

Municipal Setting Designations



MSDs: Another tool for Houston

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Municipal Setting Designations (MSDs)



Agenda

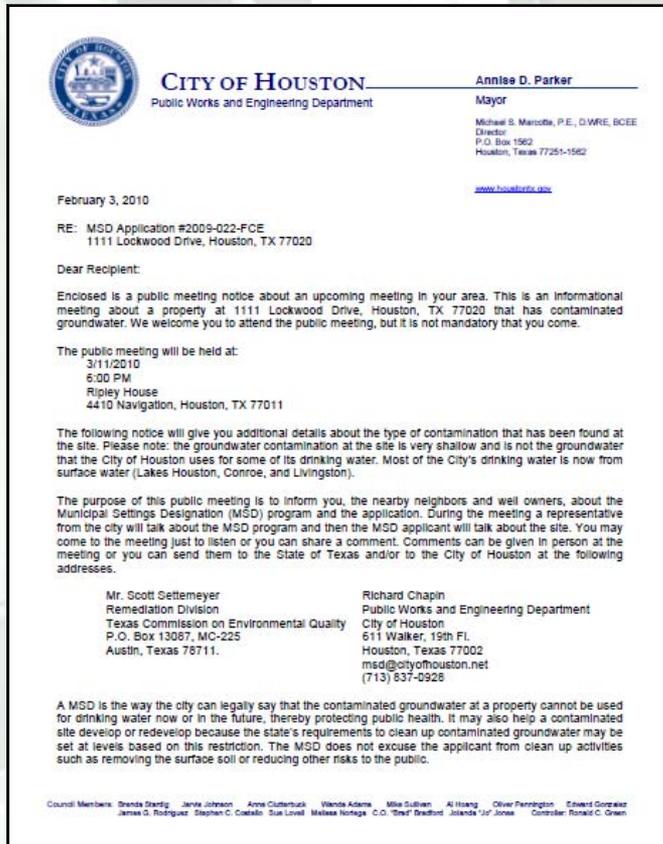
- City of Houston
 - Why we are here
 - Who the MSD impacts
 - What an MSD is
 - Why support an MSD
 - Steps in the MSD process
- MSD Applicant
 - Specific information on the site
4516 Harrisburg Blvd.
- Public comment and questions

Why Are We Here



- Inform you about an MSD application
 - BAE Systems Resolution Corporation, Inc.
 - MSD # 2010-026-FSS
- Explain what an MSD is and what it does for the applicant, the local community, and the City
- Receive public comments

MSD Notice Letters



■ Public Notices:

- Property owners

First Class Mail

½-Mile

- Water well owners

Certified Mail

5-Miles

Who the MSD Impacts



- Unless you are the applicant:
 - An MSD does not affect your property
 - An MSD does not affect your water well
 - There are no requirements on you
- Drinking water supplied by the City is not affected

What an MSD is



- Voluntary deed restriction to prevent the use of contaminated groundwater
 - State program created in 2003, administered by TCEQ
 - City process created in November 2007, administered by Public Works & Engineering
- TCEQ cannot approve an MSD without the City Council's support

What an MSD is



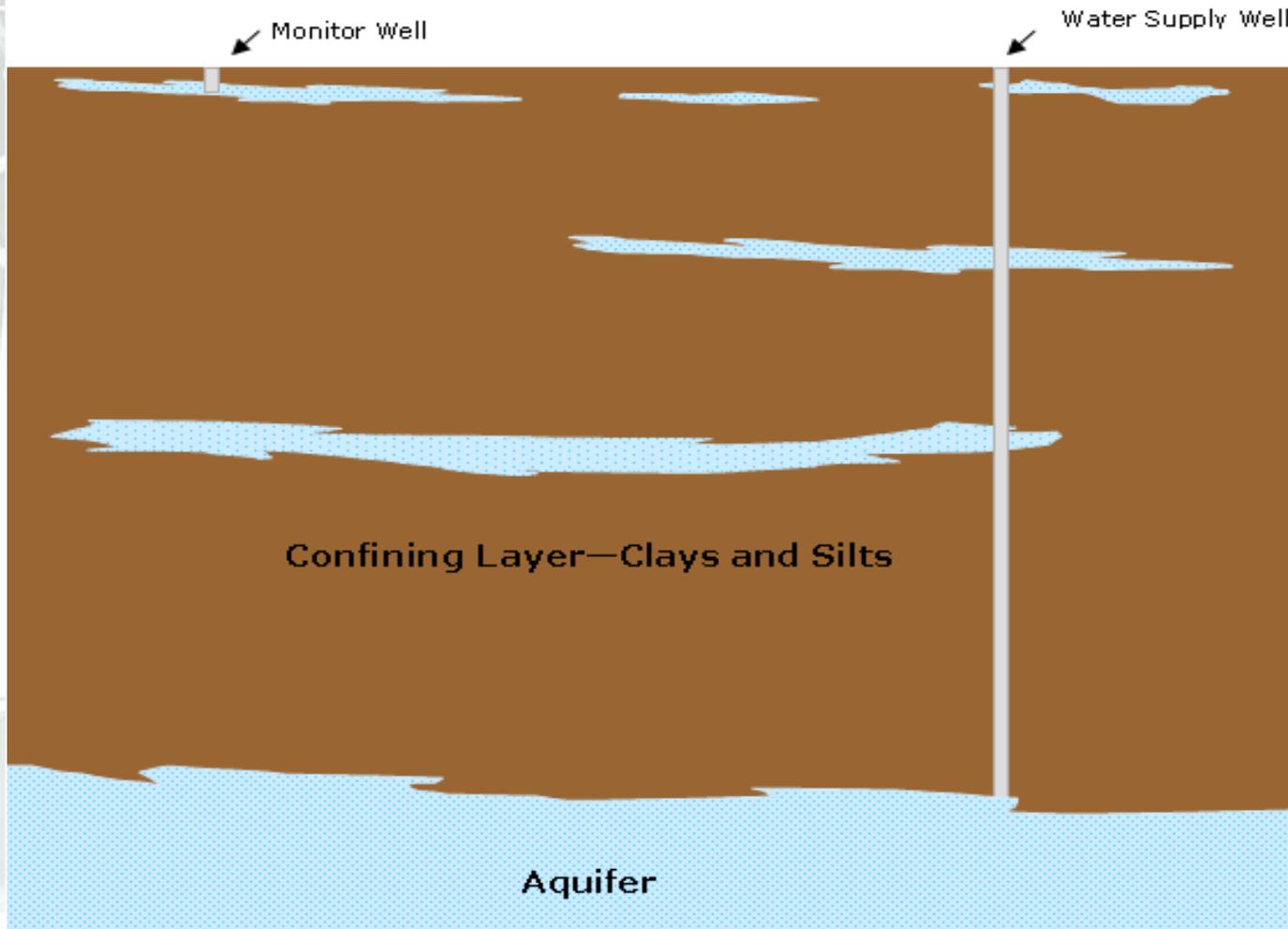
- An alternative method to address groundwater contamination
- Houston has shallow groundwater contamination scattered across the city
- This program only considers very shallow contamination (up to 200' below the surface)

City Water Supply



- Houston's drinking water comes from either deep aquifers or surface water
 - Nearest public water supply well
 - South End (well #9)
 - Distance – 2 miles
 - Depth – 1797 ft.
 - Surface water supply
 - Lake Houston
 - Lake Conroe
 - Lake Livingston

Shallow Contamination



Impacted groundwater is typically between 20 and 60 feet below the surface.

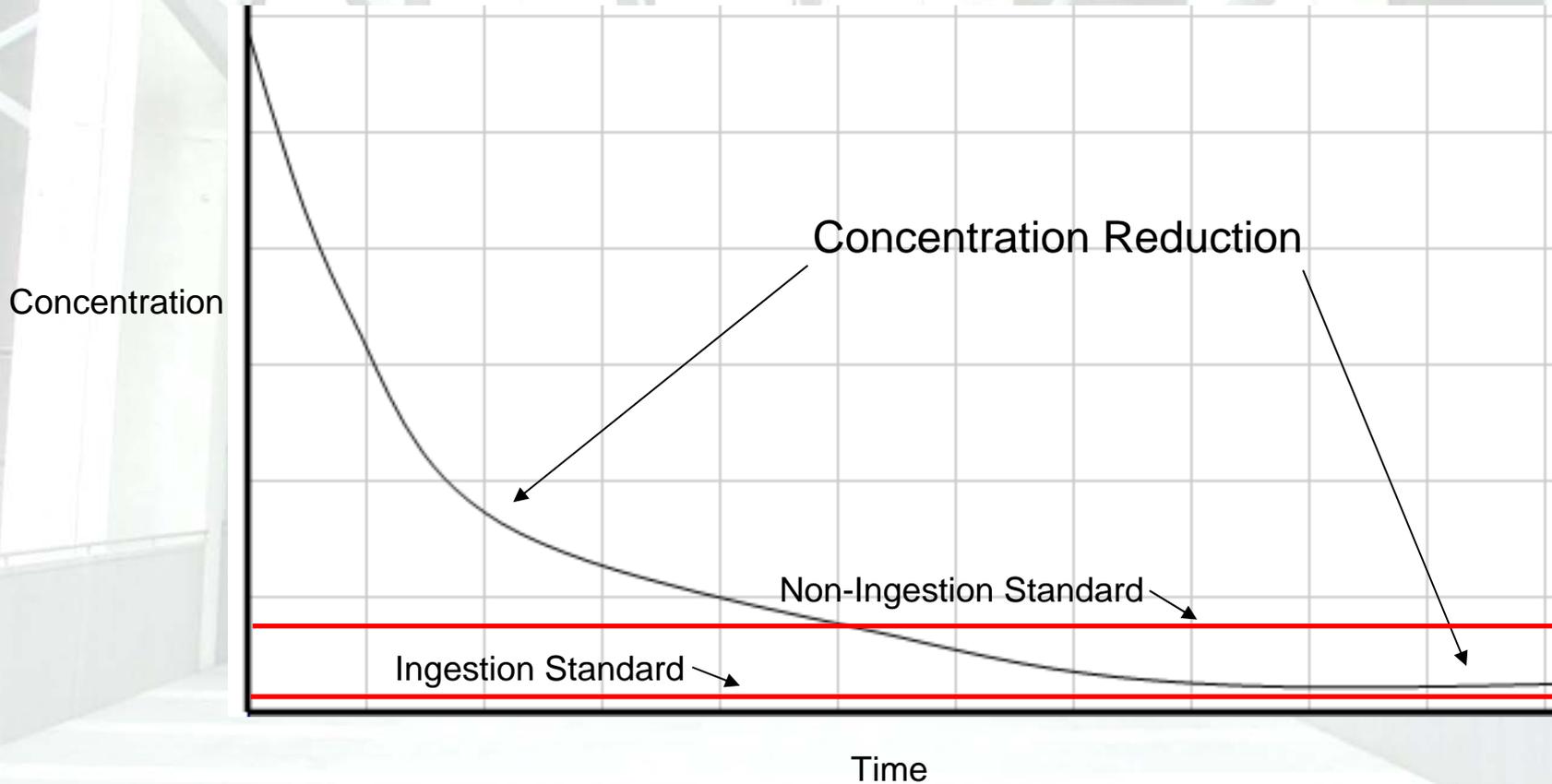
Drinking Water Supply Wells typically get water from 600 feet or deeper below the surface.

Problems of Traditional Remediation Methods

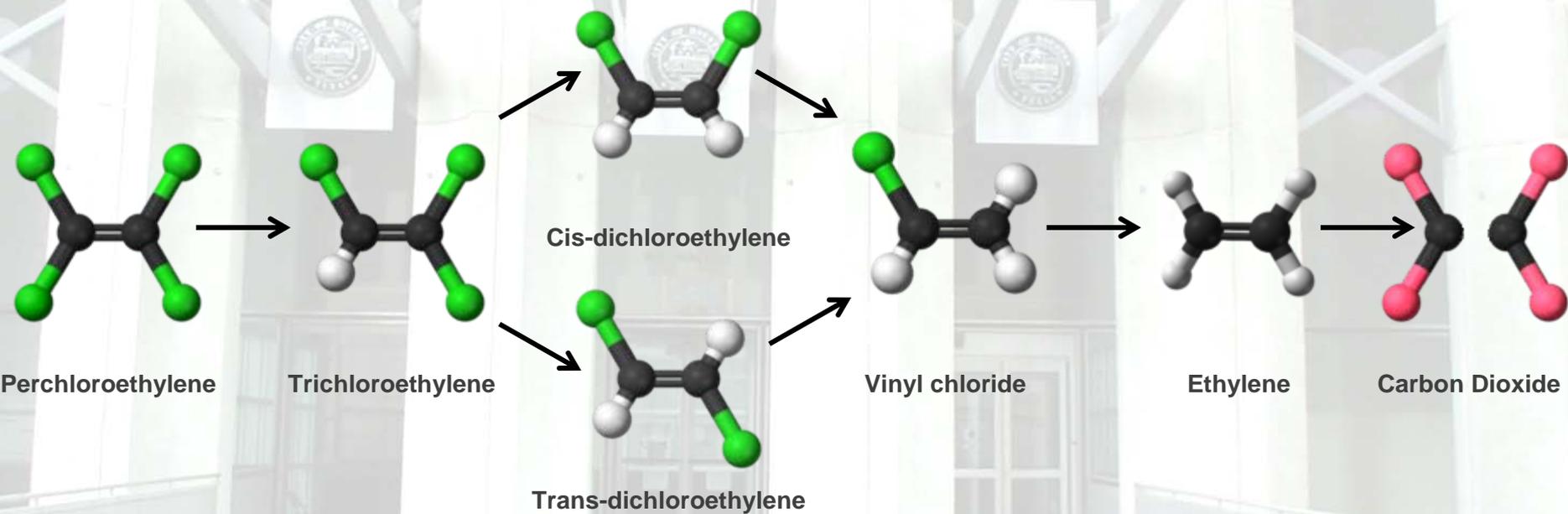


- Groundwater must be cleaned to drinking water standards even if:
 - There is no need or desire to use it, or
 - Water bearing zone is too silty, too salty, or low producing
- Groundwater remediation to drinking water standards is inefficient, costly, and can take decades

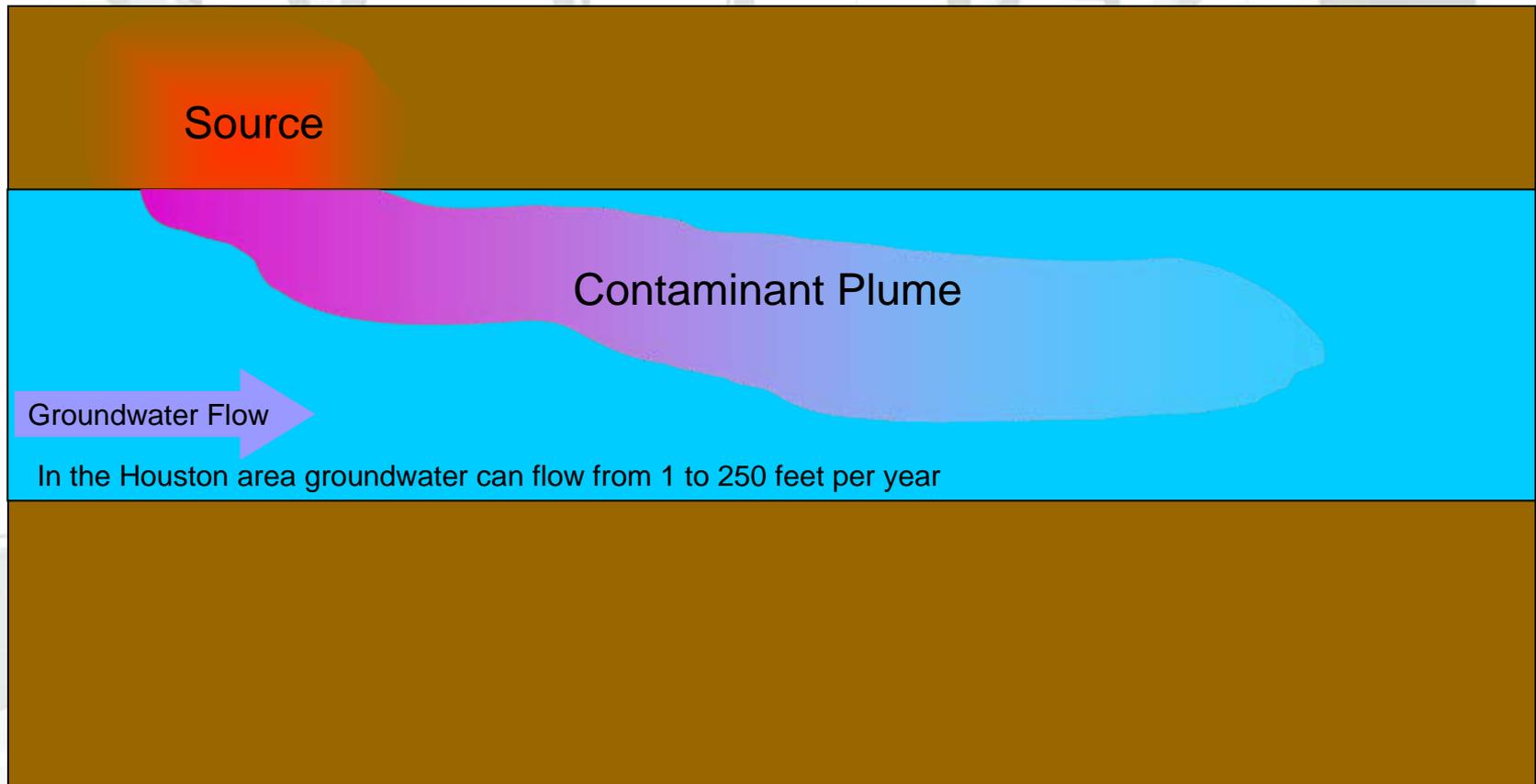
Groundwater Remediation



Natural Attenuation



Contaminant Flow



Source

Contaminant Plume

Groundwater Flow

In the Houston area groundwater can flow from 1 to 250 feet per year

Applicant's Responsibility



- An MSD does **NOT** excuse the applicant from reducing other risks to the public
- Owner must still address:
 - Non-Ingestion
 - Soil
 - Vapors
 - Runoff and other flows

City's Requirements of the Applicant:



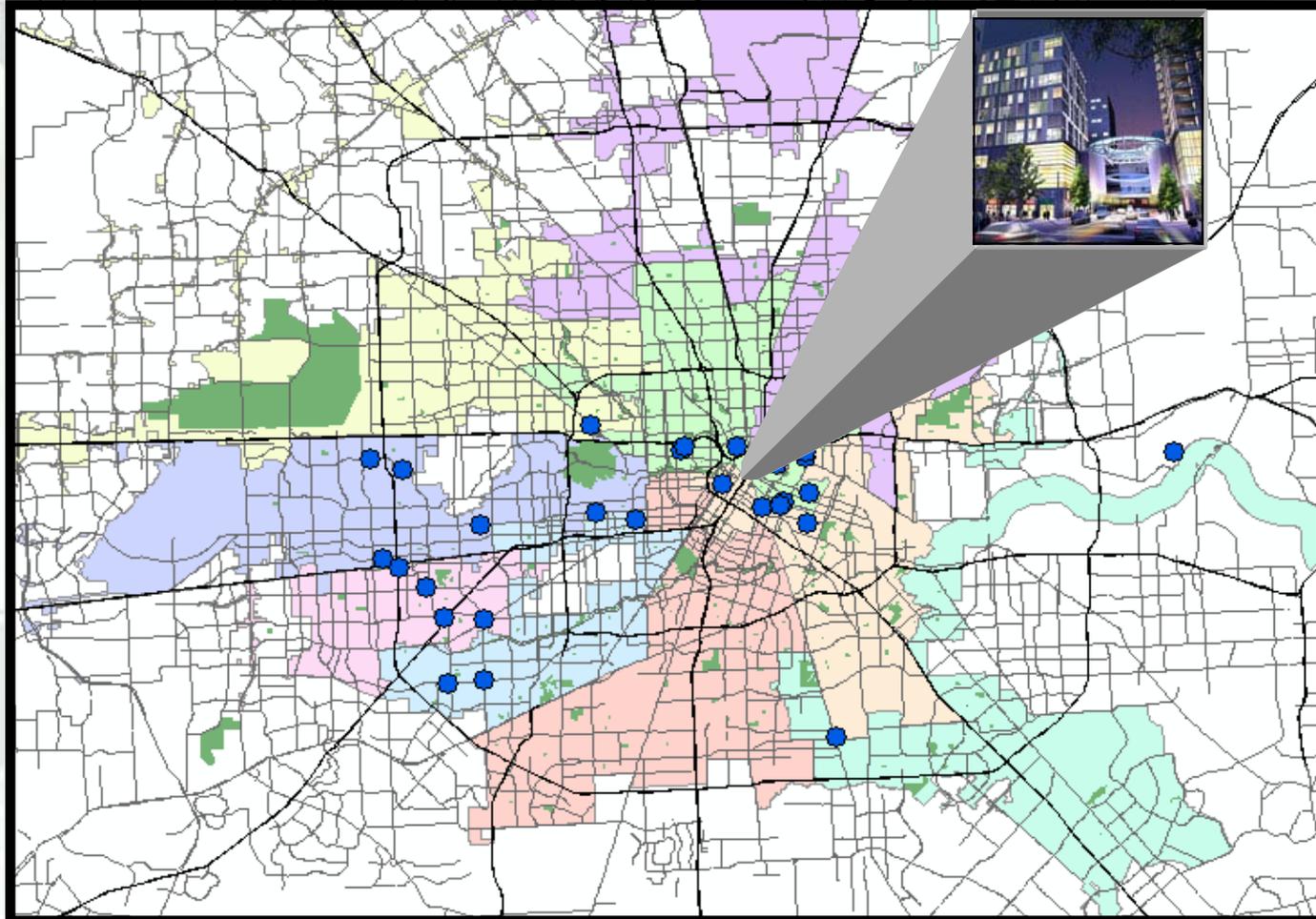
- Site must already be in a State or Federal clean up program
- Site must have been thoroughly investigated
- Data must show that the groundwater plume is stable or diminishing.
- A Professional Engineer (P.E.) or Professional Geologist (P.G.) must be willing to certify that the plume is stable or contracting.

Why Support An MSD?



- Protects the public from consumption of shallow contaminated groundwater
- Encourages clean-up of contaminated sites through participation in a State or Federal program
- Promotes redevelopment of under-utilized properties

MSD Sites in Houston



Municipal Setting Designations (MSDs)

Steps in the Process



- Based on input from this meeting and the public hearing, the City will consider supporting an MSD
- If supported, the applicant submits its application to the TCEQ
- TCEQ grants or denies the MSD
- If granted, the City files a deed restriction on the property

MSD Application



- Central Library reference desk
- 500 McKinney
Houston, TX 77002

The MSD Website



www.houstonmsd.org

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Senior Assistant Director, PE
PW&E/Planning & Development Services Division
PH 713.837.0928
FX 713.837.0658

#	Article Title
1	MSD Calendar
2	MSD Completed
3	MSD in Review

The screenshot shows the City of Houston website interface for Municipal Setting Designations (MSDs). It includes a search bar, navigation tabs (Home, About Us, Government, Resources, Business, Departments, Services), and a sidebar with categories like 'Business', 'Engineering and Construction', 'Planning and Development Services', 'Public Utilities', 'Resource Management', 'Right-of-Way and Road Maintenance', 'Traffic and Transportation', 'Director's Office', 'Chief of Staff', 'Information Technology', 'Programs', 'Houston Business', 'Control the Green', 'Water Education', and 'Safe Map'. The main content area displays information about MSDs, including a history section, general information, forms and information, and an FAQ section. A red arrow points from the 'MSD in Review' link in the table to the corresponding link in the website's sidebar.

Municipal Setting Designations (MSDs)

The MSD Website



Westbrook Investments, LP, # 2009-022-FCE (Former Cooper Energy Services Facility)
Executive Summary
Full Application
Public Meeting Notice
KBR Technical Services, Inc. # 2009-023-KBR (KBR Clinton Drive Facility)
Executive Summary
Full Application
Public Meeting Notice
Weingarten Realty Investors # 2010-024-FSW (Fondren Southwest Village Shopping Center Site)
Executive Summary
Full Application
Silver Bishop Holdings, LP # 2010-025-NOR (Navigation-Norwood Site)

Date	Time	Event
3/11/2010	6:00 PM	Public Meeting: Westbrook Investmetns, LP (MSD # 2009-022-FCE) Ripley House, 4410 Navigation, Houston, TX 77011
4/6/2010	6:00 PM	Public Meeting: KBR Technical Services, Inc. (MSD # 2009-023-KBR) Ripley House, 4410 Navigation, Houston, TX 77011
4/14/2010	9:00 AM	Public Hearing: Flex Tank Systems, LLC (MSD #2009-021-DZR) City Hall Council Chambers, 2 nd Floor, 901 Bagby, Houston, TX 77002
4/14/2010	9:00 AM	Public Hearing: Westbrook Investments, LP (MSD #2009-022-FCE) City Hall Council Chambers, 2 nd Floor, 901 Bagby, Houston, TX 77002
4/20/2010	6:00 PM	Public Meeting: Weingarten Realty Investors (MSD # 2010-024-FSW) Bayland Community Center, 6400 Bissonnet, Houston, TX 77074
5/06/2010	6:00 PM	Public Meeting: Silver Bishop Holdings, LP (MSD #2010-025-NOR) Ripley House Community Center, 4410

Public Hearing



- Date: July 14, 2010
- Time: 9:00 am
- Place: City Council Chamber
- Address: 901 Bagby, Second Floor
Houston, Texas 77002

Any person wishing to speak on this issue must contact the City Secretary's office at (832) 393-1100 to reserve time not later than 8:30 am on 7/14/2010.

Contact Information



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&

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Municipal Setting Designations (MSDs)

Contact Information



Scott Settemeyer

Remediation Division

Texas Commission on Environmental Quality

P.O. Box 13087, MC-225

Austin, Texas 78711





Former Stewart & Stevenson Lockwood Facility

4516 Harrisburg Blvd.



BAE Systems Resolution Inc.

16285 Park Ten Place

Houston, Texas



BAE Systems Resolution, Inc.

- In July 2007, BAE Systems Resolution, Inc., formerly known as Stewart & Stevenson Services, Inc., accepted responsibility for the environmental aspects at the site.

Benefit to Public

- An MSD for the Former Stewart & Stevenson Harrisburg facility will benefit the local community.
 - An MSD will minimize risk by restricting the use of the property's affected shallow groundwater.
 - The proposed redevelopment of the site as a retail center will create local jobs.
 - Redevelopment of the site will contribute to the renewal of the East End area.
 - Metro light rail line is under construction along the northern site boundary.

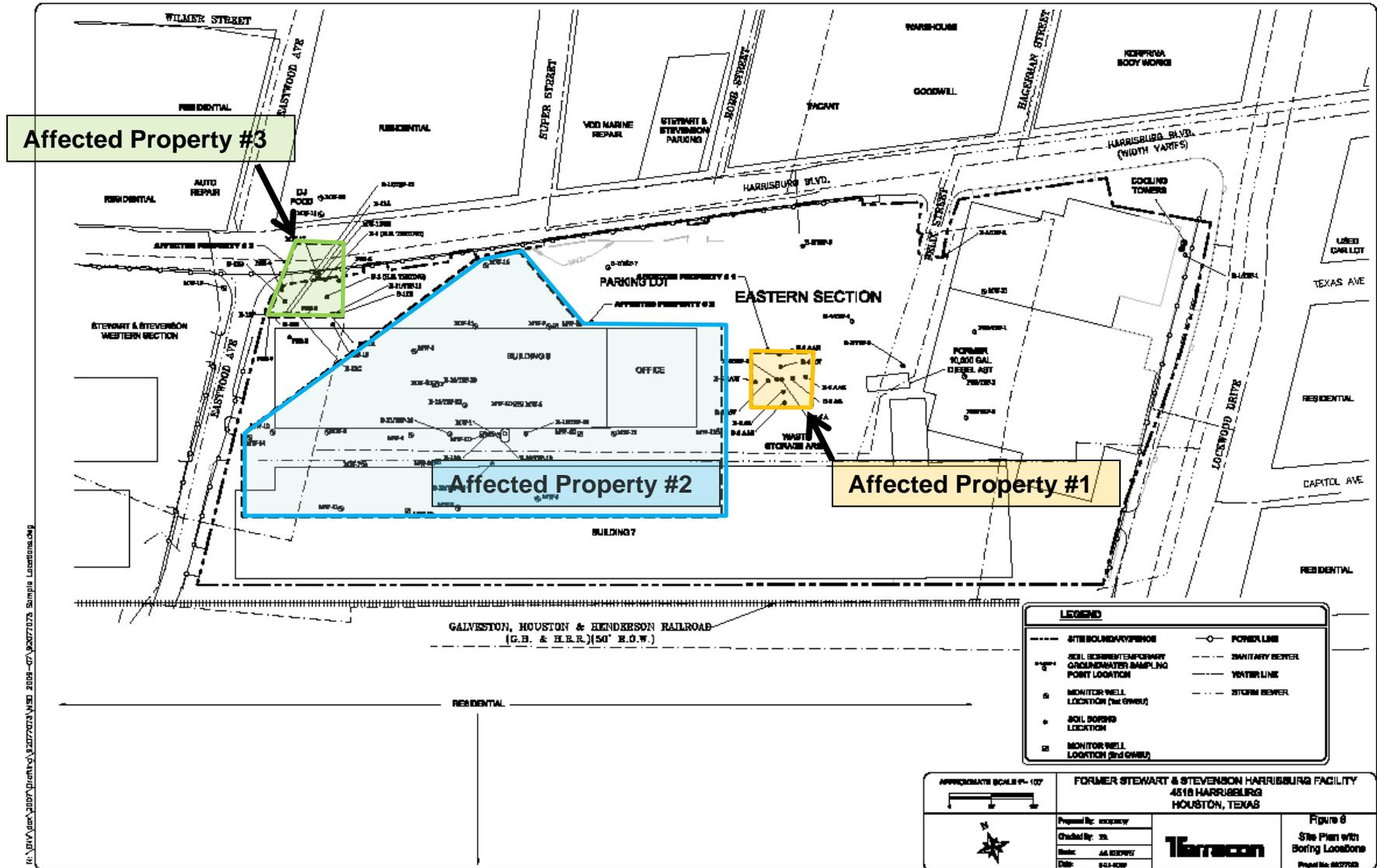
Site Vicinity



Site's Three Areas of Contamination

- The site consists of a 10.525-acre tract of land previously occupied by the Stewart & Stevenson Lockwood facility. The industrial buildings have been demolished and the property is undergoing re-development as a commercial retail shopping center for various tenants. The site has three affected properties:
 - Affected Property #1 : consists of an area approximately 90 feet by 90 feet and is located on the eastern central portion of the property.
 - Affected Property #2 : consists of an area approximately 3.07 acres in size and is located on the central portion of the site.
 - Affected Property #3 : consists of an area approximately 30 feet by 20 feet (0.02 acres) area near the northwestern corner of the site.

Affected properties map



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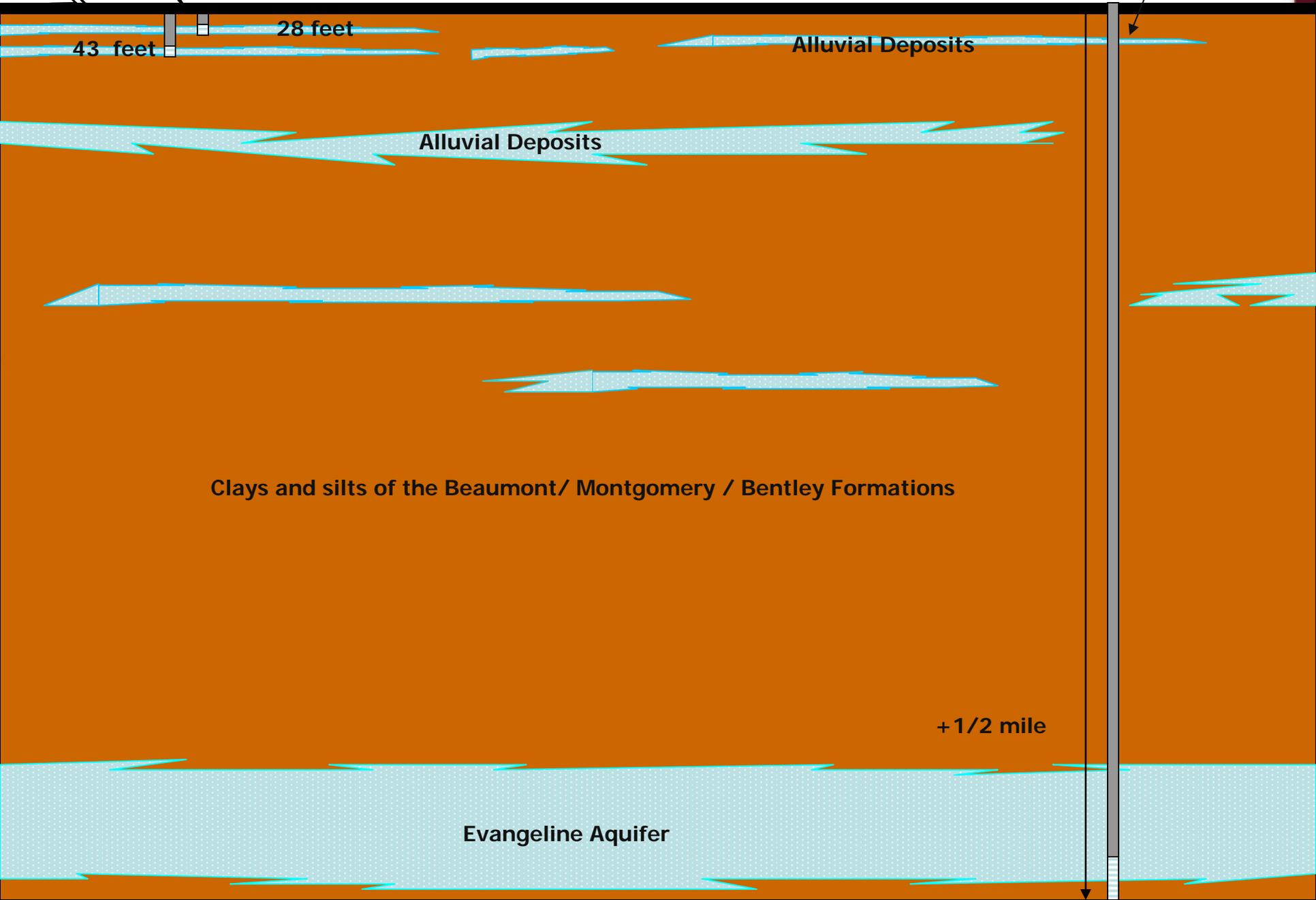
Site's Three Areas of Contamination

- Affected Property#1 - Soil was affected by lead. Groundwater is not affected. The source of contamination was likely historic auto repair facilities that operated on this portion of the site.
- Affected Property #2 - Soil was affected with volatile organic compounds (VOCs). Groundwater in the 1st and 2nd Bearing Units contains volatile organic compounds and metals. The source of contamination was historical underground storage tanks.
- Affected Property #3 – Soil was affected by petroleum hydrocarbons and tetraethyl lead. Groundwater in the 1st Bearing Unit contains petroleum hydrocarbons. Source of contamination was from underground storage tanks associated with a historic fueling station.



S&S Harrisburg
Monitoring Wells

No Public Supply Wells within 1/2
mile of the site



43 feet

28 feet

Alluvial Deposits

Alluvial Deposits

Clays and silts of the Beaumont/ Montgomery / Bentley Formations

+1/2 mile

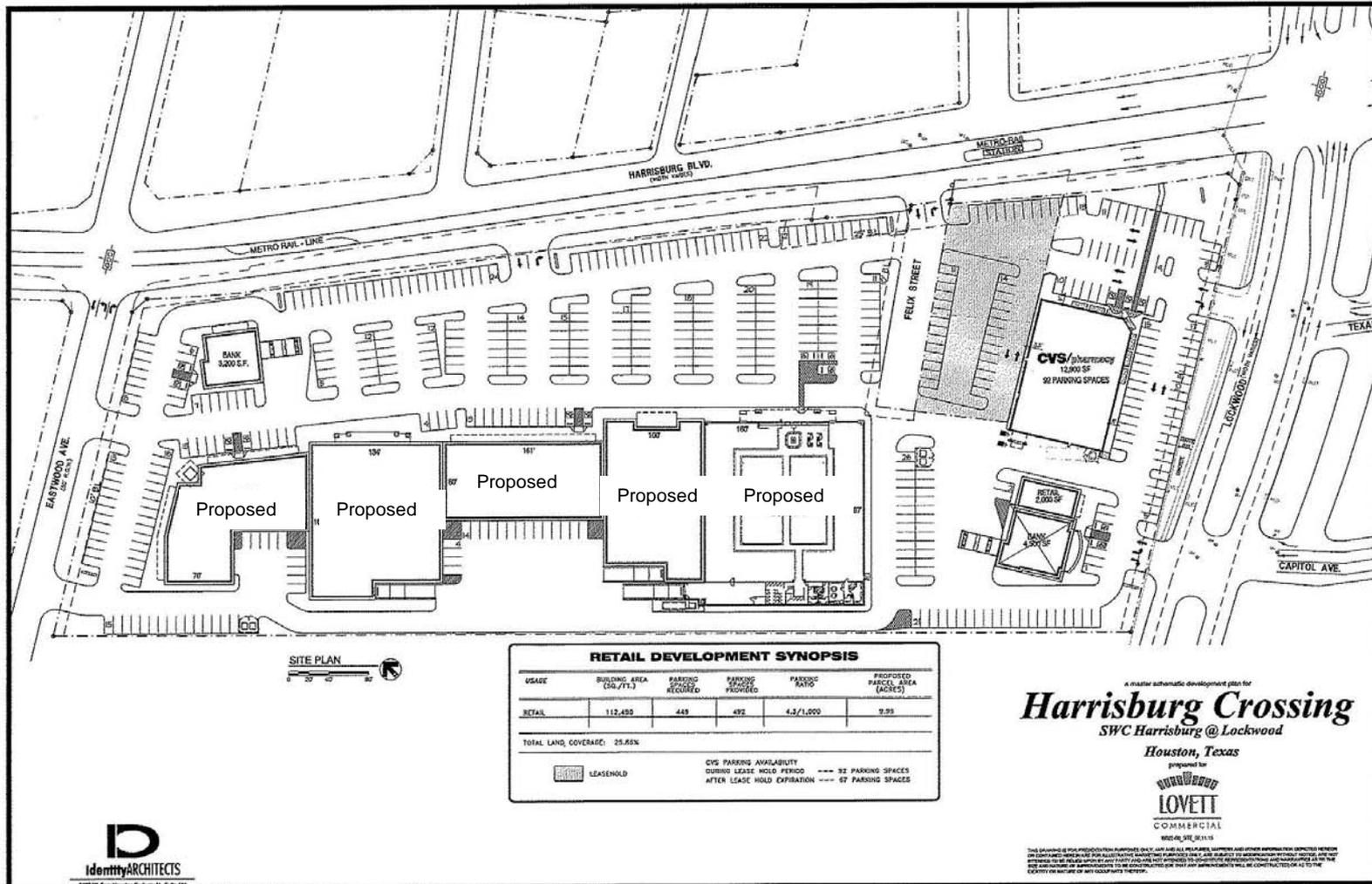
Evangeline Aquifer

Site Before

- Historical sources of contamination
 - Affected Property #1 – Presumed to be spills and leaks from former auto repair facility, prior to Stewart and Stevenson
 - Affected Property #2 - Underground storage tanks
 - Affected Property #3 - Underground storage tanks associated with a historical filling station

Site Now

- The site is currently occupied by a retail center



Site Now



Site Now – construction of Metro Rail



Site Now



Remediation Efforts

- Affected Property #1 - On January 2004, Terracon oversaw the excavation of the lead-affected soil.

Remediation Efforts

- Affected Property #2
 - Groundwater monitoring
 - Fifteen monitoring wells in the 1st groundwater bearing unit and seven monitoring wells in the 2nd groundwater bearing unit have been sampled semi-annually from 2003-2008.
 - Seven years of data indicate that area of affected groundwater is stable or decreasing, undergoing natural attenuation (that is, natural breakdown processes).

Remediation Efforts

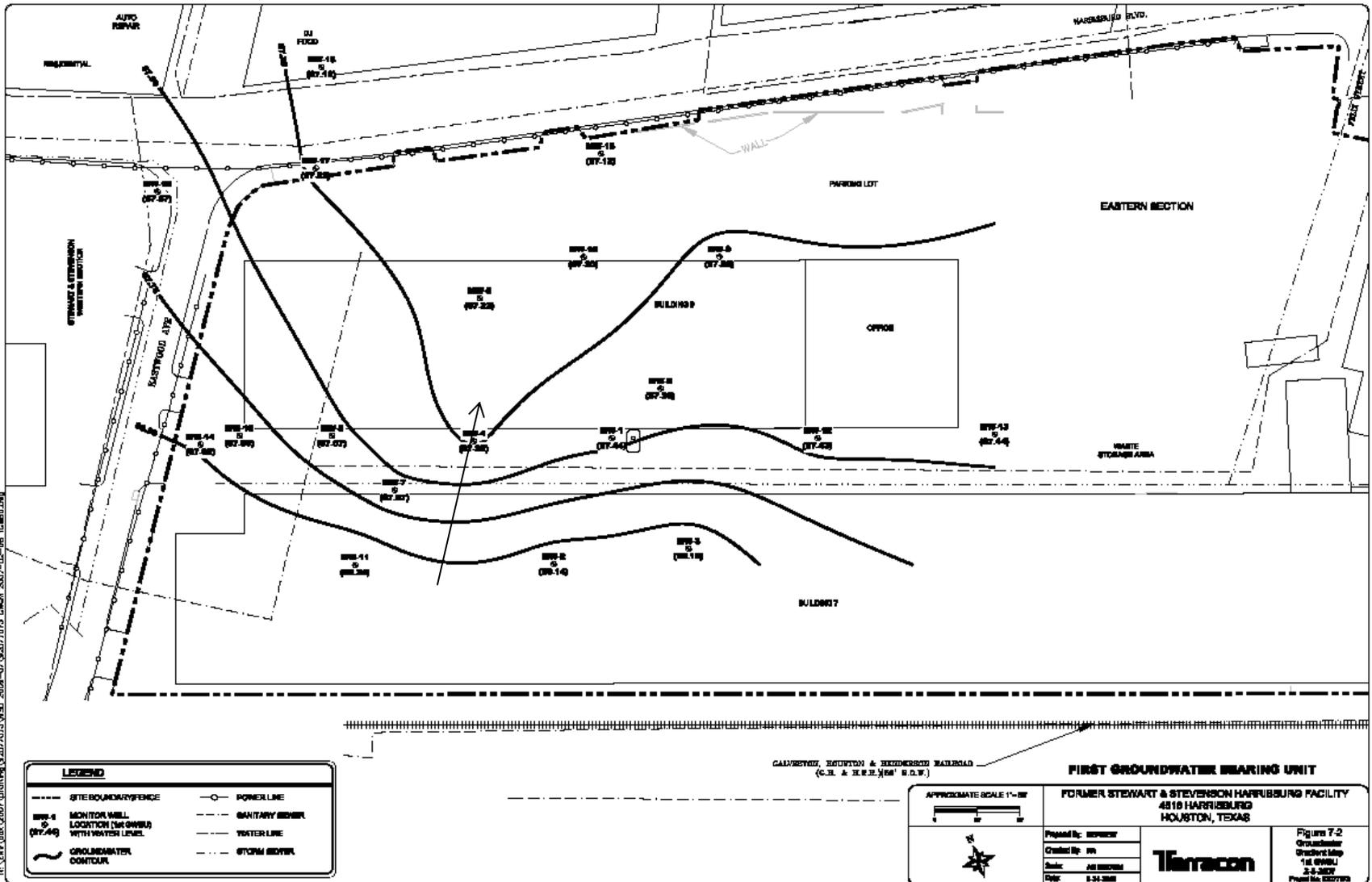
- Affected Property # 3 –
 - Groundwater monitoring
 - Two monitoring wells in the 1st groundwater bearing unit have been sampled semi-annually from 2003-2008.
 - Seven years of data indicate that areas of affected groundwater are stable and decreasing.
 - Two underground storage tanks were removed, tankhold over-excavated, and 336 cubic yards of soil were disposed at an offsite facility

Remediation Efforts

- Affected Property # 3 (cont) –
 - Removal of 3 Underground Storage Tanks

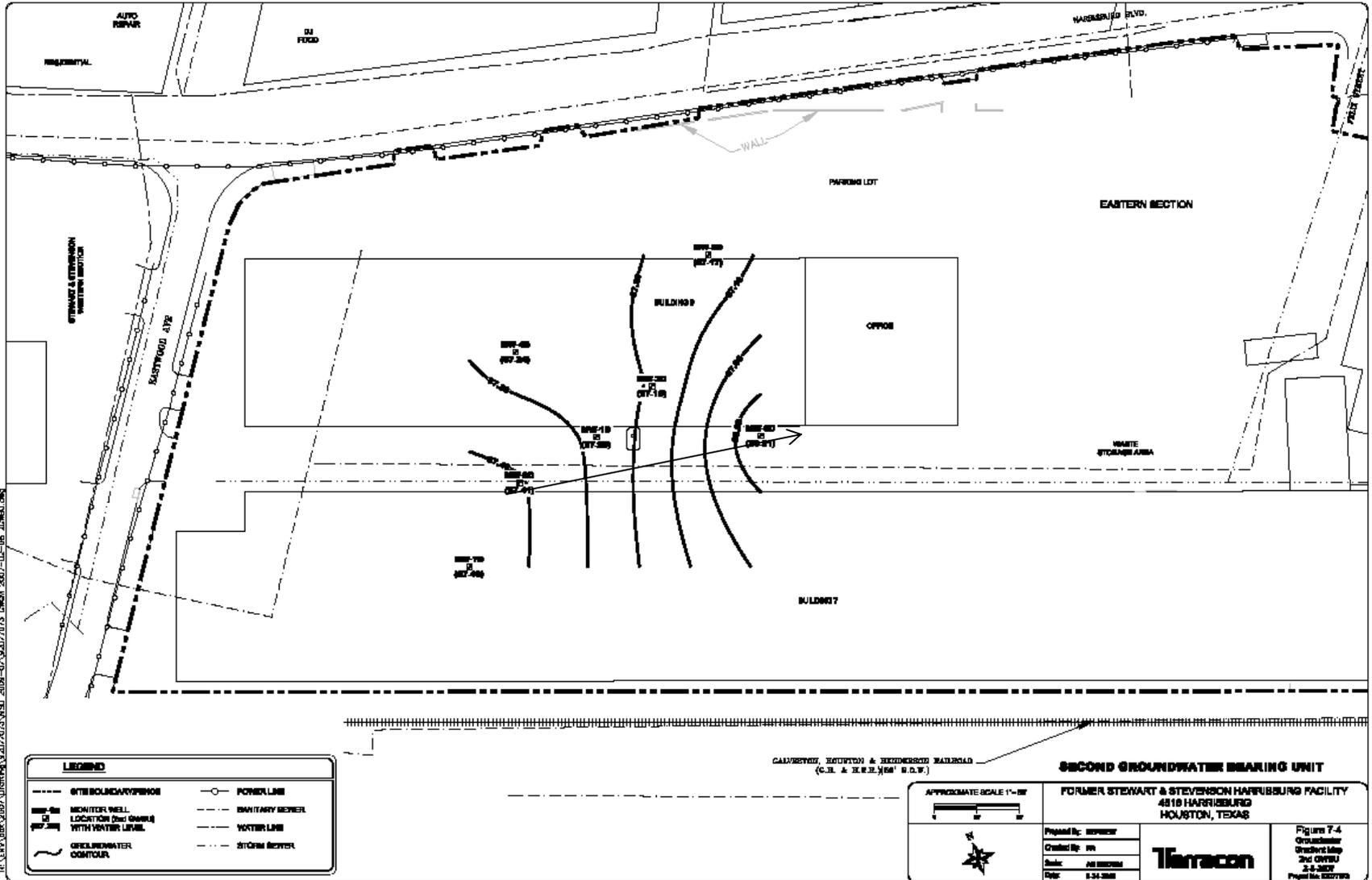


1st Groundwater Bearing Zone- Groundwater Gradient Map



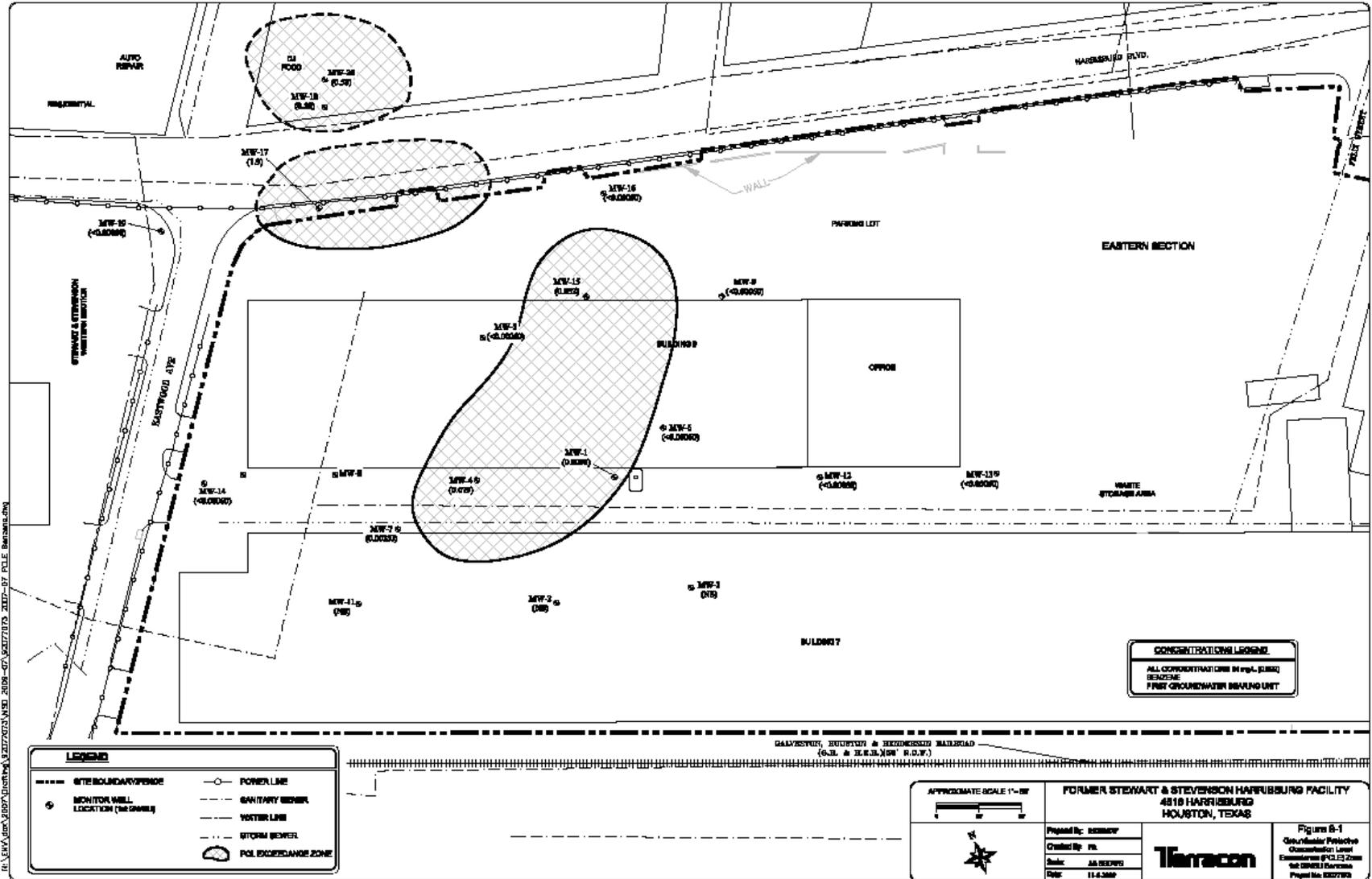
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2nd Groundwater Bearing Zone- Groundwater Gradient Map



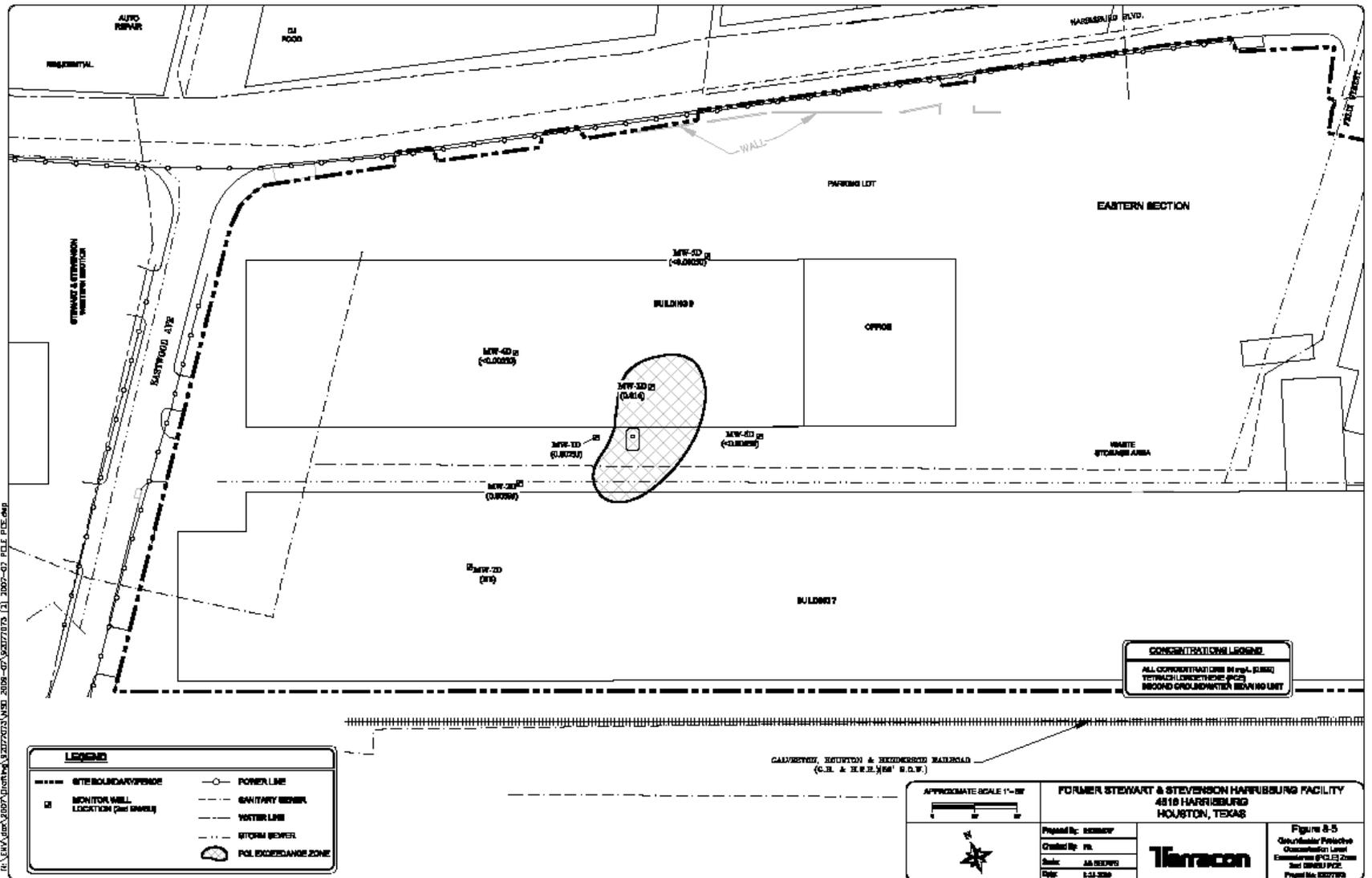
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1st Groundwater Bearing Zone- Groundwater Protective Concentration Level Exceedence Zone (PCLE) Map



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2nd Groundwater Bearing Zone- Groundwater Protective Concentration Level Exceedance Zone (PCLE) Map



Groundwater Plume

- 23 monitoring wells have been installed to delineate the extent of the affected groundwater in Affected Property #2 and #3.
- Monitoring data has been collected for over 7 years.
- This data indicates areas of affected groundwater are stable or decreasing, undergoing natural attenuation.

Summary

- Site investigation and remediation activities has been ongoing for 7 years.
- Soil at the site has been remediated to residential standards.
- Groundwater impacts are stable or decreasing, undergoing natural attenuation.
- The site is currently occupied by a CVS Pharmacy and a retail center is planned for the property.
- An MSD will facilitate completion of cleanup activities at the site.