

June 17, 2016

Ms. Cindy Mendez
Environmental Services Manager
City of Grand Prairie
201 NW 2nd Street, Suite 100
Grand Prairie, Texas 75050

RE: Request for Resolution of Support

Heritage Crossing, Tract 9

439 and 501 W. 2nd Street, 416 W. Irving Boulevard, and 127 and 129 O'Connor Road

Irving, Texas

Telephone: (972) 237-8225 Fax: (972) 237-8228

Dear Ms. Mendez:

Terracon Consultants, Inc. (Terracon), on behalf of the City of Irving, is currently pursuing a Municipal Setting Designation (MSD) with the Texas Commission on Environmental Quality (TCEQ) for the Heritage Crossing, Tract 9 property (hereinafter the "site") located at 439 and 501 W. 2nd Street, 416 W. Irving Boulevard, and 127 and 129 O'Connor Road in Irving, Texas. The City of Irving adopted Ordinance No. ORD-2016-9789 on March 31, 2016. The intent of this letter is to request a resolution of support from the City of Grand Prairie, and to provide the City with pertinent information regarding the site and the subject City water wells located within a five-mile radius.

The site is an approximate 2.8095-acre vacant tract. A legal description of the site including a survey plat is included as Attachment 1. An aerial photograph depicting the site and surrounding land uses is included in Attachment 2. The property is in the TCEQ Voluntary Cleanup Program (VCP) and assigned VCP No. 2785.

The purpose of the MSD is to restrict access to and the use of groundwater to protect public health and welfare where the quality of groundwater may present an actual or potential threat to human health.

A property is eligible for an MSD if a public drinking water supply system exists that satisfies the requirements of Texas Health and Safety Code Chapter 341 and that supplies or is capable of supplying drinking water to the property for which the MSD is sought and property within one-half mile of the property for which the MSD is sought. The site meets these criteria.

In May 2008, a Limited Subsurface Assessment was conducted by Resource Environmental Consulting, Inc. (REC), which identified various volatile organic compounds (VOCs), more specifically, trichloroethene (TCE) and tetrachloroethene (PCE), above the Texas Risk Reduction Program (TRRP) Protective Concentration Levels (PCLs) in groundwater. In December 2012, Baer Engineering and Environmental Consulting, Inc. (Baer) conducted a Limited Phase II Environmental Site Assessment (ESA), which also identified TCE and PCE in groundwater above the TRRP PCLs. Additionally, various metals including arsenic, lead, and mercury were identified in soil above the Texas-Specific Background Concentrations (TSBC).

Terracon Consultants, Inc. 8901 John W. Carpenter Freeway, Suite 100 Dallas, Texas 75247 P [214] 630 1010 F [214] 630 7070 terracon.com

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In October 2014, Terracon conducted a Limited Site Investigation (LSI) to collect additional data and assess current conditions at the site. VOCs and metals were not reported above the TRRP PCLs in groundwater.

In summary, PCE detected in groundwater above the TRRP PCL of 0.005 milligrams per liter (mg/L) ranged from 0.00585 milligrams per Liter (mg/L) in monitoring well MW-5 to 0.013 mg/L in probe P-2. TCE detected in groundwater above the TRRP PCL of 0.005 mg/L ranged from 0.0122 mg/L in monitoring well MW-2 to 0.017 mg/L in probe P-2. Maps depicting sampling locations and presumed groundwater flow direction are included in Attachment 2. A summary table of groundwater laboratory analytical results is included in Attachment 3.

The impacted groundwater plume consists of shallow perched groundwater extending to an average depth between 15 and 19 feet below grade surface (bgs). Groundwater flow at the designated property is generally towards the west. Groundwater assessment activities have not been conducted beyond the site boundaries. A soil gas/vapor intrusion risk evaluation was deemed unnecessary based on the relatively low detected concentrations of COCs, depth to groundwater, extent of the plume, and land use.

As part of the MSD application, the applicant is required to obtain support from the governing body of each retail public utility, as defined by Section 13.002, Texas Water Code, that owns or operates a groundwater supply well located not more than five miles from the site. A copy of the City of Irving MSD Ordinance (Ordinance No. ORD-2016-9789) is included as Attachment 4.

Database surveys of water wells within a five mile radius of the site owned by municipal or retail public utilities were conducted by GeoSearch. The results are summarized in report prepared by GeoSearch, including the 5-Mile Municipal Setting Designation (MSD) Report, dated September 14, 2015, and the Water Utility Database (WUD) Report of Groundwater Wells, dated August 28, 2015. The WUD report identified four groundwater supply wells operated by the City of Grand Prairie (CCN No. 10105) located within the five-mile search radius. A copy of the WUD report with a site map depicting the water well locations is included as Attachment 5. The WUD water wells were identified as follows:

Map ID	Well ID	Well Owner Name	Distance/Direction from Site	Water Usage
1	G0570048G	City Of Grand Prairie	2.80 mi West	Active-Seasonal
3	G0570048F	City Of Grand Prairie	3.49 mi Southwest	Active-Seasonal
4	G0570048C	City Of Grand Prairie	4.06 mi South	Active-Seasonal
6	G0570048D	City Of Grand Prairie	4.79 mi Southwest	Active-Seasonal

The MSD report identified 7 additional wells operated by the City of Grand Prairie (CCN No. 10105) located within the five-mile search radius. Due to the size of the MSD report (822 pages), excerpts of the MSD report, including the summary table, site map, and the applicable water well drillers schedules/reports are included as Attachment 6. The MSD water wells were identified as follows:

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Map ID	Well ID	Well Owner Name	Distance/Direction from Site	Water Usage
77	33-09-402	City Of Grand Prairie	2.83 mi West	Unused-Capped
87	TX190259	Grand Prairie Sports Facilities Development Corp	3.09 mi Southwest	Home
97	TX311821	Grand Prairie Sports Facilities Development Corp	3.30 mi Southwest	Industrial
106	33-09-704	City Of Grand Prairie	3.49 mi Southwest	Public Supply
127	33-09-703	City Of Grand Prairie	4.06 mi South	Public Supply
169	TX93100	City Of Grand Prairie	4.69 mi Southwest	Irrigation
173	33-09-701	City Of Grand Prairie	4.79 mi Southwest	Public Supply

Based on review of the well logs, the Grand Prairie water wells 33-09-402, 33-09-704, 33-09-703, and 33-09-701 produce from both the Twin Mountains Formations, part of the Trinity Group. In the site area, the Trinity Group is separated from the shallow perched groundwater in which COCs have been detected by several consecutive limestone, shale, and clay formations that combine to form a regional aguitard. Grand Prairie water wells TX190249, TX311821, and TX93100 produce from the Woodbine Formation. The shallow perched groundwater beneath the site appears to be limited to the contact between the guaternary alluvial terrace deposits and the Eagle Ford Shale. The Eagle Ford Shale occurs at depths ranging from 21 to 26 feet bgs across the site and extends to depths of approximately 220 feet bgs. The Eagle Ford Shale is also considered to be an aquitard, preventing groundwater migration to the underlying Woodbine Formation. The Woodbine Formation further extends to a depth of approximately 400 feet bgs. The Woodbine Formation primarily consists of sandstone with minor interbeds of clay and shale. The Woodbine Group is underlain by the Duck Creek, Fort Worth Limestone, Denton Clay, Weno Limestone, and Pawpaw Formation (collectively known as the Washita Group). In the site area, the Washita Group extends from approximately 400 to 800 feet bgs. The Washita Group is underlain by the Edwards Limestone, Comanche Peak Limestone, Goodland Limestone, and Walnut Shell Conglomerate (collectively known as the Fredericksburg Group), which extend approximately 100 feet beneath the Washita Group and also act as a regional aquitard. The Fredericksburg Group is underlain by the Paluxy Formation, which is a major aquifer in Texas. The Paluxy Formation extends approximately 150 feet beneath the Fredericksburg Group. The Paluxy Formation is then underlain by the Glen Rose Formation which extends approximately 400 feet beneath the Paluxy Formation. The Glen Rose Formation also acts as a regional aquitard. The Glen Rose Formation is then underlain by the Twin Mountains Formation. The City of Grand Prairie wells installed in the Twin Mountain Formation are screened from approximately 1,880 to 2,160 feet bgs. The City of Grand Prairie wells installed in the Woodbine Formation are screened from approximately 180 to 380 feet bgs.

Given the geology and the lateral distance between the site and the identified City of Grand Prairie water wells, it is unlikely that these wells are hydrologically interconnected with the shallow perched groundwater at the site. It is highly unlikely that the presence of COCs in the shallow perched groundwater at the site will affect the water quality of the City of Grand Prairie public supply wells identified within five miles of the site boundary.

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Please note that, as an identified municipal public utility, you may provide written comments on any information relevant to the TCEQ executive director's consideration of the MSD (not later than the 60th day after the date of receipt of this notice) to the following:

Ms. Joanna Manning, VCP-CA Section, Remediation Division, P.O. Box 13087, Austin, TX 78711-3087, (512)-239-3737, joanna.manning@tceq.texas.gov. Please reference VCP No. 2785 in any correspondence or when contacting TCEQ.

Following submittal of the TCEQ MSD application, the responsible executive director at the TCEQ will certify or deny the MSD application or request additional information from the applicant not later than 90 days after receiving the application.

In summary, the City of Irving is requesting a Resolution of Support from the City of Grand Prairie for the Heritage Crossing, Tract 9 MSD discussed herein. Please contact either of the undersigned should you have any questions or require additional information.

Sincerely,

Lance W. Crabtree, P.G. Senior Project Manager

Scott M. Kolodziej, P.G. Department Manager

cc: Mr. Doug Janeway, City of Irving

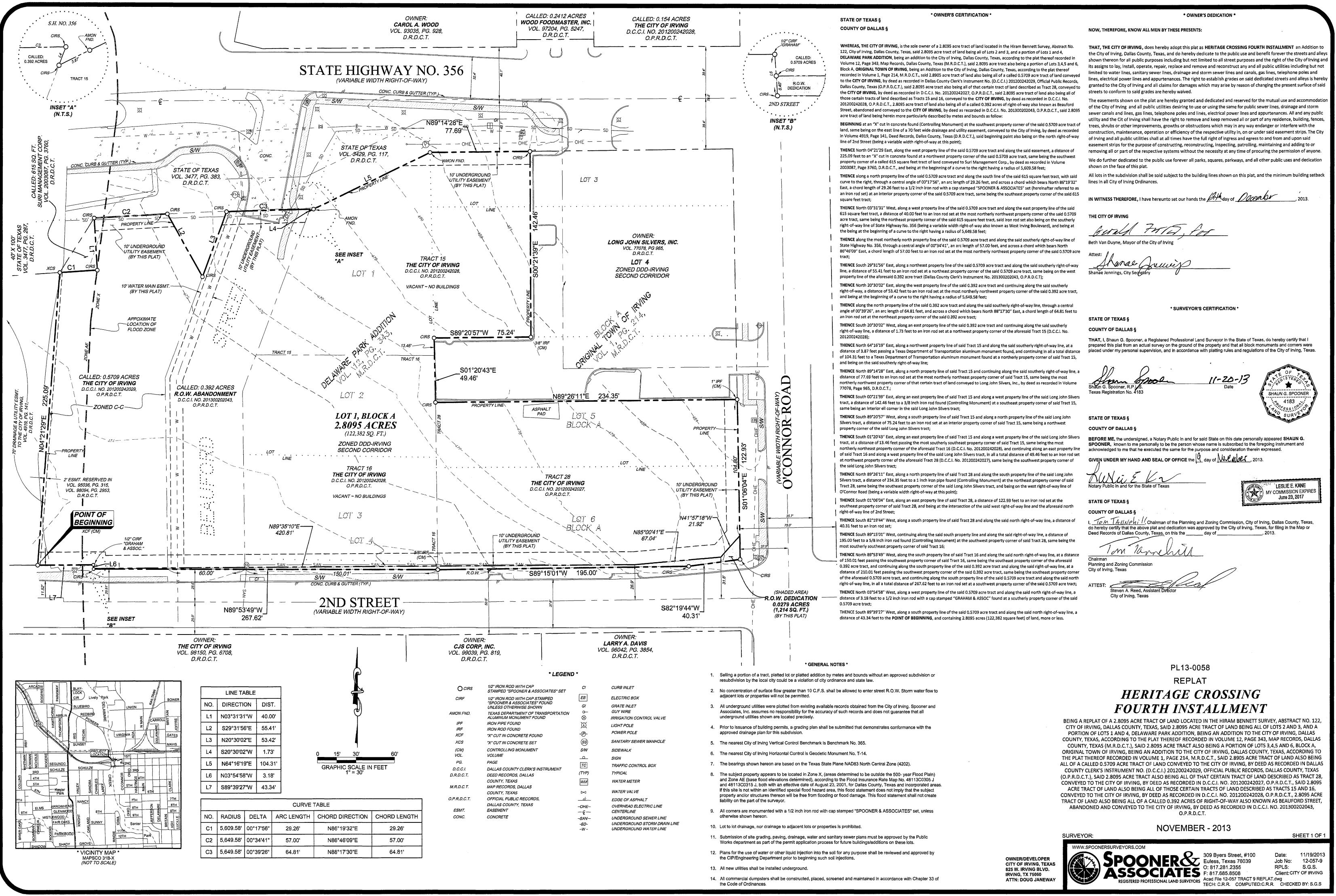
Attachments: Attachment 1 - Legal Description and Survey Plat

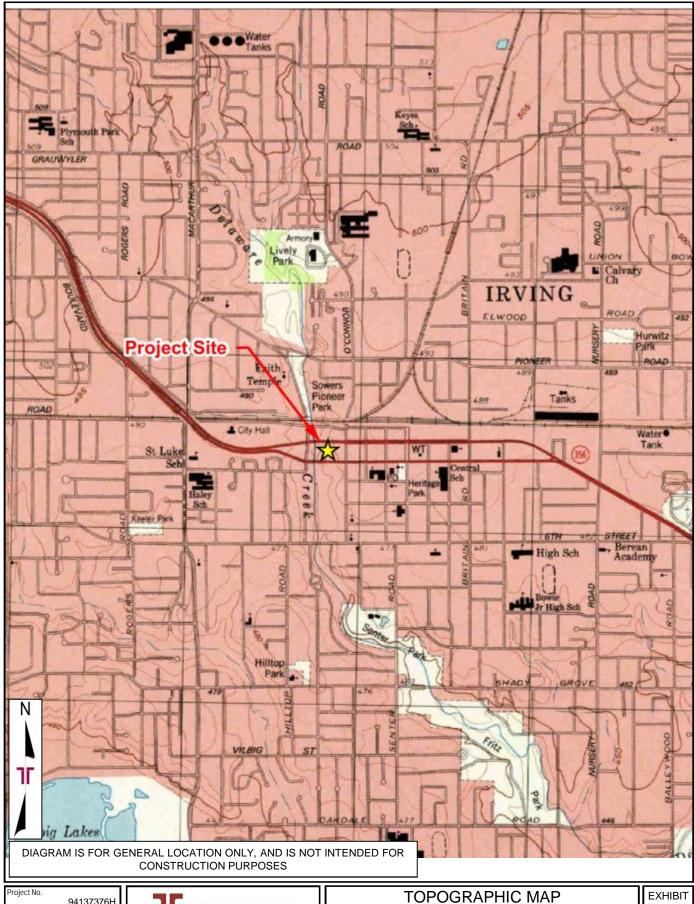
Attachment 2 – Figures Attachment 3 – Table

Attachment 4 - City of Irving MSD Ordinance

Attachment 5 – 5-Mile WUD Report

Attachment 6 - 5-Mile MSD Report Excerpts and Well Schedule/Reports





Project No. 94137376H Scale: 1" ~ 2,000 Quad Name: Irving, Texas Date: 1995

Consulting Engineers & Scientists 8901 Carpenter Freeway, Suite 100 Dallas, Texas 75247

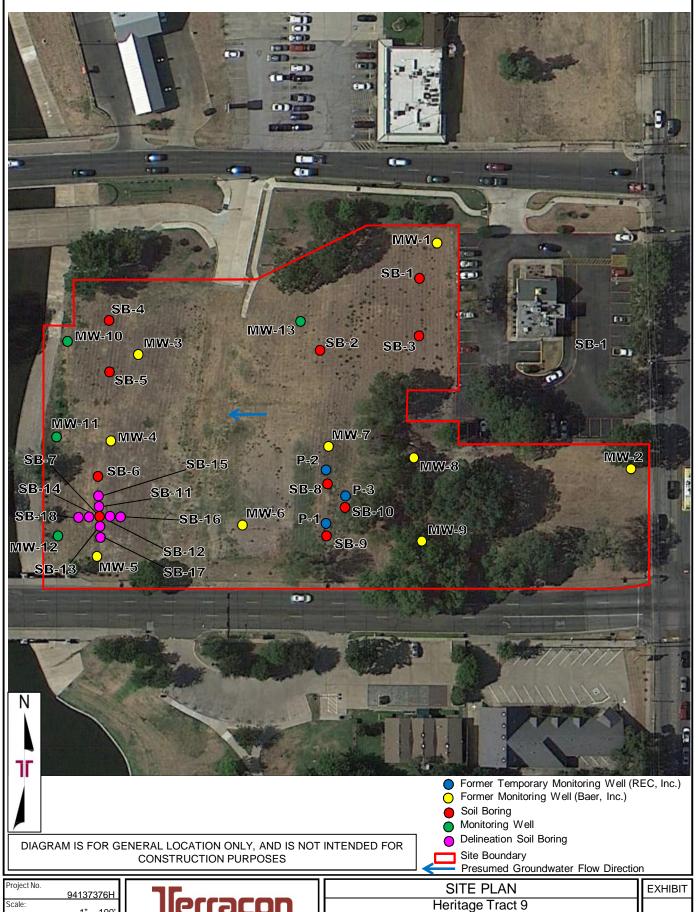
Fax (214) 630-7070

Phone (214) 630-1010

Heritage Tract 9 439 and 501 W. 2nd St./416 W. Irving Blvd./ 127 and 129 O'Connor Rd. Irving, Dallas County, Texas

EXHIBIT

1



Scale: 1" ~ 100 Quad Name: N/A Date: 2012

8901 Carpenter Freeway, Suite 100

Fax (214) 630-7070

Phone (214) 630-1010

439 and 501 W. 2nd St./416 W. Irving Blvd./ 127 and 129 O'Connor Rd. Irving, Dallas County, Texas

2

ORDINANCE NO. ORD-2016-9789

AN ORDINANCE PROHIBITING THE USE OF DESIGNATED GROUNDWATER FROM BENEATH PROPERTY GENERALLY LOCATED AT 439 AND 501 WEST 2ND STREET, 416 WEST IRVING BOULEVARD, 127 AND 129 O'CONNOR ROAD WITHIN THE CITY OF IRVING AND SUPPORTING ISSUANCE OF A MUNICIPAL SETTING DESIGNATION (MSD) CERTIFICATE BY THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY PURSUANT TO THE TEXAS HEALTH AND SAFETY CODE.

WHEREAS, Chapter 361, Subchapter W, of the Texas Health and Safety Code authorizes the Texas Commission on Environmental Quality (TCEQ) to certify Municipal Setting Designations for properties upon receipt and approval of a properly submitted application to TCEQ; and

WHEREAS, the Texas Legislature, in enacting the MSD Legislation, found that an action by a municipality to restrict access to or use of groundwater in support of or to facilitate an MSD advances a substantial and legitimate state interest where the quality of the groundwater subject to the designation is an actual or potential threat to human health; and

WHEREAS, as a part of the application to TCEQ for an MSD, the applicant is required to provide documentation that the property for which designation is sought is supported by an ordinance adopted by the City Council; and

WHEREAS, as a part of the application to TCEQ for an MSD, the applicant is required to provide documentation that the property for which designation is sought is subject to an ordinance that prohibits the use of designated groundwater from beneath the property as potable water and that appropriately restricts other uses of a contact with that groundwater; and

WHEREAS, the City Council finds that:

- A. The eligibility criteria of Section 361.803 of the Texas Health and Safety Code have been met;
- B. This MSD ordinance will not have an adverse effect on the current or future water resource needs or obligations of the City of Irving;
- C. There is a public drinking water supply system that satisfies the requirements of Chapter 341 of the Texas Health and Safety Code and that supplies or is capable of supplying drinking water to the designated property and property within one-half mile of the designated property; and
- D. This MSD ordinance is necessary because the concentration of contaminants of concern exceed ingestion protective concentration levels for human ingestion.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF IRVING, TEXAS:

SECTION 1. For purposes of this MSD ordinance, "designated property" means the property described in Exhibit A, attached to this ordinance, and "designated groundwater" means water below the surface of the designated property.

SECTION 2. Use of the designated groundwater from beneath the designated property as potable water is prohibited.

SECTION 3. Use of the designated groundwater from beneath public rights-of-ways immediately adjacent to the designated property as potable water is prohibited.

SECTION 4. The following uses of or contacts with the designated groundwater are prohibited:

- (1) Human consumption or drinking;
- (2) Showering or bathing;
- (3) Cooking; and
- (4) Irrigation of crops for human consumption.

SECTION 6. THAT the following conditions are imposed on the designated property and designated groundwater:

- (1) The potable use of the designated groundwater from beneath the designated property is prohibited.
- (2) The potable use of the designated groundwater from beneath public rights-of-way adjacent to the designated property is prohibited.

SECTION 7. THAT the City Council supports the application to the TCEQ for an MSD on the designated property, with the following comments;

(1) The TCEQ, as the state agency chartered to protect human health and the environment, is requesting to thoroughly review the conditions of the designated property and issue a certificate of completion only when all contaminants of concern, through the applicable routes of exposure, have been addressed.

SECTION 8. Any person owning, operating, or controlling the designated property remains responsible for complying with all applicable federal and state laws and regulations; all ordinances, rules, and regulations of the City of Irving; and all environmental regulations, and that this MSD ordinance in itself does not change any environmental assessment or cleanup requirements to the designated property.

SECTION 9. Any person owning, operating, or controlling any portion of the designated property is responsible for ensuring compliance with this ordinance with respect to their portion of the designated property.

SECTION 10. A person violating a provision of this MSD ordinance, upon conviction, is punishable by a fine not to exceed \$2,000, and that the TCEQ shall be notified of any violations.

SECTION 11. This MSD ordinance shall take effect immediately from and after its passage and publication in accordance with the provisions of the Charter of the City of Irving, and it is accordingly so ordained.

PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF IRVING, TEXAS, on March 31, 2016.

BETH VAN DUYNE MAYOR

ATTEST:

Shange Jennings

City Secretary

APPROVED AS TO FORM:

Charles R. Anderson

City Attorney

EXHIBIT A

WHEREAS, THE CITY OF IRVING, is the sole owner of a 2.8095 acre tract of land located in the Hiram Bennett Survey, Abstract No. 122, City of Irving, Dallas County, Texas, said 2.8095 acre tract of land being all of Lots 2 and 3, and a portion of Lots 1 and 4, DELAWARE PARK ADDITION, being an addition to the City of Irving, Dallas County, Texas, according to the plat thereof recorded in Volume 12, Page 343, Map Records, Dallas County, Texas (M.R.D.C.T.), said 2.8095 acre tract also being a portion of Lots 3,4,5 and 6, Block A, ORIGINAL TOWN OF IRVING, being an Addition to the City of Irving, Dallas County, Texas, according to the plat thereof recorded in Volume 1, Page 214, M.R.D.C.T., said 2.8995 acre tract of land also being all of a called 0.5709 acre tract of land conveyed to the CITY OF IRVING, by deed as recorded in Dallas County Clerk's instrument No. (D.C.C.I.) 201200242029, Official Public Records, Dallas County, Texas (O.P.R.D.C.T.), said 2.8095 acre tract also being all of that certain tract of land described as Tract 28, conveyed to the CITY OF IRVING, by deed as recorded in D.C.C.I. No. 201200242027, O.P.R.D.C.T., said 2.8095 acre tract of land also being all of those certain tracts of land described as Tracts 15 and 16, conveyed to the CITY OF IRVING, by deed as recorded in D.C.C.I. No. 201200242028, O.P.R.D.C.T., 2.8095 acre tract of land also being all of a called 0.392 acres of right-of-way also known as Beauford Street, abandoned and conveyed to the CITY OF IRVING, by deed as recorded in D.C.C.I. No. 201300202043, O.P.R.D.C.T., said 2.8095 acre tract of land being herein more particularly described by metes and bounds as follow:

BEGINNING at an "X" cut in concrete found (Controlling Monument) at the southwest property corner of the said 0.5709 acre tract of land, same being on the east line of a 70 feet wide drainage and utility easement, conveyed to the City of Irving, by deed as recorded in Volume 4919, Page 141, Deed Records, Dallas County, Texas (D.R.D.C.T.), said beginning point also being on the north right-of-way line of 2nd Street (being a variable width right-of-way at this point);

THENCE North 04°21'29 East, along the west property line of the said 0.5709 acre tract and along the said easement, a distance of 225.09 feet to an "X" cut in concrete found at a northwest property corner of the said 0.5709 acre tract, same being the southwest property corner of a called 615 square feet tract of land conveyed to Suri Management Corp., by deed as recorded in Volume 2003087, Page 3760, D.R.D.C.T., and being at the beginning of a curve to the right having a radius of 5,609.58 feet;

THENCE along a north property line of the said 0.5709 acre tract and along the south line of the said 615 square feet tract, with said curve to the right, through a central angle of 00°17′56″, an arc length of 29.26 feet, and across a chord which bears North 86°19′32″ East, a chord length of 29.26 feet to a 1/2 inch iron rod with a cap stamped "SPOONER & ASSOCIATES" set (hereinafter referred to as an iron rod set) at an interior property corner of the said 0.5709 acre tract, same being the southeast property corner of the said 615 square feet tract;

THENCE North 03°31'31" West, along a west property line of the said 0.5709 acre tract and along the east property line of the said 615 square feet tract, a distance of 40.00 feet to an iron rod set at the most northerly northwest property corner of the said 0.5709 acre tract, same being the northeast property corner of the said 615 square feet tract, said iron rod set also being on the southerly right-of-way line of State Highway No. 356 (being a variable width right-of-way also known as West Irving Boulevard), and being at the beginning of a curve to the right having a radius of 5,649.58 feet;

THENCE along the most northerly north property line of the said 0.5709 acre tract and along the said southerly right-of-way line of State Highway No. 356, through a central angle of 00°34'41", an arc length of 57.00 feet, and across a chord which bears North 86°46'09" East, a chord length of 57.00 feet to an Iron rod set at the most northerly northeast property corner of the said 0.5709 acre tract;

THENCE South 29°31'56" East, along a northeast property line of the said 0.5709 acre tract and along the said southerly right-of-way line, a distance of 55.41 feet to an Iron rod set at a northeast property corner of the said 0.5709 acre tract, same being on the west property line of the aforesaid 0.392 acre tract (Dallas County Clerk's Instrument No. 201300202043, O.P.R.D.C.T);

THENCE North 20°30'02" East, along the west property line of the said 0.392 acre tract and continuing along the said southerly right-of-way, a distance of 53.42 feet to an Iron rod set at the most northerly northwest property corner of the said 0.392 acre tract, and being at the beginning of a curve to the right having a radius of 5,649.58 feet;

THENCE along the north property line of the said 0.392 acre tract and along the said southerly right-of-way line, through a central angle of 00°39'26", an arc length of 64.81 feet, and across a chord which bears North 88°17'30" East, a chord length of 64.81 feet to an Iron rod set at the northeast property corner of the said 0.392 acre tract;

THENCE South 20°30'02" West, along an east property line of the said 0.392 acre tract and continuing along the said southerly right-of-way line, a distance of 1.73 feet to an iron rod set at a northwest property corner of the aforesaid Tract 15 (D.C.C.I. No. 201200242028);

THENCE North 64°16'19" East, along a northwest property line of said Tract 15 and along the said southerly right-of-way line, at a distance of 3.87 feet passing a Texas Department of Transportation aluminum monument found, and continuing in all a total distance of 104.31 feet to a Texas Department of Transportation aluminum monument found at a northerly property corner of said Tract 15, and being on the said southerly right-of-way line;

THENCE North 89°14'28" East, along a north property line of said Tract 15 and continuing along the said southerly right-of-way line, a distance of 77.69 feet to an iron rod set at the most northerly northeast property corner of said Tract 15, same being the most northerly northwest property corner of that certain tract of land conveyed to Long John Silvers, Inc., by deed as recorded in Volume 77078, Page 965, D.R.D.C.T.;

THENCE South 00°21°39" East, along an east property line of sald Tract 15 and along a west property line of the said Long John Silvers tract, a distance of 142.46 feet to a 3/8 inch iron rod found (Controlling Monument) at a southeast property corner of said Tract 15, same being an interior ell corner in the said Long John Silvers tract;

THENCE South 89°20'57" West, along a south property line of said Tract 15 and along a north property line of the said Long John Silvers tract, a distance of 75.24 feet to an Iron rod set at an interior property corner of said Tract 15, same being a northwest property corner of the said Long John Silvers tract;

THENCE South 01°20'43" East, along an east property line of said Tract 15 and along a west property line of the said Long John Silvers tract, at a distance of 13.46 feet passing the most southerly southeast property corner of said Tract 15, same being the most northerly northeast property corner of the aforesaid Tract 16 (D.C.C.I. No. 201200242028), and continuing along an east property line of said Tract 16 and along a west property line of the said Long John Silvers tract, in all a total distance of 49.46 feet to an iron rod set at northwest property corner of the aforesaid Tract 28 (D.C.C.I. No. 201200242027), same being the southwest property corner of the said Long John Silvers tract;

THENCE North 89°26'11" East, along a north property line of said Tract 28 and along the south property line of the said Long John Silvers tract, a distance of 234.35 feet to a 1 inch iron pipe found (Controlling Monument) at the northeast property corner of said Tract 28, same being the southeast property corner of the said Long John Silvers tract, and being on the west right-of-way line of O'Connor Road (being a variable width right-of-way at this point);

THENCE South 01°06'04" East, along an east property line of said Tract 28, a distance of 122.93 feet to an iron rod set at the southeast property corner of said Tract 28, and being at the intersection of the said west right-of-way line and the aforesaid north right-of-way line of 2nd Street;

THENCE South 82°19'44" West, along a south property line of said Tract 28 and along the said north right-of-way line, a distance of 40.31 feet to an Iron rod set;

THENCE South 89°15'01" West, continuing along the said south property line and along the said right-of-way line, a distance of 195.00 feet to a 5/8 inch iron rod found (Controlling Monument) at the southwest property corner of said Tract 28, same being the most southerly southeast property corner of said Tract 16;

THENCE North 89°53'49" West, along the south property line of said Tract 16 and along the said north right-of-way line, at a distance of 150.01 feet passing the southwest property corner of said Tract 16, same being the southeast property corner of the aforesaid 0.392 acre tract, and continuing along the south property line of the said 0.392 acre tract and along the said right-of-way line, at a distance of 210.01 feet passing the southwest property corner of the said 0.392 acre tract, same being the southeast property corner of the aforesaid 0.5709 acre tract, and continuing along the south property line of the said 0.5709 acre tract and along the said north right-of-way line, in all a total distance of 267.62 feet to an iron rod set at a southwest property corner of the said 0.5709 acre tract;

THENCE North 03*54'58" West, along a west property line of the said 0.5709 acre tract and along the said north right-of-way line, a distance of 3.18 feet to a 1/2 inch iron rod with a cap stamped "GRAHAM & ASSOC" found at a southerly property corner of the said 0.5709 acre tract:

THENCE South 89°39'27" West, along a south property line of the said 0.5709 acre tract and along the said north right-of-way line, a distance of 43.34 feet to the POINT OF BEGINNING, and containing 2.8095 acres (122,382 square feet) of land, more or less.