

Appendix B. Historical Aerial Photograph Review

A historical aerial photo review was conducted to document changes in site use and layout at T-108 over time. Photos from 1936 (King County 2008), 1946 (Aerial Photo Publishers), 1953 (Photographer unknown), 1961 (Pacific Aerial Surveys), 1970 (WDNR), 1981 (WDNR), 1990 (Metro Aerial 1991), and 1995 (WDNR) were available. The parcel boundaries for both the Eastern and Western Parcels of T-108 and the outline of the present-day shoreline are overlaid on the aerial photographs for reference. In addition to the aerial photos collected for this investigation, photos from 1976 and 1977 showing the central and western portions of the property were also available from an existing report by King County (King County et al. 2005).

The 1936 aerial photograph shows the property undeveloped with a tidal channel located on the eastern and northern portions of the Eastern Parcel. The shoreline extends further into the LDW than the present-day shoreline. By 1946, the Diagonal Way STP had been developed. Two large, round clarifiers are visible in the photograph, with two smaller round digesters to the west, and three or four rectangular-shaped sludge-drying beds to the west of the digesters. A control house is located to the east of the clarifiers. The STP outfall is visible approximately midway along the property shoreline, and lumber is being stored offshore within the LDW.

A report by King County indicated that the tidal channel on the north end of the property received untreated sewage from a small sewer system located to the northeast of the Diagonal Way STP (King County et al. 2005). What appears to be a small structure is visible along the eastern boundary of the Eastern Parcel in the aerial photograph from 1946. This may represent the small sewer system, however this could not be confirmed during the course of this investigation.

The site layout observed in the 1953 photograph appears similar to the 1946 layout. In the 1961 photo, a large sludge pond is visible to the west of the clarifiers and digesters; additional sludge ponds may be present to the north of the treatment plant. A large parking lot has been installed on the southern portion of the property.

In the aerial photograph from 1970, an additional structure has been added to the northeast corner of the Eastern Parcel. According to a historical map by the Kroll Map Co. contained in a historical report of site conditions conducted for Chevron by TAMS (1992), this may have been a pump house. Other changes from 1961 apparent on the 1970 photograph include filling of the tidal channel, clearing and grading on the northern and eastern portions of the site, and a reduction in the size of the open sludge pond located to the west of the clarifiers and digesters.

In the 1981 aerial photograph, the STP has been removed and the shoreline along the northern portion of the property has been dredged. It appears that the paved parking area on the southern portion of the property and an area in the center of

the Eastern Parcel are being used to store shipping containers or similar large objects.

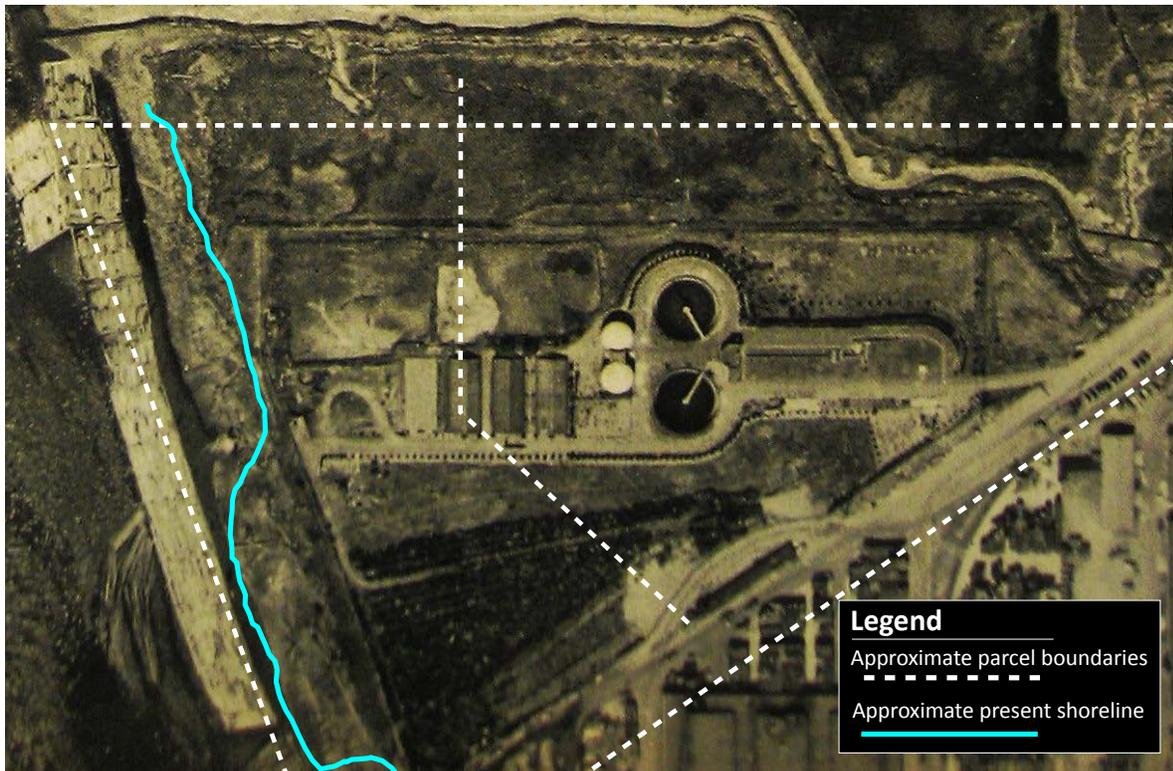
The Lafarge facility is apparent on the Western Parcel of the property in the aerial photograph from 1990. The pipeline dock, cement silos, and truck turn-around area are all distinguishable. The Eastern Parcel appears to be primarily vacant except for a few equipment storage areas visible on the central and southern portions of the parcel. The shape of the mitigation area on the southern portion of the shoreline is also apparent, and lumber is no longer being stored offshore of the property.

In the 1995 aerial photograph, the T-108 container terminal is visible on the Eastern Parcel of the property, while the Lafarge facility remains on the Western Parcel. The mitigation area appears to be more fully developed than in the 1990 photo as vegetation is now visible.

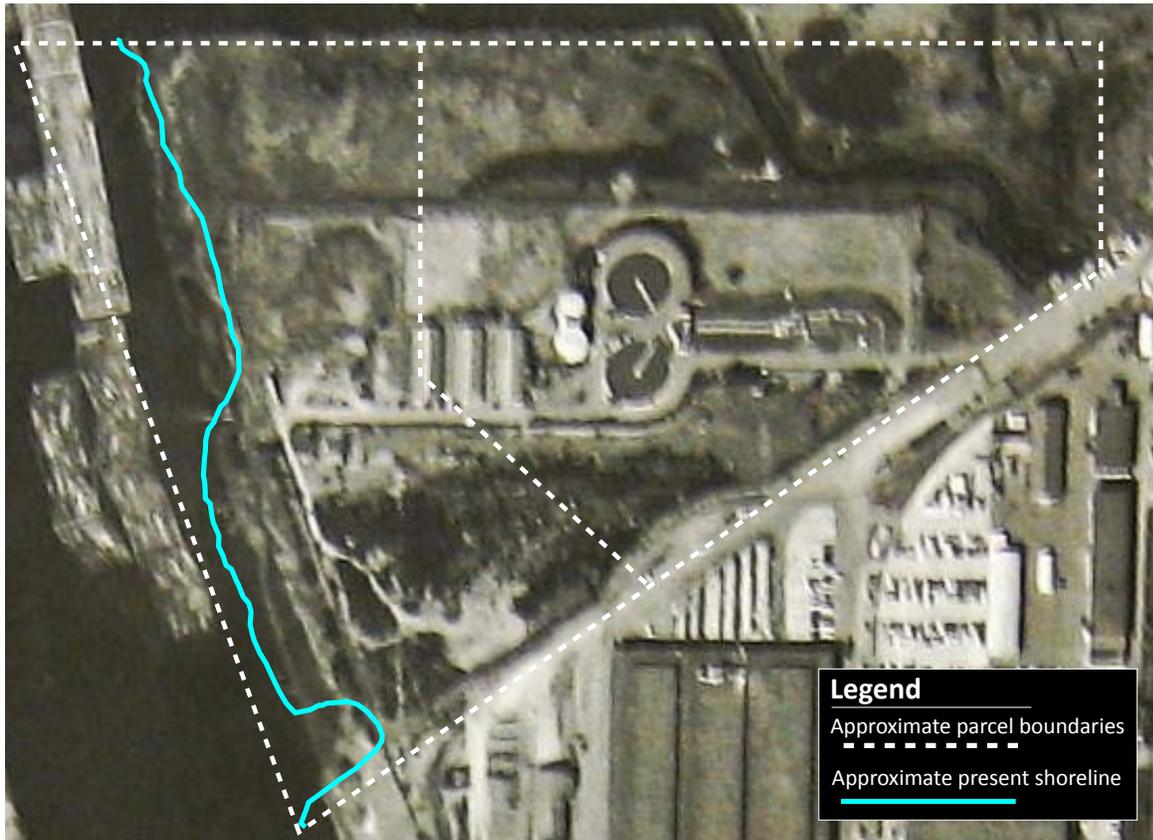
The aerial photographs with coverage of the western portion of the property acquired from the Duwamish/Diagonal CSO/SD Cleanup Study Report (King County et al. 2005) provides information on site conditions at T-108 in the mid-1970s. It was during this time period that the Diagonal Way STP was decommissioned, and also that two pits were excavated on the property to store and treat PCB-contaminated sediment dredged from the LDW. Based on these photographs, it is known that the sediment pits were present on the property in 1976 but had been filled by 1977. The Diagonal Way STP appears to have been decommissioned either in the latter half of 1976 or in 1977. The newly-dredged shoreline along the northern portion of the property is also clearly visible in the 1977 photograph. Overall, the historical aerial photographs reviewed during this investigation support the accounts of the property history reviewed in other reports and records.



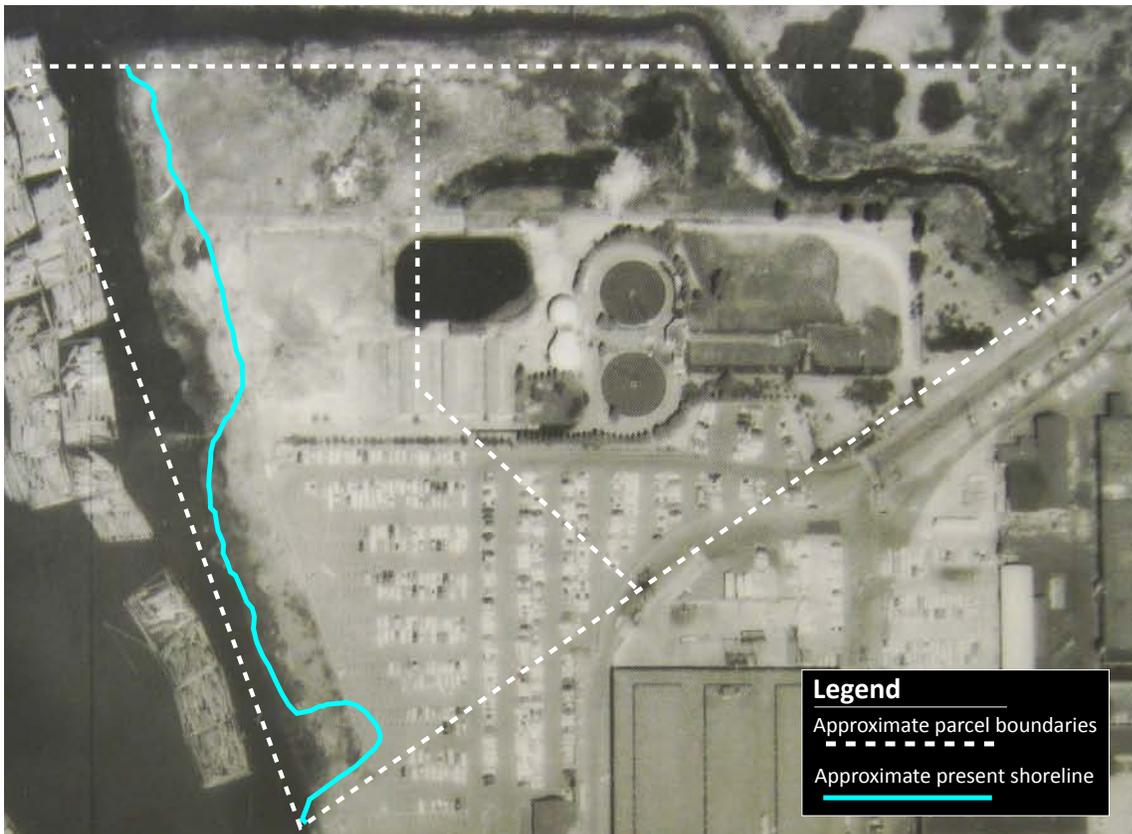
1936 aerial photograph (King County 2008)



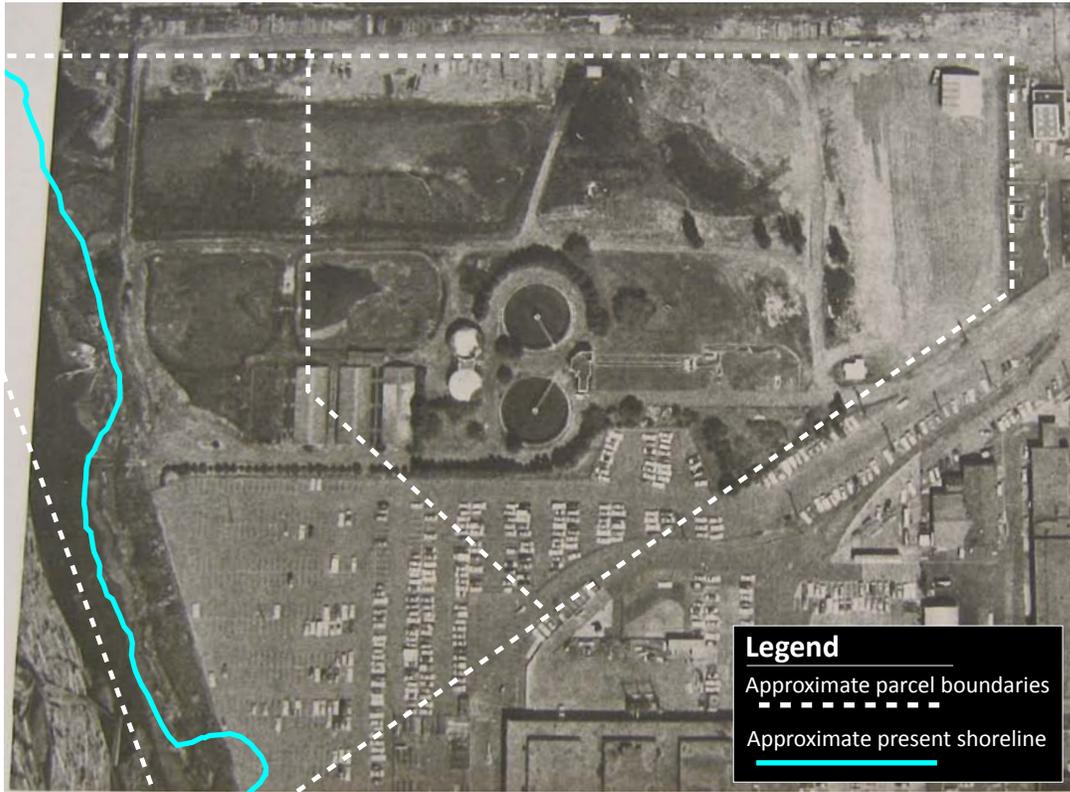
1946 aerial photograph (Aerial Photo Publishers 1946)



1953 aerial photograph (Source not reported)



1961 aerial photograph (Pacific Aerial Surveys 1961)



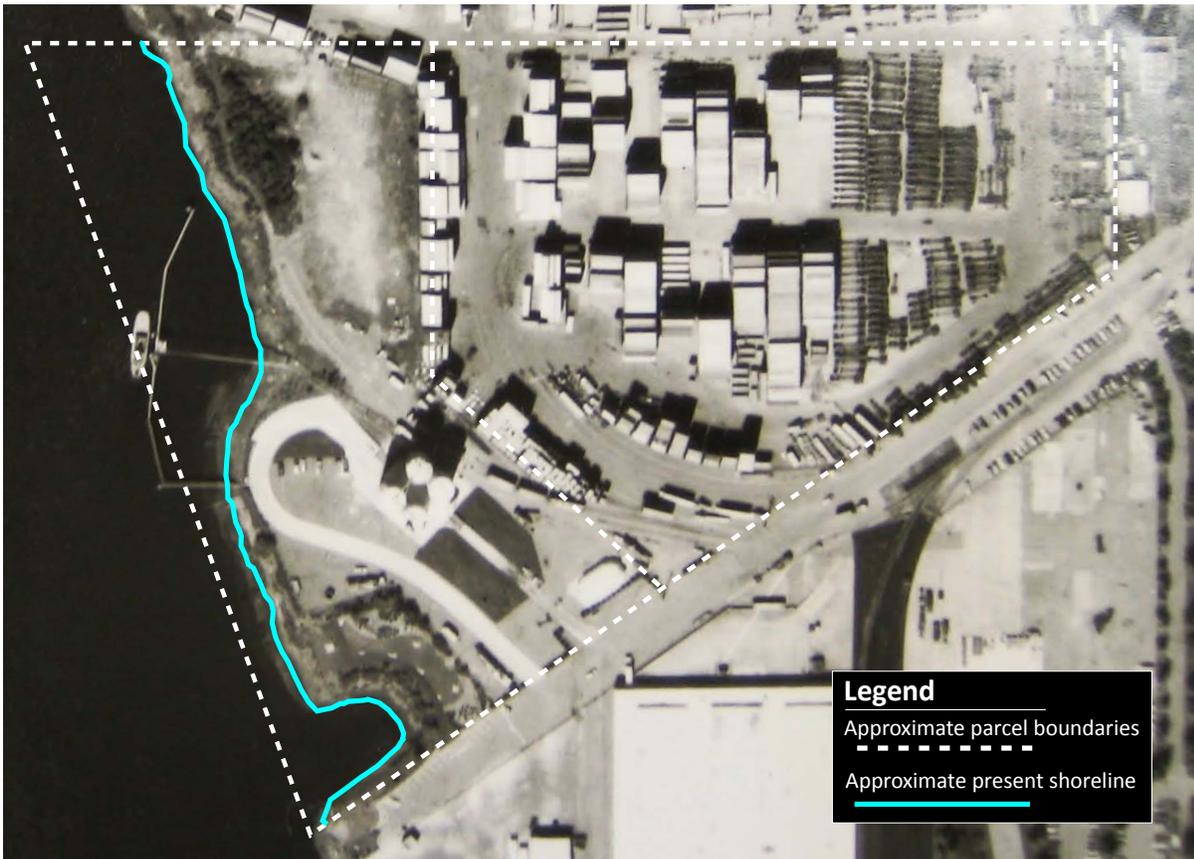
1970 aerial photograph (Washington Department of Natural Resources 1970)



1981 aerial photograph (Washington Department of Natural Resources 1981)



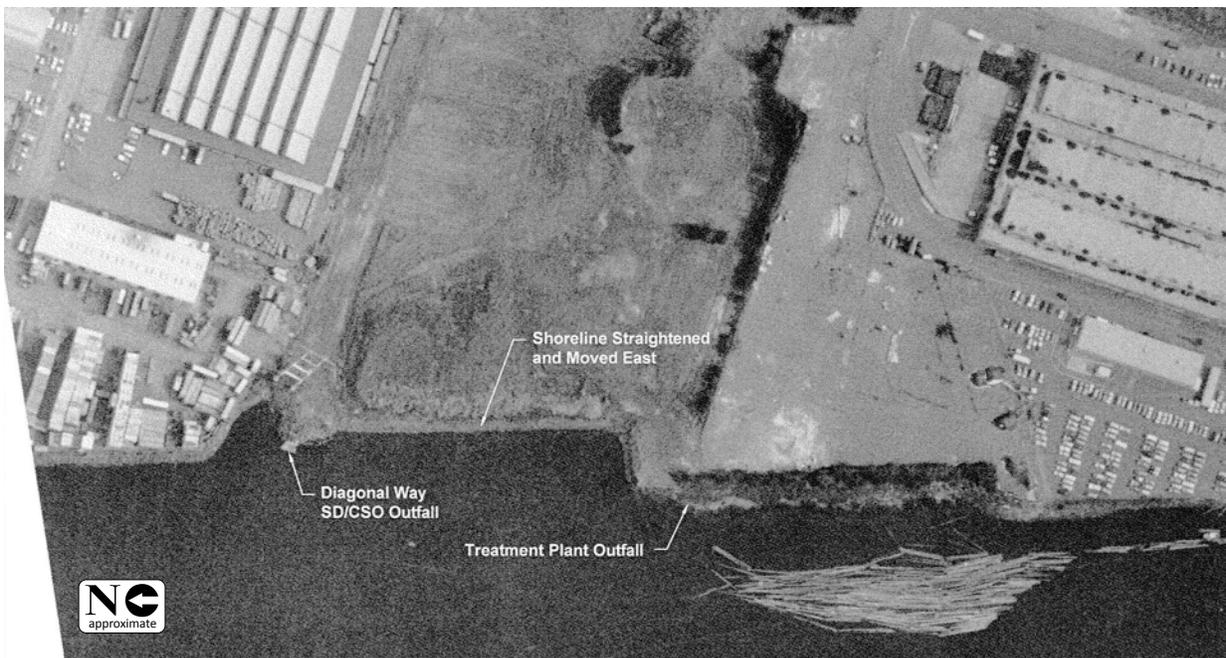
1990 aerial photograph (Metro Aerial 1991)



1995 aerial photograph (Washington Department of Natural Resources 1995)



1976 aerial photograph showing settling holding pits (KCDNR et al. 2005; photograph provided by US Army Corps of Engineers, Seattle District, dated July 28, 1976)



1977 aerial photograph showing settling holding pits filled (KCDNR et al. 2005; photograph provided by US Army Corps of Engineers, Seattle District, dated October 4, 1977)

References

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- WDNR. 1995. NW-95 enlargements: aerial photo of T-108 and vicinity. Publisher: Washington State Department of Natural Resources, Olympia, WA. Accessed at the Map Collection and Cartographic Information Services Unit, University of Washington Libraries, Seattle, WA.