed in some of the borings from near the center of the site. Based on preliminary liquefaction analysis, some soils may be susceptible to liquefaction during an earthquake. The limited liquefaction may occur in some discontinuous sand layers beneath the northwest portion of the transfer station building and liquefaction induced settlements are on the order of several inches or less. Overall, the potential for liquefaction is considered low (Shannon & Wilson 2010).

1e. Describe the purpose, type and approximate quantities of any filling or grading proposed. Indicate source of fill.

Table 2 lists the estimated clearing, filling, and grading quantities for the Factoria RTS at full buildout.

Table 2. Estimated Filling and Grading Quantities for the Factoria RTS

	Total (Approximate)
Total Project Area (acres)	15.6
Total Area Cleared/Graded (acres)	8.4
Volume of Excavation (cubic yards)	161,240
Volume of Fill (cubic yards)	51,190

It is anticipated that the majority of the cut material would be used as suitable fill on-site. If additional sources of fill material are required, it is expected that the fill would be obtained from a local, approved commercial source.

1f. Could erosion occur as a result of clearing, construction or use?
☒ Yes ☐ No If so, generally describe.

Minor erosion could occur as a result of the vegetation clearing and ground disturbance associated with construction activities. Erosion would be minimized by implementing Best Management Practices (BMPs).

No cumulative impacts to soils or erosion are expected from the proposed project because all phases of the individual projects would comply with applicable temporary erosion and sedimentation control provisions of the City of Bellevue Municipal Code and an NPDES

Construction Stormwater General Permit's Surface Water Pollution Prevention Plan, where required.

1g. About what percent of the site will be covered with impervious surfaces after project construction (i.e., asphalt or buildings)?

Approximately 31 percent of the site would be covered with impervious surfaces after project construction.

1h. Proposed measures to reduce or control erosion or other impacts to the earth, if any:

Construction

During construction, erosion control BMPs required by the King County *Surface Water Design Manual* (2009), the City of Bellevue Stormwater Manual, and Ecology's *Stormwater Management Manual for Western Washington* would be employed. The BMPs include use of mulch, silt barriers, containment systems, interim stormwater controls, cover measures (straw or plastic), and stream bypasses, as well as reseeding of areas temporarily disturbed by construction. In addition, existing vegetation would be preserved to the extent practicable.

Operation

Approved planting and seeding would be provided at the conclusion of project construction activities to ensure that all bare earth areas were revegetated to limit the potential for erosion. Landscaping in compliance with City of Bellevue standards would be installed to control erosion once the facility is functional.

2. Air

2a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke, greenhouse gases) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

Construction

Temporary air quality impacts during construction could include construction machinery exhaust emissions, primarily from particulate matter (PM₁₀ and PM_{2.5}) and small amounts of carbon monoxide (CO) and oxides of nitrogen. The sources of particulate matter might be fugitive dust from clearing, excavation activities, uncovered stockpiles, and/or diesel smoke.

Some construction activities may cause odors, in particular during paving operations using tar and asphalt. The construction contractor would be required to comply with the Puget Sound Clean Air Agency (PSCAA) regulations requiring the control of odorous emissions so as to prevent interference with adjacent uses. These types of odors would be short-term and unlikely to impact adjacent uses.

Operation

Facility Improvements

Emissions during operation of the solid waste transfer station could result from the combustion of fossil fuels. These emissions would be released in the exhaust of vehicles used to transport solid waste to the facility and equipment used to process the waste at the facility.

The proposed project would not be anticipated to substantially impact air quality due to increased vehicular emissions. All the study intersections operated at level of service (LOS) D or better in 2010. In 2014 with-project conditions, all study intersections would operate at LOS C or better. Over the long-term in 2042, all the study intersections would remain at the same LOS E conditions with or without the proposed Factoria RTS improvements. This pattern indicates that the proposed facility expansion would unlikely affect the operation of the study area intersections.

Operational improvements would also be provided for enhanced compaction of solid waste to reduce the number of facility transfer hauler trips to and from the site. Initially, this would help reduce the number of trailer loads leaving the site, resulting in lower vehicular emissions. Over time, an increase in the solid waste demands at the facility would be anticipated.

With respect to dust and odor emissions, the proposed facility improvements would be enclosed wherever possible and incorporate a dust suppression/misting system which would be coupled with a mechanical exhaust ventilation system. The misting ring around the exhaust fans would treat the exhaust air streams with an odorizing agent to prevent odors from migrating from the facility. In addition, garbage haulers in King County are converting their fleets from diesel powered trucks to compressed natural gas resulting in lower overall exhaust emissions as well.

Greenhouse Gas

Climate can be affected by many factors, including changes in atmospheric composition due to greenhouse gas (GHG) emissions. Other factors include variations in solar irradiance, volcanic activity, ocean circulation changes, and variations in Earth's orbital parameters. Concerns expressed in recent years are that mankind's emissions of GHGs may warm the climate, possibly affecting precipitation patterns as well. GHGs, and in particular carbon dioxide (CO₂), are emitted by a vast number of sources, both natural and man-made, in amounts ranging from trivial to massive. These emissions mix rapidly and uniformly in the atmosphere. They contribute equally to global concentrations no matter where they are emitted.

Ecology provides guidance for including GHG emissions in SEPA reviews. The guidance states that "new" emissions that are expected to average 10,000 metric tons of carbon dioxide equivalent per year should be disclosed. Most projects are expected to be under this level of emissions, including warehouse facilities less than 119,000 square feet in area. The warehouse

designation is the closest designation to a solid waste transfer facility in Ecology's screening tool.

The transfer station's potential contribution to global climate change would be through emission of GHGs, primarily CO₂. The net annual change in CO₂ emissions due to construction or operation of the Factoria RTS has not been quantified because the facility would process solid waste, which would continue to be produced and processed somewhere, whether at the proposed transfer station, at another transfer station, or at another solid waste handling facility. Regardless of where or how the solid waste was processed, CO₂ emissions would be emitted. Over time periods of a year or longer, it can be assumed that CO₂ is essentially evenly distributed throughout the atmosphere across the globe, and this is true for the CO₂ emissions resulting from processing of the solid waste that would be handled by the Factoria RTS, or by whatever facility handled the solid waste if Factoria RTS did not exist. Therefore, there would be no discernible impact to the climate due to construction or operation of the Factoria RTS.

The Factoria RTS design is being developed in cooperation with KCSWD's Green Building Program. As part of that program, GHG emissions from County facilities are tracked when feasible. The emissions for Factoria RTS were calculated using *King County Department of Development and Environmental Services SEPA GHG Emissions Worksheet Version 1.7, December, 26, 2007 (Introduction Revised March 2011)* (King County 2011). The new emissions resulting from the construction and operation of Factoria RTS using this worksheet method would be approximately 2,100 metric tons of carbon dioxide equivalents (MTCO₂e) per year, a level that falls under the official threshold for reporting. The emissions calculations use conservative assumptions for construction materials used, pavement area, and operations based on the number of employees for the building type. This facility is slightly different than traditional building types. While the estimate may be rough, it is sufficient for tracking and disclosure, although not required.

As part of King County's Green Building Program, the Factoria RTS would be built to Leadership in Energy and Environmental Design (LEED) standards. Energy efficient design would contribute to the long-term reduction in GHG emissions. In addition, the new facility would add recycling services that are not available at the existing facility. Increased recycling is a key carbon offset benefit that can outweigh the energy usage of this type of facility within a solid waste system.

Cumulative Impacts

Cumulative impacts of the proposed construction and operation of the facility can be considered in terms of the impact of the facility with regard to regional air quality concerns. The EPA designates regions according to their level of compliance with the Clean Air Act. Areas that have persistent air quality problems are designated by the EPA as non-attainment areas.

At one point, King County and the Puget Sound Region was designated as a non-attainment area due to carbon monoxide levels that exceeded the attainment threshold; however, in 1996 the Puget Sound Region was upgraded from "non-attainment" to an "attainment area." Such a

designation indicates that King County now meets the EPA threshold for carbon monoxide levels and has adopted a plan for continuing to meet and maintain air quality standards. The Puget Sound Region is currently designated with the “attainment” status for other air quality pollutants, such as, particulate matter and ozone. It is not expected that the proposed project would impact the attainment status of the region, since the proposed use would be enclosed wherever possible and incorporate dust suppression and exhaust ventilation systems to reduce emissions.

2b. Are there any off-site sources of emissions or odor that may affect your proposal?

☐ Yes ☒ No If so, generally describe.

No off-site sources of emissions or odors have been identified that may affect this proposal.

2c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Construction

During construction, mitigation measures for project impacts to air quality, odor, and GHG emissions could include, but would not be limited to the following:

- Spraying water, when necessary, during construction operations to reduce emissions of fugitive dust.
- Covering dirt, gravel, and debris piles as needed to reduce fugitive dust and wind-blown debris.
- Covering open-bodied trucks in accordance with RCW 46.61.655, wetting materials in trucks, or providing adequate freeboard (space from the top of the material to the top of the truck) to reduce fugitive dust emissions.
- Conserving and reusing construction materials on-site to reduce exhaust emissions and traffic delays because additional materials would not need to be delivered to the site.
- Turning off construction equipment when not in use to minimize idling and reduce GHG emissions.
- Preserve or replant trees that are removed during development as a means of maintaining carbon storage.
- Replanting all vegetation temporarily disturbed by construction activities with native vegetation within 1 year or growing season after construction was complete.

Operation

None required.

3. Water

3a. Surface:

3a (1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, salt water, lakes, ponds, wetlands)?

☒ Yes ☐ No If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

Streams

Stream 0263 is the only stream located in the project area. This stream conveys water past the project site through a culvert under the PSE access road at the east end of 30th street and then into East Creek. Table 3 summarizes the size, rating, and classification of Stream 0263.

Table 3. Summary of Streams in the Project Area

Stream Name	Tributary to	Stream Type ^a	Buffer Width ^a	USACE Jurisdiction ^b	Average Width in Project Area (feet) ^c	Approximate Length in Project Area (feet) ^c
Stream 0263	East Creek	N	50	RPW	3	306

^a Bellevue Land Use Code 20.25H.075

^b RPW = Relatively Permanent Water

^c Average widths and approximate lengths were determined based on existing survey data and field observations.

Drainage Features

Three ditches are located in the project area: Ditch A, Ditch B, and Ditch C. Ditches A and B are considered jurisdictional based on the initial USACE jurisdictional determination. More information has been discovered since the jurisdictional determination and a revisit of the Corps decision is planned during final design of the project. General characteristics of these ditches are summarized in Table 4 and described below.

Table 4. Summary of Ditches in the Project Area

Name	Approximate Length (feet)	Approximate Width (feet)	Approximate Depth (feet)	Source	Discharge Location	Jurisdictional Determination
Ditch A	604	4	<1	Stormwater runoff from the transfer station	Stormwater conveyance system located on SE 30 th Street	Jurisdictional
Ditch B	133	2	1	No surface water has been observed	Wetland 4	Jurisdictional
Ditch C	150	2	<1	Stormwater runoff from SE 32 nd Street	Wetland A	Non-jurisdictional

Wetlands

In total, five wetlands were identified in the project area. Table 5 summarizes the size, rating, and classification of wetlands found in the project area (see Figure 3, Wetlands and Streams in the Project Area).

Table 5. Wetland Size, Rating, Classification, and Buffer Width for Wetlands in the Project Area

Wetland Name	Delineated Area (overall wetland size) ^a	Hydrogeomorphic (HGM) Classification	Cowardin Classification ^c	Score for Water Quality	Score for Hydrologic Functions	Score for Habitat Functions	Total Score for Functions	Wetland Rating City of Bellevue ^b	Buffer Width ^b
2	0.38 acre	Slope	PSS/PFO	4	6	15	25	IV	40
3	0.96 acre (1.8 acre)	Slope	PEM/PSS/PFO	6	16	23	45	III	110
4	0.06 acre	Slope	PSS	14	8	10	32	III	60
A	0.01 acre	Depressional	PSS	6	5	6	17	IV	N/A
C	0.04 acre	Depressional	PFO	10	7	9	26	IV	N/A

^a Overall wetland size is the total area of wetland delineated or estimated based on aerial photograph interpretation and field reconnaissance. Area of delineated portions of the wetlands is based on the survey data.

^b Wetland ratings and buffer widths are based on City of Bellevue Land Use Code 20.25H.095.

^c Cowardin et al. (1979). All wetlands are palustrine. PSS = palustrine, scrub-shrub; PFO = palustrine forested; PEM = palustrine emergent.

3a (2) Will the project require any work over, in or adjacent to (within 200 feet) of the described waters? ☒ Yes ☐ No **If yes, please describe and attach available prints.**

Wetlands

Proposed construction activities would result in permanent fill in Wetland 2, Wetland 4, and Wetland A. This fill would be required due to expansion of the existing facility and roadway. The proposed project is anticipated to widen SE 32nd Street, west of the existing scale house, which would also result in filling Wetland A. Permanent wetland impacts are summarized in Table 6.

Table 6. Summary of Permanent Wetland Impacts in the Project Area

Wetland Name	Permanent Wetland Impact Area (acres)
Wetland 2	0.38
Wetland 4	0.06
Wetland A	0.01
Total	0.45

Construction of the Factoria RTS may result in temporary impacts to Wetland 3 from construction-related activities in the immediate vicinity of work area including, but not limited to, clearing, grading, and filling. It is anticipated that temporary impacts to Wetland 3 would be minimal and limited to short-term. All temporary impact areas would be restored to pre-existing grades and revegetated with appropriate native trees and shrubs.

Project construction would have permanent and temporary impacts to vegetated buffers of Wetland 3. Permanent buffer impacts include clearing buffer vegetation and permanent filling of these areas resulting from the construction of paved surfaces. These activities would affect approximately 0.15 acre of the buffer of Wetland 3 (Figure 3).

Temporary buffer impacts would occur where construction work extended beyond the permanent footprint of the project. Temporary buffer impacts would mostly result from vegetation removal in southwestern portion of the buffer of Wetland 3. The temporary removal of vegetation in portions of the wetland buffer would cause a minor and temporary decrease in general habitat support and native plant species support. Revegetating disturbed areas with native woody vegetation would result in a long-term increase in plant species' diversity and general habitat support.

Streams

Construction of the proposed project would not directly affect Stream 0263 since no in-water work would occur as a part of the project. Potential impacts to changes in flow and water quality could occur in the stream due to construction of additional impervious surfaces. However, implementation of water quality and flow control measures on site would limit the likelihood of potential adverse impacts to hydrology and water quality. The proposed project is proposed to include stormwater treatment and detention features to collect, convey, treat, and detain stormwater runoff. These features include rain gardens, bioretention and infiltration swales, and a detention vault. After treatment and detention, the stormwater runoff would be discharged into the existing conveyance system along SE 30th Street. There is currently no water

quality treatment under existing conditions currently provided in the project area, so the proposed project would be an improvement over existing conditions. BMPs and temporary erosion control measures would also be implemented to minimize potential impacts to surface waters during construction.

No permanent impacts to stream buffers would occur as a result of the proposed project. However, the proposed project could temporarily affect portions of the stream buffer by clearing riparian vegetation during construction, which would be primarily associated with proposed mitigation activities. These areas are dominated with invasive species and would be revegetated with native woody vegetation following construction. Revegetating disturbed areas with native woody vegetation would result in a long-term increase in plant species diversity and general habitat support.

Drainage Features

Ditch A and a portion of Ditch B would be filled permanently as a result of expansion of the paved surface area. Conveyance and biofiltration are the primary functions that these ditches provide. These functions would be mitigated onsite by construction of the stormwater treatment and detention system. The proposed system would provide additional water quality treatment that is not currently provided by the ditches.

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

Wetlands

The project would remove approximately 0.45 acre of wetland habitat (see item 3a2).

Streams

Construction of the proposed project would not directly affect Stream 0263.

3a (4) Will the proposal require surface water withdrawals or diversions? ☐ Yes ☒ No
Give general description, purpose and approximate quantities if known.

3a (5) Does the proposal lie within a 100-year floodplain? ☐ Yes ☒ No **If so, note location on the site plan.**

The site is located within a localized area of seasonal flooding associated with the drainage basin; however, it is not designated as a 100-year floodplain managed by the National Flood Insurance Program (NFIP).



0 50 100 200 Feet

Legend

- | | | | | | | |
|--------------|------------------------------|---------|-------------------|----------------|--------------------|--------|
| Wetland | Approximate Wetland Boundary | Flow | 5-foot Contour | Wetland Buffer | Project Area | Parcel |
| Stream/Ditch | Approximate Stream Location | Culvert | Soil Pit Location | Stream Buffer | Sub-drainage Basin | |

Figure 3. Wetlands and Streams in the Project Area

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3a (6) Does the proposal involve any discharges of waste materials to surface waters?
☐ Yes ☒ No If so, describe the type of waste and anticipated volume of discharge.

No waste materials would be discharged to surface waters. BMPs would be implemented following the King County, City of Bellevue, and Ecology stormwater guidance.

3b. Ground:

3b (1) Will groundwater be withdrawn or will water be discharged to groundwater?
☒ Yes ☐ No Give general description, purpose and approximate quantities if known.

Yes, a large 2:1 cut slope is proposed along the south and southeast portion of the site that would daylight groundwater from a shallow artesian aquifer. As a part of this project, a finger-drain collection system would be constructed in the slope to intercept the groundwater and convey it into an acceptable discharge point. The finger-drain system would consist of trenches excavated perpendicular to slope with a perforated drain pipe, and backfilled with clean gravel. An estimate for the expected quantity of groundwater in the finger-drain system is still being developed, and the design team would work closely with the City of Bellevue to determine the appropriate means and location of discharge. The intent of the design is to discharge the intercepted groundwater into the same stream system that it currently reaches via subsurface flow (Shannon & Wilson 2010).

Approximate quantities for groundwater and dewatering activities are unknown at this time. Anticipated general rates, volumes, and dewatering methods would be determined by the contractor. All waters discharged from the project site would meet Ecology's water quality standards.

3b (2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (i.e., 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 expected to be served by the system or systems.

None anticipated. This project involves neither the construction nor operation of a septic tank system or any other waste disposal system or facility.

3c. Water runoff (including stormwater):

3c (1) Describe the source of runoff (including stormwater) 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.

Stormwater runoff is the only source of water runoff expected at the site. The proposed site plan includes drainage features designed to collect, convey, treat, and detain this runoff.

Specific design is still under development, but treatment and detention features would include rain gardens, bioretention swales, and a detention vault. After treatment and detention, the stormwater runoff would be discharged into the existing conveyance system in SE 30th Street, which discharges into an unnamed tributary to East Creek.

3c (2) Could waste materials enter ground or surface waters? ☒ **Yes** ☐ **No** **If so, generally describe.**

Yes, there is an unlikely possibility that minimal amounts of waste materials (i.e., small amounts of petroleum products, sediments, or concrete materials) could occur from construction and operation activity. Spill prevention BMPs would be followed during construction to avoid such spills. The contractor would be required to prepare a Spill Prevention Control and Countermeasures (SPCC) Plan for the project prior to beginning construction and submit it to King County for approval.

3d. Proposed measures to reduce or control surface, ground and runoff water impacts, if any:

Construction

Proposed measures to avoid and minimize impacts to wetlands, streams, and groundwater during construction could include, but would not be limited, to the following:

1. The project would be designed to avoid or minimize impacts to wetlands, streams, and buffers wherever feasible. Project impacts to wetlands and streams would be avoided or minimized using the following design/construction methods:
 - Multiple design revisions were made for this project to limit disturbance to Wetland 3 and Stream 0263. The entire facility was shifted to the west, and a retaining wall was designed along the hillside to limit the amount of fill, resulting in a reduction in impacts to wetlands and wetland buffers.
 - Construction impacts would be confined to the minimum area necessary to complete the project.
 - To the extent practicable, work would be performed during the dry season in wetland areas to limit potential sedimentation effects and interruptions in surface and subsurface flows.
 - Construction equipment would not operate within OHWM of Stream 0263 without authorization from WDFW.
 - Exposed soils would be stabilized with a vegetative cover or other erosion control treatment immediately following construction. Landscaping in compliance with City of Bellevue standards would be installed to control erosion once the facility is functional.

- Temporary disturbed areas by construction activities would be revegetated with native vegetation within one year or one growing season after construction is complete.
- During construction, erosion control BMPs would be employed. The BMPs include use of mulch, silt barriers, containment systems, interim stormwater controls, cover measures (straw or plastic), and stream bypasses, as well as reseeding of areas temporarily disturbed by construction. In addition, existing vegetation would be preserved to the extent practicable.
- Oil, fuels, or chemicals would not be discharged to surface waters or onto land where there is a potential for reentry into surface waters.
- Developing and implementing BMPs such as a Stormwater Pollution Prevention Plan (SWPPP) that would include a Temporary Erosion and Sediment Control (TESC) Plan and an Spill Prevention and Countermeasures Control (SPCC) Plan.

Operation

Proposed measures to avoid, minimize, and compensate for permanent impacts to wetlands, streams, and groundwater during project operation would include, but would not be limited to the following:

1. Compensatory mitigation would be provided for direct impacts to wetlands and buffers, consistent with the requirements of the City of Bellevue's LUC and appropriate federal and state regulations. To meet the project's needs for compensatory mitigation, a few mitigation strategies have been discussed as a part of the project. These strategies are described in the Mitigation Options Report (HDR 2010).
 - The purpose of the mitigation plan is to first compensate for those functions provided by the impacted wetlands. Currently, the proposed mitigation area is located within the Stream 0263 corridor in the northeast corner of the site. The proposed mitigation is located on-site and on an adjacent parcel, upstream of the project area, and is intended to provide the following objectives:
 - Improve wetland habitat diversity by creating evergreen canopy, open water, emergent, scrub-shrub, and riparian habitat that would provide nesting habitat for amphibians and songbirds and enhance habitat corridor functions.
 - Improve riparian habitat by removing invasive species and planting native trees and understory in stream buffer
 - Increase plant species diversity by planting native tree, shrub, and herbaceous species and providing habitat for native emergent plant species.
 - Lessen ongoing watershed deficiencies by trapping and managing sediment loads prior to discharge into a wetland and stabilizing streambed that has been affected by stormwater peak flows.

- Provide better long-term protection of existing infrastructure such as the existing petroleum pipeline crossing of Stream 0263 that currently requires ongoing maintenance.
 - Dedicate long-term protection and maintenance by providing sediment management and native growth protection easement.
 - More details and specific design criteria on the mitigation plan would be determined during final design and would be provided in the Critical Areas Report.
2. Stormwater treatment facilities would be constructed to treat and infiltrate stormwater runoff from new and existing impervious surfaces. Stormwater treatment would comply with Ecology's 2005 *Stormwater Management Manual for Western Washington* and the 2009 King County *Surface Water Design Manual*.
 3. Sustainable features including rooftop rainwater harvesting and pervious pavement would be incorporated into the transfer station design to minimize the amount of stormwater runoff collected for treatment and discharge. Pervious areas of the proposed development would be designed to maximize infiltration through the use of engineered rain gardens, bio-infiltration swales, and other applicable infiltration facilities as allowed by the City of Bellevue Code and Standards. Harvested rooftop stormwater would be conveyed to a cistern to use for washing down the tipping floor, landscape irrigation, and other non-potable uses. Excess rainwater that was harvested would not require water quality treatment but would be attenuated in the flow control system before discharge via the storm system outlet.

4. Plants

4a. Check or circle types of vegetation found on the site:

- ☒ Deciduous tree: alder, maple, aspen, other: black cottonwood, beaked hazelnut
- ☒ Evergreen tree: fir, cedar, pine, other:
- ☒ Shrubs
- ☒ Grass
- ☐ Pasture
- ☐ Crop or grain
- ☒ Wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other: reed canarygrass, lady fern
- ☐ Water plants: water lily, eelgrass, milfoil, other:
- ☐ Other: sword fern, salmonberry, Himalayan blackberry, sword fern, horsetail

Vegetation communities found in the project area include wetlands (see item 3a1.) for a description of wetlands in the project area) and upland second-growth deciduous forest. The deciduous forest is primarily dominated by black cottonwood, big-leaf maple, and red alder with an understory of Indian plum, salmonberry, and sword fern. English ivy and Himalayan blackberry are the common invasive species in the disturbed area. Small amounts of coniferous trees such as Douglas fir and western red cedar are also present in the project area.

4b. What kind and amount of vegetation will be removed or altered?

The project would remove approximately 0.45 acre of wetland habitat (see item 3a2.). Construction of the Factoria RTS may result in temporary impacts to Wetland 3 from construction-related activities in the immediate vicinity of the work area including, but not limited to, clearing, grading, and filling. It is anticipated that temporary impacts to Wetland 3 would be minimal and limited to short-term. Approximately 0.15 acre of upland vegetation would be removed; upland vegetation to be removed includes the vegetated buffer of Wetland 3.

For site clearing of project improvements, a total of approximately 3.24 acres of vegetation in the form of trees, shrubs and understory vegetation would be removed.

Due to the limited amount of native vegetation to be removed or altered with the proposed project and the isolated location of the impacted area, the addition of the proposed project to other potential projects in the vicinity is not expected to result in cumulative impacts to vegetation.

4c. List threatened or endangered species known to be on or near the site.

There are no known threatened and endangered plant species known to be on or near the site.

4d. Proposed landscaping, use of native plants or other measures to preserve or enhance vegetation on the site, if any:

All vegetation temporarily disturbed by construction activities would be replaced with native vegetation within one year of the growing season after construction was complete.

The project would provide compensatory mitigation for direct impacts to critical areas, consistent with the requirements of the City of Bellevue Land Use Code and appropriate federal and state regulations. To meet the project's needs for compensatory mitigation, a few mitigation strategies have been discussed as a part of the project. These strategies are described in the *Wetland Mitigation Options Report* (HDR 2010e).

More details on and specific design criteria for the proposed mitigation plan would be determined during final design.

5. Animals

5a. Check or circle any birds and animals which have been observed on or near the site:

- ☒ Birds: hawk, heron, eagle, songbirds, other: red-tailed hawk, Cooper's hawk, woodpecker, crow
- ☒ Mammals: deer, bear, elk, beaver, other: raccoons, opossums, squirrels, rats
- ☐ Fish: bass, salmon, trout, herring, shellfish, other:

Birds

One active red-tailed hawk nest was observed in December 2010 in a black cottonwood tree located approximately 40 feet from SE 32nd Street and 220 feet southeast of the scalehouse. A pair of red-tailed hawks was observed at the nest and in the vicinity of the nest in March and April 2011. The nesting tree is approximately 14 inches in diameter at breast height (DBH) and is located on top of the slope. According to a personal communication with WDFW, as long as there are nesting and foraging opportunities available in the project vicinity, mitigation is not presently required. Based on field reconnaissance, suitable habitat does exist in the project vicinity to afford the red-tailed hawk opportunities for nesting and foraging.

Fish

Within the project area, the lack of defined stream channels and shallow flows on the densely vegetated hillside precludes fish passage to the project area. This concurs with the classification of Stream 0263 upstream of the culvert under the PSE access road as non-fish bearing by the City of Bellevue, and no salmon species are documented to occur within the project area (WDFW 2010a, 2010b; City of Bellevue 1993, 2002). Under the state typing system, this section of the stream is classified as Type Np, to indicate that the stream is non-fish bearing and is perennial.

5b. List any threatened or endangered species known to be on or near the site.

There are no known occurrences of threatened or endangered fish or wildlife species on or near the site (WDFW 2010a; 2010b). Chinook salmon, a federally-listed threatened species, are documented to occur in Sunset Creek; however, Sunset Creek is outside of the project area.

5c. Is the site part of a migration route? ☒ Yes ☐ No If so, explain.

The project area lies within the Pacific Flyway, an avian migratory corridor consisting of the western coastal areas of South, Central and North America.

5d. Proposed measures to preserve or enhance wildlife, if any:

KCSWD proposes replanting all vegetation temporarily disturbed by construction activities with native vegetation within one year or one growing season after construction is complete.

Removal of the red-tailed hawk nest tree would occur during off-nesting months or if the nest was abandoned and not unoccupied by young.

Coordination with USFWS, WDFW, and City of Bellevue would occur on the methods and timing of the nest removal.

Measures that would be incorporated during construction to ensure minimal impact to the surrounding areas, including potential wildlife habitat, would include use of BMPs including sediment fencing, erosion protection measures, stormwater controls, and practices to minimize impacts to air quality.

Measures to ensure minimal impacts to nearby environmentally sensitive areas would be incorporated into the final design of the new facility. Effective water quality controls, including stormwater treatment and detention, would ensure that runoff impacts were minimized down slope from the facility. Stormwater facilities would be designed in accordance with the 2009 King County *Surface Water Design Manual* and the City of Bellevue Storm and Surface Water Utility Code.

6. Energy and Natural Resources

6a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

The completed project would require energy in the form of electricity and diesel fuel. An emergency standby generator is also proposed and it would use diesel or biodiesel fuel. Similar to other KCSWD facilities, biodiesel fuel would be available to power on-site equipment.

A photovoltaic generation system and the use of green power (renewable energy purchased from the electrical utility provider) would be considered as part of the sustainable building features evaluated during design to help achieve the County's goal of a LEED® Gold rating. The photovoltaic array would likely be mounted on the south-facing section of the transfer building roof.

6b. Would your project affect the potential use of solar energy by adjacent properties?
☐ Yes ☒ No If so, generally describe.

The Factoria RTS project would not affect any potential use of solar energy by adjacent properties.

6c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

- The intent is to design and construct a facility that would at least achieve a LEED® Gold rating. The eight prerequisite categories for LEED® include sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, innovation in design process, and regional priority credits. Total points allowed under these categories are 110. A Gold level rating requires 60–79 total points to qualify.
- Energy efficient lighting systems would be implemented as appropriate.

- New light pole locations would be selected with light pollution reduction compliance. Screening systems may also be considered for exterior lighting features to reduce or eliminate off-site light pollution.

7. Environmental Health

7a. 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? ☒ Yes ☐ No If so, describe.

Construction

During construction, some risk of fuel spills/leakage from heavy equipment exists; however, this risk would not be greater than the risk normally associated with construction activities of this type. Utility relocations (e.g. electrical power, natural gas, sanitary sewer etc.) would also occur for this project and they are discussed in 16.b. As design progresses, the new utility locations would be confirmed as part of the project permitting and appropriate measures would be applied to comply with the applicable utility clearance requirements. Direct impacts during construction to the BP/Olympic Pipeline are not anticipated. Special permits or approvals would be obtained from BP/Olympic as necessary.

Household Hazardous Waste (HHW)

The existing Factoria Transfer Station processes an average of 470 tons of waste per day and includes an HHW collection area installed in 2004. HHW is stored in specialized containers fenced off in the southeast corner of the building. The HHW facility consists of a separate building east of the transfer station with a canopy structure over the drive lanes between the HHW and recycling areas. The various material types anticipated to be collected at the HHW facility may include, but are not limited to the following:

- Oil-based paint, propane tanks, used oil, batteries, fluorescent bulbs, aerosols, cleaners, adhesives, thinners, solvents, gasoline, and used oil.

The exterior storage area (including area under canopy) for the HHW would contain:

- New drum/bin storage, flammables storage, used oil tank, fluorescent bulb collection, propane tank cage, and pallets for batteries and other small items.

High-hazard (Group H) occupancy requirements per the International Building Code (IBC) would be applicable to specific portions of the HHW facility, and adequate design criteria would be developed to achieve compliance. Construction or operation of the proposed project would not pose any significant risks to workers or the public. Because municipal solid waste would be stored at the site for a single day or less, the potential for spontaneous combustion would be low. The risk of explosion associated with dust would be low because of the design of the transfer building and ventilation systems. Screening of incoming wastes would reduce the potential for explosion of compressed vessels.

Presence of Hazardous Materials

Based on a review of the Environmental Data Resources, Inc. (EDR) report (EDR is a commercial database service that searches USEPA and Ecology records) by Herrera Consultants Inc. in its 2007 Phase I and II Environmental Site Assessment for the project area, four sites with documented releases of hazardous materials, or facilities that manage hazardous materials in significant quantities, are located within a one-mile radius and uphill from the project area. These include Lakeside Industries (13620 SE Eastgate Way), WA AGR King 1 (13620 SE Eastgate Way), and Lincoln Executive Center (former gas station at 3380 146th Place SE). The risk of exposure to these sites is considered low.

In addition, HDR|e²M prepared a Hazardous Materials Survey Report in June 2010 related to the Factoria Transfer Station Improvements. Four buildings, consisting of two warehouses, the existing transfer station building, and the existing scale house, were surveyed for asbestos-containing materials (ACMs), lead-based paint (LBP), and other hazardous materials including light fixture ballasts, fluorescent bulbs, mercury switches, and exit signs. Based on the Hazardous Materials Survey Report, ACMs were not detected in any of the buildings surveyed. LBP was detected in four samples collected from the main transfer station building (HDR 2010). Table 7 below summarizes the survey.

Table 7. Hazardous Materials Survey Results for the Factoria RTS

Sample #	Location (Main Transfer Building)	Material	Condition	Estimated Quantity (sq ft) (Total)	LBP (%)
TS-LBP-02	HHW	Safety bollard below metal pillar, yellow on concrete	Fair to poor	300	6.9
TS-LBP-03	HHW	Support pillar, silver spray paint over red on metal	Fair to poor	1,000	1.6
TS-LBP-05	Residential Bays	Northeast support pillar, white over red on metal	Fair to poor	1,000	0.74
TS-LBP-06	Exterior Southwest end between bays	White on metal	Fair to poor	6,000	1.4

According to the Washington Department of Commerce Lead-Based Paint Program, abatement of the LBP before demolition is not necessary. However, if any LBP abatement or demolition activities are to take place, they must conform with the Occupational Safety and Health Administration (OSHA) Lead in Construction regulations found in 29 Code of Federal Regulations (CFR) Part 1926.62, which require the employer to provide worker protection. In addition, the waste stream needs to be analyzed for hazardous characteristics (lead) by the Toxicity Characteristic Leaching Procedure (TCLP) prior to disposal to determine if it contains a hazardous waste.

Operations of the facility would also include installation of a 2,500 gallon diesel fuel tank for vehicles. Once the Factoria RTS improvements becomes operational, storage facilities for fuel would be designed with comprehensive safety features to comply with requirements of the International Building Code (IBC) and the International Fire Code (IFC). In addition, proper stormwater management and spill prevention measures would help prevent entry of waste materials into ground or surface waters.

7a (1) Describe special emergency services that might be required.

No special emergency services are required at the existing transfer station, nor would they be required for the proposed expansion of the facility. As described in Section 7.a.2, public health and safety are an integral part of the design of the new facility and its long-term operation. Accident prevention and provision of emergency services would be an essential part of station operations. In addition, KCSWD would cooperate with other local emergency service providers to ensure that the facility would be well-served in the event of an emergency. In addition, KCSWD has an on-call hazardous waste response contractor that can respond to any hazardous waste issue within three hours. The contractor would be responsible for any and all phases of incident response, including but not limited to: immediate mitigation measures, hazardous waste collection and disposal, evaluation of cleanup and decontamination procedures, sampling and analysis, and preparation of reports. Overall, the potential need for emergency services would not be expected to be significant nor greater than what currently exists.

7a (2) Proposed measures to reduce or control environmental health hazards, if any:

KCSWD has a number of plans in place that are intended to reduce or control potential environmental health hazards at its transfer stations and other solid waste facilities throughout the county. The primary document in this regard is the Factoria RTS Operating Plan, King County Solid Waste Division (Operating Plan).

Other methods would include incorporating measures into the project design to avoid and/or minimize impacts from hazards or hazardous materials. These measures, identified in the SPCC Plan, would include engineered and operational methods for preventing, containing, and controlling potential releases, and provisions for a quick and safe cleanup. The SPCC Plan would comply with the requirements of the IBC and the Uniform Fire Code.

7b. Noise

7b (1) What types of noise exist in the area which may affect your project (i.e., traffic, equipment, operation, other)?

The daytime and nighttime sound levels are dominated in the project vicinity by traffic from I-90, local vehicular traffic, and noise associated with local activities. Generally, sound levels at the commercial and industrial monitoring locations were greater than those in the residential and institutional area due to the proximity to I-90 and other noise sources. Local sound sources in the commercial and industrial areas included large parking garages and warehouses.

7b (2) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (i.e., traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Construction

Construction activities associated with the Factoria RTS project could result in temporary noise increases within and adjacent to the project area. The noise would be generated primarily by vehicular traffic hauling construction material and by heavy machinery used during construction. Construction of the proposed facility improvements would generate short-term noise and vibration impacts caused primarily by operation of equipment associated with excavation (e.g., jackhammers, trucks, cranes, trenching, and backhoes, etc.), material removal and hauling, backfilling, pile-driving, and demolition activities. Typical construction activities would occur during daytime hours between 7:00 a.m. and 10:00 p.m. Construction activities would likely be confined to normal working hours, which are exempt from the permissible state and local sound level limits. .

Operation

Sound sources related to the Factoria RTS would include vehicular traffic, mobile and stationary equipment, and dumping and offloading activities on the tipping floor. The specific sources and their associated sound emission characteristics are identified in Table 8.

Table 8. Sound Sources for the Factoria RTS

Sound Source	Qty ¹	Location	SWL*	Calculation Assumptions	
				Exterior Speed Average	Interior Utilization Per Hour
Vehicles					
Commercial-Haul - Diesel	7	South access roads and interior tipping floor	115dBA ^c	10 mph	8 minutes
Commercial-Haul-CNG	7	South access roads and interior tipping floor	103 / 95 dBA (Enter/ Exit) ^d	10 mph	8 minutes
Residential-Haul	3	South access roads and interior tipping floor	87 dBA ^e	6 mph	7.5 minutes ^j
Transfer Vehicle ^a	1	North container yard	115 dBA ^c	3 mph	N/A ^k
Stationary Equipment					
Compactors	1	Interior lower level	111 dBA ^f	N/A ^h	10 minutes
Generator ^b	1	South exterior	N/A ^b	N/A ^b	N/A ^b
Mobile Equipment					
Front-End Loader	1	Interior tipping floor	112 dBA ^f	N/A ^h	20 minutes

¹ The quantities of vehicles are based on anticipated vehicle volumes for the 6:00 a.m. hour; the high number of commercial-haul vehicles would make this the loudest hour of operation.

Sound Source	Qty ¹	Location	SWL*	Calculation Assumptions	
				Exterior Speed Average	Interior Utilization Per Hour
Skid Loader	1	Interior tipping floor	110 dBA ^g	N/A ^h	50 minutes
Excavator	1	Interior tipping floor	123 dBA ^e	N/A ^h	10 minutes
Tipping Floor Activities					
Garbage Dumping	N/A	Interior tipping floor	108 dBA ^f	N/A ^h	1800 seconds
Heavy Material Offloading	N/A	Interior tipping floor	115 dBA ^f	N/A ^h	600 seconds

* SWL = sound power level.

^a Container yard movements may take place with yard mule or transfer vehicle; sound emission assumes all movements take place using louder transfer vehicle in place of yard mule.

^b Standby generator is for emergency use; therefore, it is not included as a contributing sound source.

^c Derived from maximum allowable sound pressure level (SPL) at 50 feet while accelerating, from King County Code §12.9.050.

^d Derived from measurements performed at the existing Factoria Transfer Station.

^e Derived from SPL at 50 feet, from FHWA (2006) RCNM User Guide (Spec).

^f Derived from measurements performed at the Shoreline Transfer Station.

^g Derived from SPL at 50 feet, from FHWA (2010) Special Report Appendix A.

^h Sound source is primarily interior.

ⁱ Assuming 15-minute stays and half of customers will leave engine idling.

^k Sound source is primarily exterior.

In conclusion, noise associated with Factoria RTS operations are predicted to comply at all residences, parks, industrial and commercial land uses. The findings are summarized below:

- During operation, project-related sound levels at the nearest residential noise-sensitive receptors would range from 15 dBA to 44 dBA Leq. On average, project-related sound levels at residential land uses and parks would be 19 dBA below existing sound levels on an hourly Leq basis.
- The average sound levels predicted at industrial and commercial property boundaries are 43 and 39 dBA Leq, 27 and 26 dB under permissible sound level limits. On average, project-related sound levels at commercial and industrial land uses would be 14 dBA below existing sound levels on an hourly Leq basis.
- Project-related noise is predicted to comply with all applicable sound level limits. Generally increases in ambient sound level are predicted to be relatively small, less than 1 dB at most noise-sensitive land uses.

Based on the moderate magnitude of project-related effects, the limited hours of operation and the localized geographic extent of the project-related noise the effects of airborne noise are not considered significant (HDR Engineering, Inc. 2011a).

7b (3) Proposed measures to reduce or control noise impacts, if any:

Construction

Because construction noise levels would be variable and short-term, contractors would implement the following measures to minimize disruption and inconvenience caused by construction activities:

- Ensure the adequacy of mufflers on all engines.
- Minimize idling time of equipment and vehicle operation.
- Operate equipment during approved hours as required by local permits.

Operation

None required.

8. Land and Shoreline Use

8a. What is the current use of the site and adjacent properties?

The current use of the project area includes buildings for recycling, processing, and transfer of solid waste. Adjacent property uses include light industrial use and storage. A regional utility corridor exists below ground and overhead adjacent to the project area. A forested parcel of land is located to the east of the project.

8b. Has the site been used for agriculture? ? ☐ Yes ☒ No If so, describe.

The project site has not been used for agriculture, but has been in active use since the 1960s as a regional recycling and solid waste facility.

c. Describe any structures on the site.

The site is currently occupied by the Factoria RTS, which is a 16,000-square-foot facility, and two adjacent warehouse properties.

8d. Will any structures be demolished? ☒ Yes ☐ No If so, what?

The existing Factoria RTS and the two warehouse buildings would be demolished and recycled or salvaged as part of a phased construction sequence. A waste management plan would be developed and incorporated into construction documents to achieve effective demolition, diversion, and recycling of the existing buildings. Deconstruction of the warehouses and existing transfer station would be conducted in a manner that preserves the feasibility of reusing materials and optimizing the amount of materials recycled, therefore minimizing the amount of waste generated.

8e. What is the current zoning classification of the site?

The site is zoned by the City of Bellevue as Light Industrial (LI). The LI zoning district is intended to serve a range of uses, including manufacturing, wholesale trade, and distribution activities.

8f. What is the current Comprehensive Plan designation of the site?

The project site's current City of Bellevue Comprehensive Plan designation is LI. The subject project site and surrounding properties are part of the Richards Valley Subarea Plan, which is a sub-element of the City of Bellevue Comprehensive Plan.

8g. If applicable, what is the current shoreline master program designation of the site?

Not applicable; the site does not contain surface waters subject to the shoreline master program.

8h. Has any part of the site been classified as an "environmentally sensitive" area?

☒ Yes ☐ No If so, specify.

Five wetlands and one stream were identified in the project area. The wetlands and stream are regulated by the City of Bellevue under its Critical Areas Ordinance and by WDFW and the U.S. Army Corps of Engineers. Portions of the site feature steep topography that meet the definition of a critical area steep slope. The project area contains a red-tail hawk nesting site and the red-tail hawk is also designated as a species of local concern in the City of Bellevue code.

8i. Approximately how many people would reside or work in the completed project?

Not applicable; the project does not provide any housing.

8j. Proposed measures to avoid or reduce displacement impacts, if any:

No displacement impacts would result from the proposed project; thus, mitigation measures are not proposed.

8k. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The proposed project would be designed and permitted in accordance with the Bellevue Land Use Code and the City of Bellevue Comprehensive Plan.

9. Housing

9a. Approximately how many units would be provided, if any? Indicate whether high, middle or low-income housing.

Not applicable; the project does not provide any housing.

9b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle or low-income housing.

The project does not provide any residential housing; thus, no units would be eliminated.

9c. Proposed measures to reduce or control housing impacts, if any:

No housing impacts would result from the proposed project; thus, mitigation measures are not proposed.

10. Aesthetics

10a. What is the tallest height of any proposed structure or structures, not including antennas? What is the principal exterior building material or materials proposed?

The tallest height of proposed structures would be that of the Factoria RTS building, which would be a maximum of 45 feet high to comply with the City of Bellevue Zoning Requirements for the Light Industrial District.

The architectural approach for the Factoria RTS is to create a presence that emphasizes a Northwest style while modulating sections of the building to break up the large mass of the facility. The color selections for the Factoria RTS would include natural hues or browns and grays intended to be subtle and complimentary with the natural tree scape of the surrounding slopes. Primary and secondary steel structural framing would project from the wall plane to provide fine shadow lines and create a layer of texture and detail not typically found on a flat structure. The sides of the building would integrate two contrasting metal panels with tinted translucent wall panels for a visually interesting composition (see Figure 4 and Figure 5, Factoria RTS Architectural Renderings).

Openings on the south side of the building would also be defined by vertical wall “fins” that would partially screen views to the interior and help deflect wind from the southwest. Exterior walls for portions of the buildings (e.g., lower level) would be concrete or concrete masonry, which would provide durability and lasting quality. A LEED compliant gray or white roof color that is visually neutral is planned. Signage at the recycling/HHW area, as well as at the transfer station self-haul entry and exit, would present information in a clear manner and be consistent with the project’s architectural themes (see Figure 4 and Figure 5, Factoria RTS Architectural Renderings).

Figure 4. Factoria RTS Architectural Rendering (View from Southeast)



Figure 5. Factoria RTS Architectural Rendering (View from Southwest)



10b. What views in the immediate vicinity would be altered or obstructed?

A visual impact assessment was conducted by Hough Beck & Baird in July 2011. In total, of the 27 views investigated, 11 would be visually affected by the new building and site improvements and 16 would have no visual impact. Of the 11 visually affected locations, the most affected areas would be SE 30th Street at approximately 13410 SE 30th Street and the Eastgate Property owned by KCSWD (on the northeast side of the stormwater pond). These viewpoints would have visual impacts to the foreground, mid-ground, and background², and include removal of vegetation and structures, re-grading, construction of new structures, construction of site elements, and planting of new vegetation.

Viewpoints at SE 32nd Street, looking toward the Transfer Station Scalehouse and Entry Gate, along the Eastgate Way shoulder, and at SE 26th Street and 138th Avenue SE would be visually affected to a lesser degree. These viewpoints would be affected from direct views of the site and the new facility due to the removal and replacement of vegetation. The remainder of the affected views would have minimal visual impact, including distant views of the site and new facility. The 16 views determined to have no visual impact were found to have existing topography, structures, and vegetation blocking all views of the new proposed site (Hough Beck & Baird 2011).

10c. Proposed measures to reduce or control aesthetic impacts, if any:

All efforts would be made to minimize the visual quality impact of the facility. The following is a preliminary list of ways in which the design and implementation of the Factoria RTS project would address the visual impact from the viewpoints mentioned above:

- The facility would meet the applicable requirements of the local zoning code, including screening requirements and setbacks.
- The facility would comply with the City of Bellevue design review process to ensure aesthetic compatibility with adjacent development.
- The facility would be designed to a visual character that fit with its surrounding area.
- The facility would be located within a topographic depression which would reduce visibility from surrounding areas.
- Off-site mature plant material would be protected during construction to maintain maximum screening of the site.

² Foreground is described as the area that is most prominent, nearest to and in front of the spectator and having greatest visual prominence. Mid-ground is described as the area that is in the middle distance range from the spectator having less visual prominence than the foreground and more than the background. Background is described as the area that is least prominent, farthest from and a considerable distance from the spectator and having the least visual prominence.

11. Light and Glare

11a. What type of light and glare will the proposal produce? What time of day would it mainly occur?

The project may produce light and glare during the night due to placement of exterior safety lighting around structures/buildings. Daytime light and glare may occur from sunlight shining on windows, solar panels, or other reflective surfaces.

11b. Could light or glare from the finished project be a safety hazard or interfere with views? ☐ Yes ☒ No **If so, explain.**

Light or glare from the finished project could not be a safety hazard or interfere with views. Exterior light and glare added as part of this project would be limited through lighting placement and design.

11c. What existing off-site sources of light or glare may affect your proposal?

No off-site sources of light or glare would affect the proposed project.

11d. Proposed measures to reduce or control light and glare impacts, if any:

Using appropriate shielding systems for exterior lighting features to reduce or eliminate off-site light pollution.

12. Recreation

12a. What designated and informal recreational opportunities are in the immediate vicinity?

Sunset Park lies in the general vicinity of the Factoria RTS site. Sunset Park is located at 2837 139th Avenue SE and generally includes the following amenities:

- Tennis court, basketball court, children's play area, picnic tables, trails, handicapped accessible (City of Bellevue 2011).

12b. Would the proposed project displace any existing recreational uses? ☐ Yes ☒ No **If so, describe.**

The proposed project would not displace any existing recreational uses.

12c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

No measures to control or reduce impacts on recreation would be implemented because no such impacts would be anticipated.

13. Historic and Cultural Preservation

- 13a. Are there any places or objects listed on, or proposed for, the national state or local preservation registers known to be on or next to the site?** ☐ Yes ☒ No If so, generally describe.

The archaeological assessment of the Factoria RTS was conducted by Drayton Archaeology in October 2010, and no archaeological deposits or potentially eligible historic properties were identified during surface and subsurface investigations of the Area of Potential Effect (APE). A No Historic Properties Affected determination has been recommended for this site (Drayton Archaeological 2010).

- 13b. Generally describe any landmarks or evidence of historic, archaeological, scientific or cultural importance known to be on or next to the site.**

No cultural resources or historic properties were identified anywhere within the Factoria RTS APE during pedestrian and subsurface surveys (Drayton Archaeological 2010).

- 13c. Proposed measures to reduce or control impacts, if any:**

In the event that archaeological materials are encountered during construction, an archaeologist would immediately be notified and work halted in the vicinity of the find until the materials can be inspected and assessed in regard to using the National Register of Historic Places criteria. In the event of inadvertently discovered human remains or indeterminate bones, work must stop immediately. Any remains should be covered and secured against further disturbance, and communication established with the King County Sheriff's Office, the State Archaeologist or State Historic Preservation Officer (SHPO), and any consulting Tribes.

14. Transportation

- 14a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.**

Currently, the site is accessed from the SE 32nd Street/Richards Road intersection. Four intersections are located in the vicinity of the project area:

- Richards Road/SE 30th Street
- Richards Road/SE 32nd Street
- Richards Road/SE Eastgate Way
- Richards Road/SE 36th Street

In the future, facility transfer haulers would use the SE 30th Street/Richards Road intersection for ingress to the facility, while all customers would continue to use the SE 32nd Street/Richards Road intersection for ingress to and egress from the facility (see Figure 2, Site Plan). As a result,

the Factoria RTS design would separate the facility transfer hauler trips from the commercial and self-hauler trips. The site would be improved to accommodate the demands of local and regional population growth. At the same time, operational improvements would be provided for enhanced compaction of solid waste to reduce the number of facility transfer hauler trips to and from the site.

14b. Is the site currently served by public transit? ☐ Yes ☒ No **If not, what is the approximate distance to the nearest transit stop?**

King County METRO bus routes 212, 246, 821, 822, 823, 824 and 890 provide weekday and weekend routes in the vicinity of the transfer station. The approximate distance to those transit stops is one-quarter to one-half mile.

14c. How many parking spaces would the completed project have? How many would the project eliminate?

The completed project would have approximately 13 parking spaces for staff and visitors. Trailer storage for the proposed facility operations would also be provided (space for 20 trailers).

Construction on the Factoria RTS site could impact the operations of adjacent businesses during construction. Specifically, an industrial park complex ("Venture Five Property") is located adjacent to the transfer station (Tax Parcel No. 5453300310). The Venture Five Property consists of two levels: the lower north level access is off SE 30th Street, and the upper south level access is off SE 32nd Street near the entrance to the transfer station. The two levels are separated by a wall that is approximately 20 feet high.

During construction, four primary impacts to the Venture Five Property would affect parking. These include (1) construction of a temporary fire lane and an associated construction area; (2) revision of the driveway access; (3) grading, wall construction, and removal of pavement along the east side of the Dance Studio; and (4) construction of a new water main connection. Approximately 10 to 20 parking spaces could be temporarily impacted during construction.

14d. Will the proposal require any new roads or streets or improvements to existing roads or streets, not including driveways? ☒ Yes ☐ No **If so, generally describe (indicate whether public or private).**

The proposed project may require a half street improvement to the frontage on SE 30th Street. The County would work with the City of Bellevue to determine the appropriate street improvement limits. Half street improvements typically include a section of street pavement (including appropriate subpaving preparation), surface water drainage facilities, sidewalks where required, curbs, gutters, street lighting, and right-of-way landscaping (including street trees where required).

- 14e. Will the project use (or occur in the immediate vicinity of) water, rail or air transportation?** ☐ Yes ☒ No If so, generally describe.

No, the project does not occur in the immediate vicinity of water, rail, or air transportation.

- 14f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.**

Traffic analysis was completed for 2008 and 2014. To support longer-range planning, a traffic analysis was also provided for the 2042 horizon year. The year 2008 was selected as the base year for this study because it had higher-than-average waste volume collection, and it also coincided with the base year of the traffic demand model. The 2008 volumes were the actual volumes collected at the registry. The 2014 and 2042 volumes were estimated based on the tonnage of solid waste disposal forecasted by the KCSWD econometric model. The site access volumes are presented below in Table 9.

Table 9. Site Access Volume for Year 2042

Time/Year	2008	2014	2042
6:00 AM	15	18	27
7:00 AM	10	12	18
8:00 AM	15	18	27
9:00 AM	19	23	34
10:00 AM	30	36	54
11:00 AM	34	41	61
12:00 PM	36	43	64
1:00 PM	41	49	73
2:00 PM	37	44	66
3:00 PM	32	38	57
4:00 PM	28	33	50
Vehicles	297	354	531

No data are available for the outbound haulers; therefore, they are considered to be the same in number as the inbound haulers of the same hour. Based on the site access volumes registered, 2:00 pm is the actual peak hour of the site on a typical weekday. However, the PM peak hour on the adjacent streets occurs between 4:30 p.m. and 5:30 p.m. Since the volumes were registered in hourly fashion, 4:00 p.m. site access hourly volume data are considered to be the PM peak hour site access volume in this study. Table 10 shows the forecasted inbound and

outbound trips by commercial and self-haulers for the future year 2042. Project trips in 2014 are shown for comparison purposes.

Table 10. PM Peak Hour Forecasted Trips by Commercial and Self-Haulers

Year	2008	2014 Additional Trips	2014	2042 Additional Trips	2042
In	28	5	33	22	50
Out	28	5	33	22	50
Total	56	10	66	44	100

Comparing to 2008, there would be 44 additional commercial and self-hauler trips per hour with 22 inbound and 22 outbound trips during the PM peak hour in 2042. The additional trips for commercial and self-haulers in 2042 may require two additional trips inbound and outbound by facility transfer haulers in 2042. Table 11 shows the forecasted inbound and outbound trips by facility transfer haulers. Project trips in 2014 are shown for comparison purposes.

Table 11. PM Peak Hour Forecasted Trips by Facility Transfer Haulers

Year	2008	2014 Additional trips	2042 Additional trips
In	2	1	2
Out	2	1	2
Total	4	2	4

Combining Table 10 and Table 11, by the year 2042, there is expected to be a net of 48 new trips during the PM peak hour.

The Factoria RTS traffic analysis has taken into consideration the cumulative traffic impacts associated with the proposed project. Peak hour traffic volumes from the proposed facility were modeled and the effects on the study area intersections were evaluated for the year 2008, the year 2014, and the year 2042. A certificate of concurrency request letter would be filed at the City of Bellevue for the project in conjunction with the land use permits. No cumulative impacts on transportation are anticipated with the completed project.

The Factoria RTS traffic analysis also considered off-site queuing. The purpose of this analysis was to examine whether or not the future demand to the Factoria RTS would negatively impact the adjacent local streets/driveways. When the Factoria RTS opens in 2015, one inbound weigh scale would be designated for all customers. The closest easterly commercial driveway would be approximately 150 feet away from the scalehouse. This distance would accommodate either 5 commercial collection trucks or 6 residential/business self-haulers. The queuing analysis

results indicate that the average queue at the entrance would not produce any negative effects to the adjacent commercial driveway both on the weekdays and weekends in 2014. However, the queue would spill back to the commercial driveway for 10 percent of the station's operating hours on the weekdays and 60 percent on the weekends in 2042. It is recommended that an additional inbound weigh scale, for a total of two inbound scales, should be considered by 2024 to increase the service rate and reduce the queue length below the KCSWD threshold.

14g. Proposed measures to reduce or control transportation impacts, if any:

Construction

During construction there would be transportation impacts, and King County may undertake the following measures to mitigate these impacts:

- Coordinating with adjacent businesses to identify alternative parking locations.
- Coordinating with local agencies to create a website providing the public with updated information on potential traffic congestion, delays, and detours located in the vicinity of parks, trails, and other recreational resources.
- Coordinating construction activities, detours, and delays with emergency service providers in the project area, including the Bellevue Police Department and the Bellevue Fire Department.
- Contacting schools in the area and public transit providers to notify them of detours and construction road closures.
- Planning construction activities to minimize potential adverse effects on community activities or gatherings.
- Using flaggers and other traffic control methods to keep traffic moving and minimize delays.
- Installing standard signage along detour routes to guide the traveling public.
- Coordinating construction with utility projects in the vicinity.
- Implementing detour routes and adjusting construction hours to minimize travel delays and avoid peak-hour disruptions.

Operation

- Due to anticipated volume growth at the Factoria RTS, evaluation may be needed to assess the need for an additional inbound scale to minimize scalehouse queuing under future conditions.

15. Public Services

- 15a. Would the project result in an increased need for public services (i.e., fire protection, police protection, health care, schools, other)? ☐ Yes ☒ No If so, generally describe.

Construction

Construction activities could temporarily disrupt access and existing transportation and circulation patterns. Response times for fire, police, and emergency responders in the vicinity could be temporarily affected due to traffic flows and street operations. It is anticipated that these delays would be minimal and temporary.

Operation

None.

- 15b. Proposed measures to reduce or control direct impacts on public services, if any:

To mitigate impacts on public services during construction, schools, churches, and social institutions in the project vicinity would be notified of detours and road closures. In addition, King County would closely coordinate road closures and detour routes with fire, law enforcement, and emergency medical services that serve the project vicinity. Access to emergency facilities would be maintained at all times during construction.

16. Utilities

- 16a. Check utilities currently available at the site:

- ☒ Electricity
- ☒ Natural gas
- ☒ Water
- ☒ Refuse service
- ☒ Telephone
- ☒ Sanitary sewer
- ☐ Septic system
- ☒ Other: Olympic Pipeline (Petroleum)

Table 12 lists the utility providers that would be anticipated to provide services to the site.

Table 12. Utilities Providers in the Site Vicinity

Utility	Provider
Electrical Power	Puget Sound Energy
Natural Gas	Puget Sound Energy
Water Service	City of Bellevue
Refuse Service	KCSWD
Telephone Service	Verizon
Sanitary Sewer	City of Bellevue
Stormwater	City of Bellevue

16b. 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.

The Factoria RTS would incorporate utility services including water, storm and sanitary sewer, electrical, natural gas, telephone, fire protection, security, and data systems. The new utilities would connect to the main lines along SE 30th Street and SE 32nd Street, similar to the connections for the existing station. As design progresses, the new utility locations would be confirmed and easements developed as part of the project permitting.

New electrical service to the Factoria RTS Replacement Project would be re-established by PSE and they would design and relocate the existing 115-kV aboveground electrical lines, the associated poles, and the lower voltage distribution lines. An 8-inch diameter natural gas line would also be relocated to avoid construction and operational conflicts with the Factoria RTS Replacement Project. The relocation of these utilities would take place in the same general area as the existing utilities (e.g. between SE 30th Street and SE Eastgate Way). The existing natural gas pipeline and southernmost 115-kV lines would be relocated upwards of 300 feet south of their existing locations. Coordination is on-going with PSE for the required utility relocations.

For the PSE utility relocations, typical excavation for a steel pole foundation is approximately 7 feet in diameter and between 30 and 50 feet deep depending on soil conditions. Wood poles are installed by augering a hole (2 to 3 feet in diameter and 8 to 12 feet deep). Total anticipated excavation work related to wood pole installation would entail between 2 and 3 cubic yards per pole. The excavation for steel pole foundations would entail around 50 cubic yards per pole. Excavation work for the relocation of the natural gas line would depend on the final route; however, it can be anticipated that the relocation would be approximately 1,000 linear feet in length, with a trench approximately 3 feet by 5 feet. If traditional open trench construction techniques are used, then approximately 600 cubic yards of material would be

excavated. If horizontal directional drilling is used, then it can be expected that this quantity would be reduced.


The proposed sanitary sewer system would be designed for connection to the relocated City of Bellevue main line on site. The new water service connections would be connected to the newly relocated City of Bellevue water main on site and developed to include all water appurtenances including backflow preventers, check valves, and domestic and irrigation water meters necessary.

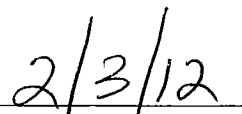
A conceptual stormwater management plan has been prepared and includes both flow control and water quality treatment. Stormwater discharge from the Factoria RTS can be classified into one of four categories: sanitary sewer, storm system, dispersion, or harvested rainwater. Separate collection and management of the stormwater flows would help minimize sanitary sewer discharge quantities in order to remain below the NPDES permitted flow rate. A stormwater treatment and detention vault would be used to attenuate peak stormwater runoff events at the Factoria RTS due to the limited site area available for surface ponds.

Telephone requirements would be established by the local service provider.

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

Date submitted

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