



RO 2444

76 Broadway
Sacramento, CA 95818
phone 916.558.7676
fax 916.558.7639

July 22, 2005

Alameda County
JUL 26 2005
Environmental Health

Mr. Don Hwang
Alameda County Health Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Re: **Document Transmittal**
Fuel Leak Case
76 Station #7124
10151 International Blvd.
Oakland, CA

Dear Mr. Hwang:

Please find attached Secor's *Addendum to Workplan for Additional Off-Site Monitoring Well Installation*, dated 7/21/05 for the above referenced site. I declare, under penalty of perjury, that to the best of my knowledge the information and/or recommendations contained in the attached proposal or report is true and correct.

If you have any questions or need additional information, please call me at (916) 558-7666.

Sincerely,

Thomas H. Kosel
Site Manger, Risk Management and Remediation
ConocoPhillips
76 Broadway, Sacramento, CA 95818

Attachment

cc: Tom Potter, Secor



SECOR
INTERNATIONAL
INCORPORATED

www.secor.com
3017 Kilgore Road, Suite 100
Rancho Cordova, CA 95670
916-861-0400 TEL
916-861-0430 FAX

July 22, 2005

Mr. Don Hwang
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Alameda County
JUL 26 2005
Environmental Health

RE: **Addendum to Workplan for Additional Off-Site Monitoring Well Installation**
Former 76 Service Station No. 7124
10151 East 14th Street, Oakland, CA
SECOR Project No.: 77CP.67124.01.0001

Dear Mr. Hwang:

SECOR International Incorporated (SECOR) is pleased to submit this Addendum to the October 14, 2004 *Workplan for Additional Off-Site Monitoring Well Installation* to Alameda County Department of Environmental Health (ACDEH) on behalf of ConocoPhillips. This addendum is to further investigate subsurface conditions beneath former 76 Service Station No. 7124, located at 10151 East 14th Street, Oakland, California (Figure 1). This work plan was prepared in accordance with the ACDEH letter dated April 12, 2005 (Attachment 1). The results of the proposed investigation will be needed to determine appropriate locations and screening intervals for potential future monitoring wells.

BACKGROUND AND PREVIOUS INVESTIGATIONS

The Site is currently an active service station located on the northwest corner of E. 14th Street (also known as International Boulevard) and 102nd Avenue in Oakland, California. Site facilities include three underground storage tanks (USTs), and associated piping and fuel dispensers.

On March 22, 2000, SECOR supervised Balch Petroleum (Balch) of Milpitas, California in the removal and replacement of product lines and dispensers. Soil samples collected from beneath the dispensers and product lines revealed the presence of total petroleum hydrocarbons as gasoline (TPHg) at a maximum concentration of 6,200 milligrams per kilogram (mg/kg), methyl tertiary-butyl ether (MTBE) at a maximum concentration of 120 mg/kg, and benzene at a maximum concentration of 7.4 mg/kg. Excavation and sampling activities were observed and approved by Inspector Gomez of the City of Oakland Fire Services Agency (COFSA).

On March 27, 2000, SECOR observed the over-excavation of approximately 60 cubic yards of soil from the beneath those portions of the dispensers and product lines where soil samples with elevated concentrations of petroleum hydrocarbons were located. Areas measuring approximately 8-10 feet long by 8-10 feet wide were over-excavated to an approximate depth of 8 feet below ground surface (bgs) in each of these areas. Additional over-excavation in these areas was not possible due to their proximity to the footings of the service station canopy. TPHg was detected in two of the three samples at a maximum

Mr. Don Hwang
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Page 2

concentration of 108 mg/kg; benzene was detected in one of the three samples at a maximum concentration of 0.162 mg/kg; and MtBE was detected in each of the three samples at a maximum concentration of 43.8 mg/kg. Lead was not detected at or above laboratory reporting limits in any of the soil samples.

During February, 2002, SECOR supervised the installation of four on-site groundwater monitoring wells. Prior to well installation, the borings were advanced to 26.5 feet bgs, and subsurface soil samples were collected every five feet. Soil samples were analyzed for gasoline range organics (GRO); benzene, toluene, ethyl-benzene and total xylenes (BTEX); and the fuel oxygenates tertiary-butyl alcohol (TBA), MTBE, di-isopropyl ether (DIPE), ethyl-tertiary-butyl ether (ETBE), tertiary-amyl methyl ether (TAME), 1,2-dichloroethane (1,2-DCA), ethylene dibromide (EDB) and ethanol by Method 8260B. The maximum reported concentrations were 42 mg/kg GRO, 0.36 mg/kg ethyl-benzene, 0.26 mg/kg total xylenes, and 1.2 mg/kg MtBE.

The Site has been monitored and sampled since 3rd quarter, 2002. Currently, four wells are monitored quarterly (MW-1 through MW-4). Samples are analyzed for TPHg, BTEX, and the fuel oxygenates TBA, MTBE, DIPE, ETBE, TAME, 1,2-DCA, EDB and ethanol by EPA method 8260B.

PROPOSED SCOPE OF WORK

The proposed scope of work consists of seven primary tasks as described below.

Task 1 - Preliminary Field Activities

Prior to conducting the subsurface investigation, SECOR will prepare a Site-specific Health and Safety Plan (HASP) for use by personnel implementing the Work Plan. The HASP will address the proposed subsurface investigation activities, and a copy of the HASP will be available on Site at all times. The subcontractor(s) performing the field activities will be provided with a copy of the HASP prior to initiating work.

SECOR will obtain monitoring well/boring installation permits from the Alameda County Public Works (ACPW). Boring locations will be marked and Underground Service Alert (USA) will be notified at least 48 hours in advance of drilling. In addition, proposed boring locations will be cleared by a private utility locator, and boring locations will be hand-dug (e.g. hand augered) to five feet bgs before machine drilling is performed.

Task 2 – Advancement of Geoprobe® Borings

SECOR proposes to advance three new off-site borings (SB-1 through SB-3) at the locations shown on Figure 1 to further delineate the downgradient petroleum hydrocarbon contamination. The borings will be advanced to total depths of approximately 25 feet below ground surface (bgs). SB-1, SB-2 and SB-3 are intended to evaluate the downgradient (west to north-northwest) extent of MtBE and gasoline constituents detected in existing monitoring wells MW-3 and MW-4.

Task 3 – Soil and Groundwater Samplings From Borings

Soil sampling Each borehole will be advanced with a Geoprobe® rig to a maximum depth of 25 feet bgs. During drilling, soil samples will be collected at changes of lithology and at the soil/groundwater interface, at a minimum of 5 foot intervals. Soil encountered will be logged by a SECOR geologist under the direction of a State of California Registered Geologist. Soil samples will also be screened in the field for the presence of volatile organic compounds (VOCs) using a photoionization detector (PID). Soil samples will be selected for analysis based on visual observations, odors and PID readings. Selected soil samples will be analyzed for TPHg, BTEX, and the fuel oxygenates MtBE, EtBE, TAME, TBA, DIPE, EDB, 1,2-DCA and ethanol by EPA Method 8260. At a minimum, three soil samples per borehole will be analyzed for the above constituents. Field and laboratory procedures are presented as Attachment 3.

Grab groundwater Samples. Groundwater will be sampled in the borings using either a HydroPunch® sampling apparatus or by lowering a clean disposable bailer through the Geoprobe® rods and retrieving a sample of the formation water. Historical groundwater ranged from 12.83 to 18.66 feet bgs. Groundwater is anticipated to be at 12 to 15 feet bgs. Groundwater samples will be collected and decanted directly from bailers into laboratory supplied glassware. Samples will be sent under chain-of-custody procedures to a California State-certified laboratory. Select grab groundwater samples will be analyzed for TPHg, BTEX, and the fuel oxygenates MtBE, EtBE, TAME, TBA, DIPE, EDB, 1,2-DCA and ethanol by EPA Method 8260.

After drilling to the desired depth, the soil borings will be abandoned in place by pouring a neat cement grout mix into the borings and finishing the surface to match existing conditions.

Task 5 - Summary Report

Upon completion of the soil boring and water sampling activities described above, SECOR will prepare a letter report describing the methods and results of the investigation. The letter report will be submitted to ConocoPhillips and the ACDEH and will include tabulated analytical data, figures depicting subsurface conditions including soil and groundwater analytical results, and appendices containing laboratory reports and well completion and soil boring logs. The letter report will also include conclusions and recommendations for further work, if warranted.

Task 6 – Preferential Pathway Study

In accordance with the April 12, 2005 ACEH request, SECOR conducted a preferential pathway study of the site on June 3, 2005. SECOR subcontracted Cruz Brothers, an underground utility locating contractor, to conduct the study. During the course of work, Cruz Brothers looked for electrical (main power and miscellaneous power lines), sewer, water, communication and gas utilities that may be present underground at the site. Additionally, SECOR visited the City of Oakland's Community and Economic Development Agency to obtain assessor and elevation maps, and maps of the underground sewer

SECOR

Mr. Don Hwang
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system (Attachment 3). Finally, SECOR contacted East Bay Municipal Utility District (EBMUD) to determine the location and depth of the main water supply.

Underground utilities located on the property were identified as power (main and miscellaneous) lines, sewer lines, communication lines, and water lines. Although exact depth of each type of line was undetermined, they were all estimated to lie between 1.5 and 3 feet bgs, based upon signal readings from utility locating contractor's equipment. East Bay Municipal Utility District (EBMUD) was contacted via telephone to determine the location and depth of the main water lines located along 102nd and International Boulevard. According to EBMUD, water mains are identified on both sides of International and 102nd Avenue; however, they did not reveal the depths of the main water lines.

Based on review of the most recent quarterly and monitoring report and a historical review over the last five years, depth to water averages 15.74 feet bgs. Based on the depth to water and the historical groundwater gradients, it is unlikely that the identified utilities and associated utility trenches act as preferential pathways.

Task 7 – Well Survey

In the correspondence from April 12, 2005, ACEH requested that SECOR perform a well survey to locate wells within a quarter-mile radius of the site. On June 6, 2005, SECOR submitted a Well Completion Report Release Agreement to the ACEH for approval. Pending approval from the ACEH, SECOR will contact the Department of Water Resources (DWR) and do a complete survey of wells within the vicinity of the site.

SCHEDULE

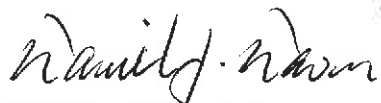
SECOR is prepared to initiate field activities upon approval of this Work Plan by the ACDEH. We anticipate that the project will require approximately 12 to 16 weeks to complete, after soil boring permit applications are approved by the ACDEH.

Should you have any questions or concerns regarding these activities, please feel free to contact the undersigned at (916) 861-0400.

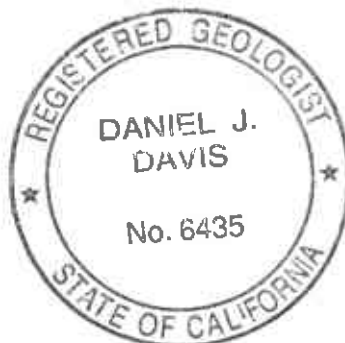
Sincerely,
SECOR International Incorporated



Thomas M. Potter
Project Scientist



Daniel J Davis, R.G.
Senior Geologist



Mr. Don Hwang
July 22, 2005
Page 5

Attachments

Figure 1 – Site Map with Proposed Soil Boring Locations

Figure 2 – Site Map with Utility Locations

Figure 3 – Generalized Geologic Cross-Section A-A'

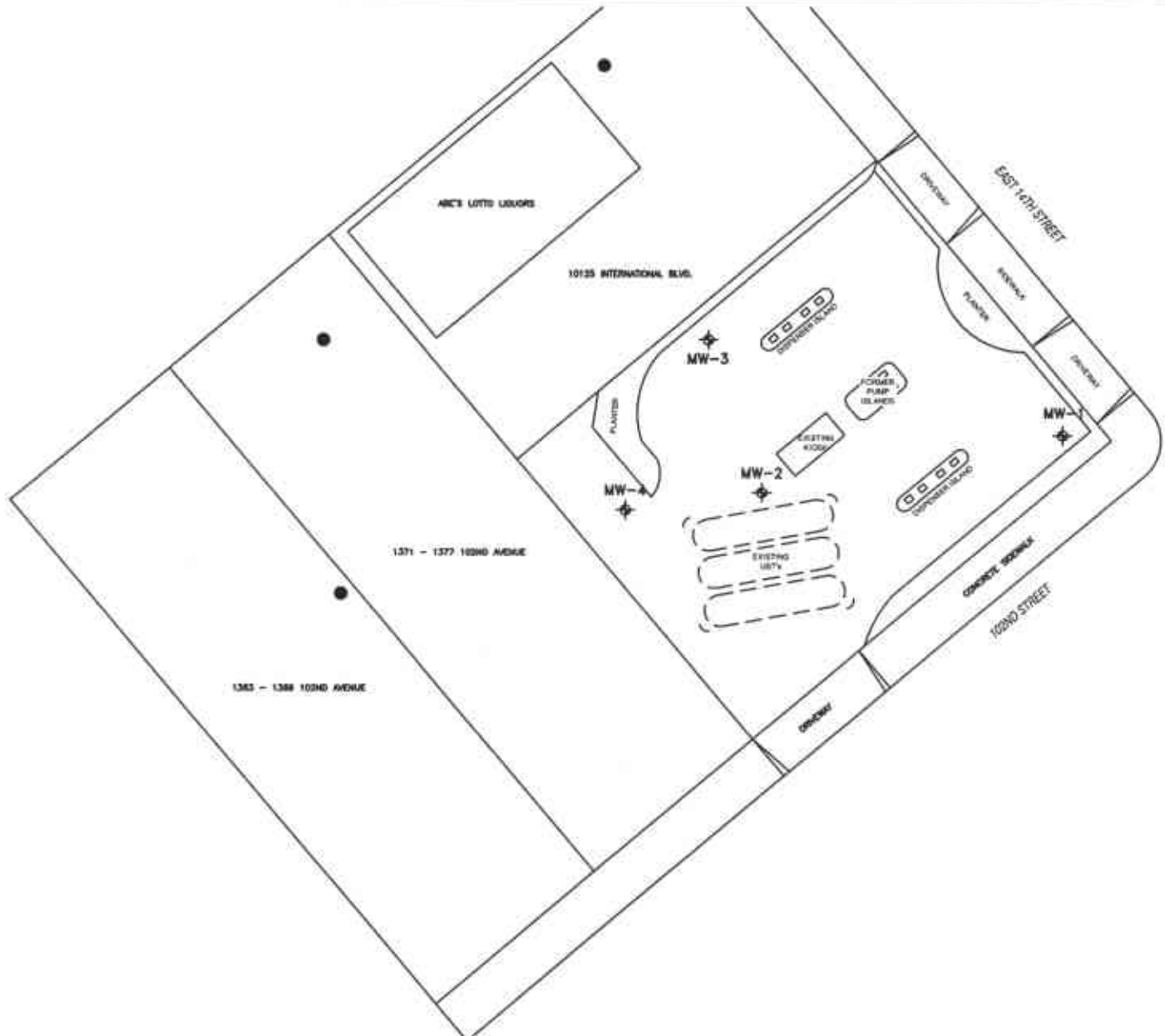
Figure 4 – Generalized Geologic Cross-Section B-B'



Attachment 1 – Correspondence from ACDEH

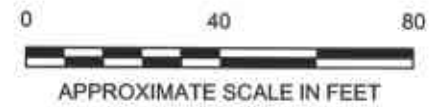
Attachment 2 – Field and Laboratory Procedures


Attachment 3 – Utility Maps (City Sewer, Assessor, and elevation maps)

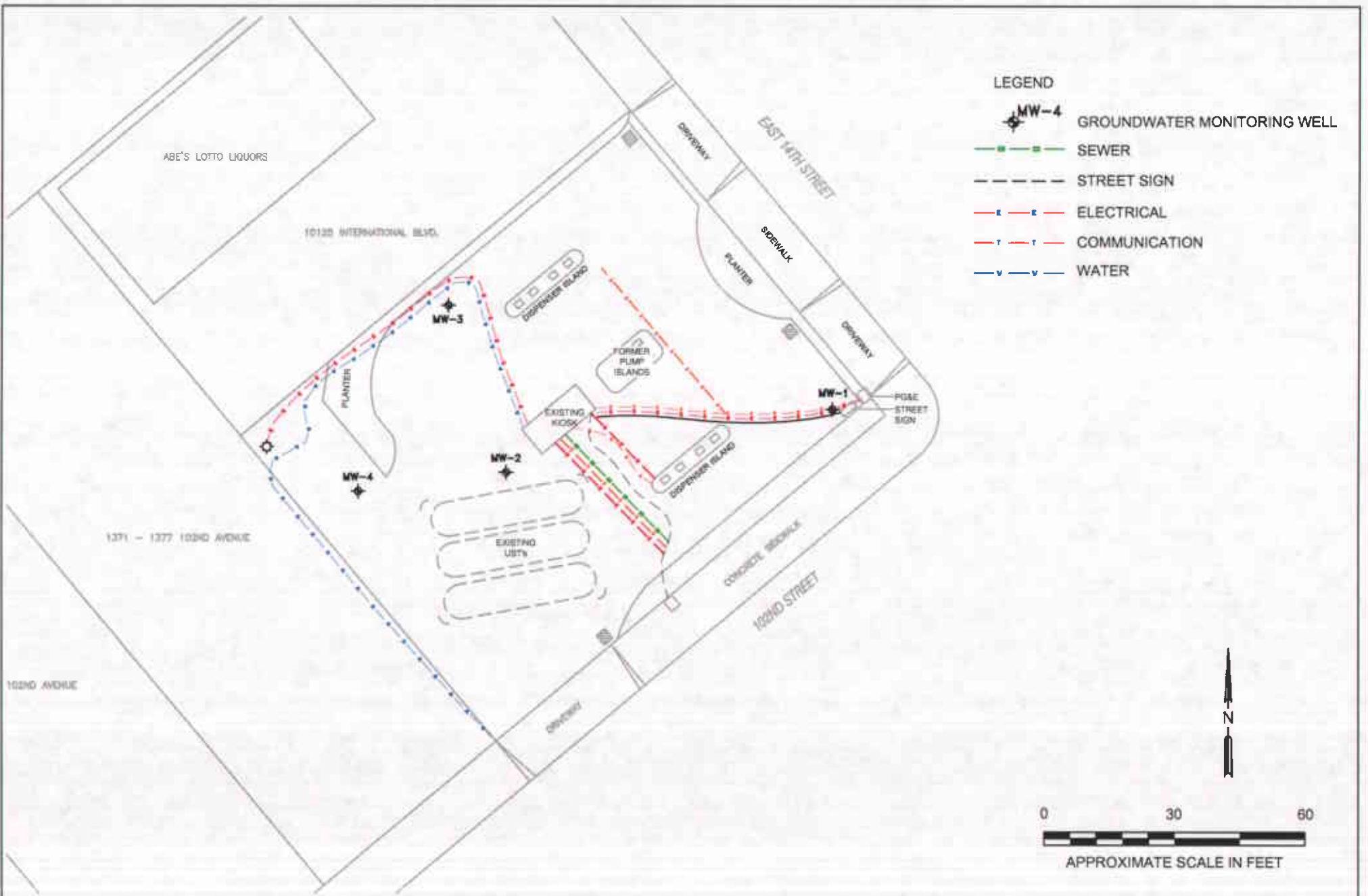
cc: Mr. Thomas Kosel, ConocoPhillips




- LEGEND**
-  **MW-4** GROUNDWATER MONITORING WELL LOCATIONS
 -  PROPOSED SOIL BORING LOCATIONS

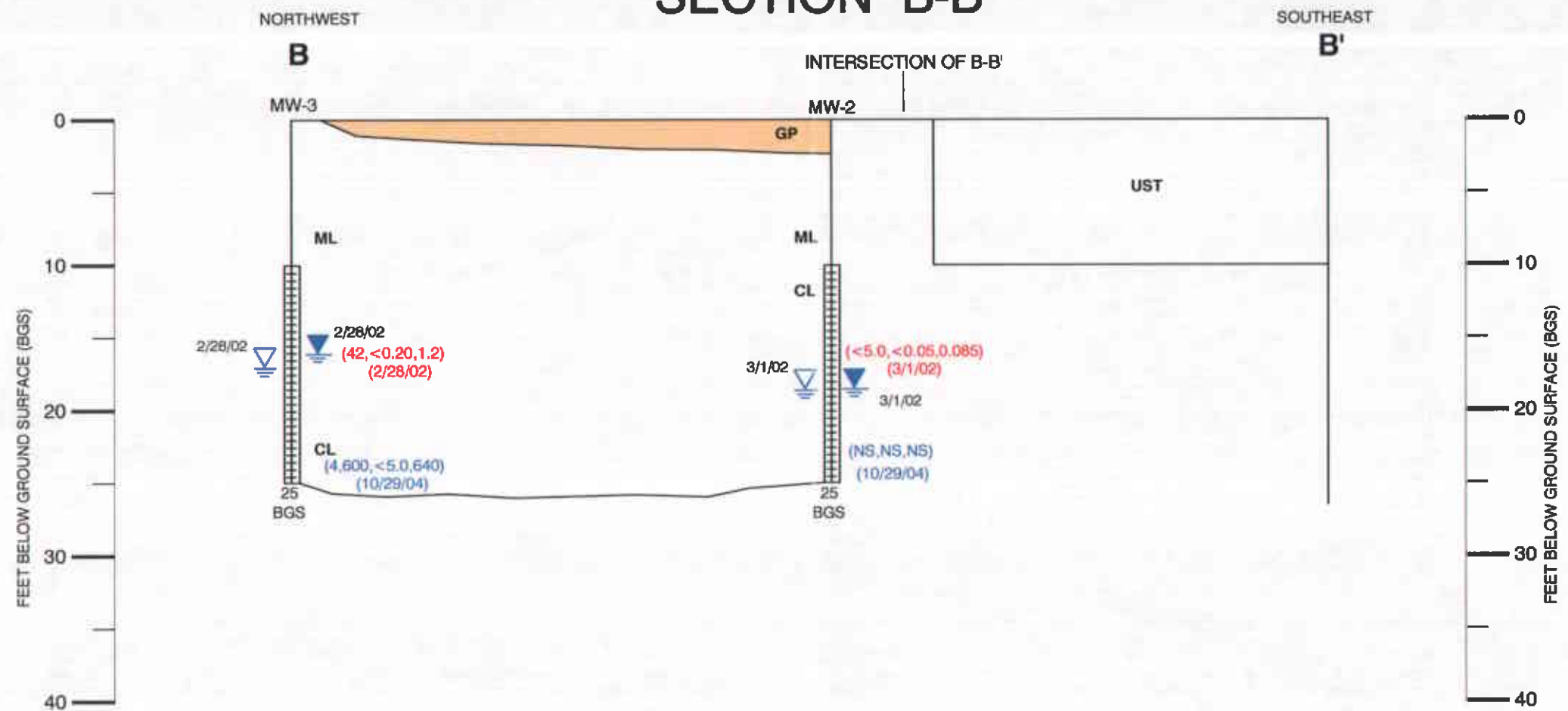


 SECOR 3017 KILGORE ROAD, SUITE 100 RANCHO CORDOVA, CA 95670 PHONE: (916) 861-0400 FAX: (916) 861-0430	FOR: FORMER 76 STATION NO. 7124 10151 EAST 14TH STREET OAKLAND, CALIFORNIA		SITE PLAN		FIGURE: <div style="font-size: 2em; text-align: center;">1</div>
	JOB NUMBER: 77CP.67124.02	DRAWN BY: INTLS	CHECKED BY: TP	APPROVED BY: TP	DATE: 7/20/05



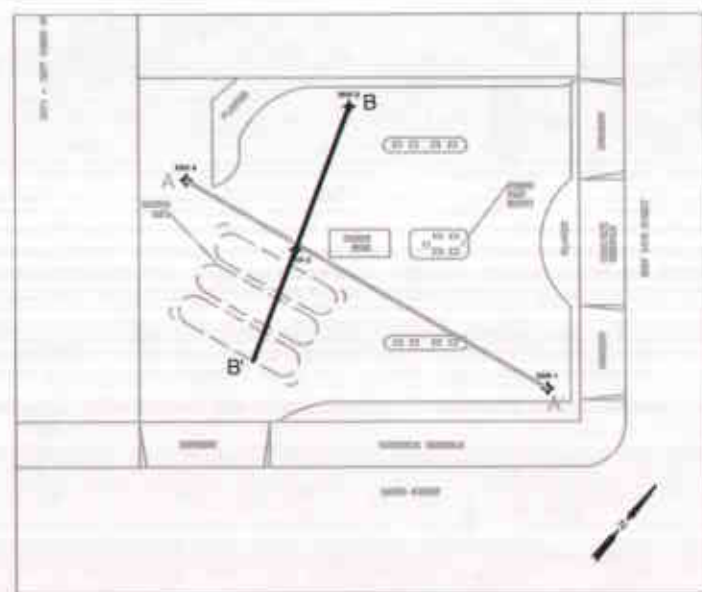
 SECOR 3017 KILGORE ROAD, SUITE 100 RANCHO CORDOVA, CA 95670 PHONE: (916) 861-0400 FAX: (916) 861-0430	FOR:	FORMER 76 STATION NO. 7124 10151 EAST 14TH STREET OAKLAND, CALIFORNIA		FIGURE:	2
	JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	
	77CP.67124.02	INTLS	TP	TP	7/20/05

SECTION B-B'

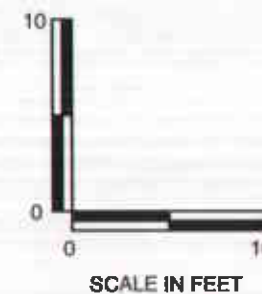


LEGEND:

- MONITORING WELLS
- SCREENED INTERVAL FOR MONITORING WELLS
- TPHg** TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
- MIBE** METHYL TERT-BUTYL ETHER
- NS** NOT SAMPLED
- GRAVEL (GP)
- SILT (ML)
CLAY (CL)
- 00/00/00** SOIL ANALYTICAL DATA (GRO/Benzene/MtBE (mg/kg)) (DATE)
- 00/00/00** GROUNDWATER ANALYTICAL DATA (TPHg/Benzene/MtBE (µg/L)) (DATE)
- STABILIZED WATER DEPTH (DATE)
- FIRST WATER DEPTH (DATE)



CROSS-SECTION LOCATION MAP
1" = 50'



 SECOR 3017 KILGORE ROAD, SUITE 100 RANCHO CORDOVA, CALIFORNIA PHONE: (916) 861-0400/861-0430 (FAX)	FOR:	FORMER 76 STATION #7124 10151 EAST 14TH STREET OAKLAND, CALIFORNIA		FIGURE:	4
	JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	
	77CP.67124.02	DWR	TP	TP	5/31/05

ATTACHMENT 1
CORRESPONDENCE FROM ACDEH
APRIL 12, 2005
Former 76 Service Station No. 7124
10151 East 14th Street
Oakland, California

ALAMEDA COUNTY
HEALTH CARE SERVICES



AGENCY
DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

April 12, 2005

Thomas H. Kosel, Site Manager, Risk Management and Remediation
ConocoPhillips
76 Broadway
Sacramento, CA 95818

Dear Mr. Kosel,

Subject: Fuel Leak Case No. R00002444, Unocal Service Station No. 7124,
10151 International Boulevard, Oakland, CA

Alameda County Environmental Health (ACEH) staff has reviewed "Work Plan for Workplan for Additional Off-Site Monitoring Well Installation" dated October 14, 2004, prepared by SECOR International Incorporated. We disapprove the Work Plan. We request that you address the following technical comments and send us the technical reports requested below.

TECHNICAL COMMENTS

- 1) Groundwater Monitoring Wells - ~~_____~~
wells. We feel that it would be premature to install more monitoring wells without additional groundwater sampling to determine the location of the plume for optimal well locations. Please submit a Work Plan for groundwater sampling, which will determine the optimal locations for additional monitoring wells.
- 2) Preferential Pathway Survey - We request that you perform a preferential pathway study that details the potential migration pathways and potential conduits (walls, utilities, pipelines, etc.) for horizontal and vertical migration that may be present in the vicinity of the site.
 - a) Utility Survey - Please submit map(s) and cross-sections showing the location and depth of all utility lines and trenches (including sewers, storm drains, pipelines, trench backfill, etc.) within and near the site and plume area(s). Evaluate the probability of the contaminant plumes encountering preferential pathways and conduits that could spread the contamination, particularly in the vertical direction to deeper water aquifers. Please submit with the Work Plan requested below.

RECEIVED
APR 15 2005

BY:.....

- b) Well Survey – Locate wells within a quarter mile radius of the site. Show the location of the wells and the site on a map and tabulate well construction details for each well. Please submit with the Work Plan requested below.
- 3) Proposed Monitoring Well Screen Length - The monitoring well screen lengths proposed are 15 feet. We request that your monitoring network be depth discrete, generally, screened intervals of 3 to 5 feet in length.
- 4) Proposed Soil Samples from Borings – Sample at changes of lithology, at the soil/groundwater interface, and at areas of obvious contamination, at a minimum of 5 ft. intervals.
- 5) MW-2 – Has been paved over since April 26, 2004. This groundwater monitoring well may need to be put back in service or replaced.

OTHER COMMENTS

- 6) Landowner Notification Requirement - Pursuant to California Health & Safety Code Section 25297.15, the active or primary responsible party for a fuel leak case must inform all current property owners of the site of cleanup actions or requests for closure. Furthermore, ACEH may not consider any cleanup proposals or requests for case closure without assurance that this notification requirement has been met. Additionally, the active or primary responsible party is required to forward to ACEH a complete mailing list of all record fee titleholders to the site.

At this time we require that you submit an updated mailing list of all record fee title owners of the site, which states, at a minimum, the following:

A. In accordance with section 25297.15(a) of Chapter 6.7 of the Health & Safety Code, I, (name of primary responsible party), certify that the following is a complete list of current record fee title owners and their mailing addresses for the above site:

- OR -

B. In accordance with section 25297.15(a) of Chapter 6.7 of the Health & Safety Code, I, (name of primary responsible party), certify that I am the sole landowner for the above site.

(Note: Complete item A if there are multiple site landowners. If you are the sole site landowner, skip item A and complete item B.)

In the future, for you to meet these requirements when submitting cleanup proposals or requests for case closure, ACEH requires that you:

1. Notify all current record owners of fee title to the site of any cleanup proposals or requests for case closure;
2. Submit a letter to ACEH which certifies that the notification requirement in 25297.15(a) of the Health and Safety Code has been met;
3. Forward to ACEH a copy of your complete mailing list of all record fee title holders to the site; and
4. Update your mailing list of all record fee titleholders, and repeat the process outlined above prior to submittal of any additional *Corrective Action Plan* or your *Request for Case Closure*.

Your written certification to ACEH (Item 2 above) must state, at a minimum, the following:

A. In accordance with Section 25297.15(a) of the Health & Safety Code, I, (name of primary responsible party), certify that I have notified all responsible landowners of the enclosed proposed action. (Check space for applicable proposed action(s)):

cleanup proposal (Corrective Action Plan)

request for case closure

local agency intention to make a determination that no further action is required

local agency intention to issue a closure letter

- OR -

B. In accordance with section 25297.15(a) of Chapter 6.7 of the Health & Safety Code, I, (name of primary responsible party), certify that I am the sole landowner for the above site.

(Note: Complete item A if there are multiple site landowners. If you are the sole site landowner, skip item A and complete item B.)

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Don Hwang), according to the following schedule:

June 12, 2005 - Work Plan

OTHER REPORT REQUEST

June 12, 2005 - List of Record Fee Title Owners

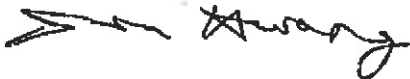
These reports are being requested pursuant to California Health and Safety Code

Mr. Kosel
April 12, 2005
Page 4 of 4

Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

If you have any questions, I may be reached at (510) 567-6746.

Sincerely,



Don Hwang
Hazardous Materials Specialist
Local Oversight Program

C: M. Gavan Heinrich, SECOR International Incorporated, 3017 Kilgore Rd., Suite 100,
Rancho Cordova, CA 95670
Donna Drogos
File

ATTACHMENT 2
FIELD AND LABORATORY PROCEDURES
Former 76 Service Station No. 7124
10151 East 14th Street
Oakland, California

ATTACHMENT 2

FIELD AND LABORATORY PROCEDURES

EXPLORATORY DRILLING

Soil borings will be drilled to maximum depth of 20 feet bgs for water lateral definition and to a maximum depth of at least 20 bgs for vertical definition using direct push drilling equipment (first groundwater is expected to be at approximately 13 feet bgs). Selected soil borings will be logged by SECOR field staff under the supervision of a geologist using the Unified Soil Classification System and standard geologic techniques. Soil samples for logging from the borings will be collected continuously. All soil samples for chemical analysis will be retained in laboratory-supplied jars with Teflon-sealed lids. The samples will be placed on ice for transport to the laboratory accompanied by chain-of-custody documentation. All down-hole drilling and sampling equipment will be steam-cleaned following the completion of each soil boring.

ORGANIC VAPOR PROCEDURES

Soil samples collected during drilling will be analyzed in the field for ionizable organic compounds using a photo-ionization detector (PID) with a 10.2 eV lamp. The test procedure will involve measuring approximately 30 grams from an undisturbed soil sample, placing this soil in a sealed container (either a zip-lock bag or a mason jar). The container will be warmed for approximately 20 minutes, then the head-space within will be tested for total organic vapor, measured in parts per million as benzene (ppm; volume/volume). The instrument will be calibrated prior to drilling using a 100-ppm isobutylene standard (in air) and a sensitivity factor of 55, which relates the photo-ionization potential of benzene to that of isobutylene at 100 ppm. The results of the field-testing will be noted on the boring logs. PID readings are useful for indicating relative levels of contamination, but cannot be used to evaluate hydrocarbon levels with the confidence of laboratory analyses.

GROUNDWATER SAMPLING

Groundwater will be sampled in the borings using either a HydroPunch[®] sampling apparatus or by lowering a clean disposable bailer through the Geoprobe[®] and retrieving a sample of the formation water. Groundwater samples will be collected from first encountered groundwater, and from deeper silty sand units (if encountered) unless first encountered water is within approximately one foot from the silty sand unit. Groundwater samples will be decanted directly from bailers into laboratory supplied glassware. Samples will be sent under chain-of-custody procedures to a California State-certified laboratory. Select grab groundwater samples will be analyzed for TPHg, BTEX, fuel oxygenates by EPA Method 8260B, and lead by EPA Method 6010.

LABORATORY PROCEDURES

Selected soil samples will be analyzed for TPHg, BTEX, fuel oxygenates by EPA Method 8260B. Select grab groundwater samples will be analyzed for TPHg, BTEX, fuel oxygenates by EPA Method 8260B.

SOIL CUTTINGS AND RINSATE/PURGE WATER

Soil cuttings and rinsate water generated during boring operations will be removed by the drilling contractor and disposed of properly.

**ATTACHMENT 3
UTILITY MAPS (CITY SEWER, ASSESSOR,
AND ELEVATION MAPS)**

Former 76 Service Station No. 7124
10151 East 14th Street
Oakland, California

TRACT 671.

(Book 47 p. 5516)

Map of the Toller Homestead Subdivision. Code Area No. 17-032

PM. 4084 (7/8/1)

Book 47

5516

(Ac. 15 7 1/2)

102nd Ave. 5517

TR. 6129 001/88

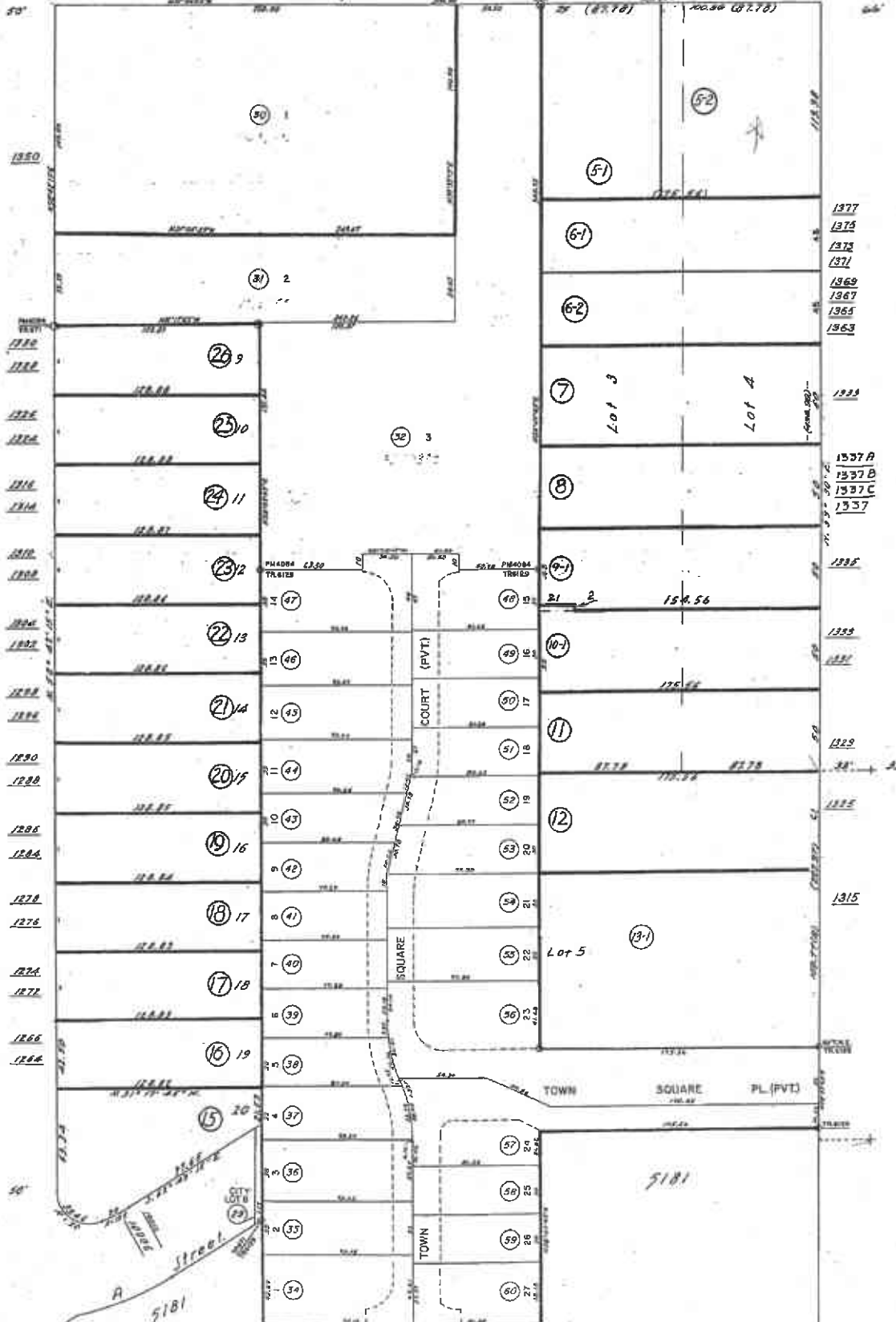
Scale: 1" = 50'

ASSESSOR'S MAP 45

5171

Abc 7-23-26-27-28-29-30-31-32-33-34-35-36-37-38-39-40-41-42-43-44-45-46-47-48-49-50-51-52-53-54-55-56-57-58-59-60-61-62-63-64-65-66-67-68-69-70-71-72-73-74-75-76-77-78-79-80-81-82-83-84-85-86-87-88-89-90-91-92-93-94-95-96-97-98-99-100

Book 34 4972
1001A Avenue.



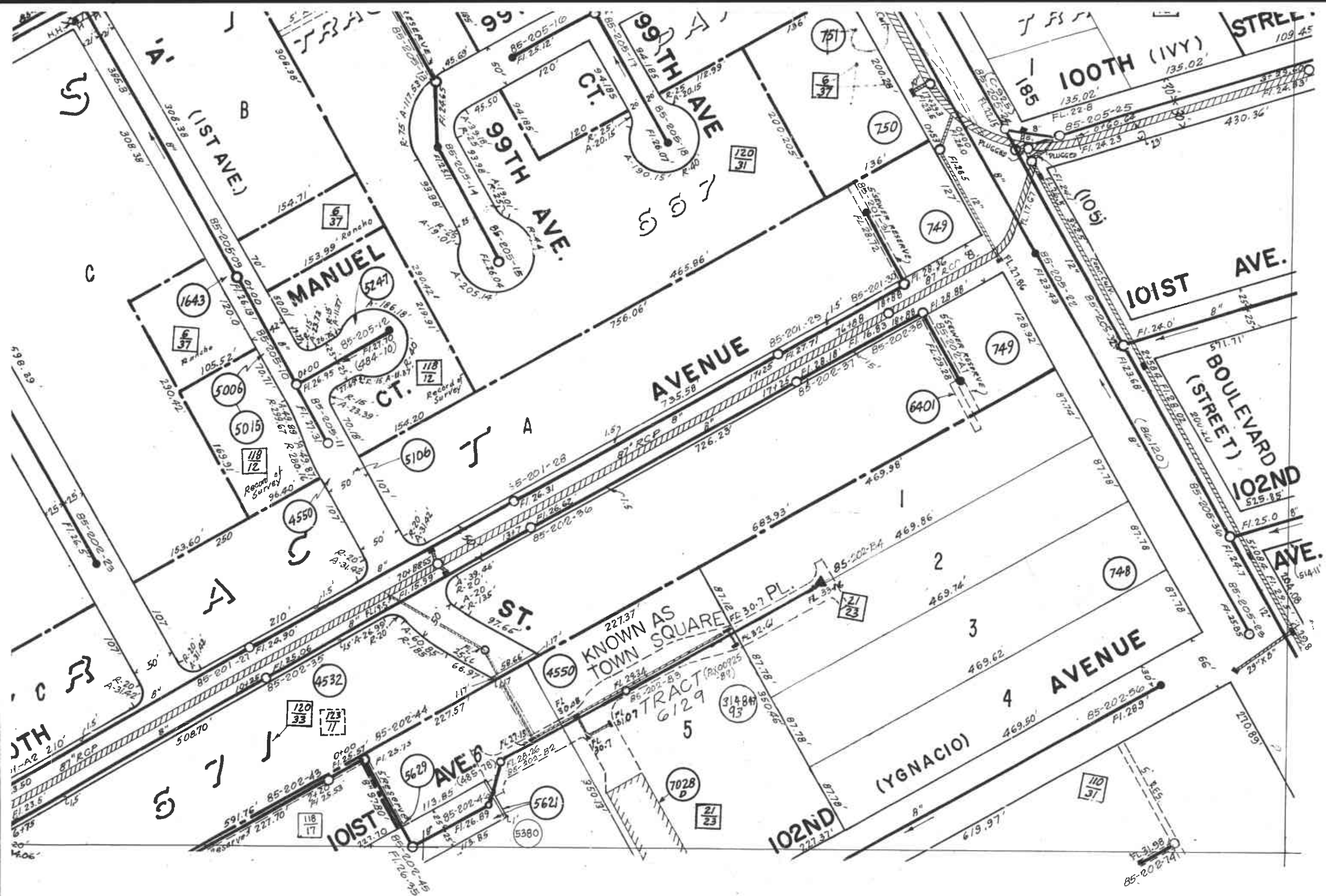
102nd (Ygnacio) Avenue.

5186

Graffion Street.

5185

HTH



NORT



LEGEND

SANITARY SEW

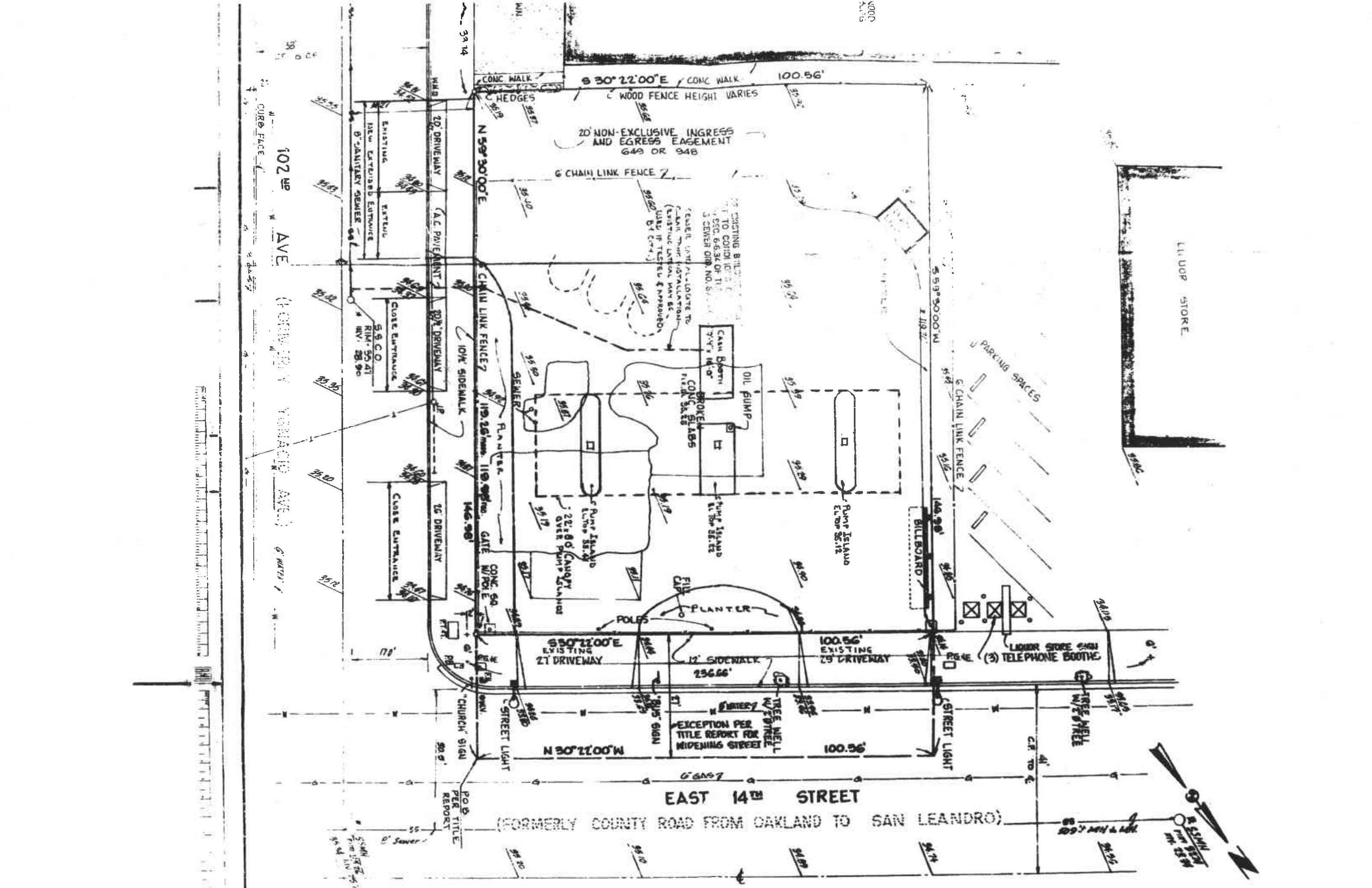
STORM COND

FLOW MONITO

MANHOLE

LAMPHOLE

...



102 W. AVE

(FORMERLY YONACIO AVE.)

WATER

EAST 14TH STREET

(FORMERLY COUNTY ROAD FROM OAKLAND TO SAN LEANDRO)

L.I. UOP STORE

N 55° 30' 00" E
RIM 28.90

1000
AUG

