CITY OF HOUSTON

PUBLIC WORKS AND ENGINEERING
PLANNING & DEVELOPMENT DIVISION

Application for Approval of Municipal Setting Designation

APPLICANT INFORMATION

Applicant's Name: JLB Realty, LLC

☐Individual ☑Private Entity ☐Public Entity ☐Non-Profit Entity ☐Other _____

Address: 909 Lake Carolyn Parkway - Suite 960 (Street) | Irving (City) | Texas (State) | 75039 (Zip)

Phone No.: 214-271-8480 Fax No.: 214-271-8508

Email: eoverton@jlbpartners.com

Contact Information

Name of Contact: Eric Overton

Title: Project Manager

Address: 909 Lake Carolyn Parkway - Suite 960 (Street) | Irving (City) | Texas (State) | 75039 (Zip)

Phone No.: 214-271-8480 Fax No.: 214-271-8508

Email: eoverton@jlbpartners.com

SITE INFORMATION

Site HCAD No(s): 0221440000018

Site Name: West Dallas Street Parcel

Site Size: 0.2486 Acre

Site Address: 2606-2616 West Dallas Street (Street) | Houston (City) | Texas (State) | 75039 (Zip)

(List all owners – additional sheet is attached, if needed)

Owner: American General Life Insurance Company

Owner Address: 2777 Allen Parkway Ste. 340, (Street) | Houston (City) | Texas (State) | 77019-2172 (Zip)

Name of Contact: Mr. W. Larry Mask

Title: Vice President

Organization: American General Life Insurance Company

Phone No.: 713-522-1111 Fax No.: _____

Email: eoverton@jlbpartners.com

CITY OF HOUSTON

PUBLIC WORKS AND ENGINEERING
PLANNING & DEVELOPMENT DIVISION

EXECUTIVE SUMMARY

Designated Property Location

The "Designated Property" for which this Municipal Setting Designation (MSD) Application has been developed consists of an approximately 0.2486-acre parcel of land located on lots with historical addresses between 2606-2616 West Dallas Street in Houston, Harris County, Texas (Site). The current property owner is American General Life Insurance Company, a Texas Corporation. The MSD applicant is JLB Realty, LLC (Applicant). The Designated Property is approximately 95 feet by 114 feet located west of Wilkinson Street immediately north of West Dallas Street.

The location, topography and layout of the Designated Property are shown on **Figures 1, 2 and 4** in **Appendix C**. The Designated Property is a portion of lots 5, 10 and 11 and all of Lot 4, Block 4, Laurel Park Addition.

The Designated Property is currently a vacant lot located south of the American General Life business complex. The Designated Property has historically been listed at street addresses from 2606 to 2616 West Dallas Street, but currently the only address listed in appraisal district records in the area is 2602 West Dallas Street, located to the east. The Designated Property was purchased by American General Life Insurance Company from Knickerbocker Corporation on May 23, 1974.

Property Ownership
American General Life Insurance Company,
a Texas Corporation
2777 Allen Parkway, Ste 340
Houston, Texas 77019

MSD Applicant
JLB Realty, LLC
909 Lake Carolyn Parkway
Suite 960
Irving, Texas 75039

Environmental Conditions

The history of the Designated Property and surrounding land was reviewed as part of a planned acquisition of multiple parcels by JLB Realty, LLC for redevelopment. The total area of the acquisition is anticipated to consist of approximately 7 acres.

CITY OF HOUSTON

PUBLIC WORKS AND ENGINEERING
PLANNING & DEVELOPMENT DIVISION

EXECUTIVE SUMMARY

The Designated Property has historically contained only single family residences based upon historical directories and maps. The residences were removed by the late 1970's, and the property has been vacant since that period.

A number of historical activities of environmental concern were identified as part of the environmental review for the 4-acre acquisition parcels. In the area of the Site, activities of concern on adjoining and nearby properties were identified. Southwestern Engraving Company of Houston, later Universal Printing Ink Corporation Manufacturing, operated one block west of the Designated Property starting at a date between 1951 and 1956 and continuing to operate at that location until 1968. From the early 1960s to the early 1980s McElreath Sam Ross Company Electrotypers operated on the property west and adjacent to the Designated Property at 2620 West Dallas Street. Both of these companies appear to be light industrial operations; the former an engraver/ink manufacturer and the latter an engraver.

As a result of these historic operations, W&M Environmental Group, Inc. (W&M) conducted subsurface investigations prior to an anticipated property transfer. The investigations included groundwater data collected from five permanent monitoring wells and eleven temporary monitoring wells. Two of the monitoring wells and one of the temporary monitoring wells were located on the Designated Property. Soil conditions were evaluated from sampling in 49 soil borings, including 17 on the Designated Property. For completeness, we have included basic information regarding the investigations completed on the entire acquisition property as part of the pre-acquisition evaluation.

Subsurface investigations did not indicate the presence of chemicals of concern (COC) exceeding the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program (TRRP) Tier 1 residential assessment levels, with the exception of arsenic. Arsenic exceeded the residential protective concentration level (PCL) in two soil samples and in one groundwater sample.

Refer to the **Tables** in **Appendix F** for specific values and assessment levels for soil and groundwater. No analytes exceed non-ingestion (MSD-adjusted) PCLs for groundwater or soil.

CITY OF HOUSTON

PUBLIC WORKS AND ENGINEERING
PLANNING & DEVELOPMENT DIVISION

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There are currently two monitoring wells on the Designated Property (MW-02 and MW-04), two wells on the adjoining parcel (MW-01 and MW-05), and one monitoring well located to the west at 2626 West Dallas Street (MW-03). Groundwater is first encountered at a depth of approximately 28 feet below ground surface (bgs). One groundwater bearing unit (GWBU) has been identified, and shallow groundwater flow direction was determined to be to the west. Only well MW-02 contains arsenic above the ingestion PCL, and the remaining wells are below the PCLs.

No water wells used for potable purposes exist within the Site.

The arsenic-impacted groundwater at the Site has been fully delineated to the TRRP assessment levels. Arsenic is likely to have migrated off-Site to the west, but has been delineated by installation of a down gradient well further west which does not contain arsenic above analytical detection limits

The Designated Property and the area within 0.5 mile is serviced or is capable of being serviced by the City of Houston or other municipal water supply. There are 538 State-registered water wells located within approximately 5-miles of the Designated Property, owned by 436 different entities. There are seven water wells located within a 0.5-mile radius of the Designated Property as identified in the water well search.

There are no other jurisdictional boundaries within 0.5-mile of the Site other than the City of Houston. Municipalities that operate water wells within 5 miles of the Designated Property are: City of West University Place, City of Southside Place, and the City of Bellaire. There are a total of 17 reported Water Utility Database (WUD) drinking water wells operating within 5 miles of the Designated Property.

Regulatory Setting
The Designated Property is not currently in a regulatory program. An application for the Voluntary Cleanup Program (VCP) is being submitted concurrently with the MSD application.

Appendix B

MUNICIPAL SETTING DESIGNATION APPLICATION

WEST DALLAS STREET PARCEL
HOUSTON, TEXAS

PROPERTY USE INFORMATION

The Designated Property consists of a portion of the property located at 2606-2616 West Dallas Street comprising approximately 0.2486 acre. According to survey in **Appendix A**, the Designated Property is partially comprised of lots 5, 10 and 11 and all of Lot 4, of Block 4, Laurel Park Addition. The Designated Property is currently vacant and located south of the American General Life business complex.

The Designated Property is approximately 95 feet by 114 feet with a western border at the adjoining 2620 West Dallas Street and the southern border at West Dallas Street. A vacant building is located on the west adjacent property, and West Lamar Street is located approximately 80 feet to the north. Single-family residences and restaurants are developed south of West Dallas Street.

The entity with the power to restrict the use of groundwater is American General Life Insurance Company, owner of the parcel since January 1985.

The MSD applicant is JLB Realty, LLC (Applicant). The property will be acquired along with adjoining unaffected land totaling approximately 7 acres and will be re-developed with Class A residential apartments. The Applicant is not aware of future changes to the use of the surrounding properties that would include the use of the groundwater bearing units (GWBUs).

Appendix C

MUNICIPAL SETTING DESIGNATION APPLICATION
WEST DALLAS STREET PARCEL
HOUSTON, TEXAS

SITE MAPS

Seven maps are attached in this section depicting relevant Designated Property information.

The Designated Property is located along West Dallas Street near the intersection with Wilkinson Street in Houston, Texas, as presented on **Figure 1**. There are currently no buildings or other structures on the Designated Property.

Figure 2 depicts the area topography, which is generally level, sloping gently downward toward Buffalo Bayou, which is approximately 1,600 feet to the north.

Figure 3 is a Federal Emergency Management Agency (FEMA) flood map showing that the Designated Property is in Flood Zone X, which implies, "areas determined to be outside the 0.2% annual chance floodplain."

Figure 4 presents the Site layout, property boundaries, and the locations of all sampling locations on the Designated Property and the surrounding parcels that were investigated on behalf of the Applicant.

The Designated Property was evaluated as part of a pre-acquisition environmental study on a larger 4-acre area in early 2012. Initial analyses of groundwater from the Site included testing for volatile organic compounds (VOCs), total petroleum hydrocarbons (TPH) and priority pollutant metals. The samples in the vicinity of the Designated Property were recovered from temporary monitoring wells TMW-06 and TMW-07, and indicated elevated concentrations of arsenic, beryllium, cadmium, chromium, copper, lead, nickel, selenium, thallium, and zinc. No VOCs or TPH were reported above Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program (TRRP) residential ingestion protective concentration levels (PCLs) in the temporary wells.

Because groundwater samples from temporary wells can be influenced by the presence of sediment from the formation, permanent monitoring wells were advanced and groundwater samples were submitted for re-analysis of metals identified as elevated in the temporary monitoring wells. A total of five permanent groundwater monitoring wells were installed, including two on the Designated Property and three on adjoining or nearby parcels. Results indicated that arsenic exceeded the TRRP residential ingestion PCL in monitoring well MW-02. The remaining permanent wells did not contain arsenic or other COCs above their respective PCLs.

Groundwater from the remaining samples recovered across the 4-acre area did not contain COCs above PCLs, and therefore these areas are not included within this MSD Application.

Appendix C

The method quantitation limit (MQL) for 2-chloroethylvinylether and 1,2,3-trichloropropane exceeded the Tier 1 residential ingestion PCLs. However, the absence of other less chemically complex solvent analytes in any of the wells or of a suspected source for these COCs makes it unlikely that they exist within the groundwater at the Site, and they were not considered further in our evaluation.

The impacted groundwater at the Designated Property is fully delineated. The groundwater gradient was measured from the five permanent monitoring wells to determine groundwater elevations, gradient and approximate flow direction. The groundwater gradient is depicted in **Figure 5**, inferring groundwater flow to the west. Since it was expected that groundwater would move north/northeast towards Buffalo Bayou, the wells were re-surveyed and gauged on three occasions to verify the westerly flow direction.

Figure 6 shows the groundwater arsenic PCL exceedance zone of the Designated Property.

In addition to the groundwater assessment, 39 soil borings and 10 surface soil samples were advanced on the 4-acre acquisition properties, including 17 on the Designated Property. Soil samples were submitted for analysis of priority pollutant metals, VOCs, and TPH. Arsenic was identified in two soil samples at concentrations above the TCEQ TRRP Tier 1 ingestion PCL at a depth of one foot bgs. **Figure 7** presents the soil arsenic PCL exceedance zone of the Designated Property.

The MQL for four compounds (acrylonitrile, 1,2-dibromoethane, 2-chloroethylvinylether and 1,2,3-trichloropropane) exceeded the Tier 1 Residential ingestion PCL. These analytes are not COCs that have been associated with historical Site activities and are unlikely to exist in any of the soil borings; they were not considered further in our evaluation.

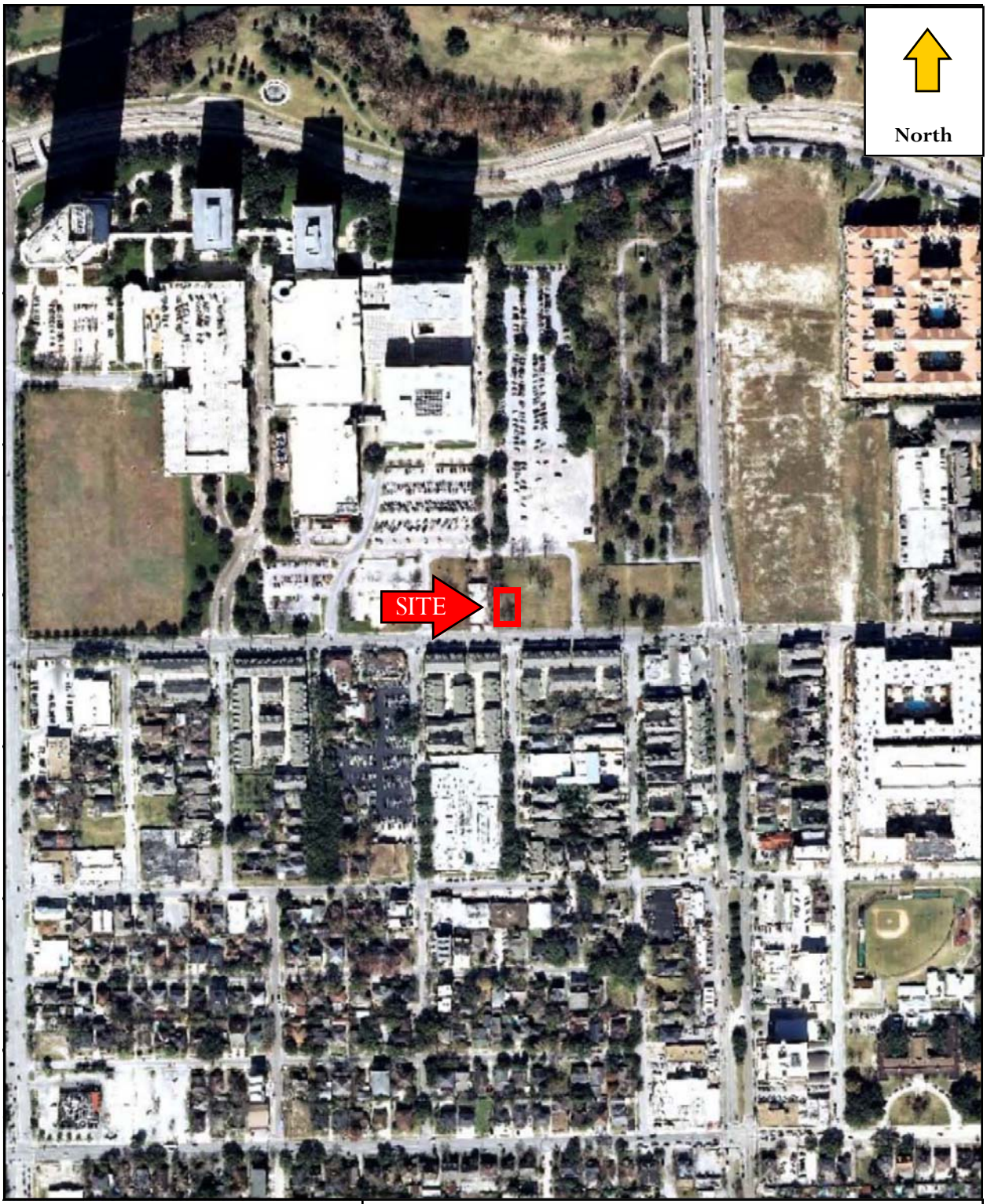
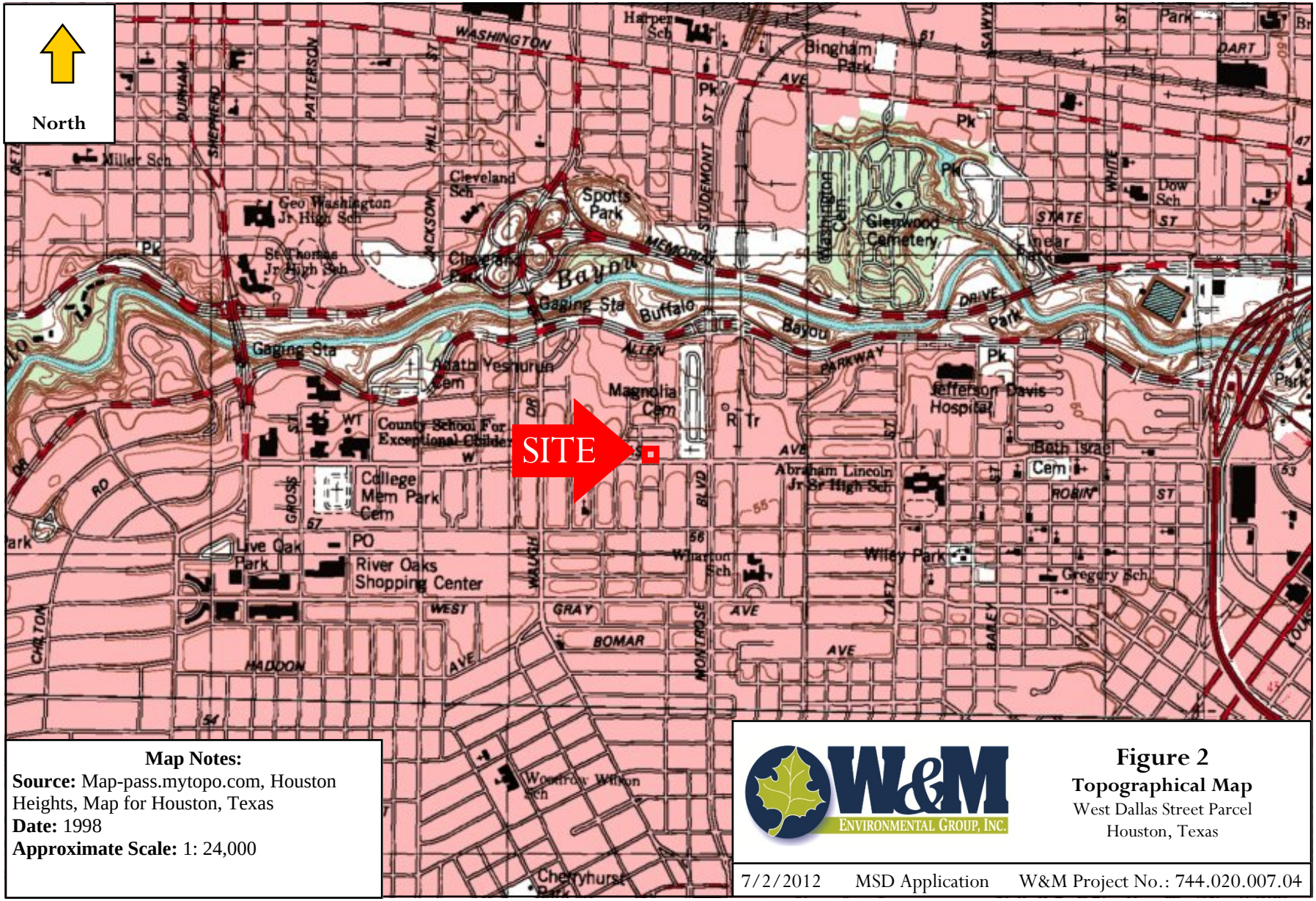


Image from City of Houston GIMS
1" = 400'

W&M Environmental Group, Inc.

Figure 1
Site Location
West Dallas Street Parcel
Houston, Texas

7/2/2012 MSD Application W&M Project No. 744.020.007.04

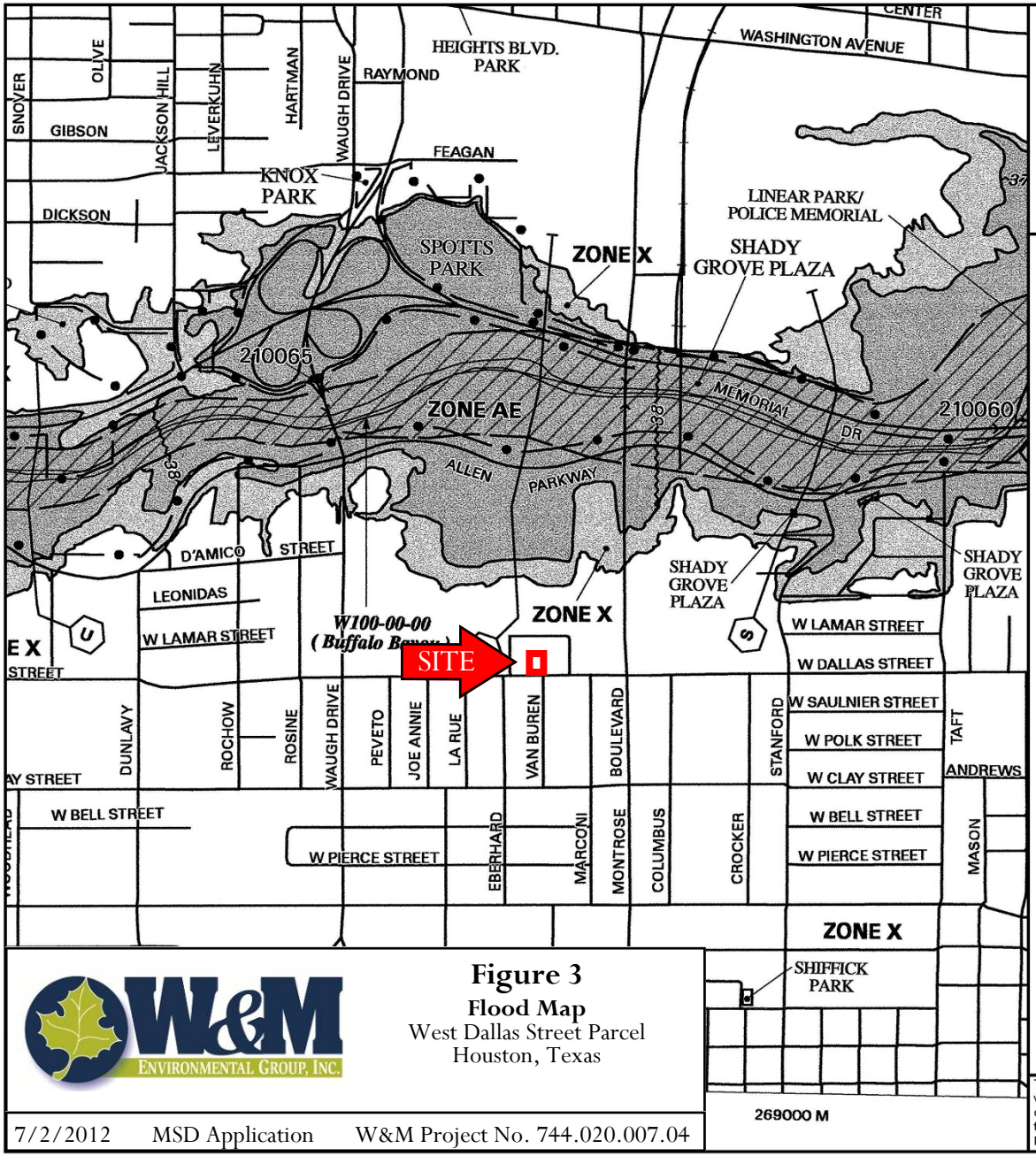


Map Notes:
Source: Map-pass.mytopo.com, Houston Heights, Map for Houston, Texas
Date: 1998
Approximate Scale: 1: 24,000

W&M Environmental Group, Inc.

Figure 2
Topographical Map
West Dallas Street Parcel
Houston, Texas

7/2/2012 MSD Application W&M Project No.: 744.020.007.04



MAP SCALE 1" = 1000'

500 0 1000 2000 FEET

PANEL 0670L

FIRM

FLOOD INSURANCE RATE MAP

HARRIS COUNTY,
TEXAS
AND INCORPORATED AREAS

PANEL 670 OF 1150

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
HOUSTON, CITY OF	480296	0670	L

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
48201C0670L

MAP REVISED:
JUNE 18, 2007

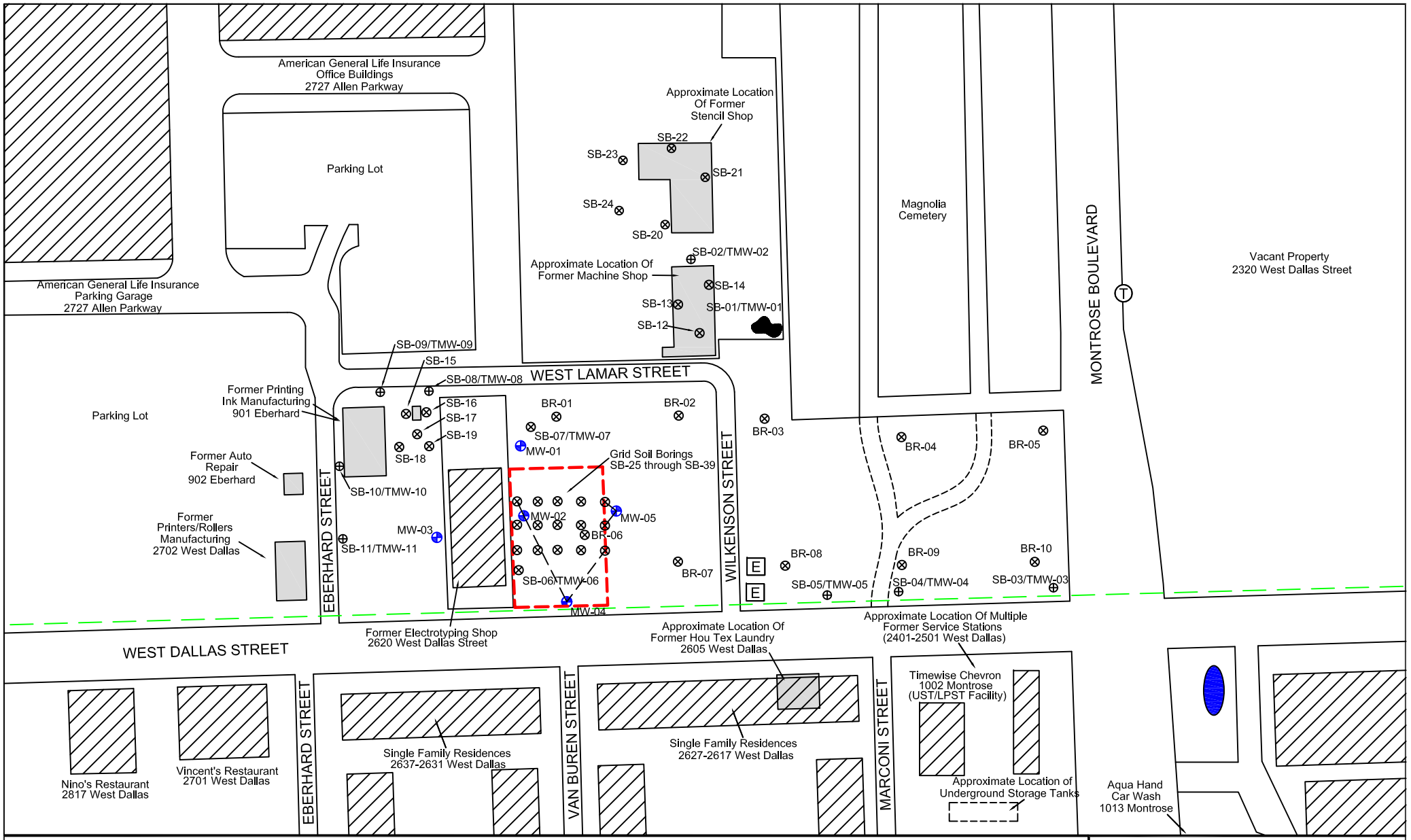
Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

W&M ENVIRONMENTAL GROUP, INC.

Figure 3
Flood Map
West Dallas Street Parcel
Houston, Texas

7/2/2012 MSD Application W&M Project No. 744.020.007.04



LEGEND

- Designated Property
- Buildings
- Underground Gas Line
- Former Road
- Soil Pile
- Storm Water Retention Pond
- Pole Mounted Transformer
- Electrical/Utility Box
- Monitoring Well (MW)
- Temporary Monitoring Well (TMW)
- Soil Boring (SB)
- Background Sample (BR)

Note: Locations of former structures are approximations based on best available sources.

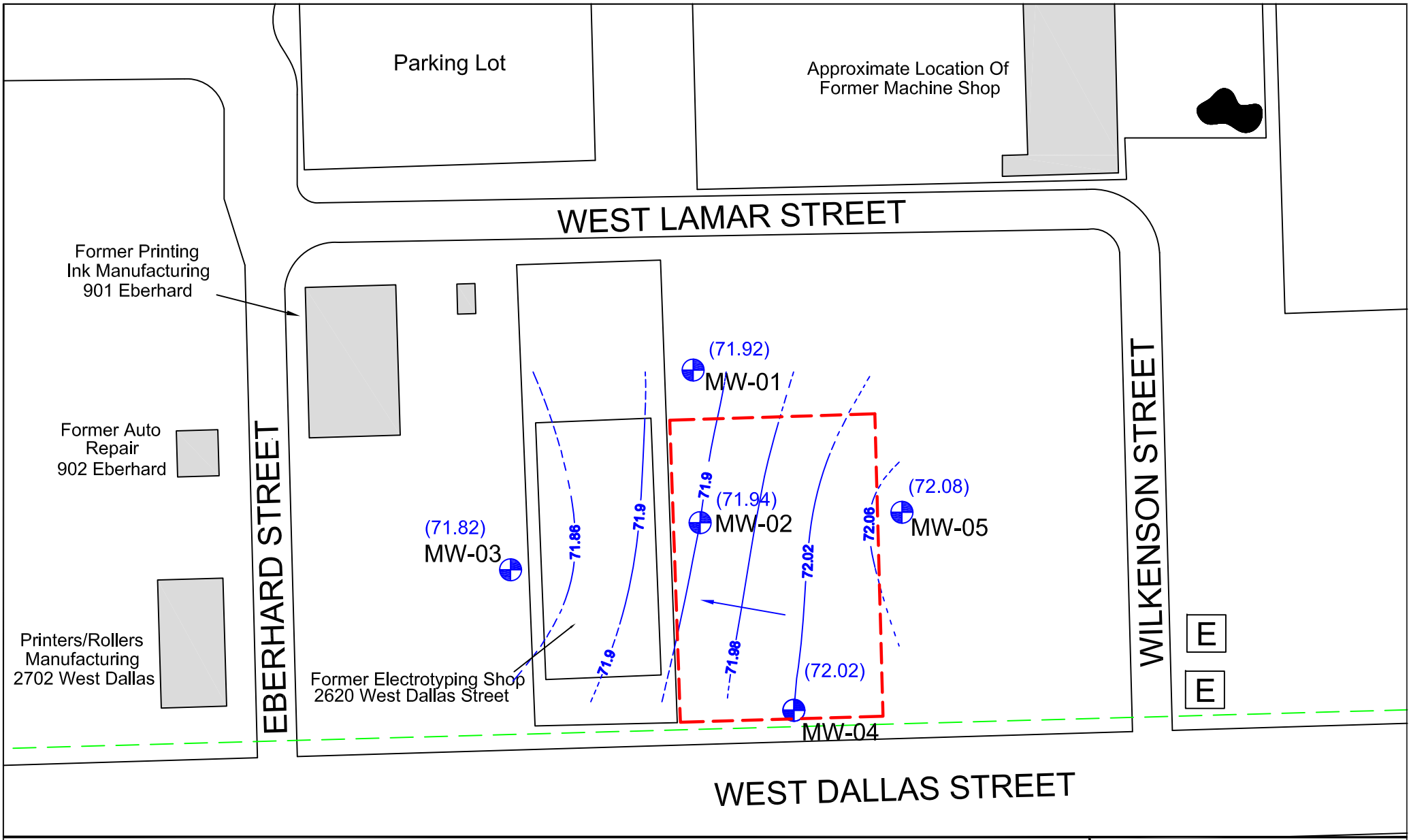
APPROXIMATE SCALE IN FEET

0 65 130

Figure 4
Site Layout
West Dallas Street Parcel
Houston, Texas

06/27/2012	W&M Project No.: 744.020	Check By: ADB	Drawn: CMM	Revised: JF

W&M ENVIRONMENTAL GROUP, INC.
www.wh-m.com



LEGEND

- Designated Property
- Buildings
- Underground Gas Line
- Soil Pile
- E Electrical/Utility Box
- Monitoring Well

Note: Locations of former structures are approximations based on best available sources.

APPROXIMATE SCALE IN FEET

0 30 60

N

Figure 5
Groundwater Gradient Map
February 24, 2012
West Dallas Street Parcel
Houston, Texas

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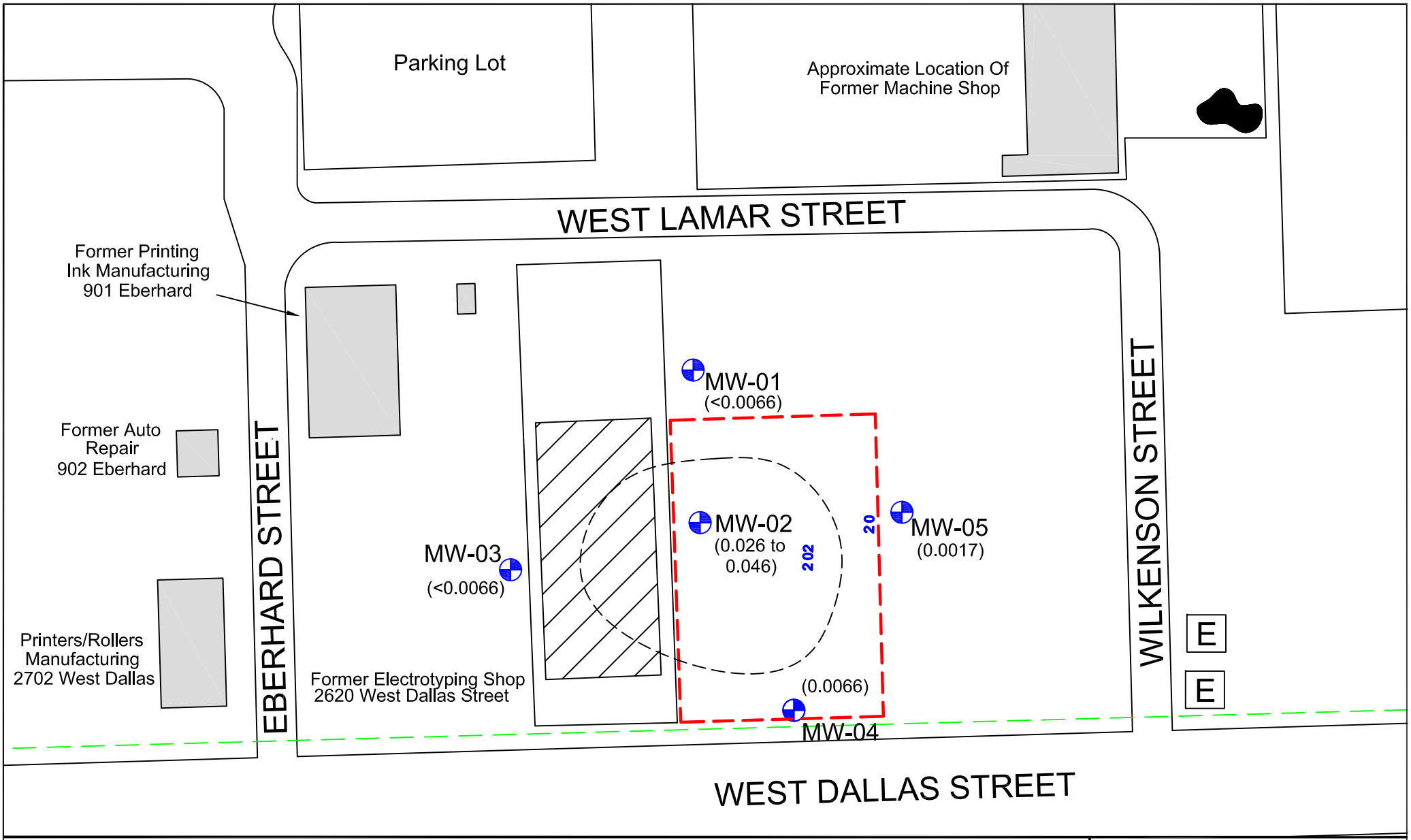
www.wh-m.com

7/2/2012	W&M Project No.: 744.020	Check By: ADB	Drawn: CMM	Revised: JF



LEGEND

- Designated Property
- Buildings
- Underground Gas Line
- Soil Pile
- E Electrical/Utility Box
- Monitoring Well (0.017) Arsenic in mg/L
- Arsenic PCLE Zone (As > 0.010 mg/L)

Note: Values represent concentrations of Arsenic expressed in mg/L from samples collected in January through February 2012.

PCL with MSD - N/A
PCL without MSD - 0.01 mg/L

APPROXIMATE SCALE IN FEET

0 30 60

N

Figure 6
Map of PCLE Zone - Arsenic
West Dallas Street Parcel
Houston, Texas

7/2/2012	W&M Project No.: 744.020	Check By: ADB	Drawn: CMM	Revised: JF

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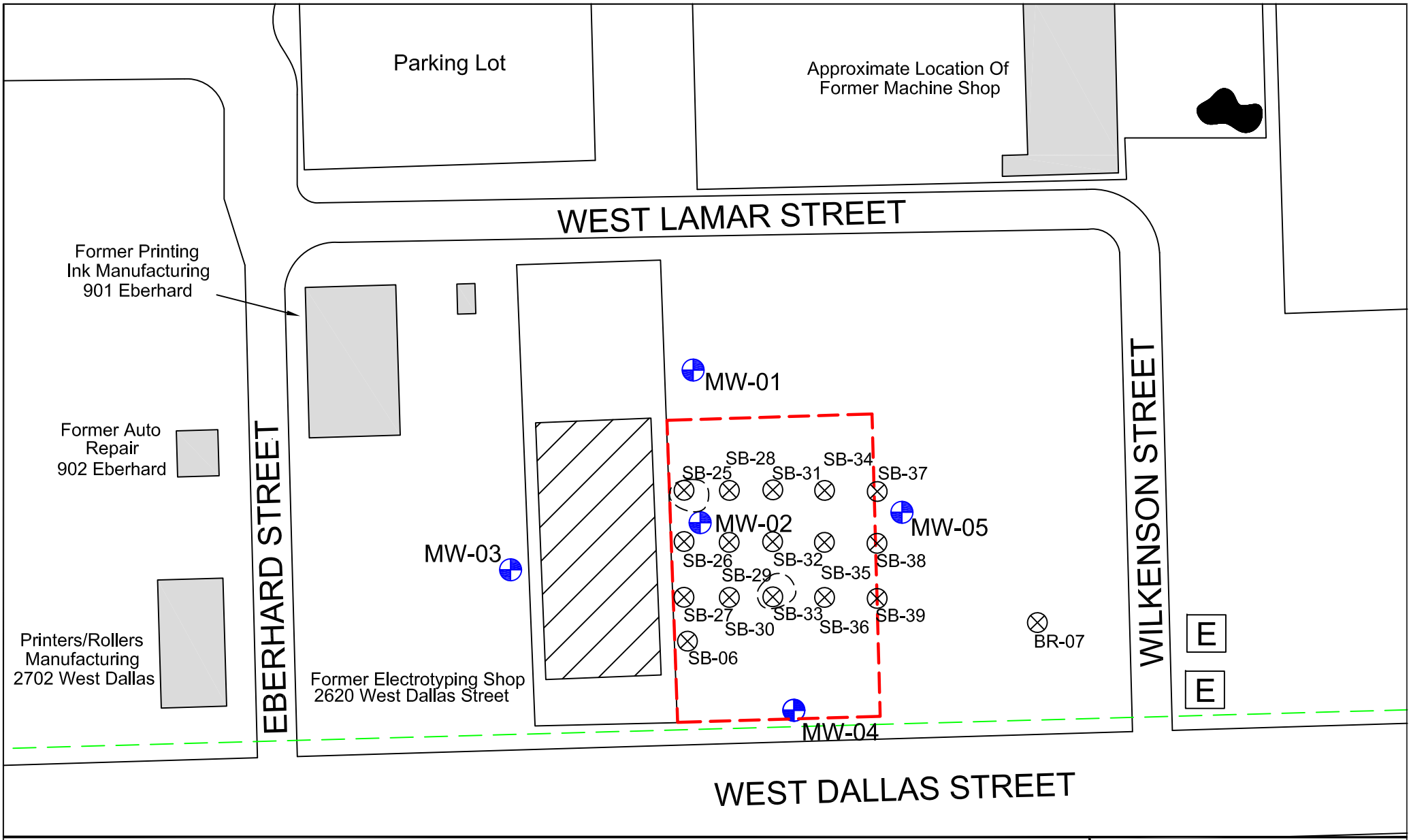


LEGEND

- Designated Property
- Buildings
- Underground Gas Line
- Soil Pile
- Electrical/Utility Box
- Monitoring Well
- Soil Boring
- Arsenic PCLE Zone (As > 5.9 mg/L)

Note:
PCL with MSD - N/A
PCL without MSD - 5.9 mg/kg

APPROXIMATE SCALE IN FEET

0 30 60

N

Figure 7
Soil PCLE Zone - Arsenic
West Dallas Street Parcel
Houston, Texas

7/31/2012	W&M Project No.: 744.020	Check By: ADB	Drawn: CMM	Revised: JF

W&M ENVIRONMENTAL GROUP, INC.
www.wh-m.com

Appendix D

MUNICIPAL SETTING DESIGNATION APPLICATION
WEST DALLAS STREET PARCEL
HOUSTON, TEXAS

PROPERTIES OF CHEMICALS of CONCERN WITHIN INGESTION PCL EXCEEDANCE ZONE

Ingestion PCLE zones exist for the following COCs in soil and groundwater:

- Arsenic

Soil and groundwater analytical data tables are presented in **Tables 1 through Table 6**, respectively (presented in **Appendix F**). The analytical data tables present the concentrations of each COC in soil and groundwater in comparison to their respective ingestion and non-ingestion (MSD-adjusted) PCLs.

Groundwater PCLE

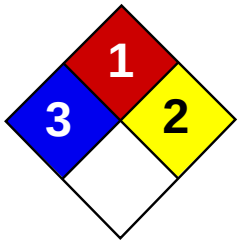
Arsenic was identified in the groundwater collected from monitoring well MW-02 during three sampling events at concentrations (0.026 to 0.046 mg/L) that exceeded the ingestion PCL. No analytes exceeded the non-ingestion PCL in groundwater. **Figure 6** (previously presented in **Appendix C**) depicts the horizontal extent of the groundwater ingestion PCL exceedance (PCLE) zone for arsenic. The total estimated surface area of the ingestion PCLE zone for arsenic is not expected to be more than 0.2 acres.

The area of groundwater impact is delineated and may extend onto the west adjacent former electrotyping shop property located at 2620 West Dallas Street. While the historic electrotyping shop is a possible source of the impact, permission was not obtained to investigate this property. Therefore, a groundwater monitoring well was placed immediately west 2620 West Dallas Street (MW-03) in order to delineate the plume in the westerly direction.

Soil PCLE

Arsenic was identified in the soil samples collected from soil borings SB-25 (7.3 mg/kg) and SB-33 (8.1 mg/kg) at a depth of one foot bgs. These concentrations exceed the groundwater protective PCL for arsenic in soils (5 mg/kg). These low concentrations of arsenic in soil are unlikely to be the source of the arsenic detected in groundwater. The total estimated surface area of the ingestion PCL exceedance zone for arsenic is not expected to be larger than 0.10 acres in size.

The chemical properties of arsenic are provided in the chemical abstract and fact sheet located in this section. In general, arsenic has limited solubility in water and tends to adsorb strongly to soil particles.



Material Safety Data Sheet
Arsenic MSDS

Section 1: Chemical Product and Company Identification

Product Name: Arsenic

Catalog Codes: SLA1006

CAS#: 7440-38-2

RTECS: CG0525000

TSCA: TSCA 8(b) inventory: Arsenic

CI#: Not applicable.

Synonym:

Chemical Name: Arsenic

Chemical Formula: As

Contact Information:

Sciencelab.com, Inc.
14025 Smith Rd.
Houston, Texas 77396

US Sales: **1-800-901-7247**
International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call:
1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Arsenic	7440-38-2	100

Toxicological Data on Ingredients: Arsenic: ORAL (LD50): Acute: 763 mg/kg [Rat]. 145 mg/kg [Mouse].

Section 3: Hazards Identification

Potential Acute Health Effects:
Very hazardous in case of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant), of eye contact (irritant).

Potential Chronic Health Effects:
CARCINOGENIC EFFECTS: Classified A1 (Confirmed for human.) by ACGIH. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance is toxic to kidneys, lungs, the nervous system, mucous membranes. Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4: First Aid Measures

Eye Contact:
Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.

Skin Contact: Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

Serious Skin Contact: Not available.

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation:
Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

Ingestion:
Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: Not available.

Flash Points: Not available.

Flammable Limits: Not available.

Products of Combustion: Some metallic oxides.

Fire Hazards in Presence of Various Substances: Flammable in presence of open flames and sparks, of heat, of oxidizing materials.

Explosion Hazards in Presence of Various Substances:
Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions:
SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards:
Material in powder form, capable of creating a dust explosion. When heated to decomposition it emits highly toxic fumes.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container.

Large Spill:
Use a shovel to put the material into a convenient waste disposal container. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:
Keep locked up.. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable

protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, acids, moisture.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8: Exposure Controls/Personal Protection

Engineering Controls:
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection: Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:
Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:
TWA: 0.01 from ACGIH (TLV) [United States] [1995] Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid. (Lustrous solid.)

Odor: Not available.

Taste: Not available.

Molecular Weight: 74.92 g/mole

Color: Silvery.

pH (1% soln/water): Not applicable.

Boiling Point: Not available.

Melting Point: Sublimation temperature: 615°C (1139°F)

Critical Temperature: Not available.

Specific Gravity: 5.72 (Water = 1)

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: Not available.

Solubility: Insoluble in cold water, hot water.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Not available.

Incompatibility with various substances: Reactive with oxidizing agents, acids, moisture.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity: Not available.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Inhalation. Ingestion.

Toxicity to Animals: Acute oral toxicity (LD50): 145 mg/kg [Mouse].

Chronic Effects on Humans:
CARCINOGENIC EFFECTS: Classified A1 (Confirmed for human.) by ACGIH. Causes damage to the following organs: kidneys, lungs, the nervous system, mucous membranes.

Other Toxic Effects on Humans:
Very hazardous in case of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are as toxic as the original product.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:

Section 14: Transport Information

DOT Classification: CLASS 6.1: Poisonous material.

Identification: : Arsenic UNNA: UN1558 PG: II

Special Provisions for Transport: Not available.

Section 15: Other Regulatory Information

Federal and State Regulations:
California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Arsenic California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Arsenic Pennsylvania RTK: Arsenic Massachusetts RTK: Arsenic TSCA 8(b) inventory: Arsenic

Other Regulations: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications:

WHMIS (Canada):
CLASS D-1A: Material causing immediate and serious toxic effects (VERY TOXIC). CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

DSCL (EEC):
R22- Harmful if swallowed. R45- May cause cancer.

HMIS (U.S.A.):

Health Hazard: 3

Fire Hazard: 1

Reactivity: 2

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 3

Flammability: 1

Reactivity: 2

Specific hazard:

Protective Equipment:
Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Safety glasses.

Section 16: Other Information

References:
-Hawley, G.G.. The Condensed Chemical Dictionary, 11e ed., New York N.Y., Van Nostrand Reinold, 1987. -Liste des produits purs tératogènes, mutagènes, cancérogènes. Répertoire toxicologique de la Commission de la Santé et de la Sécurité du Travail du Québec. -Material safety data sheet emitted by: la Commission de la Santé et de la Sécurité du Travail du Québec. -SAX, N.I. Dangerous Properties of Indutrial Materials. Toronto, Van Nostrand Reinold, 6e ed. 1984. -The Sigma-Aldrich Library of Chemical Safety Data, Edition II. -Guide de la loi et du règlement sur le transport des marchandises dangeureuses au canada. Centre de conformité internatinal Ltée. 1986.

Other Special Considerations: Not available.

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Appendix E

MUNICIPAL SETTING DESIGNATION APPLICATION
WEST DALLAS STREET PARCEL
HOUSTON, TEXAS

PROPERTIES OF CHEMICALS of CONCERN IN DESIGNATED GROUNDWATER

The following COCs have been detected in the Designated Groundwater at the Site. COCs in **bold** have been identified at concentrations above the applicable residential ingestion PCL, or the MQL exceeds the ingestion PCL for that analyte. The other COCs were identified at concentrations below the applicable ingestion PCL:

- **Arsenic**
- Barium
- Cadmium
- Lead
- Methylene Chloride (lab contaminant)

Soil and groundwater analytical data tables are presented in **Tables 1 through 6** (presented in **Appendix F**). The analytical data tables present the concentrations of COCs that are above the ingestion PCL in comparison to their respective ingestion and non-ingestion PCLs.

Figure 6 and **Figure 7** (previously presented in **Appendix C**) depict the horizontal extent of the groundwater and soil ingestion PCLE zones for arsenic. No PCLE zones exist for other COCs.

Appendix F

MUNICIPAL SETTING DESIGNATION APPLICATION
WEST DALLAS STREET PARCEL
HOUSTON, TEXAS

COC TABLES

Thirty-nine soil borings and 10 surface soil samples were advanced across the Site including seventeen located on the Designated Property (refer to **Figure 4**). Soil samples were submitted for analysis of priority pollutant metals, VOCs, and TPH. The attached soil analytical data tables, **Tables 1 through 3**, contain the concentrations of each COC detected in soil and the respective critical PCLs both with and without an MSD. No COCs were detected in soil exceeding the non-ingestion PCLs.

The attached groundwater analytical data tables, **Tables 4 through 6**, contain the concentrations of each COC in groundwater and their respective critical PCLs both with and without an MSD. No COCs were detected in groundwater exceeding the non-ingestion PCLs.

The table below reflects groundwater COCs identified in groundwater at the Designated Property, the Tier 1 residential ingestion and non-ingestion PCLs, and the maximum concentrations identified. Detections are signified in **bold**, and exceedances of the applicable PCL are highlighted. Arsenic was the only PCL exceedance in groundwater. All concentrations are in mg/L. A "J" flag is designated by the laboratory and indicates the value has been estimated because it is below the lowest calibration point. Therefore, confidence in J-flagged data correlates with its concentration. A "<" indicates the value was not detected above the MQL.

Groundwater			
COC	**$^{GW}GW_{Ing}$ Ingestion Pathway**	**$^{Air}GW_{Inh-V}$ Non-ingestion Pathway**	**Maximum Concentration**
Methylene chloride	0.0050	21,000	0.0013 J
Arsenic	0.010	--	**0.046**
Barium	2.0	--	0.32
Cadmium	0.0050	--	0.0025 J
Copper	1.3	--	0.098
Lead	0.015	--	0.0088
Nickel	0.49	--	0.17
Selenium	0.050	--	0.01 J
Zinc	7.3	--	0.24

Compounds for which laboratory MQLs exceed the ingestion PCL have not been included as these are not associated with the Site and are not likely to be in groundwater.

TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS - VOCs

West Dallas Street Parcel
Houston, Texas

Sample I.D.:[1]	Tier 1	Tier 1 Residential	SB-12		SB-15	SB-17		SB-23	
Date Sampled	Residential	Non-Ingestion	12/15/2011		12/15/2011	12/15/2011		4/30/2012	
Depth (Feet BGS)	Ingestion PCL[2]	PCL[3]	2'	8'	2'	2'	4'	6'	8'
VOCs (mg/kg)[4]									
1,1,1,2-Tetrachloroethane	**1.4**	65	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	--	--
1,1,2,2-Tetrachloroethane	**0.023**	30	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.00054	<0.00060
1,1,2-Trichlor-1,2,2-trifluoroethane	**80,000**	390,000	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0014	<0.0016
1,1,2-Trichloroethane	**0.020**	18	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0022	<0.0024
1,1-Dichloroethane	**18**	11,000	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.00054	<0.00060
1,1-Dichloroethene	**0.050**	2,300	<0.0031	<0.0031	<0.0031	<0.0031	<0.0031	<0.0016	<0.0018
1,1-Dichloropropene	**0.13**	36	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	--	--
1,1,1-Trichloroethane	**1.6**	53,000	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	--	--
1,2,3-Trichlorobenzene	**4.8**	120	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	--	--
1,2,3-Trichloropropane	**0.00053**	0.20	**<0.0056**	**<0.0056**	**<0.0056**	**<0.0056**	**<0.0056**	--	--
1,2,3-Trimethylbenzene	**32**	120	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	--	--
1,2,4-Trichlorobenzene	**26**	120	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.00097	<0.0011
1,2,4-Trimethylbenzene	**49**	150	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	--	--
1,2-Dibromo-3-Chloropropane	**0.0017**	0.15	**<0.010**	**<0.010**	**<0.010**	**<0.010**	**<0.010**	<0.0014	<0.0016
1,2-Dibromoethane (EDB)	**0.00021**	0.73	**<0.0019**	**<0.0019**	**<0.0019**	**<0.0019**	**<0.0019**	**<0.00076**	**<0.00084**
1,2-Dichlorobenzene	**18**	720	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.00086	<0.00096
1,2-Dichloroethane	**0.014**	11	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.00065	<0.00072
1,2-Dichloropropane	**0.023**	61	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.00054	<0.00060
1,3-Dichlorobenzene	**6.7**	120	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.00097	<0.0011
1,3-Dichloropropane	**0.064**	36	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	--	--
1,3,5-Trimethylbenzene	**53**	110	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	--	--
1,4-Dichlorobenzene	**2.1**	250	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.00076	<0.00084
2-Butanone (MEK)	**29**	40,000	0.021 J	<0.014	<0.014	<0.014	<0.014	**0.0080 J**	<0.0026
2,2-Dichloropropane	**0.12**	61	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	--	--
4-Methyl-2-pentanone (MIBK)	**4.9**	5,900	<0.014	<0.014	<0.014	<0.014	<0.014	<0.0011	<0.0012
Acetone	**43**	66,000	<0.12	<0.12	<0.12	<0.12	<0.12	**0.047**	**0.031**
Acrylonitrile	**0.0033**	3.6	**<0.016**	**<0.016**	**<0.016**	**<0.016**	**<0.016**	--	--
Benzene	**0.026**	120	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.00065	<0.00072
Bromobenzene	**2.3**	390	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	--	--
Bromodichloromethane	**0.065**	98	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.00065	<0.00072
Bromoform	**0.63**	400	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.00076	<0.00084
Bromomethane	**0.13**	46	<0.0088	<0.0088	<0.0088	<0.0088	<0.0088	<0.0011	<0.0012
n-Butylbenzene	**150**	3,300	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	--	--
sec-Butylbenzene	**85**	3,300	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	--	--
tert-Butylbenzene	**100**	3,300	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	--	--
Carbon tetrachloride	**0.062**	35	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0013	<0.0014
Chlorobenzene	**1.1**	525	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.00054	<0.00060
Chloroethane	**31**	27,000	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0011	<0.0012
2-Chloroethylvinylether	**0.0029**	4.5	**<0.0088**	**<0.0088**	**<0.0088**	**<0.0088**	**<0.0088**	--	--
Chloroform	**1.0**	16	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0019	<0.0022
Chloromethane	**0.41**	140	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.00097	<0.0011
2-Chlorotoluene	**9.1**	1,200	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	--	--
4-Chlorotoluene	**11**	1,600	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	--	--
cis-1,2-Dichloroethene	**0.25**	140	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0016	<0.0018
cis-1,3-Dichloropropene	**0.0066**	8.0	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.00054	<0.00060
Cymene (isopropyltoluene)	**230**	8,200	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	--	--
Dibromochloromethane	**0.049**	72	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.00054	<0.00060
Dibromomethane	**1.1**	81	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	--	--
Dichlorodifluromethane	**240**	1,400	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0019	<0.0022
Dichloromethane (MC)	**0.013**	480	<0.0065	<0.0065	<0.0065	<0.0065	<0.0065	**0.0071 J**	**0.0048 J**
Diisopropyl ether	**12**	460	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018		--
Ethylbenzene	**7.6**	6,400	0.0031 J	<0.0019	<0.0019	<0.0019	<0.0019	<0.00097	<0.0011
Hexachlorobutadiene	**3.3**	20	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	--	--
Isopropylbenzene	**350**	4,300	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0011	<0.0012
Methyl tert-butyl ether	**0.62**	800	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0021	<0.0012
Naphthalene	**31**	220	0.0094 J	<0.0028	<0.0028	<0.0028	<0.0028	--	--
n-Propylbenzene	**45**	2200	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	--	--
Styrene	**3.3**	6,700	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.00065	<0.00072
Tetrachloroethene	**0.05**	450	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0011	<0.0012
Toluene	**8.2**	5,900	0.0032 J	<0.0016	<0.0016	<0.0016	<0.0016	<0.00076	<0.00084
trans-1,2-Dichloroethene	**0.49**	590	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.00097	<0.0011
trans-1,3-Dichloropropene	**0.036**	36	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.00054	<0.00060
Trichloroethene	**0.034**	18	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0019
Trichlorofluromethane	**130**	25,000	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.00086	<0.00096
Vinyl chloride	**0.022**	3.7	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0011	<0.0012
Xylene	**120**	6,000	0.026	<0.0023	<0.0023	<0.0023	<0.0023	<0.0028	<0.0031

Samples collected by W&M and analyzed by ESC Lab Sciences (Dec. 2011, June 2012) or ALS Environmental (April 2012)

[2]Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program (TRRP) Tier 1 protective concentration level (PCL), groundwater ingestion pathway, residential land use, Class 1 groundwate

[3]TCEQ TRRP Tier 1 PCL, total soil combined pathway, residential land use, Class 1 groundwater, 0.5-acre source area

[4]VOCs analyzed by U.S. Environmental Protection Agency (EPA) EPA Method 8260B

(J) Indicates the estimated value is below the lowest calibration point. Confidence correlates with concentration.

(<) Indicates the value was not detected above the Method Quantitative Limit (MQL).

(--) Not applicable/not analyzed.

Bold indicates the applicable PCL without an MSD and analytes that exceeds that PCL

Soil borings SB-25 through SB-36 not submitted for analysis of VOCs.

BGS = Below Ground Surface

TABLE 2
SUMMARY OF SOIL ANALYTICAL RESULTS - TPH

West Dallas Street Parcel
Houston, Texas

Sample I.D.:[1]	Tier 1 Residential Ingestion PCL[2]	Tier 1 Residential Non-Ingestion PCL[3]	SB-12		SB-15	SB-17	SB-18	SB-23	
Date Sampled			12/15/2011		12/15/2011	12/15/2011	12/15/2011	4/30/2012	
Depth (Feet BGS)			2'	8'	2'	2'	4'	6'	8'
TPH (mg/kg)[4]									
C_6 - C_{12}	**65**	1,600	<2.6	<2.6	<2.6	<2.6	<2.6	<16	<18
C_{12} - C_{28}	**200**	2,300	<3.0	<3.0	<3.0	<3.0	<3.0	<16	<18
C_{28} - C_{35}			<3.0	<3.0	<3.0	<3.0	<3.0	<16	<18

[1]Samples collected by W&M and analyzed by ESC Lab Sciences (Dec. 2011, June 2012) or ALS Environmental (April 2012).

[2]Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program (TRRP) Tier 1 protective concentration level (PCL), ground

[3]TCEQ TRRP Tier 1 PCL, total soil combined pathway, residential land use, Class 1 groundwater, 0.5-acre source area.

[4]Total Petroleum Hydrocarbons (TPH) analyzed by Texas TPH Method 1005.

(<) Indicates the value was not detected above the Method Quantitative Limit (MQL).

(--) Not applicable/not analyzed.

Bold indicates the applicable PCL without an MSD and analytes that exceed that PCL.

Soil borings SB-25 through SB-36 not submitted for analysis of TPH.

BGS = Below Ground Surface

TABLE 3
SUMMARY OF SOIL ANALYTICAL RESULTS - METALS

West Dallas Street Parcel
Houston, Texas

Sample I.D.:[1]	Texas-Specific Background Value[2]	Site-Specific Background Value[3]	Tier 1 Residential Ingestion PCL[4]	Tier 1 Residential Non-Ingestion	SB-13		SB-14	SB-15	SB-16	SB-17	SB-18	SB-19	SB-20	SB-21	SB-22	SB-23		SB-24	SB-25
Date Sampled					12/15/2011		12/15/2011	12/15/2011	12/15/2011	12/15/2011	12/15/2011	12/15/2011	4/30/2012	4/30/2012	4/30/2012	4/30/2012		4/30/2012	6/14/2012
Depth (Feet BGS)					2'	4'	4'	4'	2'	4'	2'	2'	4'	2'	4'	6'	DUP-02 (6')	2'	1'
RCRA 8 Metals (mg/kg)[6]																			
Arsenic	**5.9**	--	5.0	24	1.8	1.6	2.8	<0.32	2.3	0.45	1.6	0.45	1.18	0.867	1.11	3.91	1.69	1.42	**7.3**
Barium	300	--	**440**	8,100	180	150	200	60	76	38	130	160	102	68.3	66.4	22.7	132	60.5	--
Cadmium	--	--	**1.5**	52	0.18	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	0.0580 J	0.0882 J	<0.056	0.0515 J	0.392 J	0.0851 J	--
Chromium	30	--	**2,400**	33,000	23	22	20	14	10	7.2	16	20	5.99	6.07	5.25	3.22	6.27	4.35	--
Lead	15	**312**	3	500	47	9.5	35	7.0	28	6.8	25	46	11.0	7.20	5.76	5.43	19.8	188	--
Mercury	0.04	**0.42**	0.0078	3.6	0.027	0.013	0.013	0.0039	0.023	0.0080	0.069	0.070	0.00944	0.0141	0.00505	0.00541	0.260	0.0441	--
Selenium	0.3	--	**2.3**	310	1.3	2.1	0.85	0.84	0.95	1.6	1.3	1.2	1.63	0.850	0.993	0.371 J	1.35	1.11	--
Silver	--	--	**0.48**	97	0.31	0.30	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.083	<0.085	<0.090	<0.079	<0.094	<0.085	--

Sample I.D.:[1]	Texas-Specific Background Value[2]	Site-Specific Background Value[3]	Tier 1 Residential Ingestion PCL[4]	Tier 1 Residential Non-Ingestion PCL[5]	SB-27	SB-29			SB-31		SB-32	SB-33			SB-34			SB-36	
Date Sampled					6/14/2012	6/14/2012			6/14/2012		6/14/2012	6/14/2012			6/14/2012			6/14/2012	
Depth (Feet BGS)					DUP-01 (1')	1.5'	2.0'	4.0'	3'	4'	1'	1'	2'	4'	2'	2.5'	4'	1.5'	4'
Arsenic	**5.9**	--	5.0	24	3.4	0.48	0.79	2.8	5.5	0.57	2.7	**8.1**	0.78	<0.32	<1.6	4.3	3.8	4.5	2.2
Barium	300	--	**440**	8,100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	**1.5**	52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	30	--	**2,400**	33,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	15	**312**	3	500	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	0.04	**0.42**	0.0078	3.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	0.3	--	**2.3**	310	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	**0.48**	97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

[1]Samples collected by W&M and analyzed by ESC Lab Sciences (Dec. 2011, June 2012) or ALS Environmental (April 2012).

[2]Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program (TRRP) Texas-Specific Soil Background Concentrations.

[3]Site-Specific background concentrations calculated based on analytes detected within 10 background samples taken across the Site.

[4]TCEQ TRRP Tier 1 protective concentration level (PCL), groundwater ingestion pathway, residential land use, Class 1 groundwater, 0.5-acre source area.

[5]TCEQ TRRP Tier 1 PCL, total soil combined pathway, residential land use, Class 1 groundwater, 0.5-acre source area.

[6]Metals analyzed by U.S. Environmental Protection Agency (EPA) EPA Method 6010B or EPA Method 7471 (mercury).

(J) Indicates the estimated value is below the lowest calibration point. Confidence correlates with concentration.

(<) Indicates the value was not detected above the Method Quantitative Limit (MQL).

(--) Not applicable/not analyzed.

Bold indicates the applicable PCL without an MSD and analytes that exceed that PCL.

BGS = Below Ground Surface

TABLE 4
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS - VOCs

West Dallas Street Parcel
Houston, Texas

SAMPLE I.D.:[1]	Tier 1 Residential Ingestion PCL[2]	Tier 1 Residential Non-Ingestion PCL[3]	TMW-01	TMW-02	TMW-03	TMW-04	TMW-05	TMW-06	TMW-07	TMW-08	TMW-09	TMW-10	TMW-11
DATE SAMPLED			12/14/2011	12/14/2011	12/16/2011	12/16/2011	12/16/2011	12/16/2011	12/16/2011	12/16/2011	12/15/2011	12/15/2011	12/15/2011
ANALYTE													
VOCs (mg/L)[4]													
Acetone	**22**	**100,000**	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011
Acrolein	**0.012**	**1,800**	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031
Acrylonitrile	**0.0017**	**58**	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017
Benzene	**0.005**	**180**	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018
Bromobenzene	**0.20**	**2,300**	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
Bromodichloromethane	**0.015**	**--**	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021
Bromoform	**0.12**	**5,100**	<0.00046	<0.00046	<0.00046	<0.00046	<0.00046	<0.00046	<0.00046	<0.00046	<0.00046	<0.00046	<0.00046
Bromomethane	**0.034**	**46**	<0.00057	<0.00057	<0.00057	<0.00057	<0.00057	<0.00057	<0.00057	<0.00057	<0.00057	<0.00057	<0.00057
n-Butylbenzene	**1.2**	**--**	<0.00020	<0.00020	0.00043 J	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
sec-Butylbenzene	**0.98**	**--**	<0.00018	<0.00018	0.00200	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018
tert-Butylbenzene	**0.98**	**--**	<0.00027	<0.00027	0.00039 J	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027
Carbon tetrachloride	**0.0050**	**2.0**	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038
Chlorobenzene	**0.10**	**1,200**	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
Chlorodibromomethane	**0.011**	**--**	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029
Chloroethane	**9.8**	**120,000**	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014
2-Chloroethylvinylether	**0.00083**	**20**	**<0.0027**	**<0.0027**	**<0.0027**	**<0.0027**	**<0.0027**	**<0.0027**	**<0.0027**	**<0.0027**	**<0.0027**	**<0.0027**	**<0.0027**
Chloroform	**0.24**	**20**	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022
Chloromethane	**0.070**	**36**	<0.00046	<0.00046	<0.00046	<0.00046	<0.00046	<0.00046	<0.00046	<0.00046	<0.00046	<0.00046	<0.00046
2-Chlorotoluene	**0.49**	**24,000**	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
4-Chlorotoluene	**0.49**	**--**	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011
1,2-Dibromo-3-Chloropropane	**0.00020**	**0.62**	<0.00044	<0.00044	<0.00044	<0.00044	<0.00044	<0.00044	<0.00044	<0.00044	<0.00044	<0.00044	<0.00044
Dibromomethane	**0.12**	**240**	<0.00051	<0.00051	<0.00051	<0.00051	<0.00051	<0.00051	<0.00051	<0.00051	<0.00051	<0.00051	<0.00051
1,2-Dichlorobenzene	**0.60**	**1,200**	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026
1,3-Dichlorobenzene	**0.73**	**190**	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
1,4-Dichlorobenzene	**0.075**	**3,600**	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
Dichlorodifluromethane	**4.9**	**60**	<0.00057	<0.00057	<0.00057	<0.00057	<0.00057	<0.00057	<0.00057	<0.00057	<0.00057	<0.00057	<0.00057
1,1-Dichloroethane	**4.9**	**43,000**	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029
1,2-Dichloroethane	**0.0050**	**33**	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026
1,1-Dichloroethene	**0.0070**	**1,700**	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
cis-1,2-Dichloroethene	**0.070**	**1,200**	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	0.0018	<0.00027	<0.00027	<0.00027
trans-1,2-Dichloroethene	**0.10**	**770**	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029
1,2-Dichloropropane	**0.0050**	**120**	<0.00047	<0.00047	<0.00047	<0.00047	<0.00047	<0.00047	<0.00047	<0.00047	<0.00047	<0.00047	<0.00047
1,1-Dichloropropene	**0.0091**	**19**	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027
1,3-Dichloropropane	**0.0091**	**250**	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037
cis-1,3-Dichloropropene	**0.0017**	**690**	<0.00023	<0.00023	<0.00023	<0.00023	<0.00023	<0.00023	<0.00023	<0.00023	<0.00023	<0.00023	<0.00023
trans-1,3-Dichloropropene	**0.0091**	**190**	<0.00039	<0.00039	<0.00039	<0.00039	<0.00039	<0.00039	<0.00039	<0.00039	<0.00039	<0.00039	<0.00039
2,2-Dichlorpropane	**0.013**	**57**	<0.00035	<0.00035	<0.00035	<0.00035	<0.00035	<0.00035	<0.00035	<0.00035	<0.00035	<0.00035	<0.00035
Di-isopropyl ether	**2.4**	**20,000**	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024
Ethylbenzene	**0.70**	**30,000**	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027
Hexachloro-1,3-butadiene	**0.012**	**8.9**	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038
Isopropylbenzene	**2.4**	**4,400**	<0.00018	<0.00018	0.0025	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018
p-Isopropyltoluene	**2.4**	**--**	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017
2-Butanone (MEK)	**15**	**1,000,000**	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	0.0035 J	<0.0030	<0.0030	<0.0030
Methylene Chloride	**0.0050**	**21,000**	<0.00079	<0.00079	0.0013 J	0.0013 J	0.0013 J	0.0013 J	0.0012 J	0.0013 J	<0.00079	<0.00079	<0.00079
4-Methyl-2-pentanone (MIBK)	**2.0**	**670,000**	<0.00080	<0.00080	<0.00080	<0.00080	<0.00080	<0.00080	<0.00080	<0.00080	<0.00080	<0.00080	<0.00080
Methyl tert-butyl ether	**0.24**	**0.0040**	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	0.025
Naphthalene	**0.49**	**320**	<0.00069	<0.00069	<0.00069	<0.00069	<0.00069	<0.00069	<0.00069	<0.00069	<0.00069	<0.00069	<0.00069
n-Propylbenzene	**0.98**	**6,000**	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018
Styrene	**0.10**	**15,000**	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
1,1,1,2-Tetrachloroethane	**0.035**	**110**	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031
1,1,2,2-Tetrachloroethane	**0.0046**	**--**	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029
1,1,2-Trichlorotrifluroethane	**730**	**9,200**	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038
Tetrachloroethene	**0.0050**	**500**	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024
Toluene	**1.0**	**64,000**	<0.00016	<0.00016	<0.00016	<0.00016	<0.00016	<0.00016	<0.00016	<0.00016	<0.00016	<0.00016	<0.00016
1,2,3-Trichlorobenzene	**0.073**	**130**	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
1,2,4-Trichlorobenzene	**0.070**	**160**	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021
1,1,1-Trichloroethane	**0.20**	**41,000**	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024
1,1,2-Trichloroethane	**0.0050**	**80**	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038
Trichloroethene	**0.0050**	**24**	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029
Trichlorofluromethane	**7.3**	**--**	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049
1,2,3-Trichloropropane	**0.000030**	**32**	**<0.00052**	**<0.00052**	**<0.00052**	**<0.00052**	**<0.00052**	**<0.00052**	**<0.00052**	**<0.00052**	**<0.00052**	**<0.00052**	**<0.00052**
1,2,4-Trimethylbenzene	**1.2**	**190**	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
1,2,3-Trimethylbenzene	**1.2**	**190**	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017
1,3,5-Trimethylbenzene	**1.2**	**130**	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018
Vinyl chloride	**0.0020**	**3.8**	<0.00028	<0.00028	<0.00028	<0.00028	<0.00028	<0.00028	<0.00028	<0.00028	<0.00028	<0.00028	<0.00028
Xylene	**10**	**10,000**	<0.00086	<0.00086	<0.00086	<0.00086	<0.00086	<0.00086	<0.00086	<0.00086	<0.00086	<0.00086	<0.00086

Notes:

[1]Samples collected by W&M and analyzed by ESC Lab Sciences (Dec. 2011) or ALS Environmental (April 2012).

[2]Texas Commision on Environmental Quality (TCEQ) Texas Risk Reduction Program (TRRP) $^{GW}GW_{Ing}$ for Residential, Class 1, Groundwater 0.5 acre source.

[3]TCEQ TRRP $^{Air}GW_{Inh\text{-}V}$ for Residential, Class 1, Groundwater 0.5 acre source. Due to analyte physiochemical parameters some compounds have no standard.

[4]VOCs analyzed by U.S. Environmental Protection Agency (EPA) EPA Method 8260B.

Bold indicates ingestion PCL and analyte detection above the ingestion PCL.

(J) Indicates the estimated value is below the lowest calibration point. Confidence correlates with concentration.

(<) Indicates the value was not detected above the Method Quantitative Limit (MQL).

(--) Not applicable/not analyzed.

TABLE 5
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS - TPH

West Dallas Street Parcel
Houston, Texas

			Temporary Monitoring Wells					
SAMPLE I.D.:[1]	**Tier 1 Residential Ingestion PCL[2]**	**Tier 1 Residential Non-Ingestion PCL[3]**	**TMW-01**	**TMW-02**	**TMW-03**	**TMW-08**	**TMW-10**	**TMW-11**
DATE SAMPLED								
ANALYTE			12/14/2011	12/14/2011	12/16/2011	12/16/2011	12/15/2011	12/15/2011
TPH (mg/L)[4]								
TPH C_6 - C_{12}	**0.98**	**1,800**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
TPH C_{12} - C_{28}	**0.98**	**7,500**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
TPH C_{28} - C_{35}			<0.30	<0.30	<0.30	<0.30	<0.30	<0.30

Notes:

[1]Samples collected by W&M and analyzed by ESC Lab Sciences (Dec. 2011) or ALS Environmental (April 2012).

[2]Texas Commision on Environmental Quality (TCEQ) Texas Risk Reduction Program (TRRP) $^{GW}GW_{Ing}$ for Residential, Class 1, Groundwater 0.5 acre source.

[3]TCEQ TRRP $^{Air}GW_{Inh\text{-}V}$ for Residential, Class 1, Groundwater 0.5 acre source. Due to analyte physiochemical parameters some compounds have no standard.

[4]TPH analyzed by Texas TPH Method 1005.

Bold indicates Ingestion PCL and analyte detection above the ingestion PCL (None).

(J) Indicates the estimated value is below the lowest calibration point. Confidence correlates with concentration.

(<) Indicates the value was not detected above the Method Quantitative Limit (MQL).

(--) Not applicable/not analyzed.

TABLE 6
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS - METALS

West Dallas Street Parcel
Houston, Texas

			Temporary Wells		***Permanent Monitoring Wells***						
SAMPLE I.D.:[1]	**Tier 1 Residential Ingestion PCL[2]**	**Tier 1 Residential Non-Ingestion PCL[3]**	**TMW-06***	**TMW-07***	**MW-01**	**MW-02**			**MW-03**	**MW-04**	**MW-05**
DATE SAMPLED											
ANALYTE			12/16/2011	12/16/2011	1/20/2012	1/20/2012	2/6/2012	2/14/2012	1/20/2012	2/20/2012	2/20/2012
RCRA 8 + 6 Metals (mg/L)[4]											
Antimony	**0.0060**	--	<0.00021	<0.0021	--	--	--	--	--	--	--
Arsenic	**0.010**	--	**0.054**	**0.012**	<0.0066	**0.026**	**0.046**	**0.042**	<0.0066	0.0066	0.0017
Barium	**2.0**	--	-	-	0.21	0.22	--	--	0.32	--	--
Beryllium	**0.0040**	--	**0.019**	0.0021	<0.00060	<0.00060	--	--	<0.00060	--	--
Cadmium	**0.0050**	--	**0.03**	**0.01**	0.0018 J	0.0024 J	--	--	0.0025 J	--	--
Chromium	**0.10**	--	**0.25**	0.057	<0.0040	<0.0040	--	--	<0.0040	--	--
Copper	**1.3**	--	0.098	0.025	--	--	--	--	--	--	--
Lead	**0.015**	--	**0.2**	**0.034**	0.010	0.0059	--	--	0.0088	--	--
Mercury	**0.0020**	7.3	<0.000024	<0.000024	<0.000015	<0.000015	--	--	<0.000015	--	--
Nickel	**0.49**	--	0.17	0.058	--	--	--	--	--	--	--
Selenium	**0.050**	--	0.016 J	0.013 J	0.01 J	<0.0065	--	--	<0.0065	--	--
Silver	**0.12**	--	<0.0038	<0.0038 J6 J3	<0.0038	<0.0038	--	--	<0.0038	--	--
Thallium	**0.0020**	--	**0.0022**	0.00092 J	<0.0069	<0.0069	--	--	<0.0069	--	--
Zinc	**7.3**	--	0.24	0.012	--	--	--	--	--	--	--

Notes:

[1]Samples collected by W&M and analyzed by ESC Lab Sciences (Dec. 2011) or ALS Environmental (Apri

[2]Texas Commision on Environmental Quality (TCEQ) Texas Risk Reduction Program (TRRP) $^{GW}GW_{Ing}$ for Residential, Class 1, Groundwater 0.5 acre source.

[3]TCEQ TRRP $^{Air}GW_{Inh\text{-}V}$ for Residential, Class 1, Groundwater 0.5 acre source. Due to analyte physiochemical parameters some compounds have no standard $^{Air}GW_{Inh\text{-}V}$.

[4]Metals analyzed by U.S. Environmental Protection Agency (EPA) Method 6010B (beryllium, cadmium, chromium, copper, nickel, selenium, silver and zinc), EPA Method 7471 (mercury), or EPA 6020 (antimony, arsenic, lead, and thallium).

Bold indicates the ingestion PCL and analyte detection above the ingestion PCL.

(J) Indicates the estimated value is below the lowest calibration point. Confidence correlates with concentration.

(<) Indicates the value was not detected above the Method Quantitative Limit (MQL).

(--) Not applicable/not analyzed.

* Indicates grab samples from temporary wells; data for metals not considered accurate due to sample turbidity.

Appendix G

MUNICIPAL SETTING DESIGNATION APPLICATION
WEST DALLAS STREET PARCEL
HOUSTON, TEXAS

STATEMENT REGARDING PLUME STABILITY

Based upon the investigations completed to date, in our opinion the arsenic plume is likely to be stable. This conclusion is based upon the fact that the probable source, a release from the adjacent property or leaching from a passive source on the Designated Property, is historical in nature since no significant activities have occurred in this area since the early 1980s. Additionally, arsenic is not very soluble and has a tendency to bind strongly to soils. Thus, arsenic tends to remain where it is originally deposited and will not migrate significant distances under typical aquifer conditions. These characteristics are evident in the small PCLE zone for groundwater, which has been fully delineated (**Figure 6)**.

Concentrations of the specified COCs do not exceed their respective TRRP Tier 1 residential assessment level with an MSD in any of the soil or groundwater samples from the Designated Property.