

3.14 Public Services and Utilities

This section describes public services and utilities in the study area and potential impacts from implementation of the action alternatives, compared with the No Action Alternative. The analysis considers water supply, sanitary sewer, stormwater drainage, solid waste services, electric power, natural gas, communication utilities, police, fire and emergency services, schools, and parks and other recreational facilities that could be affected by the proposed project. Additional stormwater information supplementing this section is provided in Water Resources Assessment in Appendix B.

The environmental review determined there would be no significant unavoidable adverse impacts to public services and utilities during construction or operation of any of the alternatives.

3.14.1 Regulatory Context

Local governments provide an array of public services, some of which are authorized by statute. Certain services, such as electrical utilities, may also be regulated at the state level. There is no specific state or local statute that requires cities to provide fire protection services; however, as a practical matter, a city must provide some measure of fire protection for the safety of its citizens.

Table 3.14-1 outlines federal, state, and local laws, plans, and policies applicable to public services and utilities.

Law, Regulatory Program, or Policies	Lead Agency	Description
Section 402 of the Clean Water Act	Washington State Department of Ecology (Ecology)	Section 402 establishes the NPDES permitting program that controls water pollution by regulating sources of pollutants discharged into waters of the United States. This section applies to the project area in two ways: Construction projects that disturb one or more acres of land are required to obtain an NPDES permit if stormwater runoff from the project area drains directly or indirectly to a surface water body. All of the action alternatives would require this permit. The cities of Kirkland and Woodinville are covered by the Western Washington NPDES Phase II Municipal Stormwater Permit, which was issued by Ecology in 2019. This requires those cities to issue an annual Stormwater Management Program Plan, which governs the administration of the stormwater system.
State Environmental Policy Act (WAC 197-11-444)	King County – Department of Natural Resources and Parks, Solid Waste Division	The State Environmental Policy Act includes a list of Elements of the Environment that are used in an Environmental Impact Statement to help agencies identify the impacts from proposed actions and determine if those impacts are significant. The list includes areas for analysis within the Public Services and Utilities environmental element.

Table 3.14-1. Federal, State, and Local Laws, Plans, and Policies Applicable to Public Services and Utilities.		
Law, Regulatory Program, or Policies	Lead Agency	Description
Growth Management Act	King County, City of Kirkland City of Woodinville	The Growth Management Act provides tools for local jurisdictions to effectively manage growth and provides a vision for the preparation of comprehensive plans. The comprehensive plans for each jurisdiction developed under the Growth Management Act contain elements that guide the creation and implementation of public services and utilities.
Washington State Enhanced Hazard Mitigation Plan (2018)	Washington Emergency Management Division	Identifies natural or manmade hazards, risks, and vulnerabilities and outlines strategies and actions to reduce those risks. Emergency services in the study area respond to these hazards as necessary.
King County Regional Hazard Mitigation Plan	King County, City of Kirkland City of Woodinville	Assesses natural and human-caused hazards that can impact our region and develops strategies to reduce risk and build resilience. The cities of Kirkland and Woodinville have Plan Annexes that are attached to the King County regional plan.
King County 2020 Strategic Climate Action Plan	King County Department of Natural Resources and Parks, Solid Waste Division	Focus Area 1, Mainstream Climate Preparedness, Strategy 1 directs King County to account for climate impacts in all policies, plans, practices, and procedures, and implement climate resilient decisions.
RCW 70.168	Washington State Department of Health	RCW 70.168 provides for the creation of a statewide trauma care system.
RCW 36.01	King County	Authorizes the creation of emergency medical services and ambulance systems.
RCW 80	Washington Utilities and Transportation Commission	Outlines requirements for public utilities in Washington.

NPDES = National Pollutant Discharge Elimination System; RCW = Revised Code of Washington

3.14.2 Affected Environment

The affected environment for this public services and utilities analysis includes the area within the city limits of the City of Kirkland and the City of Woodinville, in which the alternative sites are located, and the utilities provided in the study area that could be affected by the proposed project, including water supply, sanitary sewer, stormwater drainage, solid waste services, electric power, natural gas, and communication utilities. The affected environment also includes police, fire, and emergency services, schools, and parks and other recreational facilities that could be affected by the project.

Sources of information referenced in this section include:

- Cities of Kirkland and Woodinville websites
- Cities of Kirkland and Woodinville comprehensive plans and other planning documents
- King County SWD facility planning documents
- Cities of Kirkland and Woodinville codes and regulations, and

- Other agency and non-government organizational websites.

3.14.2.1 Study Area

The study area for emergency response is a one-mile radius surrounding each of the alternative sites; this captures the jurisdictions of the potential emergency services departments that serve the alternative sites. For example, the jurisdiction for the Kirkland Police and Fire departments includes all lands within the Kirkland city limits.

The city jurisdictions themselves are the study areas for physical utility infrastructure impacts because they are specific to the utilities within the project footprint that could potentially be impacted by the project. The study area to assess the long-term availability of utility services consists of the territory for each utility that would service the proposed action. The relevant service territory for Puget Sound Energy (PSE), which provides both natural gas and electricity service to the alternative sites, includes most of western King County. The service territory for City of Kirkland water and sewer systems includes the area within the city limits and some of the surrounding area. The service territory for the Woodinville stormwater utility includes the stormwater system within the city limits.

The project team considered any anticipated increase in demand that would result from project construction and operations against the capacity of the public service or utility to maintain service levels and conducted an analysis to determine if an increased demand for service would impact the ability of a service or utility provider to deliver an adequate level of service to other users. Effects on utility infrastructure were analyzed by determining the need for improvements based on the proximity of existing infrastructure to the proposed action and the potential for service interruptions. Impacts on emergency response were evaluated by considering the potential for increased demand on emergency responders within the project area.

A significant impact would occur if demand for a public service or utility exceeded available supply during project construction or operation.

3.14.2.2 No Action Alternative and Alternative 1

This section addresses the affected environment at the No Action Alternative and Alternative 1 site and study area, including options 1A and 1B. The site is located within the City of Kirkland at the existing Houghton RTS property at 11724 NE 60th Street.

3.14.2.2.1 Water

The City of Kirkland Water Division operates and maintains the city's water infrastructure, and supplies water for the study area, except those areas generally north of NE 124th Street, which is served by the Northshore Utility District or the Woodinville Water District (City of Kirkland 2022). The City's water supply is provided by the Cascade Water Alliance through purchases from Seattle Public Utilities, which currently receives all of its water from the Tolt River Watershed and the Cedar River Watershed. The City's 2023 Water Quality Report (City of Kirkland 2023c) indicates an average of 5.7 million gallons of water per day (MGD) is distributed to Kirkland's water service area customers, with over 25 million gallons of storage capacity (City of Kirkland 2023c). The 2015 Kirkland Comprehensive Plan projects that the system

generally has sufficient capacity to serve growth anticipated through the land use and future water customers into the year 2035. Cascade Water Alliance maintains agreements for supply that would provide its customers, including City of Kirkland, with capacity into the year 2042, and for future capacity development beyond 2063 (City of Kirkland 2022). A local distribution system provides water to individual homeowners and businesses (City of Kirkland 2022). Local water distribution lines are within the site of the existing Houghton RTS and the proposed action alternatives 1A and 1B.

3.14.2.2.2 Sanitary Sewer

The City of Kirkland Wastewater Division provides sanitary sewer service to the study area and the No Action and Alternative 1 site. The Northshore Utility District provides sewer service to most areas north of NE 116th Street. Through its 123 miles of sewer pipe, six pump stations, and force mains, sewage **generated within the City of Kirkland's sanitary sewer service area is transported** primarily to the KCWTD treatment facility in Renton), approximately 27 miles south of the study area (City of Kirkland 2022). **King County indicates that the existing conveyance and treatment plant capacity is adequate to treat the region's** wastewater until the 2030s, with planned upgrades to the treatment facilities to occur to serve anticipated growth beyond that timeframe (City of Kirkland 2022). Local sanitary sewer lines are within the site of the existing Houghton RTS and the proposed action alternatives 1A and 1B.

3.14.2.2.3 Stormwater

The City of Kirkland Storm and Surface Water Division maintains conveyance, flow control, and water quality treatment systems in public rights-of-way; maintains flow control and water quality treatment facilities that serve single-family developments; and ensures proper maintenance and operation of privately owned stormwater facilities that serve multifamily and commercial developments in the study area (City of Kirkland 2023d).

The Kirkland Surface Water Master Plan is a formal document adopted by the City Council that guides the City on projects and strategies to manage its **surface water and stormwater**. **Kirkland's municipal** separate storm sewer system is subject to the NPDES Western Washington Phase II Municipal Stormwater Permit, issued in 2019 by Ecology under authority from the EPA. The permit allows Kirkland to discharge stormwater into waters of the state if the City takes specific steps in each of the following areas to minimize discharge of pollutants to stormwater: stormwater planning; public education and outreach; public involvement and participation; municipal separate storm sewer system permit mapping and documentation; illicit discharge detection and elimination (IDDE); controlling runoff from new development, redevelopment, and construction sites; municipal operations and maintenance; source control; compliance with Total Maximum Daily Load (TMDL) requirements; monitoring and assessment; and reporting requirements (City of Kirkland 2023d). Section 3.3, Water, provides additional detail on permit compliance requirements and efforts.

Kirkland is divided into 11 primary drainage basins, containing approximately 29,000 public and private storm drainage catch basins and maintenance holes within the city limits, nearly 270 miles of public storm drain conveyance pipes and culverts, and nearly 700 public stormwater facilities (i.e., tanks, vaults,

treatment devices). Other drainage conveyance facilities in the city limits include over 60 miles of public and private ditches and swales. Approximately 70 public and private stormwater detention ponds are located within the city limits. (City of Kirkland 2023d)

Most of the municipal separate storm sewer system in the study area discharges to one of five drainage courses that flow into Lake Washington: Yarrow Creek, Moss Bay, Houghton Slope A, Carillon Creek, or Houghton Slope B (City of Kirkland 2023d). The stormwater infrastructure for the No Action Alternative and Alternative 1 site consists of both closed and open conveyances. There are sections of open stormwater conveyance ditches that generally align with site access roads and convey surface flow through catch basins, culverts, and a stormwater pond to two discharge locations: one near the northwest corner of the site and the other near the southwest corner of the site (Figure 3.3-1). A series of ditches and culverts direct stormwater runoff from the athletic field areas of the closed Houghton landfill property and directs it to the northwest discharge location. A series of catch basins collect stormwater runoff from the hardscaped surfaces of the Houghton RTS into a piped underground storm drain network that directs runoff to the southwest corner of the site, where it then flows into a bioretention swale designed to receive runoff from a contributing area of the transfer station (Figure 3.3-1). Section 3.3, and the Final NERTS Water Resources Assessment (Appendix B) provide additional detail about the stormwater infrastructure on the No Action Alternative and Alternative 1 site.

3.14.2.2.4 Solid Waste

Solid waste handling, as defined in RCW 70.95.030, includes management, storage, collection, transportation, treatment, utilization, processing, and final disposal of all solid wastes. KCSWD provides garbage transfer, disposal, and recycling services for residents and businesses in all of King County, except for Seattle and Milton. KCSWD also provides MRW disposal options and recycling education programs for its residents.

Countywide, KCSWD serves a population of approximately 1.3 million, or approximately 70 percent of King **County's population as a whole. Most of the customers live in incorporated areas of the county. The No Action Alternative and Alternative 1 site is within the northeast county service area.**

Customers include commercial haulers, as well as both residential and non-residential self-haulers who use County transfer station facilities. KCSWD does not itself provide curbside collection; garbage is collected from residents and businesses in the **County's service area** by commercial haulers and is taken to KCSWD recycling and transfer stations, where it is packed into larger transfer trailers for transport to the Cedar Hills Regional Landfill for disposal. The transfer stations also are open to King County residents (except Seattle and Milton), who may bring garbage to the transfer stations in addition to using curbside collection services. In addition to garbage disposal, basic recycling services are available at no charge at most transfer stations. Kirkland and other residents and businesses in north King County **participate in King County's** waste system via interlocal agreements.

Solid waste and recycling collection services for residents and businesses in the City of Kirkland are provided by Waste Management. For operations at the site of the existing Houghton RTS and the proposed

action alternatives 1A and 1B, solid waste services could also be provided by KCSWD through utilization of the facilities on site.

3.14.2.2.5 Electricity

PSE provides electric service through overhead transmission lines to the No Action Alternative and Alternative 1 site. According to PSE, approximately 46 percent of the electricity PSE customers use comes from their own power generation. PSE currently has more than 3,500 megawatts of power-generating capacity (PSE 2023a). **PSE's 2021 Integrated Resource Plan provides information on how PSE will meet** future electricity demand through 2045, mostly with reliable conservation and demand response, and distributed and centralized renewable and non-emitting resources (PSE 2021).

Electricity is provided to the study area via 230-kilovolt (kV) transmission lines to substations in Redmond and Renton and then transformed to 115 kV and ultimately to 12.5 kV. Local electric lines deliver power from substations to individual homeowners and businesses. Local power lines are located within the footprint of the site of the existing Houghton RTS and the proposed action alternatives 1A and 1B.

The existing Houghton RTS consumes electricity for the administrative building (lighting, office equipment, break room/lunchroom appliances, cooling, and heating), scale house, computers and electronic scales, radios, and other communication, as well as lighting for the transfer building, driveway, and parking lot. Energy use is estimated at approximately 170,000 kWh annually on average. Refer to Section 3.7 Energy and Natural Resources for a more detailed discussion of electrical supply.

3.14.2.2.6 Natural gas

PSE provides natural gas service to the Kirkland area and is regulated by the Washington Utilities and Transportation Commission (WUTC) (City of Kirkland 2022). Natural gas is transported throughout Washington via a network of interstate transmission pipelines owned and operated by Northwest Pipeline Corporation. A local distribution system provides natural gas to individual homeowners and businesses. PSE installs gas main extensions and new service lines in response to customer demand (City of Kirkland 2022). The existing Houghton RTS does not currently use natural gas and no known distribution lines are located within the site of the existing Houghton RTS and the proposed action alternatives 1A and 1B.

3.14.2.2.7 Communications

Telecommunications services within the study area are provided by Ziplly Fiber Northwest, LLC, a registered company regulated by WUTC (WUTC 2023). Additional services are provided by numerous cellular telecommunications providers, including AT&T, Verizon, T-Mobile, and U.S. Cellular. There is one cellular tower within the study area, southwest of the site of the existing Houghton RTS and the proposed action alternatives 1A and 1B. Throughout the study area, there are overhead telephone lines, which typically run parallel to city streets.

3.14.2.2.8 Police, Fire, and Emergency Medical Services

Pursuant to the Washington Administrative Code (WAC), transfer stations shall be designed, constructed, and operated so as to have communication capabilities to immediately summon fire, police, or emergency service personnel in the event of an emergency (WAC 173-350-310(6)(b)(2)).

The Kirkland Police Department provides police protection for Kirkland and the study area. The department includes about 75 officers and responds to approximately 48,000 service calls each year (City of Kirkland 2022b). The police department is approximately 3.8 miles from the site of the existing Houghton RTS and the proposed action alternatives 1A and 1B.

The Kirkland Fire Department provides fire and emergency medical response for Kirkland and the study area. The department provides regional services in partnership with neighboring fire departments, including emergency dispatch and 911 services by North East King County Regional Public Safety Communication Agency, hazardous materials response by Eastside Hazardous Materials Response Team (EHMT), and advanced life support services by City of Redmond Fire Department. The medic program is part of the King County Medic One Program (City of Kirkland 2022a). The Kirkland Fire Department includes about 80 firefighter/EMTs and responds to approximately 9,000 service calls each year from five stations located throughout the city (City of Kirkland 2022a). The nearest fire station— Station 22, Houghton – is approximately 1.4 miles from the site of the existing Houghton RTS and the proposed action alternatives 1A and 1B. Distance from the fire station is only one factor in determining which fire stations and how many units respond to any alarm. Other factors include, but are not limited to, type of alarm (e.g., fire or medical emergency), area impacted by the alarm, and available units.

The No Action Alternative and Alternative 1 site and the study area are within the King County Public Hospital District No. 2 (the District), which includes the cities of Kirkland, Redmond, Woodinville, Kenmore, Duvall and parts of Bothell, Carnation, **and Sammamish. The District's primary operations include** Evergreen Hospital Medical Center, an acute care hospital. The medical center provides comprehensive tertiary medical-surgical services, maternity and neonatal services, emergency services, radiation oncology, diagnostic imaging, laboratory, and related ancillary services. The District also operates primary **and specialty care group practices, a freestanding inpatient hospice unit, the Booth Gardner Parkinson's Care Center, the Multiple Sclerosis Center, a senior care clinic, and Evergreen Home Care Services** (WA State Auditors 2015). The No Action and Alternative 1 site is served by several medical facilities in addition to Evergreen Hospital Medical Center, including but not limited to Virginia Mason Kirkland Medical Center, Overlake Clinics Kirkland, Comprehensive Medical Center, Kirkland Primary Care, Evergreen Health Primary Care, and Fairfax Hospital.

Figure 3.14-1 shows the locations of the police, fire/emergency medical services (EMS), and medical facilities relative to the study area.

3.14.2.2.9 Schools

The No Action and Alternative 1 site and study area is entirely within the Lake Washington School District. The closest schools to the site are **Nanny's Kare Daycare/Preschool approximately 120 feet to the east of**

the site; Debbie's Place Preschool approximately 0.20 miles to the northeast of the site; Benjamin Franklin Elementary School (464 students in 2023), approximately 0.28 miles to the east of the No Action and Alternative 1 site; the Holy Family School (about 270 students in 2023) approximately 0.40 miles to the north of the site; and Lake Washington High School (1,875 students in 2023) approximately 0.64 miles to the north of the site. West of I-405 are Northwest University, approximately 0.38 miles to the west of the site, Puget Sound Adventist Academy, approximately 0.39 miles to the west of the site, Emerson High School and Emerson K-12, approximately 0.40 miles to the west of the site, and the International Community School, approximately 0.28 miles to the west of the site. Other nearby schools more than a mile from the site include Rose Hill Elementary School to the northeast.

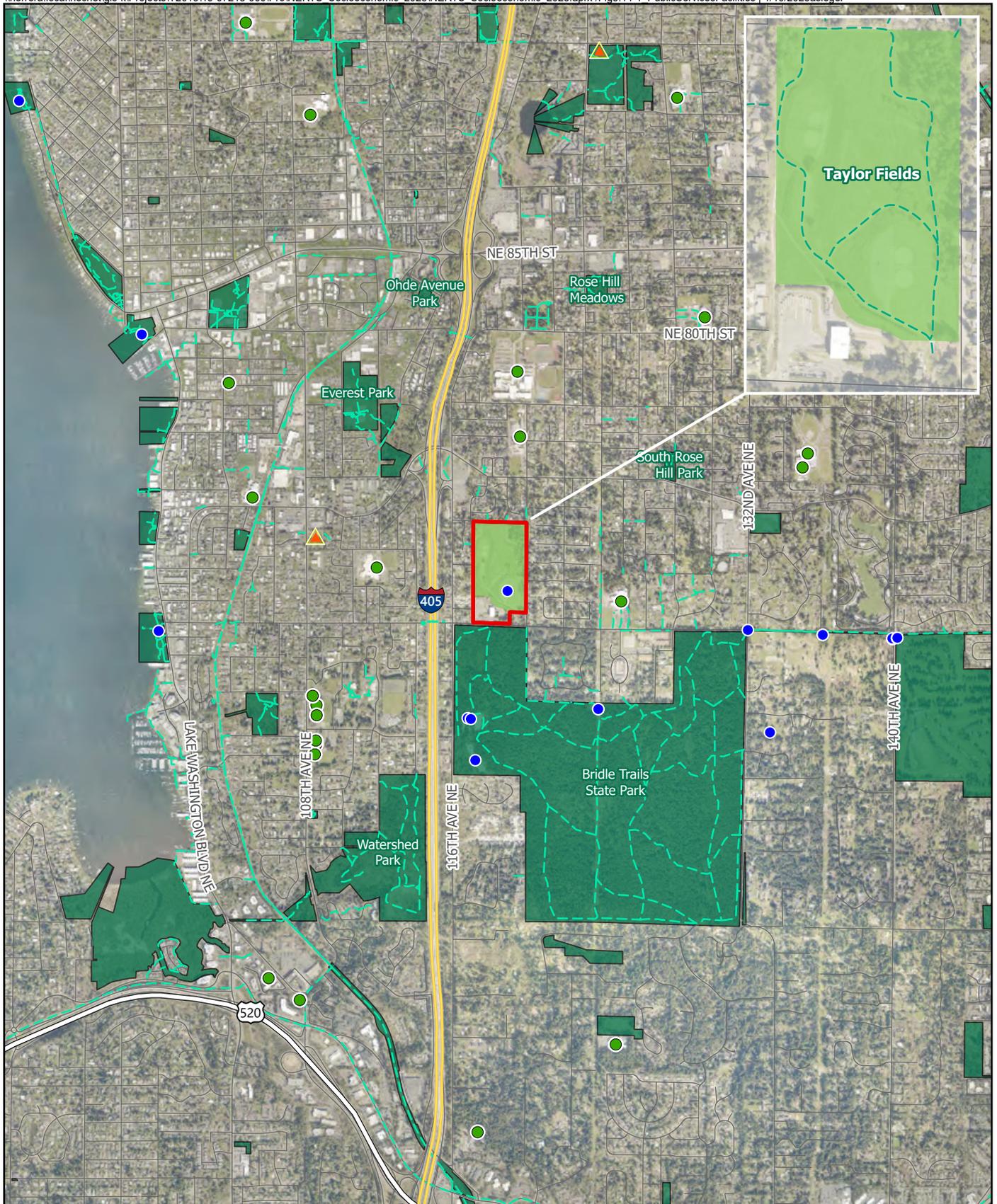
3.14.2.2.10 Parks or Other Recreational Facilities

The closed Houghton landfill property, which is directly adjacent to the north of the No Action and Alternative 1 site, is zoned by the city of Kirkland as Park/Open Space. A portion of the site has youth baseball fields (Taylor Fields). Taylor Fields is also used for active and passive recreation. A network of trails traverses the property. The property is owned and managed by King County. While the City of **Kirkland includes Taylor Fields in its online KirklandMaps resource as a "park," it is not named in the current Kirkland Comprehensive Plan as a formal Community Park, Neighborhood Park, athletic field, or as part of Kirkland's formal trail network. There are occasional observations of homeless encampments on the site.**

Other parks and recreational facilities in the study area include Bridle Trails State Park, directly south of the No Action and Alternative 1 site. Bridle Trails State Park is a 489-acre day-use park with 28 miles of trails used by equestrians, hikers, and other visitors. It does not offer bike trails or camping. South Rose Hill Park is a City of Kirkland neighborhood park featuring a playground, a basketball court, picnic tables, and restrooms, approximately 0.68 miles northeast of the site. Watershed Park is a City of Kirkland natural park with forests, walking trails, and a scenic overlook, approximately 0.60 miles northeast of the site and west of I-405. Everest Park is a City of Kirkland community park with amenities including pickleball courts, ballfields, a playground, a picnic shelter, and restrooms, approximately 0.46 miles northwest of the site and west of I-405.

Established bike routes exist west of the site, running north-south along 116th Avenue NE, east of the site, running north-south along 112nd Avenue NE, and north of the site, running east-west along NE 70th Place and NE 70th Street.

The Bridle Crest Trail, part of a regional trail system connecting Bridle Trails State Park to Marymoor Park and Sammamish River Trail passing through Kirkland, Redmond, and Bellevue, begins at the east end of



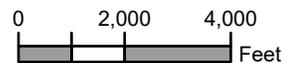
Legend

- Alternative Location
- Fire Station
- Schools
- Park Facility
- Park
- Closed Landfill / Open Space
- Trails

Figure 3.14-1. Public Services Facilities in the Vicinity of Action Alternative 1.



SCALE: 1" = 3,600'-0"



NE 60th Street approximately 0.77 miles east of the site, and travels east. The trail is used for horseback riding, mountain bicycling and hiking. Bike riders are known to travel on NE 60th Street to reach regional trails.

3.14.2.3 Alternative 2

This section addresses the affected environment at the Alternative 2 site and study area. The site is located within the City of Woodinville on six tax parcels in the 15000 block of Woodinville-Redmond Road NE.

3.14.2.3.1 Water

The Woodinville Water District (District) operates and maintains the water infrastructure and supplies water for the Alternative 2 site and study area. The District purchases all its water supply from the City of Seattle for distribution to its customers. The majority of the water comes from the Tolt River Watershed but occasionally it is received from the Cedar River Watershed (WWD 2023). The District does have several wells in the aquifer underlying the City, but the District obtains all municipal water supplies from Seattle **Public Utilities. According to the 2015 Woodinville Comprehensive Plan, the District's transmission system** consists of approximately 250 miles of water main, 45 pressure-reducing valve stations, and four booster pump stations. The District stores water in eight above ground storage reservoirs that have a combined capacity of approximately 14.9 million gallons. The Alternative 2 **site is within the District's West service** area which includes the portion of the City of Woodinville that lies west of the Sammamish River and downtown Woodinville (City of Woodinville, 2015).

The District's 2019 Comprehensive Water System Plan (2019 System Plan) projects a maximum day demand (high scenario) of 10.1 million gallons of water per day in 2023 and 12.52 MGD in 2037 serving 21,000 (WWD 2019). The 2019 System Plan also projects that **the District's water system has sufficient** capacity to meet expected growth within the 20-year planning period overall, including some minor piping improvements in the West service area (WWD 2019). A local distribution system provides water to individual homeowners and businesses. Local water distribution lines are within the Alternative 2 site.

3.14.2.3.2 Sanitary Sewer

The Woodinville Water District (District) provides sanitary sewer service to the study area and the Alternative 2 **site. According to the District's 2022 General Sewer Plan Update, all wastewater from the District's system is conveyed to the** KCWTD for treatment, reuse, and/or disposal. Currently, King County is routing the collected sewage northward to the Brightwater Wastewater Treatment Plant, located approximately 3.25 miles north of the site. (WWD 2022). The Brightwater facility has capacity to treat an average of 36 million gallons of wastewater per day (MGD). By 2040, treatment capacity may be expanded to 54 MGD (KCWTD 2023), **which is adequate to treat the region's wastewater until at least the 2030s, with** planned upgrades able to serve anticipated growth well beyond that timeframe (City of Woodinville 2022).

The District owns, maintains, and operates approximately 55 miles of collection piping, three sewage pump stations and three sewer siphons (WWD 2022). Local sanitary sewer lines are located within the existing Alternative 2 site.

3.14.2.3.3 Stormwater

The City of Woodinville Surface Water Utility maintains conveyance, manages surface water flows, and provides water quality treatment before stormwater is discharged into waterways (City of Woodinville 2022b). **Woodinville's Comprehensive Surface Water Management Plan (CSWM Plan) guides the City on projects and strategies to manage the City's storm and surface water systems. Woodinville's** municipal separate storm sewer system is subject to NPDES Western Washington Phase II Municipal Stormwater Permit, issued in 2019 by Ecology under authority from the EPA. The permit allows Woodinville to discharge stormwater into waters of the state if the City takes specific steps to minimize discharge of pollutants to stormwater, similar to those identified in Section 3.14.2.2.3. Section 3.3, Water, provides additional detail on permit compliance requirements and efforts.

The **City's CSWM Plan divides Woodinville into 20 drainage basins, containing approximately 56 NPDES** outfalls, 2,800 public storm drainage catch basins within the city limits, nearly 64 miles of public storm drain conveyance pipes, and over 120 public stormwater facilities (i.e., tanks, vaults, ponds). Other drainage conveyance facilities in the city limits include over 16 miles of public ditches and swales. (City of Woodinville 2022b)

The majority of stormwater runoff in Woodinville discharges to the Sammamish River through either a minor tributary, a major tributary, or direct drainage. Minor tributaries within the city include Woodin Creek, Derby Creek, and several unnamed tributaries. Major tributaries to the Sammamish River receiving stormwater from the city include Little Bear Creek and Bear Creek.

There is no known storm drain network on the Alternative 2 site. A residential or industrial water impoundment is located directly adjacent to the northeast border of the site but is not within the boundary of the site. The topography of the site is such that surface runoff generally flows east toward Woodinville-Redmond Road NE where it collects in a grass swale that runs parallel to Woodinville-Redmond Road NE and directs flows southeastward and off-site. The grass swale connects to an unnamed tributary that outlets to the Sammamish River and ultimately to Lake Washington. Section 3.3, and the Final NERTS Water Resources Assessment (Appendix B) provide additional detail about the stormwater infrastructure on the Alternative 2 site.

3.14.2.3.4 Solid Waste

The Alternative 2 site is within **King County's** northeast county solid waste service area. Solid waste handling in the City of Woodinville is also governed by RCW 70.95.030. Solid waste services for residential customers are provided by Waste Management Northwest, Inc., which operates under a franchise through the WUTC. Commercial enterprises are responsible for contracting for their own services. King County KCSWD provides transfer and disposal services to Woodinville residents and businesses via an interlocal agreement. The nearest recycling and transfer station is the Houghton RTS (See Section 3.14.2.2.4 for **additional information on SWD's system**). **A recycling transfer station operated by Waste Management, the Cascade Recycling Center, is located on NE 190th Street in Woodinville. The Center receives recyclable materials from a large part of Western Washington (City of Woodinville 2015).**

Solid waste and recycling collection services for residents and businesses in the City of Woodinville are provided by Waste Management, including for the businesses currently at the Alternative 2 site. For operations at the proposed Alternative 2 site, solid waste services could also be provided by KCSWD through using the facilities on site.

3.14.2.3.5 Electricity

Puget Sound Energy (PSE) provides electric service through overhead transmission lines to the **Alternative 2 site and surrounding study area. PSE's electricity sources, power generating capacity, and** ability to meet future capacity needs are the same for the Alternative 2 site and study area as were described in Section 3.14.2.2.5 for the No Action and Alternative 1 site. Electricity is provided to the Alternative 2 study area via high voltage transmission lines to 16 existing distribution substations and then transformed ultimately to 12.5 kV. Local electric lines deliver power from substations to individual homeowners and businesses. Local power lines are located within the footprint of the Action Alternative **2's** site.

The existing uses on the site consume electricity for office, commercial, and retail buildings (lighting, office equipment, cooling, and heating), storage buildings (lighting, cooling, and heating), computers and electronics, manufacturing and other industrial processes, and lighting for the driveway and parking lot. Energy use is estimated at approximately 2,500,000 kWh annually, based on average usage of 2,000,000 to 3,000,000 kWh for manufacturing facilities of similar size to the existing businesses. Refer to Section 3.7 Energy and Natural Resources for a more detailed discussion of electrical supply, and to Section 3.2.1.3.1.1 and Section 3.2.3.2.1.1 for a discussion of the use of emergency/backup generators for backup power.

3.14.2.3.6 Natural gas

PSE provides natural gas service to the Alternative 2 **site and surrounding study area. PSE's regional** natural gas infrastructure, ability to meet future capacity needs, and regulatory oversight are the same for the Alternative 2 site and study area as were described in Section 3.14.2.2.6 for the No Action and Alternative 1 site. PSE provides natural gas service to the Woodinville area via the Williams Pipeline. A local distribution system provides natural gas to individual homeowners and businesses. It is unknown whether the existing uses on the site use natural gas, and no known distribution lines are located within the Action Alternatives 2 site. PSE installed approximately four miles of new 16-inch high-pressure pipeline and constructed a new gate station along the Seattle Public Utilities Tolt utility corridor, east of Woodinville in unincorporated King County to increase capacity to northeast King County residents. Beyond 2025, PSE plans to build a 16-inch natural gas line along the Tolt corridor within the incorporated limits of Woodinville and along 132nd Ave NE (City of Woodinville 2015).

3.14.2.3.7 Communications

Telecommunications services within the study area are provided by Ziplly Fiber Northwest, LLC, a registered company regulated by WUTC (WUTC 2023). Additional services are provided by numerous

cellular telecommunications providers, including AT&T, Verizon, and T-Mobile. Internet services are provided by a range of companies, including Xfinity, Starlink, and Version, among others. There are five cellular towers within the study area, northeast of the site for Action Alternative 2. Throughout the study area, there are overhead telephone lines, which typically run parallel to city streets.

3.14.2.3.8 Police, Fire, and Emergency Medical Services

The Woodinville Police Department provides police protection for Woodinville and the study area in **partnership with the King County Sheriff's Office. In 2020, the City's department included ten patrol** deputies, one School Resource Officer, one Detective, two Patrol Operations Sergeants, and the Chief of Police. The department responds to approximately 3,300 service calls on average each year (City of Woodinville 2020). The police department is approximately 1.4 miles from the Action Alternative 2 site.

Woodinville Fire and Rescue (WF&R) provides fire and emergency medical services for Woodinville and **the study area. In 2021, WF&R's Board of Directors voted to approve a contract for fire suppression and** emergency medical services with Eastside Fire & Rescue (EF&R). WF&R serves an area of approximately 30 square miles and along with EF&R, provides regional services in partnership with neighboring fire departments, including emergency dispatch and 911 services by North East King County Regional Public Safety Communication Agency, hazardous materials response by Eastside HazMat Team, and the medic program is part of the King County Medic One Program.

Woodinville Fire and Rescue includes about 60 firefighter/EMTs and responds to over 4,000 service calls each year from three stations located throughout the city (WCOC 2023). The nearest fire station – Station 31 – is approximately 1.6 miles from the Alternative 2 site.

The Alternative 2 site and the study area are within the King County Public Hospital District No. 2 (the District), which includes the cities of Kirkland, Redmond, Woodinville, Kenmore, Duvall and parts of Bothell, **Carnation, and Sammamish. The District's primary operations include the same medical facilities listed in** Section 3.14.2.2.8. The Action Alternative 2 site is also served by several medical facilities in addition to Evergreen Hospital Medical Center, including but not limited to Kaiser Permanente Northshore Medical Center, MultiCare Indigo Urgent Care, and Evergreen Health Urgent Care-Woodinville.

Figure 3.14-2 shows the locations of the police, fire/EMS, and medical facilities relative to the study area.

3.14.2.3.9 Schools

The Alternative 2 site and study area is entirely within the Northshore School District. The closest schools to the site are Chrysalis High School and Middle School (220 students in 2023), approximately 0.10 miles to the east directly across Woodinville-Redmond Road NE; Woodmoor Elementary School (488 students in 2023) approximately 0.65 miles to the west of the site; Northshore Middle School (845 students in 2023) approximately 0.80 miles to the west of the site; Evergreen Academy Elementary School (175 students in 2023) approximately 0.98 miles to the west of the site; Woodinville Montessori School (Woodinville Campus) (263 students in 2023) approximately 0.51 miles to the northeast of the site; Chrysalis School, Elementary Campus, K-6 (enrollment included above) approximately 0.57 miles to the northeast of the site;

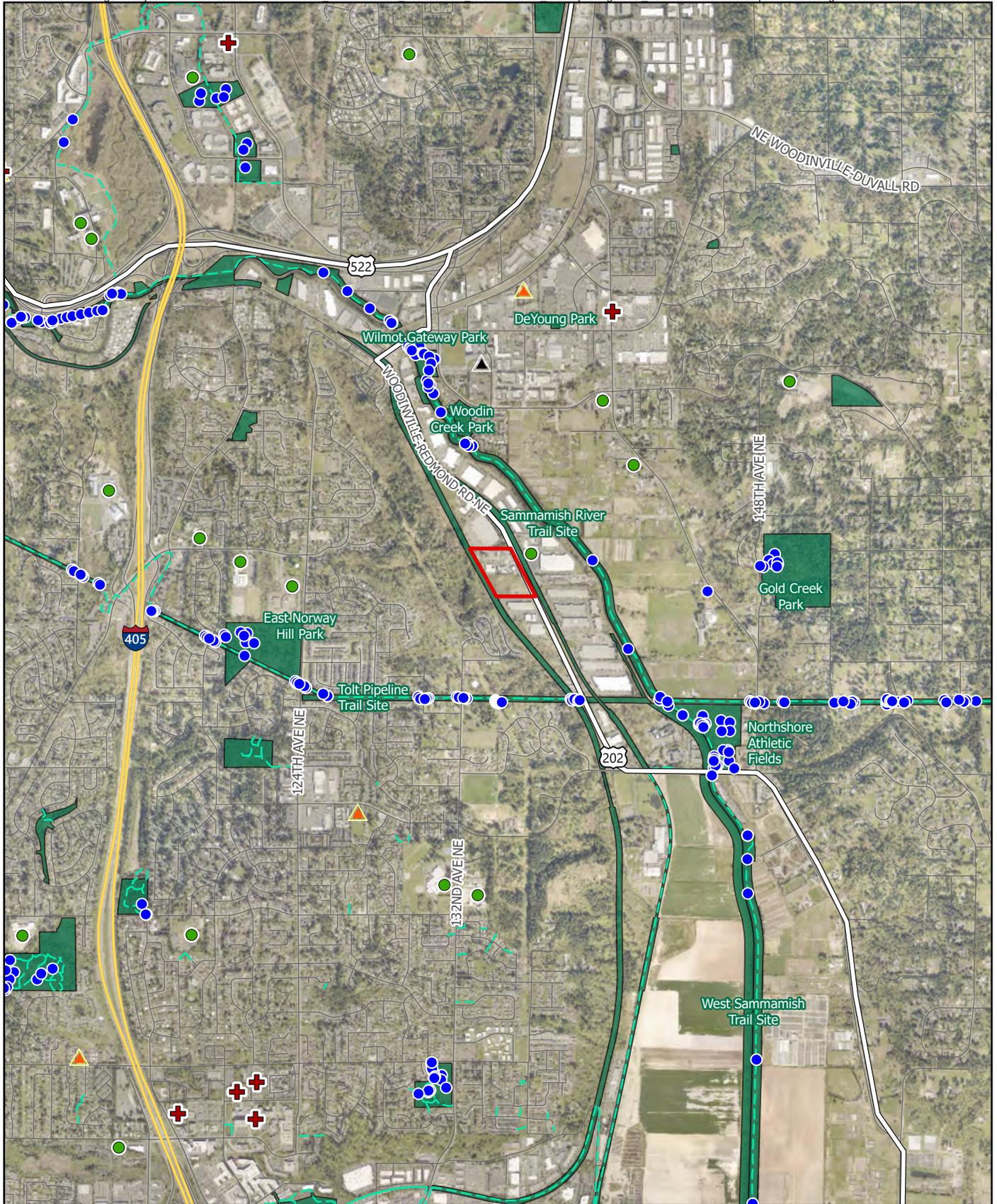
Kamiakin Middle School (609 students in 2023) approximately 1.0 miles to the south of the site; John Muir Elementary School (358 students in 2023) approximately 1.0 miles to the south of the site; and Hollywood Hill Elementary School (348 students in 2023) approximately 1.1 miles to the northeast of the site. Other nearby schools west of I-405 or north of SR-522 and more than a mile from the site include Cedar Park Christian School to the west; Providence Classical Christian School; Woodinville Montessori School (Bothell Campus); Woodin Elementary, and Woodinville High School to the north of the site.

3.14.2.3.10 Parks or Other Recreational Facilities

The City of Woodinville has 1.96 acres of neighborhood parks, 26.76 acres of community parks, 12.32 acres of open space, 6.56 acres of sport fields, and 1.7 miles of trails over eight parks, one open space, and one sports facility, totaling about 47.6 acres of public recreation area. The City also owns a number of undeveloped and restricted use areas totaling about 121.9 acres (City of Woodville PRO Plan 2020).

Parks and recreational facilities near the Alternative 2 site and in the study area include Woodin Creek Park, approximately 0.40 miles north of the site and on the east bank of the Sammamish River. This park is about 6.5 acres and has amenities including a basketball court, garden, horseshoe pit, lawn area, picnic tables and shelter, and a tennis court. Wilmot Gateway Park, approximately 0.60 miles north of the site and also on the east bank of the Sammamish River offers a playground and open play area and connects to the Sammamish River Trail along the Sammamish River. Gold Creek Park, approximately 0.82 miles east of the site is owned by King County and offers trails for equestrians and hikers. The Woodinville Sports Fields and City of Woodinville Parks and Recreation facilities are located just east of Wilmot Park across 131st Avenue NE, approximately 0.66 miles from the site. The City of Woodinville Parks, Recreation, and Open Space Plan (PRO) Plan identifies Limited Use areas, which are restricted use lands that preserves viewsheds, native vegetation, and critical environmental areas. The West Slope area is almost 40 acres of steep slope west of the Alternative 2 site and the Chateau Ridge area is about two acres approximately 0.30 miles southwest of the site for native vegetation and stream protection (City of Woodville PRO Plan 2020). Both of these areas provide passive recreation opportunities.

Several nearby trails serve as multi-use equestrian, pedestrian, and mountain bike trails, including the Tolt Pipeline Trail, the Sammamish River Trail, and the abandoned BNSF rail line that runs directly behind the site to west. The proposed Eastrail Trail is being developed as an uninterrupted, 42-mile multi-use trail extending from Renton, through Bellevue, to Woodinville and the city of Snohomish in Snohomish County. The proposed Eastrail corridor passes the Alternative 2 site in two parallel segments: one running north-south along the east side of Woodinville-Redmond Road NE, and second running north-south along the west side of the Alternative 2 site in the abandoned BNSF rail line corridor. Bike riders are known to use Woodinville-Redmond Road NE as an alternative to nearby trails.



Legend

- ▭ Alternative Location
- + Medical Facilities
- ▲ Police Station
- ▲ Fire Station
- Schools
- Park Facility
- ▭ Park
- Trails

Figure 3.14-2. Public Services Facilities in the Vicinity of Action Alternative 2.



SCALE: 1" = 3,600'-0"
 0 2,000 4,000
 Feet



Established bike routes exist directly west of the site running north-south along Woodinville-Redmond Road NE, and further east of the Sammamish River running north-south along 148th Avenue NE and 140th Place NE.

3.14.3 Environmental Impacts

This section describes the potential public services and utilities impacts from the No Action and action alternatives and identifies mitigation measures that could avoid, minimize, or reduce the identified impacts below the level of significance or reduce impacts in general.

3.14.3.1 *No Action Alternative*

This section describes the potential public services and utilities impacts from the No Action Alternative located at the existing Houghton RTS property at 11724 NE 60th Street. Under the No Action Alternative, the existing Houghton RTS would continue to operate and no new NERTS facility would be developed.

3.14.3.1.1 Impacts from Construction

Under the No Action Alternative, a new transfer station would not be built. Direct construction-related impacts to public services and utilities would not occur.

3.14.3.1.2 Impacts from Operation

Under the No Action Alternative, the existing Houghton RTS would continue to operate with no change in levels of demand for public services and utilities. No new utilities are proposed as part of the No Action Alternative. Refurbishment or replacement of various portions of the sewer, water, communications, and PSE electrical facilities would be required for some facilities at the site that are at the end of their useful life, but no additional services would be required. The existing stormwater system is currently undergoing evaluation for potential improvement, which would be implemented under the No Action Alternative, and the transfer station would remain under the Stormwater Pollution Prevention Plan (SWPPP) during continued operations. No direct impacts to existing public services and utilities are anticipated from continued operations.

Regarding solid waste disposal and levels of recycling, the lack of receiving capacity for waste and small recycling area with limited recycling services at the existing Houghton RTS could indirectly increase the amount of waste disposed in general and increase use of other public transfer stations and private recycling facilities. A net result could include a reduction in the total amount of material that is recycled and an increase in the amount that must go to the landfill and limiting the ability to meet the solid waste management goals for cities within the service area.

The area surrounding the No Action Alternative site is already developed with existing residential, commercial, and institutional uses. There are a large number of reasonably foreseeable future projects in the vicinity. However, even with a possible impact on solid waste services, there would be no significant direct impacts on public services and utilities under the No Action Alternative, and no potential for significant cumulative impacts on public services and utilities associated with the No Action Alternative.

3.14.3.2 *Impacts Common to All Action Alternatives*

3.14.3.2.1 Impacts from Construction

3.14.3.2.1.1 *Direct Impacts*

Construction of the action alternatives would require the use of water, electricity, solid waste services, and communications services. These demands would be typical of an industrial construction site. Construction activities on the action alternative sites or in their immediate vicinity include but are not limited to the installation of primary electrical service; on-site light poles and foundations; street lights; communications and power connections between new buildings; power panels and power meters; fire mains, hydrants, and fire department points of connection; storm drains and bioswales; communication conduits and cabling, sanitary sewer and side sewer lines, manholes, and connections; new backflow preventers and meters for fire and domestic water; and utility trenches, vaults and pads.

Construction water use under the action alternatives would include dust suppression, concrete mixing, and other typical construction requirements. Construction of the action alternatives would also likely require upgrades to on-site water lines. Any modifications to the water infrastructure would be made in coordination with the appropriate public utilities, include public outreach, and follow appropriate extension procedures, which would minimize the effects of such interruptions. Impacts would be limited to temporary service interruptions during work on pipes and would be minor.

Construction of the action alternatives would likely require upgrades to on-site sewer lines. New utility locations would be confirmed, and easements developed during design of the project, as part of the project permitting. As with the water infrastructure, any modifications to the sanitary sewer infrastructure would be made in coordination with the appropriate public utilities, include public outreach, and follow appropriate extension procedures, which would minimize the effects of such interruptions. During construction, the contractors would be required to provide temporary sanitary toilets on-site for use by workers and visitors. These facilities would be maintained by a designated subcontractor. Impacts would be limited to temporary service interruptions during work on pipes and would be considered minor.

During construction, it is unlikely that the existing water supply or sanitary sewer conveyance and treatment capacity would be exceeded by anticipated construction use. Minor impacts to utility service might occur if construction were to disturb existing utility lines; however, any disruptions would be temporary because the construction contractor would be required to establish connections to prevent any disruptions prior to construction. KCSWD would coordinate with the appropriate water utilities to ensure that adequate water supply and pressure for firefighting is available at new facilities and would also coordinate with all other public service utilities to ensure that adequate capacity is available for all facilities.

Construction of the action alternatives could produce temporary impacts to stormwater quality from runoff and erosion during construction clearing and grading and development of the site. An NPDES Construction Stormwater General Permit would be required and would include a Temporary Erosion and Sediment Control plan (TESC) and BMPs that would be implemented in accordance with the Stormwater Pollution Prevention Plan (SWPPP). In addition, temporary construction impacts will be minimized by implementing

BMPs in accordance with the 2021 King County Surface Water Design Manual (SWDM, King County 2021), and the 2021 King County Stormwater Pollution Prevention Manual (SPPM), including but not limited to the following:

- Sediment, erosion, and pollution prevention control measures would be implemented as defined in a TESC plan during construction to minimize effects from runoff and erosion. This could include controlling erosion at the source, when possible, and intercepting and conveying surface water from disturbed areas to sediment ponds, among others.
- Provide perimeter protection (e.g., silt fence) downslope of areas to be disturbed before construction for containment of loose material and filtration of surface runoff. All construction runoff would be managed in accordance with applicable water quality and discharge requirements. When complete, the project would provide pavement or planting over all disturbed soils for final ground cover.
- To minimize the possibility of tracking soil from the site, sediment on the wheels and undercarriage of trucks and other vehicles leaving the site would be controlled using erosion control BMPs for construction projects. Such practices may include the use of sediment traps, check dams, stabilized entrances to the construction site, mechanical wheel-washes, erosion control fabric fences and barriers and other strategies to control and contain sediment.

In addition, the SWDM (which the City of Woodinville and City of Kirkland have adopted, with amendments) would require KCSWD to prevent increases in the two-year and ten-year runoff peaks during construction using on-site flow control facilities or other approved equivalent storage facilities (such as a Baker tank). With use of these BMPs and measures, no significant impacts to stormwater infrastructure would occur during construction. Additional details are provided in Section 3.3, Water, and in Appendix B, Water Resources Assessment.

There is also potential for leaks and spills from heavy equipment, but a Spill Prevention Control and Countermeasures plan would be developed to minimize these risks. A Health and Safety Plan, a contaminated media contingency plan, and other measures would be implemented prior to construction to minimize the potential for contaminants to enter surface waters (see Section 3.4, Hazardous Materials). Negligible stormwater or water quality impacts are anticipated during construction when available BMPs are implemented.

Construction of the action alternatives would require services for the collection and disposal of solid wastes, and construction and demolition wastes. Solid waste collection services would be provided by contracted haulers in the City of Kirkland or the City of Woodinville.

Also, during construction, use of electricity and communication services will be typical for an industrial development, and PSE and existing communication service providers would have no constraints on providing needed services. As a result, no impacts are anticipated on electricity and communication utility systems.

Construction of the action alternatives could result in minor impacts to fire, emergency, and police response services if construction requires temporary road closures, which could lead to emergency response delays. Construction vehicles and construction activities on local roads could also adversely impact emergency

response time. These temporary disruptions could be disproportionately felt by residents in closer proximity to each of the sites through increases in response time for police, fire, and ambulance calls. KCSWD would work with the service providers during final design and construction of the proposed facilities to ensure that reliable emergency access is maintained and to inform them of construction schedules and any potential disruptions. The construction site would be fenced and locked to prevent entry by unauthorized persons.

Construction of the action alternatives could result in minor impacts to parks, or other recreation facilities if construction requires temporary road closures, which could lead to access disruptions. Construction vehicles and construction activities on local roads could also adversely impact access to these resources. Construction of the action alternatives could result in impacts to some schools in close proximity to the sites. As with emergency services, these temporary disruptions could be disproportionately felt by users of the schools, parks, and recreation facilities close to each of the sites.

3.14.3.2.1.2. Indirect Impacts

Under any of the alternatives, new capital costs would be incurred to construct the new NERTS facility and whether funded directly through solid waste rate-funded methods or through bonds, could increase pressure to raise solid waste rates, even with additional recycling. The added expense to the average **residential curbside customer's monthly bill under all action alternatives is unknown at this time**. The limited impacts on public services and utilities from the construction of the NERTS facility at the action alternative sites are unlikely to lead to additional projects or actions that would result in indirect public services and utilities impacts.

3.14.3.2.2 Impacts from Operation

3.14.3.2.2.1. Direct Impacts

Following construction, operation of the action alternatives would require the use of water, sewer, stormwater, electricity, solid waste services, and communications services.

Operational water use under the action alternatives would include potable water use, sanitary waste disposal, wash down of transfer building floors and other surfaces that come in contact with refuse, misting (or equivalent technology)/dust suppression, fire suppression, truck or tire wash, potential landscape irrigation, and other potential requirements. The most recently built transfer stations in King County included a looped water¹⁵ supply and fire main system around the sites with fire hydrants situated at various locations. Hydrants could be sited during the design phase of the project. Design of the transfer building would likely incorporate a dry pipe fire sprinkler system that would reduce the overall fire flow requirements for the site (King County 2006). Upgrade needs would be the responsibility of KCSWD and would be determined during design of the transfer station when detailed flow requirements are determined.

¹⁵ Looped Water System: In this system, there are numerous pathways that water can follow from the source to the consumer. By keeping water moving, the looping pattern reduces numerous issues associated with water stagnation and increases firefighting capacity.

The new NERTS facility also would be built to modern industry and green building standards. In planning for a green building certification, there would be efforts to maximize water conservation through a variety of measures incorporated into the building design, such as the use of low flow toilets and faucets, and rainwater capture systems where precipitation falling on the roof of the new transfer building would be diverted for storage to a detention system. This rainwater would be used for wash down of transfer building floors and other surfaces that come in contact with refuse, or for landscaping irrigation, if needed.

Because the water providers that serve the action alternative sites anticipate adequate water supplies for their service areas for at least the next 20 years and up to 40 years, including anticipated growth, and because the facilities will be designed with water conservation features, none of the action alternatives would result in substantial demand on or impacts to the water utilities.

The sanitary sewer system would be designed for connection to the host jurisdiction's sewer trunk line.

Based on other recent King County transfer facilities, in addition to the sanitary sewer system required for toilets and normal domestic wastewater disposal, all water that comes into contact with refuse would drain to the sanitary sewer system. In addition, all parking areas for all loaded waste trailers and containers and any outdoor areas where open top bins for recycled materials are placed would be designed to drain to the sanitary sewer system.

Because the sanitary sewer conveyance and treatment providers that serve the action alternative sites anticipate adequate capacity for their service areas for at least the next 15 years, and with planned upgrades able to provide capacity beyond that, including anticipated growth, none of the action alternatives would result in substantial demand on or impacts to the sanitary sewer utilities.

For the action alternatives, the proposed action would have beneficial direct effects on the stormwater system at each site. The project would reduce stormwater runoff quality and quantity impacts, as all untreated runoff would be treated and detained to current standards and routed to discharge points with more reliable infrastructure, which would be an improvement compared with the No Action Alternative. In accordance with applicable regulatory requirements and current stormwater management standards, the project would provide new storm drainage conveyance, treatment, and flow control facilities to replace any such facilities that may need to be removed during project construction. These features would be incorporated into the project design. With installation of these systems, no adverse stormwater drainage impacts are anticipated, and the project would enhance the capacity of the system to meet demand.

Operation of the action alternatives would require services from PSE for electricity. Electricity would be used to power administrative buildings (lighting, office equipment, break room/lunchroom appliances, cooling, and heating), transfer building (lighting, compactors, emergency equipment, etc.), scale plaza (lighting, computers, electronic scales, etc.), radios and other communication, as well as lighting for the site, driveway, and parking lot. With conservation and demand response, and distributed and centralized renewable and non-emitting resources, **PSE's Integrated Resource Plan indicates it will have available capacity to accommodate regional growth, including from the NERTS project, with no significant impacts.** In the event of power loss, all alternatives would use a combination of emergency/backup generators for

backup power, prioritized re-connection of existing power sources to an essential public facility, and expedited removal of all waste from the site until power is returned to the facility.

All of the action alternatives will require some level of police, fire, and emergency medical services serving each site during ongoing operations. All the public service providers identified have adequate capacity to handle any services required at or resulting from the development and use of the NERTS facility at either site. KCSWD would work with police, fire, and emergency medical services over the longer period of operation under all the action alternatives, to ensure that reliable emergency access is maintained. KCSWD would coordinate with water utilities to ensure that adequate water supply and pressure for firefighting is available at new facilities and would also coordinate with all other public service utilities to ensure that adequate capacity is available for all facilities.

Services to the site would incrementally increase the demand for public services and utilities, including fire, police, and emergency medical services; water, stormwater, and sewer services; communications services; and solid waste services, but would involve no significant impacts. None of the action alternatives would lead to a measurable increase in the need for public transit, health care, or schools.

3.14.3.2.2. *Indirect Impacts*

There would be limited impacts on public services and utilities from the operation of the NERTS facility at the action alternative sites, though the service needs of some rural areas of King County may lead to additional projects or actions resulting in indirect public services and utilities impacts. The actions include the potential siting and construction of additional drop box facilities to serve some residents. Construction of regional transfer stations in these rural areas would not be considered. Impacts would include typical construction-related impacts and operational impacts associated with small drop-box facilities such as truck and self-haul traffic. Due to their size, they are unlikely to be significant. Solid waste system service and capacity increases would be a beneficial impact.

The addition of recycling capacity at the new NERTS facility under all action alternatives could indirectly increase the amount of material collected for recycling, with corresponding beneficial reductions in impacts related to raw material extraction, energy use, and carbon emissions. These beneficial impacts would enhance the ability of the cities in the service area to meet their solid waste management strategies.

3.14.3.2.3 *Cumulative Impacts*

The proposed action alternatives would contribute to the general cumulative increase in demand for public services and utilities in the Kirkland and Woodinville study areas over the time the NERTS facility would remain open. In both study areas, there are numerous reasonably foreseeable future projects in the vicinity (see Appendix I). Therefore, there appears to be a potential for cumulative impacts on public services and utilities associated with the action alternatives. However, all utilities and public services have plans to add capacity to meet future demand for those services. As a result, the action alternatives would contribute to minimal, less than significant cumulative impacts on public services and utilities.

3.14.3.3 Alternative 1A

This section describes impacts unique to Alternative 1A, along with applicable mitigation measures. Alternative 1A would construct the new NERTS facility at the Houghton RTS property at 11724 NE 60th Street in Kirkland after the existing transfer station building is closed and deconstructed or demolished.

3.14.3.3.1 Impacts from Construction

3.14.3.3.1.1 Direct Impacts

All project impacts, regulatory requirements, and cumulative impacts related to public services and utilities under Alternative 1A would include those described previously in Section 3.14.3.2.1, Impacts Common to All Action Alternatives.

Construction water use under action alternative 1A would be met by the existing City of Kirkland water system. No impacts to the water utility are expected from construction of Alternative 1A. In the City of Kirkland, new water service for similar projects consists of Class 52 ductile iron water main, with provisions included for fire hydrants, and fire sprinkler and domestic services. New on-site water mains would hook up to existing city water mains (12- to 48-inch mains are located adjacent to the site in NE 60th Street) and developed to include all water appurtenances including backflow preventers, check valves, and domestic and irrigation water meters.

The City of Kirkland requires that water system extensions needed to serve new development must be available and adequate upon first use of development. The City must ensure that the improvements are made in a timely manner so as to not jeopardize concurrency requirements and must be done according to the size and configuration identified by the Kirkland Water System Plan (City of Kirkland 2022).

King County estimates water use at 1,160 gpd during construction at the Alternative 1A site based on the potential site development footprint, number of construction workers, and typical construction activities. The City would be able to serve the 1,160 gpd of projected use by the proposed project construction with no significant impact to the water supply system.

No sanitary sewer use or production of domestic wastewater is anticipated during construction on the Alternative 1A site, as the existing RTS would be deconstructed or demolished prior to the start of construction and construction contractors would provide temporary sanitary toilets on-site for use by workers and visitors. King County estimates the employment of from 120 to 730 construction worker full-time equivalents on average in the region during the construction of the NERTS facility. No impacts to sanitary sewer services are anticipated.

Removal of the existing Houghton RTS would occur before the new RTS is constructed and operating. The use of utilities at the existing Houghton RTS would cease after decommissioning. The underground sewer conveyance system would be capped and remain in place until use with the new facility is established or removed and replaced. The stormwater system would remain in place to handle site runoff until replaced with a new stormwater system and connections to existing infrastructure. Other utilities would be

temporarily capped or disconnected until use with the new facility is established or removed and replaced completely. No impacts to public services or utilities are anticipated with appropriate BMPs described for Alternative 1A.

PSE provides electric service to the Alternative 1A site, and the electric power demand required during construction would be minimal and met by the existing system. No impacts to the electric utility are anticipated. Also, during construction and following deconstruction or demolition of the existing RTS, use of communication services will be reduced compared with the operating condition and less than the No Action Alternative, as the number of on-site workers and visitors will be fewer. As a result, no impacts are anticipated on communication utility capacity.

The PSE natural gas high pressure main pipeline is located on NE 60th Street, adjacent to the site (City of Kirkland 2022). No natural gas service is planned for Alternative 1A and therefore no impacts to the natural gas utility during construction are expected.

During construction of Alternative 1A, stormwater management would be implemented to avoid adverse stream impacts to the maximum extent possible and would use the construction BMPs referenced in Section 3.14.3.2.1.1 - Impacts Common to All Action Alternatives. The BMPs for Alternative 1A would be required to meet flow control requirements provided in the 2021 King County SWDM (King County 2021a) and the Kirkland Amendments to the SWDM, since the site discharges to Yarrow Creek. BMPs and additional on-site flow control facilities or other approved equivalent storage facilities (such as a Baker tank) would be employed upstream of the existing bioretention swale and the off-site discharge location. The addition of these measures, including temporary treatment and flow control infrastructure would minimize impacts to the stormwater management system capacity in the study area. Stream flow and water quality conditions are not expected to be impacted during construction.

The Alternative 1A site is currently being served by the Kirkland Fire Department. All emergency calls are routed through the centralized emergency dispatch and 911 services provided by North East King County Regional Public Safety Communication Agency, which determines which equipment will respond to a 911 call at the site. Station 22, the nearest fire station, is staffed 24 hours a day, seven days a week by three crewmembers. Construction of the Alternative 1A site may have minor impacts on emergency vehicle access or response time to the construction area and around the site due to temporary street congestion caused by construction vehicles.

Because of the potential hazards associated with the Alternative 1A site (see Section 3.4, Hazardous Materials), construction impacts could include unintended exposure of construction workers to contaminants and hazardous materials. These conditions could increase the demand for fire and emergency medical services from the Kirkland Fire Department, its partner agency, the Eastside Hazardous Materials Response Team (EHMT), and emergency medical facilities in the City of Kirkland. The EHMT maintains equipment and personnel to staff two hazardous materials units in King County Zone 1, the northeast section of King County (EHMT 2023).

The following BMPs would be implemented to minimize impacts to fire, emergency response, and medical services:

- Contractor will be required to develop a site-specific Health and Safety Plan that details potential hazards on the Alternative 1A site, including from potential contamination and hazardous materials; documents an Emergency Response Plan for injury or exposure; identifies required training, equipment, and responsibilities of construction staff; identifies procedures for alerting local response agencies and personnel; and identifies emergency routes to nearby hospitals. Additional detail is provided in Section 3.4, Hazardous Materials.
- Coordinate with Kirkland Fire Department to minimize the possibility of service disruptions during construction.
- Coordinate with EHMT to minimize the possibility of service disruptions during construction.
- Coordinate with local medical facilities to minimize the possibility of service disruptions during construction.
- Work with all emergency service providers to ensure that reliable emergency access is maintained at the site and to emergency facilities, and to inform them of construction schedules and any potential disruptions.

Impacts to fire and emergency services would be temporary and, provided the BMPs are effectively implemented during construction, impacts to these services are anticipated to be minor to negligible.

There could be a need for traffic control by the Kirkland Police Department along NE 60th Street or other area locations during construction if road or utility improvements are made to adjacent roadways, which may temporarily impede the normal flow of traffic. The following BMPs would be implemented to minimize impacts to police services:

- Coordinate with police services to minimize the possibility of service disruptions during construction
- Maintain access to emergency facilities at all times during construction.
- The construction site would be fenced and locked to prevent entry by unauthorized persons.

It is anticipated that the short-term construction-related impacts would be within the capacity of the Kirkland Police Department. An increase in demand for police services would be temporary and with implementation of BMPs, impacts to police services are anticipated to be minor to negligible.

As discussed in Section 3.14.3.2, construction of Alternative 1A could result in impacts to some schools. These impacts could be experienced more notably by users of **Nanny's Kare Daycare/Preschool** approximately 120 feet to the east of the site, Benjamin Franklin Elementary School approximately 0.28 miles to the east of the site, and to a lesser extent Rose Hill Middle School approximately 1.1 miles to the northeast of the site, and Rose Hill Elementary School approximately 1.25 miles to the northeast of the site (see Section 3.10). Construction activities would be import and export of material and soils as well as bringing construction equipment to and from the site by vehicle. Before construction begins, a construction management plan describing procedures for construction activity such as truck routes, hours of operation, and driver safety would be developed and approved by KCSWD (see below and Section 3.13). This would serve to minimize impacts on pedestrian and vehicle safety, and access to these schools during

construction to a less than significant level. Trucks entering or exiting the site are not expected to block driveways along the haul routes.

As discussed in Section 3.14.3.2, construction of the action alternatives could result in minor impacts to parks or other recreation facilities if construction requires temporary road closures, which could lead to access disruptions. Construction vehicles and construction activities on local roads could also adversely impact access to these resources.

The closed Houghton landfill property is currently used as baseball fields (Taylor Fields), and for active and passive recreation. A network of trails traverses the property. Vehicle access to Taylor Fields, including the baseball fields operated by Kirkland American Little League, is via an access road just east of the entrance to the existing Houghton RTS from NE 60th Street. The access road encircles the recreation area and provides access to parking for the fields. There are several pedestrian access points from adjacent neighborhood roads. Fields 1 and 2 are located northeast of the RTS and north of the access road. Fields 3 and 4 are located north of the RTS. A larger parking area is located west of Fields 1 and 2 and a smaller parking area is located south of Fields 3 and 4 in a widening of the access road.

Construction of Alternative 1A would not impact access to Taylor Fields from NE 60th Street, except for the potential impacts described below. Construction would likely disrupt the southern portion of the open field area north of the existing Houghton RTS, the southwestern portion of Fields 1 and 2 parking area, and the access road to Fields 3 and 4. Access to the entire closed Houghton landfill and Taylor fields from these points would have to shift to other access points until it is restored. This disruption would occur during construction and permanently remove those existing areas and access roads totaling about three acres. King County would construct a new compressed gravel road between the Fields 1 and 2 parking area and Fields 3 and 4 to provide access during construction and following completion of construction. King County is also proposing to enhance the baseball field facilities and add supplemental recreation facilities and amenities at Taylor Fields. These activities could mitigate the temporary disruptions to access if constructed prior to the new facility and provide longer term beneficial impacts to users of these recreation facilities. Construction could also disrupt current active daily use of the entire closed Houghton landfill site due to disruption of the loop trails and inner trail connections and decrease the size of the current open space. These trail connections would be re-established, enhanced, or reconfigured following construction to the maximum extent possible to preserve current recreational uses. King County would confer with City of Kirkland and neighborhood stakeholders to identify appropriate mitigation.

King County would work with Lake Washington School District, City of Kirkland Parks Department, State Parks Commission, local and neighborhood stakeholders, and the contractors to minimize and avoid use of study area roadways by construction vehicles where nearby schools and park access are located. For example, this could include daily driver safety briefings, low posted construction speed limits, temporary flashing pedestrian beacons, material delivery hour restrictions, construction vehicle restrictions along NE 60th Street east of the site entrance to minimize interaction with **Nanny's Kare Daycare/Preschool**, Benjamin Franklin Elementary, and along 116th Avenue NE south of NE 60th Street to minimize interaction with the entrance to Bridle Trails State Park. Where that is not feasible, King County would provide public outreach through multiple outlets for notice of planned access interruptions or construction activity updates.

With the implementation of the BMPs, impacts to schools, and parks and recreation facilities in the vicinity of the Alternative 1A site are anticipated to be less than significant.

The City of Kirkland's concurrency requirement does not apply to surface water, fire, EMS, and park facilities. New development will not be denied based on the level of service standards for each of these public services. However, mitigation, impact fees, or other developer contributions may be required to meet the standards for these public facilities for level of service (City of Kirkland 2022).

3.14.3.3.1.2. Indirect Impacts

Under Alternative 1A, with the construction mitigation proposed for the minor impacts expected, no significant indirect impacts on existing public services and utilities systems during construction are expected.

3.14.3.3.2 Impacts from Operation

3.14.3.3.2.1 Direct Impacts

All project impacts, regulatory requirements, and cumulative impacts related to public services and utilities under Alternative 1A would include those described previously in Section 3.14.3.2.2, Impacts Common to All Action Alternatives.

Water use for operation of the NERTS facility at the Alternative 1A site is described in Section 3.14.3.2.2. These uses would be met by the existing City of Kirkland water system. King County estimates domestic water use at 2,400 gpd based on an estimated 15 full-time employees at the facility and the additional operational uses. The City would be able to serve the 2,400 gpd of projected domestic use by the proposed project. **The proposed project's domestic water usage would represent approximately 0.04 percent of the City of Kirkland's water system's 5.7 MGD average day production** in 2023. According to the International Fire Code Fire Flow Requirements for Buildings, the fire flow requirement is up to 6,500 gpm for a Type IIB building of a size anticipated for NERTS. These volumes are likely greater than the No Action Alternative due to the larger enclosed building size and associated RTS functions. The fire requirements can be met in the Houghton service area with no significant impact to the water supply system. Therefore, the proposed project would not result in significant adverse impacts on the City of Kirkland's water system.

The new NERTS facility would use sanitary sewer during operations under Alternative 1A. No new installation or expansion of City sanitary sewer pipes is expected to serve operation of the NERTS facility under Alternative 1A. All upgrades to the on-site sewer system would be made in coordination with City of Kirkland and in compliance with City of Kirkland 2018 General Sewer Plan, policies, and design criteria. **The City's 2018 General Sewer Plan (City of Kirkland 2018a) outlines** proposed improvements to its sewer system that are necessary to provide the system capacity for the projected sewer customer growth. The plan indicates the projected average annual flow for the sewer system in 2035 at 3.88 MGD and a total peak hourly flow of over 25,000 gpm. The Plan also indicates that, in accordance with all applicable federal, State, and local regulations, the City will design its sewer system facilities with sufficient capacity to handle

the anticipated peak daily flow under normal conditions without any overflows to the environment (City of Kirkland 2018a).

The proposed project is expected to generate 2,400 gpd in domestic wastewater demand (equal to the domestic water use), plus an additional volume associated with stormwater collection in areas that would drain to sanitary sewer. If half of the seven acres of pollution-generating impervious surface anticipated at the new NERTS site under Alternative 1A) drained to the sanitary sewer, the total wastewater treatment demand would rise to approximately 7,500 gpd, or 0.2 percent of projected total system flow in 2035 (see Water Resources Assessment, Appendix B. This volume is likely greater than the No Action Alternative due to the larger impervious footprint of Alternative 1A. The City would be able to serve the 7,500 gpd of projected domestic wastewater by the proposed project. It is anticipated that operation of Alternative 1A would not result in substantial demand on the sanitary sewer system and would not affect the capacity of the system to meet demand, resulting in less than significant impacts.

In accordance with applicable regulatory requirements and current stormwater management standards (see Section 3.3, Water), Alternative 1A would provide new storm drainage conveyance, treatment, and flow control facilities to replace facilities removed during project construction. The new stormwater system design could include, as appropriate, water quality treatment and surface and underground detention. Low Impact Development features and green building design criteria could be implemented to reduce the amount of runoff entering the stormwater system. These features could include rooftop rainwater harvesting and --where appropriate and where possible to avoid impacts to the closed Houghton landfill-- pervious **pavement on driveways or walking surfaces. The City's 2023 Surface Water Master Plan indicates that no** part of the storm drainage system in the immediate vicinity of the Alternative 1A site was a high priority for the most recent Capital Improvement between 2023 and 2028 (City of Kirkland 2023d).

Once operational, the new stormwater infrastructure at the NERTS facility under Alternative 1A would have a greater capacity than the No Action Alternative to reduce impacts from potential stormwater pollution and high stormwater flows. Treatment and detention of stormwater would be consistent with regional efforts to protect and improve water quality and salmonid habitat conditions in the surface waters downstream of the site. With installation of these systems, no stormwater drainage impacts are anticipated, and the project would enhance the capacity of the system to meet demand.

Under Alternative 1A, the existing Houghton RTS would be deconstructed or demolished prior to construction of the new NERTS facility. A new NERTS facility, designed to meet the growing needs of the northeast King County community, would add garbage transfer and recycling capacity over the long-term. Overall, Alternative 1A would result in beneficial impacts to the solid waste infrastructure due to the ability for King County to meet the commitments to growing cities in the ILAs for transfer capacity compared with the No Action Alternative. Notably, the increase in capacity also enables King County to divert additional materials, and additional volumes of materials, away from landfill disposal when compared with the No Action Alternative.

PSE provides electric service to the Alternative 1A site, and the electric power demand required during operation under Alternative 1A would be greater than under the No Action Alternative due to the addition of

waste compactors, modern air handling systems, and larger enclosed buildings for the proposed RTS functions. Modern energy-conserving fixtures and systems would limit the net increase in electricity demand, as the new NERTS facility will achieve the most aggressive green building standards feasible for this type of construction. Operation of Alternative 1A would not result in substantial demand on the electricity system and would not affect the capacity of the system to meet demand. No impacts to the electric utility are anticipated.

No natural gas service is planned for Alternative 1A and therefore no impacts to the natural gas utility during operation are expected, similar to the No Action Alternative. Use of communication services will be approximately the same as the No Action Alternative and no impacts are anticipated on communication utility capacity.

Operation of the new NERTS facility at the Alternative 1A site would be unlikely to necessitate additional fire department staffing or equipment, nor require the construction of additional fire station or emergency service facilities. In order to ensure that Alternative 1A meets all International Fire Code and City of Kirkland Amendments to the code (KMC 21.20), King County would work with the Kirkland Fire Department and Fire Chief to ensure that all proposed facilities include adequate fire and life safety protection equipment and infrastructure, such as an up-to-date fire protection equipment and design (e.g., fully equipped with sprinklers and fire resistant containers and areas) and site access for emergency vehicles. Alternative 1A also will meet Kirkland requirements for fire hydrants and fire flow (KMC 21.33; 21.20 Appendix C). Any emergencies requiring deployment would expose first responders to health and safety risks similar to those that would be encountered under the No Action Alternative.

Further, King County would cooperate with all applicable emergency service providers to ensure that the new NERTS facility is focused on accident prevention and provision of emergency services, and well prepared in the event of an emergency. The potential need for fire and emergency services is not expected to be any greater than under the No Action Alternative, and the new RTS is likely to provide an additional level of safety to staff and visitors due to the inclusion of modern safety systems, separate traffic circulation and waste unloading areas for residential and commercial users, and enhanced emergency access. Therefore, the Kirkland Fire Department and emergency services would continue to meet needed service levels and response times because modeled delays in the local street operations are expected to be minimal (see Section 3.13, Transportation). Impacts to fire and emergency services from the project are expected to be negligible.

Operation of Alternative 1A would not increase population growth or other need for police protection. The City of Kirkland Police Department would continue to meet needed service levels.

Operation of Alternative 1A would not displace any existing schools, nor is it likely that it would increase the attendance at schools in the vicinity of the site, although employees and users of schools in the study area may be affected by the impacts discussed throughout this EIS that occur under Alternative 1A. Potential impacts to transportation, traffic, and traffic safety from a new NERTS facility under Alternative 1A are discussed in Section 3.13, Transportation. The reduction in truck traffic anticipated under Alternative 1A compared with the No Action Alternative would reduce potential traffic impacts on schools and school

access. The access driveway intersection, near the **Nanny's Kare Daycare/Preschool, Debbie's Place** Preschool, and Benjamin Franklin School would meet City of Kirkland level of service standards under Alternative 1A in 2029 and in 2040 under projected traffic and traffic growth (see NERTS Transportation Assessment (revised), Appendix H.). Overall, impacts on schools in the project study area are expected to be less than significant. Additional discussion on potential noise impacts on schools is included in Section 3.10.

Operation of the new NERTS facility under Alternative 1A would permanently remove the southern portion of the open field area north of the existing Houghton RTS used for active and passive recreation, the southwestern portion of Fields 1 and 2 parking area, and the existing access road to Fields 3 and 4, totaling approximately three acres. This is considered a moderate unavoidable adverse impact because sufficient park, open space, and trail capacity would be available to serve the expected population of neighborhood users following project implementation. Other parks and park facilities are not expected to be impacted by operation of the new NERTS facility under Alternative 1A. As with schools and other community facilities, the reduction in truck traffic anticipated under Alternative 1A as compared with the No Action Alternative would reduce potential traffic impacts on those community resources and recreationists. Other beneficial impacts associated with reductions in air emissions, odor, pollutants, and noise also serve to create beneficial impacts for nearby parks and recreation facilities, as discussed in other sections of this DEIS. As discussed in Section 3.14.3.3.1.1, King County would construct a new compressed gravel road between Taylor Fields 1 and 2 parking area and Fields 3 and 4 to provide permanent access to these park and recreation resources during operation of the new NERTS facility. King County would work with the community to incorporate enhancements to the baseball field facilities and add supplemental recreation facilities and amenities at Taylor Fields as part of the project. These additions would create additional beneficial impacts under Alternative 1A compared with the No Action Alternative. While impacts to the park use of Taylor Fields and the closed Houghton landfill will result in an unavoidable adverse loss of park area at that site, impacts to parks and recreation facilities in the study area of the Alternative 1A site are anticipated to be minor and offset by beneficial impacts.

The presence of a transfer station under Alternative 1A in close proximity to several recreational and pedestrian pathways, lanes, and trails would result in the addition of RTS transfer truck traffic and customer traffic to **the study area's** street network over time. However, it would be a minimal part of the overall growth in background traffic in the vicinity, not include a growth in transfer trailer traffic due to the installation of compaction, and unlikely to affect access to area parks, park facilities, regional trails and proposed trails, and area recreationists. Additional discussion of active transportation impacts on safety is included in Section 3.13.3.3.2.1.

3.14.3.3.2.2. Indirect Impacts

The limited impacts on public services and utilities from operation of Alternative 1A are unlikely to lead to additional projects or actions that would cause indirect impacts to public services and utilities. Beneficial indirect impacts described under Section 3.14.3.2.2.2 would be applicable to Alternative 1A.

3.14.3.3.3 Cumulative Impacts

The solid waste system capacity Alternative 1A would create would be part of the response to the general cumulative increase in demand for public services and utilities in Kirkland and the study area over the time the NERTS facility would remain open. Prior growth in the Kirkland study area has contributed to demand for, and impacts to, public services and utilities. All of the service providers and utilities serving the study area have responded to that growth with public planning, regulatory updates, fee and funding proposals, and service expansion to increase the capacities of those public services and utilities to meet specific service level metrics, resulting in the existing conditions in the Alternative 1A study area.

In the Alternative 1A study area, there are numerous reasonably foreseeable future projects in the vicinity (see Appendix I). Therefore, there appears to be a potential for continued cumulative impacts on public services and utilities associated with development of Alternative 1A. However, all utilities and public services have plans to add capacity to meet future demand for those services. As a result, cumulative impacts on public services and utilities would be minimal.

3.14.3.4 Alternative 1B

This section describes impacts unique to Alternative 1B, along with applicable mitigation measures. Alternative 1B would construct the new NERTS facility at the Houghton RTS property at 11724 NE 60th Street in Kirkland while the existing transfer station building is open and operating. The old transfer station building would then be closed and repurposed or replaced after the new station is open.

3.14.3.4.1 Impacts from Construction

3.14.3.4.1.1 Direct Impacts

All project impacts, regulatory requirements, and cumulative impacts related to public services and utilities under Alternative 1B would include those described previously in Section 3.14.3.2.1, Impacts Common to All Action Alternatives.

Construction impacts associated with Alternative 1B are expected to be largely similar to those for Alternative 1A. Impacts on water, sanitary sewer, electricity, and communications utilities would be the same as Alternative 1A and with similar comparisons to the No Action Alternative. Impacts on police, fire, emergency medical services, and schools would also be the same as Alternative 1A. Construction would affect access to the open space areas and active recreation areas of the closed Houghton landfill, but only until access can be restored under the construction plan. Mitigation described in in Section 3.14.3.3.1.1 and Section 3.14.3.3.2.1 would also apply to Alternative 1B.

Alternative 1B may result in minor increases in the need for stormwater infrastructure capacity when compared with Alternative 1A and the No Action Alternative. This is due to the larger potential site development area and resulting increase in storm flows that would need control through on-site erosion control BMPs. The additional capacity would be met with existing or minimal additional temporary facilities and is a less than significant impact on the system.

If the existing transfer building is repurposed instead of deconstructed or demolished under Alternative 1B, there would be less need for solid waste recycling and disposal capacity during construction when compared with Alternative 1A. If the existing transfer building is deconstructed or demolished and replaced instead of repurposed, the need for solid waste recycling and disposal capacity would be about the same as Alternative 1A.

Neither of these impacts on the service infrastructure would be significant.

3.14.3.4.1.2. Indirect Impacts

As with Alternative 1A, with the construction mitigation proposed for the minor impacts expected, no significant indirect impacts on existing public services and utilities systems during construction are expected under Alternative 1B.

3.14.3.4.2 Impacts from Operation

3.14.3.4.2.1. Direct Impacts

All project impacts, regulatory requirements, and cumulative impacts related to public services and utilities under Alternative 1B would include those described previously in Section 3.14.3.2.2, Impacts Common to All Action Alternatives.

Operational impacts associated with Alternative 1B are expected to be largely similar to those for Alternative 1A. Impacts on water, communications, electricity, and communications utilities would be the same as Alternative 1A and with similar comparisons to the No Action Alternative. Impacts on police, fire, emergency medical services, and schools would also be the same as Alternative 1A and with similar comparisons to the No Action Alternative.

Like Alternative 1A, operation of the new NERTS facility under Alternative 1B would permanently remove a portion of the open field area north of the existing Houghton RTS used for active and passive recreation, and a portion of Fields 1 and 2 parking area, and the existing access road to Fields 3 and 4. The total area affected under Alternative 1B is approximately six acres, greater than that for Alternative 1A. Other parks and park facilities are not expected to be impacted by operation of the new NERTS facility under Alternative 1A. Mitigation described in Section 3.14.3.3.1.1 and Section 3.14.3.3.2.1 would also apply to Alternative 1B. This is considered a moderate unavoidable adverse impact because sufficient park, open space, and trail capacity would be available to serve the expected population of neighborhood users following project implementation.

Alternative 1B may result in minor increases in the need for stormwater infrastructure and sanitary sewer capacity when compared with Alternative 1A and the No Action Alternative. This is due to the larger potential site development area, larger impervious surface area, and resulting increase in storm flows that would go to both systems. The additional capacity need would be minimal and met by the new stormwater and sanitary sewer infrastructure constructed on site, which would meet more rigorous stormwater regulations and provide better stormwater treatment and flow control than the No Action Alternative. The

marginal impacts on downstream infrastructure and natural systems would also be less than significant and generally better than the No Action condition.

Like Alternative 1A, Alternative 1B would result in beneficial impacts to the solid waste infrastructure due to the growth in transfer capacity and the ability to divert additional materials, and additional volumes of materials, away from disposal compared with the No Action Alternative.

If the existing transfer building is deconstructed or demolished instead of repurposed, beneficial impacts would accrue to the solid waste system at about the same level as under Alternative 1A, but still much greater than under the No Action Alternative.

3.14.3.4.2.2. Indirect Impacts

As with Alternative 1A, the limited impacts on public services and utilities from operation of Alternative 1B are unlikely to lead to additional projects or actions that would result in indirect impacts to public services and utilities. Beneficial indirect impacts described under Section 3.14.3.2.2.2 would be applicable to Alternative 1B. If the existing transfer building is repurposed instead of deconstructed or demolished under Alternative 1B, the additional facility capacity would likely expand the materials diverted from disposal to recycling and reuse when compared with Alternative 1A and the No Action Alternative. This is an additional **beneficial indirect impact on King County's solid waste system.**

3.14.3.4.3 Cumulative Impacts

Cumulative impacts under Alternative 1B would be the same as those described under Alternative 1A.

3.14.3.5 Alternative 2

This section describes impacts unique to Alternative 2, along with applicable mitigation measures. Alternative 2 would construct the new NERTS facility on six tax parcels in the 15000 block of Woodinville-Redmond Road NE in Woodinville.

3.14.3.5.1 Impacts from Construction

3.14.3.5.1.1 Direct Impacts

All project impacts, regulatory requirements, and cumulative impacts related to public services and utilities under Alternative 2 would include those described previously in Section 3.14.3.2.1, Impacts Common to All Action Alternatives.

Construction water use under action alternative 2 would be met by the existing Woodinville Water District (District) water system. No impacts to the water utility are expected from construction of Alternative 2. In the City of Woodinville, new water service for similar projects consists of cement lined, Class 52, ductile iron pipe with "lead-free" materials (less than eight percent lead content), with provisions included for fire hydrants, and fire sprinkler and domestic services. New on-site water mains would connect to existing District water mains (eight-inch mains are located on and adjacent to the site Woodinville-Redmond

Road NE) and developed to include all water appurtenances including backflow preventers, check valves and domestic and irrigation water meters.

The City of Woodinville requires that water system extensions needed to serve new development must be adequately served prior to the time of occupancy. The City must ensure that the improvements are made in a timely manner so as to not jeopardize concurrency requirements and be done according to the size and configuration identified by the **District's** Comprehensive Water System Plan (WWD 2023).

King County estimates water use at 1,160 gpd during construction at the Alternative 2 site based on the potential site development footprint, number of construction workers, and typical construction activities. The District would be able to serve the 1,160 gpd of projected use by the proposed project construction with no significant impact to the water supply system.

No sanitary sewer use or production of domestic wastewater is anticipated during construction on the Alternative 2 site, as construction contractors would provide temporary sanitary toilets on-site for use by workers and visitors. King County estimates the employment of from 120 to 730 construction worker full-time equivalents on average in the region during the construction of the NERTS facility. No impacts to sanitary sewer services are anticipated.

PSE provides electric service to the Alternative 2 site, and the electric power demand required during construction would be minimal and met by the existing system. No impacts to the electric utility are anticipated. Use of communication services will be about the same as the current condition, the No Action Alternative, and as under Alternative 1, as the number of on-site workers and visitors will be approximately the same. As a result, no impacts are anticipated on communication utility capacity.

PSE supplies natural gas via the Williams Pipeline, which runs to the east of Woodinville in unincorporated King County and outside the Alternative 2 study area. (City of Woodinville 2015). No natural gas service is planned for Alternative 2 and therefore no impacts to the natural gas utility during construction are expected.

During construction of Alternative 2, stormwater management would be implemented to avoid adverse stream impacts to the maximum extent possible and would use the construction BMPs referenced in Section 3.14.3.2.1.1- Impacts Common to All Action Alternatives. Additionally, the BMPs for Alternative 2 would be required to meet flow control requirements provided in the 2021 King County SWDM (King County 2021a), since the site discharges to an unnamed tributary to the Sammamish River. BMPs and additional on-site flow control facilities or other approved equivalent storage facilities (such as a Baker tank) would be employed upstream of the grass swale that runs parallel to Woodinville-Redmond Road Northeast and the off-site discharge location. The addition of these measures, including temporary treatment and flow control infrastructure would minimize impacts to the stormwater management system capacity in the study area.

The Alternative 2 site is currently being served by Woodinville Fire and Rescue (WF&R), in partnership with Eastside Fire & Rescue. All emergency calls are routed through the centralized emergency dispatch and 911 services provided by North East King County Regional Public Safety Communication Agency, which

determines which equipment will respond to a 911 call at the site. Station 31, the nearest fire station, is staffed 24 hours a day, seven days a week. Construction of the Alternative 2 site may have minor impacts on emergency vehicle access or response time to the construction area and around the site due to temporary street congestion caused by construction vehicles.

The following BMPs would be implemented to minimize impacts to fire, emergency response, and medical services:

- Contractor will be required to develop a site-specific Health and Safety Plan that details potential hazards on the Alternative 2 site.
- Coordinate with Woodinville Fire and Rescue to minimize the possibility of service disruptions during construction.
- Coordinate with local medical facilities to minimize the possibility of service disruptions during construction.
- Work with all emergency service providers to ensure that reliable emergency access is maintained at the site and to emergency facilities, and to inform them of construction schedules and any potential disruptions.

Impacts to fire and emergency services would be temporary, and with BMPs effectively implemented during construction, impacts to these services would be minor to negligible.

There could be a need for traffic control by the Woodinville Police Department along Woodinville-Redmond Road NE during construction if road or utility improvements are made to the roadway or site access, which may temporarily impede the normal flow of traffic. The following BMPs would be implemented to minimize impacts to police services:

- Coordinate with police services to minimize the possibility of service disruptions during construction
- Maintain access to emergency facilities at all times during construction.
- The construction site would be fenced and locked to prevent entry by unauthorized persons.

It is anticipated that the short-term construction-related impacts would be within the capacity of the Woodinville Police Department. Because an increase in demand for police services would be temporary and provided that the BMPs are implemented, impacts to police services are anticipated to be minor to negligible.

As discussed in Section 3.14.3.2, construction of Alternative 2 could result in minor impacts to parks or other recreation facilities, including nearby recreational trails, if construction requires temporary road closures, which could lead to access disruptions. Construction vehicles and construction activities on local roads could also impact access to these resources. With access to most park, recreation and trail facilities more than one-half mile away, and with the implementation of the BMPs, impacts to parks and recreation facilities in the study area of the Alternative 2 site are anticipated to be minor.

As discussed in Section 3.14.3.2, construction of Alternative 2 could result in minor impacts to schools. These impacts could be experienced more notably by users of the Chrysalis High School and Middle School, approximately 0.10 miles to the east directly across Woodinville-Redmond Road NE from the Alternative 2 site. Construction activities would be import and export of material and soils as well as bringing construction equipment to and from the site by vehicle. Before construction begins, a construction management plan describing procedures for construction activity such as truck routes and hours of operation would be developed and approved by KCSWD (see Section 3.13). This would serve to minimize impacts on access to the Chrysalis school to a less than significant level. Impacts to property access for sites in the study area of the Alternative 2 site would be minimal. Trucks entering or exiting the site are not expected to block driveways along the haul routes.

If driveway closures are required, King County would work with Chrysalis School, Northshore School District, City of Woodinville Parks, Development Services, and Public Works departments, local and neighborhood stakeholders, and the contractors to develop a construction transportation plan that maintains access to these properties to the extent practical, particularly during drop-off and pick-up times. If access to the Chrysalis school or other business could not be maintained during construction, the specific construction activity would be reviewed to determine whether it could occur during non-business hours. King County would provide public outreach through multiple outlets for notice of planned access interruptions. With the implementation of the BMPs, impacts to schools in the study area of the Alternative 2 site are anticipated to be minor.

3.14.3.5.1.2. Indirect Impacts

Under Alternative 2, with the construction mitigation proposed for the minor impacts expected, no significant indirect impacts on existing public services and utilities systems are expected during construction.

3.14.3.5.2 Impacts from Operation

3.14.3.5.2.1. Direct Impacts

All project impacts, regulatory requirements, and cumulative impacts related to public services and utilities under Alternative 2 would include those described previously in Section 3.14.3.2.2, Impacts Common to All Action Alternatives.

Uses of water for operation of the NERTS facility at the action alternative 2 site are described in Section 3.14.3.2.2. These uses would be met by the existing Woodinville Water District water system. King County estimates domestic water use at 2,400 gpd based on an estimated 15 full-time employees at the facility and the additional operational uses. The water district would be able to serve the 2,400 gpd of **projected domestic use by the proposed project. The proposed project's domestic water usage would represent approximately 0.06 percent of the Woodinville Water District's water system's 4.0 MGD average day demand in 2020. The District expects the average day demand to increase to 4.4 MGD by 2037 (WWD 2023).** According to the International Fire Code Fire Flow Requirements for Buildings, the fire flow

requirement is up to 6,500 gpm for a Type IIB building of a size anticipated for NERTS. These volumes are the same as Alternative 1 and likely greater than the No Action Alternative due to the larger enclosed **building size and associated RTS functions. The fire requirements can be met in the District's** west service area in general with some piping improvements, but with improvements at the site for dead-end pipe fire flow capacity. However, the proposed project would not result in significant adverse impacts on the City of **Kirkland's water system.**

The new NERTS facility would use sanitary sewer during operations under Alternative 2. No new installation or expansion of City sanitary sewer pipes are expected to serve operation of the NERTS facility under Alternative 2. All upgrades to the on-site sewer system would be made in coordination with **Woodinville Water District and in compliance with WWD's 2022 General Sewer Plan (WWD 2022) policies, and design criteria. The District's 2022 General Sewer Plan identifies projects that will be necessary to** maintain existing service and expand the capacity of the in-place system to meet identified needs. The plan also identifies the most likely routing and sizing of future system extensions and serves as guidance for development within the sanitary service area. The Alternative 2 **site is within Basin 5 of the District's sewer** service area. The plan identifies a capital improvement project along Woodinville-Redmond Road NE south of the site that will rectify system capacity deficiencies to reduce pipe utilization to no more than 30 percent.

The proposed project is expected to generate 2,400 gpd in domestic wastewater demand (equal to the domestic water use), plus an additional volume associated with stormwater collection in areas that would drain to sanitary sewer. If half of the nine acres of pollution-generating impervious surface anticipated at the new NERTS site under Alternative 2 drained to the sanitary sewer, the total wastewater treatment demand would rise to approximately 8,500 gpd or around seven gallons per minute, or 1.8 percent of the 400 gpm capacity of current nearby sewer mains (see Water Resources Assessment, Appendix B). This volume is likely greater than the No Action Alternative and Alternative 1 due to the larger impervious footprint of Alternative 2. The District would be able to serve the 8,500 gpd of projected domestic wastewater by the proposed project. It is anticipated that operation of Alternative 2 would not result in substantial demand on the sanitary sewer system and would not affect the capacity of the system to meet demand, resulting in less than significant impacts.

In accordance with applicable regulatory requirements and current stormwater management standards (see Section 3.3, Water), Alternative 2 would provide new storm drainage conveyance, treatment, and flow control facilities to replace facilities removed during project construction. The new stormwater system design could include, as appropriate, water quality treatment and surface and underground detention. Low Impact Development features and green building design criteria could be implemented to reduce the amount of runoff entering the stormwater system. These features could include rooftop rainwater harvesting **and pervious pavement on driveways or walking surfaces. The City's 2023 Comprehensive Surface Water** Management Plan describes a capital improvement project south of the Alternative 2 site to alleviate flooding in the roadside ditch and ultimately realign a tributary to the Sammamish River (City of Woodinville 2022b). No other stormwater infrastructure projects are recommended in the study area of Alternative 2.

Once operational, the new stormwater infrastructure at the NERTS facility under Alternative 2 would have a greater capacity than the No Action Alternative and about the same capacity as Alternative 1 to reduce

impacts from potential stormwater pollution and high stormwater flows. Treatment and detention of stormwater would be consistent with regional efforts to protect and improve water quality and salmonid habitat conditions in the surface waters downstream of the site, including the Sammamish River. With installation of these systems, no stormwater drainage impacts are anticipated, and the project would enhance the capacity of the system to meet demand.

Under Alternative 2, the existing buildings and structures on the site would be deconstructed or demolished prior to construction of the new NERTS facility. A new NERTS facility, designed to meet the growing needs of the northeast King County community, would add garbage transfer and recycling capacity over the long-term. Overall, Alternative 2 would result in beneficial impacts to the solid waste infrastructure similar to Alternative 1 due to enabling King County to meet the commitments to growing cities in the ILAs for transfer capacity, compared with a reduced ability under the No Action Alternative. Like Alternative 1, Alternative 2 would also enable King County to divert additional materials, and additional volumes of materials, away from landfill disposal when compared with the No Action Alternative.

PSE provides electric service to the Alternative 2 site, and the electric power demand required during operation under Alternative 2 would be about the same as under Alternative 1, and greater than under the No Action Alternative due to the addition of waste compactors, modern air handling systems, and larger enclosed buildings for the proposed RTS functions. Modern energy-conserving fixtures and systems would limit the net increase in electricity demand, as the new NERTS facility will achieve the most aggressive green building standards feasible for this type of construction. Operation of Alternative 2 would not result in substantial demand on the electricity system and would not affect the capacity of the system to meet demand. No impacts to the electric utility are anticipated.

No natural gas service is planned for Alternative 2 and therefore no impacts to the natural gas utility during operation are expected, similar to Alternative 1 and the No Action Alternative. Use of communication services will be approximately the same as Alternative 1 and the No Action Alternative and no impacts are anticipated on communication utility capacity.

Operation of the new NERTS facility at the Alternative 2 site would be unlikely to necessitate additional staffing or equipment, nor require the construction of additional fire station or emergency service facilities. In order to ensure that Alternative 2 meets all International Fire Code and City of Woodinville Amendments to the code (WMC 21.62.180), King County would work with the Woodinville Fire Code Official and the Woodinville Fire and Rescue to ensure that all proposed facilities include adequate fire and life safety protection equipment and infrastructure, such as an up-to-date fire protection equipment and design (e.g., fully equipped with sprinklers and fire resistant containers and areas) and site access for emergency vehicles. Alternative 2 also will meet Woodinville requirements for fire hydrants and fire flow (WMC 21.62.040, Appendix B, C, D). Any emergencies requiring deployment would expose first responders to health and safety risks similar to those that would be encountered under Alternative 1 and the No Action Alternative.

King County would cooperate with all applicable emergency service providers to ensure that the new NERTS facility is focused on accident prevention and provision of emergency services, and well prepared

in the event of an emergency. The potential need for fire and emergency services is not expected to be any greater than under Alternative 1 or the No Action Alternative, and the new RTS is likely to provide an additional level of safety to staff and visitors due to the inclusion of modern safety systems, separate traffic circulation and waste unloading areas for residential and commercial users, and enhanced emergency access. Therefore, Woodinville Fire and Rescue and emergency services would continue to meet needed service levels and response times because modeled delays in the local street operations are expected to be minimal (see Section 3.13, Transportation). Impacts to fire and emergency services from the project are expected to be negligible.

Operation of Alternative 2 would not increase population growth or other need for police protection. The **City of Woodinville Police Department, in partnership with the King County Sheriff's office**, would continue to meet needed service levels.

Operation of Alternative 2 would not displace any existing schools, nor is it likely that it would increase the attendance at schools in the vicinity of the site, although employees and users of schools in the study area may be affected by the impacts discussed throughout this EIS that occur under Alternative 2. Potential impacts from transportation and traffic, including safety, associated with a new NERTS facility under Alternative 2 are discussed in Section 3.13, Transportation. The addition of RTS transfer truck traffic and customer traffic to Woodinville-Redmond Road NE anticipated under Alternative 2 would be greater than under the No Action Alternative, but the access driveway intersections near the Chrysalis School would meet City of Woodinville level of service standards under Alternative 2 in 2029 and in 2040 under projected traffic and traffic growth (see NERTS Transportation Assessment (revised), Appendix H.). Consider a school bus route originating at NE 116th Street and Woodinville-Redmond Road NE and traveling north through all study area intersections along SR 202 and to the SR 522 Eastbound Ramps and 131st Avenue NE (Intersections 201 through 211 from Table 3.13-10) and toward Woodinville High School. Using the operational impact analysis modeled for the EIS and the delays forecast for the 2029/2040 study area intersections under Alternative 2 due to the project (that is action alternative delays minus no action alternative delays), we could expect the school bus to add an additional 16 to 30 seconds in the 2029 AM peak hour compared to the no action condition, and an additional 15 to 22 seconds in the 2040 PM peak hour compared to the no action condition, for the 5.6-mile trip. Other routes through the study area to other school destinations are expected to be similar or less than the above scenario (See Section 3.13, Transportation). Overall, impacts on schools in the project study area, including the Chrysalis School, are expected to be less than significant.

Parks and park facilities are not expected to be impacted by operation of the new NERTS facility under Alternative 2. While the presence of a transfer station in close proximity to several recreational trails (Sammamish River Trail, Tolt Pipeline Trail, and proposed Easttrail Trail) could be visible to trail users, impacts are expected to be minor due to the short duration of their view and anticipated facility design features that would create a view consistent with its larger surroundings (see Section 3.11, Aesthetics, Light and Glare). Also, while the new NERTS facility would generate new noise, odor, and traffic in the Alternative 2 study area, these impacts are anticipated to be minor due to proposed design features and mitigation measures employed (see sections 3.10, 3.2, and 3.13, respectively). Operational noise is

modeled to be at about 65 dBA on the Eastrail Trail adjacent to the Alternative 2 site, which is above the residential daytime sound limit of 60dBA, but at the L_{25} of 65 dBA for maximum level for 15 minutes in any one-hour period, and below the $L_{8.3}$ of 70 dBA for maximum level for 5 minutes in any one-hour period. Potential users of the existing and proposed regional trails are not likely to experience more than minor impacts for a very short duration.

As with schools and other community facilities, the addition of RTS transfer truck traffic and customer traffic **to Woodinville's street network anticipated under** Alternative 2 would be greater than under the current conditions but would be a minimal part of the overall growth in background traffic in the vicinity and unlikely to affect access to area parks, park facilities, regional trails and proposed trails, and area recreationists. All of the intersections near the parks in the study area that would not meet City of Woodinville level of service standards in 2029 and in 2040 under Alternative 2 would also not do so under the No Action Alternative with projected traffic and traffic growth (see NERTS Transportation Assessment (revised), Appendix H.). The project itself would contribute minimal impact on these intersections.

Overall, impacts on parks and park facilities in the project study area from Alternative 2 are expected to be about equal to Alternative 1 and slightly greater than the No Action Alternative but less than significant.

3.14.3.5.2.2. *Indirect Impacts*

The limited impacts on public services and utilities from operation of Alternative 2 are unlikely to lead to additional projects or actions that would result in indirect public services and utilities impacts.

3.14.3.5.3 Cumulative Impacts

The proposed Alternative 2 would contribute to the general cumulative increase in demand for public services and utilities in Woodinville and the study area over the time the NERTS facility would remain open. Prior growth in the Woodinville study area has contributed to demand for, and impacts to, public services and utilities. All of the service providers and utilities serving the study area have responded to the growth with public planning, regulatory updates, fee and funding proposals, and service expansion to increase the capacities of those public services and utilities to meet specific service level metrics, resulting in the existing conditions in the Alternative 2 study area.

In the Alternative 2 study area, there are numerous reasonably foreseeable future projects in the vicinity (see Appendix I). Therefore, there appears to be a potential for continued cumulative impacts on public services and utilities associated with development of Alternative 2. However, all utilities and public services have plans to add capacity to meet future demand for those services. As a result, cumulative impacts on public services and utilities would be minimal.

3.14.4 Mitigation Measures

Although mitigation strategies are not required due to a lack of significant adverse impact findings, to address the potential for less than significant impacts to essential services in the study area of the action

alternatives, KCSWD could consider adopting the following measures in addition to those included in Section 3.14.3:

- Provide fire and emergency service workers with a full set of updated Safety Data Sheets (formerly Material Safety Data Sheets) for hazardous chemicals used on site.
- Provide all schools in the study areas with input on their emergency response plans to cover potentially hazardous situations arising from RTS operations. Install permanent traffic-calming measures, if needed, to ensure access for students, staff, and faculty of schools.
- **Install air and odor monitoring equipment at select schools in the selected site's study area that alerts School District Staff and KCSWD in case of regulatory exceedances.**
- Identify and evaluate future service system needs through collaborative planning between KCSWD and utility and service providers.
- If selected, during design consider options to optimize the Alternative 1A or Alternative 1B facility footprint to preserve additional recreational space at the Alternative 1 site.
- Evaluate and implement improvements to recreation facilities in the study areas, including Taylor Fields; local and regional bike paths and bike lanes; pedestrian, bike, and equestrian crossings on site-adjacent roadways. Engage local stakeholders in a process to identify mitigation options for impacts to park use, open space, and ballfields on the closed Houghton landfill/Taylor Fields.
- Consider incorporation of public amenities into the new NERTS facility, including meeting spaces, space for visitor education, circular economy and reuse space, sports courts, playground areas, public seating, and landscaping.
- Construction and operation of LEED compliant (or similar ranking system) buildings would reduce the power and water requirements for the facilities (e.g., incorporation of passive systems and modern power saving units could reduce the use of power in building heating and cooling).

3.14.5 Significant Unavoidable Adverse Impacts

Compliance with the applicable regulations along with implementation of the BMPs and mitigation measures described in Section 3.14.3 and 3.14.4 would reduce impacts on public services and utilities.

No additional significant unavoidable adverse impacts to public services and utilities are anticipated under any of the alternatives.