Based on site information available to us at this time, 15 soil borings will be advanced to approximately 12 feet bgs to further characterize the site soils and fill materials. The proposed boring locations are depicted on Figure 8.

The following table summarizes the rational for the boring locations:

Soil Boring	Location
ST-1 through ST-3	North, east, and south sides of turning slab in southwest corner of Scrap Metal Processors site to evaluate potential soil impacts.
ST-4	West side of site to evaluate soil conditions in areas where scrap metal piles were formerly located.
ST-5 through ST-7	Northern portion of site where ASTs were formerly located beginning in the 1940s. ST-5 also is located within footprint of former baler building. ST-7 also is located in area where a large scrap metal pile was formerly located and where soil will be graded prior to placement of a crushed concrete cap.
ST-8 through ST-14	Near turning slabs and evaporator house to evaluate potential soil impacts. Soil borings also are in an area where ASTs were formerly located beginning in the 1930s.
St-15	On Special School District #1 site near proposed bridge abutment.

The exact soil boring locations will be determined by Braun Intertec based on the locations of the potential sources of contamination, the accessibility of drilling equipment, locations of utilities, and other structures or obstructions actually observed in the field. Following advancement, the soil borings will be abandoned in accordance with MDH requirements.

In addition to the soil borings, a minimum of one test trench will be excavated along the length of the proposed roadway through the Scrap Metal Processors site. The test trench will be excavated using a backhoe to a depth of about 8 feet bgs or the top of the water table whichever is shallower. Based on the results of the initial test trench, additional trenches might be excavated to further evaluate soil conditions at the site. For example, if material in the initial test trench is heterogeneous in nature, additional test trenches will be excavated throughout the proposed roadway to further evaluate material that will be encountered. The type of soil and non-soil fill will be described and the percentage of different types of non-soil fill will be estimated.

Following field evaluation and sampling, the excavated material will be replaced in the test trench excavation unless containers of waste are encountered. If containers are encountered, the excavation will cease immediately and the excavation will be secured. The MPCA will be notified and a plan of action will be developed with the MPCA and the City.

D.1.a. Soil Classification and Monitoring

A Braun Intertec environmental field technician will monitor the subsurface materials encountered at each soil boring and test trench location. Soils will be classified in the field by the drill rig crew chief and the technician in accordance with ASTM D 2487 "Unified Soils Classification System" and ASTM D 2488 "Recommended Practice for Visual and Manual Description of Soils." Soil discoloration and odors will be documented if detected.

In addition, soil samples will be screened for the presence of organic vapors with a PID using both direct readings from each split-barrel sample and the headspace method of analysis recommended in MPCA Tanks and Emergency Response Section Fact Sheet #3.22. The sample used for the bag headspace measurements will not be used for chemical analysis. The PID will be equipped with a 10.6-eV lamp and calibrated to an isobutylene standard.

D.1.b. Chemical Analyses

Two soil samples will be collected from each of the soil borings for chemical analyses. One soil sample will be collected from the upper 4 feet of soil from the interval with the highest PID reading or where soil staining and/or odors are encountered. If no indications of contamination are encountered soil samples will be collected from random intervals within the upper 4 feet of soil. A second soil sample will be collected from immediately above the water table, which is estimated to be encountered at depths ranging from 6 feet to 10 feet bgs, in order to evaluate the vertical extent of contamination. From the test trench it is anticipated that 4 soil samples will be collected from the upper 4 feet of soil and the 4 samples will be collected from depths greater than 4 feet bgs. The samples will be collected from intervals with indications of contamination, or if such conditions are not observed, the samples will be collected at various depths to evaluate soil quality.

The soil samples will be analyzed at the Braun Intertec laboratory for the presence and concentrations of the following parameters:

- VOCs using EPA Method 8260 (MDH 466 list)
- SVOCs using EPA Method 8270
- GRO using the Wisconsin Department of Natural Resources (WDNR) Method
- DRO using the WDNR Method
- Priority Pollutant metals using EPA 6000 and 7000 series methods
- PCBs using EPA Method 8082

Additional sample volume will be held by the laboratory pending receipt of the analytical results. If potentially hazardous concentrations of metals or other contaminants are detected, those samples will be further analyzed for leachable concentrations of the applicable parameters using the TCLP. In addition, if elevated PCB impacts are detected and/or burned material is present in the sample, the additional volume might be chemically analyzed for dioxins.

The samples will be transported under refrigerated conditions and accompanied by Braun Intertec chain-of-custody records. All analyses will be performed within EPA holding times.

D.2 Additional Groundwater Assessment

As part of the additional investigation, a groundwater sample will be collected from a temporary well that will be installed within soil boring ST-15. After the water table is encountered in the borehole, a temporary monitoring well will be constructed in the hollow-stem auger and used to collect groundwater samples for laboratory chemical analyses. The water table is estimated to be within 6 feet to 10 feet bgs.

The temporary well will be constructed with 1-inch PVC screen and riser pipe. New dedicated polyethylene tubing fitted with a stainless-steel check-ball valve will be used to collect groundwater sample from the temporary wells.

After the groundwater sample has been collected, the borehole will be properly abandoned in accordance with MDH guidelines. All groundwater sampling equipment will be cleaned with soap and water prior to the collection of the sample.

The groundwater sample will be analyzed by the Braun Intertec laboratory for the following parameters:

- VOCs using EPA Method 8260
- SVOCs using EPA Method 8270
- GRO using the WDNR Method
- DRO using the WDNR Method
- Dissolved priority pollutant metals using EPA Method 200.8

D.3 Shallow Soil/Sediment Assessment

To evaluate soil/sediment in the area where an overflow channel for Bassett Creek will be constructed and the former Bassett Creek will be deepened, shallow soil/sediment samples will be collected at seven locations. In general, one soil sample will be collected every 100 feet along the proposed construction

area. A soil sample will be collected at each of these locations from ground surface to a depth of 4 feet bgs. Soil samples will be collected using hand tools or a truck-mounted drill rig and stainless steel split-barrel sampler. Sampling equipment will be cleaned with soap and water prior to the collection of each sample. The proposed soil sampling locations are shown on Figure 8.

The soil samples at each location will be chemically analyzed as follows:

- VOCs using EPA Method 8260 (MDH 466 list)
- SVOCs using EPA Method 8270
- GRO using the WDNR Method
- DRO using the WDNR Method
- Priority Pollutant metals using EPA 6000 and 7000 series methods
- PCBs using EPA Method 8082

Additional sample volume will be held by the laboratory pending receipt of the analytical results. If potentially hazardous concentrations of metals or other contaminants are detected, those samples will be further analyzed for leachable concentrations of the applicable parameters using the TCLP. In addition, if elevated PCB impacts are detected and/or burned material is present in the sample, the additional volume might be chemically analyzed for dioxins.

D.4 Concrete Sampling

Prior to removal of the concrete turning slabs/bunkers, concrete core samples will be collected from each bunker. From the turning slabs located near the evaporator house, one core will be collected from the base of the bunker, and two samples will be collected from the bunker walls. From the turning slab located on the southwest side of the site, two concrete cores will be collected from the base of the slab. No samples will be collected from the walls of this slab because the walls are only about 1 foot high. Prior to analysis, each concrete core will be crushed. The concrete samples will be analyzed for the following parameters:

- VOCs using EPA Method 8260 (MDH 466 list)
- SVOCs using EPA Method 8270
- GRO using the WDNR Method
- DRO using the WDNR Method
- Priority Pollutant metals using EPA 6000 and 7000 series methods
- PCBs using EPA Method 8082

Additional sample volume will be held by the laboratory pending receipt of the analytical results. If potentially hazardous concentrations of metals or other contaminants are detected, those samples will be further analyzed for leachable concentrations of the applicable parameters using the TCLP. In addition, if elevated PCB impacts are detected and/or burned material is present in the sample, the additional volume might be chemically analyzed for dioxins.

D.5 QA/QC Sample Collection

The following quality assurance samples will be collected during the field investigation: (1) duplicate samples, (2) equipment blanks, (3) VOC trip blank, and (4) methanol blank. Duplicate soil and groundwater samples will be collected at a frequency of one duplicate sample per ten investigative samples. (No duplicate concrete samples will be collected.) Equipment blanks will be collected at a frequency of one equipment blank per twenty investigative samples. The duplicate and equipment blank samples will be analyzed for the same parameters as the investigative samples. One trip blank will accompany each cooler containing investigative samples for VOC analysis. Trip blanks and methanol blanks will be analyzed for VOCs.

E. Response Actions

Based on the existing environmental data for the site, the following response actions are proposed to properly manage contaminated material.

E.1. Removal of Turning Slabs and Evaporator House and Associated Oil/Water Separator and Holding Tank

As part of construction, these existing structures will be removed from the Scrap Metal Processors site. Currently, liquid and sludge are present in the oil/water separator and holding tank. Braun Intertec will coordinate removal and disposal of the liquid and sludge with an appropriately licensed waste hauler and disposal facility. Based on results from field test kits used by the waste hauler, an oily sludge on top of the frozen liquid contained elevated concentrations of chlorinated solvents and PCBs. Additional analytical testing for PCBs was conducted at a fixed-based laboratory, and the results indicated the total PCB concentration of the material was 33 mg/kg. The VOC analytical results for the oily sludge are pending and will be provided to the MPCA when they become available. Additional characterization of sludge in the bottom of the tank, which is currently frozen under ice, will be conducted at a later date when the material is accessible. The additional testing results and proposed disposal options will be provided to the MPCA at a later date when they become available.

In addition, to evaluating the liquid and sludge within the collection system, the concrete will be tested as part of the additional investigation. Following receipt of the analytical testing results, they will be forwarded to the MPCA along with proposed disposal options.

As the turning slabs, evaporator house, oil/water separator, and holding tank are removed, the surrounding soils will be screened in accordance with the procedures included in Section F. Following removal of the structures, confirmation samples will be collected for potential chemical analyses, which might include VOCs, SVOCs, priority pollutant metals, and PCBs.

E.2. Rough grading and placement of a crushed concrete cap.

The western side of the Scrap Metal Processors site will be graded for use as a construction staging area. The surface soils will be screened to remove at least the largest pieces of the remaining scrap metal and to level out that portion of the site for construction staging. Following grading, a cap of crushed concrete between 6 inches and 1 foot thick will be placed on the ground surface to act as a barrier between material that will be staged on the site and the underlying soil. The crushed concrete cap also will limit exposure to contaminated soil at the site. The results of the previous investigations indicate that areas where metals concentrations exceed Industrial SRVs are widespread in shallow soil (i.e., at about 1 foot bgs) across the site. Areas with VOC and PCB contamination at concentrations above the Industrial SRVs appear more limited in extent. VOCs above the Industrial SRVs have primarily been detected on the western side of the site in samples collected from soil borings SB-22 and SB-24. Elevated concentrations of PCBs have primarily been detected near the evaporator house and the turning slabs on the central portion of the site. If grading is conducted in areas where elevated concentrations of VOCs and PCBs, the soil will be kept in that specific area to prevent spreading of contamination to other areas of the site. Based on the results of the additional assessment and pending sufficient cleanup grant funding, discreet source areas where contaminant levels exceed Industrial SRVs, areas where elevated concentrations of PCBs are present, or areas where potentially hazardous waste is present, will be excavated and either stabilized for on-site re-use or disposed of off site. Otherwise, the response actions will be limited to those necessary to construct the roadway and capping the remainder of the site. In any event, additional response actions and investigation of groundwater and potentially soil at the Scrap Metal Processors and Feist Blanchard sites will be implemented as development of the area continues following construction of Van White Memorial Boulevard.

E.3. Management of Contaminated Soil

Contaminated soil is likely to be encountered during the following activities as part of construction of Van White Memorial Boulevard:

- During geotechnical soil correction and installation of utilities along Freemont Avenue near the Timberland Lumber Company petroleum-contaminated soil is likely to be encountered. This soil will be evaluated and managed in accordance with procedures described in Section F.

- During geotechnical soil correction activities and installation of utilities through the Feist Blanchard site, petroleum-impacted soil will be encountered. Through the CPR site, petroleum-impacted soil also likely will be encountered during construction. This soil will be evaluated and managed in accordance with procedures described in Section F.

- During geotechnical soil correction activities and installation of utilities through the Scrap Metal Processors site, metals, VOC, and PAH impacted soil will be encountered. This soil will be treated and re-used or disposed of in accordance with criteria included in Section F.4.

- During excavation of the overflow channel and deepening of the former Bassett Creek Channel and excavation for construction of the bridge abutment on the Special School District #1 site, metal and PAH impacted soil will be encountered. This soil will be managed in accordance with procedures outlined in Section F.

- During grading of soils for construction of the embankment and excavation for placement of the EPS and construction of the bridge abutments on the Impound Lot site, metals and VOC-impacted soil, as well as buried debris likely will be encountered. Areas of identified impacted soil will be managed in accordance with procedures outlined in Section F.

F. Construction Contingency Plan

F.1 Soil Screening

A Braun Intertec environmental technician will be on site during the excavation activities at the site and periodically during construction of the embankment and other filling activities. Soils will be observed for the presence of visual and olfactory indications of contamination. Direct olfactory evaluation of contaminated soil is not recommended for safety reasons, but incidental observations will be noted and acted on. The technician will follow MPCA-approved headspace methodology using a PID equipped with a 10.6-electron-volt lamp to monitor soil for the presence of organic vapors. A minimum of one sample for headspace analysis will be collected for every 20 cubic yards of soil removed. Screening results will be documented.

The headspace procedure is used to field-screen organic vapor levels in soils. The procedure consists of half-filling a new quart-sized sealable bag with a soil sample. The bag is quickly closed and headspace development is allowed to proceed for at least 10 minutes. The bag is shaken vigorously for 15 seconds, both at the beginning and the end of headspace development. After headspace development, the PID probe is inserted into the bag to one-half the headspace depth. The highest reading observed on the PID is then recorded.

F.2 Segregation of Potentially Contaminated Soil

In the event that potentially contaminated soils (i.e., soil with PID headspace readings greater than background, with other olfactory indications of contamination, or visual indications of contamination including staining or presence of non-soil material such as debris or ash) are encountered during the excavation activities, those soils will managed as follows:

Potentially Contaminated Soil Located North of Feist Blanchard and South of the Impound Lot

- Soils that do not exhibit organic vapor concentrations greater than background, as determined by PID headspace readings and that exhibit no significant visual or olfactory indications of potential contamination, will be re-used on site or off-site at the discretion of the contractor.

- Potentially impacted soils that exhibit PID headspace readings greater than background concentrations and/or soils that display visual or olfactory indications of contamination will be segregated and stockpiled on polyethylene sheeting or other impervious surface, covered with polyethylene sheeting at the end of each workday and will be secured in place. The stockpile(s) will be bermed, if necessary, to prevent stormwater run-on and/or runoff. Braun Intertec staff will work with the contractor to identify a convenient site location for stockpiling soils. Segregated soil that appears to have different types of impacts will be placed into separate stockpiles.

Potentially Contaminated Soil Located South of Feist Blanchard through the Impound Lot

- Soils excavated from these areas will be re-used or disposed of off site based on field observations and laboratory analytical results using the criteria included in Section F.4. If additional analytical data is required to evaluate potential re-use or disposal, the soil will be segregated and stockpiled on polyethylene sheeting or other impervious surface, covered with polyethylene sheeting at the end of each workday and will be secured in place. The stockpile(s) will be bermed, if necessary, to prevent stormwater run-on and/or runoff. Braun Intertec staff

will work with the contractor to identify a convenient site location for stockpiling soils. Segregated soil that appears to have different types of impacts will be placed into separate stockpiles.

F.3 Soil Sampling and Analysis

Soil samples will be collected for chemical analysis as described below.

F.3.a Stockpile Sampling

If it becomes necessary to stockpile-impacted soils prior to reuse on site or for off-site disposal, the soils will be staged on site in one or more stockpiles. The stockpiles will be numbered, a sketch will be made of each stockpile location, and a description will be made of the type of material and where it originated. Soils from different areas with suspected different contaminants, soils exhibiting different visual or olfactory characteristics, or soils with significantly different PID measurements will be stored separately.

Stockpiled soils will be placed on 6-mil polyethylene sheeting and covered with 6-mil polyethylene sheeting at the end of each workday and they will be secured in place. The stockpiles will be bermed to prevent stormwater run-on and/or runoff.

If laboratory analysis of stockpiled soils is required to meet MPCA Guidelines and/or disposal requirements, the number of stockpile samples collected will be in accordance with stockpile sampling requirements of the MPCA LUST program, specifically:

Cubic Yards of Soil in Stockpile	Number of Grab Samples
<500	1 per 100 cubic yards
501-1,000	1 per 250 cubic yards
1,001 or more	1 per 500 cubic yards

Sampling parameters will be determined based on field observations and conversations with the City and MPCA and might include the following parameters:

- VOCs using EPA Method 8260B (MDH 466 list)
- SVOCs using EPA Method 8270
- DRO using WDNR Method
- GRO using WDNR Method
- Priority pollutant metals using EPA 6000 and 70000 Series Methods
- PCBs using EPA Method 8082

The samples will be transported under refrigerated conditions and accompanied by Braun Intertec Chain-of-Custody records. All analyses will be performed within EPA holding times.

F.3.b Confirmation Samples

Confirmation samples will be collected for laboratory analysis for parameters in accordance with the scheme described for stockpile sampling. The number of soil samples will be collected based on the following:

Base of Excavation (ft^2)	Number of Samples	Sidewalls (ft^2)	Number of Samples
<500	2	<500	4
500-1000	3	500-1000	5
1000-1500	4	1000-1500	6
1500-2500	5	1500-2000	7
2500-4000	6	2000-3000	8
4000-6000	7	3000-4000	9
6000-8500	8	>4000	1 per 45 linear feet
8500-10890	9		

Braun Intertec will discuss the need for laboratory analytical tests to characterize the unexcavated soils with the City and the MPCA prior to initiating any laboratory analyses. In such situations, analytical parameters will be based on field observations and discussions with the City and the MPCA. Confirmation samples will be chemically analyzed only if excavation of previously unidentified contamination is conducted.

F.4 Soil Disposal and/or Reuse

Pending the results of laboratory analysis, soils will be reused or disposed of as follows:

Petroleum-Impacted Soil

- Soils that are impacted only with petroleum and exhibit organic vapor concentrations, as determined by PID headspace reading, less than 10 ppm above background concentrations will be re-used on site at the discretion of the contractor.

- Petroleum-impacted soil that exhibits organic vapor headspace readings between 10 ppm and 200 ppm will either be re-used on site as restricted fill beneath paved areas or in embankments or below at least 4 feet of clean fill in green space areas or will be transported off site for disposal or thermal treatment.

- Petroleum-impacted soil with PID headspace readings greater than 10 ppm that is encountered during installation of site utilities will be removed from the utility corridor and properly managed in accordance with the RAP/CCP.

- Petroleum-impacted soil that exhibits organic vapor headspace readings greater than 200 ppm will be transported off site for thermal treatment or disposal.

Non-petroleum-Impacted Soil

- If there is no indication of contamination from the laboratory tests (i.e., contaminant levels are below Residential SRVs and below SLVs) and no construction debris is present, the soil will be re-used on-site or off-site at the discretion of the contractor. If contamination levels are less than the Residential SRVs, but greater than the SLVs, soil re-use will be determined on a case-by-case basis in consultation with the City and MPCA.

- Soils containing construction debris, including Category I, non-friable ACM will be disposed of at a licensed and state agency-approved demolition landfill.

- Impacted soils with contaminant concentrations above the Residential SRVs or SLVs, but below the MPCA Industrial SRVs can be used on-site as restricted fill material beneath paved areas or used as embankment fill. If contaminant concentrations are below the SLVs, but between the Residential and Industrial SRVs, the soil can be re-used on site in greenspace areas below at least four feet of clean fill. Soil re-use will be determined on a case-by-case basis in consultation with the City and MPCA.

- If elevated metals concentrations are present in the soil, the material may be stabilized prior to reuse on site. If stabilization is proposed, a work plan describing the proposed response action and proposed re-use will be provided to the MPCA for review and comment prior to commencement of the work.

- Soils exhibiting contaminant concentrations in excess of the proposed standards described above will be transported off-site for thermal treatment or off-site disposal.

G. Schedule

Construction of the proposed development is scheduled to begin in April 2005 with demolition of the existing site building. Excavation activities will begin in early June 2005.

H. Site Health and Safety Plan

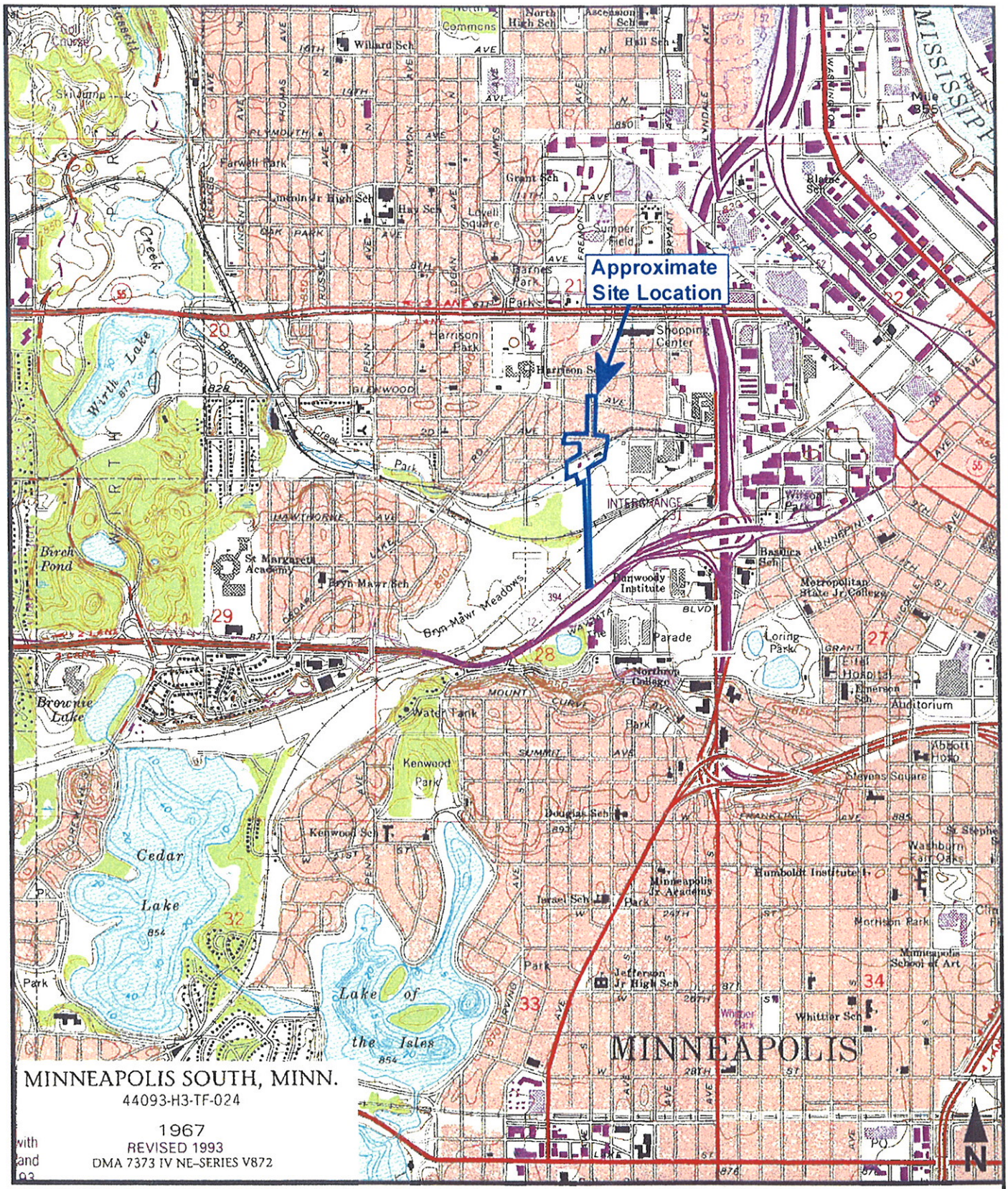
A site Health and Safety Plan (HASP) will be prepared under separate cover and will be maintained at the site at all times. Braun Intertec will provide the HASP to the General Contractor and will provide technical assistance when required.

I. Reporting

The results of the additional investigation will be summarized in a report that will be prepared about one week to two weeks after receipt of the analytical testing results. Modifications to the RAP/CCP also will be made at that time.

A RAP/CCP Implementation Report will be prepared following the conclusion of the various RAP/CCP activities previously described. The Implementation Report will include the results of field soil screening activities, quantities, and areas from which contaminated soils were excavated, soil analytical results, and contaminated soil disposition records.

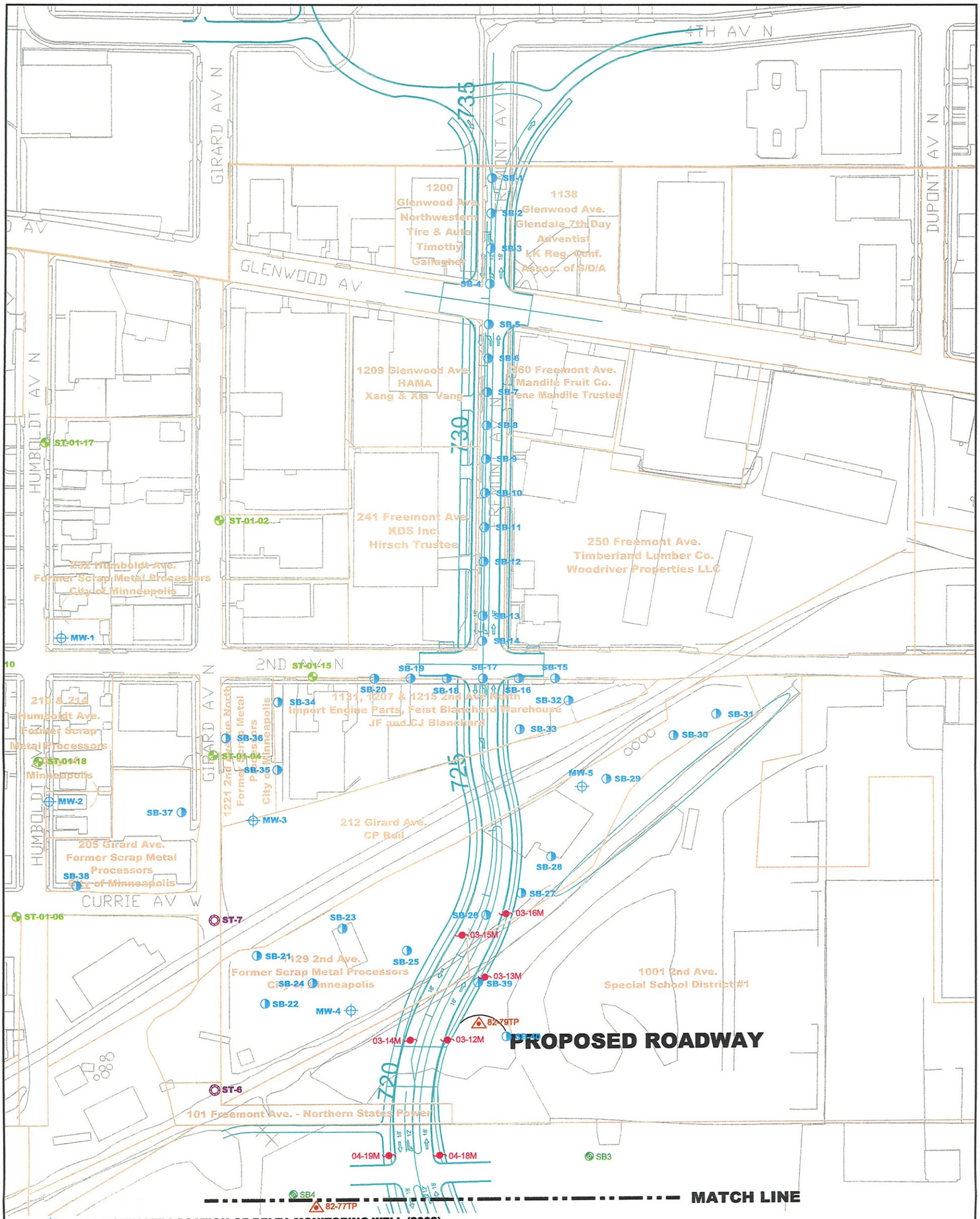
Figures



BRAUN INTERTEC

Site Location Map
RAP/CCP
Van White Memorial Boulevard
Minneapolis, Minnesota

USGS TOPOGRAPHIC MAP		
Minneapolis South, MN		
DATE:	4/1/2005	
JOB NO:	BL-04-06469	
SCALE:	1 : 24,000	FIGURE NO:
DRAWN BY:	FER	1



APPROXIMATE LOCATION OF DELTA MONITORING WELL (2003)

APPROXIMATE LOCATION OF DELTA SOIL BORING (2003)

APPROXIMATE LOCATION OF BRAUN INTERTEC SOIL BORING (2001)

APPROXIMATE LOCATION OF BRAUN INTERTEC SOIL BORING (1999)

APPROXIMATE LOCATION OF BRAUN INTERTEC SOIL BORING (1998)

APPROXIMATE LOCATION OF BRAUN INTERTEC SOIL BORING (1986)

APPROXIMATE LOCATION OF ARMY CORPS OF ENGINEERS SOIL BORING (2003-2004)

APPROXIMATE LOCATION OF ARMY CORPS OF ENGINEERS TEST PIT (1982)

APPROXIMATE LOCATION OF BARR ENGINEERING SOIL BORING (1989)

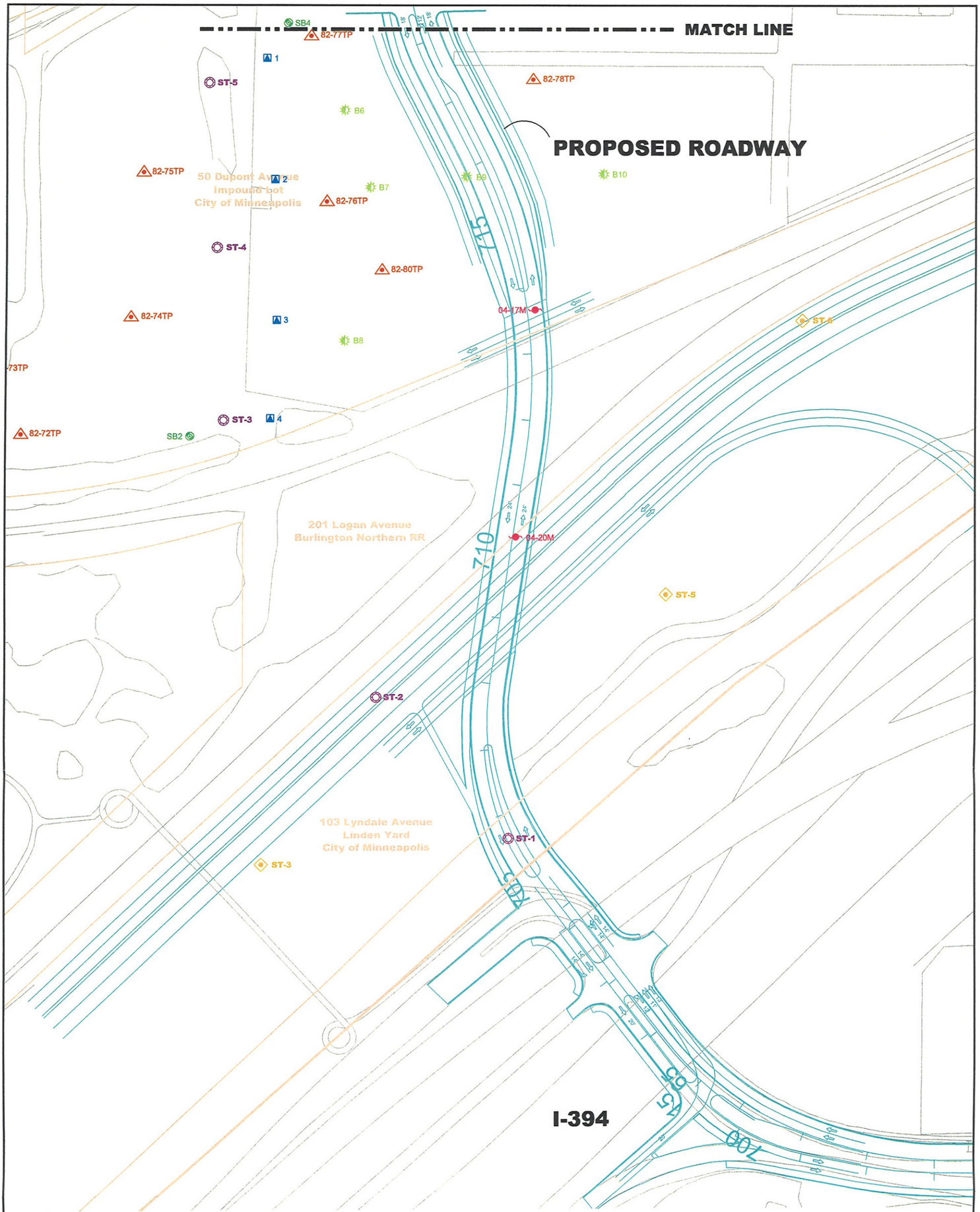
APPROXIMATE LOCATION OF TWIN CITY TESTING SOIL BORING (1986)

FIGURE NO. 2

INT		DATE
DRAWN BY:	JAG	9-22-04
APP'D BY:	JAF	3-28-05
JOB NO.	BL0406469	
DWG. NO.	BL0406469	SHEET OF
SCALE	1"= 150'	

ROADWAY ALIGNMENT – NORTH OF BASSETT CREEK
RESPONSE ACTION PLAN / CONSTRUCTION CONTINGENCY PLAN
VAN WHITE MEMORIAL BOULEVARD
MINNEAPOLIS, MINNESOTA

BRAUN INTERTEC



- APPROXIMATE LOCATION OF DELTA MONITORING WELL (2003)
- APPROXIMATE LOCATION OF DELTA SOIL BORING (2003)
- APPROXIMATE LOCATION OF BRAUN INTERTEC SOIL BORING (2001)
- APPROXIMATE LOCATION OF BRAUN INTERTEC SOIL BORING (1999)
- APPROXIMATE LOCATION OF BRAUN INTERTEC SOIL BORING (1998)
- APPROXIMATE LOCATION OF BRAUN INTERTEC SOIL BORING (1986)
- APPROXIMATE LOCATION OF ARMY CORPS OF ENGINEERS SOIL BORING (2003-2004)
- APPROXIMATE LOCATION OF ARMY CORPS OF ENGINEERS TEST PIT (1982)
- APPROXIMATE LOCATION OF BARR ENGINEERING SOIL BORING (1989)
- APPROXIMATE LOCATION OF TWIN CITY TESTING SOIL BORING (1986)

FIGURE NO. 3

	INT	DATE
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APP'D BY:	JAF	3-28-05
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DWG. NO.	BL0406469	SHEET / OF
SCALE	1"= 150'	

ROADWAY ALIGNMENT – SOUTH OF BASSETT CREEK
RESPONSE ACTION PLAN / CONSTRUCTION CONTINGENCY PLAN
VAN WHITE MEMORIAL BOULEVARD
MINNEAPOLIS, MINNESOTA

BRAUN INTERTEC

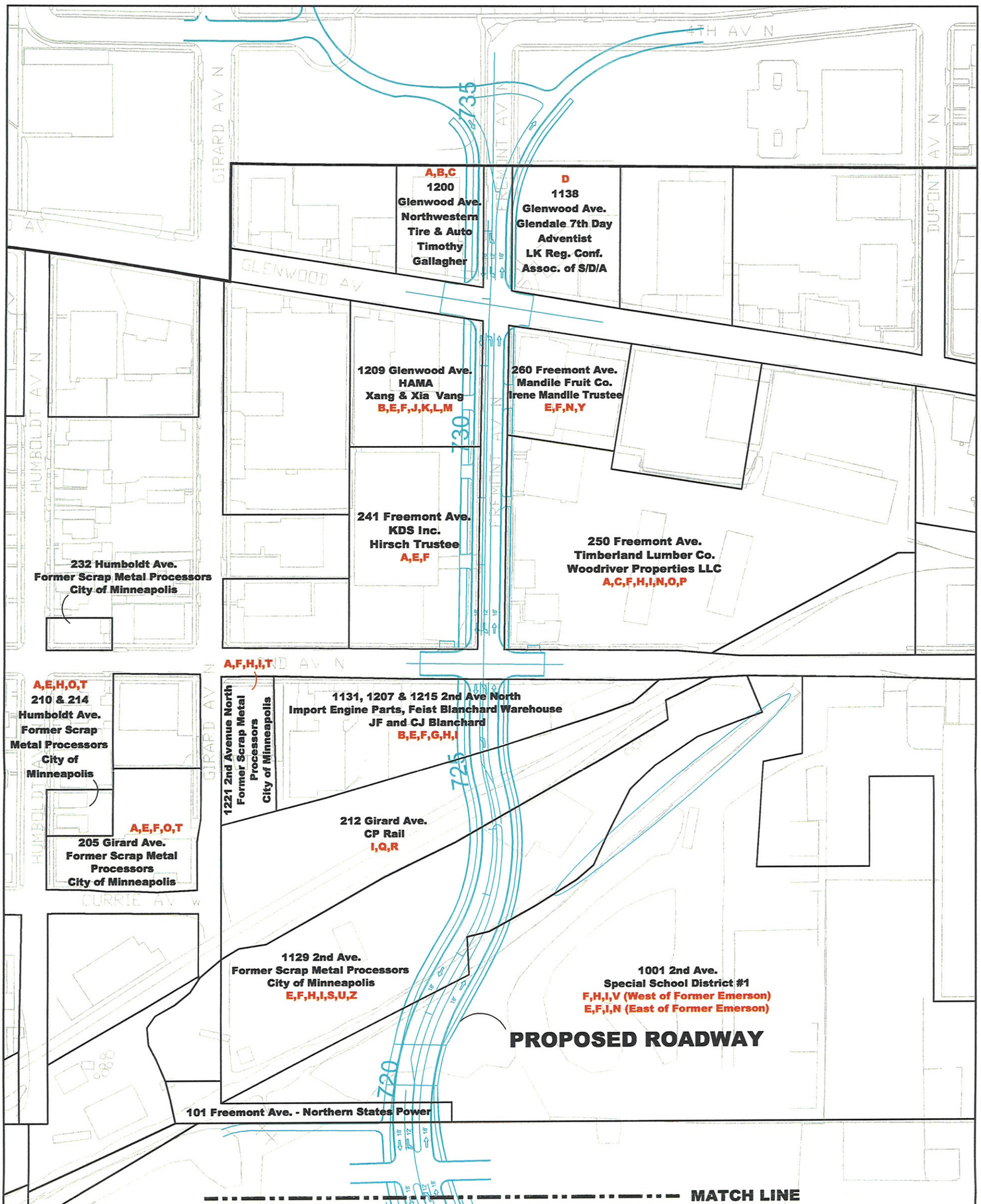

FIGURE NO. 4	INT	DATE
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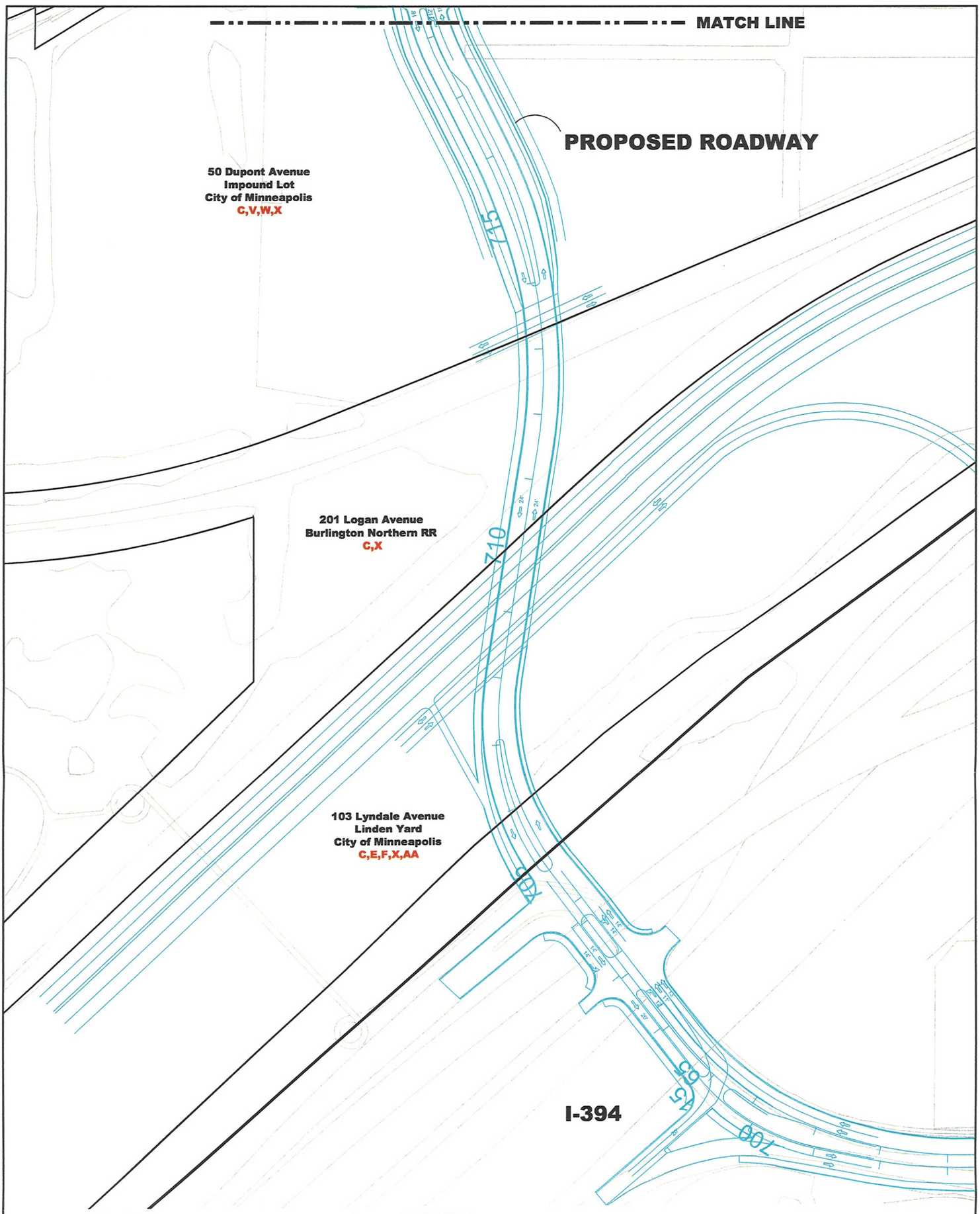
	APP'D BY: JAF	3-28-05
	JOB NO. BL0406469	
	DWG. NO. BL0406469	SHEET OF
	SCALE 1"= 150'	

HISTORIC PROPERTY USE – NORTH OF BASSETT CREEK
RESPONSE ACTION PLAN / CONSTRUCTION CONTINGENCY PLAN
VAN WHITE MEMORIAL BOULEVARD
MINNEAPOLIS, MINNESOTA

BRAUN INTERTEC



- A - Residential
- B - Auto Repair
- C - Storage Yard
- D - Church
- E - Office
- F - Warehouse
- G - Warehouse Chemical Storage
- H - Warehouse Oil Storage
- I - Bulk Product Storage A.S.T.'s/U.S.T.'s
- J - Disinfectant Manufacturer
- K - Dry Cleaner
- L - Store
- M - Restaurant
- N - Gas Station
- O - Lumber Yard
- P - Blacksmith
- Q - Tank Car Storage
- R - Semi Trailer Storage
- S - Box Company Manufacturer
- T - Scrap Metal Storage
- U - Scrap Metal Processing Yard
- V - Landfill
- W - Impound Lot
- X - Railroad Switching Yard
- Y - Electrical Supply Warehouse
- Z - Hennepin County Box Company and A&L Laboratories
- AA - Grain Elevator

N
W E
S

75' 0 150'

SCALE 1"= 150'

FIGURE NO. 5

INT		DATE
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APP'D BY:	JAF	3-28-05
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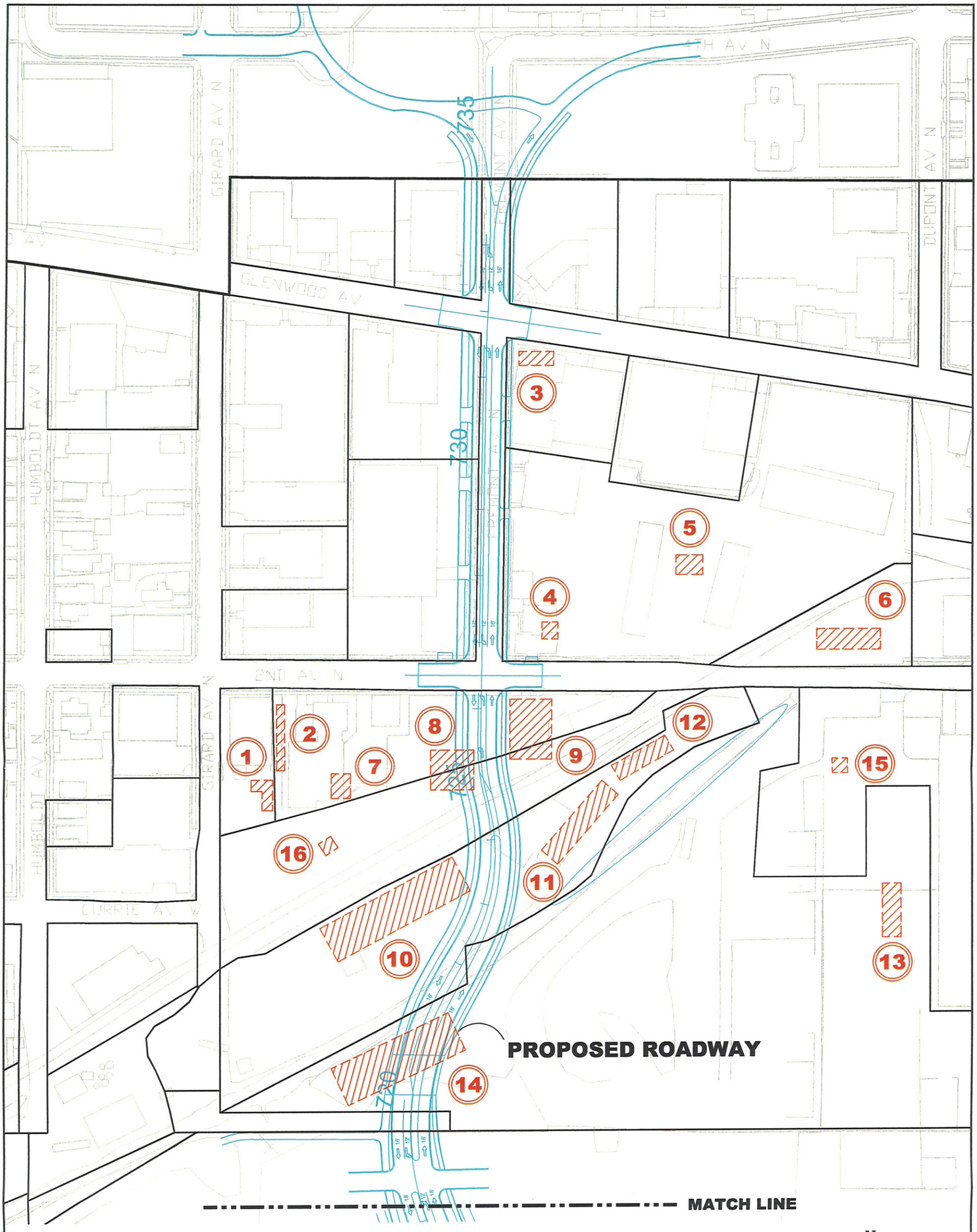
DWG. NO.	BL0406469	SHEET OF
SCALE	1"= 150'	

HISTORIC PROPERTY USE – SOUTH OF BASSETT CREEK
RESPONSE ACTION PLAN / CONSTRUCTION CONTINGENCY PLAN
VAN WHITE MEMORIAL BOULEVARD
MINNEAPOLIS, MINNESOTA

BRAUN INTERTEC



1 - 1939-1993 A.S.T.'s and U.S.T.'s (Petroleum)
2 - 1961-1969 A.S.T.'s (Petroleum)
3 - 1940-1950 U.S.T.'s (Petroleum)
4 - 1970-1990 U.S.T.'s (Petroleum)
5 - 1950-1967 A.S.T.'s (Petroleum)
6 - 1939-1967 A.S.T.'s (Petroleum)
7 - 1939-Present A.S.T.'s (Petroleum, Solvent)
8 - 1939-1970 A.S.T.'s (Petroleum, Stoddard Solvent)
9 - 1939-1967 A.S.T.'s (Petroleum, Solvent, TCP, Butanol)
10 - 1947-1978 A.S.T.'s (Petroleum)
11 - 1939-1978 A.S.T.'s (Petroleum)
12 - 1974-1983 A.S.T.'s (Petroleum, Petroleum Solvent, PCE, Alcohol)
13 - 1980-Present U.S.T.'s (Petroleum)
14 - 1940-1970 A.S.T.'s (Asphalt)
15 - 1930-1940 U.S.T.'s (Petroleum)
16 - 1950-1960 A.S.T.'s (Petroleum)
17 - 1938-1960 A.S.T. (Unknown)

N
W E
S

75' 0 150'

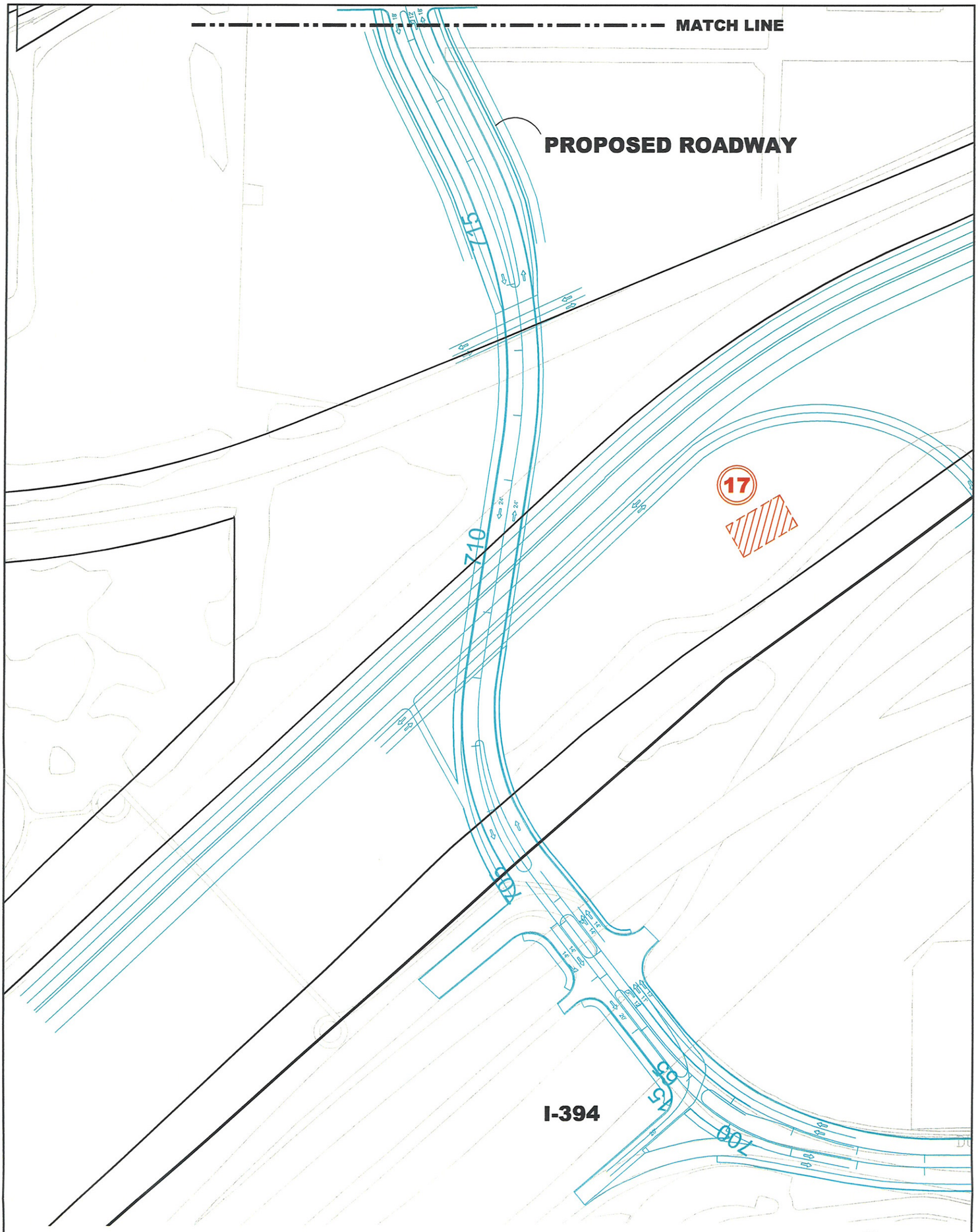
SCALE 1"= 150'

FIGURE NO. 6

	INT	DATE
DRAWN BY:	JAG	9-22-04
APP'D BY:	JAF	3-28-05
JOB NO.	BL0406469	
DWG. NO.	BL0406469	SHEET OF
SCALE	1"= 150'	

PRODUCT STORAGE SUMMARY – NORTH OF BASSETT CREEK
RESPONSE ACTION PLAN / CONSTRUCTION CONTINGENCY PLAN
VAN WHITE MEMORIAL BOULEVARD
MINNEAPOLIS, MINNESOTA

BRAUN INTERTEC



1 - 1939-1993 A.S.T.'s and U.S.T.'s (Petroleum)
2 - 1961-1969 A.S.T.'s (Petroleum)
3 - 1940-1950 U.S.T.'s (Petroleum)
4 - 1970-1990 U.S.T.'s (Petroleum)
5 - 1950-1967 A.S.T.'s (Petroleum)
6 - 1939-1967 A.S.T.'s (Petroleum)
7 - 1939-Present A.S.T.'s (Petroleum, Solvent)
8 - 1939-1970 A.S.T.'s (Petroleum, Stoddard Solvent)
9 - 1939-1967 A.S.T.'s (Petroleum, Solvent, TCP, Butanol)
10 - 1947-1978 A.S.T.'s (Petroleum)
11 - 1939-1978 A.S.T.'s (Petroleum)
12 - 1974-1983 A.S.T.'s (Petroleum, Petroleum Solvent, PCE, Alcohol)
13 - 1980-Present U.S.T.'s (Petroleum)
14 - 1940-1970 A.S.T.'s (Asphalt)
15 - 1930-1940 U.S.T.'s (Petroleum)
16 - 1950-1960 A.S.T.'s (Petroleum)
17 - 1938-1960 A.S.T. (Unknown)

N
W E
S

75' 0 150'

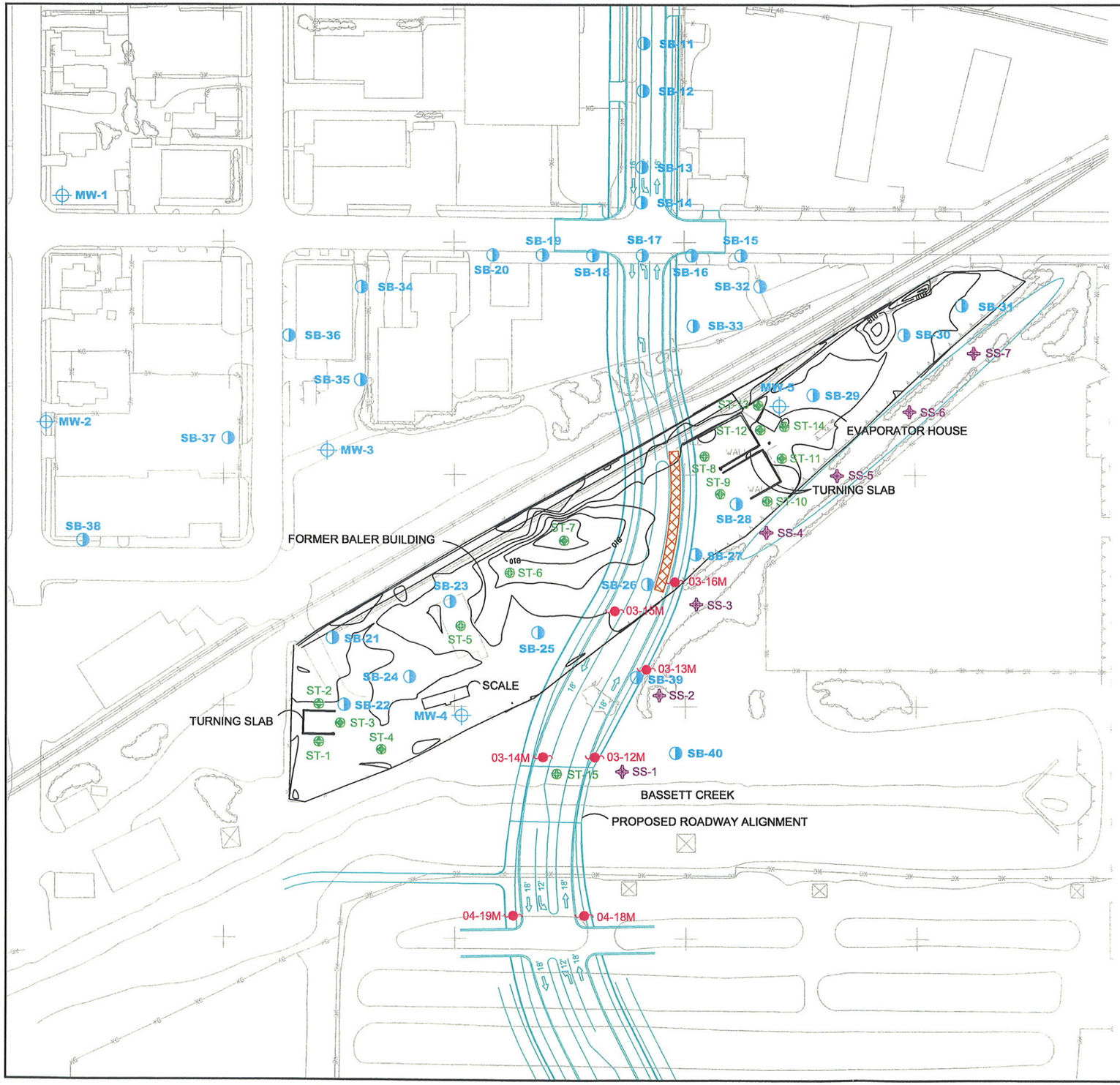
SCALE 1"= 150'

FIGURE NO. 7

	INT	DATE
DRAWN BY:	JAG	9-22-04
APP'D BY:	JAF	3-28-05
JOB NO.	BL0406469	
DWG. NO.	BL0406469	SHEET / OF
SCALE	1"= 150'	

PRODUCT STORAGE SUMMARY – SOUTH OF BASSETT CREEK
RESPONSE ACTION PLAN / CONSTRUCTION CONTINGENCY PLAN
VAN WHITE MEMORIAL BOULEVARD
MINNEAPOLIS, MINNESOTA

BRAUN INTERTEC



APPROXIMATE LOCATION OF DELTA MONITORING WELL (2003)

APPROXIMATE LOCATION OF DELTA SOIL BORING (2003)

APPROXIMATE LOCATION OF ARMY CORPS OF ENGINEERS SOIL BORING (2003-2004)

PROPOSED SOIL BORING LOCATION

PROPOSED SHALLOW SOIL SEDIMENT SAMPLE LOCATION

PROPOSED TEST TRENCH LOCATION

NOTE: 1 FT. CONTOUR INTERVAL ON SCRAP METAL PROCESSOR SITE

BRAUN INTERTEC

PROPOSED SAMPLING LOCATIONS
RESPONSE ACTION PLAN / CONSTRUCTION CONTINGENCY PLAN
VAN WHITE MEMORIAL BOULEVARD
MINNEAPOLIS, MINNESOTA

INT	DATE	
DRAWN BY: JAG	3-28-05	
APP'D BY: JAF	3-28-05	
JOB NO. BL0406469		SHEET OF
DWG. NO. BL0406469		SCALE 1"= 120'

FIGURE NO. 8

Appendix A

Proposed Roadway Profile

Appendix B

Summary of Previous Environmental Investigations

Environmental Assessment Report

Basset Creek Valley Area
Minneapolis, Minnesota

Prepared for

Minneapolis Community Development Agency

and

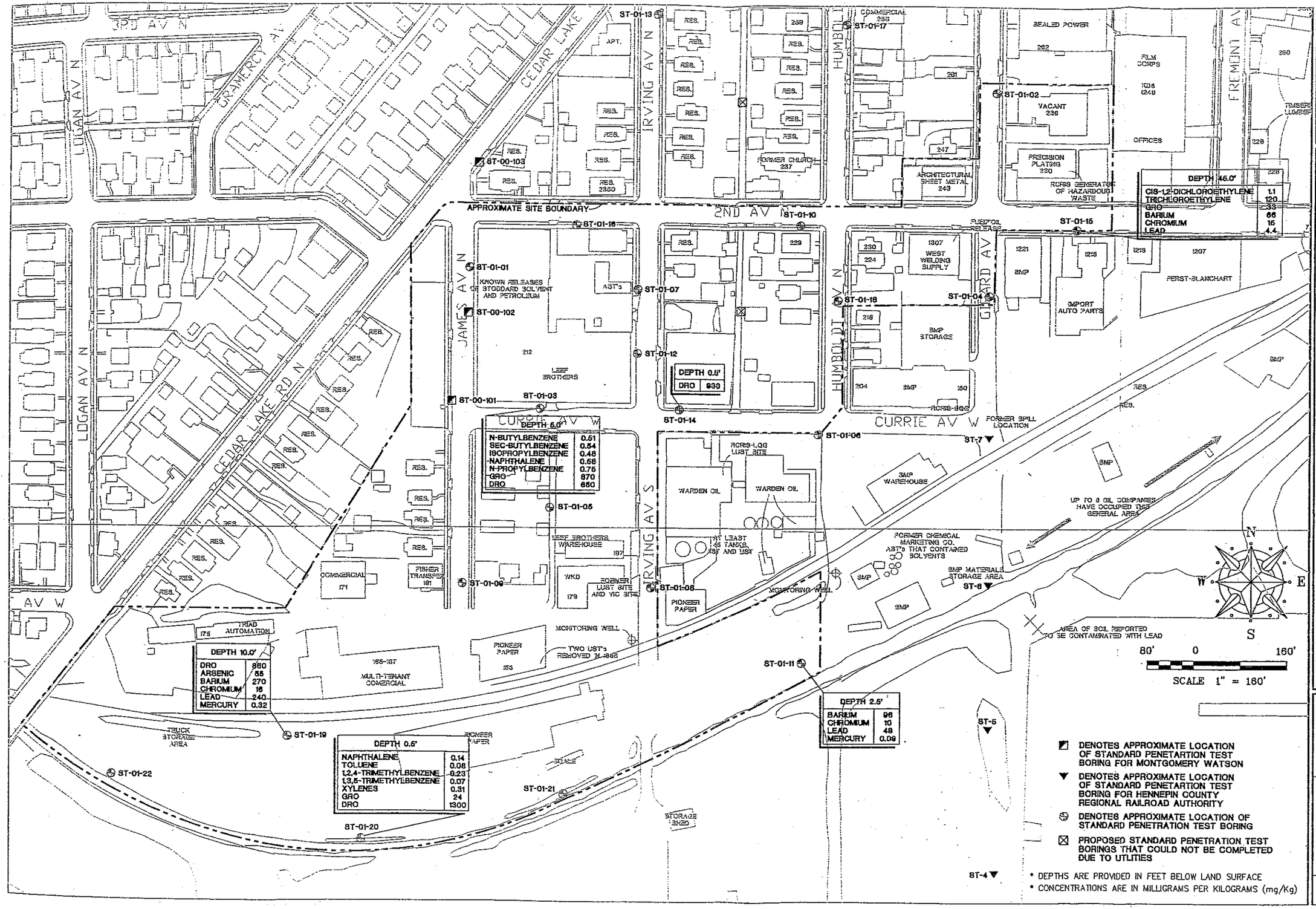
The City of Minneapolis

Project No. CMXX-01-0004
April 6, 2001

Braun Intertec Corporation

SUMMARY OF SOIL ANALYTICAL RESULTS (mg/kg)
GEOTECHNICAL AND ENVIRONMENTAL ASSESSMENT
MCDA – BASSET CREEK VALLEY
MINNEAPOLIS, MINNESOTA

BRAUN INTERTEC



DENOTES APPROXIMATE LOCATION OF STANDARD PENETARTION TEST BORING FOR MONTGOMERY WATSON

▼ DENOTES APPROXIMATE LOCATION OF STANDARD PENETARTION TEST BORING FOR HENNEPIN COUNTY REGIONAL RAILROAD AUTHORITY

⊕ DENOTES APPROXIMATE LOCATION OF STANDARD PENETRATION TEST BORING

⊠ PROPOSED STANDARD PENETRATION TEST BORINGS THAT COULD NOT BE COMPLETED DUE TO UTILITIES

* DEPTHS ARE PROVIDED IN FEET BELOW LAND SURFACE
* CONCENTRATIONS ARE IN MILLIGRAMS PER KILOGRAMS (mg/Kg)

INT	DATE
DRAWN BY: BJB	1-4-01
APP'D BY: MB	3-13-01
JOB NO. CMXX-01-0004	SHEET OF
DWG. NO. MX10004	
SCALE 1" = 160'	

FIGURE NO. 3

Minneapolis Community Development Agency
Basset Creek Valley Area
Minneapolis, Minnesota

Soil Screening Results

(photoionization detector readings in parts per million)

Sample Depth (feet)	ST-01-01	ST-01-02	ST-01-03	ST-01-04	ST-01-05	ST-01-06	ST-01-07	ST-01-08	ST-01-09	ST-01-10	ST-01-11	ST-01-12	ST-01-13	ST-01-14	ST-01-15	ST-01-16	ST-01-17	ST-01-18	ST-01-19	ST-01-20	ST-01-21	ST-01-22
0		0		0		0								15.1	3.3			0	8.3	81	10.4	
2.5	0	0.4	19	0.4	0	2.4	0	0	0	0	0	0	0	0	1.6	0	0	0	3.8	0	12.7	
5	0	0.4	46	0	0	3.6	0	0	0	0	0	0	0	0	1.6	0	0	0	9.7	0	8.1	
7.5	0	0	1.8	0.4	0		0	0	0	0	0	1.6	0	0	5.6	0	0	0	9.7	8.7	9.9	
10	0	0	0	0.4	0	0.4	0	0	0	0	0	3.3	0	0	3.3	0	0	0	3.8	6.0	7.8	
12.5	0	0	0	0.4	0	0.4	0	5.6	0	0	0	3.3	0	0	3.3	0	0	0	3.8	9.4	3.3	
15	0	0	0	0.4	0	0.4	0	5	0	0	0	1.6	0	3.3	3.3	0	0	0	3.8	10.2	2.2	3.4
20	0	0	0	0.4	0	0.4	0	6.7	0	0	0		0	3.3	3.3	0	0	0	5.8	8.2	3.4	3.6
25	0	0.4	0	0.4	0	0.4	0	6.7	0	0	0		0	5.6	3.3	0	0	0	3.8	11.2	6.1	1.3
30	0	0	0	16	0	0.4	0	6.7	0	0	0		0	11.7	3.3	0	0	0	3.8	9.0	3.1	0
35	0	0	0	0.4	0	0.4	0	5	0		0		0	5	3.3	0	0	0	3.8	10.2	4.6	0
40	0	0	0	0.4	0	0.4	0	3.3	0		0			3.3	181	0	0	0	3.8	9.0	4.2	
45	0	0	0		0	0.4	0	3.3	0		0			3.3	31			0	3.8	5.4	5.1	
50	0	0	0	0	0	0.4	0	6.7	0		0			5	6.7			0				
55						0.4		8.4	0		0			6.7								
60						0			0		0			3.3								
65									0		0			3.3								
70									0		0											
75									0		0											
80									0		0											
85									0		0											
90									0		0											
95											0											

Notes: Relativley low PID readings (<10) may be due to moisture in the headspace samples rather than organic vapors from possible contaminants.
Because two different PIDs were used, there is a variation in background readings between the two Intruments.
A blank box indicates no sample was collected.

Table 2

Minneapolis Community Development Agency
Basset Creek Valley Area
Minneapolis, Minnesota

Soil Analytical Results

(Results in milligrams per kilogram, mg/kg)

Sample Location	Sample Depth (feet)	Sample Date	n-Butylbenzene	sec-Butylbenzene	Cis-1,2-Dichloroethylene	Isopropylbenzene	Naphthalene	n-Propylbenzene	Toluene	Trichloroethylene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Xylenes	GRO	DRO	Arsenic	Barium	Chromium	Lead	Mercury
		Residential SRV	30	25	8	30	10	30	107	29	5	4	110	NA	NA	10	1200	71	400	0.7
		Industrial SRV	92	70	22	87	28	93	305	46	5	10	248	NA	NA	25	12500	425	700	2
		SLV	NA	NA	0.14	18	7.5	NA	6.4	0.14	NA	NA	45	NA	NA	15.1	842	18	525	1.6
ST-01-03	5.0	1/23/01	0.51	0.54	<0.05	0.48	0.58	0.75	<0.05	<0.05	<0.05	<0.05	<0.10	870	650	NS	NS	NS	NS	NS
ST-01-11	2.5	1/25/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<6.4	96	10	49	0.09
ST-01-14	0.5	1/30/01	NS	NS	NS	NS	NS	NS	<0.05	NS	NS	NS	<0.10	<10	930	NS	NS	NS	NS	NS
ST-01-15	45	1/31/01	<0.05	<0.05	1.1	<0.05	<0.05	<0.05	<0.05	120	<0.05	<0.05	<0.10	33	<10	<6.4	66	15	4.4	<0.030
ST-01-19	10	2/12/01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.10	<10	880	55	270	16	240	0.32
ST-01-20	0.5	2/13/01	<0.05	<0.05	<0.05	<0.05	0.14	<0.05	0.08	<0.05	0.23	0.07	0.31	24	1300	NS	NS	NS	NS	NS

GRO - Gasoline Range Organics
DRO - Diesel Range Organics
Industrial SRV - Minnesota Pollution Control Agency Industrial Soil Reference Value (1999)
Residential SRV -Minnesota Pollution Control Agency Tier 1Soil Reference Value (1999)
SLV - Minnesota Pollution Control Agency Soil Leaching Value (11/2/99)
< - Less than the laboratory method detection limit.
NS - Not sampled for this parameter.

Table 3

Minneapolis Community Development Agency
Basset Creek Valley Area
Minneapolis, Minnesota

Groundwater Analytical Results

(Results in micrograms per liter, ug/L)

Sample Location	Sample Date	1,1-Dichloroethane	1,1-Dichloroethylene	cis-1,2-Dichloroethylene	trans-1,2-Dichloroethylene	Isopropyltoluene	Naphthalene	Toluene	Vinyl Chloride	Xylenes	GRO	DRO	Barium	Chromium	Lead	Mercury
	HRL	70	6	70	100	NA	300	1000	0.2	10000	NA	NA	2000	100	NA	NA
ST-01-03	1/23/01	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<100	<100	NS	NS	NS	NS
ST-01-04	1/23/01	**11**	**27**	**12000**	**260**	<1.0	**2.9**	**3.0**	**61**	<2.0	**1500**	<100	NS	NS	NS	NS
ST-01-05	1/23/01	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<100	<100	NS	NS	NS	NS
ST-01-10	1/29/01	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<100	<100	NS	NS	NS	NS
ST-01-11	1/26/01	<1.0	<1.0	<1.0	<1.0	<1.0	**7.4**	<1.0	<1.0	<2.0	<100	<100	**720**	**28**	**50**	**0.5**
ST-01-12	2/1/01	<1.0	<1.0	<1.0	<1.0	<1.0	**1.5**	<1.0	<1.0	<2.0	<100	<100	NS	NS	NS	NS
ST-01-14	1/30/01	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**2.7**	<100	<100	NS	NS	NS	NS
ST-01-15	2/2/01	<1.0	<1.0	**70**	<1.0	<1.0	**2.7**	**1.4**	<1.0	<2.0	<100	<100	**190**	<10	<40	<0.4
ST-01-16	1/31/01	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<100	<100	NS	NS	NS	NS
ST-01-19	2/12/01	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<100	<100	NS	NS	NS	NS
ST-01-20	2/13/01	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<100	<100	NS	NS	NS	NS
ST-01-21	2/15/01	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<100	**560**	NS	NS	NS	NS
ST-01-22	2/19/01	<1.0	<1.0	<1.0	<1.0	**1.1**	<1.0	**1.2**	<1.0	<2.0	<100	**500**	NS	NS	NS	NS

GRO - Gasoline Range Organics
DRO - Diesel Range Organics
HRL - Minnesota Department of Health - Health Risk Limit
< - Less than the laboratory method detection limit.
NS - Not sampled for this parameter.
Note: Only parameters that were detected in at least one sample are included in this table.

LIMITED PHASE II ENVIRONMENTAL ASSESSMENT

BASSETT CREEK VALLEY REDEVELOPMENT
FREMONT AVENUE CORRIDOR
MINNEAPOLIS, MINNESOTA
DELTA PROJECT NO. A001-123

Prepared by:

Delta Environmental Consultants, Inc.
5910 Rice Creek Parkway, Suite 100
Shoreview, Minnesota 55126
(651) 639-9449

November 20, 2002

Soil Analytical Results - Organics
Bassett Creek Redevelopment
Fremont Avenue Corridor - Minneapolis, Minnesota
Delta Project No. A001-123

Sample ID	Sample Depth (feet below ground surface)	Sample Date	VOCs							
			Benzene	Toluene	Ethyl-benzene	cis-1,2-Dichloro-ethene	Isopropyl-benzene	n-Propyl-benzene	1,3,5-TMB	1,2,4-TMB
SB-1	4.0 - 5.5 ft	08/06/02	**0.4**	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
SB-2	11.5 - 13.0 ft	08/07/02	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34
SB-3	4.0 - 5.5 ft	08/07/02	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29
SB-4	4.0 - 5.5 ft	08/06/02	<0.28	<0.28	<0.28		<0.28	<0.28	<0.28	<0.28
SB-5	1.5 - 3.0 ft	08/07/02	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
SB-6	6.5 - 8.0 ft	08/07/02	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
SB-7	1.5 - 3.0 ft	08/08/02	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
	4.0 - 5.5 ft	08/08/02	--	--	--	--	--	--	--	--
SB-8	1.5 - 3.0 ft	08/08/02	**0.33**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
SOIL DUP	SB-8 (1.5-3) DUP	08/08/02	**0.36**	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28
SB-9	1.5 - 3.0 ft	08/08/02	**0.35**	<0.28	1.1	<0.28	<0.28	<0.28	0.51	1.8
	16.5 - 18.0 ft	08/08/02	<0.26	<0.26	4.1	<0.26	1.4	6.7	**13**	**40**
SB-10	6.5 - 8.0 ft	08/08/02	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27
	16.5 - 18.0 ft	08/08/02	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.4
SB-11	1.5 - 3.0 ft	08/09/02	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26
SOIL DUP #5	SB-11 (1.5-3) DUP	08/09/02	--	--	--	--	--	--	--	--
SB-12	14.5 - 16.0 ft	08/09/02	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28
SB-13	14.5 - 16.0 ft	08/09/02	<0.35	<0.35	<0.35	**0.39**	<0.35	<0.35	<0.35	<0.35
SB-14	6.5 - 8.0 ft	08/09/02	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41
SB-15	4.5 - 6.0 ft	08/09/02	<0.53	<0.53	<0.53	<0.53	0.69	1.1	<0.53	<0.53
	9.5 - 11.0 ft	08/09/02	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42
SB-16	7.5 - 9.0 ft	08/12/02	<0.49	<0.49	<0.49	<0.49	<0.49	<0.49	<0.49	<0.49
SB-17	2.5 - 4.0 ft	08/12/02	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27
SOIL DUP #2	SB-17 (2.5-4) DUP	08/12/02	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
SB-18	7.5 - 9.0 ft	08/12/02	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45
SOIL DUP #3	SB-18 (7.5-9) DUP	08/12/02	--	--	--	--	--	--	--	--
SB-19	2.5 - 4.0 ft	08/12/02	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27
	7.5 - 9.0 ft	08/12/02	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42
SB-20	4.5 - 6.0 ft	08/12/02	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57
SOIL DUP #4	SB-20 (4.5-6) DUP	08/12/02	--	--	--	--	--	--	--	--
Methanol Blank	--	08/06/02	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Methanol Blank	--	08/07/02	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
MPCA - Tier I Soil Reference Value (SRV) (mg/kg)			1.5	107	200	8	NA	30	4	5
MPCA - Tier I Soil Leaching Value (SLV) (mg/kg)			0.034	6.4	4.7	0.14	18	NA	NA	NA

all analytical results expressed in milligrams per kilogram
< less than the specified reporting limit
10 analytical result at or above the reporting limit
10 analytical result exceeding either the SRV or SLV

RCRA = Resource, Conservation, and Recovery Act
VOCs = Volatile organic compounds
TMB = Trimethylbenzene
MIBK = Methyl isobutyl ketone