Tiki Car Wash
Last # 2910
UST # 100678
Bellevue / King Co.

ENVIRONMENTAL ASSOCIATES, INC.

1380 - 112th Avenue Northeast, Suite 300
Bellevue, Washington 98004
(425) 455-9025 Office
(888) 453-5394 Toll Free
(425) 455-2316 Fax

April 7, 2003

ENTERED 5/2/03 - R.U

JN 23026-2

Mr. Roger Nye
Washington State Department of Ecology
3190 - 160th Avenue SE
Bellevue, Washington 98008-5452

RECEIVED
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DEPT OF ECOLOGY

Subject: **TECHNICAL OVERVIEW**
Mid-Lakes Property
11807, 11811, 11815 Northeast 8th Street
Bellevue, Washington

Dear Mr. Nye:

In February 2003, Environmental Associates, Inc (EAI) presented our client South Heights, LLC with the findings of our Phase-I Environmental Audit on the above referenced property. Subsequently EAI was retained by South Heights, LLC to perform various subsurface soil and groundwater explorations on the subject property. Interpretations based upon the results of these explorations suggested that two (2) groundwater contaminant plumes from potential off-site sources appear to be impacting the subject property. These two (2) plumes are referred to by us as the Tiki Car Wash "plume" and the Frontline Auto "plume."

It is our understanding that our client and the seller have initiated a discussion with you to solicit your opinion as to the protections provided the involved parties under RCW 70.105D.020(12)(b)(iii) sometimes referred to as the "plume clause." In support of these discussions, our client has asked us to prepare this summary letter which presents information from our various phases of study that are specifically relating to both Frontline Auto and Tiki Car Wash developed by us during our resent Phase-I and Phase-II work.

Tiki Car Wash

Tiki Car Wash, located at 11909 Northeast 8th Street, which has been a gasoline service station since 1971, notified the WDOE of a release of petroleum hydrocarbons to soil and groundwater on approximately June 7, 1990. This LUST site is located adjacent to the east/northeast of the subject property in an inferred up-gradient hydrologic position, and several monitoring wells associated with this LUST site have been installed by others on the eastern-most subject parcel (see Plate 2, Site Plan). The WDOE lists the status of this site as "Cleanup Started" as of September 29, 1995. The WDOE LUST database suggests that an interim cleanup report for this site was received on July 25, 1996. The WDOE UST database suggests that a two (2) gasoline USTs installed in 1971, one (1) gasoline UST installed in 1978, and a single diesel UST installed in 1971, are presently operational at the Tiki Car Wash site (presently a Chevron-brand retail gasoline station and car wash).

On January 31, 2003, we spoke with you regarding the Tiki Car Wash LUST site. You advised us that the WDOE became involved with the Tiki Car Wash site cleanup efforts during the mid-1990's under a consent decree with the owner of that site. At that time, you also informed us that you were unaware of any recent groundwater sampling and testing from monitoring wells on/near the Tiki site (including five (5) monitoring wells on the subject property), conducted since the mid-1990's. You further advised us that groundwater sampled and tested from monitoring wells MW-2 and MW-6 (located on the subject property, see Plate 2, Site Plan) had concentrations above the MTCA Method A cleanup levels at that time for gasoline-range petroleum hydrocarbons. We were further advised that the groundwater remediation system on the Tiki site has not been operational for several years.

We independently reviewed files at the Northwest Regional Office of the WDOE for the Tiki Car Wash site on February 4, 2003. The most recent groundwater sampling data found in the WDOE files was conducted in 1996 (Enviros, 1996). At the time of the May 1996 sampling event, reported concentrations of gasoline-range petroleum hydrocarbons and associated BTEX constituents were well above their applicable MTCA Method A cleanup levels in samples collected from MW-29 (on the Tiki Car Wash site), MW-2, and MW-6 (on the subject site). All of the groundwater samples which were analyzed at that time were reportedly tested by method WTPH-G/BTEX and/or EPA Method 5030/8020. Total gasoline range petroleum hydrocarbon concentrations reported for groundwater samples collected and analyzed from these wells in May 1996 were 6,800 ppb (MW-2), 110,000 ppb (MW-6), and 150,000 ppb, (MW-29). Concentrations of total gasoline-range petroleum hydrocarbons and associated BTEX constituents were reportedly not detected in groundwater samples analyzed from monitoring wells MW-5, MW-7, MW-20, MW-23, and AGI MW-3 (see Plate 2, Site Plan), during the May 1996 sampling event.(Enviros, 1996).

As noted earlier, the WDOE UST database suggests that a single diesel UST installed in 1971 is presently in operation at the Tiki Car Wash site. No laboratory testing results or discussions for analysis of diesel-range petroleum hydrocarbons in samples collected by others from the monitoring wells depicted on Plate 2,Site Plan (if any) were found in our research of files at the Northwest Regional Office of the WDOE.

Frontline Auto

Dollar Rent-A-Car Systems #223 (presently identified as Frontline autos), located at 11839 Northeast 8th Street, reported a release to the WDOE of petroleum products to soil and groundwater at that site on approximately August 23, 1989. This property was a former gasoline station and bulk-heating oil distributor. This LUST site is situated adjacent to the north of the eastern-most subject parcel, and adjacent to the east of the northern portion of the western subject parcel, in an inferred up-gradient hydrologic position. The WDOE lists the status of this LUST site as "Cleanup Started" for groundwater and "Reported Cleaned Up" for soil. A review information regarding this LUST site on-file at the Northwest Regional Office of the WDOE revealed that a total of five (5) USTs were removed from this site in August and September 1989 (AGI, 1989). These USTs reportedly included two (2) 10,000-gallon and one (1) 6,000-gallon gasoline tanks, a single 550-gallon waste oil tank, and a single 600-gallon "fuel oil" tank. Following UST removals, approximately 990 cubic yards of petroleum-impacted soil was excavated proximal to the removed gasoline and fuel oil tanks, and lawfully treated off-site. Applied Geotechnology, Inc. (AGI) opined on page 7 of their tank closure report (AGI, 1989) that "the highest levels of contamination were found along most of the east wall of the excavation, and appeared to be associated with a 600-gallon fuel oil tank". This AGI report further advises that complete excavation of this petroleum-impacted soil was not possible owing to reasonable concerns of affecting the integrity of the site building foundation. A groundwater remediation system was reportedly put into operation at this LUST site in March 1990, and operated until August 13, 1990 (AGI, 1990). The groundwater remediation system was reportedly removed from that site in September 1990. Concentrations of benzene in groundwater collected from monitoring well MW-2 (see Plate 2, Site Plan) reportedly decreased from 780 ppb in March 1989, prior to installation of the groundwater remedial system, to 6.8 ppb in a sample collected from MW-2 on August 15, 1990.

Tiki-Car Wash Plume - Monitoring Well Sampling

EAI sampled groundwater from four (4) monitoring wells located on the subject property (MW-2, MW-5, MW-6, MW-7) on February 3, 2003, followed by sampling of groundwater from a fifth well on the property (MW-12) on February 6, 2003, using sterile disposable Teflon bailers. The locations of these wells are presented on Plate 2, Site Plan.

Groundwater was encountered at depths ranging from approximately 4 feet to approximately 6.5 feet below the ground surface in the five (5) pre-existing monitoring wells on the property.

Very strong gasoline-like odors were noticed in water purged from monitoring well MW-6 on February 3, 2003. A thin layer, approximately one-eighth of an inch thick, of "free-product" gasoline was observed in the first volume of water withdrawn from that well. The layer of "free-product" was not visible in additional volumes of water withdrawn from this well with a teflon bailer. However, a strong gasoline odor was still noticeable after approximately 4.5 gallons of water had been purged from the well, and a "sheen" was visible on water purged into a storage container.

Strong diesel-like odors were noticed in water purged from monitoring well MW-2 on February 3, 2003. A strong diesel-like odor was still noticeable after approximately 8 gallons of water had been purged from that well, and a "sheen" was observed on water purged into a storage container, separate from the container used for purge water from well MW-6. No strong petroleum-like odors or sheens were noticed in groundwater purged or collected from monitoring wells MW-5, MW-7, or MW-12.

As summarized on Table 1, laboratory testing of groundwater samples collected from the five (5) monitoring wells located on the subject property (MW-2, MW-5, MW-6, MW-7, and MW-12) revealed concentrations of gasoline-range hydrocarbons of 3,600 parts-per-billion (ppb) in MW-2, 45,000 ppb in MW-5, and 86,000 ppb in MW-6 . Benzene concentrations ranged from 22 ppb in the groundwater sample collected from MW-2, to 13,000 ppb in the samples collected from MW-5 and MW-6. Laboratory testing of collected groundwater samples for diesel-range petroleum hydrocarbons revealed a concentration of 3,200 ppb in MW-2, 7,400ppb in MW-6, and 6,500 ppb in MW-5. All of the tested groundwater samples collected from monitoring wells MW-2, MW-5, and MW-6 were reportedly diluted at the project laboratory prior to quantitative analysis. Concentrations of gasoline- and diesel-range petroleum hydrocarbons along with gasoline constituents benzene, toluene, ethylbenzene, and xylene (BTEX) were not detected in the groundwater samples recently collected by EAI from MW-7 and MW-12. No heavy oil-range petroleum hydrocarbons were detected in any of the tested groundwater samples collected from the five (5) on-site monitoring wells. For reference, the WDOE cleanup levels for gasoline, benzene, and diesel in groundwater are 800 ppb (with benzene present), 5.0 ppb, and 500 ppb, respectively.

EAI - Additional Groundwater Sampling & Testing

On February 24, 2003 four (4) auger borings (B6 through B9) were made at the approximate locations noted on Plate 2, Site Plan, using a truck mounted hollow-stem auger soil boring rig. Borings B6, B7, and B8 were located proximal to the shared property boundary with the adjacent Dollar Rent-A-Car (currently Frontline autos) WDOE-listed "Leaking Underground Storage Tank" (LUST) site, in an effort to assess whether or not the subject property has been adversely impacted by this off-site locality. The location of boring B9 was selected to assist in deducing the possible lateral limits of the potential petroleum hydrocarbon-contaminated groundwater plume which apparently originated from the adjacent Tiki Car Wash site.

Groundwater samples were collected from the augers in boring B6 using a sterile disposable teflon bailer. Groundwater samples were collected using disposable sterile teflon bailers from borings B7 and B9 through a temporary sterile perforated PVC pipe inserted into each boring, following removal of the auger string, due to the relatively slow groundwater recharge rates. We were unable to collect groundwater samples from boring B8 as the seepage zone noted from that boring did not yield a sufficient quantity of water, however a soil sample was recovered from the seepage-zone at a depth of 6 to 7.5 feet below the ground surface.

Laboratory Results- Tiki Car Wash Borings

As summarized in Table 1, the groundwater sample collected and laboratory tested from boring B9 contained a total gasoline-range petroleum hydrocarbon (TPH-G) concentration of approximately 58,000 parts-per-billion (ppb), and a total diesel- range petroleum hydrocarbon (TPH-D) concentration of approximately 12,000 ppb which are both well above their applicable MTCA Method A cleanup levels of 800 ppb (with benzene present) and 500 ppb, respectively in groundwater. Approximate concentrations of benzene, toluene, ethylbenzene, and total xylenes are all well above their applicable MTCA Method A cleanup levels in the laboratory tested groundwater sample collected from boring B9. No heavy oil-range petroleum hydrocarbons were reportedly detected in the laboratory analyzed groundwater sample collected from boring B9. As mentioned earlier, the location of boring B9 was selected to assist in deducing the possible lateral limits of the potential petroleum hydrocarbon-contaminated groundwater plume which apparently originated from the adjacent Tiki Car Wash site, Plate 2, Site Plan depicts very approximate lateral limits of the potential "Tiki Car Wash" plume.

Laboratory Results- Frontline Auto Borings

As summarized in Table 1, a concentration of 500 ppb for total diesel-range petroleum hydrocarbons was detected in the laboratory tested groundwater sample collected from boring B6 (see Plate 2, Site Plan), which coincides with the applicable MTCA Method A cleanup level in groundwater. Laboratory testing of groundwater samples collected from borings B6 and B7 revealed no detectable concentrations of heavy oil-range or total gasoline-range petroleum hydrocarbons and associated BTEX gasoline constituents. No total diesel-range petroleum hydrocarbons were detected in the tested groundwater sample collected from boring B7.

Although a groundwater sample was not retrievable from B8, the soil sample collected at the depth of the suspected groundwater seep did not have detectable concentrations of gasoline, BTEX, diesel or heavy oil.

Supplemental Groundwater Testing - Frontline Auto Plume

Acknowledging the elevated concentration of diesel detected in the groundwater at B6, EAI completed a Strataprobe boring (B15) in the northeast corner of the subject property building (Plate 2, Site Plan) on March 11, 2003. The groundwater grab sample retrieved from Boring B15 was tested for diesel range petroleum hydrocarbons. As presented on Table 1, the groundwater sample from B15 contained 190 ppb diesel, which is below the 500 ppb target compliance level.

Summary Discussion / Conclusions

As depicted on Plate 2, two (2) separate plumes of impacted groundwater appear to have migrated onto the subject property from adjacent sources.

Impacts to the subject property from a petroleum product release that apparently originated off-site at the adjacent "Tiki Car Wash 'Leaking Underground Storage Tank'" site were confirmed in tested soil and groundwater samples collected by EAI from boring B9 and in groundwater samples collected and laboratory tested from pre-existing monitoring wells MW-2, MW-5, and MW-9 on the subject site (see Plate 2, Site Plan).

The east adjacent Frontline Auto facility, which was formerly a gasoline station and bulk-heating oil facility, may conceivably be the source of diesel-impacted groundwater in the vicinity of Boring B6. The concentration of diesel at B6 was coincident with the target compliance level of 500 ppb. Acknowledging that the concentration of diesel at B15 is well below the compliance level, it would appear that the encroachment of diesel-impacted groundwater onto the subject property may currently be marginal.

Acknowledging that the suspected sources of both of these contamination plumes on the subject property appear to be associated with adjacent properties, we advised our client that he and his lender may not be held liable by the regulatory agencies for future cleanup of the subject property that could result from the continued inaction of the adjacent property owners. The reasoning behind this presumption rests upon provisions of the Model Toxics Control Act (MTCA 2001 edition), and more specifically under "Definitions" RCW 70.105D.020 (12) (b) (iii) A though E et seq., wherein an owner or operator of the subject property may not be liable for the clean up if the problem migrated to his property through the groundwater from an off-site source so long as the provisions of sections A through E can be demonstrated or met.

Limitations

This technical overview has been prepared for the exclusive use of South Heights, LLC, along with Puget Sound Properties and their several representatives for specific application to this site. Our work for this project was conducted in a manner consistent with that level of care and skill normally exercised by members of the environmental science profession currently practicing under similar conditions in the area, and in accordance with the terms and conditions set forth in our proposal dated February 28, 2003. The opinions expressed in this technical overview are based upon the results of sampling and testing conducted at separated sampling localities and conditions may vary between those locations or at other locations and depths. EAI makes no warranty with respect to future actions of regulatory agencies with respect to this property. No other warranty, expressed or implied, is made. If new information is developed in future site work that may include excavations, borings, studies, etc., Environmental Associates, Inc., must be retained to reevaluate the conclusions of this technical overview and to provide amendments as required.

We appreciate the opportunity to provide this addendum and trust that the information provided here is responsive to your needs. If you have any questions or we may be of additional service, please do not hesitate to contact us.

Respectfully submitted,
ENVIRONMENTAL ASSOCIATES, INC.

Robert B. Roe, M.Sc., P.G.
Hydrogeologist

License: 1125 (Washington)

Don W. Spencer, M.Sc., P.G., R.E.A.
Principal

EPA Certified Asbestos Inspector/Management Planner
I.D. # AM 48151

EPA/HUD Certified Lead Inspector

Registered Site Assessor/Licensed UST Supervisor
State Certification # 947458636

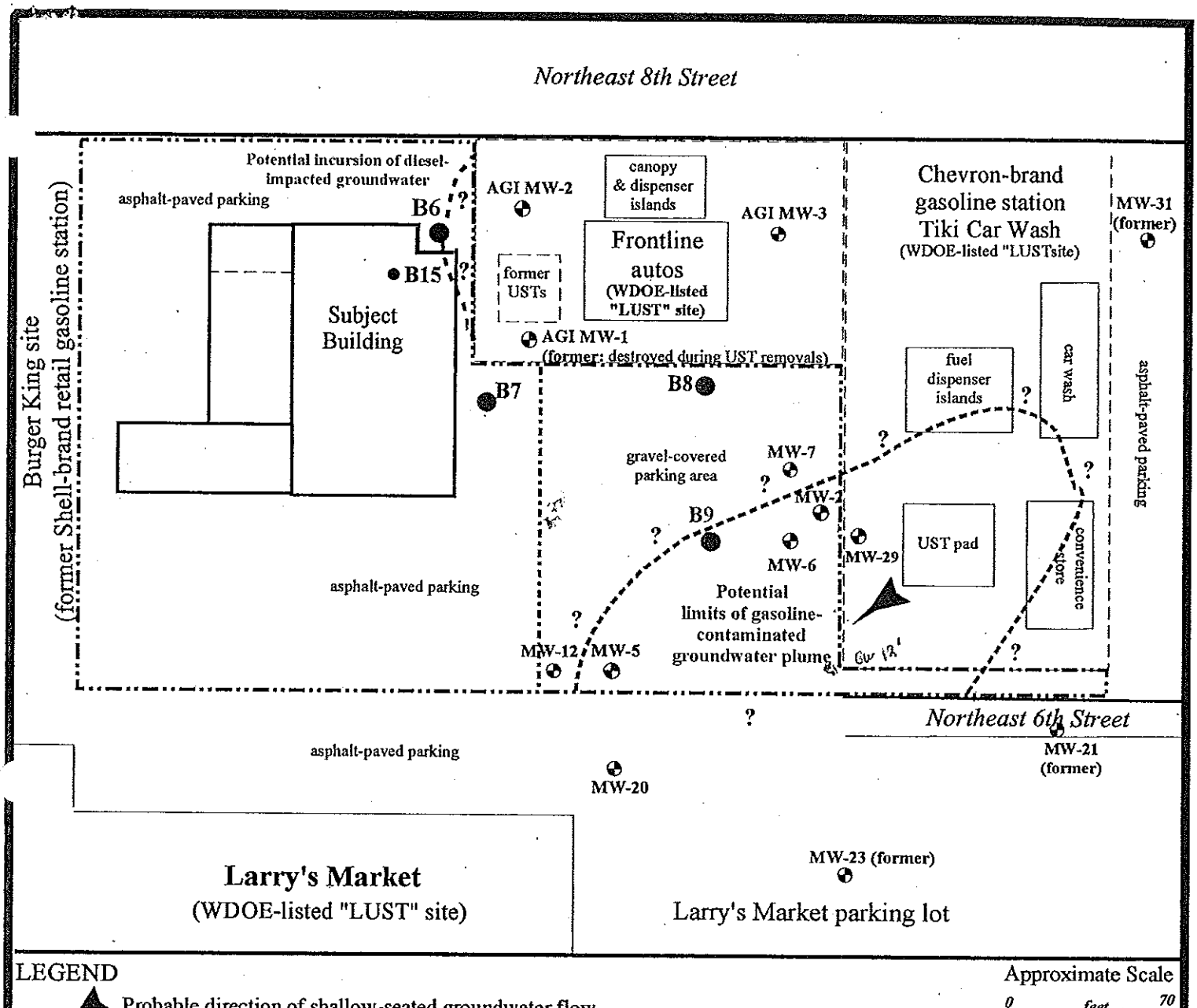
License: 604 (Washington)
License: 11464 (Oregon)
License: 876 (California)
License: 5195 (Illinois)
License: 0327 (Mississippi)

TABLE 1 - Petroleum Hydrocarbons - Groundwater Sampling Results
Mid-Lakes Property - Bellevue, Washington
All results and limits in parts per billion (ppb)

Monitoring Wells	Gasoline (TPH)	Diesel	Heavy Oil	Benzene	Toluene	Ethylbenzene	Total Xylenes
MW-2	***3,600***	***3,200***	ND	***22***	28	160	470
MW-5	***45,000***	***6,500***	ND	***13,000***	***5,600***	***2,400***	***12,000***
MW-6	***86,000***	***7,400***	ND	***13,000***	***21,000***	***3,500***	***18,000***
MW-7	ND	ND	ND	ND	ND	ND	ND
MW-12	ND	ND	ND	ND	ND	ND	ND
Hollow-Stem Auger & Strataprobe Borings	**Gasoline (TPH)**	**Diesel**	**Heavy Oil**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**
B6	ND	***500***	ND	ND	ND	ND	ND
B7	ND	ND	ND	ND	ND	ND	ND
B9	***58,000*** [3,6]	***12,000*** [3]	ND	***4,900*** [3,6]	***4,500*** [3,6]	***1,200*** [3,6]	***5,700*** [3,6]
B15	NT	190	ND	NT	NT	NT	NT
Reporting Limit [4]	50	50	250	1	1	1	1
MTCA-Method-A Cleanup Levels[5]	1,000 (no benzene) 800 (with benzene)	500	500	5	1000	700	1000

Notes:
1 - "ND" denotes analyte not detected at or above listed Reporting Limit.
2- "NT" denotes sample not tested for specific analyte.
3- Reported concentration is an estimate as the value reported exceeded the calibration range established for the analyte.
4- "Reporting Limit" represents the laboratory lower quantitation limit.
5- Method A groundwater cleanup levels as published in the Model Toxics Control Act (MTCA) 173-340-WAC.
The MTCA gasoline TPH cleanup level is 1000 ppb for groundwater with no benzene. Otherwise, the cleanup level is 800 ppb.
6- Sample was reportedly diluted at the project laboratory prior to analysis.

Bold and Italics denotes concentrations above existing MTCA Method A groundwater cleanup levels.



LEGEND

- Probable direction of shallow-seated groundwater flow
- Approximate limits of subject property
- MW-2 / AGI MW-1 — Approximate location of groundwater monitoring wells installed by others
- Approximate location of EAI Strataprobe borings (●) and Auger borings (●).
- Red-colored wells indicates that contaminant concentrations) exceeded MTCA Method A Cleanup levels.

Approximate Scale: 0 feet 70

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ENVIRONMENTAL ASSOCIATES, INC.

1380 - 112th Avenue NE, Suite 300
Bellevue, Washington 98004

SITE PLAN

Mid-Lakes Property
11807, 11811, 11815 Northeast 8th Street
Bellevue, Washington

Job Number:	Date:		Plate:
JN 23026-2	April 2003		2