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PROPOSED FIELD CHANGE FOR SITE 11 — NORTH CHEVALIER DISPOSAL FIELD NAVAL AIR STATION PENSACOLA, FLORIDA

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Prepared for:
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Proposed Field Change
Site 11 — North Chevalier Disposal Field
August 16, 1993

Currently, 36 shallow soil borings, 14 shallow monitoring wells and 11 intermediate monitoring wells are proposed in and around the landfill boundaries (see Figures 4-1 and 4-2 of the Site 11 SAP). Due to the unknown contents of the landfill and the potential widespread distribution of heterogeneous wastes across the landfill, [the Navy] recommends that the methods of investigation be changed. One recommendation includes using an excavator to uncover discrete sections of the landfill in place of installing soil borings. A second modification is to revise the locations of the monitoring wells to better determine the extent of contaminant migration, both within and off the landfill site. Each of these changes will be discussed in the following sections.

TRENCHING

Due to the potential for heterogeneous wastes to be present across the landfill and the lack of knowledge regarding the wastes at the landfill, [the Navy] recommends the use of trenching in place of soil borings. This recommendation is based on the following objectives:

- Excavating discrete Sections of the landfill will furnish both quantitative and qualitative data on the contents and depositional methods used at the landfill.
- Excavating offers better worker safety by limiting the number of workers required in the work zone during the investigation.
- Excavating offers a cross-sectional view of subsurface soil horizons and waste material deposited. The excavation *can* be logged and sampled as necessary.
- Excavating will be a quicker and more effective method of evaluating the landfill contents.
- Excavating minimizes the potential for "blind" drilling through buried materials (e.g., drums, pails, etc.).

[Bold items enclosed in brackets denote *changes* to the draft version of the dowment.]

The test trench locations were selected to determine the types of waste deposited in the landfill and to determine the extent of the landfill. Figure 1 illustrates the 6 to 8 locations where test trench activities are proposed.

The trenches will be orientated approximately east-west and will be advanced to the groundwater. Each trench will be approximately 120 feet in length and the width of each trench will be approximately the width of the excavator bucket or the width *necessary* to keep the trench open from cave-in. Actual trench locations might be altered in the field based on accessibility and field observations during the investigation. **[Trenches will be extended as necessary to delineate the extent of the site.]** The excavated contents of the landfill will be visually inspected, logged in a field logbook, and photographed. Representative soil samples will be collected for laboratory analysis. All excavated material will be placed back into the excavation upon completion. **[If readily removable potential sources of contamination are encountered during trenching, the potential sources** will **be removed if contractually possible for the Navy. If not possible, the potential sources will remain in the area of contamination (AOC).]** Soil that cannot be returned to the trench because of soil bulking will be placed in a lined roll off dumpster for future disposal by the Navy.

Sampling

At each test trench location where waste/fill material is encountered, soil/waste material sample collection is proposed at the following frequency:

- One discrete sample will be collected from the landfill overburden, 0 to 1 feet below land surface.
- Samples will be collected from areas of obvious contamination from native unsaturated soil located at the bottom of the trench or from the unsaturated sidewalls containing large amounts of waste.
- If groundwater is encountered in the excavation, a groundwater sample will be collected from the pit if waste is observed above the water table.

[Bold items enclosed in brackets denote *changes* to the draft version of the document.]

- If native soil is not encountered in .theexcavation, a groundwater sample will be collected from the bottom of the pit.
- If seeping waste (e.g. sludges) is encountered above the water table, a sample will be collected of the waste and submitted for TCLP analysis.

An EnSafe/Allen & Hoshall geologist or engineer will oversee all excavation activities. As the trench is excavated, EnSafe/Allen & Hoshall personnel will direct the operator to retrieve soil from selected intervals based on field observations. Soil samples will be collected from the [center of the] backhoe bucket to avoid sampling soil which has come in contact with the sides of the bucket.

Use of a backhoe for sample collection may be inappropriate for some locations that are inaccessible for the equipment. In these locations, samples will be collected by a hand auger. The hand auger will be advanced as deep as possible or to groundwater, whichever comes first. Samples will be collected directly from the hand auger bucket.

All sampling and decontamination procedures will be performed in accordance with the EPA *Standard Operating Procedures/Quality Assurance Manual,* site-specific Sampling and Analysis Plan and the Comprehensive Sampling and Analysis Plan.

MONITORING WELL LOCATIONS

[The Navy] recommends that the current monitoring well locations be revised based on the following objectives:

- Installing a series of upgradient monitoring well nests consisting of one shallow and one intermediate depth monitoring well to furnish data of potential contaminants migrating onto the landfill from sites located to the west.
- Installing a series of downgradient monitoring well nests to furnish data of contaminants migrating from the landfill site.

[Bold items enclosed in brackets denote *changes* to the draft version of the document.]

- In conjunction with the trenching approach, the proposed monitoring well locations minimize the potential for "blind" drilling through buried materials (e.g., drums, pails, etc.).

Figure 2 illustrates the 8 locations where monitoring well nests are proposed. The well locations were selected to determine the extent of contaminant migration, both within and off the landfill site. Downgradient and internal monitoring wells may be moved or added based on field observations during test trenching.

Decontamination procedures and all monitoring well installation, development, and sampling procedures will be performed in accordance with the EPA *Standard Operating Procedures/Quality Assurance Manual,* site-specific Sampling and Analysis Plan and the Comprehensive Sampling and Analysis Plan.

LABORATORY ANALYSIS

Full CLP TAL/TCL protocol analyses are proposed for all samples collected, as well as selected physical parameter analyses (Physical Parameters — Soil and Physical Parameters — Water, see Site 11 *SAP).*

[Bold items enclosed in brackets denote changes to the draft version of the document.]

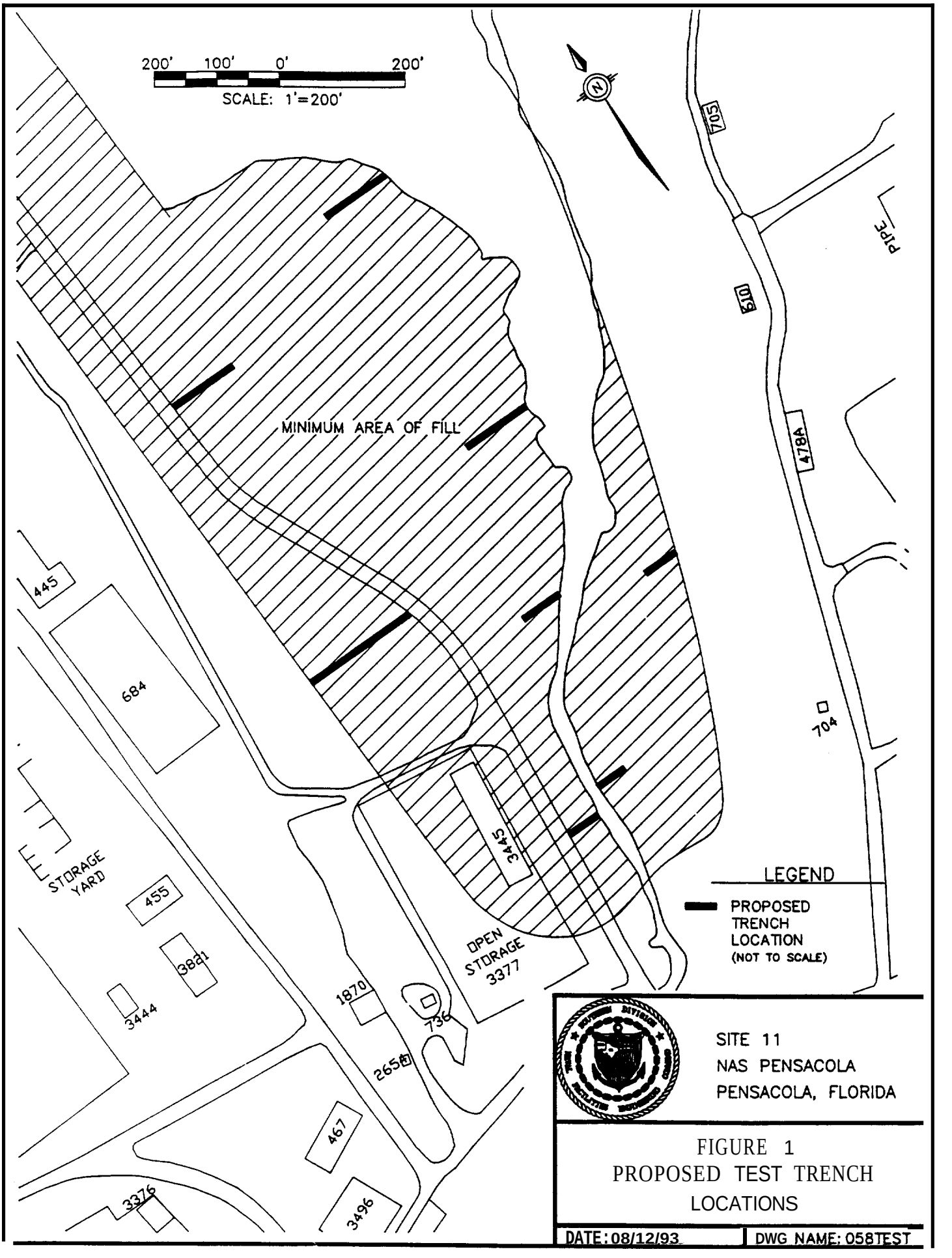

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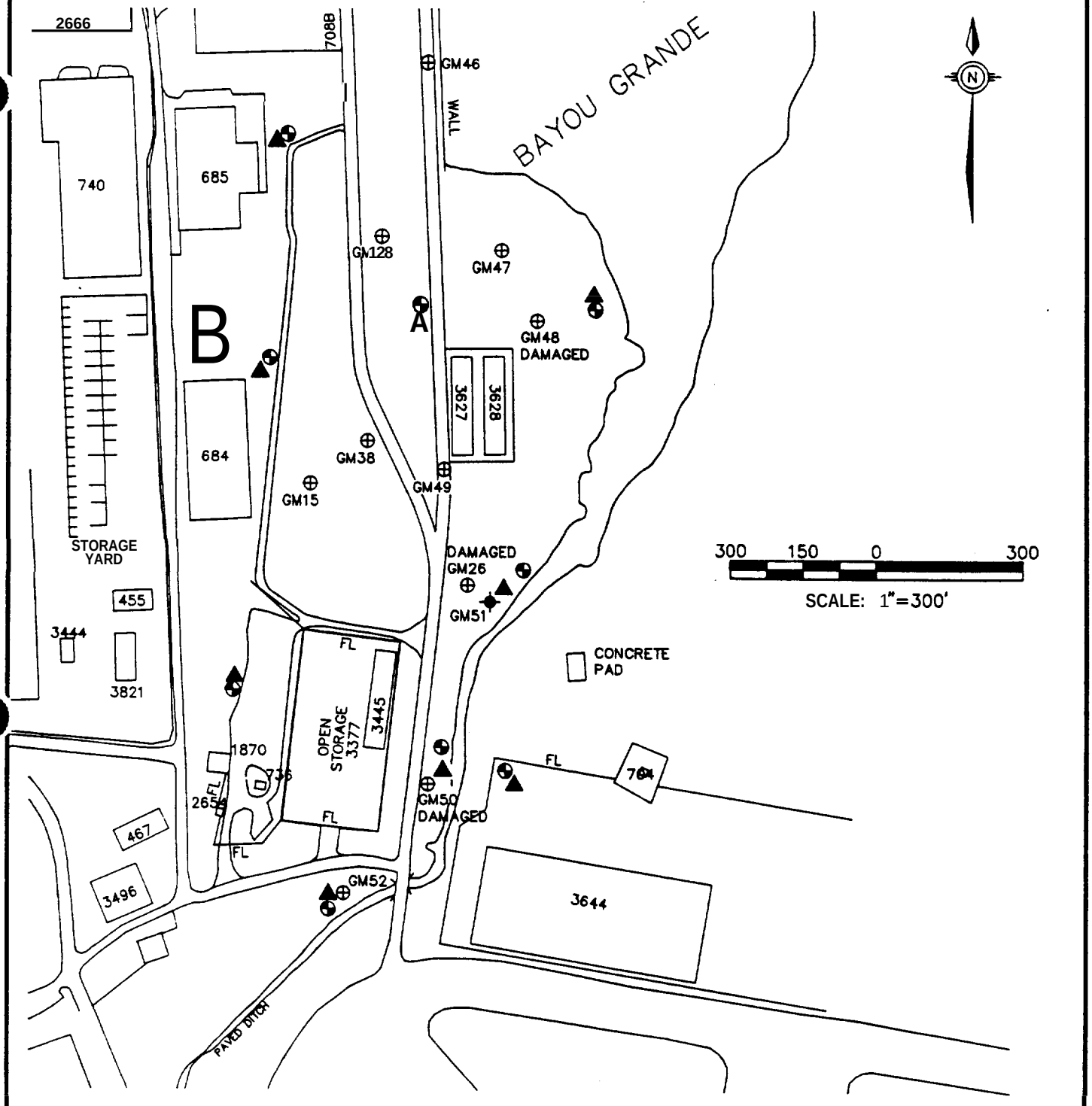
FIGURE 1
PROPOSED TEST TRENCH LOCATIONS

DATE: 08/12/93 | DWG NAME: 058TEST



LEGEND

- ▲ PROPOSED INTERMEDIATE MONITORING WELL
- e PROPOSED SHALLOW MONITORING WELL
- ✦ EXISTING PERMANENT DEEP MONITORING WELL
- ⊕ EXISTING PERMANENT SHALLOW MONITORING M L L

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FIGURE 2
PROPOSED MONITORING WELL LOCATIONS

DWG DATE: 06/28/93 | DWG NAME: 058SIT11