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By Alameda County Environmental Health at 11:22 am, Aug 11, 2014

August 07, 2014

Keith Nowell, PG, CHG
Alameda County
Environmental Health Department
1131 Harbor bay Parkway, Suite 250
Alameda, CA 94502-6577

(510) 567 6764
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,

SUBJECT: PERJURY STATEMENT FOR THE SITE CLOSURE SUMMARY REPORT (REQUEST FOR UST SITE CLOSURE) FOR Acts Community Development for the Property @ 1001 77th Avenue, Oakland, CA 94621
LOP CASE NO. RO0002905 (UST) AND GEOTRACKER GLOBAL ID SL0600129548 (SOLVENT)

To Alameda County Environmental Health,

"I declare under penalty of perjury that the information and/or recommendations contained in the technical document designated above are true and correct to the best of my knowledge." This statement is made in reference to the attached Site Closure Summary Report, dated August 01, 2014, regarding the property at 1001 77th Avenue.

Thank you,

Mark Claybrooks for Bishop Bob Jackson

Bishop Bob Jackson
Acts Community Development
1034 66th Avenue
Oakland, CA 94621

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Phone: (510) 568-6080
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PO BOX 1193, Meadow Vista, CA 95722
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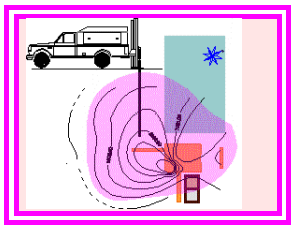

August 01, 2014

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Alameda County keith.nowell@acgov.com
Environmental Health Department
1131 Harbor bay Parkway, Suite 250
Alameda, CA 94502-6577

,

SUBJECT: SITE CLOSURE SUMMARY REPORT FOR THE FORMER UNDERGROUND STORAGE TANK Site for Acts Community Development for the Property @ 1001 77th Avenue, Oakland, CA 94621
LOP CASE NO. RO0002905 (UST) AND GEOTRACKER GLOBAL ID SL0600129548 (SOLVENT)

Mr. Nowell,

This technical report addresses your agency's requirement to address the underground storage tank case with respect to the "Low Threat Closure Policy" as stated in your June 24, 2014 letter. In addition, the dissolved chlorinated solvents (e.g. TCE) identified in the most recent subsurface investigations, which is part your recent letter, is also addressed in this technical report.

The most recent correspondence by Alameda County Department of Environmental Health (ACDEH), which contained substantial and detailed technical comments, is dated April 03, 2008.

This technical report addresses the comments in the April 03, 2008 correspondence, in an item-by-item format and then addresses the residual petroleum UST contamination with respect to the LTCP.

Kindest regards,

Franklin J. Goldman

REGISTERED GEOLOGIST
FRANKLIN J. GOLDMAN
CERTIFIED HYDROGEOLOGIST
NO. 466
STATE OF CALIFORNIA

Frank Goldman, PG, CHG

ITEM-BY-ITEM RESPONSE TO THE 04-03 2008 ACDEH CORRESPONDENCE

The ACDEH correspondence commented on two subsurface investigation technical reports dated May 09, 2007 and February 26, 2008 by Frank Goldman, CHG. The work was performed under a County approved workplan, along with follow-up written correspondence and emails. Any changes to the workplan, as carried out in the field, were due to subsurface obstructions and or overhead power lines.

Not all technical comments were addressed as financial limitations had to be considered before proceeding to the next phase of work. A "phased approach," was implemented as is recommended in State Board Resolution No. 92-49.

Item #1

General Statement by ACDEH:
Request for a soil vapor survey of chlorinated solvents.

Reply: A soil vapor survey would be problematic due the clayey shallow soils encountered during drilling. Soil gas investigations are effective when the soil that is being sampled for soil gas is permeable. Clayey soils are generally not very permeable.

Push technology soil borings drilled by Basics and Steller, in 2005, encountered clayey soils from five (5) feet to 13 ½ feet bgs across the site. Groundwater was first encountered between 8 and 13 feet bgs under confined conditions (**figure 1**).

In 2007, Goldman installed seven (7) hollow-stem auger soil borings which encountered a thin layer of gravelly soil in the upper 0 to 1 ½ feet deep bgs underlain by clayey soils to depths of 7 to 8 ½ feet bgs. The shallow gravelly soil layer at MW-3 was 5 ½ feet thick. Groundwater was first encountered between 6 and 8 ½ feet bgs (**figure 2**).

Based upon the subsurface investigations performed in 2005 and 2007, it appears that the thick, shallow, clayey layer is underlain by generally confined conditions. After groundwater was first encountered, the water levels in the soil borings, and later in the monitor wells, rose to shallower elevations.

Abundant shallow clayey soils with shallow groundwater is not conducive to an effective soil gas investigation. Permeability lab testing would a prudent precursor to soil gas investigation.

Item #2

General Statement by ACDEH:
Insufficient information is available to make the stated conclusions and recommendations. One conclusion related to the solvent contamination identified in soil and groundwater is that "the lack of solvents in soil" is evidence that the dissolved solvents are from an offsite source.

Reply: The conclusion in the 2008 report which states that the lack of TCE indentified in saturated soil was significantly lower than in the groundwater (*e.g. 1,700 ppb in water vs*

35 - 62 ppb in soil in MW-5), in the same location, is "unlikely" indicative of a solvent point source, is a reasonable assertion.

Also, the 2008 report asserted that the lack of solvents in soil relative to dissolved solvents at the same location, and that the dissolved solvents identified adjacent to street sewer lines is "likely" coming from offsite, is also a reasonable assertion.

There is no statement in the 2008 report that says "the lack of solvents in soil" is evidence that the dissolved solvents are from an offsite source. There is no statement in the 2008 report that definitively states that the solvents did not come from the site itself. In fact, the conclusion made in the 2008 report explicitly acknowledges that additional solvent investigation should be required of Acts Community Development after other potential solvent dischargers in the vicinity are also required to investigate their sites. See 2008 conclusion statement below:

"Since the lack of solvents in soil implies that the dissolved solvent identified in the investigation area is likely coming from offsite (i.e. likely along the sewer lines), Alameda County should name all other potential solvent dischargers up-flow of the investigation area as potential responsible parties prior to requiring ACTS Community Development from performing anymore environmental work at this site."

There are numerous sites in the immediate vicinity of the subject site which could have contributed to the dissolved solvent plume identified in wells along the sewer line in the street.

Specifically, the former Chip Steak Company site identified 3,000 ppb TCE in groundwater in soil boring HP-5 located adjacent to a sewer line located in the street along 77th Avenue. The site was closed by Alameda County in 1995, anyway. The Responsible Party was not required to perform any addition investigation, according to available County records located in the County FTP Website, no neighboring sites, which could be associated with the subject site, were required to perform subsurface investigation either. Regardless of which property owner(s) are responsible for the source of the dissolved TCE identified, the County should have followed through with enforcement with all potential users of chlorinated solvents in the vicinity of this well documented contamination in HP-5 (**see figure 3**).

Next, the former Union Rubber Company, which is located directly across the street from 1001 77th Avenue, is a "very" likely point source of TCE as the Rubber industry is a confirmed user of TCE in the rubber manufacturing process. As a reminder, chlorinated solvents can remain in the subsurface from decades to centuries (**see figure 3**).

Also, two different machine shop type operations, one immediately south of the site, and one north of the site were identified on a 1969 Sanborn map (**see figure 3**) previously submitted by Stellar and Basics.

Item #3

General Statement by ACDEH:
Was the soil sample designated as "Spencer Street," in the 2008 report laboratory data sheets the sample that was collected from the sandy backfill in the concrete vault?

Reply: Yes. The loose soil sample collected from the sandy backfill of the concrete vault was collected at the location designated as BH-8. No VOCs were identified in the soil sample.

General Statement by ACDEH:
Will the oil water separator and hydraulic hoist in the concrete vault be used in the future?

Reply: Not likely. The site has been used for storage of vintage automobiles and it does not appear that the site will be used for anything else in the near future. Perhaps it will be used to store construction equipment as has been done in the past. Note: hydraulic hoists are not regulated unless a discharge of a Prop 65 chemical is suspected or confirmed.

Item #4

General Statement by ACDEH:
Have you performed a more detailed underground utility survey which can identify potential migratory pathways for solvents (e.g. sewer and storm drain lines)?

Reply: Yes. On May 09, 2008, a geophysical survey was performed by Subtronics for the purpose of identifying sewer laterals running from the building out to the sewer mains in the street (**see figure 4 for Geophysical survey**). A sewer line was identified running from the building toilet out to Spencer street in the immediately vicinity of groundwater monitor wells MW-1 and MW-2 (**see figure 4 for Geophysical survey**) & (**see figure 3 for sewer lateral going from toilet to the sewer main**). In addition, a magnetic anomaly was identified between the southeast edge of the building and the former UST pit (**see figure 4 for Geophysical survey for magnetic anomaly**). The geophysical survey map shown in figure 4 was recently provided by Subtronics and is the only documentation of the performed on May 09, 2008. The purpose of the geophysical survey was to identify sewer laterals originating from the subject site. Only one sewer lateral was identified.

General Statement by ACDEH:
A City of Oakland sewer and storm drain map provided in Appendix C of the 2008 report does not show the flow direction of the sewer and storm drain lines nor does it show the depth of the sewer and storm drain lines)? Also, the flow lines for the storm drain and sewer lines, as stated in the 2008 report, flow from northeast to southwest, not southwest to northeast.

Reply: The depth of the sewer and storm drain lines can be calculated by subtracting the Flow Line elevation of the sewer and or storm drain line from the curb elevation. This gives you the depth of the line bgs (***See Attachment A for City of Oakland curb elevation map, storm and sewer map, and guide map on how to calculated depth to utility lines***).

For instance, the map sets show that the depth of the sewer line at 77th and Spencer is 6.5 foot curb - 0.87 = 5.63 feet bgs. It also shows that the depth of the storm drain line at 77th and Spencer is 6.5 foot curb - 1.47 = 5.03 feet bgs. So the two utility lines, at the intersection where the site is located, are about 5 to 5 ½ feet deep bgs.

The storm drain and sewer line map shown in the 2008 report was not labeled (**see figure 5 for Flow Line elevations for sewer and storm drain lines**).

The City of Oakland storm and sewer line map is labeled in Figure 5 of this report and the data provided shows that the flow is from southwest to northeast as indicated in the 2008 report.

For instance, the sewer line which flows along 77th from Hawley to Spencer, flows from 2.58' to 1.56' to 0.87'. This indicates a flow from southwest to northeast

The storm drain line flows along 77th from Hawley to Spencer from 1.26' to 0.47'. This indicates a flow from southwest to northeast.

Finally the next parallel, sewer line which flows along 77th from Hawley to Spencer, flows from flow line elevations from 2.32' to 1.48' to 0.98'. Again, the flow is southwest to northeast,.

Note: all three public utility lines flow from Southwest to Northeast.
This implies that 3,000 ppb TCE dissolved in groundwater, as identified in 1995 could have migrated down the public utility lines, to 1001 77th Avenue.

That being said, these Public Utility line maps could be wrong and none of the subsurface utility line cross sections have been made available to cross check the accuracy of the depth to utility line maps.

Finally, the flow direction of subsurface storm and sewer lines is only one of many migratory pathways for chlorinated solvent to migrate. After numerous years in the subsurface, vapor phase migration can be a significant factor in the spread of chlorinated solvents in any direction; not just in the groundwater and or sewer and storm water flow direction.

General Statement by ACDEH:
Sewer lines are suspected of being preferential pathways…..

Reply: Sewer lines and the associated trench backfill are man-made preferential pathways for the migration of chlorinated solvents as a DNAPL, dissolved in water, and as vapor phase transport. Many of these sewer line trenches are encased in clayey soils. For example, clayey soils has been identified from approximately five (5) to 13 ½ feet bgs and the storm drain and sewer lines were identified between approximately 5 to 6 feet bgs. Given that chlorinated solvents can migrate as vapor phase transport in any direction along a utility trench backfill, and DNAPL can migrate through clay soils, the migratory pathway from the source(s) is likely to have been substantial through utility line backfills and in groundwater since the 3,000 ppb was identified in HP-5 in 1995.

Note: Enough focus has been made on the utility line backfill to date. Two geophysical surveys have been performed on the subject property and one sewer lateral has been identified leading from the site bathroom adjacent to the concrete vault. The site building is underlain by reinforced concrete slabs which are not conducive to remote sensing. The locations of sumps and or other sewer cleanouts and drains, inside the building, were not readily apparent during the numerous site visits made by three different consultants over the years. In addition, given that the site is predominantly underlain by

shallow clayey soils, subsurface investigation by soil gas may be ineffective and possibly misleading. That is not to say that soil gas won't work; it just may not be a definitive first step at an initial comprehensive subsurface investigation to determine the point source. It is also very expensive to mobilize to perform a soil gas investigation in clayey soils and find out the whole operation is ineffective. Soil gas drillers and mobile labs charge a daily rate. Groundwater investigation of potential point sources on and offsite are likely to be the most effective to determine the location of potential point sources of TCE on and off site.

Items #5, #6, and #7

General Statement by ACDEH:
Future analytical of groundwater samples will include diesel and soil samples will include lead.

Reply: Since diesel is not carcinogenic or toxic, it is rarely a threat to human health and drinking water and therefore these requirements seem unnecessary and will add unnecessary costs to corrective action. Since inorganic lead at a gasoline fuel site is rarely a threat to health and drinking water due to typically low concentrations encountered and its relatively low mobility in comparison to other gasoline related constituents, this requirement seem unnecessary. That being said, it is within the authority of the County to require these analyses and they will be performed in any future lab analyses.

Item #8

General Statement by ACDEH:
Groundwater monitor wells MW-1 and MW-2 were located too close together. MW-4 was moved west of its proposed location. Additional wells MW-5, MW-6, and MW-7 were later installed to define the dissolved plume.

Reply: Groundwater monitor well locations were changed in the field due to subsurface obstructions as well as overhead lines. Alameda County staff is always welcome to perform site visits during subsurface investigations.

SITE CLOSURE SUMMARY REPORT FOR PETROLEUM DISCHARGE FROM FORMER UST

General Site History

The subject property is also a LOP CASE NO. RO0002905 (UST). Since the implementation of the new Low Threat Closure Policy for Underground Storage Tank sites, the petroleum discharge portion of this case has new requirements for closure.

Collins and Collins Auto repair operated onsite from 1984, to at least January 1991. The site was owned by Daniel Ustin up until, at least, August 1991. During the time that Mr. Ustin owned the property, and approximately 20 years prior to that date, the site was reported to have been used as an auto repair facility. The site was later used by Acts Community Development to store vintage cars from 2002 thru 2008. By January of 1994, the auto repair business had been reported as closed at some time prior to that; most likely back in late 1991 when the Church took over the property.

Based upon the report by Steller, September 06, 2005, the site was used as any oil and gas station from the 1950s through the 1970s according to interpretations of the Sanborn maps for this locality by past consultants.

Evidence of an Underground Storage Tank

During the soil cleanup by Steller, well sorted of sands, indicative of a former UST excavation were identified to a depth of eight (8) feet bgs. The report also stated that a traffic bollard and a piece of dispenser related piping were identified in the UST backfills, indicating that the UST must have been removed and backfilled with sand, and that pieces of the equipment must have been thrown into the excavation (Steller, Corrective Action Report, February 2006, page 6, last paragraph) & (***See Attachment B for photo of remnants of UST system***).

Extent of Site Cleanup

On January 9, 2006, Soils were then excavated to a depth of approximately 11 feet below grade (Steller, Corrective Action Report, February 2006, page 11, paragraph 3). Excavation was extended laterally until limitations were encountered by Public Right-of-Ways (Steller, Corrective Action Report, February 2006, page 13, paragraphs 3 & 4).

Approximately 130 cubic yards was excavated and the final excavation was approximately 10 feet deep, within a stiff clay. The excavation was approximately 20 by 15 feet in dimension (Steller, Corrective Action Report, February 2006, page 13, paragraphs 5 & 6).

On January 20, 2006, the 128 tons of contaminated soil was transported offsite (Steller, Corrective Action Report, February 2006, page 14, paragraph 4).

Approximately 1,200 gallons of groundwater was pumped from the excavation on January 9 and 10, 2006 as a corrective action measure (to remove contaminant mass). A pre-pumping and a post-pumping groundwater sample were collected for laboratory analysis. The pumped water was stored onsite in a 1,200-gallon plastic tank. In the subsequent period, during which excavation confirmation soil samples were analyzed, a heavy rain occurred, causing groundwater in the excavation to rise to 6 feet bgs. To ensure competent excavation backfill compaction, an additional 4,800 gallons of groundwater was pumped from the excavation on January 20, 2006, directly into a vacuum truck. This brought the groundwater level down to approximately 1 foot off the bottom, sufficient for backfilling (Steller, Corrective Action Report, February 2006, page 14, last paragraph, page 15 first paragraph).

The soil contamination encountered during the January 2006 excavation was fairly easy to identify visually and by its odor and PID readings, and in some places, its correlation with a sandy gravelly lens (Steller, Corrective Action Report, February 2006, page 17, paragraph 4).

In the area of the former UST excavation, contamination likely extends from the apparent base of the UST excavation (approximately 8 feet) downward several feet into the underlying clay (Steller, Corrective Action Report, February 2006, page 20, paragraph 3).

The excavation confirmation soil sampling results were consistent with the results of the previous boreholes (three of which were located just beyond the excavation limits), which showed low to non-detectable soil petroleum contamination to the north, east, and west, and higher concentrations to the south. (Steller, Corrective Action Report, February 2006, page 20, paragraph 4).

Field evidence suggests that soil contamination began at a depth of approximately 7 feet bgs, and likely did not extend deeper than several feet into the underlying low permeability clay (likely 11 or 12 feet deep). Residual soil contamination appeared to be minimal to the north, east, and west portions of the corrective action excavation. To the south/southeast (underneath and in the immediate vicinity of the former UST[s]), an unknown quantity of contaminated soil remains. (Steller, Corrective Action Report, February 2006, page 23, bullet 5).

So, in summary, the Stellar remediation excavation removed a significant mass of fuel contaminated soil and groundwater except to the south.

It is also important to note, that of the seven boreholes (BH-1 thru BH-7), none of the soil and groundwater samples analyzed for BTEX identified any benzene. This indicates that the residual contamination is "very unlikely" to be a threat to human health and drinking water (Steller, Corrective Action Report, February 2006, Tables 1 & 2). Also, no MTBE was identified either.

Followup Hydrogeologic Investigation

In 2007, seven (7) groundwater monitor wells were installed (by Goldman) on and off site around the vicinity of the former UST cleanup excavation performed by Steller.

16 ppb benzene was identified in groundwater from MW-4 which is located adjacent to the former UST pit. No dissolved benzene was identified in any of the soil samples collected from well locations MW-5, MW-6, and MW-7. 2.0 ppb MTBE was identified in the groundwater sample collected from MW-5. The highest concentration of dissolved benzene in groundwater was identified in MW-4 at 50 ppb initially; and then 16 ppb during the last groundwater sampling event. In addition, the 1.3 ppm benzene identified in MW-4 at 8 feet bgs was clean at 5 feet and 14 feet bgs. This would make vapor intrusion of benzene to indoor air in a future building unlikely. The benzene identified in soil at MW-4 is outside the building footprint.

Soil sampling and analysis of benzene and MTBE from the seven (7) borehole/wells indicates that these plumes have been defined except at the northwest side of the property where there is no room to drill a borehole except at the residence to the northwest (See figure 2 map of the 02 26 08 report by Goldman). Considering the fact that relatively high concentrations of benzene (1.3 ppm) and MTBE (2.8 ppm) were identified in soil at a depth of 8 ½ in MW-4, and surrounding wells were non-detectable or, in the case of MW-3, no hydrocarbon odor was identified at the same depth, it appears that the gasoline plume is limited to the former UST excavation area. Given that the surrounding soils are predominantly clay, this is most likely the main limiting factor for significantly limiting the migration of these very volatile constituents. This would also limit the migration of these constituents to the northwest where we do not have subsurface data.

Sensitive Receptor Survey

A ½ mile radius search of water supply wells was performed for the site and reported in the May 09, 2007 report by Goldman. No water wells were identified that could be impacted by the residual gasoline related constituents identified at the site.

A surface water body, Airport Channel of San Leandro Bay, is located approximately 2 miles west of the subject property.

A very detailed 2,000 foot supply well and surface water body radius search was performed for a nearby property located at 901 77th Avenue in Oakland. The site is located approximately 450 feet southwest of the subject site (Ref: Well Survey Report, P&D Environmental, April 29, 2008).

After an exhaustive review and evaluation of well driller reports, it was determined that there were no water supply wells within the vicinity of the site at 901 77th that could be impacted by the residual gasoline contamination (Well Survey Report, P&D Environmental, April 29, 2008, bottom of page 4).

The site at 1001 77th is located close enough to the site at 901 77th to make similar conclusions about the potential impact of gasoline constituents reaching a water supply well (Well Survey Report, P&D Environmental, April 29, 2008, figure 2 well radius map).

A cursory view of P&D's figure 2 by Goldman, shows water supply wells in the vicinity of the intersection of 77th and Spencer (i.e. 1001 77th-the subject site), are conspicuously absent.

In addition, a drainage feature possibly related to an unknown creek, was identified on the southwest side of San Leandro Boulevard, approximately 1,100 feet west of the 901 77th (Well Survey Report, P&D Environmental, April 29, 2008, page 3, paragraph 2). That would make this drainage located approximately 1,400 feet southwest of 1001 77th.

Similarly, another drainage feature that appears to be the outfall to an unknown creek is located on the southwest side of San Leandro Boulevard, approximately 1,800 feet south of the 901 77th (Well Survey Report, P&D Environmental, April 29, 2008, page 3, paragraph 2). That would make this drainage located approximately 2,100 feet southwest of 1001 77th.

Arroyo Viejo, a channelized creek is located approximately 2,500 feet northeast of 1001 77th. Both surface water bodies are too far away from the subject site to be adversely impacted by the residual petroleum at the subject site, 1001 77th. In fact, given the distance of all of the water supply wells and surface waters from the subject site, and the typical lengths of dissolved gasoline constituent related plumes, it is not likely that gasoline from the subject site will reach any of these aforementioned sensitive receptors.

CONCLUSIONS

The criterion for site closure as per State Water Board Water Quality Orders are satisfied according to the following rationale:

1. The primary and secondary sources of the benzene related discharge was identified, stopped, and removed.

2. The residual benzene in soil and groundwater has been adequately characterized and is not a significant threat to human health and drinking water.

3. The residual MTBE in groundwater has been defined and is not a significant threat to drinking water.

4. There are no water supply wells or surface water bodies that can be adversely impacted by residual dissolved benzene and MTBE associated with the subject site.

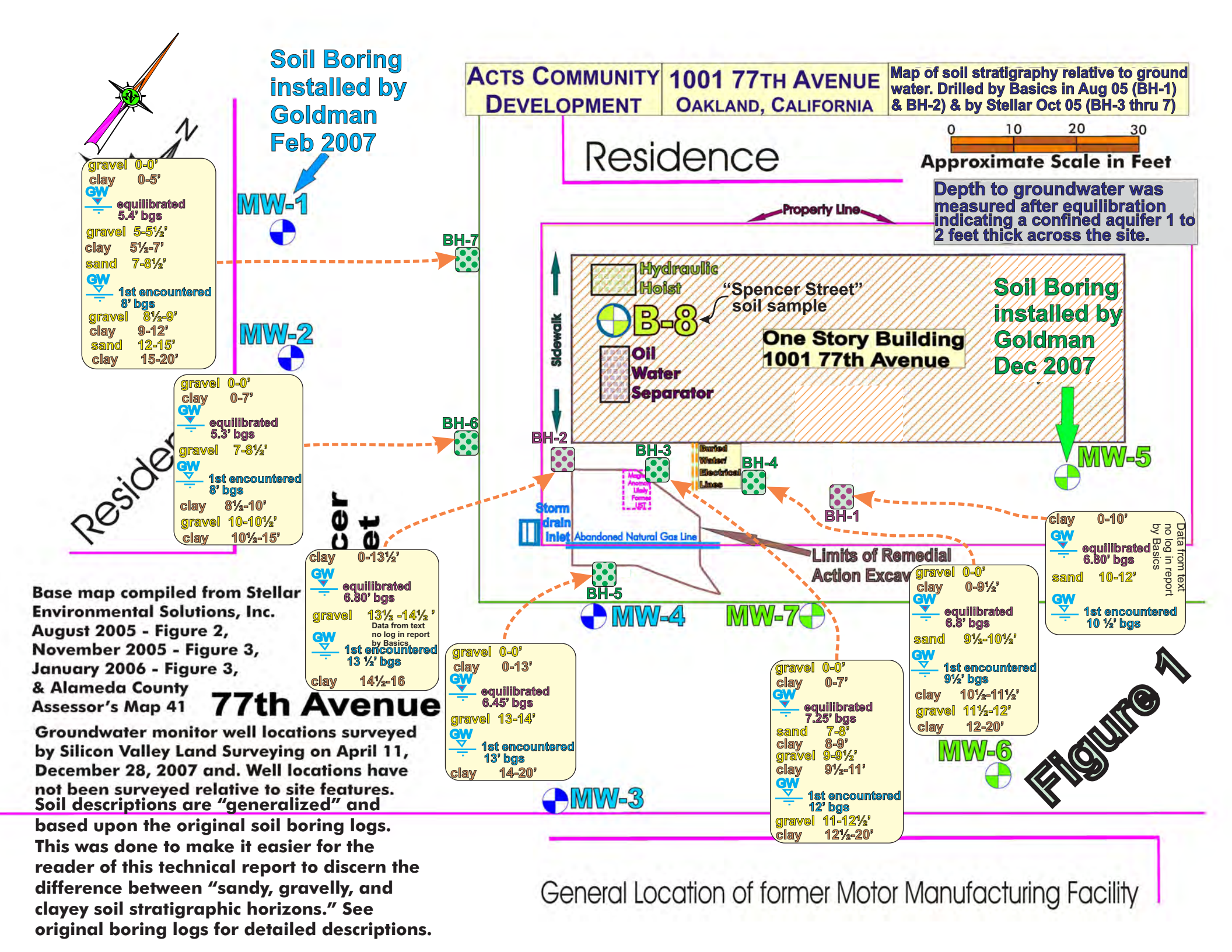
5. Residual benzene in soil is not a significant health threat due to dermal exposure or vapor intrusion to indoor air. Residual benzene (1.3 ppm) was identified in soil at a depth of 8 ½ feet bgs, in the immediate vicinity of the former UST excavation. Any residual benzene in the immediate vicinity would be under 5 to 8 feet of clayey soils. Although adjacent tank backfill is sandy, the benzene vapor in soil, emanating from a depth of 8 ½ feet bgs would have to migrate upwards vertically through the current asphalt cover, which is outside the building footprint.

RECOMMENDATION

Close the site in reference to the former gasoline UST discharge under the UST LTCP. Any subsurface investigation of the dissolved TCE identified should be accompanied by the naming of all other potential responsible parties in the vicinity of the subject site.

LIMITATIONS

This report has been prepared in accordance with generally accepted environmental, geological and engineering practices. No warranty, either expressed or implied, is made as to the professional advice presented herein. The analyses, conclusions and recommendations contained in this report are based upon site conditions as they existed at the time of the investigation and they are subject to change. The conclusions presented in this report are professional opinions based solely upon visual observations of the site and vicinity, and interpretation of available information as described in this report. Since Alameda County would not provide access to the case file or permit file for the subject site and limited access to Public records to eight other sites in their possession, this evaluation in this technical report is restricted to only the reference provided herein. Franklin J. Goldman therefore reserves the right to revise and or amended any and all interpretations and or conclusions and or recommendations as more information and data becomes available by Alameda County Environmental Health and or any other sources and any time, now or in the future. Franklin J. Goldman, and all users of this technical report, recognize that the limited scope of services performed in execution of this investigation may not be appropriate to satisfy the needs, or requirements of all government agencies, or of other users. Any use or reuse of this document or its findings, conclusions or recommendations presented herein, is done so at the sole risk of the said user.

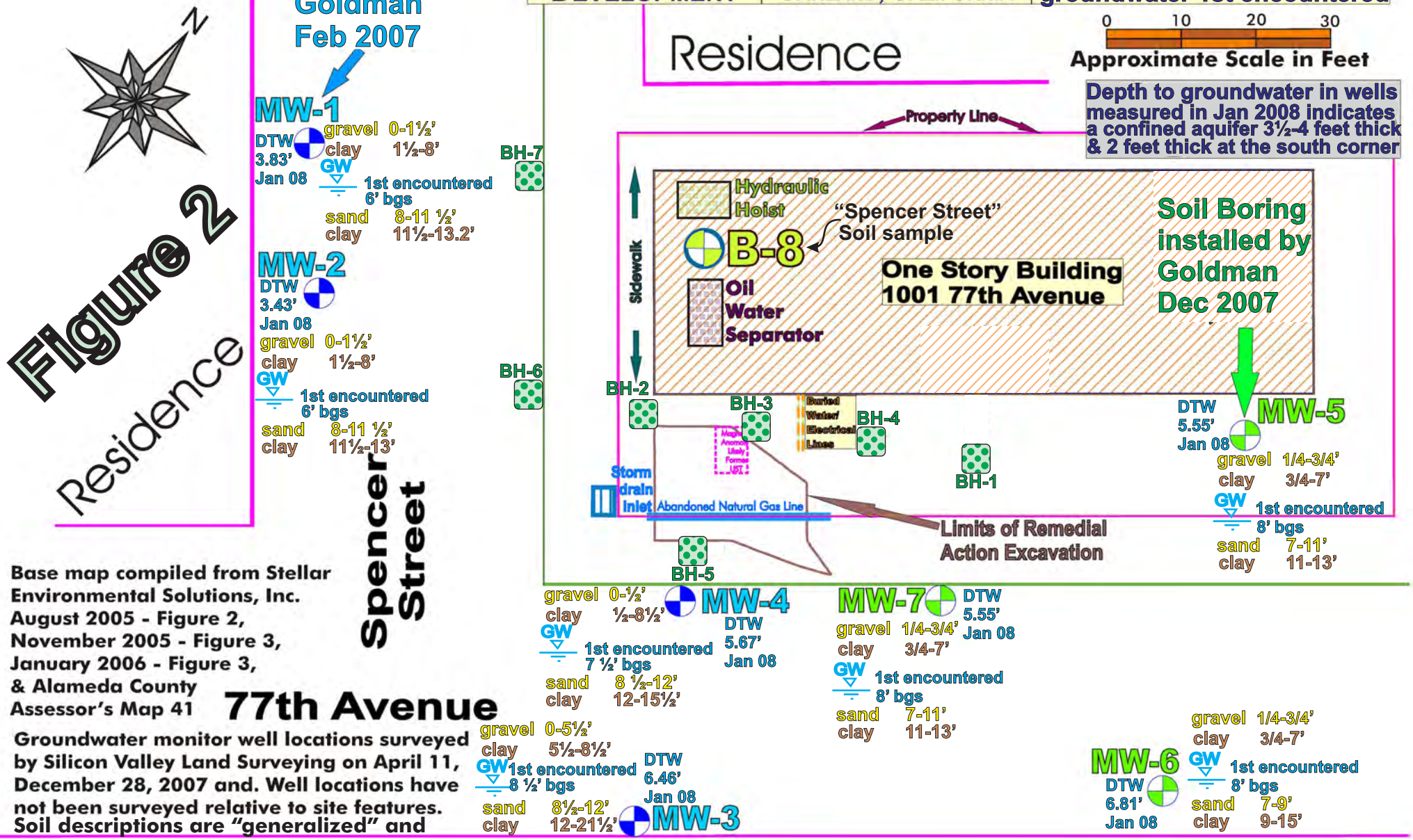


Base map compiled from Stellar Environmental Solutions, Inc. August 2005 - Figure 2, November 2005 - Figure 3, January 2006 - Figure 3, & Alameda County Assessor's Map 41

Groundwater monitor well locations surveyed by Silicon Valley Land Surveying on April 11, December 28, 2007 and. Well locations have not been surveyed relative to site features.

Soil descriptions are "generalized" and based upon the original soil boring logs. This was done to make it easier for the reader of this technical report to discern the difference between "sandy, gravelly, and clayey soil stratigraphic horizons." See original boring logs for detailed descriptions.

Figure 2



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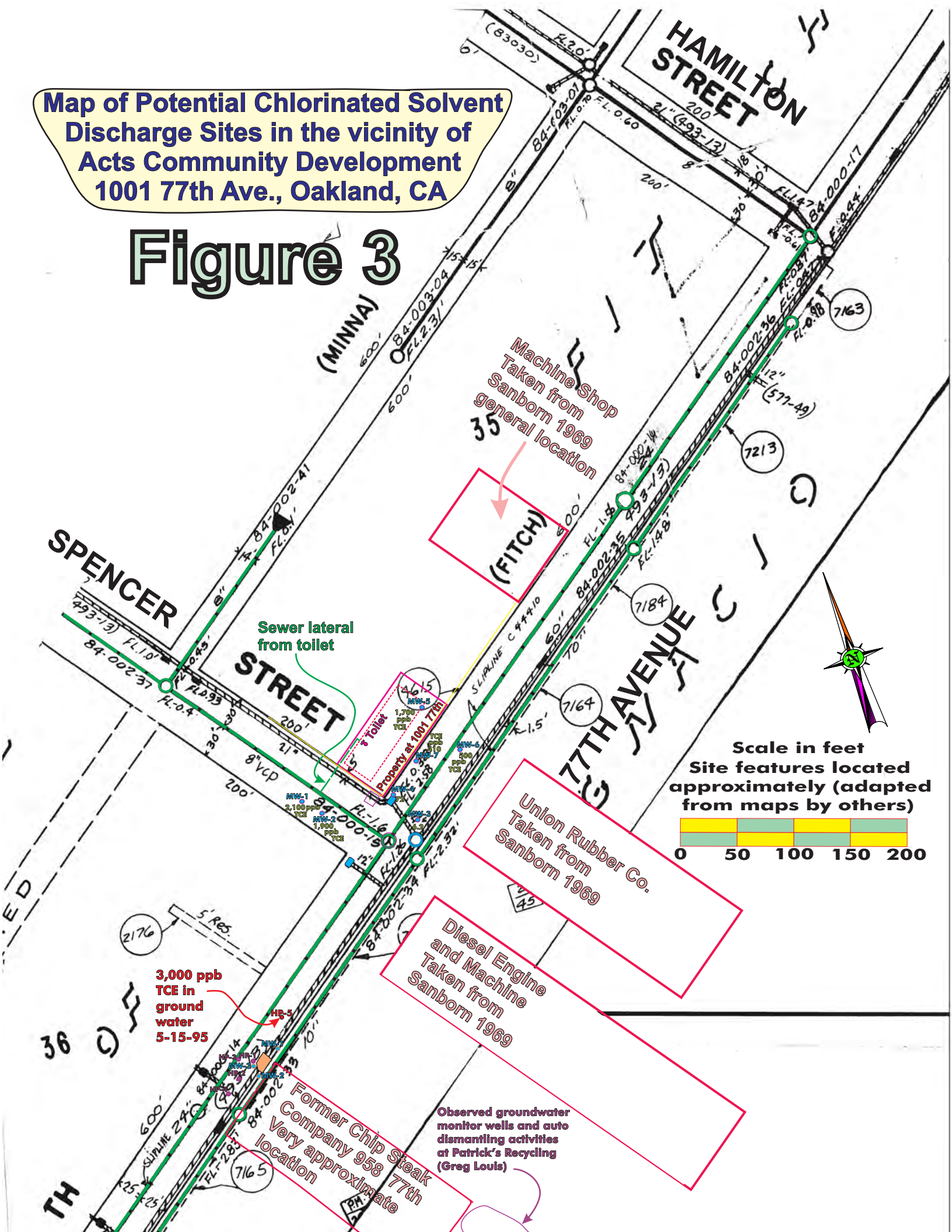
General Location of former Motor Manufacturing Facility

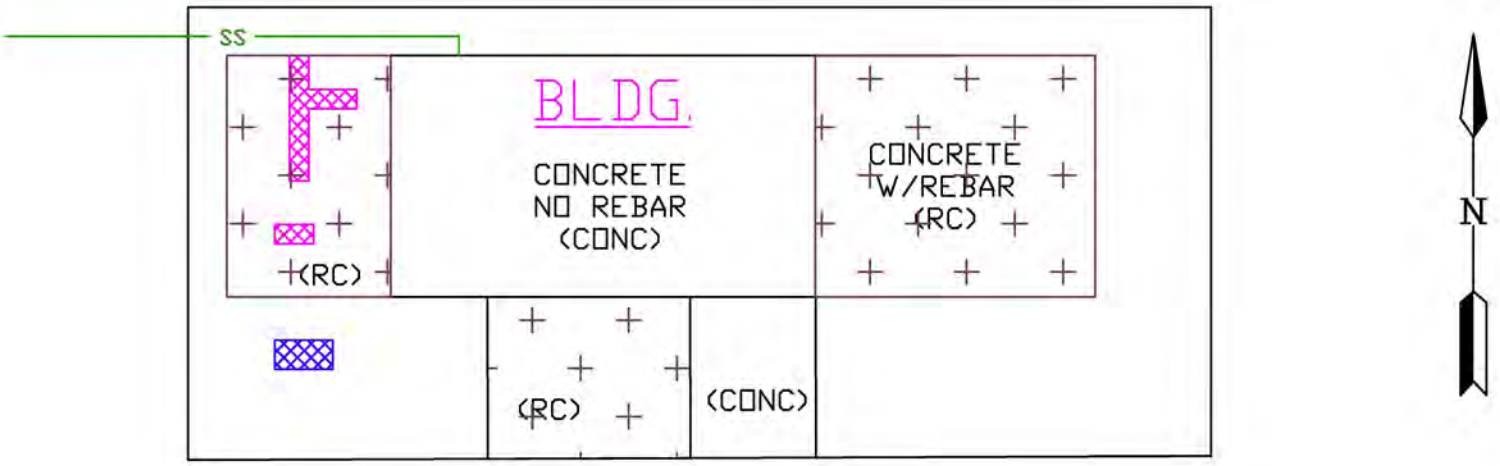
Map of Potential Chlorinated Solvent Discharge Sites in the vicinity of Acts Community Development 1001 77th Ave., Oakland, CA

Figure 3



Subtronic Corp.
Drawn By Pierre Armand
Geophysical Survey Site Map
Site 1001 77th Street, Oakland, CA

Performed May 09, 2008



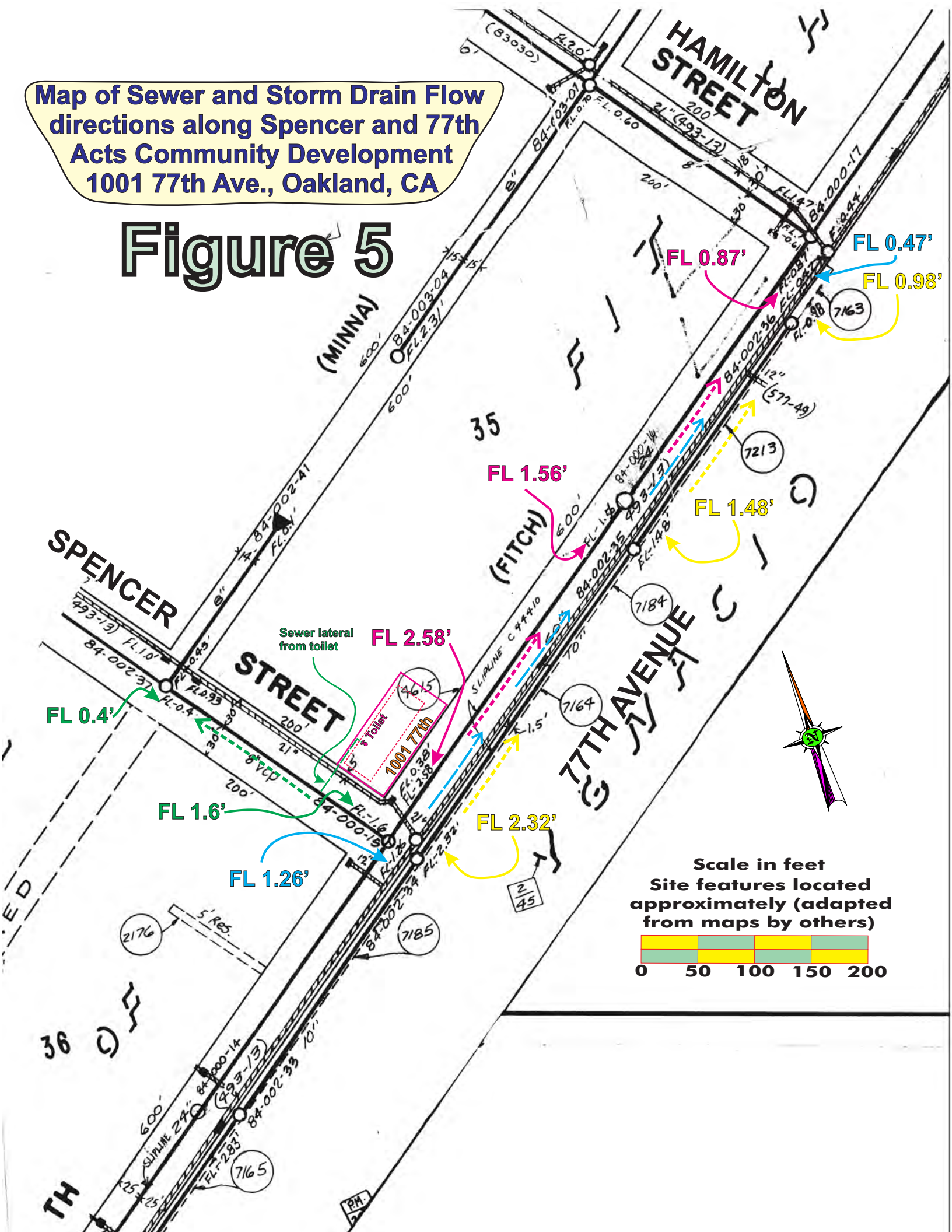
Radar Anomalies

Metallic Anomalies

Figure 4

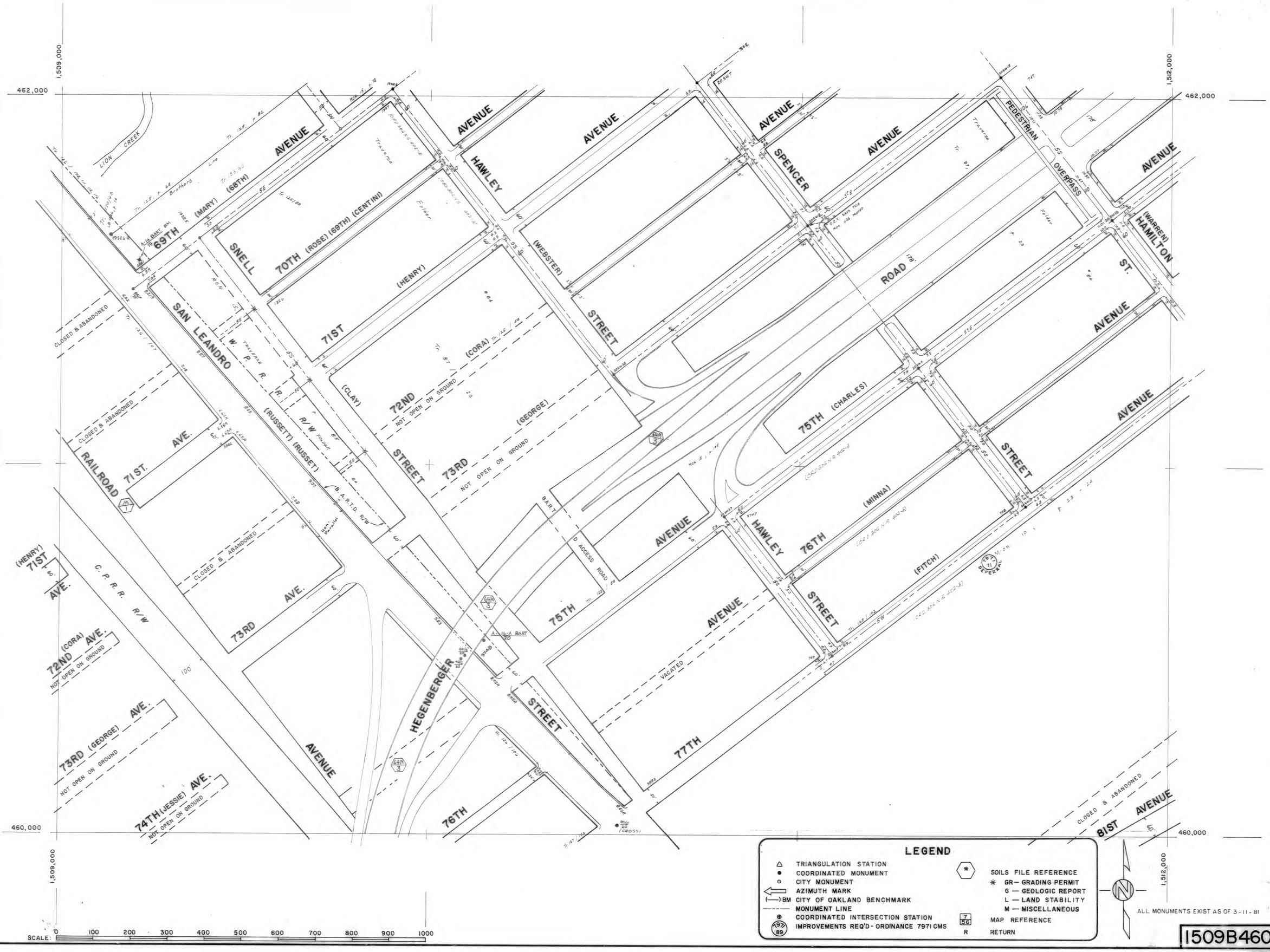
Map of Sewer and Storm Drain Flow directions along Spencer and 77th Acts Community Development 1001 77th Ave., Oakland, CA

Figure 5



ATTACHMENT A

Maps of curb elevations relative to storm and sewer line elevations

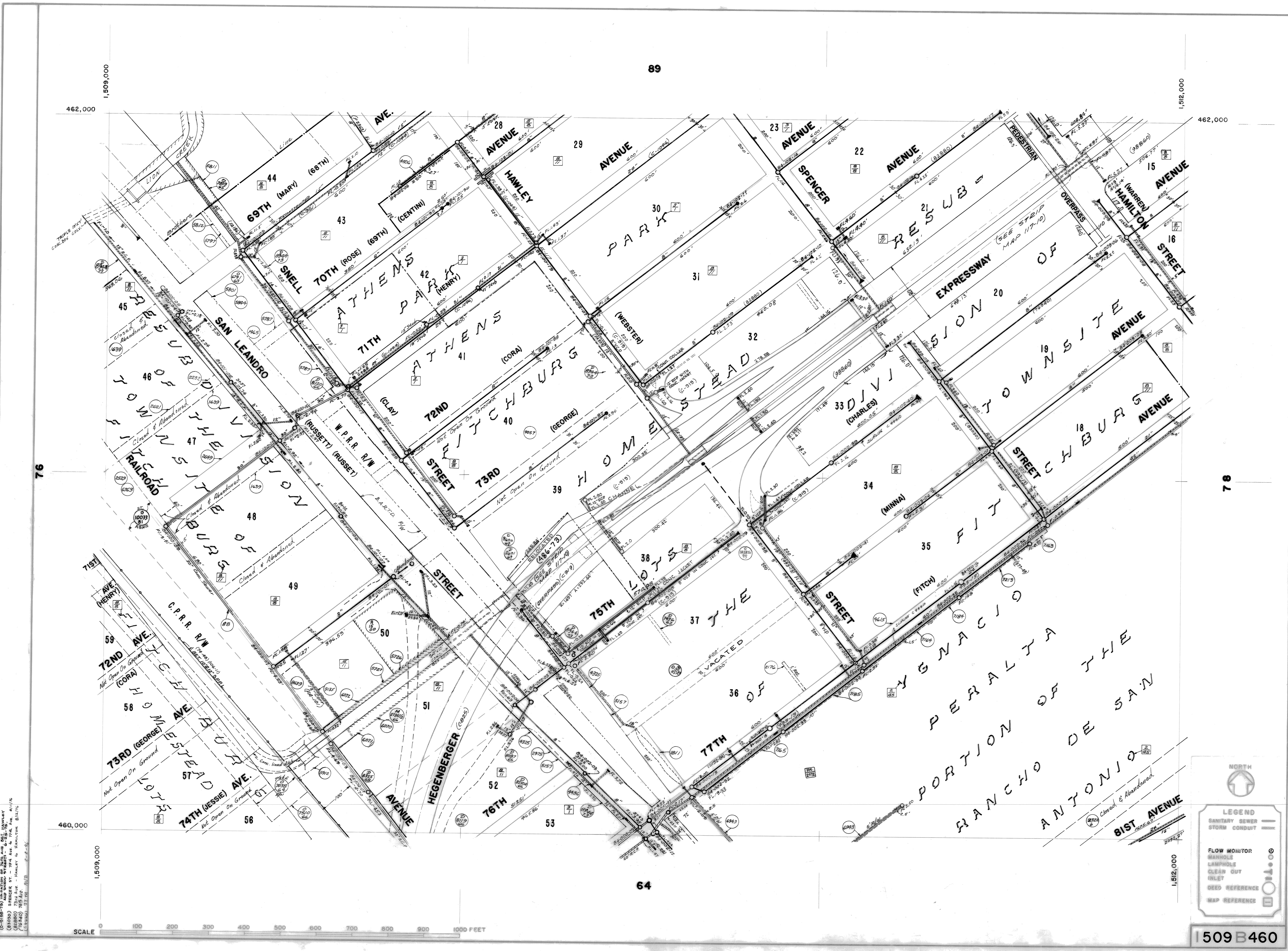


LEGEND

- △ TRIANGULATION STATION
- ● COORDINATED MONUMENT
- ○ CITY MONUMENT
- ⇦ AZIMUTH MARK
- (—) BM CITY OF OAKLAND BENCHMARK
- ——— MONUMENT LINE
- ⊕ COORDINATED INTERSECTION STATION
- (97/89) IMPROVEMENTS REQ'D - ORDINANCE 7971 CMS
- ✳ SOILS FILE REFERENCE
- ✳ GR — GRADING PERMIT
  G — GEOLOGIC REPORT
  L — LAND STABILITY
  M — MISCELLANEOUS
- 7/56 MAP REFERENCE
- R RETURN

ALL MONUMENTS EXIST AS OF 3-11-81

1509B460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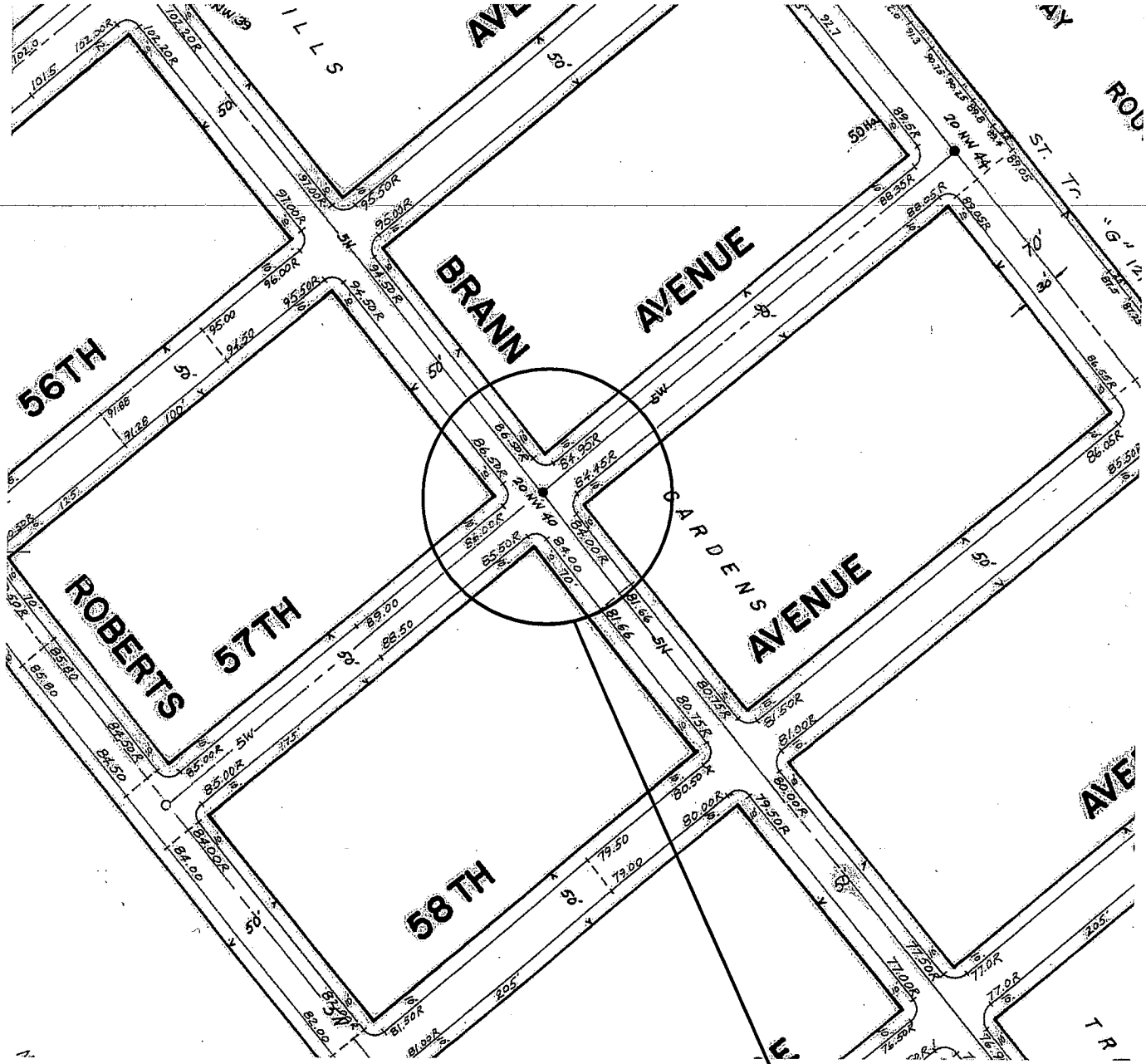
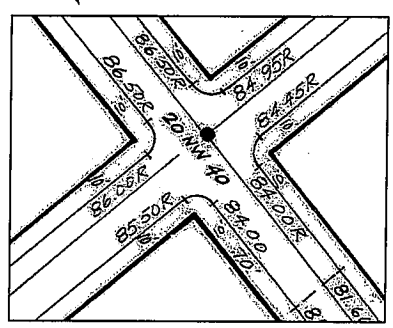
1,509,000
1,512,000
69TH (MARY) (68TH)
70TH (ROSE) (69TH)
71TH
72ND
73RD
75TH
76TH
77TH
81ST AVENUE
SNELL
HAWLEY AVENUE
SPENCER AVENUE
HAMILTON AVENUE
PEDESTRIAN OVERPASS
EXPRESSWAY (SEE STRIP MAP 117-10)
SAN LEANDRO STREET
HEGENBERGER (C825)
(CENTINI)
(HENRY)
(CORA)
(GEORGE)
(CLAY)
(RUSSETT) (RUSSET)
(WEBSTER)
(CHARLES)
(MINNA)
(FITCH)
(WARREN)
W.P.R.R. R/W
C.P.R.R. R/W
B.A.R.T.D. R/W
RAILROAD
LION CREEK
ATHENS PARK
ATHENS
FITCHBURG
HOMESTEAD
PARK
RESUBDIVISION OF FITCHBURG TOWNSITE
RESUBDIVISION OF THE TOWNSITE OF FITCHBURG
LOTS OF THE VACATED
FITCHBURG HOMESTEAD LOTS
PORTION OF THE RANCHO DE SAN ANTONIO
YGNACIO PERALTA
Not Open On Ground
Closed & Abandoned
71ST AVE. (HENRY)
72ND AVE. (CORA)
73RD (GEORGE) AVE.
74TH (JESSIE) AVE.
NORTH
LEGEND
SANITARY SEWER
STORM CONDUIT
FLOW MONITOR
MANHOLE
LAMPHOLE
CLEAN OUT
INLET
DEED REFERENCE
MAP REFERENCE
SCALE
0 100 200 300 400 500 600 700 800 900 1000 FEET

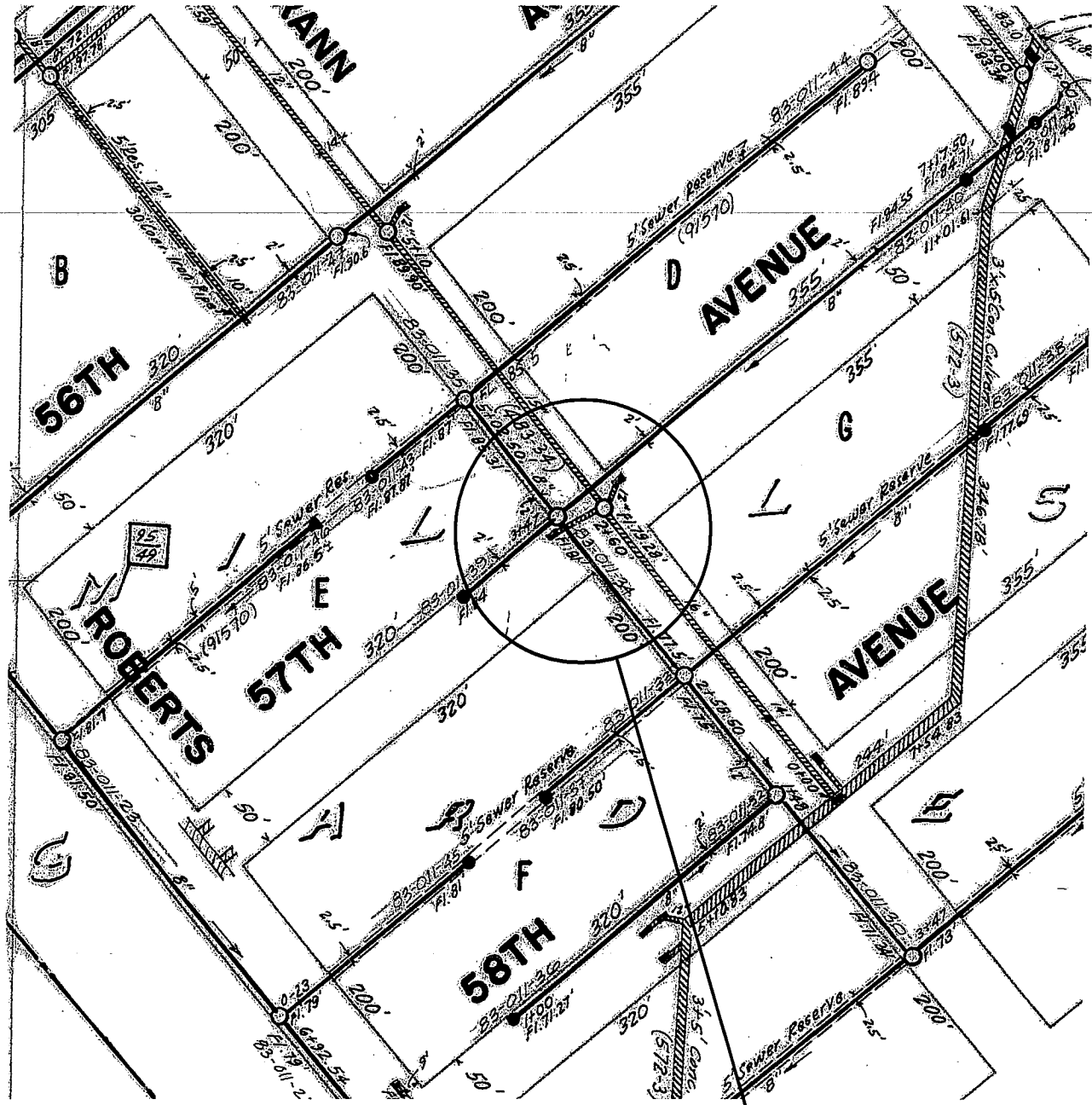
1509 B460



Curb elevation range at this intersection is from 84.00 to 86.50. See next page for sewer flow line information and calculation example.

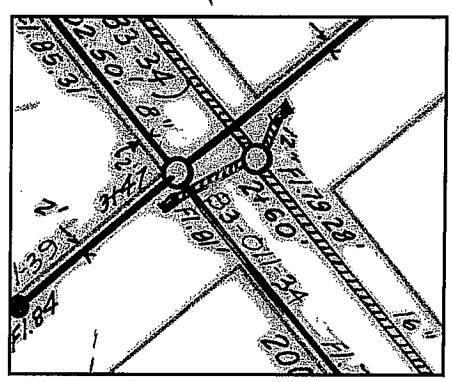


Detail



Flow line at this intersection for storm drain = 79.28'; for sanitary sewer = 81'.

To obtain depth of sewer one needs to subtract flow line from curb elevation. For example, the storm drain is located 4.72' below grade (84.00' – 79.28' = 4.72').



Detail

Attachment 2

Photo number 7 showing UST parts in tank backfill (Corrective Action Report, Steller, February 2006)

Subject: Looking east at former UST excavation backfill material, showing former UST parts in the backfill material.	
Site: 1001 77th Avenue, Oakland, CA	
Date Taken: January 9, 2006	Project No.: SES 2005-51
Photographer: Joe Dinan	Photo No.: 07

Subject: Pumping contaminated groundwater from the excavation.	
Site: 1001 77th Avenue, Oakland, CA	
Date Taken: January 20, 2006	Project No.: SES 2005-51
Photographer: Joe Dinan	Photo No.: 08