



**US Army Corps
of Engineers** ®
Fort Worth District

Public Notice

Applicant: Bexar County Public Works

Project No.: SWF-2011-00144

Date: February 23, 2012

The purpose of this public notice is to inform you of a proposal for work in which you might be interested. It is also to solicit your comments and information to better enable us to make a reasonable decision on factors affecting the public interest. We hope you will participate in this process.

Regulatory Program

Since its early history, the U.S. Army Corps of Engineers has played an important role in the development of the nation's water resources. Originally, this involved construction of harbor fortifications and coastal defenses. Later duties included the improvement of waterways to provide avenues of commerce. An important part of our mission today is the protection of the nation's waterways through the administration of the U.S. Army Corps of Engineers Regulatory Program.

Section 10

The U.S. Army Corps of Engineers is directed by Congress under Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) to regulate *all work or structures in or affecting the course, condition or capacity of navigable waters of the United States*. The intent of this law is to protect the navigable capacity of waters important to interstate commerce.

Section 404

The U.S. Army Corps of Engineers is directed by Congress under Section 404 of the Clean Water Act (33 USC 1344) to regulate the *discharge of dredged and fill material into all waters of the United States, including wetlands*. The intent of the law is to protect the nation's waters from the indiscriminate discharge of material capable of causing pollution and to restore and maintain their chemical, physical and biological integrity.

Contact

Name: Mr. Fred Land, Project Manager

Phone Number: (817) 886-1729

JOINT PUBLIC NOTICE

U.S. ARMY CORPS OF ENGINEERS, FORT WORTH DISTRICT

AND

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUBJECT: Application for a Department of the Army Permit under Section 404 of the Clean Water Act (CWA) and for water quality certification under Section 401 of the CWA to discharge dredged and fill material into waters of the United States associated with the construction of floodplain enhancements along Huebner Creek, located within the city limits of Leon Valley and San Antonio, Bexar County, Texas.

APPLICANT: Bexar County public Works
Bexar County Flood Control Capital Improvement Program
6800 Park Ten Blvd.
Suite 180-South
San Antonio, Texas 78213

APPLICATION NUMBER: SWF-2011-00144

DATE ISSUED: February 23, 2012

LOCATION: The proposed Huebner Creek project is located on SH 16 (Bandera Road) in the city limits of Leon Valley and San Antonio, Bexar County, Texas (Figure 1). The approximate coordinates for the proposed project are: Latitude 29.49388 N, Longitude -98.6155 W. The project is located in the 7.5 Minute Quadrangle San Antonio West (Quad. No. 2909836) and Culebra Hill (Quad No. 2909835) (Figure 2) and is in the Middle Leon Creek River Basin (HUC: 121003020405) (Figure 2). Huebner Creek lies within the Federal Emergency Management Agency (FEMA) floodplain designated Zone AE, defined as Special Flood Hazard Areas (Panels 48029C0407F, 48029C0409F, and 48029C0426F) (Figure 2). According to the U.S. Department of the Interior National Wetland Inventory (NWI), Huebner Creek is classified as a Riverine-Intermittent-Streambed-Temporarily Flooded (R4SBA) (Figure 3).

PROJECT DESCRIPTION: Bexar County Public Works propose to widen and deepen approximately 4,450 linear feet, 1.75 acres of Huebner Creek for the purpose of flood control. The purpose of this project, within the Bexar County Flood Control Capital Improvement Program is to reduce commercial and residential structural flooding along Huebner Creek for the ultimate 100-year storm event by (a) deepening the existing channel (below the OHWM) to reduce the velocities and increase the channel volume to ultimately convey the 100-year storm peak discharge; and (b) acquiring properties and removing vulnerable structures lying within the existing and proposed

floodplain boundaries located within the city limits of Leon Valley. In addition to reducing the structural flooding in this area for residences and commercial properties, the design would create a natural setting and provides a more aesthetically-pleasing channel than what currently exists (i.e. concrete-lined pilot channel) within the city of Leon Valley. As a part of the County's construction project, the sewer main would be relocated.

The total project area for Huebner Creek is approximately 155.0 acres. The total project length of Huebner Creek is 11,165 linear feet with an ordinary high water mark width that varies from 18 to 45 feet (Figures 4-4G).

There is a 390 feet long concrete apron beginning approximately 30 feet upstream of SH 16 and continues under the SH 16 bridge and downstream of SH 16 where sediment and debris from upstream have collected on the apron. This sediment/debris would be removed; however, the concrete apron would remain.

Channel deepening below the ordinary high water mark would begin approximately 200 feet south of SH 16 (at the end of the concrete apron) and continue for 3,950 feet downstream to approximately 270 feet south of the Leon Valley/San Antonio city limits. At this point, a 4,770 foot segment of stream/ordinary high water mark located between the San Antonio/Leon Valley city limit boundary and the Timberhill bridge crossing would be preserved. Approximately 3,345 linear feet of Huebner Creek would be excavated in uplands for additional channel conveyance adjacent to this preservation area. The channel deepening would then begin again approximately 50 feet south of Timberhill bridge crossing and continue for approximately 500 feet. The total length of channel deepening is approximately 4,450 linear feet. Channel deepening would help reduce velocities and allow for additional channel conveyance capacity.

Within the Leon Valley city limits, there is a 3,675 feet long concrete-lined pilot channel with concrete side slopes. The bottom of the channel would be returned to its earthen substrate. Only the northern concrete side slope would be removed with the additional conveyance (deepening). The southern side slope would remain. An approximately 3,770 linear feet low-flow earthen pilot channel would be created within this newly-expanded floodplain (deepening). It would function as an ephemeral stream to convey stormwater overflow from Huebner Creek and surrounding properties.

During construction, a deficient and deteriorated existing 24-inch gravity sanitary sewer main would be relocated and upgraded with approximately 8,500 linear feet of new 42-inch sanitary sewer main. The replacement begins at a manhole located approximately 1,050 linear feet (0.21 mi.) upstream and to the north of SH 16 within the Leon Valley city limits. This portion of the sewer line, located in Leon Valley is currently in design and its exact location is unknown, but it would, in all likelihood, be located on the north side of the existing channel in a previously disturbed area. No additional impacts would occur as a result of this sewer replacement. In addition, approximately 530 linear feet of 12-inch and 1,300 linear feet of 8-inch sanitary sewer would also be constructed. Approximately 5,300 linear feet of an existing 36-

inch recycled water main would be relocated as well. This portion of the water line located in Leon Valley is currently in design and its exact location is unknown, but it would, in all likelihood, also be located on the north side of the existing channel in a previously disturbed area. No additional impacts would occur as a result of this water line relocation. Both utilities that would be replaced/relocated are owned and operated by the San Antonio Water System (SAWS).

Current land use in the vicinity appears to consist primarily of residential and commercial developments, with some adjacent pasture. The areas adjacent to the watercourses are partly wooded and partly open and grassy. The Natural Resources Conservation Society (NRCS) *Soil Survey for Bexar County* indicates that there are several different types of soils in the project area. These include Trinity and Frio soils (Tf), Houston Black clay (HtA), Tarrant Association (TaB), Houston Black gravelly clay (HuB), and Lewisville silty clay (LvB) (Figure 5).

Historical aerials dating back to 1938 were obtained and are included (Figures 6-6G). In 1938, narrower versions of the current SH 16 (Bandera Road) abut the project area. The surrounding area is mainly rural pasture, agriculture, and/or undeveloped woodland. By 1955, Jeff Loop Road and El Verde Road had been constructed within the project area, south of SH 16 (Bandera Road). A few scattered residential dwellings along these roadways had been built by this time. Residential development activity increased in this vicinity after 1955. In 1966 and 1973 aerial photographs, areas adjacent to the project area appear disturbed from apparent borrow activities (i.e. excavation pits, etc.). By 1985, surrounding land uses have significantly changed from predominantly rural to mixed residential and commercial uses, a pattern that continues through 2010. Based on these historical aerials, the project area itself has predominantly been undeveloped in the portion of the City of San Antonio's jurisdiction, but in the jurisdiction of Leon Valley, houses begin to appear in the 1955 aerial and by 1966, most of the current day houses were constructed. There are intermittent riparian zones along the immediate area of Huebner Creek. The creek channel appears relatively consistent throughout this timeframe except for the portion of Huebner Creek within the Leon Valley city limits where the channel appears to be concrete-lined in the 1985 aerial.

According to the Texas Parks and Wildlife Department Map of Texas Ecoregions, the project is located within the Blackland Prairie Ecoregion. Typical vegetative species in the Blackland Prairie Ecoregion include pecan (*Carya illinoensis*), black walnut (*Juglans nigra*), little bluestem (*Schizachyrium scoparium*), big bluestem (*Andropogon gerardii*), pale leaf yucca (*Yucca pallid*), eastern cottonwood (*Populus deltoides*), American elm (*Celtis americana*), button bush (*Cephalanthus occidentalis*), and American beauty berry (*Callicarpa americana*).

Total area of surface waters of the U.S. (including wetlands) in the project area is approximately 5.80 acres, of which approximately 1.75 acres would be adversely impacted as a result of the removal of approximately 4,816 cubic yards of removal of material below the ordinary high water mark would occur.

The total project length of Huebner Creek is 11,165 linear feet. The ordinary high water mark width varies from 18-45 feet. There are six wetlands totaling approximately 1.123 acres in the project area. Three of these (Wetlands #2, #3, and #4) would be permanently impacted (0.434 acres total).

Table 1. Potential Non-Wetland Waters in the Project Area

Name	USACE Classification	Flow Regime	Length (linear feet)	Average Width (feet)	Area within USACE review area (acres)
Huebner Creek	NRPW	Intermittent (main channel) with four ephemeral tributaries	11,165	18-45	4.67

Table 2. Potential Wetlands in the Project Area

ID	Approximate Size (Acres)	Adjacent Water Body	Geographic Coordinates (UTM)		Description
			Latitude	Longitude	
Wetland #1	0.008	Huebner Creek	29.492506	-98.614847	Non-section 10 wetland; Palustrine, emergent. Depicted in Figure 4.
Wetland #2	0.341	Huebner Creek	29.490989	-98.614847	Non-section 10 wetland; Palustrine, emergent. Depicted in Figure 4A.
Wetland #3	0.044	Huebner Creek	29.48995	-98.61585	Non-section 10 wetland; Palustrine, emergent. Depicted in Figure 4A.
Wetland #4	0.049	Huebner Creek	29.485239	-98.620081	Non-section 10 wetland; Palustrine, emergent. Depicted in Figure 4C.
Wetland #5	0.447	Huebner Creek	29.473117	-98.622975	Non-section 10 wetland; Palustrine, emergent. Depicted in Figure 4G.
Wetland #6	0.234	Huebner Creek	29.471803	-98.624325	Non-section 10 wetland; Palustrine, emergent. Depicted in Figure 4G.
Total Wetlands	1.123	---	---	---	---

ALTERNATIVE SITE LOCATIONS AND ALTERNATIVE LAYOUTS: The alternatives proposed for consideration for the Huebner Creek Conveyance NWWC Project include Alternative A-Construction of a “trapezoidal channel” with no preservation of the creek channel. Impacts: grading 11,165 linear feet of Huebner Creek; excavation of a total of 906,000 cubic yards of material with 8,700 cubic yards below the plane of the ordinary high water and 1,671 cubic yards of permanent fill; Alternative B – Avoidance measures with “natural channel design concepts.” Impacts: Grading 4,625 linear feet of Huebner Creek; 4,770 linear feet of preservation of creek channel; excavation of a total of 710,500 cubic yards with 4,816 cubic yards below the plane of ordinary high water of material; 2.43 acres of permanent fill (rock riprap around aquatic depression areas). This is the applicant’s preferred alternative. Alternative C – No Action Alternative

Alternative A

Alternative A involves a large amount of excavation in the existing channel in order to increase the channel volume so it can convey the peak discharge generated by the watershed. As part of this alternative, approximately 8,700 cubic yards below the plane of ordinary high water (906,000 cubic yards total) would be excavated. Approximately 1,671 cubic yards of permanent fill would occur with this alternative. This alternative would require the disturbance/modification of approximately 11,165 linear feet of Huebner Creek's streambed. This option would also result in the removal of the riparian area along this entire stretch of Huebner Creek within the project limits. This alternative involves creating channel improvements in the area of the future City of San Antonio Crystal Hills Park, which reduces the potential area for public parkland. This alternative would impact five of the six wetlands for a total of 1.12 acres.

Currently, the northern stretch of Huebner Creek between SH 16 (Bandera Road) (near the northern terminus) and the city of Leon Valley has a concrete-lined pilot channel with concrete side slopes at the edges of the channel. The area between the concrete-lined pilot channel and the side slopes contains a vegetated earthen substrate. This alternative would remove approximately 3,675 linear feet of the concrete pilot channel and restore the streambed to its earthen substrate. It would disturb a total of 11,165 linear feet (concrete-lined and earthen streambed).

The existing Huebner Creek channel averages from 25 feet to 75 feet in width and Alternative A would widen the existing channel bottom to up to 300 feet wide and would increase the channel bank to channel bank to up to 600 feet in width. Side slopes of the trapezoidal channel would typically be 6:1, but the slopes increase up to 40:1 in some places. A 30 foot wide, one foot in depth pilot/low flow earthen channel is proposed for the entire length of the channel. As described in Table 3, tree preservation (both significant and heritage trees) under this alternative is low.

Table 3. Preservation of Trees under Alternative A

	Leon Valley (number of trees)*	San Antonio (inches of tree)*
Total (Significant/Heritage Trees) to be removed	1,193	14,334

*Requirements for tree removal are reported differently for the tree ordinances in respective municipalities

This alternative was eliminated as it would have the greatest negative impact upon Huebner Creek (11,165 linear feet would be disturbed). Almost half of Huebner creek can be avoided under Alternative B (Preferred Alternative) below.

Alternative B-Preferred Alternative

Alternative B has been previously discussed. Please refer back to the Project Description Section of this Public Notice (pages 1-4)

Alternative B would not only improve the aquatic habitat but also the overall environmental biodiversity. In turn, the hydrologic conditions for the stream would not be negatively impacted after the newly created channel is fully functioning. Even with avoidance and minimization efforts, the proposed action would still result in a permanent impact of 5,130 linear feet (1.32 acres) of impact to an intermittent and ephemeral stream (concrete-lined pilot channel and natural streambed) and 0.434 acres of wetlands. Therefore, in accordance with USACE mitigation recommendations, increased emphasis was placed on compensatory mitigation for the stream.

Six areas of created wetlands/aquatic depressions are proposed in Alternative B (Figures 7-7G: Mitigation Plan for the aquatic depression details). The deepest point in these depressions would be randomly placed along the pilot channel alignment and those depressions not located on the pilot channel would have the deepest point located in the center of the depression. These aquatic depressions are approximately 25 feet in width, 75 feet in length, and of irregular shape. The bottom would contain planted hydrophytic vegetation to support the development of wetlands. The sides of the depression are lined with large sized (9-inch to 12-inch diameter) rock riprap with 3:1 side slopes. The depth would vary from one to two feet where the depressions would be allowed to drain naturally through soils infiltration and evaporation. This alternative would avoid three wetlands (Wetlands 1, 5 and 6) totaling 0.689 acres. As part of this alternative, approximately 4,816 cubic yards of material would be excavated below the plane of ordinary high water, which is more than half of the 8,700 cubic yards required for Alternative A).

Tree preservation under the preferred Alternative B is approximately 22 percent within the city limits of Leon Valley and approximately 60 percent within the San Antonio city limits. This alternative preserves the highest number of trees.

Table 4. Preservation of Trees under Alternative B

	Leon Valley (number of trees)*	San Antonio (inches of tree)*
Total (Significant/Heritage Trees) to be removed	1,039	1,037 Inches

* Requirements for tree removal are reported differently for the tree ordinances in respective municipalities

Plan and Profile drawings of Alternative B proposed activities are attached (Figures 7a-7d).

Alternative C

Alternative C is the No Action Alternative and proposes that the Huebner Creek Conveyance NWCC (LC-17) Project would not occur. The No Action Alternative would

leave Huebner Creek functioning in the same manner as it currently does. The No Action Alternative would not satisfy the primary goal of reducing commercial and residential structural flooding in the project area for the ultimate 100-year storm event. The No Action Alternative would also not provide any additional storm conveyance through the project area. For these reasons, Alternative C was eliminated.

COMPENSATORY MITIGATION PLAN: Bexar County Public Works proposes to compensate for 0.434 acres of wetland impacts and 1.32 acres of non-wetland impacts by creating 0.90 acres of wetlands (aquatic depressions), plantings, and invasive species control; 5,000 linear feet of stream replacement, restoration, or enhancement, tree plantings, tree preservation, stream avoidance, channel plantings, and aquatic depression plantings, within the project area (Figure 8a-8l).

The Texas Rapid Assessment method (TXRAM) was used to assess the jurisdictional waters of the United States (WOUS) along the proposed project corridor. To calculate the mitigation required using the TXRAM model, the baseline score and impacts to WOUS within each Stream Assessment Reach (SAR) or Wetland Assessment Area (WAA) (linear feet or acres, respectively) is entered into a TXRAM spreadsheet along with the proposed mitigation and target score of the mitigated area. This, in turn, calculates the mitigation requirements in linear feet or acres for no net loss of function of a stream or wetland, respectively. To achieve a no net loss of function, the TXRAM score of the mitigated stream or wetland at maturity must score equal to or greater than the baseline TXRAM score.

Stream Mitigation

To achieve stream mitigation requirements and achieve the generated TXRAM release of monitoring score, impacts would be mitigated by the replacement, restoration, or enhancement of the channel, riparian buffer, in-stream condition and hydrologic condition of Huebner Creek. Mitigation to the eight impacted SARs is detailed below:

Impacts to Huebner Creek from the beginning of the construction limits to approximately 3,955 linear feet downstream (south) (SAR-1, SAR-2, SAR-3, and SAR-4) will be mitigated by the replacement and realignment of the existing stream channel with a newly created 3,955 linear feet of natural bottom channel. The replacement channel will have very little incision and overflow will have access to the adjacent expanded floodplain. The floodplain will act as a vegetative buffer and riparian corridor throughout the project limits to prevent erosion and sedimentation for the newly created channels and provide trail corridors for wildlife. The stream channel substrate is proposed to consist of boulders, cobbles, gravel and soil generated during construction activities. Furthermore, the concrete-lined channel within the Leon Valley city limits will be removed and the creek channel will be relocated and restored to a natural substrate channel. This will improve the water quality and support aquatic life in a more consistent fashion. This will result in an improved stream channel and *in-kind* mitigation that will replace

the impacted functions and values of Huebner Creek from the proposed project impacts. This will also allow the site to be self-sustaining and not require extensive manipulation or maintenance after it is fully functional.

Impacts to Huebner Creek located approximately 1,200 feet north of Timberhill Bridge (SAR-6) and from Timberhill Bridge downstream to the project terminus (SAR-8) will be mitigated by restoring and enhancing approximately 150 linear feet and 520 linear feet of impacted stream channel, respectively. The stream channel and banks will be restored with natural substrates similar to the upstream and downstream portions which have not been impacted. Furthermore, the stream banks will be stabilized utilizing a native vegetation seed mixture and the riparian corridor will be replaced and enhanced by removing invasive/non-native trees (e.g. chinaberry). This will result in an in-kind mitigation that will replace the impacted functions and values of Huebner Creek.

Impacts to the two ephemeral streams (SAR-1T and SAR-3T) will be mitigated by the creation of a 3,770 linear feet low flow pilot channel located within the newly expanded floodplain. This pilot channel, once constructed, will function as an ephemeral stream to convey storm water overflow from Huebner Creek and surrounding properties. The pilot channels substrate is proposed to consist of boulders, cobbles, gravel and soil generated during construction activities. The pilot channels will be stabilized utilizing a native vegetation seed mixture and a riparian corridor will be created along the channel banks. This will also allow the pilot channel to be self-sustaining and not require extensive manipulation or maintenance after it is fully functioning.

Wetland Mitigation

Wetland impacts are limited to three WAAs, which total approximately 0.434 acres. All three wetlands/WAAs are located adjacent to the previously excavated concrete-lined portion of Huebner Creek within the city limits of Leon Valley. To achieve wetland mitigation requirements, the Bexar County Public Works proposes to create six wetlands (aquatic depressions) which will total 0.90 acres within the city limits of Leon Valley. The six proposed aquatic depressions are approximately double in size to the impacted wetlands to account for failure. To achieve the TXRAM release of monitoring score, construction of the aquatic depressions will focus on landscape, hydrology, soils, physical structure, and biotic structure. The newly created aquatic depressions will be located in the general vicinity of the impacted wetlands which should keep the connectivity, buffers, water source, hydroperiod, and hydrologic flow approximately equal to or greater than the impacted wetlands. The topsoil (approximately the top 6 to 12 inches) from the existing wetlands will be segregated and stockpiled. Once construction of the aquatic depressions is complete the stockpiled topsoil will be spread along the bottom of the depression. Furthermore, a native aquatic seed mix will be applied to enhance species richness.

STATE WATER QUALITY CERTIFICATION: This project would result in a direct impact of greater than three acres of waters of the state or 1,500 linear feet of stream (or a combination of the two is above the threshold), and as such would not fulfill Tier I criteria for the project. Therefore, Texas Commission on Environmental Quality (TCEQ) certification is required. Concurrent with USACE processing of this Department of the Army application, the TCEQ is reviewing this application under Section 401 of the CWA, and Title 30, Texas Administrative Code Section 279.1-13 to determine if the work would comply with State water quality standards. By virtue of an agreement between the USACE and the TCEQ, this public notice is also issued for the purpose of advising all known interested persons that there is pending before the TCEQ a decision on water quality certification under such act. **Any comments concerning this application may be submitted to the Texas Commission on Environmental Quality, 401 Coordinator, MSC-150, P.O. Box 13087, Austin, Texas 78711-3087.** The public comment period extends 30 days from the date of publication of this notice. A copy of the public notice with a description of the work is made available for review in the TCEQ's Austin Office. The TCEQ may conduct a public meeting to consider all comments concerning water quality if requested in writing. A request for a public meeting must contain the following information: the name, mailing address, application number, or other recognizable reference to the application; a brief description of the interest of the requestor, or of the person represented by the requestor; and a brief description of how the application, if granted, would adversely affect such interest.

ENDANGERED AND THREATENED SPECIES: The USACE has reviewed the latest Fish and Wildlife Service's published version of listed endangered and threatened species to determine if any may occur in the project area. The proposed project would be located in Bexar County where ten cave dwelling invertebrates are known to occur as listed endangered species under the authority of the Endangered Species Act of 1973, as amended. These ten species include the ground beetle (*Rhadine exilis*), the ground beetle (*Rhadine infernalis*), Helotes mold beetle (*Batrisodes venyivi*), Cokendolpher Cave Harvestman (*Texella cokendolpheri*), Robber Baron cave spider (*Cicurina baronia*), Madla's cave spider (*Cicurina madla*), Braken Bat Cave meshweaver (*Cicurina venii*), Vesper cave spider (*Cicurina vespera*), Government Canyon cave spider (*Neoleptoneta microps*), and Peck's cave amphipod (*Stygobromus pecki*). In addition to cave dwelling invertebrates, nine other listed endangered species are known to occur or may occur as migrants. These nine species include the black-capped Vireo (*Vireo atricapilla*), golden-cheeked warbler (*Dendroica chrysoparia*), whooping crane (*Grus americana*), Comal Springs dryopid beetle (*Stygoparnus comalensis*), Comal Springs riffle beetle (*Heterelmis comalensis*), the fountain darter (*Etheostoma fonticola*), San Marcos gambusia (*Gambusia georgei*), Texas blind salamander (*Typhlomolge rathbuni*), and Texas wild-rice (*Zizania texana*). The San Marcos salamander (*Eurycea nana*), a listed threatened species, is also known to occur in Bexar County. Our initial review indicates that the proposed work would have no effect on federally-listed endangered or threatened species.

NATIONAL REGISTER OF HISTORIC PLACES: The proposed work along Huebner Road will potentially affect several historic and prehistoric sites. The Huebner-Onion Homestead and Stagecoach Stop is listed on the National Register of Historic Places (NRHP). The main structure is not within the area of potential effect for this project, but several of its associated out

buildings will be adjacent to the proposed work. Work will have a temporary visual and audible effect on the Huebner-Onion Homestead and its associated structures, but the effects will be temporary. Two small prehistoric sites were also identified within the area of potential effect. Both sites were shallow and previously impacted by erosion and collectors. The sites are considered ineligible for inclusion in the NRHP. The Texas State Historic Preservation Office concurred with these conclusions in correspondence dated July 8, 2011, and August 26, 2011.

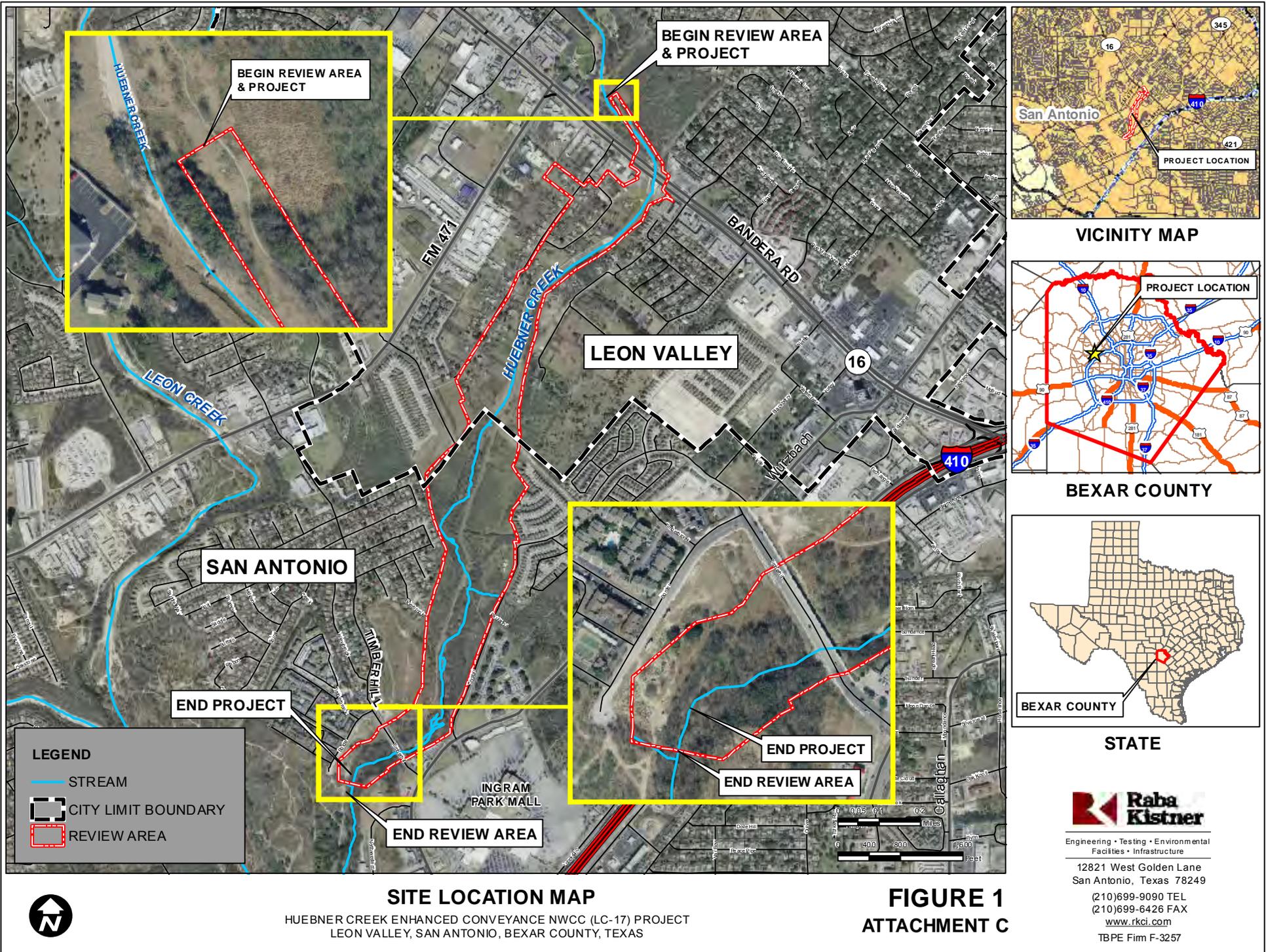
FLOODPLAIN MANAGEMENT: The USACE is sending a copy of this public notice to the local floodplain administrator. In accordance with 44 CFR part 60 (Flood Plain Management Regulations Criteria for Land Management and Use), the floodplain administrators of participating communities are required to review all proposed development to determine if a floodplain development permit is required and maintain records of such review.

SOLICITATION OF COMMENTS: The public notice is being distributed to all known interested persons in order to assist in developing fact upon which a decision by the USACE may be based. For accuracy and completeness of the record, all data in support of or in opposition to the proposed work should be submitted in writing setting forth sufficient detail to furnish a clear understanding of the reasons for support or opposition.

PUBLIC HEARING: Prior to the close of the comment period any person may make a written request for a public hearing setting forth the particular reasons for the request. The District Engineer will determine whether the issues raised are substantial and should be considered in his permit decision. If a public hearing is warranted, all known interested persons will be notified of the time, date, and location.

CLOSE OF COMMENT PERIOD: All comments pertaining to this Public Notice must reach this office on or before March 26, 2012, which is the close of the comment period. Extensions of the comment period may be granted for valid reasons provided a written request is received by the limiting date. If no comments are received by that date, it will be considered that there are no objections. Comments and requests for additional information should be submitted to Mr. Fred Land; Regulatory Branch, CESWF-PER-R; U. S. Army Corps of Engineers; Post Office Box 17300; Fort Worth, Texas 76102-0300. You may visit the Regulatory Branch in Room 3A37 of the Federal Building at 819 Taylor Street in Fort Worth between 8:00 A.M. and 3:30 P.M., Monday through Friday. Telephone inquiries should be directed to (817) 886-1729. Please note that names and addresses of those who submit comments in response to this public notice may be made publicly available.

DISTRICT ENGINEER
FORT WORTH DISTRICT
CORPS OF ENGINEERS



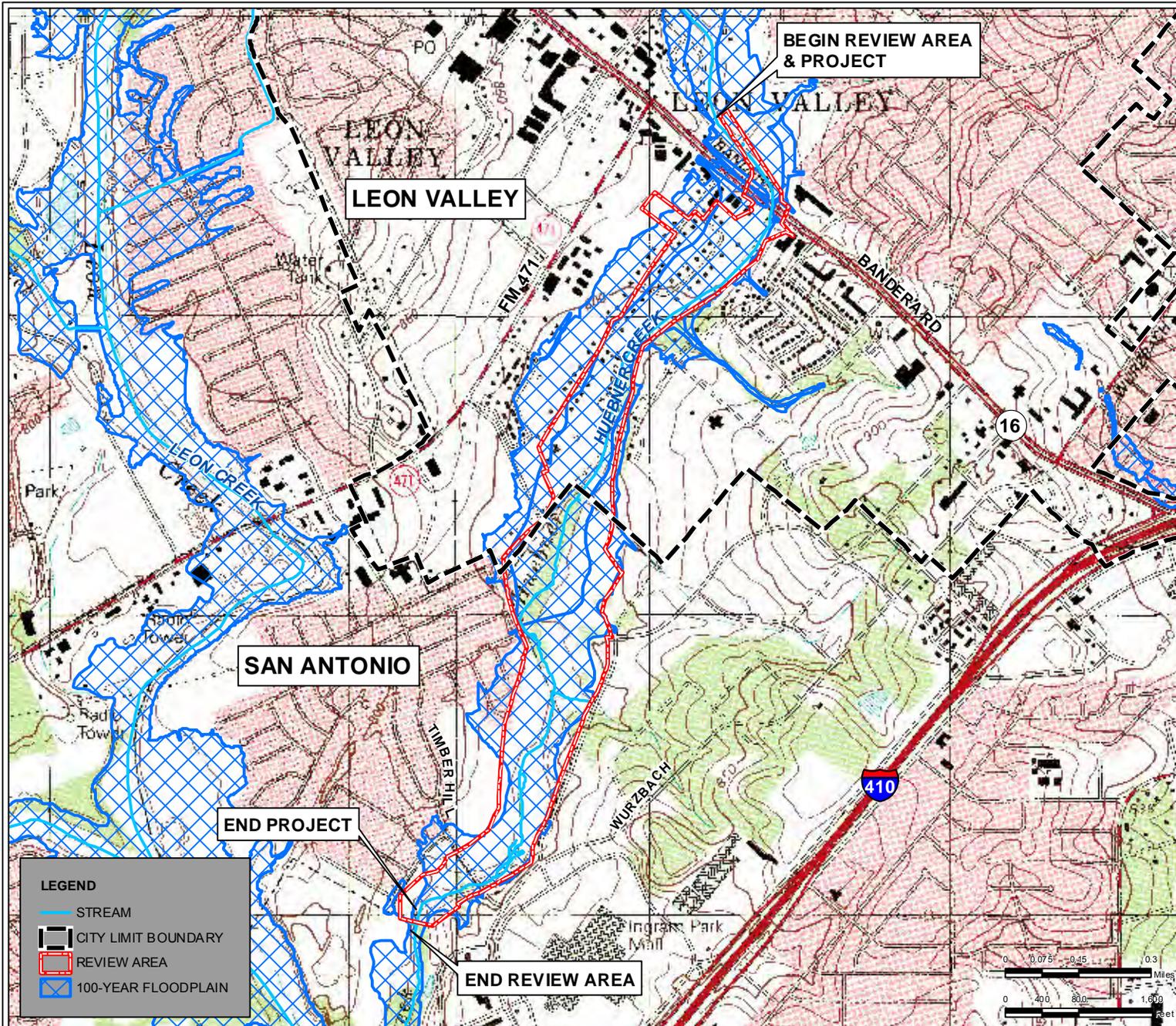
SITE LOCATION MAP
 HUEBNER CREEK ENHANCED CONVEYANCE NWCC (LC-17) PROJECT
 LEON VALLEY, SAN ANTONIO, BEXAR COUNTY, TEXAS

SOURCE: 2010 Aerial Photograph, Van Raub Quadrangle Provided by The City of San Antonio (COASA)

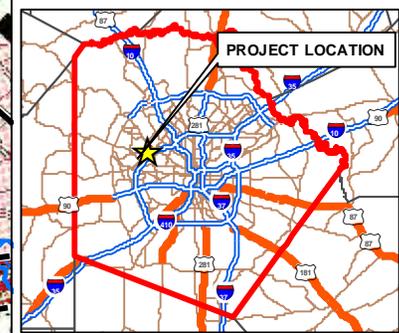


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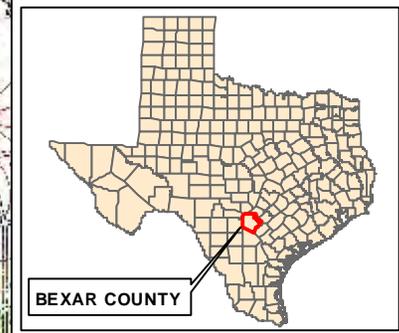
12821 West Golden Lane
 San Antonio, Texas 78249
 (210)699-9090 TEL
 (210)699-6426 FAX
www.rkci.com
 TBPE Firm F-3257



VICINITY MAP



BEXAR COUNTY



STATE



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San Antonio, Texas 78249
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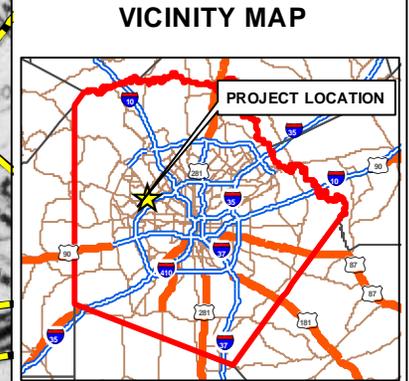
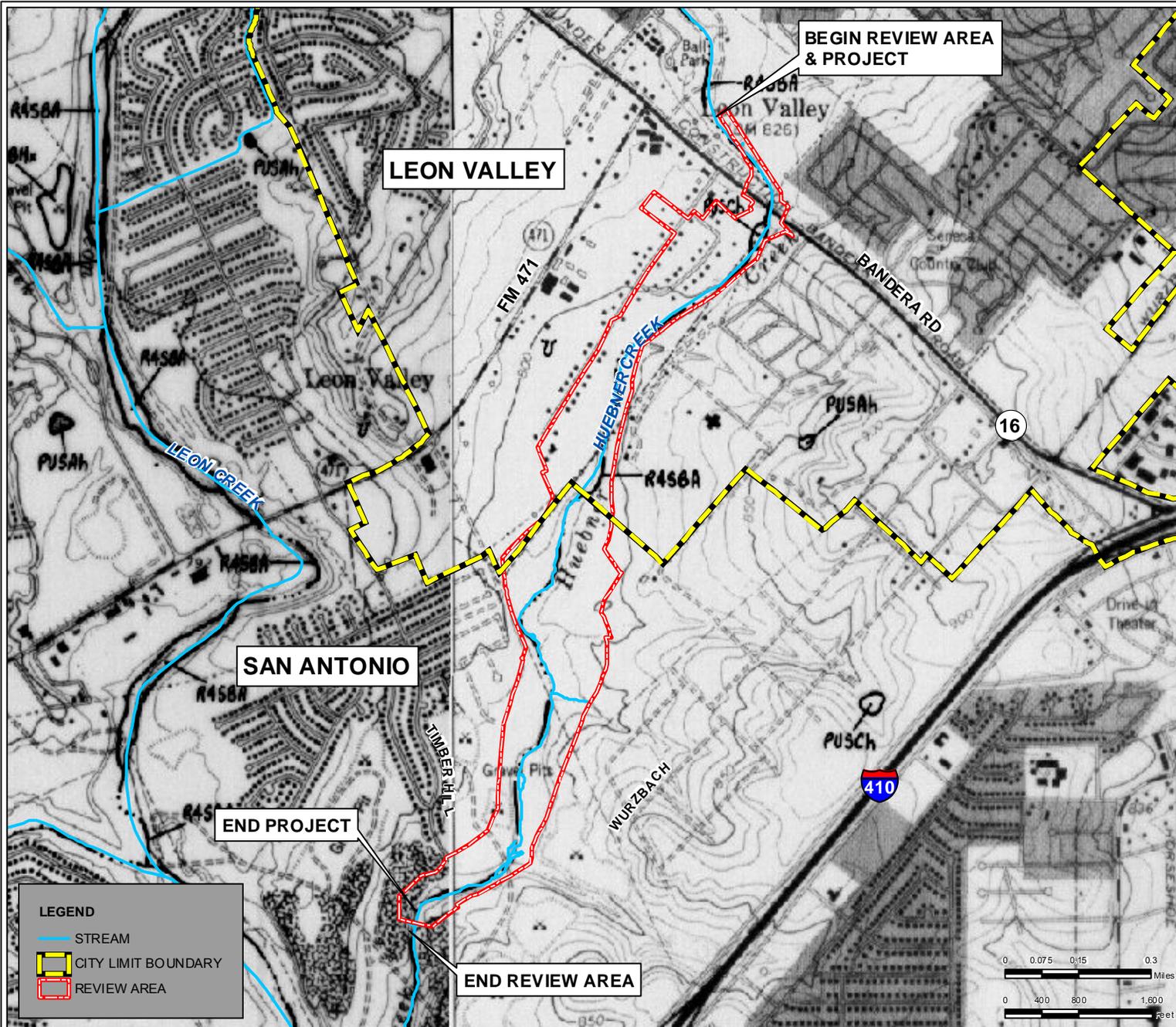
FEMA 100-YEAR FLOODPLAIN & USGS TOPOGRAPHIC MAP

HUEBNER CREEK ENHANCED CONVEYANCE NWCC (LC-17) PROJECT
LEON VALLEY, SAN ANTONIO, BEXAR COUNTY, TEXAS

**FIGURE 2
ATTACHMENT C**

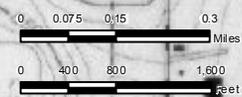


SOURCE: 1) USGS Topographic 7.5 Minute Quadangle San Antonio West, Culebra Hills Provided by Texas Natural Resources Information System (TNRIS) - 1993
2) 100-Year Floodplain Data Provided by FEMA - 2010



LEGEND

- STREAM
- CITY LIMIT BOUNDARY
- REVIEW AREA



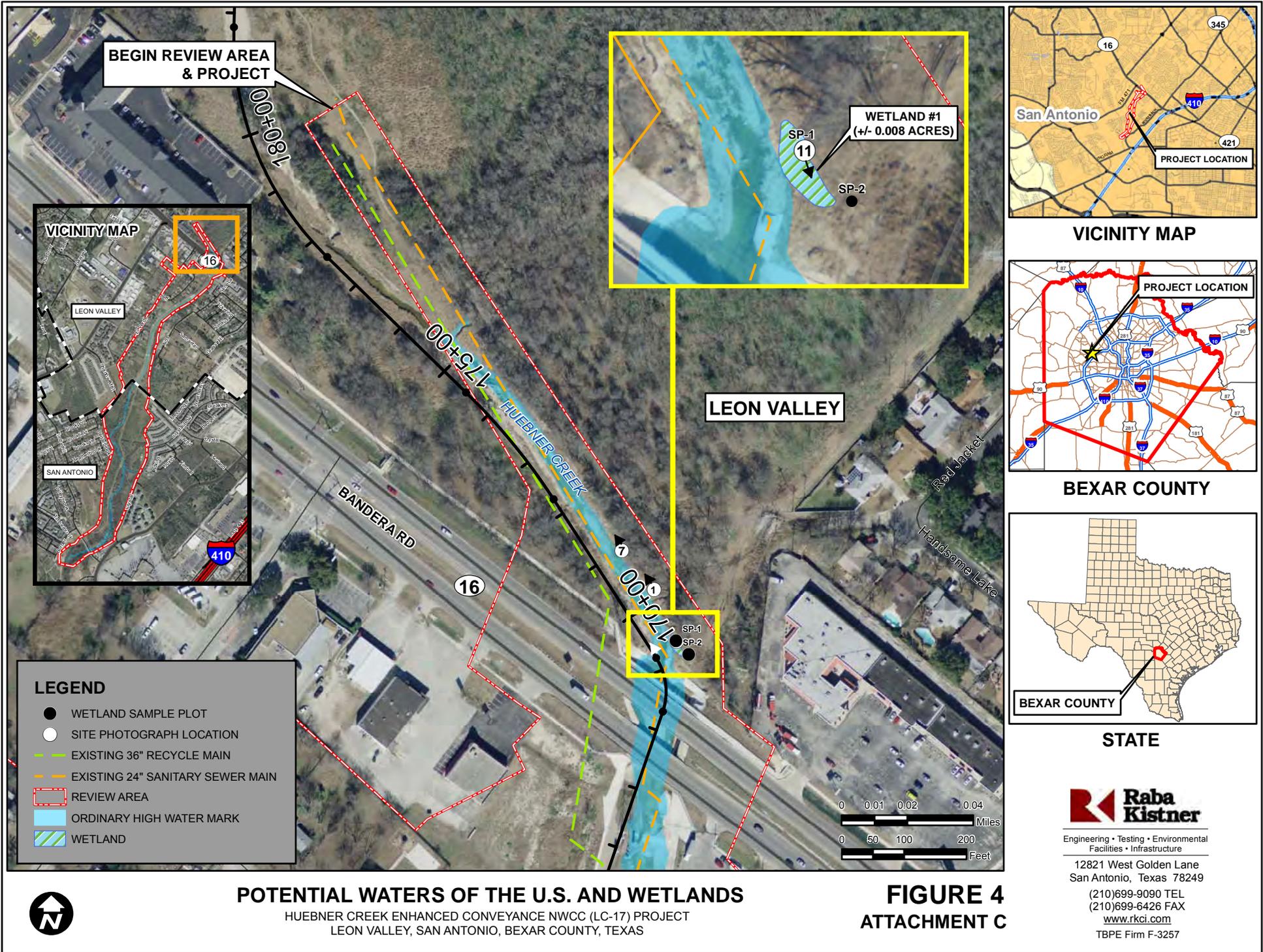
NATIONAL WETLAND INVENTORY MAP
 HUEBNER CREEK ENHANCED CONVEYANCE NWCC (LC-17) PROJECT
 LEON VALLEY, SAN ANTONIO, BEXAR COUNTY, TEXAS

FIGURE 3
ATTACHMENT C



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SOURCE: National Wetland Inventory 7.5 Minute Quadrangles San Antonio West & Culebra Hills Provided by The United States Fish & Wildlife Service (USFWS) - 1994

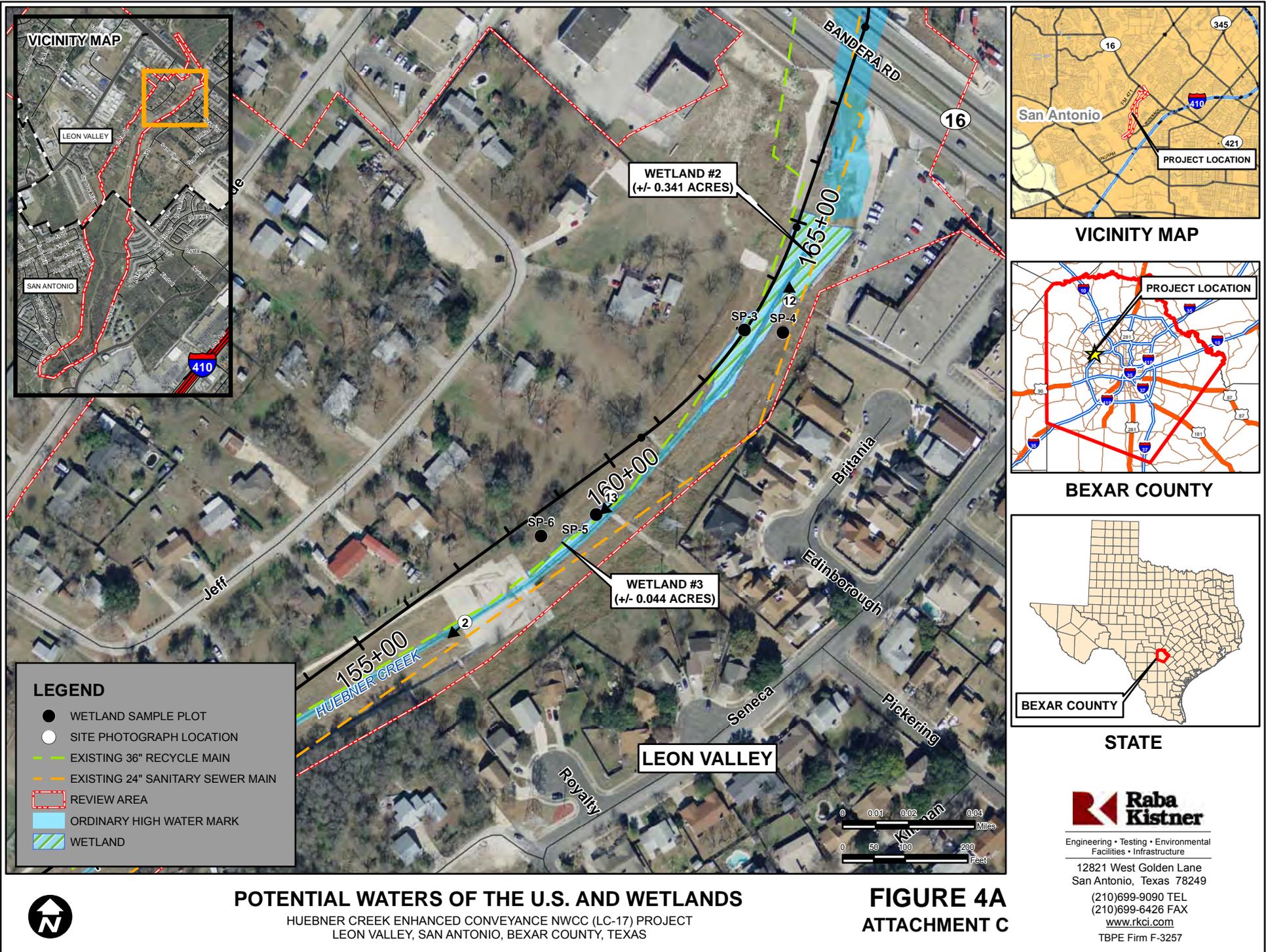


SOURCE: 2010 Aerial Photograph, Van Raub Quadrangle Provided by The City of San Antonio (COSA)



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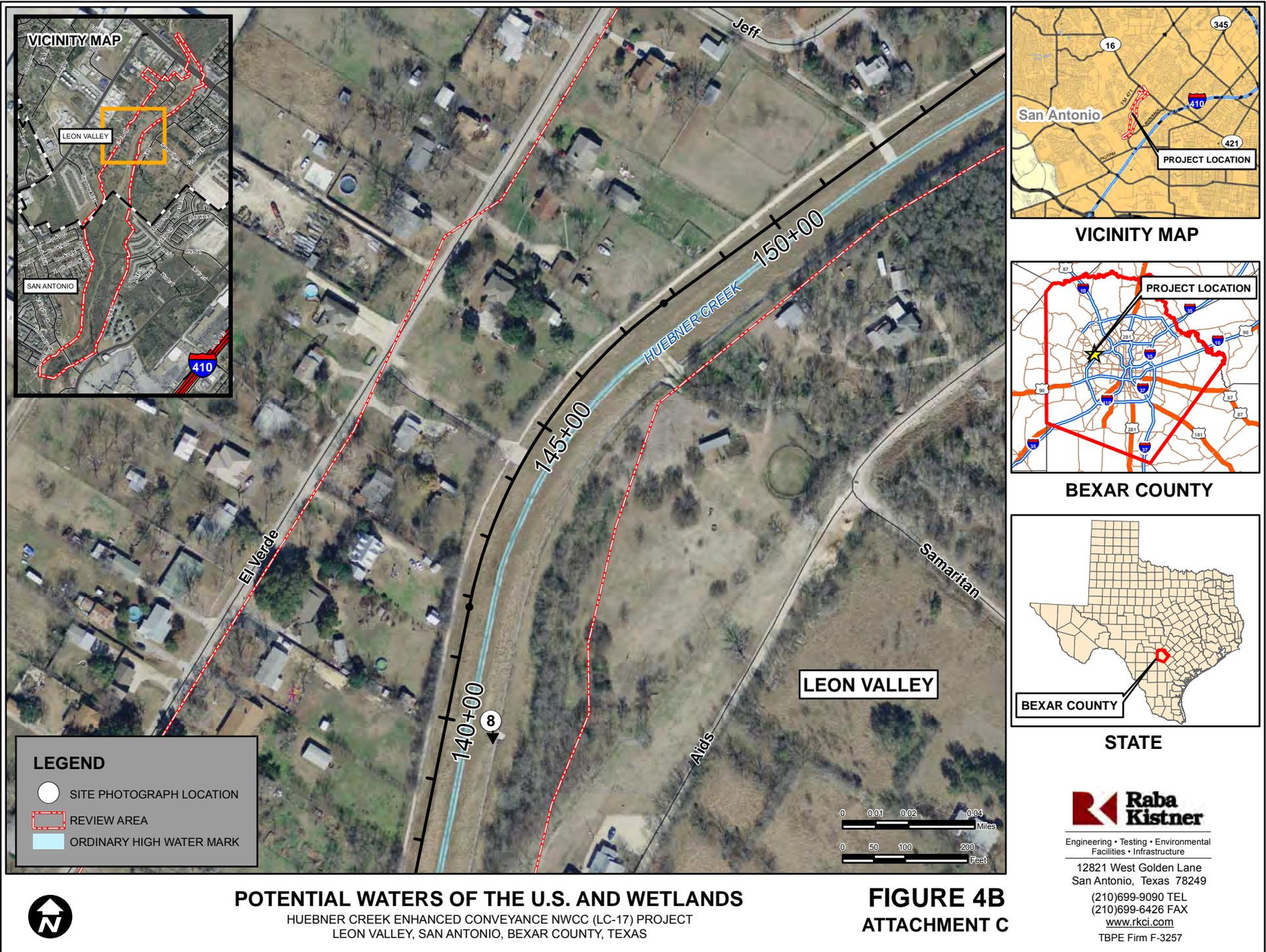


SOURCE: 2010 Aerial Photograph, San Antonio West Quadrangle Provided by The City of San Antonio (COSA)



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LEGEND

-  SITE PHOTOGRAPH LOCATION
-  REVIEW AREA
-  ORDINARY HIGH WATER MARK

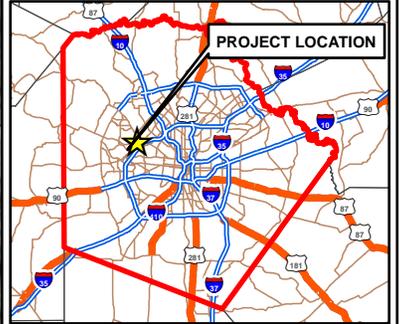


POTENTIAL WATERS OF THE U.S. AND WETLANDS
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 LEON VALLEY, SAN ANTONIO, BEXAR COUNTY, TEXAS

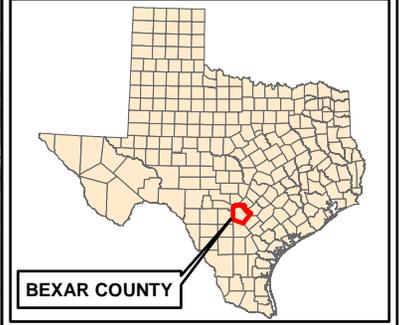
FIGURE 4B
ATTACHMENT C



VICINITY MAP



BEXAR COUNTY

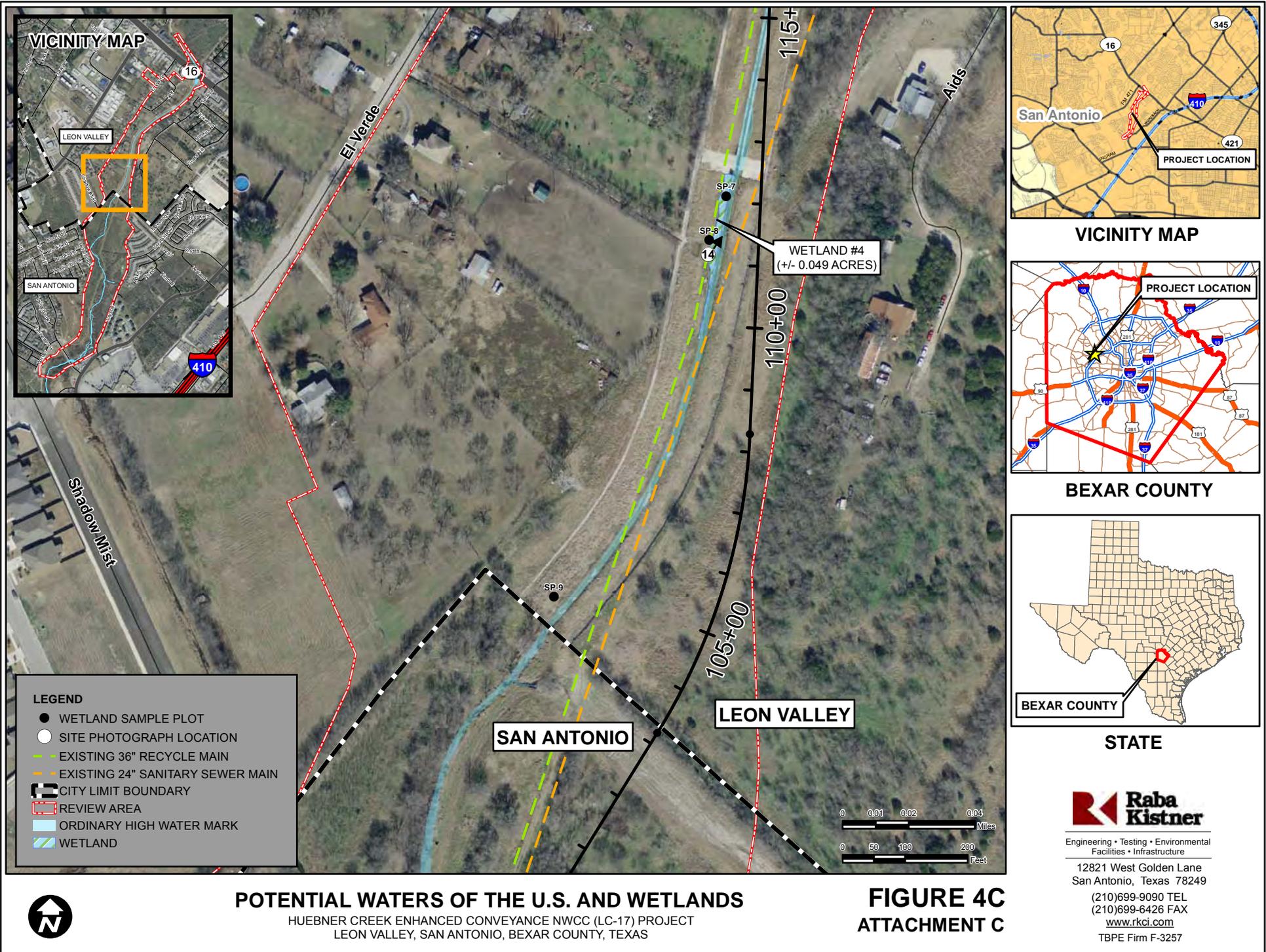


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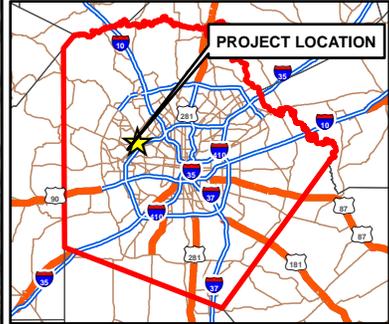
SOURCE: 2010 Aerial Photograph, Van Raub Quadrangle Provided by The City of San Antonio (COSA)



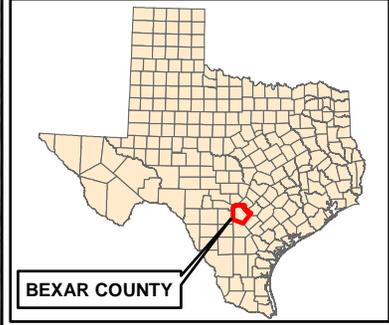
VICINITY MAP



VICINITY MAP



BEXAR COUNTY



STATE

- LEGEND**
- WETLAND SAMPLE PLOT
 - SITE PHOTOGRAPH LOCATION
 - EXISTING 36" RECYCLE MAIN
 - EXISTING 24" SANITARY SEWER MAIN
 - CITY LIMIT BOUNDARY
 - REVIEW AREA
 - ORDINARY HIGH WATER MARK
 - WETLAND



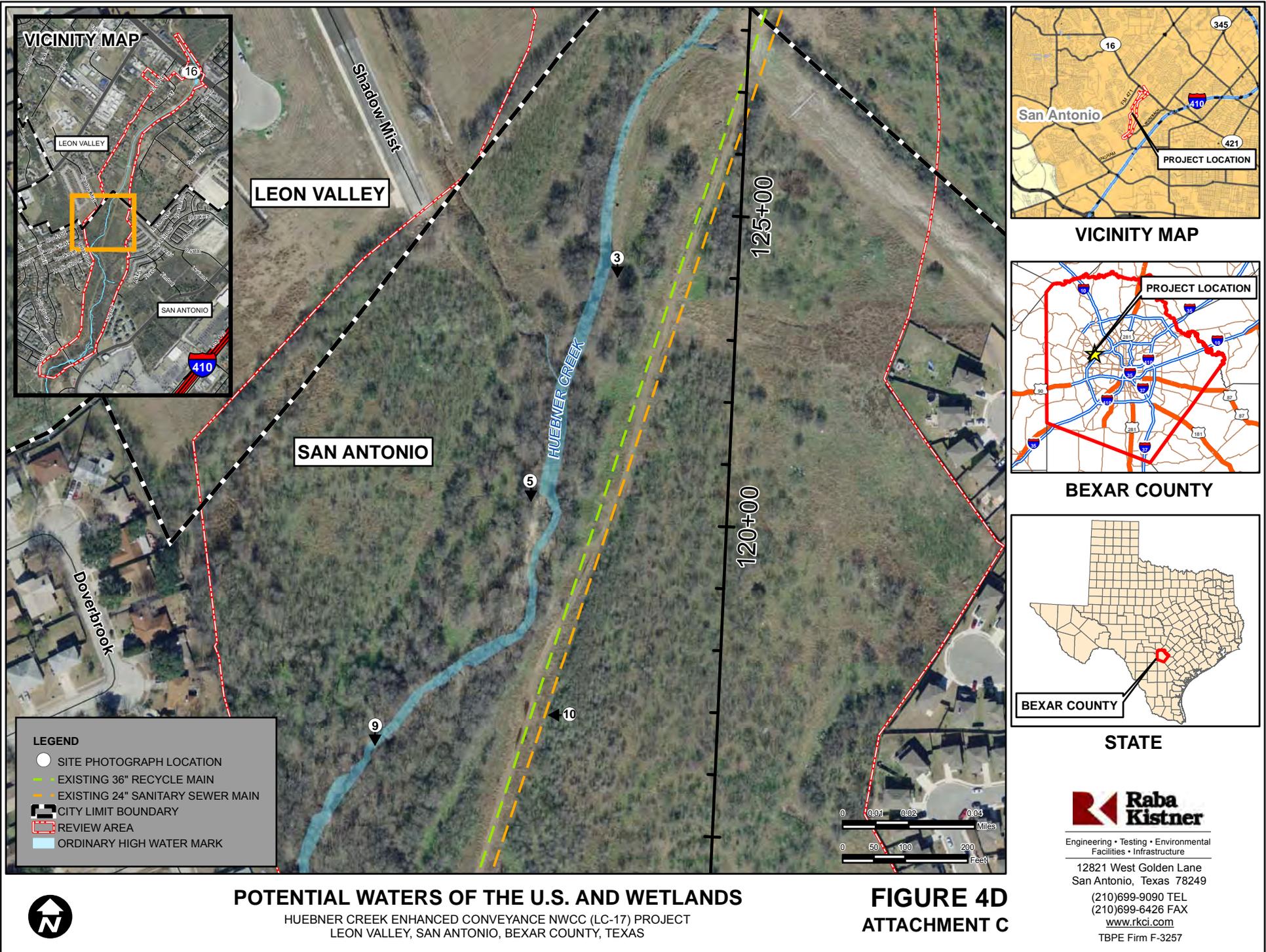
POTENTIAL WATERS OF THE U.S. AND WETLANDS
 HUEBNER CREEK ENHANCED CONVEYANCE NWCC (LC-17) PROJECT
 LEON VALLEY, SAN ANTONIO, BEXAR COUNTY, TEXAS

FIGURE 4C
ATTACHMENT C

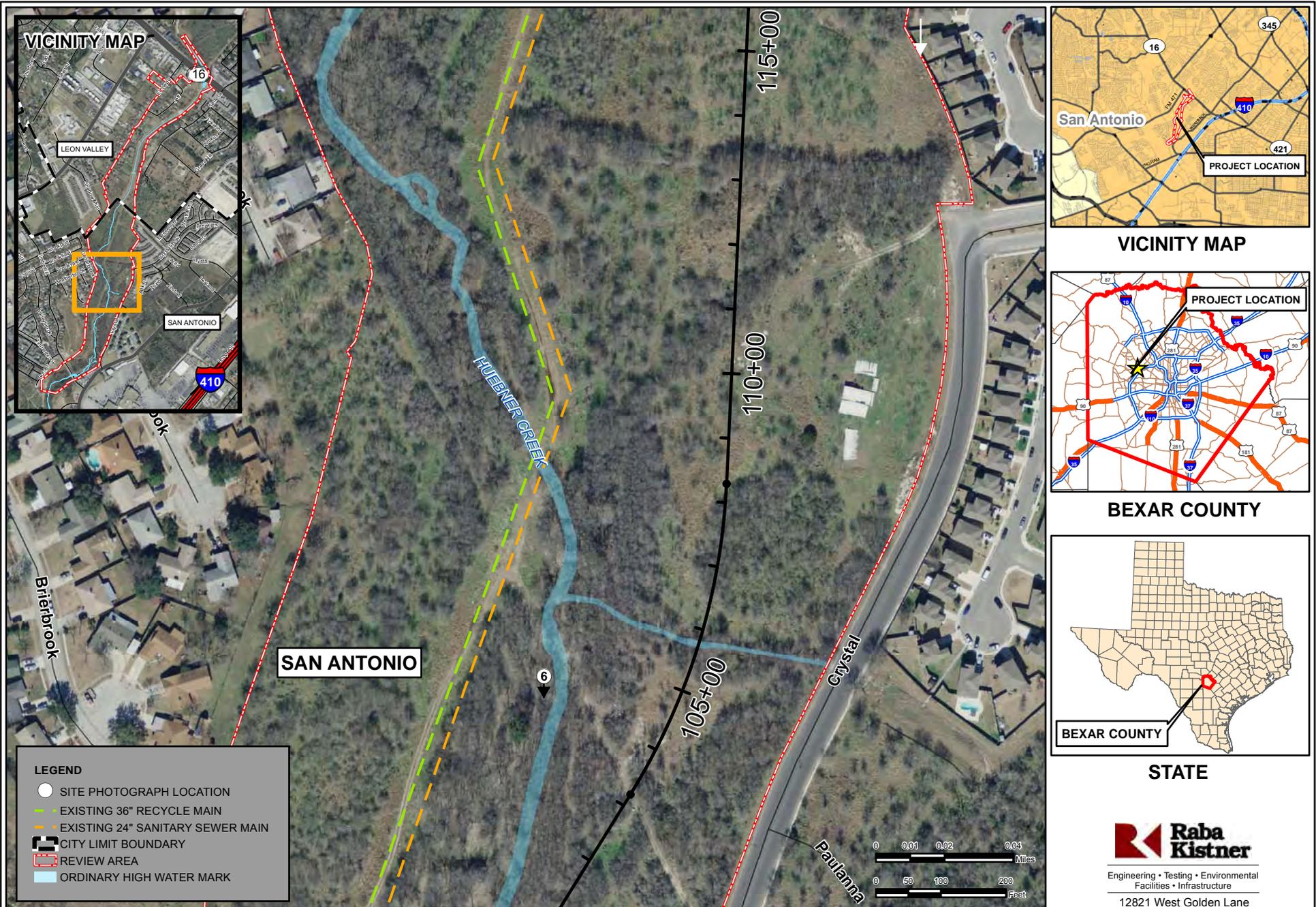


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SOURCE: 2009 Aerial Photograph, Van Raub Quadrangle Provided by The City of San Antonio (COSA)



SOURCE: 2010 Aerial Photograph, San Antonio West Quadrangle Provided by The City of San Antonio (COSA)



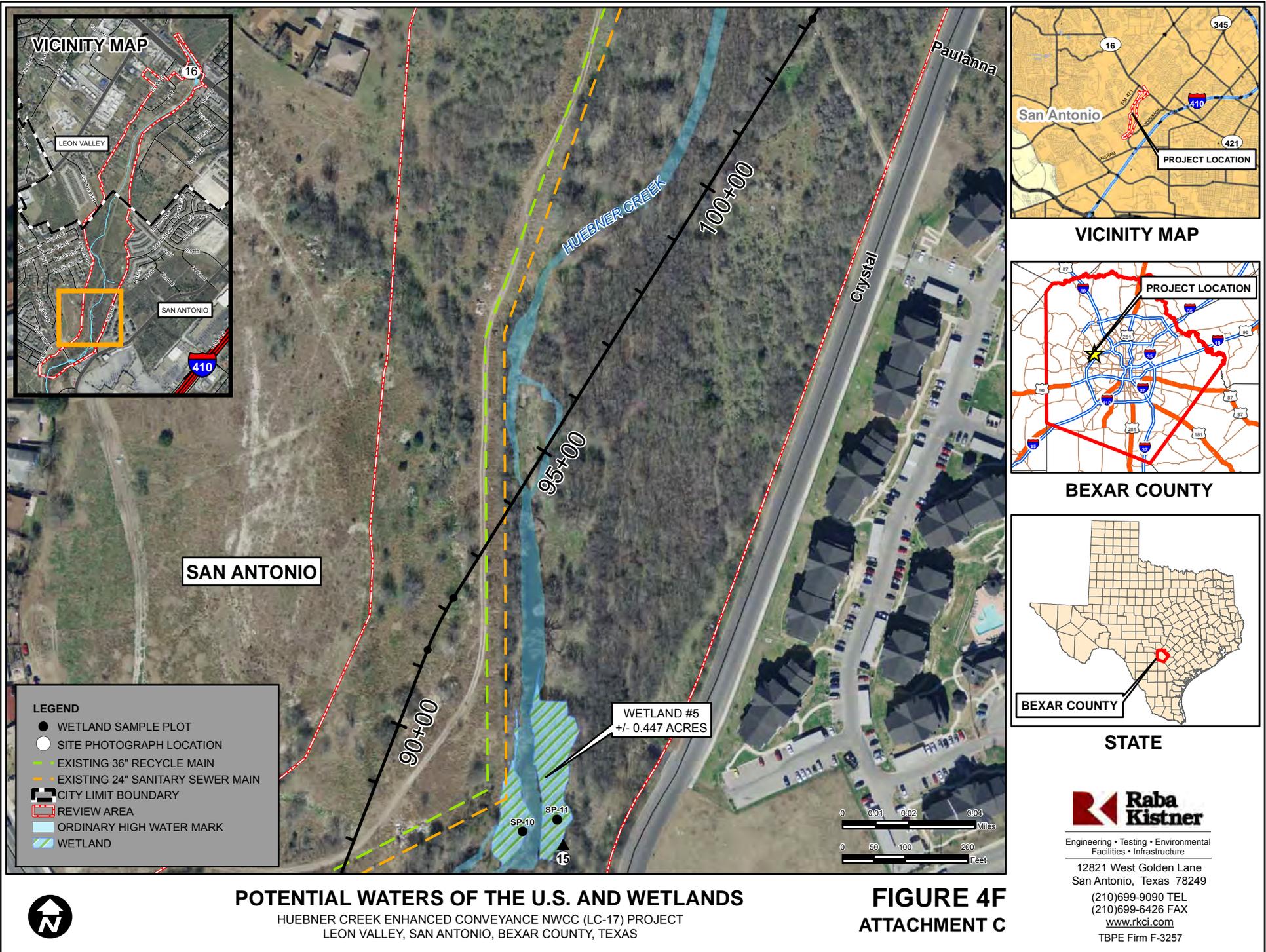
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 HUEBNER CREEK ENHANCED CONVEYANCE NWCC (LC-17) PROJECT
 LEON VALLEY, SAN ANTONIO, BEXAR COUNTY, TEXAS

FIGURE 4E
ATTACHMENT C

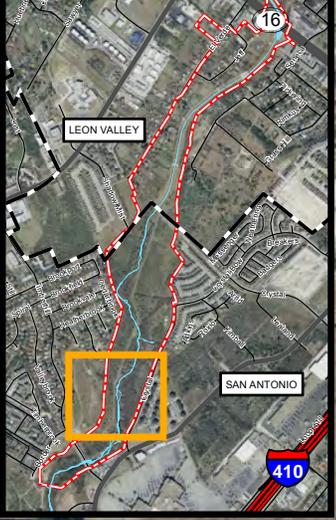
SOURCE: 2010 Aerial Photograph, San Antonio West Quadrangle Provided by The City of San Antonio (COSA)



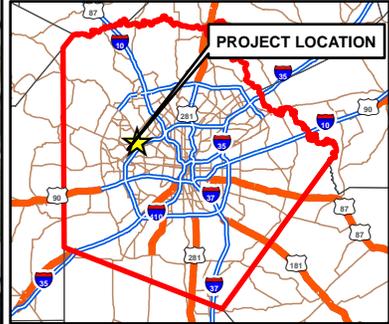
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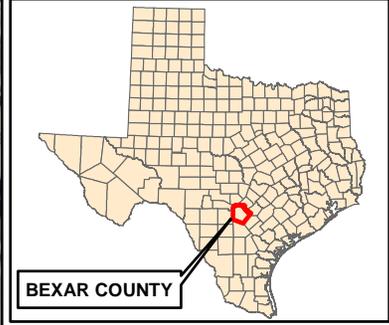
VICINITY MAP



VICINITY MAP



BEXAR COUNTY



STATE

LEGEND

- WETLAND SAMPLE PLOT
- SITE PHOTOGRAPH LOCATION
- EXISTING 36" RECYCLE MAIN
- EXISTING 24" SANITARY SEWER MAIN
- CITY LIMIT BOUNDARY
- REVIEW AREA
- ORDINARY HIGH WATER MARK
- WETLAND

WETLAND #5
+/- 0.447 ACRES



POTENTIAL WATERS OF THE U.S. AND WETLANDS

HUEBNER CREEK ENHANCED CONVEYANCE NWCC (LC-17) PROJECT
LEON VALLEY, SAN ANTONIO, BEXAR COUNTY, TEXAS

**FIGURE 4F
ATTACHMENT C**



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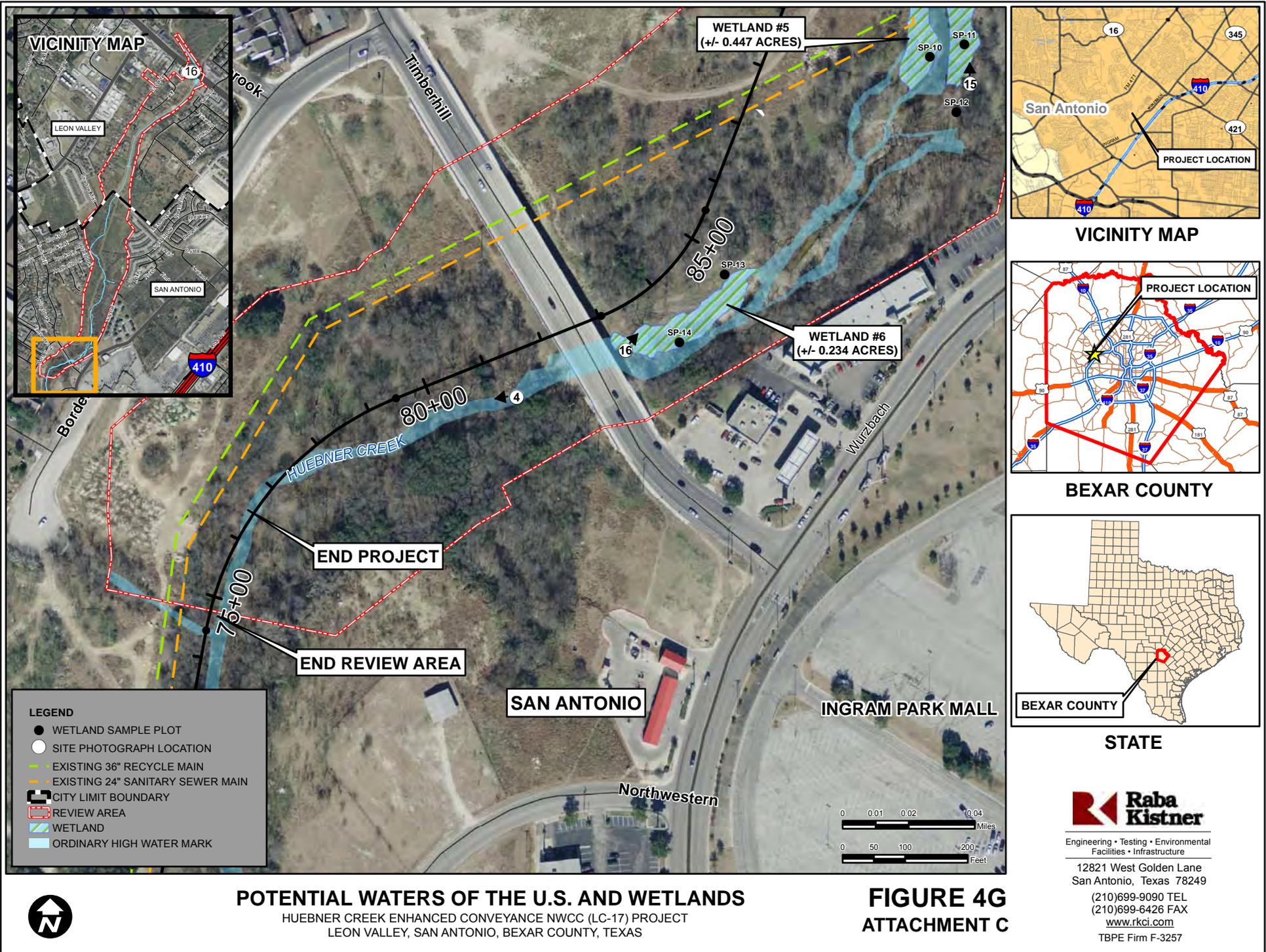
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SOURCE: 2009 Aerial Photograph, Van Raub Quadrangle Provided by The City of San Antonio (COSA)



SOURCE: 2009 Aerial Photograph, Van Raub Quadrangle Provided by The City of San Antonio (COSA)

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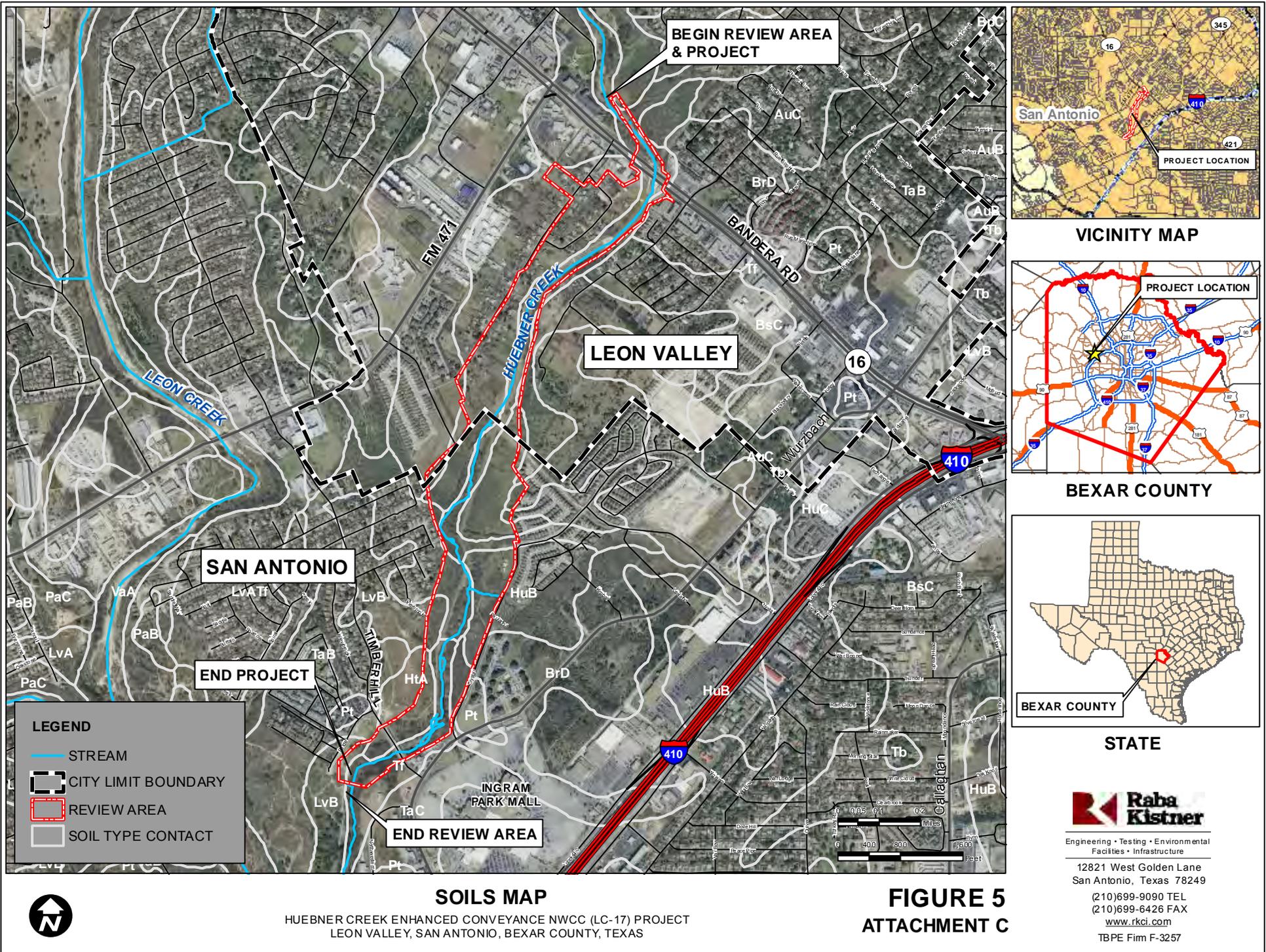
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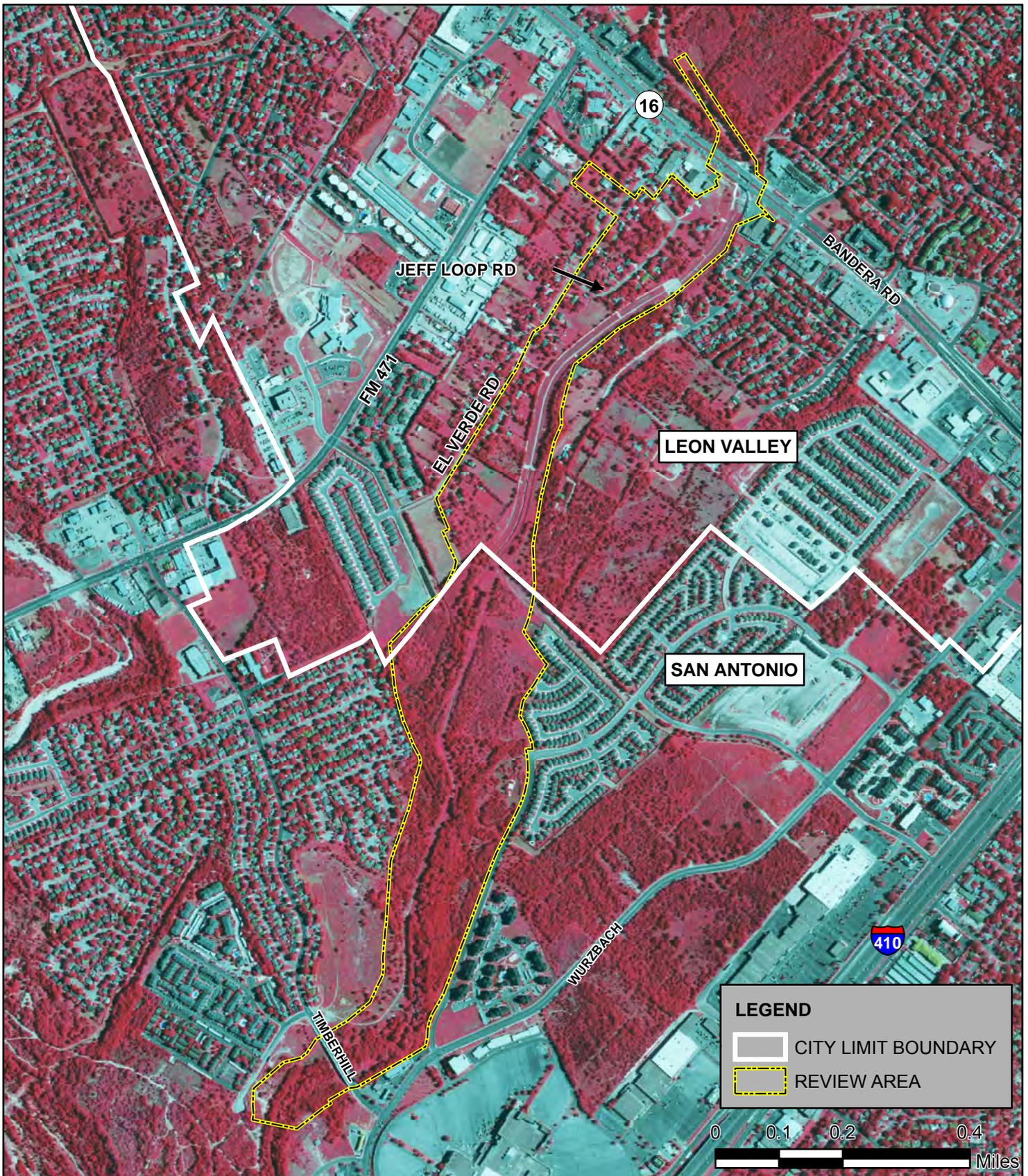
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SOURCE: 1) 2010 Aerial Photograph, Van Raub Quadrangle Provided by The City of San Antonio (COSA)
2) Soil Type Data Provided by Natural Resources Conservation Service (NRCS) - 2004



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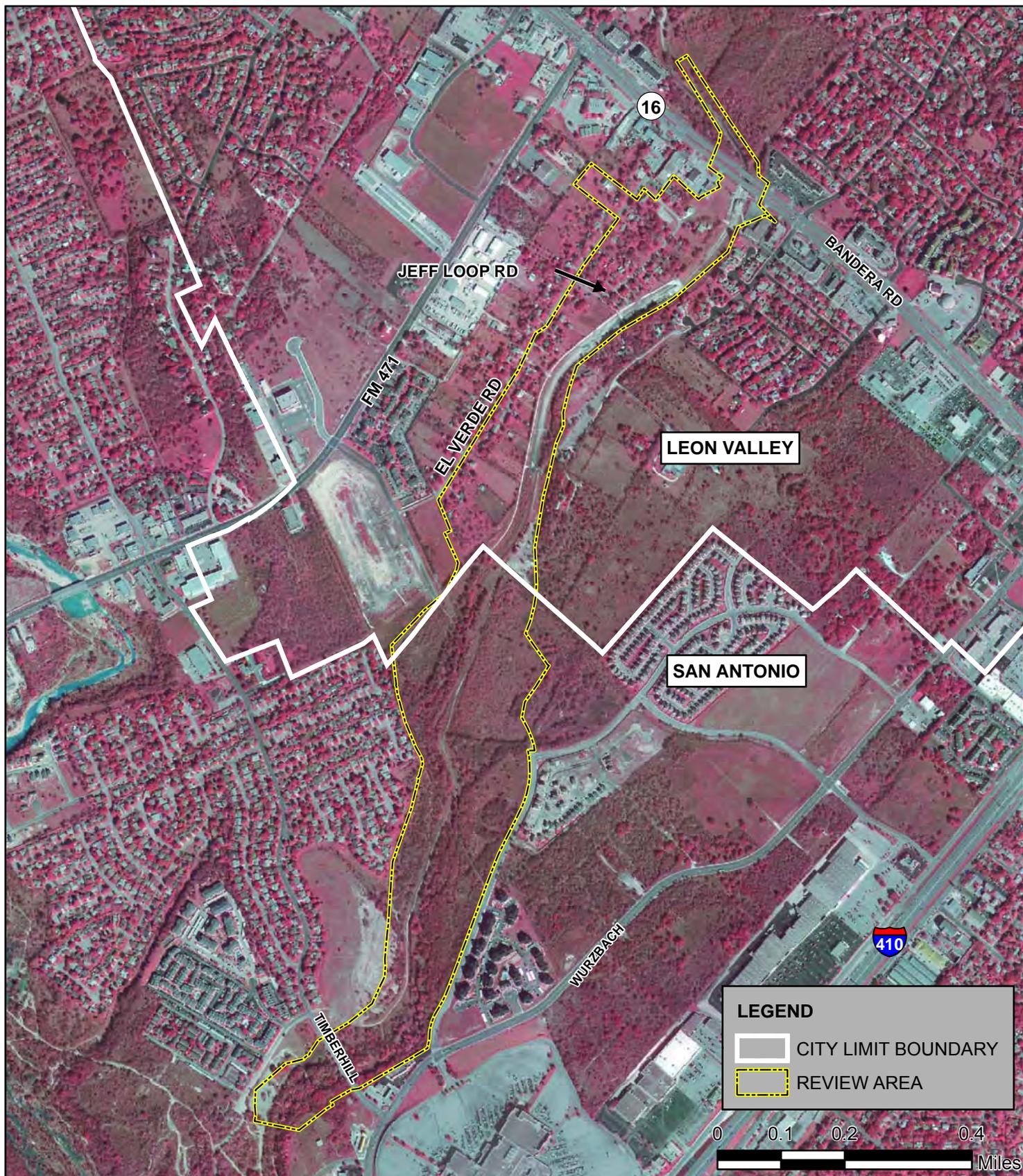
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2010 AERIAL PHOTOGRAPH

HUEBNER CREEK - ENHANCED CONVEYANCE PROJECT (LC-17)
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FIGURE 6

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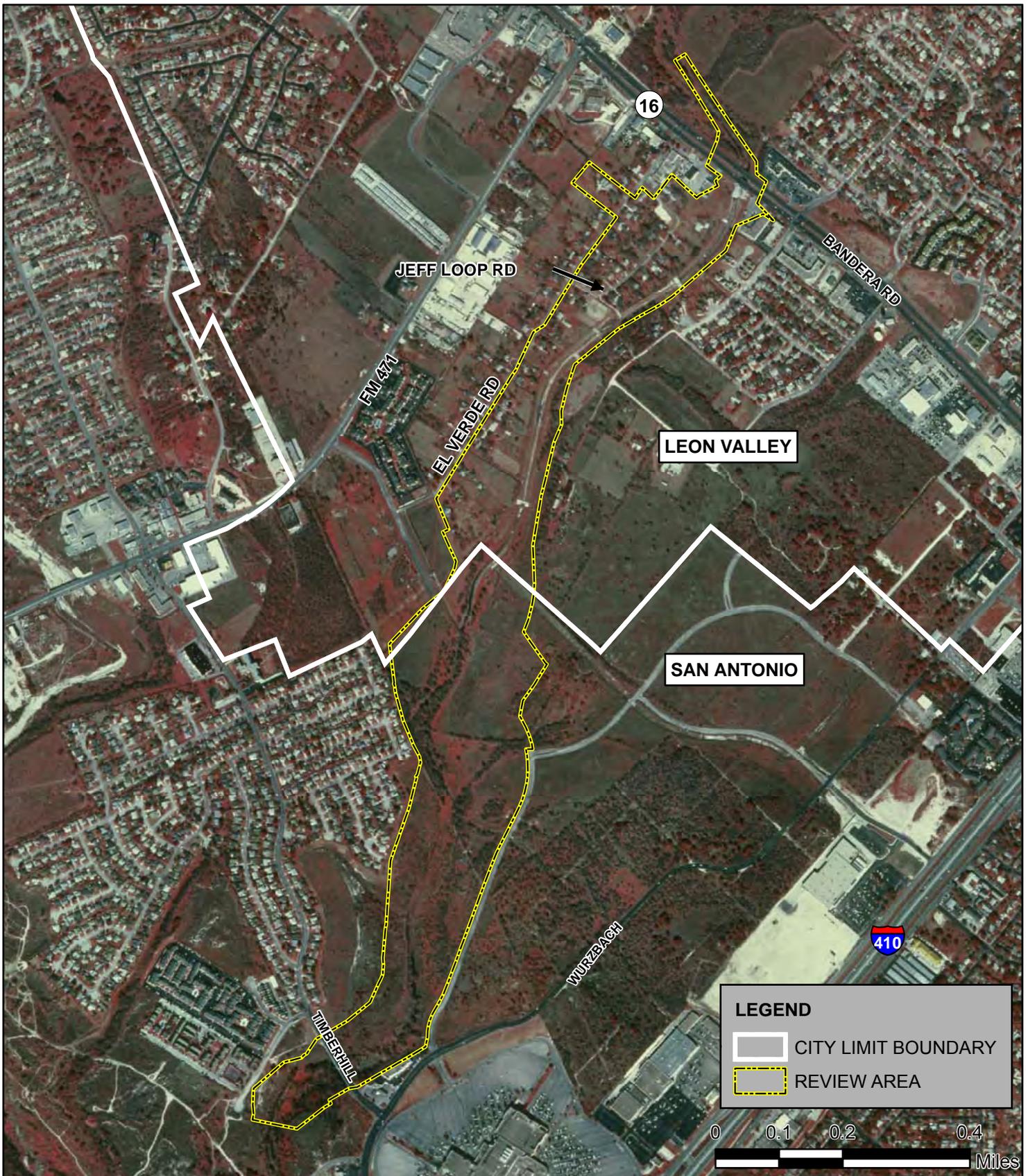
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2004 AERIAL PHOTOGRAPH

HUEBNER CREEK - ENHANCED CONVEYANCE PROJECT (LC-17)
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FIGURE 6A

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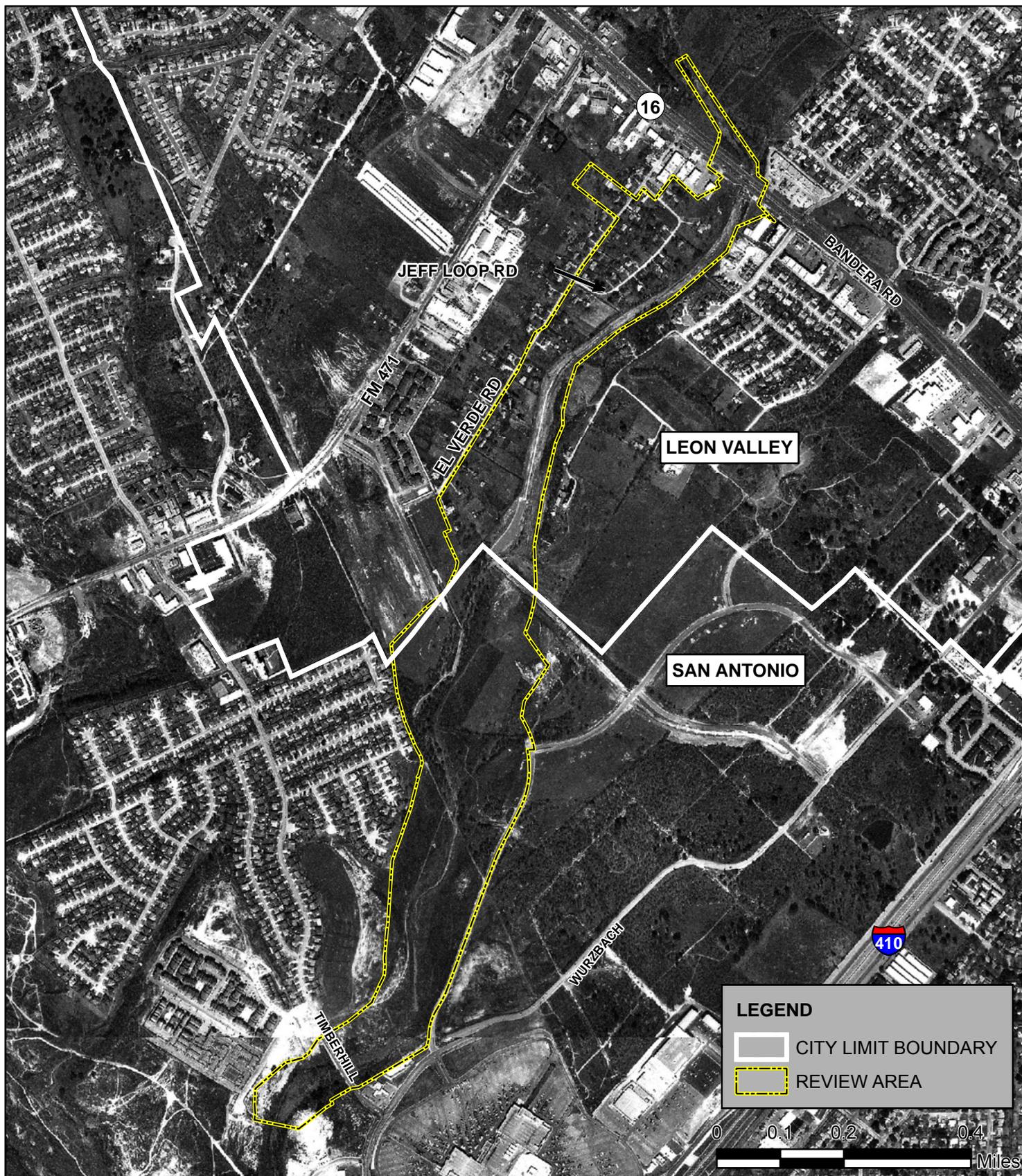
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1995 AERIAL PHOTOGRAPH

HUEBNER CREEK - ENHANCED CONVEYANCE PROJECT (LC-17)
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FIGURE 6B

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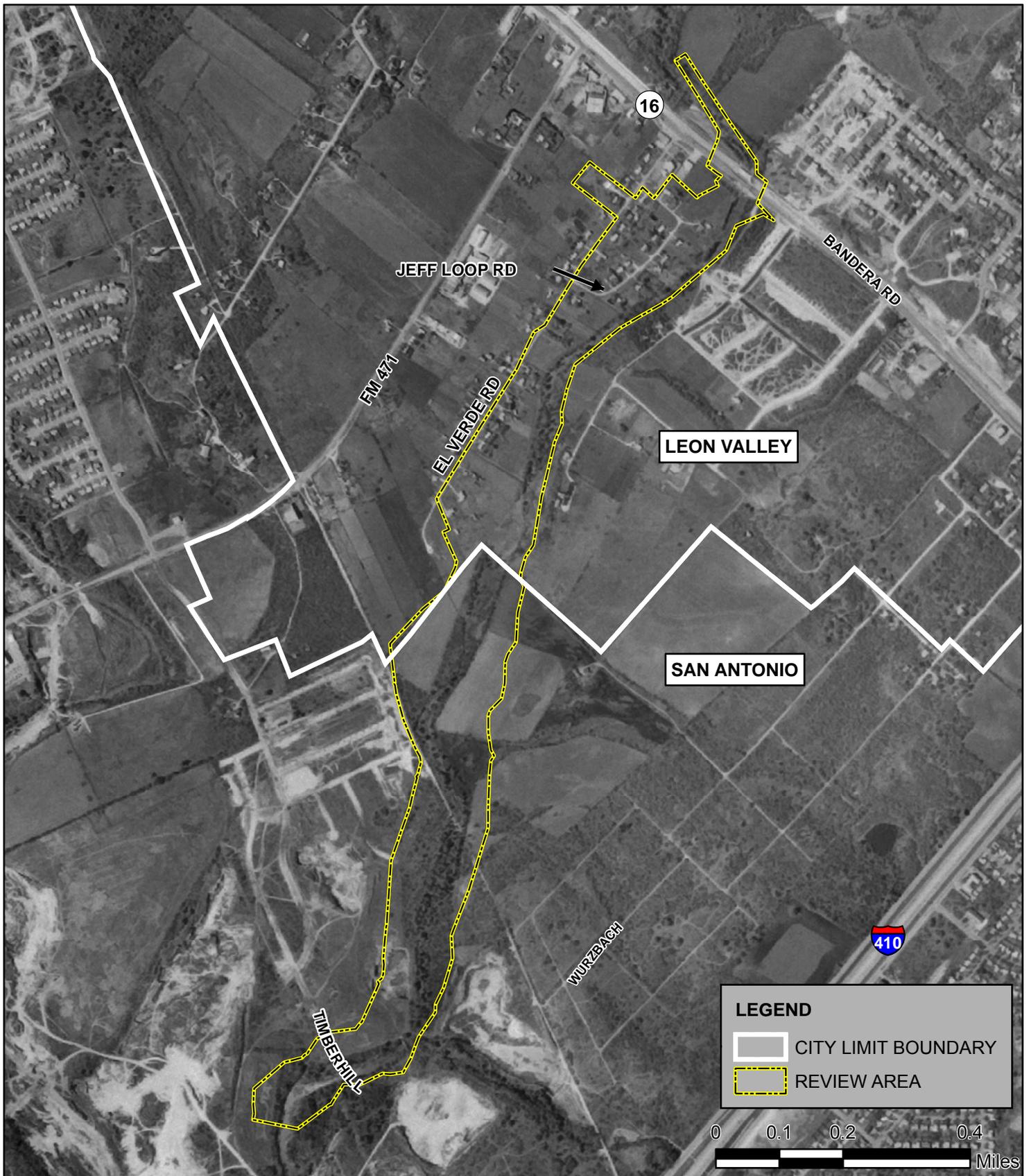
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1985 AERIAL PHOTOGRAPH

HUEBNER CREEK - ENHANCED CONVEYANCE PROJECT (LC-17)
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FIGURE 6C

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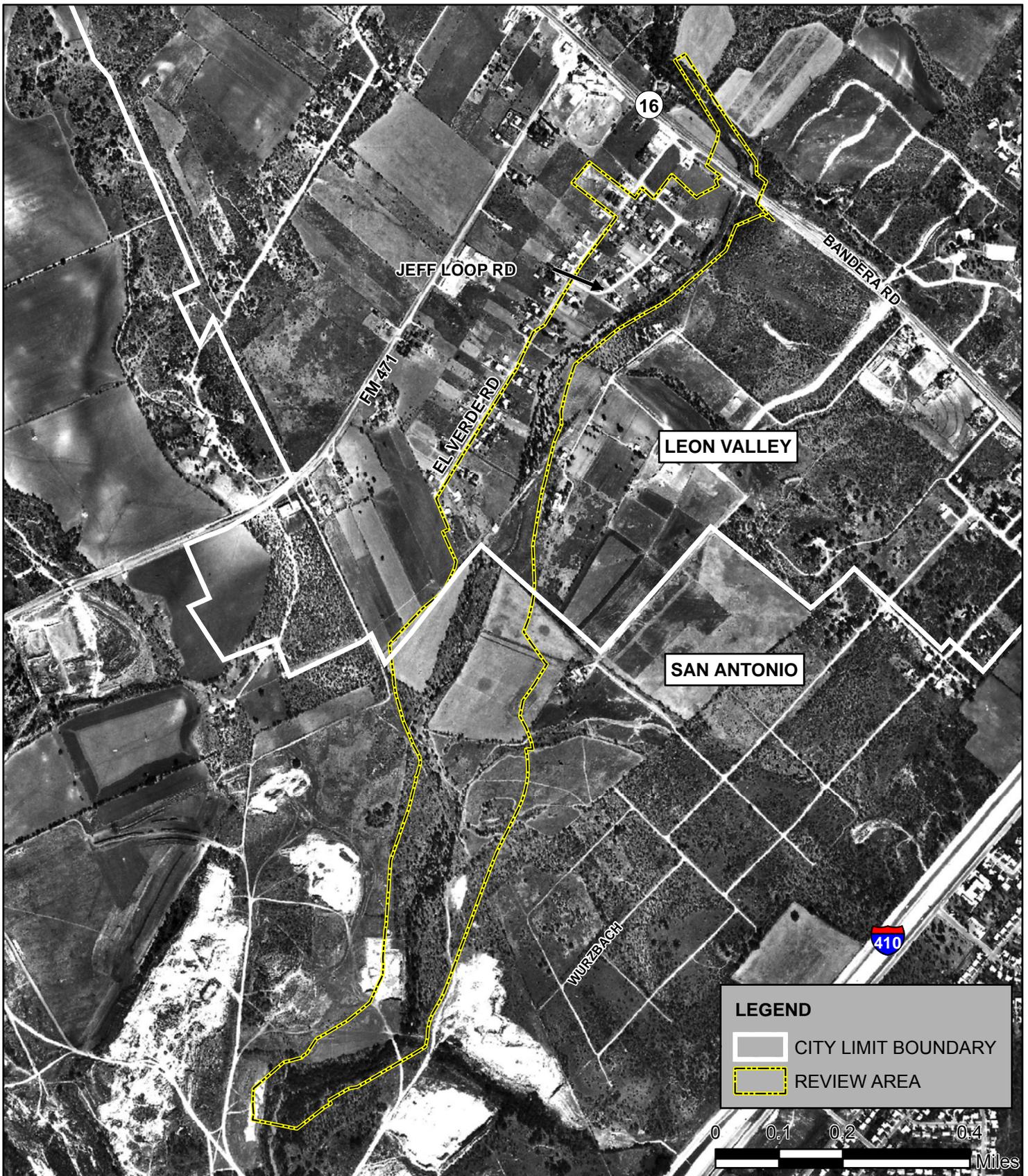
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1973 AERIAL PHOTOGRAPH

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FIGURE 6D

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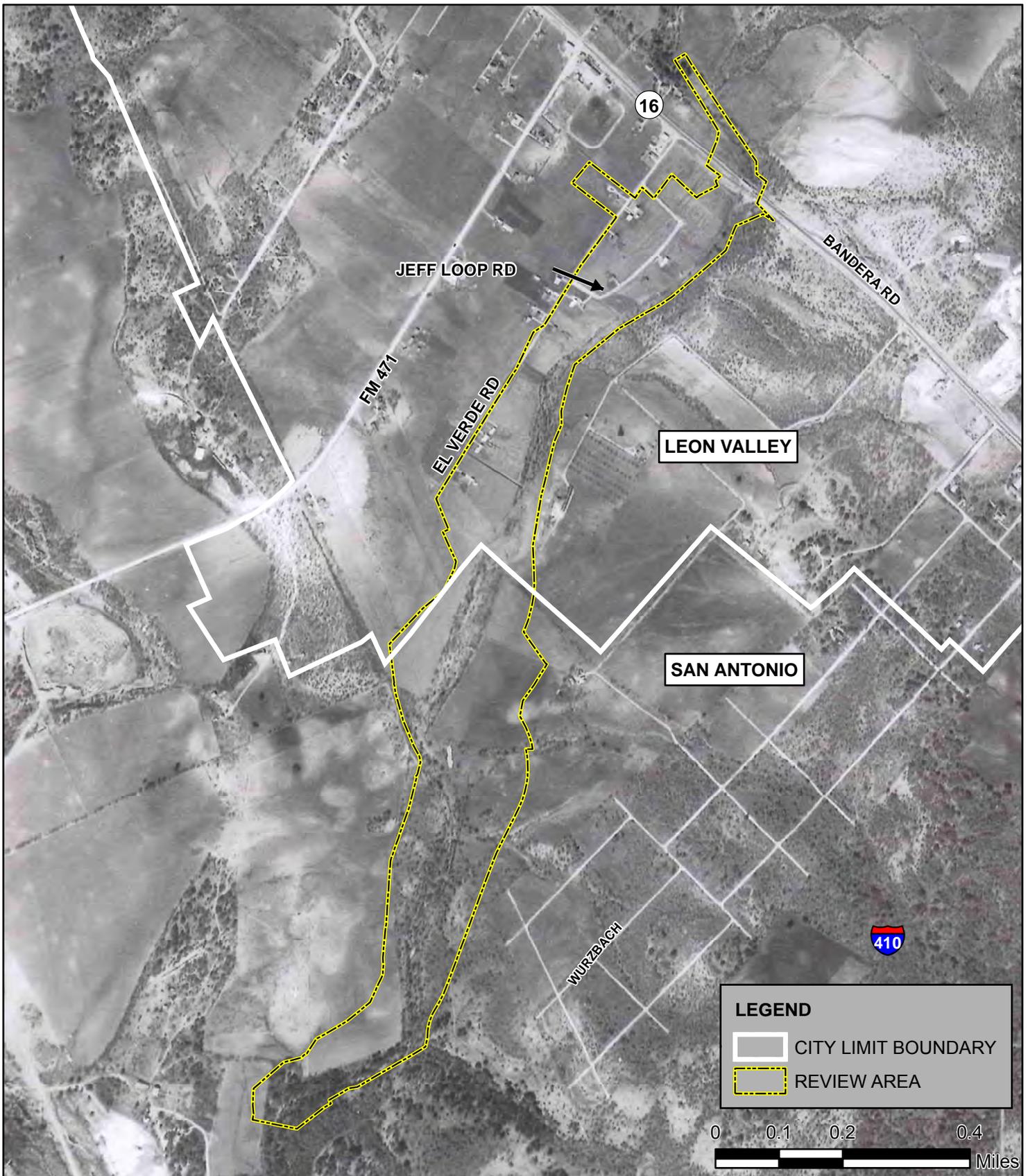
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1966 AERIAL PHOTOGRAPH

HUEBNER CREEK - ENHANCED CONVEYANCE PROJECT (LC-17)
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FIGURE 6E

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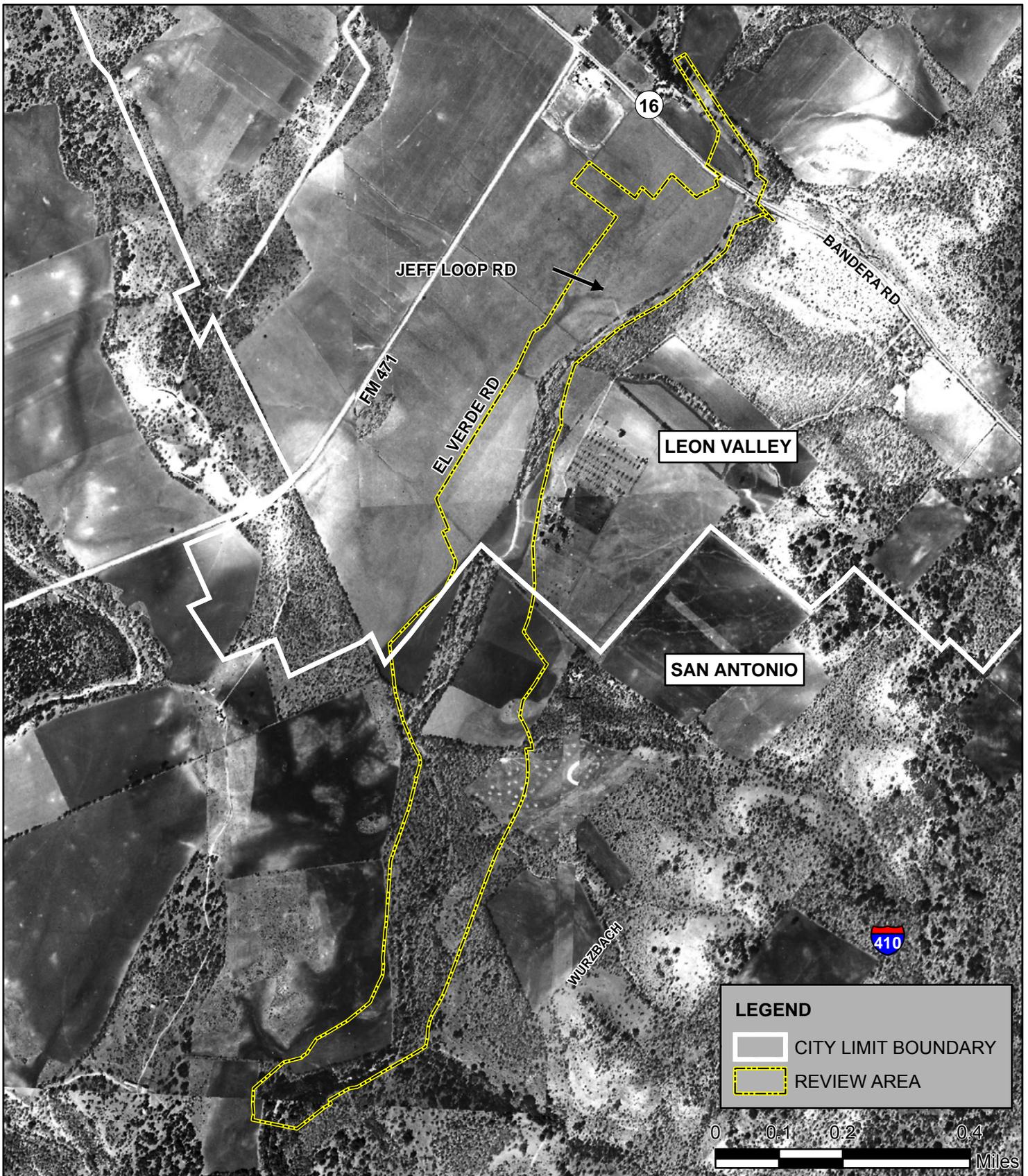
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1955 AERIAL PHOTOGRAPH

HUEBNER CREEK - ENHANCED CONVEYANCE PROJECT (LC-17)
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FIGURE 6F



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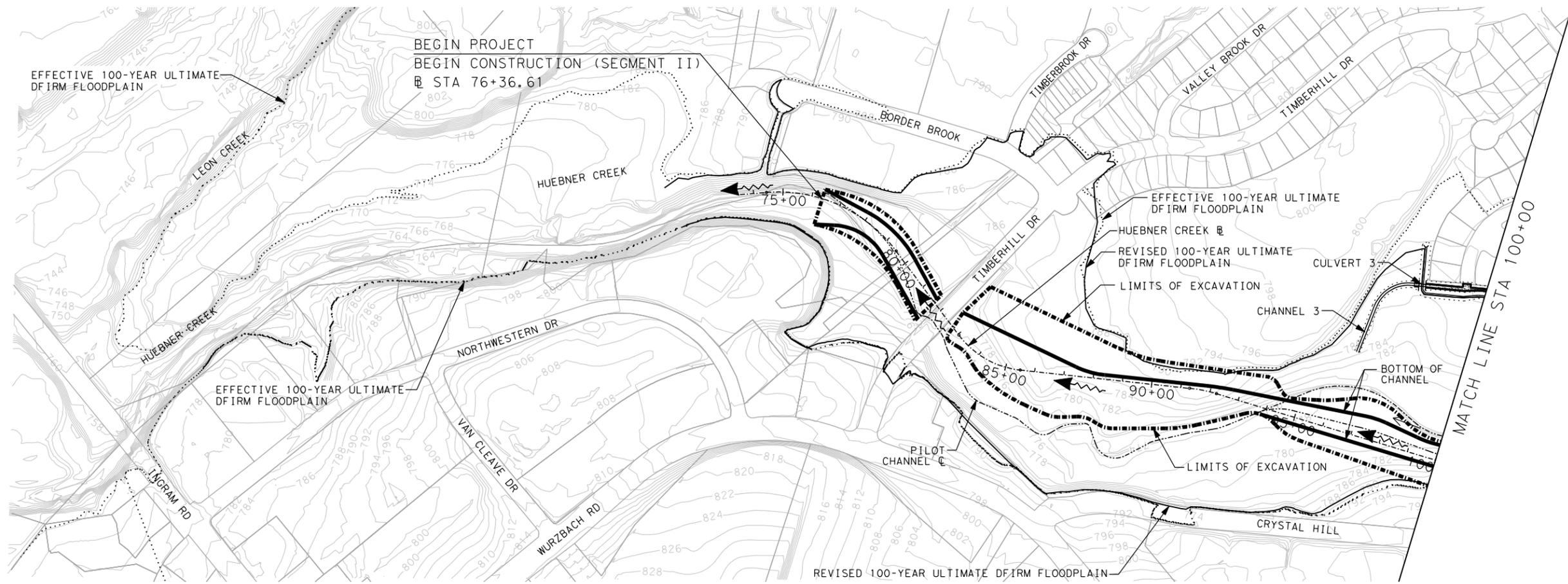
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1938 AERIAL PHOTOGRAPH

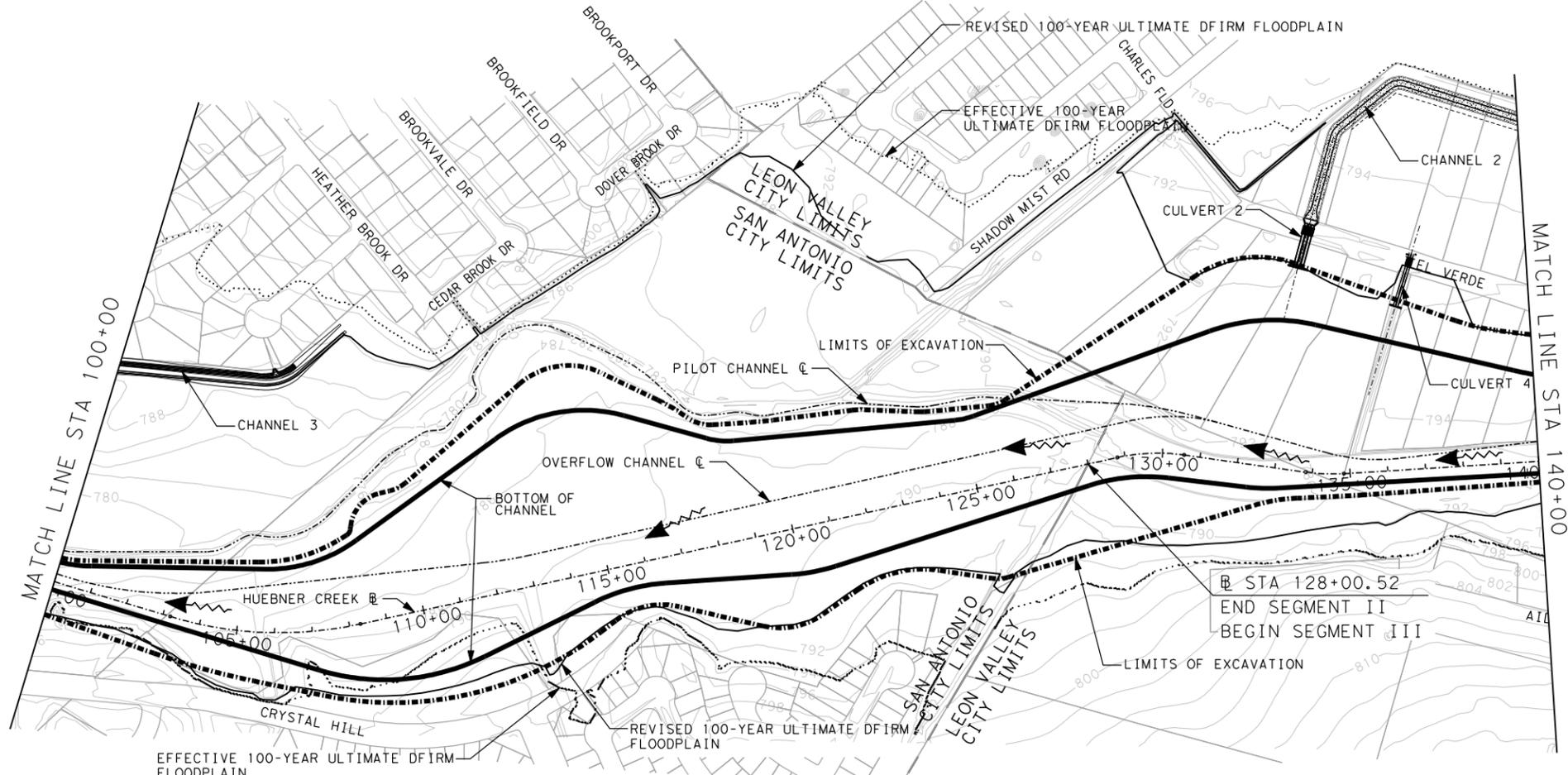
HUEBNER CREEK - ENHANCED CONVEYANCE PROJECT (LC-17)
LEON VALLEY & SAN ANTONIO, BEXAR COUNTY, TEXAS

FIGURE 6G

SWF-2011-00144



- LEGEND**
- ▬▬▬▬ LIMITS OF EXCAVATION
 - REVISED 100-YR ULTIMATE DFIRM FLOODPLAIN
 - ⋯⋯⋯ EFFECTIVE 100-YR ULTIMATE DFIRM FLOODPLAIN
 - ▬ BOTTOM OF CHANNEL
 - ⋯⋯⋯ PILOT CHANNEL @
 - ⋯⋯⋯ HUEBNER CREEK @
 - ← DRAINAGE FLOW ARROW



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 DATE: 07/15/11
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BEXAR COUNTY
FLOOD CONTROL DIVISION

NO	DATE	DESCRIPTION	DGN	CHK
REVISIONS				

HUEBNER CREEK
 SEGMENT II & III
 PROJECT LAYOUT
 BEGIN TO STA 140+00

0 100 200 400
 H: 1"=400'

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 TEXAS BOARD OF PROFESSIONAL ENGINEERS REGISTRATION # F-000159
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CHK:			
DWG:	STATE	COUNTY	SHEET NO.
CHK:	TEXAS	BEXAR	XX OF XXX

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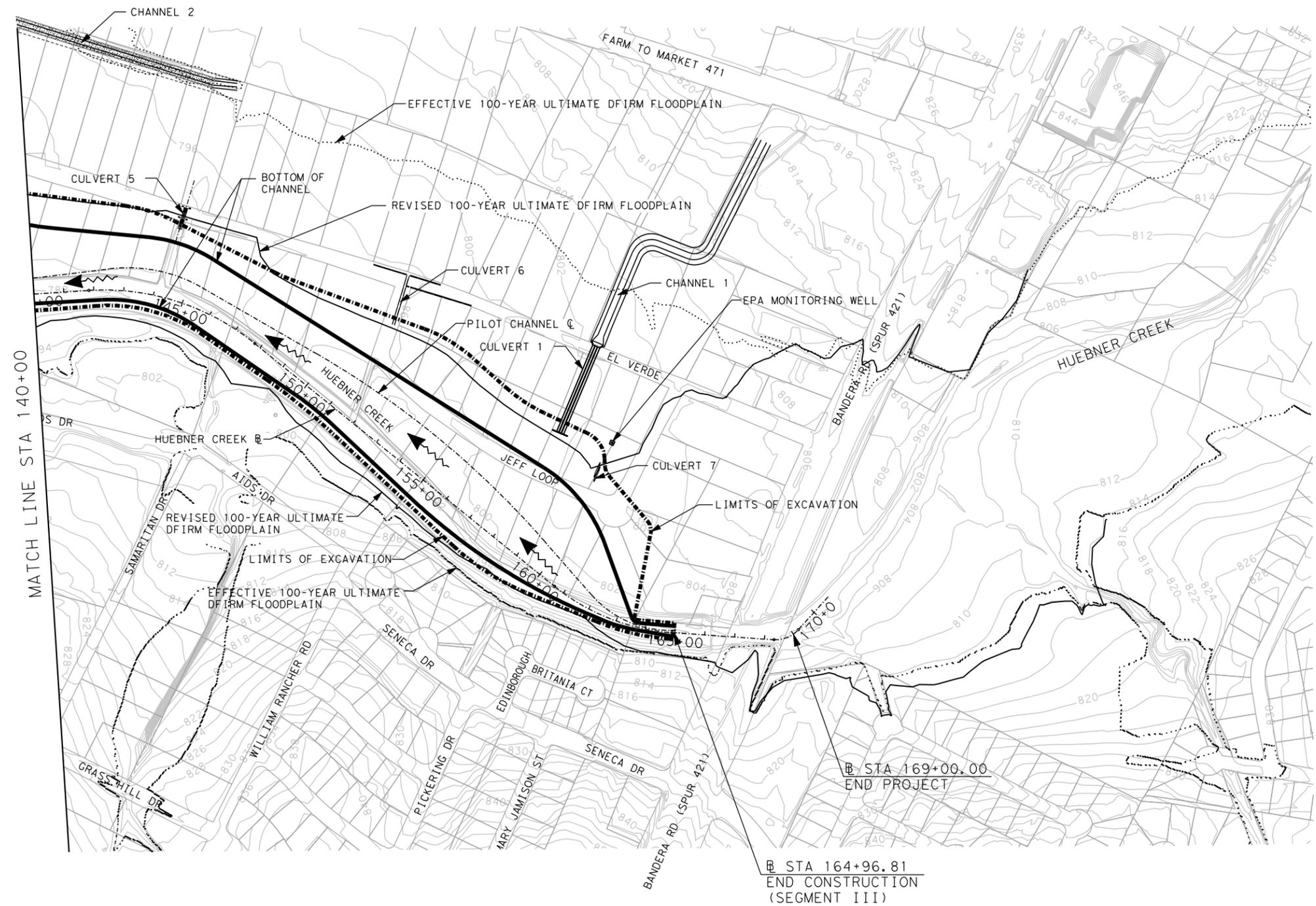
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Figure 7a.



LEGEND

- ▬▬▬▬ LIMITS OF EXCAVATION
- REVISED 100-YR ULTIMATE DFIRM FLOODPLAIN
- ⋯⋯⋯ EFFECTIVE 100-YR ULTIMATE DFIRM FLOODPLAIN
- BOTTOM OF CHANNEL
- ⋯⋯⋯ PILOT CHANNEL @
- ⋯⋯⋯ HUEBNER CREEK @
- ← DRAINAGE FLOW ARROW



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NO	DATE	DESCRIPTION	DGN	CHK
REVISIONS				

HUEBNER CREEK
 SEGMENT II & III
 PROJECT LAYOUT
 STA 140+00 TO END

0 100 200 400
 H: 1" = 400'

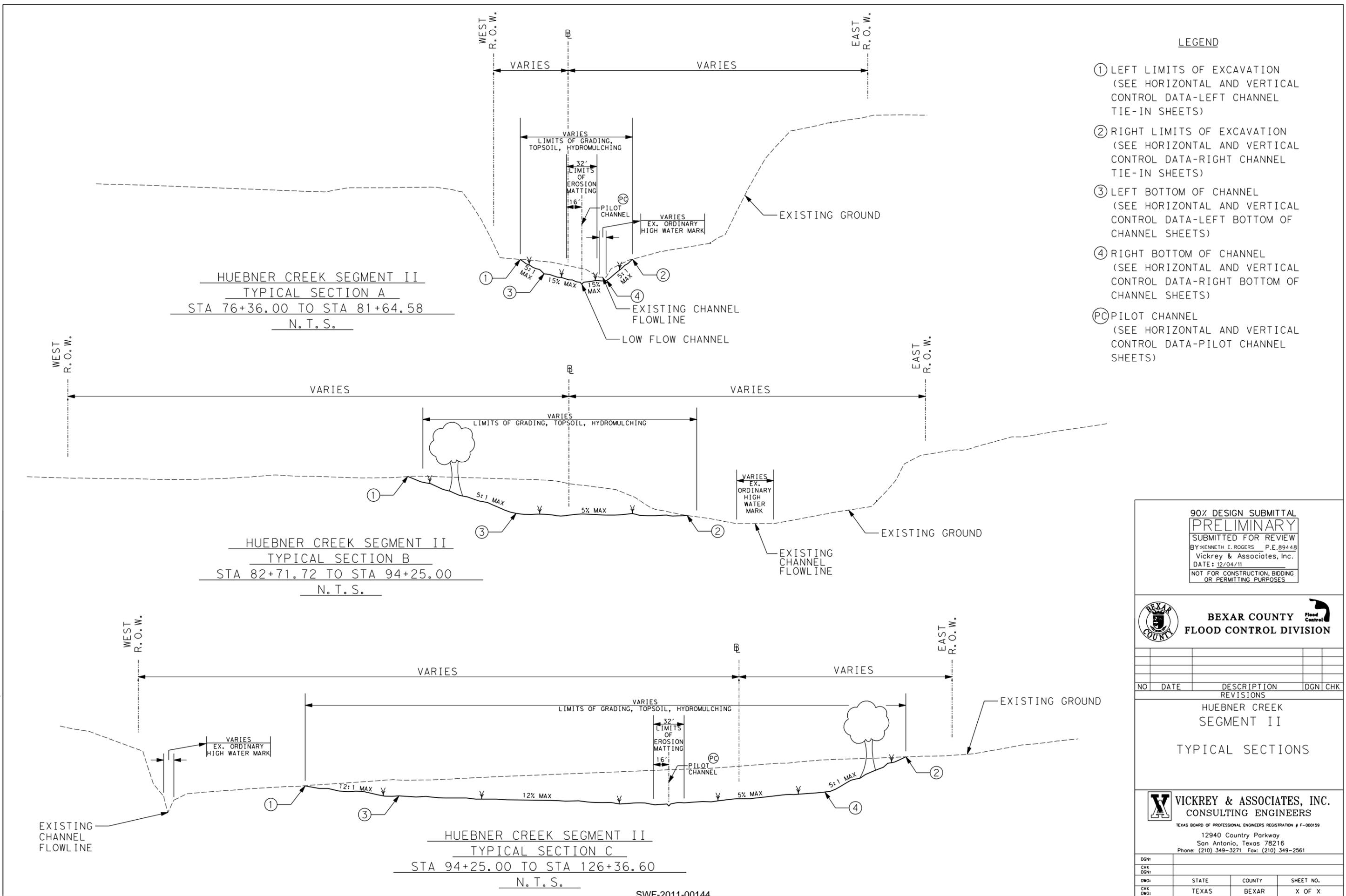
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CHK:	TEXAS	BEXAR	XX OF XXX

Figure 7b.

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- LEGEND**
- ① LEFT LIMITS OF EXCAVATION
 (SEE HORIZONTAL AND VERTICAL CONTROL DATA-LEFT CHANNEL TIE-IN SHEETS)
 - ② RIGHT LIMITS OF EXCAVATION
 (SEE HORIZONTAL AND VERTICAL CONTROL DATA-RIGHT CHANNEL TIE-IN SHEETS)
 - ③ LEFT BOTTOM OF CHANNEL
 (SEE HORIZONTAL AND VERTICAL CONTROL DATA-LEFT BOTTOM OF CHANNEL SHEETS)
 - ④ RIGHT BOTTOM OF CHANNEL
 (SEE HORIZONTAL AND VERTICAL CONTROL DATA-RIGHT BOTTOM OF CHANNEL SHEETS)
 - PC PILOT CHANNEL
 (SEE HORIZONTAL AND VERTICAL CONTROL DATA-PILOT CHANNEL SHEETS)

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HUEBNER CREEK
 SEGMENT II
 TYPICAL SECTIONS

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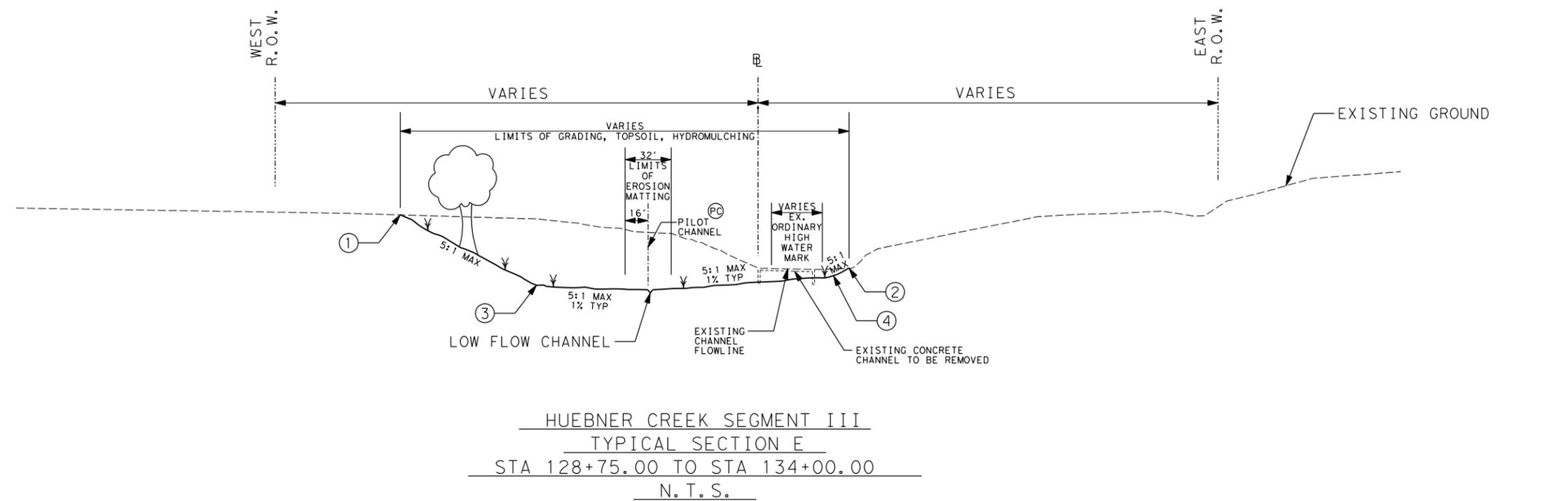
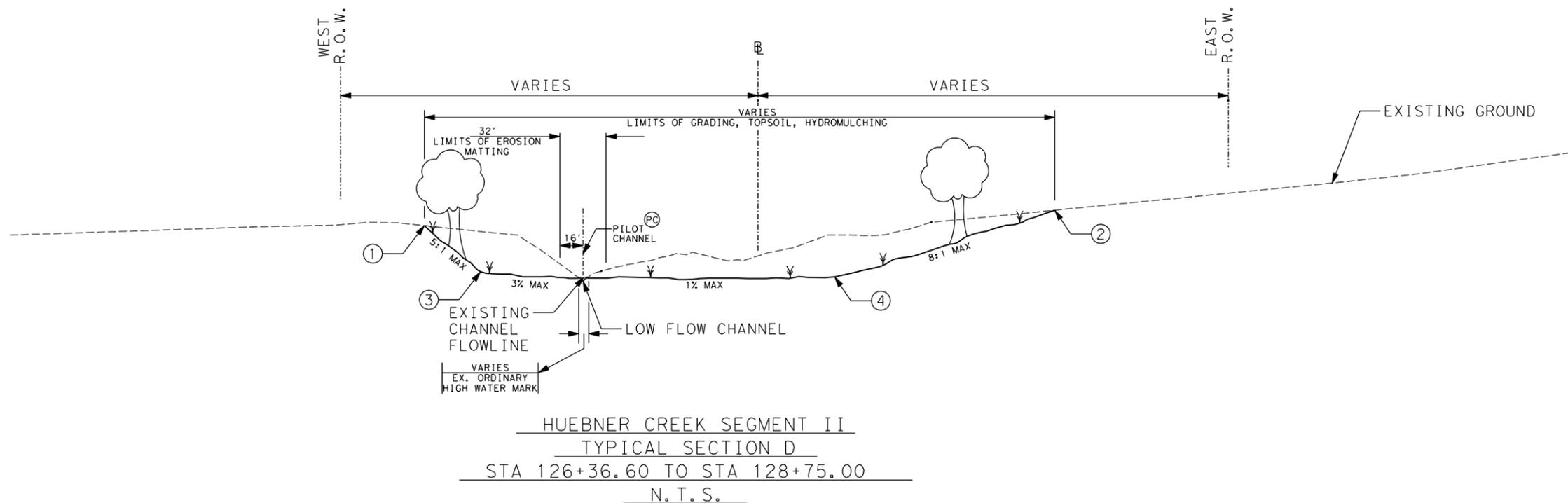
DGN:			
CHK:			
DWG:	STATE	COUNTY	SHEET NO.
CHK DWG:	TEXAS	BEXAR	X OF X

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Figure 7c.

LEGEND

- ① LEFT LIMITS OF EXCAVATION
(SEE HORIZONTAL AND VERTICAL CONTROL DATA-LEFT CHANNEL TIE-IN SHEETS)
- ② RIGHT LIMITS OF EXCAVATION
(SEE HORIZONTAL AND VERTICAL CONTROL DATA-RIGHT CHANNEL TIE-IN SHEETS)
- ③ LEFT BOTTOM OF CHANNEL
(SEE HORIZONTAL AND VERTICAL CONTROL DATA-LEFT BOTTOM OF CHANNEL SHEETS)
- ④ RIGHT BOTTOM OF CHANNEL
(SEE HORIZONTAL AND VERTICAL CONTROL DATA-RIGHT BOTTOM OF CHANNEL SHEETS)
- PC PILOT CHANNEL
(SEE HORIZONTAL AND VERTICAL CONTROL DATA-PILOT CHANNEL SHEETS)



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BEXAR COUNTY
FLOOD CONTROL DIVISION

NO	DATE	DESCRIPTION	DGN	CHK
REVISIONS				

HUEBNER CREEK
SEGMENT II
TYPICAL SECTIONS

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12940 Country Parkway
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Phone: (210) 349-3271 Fax: (210) 349-2561

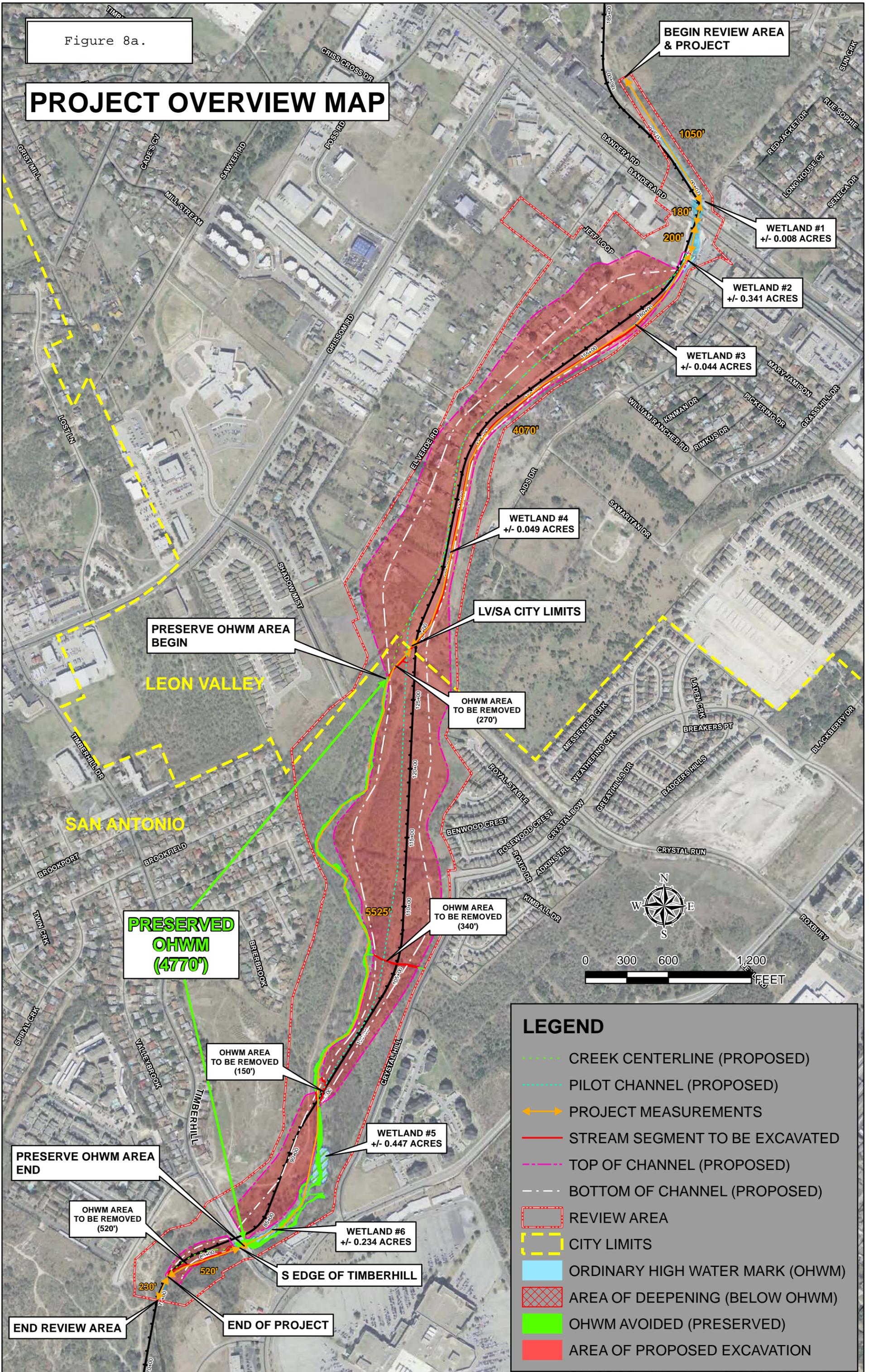
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CHK:			
DWG:	STATE	COUNTY	SHEET NO.
CHK:	TEXAS	BEXAR	X OF X

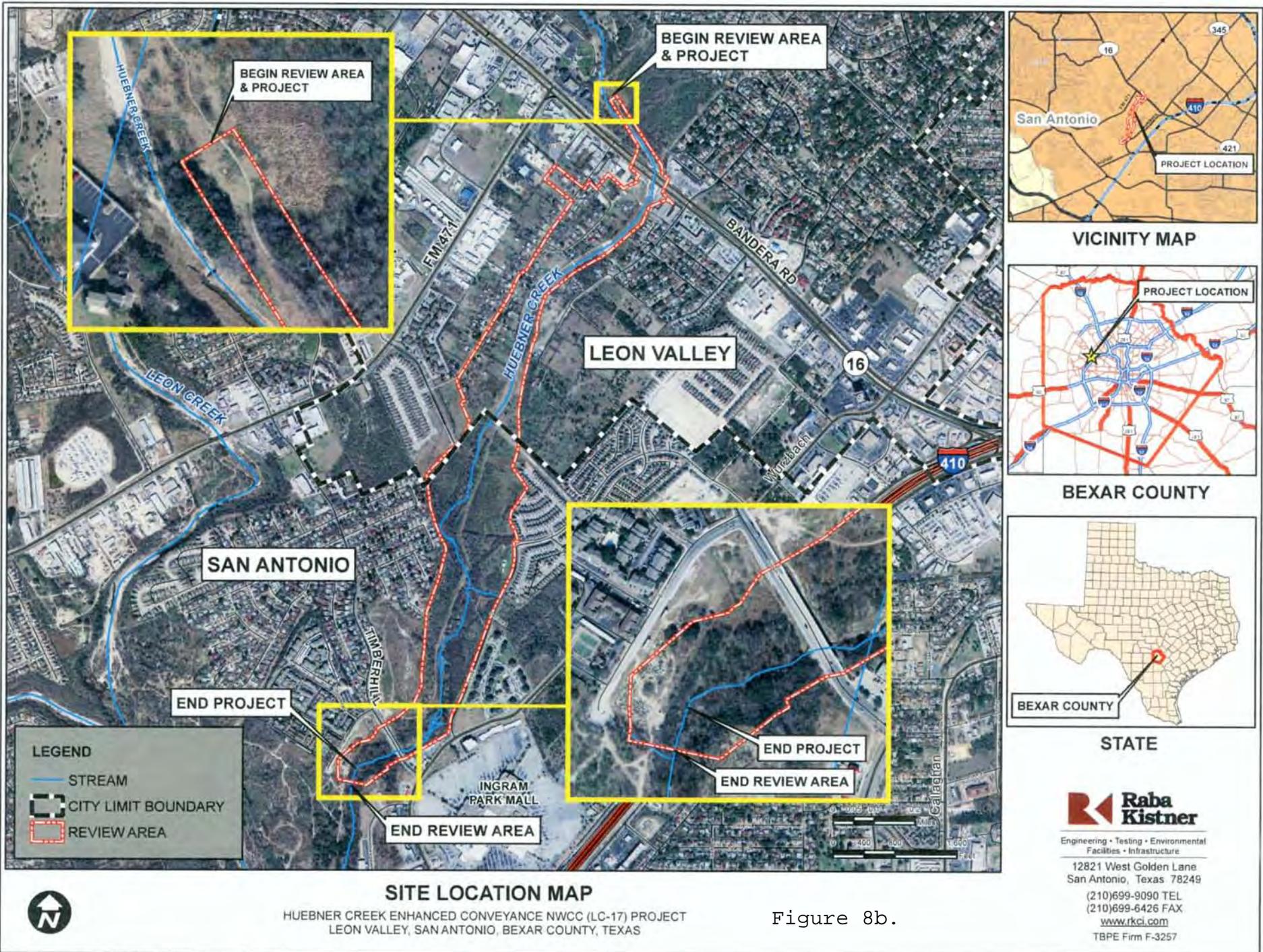
Figure 7d.

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Figure 8a.

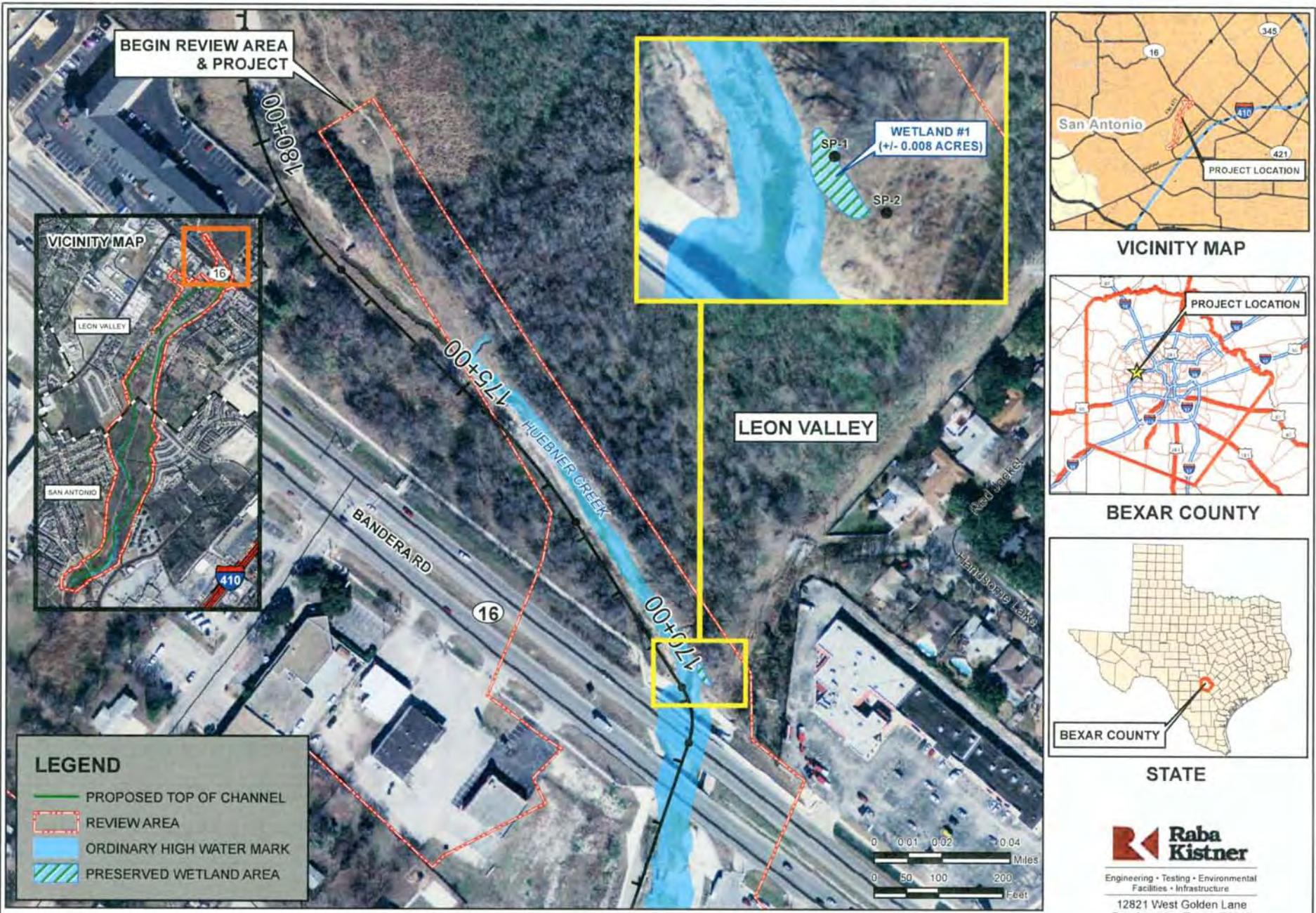
PROJECT OVERVIEW MAP





SOURCE: 2010 Aerial Photograph, Van Raub Quad/angle Provided by The City of San Antonio (COSA)

Figure 8b.

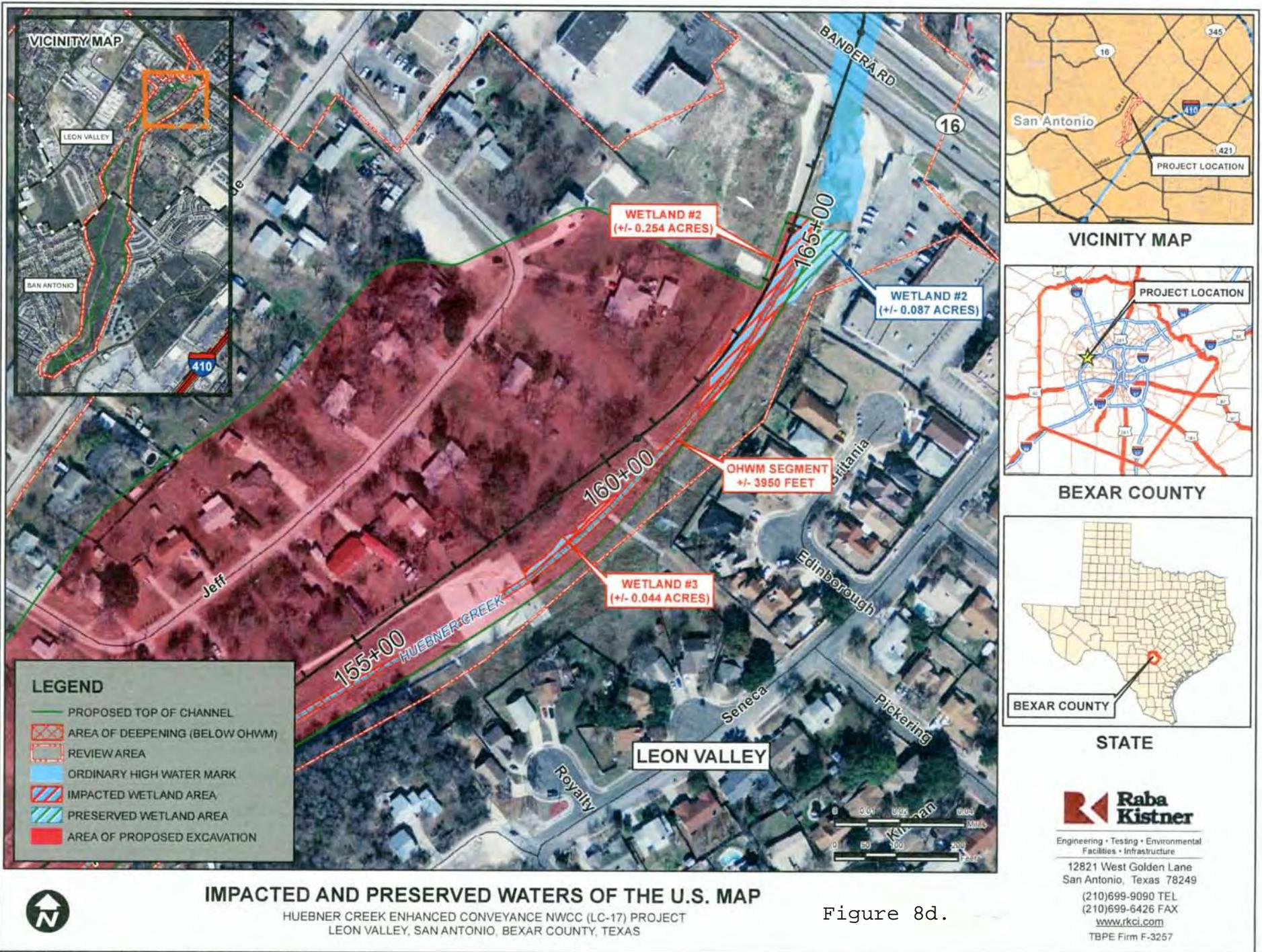


IMPACTED AND PRESERVED WATERS OF THE U.S. MAP
 HUEBNER CREEK ENHANCED CONVEYANCE NWCC (LC-17) PROJECT
 LEON VALLEY, SAN ANTONIO, BEXAR COUNTY, TEXAS

Figure 8c.

SOURCE: 2010 Aerial Photograph, Van Raub Quadrangle Provided by The City of San Antonio (GOSA)

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SOURCE: 2010 Aerial Photograph, San Antonio West Quadrangle Provided by The City of San Antonio (COSA)

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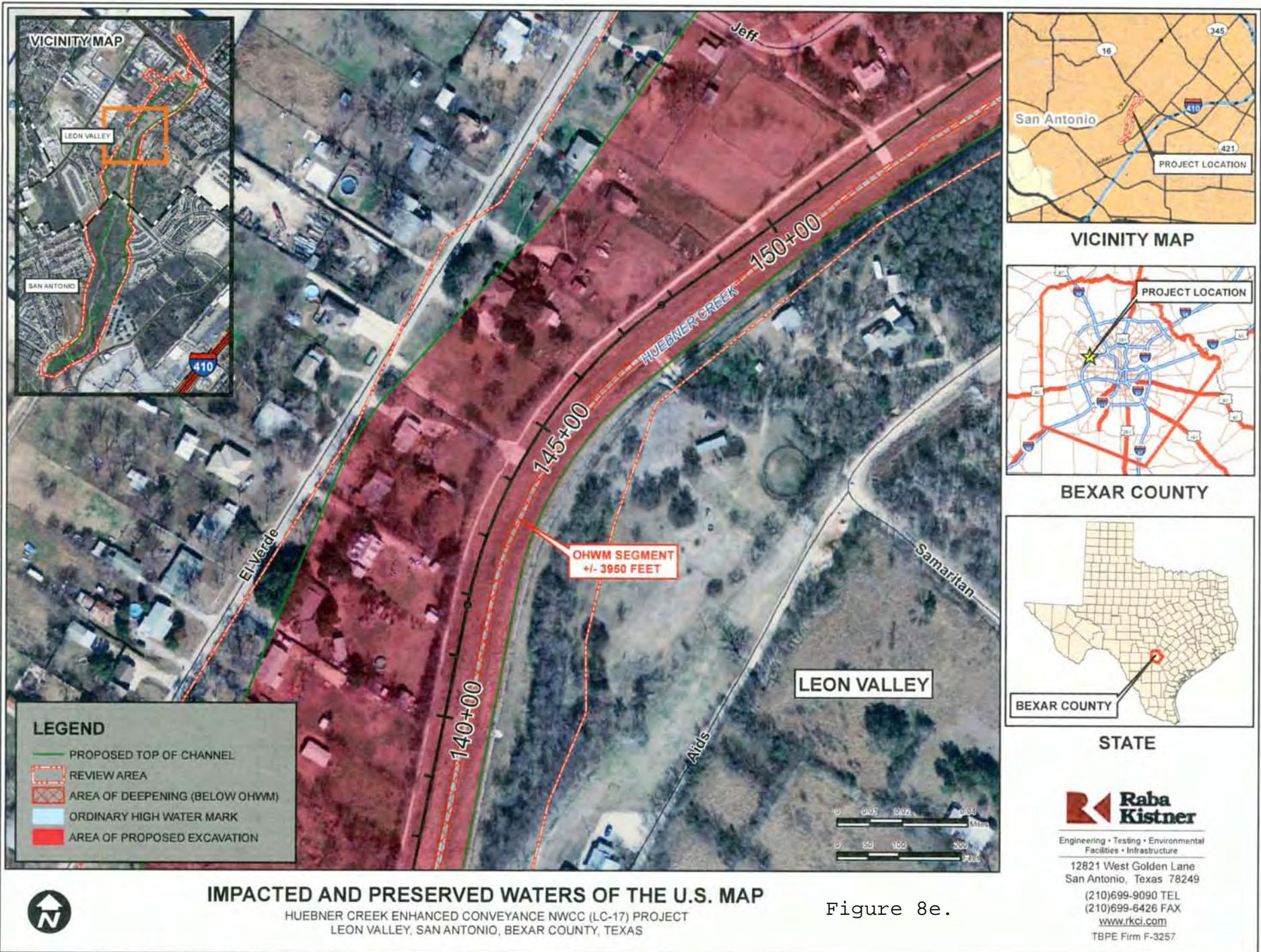


Figure 8e.

SOURCE: 2010 Aerial Photograph, Van Raub Quadrangle Provided by The City of San Antonio (COISA)

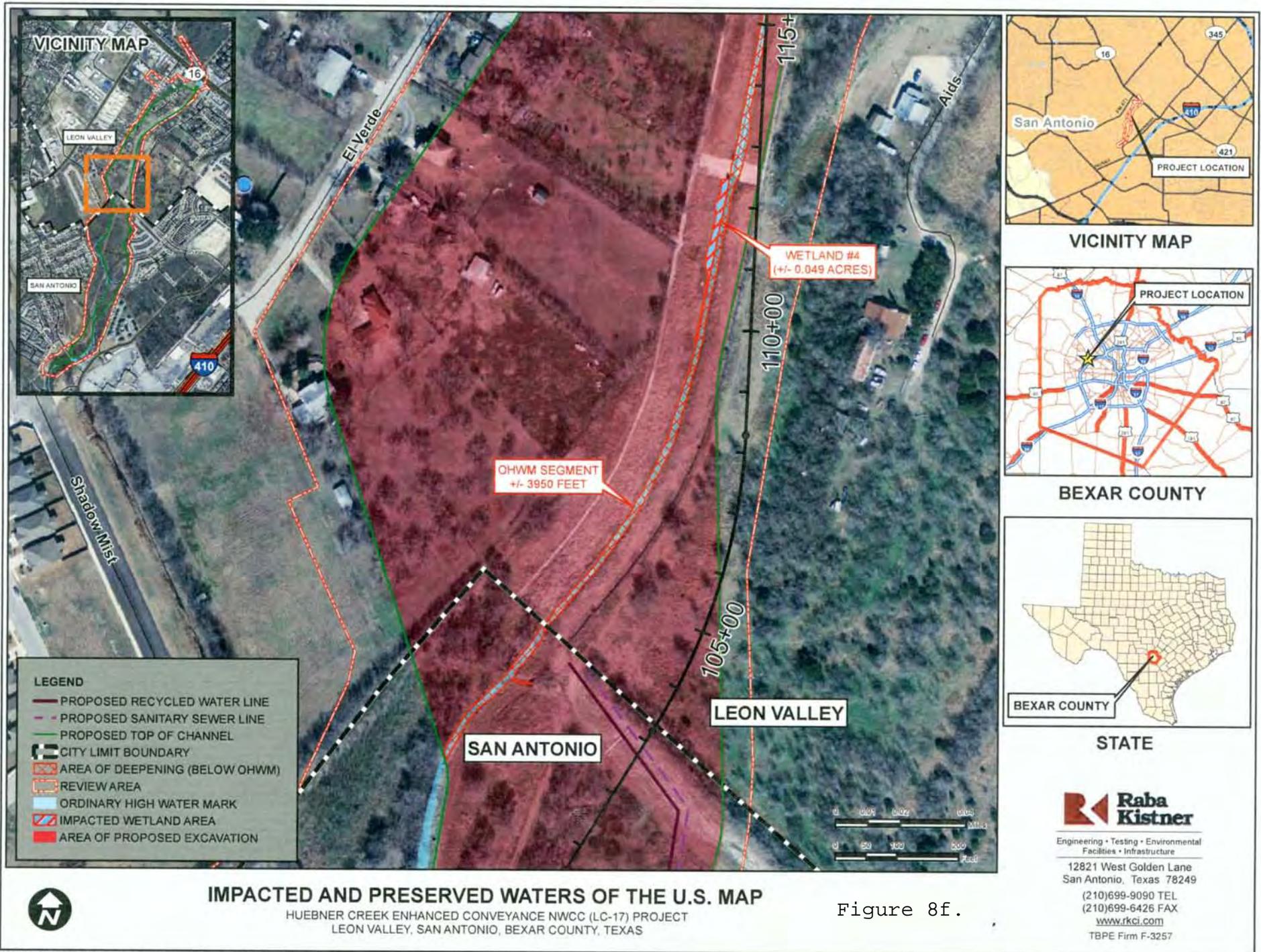
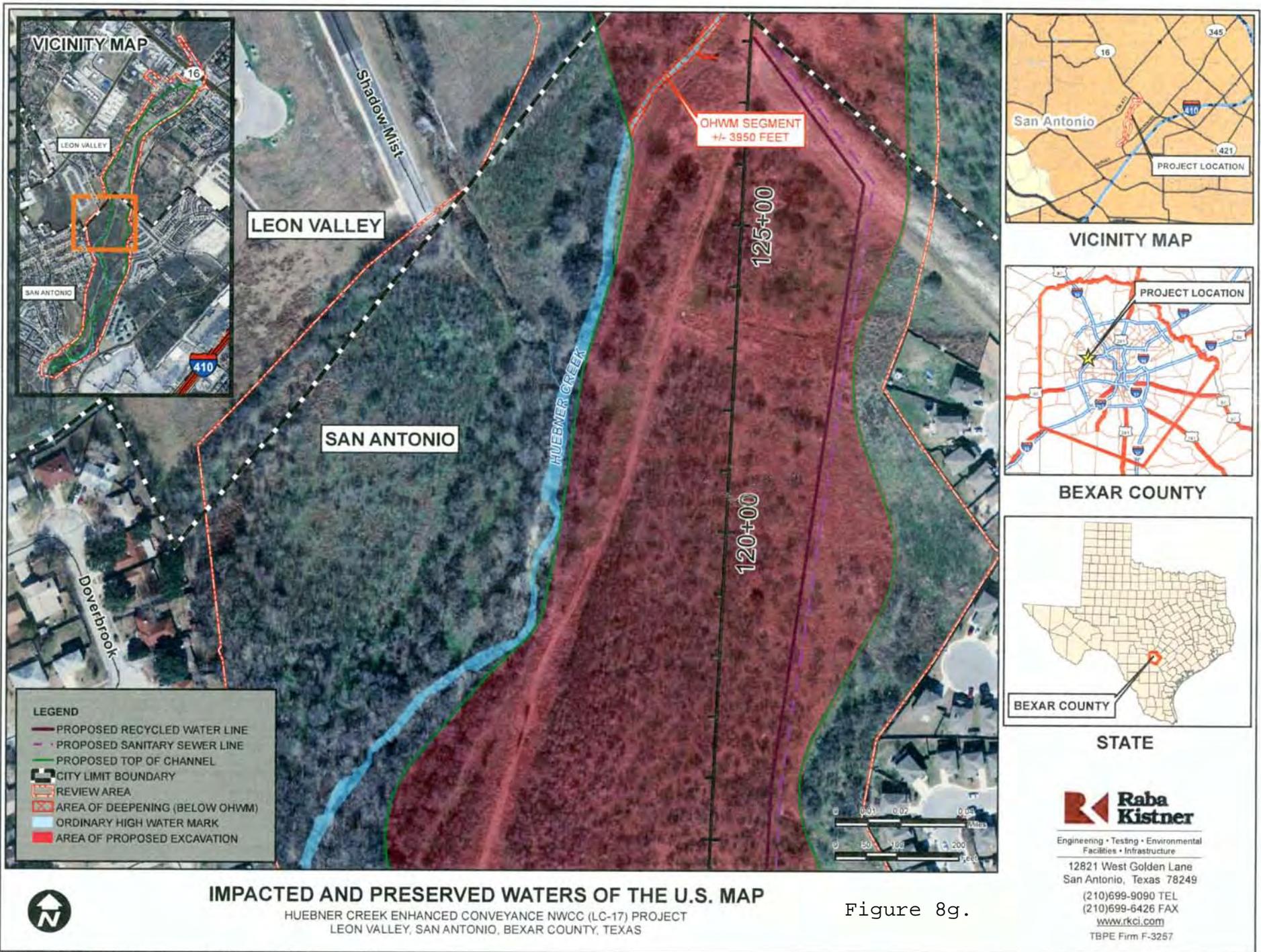


Figure 8f.

SOURCE: 2009 Aerial Photograph, Van Raub Quadrangle Provided by The City of San Antonio (COSA)



SOURCE: 2009 Aerial Photograph, San Antonio West Quadrangle Provided by The City of San Antonio (COSEA)

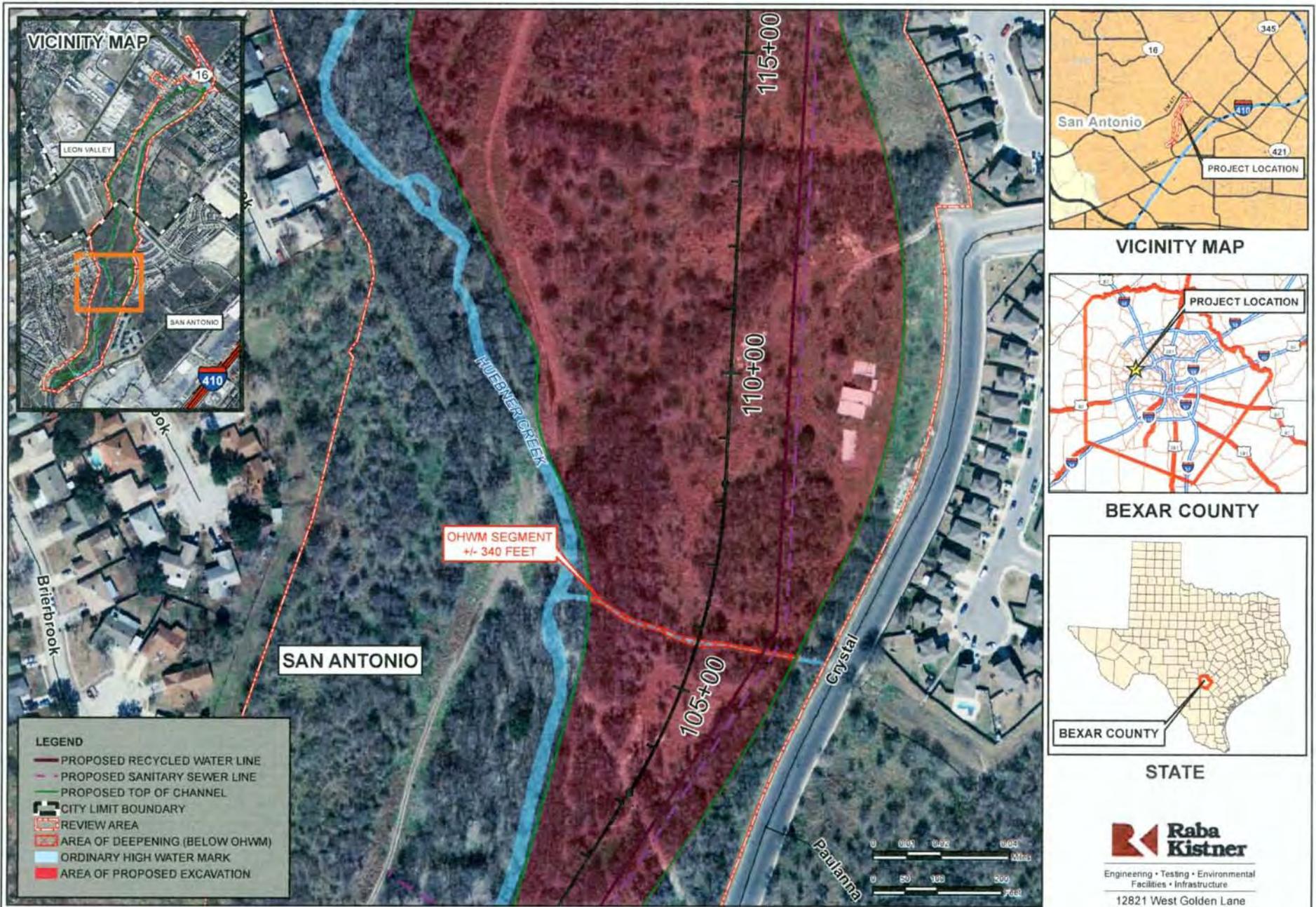
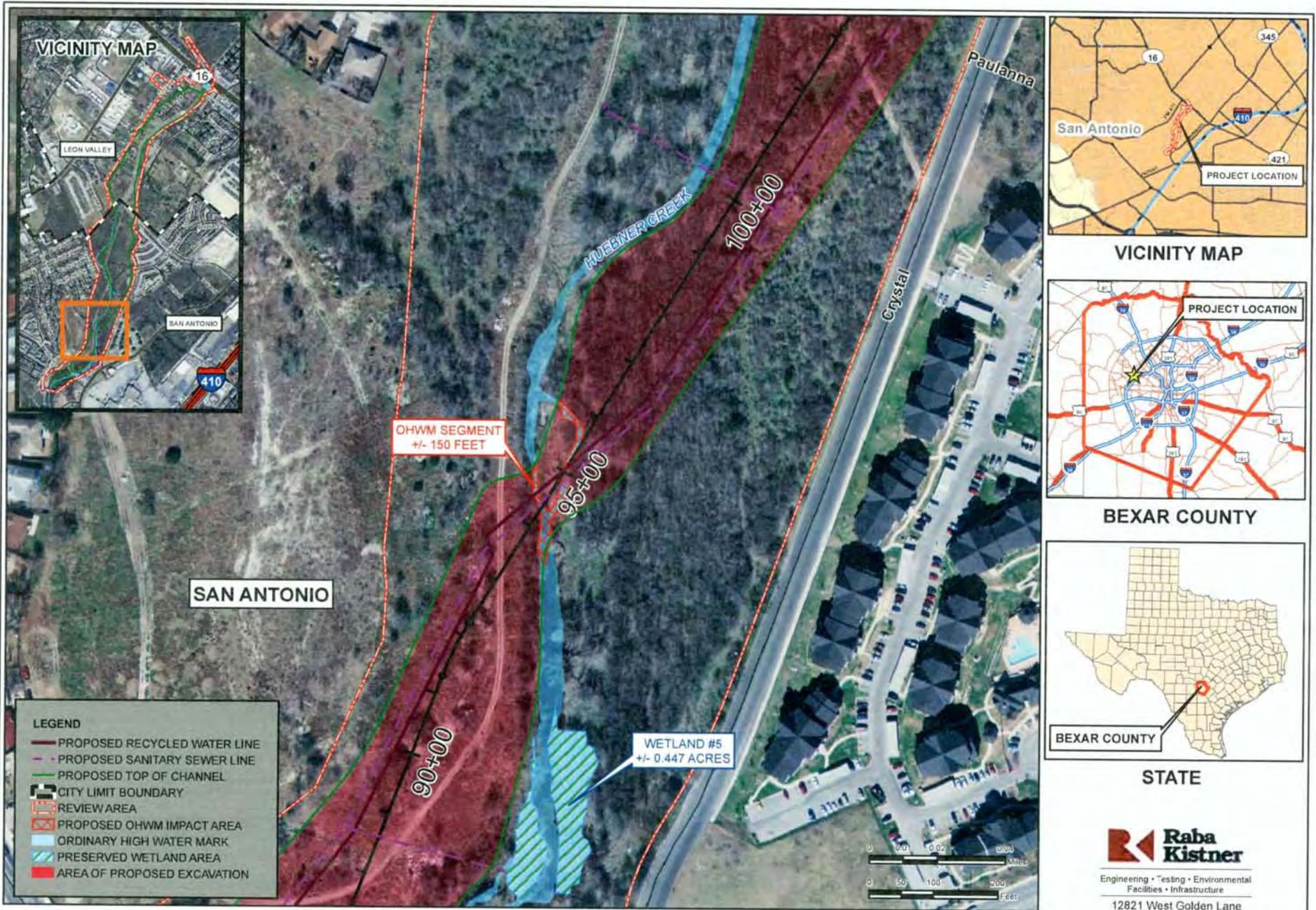


Figure 8h.



- LEGEND**
- PROPOSED RECYCLED WATER LINE
 - - - PROPOSED SANITARY SEWER LINE
 - PROPOSED TOP OF CHANNEL
 - CITY LIMIT BOUNDARY
 - REVIEW AREA
 - PROPOSED OHWM IMPACT AREA
 - ORDINARY HIGH WATER MARK
 - PRESERVED WETLAND AREA
 - AREA OF PROPOSED EXCAVATION



IMPACTED AND PRESERVED WATERS OF THE U.S. MAP

HUEBNER CREEK ENHANCED CONVEYANCE NWCC (LC-17) PROJECT
LEON VALLEY, SAN ANTONIO, BEXAR COUNTY, TEXAS

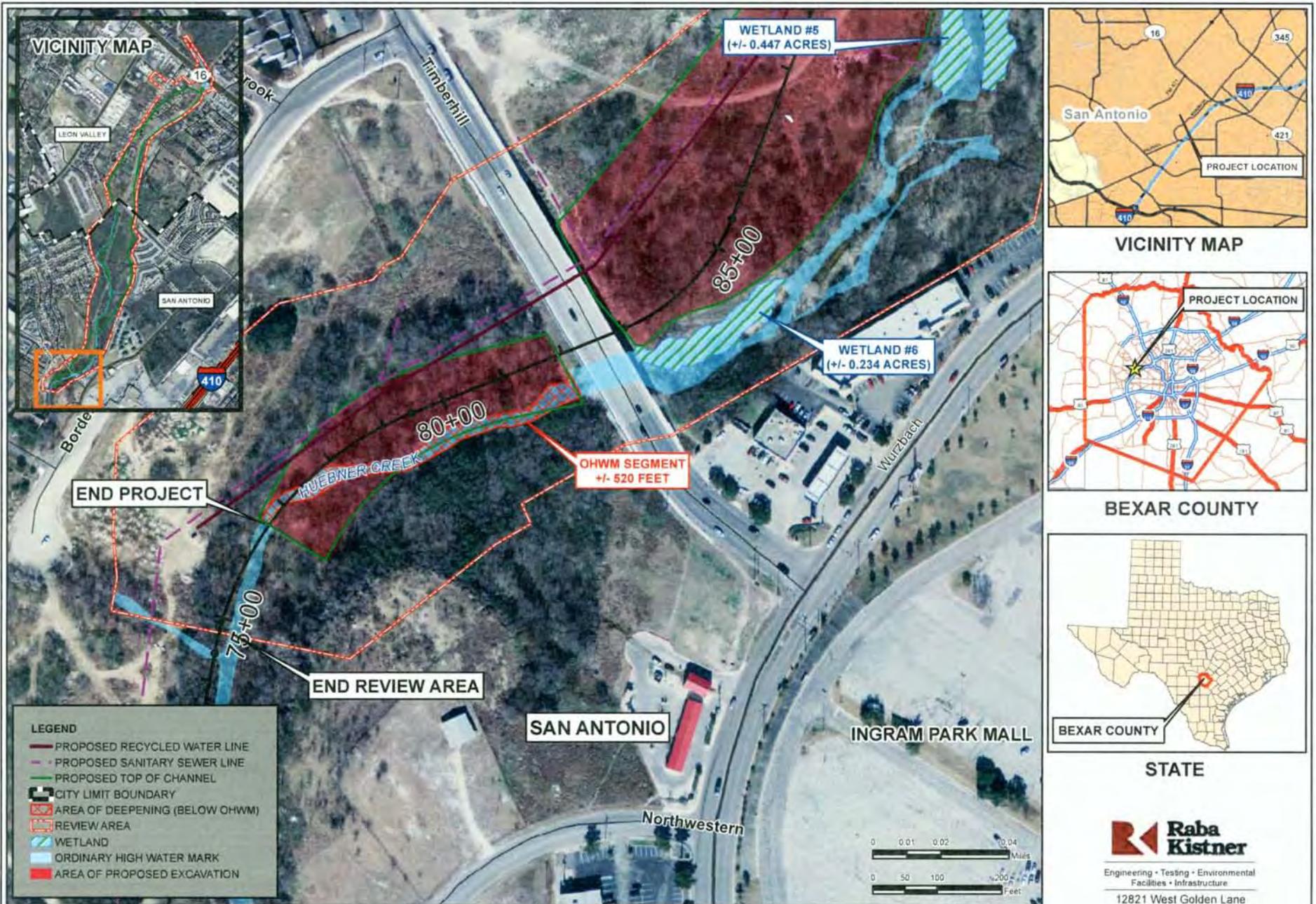


Figure 8i.



Engineering • Testing • Environmental
Facilities • Infrastructure
12821 West Golden Lane
San Antonio, Texas 78249
(210)699-9090 TEL
(210)699-6426 FAX
www.rkci.com
TBPE Firm F-3257

SOURCE: 2009 Aerial Photograph, Van Raub Quadrangle Provided by The City of San Antonio (COISA)



IMPACTED AND PRESERVED WATERS OF THE U.S. MAP

HUEBNER CREEK ENHANCED CONVEYANCE NWCC (LC-17) PROJECT
LEON VALLEY, SAN ANTONIO, BEXAR COUNTY, TEXAS

Figure 8j.



Engineering • Testing • Environmental
Facilities • Infrastructure

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San Antonio, Texas 78249

(210)699-9090 TEL

(210)699-6426 FAX

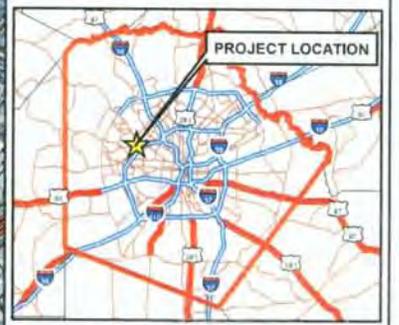
www.rkci.com

TBPE Firm F-3257

SOURCE: 2009 Aerial Photograph. Van Raub Quadrangle Provided by The City of San Antonio (COSA)



VICINITY MAP



BEXAR COUNTY



STATE

SAR AND WAA LOCATION MAP

HUEBNER CREEK ENHANCED CONVEYANCE NWCC (LC-17) PROJECT
LEON VALLEY, SAN ANTONIO, BEXAR COUNTY, TEXAS

Figure 8k.



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SOURCE: 2010 Aerial Photograph; Van Raub Quadrangle Provided by The City of San Antonio (COSA)

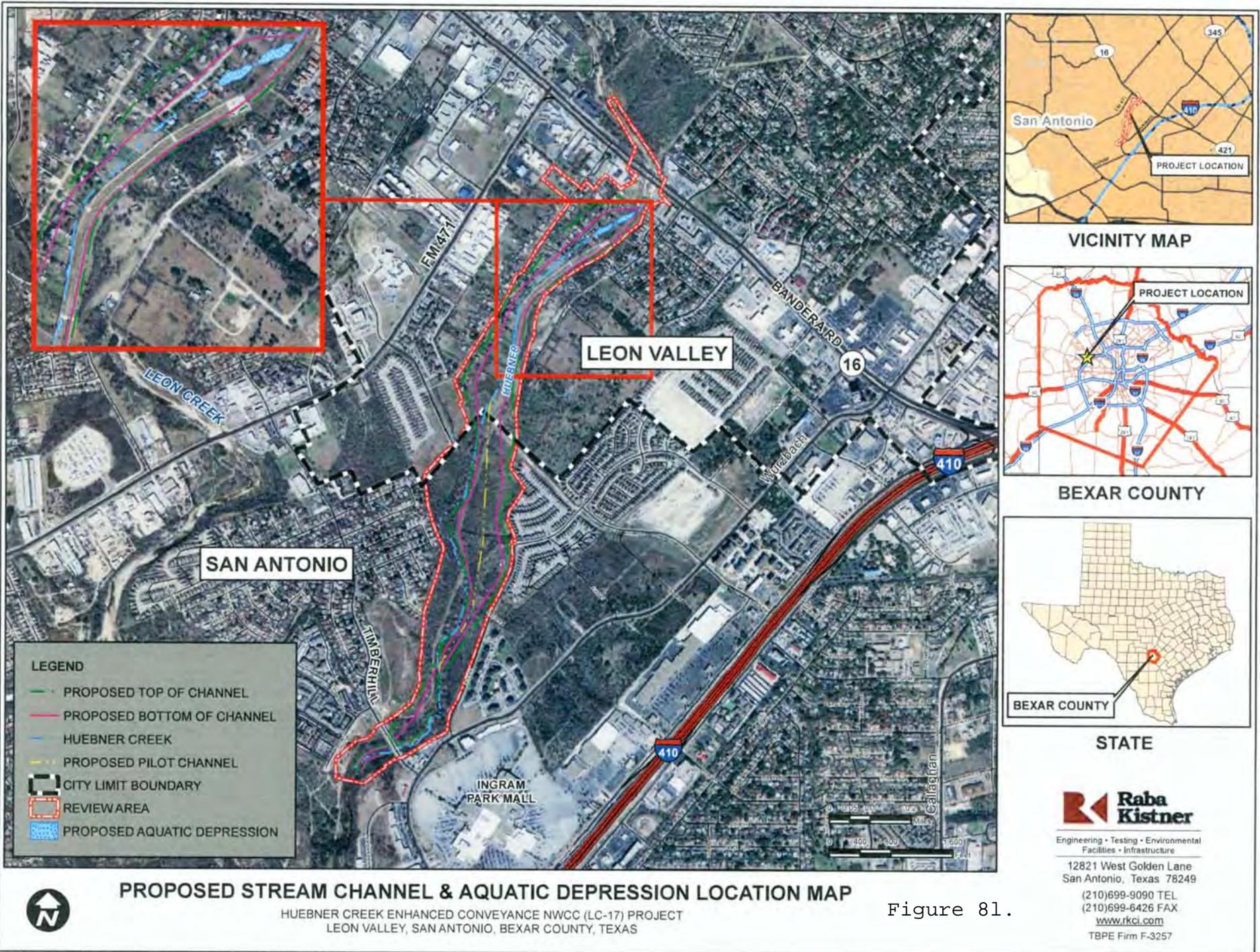


Figure 81.