

# Sounder Yard and Shops Facility Project SEPA Environmental Checklist



March 2016



**SOUNDTRANSIT**

Central Puget Sound  
Regional Transit Authority



U.S. Department of Transportation  
**Federal Transit Administration**



# Sound Transit Souder Yard and Shops Facility Project

## SEPA Environmental Checklist

March 25, 2016

*Prepared for:*



401 South Jackson Street  
Seattle, Washington 98104





# Table of Contents

<b>A. Background</b> .....	<b>1</b>
1. Proposed Project .....	1
2. Applicant.....	1
3. Applicant Contact Information .....	1
4. Checklist Date .....	1
5. Requesting Agency .....	1
6. Proposed Schedule .....	1
7. Future Activity .....	1
8. Environmental Information .....	2
9. Pending Applications or Approvals .....	3
10. Government Approvals or Permits .....	4
11. Proposal Description.....	5
12. Proposal Location .....	8
<b>B. Environmental Elements</b> .....	<b>9</b>
1. Earth .....	9
2. Air .....	10
3. Water .....	12
4. Plants .....	14
5. Animals .....	16
6. Energy and Natural Resources.....	17
7. Environmental Health .....	18
8. Land and Shoreline Use .....	23
9. Housing and Population.....	28
10. Aesthetics .....	29
11. Light and Glare.....	29
12. Recreation.....	30
13. Historic and Cultural Preservation .....	30
14. Transportation .....	32
15. Public Services .....	37
16. Utilities.....	38
<b>C. Signature</b> .....	<b>38</b>

Attachment A— FTA DCE Worksheet Section II, NEPA Class of Action

Attachment B— Threatened and Endangered Species ESA Screening Checklist (Updated 2015)

Attachment C— Noise and Vibration Technical Memorandum

Attachment D— Environmental Justice and Outreach

Attachment E— Cultural Resources Assessment for the Sounder Yard Expansion Project and  
Letter of No Effect (redacted version 2013)

Attachment F— Transportation Technical Memorandum

Attachment G – Sounder Century Yard Train Operations

Attachment H – Cumulative and Indirect Impacts

## Table of Figures

---

Figure 1. Project Vicinity Map.....	6
Figure 2. Site Layout and Configuration.....	7
Figure 3. Project Site and Surrounding Land Uses.....	24
Figure 4. Project Site and Surrounding Zoning.....	26

## Table of Tables

---

Table 1. Bus Routes Serving Project Site.....	33
---	----

# Environmental Checklist

---

## A. Background

1. Name of the proposed project, if applicable:

Sounder Yard and Shops Facility Project

2. Name of Applicant:

Sound Transit is the project proponent.

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

Lauren Swift, Senior Environmental Planner  
Sound Transit  
401 South Jackson Street  
Seattle, WA 98104-2826  
(206) 398-5302  
[lauren.swift@soundtransit.org](mailto:lauren.swift@soundtransit.org)

4. Date checklist prepared:

March 25, 2016

5. Agency requesting checklist:

Sound Transit is the lead agency under the State Environmental Policy Act (SEPA).

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

Conceptual design and environmental review are anticipated to be complete in winter 2016. Final design would continue through winter of 2017 with start of construction to begin in the spring. Targeted completion of the construction of the Sounder Yard and Shops Facility Project is in 2021. Prior to the start of construction, an existing Tacoma Public Utilities transmission power line that parallels the eastern property edge would be relocated on site in order to avoid conflicts with the planned maintenance facility.

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

There are no current plans for additional improvements or expansion of the Sound Transit Sounder Century Yard in Lakewood, Washington. Previously approved Sounder Yard Expansion Project on the same site is described in Question 9 below.

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

Environmental information that has been prepared directly related to this project includes:

*FTA DCE Worksheet Section II, NEPA Class of Action – Attachment A*

*ESA Screening Checklist for the Sounder Yard and Shops Facility Project (Herrera Environmental, 2015b) – Attachment B*

*Sounder Yard and Shops Facility Project Noise and Vibration Technical Memorandum (Parsons Brinckerhoff, 2016a)—Attachment C*

*Environmental Justice and Outreach— Attachment D*

*Cultural Resources Assessment for the Sounder Yard Expansion Project (Historical Research Associates, Inc., 2013) – Attachment E*

*Sounder Yard and Shops Facility Project Transportation Technical Memorandum (Parsons Brinckerhoff, 2016b) —Attachment F*

*Sounder Century Yard Train Operations – Attachment G*

*Cumulative and Indirect Impacts – Attachment H*

*Cursory Hazardous Materials Evaluation Sounder Yard and Shop Sites (GeoEngineers, 2015a)—Available upon request*

*Categorical Exclusion Checklist, Early Property Acquisition Sounder Yard and Shop Project (Sound Transit, 2015)*

*Preliminary Geotechnical Services Sounder Yard & Shop Facilities King and Pierce Counties Report (GeoEngineers, 2015b)—Available upon request*

*Regional Transit Long-Range Plan Update (ST3 Plan) (Sound Transit, 2014a)*

*Final Supplemental Environmental Impact Statement for the Regional Transit Long-Range Plan Update (Sound Transit, 2014b)*

*SEPA Environmental Checklist for the Sounder Yard Expansion Project (Sound Transit, 2013)*

*Regional Transit Long-Range Plan (ST2 Plan) (Sound Transit, 2005a)*

*Final Supplemental Environmental Impact Statement on the Regional Transit Long-Range Plan (Sound Transit, 2005b)*



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

The Sounder Yard and Shops Facility Project is proposed to be built at the Century Yard site in Lakewood, Washington. Over the next two years, Sound Transit will be constructing another project—the Sounder Yard Expansion Project—at the same location. Both projects were part of the additional train storage and maintenance facilities included in the Regional Transit Long-Range Plan (ST2 Plan) (Sound Transit, 2005a).

The Sounder Yard Expansion Project includes a new building for the train crews and engineers in the center of the site, east of the existing railroad tracks. In addition, a small storage building, air compressor units, two new guard booths, and a third layover track will be constructed nearby. Other improvements include new onsite roads, walkways, parking, improved stormwater and utility systems, and track overhead lighting.

The Sounder Yard Expansion Project is needed to accommodate increased Sounder service beginning late 2017, and it will proceed independent of the current Sounder Yard and Shops Facility proposal. Sound Transit published a SEPA Environmental Checklist and Determination of Non-significance for the Sounder Yard Expansion Project in August 2013, and the Sound Transit Board authorized the project to move forward. Construction on the Sounder Yard Expansion Project is scheduled to be completed in fall 2017, before the start of construction of the proposed Sounder Yard and Shops Facility Project.

In consultation with FTA, Sound Transit determined that the Sounder Yard Expansion Project and the Sounder Yard and Shops Facility Project have independent utility. Additional train storage is needed (Sounder Yard Expansion Project) whether or not the larger maintenance facility (Sounder Yard and Shops Facility Project) is built. If the Sounder Yard and Shops Facility Project is not built, Sound Transit train maintenance services would continue to be performed by Amtrak at its facilities in Seattle.

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

- Documented Categorical Exclusion – Federal Transit Administration (January 8, 2016)
- National Historic Preservation Act Section 106 – Federal Transit Administration with October 1, 2013 concurrence from Washington State Historic Preservation Officer (SHPO)
- Endangered Species Act and Essential Fish Habitat
- Pre-Application Conference – City of Lakewood
- Commercial Site Development Permit—City of Lakewood
- New Commercial/Industrial Building Permit – City of Lakewood
- Clear and Grading/Excavation Approval—City of Lakewood
- Commercial Mechanical and Gas Piping Permit – City of Lakewood
- National Pollutant Discharge Elimination System (NPDES) Construction Stormwater General Permit—Washington State Department of Ecology
- Sewer Line Extension Permit – Pierce County Sewer District
- Water Availability Certification – Lakewood Water District
- Application and Agreement for Water Service – Lakewood Water District
- Backflow Permit – Lakewood Water District
- International Fire Code Permit – West Pierce Fire and Rescue
- Street Use Permit - City of Lakewood
- Plumbing Permit – City of Lakewood
- Electrical Permit – Washington Department of Labor and Industries
- Certificate of Occupancy – City of Lakewood

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

Purpose and Need

The ST2 Plan included a Sounder commuter rail project to construct a new yard and shops facility to support existing and future Sound Transit Sounder commuter rail service. The project purpose is to provide sufficient capacity to operate, store, and maintain the existing and future Sound Transit cars and locomotives projected for the year 2021.

Project Description

The existing Sounder Century Yard is located between Steilacoom Boulevard SW and 100th Street SW (Figure 1). The majority of the improvements associated with the Sounder Yard and Shops Facility Project are located on the northern end of the existing yard, south of Steilacoom Boulevard SW. Sound Transit plans to purchase two additional parcels at the northern end of the existing yard and to the east of the existing site to accommodate the new shop building, vehicle parking, and access (Figure 2).

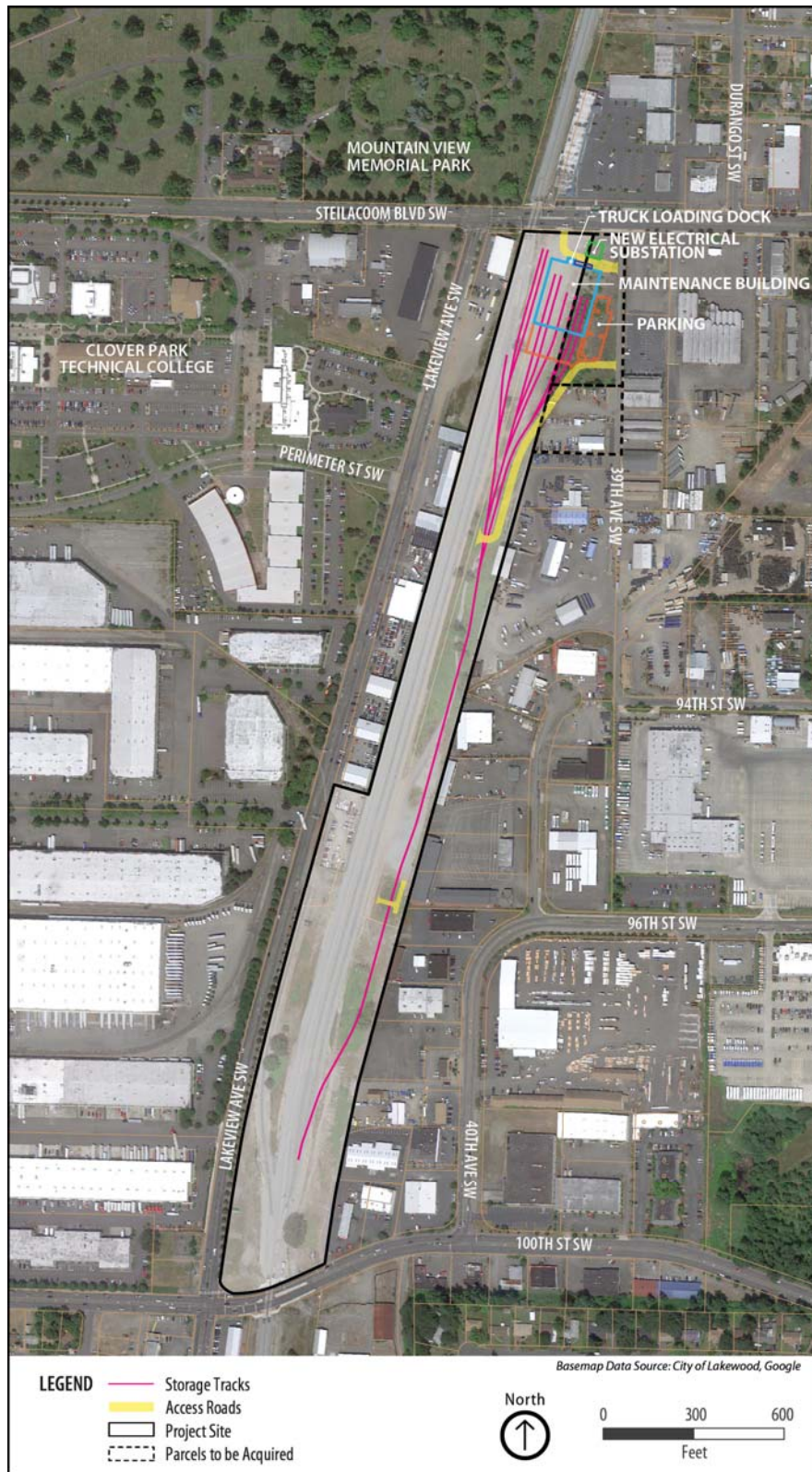
Sound Transit is proposing construction of a new, approximately 40,000-square-foot maintenance building on the Sounder Century Yard site. The single-story building would contain back shops, material storage areas, offices, a conference room, welfare facilities for workers, including restrooms, locker rooms, a lunchroom kitchenette, and other ancillary uses. Posted rail, hoisting equipment, cranes, and other machinery required to support the inspection and maintenance of the fleet would be included. The improvements would allow for daily Federal Railroad Administration-required inspection of the fleet. Some of the maintenance activities performed at the Seattle Amtrak Yard would be relocated to the proposed shop; however the Amtrak facility would continue to provide car wash and fueling services.

The proposed project provides no new train service. Up to approximately 24 nighttime crossings of 100th Street SW per week (or up to approximately 12 per night) to and from the site would be required for train switching to move trains between the yard and shop areas (Attachment G). This would block 100th Street SW for approximately 3 minutes for each crossing. To minimize the duration of the blockage, the train sets will move all the way through the intersection, allowing the railroad gate arm to rise and the

Figure 1. Project Vicinity Map



Figure 2. Site Layout and Configuration



queue of vehicles to pass before the gates lower again to allow the train to move north across the intersection back into the train yard.

An estimated 31 staff would be employed at the maintenance building (27 day-shift and 4 night-shift employees). Primary night shift activities consist of moving the train cars into the maintenance building and staging the remaining cars that require work so they are in position for access to the maintenance building.

In addition to the maintenance building, approximately 40 vehicle parking spaces would be provided east of the maintenance building. The existing north access road from Steilacoom Boulevard SW would be reconfigured into a paved access drive for truck deliveries to the loading dock behind the maintenance building. The main entrance to the site would be relocated from Steilacoom Boulevard SW to the new access drive off of 39th Avenue SW, a private roadway that would be improved.

The Tacoma Public Utilities 115kV transmission line, currently located parallel to the rail alignment, would be relocated on-site to avoid conflicts with the planned maintenance facility.

Supporting facilities, such as roadway, site lighting, drainage facilities, and required utility infrastructure, are included in the project. Additional key project elements are as follows:

- Construct a new shop lead track on the eastern side of the site
- Construct shop tracks to provide train access to the new maintenance building
- Relocate the existing north guard booth to the new site entrance off 39th Avenue SW
- Construct a new electrical substation to serve the new facility
- Modify or partially relocate existing on-site fiber optic lines crossed by new track

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

The Century Yard site is located east of Lakeview Avenue SW, between 100th Street SW and Steilacoom Boulevard SW, in the City of Lakewood, Washington, in Pierce County

(Figure 2). The site is located in Range 02E, Township 19N, Section 01. The property is Pierce County Assessor tax parcel numbers 0219011133 (portion) and 0220364108. As part of the project, two parcels would be acquired at the far northeast portion of the site – tax parcel numbers 0220368018 and 0220368019.

## B. Environmental Elements

### 1. Earth

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

The project site is relatively flat with a gradient of less than 0.5 percent.

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

The project site is generally flat with some minor exceptions.

- c. What general types of soils are found on the site (for example clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

The project site is located on filled land overlaying glacial drift referred to locally as Steilacoom Gravel. The glacial drift consists of loose-to-dense fine-to-coarse gravel with varying sand, cobble, and boulder content as well as localized sand layers.

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

Based on geologic mapping and the available subsurface information of the Century Yard, it does not appear that the site is underlain by liquefiable soils. The project site is not located in known fault areas; therefore, the risk of fault rupture is considered to be low. There are no steep slopes on the project site; therefore, the risk of landslides is considered to be low (GeoEngineers, 2015b).

- e. Describe the purpose, type, total area, and approximate quantities of total affected area of any filling, excavation, and grading proposed. Indicate the source of the fill.

The project would require the placement of approximately 9,650 cubic yards of fill material that is necessary to provide appropriate bedding for the maintenance building, the parking lot, and new rail tracks. The type of fill would be specified in construction bid documents.

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

Erosion, if any, would be minimal due to the flat nature of the project site in the areas that would be cleared and the highly infiltrative nature of on-site soils.

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

The project site would be approximately 65 percent impervious surface after construction. This includes all of the previous site improvements associated with the tracks as well as the several small buildings associated with the Sounder Yard Expansion Project. The specific new impervious surface associated with the Sounder Yard and Shops Facility Project would consist of approximately 118,800 square feet (2.73 acres) of compacted gravel, pavement, concrete, and rooftops.

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

The following best management practices (BMPs) would be used to reduce or control erosion and sediment impacts during construction to the extent possible:

- Construction BMPs, such as the use of stabilized construction entrances, silt fencing, sediment traps, application of seeding or mulching for soil stabilization, or other techniques, would be incorporated as necessary in accordance with the requirements of the NPDES permit for construction.
- The areal extent of exposed soil would be minimized at any given time.
- A Temporary Erosion and Sediment Control Plan would be prepared prior to construction to identify erosion and sediment control procedures.

## 2. Air

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities, if known.

The proposed project is likely to generate a minor increase in air emissions but contribute to the long-term trend of incremental regional reductions in emissions as described below.

The air pollutants that could be present are particulates from construction and possibly carbon monoxide from any localized changes in roadway traffic conditions. The proposed project would not provide additional train service, only train storage and maintenance. Therefore, no additional air emissions would occur from train service.



Project construction would result in temporary impacts from fugitive dust and emissions from construction equipment and vehicles. On-site equipment would include heavy trucks, excavators, pavers, and compressors for demolition, grading, and construction. Emissions from construction are not expected to substantially degrade local air quality.

Added traffic from the proposed maintenance facility is expected to result in 40 new trips during the typical AM and PM commute periods (or 110 daily trips). It is not known at this time whether any of these trips would be removed from the Amtrak facility as this depends on Sound Transit maintenance contract decisions. These trips are not expected to increase congestion-related air emissions in the area surrounding the site. Traffic impacts are discussed in further detail in the *Sounder Yard and Shops Facility Project Transportation Technical Memorandum* (Attachment F).

The proposed project is exempt under air quality conformity requirements based on Washington Administrative Code (WAC) 173-420-110(2)(k) and 40 Code of Federal Regulations 93.126, Exempt Projects, "Construction of new vehicle storage and maintenance facilities." The exempt status of the proposed improvements was confirmed by Rebecca Frohning, Senior Air Quality Modeler at the Puget Sound Regional Council (Frohning, 2015).

Additionally, as the proposed maintenance facility would not affect vehicle miles traveled (VMT), no substantial change in greenhouse gas (GHG) emissions would be anticipated. Although some maintenance activities would be relocated from the Amtrak facility in Seattle to the new shop facility, it is not known at this time whether any of the associated vehicle trips would also transfer to the new facility. The operation of the facility would result in a minor increase in GHG emissions associated with exhaust from worker vehicles and any fossil-fueled maintenance equipment. In addition, the nighttime train switching activity required for train access into the yard and shop area would result in the minor increase in car and bus idling at the intersection of 100th Street SW. Because this activity would occur during the lowest volume periods of the day (8:00 PM to 4:00 AM), the impact of the idling of vehicles would result in a negligible increase in GHG emissions.

The GHG emissions generated during construction are temporary in nature and would be considered minimal.

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

There are no off-site sources of emissions or odors that would affect the proposal.

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

The construction contractor will be required to comply with all relevant federal, state, and local air quality laws, including the requirements of the Puget Sound Clean Air Agency.

Appropriate BMPs would be employed to reduce surface and air movement of dust during grading, demolition, and construction. Construction-related mitigation measures would include the following as needed to control dust:

- Impervious surfaces on the site would be maintained to suppress dust.
- Project-specific and appropriate BMPs for disturbed soil covers and/or stockpiled materials would be implemented.
- Construction would be planned to minimize exposing areas of earth for extended periods.
- Appropriate emission-control devices would be required on all construction equipment powered by gasoline or diesel fuel to reduce carbon monoxide and nitrogen oxide emissions in vehicular exhaust.

### 3. Water

- a. Surface Water

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

The project site is located within the Clover Creek/Chambers or Murray Creek drainage basins; however, other than water quality/infiltration ditches, there are no surface-water features on the site. There are no wetlands, streams, or other bodies of water present on-site or in the vicinity.

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

The proposed project would not require any work over, in, or adjacent to surface waters.

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

No fill or dredge material would be placed in or removed from any surface-water body. While the proposed project would modify and fill existing water quality/infiltration ditches to provide appropriate track bedding for the new maintenance base and tracks, equivalent features would be provided on-site to manage stormwater runoff (pre-treatment prior to infiltration, etc.).

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

No, the proposed project would not require surface-water withdrawals or diversions.

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

No, as shown in the Flood Insurance Rate Map (FIRM Panel 530138 0311C), the project site does not lie within a 100-year or 500-year floodplain (FEMA, 1987).

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

No waste materials would be discharged to surface waters from construction or operation of the proposed project.

b. Ground Water:

- (1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities, if known.

No ground water would be withdrawn, nor would water be discharged to ground water as part of the proposed project.

- (2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals...; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) is expected to serve.

No waste material would be discharged into the ground from construction or operation of the proposed project.

c. Water Runoff (including storm water)

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

Currently stormwater runoff on the project site is managed through pre-treatment prior to infiltration. The characteristics of the native soil on the project site are not adequate to provide treatment of stormwater runoff. Therefore, a basic water quality facility provides pre-treatment of precipitation that is then infiltrated into subsurface soil. While the proposed project would fill existing water quality/infiltration ditches to provide appropriate track bedding for new tracks, new water quality and infiltration facilities would be constructed to manage stormwater runoff.

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

Stormwater runoff would be conveyed to a pre-treatment facility prior to infiltrating into subsurface soil. No waste materials would enter ground or surface waters.

- (3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

No, drainage patterns would not be altered or affected by the proposal. Future conditions would match current discharge patterns.

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

Site disturbance and associated grading activities during construction could temporarily affect surface-water quality, but these impacts will be avoided or minimized with appropriate BMPs. Construction BMPs, such as the use of stabilized construction entrances, silt fencing, sediment traps, application of seeding or mulching for soil stabilization, or other techniques, would be implemented as necessary in accordance with the NPDES Construction Stormwater General Permit requirements.

4. Plants

a. Check the types of vegetation found on-the site:

deciduous tree: alder, maple, aspen, other: Garry oak

evergreen tree: fir, cedar, pine, other

shrubs: non-natives such as butterfly bush

- grass: non-natives such as crabgrass and velvet-grass
- pasture
- crop or grain
- Orchards, vineyards or other permanent crops
- wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other
- water plants: water lily, eelgrass, milfoil, other
- other types of vegetation: mosses and lichen

The project site is partially vegetated with several patches of trees, including Douglas fir (*Pseudotsuga menziesii*), walnut (*Juglans* spp.), maples (*Acer* spp.), poplar (*Populus* spp.), a small patch of Garry oak (*Quercus garryana*), and one Pacific madrone (*Arbutus menziesii*). Shrub species include scotch broom (*Cytisus scoparius*), butterfly bush (*Buddleja* spp.), Himalayan blackberry (*Rubus armeniacus*), and cutleaf blackberry (*Rubus laciniatus*). Common herbaceous species include California poppy (*Eschsolzia californica*), plantain (*Plantago* spp.), vetch (*Vicia* spp.), and grasses. Garry oak is Washington's only native oak and is the "official tree" of the City of Lakewood.

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

Some existing vegetation would be removed from the project site. The patch of Garry oak described in Item 4a is east of the existing east access road and would not be disturbed.

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

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

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

Landscaping for the proposed project will be consistent with the City of Lakewood Municipal Code requirements, which may include landscaping along Steilacoom Boulevard SW, east of the existing drive, in the parking lot, and building landscaping as determined through the permit approval process. During construction, the patch of Garry oak that is east of the existing access road would be protected by a temporary 6-foot-high chain-link fence to avoid damage to the trees or their root systems.

- e. List all noxious weeds and invasive species known to be on or near the site.

Three species of noxious weed were found at the project site. Butterfly bush (*Buddleia davidii*), Class B; Scotch broom (*Cytisus scoparius*), Class B; and Himalayan blackberry (*Rubus armeniacus*), Class C, were all found in scattered patches throughout the project area.

## 5. Animals

- a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site. Examples include:

birds: hawk, heron, eagle, songbirds, other

mammals: deer, bear, elk, beaver, other

fish: bass, salmon, trout, herring, shellfish, other

Birds and animals that have been observed on or near the project site include the following:

- **Birds**—American crows, English sparrows, swallows, and pigeons.
- **Mammals**—Various small mammals that live in urban habitats may be present on or near the project site, including rabbits, opossums, mice, rats, shrews, moles, bats, squirrels, muskrats, and raccoon. Coyotes also have been observed in the general area.

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

Threatened and endangered species that may be in or near the project vicinity were identified using the U.S. Fish and Wildlife Service and National Marine Fisheries Service species list and the Washington State Department of Fish and Wildlife Priority Habitats and Species Database. There are no known threatened or endangered species known to be on or near the site. See Attachment B for the complete ESA list. Suitable habitat for two listed species, Puget Sound steelhead and Puget Sound Chinook, is found at Flett Creek, approximately 0.3 mile north of the project area. No impacts to Flett Creek are expected with the implementation of construction stormwater BMPs and therefore no effects to these fish species would result from the proposed project. Additionally, the project would have no effect on designated critical habitats for listed species.

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

Yes. The entire Puget Sound area is part of the Pacific Flyway for migratory birds.

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

Measures would be implemented before and during project construction to avoid or minimize effects on vegetation and wildlife resources. Examples of these measures are minimizing vegetation clearing, restoring temporarily affected areas, preparing and implementing a revegetation plan, and implementing construction methods to avoid impacts on migratory birds. The existing patch of Garry oak described in Item 4a located east of the existing east access road would not be disturbed to minimize impacts to vegetation and wildlife habitat.

In accordance with the Migratory Bird Treaty Act, Sound Transit would consult with the U.S. Fish and Wildlife Service on measures to avoid impacts on migratory birds. Measures likely to be required may include preconstruction surveys for migratory birds and/or restrictions on vegetation clearing during the breeding season for migratory birds. Except where hazard trees pose an immediate threat to rail safety or reliability, vegetation maintenance and hazard tree removal would be conducted outside of the breeding season for migratory birds.

The removal of grasses and small shrub vegetation east of the railbed would remove habitat and could displace small mammals and birds. Increased train movements could also disrupt wildlife. However, the site is located between two arterials (100th Street SW and Steilacoom Boulevard SW) in an urbanized area with existing rail traffic and industrial noise. Since the project would not involve in-water work and would have minimal impact to wildlife habitat, including habitat of threatened or endangered species, no measures to further preserve or enhance wildlife are proposed.

e. List any invasive animal species known to be on or near the site.

No invasive animal species were observed or are known to be on or near the site.

## 6. Energy and Natural Resources

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

The new maintenance building would require electrical power for lighting and operation of equipment. The outside areas, parking lot, access roads, and new track work also would use electricity for lighting. The maintenance building would be heated with natural gas.

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

The proposed project would not affect the use of solar energy by any adjacent properties.

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

The project site would be lit with LED lamps to conserve energy. In addition, the proposed project would comply with applicable requirements of the Lakewood Energy Code. Skylights have been included within the maintenance building roof to provide additional daylighting, and reduce energy use related to lighting, where possible. The overall effect of the proposed project would be to contribute to the reliability and efficiency of the commuter rail system (Sounder). In addition, Sound Transit would continue its efforts to reduce its fuel consumption and emissions as part of the agency's Sustainability Program.

## 7. Environmental Health

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

Sound Transit conducted a hazardous materials investigation for the project site in June 2011 (GeoEngineers, 2011 and 2015a). The investigation included a search of the Environmental Data Resources (EDR) records for federal, state, local, and tribal environmental listings of properties with known or suspected environmental conditions on or near the project site. Ten potential properties of concern were noted in the EDR records search. However, none of these properties are located in areas that would be disturbed for construction of the project.

The construction contractor may use small amounts of diesel fuel, oil, hydraulic fluid, construction adhesives, cleaning solvents, and similar chemical compounds on-site during construction.

The types of maintenance and repair work to occur in the maintenance building on the various types of train cars would require the use of diesel fuel, lubricants, cleaning solvents, and similar chemical compounds. The proposed improvements include the construction of a stand-alone hazardous materials shed for safe storage of these chemicals. All hazardous wastes and hazardous materials resulting from operation and maintenance of the proposed facility would follow all proper handling



and disposal procedures for regulated materials. The vehicles will not be washed on the site.

(1) Describe any known or possible contamination at the site from present or past uses.

A subsurface soil investigation was conducted for petroleum hydrocarbons, volatile organic compounds, semivolatile organic compounds, metals, polychlorinated biphenyls, chlorinated acid herbicides and/or organochloride pesticides. Only lube-oil range hydrocarbons were present at concentrations greater than Model Toxics Control Act (MTCA) Method A Unrestricted Land Use (ULU) clean up levels. Contamination is consistent with historic rail use on the property.

(2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

There are no hazardous chemicals/conditions or underground transmission pipelines located within the project area or vicinity that might affect project development and design.

(3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

The construction contractor may use small amounts of diesel fuel oil, hydraulic fluid, construction adhesives, cleaning solvents, and similar chemical compounds on-site during construction.

The types of maintenance and repair work to occur in the maintenance building on the various types of train cars would require the use of oils, cleaning solvents, and similar chemical compounds. Vehicles would not be washed on-site. The proposed improvements include the construction of a stand-alone hazardous materials shed for safe storage of these chemicals.

(4) Describe special emergency services that might be required.

No special emergency services would be required beyond those occasionally needed by other similar facilities, such as police, fire, and emergency medical services.

(5) Proposed measures to reduce or control environmental health hazards, if any:

Given that there are lube-oil-range hydrocarbons present on the site at concentrations greater than MTCA Method A ULU clean up levels, any required

remediation would be consistent with applicable regulations including the proper disposal of any contaminated soils disturbed during construction.

To address environmental health hazards during construction, the contractor would implement hazardous materials management plans, construction stormwater pollution prevention plans, health and safety plans, spill control and prevention plans, contaminated media management plans, and lead and asbestos abatement programs as necessary. These plans would establish the procedures for managing hazardous materials in accordance with state and federal regulations.

b. Noise

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

Existing noise in the vicinity of the project site primarily consists of typical urban noise resulting from motor vehicle traffic on local streets. The existing noise environment is also influenced by periodic noise from commuter train service, freight train service, and commuter train storage on two existing layover tracks located adjacent to the third layover track being constructed by fall 2017. Aircraft flyover noise is also present in the area with aircraft flying to and from Joint Base Lewis-McChord and nearby Clover Park Vocational Technical School Airport. Several light industrial businesses are located to the east and west of the project site and contribute to the existing noise environment.

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

The area surrounding the proposed project includes primarily industrial and commercial land use with a residential neighborhood to the south. Residences are located south of 100th Street SW to the east and west of Lakeview Avenue SW. Southgate Elementary School is also located south of the proposed project and south of 100th Street SW. Clover Park Technical College is located to the west of the proposed project and Mountain View Memorial Cemetery Park is located to the northwest.

The proposed project includes new tracks on the site to facilitate train car access to the maintenance building. The proposed project provides no new train service; however up to 12 one-way nighttime crossings of 100th Street SW would be needed to move trains on the site and place cars in the maintenance

shop for work starting the next day. Each crossing would sound wayside horns and crossing bells. Train movements in the storage yard are restricted to 5 miles per hour (mph). The proposed project includes parking for approximately 40 automobiles. An estimated 120 new daily vehicle trips would result from the proposed project from staff traveling to and from the site.

Project-generated noise levels are projected to be between 3 and 11 dBA less than measured existing noise levels, which would result in increases of 0 to 2 dBA in total noise levels. Moderate noise impacts under the FTA criteria are predicted to occur at one of the four locations evaluated for the Sounder Yard and Shops Project. This site represents 12 multi-family units along Lakewood Avenue S. and 4 single family homes along Kline Street SW. There would be an increase in the frequency of nighttime noise peaks caused by train operations and project-related facilities at the project site. The highest noise levels associated with this project would occur between 8:00 PM and 4:00 AM at Site 3 at residences located south of the crossing at 100th Street SW west of Lakeview Avenue SW, because of the project's maintenance schedule and this site's proximity to the at-grade crossing of 100th Street SW and associated bell and horn noise. Future total noise levels near the project site are predicted to increase from existing noise levels of 60 to 62 dBA Ldn at the nearest residential locations to 61 to 64 dBA Ldn. Levels at Clover Park Technical College would increase from 60 to 61 dBA Leq, while the levels at Southgate Elementary School would be unchanged.

In addition, load testing, which assesses the performance of locomotives, will occur at the site and generate noise. This activity would generally occur approximately 170 times per year during daytime hours. The load testing would occur over one hour to cover either: 1) pre-load testing when the locomotive arrives for inspections; or 2) a final load test when the inspection is completed. The highest noise level would be about 62 dBA Leq at 100 feet and would not result in an impact under FTA criteria. Load testing would only occur at night in an emergency situation.

There are no vibration-sensitive uses within the 50 foot survey screening distance to project improvements. No vibration impacts are predicted due to project operation.

During construction of the maintenance building, minor auxiliary buildings, parking lot, access roads, and track improvements there would be temporary increases in sound levels near active areas of construction and along roadways

used for construction vehicles traveling to and from the site. Temporary increases in vibration would also occur near activities, such as the use of excavators that produce higher vibration levels. The amount of increase in noise and vibration levels would depend on the type and duration of the equipment used. On-site equipment could include on-track rail equipment, dump trucks, dozers, excavators, graders, compact rollers, cranes, and pavers for demolition, grading, and construction. Sound levels generated during construction would be temporary in nature and would predominately occur during daytime hours within the City of Lakewood's allowed construction time period of 7:00 AM to 10:00 PM on weekdays and 9:00 AM to 10:00 PM on weekends (City of Lakewood Municipal Code 08.36.010—Noise Control). Construction activities may occur during nighttime hours (10:00 PM to 7:00 AM), which may require coordination with the City of Lakewood and the Contractor as the City of Lakewood has no formal noise variance application process.

Additional information is available in Attachment C, *Sounder Yard and Shops Facility Project Noise and Vibration Technical Memorandum*.

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

Moderate noise impacts under the FTA criteria are predicted to occur at one of the four locations evaluated for the project, representing 12 multi-family residences and 4 single family residences, as a result of the warning devices sounded at the 100th Street SW crossing during nighttime hours. Because the impacts would result from safety devices located at a roadway crossing, constructing barriers to shield residences from noise is not possible while maintaining access to the crossing and continuing to provide an audible warning to approaching traffic. Instead, residential sound insulation will be evaluated for the 12 multi-family residential units and 4 single family units that would experience moderate impacts and offered at properties where the existing building does not already achieve a sufficient exterior-to-interior reduction of noise levels. During final design, all predicted noise levels and mitigation measures will be reviewed. If equivalent mitigation can be achieved by a less costly means or if the final design analysis shows no impact, then the mitigation measure may be modified or eliminated.

All construction activities would have to comply with local noise regulations. Nighttime work (10:00 PM to 7:00 AM weekdays and 10:00 PM to 9:00 AM weekends) is regulated by the City of Lakewood as a public disturbance. If

construction occurred during nighttime hours, the following measures could be implemented as needed to reduce potential effects of construction noise.

- Construction hours could be set, and construction activity noise level emission criteria could be determined and compliance required during construction.
- Natural and artificial barriers (e.g., ground elevation changes and existing buildings) could be considered for use as shielding against construction noise.
- Noisier activities involving large machinery would be limited to daytime hours as practical.
- Stationary construction equipment would be placed as far away from sensitive receiving locations as possible.

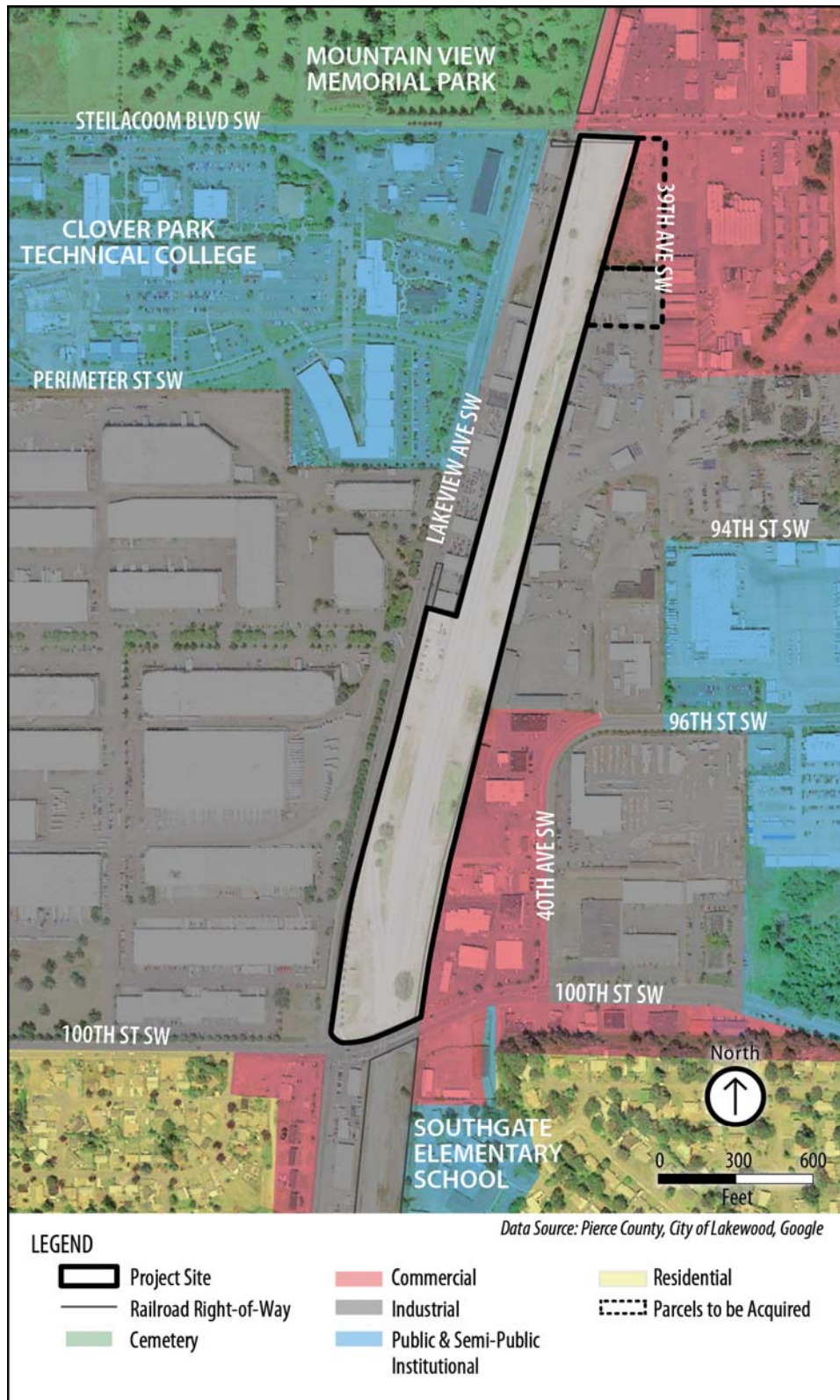
## 8. Land and Shoreline Use

- a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

The project site is currently used as a train yard for Sound Transit Sounder commuter rail service. Five 7-car train sets are now stored at the yard, but this will increase to seven 8-car train sets with the completion of the Sounder Yard Expansion Project in fall 2017. The two parcels to be purchased at the north end of the site include a vacant parcel just south of Steilacoom Boulevard SW and a commercial property (a vehicle and heavy-duty truck-towing business) located on the parcel immediately to the south. The site is in an area that is primarily developed as industrial between 100th Street SW and Steilacoom Boulevard SW (Figure 3).

Other land uses in this area include public and semi-public institutional (Clover Park Technical College west of the existing yard and the Pierce County Transit base east of the site) and commercial. Land uses south of 100th Street SW are primarily residential with a public and semi-public institutional use (Southgate Elementary School) located directly east of the railroad right-of-way. Land uses north of Steilacoom Boulevard SW include a cemetery and commercial uses.

Figure 3. Project Site and Surrounding Land Uses



- a. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

No, the project is located in a light industrial urbanized area of Lakewood and has not been used for agriculture or forestry.

- (1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

No, the project is located in a light industrial urbanized area of Lakewood and has not been used for agriculture or forestry.

- b. Describe any structures on the site.

There are currently no structures on the project site. However, as part of the Sounder Yard Expansion Project, buildings will be constructed on the site, including a pre-fabricated small building for the train crews and engineers, a building for storage, two guard booths, and packaged air compressor units and associated

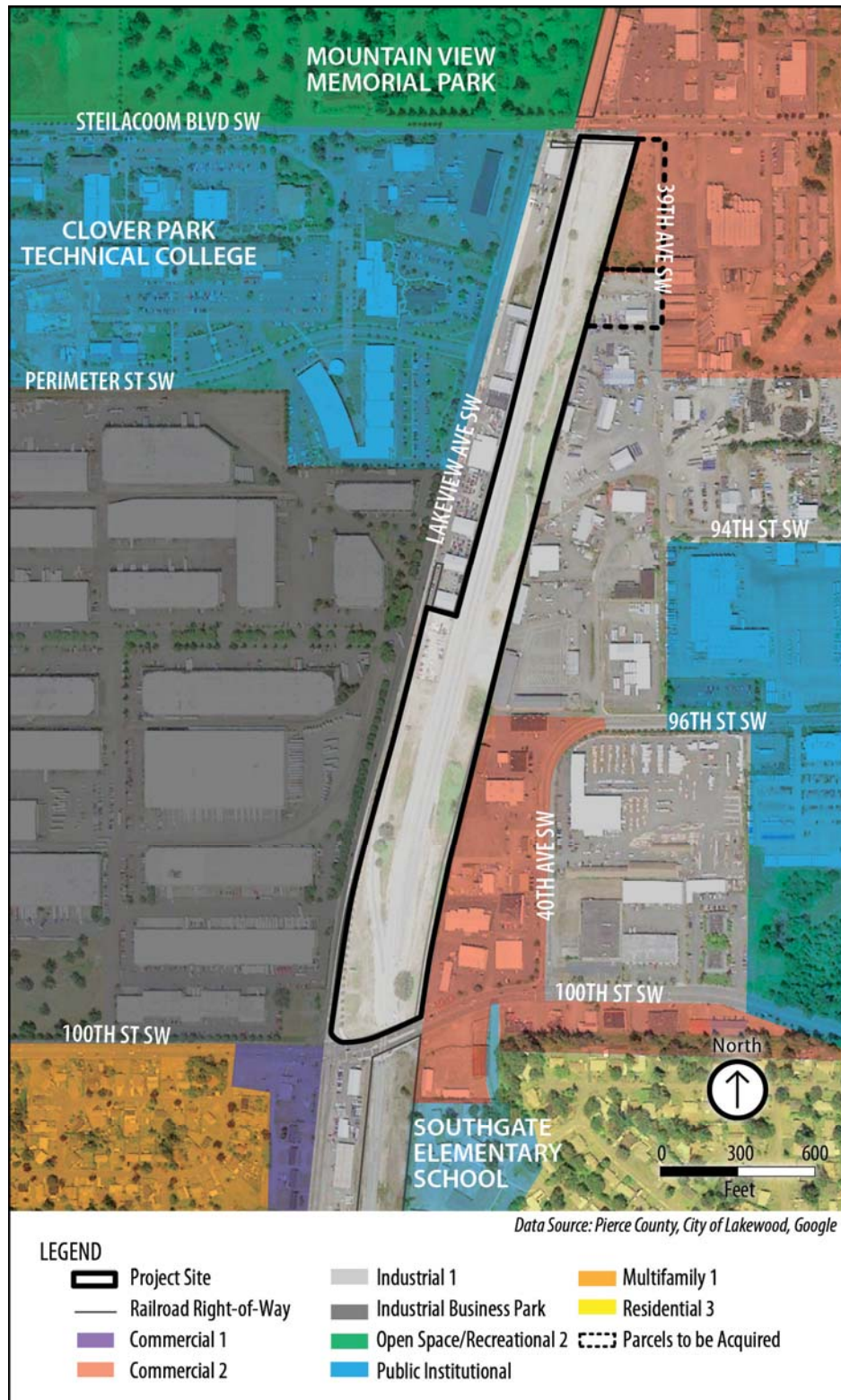
- c. Will any structures be demolished? If so, what?

Several structures located on a parcel to be acquired would be demolished as part of the Sounder Yard and Shops Facility Project. The parcel is located east of the existing yard at the north end near Steilacoom Boulevard SW. The business located on the site is a vehicle and heavy-duty truck-towing business. The parcel is largely unpaved for vehicular parking. The large prefabricated building that contains an office and space for vehicle maintenance and two small sheds on the property would be demolished.

- d. What is the current zoning classification of the site?

The proposed project is located on a site that is primarily zoned Industrial 1 (I1) by the City of Lakewood (Figure 4). This includes the main north-south rail corridor as well as the southernmost parcel of the two parcels to be acquired. Per the City of Lakewood Municipal Code Section 18A.30.630, the I1 zoning district provides for regional research, light manufacturing, warehousing, concentrated business/employment parks, and other major regional employment uses. Some primary permitted uses in the I1 zoning district include transportation, public maintenance facilities, utility facilities, storage, and contractor yards.

Figure 4. Project Site and Surrounding Zoning



Source: City of Lakewood Zoning Map, Ordinance No. 560, adopted December 1, 2014



The northernmost parcel to be acquired fronts on Steilacoom Boulevard SW and is zoned Commercial 2. The purpose of the Commercial 2 zoning district (City of Lakewood Municipal Code Section 18A.30.530) is to promote employment, services, retail, and business uses serving and linking neighborhoods to Lakewood's major transportation networks. Some primary permitted uses in the C2 zoning district include transportation, public maintenance facilities, storage, contractor yard, warehousing, and distribution

The proposed project to construct a maintenance facility at the Sounder Century Yard is consistent with the existing I1 and C2 zoning of the site.

e. **What is the current comprehensive plan designation of the site?**

The current comprehensive plan designation for the Century Yard site is primarily industrial. One of the two parcels to be acquired, the one fronting on Steilacoom Boulevard SW, is designated corridor commercial (City of Lakewood *Comprehensive Plan*, last revised December 2014).

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

Not applicable. The project site lies outside the boundary of the City of Lakewood *Shoreline Master Program* (December 17, 2014).

g. **Has any part of the site been classified as a critical area by the city or county? If so, specify.**

Title 14A Environmental Protection of the City of Lakewood Municipal Code regulates critical areas as required by the Washington State Growth Management Act (Revised Code of Washington (RCW) 36.70A.060). The ordinance designates and protects critical areas and natural resource lands, including wetlands, critical aquifer recharge areas, fish and wildlife habitat areas, geologically hazardous areas, flood hazard areas, and mineral resource lands.

Based on research and field investigations, the Century Yard site is not located in an environmentally sensitive area. Geotechnical research determined the site is not located in a mapped geologically hazardous area (steep slope, seismic hazard, liquefaction, erosion, potential landslide, or known landslide area) (GeoEngineers, 2015b).

The site does not have any streams, ponds, wetlands, or critical wildlife habitat areas (Herrera, 2015a). The site is not located in a flood hazard area (FEMA, 1987). Similar to much of Pierce County and all of the City of Lakewood, the site is designated as an aquifer recharge area ("Aquifer Recharge Areas" (updated January 2013) from Pierce County Map Gallery at <http://yakima.co.pierce.wa.us/MapGallery/>).

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

No residential development is proposed as part of the project. The proposed project would bring an additional 31 employees to the site (27 day shift and 4 night shift), once the construction is completed in 2021.

i. Approximately how many people would the completed project displace?

People who currently work at the vehicle and heavy-duty truck towing business on one of the commercial parcels to be acquired for the project would be displaced. It is estimated that this business employs approximately 20 workers.

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

The proposed construction of the new maintenance base on the site would require the acquisition of two parcels of land in the northeast portion of the site immediately south of Steilacoom Boulevard SW (parcels #0220368018 and #0220368019). The more northerly parcel is currently vacant, and the parcel to the south is a commercial business (a vehicle and heavy-duty truck-towing business). Additional property may be needed as temporary easements for construction or permanent easements for utilities or access, but the easements would not result in displacements.

For property that is permanently or temporarily acquired for this project, Sound Transit would compensate affected property owners according to the provisions specified in Sound Transit's Real Estate Property Acquisition and Relocation Policy, Procedures, and Guidelines; the federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended; and the State of Washington's relocation and property acquisition law and regulations. The primary mitigation for acquisitions and displacements would be payment of just compensation and relocation assistance.

For temporary construction easements, in addition to just compensation, the property would be restored to its previous condition.

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

None required. Project is consistent with zoning and existing uses.

## 9. Housing and Population

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

No residential development is included as part of the proposed project.

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

The proposed project would not displace any residential properties.

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

Because the proposed project would not impact housing, no measures are necessary to reduce or control housing impacts.

## 10. Aesthetics

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

The proposed project would include the construction of a maintenance building. This building is proposed to be a single-story structure and would have a maximum height of about 50 feet. The exterior of this proposed structure would be primarily composed of insulated metal panels mounted on top of an 8-foot precast concrete base, which would be compatible with nearby industrial, commercial, and institutional buildings.

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

Improvements proposed as part of the project would be similar in design and character to the existing yard site and would not have an adverse effect on key views from residences or public spaces. No scenic vistas would be affected.

- c. Proposed measures to reduce aesthetic impacts, if any.

Existing development surrounding the project site is generally industrial and commercial businesses. Since the visual character and scale of the proposed project elements would be compatible with the existing character of the project site and surrounding uses, no additional measures are necessary to reduce aesthetic impacts. The proposed project may include landscaping along Steilacoom Boulevard, east of the existing drive, in the parking lot, and building landscaping per the City of Lakewood Municipal Code as determined through the permit approval process.

## 11. Light and Glare

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

The primary source of light and glare from the completed project would come from trains, site lighting, and outdoor lighting around the new maintenance building and parking lot. The site would be lit from dusk to dawn. The lighting fixtures would be

shielded to minimize off-site glare and LED lamps would be used to conserve energy and reduce glare.

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

No, new site lighting would be shielded and directed toward the interior of the site to minimize lighting spill-over to adjacent properties. The lighting would not interfere with views, nor would it create a safety hazard.

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

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

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

No light and glare impacts are anticipated; therefore, no additional measures are proposed. The site would be lit with LED lamps to conserve energy and reduce glare. Lighting would be shielded and focused downward.

## 12. Recreation

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

No designated or informal parks recreational opportunities or Section 4(f) or 6(f) properties are located on or in the immediate vicinity of the proposed site.

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

No, the proposed project would not displace any existing recreational uses.

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

Since the proposed project would not result in any impacts on recreation, no measures are necessary or proposed to reduce or control such impacts.

## 13. Historic and Cultural Preservation

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for national, state, or local preservation registers located on or near the site? If so, specifically describe.

There is one historic property eligible for the National Register of Historic Places (NRHP) within the Area of Potential Effects (APE). This property is a section of the Northern Pacific Railroad alignment that was recorded and recommended eligible for the NRHP by Jones and Stokes in 2008 (Jones and Stokes, 2008). Jones and Stokes (2008) recommended this section of the alignment eligible for the NRHP under Criterion A, "for the profound influence the rail line had in economic and residential development in the Pacific Northwest," and under Criterion B for its

association with E.S. “Skookum” Smith, a Northern Pacific Railroad engineer. The eligibility was limited to the alignment rather than the physical equipment, which had been routinely replaced since the original period of construction. The Department of Archaeology and Historic Preservation (DAHP) concurred with this recommendation and determined the section of the rail alignment eligible for the NRHP in 2010 (DAHP, 2010). Section 106 consultation was completed during environmental review of the yard expansion and concurrence of no effect was obtained from the State Historic Preservation Officer on October 1, 2013 (Attachment E).

- b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

The historic Northern Pacific Railroad (NPRR) alignment was identified in or within 0.5 miles of the project APE, as described in Item 13a. There were no other landmarks, features, or other evidence of Indian or historic use or occupation found within the APE or any material evidence, artifacts, or areas of cultural importance on or near the site. A review of archival information, cultural resource survey, and subsurface investigation of the site was conducted by Historical Research Associates, Inc. (HRA, 2013) during the environmental review for the yard expansion and is documented in the cultural resources report (Attachment E).

- c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

A review of archival information, cultural resource survey, and subsurface investigation of the site was conducted by Historical Research Associates, Inc. (HRA, 2013) during the environmental review for the yard expansion and is documented in the cultural resources report (Attachment E). The review of archival information included historic maps, historic documents, DAHP’s Washington Information System for Architectural and Archaeological Records Data database, and Pierce County Tax Assessor data (HRA, 2013). Section 106 consultation was completed during environmental review of the yard expansion and concurrence of no effect was obtained from the State Historic Preservation Officer on October 1, 2013 (Attachment E).

- d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

The proposed project would not constitute an adverse impact on the Northern Pacific Railroad alignment because the project would not alter the integrity of the rail alignment. The project elements would preserve its historic function as an operational rail line. The basic alignment grade or design, original alignment location, and association with the Northern Pacific Prairie Line and E.S. Smith would not be affected by the project. Although substantial changes in land use on each side have occurred since the early twentieth century, the proposed project would be visually consistent with the warehouses and commercial buildings along this section of the railroad corridor.

The project would not pose an adverse impact on the Northern Pacific Railroad alignment. No further action is required for architectural resources in the APE.

In the event that archaeological deposits are inadvertently discovered during construction in any portion of the APE, ground-disturbing activities in the vicinity of the find will be halted immediately and Sound Transit will be notified immediately. Sound Transit will contact DAHP, as well as other agencies and affected Tribes, as appropriate. Additional information on inadvertently discovered archaeological deposits is provided in the *Cultural Resources Assessment for the Sounder Yard Expansion Project, Lakewood, Washington* (HRA, 2013) (Attachment E). Section 106 consultation was completed during environmental review of the yard expansion and concurrence of no effect was obtained from the State Historic Preservation Officer on October 1, 2013 (Attachment E).

#### 14. Transportation

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

Major east–west arterials serving the project site include 100th Street SW to the south and Steilacoom Boulevard SW to the north. Both are designated principal arterials based on the City of Lakewood Municipal Code (12A.09.022) with speed limits of 35 mph and two travel lanes in each direction. A center two-way left-turn lane is provided along both of these arterials in the vicinity of the project. The nearest north–south principal arterial is South Tacoma Way, which lies approximately one-half mile to the east and is similarly configured with two lanes in each direction and a center two-way left-turn lane. Major freeways and highways in

the vicinity of the project site include Interstate 5 and State Route 512 (an east–west state highway), both located less than one mile away to the east.

The project site is accessed via existing driveways at 100th Street SW and Steilacoom Boulevard SW. The driveways are located east of the Souder rail line and restricted to right-in and right-out movements because of their proximity to the tracks and the existing raised arterial medians on 100th Street SW and Steilacoom Boulevard SW. Traffic levels along 100th Street SW and Steilacoom Boulevard SW are moderate to high. Twenty-four hour two-way traffic counts in 2015 showed average daily volumes of 24,800 vehicles per day on 100th Street SW (near Lakewood Avenue SW) and 22,400 vehicles per day on Steilacoom Boulevard SW (between Lakeview Avenue SW and South Tacoma Way).

**b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?**

Public transit near the project site is provided by Pierce Transit bus service. Three main bus routes serve the site with stops near, or relatively near, the main access driveways: Route 48 along 100th Street SW (south side of the site), Route 3 along Steilacoom Boulevard SW (north side of the site), and Route 300 on South Tacoma Way (0.5 mile east of the site). In addition, Sound Transit Route 574 and Pierce Transit buses travel across 100th Street SW to deadhead from the Pierce Transit base to the Lakewood Transit Center during nighttime and early morning hours.

As shown in Table 1, bus service for the above routes is provided during the hours when employees are expected to arrive at (7:00 AM) and depart from (4:00 PM) the site.

**Table 1. Bus Routes Serving Project Site**

<b>Bus Route</b>	<b>Relevant Arterial</b>	<b>Origin-Destination</b>	<b>Peak/Off Peak Frequency</b>	<b>Weekday Hours of Operation</b>	<b>Nearest Stop to Site</b>
3	Steilacoom Blvd SW	Lakewood—Tacoma	30/30 minutes	6 AM – 10 PM	< 500 feet
48	100th St SW	Lakewood—Tacoma	30/60 minutes	5:30 AM – 9:30 PM	~ 1/4 mile
300	South Tacoma Way	Tacoma Mall—Joint Base Lewis-McChord	30/30 minutes	6:30 AM – 8:30 PM	~ 1/2 mile
574	108th St SW	Lakewood-SeaTac	30/60 minutes	4 PM – 11 PM	~ 1/2 mile

- c. How many additional parking spaces would the completed project have? How many would the project or proposal eliminate?

Parking would be provided adjacent to the maintenance building. Approximately 40 additional spaces would be added to the existing 45 spaces planned as part of the Sounder Yard Expansion Project. No spaces would be eliminated.

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

Improvements to the existing 39th Avenue SW private roadway may include sidewalk, paving, lighting, or drainage as determined by the easement agreement with the property owners adjacent to the roadway. A new paved road would provide access on the site to and from the maintenance building. This roadway would be designed and constructed based on typical city and industry standards. It would go past the maintenance building and parking lot to connect with 39th Avenue SW. The proposed new tracks would prevent continued use of the existing driveway at Steilacoom Boulevard SW. A small portion of the access road from Steilacoom Boulevard SW would remain but would also be extended south and east behind the new maintenance building, thus providing access to the truck loading dock. Pierce Transit bus routes would continue to cross railroad grade crossings at 100th Street SW and Steilacoom Boulevard SW.

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

The project would construct new track work on the site to allow for commuter rail train storage and train car access to and from the maintenance building. The main line tracks are also used by freight rail and Amtrak passenger rail. Employee and visitor access to and from the site would be via private vehicle (auto, light truck, etc.) or bus.

- f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and non-passenger vehicles). What data or transportation models were used to make these estimates?

Based on the anticipated facility operations, the project is expected to generate approximately 40 trips during a typical AM peak commute hour (30 entering and 10 exiting) and 40 additional trips during the PM peak commute hour (10 entering and 30 exiting). A total of 120 new trips per day (60 entering and 60 exiting) are expected to be generated by the Sounder Yard and Shops Facility Project. The



majority of these trips would be generated by passenger vehicles. This conservative estimate is based on the proposed use of the site and projected number of employees traveling to and from the facility including commuting to work and other trips for breaks and errands.

While occasional vendor activity (deliveries) may occur around the shift start and end times, the bulk of entering and exiting trips would consist of employees arriving at or leaving the site.

All intersections captured in the analysis currently operate at LOS C or better (overall) during the evening peak hour. Field observations of traffic conditions during commute periods confirmed the overall moderate congestion levels for the three signalized intersections and two stop-controlled intersections. No substantial changes in overall intersection delay or level of service are anticipated between Baseline and Build conditions, with only the Steilacoom Boulevard SW/39th Avenue SW stop-controlled intersection showing any potential increase in delay, although considered minimal at 4 seconds per vehicle. The City of Lakewood level of service standard for the targeted arterials and intersections is LOS D as described in the City of Lakewood *Comprehensive Plan* (December 2014).

- g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No, the project is located in a light industrial urbanized area of Lakewood, which is not used for agriculture or forestry.

- h. What are the transportation impacts and the proposed measures to reduce or control the impacts, if any?

There would be no weekday peak hour LOS impacts resulting from the Sounder Yard and Shops Facility Project and therefore no mitigation measures would be required.

The nighttime train switching activity required for train access into the yard and shop area will occur during the lowest volume periods of the day (8:00 PM to 4:00 AM). Delays of up to approximately 3 minutes up to approximately 12 times per night would occur. These blockages of 100th Street SW are due to nighttime switching maneuvers to place train cars in the maintenance base for work starting the next morning. The blockages will affect traffic, non-motorized trips, freight, and bus service on 100th Street SW during this time, but are similar to existing blockages from through trains and Sounder trains accessing the existing layover tracks at this location. Traffic volumes decline considerably after 9:00 to 10:00 PM, thus resulting in minimal impacts. The transportation analysis determined that the overall signal

cycle length provides sufficient capacity for vehicular traffic volumes at this location and few, if any, impacts to background traffic flow are expected.

Freight movements on Steilacoom Boulevard SW, 100th Street SW, and Lakeview Avenue SW would not be affected by project trip activity during typical weekday hours. However, train switching maneuvers across 100th Street SW may cause temporary delays to freight using 100th Street SW. Given the short duration of the blockage of 100th Street SW and alternative routing available via Steilacoom Boulevard SW and Lakeview Avenue SW, however, these disruptions would not have an appreciable effect on overall freight mobility and capacity in the area. Traffic volumes on Steilacoom Boulevard SW drop noticeably after the evening peak period and are modest during the night time period until 7:00 AM.

Public transit in the vicinity of the Century Yard is provided by Pierce Transit, which operates four routes that travel along South Tacoma Way, Steilacoom Boulevard SW, 108th Street SW, and 100th Street SW. For the Pierce Transit Route 48 along 100th Street SW, minor delays may be caused by train switching activity. The service hours end at approximately 9:00 PM, while train switching would likely occur between 8:00 PM and 4:00 AM. As such, bus route delays would be minimal. During weekday evening and early morning hours, a number of deadheading buses (non-revenue service trips) also use 100th Street SW to travel to or from the Pierce Transit bus maintenance base on 96th Street SW. Similar to the Route 48, these buses would be directly affected by delays due to rail switching activity. Potential future increases in bus service levels and/or evening deadheading activity would be impacted by train switching across 100th Street SW during overlapping hours of operation. However, these blockages are not anticipated to substantially delay or add travel time. In addition, alternative routing is available to further minimize delays.

Similar to freight and transit, train switching maneuvers across 100th Street SW could cause temporary delays to emergency services using 100th Street SW. Police and fire services have alternative routes. The most suitable alternative pathway across the rail tracks would be Steilacoom Boulevard SW via Lakeview Avenue SW or South Tacoma Way. The greatest impact would be for westbound traffic on 100th Street SW that must backtrack to access Steilacoom Boulevard SW. In this case, delays would be more prominent since routing to Steilacoom Boulevard SW could include the use of 40th Avenue SW and 96th Street SW. However, emergency services could avoid 100th Street SW during the night time hours when switching occurs, using South Tacoma Way to travel more directly to Steilacoom Boulevard SW

or Lakeview Avenue SW in order to avoid the need to backtrack to South Tacoma Way and Steilacoom Boulevard SW. Alternate routes via Lakeview Avenue SW and Steilacoom Boulevard SW will be available and are not expected to notably increase response times.

There are no significant impacts to bikes, pedestrians, and general-purpose traffic, as there are alternative routes available via Steilacoom Boulevard SW to the north and 108th Street SW to the south and therefore mitigation measures are not proposed.

Discussions with Pierce Transit and Sounder train operations staff will continue through final design to identify opportunities to further minimize potential impacts to public transit riders and non-revenue (deadheading) buses due to train blockages at 100th Street SW. Potential options may include temporary (time of day) rerouting of buses to Steilacoom Boulevard SW or permanent route realignment to circumvent 100th Street SW. Also, temporary (time of day) or permanent rerouting of deadheading buses returning to the Pierce Transit maintenance base in the evening could further minimize the impact of train switching activity on bus routes and non-revenue bus operations.

There are no mitigation measures recommended during construction as the work will take place on the existing property and acquired parcels.

## 15. Public Services

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

No, the proposed project is not expected to increase the need for public services. Travel patterns and response time for police, fire, and ambulance services could be affected by nighttime train switching movements that would result in approximately 3 minute blockages for up to 12 times per night and up to 24 times per week. These blockages, however, are similar to existing blockages due to through-train movements across 100th Street SW. In addition, there are nearby alternative routes for emergency response vehicles that would not be expected to result in substantial increased travel time. Vehicles could travel on Steilacoom Boulevard SW to the north, or 108th Street SW to the south. Lakeside Avenue SW travels north-south immediately west of the Century Yard site, and South Tacoma Way (approximately 36th Street SW) travels north-south east of the site. As such, the project would not result in substantial impacts on public services.

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

No impacts to public services are anticipated; therefore, no measures are necessary or proposed to reduce or control such impacts.

## 16. Utilities

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

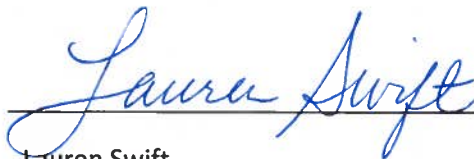
Utilities currently available on the project site include natural gas, fiber optic, overhead power, underground power, and water. Completion of the Sounder Yard Expansion Project in fall 2017 will bring sewer and additional water to the site. An existing Tacoma Public Utilities electric transmission line that traverses the eastern edge of the site would be relocated on-site prior to the start of the shops facility project construction.

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

No additional utilities are proposed to be extended to the project site. All necessary utilities will be available on the site following the completion of the Sounder Yard Expansion Project in fall 2017. A new substation will be constructed on the north side of the maintenance building as part of the proposed Sounder Yard and Shops Facility Project. In addition, the project would require the relocation of the existing Tacoma Public Utilities 115kV transmission line to accommodate the proposed site improvements and maintenance building. The line would be relocated on site in coordination with Tacoma Public Utilities.

## C. Signature

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

Signature   
Name (print) Lauren Swift  
Title Senior Environmental Planner  
Date Submitted March 25, 2016

## References

---

City of Lakewood, 2013a. GIS Zoning Data accessed at:

<http://www.cityoflakewood.us/government/departments/geographic-information-systems/downloadable-data>. May.

City of Lakewood, 2013b. Future Land Use Map accessed at:

[https://www.cityoflakewood.us/documents/geographic\\_information\\_systems/maps/future\\_land\\_use.pdf](https://www.cityoflakewood.us/documents/geographic_information_systems/maps/future_land_use.pdf). May.

City of Lakewood, 2014. Comprehensive Plan. December 2014.

Department of Archaeology and Historic Preservation (DAHP), 2010. *Historic Property Inventory Form for Northern Pacific Railroad*. On file at DAHP, Olympia, Washington.

Federal Emergency Management Agency (FEMA), 1987. Flood Insurance Rate Map, Pierce County, WA. Community Parcel # 530138 0311C. August 19.

Frohning, Rebecca, 2015. Telephone communication with Rebecca Frohning, Senior Air Quality Modeler at the Puget Sound Regional Council to confirm the exempt status of the proposed improvement. July 17.

GeoEngineers, 2011. *Cursory Hazardous Materials Evaluation, Souder Yard and Shops Sites, King and Pierce Counties, Washington*. Prepared for Sound Transit. June 2.

GeoEngineers, 2015a. *Cursory Hazardous Materials Evaluation Souder Yard and Shop Sites*. July 17.

GeoEngineers, 2015b. *Preliminary Geotechnical Engineering Services Souder Yard & Shop Facilities King and Pierce Counties, Washington*. July 17.

GeoEngineers, 2015c. *Subsurface Soil Investigation Souder Yard & Shops Facility*. July 14.

Herrera Environmental, 2015a. *Souder Yard and Shops Facility Project Site Visit Summary, May 2015*. July 17.

Herrera Environmental, 2015b. *ESA Screening Checklist for the Souder Yard and Shops Facility Project*.

Historical Research Associates (HRA), Inc., 2013. *Cultural Resources Assessment for the Souder Yard Expansion Project*. Prepared for Sound Transit. August 13.

Jones and Stokes, 2008. *Point Defiance Bypass Project: Final Cultural Resources Survey/Discipline Report*. Prepared for the Washington State Department of Transportation. On file at the

- Department of Archaeology and Historic Preservation, Olympia, Washington.
- National Marine Fisheries Service, 2013. Essential Fish Habitat Report. Accessed at: <http://www.habitat.noaa.gov/protection/efh/efhmapper/index.html>. May 15.
- Parsons Brinckerhoff, 2016a. *Sounder Yard and Shops Facility Project Noise and Vibration Technical Memorandum*. Prepared for Sound Transit. March 2016.
- Parsons Brinckerhoff, 2016b. *Sounder Yard and Shops Facility Project Transportation Technical Memorandum*. Prepared for Sound Transit. March 2016.
- Pierce County, 2013. Public GIS data. Accessed at: <http://matterhorn3.co.pierce.wa.us/publicgis/>. May 15.
- Sound Transit, 1998. *Tacoma-to-Seattle Commuter Rail Environmental Assessment*. June.
- Sound Transit, 2002. *Lakewood-to-Tacoma Commuter Rail and SR-512 Park-and-Ride Lot Expansion Final Environmental Impact Statement (EIS)*. May. Seattle, Washington.
- Sound Transit, 2005. *SEPA Addendum to the Lakewood-to-Tacoma Commuter Rail and SR-512 Park-and-Ride Lot Expansion Final Environmental Impact Statement (EIS)*. October. Seattle, Washington.
- Sound Transit, 2005a. Regional Transit Long-Range Plan (ST2 Plan).
- Sound Transit, 2005b. Final Supplemental Environmental Impact Statement on the Regional Transit Long-Range Plan.
- Sound Transit, 2013. *SEPA Environmental Checklist for the Sounder Yard Expansion Project*. November 13.
- Sound Transit, 2014a. Regional Transit Long-Range Plan Update (ST3 Plan).
- Sound Transit, 2014b. Final Supplemental Environmental Impact Statement for the Regional Transit Long-Range Plan Update.
- Sound Transit, 2015. Categorical Exclusion Checklist Early Property Acquisition Sounder Yard and Shop Project.
- Streamnet, 2013. Interactive map. Accessed at: <http://map.streamnet.org/website/bluesnetmapper/viewer.htm>. May 15.
- Washington Department of Fish and Wildlife, 2013. Washington Department of Fish and Wildlife Priority Habitats and Species Database. Accessed at: <http://wdfw.wa.gov/mapping/phs/>. May 16.