

CITY OF HOUSTON



**PUBLIC WORKS AND
ENGINEERING**
PLANNING & DEVELOPMENT
DIVISION

EXECUTIVE SUMMARY

Executive Summary

SKA Consulting, L.P. (SKA), on behalf of Texas InTownHomes, LLC, has prepared this Municipal Setting Designation (MSD) Application for approximately 8.0028 acres of privately-owned commercial land and a publicly owned right-of-way located at 3480-3484 (Evens) West 12th Street in Houston, Harris County, Texas. The privately-owned commercial land and publicly-owned right of way (West 12th Street) comprise the designated property. The designated property is situated approximately 4.4 miles northwest of downtown Houston.

The designated property includes approximately 6.9161 acres of privately-owned commercial land and ±1.0867 acres of the publicly-owned adjacent West 12th Street right-of-way. The privately-owned commercial land was recently replatted for future residential development but was formerly divided into three separate commercial tracts (Tracts 1 through 3) addressed as 3484, 3482, and 3480 West 12th Street, respectively. The tracts addressed as 3484 West 12th Street (Tract 1) and 3482 West 12th Street (Tract 2) are currently vacant and undeveloped lands and the tract addressed at 3480 West 12th Street (Tract 3) is commercially-developed land improved with a warehouse building occupied by a wine and alcoholic beverages wholesaler. Historical use at the designated property included light industrial and commercial activities. Among them, a former Petroleum Storage Tank facility (PST ID No. 35710) and closed Leaking Petroleum Storage Tank site (LPST ID No. 114069) associated with a fleet refueling facility on Tract 1 are believed to be the source of the methyl tert-butyl ether (MTBE)-impacted groundwater beneath the designated property; and a former Industrial Hazardous Waste (IHW) facility (ID No. 71466) on Tract 2 and other historical unspecified business activities on Tract 2 and Tract 3 are believed to be one of the sources of the chlorinated solvent-impacted groundwater beneath the designated property. The other likely source of the chlorinated solvent-impacted groundwater is believed to be a former IHW facility located adjacently west of the designated property. Presently, approximately 6.9161 acres of the designated property corresponding to the privately-owned land is owned by Texas InTownHomes, LLC and is enrolled in the Texas Commission on Environmental Quality (TCEQ) IHW Corrective Action Program as Solid Waste Registration (SWR) ID No. T3205. The future use of the land is anticipated to become residential.

Properties in the vicinity of the designated property are predominantly light industrial or single-family residential. The designated property is bordered by light industrial properties to the south, a former railroad track easement followed by residential properties to the north, an electrical power line easement followed by residential properties to the east, and residential properties to the west.

No municipalities, other than the City of Houston, have corporate limits within one-half mile of the boundary of the designated property. In addition, public drinking water is currently available to the designated property and properties located within a one-half mile radius surrounding the designated property by the City of Houston public water supply system.

According to records obtained from GeoSearch Inc., approximately 1,011 registered/permitted water wells are reportedly located within a 5-mile radius of the designated property. Of these, 6 are reportedly located within a 0.5-mile radius of the designated property. However, 3 of these wells are reportedly plugged and abandoned. The 3 remaining wells are located downgradient of the designated property, at distances between approximately 630 feet and 2,535 feet from

the affected groundwater. These three wells are reportedly screened at depths greater than 277 feet, and were not observed during a door-to-door survey conducted by SKA in March 2015; therefore, they are believed to have been destroyed. As such, and based on the groundwater plumes being stable and delineated in a downgradient direction within the designated property, no potable wells are likely to be affected by contaminants present in soil or groundwater at the designated property.

Of the approximately 1,011 registered/permitted water wells reportedly located within 5 miles of the designated property, approximately 18 are reportedly owned or operated by a public retail water utility. In addition, 5 of the 18 water wells reportedly located within 5 miles of the designated property are reportedly owned by municipalities other than the City of Houston. These municipalities or retail public utilities include the City of Spring Valley Village, City of West University Place, and Memorial Villages Water Authority.

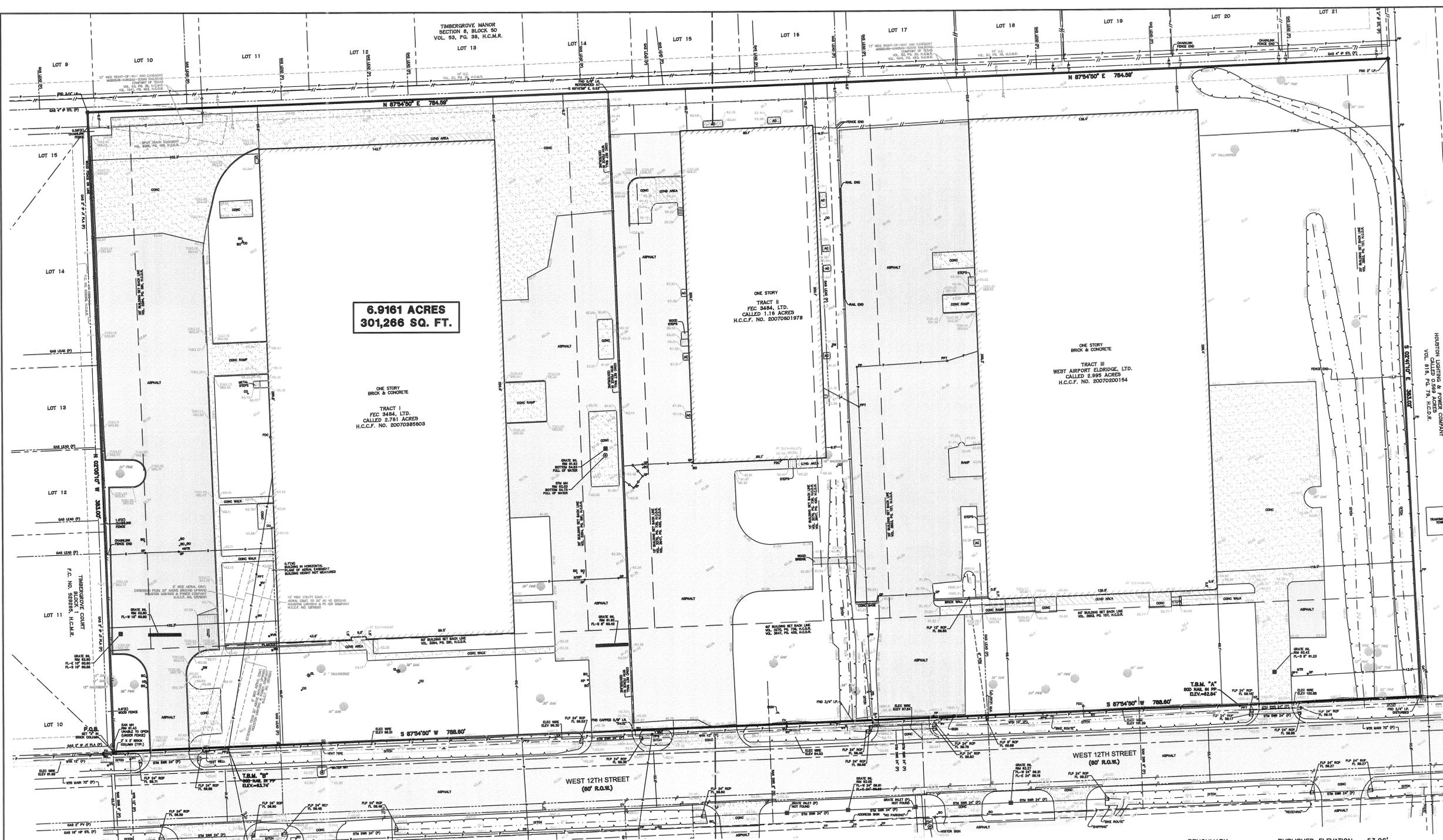
The depth to groundwater for the shallow groundwater-bearing unit (GWBU) ranges from 16.77 to 21.80 feet below ground surface. Contaminants of concern (COCs) exceeding the Texas Risk Reduction Program (TRRP) Tier 1 Residential Groundwater Ingestion (^{GW}GW_{ing}) Protective Concentration Levels (PCLs) in the shallow GWBU are MTBE, trichloroethene (TCE), and 1,1-dichloroethene (1,1-DCE). As the source of the MTBE-impacted groundwater is a closed on-site TCEQ LPST site (ID No. 114069), the MTBE plume will be addressed through the TCEQ PST Program. Therefore, there are three COCs above TRRP Tier I Residential Groundwater Ingestion PCLs (Groundwater Ingestion PCLs) at the designated property; TCE, MTBE and 1,1-DCE.

The results of assessment and monitoring activities performed to date indicate three Groundwater Ingestion PCL exceedance (PCLE) zones are present on the designated property. A TCE PCLE zone is located beneath the western portion of the designated property, a MTBE PCLE zone is located beneath the central portion of the designated property, and a 1,1-DCE PCLE zone is located beneath the eastern portion of the designated property. The groundwater flow direction in the shallow GWBU has consistently been towards the southeast beneath the designated property. The TCE PCLE zone is likely attributed to an off-site source corresponding to a former IHW facility formerly addressed at 3490 West 12th Street and located adjacently west of the designated property. As such, while the TCE PCLE zone is not delineated in the upgradient direction, it is delineated in a downgradient direction within the designated property. The MTBE PCLE zone is delineated in a downgradient direction within the designated property and is likely attributed to a former fleet refueling underground storage tank (UST ID No. 35710 and LPST ID No. 114069) located on the eastern portion of Tract 1. The 1,1-DCE PCLE zone, also delineated in a downgradient direction within the designated property, is likely attributed to a former on-site source(s) corresponding to an inactive IHW facility (ID No. 71466) on Tract 2 and/or historical commercial activities on Tract 2 and Tract 3. The TCE, MTBE, and 1,1-DCE PCLE zones are stable and/or decreasing in magnitude and no COCs have been detected in groundwater downgradient of the designated property in excess of any TRRP ingestion or non-ingestion PCL. In addition, no COCs are expected to migrate off the designated property in the future at concentrations that would exceed any applicable TRRP non-ingestion PCLs (the TRRP PCLs applicable for the designated property should an MSD be granted). No COCs have been detected in soil in the designated property in excess of any TRRP ingestion or non-ingestion PCL.

The following Appendices “A” through “Y” provide the requested documentation corresponding to the Items in the attached City of Houston MSD Application checklist. Supporting documentation for certain Items are attached and included with the Item’s corresponding Appendix.

Appendix A – Legal Property Description_____

A legal description and metes and bounds for the designated property are included in **Appendix A**. In addition, the deeds for the privately-owned property are also included in **Appendix A**.



**6.9161 ACRES
301,266 SQ. FT.**

ONE STORY
BRICK & CONCRETE
TRACT I
FEC 3484, LTD.
CALLED 2.781 ACRES
H.C.C.F. NO. 2007085603

ONE STORY
TRACT II
FEC 3484, LTD.
CALLED 1.18 ACRES
H.C.C.F. NO. 2007081978

ONE STORY
BRICK & CONCRETE
TRACT III
WEST AIRPORT ELDREDGE, LTD.
CALLED 2.995 ACRES
H.C.C.F. NO. 2007080154

POWER LINE ELEVATIONS

	PP1	PP2	PP3	PP4	PP5	PP6	PP7	PP8
NORTH LINE ELEV.	98.40	98.59	97.62	97.47	98.27	97.48	102.88	95.15
MID LINE ELEV.	98.08	98.30	97.24	97.21	98.14	97.51	102.60	95.06
SOUTH LINE ELEV.	97.91	98.17	97.02	97.16	98.04	97.43	102.48	94.89
CROSSBAR ELEV.	98.07	97.37	97.32	97.23	98.08	98.08	103.88	95.06



NORTH

GRAPHIC SCALE: 1" = 30'

LEGEND

- * SOME OF THESE ELEMENTS MAY NOT BE USED ON THIS SURVEY
- BO - BOLLARD
 - HM - HANDICAP
 - GM - GAS METER
 - GV - GAS VALVE
 - GH - FIRE HYDRANT
 - WM - WATER METER
 - WV - WATER VALVE
 - ICV - IRRIGATION CONTROL VALVE
 - GI - GRATE INLET
 - GI - GRATE INLET
 - M - MANHOLE
 - GT - GREASE TRAP MANHOLE
 - CP - CLEANOUT
 - TE - TELEPHONE PEDESTAL
 - EB - ELECTRIC BOX
 - LP - LIGHT POLE
 - TL - TRAFFIC LIGHT POLE
 - DP - DROP POLE
 - PP - POWER POLE W/TRANSFORMER
 - MP - METER POLE W/LIGHT
 - SP - SERVICE POLE
 - GA - GUY ANCHOR
 - OL - OVERHEAD POWER LINE
 - HW - HARBED WIRE FENCE
 - WIF - WROUGHT IRON FENCE
 - WF - WOOD FENCE
 - U - UNDERGROUND
 - F - FOUND
 - H.C.C.F. - HARRIS COUNTY CLERK FILE
 - H.C.D.R. - HARRIS COUNTY DEED RECORDS
 - H.C.M.R. - HARRIS COUNTY MAP RECORDS
 - P - IRON PIPE
 - R - IRON ROD
 - N - NUMBER
 - PC - PAGE
 - R.O.W. - RIGHT-OF-WAY
 - SQ. FT. - SQUARE FEET
 - VOL. - VOLUME
 - F.C. - FILM CODE
 - TC - TOP OF CURB
 - T - TREE/SHRUB
 - KEY - KEY PAD
 - GM - GATE MOTOR
 - FP - FLAG POLE
 - CF - CHAINLINK FENCE
 - OL - OVERHEAD UTILITY LINE
 - DI - DISTINCTION
 - PL - PER PLANS
 - SI - SIGN
 - PM - PIPELINE MARKER
 - UCS - UNDERGROUND CABLE SIGN
 - MC - MONITORING WELL
 - BC - BACK OF CURB
 - G - GUTTER
 - TO - TOP OF GRATE
 - FL - FLOW LINE
 - HL - HIGH-BANK
 - SS - SANITARY SEWER
 - STW - STORM SEWER
 - CM - CORRUGATED METAL PIPE
 - RC - REINFORCED CONCRETE PIPE
 - TEL - TELEPHONE
 - SWT - SOUTHWESTERN BELL TELEPHONE CO.
 - W - WATER
 - SET CHARGED 5/8" IR - 5/8" IRON ROD W/PLASTIC CAP STAMPED "WINDROSE LAND SERVICES"
 - PP - POWER POLE W/TRANSFORMER
 - PPL - POWER POLE W/LIGHT
 - GL - GROUND LIGHT
 - WR - WATER VALVE RISER
 - SH - SHARPLE WELL
 - AP - APPROXIMATE
 - H.B. - HIGH-BANK

DESCRIPTION

A TRACT OR PARCEL OF LAND CONTAINING 6.9161 ACRES OR 301,266 SQUARE FEET, COMPOSED OF THREE PARCELS OF LAND, BEING ALL OF A CALLED 2.781 ACRES RECORDED IN THE NAME OF WEST AIRPORT ELDREDGE, LTD., AS RECORDED UNDER HARRIS COUNTY CLERK'S FILE NO. 2007085603, BEING ALL OF A CALLED 1.18 ACRES RECORDED IN THE NAME OF WEST AIRPORT ELDREDGE, LTD., AS RECORDED UNDER HARRIS COUNTY CLERK'S FILE NO. 2007081978, BEING ALL OF A CALLED 2.995 ACRES RECORDED IN THE NAME OF WEST AIRPORT ELDREDGE, LTD., AS RECORDED UNDER HARRIS COUNTY CLERK'S FILE NO. 2007080154, SITUATED IN THE JOHN REINERMAN SURVEY, ABSTRACT NO. 642, HARRIS COUNTY, TEXAS, SAID 6.9161 ACRE TRACT DESCRIBED AS FOLLOWS: WITH ALL BEARINGS BASED ON THE TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE, 43

BEGINNING AT A CUT "X" SET ON TOP OF A BRICK COLUMN BEING ON THE NORTH RIGHT-OF-WAY (R.O.W.) LINE OF WEST 12TH STREET (60' R.O.W.), MARKING THE SOUTH CORNER OF LOT 11, THENCE ALONG THE NORTH LINE OF SAID 2.781 ACRE TRACT AND THE NORTH LINE OF SAID 2.995 ACRE TRACT AND THE NORTH LINE OF SAID 1.18 ACRE TRACT, A DISTANCE OF 301.266 FEET TO A 1/4" INCH IRON ROD FOUND IN THE CENTERLINE OF A 17 FOOT WIDE BARBED WIRE FENCE AS RECORDED UNDER HARRIS COUNTY CLERK'S FILE NO. 2007085603, MARKING THE NORTHWEST CORNER OF SAID 2.781 ACRE TRACT AND THE HEREIN DESCRIBED TRACT;

THENCE, DEPARTING SAID R.O.W. LINE ALONG THE COMMON LINE OF SAID 2.781 ACRE TRACT AND SAID BLOCK 1 OF WINDROSE COURT, NORTH 02 DEG. 00 MIN. 50 SEC. WEST, A DISTANCE OF 301.266 FEET TO A 1/4" INCH IRON ROD FOUND IN THE CENTERLINE OF A 17 FOOT WIDE BARBED WIRE FENCE AS RECORDED UNDER HARRIS COUNTY CLERK'S FILE NO. 2007085603, MARKING THE NORTHWEST CORNER OF SAID 2.781 ACRE TRACT AND THE HEREIN DESCRIBED TRACT;

THENCE, ALONG THE CENTERLINE OF SAID EASEMENT, AND THE NORTH LINE OF SAID 2.781 ACRE TRACT, SAID 1.18 ACRE TRACT, AND SAID 2.995 ACRE TRACT, A DISTANCE OF 301.266 FEET, EAST, PASSING AT A DISTANCE OF 314.00 FEET THE NORTHEAST CORNER OF SAID 2.781 ACRE TRACT AND THE NORTHEAST CORNER OF SAID 1.18 ACRE TRACT, FROM WHICH A 5/8" IRON ROD AND WEST BEARS FOR REFERENCE SOUTH 85 DEG. 10 MIN. 59 SEC. EAST, A DISTANCE OF 0.53 FEET, AND CONTINUES FOR A TOTAL DISTANCE OF 301.266 FEET TO A 1/4" INCH IRON ROD FOUND ON THE WEST LINE OF A CALLED 0.949 ACRE TRACT, BEING A 30 FOOT WIDE HOUSTON LIGHTING & POWER COMPANY (H&P) RIGHT-OF-WAY RECORDED UNDER VOL. 518, PG. 78, H.C.D.R. MARKING THE NORTHEAST CORNER OF SAID 2.995 ACRE TRACT AND THE HEREIN DESCRIBED TRACT;

THENCE, ALONG THE COMMON LINE OF SAID H&P CO. RIGHT-OF-WAY AND SAID 2.995 ACRE TRACT, SOUTH 02 DEG. 00 MIN. 50 SEC. EAST, A DISTANCE OF 301.266 FEET TO A 1/4" INCH IRON ROD FOUND DISTURBED ON THE NORTH R.O.W. LINE OF SAID WEST 12TH STREET MARKING THE SOUTHWEST CORNER OF SAID 2.995 ACRE TRACT AND THE HEREIN DESCRIBED TRACT;

THENCE, DEPARTING SAID COMMON LINE, ALONG SAID R.O.W. LINE, SAID 2.995 ACRE TRACT, SAID 1.18 ACRE TRACT, AND SAID 2.781 ACRE TRACT, SOUTH 87 DEG. 54 MIN. 50 SEC. WEST, A DISTANCE OF 301.266 FEET TO A 1/4" INCH IRON ROD FOUND MARKING THE SOUTHWEST CORNER OF SAID 2.995 ACRE TRACT AND THE SOUTHWEST CORNER OF SAID 1.18 ACRE TRACT, AT A DISTANCE OF 474.56 FEET FROM SAID 1.18 ACRE TRACT, FROM WHICH A 5/8" IRON ROD AND WEST BEARS FOR REFERENCE SOUTH 85 DEG. 10 MIN. 59 SEC. EAST, A DISTANCE OF 0.53 FEET, AND CONTINUES FOR A TOTAL DISTANCE OF 301.266 FEET TO THE PLACE OF BEGINNING, AND CONTAINING 6.9161 ACRES OR 301,266 SQUARE FEET OF LAND, AS SHOWN ON SURVEY, JOB NO. 50969, PREPARED BY WINDROSE LAND SERVICES, INC.

GENERAL NOTES

- SURVEYOR DID NOT ABSTRACT SUBJECT PROPERTY. THIS SURVEY WAS PREPARED WITH INFORMATION CONTAINED IN CITY PLANNING SEARCH REPORT PROVIDED BY CHARTER TITLE COMPANY, ORDER NO. 2013-0150, DATED JULY 10, 2013.
- BEARINGS WERE BASED ON THE TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE, 43.
- ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), FLOOD INSURANCE RATE MAP (FIRM) FOR HARRIS COUNTY, TEXAS, MAP NO. 48021D 0207L REVISION DATED JUNE 18, 2007, THE SUBJECT TRACT APPEARS TO BE WITHIN UNSHADDED ZONE "X", THIS DETERMINATION WAS DONE BY GRAPHIC PLOTTING AND IS APPROXIMATE ONLY AND HAS NOT BEEN VERIFIED. THIS FLOOD STATEMENT DOES NOT IMPLY THAT THE PROPERTY OR STRUCTURES THEREON WILL BE FREE FROM FLOOD DAMAGE OR TOTAL DAMAGE ON RAINFALL EXCESS CAN AND WILL OCCUR AND FLOOD HEIGHTS MAY BE INCREASED BY MAN-MADE OR NATURAL CAUSES. THIS FLOOD STATEMENT SHALL NOT CREATE LIABILITY ON THE PART OF WINDROSE LAND SERVICES, INC.
- DEVELOPMENT OF THIS TRACT IS SUBJECT TO REQUIREMENTS PER CITY OF HOUSTON ORDINANCE NO. 1989-282 WHICH STIPULATES PLATING AND SETBACK CONSTRAINTS. PROPOSED USE OF THIS TRACT WILL DETERMINE ACTUAL BUILDING SETBACK LINES) ALONG ANY ADJOINING STREET. CITY OF HOUSTON BUILDING CODES: AN ESTABLISH MINIMUM PUBLISHED SETBACK REQUIREMENTS. ULTIMATELY THE CITY OF HOUSTON PLANNING COMMISSIONS REQUIRED SETBACKS UPON REVIEW OF PLANS OR PLATS SUBMITTED TO SAID COMMISSION. THIS TRACT MAY REQUIRE PLATING AS A CONDITION FOR RECEIVING PERMITS.
- RECENTLY MADE IMPROVEMENTS AND UTILITIES WERE LOCATED WITH THIS SURVEY. NO SUBSURFACE PROBING, EXCAVATION OR EXPLORATION WAS PERFORMED BY WINDROSE LAND SERVICES, INC.
- ENVIRONMENTAL AND CHANGES ISSUES ARE BEYOND THE SCOPE OF THIS SURVEY.
- THE SQUARE FOOTAGE TOTALS SHOWN HEREON ARE BASED ON THE MATHEMATICAL CLOSURE OF THE COURSES AND DISTANCES REFLECTED ON THIS SURVEY. IT DOES NOT INCLUDE TELEGRAPHIC TIES THAT MAY BE PRESENT DUE TO THE POSITIONAL ACCURACY OF THE BOUNDARY MONUMENTATION.
- FENCES SHOWN HEREON WITH DIMENSIONAL TIES ARE SHOWN WHERE THEY ARE PHYSICALLY MEASURED. THE FENCE MAY MEASURE BETWEEN MEASURED LOCATIONS.
- ELEVATIONS SHOWN TO THE NEAREST TENTH (0.1) FEET ARE NATURAL GROUND SURFACE ELEVATIONS AND ELEVATIONS SHOWN TO THE NEAREST HUNDRETH ARE SOLID SURFACE ELEVATIONS.
- ALL SANITARY, STORM, TELEPHONE AND WATER LINES SHOWN HEREON ARE BASED ON UTILITY PLANS ACQUIRED FROM THE CITY OF HOUSTON AND CENTERPOINT ENERGY, AND WERE FIELD VERIFIED WHERE POSSIBLE. OTHER UTILITY PLANS OR INFORMATION MAY EXIST NOT KNOWN TO THIS COMPANY.
- SURVEYOR DID NOT PHYSICALLY ENTER MANHOLES, UNDERGROUND PIPE SIZES WERE DETERMINED BY A MEASURE DOWN METHOD FROM TOP OF MANHOLE BSM OR TOP OF GRATE OR TOP OF CURB AND WERE COMPARED WITH UTILITY PLANS WHERE POSSIBLE.
- SURVEYOR HAS CONTACTED DIGTESS FOR LOCATION OF BURIED UTILITY AND FIBER OPTIC LINES PRIOR TO THIS SURVEY. SURVEYOR CANNOT CERTIFY OR GUARANTEE THE ACCURACY OR COMPLETENESS OF THIS REQUEST. OTHER UNDERGROUND UTILITIES MAY EXIST NOT KNOWN TO THIS COMPANY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT DIGTESS OR OTHER UTILITY NOTIFICATION SERVICES FOR LOCATION OF UNDERGROUND UTILITIES, PRIOR TO CONSTRUCTION.

CITY PLANNING LETTER TRACTS

TRACT ONE:
ALL THAT CERTAIN 2.781 ACRES OF LAND, WHICH IS THE 2.781 ACRE TRACT DESCRIBED IN THE DEED FROM INDUSTRIAL PARTNERS, LLC TO CARLEE/FR INVESTORS, LLC, RECORDED UNDER FILE NO. 2013251, IN THE OFFICIAL PUBLIC RECORDS OF REAL PROPERTY OF HARRIS COUNTY, TEXAS, AND MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS ON EXHIBIT "A" OF CITY PLANNING LETTER REFERENCED HEREON.

TRACT TWO:
1.180 ACRES OF LAND BEING THAT SAME 1.18 ACRE TRACT DESCRIBED AS PARCEL ONE IN THE DEED FROM HINES & CO. TO GDM INDUSTRIES, RECORDED UNDER FILE NO. 1708391, HARRIS COUNTY REAL PROPERTY RECORDS, OUT OF THE JOHN REINERMAN SURVEY, ABSTRACT NO. 642, HARRIS COUNTY, TEXAS, AND MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS ON EXHIBIT "A" OF CITY PLANNING LETTER REFERENCED HEREON.

TRACT THREE:
2.995 ACRES (130,471 SQUARE FEET) TRACT OF LAND LOCATED IN THE JOHN REINERMAN SURVEY, ABSTRACT NUMBER 642, CITY OF HOUSTON, HARRIS COUNTY, TEXAS, SAID 2.995 ACRE TRACT BEING ALL OF THE 2.995 ACRE TRACT DESCRIBED IN THE DEED TO COLMETH-KIRK PAPER COMPANY RECORDED UNDER HARRIS COUNTY CLERK'S FILE NUMBER (H.C.C.F. NO.) 2007080154, SAID 1.18 ACRE TRACT BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS ON EXHIBIT "A" OF CITY PLANNING LETTER REFERENCED HEREON.

CITY PLANNING LETTER NOTES

AS TO TRACT ONE:
UTILITY EASEMENT TEN (10) FEET IN WIDTH EXTENDING UPWARD TO A PLANE TWENTY (20) FEET IN WIDTH FROM A PLANE TWENTY (20) FEET ABOVE THE GROUND UPWARD, GRANTED TO HOUSTON LIGHTING & POWER COMPANY RECORDED IN VOLUME 7542, PAGE 278 (AS SHOWN) OF THE DEED RECORDS OF HARRIS COUNTY, TEXAS, (AS SHOWN HEREON).

MISSOURI-KANSAS-TEXAS RAILROAD COMPANY SPUR LINE RIGHT-OF-WAY RECORDED IN VOLUME 3584, PAGE 193 OF THE DEED RECORDS OF HARRIS COUNTY, TEXAS, (AS SHOWN HEREON).

AS TO TRACT TWO:
RAILROAD SPUR OVER THE NORTHERLY PORTION OF THE SUBJECT PROPERTY AS DISCLOSED IN THE METES AND BOUNDS DESCRIPTION ATTACHED AS EXHIBIT "A" TO INSTRUMENT FILED FOR RECORD UNDER COUNTY CLERK'S FILE NO. 839704 IN THE OFFICIAL PUBLIC RECORDS OF REAL PROPERTY OF HARRIS COUNTY, TEXAS, (AS SHOWN HEREON).

BUILDING SET BACK LINE OF 60 FEET FROM THE NORTH LINE OF 12TH STREET AS SET FORTH IN INSTRUMENT RECORDED IN VOLUME 3270, PAGE 736 AND VOLUME 420 OF THE DEED RECORDS OF HARRIS COUNTY, TEXAS, (AS SHOWN HEREON).

BUILDING SET BACK LINE OF FIFTEEN FEET ALONG THE SIDE PROPERTY LINES AS SET FORTH IN INSTRUMENT RECORDED IN VOLUME 3583, PAGE 157 OF THE DEED RECORDS OF HARRIS COUNTY, TEXAS, (AS TO TRACT THREE) (AS SHOWN HEREON).

AS TO TRACT THREE:
TERMS AND PROVISIONS OF AN UNRECORDED LEASE DATED APRIL 2, 2007, BY AND BETWEEN CLUMSTED-KIRK PAPER COMPANY, AS LESSEE, AND SAGE INTERESTS, INC., AS LESSOR.

EASEMENT FOR SPUR RAILROAD TRACK GRANTED TO MISSOURI-KANSAS-TEXAS RAILROAD COMPANY OF TEXAS OVER THE NORTH EIGHT AND ONE-HALF FEET OF SUBJECT PROPERTY AS SET FORTH IN INSTRUMENT RECORDED IN VOLUME 1941, PAGE 453 OF THE DEED RECORDS OF HARRIS COUNTY, TEXAS.

REVISIONS

DATE	REASON	BY
12/10/2013	ADDED PAVEMENT WIDTH DIMENSIONS	MT
06-26-2014	DEPICT NEW FENCE AT N.W. CORNER	R.V.
12-03-2015	ADDED APPROPRIATE SCALE	R.V.

TEMPORARY BENCHMARK "A" ELEVATION = 62.84'
BENCHMARK IS FLOORING REFERENCE MARK NUMBER 05046, BEING AN HXFO BRASS DISK STAMPED 1100 BMDA, ELEV=63.09 FEET.

TEMPORARY BENCHMARK "B" ELEVATION = 63.74'
BENCHMARK IS FLOORING REFERENCE MARK NUMBER 05046, BEING AN HXFO BRASS DISK STAMPED 1100 BMDA, ELEV=63.09 FEET.

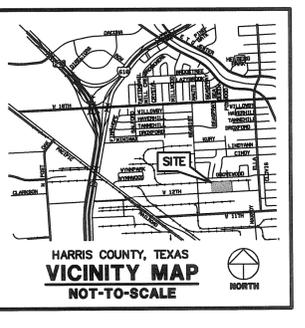
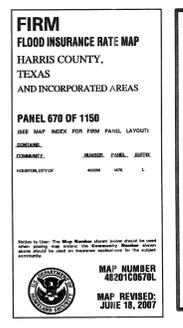
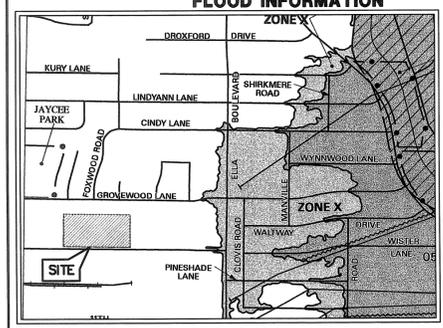
SURVEYOR'S CERTIFICATION

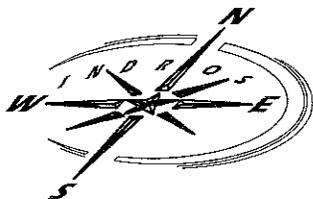
TO: LOVETT HOMES

I DO HEREBY CERTIFY TO THE ABOVE LISTED THAT THIS SURVEY WAS THIS DAY MADE ON THE GROUND AND WAS PERFORMED UNDER MY SUPERVISION, THAT THIS PLAT CORRECTLY REPRESENTS THE PROPERTY LEGALLY DESCRIBED HEREON, THAT THE FACTS FOUND AT THE TIME OF THIS SURVEY SHOW THE IMPROVEMENTS AND THAT THERE ARE NO VISIBLE ENCROACHMENTS APPARENT ON THE GROUND, EXCEPT AS SHOWN. THIS SURVEY IS SUBSTANTIALLY CONFORMS TO THE CURRENT TEXAS SOCIETY OF PROFESSIONAL SURVEYORS STANDARDS AND SPECIFICATIONS FOR A CATEGORY 1A, CONDITION II SURVEY AND A CATEGORY 6, CONDITION II SURVEY, TO THE BEST OF MY KNOWLEDGE.

MIKE KURKOWSKI
Registered Professional Land Surveyor
Texas Registration No. 5101

DATE: 08-02-13





Windrose Land Services, Inc
3200 Wilcrest Drive, Suite 325
Houston, Texas 77042
Phone (713) 458-2281 Fax (713) 461-1151

Professional Development Consultants
Land Surveying, Platting, Project Management and GIS Services
Firm Registration No. 10108800

DESCRIPTION

1.0867 ACRES OR 47,335 SQUARE FEET

A TRACT OR PARCEL OF LAND CONTAINING 1.0867 ACRES OR 47,335 SQUARE FEET, BEING A PORTION WEST 12TH STREET SITUATED IN THE JOHN REINERMAN SURVEY, A-642, HARRIS COUNTY, TEXAS, BEING DESCRIBED AS FOLLOWS, WITH ALL BEARINGS BASED ON THE TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE, NAD 83:

BEGINNING AT A CUT "X" SET ON TOP OF A BRICK COLUMN BEING ON THE NORTH RIGHT-OF-WAY (R.O.W.) LINE OF WEST 12TH STREET (60' R.O.W.), MARKING THE SOUTH CORNER OF LOT 11, BLOCK 1, TIMBERGROVE COURT, MAP OR PLAT THEREOF RECORDED UNDER FILM CODE (F.C.) NO. 529265, HARRIS COUNTY MAP RECORDS (H.C.M.R.), THE EAST CORNER OF LOT 10 OF SAID BLOCK 1 OF TIMBERGROVE COURT, AND THE SOUTHWEST CORNER OF CALLED 2.761 ACRE TRACT CONVEYED TO FEC 3484 LTD, AS RECORDED IN THE HARRIS COUNTY CLERK'S FILE No. 20070385603 AND THE NORTHWEST CORNER OF THE HEREIN DESCRIBED TRACT;

THENCE, ALONG SAID NORTH RIGHT-OF-WAY LINE OF WEST 12TH STREET, THE SOUTH LINE OF SAID CALLED 2.761 ACRES, THE SOUTH LINE OF A CALLED 1.16 ACRES CONVEYED TO FEC 3484, LTD. AS RECORDED IN THE HARRIS COUNTY CLERK'S FILE No. 20070601978 AND THE SOUTH LINE OF A CALLED 2.995 ACRES CONVEYED TO WEST AIRPORT ELDRIDGE, LTD, AS RECORDED IN HARRIS COUNTY CLERK'S FILE No. 20070200154, NORTH 87 DEGREES 54 MINUTES 50 SECONDS EAST, A DISTANCE OF 788.60 FEET TO A 3/4 INCH IRON PIPE FOUND DISTURBED ON THE WEST LINE OF A CALLED 0.569 ACRES CONVEYED TO HOUSTON LIGHTING & POWER COMPANY, AS RECORDED IN VOLUME 818, PAGE 79, HARRIS COUNTY DEED RECORDS, THE SOUTHWEST CORNER OF SAID CALLED 2.995 ACRES AND THE NORTHEAST CORNER OF THE HEREIN DESCRIBED TRACT;

THENCE, SOUTH 02 DEGREES 41 MINUTES 10 SECONDS EAST, A DISTANCE OF 60.00 FEET TO A POINT ON THE SOUTH RIGHT-OF-WAY LINE OF WEST 12TH STREET MARKING THE NORTHEAST CORNER OF A CALLED 4.581 ACRES CONVEYED TO WVN INVESTMENTS II, LTD AS RECORDED IN HARRIS COUNTY CLERK'S FILE No. 20060052343 AND THE SOUTHEAST CORNER OF THE HEREIN DESCRIBED TRACT;

THENCE, ALONG THE NORTH LINE OF SAID CALLED 4.581 ACRES, A CALLED 1.4890 ACRES CONVEYED TO JOHNSON-KRUEGER HOLDINGS, LTD RECORDED IN HARRIS COUNTY CLERK'S FILE No. 20110292503, CALLED 3.00 ACRES CONVEYED TO ALBERT H. HERZSTEIN AS RECORDED IN VOLUME 3273, PAGE 310, HARRIS COUNTY DEED RECORDS AND SAID SOUTH RIGHT-OF-WAY LINE OF WEST 12TH STREET, SOUTH 87 DEGREES 54 MINUTES 50 SECONDS WEST, A DISTANCE OF 789.23 FEET TO THE SOUTHWEST CORNER OF THE HEREIN DESCRIBED TRACT; ;

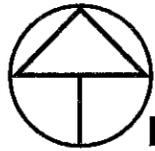
THENCE, NORTH 02 DEGREES 05 MINUTES 10 SECONDS WEST, A DISTANCE OF 60.00 FEET TO THE PLACE OF BEGINNING CONTAINING 1.0867 ACRES OR 47,335 SQUARE FEET OF LAND, AS SHOWN ON JOB No. 50969-EXH-ROW, PREPARED BY WINDROSE LAND SERVICES, INC.




MIKE KURKOWSKI

REGISTERED PROFESSIONAL LAND SURVEYOR
TEXAS REGISTRATION No. 5101

06-23-15
DATE



NORTH

SCALE: 1" = 60'

GENERAL NOTES

1. SURVEYOR DID NOT ABSTRACT SUBJECT PROPERTY, THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A CURRENT TITLE REPORT OR ABSTRACTORS CERTIFICATE AND WOULD BE SUBJECT TO ANY ALL CONDITIONS OR RESTRICTIONS THAT A CURRENT TITLE REPORT OR ABSTRACTORS CERTIFICATE MAY DISCLOSE.
2. BEARINGS WERE BASED ON THE TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE. (NAD83)
3. THIS EXHIBIT IS ACCOMPANIED BY A SEPARATE METES AND BOUNDS DESCRIPTION.

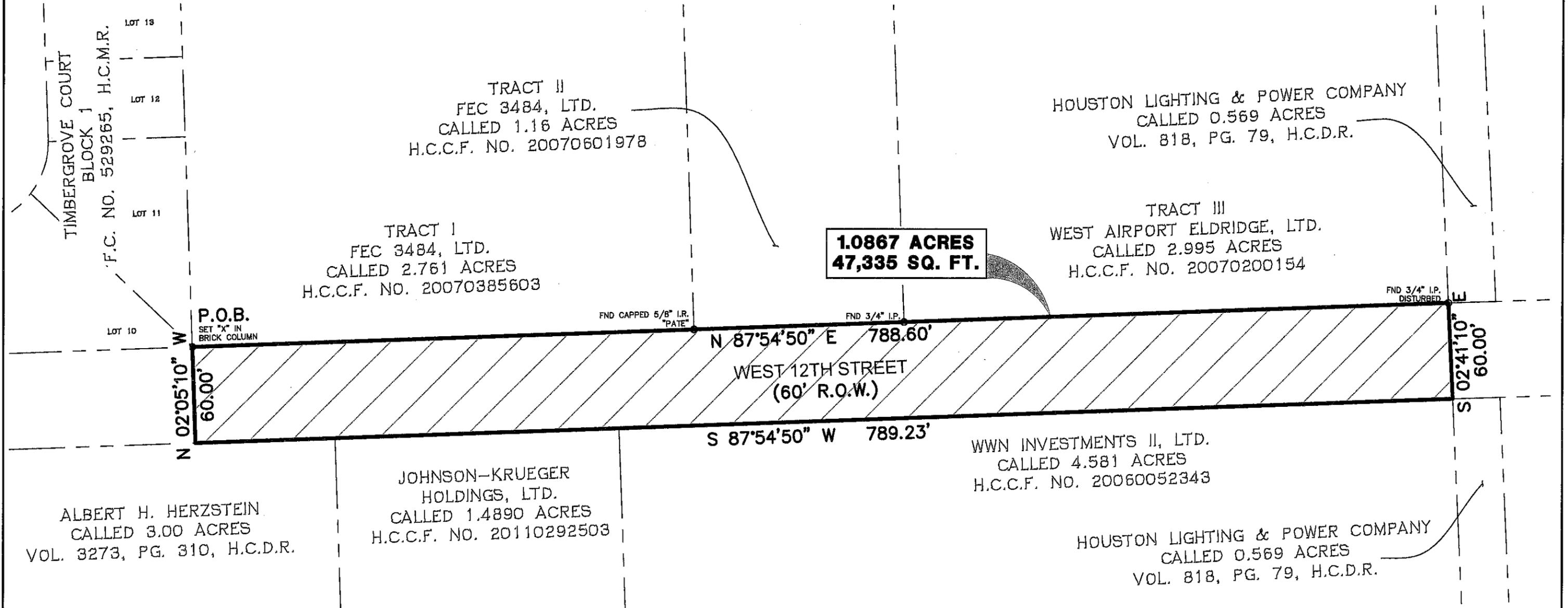


EXHIBIT OF
1.0867 ACRES OR 47,335 SQUARE FEET
SITUATED IN THE
JOHN REINERMAN SURVEY, A-642
HARRIS COUNTY, TEXAS

FIELD BY: -	DATE: 06-23-15
DRAWN BY: RV	REV:
CHECKED BY: MK	REV:
JOB NO. 50969-EXH-ROW	REV:
SHEET 1 OF 2	REV:



Windrose Land Services, Inc.
3200 Wilcrest, Suite 325
Houston, Texas 77042
Phone (713) 458-2281 Fax (713) 461-1151

Professional Development Consultants
Land Surveying, Platting, Project Management, GIS Services
Firm Registration No. 10108800

WD

N

GENERAL WARRANTY DEED

GF13188

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OR ALL OF THE FOLLOWING INFORMATION FROM ANY INSTRUMENT THAT TRANSFERS AN INTEREST IN REAL PROPERTY BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

Date June 19, 2014

Grantor: WEST AIRPORT ELDRIDGE, LTD., a Texas limited partnership, acting by and thru its duly authorized officer

Grantor's Mailing Address: 1520 Oliver Street, Suite 230, Houston, Texas 77007

Grantee: TEXAS INTOWNHOMES, LLC, a Texas limited liability company

1EE

Grantee's Mailing Address: 1520 Oliver Street, Houston, Texas 77007

Consideration:

The sum of TEN AND NO/100 DOLLARS (\$10.00) and other good and valuable consideration, the receipt of which is hereby acknowledged.

Property (including any improvements):

Field note description of a 2.995 acre (130,471 square feet) tract of land, more or less, located in the John Reinerman Survey, Abstract Number 642, City of Houston, Harris County, Texas and said 2.995 acre tract being all of the 3.00 acre tract described in the deed to Olmsted-Kirk Paper Company recorded under Harris County Clerk's File Number (H.C.C.F No.) E030098, said 2.995 acre tract being more particularly described by metes and bounds on exhibit attached hereto and made a part hereof:

D

Reservations from Conveyance: None.

Exceptions to Conveyance and Warranty:

This conveyance is made subject to any and all restrictions, minerals and/or royalty reservations, covenants, maintenance or similar charges, and easements, if any, relating to the hereinabove described property, but only to the extent that they are still in force and effect, shown of record in said County, and to all zoning laws, regulations and ordinances of municipal and other governmental authorities, if any, but only to the extent that they are still in effect, relating to the hereinabove described property.

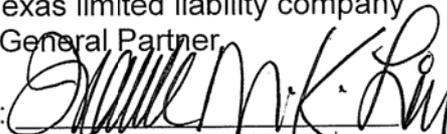
Grantor, for the Consideration and subject to the Reservations from Conveyance and the Exceptions to Conveyance and Warranty, grants, sells, and conveys to Grantee the Property, together with all and singular the rights and appurtenances thereto in any way belonging, to have and to hold it to Grantee and Grantee's heirs, successors, and assigns forever. Grantor binds Grantor and Grantor's heirs and successors to warrant and forever defend all and singular the Property to Grantee and Grantee's heirs, successors, and assigns against every person whomsoever lawfully claiming or to claim the same or any part thereof, except as to the Reservations from and the Exceptions to Conveyance and Warranty.

Taxes for the current year have been prorated between the Grantor and Grantee, and the Grantee assumes the payment thereof.

When the context requires, singular nouns and pronouns include the plural.

WEST AIRPORT ELDRIDGE, LTD.,
a Texas Limited Partnership
BY: Westheimer Wilcrest GP, L.L.C.,
a Texas limited liability company
Its General Partner

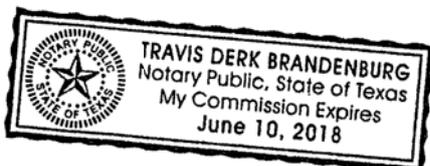
2OR

BY: 
Name: Frank M. K. Liu
Title: Manager

THE STATE OF TEXAS §
COUNTY OF HARRIS §

This instrument was acknowledged before me, on this the 19 day of June, 2014, by Frank M. K. Liu, in the capacity therein stated.


NOTARY PUBLIC, STATE OF TEXAS



ER 058 - 04 - 0495

Mailing address of Grantee:

TEXAS INTOWNHOMES, LLC.
1520 Oliver Street,
Houston, Texas 77007

GF No. 13188

Return to:

ER 058 - 04 - 0496

Exhibit "A"

FIELD NOTE DESCRIPTION of a 2.995 acre (130,471 square feet) tract of land, more or less, located in the John Reinerman Survey, Abstract Number 642, City of Houston, Harris County, Texas and said 2.995 acre tract being all of the 3.00 acre tract described in the deed to Olmsted-Kirk Paper Company recorded under Harris County Clerk's File Number (H.C.C.F. No.) E030098, said 2.995 acre tract being more particularly described by metes and bounds as follows: (The bearings described herein are oriented to the Texas State Plane Coordinate System, South Central Zone, NAD 1983, based on the Cornerstone Co-op CORS ARP, COR ID CMS1, N.G.S. PID DE8140, theta angle =+01°44'10.5".)

COMMENCING at intersection of the east right-of-way line of Seamist Drive (based on a width of 60 feet) and the north right-of-way line of West 12th Street (based on a width of 60 feet);

THENCE, North 88°04'15" East, along the north right-of-way line of said West 12th Street, a distance of 1027.40 feet, to the southeast corner of a called 1.160 acre tract, the POINT OF BEGINNING and the southwest corner of the herein described tract, from which a 3/4-inch iron pipe found bears, South 89°40'14" East, 0.16 feet;

THENCE, North 01°55'45" West, departing the north right-of-way line of said West 12th Street along the common east line of said 1.160 acre tract and the west line of the herein described tract, a distance of 382.98 feet, to the centerline of a railroad spur easement recorded in Volume 1941, Page 453, Harris County Deed Records, the northeast corner of said 1.160 acre tract and the northwest corner of the herein described tract, from which a 5/8-inch iron rod bears, South 14° 16'40" East, 0.16 feet;

THENCE, North 88°04'15" East, along the centerline of said railroad spur, a distance of 338.67 feet, to a 1/2-inch iron pipe in the west line of a 130-foot wide fee strip described in a deed to Houston Lighting and Power Company recorded in Volume 1697, Page 127, Harris County Deed Records and marking the northeast corner of the herein described tract,

THENCE, South 02°31'45" East, departing the center line of said railroad spur and along the west line of said 130-foot wide fee strip, a distance of 383.00 feet, to the north right-of-way line of said West 12th Street and the southeast corner of the herein described tract, from which a 3/4-inch iron pipe found bears, North 89°26'10" West, 0.16 feet;

THENCE, South 88°04'15" West, along the north right-of-way line of said West 12th Street, a distance of 342.68 feet, to the POINT OF BEGINNING and containing a computed area of 2.995 acres (130,471 square feet) of land, more or less.

ER 058 - 04 - 0497

20140267010
Pages 5
06/20/2014 08:21:46 AM
e-Filed & e-Recorded in the
Official Public Records of
HARRIS COUNTY
STAN STANART
COUNTY CLERK
Fees 28.00

RECORDERS MEMORANDUM

This instrument was received and recorded electronically and any blackouts, additions or changes were present at the time the instrument was filed and recorded.

Any provision herein which restricts the sale, rental, or use of the described real property because of color or race is invalid and unenforceable under federal law.

THE STATE OF TEXAS
COUNTY OF HARRIS

I hereby certify that this instrument was FILED in File Number Sequence on the date and at the time stamped hereon by me; and was duly RECORDED in the Official Public Records of Real Property of Harris County, Texas.



Stan Stanart

COUNTY CLERK
HARRIS COUNTY, TEXAS

Appendix B – Property Use

The following is a description of the current land use, and to the extent known, the anticipated uses of the designated property and surrounding properties located within 500 feet of the designated property boundary.

Current and Anticipated Land Use of the Designated Property

The designated property is approximately 8.0028 acres and includes approximately 6.9161 acres of privately-owned commercial land and ± 1.0867 acres of the publicly-owned adjacent West 12th Street right-of-way. The privately-owned commercial land owned by Texas InTownHomes, LLC has been recently replatted for future residential development but was formerly divided into three contiguous tracts (Tracts 1 through 3) addressed at 3484, 3482, and 3480 West 12th Street. The tracts addressed at 3484 West 12th Street (Tract 1) and 3482 West 12th Street (Tract 2) are currently vacant and undeveloped and were formerly commercially-developed lands. The tract addressed at 3480 West 12th Street (Tract 3) is currently commercially-developed land improved with a warehouse building.

The designated property is situated approximately 4.4 miles northwest of downtown Houston and is bordered by light industrial properties to the south, a former railroad track easement followed by single-family residential properties to the north, an electrical power line easement followed by single-family residential properties to the east, and residential properties to the west. Plat maps and metes and bounds descriptions of the designated property are included in **Appendix A**.

The publicly-owned right-of-way (West 12th Street) is covered by asphalt. Approximately 40 percent of the privately-owned commercial land is covered by an on-site building and gravel, concrete, or asphalt pavement. Tract 1 and Tract 2 of the privately-owned land are undeveloped, vacant land covered with grass, dirt, and trees. Tract 3 is developed with an approximately 130,680 square feet (SF) commercial warehouse building currently occupied by United Wine and Spirits. Other improvements on Tract 3 include two asphalt/cement parking lots, driveways, and landscaped areas. The privately-owned land (Tract 1 through 3) is enrolled in the TCEQ IHW Corrective Action Program as Solid Waste Registration (SWR) No. T3205 for adverse environmental impacts identified from a former neighboring IHW facility and historical on-site business activities. Therefore, it is also referred to as the SWR Property. The former use of the SWR Property is further discussed in **Appendix J**.

The designated property is located in the White Oak Bayou Watershed. According to the Federal Emergency Management Agency (FEMA) Federal Insurance Rate Map (FIRM), *Map No. 48201C0670M*, the designated property is classified as Zone X (unshaded) and is determined by FEMA to be outside the 0.2% annual chance floodplains. A watershed map and a FEMA floodplain map of the area containing the designated property are included as **Figures C.2** and **C.3**, respectively.

Current and Anticipated Land Use of the Surrounding Properties

Properties in the vicinity of the designated property are mixed light industrial and residential. One municipal park, Jaycee Park, is also in the vicinity of the designated property. Single-family residences are located to the north, east, and west of the designated property, Jaycee Park is

located to the northwest, and light industrial properties are located to the south of the designated property. A map detailing the land use of the surrounding properties within 500 feet of the designated property is presented as **Figure C.4**. The future land use in the area of the designated property is anticipated to remain mixed light industrial and single-family residential.

Water Wells

According to records obtained from GeoSearch Inc., approximately 1,011 registered/permited water wells are reportedly located within a 5-mile radius of the designated property. Of these, 6 are reportedly located within a 0.5-mile radius of the designated property. However, 3 of these wells are reportedly plugged and abandoned. The 3 remaining wells are located downgradient of the designated property, at distances between approximately 630 feet and 2,535 feet from the affected groundwater. These three wells are reportedly screened at depths greater than 277 feet, and were not observed during a door-to-door survey conducted by SKA in March 2015; therefore, they are believed to have been destroyed. As such, and based on the groundwater plumes being stable and delineated in a downgradient direction within the designated property, no potable wells are likely to be affected by contaminants present in soil or groundwater at the designated property.

Appendix C – Site Maps

The following figures are included in **Appendix C**. The figures are:

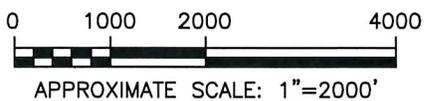
- Figure C.1 Site Vicinity and Topographic Map
- Figure C.2 Watershed Map
- Figure C.3 Floodplain Map
- Figure C.4 Surrounding Land Use Map
- Figure C.5 Soil and Groundwater Sample Location Map
- Figure C.6A Groundwater Gradient Map October 17, 2014
- Figure C.6B Groundwater Gradient Map February 15, 2015
- Figure C.6C Groundwater Gradient Map May 28, 2015
- Figure C.6D Groundwater Gradient Map September 1, 2015
- Figure C.7 Groundwater Protective Concentration Level Exceedance Zone Map



**DESIGNATED
PROPERTY**

Professional Engineer Seal
 STATE OF TEXAS
 PROFESSIONAL ENGINEER
 No. 12345
 Date: 12/15/15

REFERENCE USGS 7.5-MINUTE TOPOGRAPHIC QUADRANGLE
 HOUSTON HEIGHTS, TEXAS
 1995



SKA CONSULTING, L.P.
 1888 STEBBINS DR, SUITE 100
 HOUSTON, TEXAS 77043

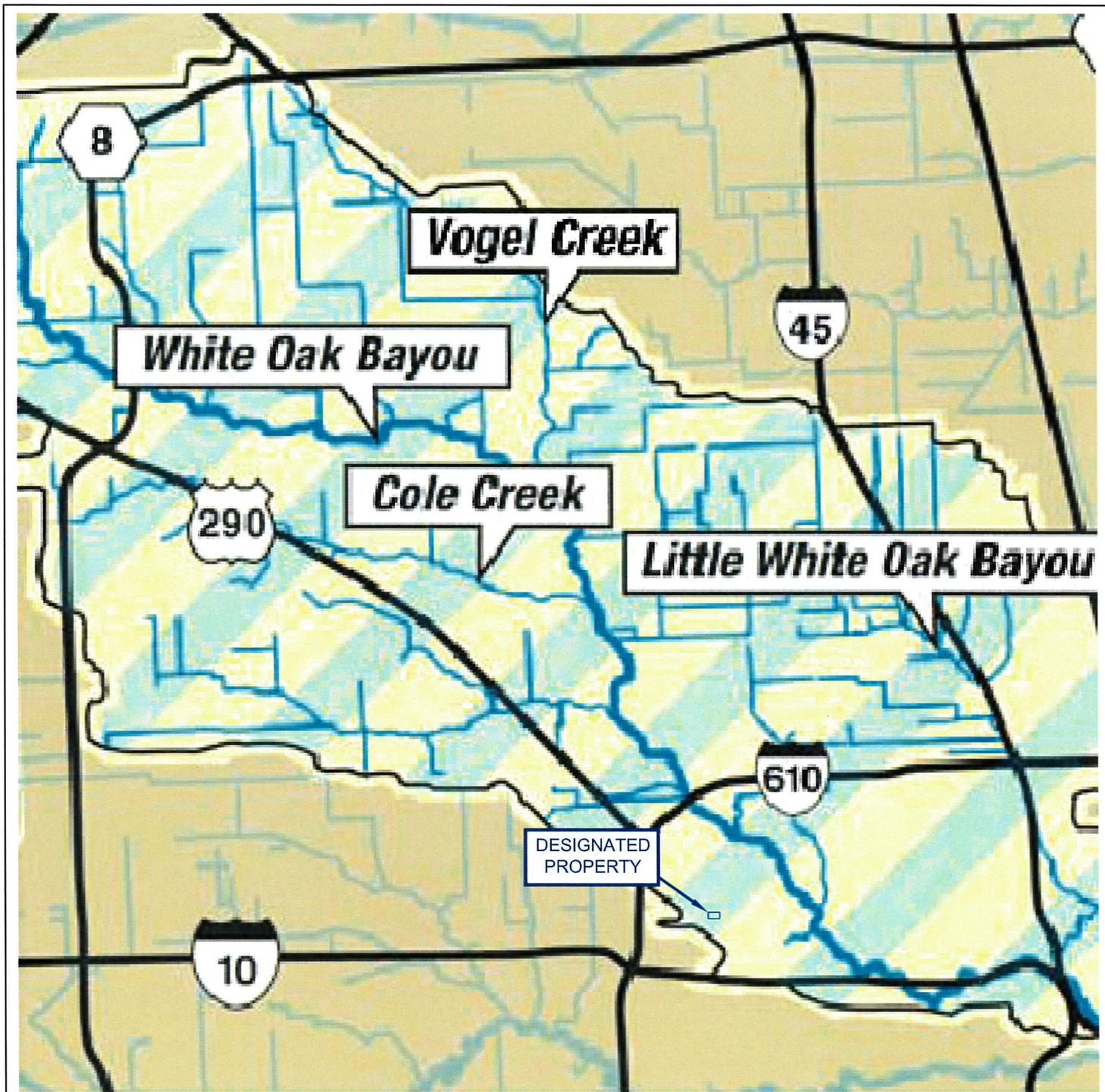
SITE VICINITY AND TOPOGRAPHIC MAP

FIGURE
C.1

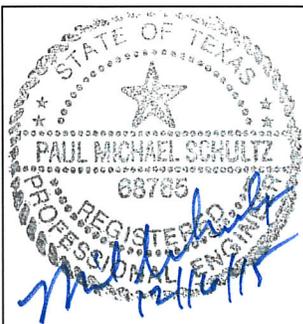
CITY OF HOUSTON
 MUNICIPAL SETTING DESIGNATION APPLICATION
 ±6.9-ACRE WEST 12TH STREET PROPERTY
 3480-3484 (EVENS) WEST 12TH STREET
 HOUSTON, HARRIS COUNTY, TEXAS
 SWR ID. NO. T3205

DATE: DECEMBER 2015	JOB NO: 13001-0092	SCALE: AS SHOWN
1 FIRST REVISION	-	DRAWN BY: PSB
2 SECOND REVISION	-	CHECKED BY: VMM
3 THIRD REVISION	-	APPROVED BY: JRM





 WHITE OAK BAYOU WATERSHED



0 5000 10,000

 APPROXIMATE SCALE:
 1"=10,000'



SKA CONSULTING, L.P.
 1888 STEBBINS DR, SUITE 100
 HOUSTON, TEXAS 77043

Texas Registered Engineering Firm F-005009
 Texas Registered Geoscience Firm 50011

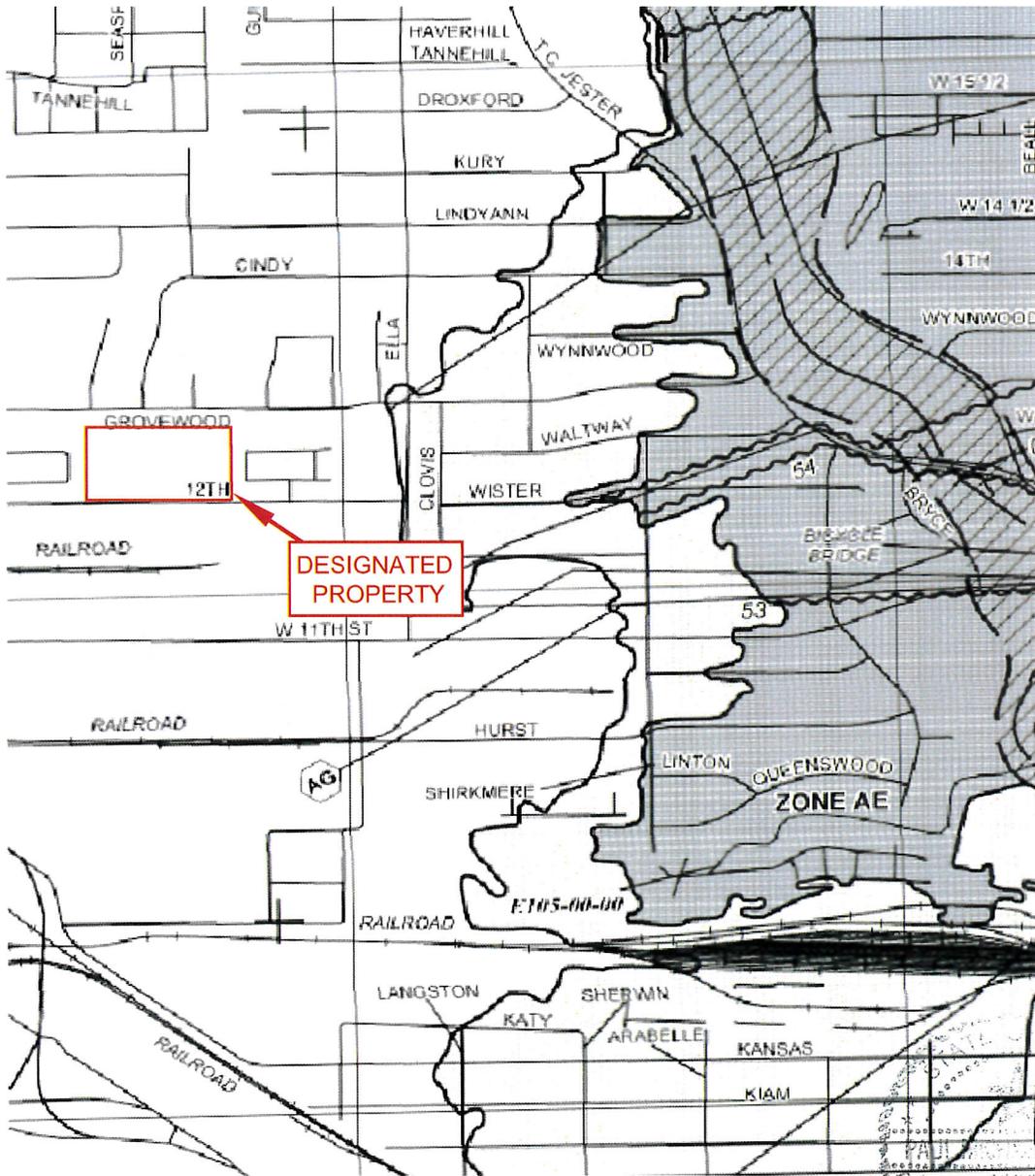
WATERSHED MAP

CITY OF HOUSTON
 MUNICIPAL SETTING DESIGNATION APPLICATION
 ±6.9-ACRE WEST 12TH STREET PROPERTY
 3480-3484 (EVENS) WEST 12TH STREET
 HOUSTON, HARRIS COUNTY, TEXAS
 SWR ID. NO. T3205

DATE:	DECEMBER 2015	JOB NO:	13001-0092	SCALE:	AS SHOWN
1	FIRST REVISION	-	DRAWN BY:	PSB	
2	SECOND REVISION	-	CHECKED BY:	VMM	
3	THIRD REVISION	-	APPROVED BY:	JRM	

FIGURE
C.2





M. Stachey

 12/11/15

EXPLANATION:

Zone X (unshaded) - Areas determined to be outside the 0.2% annual chance floodplains.

Zone X (shaded) - Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depth of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

Zone AE - (medium shaded) Base Flood Elevations determined

FEDERAL EMERGENCY MANAGEMENT AGENCY
 HARRIS COUNTY, TEXAS
 MAP No.: 48201C0670M (JUNE 19, 2014)



APPROXIMATE SCALE: 1"=1000'



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 1888 STEBBINS DR, SUITE 100
 HOUSTON, TEXAS 77043

Texas Registered Engineering Firm F-005009
 Texas Registered Geoscience Firm 50011

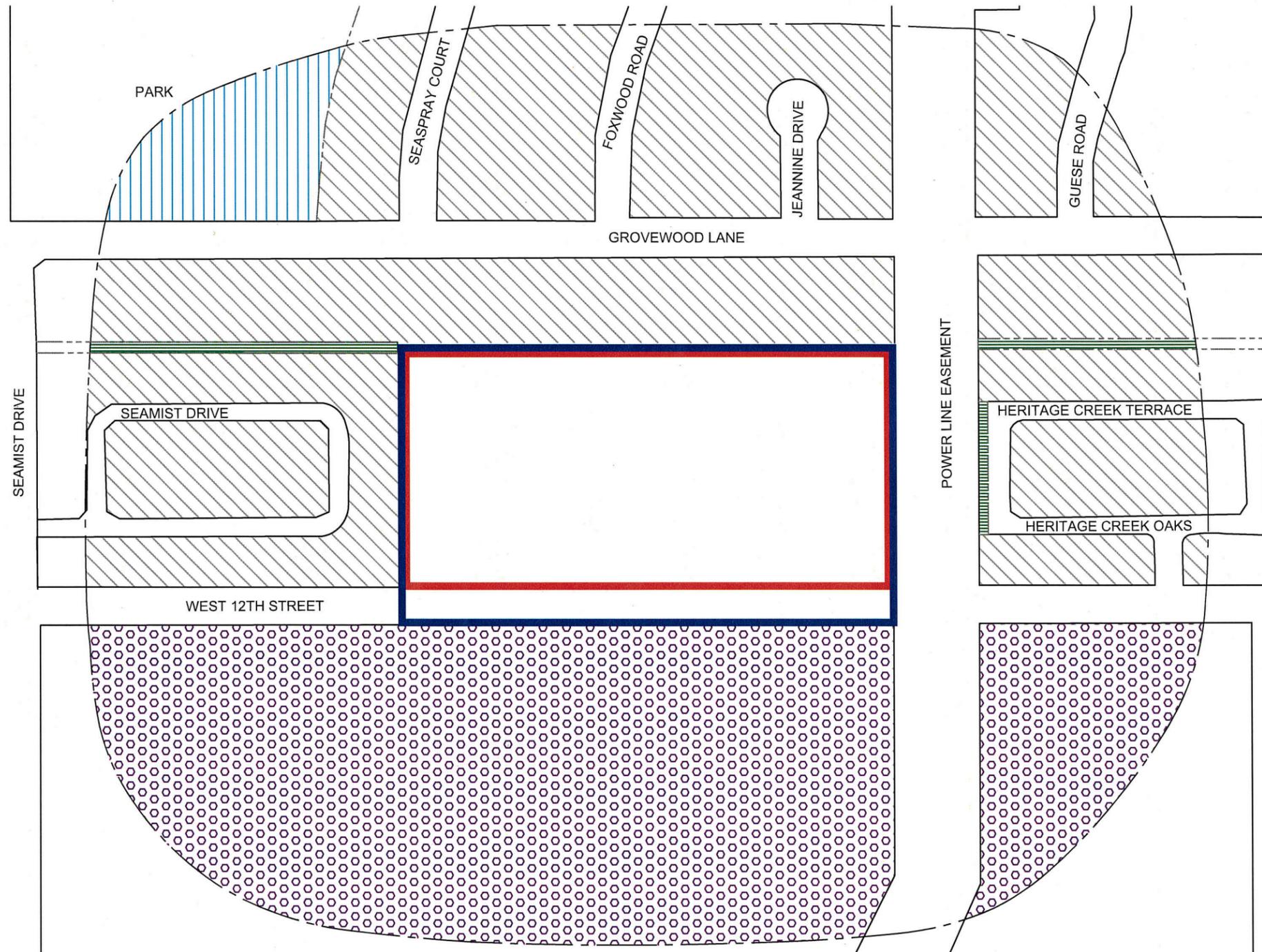
FLOODPLAIN MAP

FIGURE
C.3

CITY OF HOUSTON
 MUNICIPAL SETTING DESIGNATION APPLICATION
 ±6.9-ACRE WEST 12TH STREET PROPERTY
 3480-3484 (EVENS) WEST 12TH STREET
 HOUSTON, HARRIS COUNTY, TEXAS
 SWR ID. NO. T3205

DATE:	DECEMBER 2015	JOB NO:	13001-0092	SCALE:	AS SHOWN
1	FIRST REVISION	-	DRAWN BY:	PSB	
2	SECOND REVISION	-	CHECKED BY:	VMM	
3	THIRD REVISION	-	APPROVED BY:	JRM	



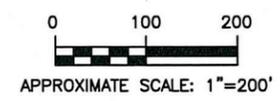


LEGEND

-  DESIGNATED PROPERTY BOUNDARY
-  SWR PROPERTY BOUNDARY
-  LOT BOUNDARY
-  500' RADIUS

PARCEL LAND USE

-  COMMERCIAL
-  INDUSTRIAL / COMMERCIAL
-  SINGLE-FAMILY RESIDENTIAL
-  RECREATIONAL (PARK)
-  VACANT



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 1888 STEBBINS DR, SUITE 100
 HOUSTON TEXAS 77043
 Texas Registered Engineering Firm F-005009
 Texas Registered Geoscience Firm 50011

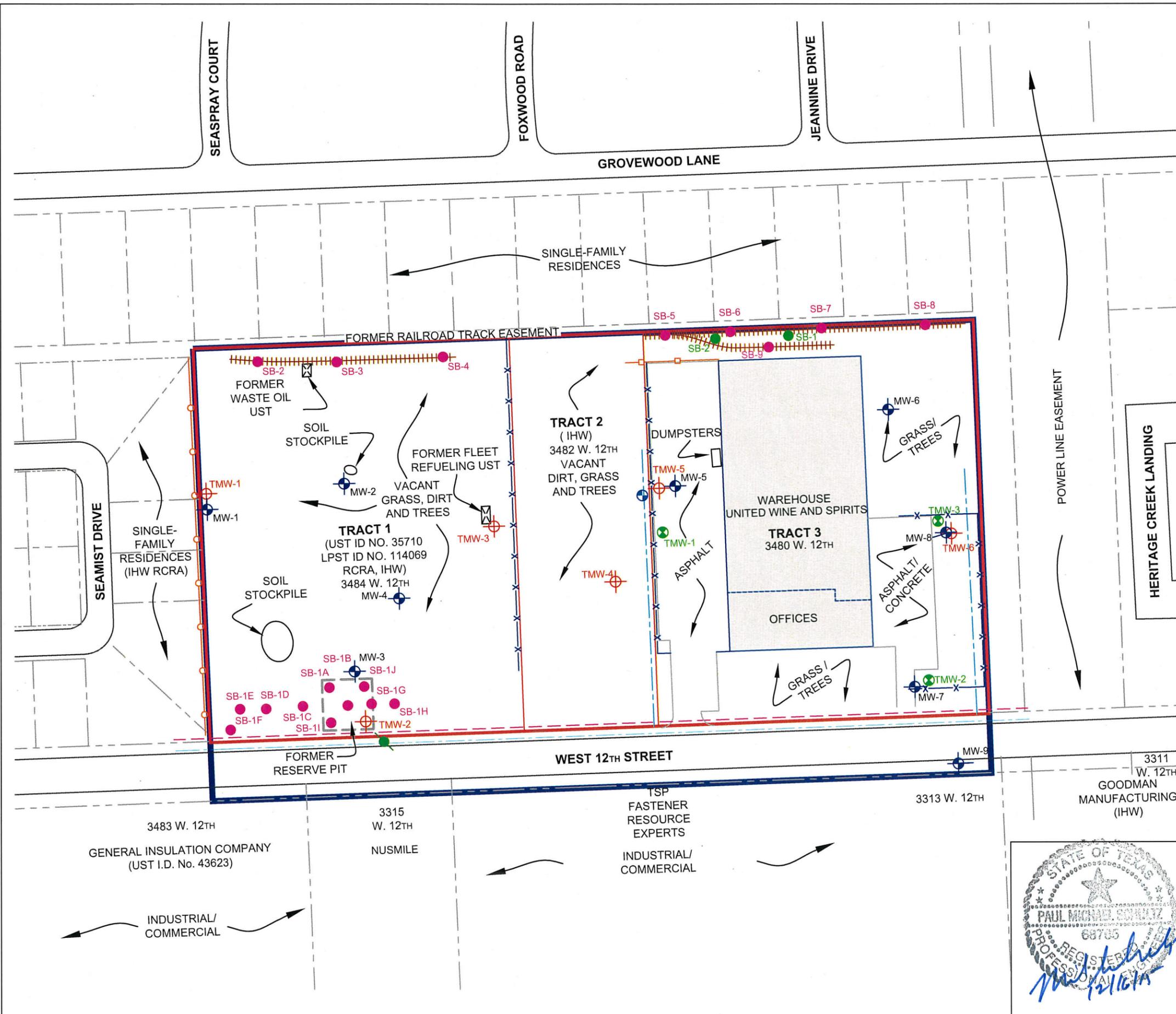
SURROUNDING LAND USE MAP

CITY OF HOUSTON
 MUNICIPAL SETTING DESIGNATION APPLICATION
 ±6.9-ACRE WEST 12TH STREET PROPERTY
 3480-3484 (EVENS) WEST 12TH STREET
 HOUSTON, HARRIS COUNTY, TEXAS
 SWR ID. NO. T3205

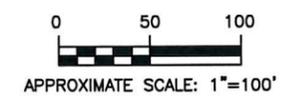
DATE: DECEMBER 2015	JOB NO: 13001-0092	SCALE: AS SHOWN
1 FIRST REVISION	-	DRAWN BY: PSB
2 SECOND REVISION	-	CHECKED BY: VMM
3 THIRD REVISION	-	APPROVED BY: JRM

FIGURE
C.4





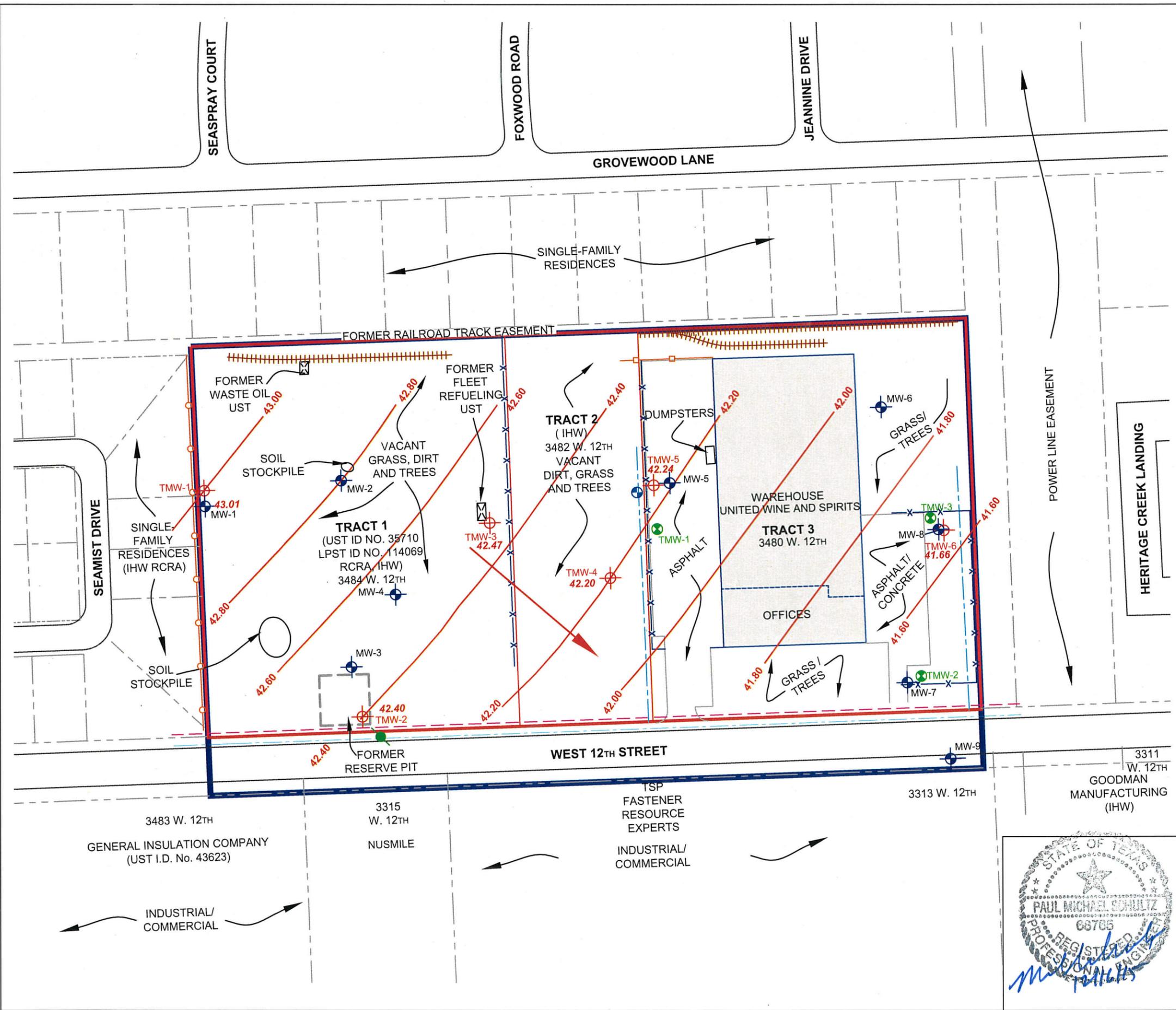
LEGEND	
	DESIGNATED PROPERTY BOUNDARY
	SWR PROPERTY BOUNDARY
	LOT BOUNDARY
	FORMER RAILROAD TRACK
	WOODEN FENCE
	CHAIN-LINK FENCE
	EARTHEN DRAINAGE DITCH
	OVERHEAD POWER LINE
	ON-SITE BUILDING
	FORMER UST
	SANITARY SEWER SAMPLE WELL
	PLUGGED OIL WELL
	SOIL BORING LOCATION (SKA, 2014)
	TEMPORARY MONITORING WELL LOCATION (SKA, 2014)
	PERMANENT MONITORING WELL LOCATION (SKA, 2015)
	TEMPORARY MONITORING WELL LOCATION (ESA SPECIALISTS, 2006)
	SOIL BORING LOCATION (ESA SPECIALISTS, 2006)



ska SKA CONSULTING, L.P.
 1888 STEBBINS DR, SUITE 100
 HOUSTON, TEXAS 77043
 Texas Registered Engineering Firm F-005009
 Texas Registered Geoscience Firm 50011



SOIL AND GROUNDWATER SAMPLE LOCATION MAP		FIGURE C.5
CITY OF HOUSTON MUNICIPAL SETTING DESIGNATION APPLICATION ±6.9-ACRE WEST 12TH STREET PROPERTY 3480-3484 (EVENS) WEST 12TH STREET HOUSTON, HARRIS COUNTY, TEXAS SWR ID. NO. T3205		
DATE: DECEMBER 2015	JOB NO: 13001-0092	SCALE: AS SHOWN
1 FIRST REVISION	-	DRAWN BY: JCM
2 SECOND REVISION	-	CHECKED BY: VMM
3 THIRD REVISION	-	APPROVED BY: JRM



LEGEND	
	DESIGNATED PROPERTY BOUNDARY
	SWR PROPERTY BOUNDARY
	LOT BOUNDARY
	FORMER RAILROAD TRACK
	WOODEN FENCE
	CHAIN-LINK FENCE
	EARTHEN DRAINAGE DITCH
	OVERHEAD POWER LINE
	ON-SITE BUILDING
	FORMER UST
	SANITARY SEWER SAMPLE WELL
	PLUGGED OIL WELL
	TEMPORARY MONITORING WELL LOCATION (SKA, 2014)
	PERMANENT MONITORING WELL LOCATION (SKA, 2015)
	TEMPORARY MONITORING WELL LOCATION (ESA SPECIALISTS, 2006)
	GROUNDWATER ELEVATION
	GROUNDWATER CONTOUR
	GROUNDWATER FLOW DIRECTION



ska SKA CONSULTING, L.P.
 1888 STEBBINS DR, SUITE 100
 HOUSTON, TEXAS 77043
 Texas Registered Engineering Firm F-005009
 Texas Registered Geoscience Firm 50011

GROUNDWATER GRADIENT MAP

OCTOBER 17, 2014

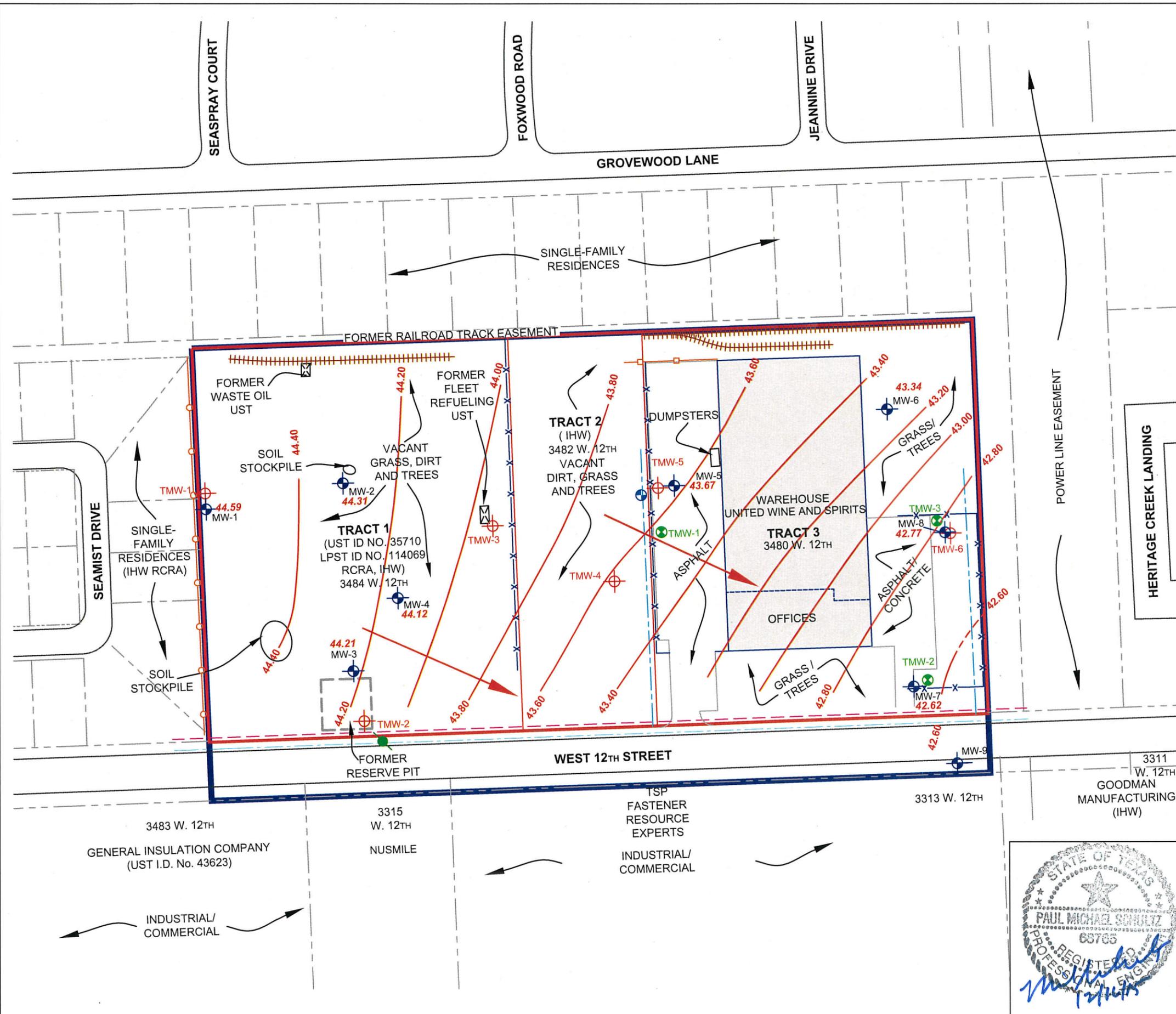
CITY OF HOUSTON

MUNICIPAL SETTING DESIGNATION APPLICATION
 ±6.9-ACRE WEST 12TH STREET PROPERTY
 3480-3484 (EVENS) WEST 12TH STREET
 HOUSTON, HARRIS COUNTY, TEXAS
 SWR ID. NO. T3205

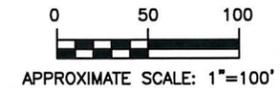
DATE: DECEMBER 2015	JOB NO: 13001-0092	SCALE: AS SHOWN
1 FIRST REVISION	-	DRAWN BY: JCM
2 SECOND REVISION	-	CHECKED BY: VMM
3 THIRD REVISION	-	APPROVED BY: JRM

FIGURE
C.6A





- LEGEND**
- DESIGNATED PROPERTY BOUNDARY
 - SWR PROPERTY BOUNDARY
 - LOT BOUNDARY
 - FORMER RAILROAD TRACK
 - WOODEN FENCE
 - CHAIN-LINK FENCE
 - EARTHEN DRAINAGE DITCH
 - OVERHEAD POWER LINE
 - ON-SITE BUILDING
 - FORMER UST
 - SANITARY SEWER SAMPLE WELL
 - PLUGGED OIL WELL
 - TMW-1
 - MW-1
 - TMW-1
 - 42.5
 - GROUNDWATER ELEVATION
 - GROUNDWATER CONTOUR
 - GROUNDWATER FLOW DIRECTION



ska SKA CONSULTING, L.P.
 1888 STEBBINS DR, SUITE 100
 HOUSTON, TEXAS 77043
 Texas Registered Engineering Firm F-005009
 Texas Registered Geoscience Firm 50011

GROUNDWATER GRADIENT MAP

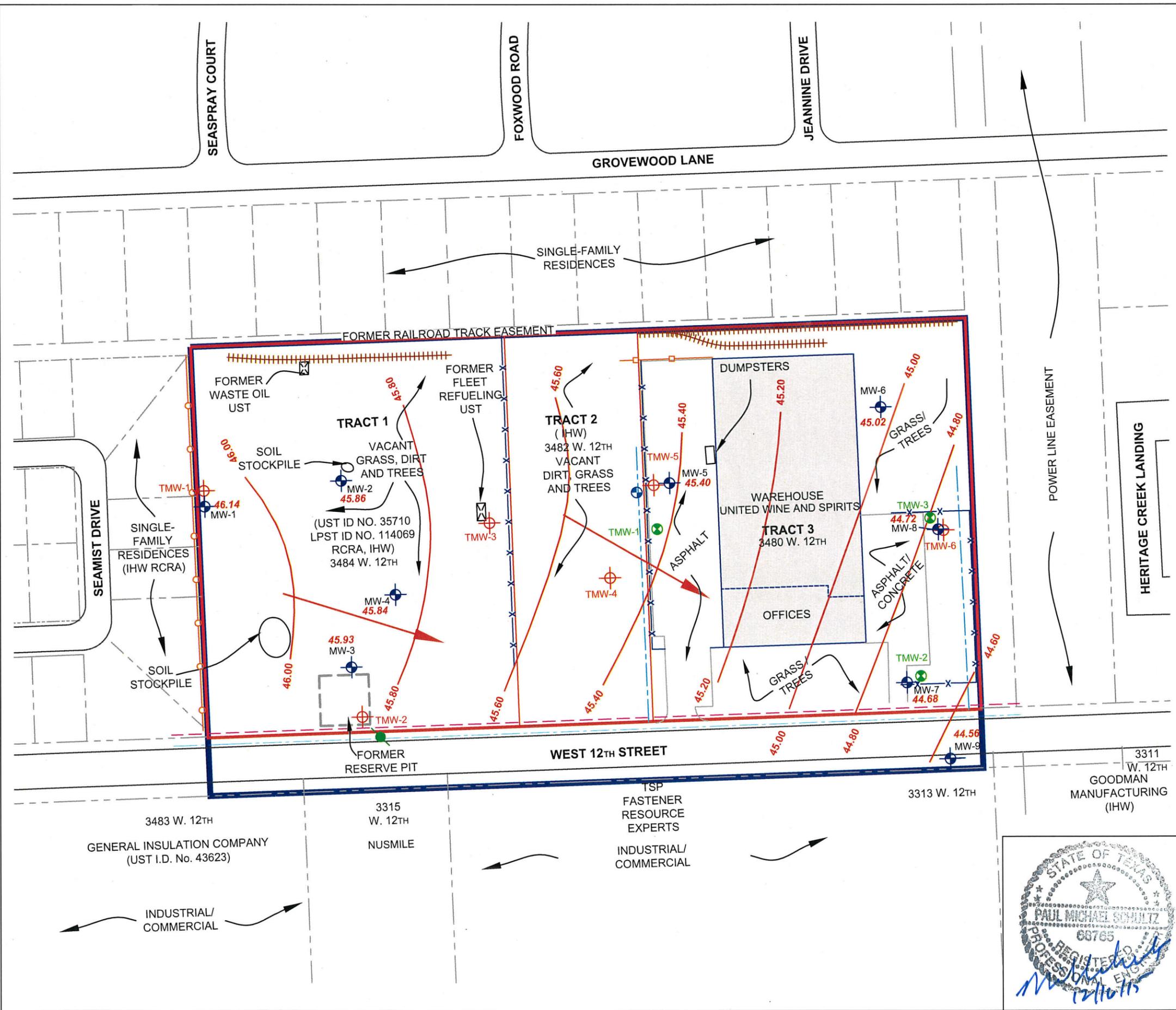
FEBRUARY 15, 2015

CITY OF HOUSTON
 MUNICIPAL SETTING DESIGNATION APPLICATION
 ±6.9-ACRE WEST 12TH STREET PROPERTY
 3480-3484 (EVENS) WEST 12TH STREET
 HOUSTON, HARRIS COUNTY, TEXAS
 SWR ID. NO. T3205

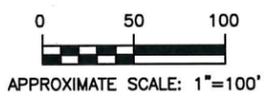
FIGURE
C.6B



DATE: DECEMBER 2015	JOB NO: 13001-0092	SCALE: AS SHOWN
1 FIRST REVISION	-	DRAWN BY: JCM
2 SECOND REVISION	-	CHECKED BY: VMM
3 THIRD REVISION	-	APPROVED BY: JRM



- LEGEND**
- DESIGNATED PROPERTY BOUNDARY
 - SWR PROPERTY BOUNDARY
 - LOT BOUNDARY
 - FORMER RAILROAD TRACK
 - WOODEN FENCE
 - CHAIN-LINK FENCE
 - EARTHEN DRAINAGE DITCH
 - OVERHEAD POWER LINE
 - ON-SITE BUILDING
 - FORMER UST
 - SANITARY SEWER SAMPLE WELL
 - PLUGGED OIL WELL
 - TMW-1
 - MW-1
 - TMW-1
 - 42.50
 - GROUNDWATER ELEVATION
 - GROUNDWATER CONTOUR
 - GROUNDWATER FLOW DIRECTION



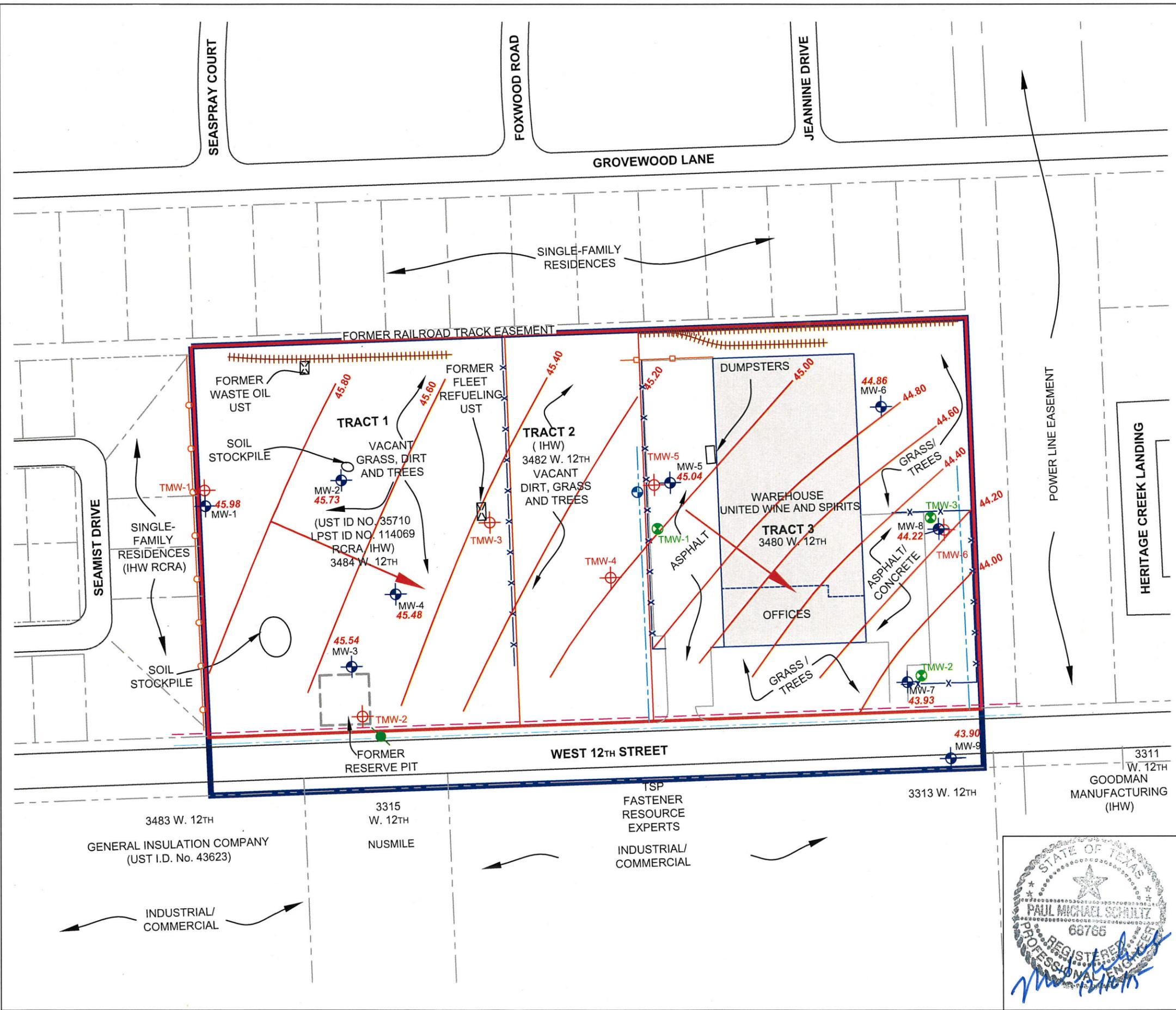
ska SKA CONSULTING, L.P.
 1888 STEBBINS DR, SUITE 100
 HOUSTON, TEXAS 77043
 Texas Registered Engineering Firm F-005009
 Texas Registered Geoscience Firm 50011

GROUNDWATER GRADIENT MAP
MAY 28, 2015
 CITY OF HOUSTON
 MUNICIPAL SETTING DESIGNATION APPLICATION
 ±6.9-ACRE WEST 12TH STREET PROPERTY
 3480-3484 (EVENS) WEST 12TH STREET
 HOUSTON, HARRIS COUNTY, TEXAS
 SWR ID. NO. T3205

FIGURE
C.6C

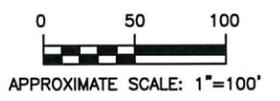


DATE: DECEMBER 2015	JOB NO: 13001-0092	SCALE: AS SHOWN
1 FIRST REVISION	-	DRAWN BY: JCM
2 SECOND REVISION	-	CHECKED BY: VMM
3 THIRD REVISION	-	APPROVED BY: JRM



LEGEND

- DESIGNATED PROPERTY BOUNDARY
- SWR PROPERTY BOUNDARY
- LOT BOUNDARY
- FORMER RAILROAD TRACK
- WOODEN FENCE
- CHAIN-LINK FENCE
- EARTHEN DRAINAGE DITCH
- OVERHEAD POWER LINE
- ON-SITE BUILDING
- FORMER UST
- SANITARY SEWER SAMPLE WELL
- PLUGGED OIL WELL
- TMW-1
- MW-1
- TMW-1
- 42.50
- GROUNDWATER ELEVATION
- GROUNDWATER CONTOUR
- GROUNDWATER FLOW DIRECTION



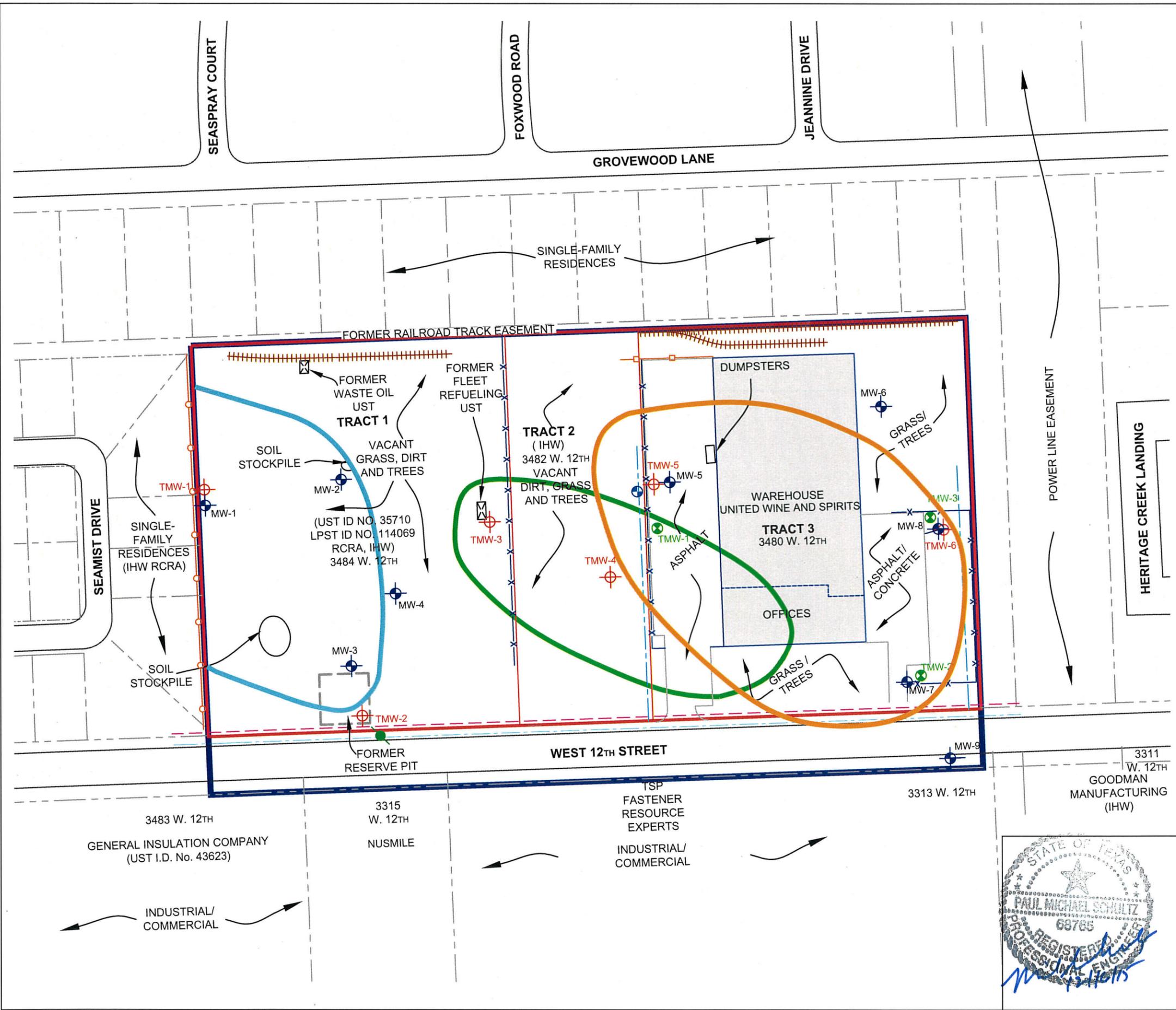
ska SKA CONSULTING, L.P.
 1888 STEBBINS DR, SUITE 100
 HOUSTON, TEXAS 77043
 Texas Registered Engineering Firm F-005009
 Texas Registered Geoscience Firm 50011

GROUNDWATER GRADIENT MAP
SEPTEMBER 1, 2015
 CITY OF HOUSTON
 MUNICIPAL SETTING DESIGNATION APPLICATION
 ±6.9-ACRE WEST 12TH STREET PROPERTY
 3480-3484 (EVENS) WEST 12TH STREET
 HOUSTON, HARRIS COUNTY, TEXAS
 SWR ID. NO. T3205

FIGURE
C.6D



DATE: DECEMBER 2015	JOB NO: 13001-0092	SCALE: AS SHOWN
1 FIRST REVISION	-	DRAWN BY: JCM
2 SECOND REVISION	-	CHECKED BY: VMM
3 THIRD REVISION	-	APPROVED BY: JRM



LEGEND

- DESIGNATED PROPERTY BOUNDARY
- SWR PROPERTY BOUNDARY
- LOT BOUNDARY
- FORMER RAILROAD TRACK
- WOODEN FENCE
- CHAIN-LINK FENCE
- EARTHEN DRAINAGE DITCH
- OVERHEAD POWER LINE
- ON-SITE BUILDING
- FORMER UST
- SANITARY SEWER SAMPLE WELL
- PLUGGED OIL WELL
- TMW-1
- MW-1
- TMW-1
- TRICHLOROETHENE PCLE ZONE
- 1,1 - DICHLOROETHENE PCLE ZONE
- MTBE PCLE ZONE

0 50 100
APPROXIMATE SCALE: 1"=100'

ska SKA CONSULTING, L.P.
1888 STEBBINS DR, SUITE 100
HOUSTON, TEXAS 77043
Texas Registered Engineering Firm F-005009
Texas Registered Geoscience Firm 50011

GROUNDWATER PROTECTIVE CONCENTRATION LEVEL EXCEEDANCE (PCLE) ZONE MAP
CITY OF HOUSTON
MUNICIPAL SETTING DESIGNATION APPLICATION
±6.9-ACRE WEST 12TH STREET PROPERTY
3480-3484 (EVENS) WEST 12TH STREET
HOUSTON, HARRIS COUNTY, TEXAS
SWR ID. NO. T3205

DATE: DECEMBER 2015 JOB NO: 13001-0092 SCALE: AS SHOWN

1	FIRST REVISION	-	DRAWN BY:	JCM
2	SECOND REVISION	-	CHECKED BY:	VMM
3	THIRD REVISION	-	APPROVED BY:	JRM

FIGURE C.7



Appendix D – COCs in Designated Groundwater

Groundwater sampling and analysis activities indicate three contaminants of concern (COCs) are exceeding their respective TRRP Tier 1 Residential Groundwater Ingestion (^{GW}GW_{Ing}) PCLs (Groundwater Ingestion PCLs) at the designated property: MTBE, TCE, and 1,1-DCE. These COCs currently above applicable Groundwater Ingestion PCLs will be addressed through the TCEQ IHW Corrective Action Program (30 TAC 350). Moreover, as the source of the MTBE-impacted groundwater is a closed on-site TCEQ LPST site (ID No. 114069), the MTBE plume will also be addressed through the TCEQ PST Program (30 TAC 334).

A brief summary discussion regarding the three COCs currently present in the groundwater of the designated property follows. Maps showing the current locations and concentrations of COCs in the groundwater are provided in **Appendix C** and summary tables of all groundwater sampling and analysis results obtained for the designated property are provided in **Appendix G** as **Tables G.1** and **G.2**.

Ingestion PCLE Zone in Designated Groundwater

The results of groundwater sampling and analytical testing from the designated property indicate TCE, MTBE, and 1,1 DCE are present in the shallow GWBU in excess of their applicable Groundwater Ingestion PCLs in three distinct areas; a TCE PCLE zone beneath the western portion of the designated property, a MTBE PCLE zone beneath the central portion of the designated property, and a 1,1-DCE PCLE zone beneath the eastern portion of the designated property. The groundwater flow direction in the shallow GWBU of the designated property has consistently been towards the southeast (**Figure C.6A through C.6D**).

Further discussion regarding the three groundwater PCLE zones follows. The location of the groundwater PCLE zones is shown on **Figure C.7** in **Appendix C**.

TCE PCLE Zone (Western Plume)

Groundwater assessment activities revealed a chlorinated ethene plume consisting primarily of TCE that has adversely impacted the shallow GWBU beneath the western portion of the designated property. This TCE plume or western plume also contains concentrations of 1,1-dichloroethane (1,1-DCA), 1,1-dichloroethene (1,1-DCE), tetrachloroethene (PCE), cis-1,2-dichloroethene (cis-1,2-DCE), trans-1,2-dichloroethene (trans-1,2-DCE) and vinyl chloride (VC) below their respective Groundwater Ingestion PCLs. Constituents associated with the western plume were detected in groundwater sampled from temporary monitoring wells TMW-1 and TMW-2 installed by SKA in 2014 and permanent monitoring wells (monitoring wells) MW-1, MW-2, MW-3, and MW-4 installed by SKA in 2015. However, the most recent groundwater sampling results indicate that only TCE concentrations in monitoring wells MW-1, MW-2, and MW-3 are above the applicable Groundwater Ingestion PCL.

Monitoring well MW-1, located along the western property boundary, has the highest TCE concentration within the western plume and designated property (0.47 mg/L in February 2015 and 0.348 mg/L in September 2015). The most recent TCE concentrations from downgradient monitoring wells MW-2, MW-3, and MW-4 in Tract 1 are 0.00534 mg/L, 0.0117 mg/L, and 0.00447 mg/L, respectively. Based on decreasing TCE concentrations with increasing distance from monitoring well MW-1 and the groundwater flow direction towards the southeast, the source of the TCE beneath the western portion of the designated property appears to be from a

former IHW facility located hydraulically upgradient and adjacently west of the designated property (see also **Appendix J** for the origin of the contamination).

The western plume is approximately 47,600 square feet (SF). The TCE PCLE zone is delineated to the east by monitoring well MW-2 and temporary monitoring well TMW-3, and to the southeast by monitoring well MW-4 and temporary monitoring well TMW-2. **Figure C.6D** indicates that monitoring well MW-4 and temporary monitoring well TMW-2 are the downgradient monitoring wells which delineate the TCE PCLE Zone.

MTBE PCLE Zone (Central Plume)

Groundwater assessment activities revealed a MTBE plume that has adversely impacted the shallow GWBU beneath the central portion of the designated property. This MTBE plume or central plume contains only MTBE in concentrations above the laboratory sample detection limits (SDL). MTBE was detected in groundwater sampled from temporary monitoring well TMW-1 installed by ESA Specialists of America, Inc. (ESA Specialists) in 2006, from temporary monitoring wells TMW-3 and TMW-4 installed by SKA in 2014, and from monitoring wells MW-1, MW-2 and MW-7 installed by SKA in 2015. However, the most recent groundwater sampling results indicate that only MTBE concentrations in SKA temporary monitoring wells TMW-3 and TMW-4 are above the applicable Groundwater Ingestion PCL.

Temporary monitoring well TMW-4, located on the east-central portion of Tract 2, has the highest MTBE concentration (2.7 mg/L). Based on the groundwater flow direction towards the southeast, the source of the MTBE beneath the central portion of the designated property appears to be from a former fleet refueling UST (UST ID No. 35710 and LPST ID No. 114069) located on the eastern portion of Tract 1, hydraulically upgradient of temporary monitoring well TMW-4 and in the vicinity of temporary monitoring well TMW-3 (see also **Appendix J** for the origin of the contamination).

The central plume is approximately 47,200 SF. The MTBE PCLE zone is delineated to the northeast by monitoring wells MW-5 and MW-8, to the west by monitoring wells MW-2 and MW-4, and to the southeast by monitoring wells MW-7 and MW-9, as shown in **Figure C.7**.

1,1-DCE PCLE Zone (Eastern Plume)

In addition to the TCE and MTBE PCLE Zones, groundwater assessment activities have revealed a third plume consisting primarily of the chlorinated ethene 1,1-DCE that has adversely impacted groundwater beneath the eastern portion of the designated property. The eastern plume also contains low concentrations of 1,1-DCA that are not exceeding the Groundwater Ingestion PCL. Constituents associated with the eastern plume were detected in groundwater sampled from temporary monitoring wells installed by ESA Specialists in 2006, SKA temporary monitoring wells TMW-5 and TMW-6 in 2014, and permanent monitoring wells MW-5, MW-6, MW-7, MW-8, and MW-9 in 2015.

The maximum concentration of 1,1-DCE detected in the groundwater at the designated property was 0.0282 mg/L from ESA Specialists temporary monitoring well TMW-3, and the maximum concentration detected from a monitoring well installed by SKA was 0.0253 mg/L from permanent monitoring well MW-5 in May 2015, which decreased to 0.0188 mg/L in August 2015. However, in addition to monitoring well MW-5, the most recent groundwater sampling results indicate that only 1,1-DCE concentrations in permanent monitoring wells MW-7 and MW-8 are above the Groundwater Ingestion PCL, and are 0.0128 mg/L and 0.00878 mg/L,

respectively.

Based on the groundwater flow direction to the southeast beneath the eastern portion of the property, the distribution of the groundwater contaminant concentrations (lower concentrations towards the southeast), and the decreasing contaminant concentrations in groundwater over time (**Table G.2**), the source of the 1,1-DCE PCLE zone could originate from a former on-site source on Tract 2 such as a sanitary sewer (sanitary sewer sample well shown on **Figure C.7**) and/or possibly from another former on-site source on Tract 3 (see also **Appendix J** for the origin of the contamination).

The eastern plume is approximately 89,800 SF. The 1,1-DCE PCLE zone is delineated to the northeast by monitoring well MW-6, to the west by temporary monitoring wells TMW-3 and TMW-4 and monitoring wells MW-2 and MW-4, and to the southeast by monitoring wells MW-8 and MW-9, as shown in **Figure C.7**.

COCs Chemical Properties

Two of the COCs (TCE and 1,1-DCE) which are the primary COCs in the western and eastern plumes, respectively, are chlorinated ethenes (two double-bonded carbon atoms), and the COC (MTBE) which is in the central plume, is a petroleum hydrocarbon. The COCs are present in the groundwater in the dissolved-phase and no direct evidence of non-aqueous phase liquids (NAPLs) has been observed or detected. Due to their densities, NAPLs composed of chlorinated ethenes are dense non-aqueous phase liquids (DNAPLs) that have a tendency to migrate vertically and “sink” in GWBUs, whereas NAPLs with petroleum hydrocarbons are light non-aqueous phase liquids (LNAPLs) and “float” in GWBU. Typically, dissolved-phase COCs preferentially migrate with groundwater flow. However, DNAPLs, when present, can migrate along the dip of geologic contacts counter to groundwater flow. Eight permanent monitoring wells at the designated property fully penetrate the shallow GWBU, and no DNAPL-phase COCs have been observed.

Non-Ingestion PCLE Zone in Designated Groundwater

None of the COCs detected in the shallow GWBU exceed their applicable TRRP Groundwater Non-ingestion PCLs (TRRP Tier 1 Residential ^{Air}GW_{Inh-v} PCLs) of 24 mg/L (TCE) and 1,700 mg/L (1,1-DCE). As such, no TRRP non-ingestion groundwater PCLE zones exist at the designated property.

Appendix E – Summary of Soil and Groundwater Data

Summary of Soil Data

Soil sampling and analysis indicated that regulated substances including volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs), and metals were present in soil samples collected from the designated property. However, with the exceptions of arsenic, lead, and selenium, all of the detected contaminant concentrations were below their most conservative, applicable State of Texas regulatory residential cleanup levels (TCEQ TRRP Tier 1 Residential Soil-to-Groundwater Ingestion PCLs) (Residential Soil PCLs) or the TCEQ PST Program Action Levels (for MTBE). The elevated concentrations of arsenic, lead, and selenium in soils exceeded TRRP Tier 1 Residential Soil PCLs for protection of groundwater; however, TCEQ TRRP Tier 2 Residential PCLs were determined based on site-specific data and indicated that the arsenic, selenium, and lead concentrations are protective of groundwater beneath the subject property. In addition, none of the reported arsenic, selenium, or lead concentrations exceeded their respective TCEQ TRRP residential direct exposure PCLs (soil ingestion, dermal contact, inhalation of volatiles and particulates, and ingestion of aboveground and below-ground) for a 0.5-acre source area. In summary, no contaminant concentrations were detected above the Tier 1 Residential Soil PCLs or the site-specific Tier 2 Residential Soil PCLs in the soil samples at the designated property. Therefore, there are no TRRP ingestion soil PCLE zones on the designated property.

The TRRP Tier 1 and Tier 2 Residential Soil PCLs and TCEQ PST Program Action Levels for soils to determine the designated property's soil-to-groundwater ingestion and non-ingestion PCLE zones are included in **Table G.1**. A summary of maximum soil concentrations compared to applicable soil-to-groundwater ingestion PCLs, non-ingestion PCLs, and PST Program Action Levels are included in **Table E.1**.

None of the metals, PCBs, or VOCs detected in the soil at the designated property exceeded their applicable TRRP non-ingestion soil PCLs ($T^{ot}Soil_{Comb}$) PCLs for surface soils and $^{Air}Soil_{Inh-v}$ PCLs for subsurface soils. As such, no TRRP non-ingestion soil PCLE zones exist at the designated property.

Summary of Groundwater Data

As previously discussed and detailed in **Appendix D**, groundwater sampling and analysis activities performed to date have revealed detectable concentrations of TCE and 1,1-DCE exceeding the Tier 1 Groundwater Ingestion PCLs, and concentrations of MTBE exceeding the Tier 1 Groundwater Ingestion PCL and the PST Program Action Level. As the source of the MTBE-impacted groundwater is a closed LPST site (ID No. 114069), the MTBE plume will be addressed through the TCEQ PST Program. Therefore, there are three COCs currently above TRRP Tier I Groundwater Ingestion PCLs at the designated property; TCE, MTBE, and 1,1-DCE. None of the COCs detected in the shallow GWBU exceed their applicable TRRP non-ingestion groundwater PCLs (TRRP Tier 1 residential $^{Air}GW_{Inh-v}$ PCLs). As such, no TRRP non-ingestion groundwater PCLE zones exist at the designated property.

Summary tables showing the maximum concentrations of COCs detected in groundwater at the designated property are provided in **Table E.2**. Included with the maximum COC concentrations detected in groundwater in **Table E.2** are the COC's applicable TRRP PCLs for both ingestion and non-ingestion exposure pathways and the PST Program Action Levels.

Complete summaries of all sampling and analysis results for soil and groundwater samples collected from the designated property are provided in **Tables G.1** and **G.2**, respectively. The locations of all soil and groundwater sampling points are presented on **Figure C.5** in **Appendix C**.

TABLE E.1
SUMMARY OF MAXIMUM SOIL CONCENTRATIONS
MUNICIPAL SETTING DESIGNATION APPLICATION
± 6.9-ACRE WEST 12TH STREET PROPERTY
3480-3484 (EVENS) WEST 12TH STREET
HOUSTON, HARRIS COUNTY, TEXAS

CONTAMINANT OF CONCERN	MAXIMUM SOIL CONCENTRATION				TRRP RESIDENTIAL SOIL CRITICAL PROTECTIVE CONCENTRATION LEVEL (PCL)			TCEQ PST PROGRAM ACTION LEVEL
	Sample ID	Sample Depth (ft-bgs)	Sample Date	Detected Concentration (mg/kg)	Ingestion PCL (Without MSD)	Non-Ingestion PCL (With MSD)		Ingestion Action Level (Without MSD)
					^{GW} Soil _{ing} (mg/kg)	^{Tot} Soil _{comb} (mg/kg)	^{Air} Soil _{inh} (mg/kg)	Action Level (mg/kg)
Arsenic	SB-2	1-2	10/15/14	18	43.5*	24	--	--
Barium	MW-7	4-5	1/27/15	89	440	8,100	--	--
Cadmium	MW-2	6-7	1/29/15	0.53 J	1.5	52	--	--
Chromium	MW-6	4-5	1/28/15	27	2,400	33,000	--	--
Lead	SB-2	0-1	10/15/14	78	549*	500	--	--
Mercury	TMW-2	0-1	10/16/14	0.035	0.04**	3.6	--	--
Methyl tert-butyl ether	TMW-3	24-26	10/16/14	0.0062	0.62	800	1,400	2.56
Naphthalene	MW-8	71.5-72.5	1/28/15	0.0090 J	31	220	270	99.7
n-Propylbenzene	MW-8	71.5-72.5	1/28/15	0.0030 J	45	2,200	6,300	--
PCB 1254	SB-2	0-1	10/15/14	0.041	11	1.1	54	--
Selenium	SB-1C	0-2	10/15/14	3.3	8.7*	310	--	--
1,2,4-Trimethylbenzene	MW-3	29-30	1/25/15	0.0034 J	49	150	160	--

NOTES:

- 1) "--" indicates not applicable.
- 2) "*" indicates site specific Tier 2 soil-to-groundwater ingestion PCL.
- 3) "**" indicates the TCEQ Texas-Specific Background Concentration of 0.04 mg/kg for mercury is used as the critical PCL.
- 4) COCs highlighted in yellow exceed the TRRP Tier 1 or Tier 2 Residential Soil Critical PCL (applicable TRRP Tier 1 or Tier 2 Residential Soil Ingestion PCL) without an MSD; but do not exceed the TRRP Tier 1 Residential Soil Critical PCL (applicable TRRP Tier 1 Residential Soil Non-Ingestion PCL) with an MSD.
- 5) COCs highlighted in green exceed the TRRP Tier 1 Residential Soil Critical PCL (applicable TRRP Tier 1 Residential Soil Non-Ingestion PCL) with an MSD.
- 6) COCs highlighted in blue exceed the TCEQ PST Program Action Level.
- 7) "J" indicates a laboratory qualifier for an estimated value detected below the method quantitation limit (MQL).
- 8) "ft-bgs" represents feet below ground surface.

TABLE E.2
SUMMARY OF MAXIMUM GROUNDWATER CONCENTRATIONS
MUNICIPAL SETTING DESIGNATION APPLICATION
± 6.9-ACRE WEST 12TH STREET PROPERTY
3480-3484 (EVENS) WEST 12TH STREET
HOUSTON, HARRIS COUNTY, TEXAS

CONTAMINANT OF CONCERN	GROUNDWATER-BEARING UNIT	MAXIMUM GROUNDWATER CONCENTRATION			TRRP RESIDENTIAL GROUNDWATER CRITICAL PROTECTIVE CONCENTRATION LEVEL (PCL)		TCEQ PST PROGRAM ACTION LEVEL
		Sample ID	Sample Date	Detected Concentration (mg/L)	Ingestion PCL (Without MSD)	Non-Ingestion PCL (With MSD)	Ingestion Action Level (With/Without MSD)
					^{GW} GW _{Ing} (mg/L)	^{Air} GW _{Inh-V} (mg/L)	Action Level (mg/L)
Chloroform	Shallow	MW-9	4/30/15	0.00139 J	0.24	20	-
1,1-Dichloroethane	Shallow	MW-4	5/28/15	0.0399	4.9	43,000	-
1,1-Dichloroethene	Shallow	TMW-3 (ESA)	10/27/06	0.0282	0.007	1,700	-
cis-1,2-Dichloroethene	Shallow	MW-1	2/2/15	0.062	0.07	1,200	-
trans-1,2-Dichloroethene	Shallow	MW-1	2/2/15	0.017	0.1	770	-
Tetrachloroethene	Shallow	MW-1	2/2/15	0.0018	0.005	500	-
Trichloroethene	Shallow	MW-1	2/2/15	0.47	0.005	24	-
Vinyl chloride	Shallow	TMW-1	10/17/14	0.0012	0.002	3.8	-
Methyl tert-butyl ether	Shallow	TMW-4	10/17/14	2.7	0.24	4,000	0.24
Arsenic	Shallow	MW-1	2/2/15	0.0025	0.010	-	-
Barium	Shallow	MW-4	2/2/15	0.77	2.0	-	-
Chromium	Shallow	TMW-2	10/17/14	0.0028 J	0.1	-	-
Lead	Shallow	TMW-2	10/17/14	0.00029 J	0.015	-	-
Selenium	Shallow	MW-3 MW-5	1/29/15 1/30/15	0.013 J	0.05	-	-
Mercury	Shallow	MW-7	2/2/15	0.00011 J	0.002	7.3	-

NOTES:

- 1) COCs highlighted in yellow exceed the critical TRRP Tier 1 Residential Groundwater PCL (applicable TRRP Tier 1 Residential Groundwater Ingestion PCL) without an MSD; but do not exceed the critical TRRP Tier 1 Residential Groundwater PCL (applicable TRRP Tier 1 Residential Groundwater Non-Ingestion PCL) with an MSD.
- 2) COCs highlighted in green exceed the critical TRRP Tier 1 Residential Groundwater PCL (applicable TRRP Tier 1 Residential Groundwater Non-Ingestion PCL) with an MSD.
- 3) COCs highlighted in blue exceed the TCEQ PST Program Action Level.
- 4) "J" indicates a laboratory qualifier for an estimated value detected below the method quantitation limit (MQL).

Appendix F – Off-Site Impacted Property Owners

As previously stated, the source of the TCE within the western plume appears to be from a former IHW facility located hydraulically upgradient and adjacently west of the designated property, formerly addressed at 3490 West 12th Street. This site was redeveloped in 2003 as a single-family residential subdivision. No additional information pertaining to off-site impacted property owners is available, as groundwater monitoring wells were not installed within the former IHW facility.

As previously discussed, the TCE, MTBE and 1,1-DCE plumes are delineated as shown in **Figure C.7**. Therefore, notification of off-site impacted property owners is not necessary.

Appendix G – Plume Stability

Groundwater assessment activities performed to date have identified three distinct groundwater contaminant plumes at the designated property. Two of the groundwater plumes are composed of chlorinated ethenes (TCE and 1,1-DCE) and are located on the western and eastern portions of the designated property, respectively (see **Figure C.7**). The third groundwater plume is composed of MTBE and is located on the central portion of the designated property. As the source of the MTBE-impacted groundwater is a closed LPST site (ID No. 114069), the MTBE plume will be addressed through the TCEQ PST Program. The following sections provide discussions regarding the stability of the three groundwater plumes within the designated property.

TCE PCLE Zone (Western Plume)

As previously stated, groundwater assessment activities revealed a chlorinated ethene plume consisting primarily of TCE that has adversely impacted groundwater beneath the western portion of the designated property (western plume). The western plume also contains low concentrations of PCE, 1,1-DCA, 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE and VC that are not exceeding Tier 1 Groundwater Ingestion PCLs. Constituents associated with the western plume were detected in groundwater sampled from temporary monitoring wells TMW-1 and TMW-2 and monitoring wells MW-1, MW-2, MW-3, and MW-4 (**Figure C.7** and **Table G.2**).

Groundwater sampled from monitoring well MW-1, located along the western property boundary, consistently has the highest TCE concentration at the designated property (0.47 mg/L in February 2015 to 0.348 mg/L in September 2015). The September 2015 TCE concentrations from downgradient monitoring wells MW-2, MW-3, and MW-4 are 0.00534 mg/L, 0.0117 mg/L, and 0.00447 mg/L, respectively. Based on decreasing TCE concentrations with increasing distance from monitoring well MW-1 and the groundwater flow direction towards the southeast, the source of the TCE beneath the western portion of the designated property is likely from a former RCRA and IHW facility located hydraulically upgradient and adjacently west of the designated property (see also **Appendix J** for the origin of the contamination).

The presence of TCE degradation products (i.e. cis-1,2-DCE and VC) where TCE degrades to cis-1,2-DCE in a one-to-one relationship (i.e., one molecule of TCE degrades to one molecule of cis-1,2 DCE, which degrades to one molecule of VC) indicates that natural attenuation of TCE is occurring. In addition, the stable to decreasing TCE concentrations from monitoring wells MW-1, MW-2 and MW-3 indicates that the western plume is stable to decreasing.

Figure C.6D indicates that monitoring well MW-4 and temporary monitoring well TMW-2 delineate the western plume, as these wells exhibit TCE concentrations below the TRRP Tier 1 Groundwater Ingestion PCL. Therefore, the western plume is delineated in a downgradient direction to the residential assessment levels within the designated property.

MTBE PCLE Zone (Central Plume)

As previously stated, groundwater assessment activities revealed a MTBE plume that has adversely impacted groundwater beneath the central portion of the designated property (central plume). This central plume contains only MTBE in concentrations above the laboratory SDLs. MTBE was detected in groundwater sampled from ESA Specialists temporary monitoring well TMW-1, SKA temporary monitoring wells TMW-3 and TMW-4, and permanent monitoring wells

MW-1, MW-2 and MW-7. However, the most recent groundwater sampling results indicate that only MTBE concentrations in SKA temporary monitoring wells TMW-3 and TMW-4 are above the applicable Groundwater Ingestion PCL (**Figure C.7** and **Table G.2**).

Temporary monitoring well TMW-4, located on the east-central portion of Tract 2, has the highest MTBE concentration (2.7 mg/L). Based on the groundwater flow direction towards the southeast, the source of the MTBE beneath the central portion of the designated property appears to be from a former fleet refueling UST (UST ID No. 35710 and LPST ID No. 114069) located on the eastern portion of Tract 1, hydraulically upgradient of temporary monitoring well TMW-4 and in the vicinity of temporary monitoring well TMW-3 (see also **Appendix J** for the origin of the contamination).

The low MTBE concentrations in groundwater sampled from monitoring well MW-7, located hydraulically downgradient of temporary monitoring well TMW-4 range from 0.0019 mg/L to below SDLs, and indicate that the central plume is stable and not extending. Concentrations of MTBE in the shallow GWBU are not expected to increase, as no sources of petroleum hydrocarbons are currently present on-site. The central plume is delineated to the northeast by monitoring wells MW-5 and MW-8, to the west by monitoring wells MW-2 and MW-4, and to the southeast, in a downgradient direction, by monitoring wells MW-7 and MW-9, as shown in **Figure C.6D**. Therefore, the central plume is delineated.

1,1-DCE PCLE Zone (Eastern Plume)

As previously stated, groundwater assessment activities also revealed a second chlorinated ethene plume consisting primarily of 1,1-DCE that has adversely impacted groundwater beneath the eastern portion of the designated property (eastern plume). The eastern plume also contains low concentrations of 1,1-DCA that are not exceeding the TRRP Tier 1 Groundwater Ingestion PCL. Constituents associated with the eastern plume were detected in groundwater sampled from ESA Specialists temporary monitoring wells TMW-1 through TMW-3 in 2006, SKA temporary monitoring wells TMW-5 and TMW-6 in 2014, and permanent monitoring wells MW-5, MW-6, MW-7, MW-8, and MW-9 (**Figure C.7** and **Table G.2**). However, the September 2015 groundwater sampling results indicate that only 1,1-DCE concentrations in monitoring wells MW-5, MW-7, and MW-8 are above the TRRP Tier 1 Groundwater Ingestion PCL.

Based on the groundwater flow direction to the southeast, decreasing groundwater contaminant concentrations towards the southeast and higher historical 1,1-DCE concentrations from the ESA Specialists temporary monitoring wells from 2006 (presented in **Table G.2**), the source of chlorinated ethene impacts identified in groundwater beneath the eastern portion of the designated property may originate from a former on-site source on Tract 2 (i.e. sanitary sewer sample well) and/or another former on-site source on Tract 3.

The 1,1-DCE concentrations in groundwater sampled from monitoring wells MW-5 through MW-9 indicate that the eastern plume is stable to decreasing. A concentration of 1,1-DCE slightly above the Groundwater Ingestion PCL was detected at monitoring well MW-8 in May and September 2015 (at 0.00837 and 0.00878 mg/L); however, 1,1-DCE concentrations in monitoring well MW-8 were previously detected slightly below the PCL (0.0064 mg/L). This data suggests that 1,1-DCE concentrations in MW-8 are fluctuating at the Groundwater Ingestion PCL, and monitoring well MW-8 is located at the eastern extent of the eastern plume. Concentrations of 1,1-DCE in the shallow GWBU are not expected to increase, as no sources of chlorinated ethenes are currently present on-site. The eastern plume is delineated to the north

by monitoring well MW-6; to the west by temporary monitoring wells TMW-3 and TMW-4; and to the southeast, in a downgradient direction, by monitoring well MW-9, as shown in **Figure C.6D**. Therefore, the eastern plume is delineated.

TABLE G.1
SOIL DATA SUMMARY
CITY OF HOUSTON MUNICIPAL SETTING DESIGNATION
± 6.9-ACRE WEST 12TH STREET PROPERTY
3480-3484 (EVENS) WEST 12TH STREET
HOUSTON, HARRIS COUNTY, TEXAS
SWR ID NO. T3205

Sample Name	Sample Depth (ft-bgs)	Sample Date	VOCs				BTEX	TOTAL PETROLEUM HYDROCARBONS (TPH)				PCBs	METALS							CHLORIDE	pH
			Methyl tert-butyl ether Method 8260B mg/Kg	Naphthalene Method 8260B mg/Kg	n-Propylbenzene Method 8260B mg/Kg	1,2,4-Trimethylbenzene Method 8260B mg/Kg	BTEX 8021B mg/Kg	C6 - C12 TX 1005 mg/Kg	C12 - C28 TX 1005 mg/Kg	C28 - C35 TX 1005 mg/Kg	TOTAL TPH TX 1005 mg/Kg	PCB 1254 8082 mg/Kg	Arsenic (As) 6020 mg/Kg	Barium (Ba) 6020 mg/Kg	Cadmium (Cd) 6020 mg/Kg	Chromium (Cr) 6020 mg/Kg	Lead (Pb) 6020 mg/Kg	Selenium (Se) 6020 mg/Kg	Silver (Ag) 6020 mg/Kg	Mercury (Hg) 7471 mg/Kg	Chloride 9056 mg/Kg
TEMPORARY MONITORING WELLS (ESA)																					
TMW-1	27	10/27/06	0.0086	<0.0014	<0.0014	<0.0013	-	<7.8	<3.5	<3.5	<3.5	-	-	-	-	-	-	-	-	-	
TMW-2	2	10/27/06	<0.0019	<0.0016	<0.0014	<0.0014	-	<8.1	<3.6	<3.6	<3.6	-	-	-	-	-	-	-	-	-	
TMW-3	7	10/27/06	<0.0016	<0.0013	<0.0012	<0.0012	-	<7.2	<3.2	<3.2	<3.2	-	-	-	-	-	-	-	-	-	
TEMPORARY MONITORING WELLS (SKA)																					
TMW-2	0-1	10/16/14	-	-	-	-	-	<19	<19	<19	<19	-	2.3	37	<0.20	13	24	2.3	<0.39	0.035	77
	1-2	10/16/14	-	-	-	-	-	<18	<18	<18	<18	-	1.5	31	<0.19	11	5.7	1.8	<0.37	0.013 J	130
TMW-3	8-10	10/16/14	0.0037 J	<0.0064	<0.0013	<0.0013	-	<19	<19	<19	<19	-	-	-	-	-	-	-	-	-	
	24-26	10/16/14	0.0062	<0.0058	<0.0012	<0.0012	-	<18	<18	<18	<18	-	-	-	-	-	-	-	-	-	
TMW-4	20.5-22.5	10/14/14	0.0037 J	<0.0060	<0.0012	<0.0012	-	<18	<18	<18	<18	-	-	-	-	-	-	-	-	-	
	28-30	10/14/14	0.0036 J	<0.0060	<0.0012	<0.0012	-	<18	<18	<18	<18	-	-	-	-	-	-	-	-	-	
TMW-5	18-20	10/14/14	<0.0013	<0.0058	<0.0012	<0.0012	-	<17	<17	<17	<17	-	-	-	-	-	-	-	-	-	
	24-26	10/14/14	<0.0013	<0.0059	<0.0012	<0.0012	-	<18	<18	<18	<18	-	-	-	-	-	-	-	-	-	
TMW-6	8-10	10/14/14	<0.0014	<0.0063	<0.0013	<0.0013	-	<19	<19	<19	<19	-	-	-	-	-	-	-	-	-	
	24-26	10/14/14	<0.0013	<0.0061	<0.0012	<0.0012	-	<18	<18	<18	<18	-	-	-	-	-	-	-	-	-	
SOIL BORINGS (ESA)																					
SB-1	2	10/27/06	<0.0017	<0.0014	<0.0013	<0.0013	-	<7.2	<3.2	<3.2	<3.2	-	-	-	-	-	-	-	-	-	
SB-2	7	10/27/06	<0.0018	<0.0015	<0.0013	<0.0013	-	<7.6	<3.4	<3.4	<3.4	-	-	-	-	-	-	-	-	-	
SOIL BORINGS (SKA)																					
SB-1A	0-1.5	10/15/14	-	-	-	-	ND	<17	<17	<17	<17	<0.0047	1.1	88	<0.18	14	7.2	1.2	<0.35	0.020 J	90
SB-1C	0-2	10/15/14	-	-	-	-	ND	<17	<17	<17	<17	<0.0047	4.1	41	0.25 J	14	11	3.3	<0.36	0.015 J	81
SB-2	0-1	10/15/14	-	-	-	-	-	<17	<17	<17	<17	0.041	10	79	0.51 J	18	78	1.8	<0.35	0.025	-
	1-2	10/15/14	-	-	-	-	-	-	-	-	-	-	18	-	-	-	4.9 B	-	-	-	
	2-3	10/15/14	-	-	-	-	-	-	-	-	-	<0.82	-	-	-	-	-	-	-	-	
SB-3	0-1	10/15/14	-	-	-	-	-	<18	<18	<18	<18	<0.0047	2.6	84 J5J3	<0.20	12	12	2.1	<0.38	0.023 J	-
	2-3	10/15/14	<0.0014	<0.0062	<0.0012	<0.0012	-	<19	<19	<19	<19	-	-	-	-	-	-	-	-	-	
SB-4	0-1	10/15/14	-	-	-	-	-	<18	<18	<18	<18	<0.0047	3.7	24	0.37 J	11	35	1.3	<0.36	0.019 J	-
	1-2	10/15/14	-	-	-	-	-	-	-	-	-	-	-	-	-	2.5 B	-	-	-	-	
SB-5	0-1	10/15/14	-	-	-	-	-	<17	<17	<17	<17	<0.0047	2.8	13	<0.18	5.9	5.4	1.6	<0.36	0.016 J	-
SB-6	0-1	10/15/14	-	-	-	-	-	<16	<16	<16	<16	<0.0047	2.8	25	0.21 J	7.5	44	0.77J	<0.32	0.0090 J	-
	1-2	10/15/14	-	-	-	-	-	-	-	-	-	-	-	-	-	4.0 B	-	-	-	-	
SB-7	0-1	10/15/14	-	-	-	-	-	<18	<18	<18	<18	<0.0047	4.8	22	<0.20	5.4	7.5	1.2	<0.38	0.020 J	-
SB-8	0-1	10/15/14	-	-	-	-	-	<17	<17	<17	<17	<0.0047	1.6	18	<0.18	5.0	3.9	1.2	<0.34	0.016 J	-
SB-9	0-1	10/15/14	-	-	-	-	-	<18	<18	<18	<18	<0.0047	1.1 J	54	<0.19	7.3	6.0	1.6	<0.36	0.010 J	-
REGULATORY STANDARDS																					
TCEQ TRRP Tier 1 ^{Soil} Residential Soil PCLs (0.5-Acre Source Area)			800	220	2,200	150	--	1,600	2,300	2,300	--	1.1	24	8,100	52	33,000	500	310	97	3.6	--
TCEQ TRRP Tier 1 ^{Soil} Residential Soil PCLs (0.5-Acre Source Area)			0.62	31	45	49	--	65	200	200	--	11	5.0	440	1.5	2,400	3.0	2.3	0.48	0.0078	--
TCEQ TRRP Tier 2 ^{Soil} Residential Soil PCLs (0.5-Acre Source Area)			--	--	--	--	--	--	--	--	--	--	43.5	--	--	--	549	8.7	--	--	--
TCEQ TRRP Tier 1 ^{Soil} Residential Soil PCLs (0.5-Acre Source Area)			1,400	270	6,300	160	--	3,100	15,000	15,000	--	54	--	--	--	--	--	--	--	16	--
TCEQ Texas-Specific Background Concentrations 30 TAC 350.51(m)			--	--	--	--	--	--	--	--	--	--	5.9	300	--	30	15	0.3	--	0.04	--
TCEQ Petroleum Storage Tank (PST) Action Levels			2.56	99.7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Railroad Commission of Texas Proposed Screening Level			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3,000

Notes:

"-" represents not applicable.
 "--" represents not analyzed.
 "mg/Kg" represents milligrams per kilogram.
 "mg/L" represents milligrams per liter.
 "ft-bgs" represents feet below ground surface.
 "VOCs" represents Volatile Organic Compounds.
 "TCEQ" represents Texas Commission on Environmental Quality.
 "TRRP" represents Texas Risk Reduction Program.
 "PCLs" represents Protective Concentration Levels.

"<0.065" indicates the analyte was not detected by the laboratory at or above the reported laboratory sample detection limit (SDL).
 "J" indicates a laboratory qualifier for an estimated value detected below the method quantitation limit (MQL).
 "ND" indicates the analytes were not detected by the laboratory at or above the reported SDL.
 "B" indicates that the compound was found in the method blank as well as the laboratory sample; results are estimated with a bias likely to be high.
 Bold concentrations represent a detectable concentration above the laboratory SDL.
 Only VOC, BTEX, and PCB constituents with at least one concentration above the SDL are shown on this table.
 TCEQ TRRP Tier 1 Residential PCLs (30 TAC 350) Table 1: Tier 1 Residential PCLs - Updated: November 12, 2014.
 "BTEX" represents benzene, toluene, ethylbenzene, and xylene.
 "PCBs" represents polychlorinated biphenyls.
 TCEQ PST Program Action and Screening Levels Table 1: TCEQ Regulatory Guidance document RG-411, dated August 2011.

TABLE G.1
SOIL DATA SUMMARY
CITY OF HOUSTON MUNICIPAL SETTING DESIGNATION
± 6.9-ACRE WEST 12TH STREET PROPERTY
3480-3484 (EVENS) WEST 12TH STREET
HOUSTON, HARRIS COUNTY, TEXAS

Sample Name	Sample Depth (ft-bgs)	Sample Date	VOCs				BTEX	TOTAL PETROLEUM HYDROCARBONS (TPH)				PCBs	METALS							CHLORIDE	pH	
			Methyl tert-butyl ether	Naphthalene	n-Propylbenzene	1,2,4-Trimethylbenzene	BTEX	C6 - C12	C12 - C28	C28 - C35	TOTAL TPH	PCB 1254	Arsenic (As)	Barium (Ba)	Cadmium (Cd)	Chromium (Cr)	Lead (Pb)	Selenium (Se)	Silver (Ag)	Mercury (Hg)	Chloride	pH
			Method 8260B mg/Kg	Method 8260B mg/Kg	Method 8260B mg/Kg	Method 8260B mg/Kg	8021B mg/Kg	TX 1005 mg/Kg	TX 1005 mg/Kg	TX 1005 mg/Kg	TX 1005 mg/Kg	8082 mg/Kg	6020 mg/Kg	7471 mg/Kg	9056 mg/Kg	9045D su						
PERMANENT MONITORING WELLS																						
MW-1	2-3	1/30/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	22.5-25	1/30/15	<0.0013	<0.0061	<0.0012	<0.0012	-	<18	<18	<18	<18	-	-	-	-	-	-	-	-	-	-	
	53-54	1/30/15	<0.0014	<0.0062	<0.0012	<0.0012	-	<18	<18	<18	<18	-	-	-	-	-	-	-	-	-	-	
MW-2	6-7	1/29/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	26.5-27.5	1/29/15	<0.0014	<0.0065	<0.0013	<0.0013	-	<19	<19	<19	<19	-	-	-	-	-	-	-	-	-	-	
	54-55	1/29/15	<0.0014	<0.0066	<0.0013	<0.0013	-	<20	<20	<20	<20	-	-	-	-	-	-	-	-	-	-	
MW-3	10-11	1/25/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	29-30	1/25/15	<0.0014	<0.0062	<0.0012	0.0034 J	-	<19	<19	<19	<19	-	-	-	-	-	-	-	-	-	-	
	51-53	1/25/15	<0.0014	<0.0062	<0.0012	<0.0012	-	<18	<18	<18	<18	-	-	-	-	-	-	-	-	-	-	
MW-4	5-6	1/29/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	29-30	1/29/15	<0.0014	<0.0062	<0.0012	<0.0012	-	<19	<19	<19	<19	-	-	-	-	-	-	-	-	-	-	
	53-54	1/29/15	<0.0014	<0.0064	<0.0013	<0.0013	-	<19	<19	<19	<19	-	-	-	-	-	-	-	-	-	-	
MW-5	9-10	1/27/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	26-27	1/27/15	<0.0013	<0.0060	<0.0012	<0.0012	-	<18	<18	<18	<18	-	-	-	-	-	-	-	-	-	-	
	56.5-57.5	1/27/15	<0.0014	<0.0066	<0.0013	<0.0013	-	<20	<20	<20	<20	-	-	-	-	-	-	-	-	-	-	
MW-6	4-5	1/28/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	29-30	1/28/15	<0.0015	<0.0068	<0.0014	<0.0014	-	<20	<20	<20	<20	-	-	-	-	-	-	-	-	-	-	
	56-57	1/28/15	<0.0014	<0.0064	<0.0013	<0.0013	-	<19	<19	<19	<19	-	-	-	-	-	-	-	-	-	-	
MW-7	4-5	1/27/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	12-14	1/27/15	<0.0012	<0.0057	<0.0011	<0.0011	-	<17	<17	<17	<17	-	-	-	-	-	-	-	-	-	-	
	24-25	1/27/15	<0.0013	<0.0060	<0.0012	<0.0012	-	<18	<18	<18	<18	-	-	-	-	-	-	-	-	-	-	
MW-8	2-3	1/28/15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	26-27	1/28/15	<0.0013	<0.0059	<0.0012	<0.0012	-	<18	<18	<18	<18	-	-	-	-	-	-	-	-	-	-	
	71.5-72.5	1/28/15	<0.0015	0.0090 J	0.0030 J	<0.0013	-	<20	<20	<20	<20	-	-	-	-	-	-	-	-	-	-	
TCEQ TRRP Tier 1 ^{Soil} Residential Soil PCLs (0.5-Acre Source Area)			800	220	2,200	150	--	1,600	2,300	2,300	--	1.1	24	8,100	52	33,000	500	310	97	3.6	--	--
TCEQ TRRP Tier 1 ^{Soil} Residential Soil PCLs (0.5-Acre Source Area)			0.62	31	45	49	--	65	200	200	--	11	5.0	440	1.5	2,400	3.0	2.3	0.48	0.0078	--	--
TCEQ TRRP Tier 2 ^{Soil} Residential Soil PCLs (0.5-Acre Source Area)			--	--	--	--	--	--	--	--	--	43.5	--	--	--	549	8.7	--	--	--	--	
TCEQ TRRP Tier 1 ^{Soil} Residential Soil PCLs (0.5-Acre Source Area)			1,400	270	6,300	160	--	3,100	15,000	15,000	--	54	--	--	--	--	--	--	--	16	--	--
TCEQ Texas-Specific Background Concentrations 30 TAC 350.51(m)			--	--	--	--	--	--	--	--	--	5.9	300	--	30	15	0.3	--	0.04	--	--	
TCEQ Petroleum Storage Tank (PST) Action Levels			2.56	99.7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Railroad Commission of Texas Proposed Screening Level			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3,000	--	

Notes:

"-" represents not applicable.
 "--" represents not analyzed.
 "mg/Kg" represents milligrams per kilogram.
 "ft-bgs" represents feet below ground surface.
 "VOCs" represents Volatile Organic Compounds.
 "BTEX" represents benzene, toluene, ethylbenzene, and xylene.
 "PCBs" represents polychlorinated biphenyls.
 "TCEQ" represents Texas Commission on Environmental Quality.
 "TRRP" represents Texas Risk Reduction Program.
 "PCLs" represents Protective Concentration Levels.

"<0.065" indicates the analyte was not detected by the laboratory at or above the reported laboratory sample detection limit (SDL).
 "J" indicates a laboratory qualifier for an estimated value detected below the method quantitation limit (MQL).
 "T" indicates that the sample was analyzed past the holding time expiration (two days); results are estimated with a bias likely to be low.
 "ND" indicates the analytes were not detected by the laboratory at or above the reported SDL.
 "B" indicates that the compound was found in the method blank as well as the laboratory sample; results are estimated with a bias likely to be high.
 Bold concentrations represent a detectable concentration above the laboratory SDL.
 Concentrations in bold and highlighted yellow exhibit a concentration in excess of the laboratory SDL and the TRRP Tier 1 Residential PCL.
 Only VOC, BTEX, and PCB constituents with at least one concentration above the SDL are shown on this table.
 TCEQ TRRP Tier 1 Residential PCLs (30 TAC 350) Table 1: Tier 1 Residential PCLs - Updated: November 12, 2014.
 TCEQ PST Program Action and Screening Levels Table 1: TCEQ Regulatory Guidance document RG-411, dated August 2011.

**TABLE G.2
GROUNDWATER DATA SUMMARY - ORGANICS
CITY OF HOUSTON MUNICIPAL SETTING DESIGNATION
± 6.9-ACRE WEST 12TH STREET PROPERTY
3480-3484 (EVENS) WEST 12TH STREET
HOUSTON, HARRIS COUNTY, TEXAS
SWR ID NO. T3205**

Sample Name	Location	Sample Date	VOCS									TOTAL PETROLEUM HYDROCARBONS (TPH)			
			Chloroform	1,1-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl chloride	Methyl tert-butyl ether (MTBE)	C6 - C12	C12 - C28	C28 - C35	TOTAL TPH
			Method 8260B mg/L	Method 8260B mg/L	Method 8260B mg/L	Method 8260B mg/L	Method 8260B mg/L	Method 8260B mg/L	Method 8260B mg/L	Method 8260B mg/L	Method 8260B mg/L	TX 1005 mg/L	TX 1005 mg/L	TX 1005 mg/L	TX 1005 mg/L
ESA TEMPORARY MONITORING WELLS (2008)															
TMW-1	Tract 3	10/27/06	<0.00066	0.0127	0.0045	<0.00083	<0.00075	<0.00074	<0.00063	<0.00032	0.107	<0.66	<0.31	<0.31	-
TMW-2	Tract 3	10/27/06	<0.00066	0.0015 J	0.0043	<0.00083	<0.00075	<0.00074	<0.00063	<0.00032	<0.00045	<0.67	<0.31	<0.31	-
TMW-3	Tract 3	10/27/06	<0.00066	0.0022	0.0282	<0.00083	<0.00075	<0.00074	<0.00063	<0.00032	<0.00045	<0.67	<0.31	<0.31	-
SKA TEMPORARY MONITORING WELLS (2014)															
TMW-1	Tract 1	10/17/14	<0.00032	0.055	0.0050	0.029	0.0050	<0.00037	0.12	0.0012	<0.00037	<0.60	<0.60	<0.60	<0.60
TMW-2	Tract 1	10/17/14	<0.00032	<0.00026	<0.00040	0.0090	0.00064 J	<0.00037	0.0048	<0.00026	<0.00037	<0.60	<0.60	<0.60	<0.60
TMW-3	Tract 1	10/17/14	<0.00032	<0.00026	<0.00040	<0.00026	<0.00040	<0.00037	<0.00040	<0.00026	0.21	<0.60	<0.60	<0.60	<0.60
TMW-4	Tract 2	10/17/14	<0.0016	<0.0013	<0.0020	<0.0013	<0.0020	<0.0019	<0.0020	<0.0013	2.7	<0.60	<0.60	<0.60	<0.60
TMW-5	Tract 3	10/17/14	<0.00032	0.00046 J	0.0035	<0.00026	<0.00040	<0.00037	<0.00040	<0.00026	<0.00037	<0.60	<0.60	<0.60	<0.60
TMW-6	Tract 3	10/17/14	<0.00032	0.0026	0.0090	<0.00026	<0.00040	<0.00037	<0.00040	<0.00026	<0.00037	<0.60	<0.60	<0.60	<0.60
SKA PERMANENT MONITORING WELLS (2015)															
MW-1	Tract 1	2/2/15	<0.00032	0.0057	0.0023	0.062	0.017	<0.00037	0.47	0.00044 J	0.00071 J	<0.60	<0.60	<0.60	<0.60
		5/28/15	<0.00320	0.00593 J	<0.00400	0.0592	0.0159	<0.00370	0.374	<0.00260	<0.00370	<0.600	<0.600	<0.600	<0.600
		9/1/15	<0.000324	0.00463 J	<0.00398	0.0556	0.0133	<0.00372	0.348	<0.00259	<0.00367	-	-	-	-
MW-2	Tract 1	2/2/15	<0.00032	0.014	0.00076 J	0.0024	<0.00040	<0.00037	0.0035	<0.00026	<0.00037	<0.60	<0.60	<0.60	<0.60
		5/28/15	<0.000320	0.0155	0.00114	0.00293	<0.000400	<0.000370	0.00640	0.000479 J	<0.000370	<0.600	<0.600	<0.600	<0.600
		8/31/15	<0.000324	0.0144	0.0010	0.00265	<0.000396	<0.000372	0.00534	<0.000259	0.000519 J	-	-	-	-
MW-3	Tract 1	1/29/15	0.00056 J	0.00059 J	<0.00040	0.0043	0.0011	0.0018	0.021	<0.00026	<0.00037	<0.60	<0.60	<0.60	<0.60
		5/28/15	<0.000320	<0.000260	<0.000400	0.00338	0.000978 J	0.000781 J	0.0166	<0.000260	<0.000370	<0.600	<0.600	<0.600	<0.600
		9/1/15	<0.000324	<0.000259	<0.000398	0.00309	0.000933 J	<0.000372	0.0117	<0.000259	<0.000367	-	-	-	-
MW-4	Tract 1	2/2/15	<0.00032	0.026	0.0016	0.00084 J	<0.00040	<0.00037	0.0036	<0.00026	<0.00037	<0.60	<0.60	<0.60	<0.60
		5/28/15	<0.000320	0.0399	0.00248	0.00128	<0.000400	<0.000370	0.00567	<0.000260	<0.000370	<0.600	<0.600	<0.600	<0.600
		9/1/15	<0.000324	0.0324	0.00167	0.00116	<0.000396	<0.000372	0.00447	<0.000259	<0.000367	-	-	-	-
MW-5	Tract 3	1/30/15	0.00041 J	0.0019	0.022	0.00034 J	<0.00040	<0.00037	<0.00040	<0.00026	<0.00037	<0.60	<0.60	<0.60	<0.60
		5/28/15	<0.000320	0.00214	0.0253	0.000402 J	<0.000400	<0.000370	<0.000400	<0.000260	<0.000370	<0.600	<0.600	<0.600	<0.600
		8/31/15	<0.000324	0.00187	0.0188	0.000389 J	<0.000396	<0.000372	<0.000398	<0.000259	<0.000367	-	-	-	-
MW-6	Tract 3	2/2/15	<0.00032	0.00060 J	<0.00040	<0.00026	<0.00040	<0.00037	<0.00040	<0.00026	<0.00037	<0.60	<0.60	<0.60	<0.60
		5/27/15	<0.000320	0.00177	0.000600 J	<0.000260	<0.000400	<0.000370	<0.000400	<0.000260	<0.000370	<0.600	<0.600	<0.600	<0.600
		9/1/15	<0.000324	0.00100	0.000451 J	<0.000260	<0.000396	<0.000372	<0.000398	<0.000259	<0.000367	-	-	-	-
MW-7	Tract 3	2/2/15	<0.00032	0.0012	0.015	<0.00026	<0.00040	<0.00037	<0.00040	<0.00026	0.0019	<0.60	<0.60	<0.60	<0.60
		5/27/15	<0.000320	0.00126	0.0152	<0.000260	<0.000400	<0.000370	<0.000400	<0.000260	<0.000370	<0.600	<0.600	<0.600	<0.600
		9/1/15	<0.000324	0.00110	0.0128	<0.000260	<0.000396	<0.000372	<0.000398	<0.000259	<0.000367	-	-	-	-
MW-8	Tract 3	2/2/15	<0.00032	0.0032	0.0064	<0.00026	<0.00040	<0.00037	<0.00040	<0.00026	<0.00037	<0.60	<0.60	<0.60	<0.60
		5/27/15	<0.000320	0.00357	0.00837	<0.000260	<0.000400	<0.000370	<0.000400	<0.000260	<0.000370	<0.600	<0.600	<0.600	<0.600
		9/1/15	<0.000324	0.00401	0.00878	<0.000260	<0.000396	<0.000372	<0.000398	<0.000259	<0.000367	-	-	-	-
MW-9	offsite	4/30/15	0.00139 J	<0.000260	<0.000400	<0.000260	<0.000400	<0.000370	<0.000400	<0.000260	<0.000370	-	-	-	-
		9/1/15	<0.000324	0.000331 J	0.000399 J	<0.00026	<0.000396	<0.000372	<0.000398	<0.000259	<0.000367	-	-	-	-
REGULATORY STANDARDS															
TCEQ TRRP Tier 1 ^{GW} GW _{ing} Residential Groundwater PCLs			0.24	4.9	0.007	0.07	0.1	0.005	0.005	0.002	0.24	0.98	0.98	0.98	--
TCEQ TRRP Tier 1 ^{Air} GW _{inh-v} Residential Groundwater PCLs (0.5-Acre Source Area)			20	43,000	1,700	1,200	770	500	24	3.8	4,000	1,800	7,500	7,500	--
TCEQ Petroleum Storage Tank (PST) Action Levels			--	--	--	--	--	--	--	--	0.24	--	--	--	--

Notes:

"-" represents not analyzed.
 "--" represents not applicable.
 "mg/L" represents milligrams per liter.
 "VOCs" represents Volatile Organic Compounds.
 "ND" represents not detected above the sample quantitation limits.
 "TCEQ" represents Texas Commission on Environmental Quality.
 "TRRP" represents Texas Risk Reduction Program.
 Only VOC constituents with at least one concentration above the SDL are shown on this table.

"PCLs" represents Protective Concentration Levels.
 "<0.60" indicates the analyte was not detected by the laboratory at or above the reported laboratory Sample Detection Limit (SDL).
 "J" indicates a laboratory qualifier for an estimated value detected below the method quantitation limit (MQL).
 Bold concentrations represent a detectable concentration above the laboratory SDL.
 Bold concentration highlighted yellow indicate an exceedance above a regulatory standard.
 TCEQ TRRP Tier 1 Residential PCLs (30 TAC 350) Table 3: Tier 1 Residential PCLs - Updated: November 12, 2014.
 TCEQ PST Program Action and Screening Levels Table 1: TCEQ Regulatory Guidance document RG-411, dated August 2011.

**TABLE G.2
GROUNDWATER DATA SUMMARY -INORGANICS
CITY OF HOUSTON MUNICIPAL SETTING DESIGNATION
± 6.9-ACRE WEST 12TH STREET PROPERTY
3080-3084 (EVENS) WEST 12TH STREET
HOUSTON, HARRIS COUNTY, TEXAS
SWR ID NO. T3205**

Sample Name	Location	Sample Date	METALS							SOLIDS	CHLORIDE	pH		
			Arsenic	Barium	Cadmium	Chromium	Lead	Selenium	Silver	Mercury	Dissolved Solids	Chloride	pH	
			Method 6010B mg/L	Method 7470A mg/L	Method 2540C mg/L	Method 9056 mg/L	Method 9040C su							
ESA TEMPORARY MONITORING WELLS (2006)														
TMW-1	Tract 3	10/27/06	-	-	-	-	-	-	-	-	-	-	-	
TMW-2	Tract 3	10/27/06	-	-	-	-	-	-	-	-	-	-	-	
TMW-3	Tract 3	10/27/06	-	-	-	-	-	-	-	-	-	-	-	
SKA TEMPORARY MONITORING WELLS (2014)														
TMW-1	Tract 1	10/17/14	-	-	-	-	-	-	-	-	-	-	-	
TMW-2	Tract 1	10/17/14	0.00094 J	0.14	<0.00016	0.00094J	0.00029J	0.0040	<0.00031	<0.000049	-	72	-	
TMW-3	Tract 1	10/17/14	-	-	-	-	-	-	-	-	-	-	-	
TMW-4	Tract 2	10/17/14	-	-	-	-	-	-	-	-	-	-	-	
TMW-5	Tract 3	10/17/14	-	-	-	-	-	-	-	-	-	-	-	
TMW-6	Tract 3	10/17/14	-	-	-	-	-	-	-	-	-	-	-	
SKA PERMANENT MONITORING WELLS (2015)														
MW-1	Tract 1	2/2/15	0.0025	0.69	<0.00070	<0.0014	<0.0019	<0.0074	<0.0028	<0.000049	-	-	-	
		5/28/15	-	-	-	-	-	-	-	-	-	936	-	6.40
		9/1/15	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	Tract 1	2/2/15	0.0021	0.68	<0.00070	<0.0014	<0.0019	<0.0074	<0.0028	<0.000049	-	-	-	
		5/28/15	-	-	-	-	-	-	-	-	-	-	-	
		8/31/15	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	Tract 1	1/29/15	<0.0065	0.21	<0.00070	<0.0014	<0.0019	0.013 J	<0.0028	<0.000049	750	-	6.9	
		5/28/15	-	-	-	-	-	-	-	-	-	-	-	
		9/1/15	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	Tract 1	2/2/15	0.0019 J	0.77	<0.00070	<0.0014	<0.0019	<0.0074	<0.0028	<0.000049	-	-	6.9	
		5/28/15	-	-	-	-	-	-	-	-	-	-	-	
		9/1/15	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	Tract 3	1/30/15	<0.0065	0.45	<0.00070	<0.0014	<0.0019	0.013 J	<0.0028	<0.000049	770	-	6.9	
		5/28/15	-	-	-	-	-	-	-	-	-	-	-	
		8/31/15	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	Tract 3	2/2/15	0.0022	0.65	<0.00070	<0.0014	<0.0019	<0.0074	<0.0028	<0.000049	-	-	7.0	
		5/17/15	-	-	-	-	-	-	-	-	-	-	-	
		9/1/15	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	Tract 3	2/2/15	0.0021	0.40	<0.00070	0.0028 J	<0.0019	0.0095 J	<0.0028	0.00011 J	870	-	7.0	
		5/27/15	-	-	-	-	-	-	-	-	-	-	-	
		9/1/15	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	Tract 3	2/2/15	0.0019 J	0.67	<0.00070	<0.0014	<0.0019	0.0091 J	<0.0028	<0.000049	-	-	-	
		5/27/15	-	-	-	-	-	-	-	-	-	-	-	
		9/1/15	-	-	-	-	-	-	-	-	-	-	-	-
MW-9	offsite	4/30/15	-	-	-	-	-	-	-	-	-	-	-	
		9/1/15	-	-	-	-	-	-	-	-	-	-	-	
REGULATORY STANDARDS														
TCEQ TRRP Tier 1 ^{GW} GW _{ing} Residential Groundwater PCLs			0.010	2.0	0.005	0.1	0.015	0.05	0.12	0.002	--	--	--	
TCEQ TRRP Tier 1 ^{Air} GW _{inh-v} Residential Groundwater PCLs (0.5-Acre Source Area)			--	--	--	--	--	--	--	7.3	--	--	--	
Railroad Commission of Texas Proposed Screening Level			--	--	--	--	--	--	--	--	--	250	--	

Notes:

"-" represents not analyzed.
 "--" represents not applicable.
 "mg/L" represents milligrams per liter.
 "TCEQ" represents Texas Commission on Environmental Quality.
 "TRRP" represents Texas Risk Reduction Program.
 Note: metals in TMW-2 analyzed utilizing EPA Method 6020.

"PCLs" represents Protective Concentration Levels.
 "<0.60" indicates the analyte was not detected by the laboratory at or above the reported laboratory Sample Detection Limit (SDL).
 "J" indicates a laboratory qualifier for an estimated value detected below the method quantitation limit (MQL).
 Bold concentrations represent a detectable concentration above the laboratory SDL.
 Bold concentration highlighted yellow indicate an exceedance above a regulatory standard.
 TCEQ TRRP Tier 1 Residential PCLs (30 TAC 350) Table 3: Tier 1 Residential PCLs - Updated: November 12, 2014.