2740 98th Avenue
Oakland, CA 94605

Freeway
Station & Service

(510) 562-4505

Refer Dec, 5, 1995

APr, 26, 96

TO: ALAMEDA COUNTY HEALTH CARE SERVICE AGENCY

Dear ms. Juliet Shin

enclosed is a copy of the work plan, quarterly Groundwater monitoring from soil Tech engineering and Phase one Preperd by northwest envirocon inc on june 1992 for my site at 2740 98th Ave for your approval.

Sincerely

K. Ghofroni

ENVIRONMENTAL
PROTECTION
96 APR 29 PM 2:55

SOIL TECH ENGINEERING

Environmental and Geological Engineers

1761 JUNCTION AVENUE, SAN JOSE, CA 95112 (408) 441-1881

April 10, 1996

File No. 7-93-556-SI

Mr. Kiyoumars Ghofrani
Freeway Station and Service
2740 98th Avenue
Oakland, California 94605

SUBJECT: WORK PLAN FOR ADDITIONAL SITE ASSESSMENT FOR THE PROPERTY Located at 2740 98th Avenue, in Oakland, California

Dear Mr. Ghofrani:

This letter addresses three concerns raised by Ms. Juliet Shin in her letter of December 5, 1995.

1) Request for any information we have regarding Northwest Envirocon, Inc.'s report dated July 22, 1992.

2) Further rationale to explain how our proposed additional monitoring wells would attempt to define the lateral extent of soil contamination and would confirm the groundwater gradient at the site.

3) That the monitoring well proposed to replace the existing 7" diameter production well, W-4, be drilled to the same depth and screened in the same interval.

Regarding the first concern, we have attached a copy of the Phase I Environmental Site Assessment for 2740 98th Avenue, in Oakland, California, dated June 22, 1992, prepared by Northwest Envirocon, Inc.

The second concern is that we provide rationale for our proposal to install additional groundwater monitoring wells. Our proposal for installing three additional monitoring wells is to define groundwater gradients on the site and to monitor known areas of hydrocarbon contamination. The data gathered from our Preliminary Site Assessment in April 1994, our Environmental Site Assessment in March 1995, and subsequent Quarterly Groundwater Monitoring in February 1995, July 1995, October 1995 and January 1996, indicates that shallow groundwater beneath the site rises and falls approximately 11 feet in well STMW-1 and 16 feet in well W-4 with seasonal rainfall. In all cases, groundwater is no deeper than 18 feet below ground surface where it is encountered. Currently, two on-site wells have penetrated the groundwater table. These wells are STMW-1, apparently up gradient of the site in the southwest corner of the site, and the existing unregistered 7-inch diameter production well, W-4, on the east side of the site. The two wells to the north, STMW-2, and to the south, STMW-3, are currently dry, and they are screened approximately 8 to 16 feet below the top of groundwater encountered in wells STMW-1 and W-4. Groundwater elevations in wells STMW-1 and W-4 indicate that the local gradient is to the east but two points do not define a gradient. Therefore, additional monitoring wells are necessary to provide additional data of groundwater elevations and gradient.

Groundwater contamination has been detected at two locations at the site. Total Petroleum Hydrocarbons as gasoline (TPHg), Benzene, Toluene, Ethylbenzene and Total Xylenes (BTEX) were detected in a grab water sample collected from soil boring B-1 during our preliminary site assessment in 1994. The second location of groundwater contamination was the existing production well W-4. TPHg, toluene, Ethylbenzene and Total Xylenes were detected in a groundwater sample collected from Well W-4 in July 1995. The depth of well W-4 casing was measured as 19 feet below ground surface during our first sampling event in February 1995. Groundwater rose as high as 2 feet below ground surface in well W-4 during our latest sampling event.

Our proposed monitoring wells STMW-4, STMW-5 and STMW-6 are intended to monitor groundwater contamination in the apparent downgradient direction of the underground storage tanks and in the area of soil boring B-1 as well as assist in defining groundwater gradients. Our proposed monitoring well STMW-6 is designed to monitor groundwater in the vicinity of waste oil tank with a properly designed monitoring well intended to replace the existing 7-inch unregistered well (W-4).

In addition, Ms. Shin expressed concern for defining the extent of soil contamination at the site. The soil samples were collected from soil boring B-1 during our preliminary site assessment. Therefore, we propose to send only soil samples collected above the top of groundwater from the two proposed wells to a lab for analysis for TPHg and BTEX and to send all samples collected

from the monitoring well proposed to replaced the existing well W-4 to a lab for the same analysis.

Groundwater samples collected from well W-4 in October 1995 and most recently in January 1996 did not detect TPHg or BTEX. Therefore well STMW-6 will assist to verify that the contaminant plume migrate and assist in determining groundwater gradient.

Light yellowish-brown fat clay, probable Temescal formation, was encountered in the borings for STMW-1 and STMW-2 on the west side of the site at an elevation of 91 feet. A similar fat clay was encountered in the boring for STMW-3 to the east at an elevation of 88 feet. STE would expect the top of this unit to slope to the east. The groundwater table seems to fluctuate both above and below the top of this unit with the rain seasons. It does not appear to be confined. Groundwater was encountered at 7 feet below ground surface during drilling of the soil boring for STMW-1 and had not risen, as would be expected, if the aquifer were confined, when the monitoring well was sampled approximately two week latter. The shallow groundwater at the site does seem to be limited to a relatively narrow east-west trending zone across the middle of the site. Petroleum hydrocarbon contamination was detected in the eastern half of this zone on the site, and the plume is apparently being reduced as petroleum hydrocarbons and have not been detected in the existing production well W-4 in the last two quarterly sampling events.

why?

why?

what does this really tell us?

As for Ms. Shin's third concern, we intend to install the replacement well for the abandoned production well W-4 to a depth of 20 feet. Well W-4's depth is measured as 19 feet. In order to provide a surface seal for the replacement monitoring well, we propose to screen from 5 feet to 20 feet below ground surface and to provide a minimum seal of approximately 4 feet. If the construction of well W-4 varies significantly from what we expect, the replacement can be constructed to account for that difference.

In light of the December 8, 1995, letter from Mr. Walt Pettit, the Executive Director of the State Water Resources Control Board, we see this site as a low risk groundwater contamination case. The maximum depth to impacted groundwater is less than 50 feet. Local domestic water is provided by East Bay Municipal Utilities. We propose to properly abandon the known production well on the site and allow passive bio-remediation to act as the primary remediation tool for the site.

If you have any questions or require additional information, please contact our office at (408) 441-1881.

Sincerely,

SOIL TECH ENGINEERING, INC.

ROBERT BAKER
PROJECT GEOLOGIST

LAWRENCE KOO, P. E.
C. E. #34928

FRANK HAMEDI-FARD
GENERAL MANAGER

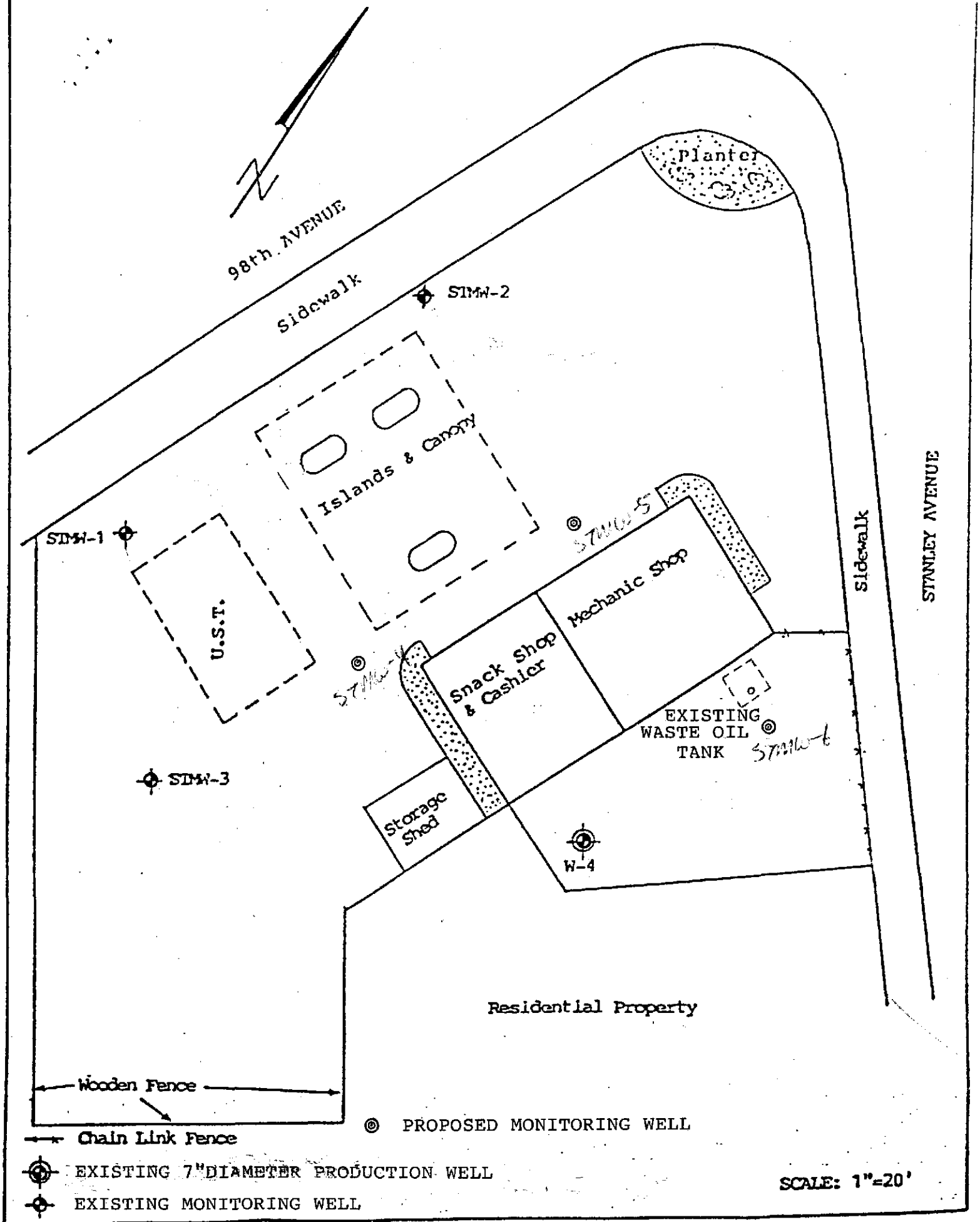

Figure 2

SOIL TECH ENGINEERING, INC.

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