

P & D ENVIRONMENTAL

A Division of Paul H. King, Inc.
4020 Panama Court
Oakland, CA 94611
(510) 658-6916

November 18, 1999
Work Plan 0221.W1

Mr. Scott Seery
Alameda County Department of Environmental Health
1131 Harbor Parkway
Alameda, CA 94502

SUBJECT: SUBSURFACE INVESTIGATION WORK PLAN
Lands of Chiu and Chang
2497 and 2507 Grove Way
Castro Valley, California

Dear Mr. Seery:

P&D Environmental, a division of Paul H. King, Inc. (P&D), is pleased to present this work plan for the drilling of twelve soil borings and the collection of one soil and one groundwater sample from each boring. The twelve soil and groundwater samples will be collected to determine the extent of petroleum hydrocarbons in soil and groundwater in the vicinity of the former UST system at the subject site. A Site Plan showing the proposed boring locations is attached as Figure 1.

All work will be performed under the direct supervision of an appropriately registered professional. This work plan is prepared in accordance with guidelines set forth in the document "Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites" dated August 10, 1990 and "Appendix A - Workplan for Initial Subsurface Investigation" dated August 20, 1991.

BACKGROUND

Based upon site history summaries prepared by others, it is P&D's understanding that from 1955 to 1985, the subject site was occupied by Cottage Bakery. Records indicate that one 10,000 gallon capacity underground storage tank (UST) was installed at the site in 1955. The property was acquired by Cliff Sherwood and subsequently subdivided. Records show that the UST was removed in 1986. Eventually, the western portion of the property was purchased by Tony Marquez, and the eastern portion of the property was purchased by Mr. Wilson Chiu and Ms. Meranda Chang. Review of maps for the site indicate that the UST and dispenser were located in the immediate vicinity of the new property line, with the UST located on the western portion and the dispenser located on the eastern portion.

The scope of work set forth in this work plan was determined during a site meeting on October 14, 1999 with Mr. Scott Seery of the Alameda County Department of Environmental Health (ACDEH), Ms. Chang, and other parties associated with the former Underground Storage Tank (UST) system for the subject property.

SCOPE OF WORK

In order to collect soil and groundwater samples, P&D will perform the following tasks:

- o Regulatory agency coordination, including permitting for drilling of twelve soil borings.
- o Health and safety plan preparation.
- o Client and contractor (driller and laboratory) coordination.
- o Soil boring oversight.
- o Collection of one soil sample and one groundwater sample from each borehole.
- o Arrange for sample analysis.
- o Report preparation documenting collection of soil and groundwater samples and the laboratory analytical results.

ENVIRONMENTAL
PROTECTION
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Each of these is discussed below in detail.

Permitting and Regulatory Coordination

A permit will be obtained for the installation of the soil borings and Underground Service Alert will be notified for underground utility location. In addition, notification will be provided to the ACDEH prior to drilling.

Health and Safety Plan Preparation

A health and safety plan will be prepared for the scope of work identified in this work plan.

Client and Contractor Coordination

Following County approval of this work plan, field activities will be scheduled with the County, client, drillers, and the laboratory.

Soil Boring Oversight and Sample Collection

A total of twelve soil borings, designated as borings B1 through B12, will be drilled to total depths of approximately 25 feet. The borings will be drilled using GeoProbe technology. The proposed locations of the soil borings are shown on the attached Site Plan, Figure 1. Soil samples will be collected at a minimum of five foot intervals for logging purposes. The soil from the borings will be logged in the field in accordance with standard geologic field techniques and the Unified Soil Classification System. All soil samples from the boreholes will be evaluated with a Photoionization Detector (PID). One soil and one groundwater grab sample will be collected from each borehole for laboratory analysis. The soil sample collected from each borehole for laboratory analysis will be collected from the 15 foot depth, or from the depth exhibiting the highest PID reading in a given borehole. All drilling and sampling equipment will be cleaned with an Alconox solution followed by a clean water rinse prior to use in each borehole. Following completion of sample collection activities, the boreholes will be filled with neat cement grout. Any soil or water generated during drilling will be stored in drums at the site pending characterization and disposal.

Arrange for Sample Analysis

All of the soil and groundwater samples will be analyzed on a normal (five working day) turn around basis at a State-approved hazardous waste testing laboratory. Each sample will be analyzed for TPH-Diesel, TPH-Gasoline, BTEX and MTBE. MTBE analysis will be performed by EPA Method 8020.

Report Preparation

Upon receipt of the laboratory analytical results, a report will be prepared. The report will document soil and groundwater sample collection and sample results. The report will include a site plan showing the drilling locations, tables summarizing the sample results, and the stamp of an appropriately registered professional.

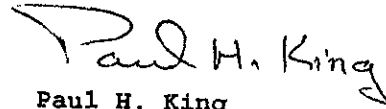
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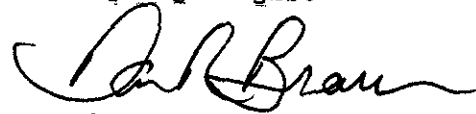
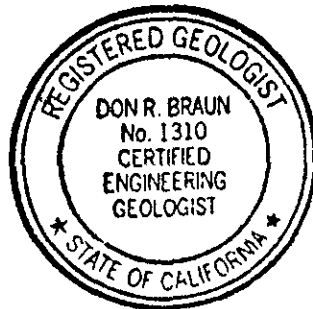
Should you have any questions, please do not hesitate to contact us at
(510) 658-6916.

Sincerely,

P&D Environmental



Paul H. King
Hydrogeologist



Don R. Braun
Certified Engineering Geologist
Registration No.: 1310
Expires: 6/30/00

Attachments: Site Plan (Figure 1)

PHK/gmb
0221.W1

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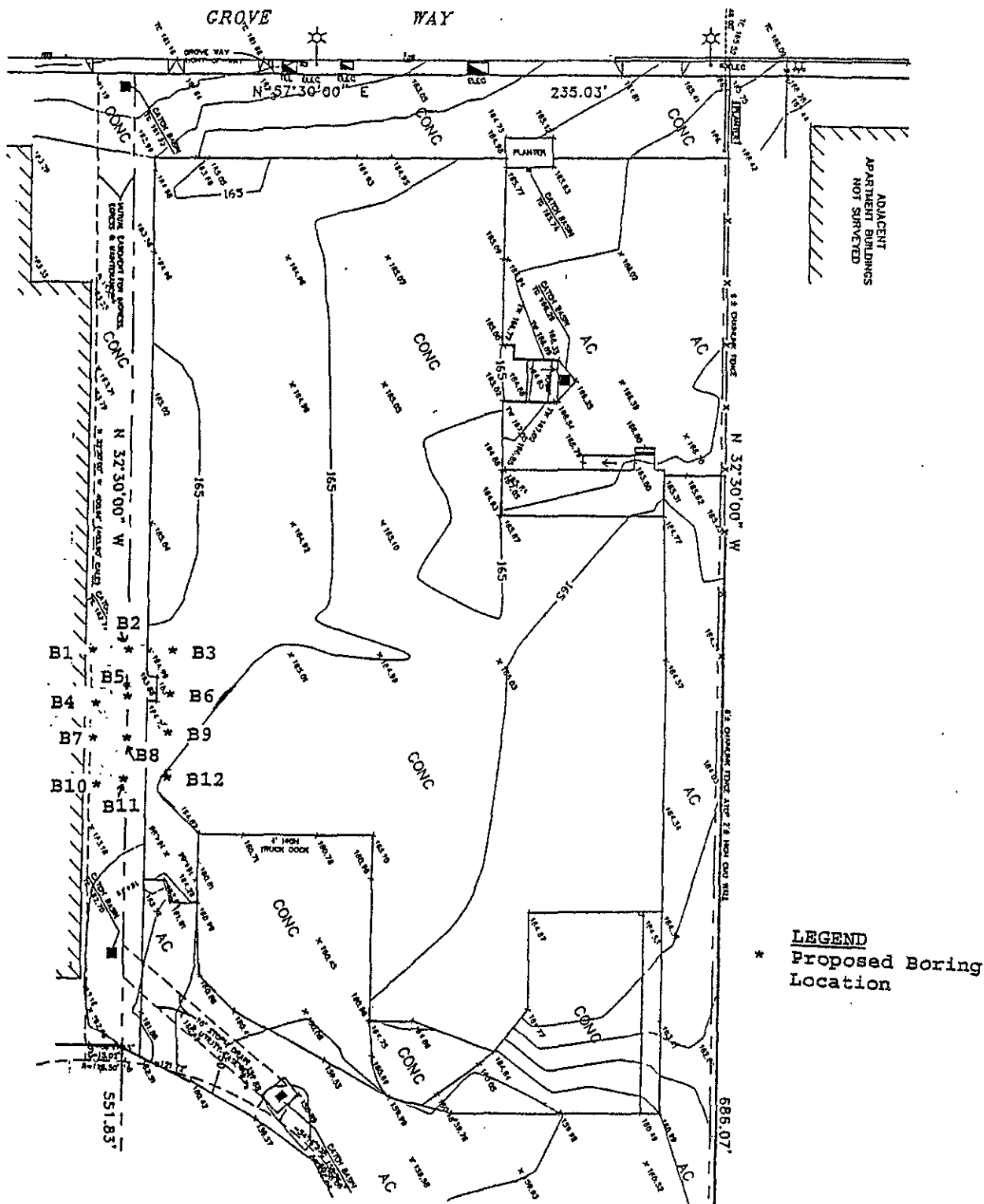
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Base Map From:
Center Line Land Surveyors
Livermore, California
August, 1999 Land Title Survey

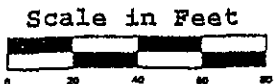


Figure 1
SITE PLAN
Lands of Chiu and Chang
2497-2507 Grove Way
Castro Valley, California

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FAX TRANSMITTAL COVER SHEET

Date: 11/19/99 Job #: _____

To: Scott Seery

Company: ACDEM

From: Paul H. King
P&D ENVIRONMENTAL

Number of pages in this transmittal, including this cover sheet: 4

SUBJECT: 2497/2507 Grove Way, Castro Valley

MESSAGE: Work Plan 0221.W1

Scott,

Please let me know if you have any
questions

- Paul

If transmittal is incomplete, please call (510) 658-6916.
P&D Environmental fax number: (510) 658-9074.

DESTINATION FAX NUMBER: 337-9335

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approved
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Fringe
at

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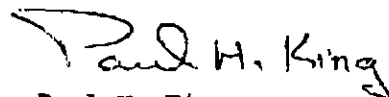
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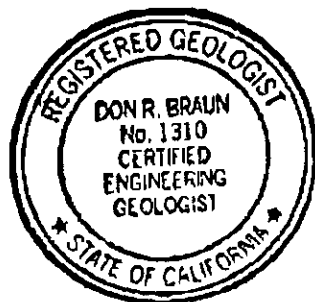
P&D Environmental



Paul H. King
Hydrogeologist

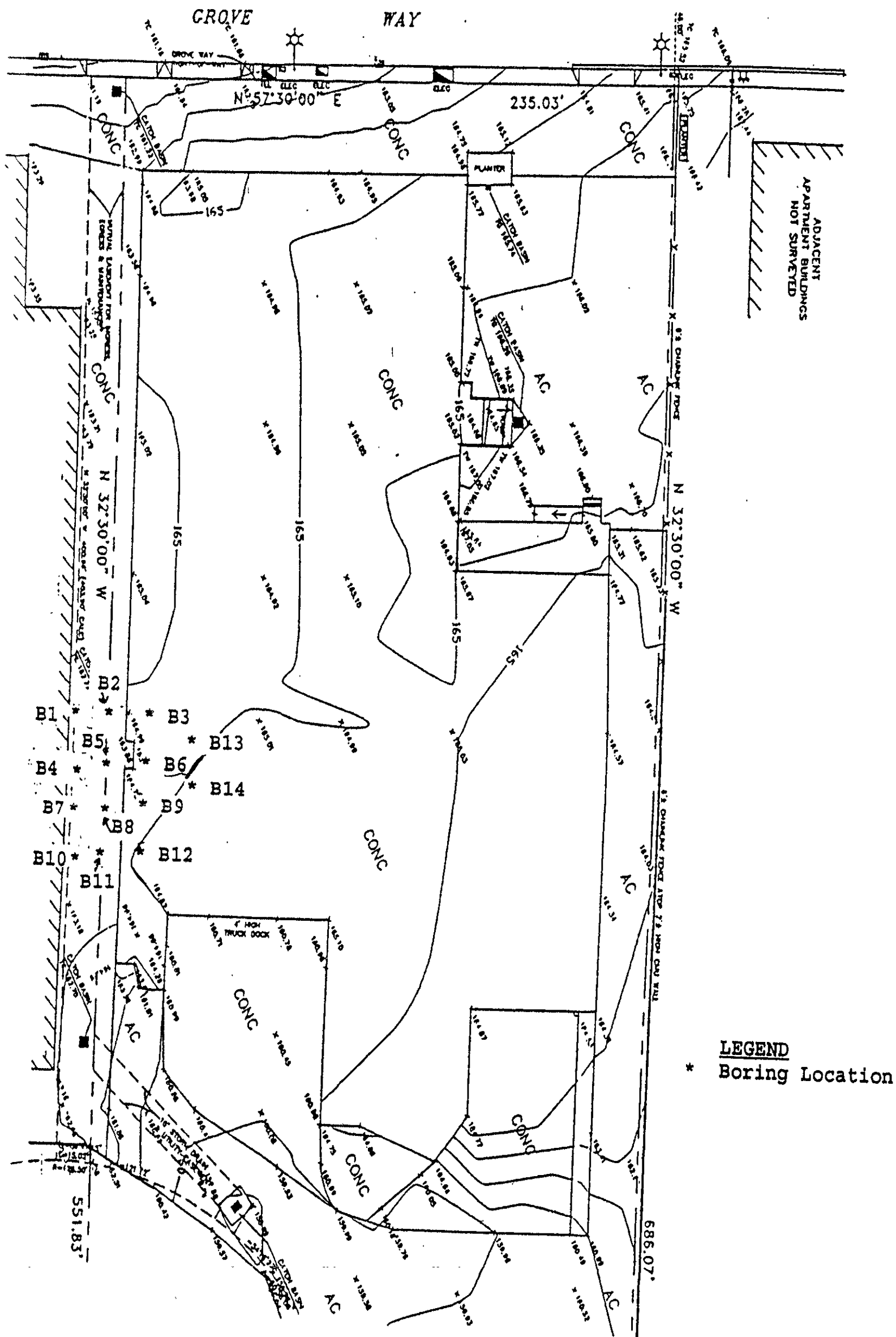


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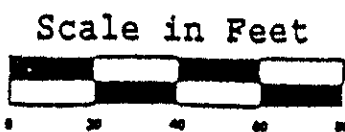


Figure 2
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