

SANDY DELTA

LOCATION

The Sandy Delta Site is immediately east of the Sandy River on the north side of I-80N in northeast Multnomah County about 14 miles east of Portland (Figure 1). The city of Troutdale is situated southwest of the site and the Columbia River bounds the site to the north. More specifically, the site is located in Section 24, TIN, R3E and Section 19, TIN, R4E (Figure 2).

ZONING

Section 19 T IN R4E is zoned Multiple Use Agricultural District, 20 acres minimum lot size.

CURRENT SITE USE

The site proper is undeveloped lowland lying along the Sandy and Columbia Rivers. The site is vegetated primarily by alders and grasses.

ADJACENT LAND USE

The land south of the site, across I-80N, is a State park, lying adjacent to the Sandy River. The land to the west across the Sandy River is owned by the Port of Portland and the Troutdale Airport is less than one mile from the site.

NATURAL SCREENING

Natural screening would be required along 80N.

GEOLOGY

The proposed disposal site is underlain by younger alluvium which consists of sands and gravels with occasional beds of silt (Figure 3). The younger alluvium is in excess of 100 feet thick at this site. Sedimentation of this type is quite irregular and no geologic units extend over the entire site area.

GROUNDWATER

The area is usually one of groundwater discharge; there is no consumptive use of groundwater between the site and the river. Even with dikes, during high river stages the water table would reach the ground surface. The groundwater gradient would intrude into the site if this water were pumped out. The depth to the water table would depend on the river stages of the Sandy and Columbia Rivers. High river stages for the Sandy River would be expected in the winter rainy season and the early spring during the first snow melt. The Columbia River floods during late spring as a result of the snow melt in the Rocky Mountains.

SOIL

On site soils are associations with 50 percent or more Class II soils.

FLOODING

The surface of the site is submerged during high water and a thin (one-inch to two-inch) peaty layer has developed over much of the site.

DIKE

The existing ground surface is at elevation 20 to 22 (USGS). The projected 100-year flood stage at Washougal, Washington, immediately north of the site across the Columbia River is 32.0 (USGS). Therefore, dikes will need to be constructed to a minimum water elevation of 33.0 (USGS). Dike construction on the Sandy River side would have to be capable of withstanding high velocity currents.

SURFACE WATER

Diking would be necessary to protect against the frequent flooding from the Columbia and Sandy Rivers. High river stages in the Sandy River could expose dikes to strong currents.

COVER MATERIAL

Cover material is permeable with the exception of occasional silt beds. A cover material of low permeability would have to be imported.

CAPACITY

The total site area encompasses about 1,400 acres after allowing 500 feet setback from the highway and 200 feet setback from both rivers allowing for diking around the entire site and cover material. The site should accommodate 50 million cubic yards of refuse. This assumes an average fill depth of 26 feet, including two-feet of final cover.

ACCESS CONSIDERATION

Access is off 80N. Traffic maneuverability on this site could be a problem during periods of high water. The site is approximately 23 miles from Rossman's at Oregon City.

CLIMATIC FACTORS

Annual precipitation is 50 inches per year.

BOTTOM SEAL MATERIAL

The material on site is too permeable to be considered a bottom seal. However, bottom seal material should not be required at this site because the groundwater is unused and discharges into the Columbia River.

GAS MIGRATION

Gas migration should pose few problems at this site. No confining beds are present, and cover material would be the only influencing factor.

TA:ss

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Prepared by Metro Staff

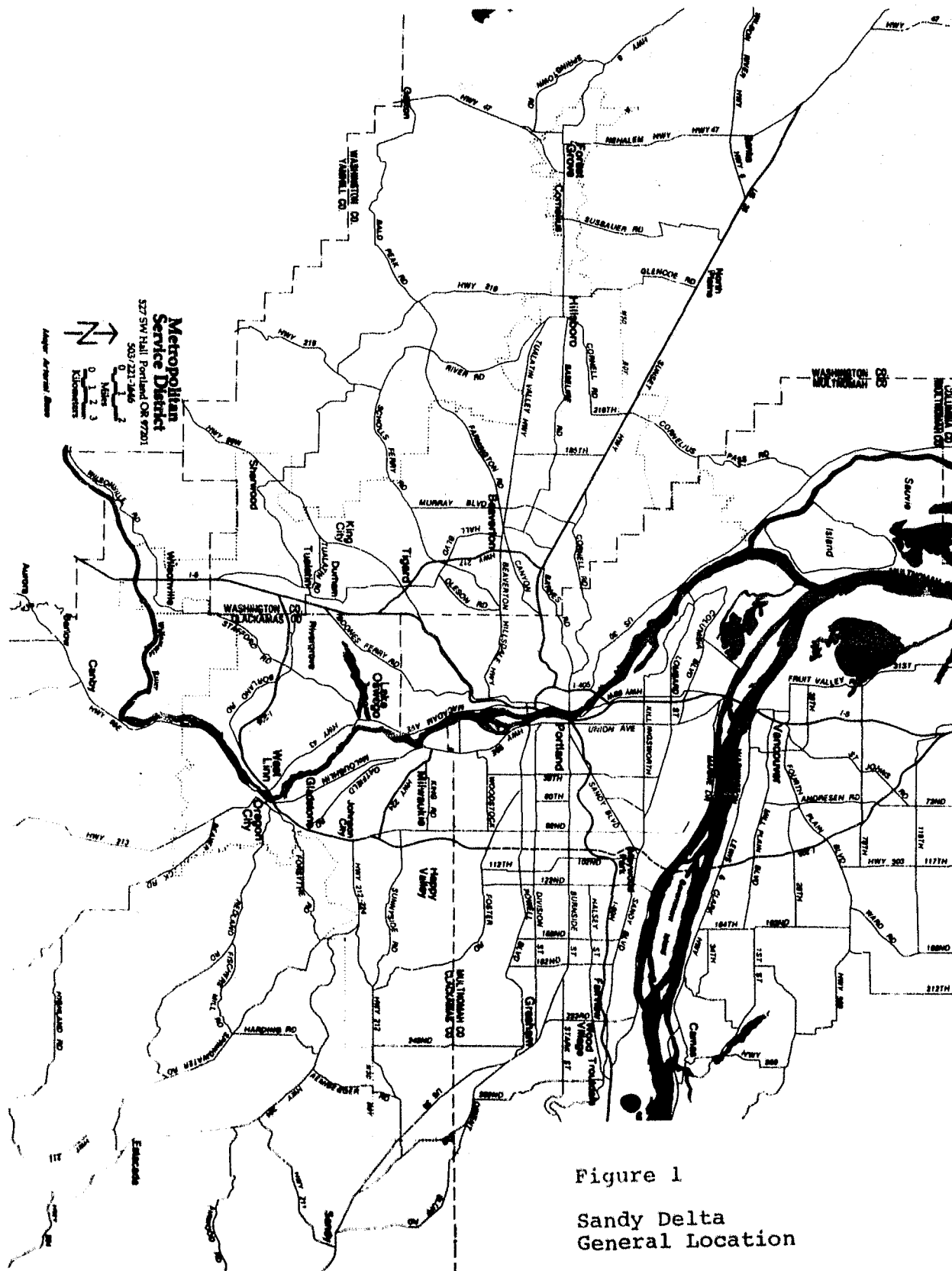


Figure 1

Sandy Delta
General Location

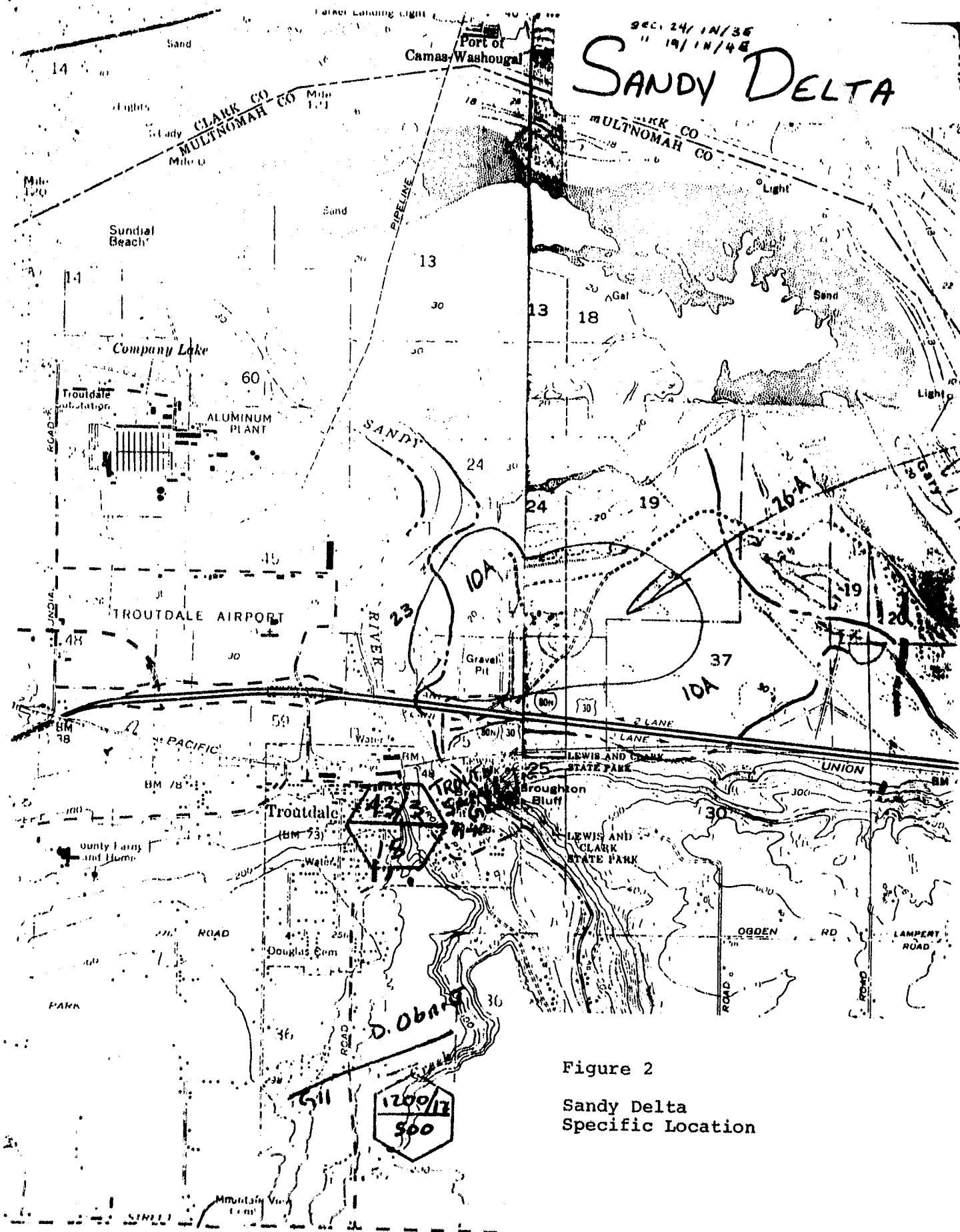


Figure 2

Sandy Delta
Specific Location

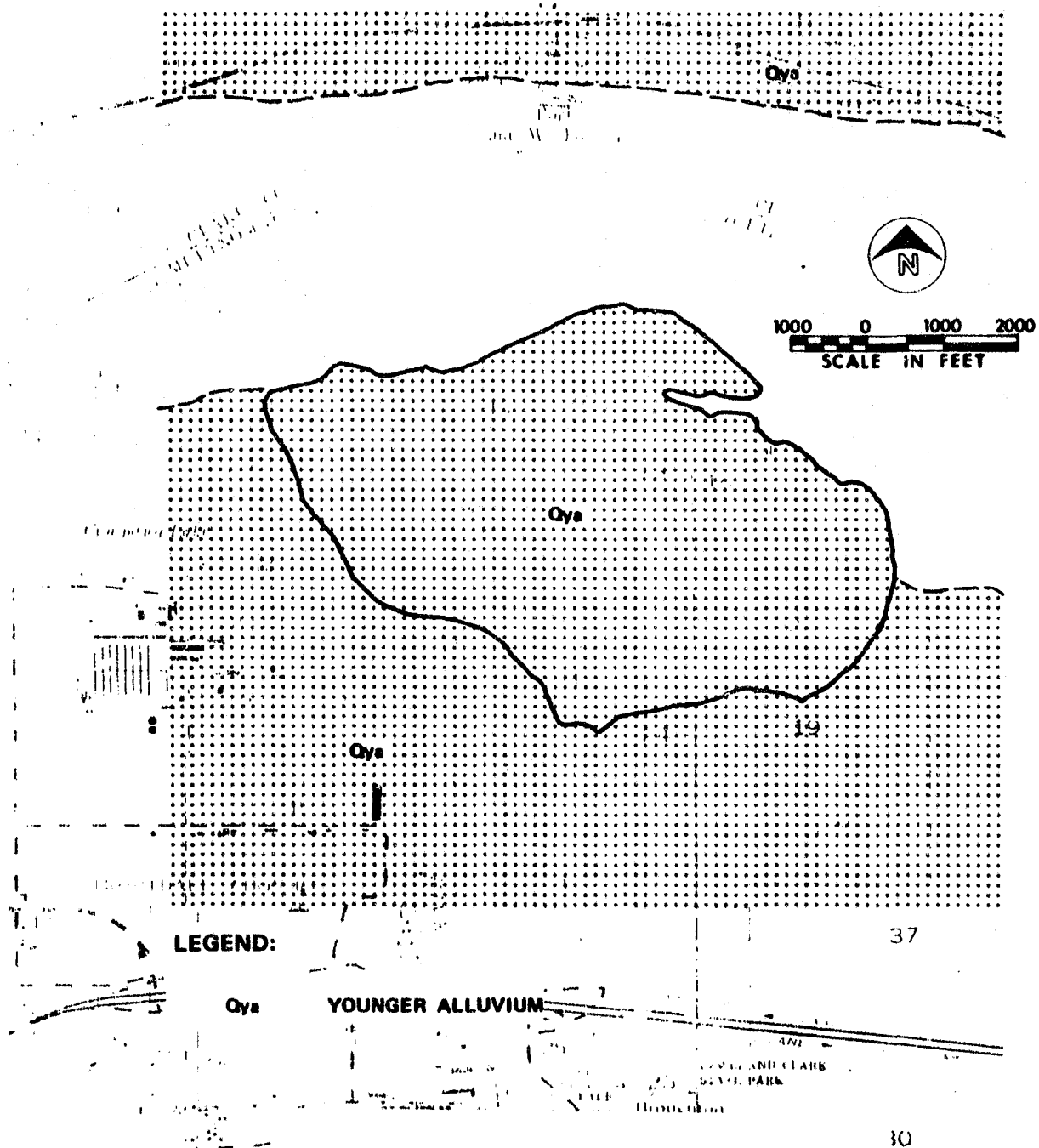


Figure 3

Sandy Delta
Geology