

April 9, 1998
Work Plan 0164.W1

ENVIRONMENTAL
PROTECTION

98 APR 28 PM 2:45

Ms. Susan Hugo
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502

RE: CONTAMINATION MITIGATION WORK PLAN
Hardage Suite Hotels, Inc. Site
Intersection of Shellmound Street and Powell Street
Emeryville, California

Dear Ms. Hugo:

This work plan addresses the management and monitoring of contaminated soil and groundwater, which may be encountered during development of the subject property. The subject property is located at the northeast corner of the intersection of Shellmound Street and Powell Street in Emeryville. The development of the property consists of the construction of a multi-story hotel. Soil which has been identified during previous subsurface investigations as containing organic and inorganic contaminants may be encountered while excavating for the construction of structure footings and utility trenches.

This work plan includes the following elements.

- Health and safety plan.
- Soil contamination management plan.
- Groundwater contamination management plan.

A Site Location Map is attached as Figure 1, and a Site Plan is attached as Figure 2.

BACKGROUND

A summary of investigations performed at the subject site is provided in RGA's "Environmental Site Assessment Update Report" dated December 11, 1997.

HEALTH AND SAFETY PLAN

A health and safety plan will be prepared and implemented for all site workers who may be exposed to contaminated soil. The health and safety plan will address all known or suspected



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Emeryville, CA 94608

510 547 7771
FAX 547 1983

contaminants which may be encountered in soil or groundwater at the site. The plan will include the following information.

- The types of contaminants which may be encountered.
- The physiological effects and symptoms of exposure to the contaminants.
- The anticipated locations of the contaminants.
- Engineering and administrative procedures to minimize exposure to contaminants.
- Contaminant monitoring requirements.
- Personal protective equipment requirements.
- Equipment and personnel decontamination procedures.
- Procedures for implementation and administration of the plan.

SOIL CONTAMINATION MANAGEMENT PLAN

Soil will only be excavated for construction purposes, such as construction of structural footings or digging of utility trenches. Soil excavated during construction activities will be stockpiled on site on a sheet of visqueen and covered with visqueen to prevent runoff during rain events or to minimize dust generation. Exposed soil will be wetted during excavation activities to minimize dust generation.

Composite soil samples consisting of four discrete samples will be collected for each 100 cubic yards of stockpiled soil for characterization purposes. The samples will be collected in the following manner. Four evenly spaced locations will be selected for each 100 cubic yards of soil. The stockpile will be excavated to a depth of approximately one to two feet at each location, and a brass tube will be filled with soil at each location. After sample collection, the ends of the brass tubes will be sealed in aluminum foil, covered with plastic endcaps, labeled, and placed in ziplock baggies. The capped brass tubes were then placed into a cooler with ice pending delivery to a State-certified hazardous waste testing laboratory. Chain of custody procedures were followed for all sample handling.

The composite samples will be analyzed for the following constituents.

- Total Recoverable Petroleum Hydrocarbons (EPA Method 418.1)
- BTEX (EPA Method 8020)
- CAM 17 Metals, total concentrations (using EPA-approved methods).

*change to
TPH fingerprinting*

Based on the sample results, the stockpiled soil will be evaluated for use as fill material at the site. In the event that hazardous waste concentrations are encountered, the soil which exhibited the hazardous waste concentrations will be removed from the site as hazardous waste to a hazardous waste disposal facility.

GROUNDWATER CONTAMINATION MANAGEMENT PLAN

Groundwater removed during construction activities eg. for dewatering will be stored in holding tanks and analyzed prior to discharge to either the sanitary sewer or the storm drain. The samples will be analyzed for constituents and at frequencies required by the permitting agency for discharge.

A total of six existing groundwater monitoring wells, designated as ATD1 through ATD6, have been identified at the site. The wells were installed during previous subsurface investigations. Review of site conditions during a site visit in November, 1997 revealed a hole filled with concrete at the location of one of the wells identified as ATD1. During the site visit, two of the wells (ATD2 and ATD3) were not located because of the presence of soil which had been spread on the central and eastern portion of the site.

Comparison of the planned area of construction for development of the site with the location of the existing wells shows that well ATD5 is located within the footprint of the planned building.

Prior to the beginning of construction at the site, well ATD5 will be permitted and destroyed by a properly licensed contractor. Well ATD5 will be replaced with a well of similar construction designated as ATD5A at a location approximately 10 to 15 feet to the west of the present ATD5 location.

Soil covering the ATD2 and ATD3 well locations will be removed to locate the wells. In the event that the wells are not located, replacement wells designated as ATD2A and ATD3A of similar construction will be installed at the ATD2 and ATD3 locations.

The groundwater monitoring network for the site (six wells) will be monitored and sampled for four quarters. Quarterly monitoring and sampling procedures will be as follows. Prior to sampling, the monitoring wells will be purged of a minimum of three casing volumes of water, or until the wells have been purged dry. During purging operations, the field parameters of electrical conductivity, temperature and pH will be monitored. Once the field parameters are observed to stabilize, and a minimum of three casing volumes have been purged or the wells have been purged dry and partially recovered, water samples will be collected using a clean Teflon bailer.

The water samples will be transferred to 40-milliliter glass Volatile Organic Analysis (VOA) vials and 1-liter amber glass bottles which will be sealed with Teflon-lined screw caps. The VOA vials will be overturned and tapped to assure that no air bubbles are present.

The VOA vials and bottles will then be transferred to a cooler with ice, until they are transported to a State-certified hazardous waste testing laboratory. Chain of custody documentation will accompany the samples to the laboratory.

The groundwater samples will be analyzed for TPH-Diesel and Benzene, Toluene, Ethylbenzene and Xylenes (BTEX). Monitoring and sampling reports will be prepared and submitted to the Alameda County Department of Environmental Health on a quarterly basis. After four quarters, the sample results will be evaluated to determine if contaminant concentrations have changed. If there is no evidence of increasing contaminant concentrations, case closure will be requested.

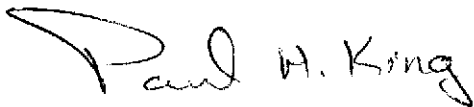
Should you have any questions or comments, please do not hesitate to contact us at (510) 547-7771.

Sincerely,

RGA Environmental, Inc.



Karin Schroeter
Project Manager



Paul H. King
California Registered Geologist
Registration No.: 5901
Expiration Date: 12/31/99



PHK
0164.W1

Attachments: Figures 1 and 2

cc: Ms. Judith S. Fabion, Hardage Suite Hotels, Inc.

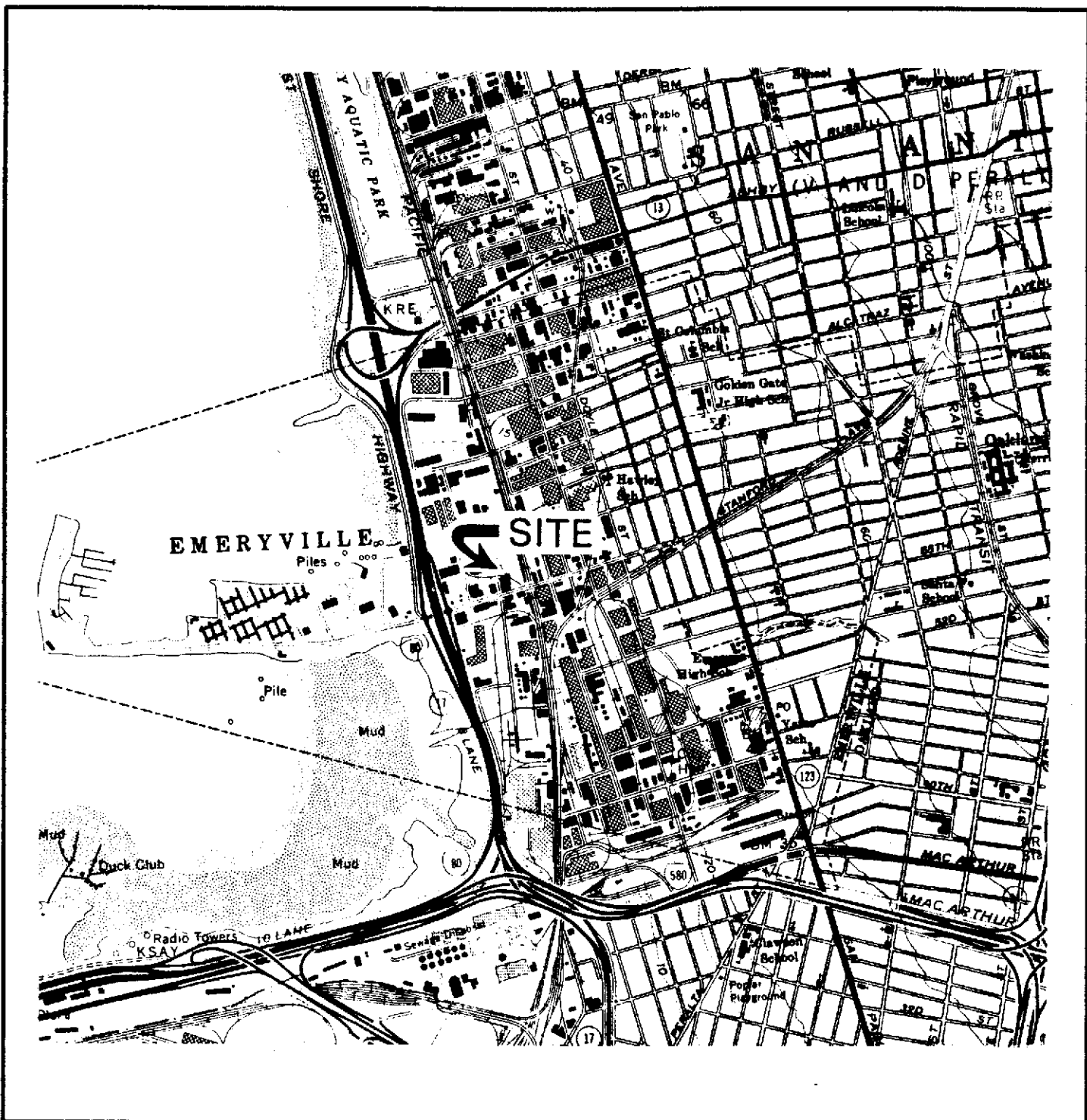
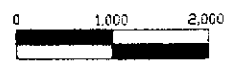


FIGURE 1
 SITE LOCATION MAP
 Hardage Suite Hotels, Inc.
 Intersection of Shellmound and Powell Street (Northeast corner)
 Emeryville, California

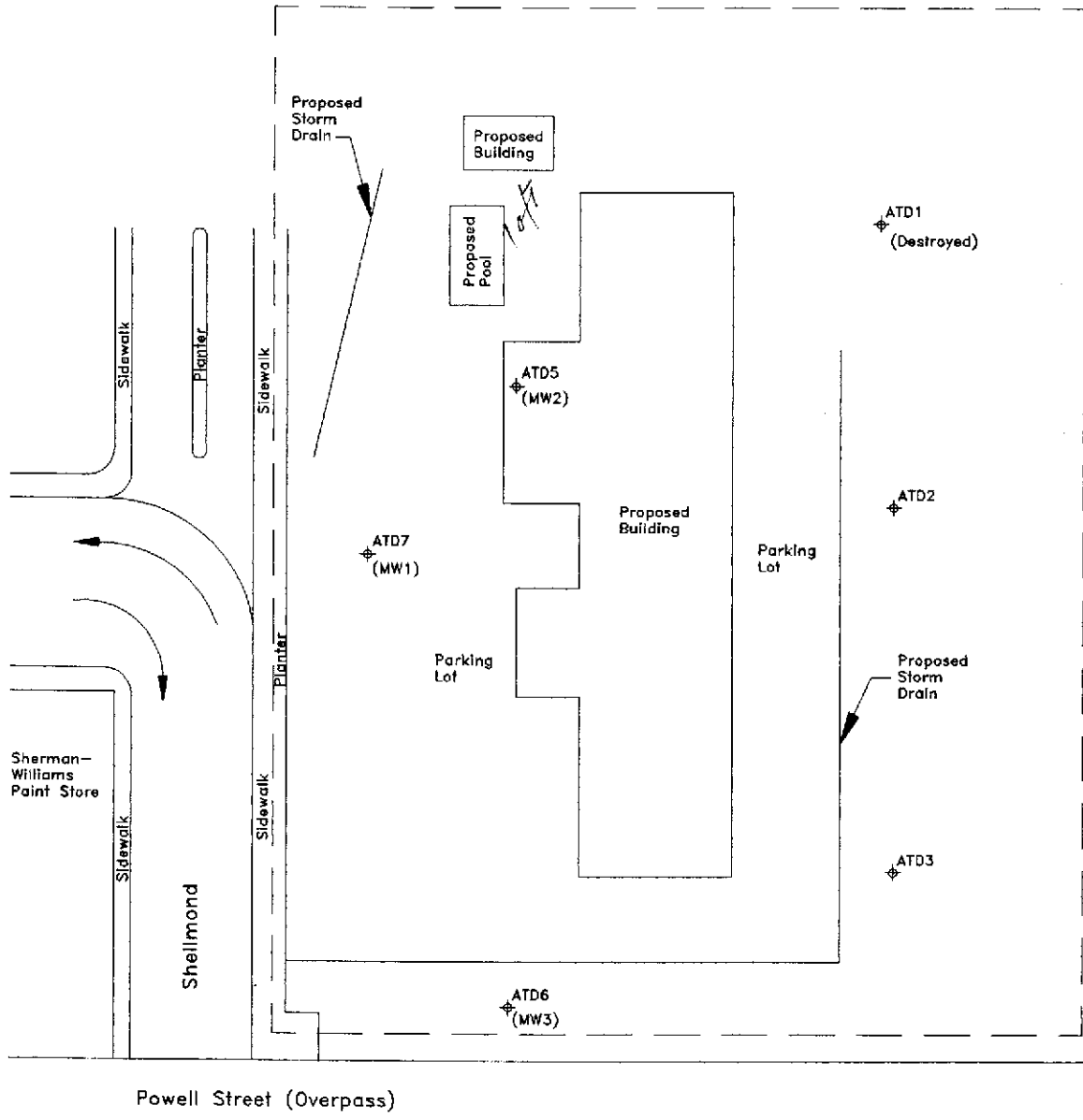


Source:
 U.S. Geological Survey
 Oakland West, California
 7.5 Minute Quadrangle
 Photorevised, 1980

RGA Environmental, Inc.
 1260 45th Street
 Emeryville, California 94608



SCALE IN FEET



LEGEND

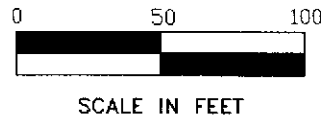
- ⊕ Monitoring Well Location
- Property Boundary

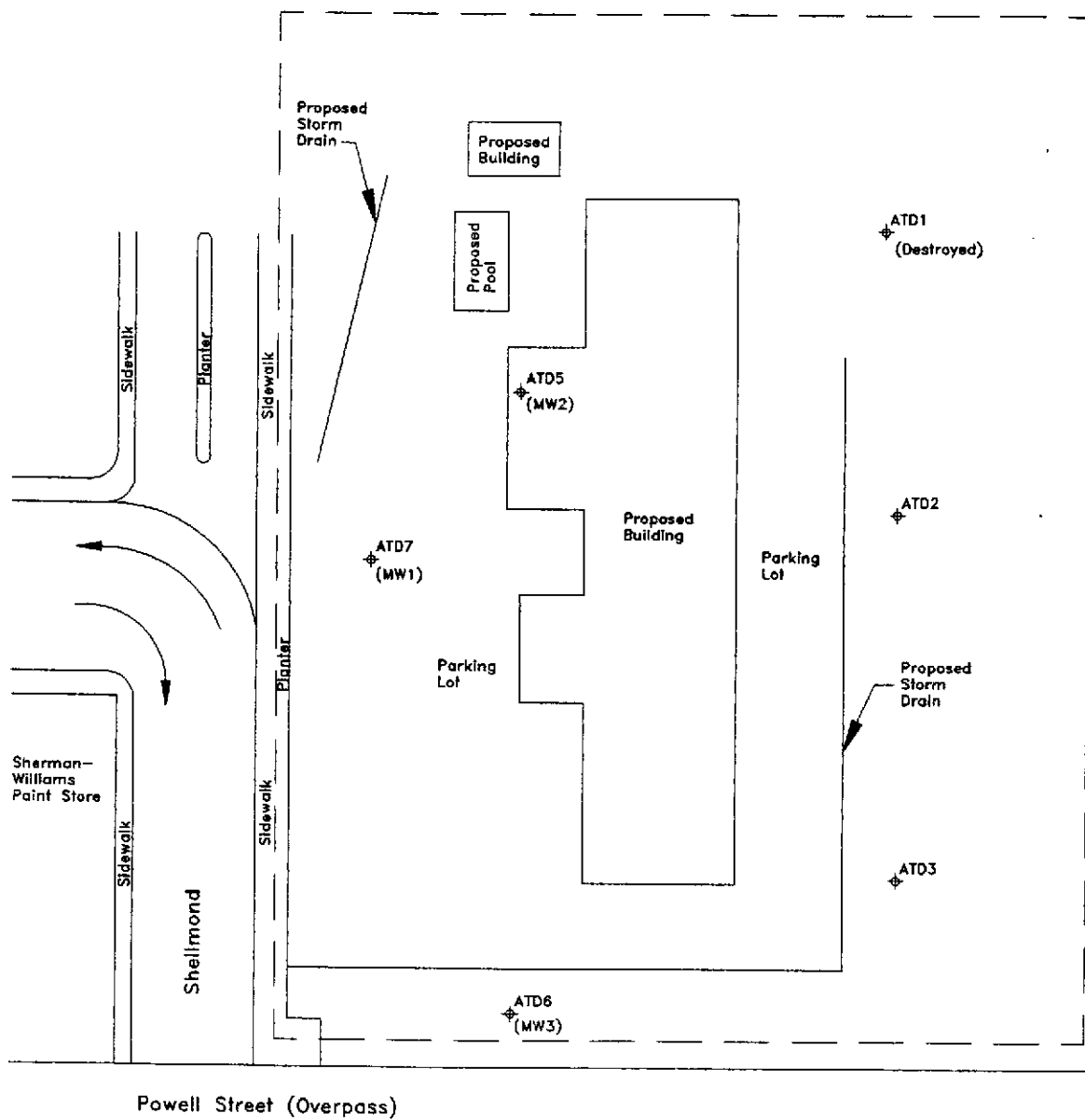
FIGURE 2
SITE PLAN
 Hardage Suite Hotels, Inc.
 Intersection of Shellmound and Powell Street (Northeast Corner)
 Emeryville, California



Base Map From:
 RGA Environmental Inc.
 November, 1997
 Mission Engineers, Inc.
 August 6, 1991
 Applied GeoSciences
 February, 1992
 (BJ10640055)

RGA Environmental, Inc.
 1260 45th Street
 Emeryville, California 94608





LEGEND

- ⊕ Monitoring Well Location
- — Property Boundary

FIGURE 2
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