

CIPOLE

LOCATION

The Cipole site is located about 2.5 miles southwest of Tigard in southeast Washington County (Figure 1). The site is bounded by Tualatin Road on the north, 108th Avenue on the east and Highway 99W on the west. More specifically, the site lies within Section 22, T2S, R1W (Figure 2).

ZONING

The zoning has recently been changed from general industrial to an extensive industrial (MAE) designation by Washington County. The MAE zone allows only a minimal amount of industrial activity and utility usage.

CURRENT SITE USE

The site has been used for mining gravel and sand and several pits have been excavated at the west end of the site. The remainder of the site is used for farming.

ADJACENT LAND USE

Light residential development does exist to the north and east of the site, but the predominant surrounding land use is agricultural and light industrial.

NATURAL SCREENING

The site is approximately 50 percent screened.

GEOLOGY

The proposed disposal site is underlain by older lacustrine sands in the northern portion and younger alluvium in the southern part. The older lacustrine deposits are generally coarse grained sands with lenses of pebbles. The older lacustrine sands are a flood deposited sand which contains scarcely any fine material. The younger alluvium is a deposit of silts and fine sands with some clays.

Beneath the older sands and the younger silts and clays is the Troutdale Formation. This formation consists of poorly cemented silt, clay and silty fine sand. The Troutdale Formation contains the principally developed aquifer in the area.

Depth to the Troutdale Formation varies, in the vicinity of the disposal site, with elevation. The Troutdale Formation is found at about 100 feet above sea level here. Below the Troutdale Formation the Columbia River basalt is found from 560 feet below sea level to 300 feet below sea level. One well near the site penetrated the basalt at 370 feet below sea level.

The surficial geology of the site is mapped on Figure 3.

GROUNDWATER

The local groundwater appears to flow west toward Rock Creek and north toward the Tualatin River, as determined from existing well data. (Figure 2)

A single test hole was drilled during the COR-MET study and a highly impermeable layer was found from a depth of 72 to 85 feet below the surface. However, other available data is not adequate to substantiate the existence of this impermeable layer. Therefore, it is conservatively assumed that the low permeability material occurs in lenses.

There is some indication that the groundwater in the local shallow aquifer could be contaminated. Water drawn from deep aquifers shows no contamination.

SOIL

Soils in the vicinity of Cipole are Class I. On-site soils have been removed due to mining operations.

FLOODING

A portion of the site is subject to seasonable flooding from Rock Creek, and utilization of this portion of the site would require extensive diking and pumping facilities.

SURFACE WATER

Surface runoff poses little problem at this site. The general surface drainage is to the southwest toward Rock Creek. Imported cover material would alter the surface runoff pattern slightly, but any alterations could be handled in design.

SLOPE

Slope changes due to mining operations.

COVER MATERIAL

Most of the area has a very shallow soil; therefore, the cover material on site is the same as the base material, medium sand. If excessive filtration of surface water is to be prevented, a low permeability cover material would have to be imported to the site.

CAPACITY

The site is 315 acres and its capacity is estimated to be 950,000 tons.

ACCESS

The site is reached directly from Highway 99W. It is approximately 13 miles from Rossmans.

CLIMATE

Annual rainfall is 54 inches.

GAS

Gas migration would be essentially vertical through surrounding soils and lateral movement of gases should be no problem.

TA:bk

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Prepared by Metro Staff

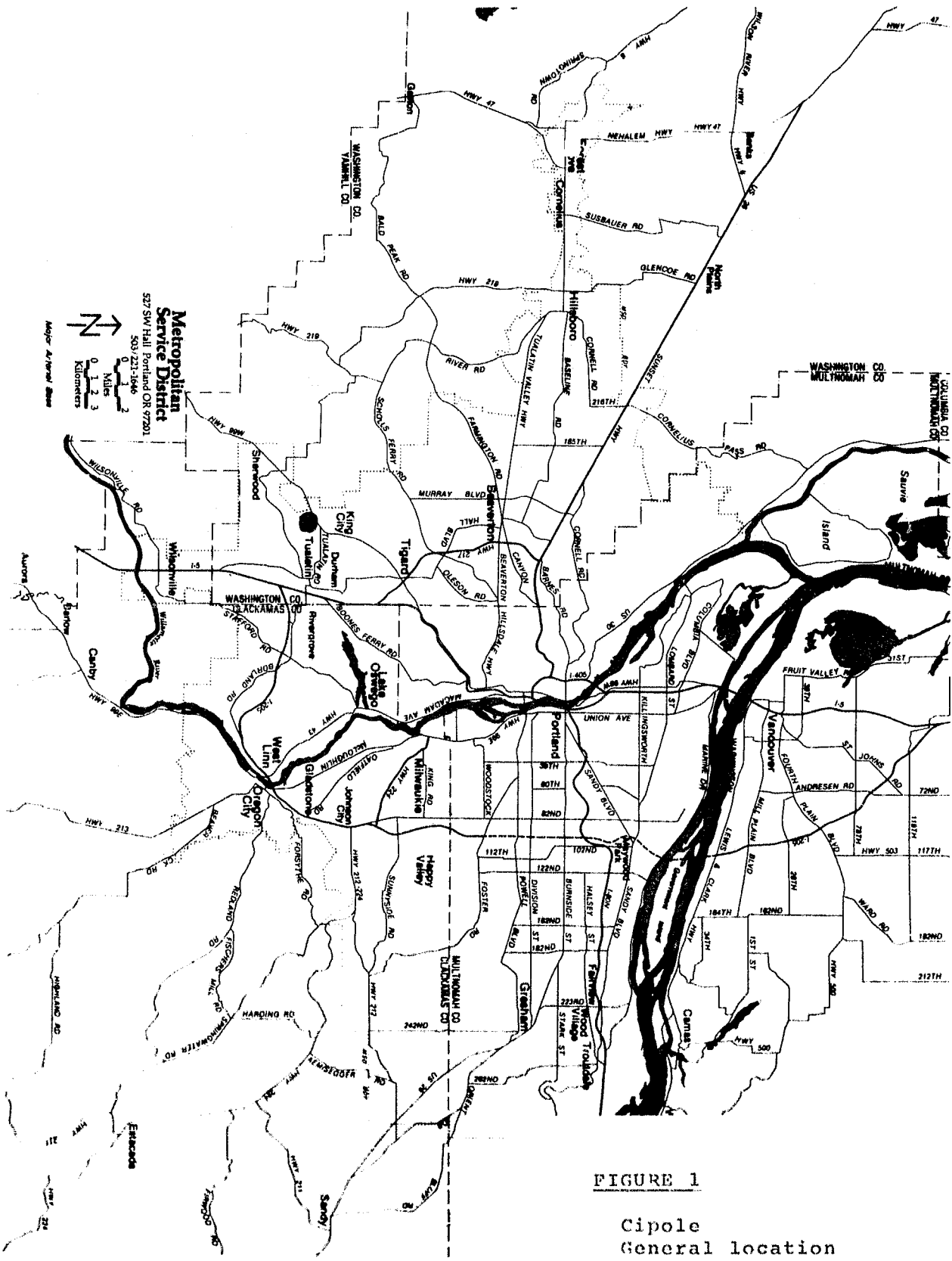
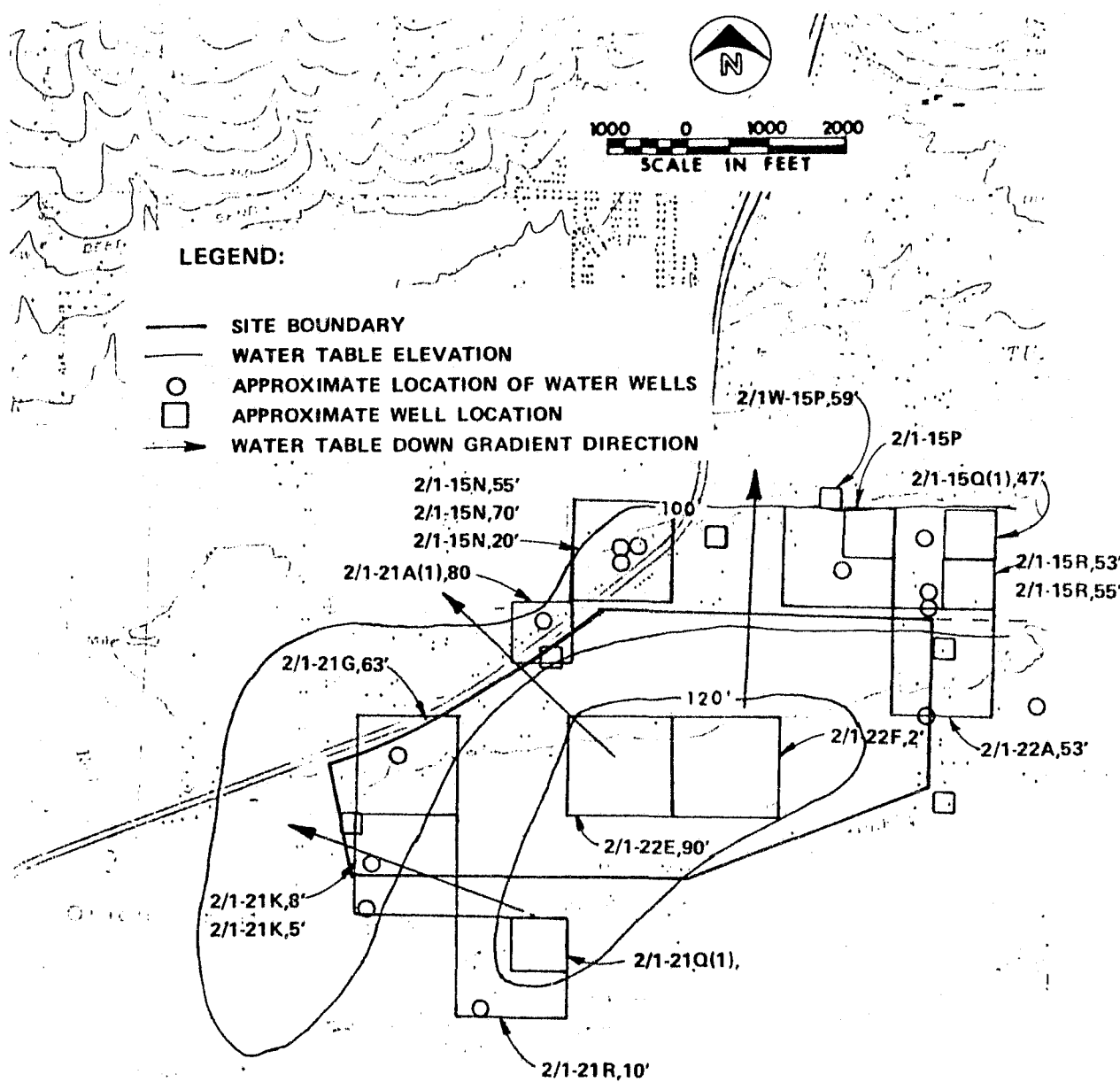


FIGURE 1
 Cipole
 General location



FIGURE

METROPOLITAN SERVICE DISTRICT

SOLID WASTE MANAGEMENT ACTION PLAN

GREATER PORTLAND AREA

CIPOLE POTENTIAL LAN

FIGURE 2

Cipole
Specific location

LEGEND:

- Qya** YOUNGER ALLUVIUM
- Qlg** LACUSTRINE GRAVEL
- Qls** LACUSTRINE SAND
- Qws** WILLAMETTE SILT

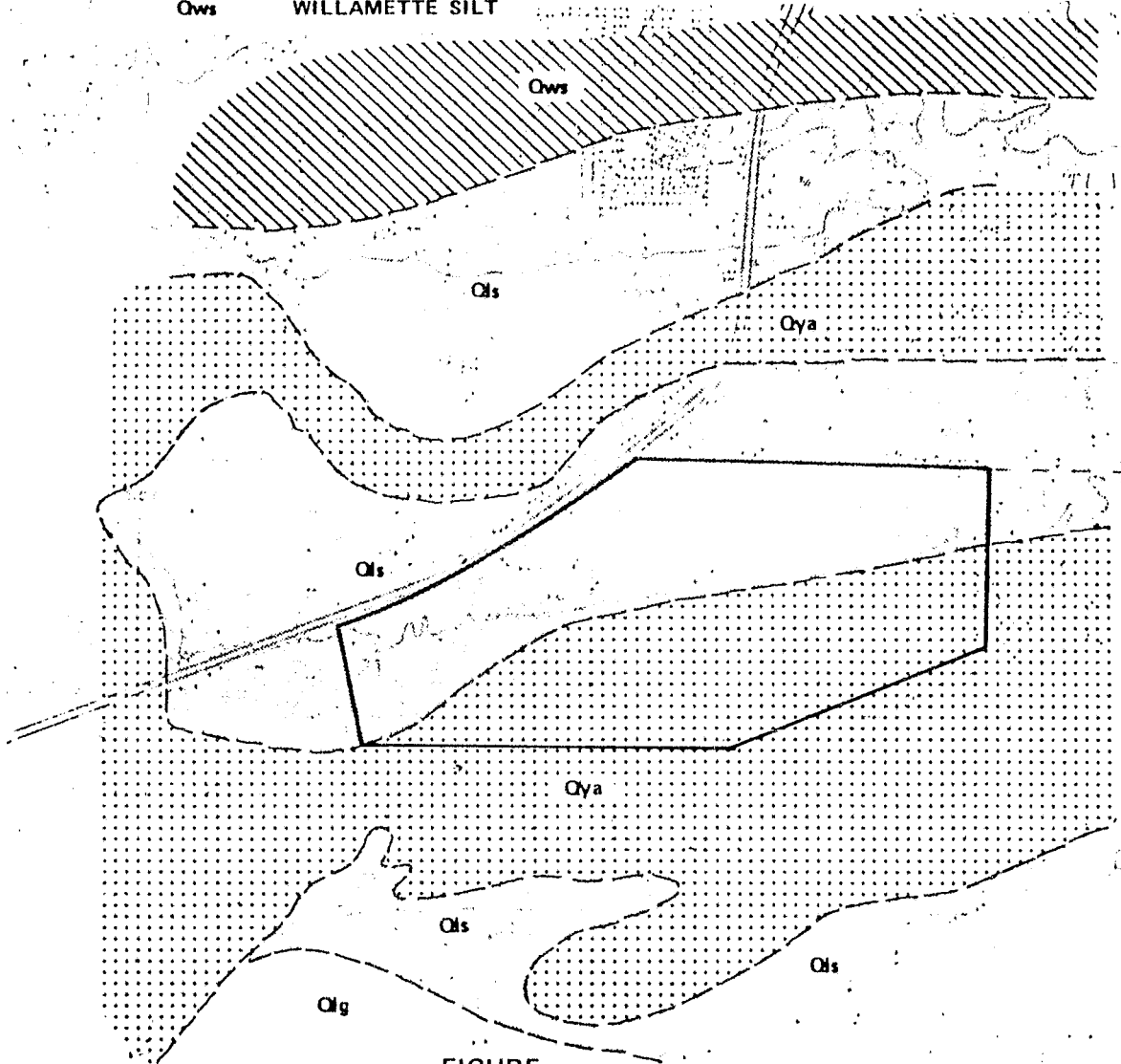


FIGURE
METROPOLITAN SERVICE DISTRICT
SOLID WASTE MANA
GREATER PO
SURFICIAL

FIGURE 3

Cipole
Geology