

**ISS: Site Name: Davenport West Diversion Tunnel**

Pre-Remedial Initial Site Screening (ISS)

Project Manager: Matt Culp

Date: 6/2/2010

**CON 12-15  
Doc #22718**

***Summarize the site history (past usages, past ownerships, wastes, **known** or suspected contamination pathways such as tanks, septic tank/tile field, lagoon, **land** applications, S.W. burial, etc)***

The site is located in a heavily industrial area of the city of Davenport, Iowa and is described as being a one block stretch of the south bound lane of South Howell Street between West River Drive and Rockingham Road along the alignment of the west side storm water diversion tunnel project. According to the EDR environmental record search conducted for this site it is (and has been) a section of city street in Davenport. There are several **known** potential sources of contamination in the vicinity that include four leaking underground fuel storage (LUST) sites within 1200 feet of the site and at least three known contaminated sites listed on the IDNR Contaminated Sites database that could contribute to the contaminants that have been detected at the subject site (figure 1).

***Briefly describe the site assessment that was conducted (number of **borings**, monitoring wells, number of samples, depth of soil samples and monitoring wells, analysis, etc.)***

A total of 21 soil borings were completed along a north to south transect to a depth of 15 feet on the Howell street right-of-way. Soils from these borings were **field** screened for volatile organic compounds using a photo-ionization detector (PID). Any soil sample registering 100 PPM or greater with the PID and/or exhibiting an odor was noted and samples were collected for lab testing. Four borings were identified for further testing from **the** field screening and soil samples were collected from these locations for lab analysis. The **four** borings were converted to temporary monitoring wells. Ground water was sampled from **the** temporary wells for RCRA metals by EPA method SW-6000 and SW-7000, volatile and semi-volatile organic compounds (VOCs, SVOCs) were tested by EPA methods 8260B and 8270C and for petroleum compounds common to the IDNR/ LUST program (benzene, ethyl-benzene, toluene, total xylenes) by Iowa Method OA-2.

***Summarize the findings and conclusions regarding the contaminants **found** and their extent and concentrations. Relate those values to known criteria such as **statewide** standards, MCLs, water quality standards, background levels or other **benchmarks** used to determine site priority.***

In soil, the RCRA metals arsenic, barium, chromium and mercury were detected along with the three semi-volatile organic compounds (VOC) Bis(2-ethyl-hexyl) phthalate, 1,2, Dichlorobenzene, 4,6-Dinitro-2-methylphenol. The RCRA metals and semi-volatile organic compounds detected were not above the state-wide standards (SWS). Similarly, no VOCs or petroleum hydrocarbons were detected in soil.

Three RCRA metals were detected in ground water at this site. These metals include: arsenic, barium and lead; however, only lead was detected in one of four soil samples at a concentration (0.0151 mg/L) slightly above the SWS for protected ground water of 0.0150 mg/L.

Several VOCs were detected in ground water but only five were above SWS for protected ground water and no VOCs were detected above the non-protected standards. The VOCs detected above the protected standards were benzene in (1 of 4 samples) at 7.55ug/L. The standard for benzene is 5ug/L. Ethyl-benzene was detected (in 1 of 4 samples) at 2020ug/L and the protected standard is 700ug/L with a non-protected standard of 3500ug/L. Other VOCs detected include methylene chloride at 6.11ug/L (in 1 of 4 samples) which has a protected ground water standard of 5ug/L and non-protected standard of 470ug/L. The other VOC that exceeded the protected ground water standards was 1, 2, 4-trimethyl-benzene (in 3 of 4 samples) at a maximum concentration of 958ug/L. The standard for this compound is 350ug/L.

Two semi-volatile organic compounds (SVOCs) were detected above their protected ground water standards. These were 2-methyl-naphthalene and naphthalene at 54.5ug/L and 542ug/L respectively. The protected ground water standards for these compounds are 28ug/L and 100ug/L and their non-protected standards are 140ug/l and 700ug/l.

Total extractable hydrocarbons as gas and diesel were detected (in 2 of 4 samples) but the reported concentrations of diesel were below all state standards. Although the maximum reported concentration for extractable hydrocarbon as gas was 17,000ug/L, there is no applicable standard for comparison.

***Identify on-site or off-site potential and actual targets (e.g., municipal wells, private wells, drinking water intakes). What is known of the neighboring area, i.e., are there residences, businesses, public use areas, etc.? Are there utility lines that could be impacted by site contaminants? Identify any other use/location issues that deserve consideration.***

Potential receptors include buried city utilities that may exist under Howell Street (site) and any private service utility lines that serve the businesses in the area. The number and location of these utilities are unknown. No municipal wells are reported in this area. GEOSAM records exist for four older commercial wells in the area (see attached). Two well records are for the Oscar Meyer plant, one for Davenport Iron works, and one for Bottling Works Inc. however the actual locations are suspect and it is not known if they are still in service (see map). As stated in a previous section, the general area is dominated by industrial and commercial facilities for several miles in both directions along the Mississippi River (see map). Less than a quarter mile to the north (away from the river) the land use becomes predominately residential, however this area is up gradient of this site and all the known UST/LUST and contaminated sites in the vicinity.

***Rate the site on a scale of 1 to 4, in decreasing order of severity or priority.***

The recommended priority for this site is (3)

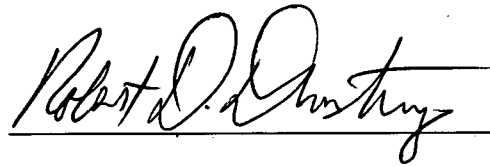
**Summarize the reasoning, knowledge or any other information used in determining your recommendation regarding the priority assigned to this site.**

The designated priority (3) of this site is based on the demonstrated (limited) extent of contamination and low concentration of contaminants in both soil and ground water. The low priority designation is also based on the low potential for exposure to human receptors or buried utilities despite the presence of one contaminant (lead) slightly above applicable soil standard and six compounds above protected ground water standards. The detections however are below the non-protected standards.

**Site recommended for:**

- ☒ No further action
- ☐ Additional investigation under state program (activity code 2824)
- ☐ Additional investigation under CERCLA (Extended Site Screening)
- ☐ Additional investigation by responsible party
- ☐ Transfer to LUST/UST

Form Reviewed:



Date Reviewed:

6/21/10



REGION VII U.S. EPA SUPERFUND  
NO DISCOVERY DATE

PRE-CERCLIS INITIATION FORM

NPL Status = O-NOT A VALID SITE OR INCIDENT

Site Name: West Side Diversion Tunnel

Identified By: \_\_\_\_\_

☐ Removal ☒ Site Assessment ☐ Federal Facilities ☐ States  
☐ Other Federal Agency Check if: ☐ FUD Site

Address: South Howell Street

County Name: Scott

City, State, Zip: Davenport, Iowa

State ID (if one exists): none

Congressional District: 1st

NPL Status: = : Not a Valid Site or Incident Federal Facility Indicator: ☐ Federal Facility ☒ Not a Federal Facility ☐ Status Undetermined

Section: ☐ C-(STAR) SPFD Technical Assistance/Re-Use Branch ☒ L-(EFLR) Enfr/Fund Lead RV Branch ☐ F-(FFSE) Federal Facilities/Special Emphasis Branch  
☐ M-(MOKS) MO/KS remedial Branch ☐ I-(IANE) IA/NE Remedial Branch ☐ O-(ER&R) Emergency Response & RV Branch

List Site Alias Name (s): none

Directions to Site: From Des Moines Travel east on Interstate 80 to Davenport Iowa. Turn South on Interstate 280 and travel to highway 61 and turn east. Travel east on highway 61 until the intersection with South Howell Street. This is the southern end of the site.

Site Description: This is a city street in Davenport

USGS Quadrant: Davenport East USGS Hydro Unit: \_\_\_\_\_

Latitude: 41.5165 Longitude: 90.6037

(Decimal Degree format) (with release of 3.17 see attached required location data form)

Lat/Long Accuracy: ☒ Seconds ☐ Miles ☐ Feet  
☐ Degrees ☐ Minutes ☐ Kilometers ☐ Meters

Owner ☐ Bank/Loan Company ☒ Municipality  
Operator ☐ County Owned ☐ Other  
Type ☐ District Owned ☐ Private  
☐ Federally-Owned ☐ Mixed Ownership  
☐ Former Federally Owned or Operated ☐ State Owned  
☐ Former Federally Owned or Operated ☐ State Owned  
☐ Government Owned/Contractor Operated ☐ Trustee, Federal  
☐ Privately Owned/Government Operated ☐ Trustee, State  
☐ Property Defaulted Back to Government ☐ Unknown  
☐ Brownfields/Public

Operational Status: ☐ Active ☐ Inactive ☒ Unknown ☐ Blank  
Native American Interest: ☐ Yes ☐ No

Non-NPL Status (Choose one):

☒ Not a Valid Site or Incident ☐ Not a Valid Site or Incident: NRC Lead  
☐ Not a Valid Site or Incident: RCRA Lead ☐ Not a Valid Site or Incident: State Lead  
☐ Not a Valid Site or Incident: Tribal Lead

Add Action: OU\_00

PRE-CERCLIS SCREENING: Planned Complete: \_\_\_\_/\_\_\_\_/\_\_\_\_

Actual Complete: \_\_\_\_/\_\_\_\_/\_\_\_\_

Lead code (choose one)

☐ F-EPA Fund Financed ☐ FF - Federal Facility ☐ S - State, Fund Financed

SCAP Note: \_\_\_\_\_

Add below Action (if No Further Action):

OU\_00 Lead: EP

☐ PRE-CERCLIS ARCHIVE Actual Complete: \_\_\_\_/\_\_\_\_/\_\_\_\_

SCAP Note: \_\_\_\_\_

Comments: ☐ Site or ☐ Action

Signatures: \_\_\_\_\_

States: Robert D. Dunning Date: 06/21/10 RPM/OSC/SAM: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Site Type: (Choose all that apply - for every main category chosen in bold at least one sub-category must be selected; if more than one main and sub-category is selected indicate which is primary):

Primary Designation: OT

☐ **MP-Manufacturing/Processing/Maintenance** - Applicable sub-categories:

- ☐ CA-Chemicals and allied products
- ☐ CG-Coal gasification
- ☐ CP-Coke production
- ☐ EP-Electric power generation and distribution
- ☐ FT-Fabrics/textiles
- ☐ EE-Electronic/electrical equipment
- ☐ LW-Lumber and wood products/pulp and paper
- ☐ WP-Lumber and wood products/wood preserving/preserving/treatment
- ☐ MF-Metal fabrication/finishing/coating and allied industries
- ☐ OR-Oil and gas refining
- ☐ OP-Ordnance production
- ☐ PR-Plastics and rubber products
- ☐ PM-Primary metals/mineral processing
- ☐ RA-Radioactive products
- ☐ TA-Tanneries ☐ OT-Other-Description(needed): \_\_\_\_\_
- ☐ TS-Trucks/ships/trains/aircraft and related components

☐ **MI-Mining** - Applicable sub-categories:

- ☐ CO-Coal ☐ ME-Metals ☐ NM-Non-metal minerals
- ☐ OG-Oil and Gas ☐ OT-Other-Description(needed): \_\_\_\_\_

☐ **WM-Waste Management** - Applicable sub-categories:

- ☐ CI-Co-disposal landfill (municipal and industrial)
- ☐ ID-Illegal disposal/open dump
- ☐ IF-Industrial waste facility (non-generator)
- ☐ MD-Mine tailings disposal ☐ OT-Other-Description(needed): \_\_\_\_\_
- ☐ MI-Municipal solid waste landfill
- ☐ RW-Radioactive waste treatment, storage, disposal (non-generator)

☒ **OT-Other** - Applicable sub-categories:

- ☐ AG-Agricultural (e.g., grain elevator)
- ☐ CS-Contaminated sediment site with no identifiable source
- ☐ DC-Dust control ☐ OT-Other-Description(needed): \_\_\_\_\_
- ☐ GP-Ground water plume site with no identifiable source
- ☐ MO-Military/Other Ordnance
- ☐ PS-Product Storage/distribution
- ☐ RD-Research, development and testing facility
- ☐ RC-Retail/commercial
- ☒ SE-Spill or other one-time event
- ☐ TP-Transportation (e.g., railroad yards, airport, barge docking, site)
- ☐ TW-Treatment works/septic tanks/other sewage treatment

☐ **RE-Recycling** - Applicable sub-categories:

- ☐ AT-Automobiles/tires ☐ DT-Drums/tanks ☐ WO-Waste/used
- ☐ BS-Batteries/scrap metals/secondary smelting/precious metal recovery
- ☐ CC-Chemicals/chemical waste (e.g., solvent recovery)
- ☐ OT-Other-Description(needed): \_\_\_\_\_



**REGION VII**  
**U.S. ENVIRONMENTAL PROTECTION AGENCY**

ENFORCEMENT SENSITIVE INFORMATION  
FOR INTERNAL USE ONLY

**LOCATION FORM** - (Required information highlighted in red)

SITE NAME: West Side Diversion Tunnel

EPA ID: \_\_\_\_\_

Latitude: 41.5165 Longitude: 90.6037  
(Decimal Degree format)

Measurement Sequence: \_\_\_\_\_

(See Comment A)

Lat/Long Source: ☐ Contractor  
☐ Dun & Bradstreet  
☐ EPA Region 7  
☐ Geograph  
☐ Other Federal Agency  
☐ Regulated Entity  
☒ State

☐ EPA Headquarters  
☐ Epic  
☐ Other  
☐ Private  
☐ SNAP  
☐ Tribe  
☐ Unknown

☐ (Blank)

Designate Lat/Long: ☐ Primary ☐ NPL Coordinate

Collection Method: ☐ Address Matching - House Number ☐ Address Matching - Block Face ☐ Address Matching - Street Centerline  
☐ Address Matching - Nearest Intersection ☐ Address Matching - Primary Name ☐ Address Matching - Digitized  
☐ Address Matching - Other ☐ Census Block - 1990 - Centroid ☐ Census Block/Group 1990-Centroid  
☐ Census Block/Tract - 1990 - Centroid ☐ Classical Surveying Techniques ☐ Census - Other  
☐ GPS Carrier Phase Static Relative Position ☐ GPS Carrier Phase Kinematic Relative Position ☐ GPS, with Canadian Active Control System  
☐ GPS Code (Pseudo Range) Differential ☐ GPS Code (Pseudo Range) Precise Position ☐ GPS Code (Pseudo Range) Standard Position (SA-Off)  
☐ GPS Code (Pseudo Range) Standard Position Service SA-On ☐ GPS-Unspecified ☐ Interpolation-Digital Map Source (TIGER)  
☐ Interpolation-Map ☐ Interpolation - MSS ☒ Interpolation - Photo ☐ Interpolation - Satellite ☐ Interpolation - SPOT  
☐ Interpolation-TM ☐ Interpolation - Other ☐ LORAN C ☐ Public Land Survey-Eighth Section ☐ Public Land Survey-Footing  
☐ Public Land Survey-Quarter Section ☐ Public Land Survey-Section ☐ Public Land Survey-Sixteenth Section  
☐ ZIP+2 Centroid ☐ ZIP+4 Centroid ☐ ZIP Code - Centroid ☐ Unknown

Reference Point: ☐ Administrative Building ☐ Air Monitoring Station ☐ Air Release Stack ☐ Air Release Vent  
☐ Atmos. Emissions Trtmt Unit ☐ Boundary Point ☐ Building Entrance ☐ Facility/Centroid Cent ☐ Facility/Station Bldg Entrance  
☐ Intake Point ☐ Lagoon or Settling Pond ☐ Liquid Waste Treatment Unit ☐ Loading Area Centroid ☐ Loading Facility  
☐ Monitoring Point ☐ NE Corner of Land Parcel ☐ NW Corner of Land Parcel ☐ Other ☐ Plant Entrance (Freight)  
☐ Plant Entrance (General) ☐ Plant Entrance (Personnel) ☐ Process Unit Area Centroid ☐ Process Unit ☐ SE Corner of Land Parcel  
☐ Solid Waste Storage Area ☐ Solid Waste Trtmt/Disp. Unit ☐ Storage Tank ☐ SW Corner of Land Parcel ☒ Unknown  
☐ Water Monitoring Station ☐ Water Release Pipe ☐ Well ☐ Well Protection Area ☐ Release Point ☐ Treatment/Storage Plant

Reference Datum: ☐ NAD27 ☒ NAD83 ☐ Other ☐ Unknown ☐ WGS84

Accuracy Meters +/-: \_\_\_\_\_

☒ Accuracy Unknown

Collection Date: 6/4/10

Verification Method: ☐ Ground Truth Conducted ☐ Point in Polygon (County) ☐ Blank  
☐ Point in Polygon (Zip) ☐ Proximity to Alternative Facility Coordinate) ☒ Not Verified  
☐ Proximity to Polygon Centroid(Other) ☐ Proximity to Polygon Centroid (Zip Code)  
☐ Verified Relative to Map Features (1:100K/Tiger) ☐ Verified Relative to Map Features (1:24K)  
☐ Verified Relative to Map Features (Other) ☐ Verified, Unknown Method  
☐ Proximity to Polygon Centroid (County) ☐ Point in Polygon (Other)

Point/ Line/ Area: ☐ AREA ☐ LINE ☒ POINT ☐ REGION ☐ ROUTE ☐ (BLANK)

Source Map Scale: ☐ 1:10,000 ☐ 1:12,000 ☐ 1:15,840 ☐ 1:20,000 ☐ 1:24,000 ☐ 1:25,000 ☐ 1:50,000  
☐ 1:62,500 ☐ 1:63,360 ☐ 1:100,000 ☐ 1:125,000 ☐ 1:250,000 ☐ 1:500,000 ☐ NONE ☒ UNKNOWN  
☐ OTHER \_\_\_\_\_

COMMENTS: \_\_\_\_\_

Signatures:

RPM/OSC: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ BRANCH CHIEF: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

A) A sequential number to indicate the order in which points on a line or area are connected. For an area, the maximum point is connected to the first. Required if the feature is polygonal or linear 3 numeric.

# PRE-CERCLIS SCREENING ASSESSMENT CHECKLIST/DECISION FORM

This checklist can assist the site investigator during the Pre-CERCLIS screening. It will be used to determine whether further steps in the site investigation process are required under CERCLA. Use additional sheets, if necessary.

<b>Checklist Preparer:</b>	<u>Matt Culp</u>	<u>6/4/2010</u>
	(Name/Title)	(Date)
	<u>Wallace Building Des Moines Iowa 50319</u>	<u>1-515-242-5087</u>
	(Address)	(Phone)
	<u>matt.culp@dnr.iowa.gov</u>	
	(E-mail Address)	
<b>Site Name:</b>	<u>West Side Diversion Tunnel</u>	
<b>Previous Names (if any):</b>	<u>none</u>	
<b>Site Location:</b>	<u>South Howell Street between West River Drive and Rockingham Road</u>	
	<u>Davenport</u>	<u>Iowa 52802</u>
	(City)	(ST) (Zip)
<b>Latitude:</b>	<u>44.5165</u>	<b>Longitude:</b> <u>90.6037</u>

Compare the following checklist. If "yes" is marked, please explain below.

	YES	NO
1. Does the site already appear in CERCLIS?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Is the release from products that are part of the structure of, and result in exposure within, residential buildings or businesses or community structures?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Does the site consist of a release of a naturally occurring substance in its unaltered form, or altered solely through naturally occurring processes or phenomena, from a location where it is naturally found?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Is the release into a public or private drinking water supply due to deterioration of the system through ordinary use?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Is some other program actively involved with the site (i.e., another Federal, State, or Tribal program)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Are the hazardous substances potentially released at the site regulated under a statutory exclusion (i.e., petroleum, natural gas, natural gas liquids, synthetic gas usable for fuel, normal application of fertilizer, release located in a workplace, naturally occurring, or regulated by the NRC, UMTRCA, or OSHA)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Are the hazardous substances potentially released at the site excluded by policy considerations (e.g., deferral to RCRA Corrective Action)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Is there sufficient documentation that clearly demonstrates that there is no potential for a release that could cause adverse environmental or human health impacts (e.g., comprehensive remedial investigation equivalent data showing no release above ARARs, completed removal action, documentation showing that no hazardous substance release have occurred, EPA approved risk assessment completed)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Please explain all "yes" answer(s), attach additional sheets if necessary:

- Site Determination: ☐ Enter the site into CERCLIS. Further assessment is recommended (Explain below).
- ☒ The site is not recommended for placement into CERCLIS (Explain below).
- ☐ Further assessment is recommended under PRE-CERCLA (Explain below).

**DECISION/DISCUSSION/RATIONALE:**

The site assessment has demonstrated a limited extent of contamination and low concentration of contaminants in both soil and ground water. In addition, there is low potential for exposure to human receptors despite the presence of one contaminant (lead) slightly above applicable soil standard and six compounds above protected state ground water standards. All contamination levels in ground water are below the non-protected ground water standards, which are more applicable in this situation.

Regional EPA Reviewer:

State Agency/Tribe:

Print Name/Signature

*Robert D. Dunning*

Date *RAD*

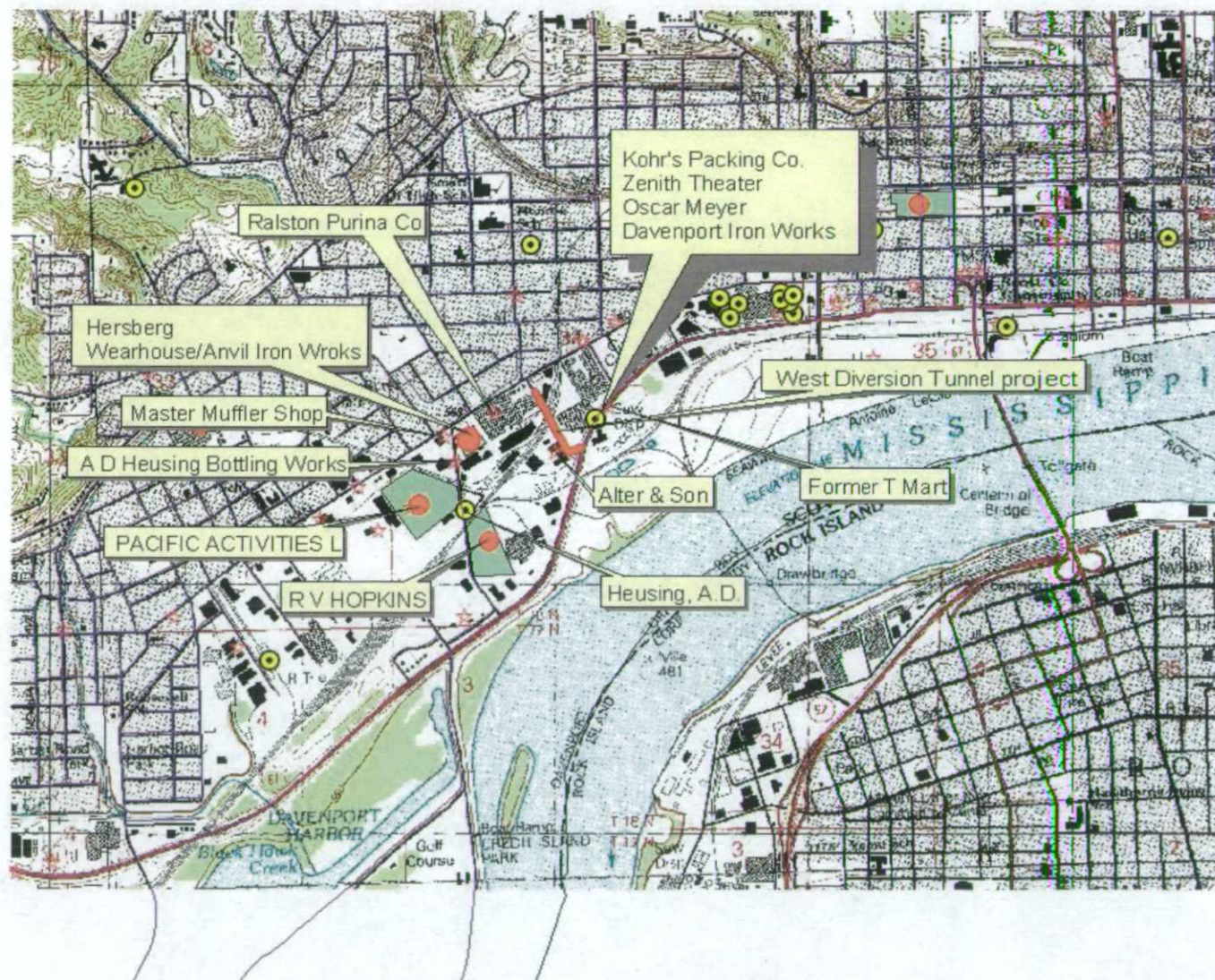
*6/22/10*

Print Name/Signature

Date



# West Diversion Tunnel Project Davenport, Iowa



- ✓ Roads\_2006\_82.shp
- Geologic\_sampling\_points.shp
- ★ LUST sites
- Userpt.shp
- Municipal wells
- User.shp
- Pvtperm
- County



0.9 0 0.9 1.8 Miles



# West Diversion Tunnel Davenport Iowa



 Roads\_2006\_82.shp  
County

0.2

0

0.2

0.4 Miles

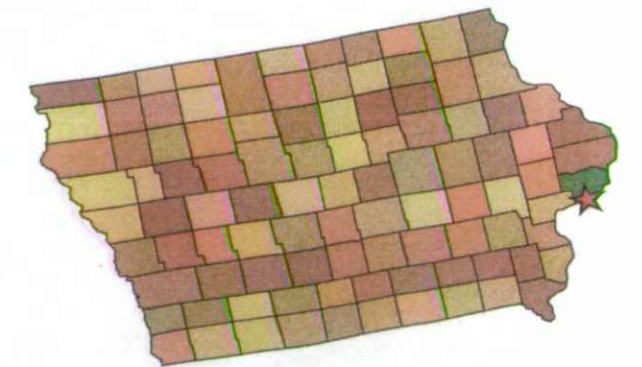
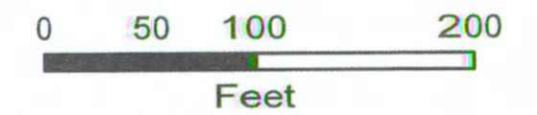






## Legend

- Boring Locations 1
- Diversion Tunnel



  
**Stanley Consultants INC.** May 2010

**SAMPLING LOCATION MAP**  
Westside Diversion Tunnel  
City of Davenport  
Figure 1