Section 2.1 Site Description

2.1.1 Location of Tesoro Savage Vancouver Energy Distribution Terminal

The proposed Tesoro Savage Vancouver Energy Distribution Terminal (Facility) will be constructed at the Port of Vancouver (Port) within the City of Vancouver (City) in Clark County, Washington. The Facility includes construction and operations in different "Areas" on the overall facility, each area serving different functions. The site is located on the north (Washington) shore of the Columbia River. State Route (SR) 501 (Lower River Road) is located immediately to the north of the site. Interstate 5 (I-5) is located approximately 2.5 miles east. Rail access to the site is available from the east. Figure 2.1-1 presents a general vicinity map of the location; Figure 2.1-2 provides an aerial view and identifies existing adjacent uses. Each Facility area is described in further detail below. The entire Facility will be constructed on approximately ~~41.5~~44.9 acres.

The Port is located from approximately 103 to 106 river miles (RM) from the Pacific Ocean on the Columbia River at the head of the deep-water navigation channel. The total land area of the Port is approximately 2,127 acres, including approximately 800 developed acres and 500 acres planned for future development. Marine operations include five terminals and 13 berths. The Port handles 400 to 500 vessel calls per year and approximately 5 million metric tons of cargo yearly, including grain, scrap steel, bulk minerals, pulp, automobiles, refined petroleum products, and other bulk liquids. More than 2,300 people are directly employed by businesses at the Port (Port of Vancouver 2013).

Most of the site will be leased from the Port and will be used exclusively by the Applicant for the construction and operation of the Facility. The Transfer Pipelines will be located on non-exclusive easements within the Port.

The site is located in the SE ¼ of Section 18, NW ¼ of Section 19, and the NW and NE ¼ of Section 20, Township 2 North, Range 1 East WM. Berths 13 and 14 are located at approximately Columbia RM 103.5. Table 2.1-1 summarizes the project site areas discussed in detail below.

Table 2.1-1. Project Development Summary

Project Element	Site Location	Area (acres)
Area 200 – Unloading and Office	5501 NW Lower River Road NE ¼ Section 19, & S ½ Section 18, T2N, R1E WM Parcels: 152799-000, 152903-000	7.59
Area 300 – Storage	No site address N ½ Section 20, T2N, R1E WM Parcel: 152173-000	20.84
Area 400 – Marine Terminal	No site address NW ¼ Section 20, T2N, R1E WM Parcels: 152166-000, 503030-000, 503030-003	~~4.97~~7.63
Area 500 – Transfer Pipelines	No address NE ¼ Section 19 & NW ¼ Section 20, T2N, R1E WM Parcels: 152184-000, 152177-000, 152179-000, 986027-146, 986027-027, 50303-001, 152166-000,	~~2.20~~2.62

Project Element	Site Location	Area (acres)
Area 600 – West Boiler	No site address SW ¼ Section 19, T2N R1E WM Parcel:152799-000	~~0.45~~0.79
Rail Infrastructure	5501 NW Lower River Road N ½ Section 19, & S ½ Section 18, T2N, R1E WM Parcels: 152799-000, 152903-000, 152905-000, 152798-000	5.45

2.1.1.1 Area 200 – Administrative/Support and Rail Unloading

Area 200 is located at 5501 NW Lower River Road in Vancouver. The following Facility elements will be located in Area 200: administrative and support buildings, parking, rail access to the rail unloading facility, and the rail unloading facility. Area 200 will be accessible from an unnamed private road owned and maintained by the Port. Area 200 facilities will be constructed on approximately 7.59 acres.

Area 200 is in the northern portion of the area of the Port that is generally defined as Terminal 5. Terminal 5 is the former location of aluminum processing facilities owned and operated by Evergreen Aluminum LLC (Evergreen) and the Aluminum Company of America (Alcoa). The site has been the location of intensive historic industrial use, dating back to the 1940s when Alcoa first developed the site for aluminum smelting operations, through the early 2000s, when aluminum processing activities on the property ended. The Port completed the purchase of the Evergreen and Alcoa properties in 2009 and, with the exception of the onsite water tower and the dock structure in the Columbia River, all structures of the former aluminum processing plants have been removed and remediation has been conducted at the site in accordance with Washington State Department of Ecology (Ecology) approvals.

The Terminal 5 site is currently developed and used for the outdoor storage of wind turbine components and other cargoes and contains multiple rail lines for Port operations. The rail on the site represents the westernmost segment of the West Vancouver Freight Access (WVFA) project, a rail improvement project that is under construction at the Port. See Figure 2.1-2 for existing conditions at Terminal 5.

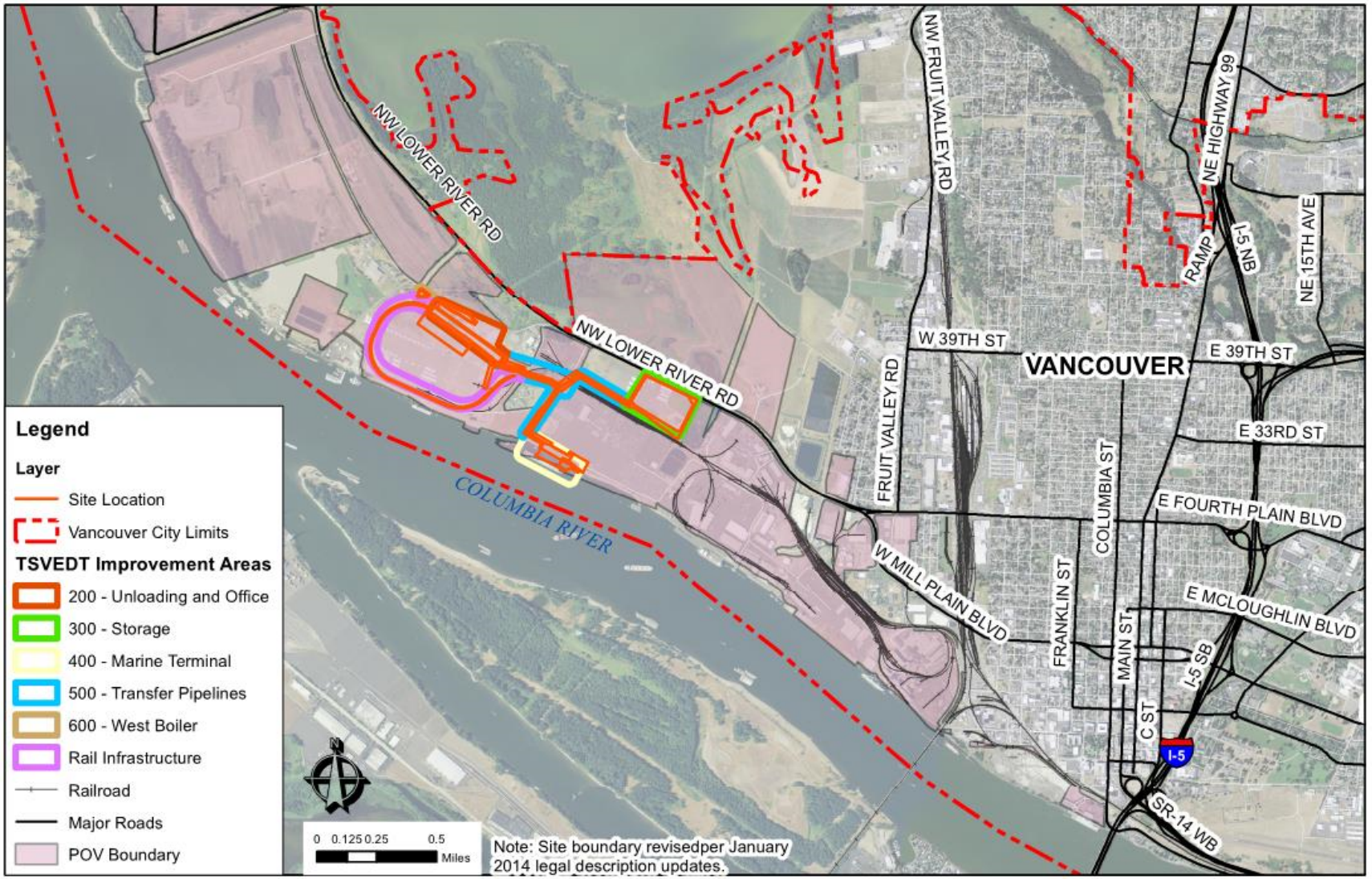

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Figure 2.1-1. General Vicinity Map (Revised)

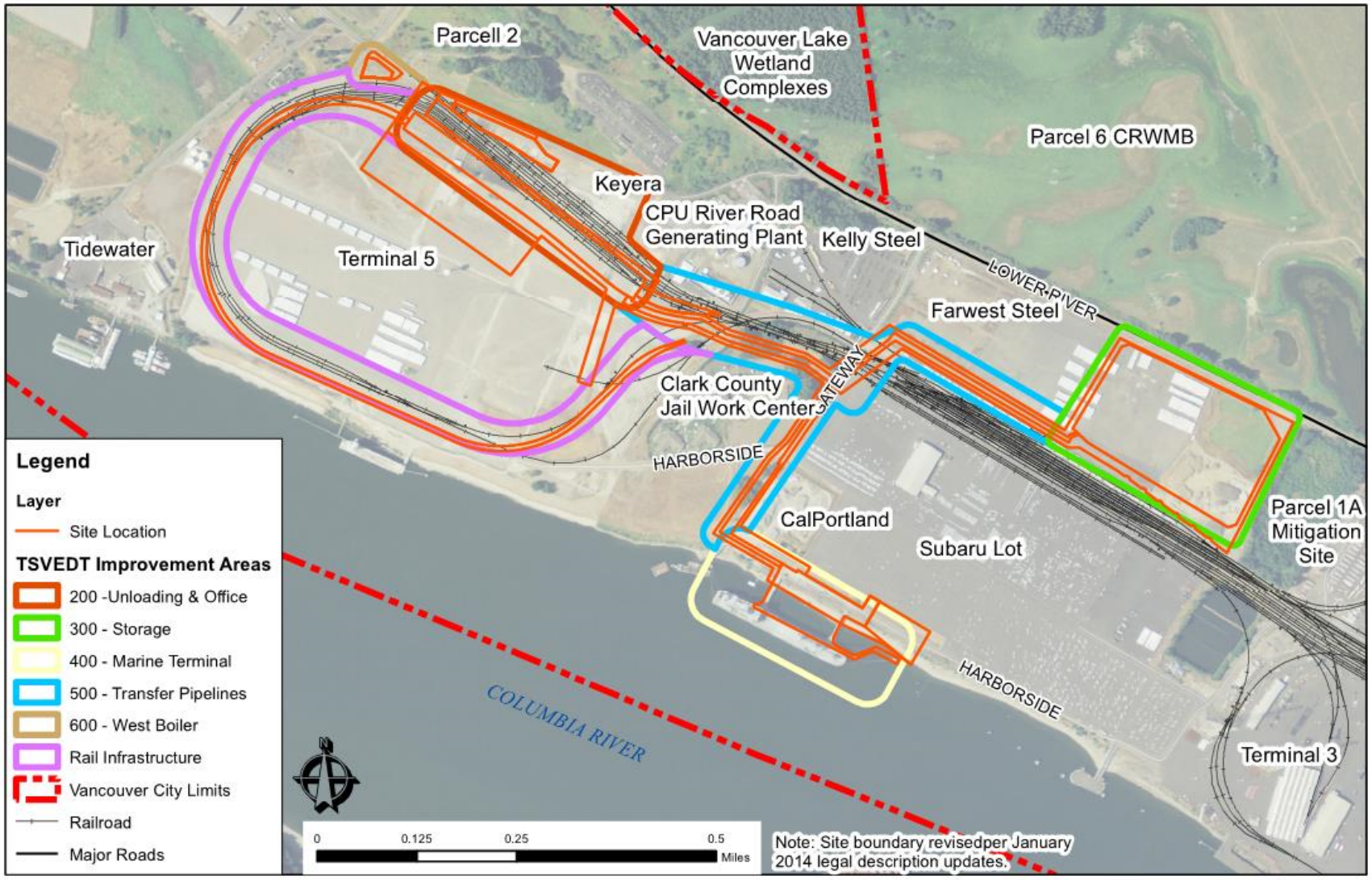

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Figure 2.1-2. Aerial View (Revised)

2.1.1.2 Area 300 – Storage

Area 300 is located at the Port's Parcel 1A on the south side of NW Lower River Road just east of the existing Farwest Steel facility. The following Facility elements will be located in Area 300: product storage tanks and associated secondary containment, the Area 300 Boiler Building, and associated control and ancillary systems. Area 300 will be accessible from NW Gateway Avenue and NW Lower River Road via a shared private drive. Area 300 elements will be constructed on approximately 20.84 acres.

This site was developed by the Port for laydown and industrial development and is currently partially occupied by a temporary steel scrap storage yard. See Figure 2.1-2 for existing conditions at Parcel 1A.

2.1.1.3 Area 400 – Marine Terminal

Area 400 is located at existing Port berths 13 and 14 on the Columbia River south of the current Subaru facility. The following Facility elements will be located in Area 400: product conveyance and loading facilities located on the dock, the MVCUs, emergency containment and response equipment, and control and ancillary facilities associated with vessel loading. This area will be accessed from Gateway Avenue and Harborside Drive by a driveway to be constructed with the project. Area 400 will be constructed on approximately ~~4.97~~7.63 acres.

Berths 13 and 14 were developed by the port in the early 1990s for a short- and/or long-term moorage of ocean-going governmental and commercial vessels~~and most recently have been used as vessel layberths~~. The dock consists of two access trestles and T docks with associated mooring elements. The access trestles and T docks consist of steel pile-supported concrete decks with a steel pile fenders system. Four steel pile-supported concrete breasting dolphins are connected to the T docks by steel-grated walkways. Three steel pile-supported concrete mooring dolphins are located between the shoreline and the T docks. The navigation channel of the Columbia River in this area is maintained artificially at a depth of -43 feet and the Port maintains the berths to the same depth. The nearshore habitat drops off rapidly and, as a result, there is little shallow water habitat or transition zone. Columbia River water volumes are managed by upstream dams, and there is no functioning floodplain within the project site. Sediments in the area of the project are predominantly silts, sands, and clays, with very little gravel or cobble present. There is no in-stream large woody debris or any backwater or side channel habitat at the project site. See Figure 2.1-2 for existing conditions at berths 13 and 14.

2.1.1.4 Area 500 – Transfer Pipelines

Area 500 consists of a non-exclusive easement located within Terminal 5, Parcel 1A, Terminal 4, and corridors adjacent to existing private port roads. Area 500 includes the corridors for the approximately 38,500 lineal feet of transfer pipelines that will connect the Unloading (Area 200), Storage (Area 300), and Marine Terminal (Area 400) portions of the project. See Figure 2.1-2 for existing conditions along the transfer pipeline corridor. Area 500 will be constructed on approximately ~~2.20~~2.62 acres.

2.1.1.5 Area 600 – West Boiler

Area 600 is located at the northwest corner of Terminal 5. The Area 600 Boiler Building and its associated parking will be constructed at this location. Area 600 will be accessed from Old Lower River Road and a private road owned and maintained by the Port. See Figure 2.1-2 for

existing conditions at Area 600. Area 600 facilities will be constructed on approximately ~~0.45~~0.79 acre.

2.1.1.6 Rail Infrastructure

The project will require the construction of two additional rail loops (tracks 4106 and 4107) consisting of approximately 18,000 lineal feet of new rail located on approximately 5.45 acres at Terminal 5. Existing Terminal 5 rail associated with the WVFA will be shifted; the shifting of existing facilities will be performed by others, has been previously permitted, and is not included within this request for Site Certification. A third rail loop (track 4105) is permitted for general Port use. This track may be transferred to exclusive use by the Facility once a sustained volume of 120,000 barrels per day is received by the Facility.

2.1.2 Prominent Geographic Features

2.1.2.1 Terminal 5

Terminal 5 is the location of the Unloading and Office elements (Area 200) and the rail infrastructure. This area is bounded on the south by the Columbia River. With the exception of the riprapped shoreline, the site is flat and is composed of developed rail facilities, gravel surfacing, and paving.

2.1.2.2 Parcel 1A

Parcel 1A is the location of Storage (Area 300). There are no prominent geographic features on Parcel 1A. The site is flat and consists of gravel or dirt with scattered grasses and weeds and a temporary scrap steel yard.

2.1.2.3 Terminal 4 Berths 13 and 14

Berths 13 and 14 are the location of the Marine Terminal (Area 400) and include the Columbia River and shoreline. At this location, the river has a bank to bank width of approximately 5,600 feet, with a maintained channel width of 600 to 800 feet and a maintained depth of -43 feet Columbia River Datum (CRD). The bank consists of steeply sloping riprap with parking and storage at the top of the bank. The existing pile-supported dock consists of two access trestles, four breasting dolphins connected to the trestles by catwalks, and three mooring dolphins.

2.1.2.4 General Area

Within the general vicinity of the Facility location, there are several other geographic features. Vancouver Lake is an approximately 2,287 acre shallow lake located in the Columbia River floodplain is located northeast of the project site (Clark County 2010). There is an associated wetland complex located south of Vancouver Lake. The Columbia River Wetland Mitigation Bank (CRWMB), an approximately 154-acre wetland mitigation bank established in 2010, is located at the southern extent of this wetland complex.

There are also two wetland mitigation sites in the vicinity of the project site. The Parcel 1A wetland mitigation site, located immediately east of Parcel 1A, was created in 1994. The Parcel 2 wetland mitigation site is an approximately 16.4-acre mitigation site, situated on an approximately 31.3-acre parcel north of the existing Terminal 5 site.