
Hazardous Materials Technical Report



U.S. Highway 290 (US 290) / State Highway (SH)
71 West from State Loop 1 (MoPAC) to
Ranch-to-Market (RM) 1826 and SH 71 to
Silvermine Drive
Travis County, Texas
CSJ # 0113-08-060 and 0700-03-077
October 2017



The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 16, 2014, and executed by FHWA and TxDOT.

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1. Introduction

1.1 Purpose

The Texas Department of Transportation (TxDOT) and the Central Texas Regional Mobility Authority (Mobility Authority) are assessing the environmental impacts associated with proposed improvements to U.S. Highway 290 (US 290) from Loop 1 (Mopac) to Ranch-to-Market Road 1826 (RM 1826) and State Highway (SH) 71 from US 290 to Silvermine Drive (CSJs 0013-08-060 and 0700-03-077). As part of the environmental analysis required by the National Environmental Policy Act, alternatives for the proposed Oak Hill Parkway Project were developed and evaluated. Based on the preliminary alternatives analysis, two build alternatives, Alternative A and Alternative C, and the No Build Alternative are being carried forward for further analysis. This technical report documents the potential hazardous materials impacts associated with the Build Alternatives.

The purpose of this assessment of hazardous materials is to identify initial hazardous materials constraints and determine the potential for encountering hazardous materials or recognized environmental conditions within the Project Area.

1.2 Definitions

The American Society for Testing and Materials (ASTM) Practice E 1527-13 (ASTM, 2013) defines three categories of Recognized Environmental Conditions (REC): REC, Historical REC, and Controlled REC.

REC: The presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. *De minimis* conditions are not recognized environmental conditions (see definition below).

Historical REC: A past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

Controlled REC: A recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

Additional conditions that are not included under the definitions of a REC, but are defined by ASTM Practice 1527-13 include:

De minimis: A condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimis* are neither recognized environmental conditions nor controlled recognized environmental conditions.

Business Environmental Risk: A risk which can have a material environmental or environmentally driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in this practice. Consideration of business environmental risk issues may involve addressing one or more non-scope considerations.

1.3 Scope of Services, Significant Assumptions, and Limitations of Assessment

The services provided for this project consisted of the following:

- Provide a description of the Project Area, including current land uses.
- Provide a general description of the topography, soils, geology, and groundwater flow direction.
- Review reasonably ascertainable and reviewable regulatory information published by federal, state, local, tribal, health, and/or environmental agencies pertaining to the Project Area.
- Review historical data sources for the Project Area, including aerial photographs, topographic maps, fire insurance maps, and other readily available development data.

- Conduct an area reconnaissance and an environmental review—including a visual review of adjoining properties—with a focus on indications of hazardous substances, petroleum projects, polychlorinated biphenyls (PCBs), wells, storage tanks, solid waste disposal pits and sumps, and utilities.
- Prepare a written report of methods, findings, and conclusions.

The scope of services for this project did not include the completion of soil borings, the installation of groundwater monitoring wells, the collection of soil or groundwater samples, or interviews with any landowners, occupants or agencies.

HDR has made certain assumptions in preparing the scope of this assessment:

- Data gathered from public information sources (i.e., libraries or public regulatory agencies) are accurate and reliable.
- Site operations reflect site conditions relative to potential releases and no intentional concealment of environmental conditions or releases has occurred.
- Published geologic information and site observations made by the environmental professional are used to estimate likely contaminant migration pathways in the subsurface. These estimates by the environmental professional are limited in accuracy and are generally cross-referenced with existing information about similar sites and environmental releases in the area.
- Regulatory information is limited to sites identified after the late 1980s because reliable records were not kept by regulatory agencies prior to that timeframe.

The findings and conclusions presented in this report are based on the procedures described in this report, a review of the available literature cited in this report, conditions noted at the time of the site reconnaissance, and HDR's interpretation of the information obtained as part of this Hazardous Materials Technical Report. The findings and conclusions are limited to the specific project and properties described in this report, and by the accuracy and completeness of the information provided by others. This is not a Phase I Environmental Site Assessment (ESA) produced to ASTM Practice E 1527-13 standards (ASTM, 2015), but a Hazardous Materials Technical Report aimed at identifying initial hazardous materials constraints along the project corridor.

A Hazardous Materials Technical Report cannot entirely eliminate uncertainty regarding the potential for RECs. Production of this technical report is intended to identify as early as possible in the development process any hazardous materials constraints located along the project corridor. In conducting its services, HDR used a degree of care and skill ordinarily exercised under similar circumstances by reputable members of its profession practicing in the same locality. This technical report does not conform to the level of documentation required in ASTM Practice E 1527-13. HDR may omit discussion of certain records, i.e., sources deemed, in HDR's professional opinion, to be inapplicable, or of limited value, to the specific needs of this client.

2. General Project Area Description

2.1 Location

The project corridor, as shown on **Figure 1** in Appendix A, is located in southwestern Travis County, Texas. The project corridor occurs within an area that has a variety of commercial, residential, institutional, and industrial land uses. The proposed project area extends along US 290 from State Loop 1 (Loop 1 or Mopac) to RM 1826, a distance of approximately 6.15 miles with a transition west to Circle Drive. The project also includes the interchange on SH 71 from US 290 to Silvermine Drive, a distance of approximately 1.3 miles, as shown on Figure 1. The intersection of US 290 and SH 71 is locally known as the "Y" in Oak Hill. HDR staff conducted a windshield and pedestrian reconnaissance of the study corridor on February 3, 2016.

2.2 Project Area and Vicinity General Characteristics

The project corridor is situated in a developed area within the City of Austin's jurisdiction (primarily full purpose, with some areas of limited purpose planning and zoning, and two-mile extra-territorial jurisdiction). The project vicinity includes commercial/office complexes, multi- and single-family residential areas, retail, restaurants, recreational facilities, medical facilities, undeveloped tracts, and roadway and utility right-of-way. The project area is located in the Edwards Plateau ecoregion (Griffith, et.al, 2007).

2.3 Description of Site Improvements

The majority of the project site consists of the U.S. 290 and SH 71 roadway facilities and transportation right-of-way (ROW). Some areas of new ROW (80 parcels, totalling approximately 74.6 acres, for Alternative A and 87 parcels, totalling approximately 75.2 acres, for Alternative C) would be required for the proposed project. As of June 2017, the new ROW would include acquiring one residential property and four

commercial properties. The commercial acquisitions include an office building housing an engineering firm, a Speedy Stop gas station/convenience store (Circle K 3276), City Collision an auto body and paint shop, and the Donut Hole dessert shop. Underground and aboveground utilities including electrical transmission lines, water/wastewater lines, natural gas lines, fiber optic cables, and other utilities were present within the project site.

2.4 Topography

The 7.5-minute series U.S. Geological Survey (USGS) topographic maps for the project area (Bee Cave, Signal Hill, and Oak Hill) indicate that elevations along the corridor range from approximately 1,050 feet above sea level (asl) along the western portion of the project area to approximately 800 feet asl along the eastern portion of the project area. The topography and geographic location suggests that shallow groundwater generally flows to the east toward Williamson and Barton Creeks.

Geographic Information System shapefiles of Federal Emergency Management Agency floodplain data reveal that portions of SH 71 and US 290 east of the intersection of the "Y" are located within floodplain Zone A, an area that has been determined to be within the 100-year floodplain.

2.5 Geology and Hydrogeology

The project area lies within the principal section of the Edwards Plateau Physiographic Province of Texas (BEG, 1996). This includes the area known as the Hill Country and a broad plateau which is capped by hard Cretaceous limestones. This section of the province developed on limestones and dolomites; this source material weathered and eroded into thin and rocky soils within the area. The topography of this area includes a flat upper surface with box canyons and geologic structure beds which dip to the south. The area is considered to be normally faulted, although no geologic faults occur within the project area. Elevation in this portion of the Edwards Plateau ranges from a maximum of 3,000 feet in the west to 450 feet in the east.

Geologic formations within the project area are Lower Cretaceous marine deposits and more recent Quaternary sediments. These rocks, comprised chiefly of limestone, were deposited on a vast submerged plain known as the Comanche Shelf (BEG, 1972). The Comanche Shelf depositional environment is located between the San Marcos Platform to the south and the Maverick Basin to the west (Abbott et.al, 1986).

The Trinity and Edwards Aquifers underlie the subject property. The portion of the project area generally east of William Cannon Drive is within the Edwards Aquifer recharge zone; the project area west of William Cannon Drive is within the Edwards Aquifer contributing zone. Depth to groundwater is variable but ranges from 100 to 800 feet based on nearby water well data.

2.6 Soils

The project study area includes two general soil map units, the Brackett Association and the Speck-Tarrant Association. These soil associations are described as mainly shallow, rolling, and steep soils of the Edwards Plateau (USDA, 1974). The Brackett Association occurs in the western portion of the project area, originating near the intersection of US 290 and William Cannon Drive. This general soil map unit includes gently undulating to steep soils which are capped in some locations on narrow ridges (USDA, 1974). The Brackett Association primarily includes Brackett and Tarrant soils, with lesser percentages of Volente, Denton, San Saba, Pedernales, and Altoga soils. Although this association is generally considered to be too shallow, stony, gravelly, or steep for farming, it is well suited for use as rangeland. Wildlife, particularly deer and turkey are common within areas of this soil association.

The Speck-Tarrant Association includes shallow, stony, loamy soils and very shallow, stony, clayey soils overlying limestone (USDA, 1974). This soil association occurs east of the Brackett Association soils and is described as nearly level to gently sloping and gently undulating. The Speck-Tarrant Association contains two major soil types, Speck soils and Tarrant soils, along with minimal amounts of San Saba, Crawford, and mixed alluvial soils. Areas of this soil association are commonly used for range and are well suited for wildlife habitat.

2.7 Known Current and Past Uses of the Project Area and Adjoining Properties

Information on current and past uses of the project area and adjoining properties was obtained from an inspection of the project area, a windshield and pedestrian survey of the surrounding area, and a review of historical aerial photography and topographic maps.

Aerial photographs of the project area from the years 1940, 1953, 1966, 1973, 1980, 1988, 1996, 2004, and 2012 were reviewed. In addition, topographic maps from 1896, 1910, 1955, 1966, 1968, 1973, 1986, and 2013 were reviewed. Since at least 1953, US 290 and SH 71 have been present in the same general configuration they have today. From 1940 through 1973, the majority of the land adjacent to these

roadways included undeveloped areas or pasture. By 1980, residential neighborhoods had been developed along US 290 and SH 71. Southwest Parkway and William Cannon Drive were constructed between 1980 and 1988, as were local streets and neighborhoods and a portion of the NXP (formerly Freescale Semiconductor) campus located along William Cannon. Seton Southwest Hospital was constructed between 1996 and 2004 and the Austin Community College (ACC) Pinnacle campus building (ACC was not its original use) was built between 2004 and 2012. Based on aerial photography, the rate of development within the Oak Hill Parkway corridor accelerated between 1980 and 2012.

As previously described, land use adjacent to the project corridor is currently a mosaic of commercial/office complexes, multi- and single-family residential, retail, restaurants, recreational facilities, medical facilities, undeveloped tracts, and roadway and utility right-of-way. Several retail fueling facilities, vehicle maintenance shops, dry cleaners, electrical substations and transmission lines, and other businesses that store or use hazardous materials or petroleum products occur along or near the project corridor.

3. Records Review

3.1 Standard Environmental Record Sources

A computerized environmental database search was produced for the project area by GeoSearch on August 3, 2015 (GeoSearch, 2015a) and on January 20, 2016 (GeoSearch, 2016). The databases searched included federal, state, local, and tribal databases as defined by ASTM E 1527-05. Results of the database search are summarized below in **Table 1**. More information regarding the sites identified in the database reports can be found in Appendix B and a complete copy of the GeoSearch environmental database reports are in the project file.

TABLE 1. ENVIRONMENTAL RECORDS SEARCHED

Database	Description	Number of Sites		Search Radius (Miles)
		Locatable	Unlocatable	
NPL	The National Priorities List (NPL) is the EPA's database of uncontrolled or abandoned hazardous waste facilities that have been listed for priority remedial actions.	0	0	1.00
Delisted NPL	The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) established the criteria used to delete sites from the NPL.	0	0	0.50
CERCLIS	This database is a compilation of facilities that the EPA has investigated or is currently investigating for a release or threatened release of hazardous substances pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980.	0	1	0.50
NFRAP	No Further Remedial Action Planned (NFRAP) refers to facilities that have been removed and archived from the EPA's inventory of CERCLA sites.	0	1	0.50

Database	Description	Number of Sites		Search Radius (Miles)
		Locatable	Unlocatable	
RCRAC	Includes hazardous waste sites listed with corrective action activity. A “corrective action” order is issued when there has been a release of hazardous waste or constituents into the environment from a RCRA facility.	0	0	1.00
RCRAT	The RCRAT database includes non-corrective action sites listed as treatment, storage, and/or disposal facilities of hazardous waste in the RCRA Info system.	0	0	0.50
RCRAGRO 6	Sites listed as generators of hazardous waste (large, small, and exempt) in the RCRA Info System.	3	0	0.125
NLRRCRAG	The No Longer Regulated RCRA Generator Facilities database includes RCRA generator facilities that are no longer regulated by the EPA or that do not meet other RCRA reporting requirements.	2	0	0.125
NPDES	National Pollutant Discharge Elimination System (NPDES) database information extracted from the Water Permit Compliance System database used by the EPA to track surface water permits issued under the Clean Water Act (CWA).	0	0	TP/AP*

Database	Description	Number of Sites		Search Radius (Miles)
		Locatable	Unlocatable	
PCS	The Permit Compliance System (PCS) is used in tracking enforcement status and permit compliance of facilities controlled by the NPDES.	0	0	TP/AP
EC	This database includes sites where Engineering and/or Institutional Controls have been identified as part of a selected remedy for the site as defined by US EPA remedy decision documents.	0	0	TP/AP
ERNS	Emergency Response Notification System (ERNS) records and stores information on reported releases of oil and hazardous substances.	0	0	TP/AP
PADS	PCB Activity Database System (PADS) is used by the EPA to monitor the activities of PCB handlers.	0	0	TP/AP
HMIRSRO 6	Hazardous Materials Incident Reporting System (HMIRSRO6) contains hazardous material spill incidents reported to USDOT.	2	0	TP/AP

Database	Description	Number of Sites		Search Radius (Miles)
		Locatable	Unlocatable	
MLTS	MLTS is maintained by the Nuclear Regulatory Commission (NRC) and contains a list of approximately 8,100 sites that possess or use radioactive materials and are subject to NRC licensing requirements.	0	0	TP/AP
TRI	Toxic Chemical Release Inventory (TRI) includes data on toxic chemical releases and waste management activities from certain industries as well as federal facilities.	1	0	TP/AP
FRSTX	The Facility Registry System (FRSTX) is the centrally managed database that identifies facilities, sites, or places subject to environmental regulations or of environmental interest.	39	2	TP/AP
TSCA	Toxic Substances Control Act (TSCA) Inventory identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list.	0	0	TP/AP
BRS	This report captures detailed data on the generation of hazardous waste from large quantity generators and data on waste management practices from treatment, storage, and disposal facilities.	1	0	TP/AP

Database	Description	Number of Sites		Search Radius (Miles)
		Locatable	Unlocatable	
RCRANGRO6	This database identifies sites that only handle hazardous wastes, such as transporter sites, without generating any amount of hazardous waste.	12	0	0.125
SF	State Superfund Program.	0	0	1.00
APAR	An Affected Property Assessment Report (APAR) required by TCEQ documents all relevant affected property information to identify all release sources and contaminants of concern (COCs), determine the extent of all COCs, identify all transport/exposure pathways, and determine if any response actions are necessary.	1	0	0.50
BSA	Brownfields Site Assessments (BSA) database includes relevant information on contaminated Brownfield properties that are being cleaned.	0	0	0.50
CALF	Closed and Abandoned Landfill Inventory (CALF) has located over 4,000 closed and abandoned municipal solid waste landfills throughout Texas.	1	0	0.50

Database	Description	Number of Sites		Search Radius (Miles)
		Locatable	Unlocatable	
IOP	Innocent Owner/Operator Database (IOP) provides a certificate to an innocent owner or operator if their property is contaminated as a result of a release or migration of contaminants from a source not located on the property and they did not cause or contribute to the contamination.	0	0	0.50
LPST	Includes aboveground and underground storage tank facilities with reported leaks.	13	0	0.50
MSWLF	Municipal Solid Waste Landfill Sites (may include active landfills and inactive landfills where solid waste is treated or stored.)	0	0	0.50
RWS	This TCEQ database contains all sites in the state that have been designated as Radioactive Waste sites.	0	0	0.50
RRCVCP	Railroad Commission Voluntary Cleanup Program and Brownfields Sites is an incentive to remediate oil & gas related pollution by participants as long as they did not cause or contribute to contamination.	0	0	0.50

Database	Description	Number of Sites		Search Radius (Miles)
		Locatable	Unlocatable	
VCP	Texas Voluntary Cleanup Program (VCP) provides administrative, technical, and legal incentives to encourage the cleanup of contaminated sites in Texas.	2	0	0.50
WMRF	Listing of recycling facilities in Texas.	1	0	0.50
DCR	Dry Cleaner Registration (DCR) database includes dry cleaning drop stations and facilities.	6	0	0.25
DCRPS	Dry Cleaner Remediation Program Sites database establishes a prioritization list of dry cleaner sites and administers the Dry Cleaning Remediation fund to assist with remediation of contamination caused by cleaning solvents.	0	0	0.50
IHW**	Database of permitted and non-permitted industrial and hazardous waste (IHW) sites.	21	0	0.25

Database	Description	Number of Sites		Search Radius (Miles)
		Locatable	Unlocatable	
IHWCA	The Industrial and Hazardous Water Corrective Action Sites is provided by the TCEQ to report the cleanup of sites contaminated from industrial and municipal hazardous waste and industrial non-hazardous waste. Sites in this program would be assessed and remediated to levels that protect human health and the environment.	1	0	1.00
NOV	This database containing Notice of Violations (NOV) is maintained by the TCEQ. An NOV is a written notification that documents and communicates violations observed during an inspection.	5	0	TP/AP
PST**	Aboveground and underground storage tanks registered with the TCEQ.	34	0	0.25
SPILLS	TCEQ database includes releases of hazardous or potentially hazardous materials into the environment.	5	0	TP/AP
SIEC01	State institutional / Engineering control sites.	0	0	TP/AP
TIERII	Texas Tier II Chemical Reporting Program maintains notifications from facilities that have certain hazardous chemicals in specified amounts.	13	0	TP/AP

*TP/AP – Target property/Adjacent property

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*TP/AP – Target property/Adjacent property

**There were many PST and IHW sites located immediately adjacent to the project corridor. These sites were not considered to have a high likelihood of impacting the project ROW unless information was provided which would suggest a possible concern during preliminary design.

Database results of the greatest environmental concern to the project corridor are summarized below in **Table 2** (GeoSearch, 2015a; GeoSearch, 2016). The number listed for each site is the “Map ID” which corresponds to the number provided for the site in the GeoSearch Radius Report. The Map ID is also called out on **Figure 2** which is included in Appendix A.

TABLE 2. SITES OF GREATEST ENVIRONMENTAL CONCERN

Map ID	Regulatory Database	Regulatory Reference	Facility Name and Location	Potential to Impact Project
1	LPST PST	104820 57760	Big Wheel Truck Stop 6517 W. Highway 290 Austin, TX 78735-8508	Yes
2	LPST	095163	Road & Bridge Office 6005 McCarty Lane Austin, TX 78749	Yes
4	LPST* PST FRSTX RCRANGRO6 IHW	0026134 26134 110041756720 TXD988031878 77200	Exxon RAS 68497 6820 W. Highway 290 Austin, TX 78735	Yes
6	LPST	GS115167	AusTex Used Cars/ TxDOT ROW 6812 W. Highway 290 Austin, TX 78735	Yes
8	PST	16673	Country Grocery and Market 6850 W. Hwy 290	Not Likely
9	PST	7140	7 Eleven 25347 6223 W Hwy 290	Not Likely
20	LPST	0036531	Circle K 3276 7912 W. Highway 290 Austin, TX 78736	Yes
23	LPST	0036619	Circle K 7136 Highway 71 Austin, TX 78735	Yes

Map ID	Regulatory Database	Regulatory Reference	Facility Name and Location	Potential to Impact Project
24	LPST PST	0019348 19348	Cedar Valley Central Office 8900 Circle Drive	Not Likely
35	VCP	2285	Austin Community College Pinnacle Annex 7748 Highway 290 West Austin, TX 78736	Not likely
1b	LPST	0042883	290 Location Boston Lane Austin, TX 78735	Yes
8b	LPST* PST	0025022 25022	A Tex Pools 5258 Highway 290 W. Austin, TX 78735	Not likely
8b	LPST* PST FRSTX	0046115 46115 110033544671	Austin Twinbrook 892 CO 5240 Highway 290 W. Austin, TX 78735	Not likely
11b	PST LPST*	10027 0010027	Road Runner Lube / TxDOT ROW 5199 W. Highway 290 Austin, TX 78735	Yes
16b	PST LPST*	35791 0035791	Polk Feed/Former Polk's Feed Store 5610 W. Highway 290 Austin, TX 78735	Yes
19b	PST LPST*	49375 0049375	Pro-Ed 5341 Industrial Oaks Blvd. Austin, TX 78735	Not likely

3.2 Historical Use Information

The objective of reviewing historical use information is to develop a history of previous land uses within and in the vicinity of the project area and to assess these uses for potential hazardous materials impacts. HDR reviewed fire insurance maps, historical aerial photographs and historical topographic maps for the project corridor. The subject corridor has been used as a transportation corridor since at least the 1940s, with its general current configuration being constructed between 1940 and 1953.

(a) Fire Insurance Maps

GeoSearch reviewed collections of fire insurance maps from the Library of Congress, University Publications of America, and other Libraries (universities, state, local, etc.) for the project corridor. No fire insurance map coverage was available for the project area (GeoSearch, 2015b).

(b) Historical Aerial Photographs

Historical aerial photographs are valuable for the environmental assessor to review features of the property over a long period of time. HDR requested historical aerial photographs from GeoSearch (2015c). HDR reviewed historical aerial photographs from 1940, 1953, 1966, 1973, 1980, 1988, 1996, 2004, and 2012. Historical aerial photographs are included in Appendix C. Information regarding the subject property is presented below.

- 1940** Primarily agricultural with cleared pastures along roadways.
- 1953** US 290 and SH 71 form current Y configuration. Agricultural and rural residential land uses dominated the project area.
- 1966** Similar to previous aerial photograph.
- 1973** Increased residential roadways and developments have been constructed—especially along SH 71 and east of the Y along US 290.
- 1980** A large housing development west of the Y and north of US 290 is the most visible change from the previous aerial photograph.
- 1988** William Cannon and Southwest Parkway have been constructed, as well as the NXP (formerly Freescale) campus. Increased residential development has changed from the previous aerial photograph.
- 1996** The ACC Pinnacle building has been constructed but otherwise the area is similar to the previous aerial photograph.
- 2004** Improvements to US 290 east of the Y have been constructed as well as Seton Southwest Hospital at RM 1826.
- 2012** Increased residential development in the corridor, especially west of the Y and north of US 290.

(c) Historical Topographic Maps

Historical topographic maps provide an overview of the area relative to potential previous land uses. HDR reviewed the historical USGS topographic maps provided by GeoSearch (2015d), which are included in Appendix D.

- 1896** Austin, Texas at 1:125,000 scale. The project area was primarily undeveloped at the time of this topographic map.
- 1910** Austin, Texas at 1:125,000 scale. The project area appears to have been primarily undeveloped at the time of this topographic map.
- 1966** Oak Hill, Texas at 1:24,000 scale. This map shows the eastern portion of the project area from the “Y” at Oak Hill to the east. Primarily small structures, likely residential, were present along US 290. Forest Oaks Memorial Park was present near McCarty Lane and Oak Hill Downs track was present north of a roadside park near the “Y.”
- 1968** Bee Cave, Texas at 1:24,000 scale. This map shows SH 71 in the project area north of the “Y” at Oak Hill. The area was primarily undeveloped with a few residential buildings along Thomas Springs Road. A quarry was located to the west of SH 71 south of Thomas Springs Road.
- 1968** Signal Hill, Texas at 1:24,000 scale. This quad shows the portion of the project area west of the “Y” at Oak Hill (including most of SH 71 in the project area). A gravel pit was shown near the current location of Convict Hill Road. Limited residential development present to the west of RM 1826 and north of US 290. A few small structures were located along SH 71.
- 1966 photo revised 1973** Oak Hill, Texas at 1:24,000 scale. This map is similar to the previous topographic map (Oak Hill, Texas 1966) and showed low density residential areas and undeveloped land.
- 1968 photo revised 1973** Bee Cave, Texas at 1:24,000 scale. This map shows SH 71 in the project area north of the “Y” at Oak Hill. It is similar to the earlier topographic map but shows slightly more residential development.
- 1968 photo revised 1973** Signal Hill, Texas a 1:24,000 scale. This quad includes the portion of the project area west of the “Y” at Oak Hill (including most of SH 71 in the project area). A gravel pit was shown near the current location of Convict Hill Road. A trailer park was located along RM 1826, as well as increased residential development along US 290 west of RM 1826, both

north and south of US 290. Residential development also occurred primarily along some tributaries of Williamson Creek on the west side of SH 71.

- 1986** Bee Cave, Texas at 1:24,000 scale. This map shows SH 71 in the project area north of the “Y” at Oak Hill. The map was similar to the earlier topographic map but shows slightly more residential development.
- 1986** Signal Hill, Texas at 1:24,000 scale. This map shows the western portion of the project area from just west of the “Y” at Oak Hill. Larger structures have been constructed on the northwest side of the SH 71 and US 290 intersection, as well as more commercial type development along SH 71. Convict Hill Road has been constructed as well as residential development on the hill (in the location of a former gravel pit). Residential development was present along US 290.
- 1988** Oak Hill, Texas at 1:24,000 scale. This map shows the project area from just west of the “Y” at Oak Hill to the east. This map displays McCarty Lane, Patton and Oak Hill Elementary Schools, Forest Oaks Memorial Park, a trailer park, and various structures (likely for commercial use) located along US 290 in the project area. Residential developments were depicted south of US 290 near Convict Hill Road and north of US 290 east of McCarty Lane.
- 2013** Signal Hill, Oak Hill, and Bee Caves Quads, Texas at 1:48,000 scale. Roadways were in their current configuration. Schools, Seton Southwest Hospital, several cemeteries and primarily residential streets were depicted on the topographic map.

4. Site Reconnaissance

HDR personnel conducted a site reconnaissance of the project corridor on February 3, 2016. The site reconnaissance included an inspection of the project area focused on identifying readily apparent RECs. Observations of RECs are described below, and project area photographs are presented in Appendix E. The following is a summary of the current land use as it was during the site reconnaissance:

- Transportation facilities and ROW are the most prominent features within the project corridor.
- Overhead utility lines were present in many locations within the project vicinity. Pole-mounted transformers within the project area were in good condition with no cracks, leaks, or dents identified. One electrical

substation was present adjacent to the project corridor; all transformers were in good condition and the substation was well covered with gravel. The substation was located off Joe Tanner Lane. Electrical transmission lines were present within the project corridor along portions of the north side of US 290 and near the electrical substation.

- A variety of land uses were evident in the vicinity of the transportation corridors including residential, commercial/retail, medical/office, recreational, institutional, and industrial. Retail fueling stations, vehicle maintenance shops, dry cleaners, and electrical substations were present. USTs were present at retail fueling facilities and a few 55-gallon drums behind the Coleman Express Lube on US 290 west of Patton Ranch Road.
- No spills of hazardous materials or petroleum products, no unusual odors, no stressed vegetation, or other indications of contamination were present during the site reconnaissance.
- Minor solid waste dumping was present in the project vicinity near Williamson Creek, primarily including discarded household items and food packaging.
- No water wells were observed during the site reconnaissance.

4. Findings, Conclusions, and Recommendations

HDR completed this Hazardous Materials Technical Report for the corridor along US 290 from just east of Old Fredericksburg Road to Circle Drive, and along SH 71 from US 290 to Silvermine Drive, in the City of Austin and Travis County, Texas.

This report includes a summary of the site reconnaissance conducted February 3, 2016, a review of environmental databases, and a review of historical data sources. This research resulted in the following findings and conclusions.

4.1 Findings

- The subject property is the proposed right-of-way along US 290 from Mopac (Loop 1) to Circle Drive and along SH 71 from US 290 to Silvermine Drive as shown on Figure 1. The subject corridor is located in Austin, Travis County, Texas. The subject corridor is within a developed area.
- Land use within the project area consisted of a mosaic of land uses including transportation and utility right-of-way, commercial/retail, residential, medical offices (and hospitals), institutional, industrial, and

recreational (golf driving range; baseball fields). The topography and geographic location suggests that shallow groundwater generally flows east and southeast towards Williamson Creek.

- In all, 190 findings were included in databases within the ASTM search radius as shown in Table 1 (GeoSearch, 2015a; GeoSearch, 2016). Of those, 13 sites (including primarily LPST and VCP) were determined to have the potential to impact the project corridor. This determination was based on the type of database listing, the information provided in the database report, and the distance and direction of the listing to the corridor as shown on Figure 2. Twelve orphan or unlocatable sites were included in the database search. One CERCLIS (superfund) site was listed as an unlocatable site: the IMC Chemical Group. Homefacts.com plots the location of this site on US 290 between Oak Meadow Drive and Convict Hill Road. This site was archived by the EPA in 1980 and no further clean up action or investigation at the site is required.
- Fire Insurance Map reports were not available for the project corridor (GeoSearch, 2015b).
- A review of historic aerial photographs and topographic maps of the project area indicated that the “Y” in Oak Hill was developed between 1940 and 1953. Prior to its development as a roadway, and the myriad of land uses currently within the project corridor, the land was primarily used as ranchland/pasture or was undeveloped. Major residential development within the subject corridor began in the 1970s, based on aerial photographs.
- A site reconnaissance of the project area was conducted February 3, 2016, and focused on the roadway, proposed project right-of-way, and adjacent properties. Electrical transmission lines parallel portions of US 290. Overhead utility lines, an electrical substation, and pole-mounted transformers were present in the vicinity of the corridor. Signs of USTs were present at retail fueling facilities adjacent to the project corridor, and 55-gallon drums were behind a service station adjacent to the corridor. Minor solid waste dumping was found near Williamson Creek. No wells, spills, odors, stressed vegetation, or other indications of contamination were noted during the site reconnaissance.

4.2 Recommendations

Recommendations included in this report were developed through the investigative procedures described in the *Scope of Services, Significant Assumptions, and Limitations* section of this report. These findings should be reviewed within the context of the limitations provided in the *Scope of Services, Significant Assumptions, and Limitations* section. HDR makes the following general recommendations related to the project corridor.

(a) Recommendation 1

HDR recommends that an ASTM-conforming Phase I ESA be conducted prior to property acquisition.

(b) Recommendation 2

HDR recommends that all construction contractors be instructed to immediately stop all subsurface activities in the event that potentially hazardous materials are encountered, an odor is identified, or significantly stained soil is visible. Contractors and maintenance personnel should be instructed to follow all applicable regulations regarding discovery and response for hazardous materials encountered during the construction process.

(c) Recommendation 3

HDR recommends determination of the depth to groundwater at locations where construction is going to occur to determine the likelihood of reaching groundwater and to determine whether contaminants held in groundwater would be likely to impact construction.

(d) Recommendation 4

HDR recommends further analysis of potential sites of concern and their proximity in the project area during preliminary design development.

(e) Recommendation 5

Alternative A and Alternative C would require the acquisition of right-of-way. In addition to small slivers of property along the existing facility, the acquisition also includes four commercial properties and one residential property. One of the commercial properties, the Speedy Stop gas station and convenience store (Circle K 3276), is listed in the PST and LPST databases. It is anticipated that contaminated soil and/or groundwater could be encountered during construction. Special provisions or contingency language would

be included in the project's plans, specifications and estimates (PS&E) to handle hazardous materials and/or petroleum contamination according to applicable federal and state regulations. The underground storage tanks would be addressed during the right-of-way acquisition process following normal TxDOT right-of-way procedures. It is recommended that an ASTM-conforming Phase I Environmental Sites Assessment be completed prior to any property acquisition.

(f) Recommendation 6

The proposed project includes the demolition of building structures. The buildings may contain asbestos containing materials. Asbestos inspections, specification, notification, license, accreditation, abatement and disposal, as applicable, would comply with federal and state regulations. Asbestos issues would be addressed during the right-of-way process prior to construction.

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Acronyms and Abbreviations

ACC	Austin Community College
Asl	Above sea-level
ASTM	American Society for Testing and Materials
BEG	Bureau of Economic Geology
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
COC	Contaminants of concern
ESA	Environmental Site Assessment
FRSTX	Facility Registry System
IHW	Industrial and Hazardous Waste
LPST	Leaking Petroleum Storage Tank
Mobility Authority	Central Texas Regional Mobility Authority
MoPAC	Loop 1
PCBs	Poly-chlorinated Biphenyls
PST	Petroleum Storage Tank
RCRANGRO6	Resource Conservation and Recovery Act – Non-generators
REC	Recognized Environmental Condition
RM	Ranch-to-Market Road
ROW	Right-of-way
SH	State Highway
TxDOT	Texas Department of Transportation
US290	U.S. Highway 290
USDA	U.S. Department of Agriculture
USGS	U.S. Geological Survey

UST	Underground Storage Tank
VCP	Voluntary Clean-up Program

APPENDIX A. Figures

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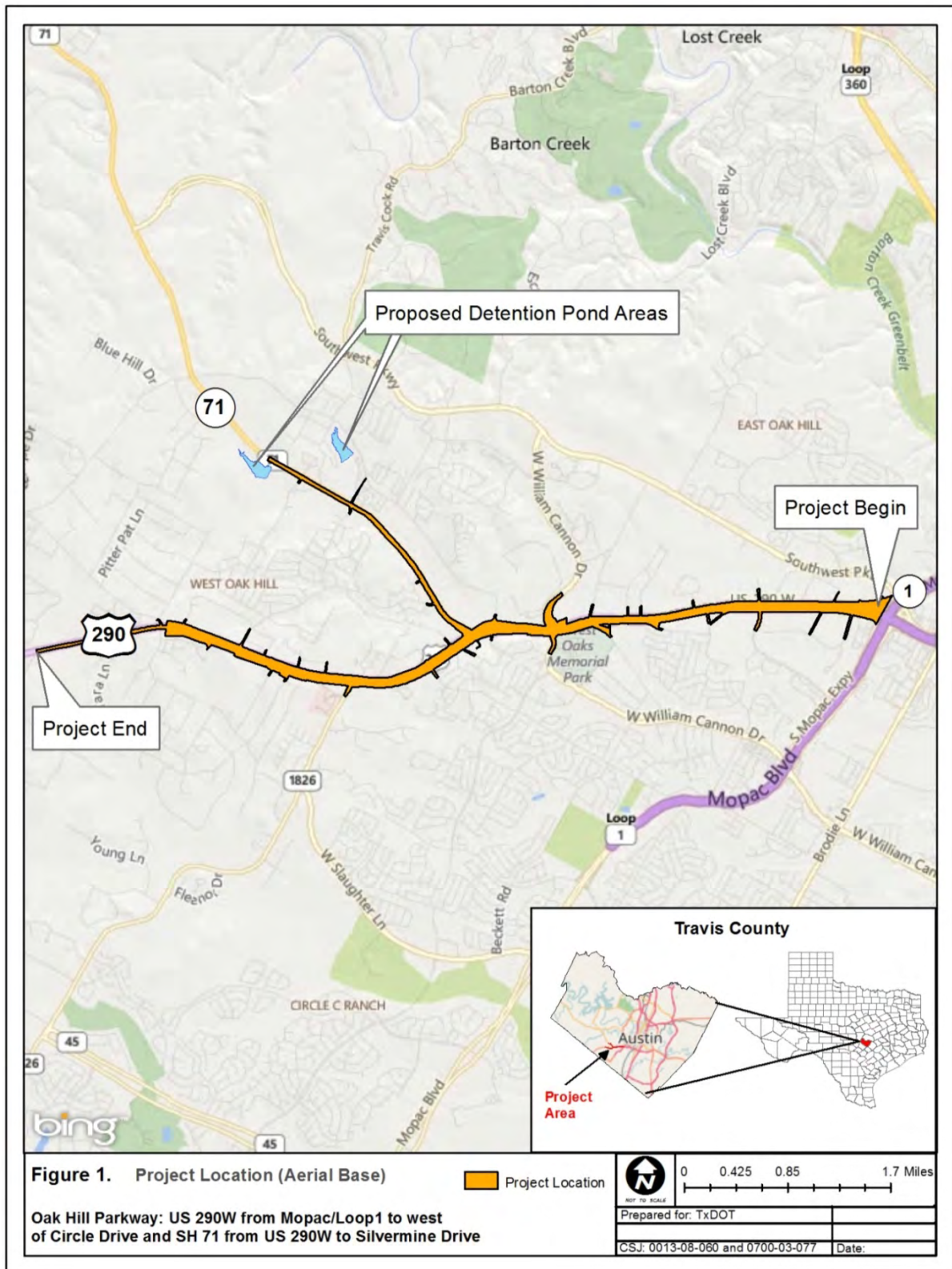


Figure 1. Project Location



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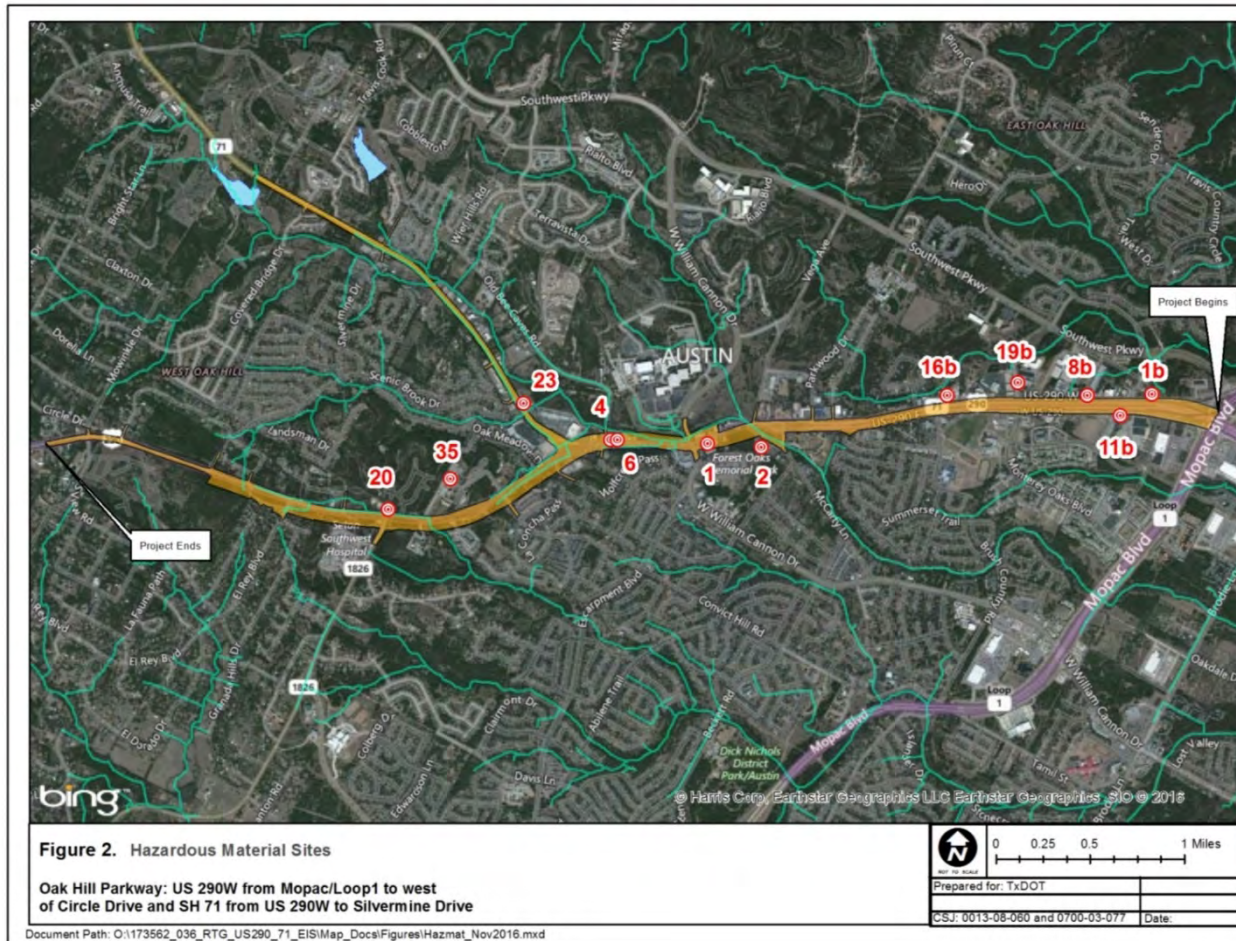


Figure 2. Potential Hazardous Material Sites



APPENDIX B. Summary of GeoSearch Radius Reports



Hazardous Materials Technical Report

Sites from GeoSearch Radius Report, August 3, 2015 (GeoSearch, 2015)

Map ID	Address	Database ID	Summary of Site
1	Big Wheel Truck Stop 3517 W. Hwy 290 (site is shown within the proposed ROW of US 290 southeast of its intersection with William Cannon Dr.)	LPST #104820	An LPST was reported 9/24/1992. The site reported no underground storage tanks (UST) only aboveground storage tanks (AST). Priority code indicated Edwards Aquifer, recharge zone or transition zone impact. Final concurrence has been issued and the case is closed.
		PST #57760	This site is listed as an inactive retail facility in the PST database. Ten 9,999-gallon ASTs were registered to the facility in 1992 (installed previously); three contained diesel fuel and seven contained gasoline. All ASTs are reported out of use.
		Spills #9/20/92001	2,000 gallons of unleaded gasoline/diesel were reported spilled on 9/23/1992 with no waters affected.
		Spills #1/26/84001	50 gallons of light diesel oil were reported spilled on 1/26/1984 with no waters affected.
	Affordable Dentures 6611 US 290 East	FRSTX #110058978619	Programs listed for this facility include OSHA-OIS. Site is listed as a dental laboratory.
	Rick's Cleaners 6515 W. Hwy 290	FRSTX #110034526118	This facility was listed in the TCEQ Agency Central Registry.
		DCR #RN103959821	This facility was reported as a dry cleaner drop station. No solvents or quantities were reported.



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Map ID	Address	Database ID	Summary of Site
2	City of Austin Oak Hill Substation 5915 McCarty Lane	EAP #92072403 #92090901	Edward Aquifer Permit.
		Tier II #71KL0703F89K #989213882362	This electrical power distribution site reported having sulfuric acid in batteries, lead-acid battery electrolyte, ASTM D-3487 Type II transformer oil, highly refined petroleum oils, and dielectric oil on site.
		FRSTX #110034659028	This facility was listed in the TCEQ Agency Central Registry.
	Road & Bridge Office 6005 McCarty Lane	LPST #095163	An LPST was reported at this site on 3/6/1990. Two USTs were reported as removed from the ground at the end of March 1990. LPST resulted in soil contamination only which required a full site assessment and remedial action plan (RAP). Final concurrence has been issued and the case is closed.
	Travis County Road and Bridge Office 6003 McCarty Lane	PST #15853	This site was used for fleet refueling, but is now listed as inactive in the PST database. The site reported two 10,000-gallon USTs (one gasoline, one diesel) that have been removed from the ground (1990).
3	Freescall Semiconductor (currently NXP) 6501 W. William Cannon Drive	NOV #RN102752763	A minor violation was issued in 2010 for failure to maintain sufficiently detailed and complete records of the location of hazardous waste accumulation areas near any point of generation. The issue has been reported as resolved.



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Map ID	Address	Database ID	Summary of Site
		PST #68327	Freescall is listed in the PST database as an industrial/manufacturing/chemical plant with two active ASTs. The ASTs are reported to store diesel fuel with capacities of 6,000 and 2,773 gallons.
		Spills #80444	A spill of 98 gallons of diesel oil #2/guar gum was reported 1/28/2006 affecting a retention pond. According to the database report, Eagle Environmental was hired for clean-up and a final report was submitted to TCEQ.
		Tier II #3J5JUU002SV5 #5N62U8002Z57 #4YYWBP002UZ4	Various amounts of many chemicals used during the manufacturing of semiconductors were reported as stored at this site. Air-Products – Freescall also reported stored chemicals for industrial gas manufacturing on the site.
		HMIRSR06 #I-2002090036	A portable tank was being loaded with sulfuric acid when a leak developed around the external valve. Loading was stopped and less than 0.2 gallons were released.
		RCRAGR06 #TXD980870356	As of December 2014, Freescall was listed as a large quantity generator – transporter. One violation and one verbal informal enforcement occurrence were noted. Many hazardous waste classes were identified.
		TRI #78735MTRLN6501W	According to the database report, this site releases ethylene glycol, hydrogen fluoride, n-methyl-2-pyrrolidone, nitric



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Map ID	Address	Database ID	Summary of Site
			acid, ozone, nitrate compounds, sulfuric acid (1994 and after “acid aerosols” only) into the air through stacks and fugitive air.
		IHW #34313	This site was listed as an active large-quantity waste generator and waste transporter. Site is a facility that does design, manufacturing, and testing of integrated circuit devices.
3	Vega Substation 6501-1/2 W. William Cannon Drive	Tier II #329806487099 #71MPAV03XQ7R	This electrical power distribution site reported having sulfuric acid in batteries and lead-acid battery electrolyte on site.
4	Exxon RAS 68497 6820 W. Hwy 290	LPST #0026134	An LPST was reported at this site 12/31/1992 resulting in soil contamination only requiring a full site assessment and RAP. Final concurrence has been issued and the case is closed.
		PST #26134	This site is inactive in the PST database with three USTs which stored gasoline (two 8,000-gallon tanks and one 6,000-gallon tank) were removed from the ground in early December 1992.
		FRSTX #110041756720 #110006129821	This site was listed in the RCRA Information System.
		RCRANGR06 #TXD988031878	Exxon at this location is currently listed as “Not a Generator” of waste.



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Map ID	Address	Database ID	Summary of Site
		IHW #77200	This service station was listed as an inactive conditionally exempt small quantity generator.
4	Viking Construction US 290 Staging Area	FRSTX #110041756720	This facility was listed in the TCEQ Agency Central Registry.
5	Reid's Laundry & Dry Cleaners 7010 W. Hwy 71	IHW #70575	This site was listed as an inactive large quantity generator.
		IHWCA #T0637	Inactive in the IHWCA database as of 7/21/09.
		FRSTX #110006127501 #110034799010	This site was listed in the RCRA Information System and TCEQ Agency Central Registry.
		RCRANGRO6 #TXD981606254	As of 2004, this dry cleaner was listed as not a generator of waste. No evaluation, violations or enforcements noted.
		DCR #RN100594753	This facility is registered as a drop station. No quantities or names of solvents were reported.
5	Perry Rose Tire & Auto Oak Hill 7010 W. Hwy 71	PST #5224	Currently inactive, this site had one reported 550-gallon UST for used oil that was removed from the ground in 1993.
5	HEB Grocery Company, LP – Austin 10	Tier II #7Q95QY028JUS	HEB is a supermarket and other grocery that reported storing sulfuric acid and lead acid batteries in a wareroom.



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Map ID	Address	Database ID	Summary of Site
	7010 W. Hwy 71		
5	Advance Auto Parts 8426 7010 W. Hwy 71, Ste. 250	FRSTX #110037571197	This facility was listed in the TCEQ Agency Central Registry.
6	TxDOT ROW AusTex Used Cars 6812 W. Hwy 290	LPST #GS115167	The date of this LPST was not reported but was prior to 5/4/2001. The LPST assessment was incomplete and there were no apparent receptors impacted. Final concurrence has been issued and the case is closed.
7	Amazing Scapes 6411 W. Hwy 290	FRSTX #110033321144	This landscape counseling and planning facility was listed in the TCEQ Agency Central Registry.
		NOV #RN103041844	Amazing Scapes received a minor waste violation in 2003 for failure to properly label the waste oil storage tank. The issue has been resolved.
8	Country Grocery & Market 6850 W. Hwy 290	PST #16673	This facility had three USTs that were removed from the ground in 2003. No active USTs or ASTs were registered at the site.
		NOV #RN102050622	This retail facility received a major waste violation in 2003 for failure to provide acceptable financial assurance. Status of the violation was listed as active.
9	7 Eleven 25347 6223 W. Hwy 290	PST #7140	This site is inactive in the PST database. The facility had three 12,000-gallon ASTs for gasoline that were removed from the ground in 1995.



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Map ID	Address	Database ID	Summary of Site
10	Buddy's Corner 8600 W. Hwy 290	FRSTX #110033553465	This facility was listed in the TCEQ Agency Central Registry.
		PST #39891	This is an active retail facility with two registered USTs. Each tank is 8,000 gallons and stores gasoline.
11	Oak Hill Texaco 6911 W. Hwy 290	PST #35790	This facility is listed as inactive in the PST database. The tank previously had four 6,000-gallon and one 4,000-gallon USTs for gasoline and one 3,000-gallon UST for diesel fuel that were removed from the ground in 1998.
12	Shoppers Mart 31 6412 W. Hwy 290	FRSTX #110035226083	This facility was listed in the TCEQ Agency Central Registry.
12	Circle K Store 2704684 6412 W. Hwy 290	PST #34922	Circle K is an active retail fueling facility with four active USTs. Three USTs storing gasoline (two 10,000-gallon and one 6,000-gallon) and one 6,000-gallon UST storing diesel fuel were reported.
13	Bee Caves Apartments Borders Old Bee Caves Road and Hwy 71	FRSTX #110033459068	This residential property was listed in the TCEQ Agency Central Registry.
14	Jack Brown Cleaners 13	IHW #66317	Jack Brown Cleaners was listed as an inactive conditionally exempt small quantity generator of non-industrial and/or municipal waste.



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Map ID	Address	Database ID	Summary of Site
	6763 W. Hwy 290	FRSTX #110033909536 #110006127342	This facility was listed in the TCEQ Agency Central Registry and RCRA Information Systems.
		NLRRCRAG #TXD981590748	As of 2010, this facility is classified as “Not a Generator” of waste. No evaluations, violations or enforcements were reported. Former waste streams included corrosive waste, tetrachloroethylene, and spent halogenated solvents.
		RCRAGR06 #TXD981590748	As of 2010, this facility is classified as “Not a Generator” of waste.
		DCR #RN102963170	Jack Brown Cleaners was registered as a facility and listed as having perchloroethylene (tetrachloroethylene) on site.
15	Jerry Dixons Automotive 6861 W. Hwy 290	IHW #77815 #68789	The IHW registration was inactivated.
		FRSTX #110006127360	This facility was listed in the RCRA Information Systems.
		RCRANGR06 #TXD981592025	As of 2004, this facility is classified as “Not a Generator” of waste.
	Oak Hill Automotive 6861 W. Hwy 290	FRSTX #110034788861	This facility was listed in the TCEQ Agency Central Registry.



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Map ID	Address	Database ID	Summary of Site
16	Oak Hill Quick & Save 6132 W. Hwy 290	FRSTX #110034739068	This facility was listed in the TCEQ Agency Central Registry.
		PST #19611	Oak Hill Quick & Save was listed as an active retail facility with four active USTs. Three tanks storing gasoline (one 12,000-gallon and two 4,000-gallon) and one 8,000-gallon UST storing diesel fuel were registered.
17	C&T Reclamation 7824 W. Hwy 71	IHW #39819	This site was listed as an inactive large quantity generator.
		FRSTX #110006130588	This facility was listed in the RCRA Information Systems.
		RCRANGR06 #TXD988053757	
17	Oak Hill Screen Graphics 7824 W. Hwy 71	FRSTX #110006129572	This facility was listed in the RCRA Information Systems.
		RCRANGR06 #TXD988024766	As of 2004, this facility is listed as “not a generator.” Formerly they were registered as a large quantity generator with no evaluations, violations or enforcements reported. Former waste streams included ignitable waste, benzene, and tetrachloroethylene.
		IHW #75293	Registered as inactive waste generator.
18	Texaco 8314 W. Hwy 71	FRSTX #110033972538	This facility was listed in the TCEQ Agency Central Registry.



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Map ID	Address	Database ID	Summary of Site
18	7 Eleven Store 36644	PST #51476	7 Eleven, a retail fueling facility, had three registered USTs. Two 8,000-gallon and one 4,000-gallon USTs with gasoline.
19	Diamond Shamrock 1311 7622 W. Hwy 71	FRSTX #110034369207	This facility was listed in the TCEQ Agency Central Registry.
19	7622 W. Hwy 71	HMIRSRO6 #E-2005020067	The Mission Petroleum Carrier driver overfilled the tank and approximately three gallons of gasoline spilled. The spill was cleaned up with absorbent.
19	Corner Store 1311 7622 W. Hwy 71	PST #54010	This retail fueling facility had three active registered USTs. Three 12,098-gallon USTs: two filled with gasoline and one with diesel fuel.
20	Speedy Stop 214 7912 W. Hwy 290	PST #36531	Speedy Stop is an active retail facility with three active USTs. The registered tanks were 9,864 gallons, two filled with gasoline and one with diesel fuel. There were also two registered USTs that had been removed from the ground.
	Circle K 3276 7912 W. Hwy 290	LPST #0036531	A LPST was reported at this facility in February 1987. The priority code indicated that a groundwater impact, public/domestic water supply well was located within 0.25-0.5 miles. Final concurrence has been issued and the case is closed.
21		Tier II #48ZYN500Y0KD	Seton Southwest Hospital was in the Tier II Chemical Reporting database for storing propane southwest of the



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Map ID	Address	Database ID	Summary of Site
	Seton Southwest Hospital 7900 FM 1826	#4Y6HN201HL1N	hospital and parking lot. This facility passed all validation checks.
		FRSTX #110034822627 #110035353934	This facility was listed in the TCEQ Agency Central Registry.
22	KMW Systems 8313 W. Hwy 71	FRSTX #110006129607	This facility was listed in the RCRA Information Systems.
		RCRANGR06 #txd988025961	As of 2004, KMW Systems was listed as “not a generator.” Formerly this facility was a large quantity generator with no evaluations, violations or enforcements reported. Waste streams included ignitable waste, o-cresol and 1,2-dichloroethane.
		IHW #68384	Listed as an inactive small quantity generator of waste.
23	Scenic Brook Food Mart 7216 W. Hwy 71	PST #36619	Scenic Brook Food Mart was listed as an active retail facility with one active UST. The registered active tank was listed as 22,000 gallons with three compartments, 6,000 gallons of diesel fuel, and 16,000 gallons of gasoline.
23	Circle K 7136 Hwy 71	LPST #0036619	An LPST was reported at this location in 1984. The priority code indicated groundwater was impacted with no apparent threats or impacts to receptors. Final concurrence has been issued and the case is closed.
24	Cedar Valley Central Office	PST #19348	This facility listed one 2,000-gallon UST in use for an emergency power



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Map ID	Address	Database ID	Summary of Site
	8900 Circle Drive		generator. The tank listed was filled with diesel.
		LPST #0019348	An LPST was reported at this location in 1992 resulting in minor soil contamination with no remedial action required. Final concurrence has been issued and the case is closed.
25	7 Eleven 36456 8225 W. Hwy 71	PST #86121	Status of this registration was pending and no active USTs or ASTs were reported.
26	Lube Pitstop Inc. 6410 W. Hwy 290	NLRRCRAG #TXD988018974	This facility was classified as “all other automotive repair and maintenance.” Currently, as of 2012 this facility was reported as “not a generator” of waste. Formerly the facility was listed as a small quantity generator with no evaluations, violations or enforcements reported. The hazardous waste formerly reported for the facility was lead and benzene.
		IHW #84191	This facility was listed as an inactive small quantity generator in the IHW database.
		RCRANGR06 #TXD988018974	As of 2008, listed as not a generator of waste.
27	Walgreens Store 1520 6705 W. Hwy 290	IHW #85351	This facility was listed as inactive in the IHW database. Formerly the business was a small quantity generator of waste from photo processing.



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Map ID	Address	Database ID	Summary of Site
		RCRANGR06 #TXD988024758	Currently listed as “not a generator” as of 2004. No evaluations, violations, or enforcements were reported.
27	Brothers Printing 6705 W. Hwy 290	IHW #76600	This commercial printing business is listed as an inactive small quantity generator as of 1997 and was no longer located at that address.
27	Jack Brown Cleaners 93 6705 W. Hwy 290	DCR #RN103987384	Jack Brown Cleaners has a drop station registration.
28	Southwest Automotive 5905 McCarty Lane	PST #65649	Southwest Automotive was listed as inactive in the PST database for one 1,000-gallon UST that was removed from the ground in 1994.
29	Value Mart 6218 Oakclaire Dr.	PST 45197	Value Mart was listed as inactive in the PST database. This facility formerly had two 10,000-gallon and one 8,000-gallon USTs that were removed from the ground in 2011.
30	Sweet Cleaners 7101 W. Hwy 71	IHW #66874	Sweet Cleaners was listed as an inactive conditionally exempt small quantity generator.
		DCR #RN103963823	This facility had a drop station registration.
31	Sweet Cleaners 7101 E. Hwy 71	RCRANGR06 #TXD981586795	Current activity indicates this facility is “not a generator” of hazardous waste. No evaluations, violations, or enforcements were reported. Hazardous waste streams that were



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Map ID	Address	Database ID	Summary of Site
			listed included a variety of spent halogenated solvents.
32	Hohmanns Automotive, Inc. 8917 Circle Dr.	RCRANGR06 #TXD981592991	As of 2004, this facility was listed as “not a generator.” Formerly this facility was classified as a small quantity generator with various waste streams including but not limited to ignitable waste, corrosive waste, spent halogenated solvents, spent non-halogenated solvents, and etc. No evaluations, violations, or enforcements were reported.
		IHW #68922	Hohmann’s Automotive was listed as an inactive conditionally exempt small quantity generator in the IHW database.
33	Highway 71 Land	CALF #1284	No information about this facility was provided in the database report. No open/close dates, size, depth or landfill contents were reported and the location is not specific.
34	Oak Hill Elem. School 6240 W. Hwy 290	PST #48095	This school was listed as inactive in the PST database for one 500-gallon tank that was removed from the ground in 1994.
35	Austin Community College – Pinnacle Campus 7748 W. Hwy 290	VCP #2285	This community college campus applied for the VCP in 2009. The phase listed was an investigation of soils potentially impacted by heavy metals. No date of agreement was reported and the case was still open.
		IHW #81105	This facility was listed as an inactive conditionally exempt small quantity



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Map ID	Address	Database ID	Summary of Site
			generator. No waste records were presented.
36	Escarpment Exxon 6109 W. William Cannon Dr.	PST #73060	This retail facility had two registered 15,000-gallon USTs storing gasoline.
37	Former Polk's Feed Store 5610 W. Hwy 290	LPST #0035791	A LPST was reported in 1995, the priority code indicated Edwards Aquifer recharge zone or transition zone impacts. Final concurrence has been issued and the case is closed.
38	A-Line Auto Parts 5608 Hwy 290	WMRF #31472	According to the database report, this facility accepts metals: batteries (B309)-lead.



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Sites from GeoSearch Radius Report January 20, 2016 (GeoSearch, 2016)

Map ID	Address	Database ID	Summary of Site
1	Safe Way Rental AST 4518 Boston Lane	FRSTX #110036106694	This site is listed in the TCEQ Agency Central Registry.
1	290 Location Boston Lane	LPST #0042883	Soil contamination only, required a full site assessment and remedial action plan. Final concurrence issued and the case was closed in 1990.
		PST #42883	Inactive registration with three USTs that had been removed from the ground in 1990.
	Sprint Tower Improvements 4518 Boston Lane	FRSTX #110034995496	This site is listed in the TCEQ Agency Central Registry.
3	Turfgrass America 5910 W. Highway 290	FRSTX #110035271498	This site is listed in the TCEQ Agency Central Registry. SIC codes for this site include 5193 for flowers, nursery stock and florists' supplies and 5261 for retail nurseries and lawn and garden supply stores.
5	Auto-Tech Hwy 290 Austin 5635A W. Highway 290	IHW #74002	This site was listed as an inactive small quantity generator. Description of waste was not reported.
		FRSTX #110006127510	This site was listed in the RCRA Information System program (site name also Southwest Motor Cars).
		RCRANGRO6 #TXD981606312	Current information as of 2005 lists this site as "not a generator" of waste.



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Map ID	Address	Database ID	Summary of Site
			No evaluations, violations or enforcements were reported.
	Klingemann Tire & Automotive 5635 W. Hwy 290	FRSTX #110033925581	This site is listed in the TCEQ Agency Central Registry.
7	Capital Equipment 5508 W Highway 290	PST #21295	This fleet refueling site is listed as inactive in the PST database. Three registered tanks had been removed from the ground in 1986.
	Stripling Blake United Pump Supply 5508 Hwy 290 W	FRSTX 110037919553	This site is listed in the TCEQ Agency Central Registry.
	5506 Highway 290 W	FRSTX #110033280526	This site was listed in the TCEQ Agency Central Registry. SIC codes listed were 7542 for carwashes and 6512 for operators of non-residential buildings. Additionally, NAICS code 531120, lessors of non-residential buildings (except mini-warehouses) was listed.
	Air Products and Chemicals, Inc. 5508 Hwy. 290	FRSTX #110059587683	This site is listed in the OSHA-OIS program and listed NAICS code 325120 – industrial gas manufacturing.
8	A Tex Pools 5258 Hwy 290 W	LPST #0025022	This LPST resulted in soil contamination only and required a full site assessment and remedial action plan. Final concurrence was entered in 1993 and the case was closed.



Hazardous Materials Technical Report

Map ID	Address	Database ID	Summary of Site
		PST #25022	This site is listed as inactive in the PST database with three USTs removed from the ground prior to December 1992.
	Austin Twinbrook 892 CO 5240 Hwy 290 W	LPST #0046115	This LPST resulted in minor soil contamination with no remedial action required. Final concurrence was issued and the case was closed in 1992.
		PST #46115	One AST is registered to this site and is owned by Southwestern Bell Telephone LP. The active AST has a 6,000-gallon capacity and was filled with diesel. One registered UST was removed from the ground in 2002.
		FRSTX #110033544671	This site is listed in the TCEQ Agency Central Registry. No SIC or NAICS data reported.
	AT&T Telephone Facility 5240 Highway 290 W	Tier II #3SBCIDXP3624	This site reported storing sulfuric acid and diesel fuel at this location.
9	Monterey Oaks Citgo 4912 Monterey Oaks Blvd.	NOV #RN102478856	This retail facility was issued five violations in March 2008: four moderate and one minor infraction. Allegations involved failure to provide written notice of change or additional information, but are not fully described. Status is resolved but description of the resolution was not provided.
	Star Stop 38	PST #73059	Retail fueling facility with two reported active USTs. The USTs are 20,000-

Hazardous Materials Technical Report

Map ID	Address	Database ID	Summary of Site
	4912 Monterey Oaks Blvd.		gallon tanks for storing gasoline with double wall design tank and pipes.
	Handi Plus 4912 Monterey Oaks Blvd.	FRSTX #110038459557	This site is listed in the TCEQ Agency Central Registry with SIC code 5541 - Gasoline Service Stations.
	Storm 290 Lot 5 Block A 4912 Monterey Oaks Blvd.	FRSTX #110035125012	This site is listed in the TCEQ Agency Central Registry. No SIC or NAICS data reported.
10	Dynamic Systems, Inc. Austin Cleanroom 5446 Hwy 290 West, Suite 302	Tier II #4Z1M4W002DE	It is reported that argon and nitrogen are stored at this location outside of the building in front (facing street).
	TPDC 5446 W Highway 290 Suite 206	IHW #34167	This facility was listed as an inactive waste generator. Activity type was reported as unknown and no waste records were provided.
11	Road Runner Lube / TxDOT ROW 5199 W. Highway 290	PST #10027	Road Runner Lube is listed as inactive in the PST database. One 550-gallon used oil tank is reported as removed from the ground in 1992.
		LPST #0010027	The LPST was reported in 1992 and resulted in no groundwater impact and no apparent threats or impacts to receptors. Final concurrence has been issued and the case is closed.
	Mulry Square Package Store	PST #55953	This was listed as an inactive retail facility. The owner was reported as



Hazardous Materials Technical Report

Map ID	Address	Database ID	Summary of Site
	5197 W. Highway 290		TxDOT. One 500-gallon tank was reported as removed from the ground.
12	Chuchia 290 5307 US 290 West	NOV #RN105793996	The violation at this commercial business was a failure to construct the sedimentation/filtration water quality pond as designed and approved affecting water. The status is resolved but no resolution description was reported.
13	Exxon RS 60462 5445 W. Highway 290	FRSTX #110034409637	This site is listed in the TCEQ Agency Central Registry. No SIC or NAICS data was reported.
	7-Eleven Store 36597 5445 W. Highway 290	PST #74117	7-Eleven is a retail facility with two reported active USTs. The tanks are listed as two 15,000-gallon USTs storing gasoline. The tanks and pipes were reported as double-walled.
15	Austin Twinbrook 892 CO - XP3624 5204 Hwy 290 W (4605 Boston Ln.)	Tier II #45258ZXXXXX	This facility is in the database for storing sulfuric acid, lead, and diesel fuel #2 low sulphur. The locations of the chemicals at the site were not provided.
	Southwestern Bell Twinbrooks Site 5204 W. Highway 290	FRSTX #110034826543	This site is listed in the TCEQ Agency Central Registry. No SIC or NAICS data was reported.
16	Polk Feed/Former Polk's Feed Store	PST #35791	Polk's Feed was listed as inactive in the PST database and had four USTs that were reported as removed from the ground in 1996.



Hazardous Materials Technical Report

Map ID	Address	Database ID	Summary of Site
	5610 W. Highway 290	LPST #0035791	An LPST at this location was reported in 1995 with Edwards Aquifer recharge zone or transition zone impacts. Final concurrence has been issued and the case is closed.
17	NTB No. 685 5234 US Hwy 290 West	RCRAGR06 #TXR000051094	Currently, NTB No. 685 was reported as a conditionally exempt small quantity generator. Hazardous waste types included ignitable waste, lead, and tetrachloroethylene. No evaluations, violations or enforcements were reported.
18	A-Line Auto Parts 5608 Hwy 290	WMRF #31472	A-Line Auto Parts was listed in the WMRF database as accepting: Metals: Batteries (B309) – Lead.
19	Pro-Ed 5341 Industrial Oaks Blvd.	PST #49375	Pro-Ed was listed as an inactive facility in the PST database. Formerly, tanks were used for fleet refueling. One UST was listed as removed from ground in 1990.
		LPST #0049375	An LPST at Pro-Ed was reported in May 1990 resulting in soil contamination only. The site required a full site assessment and remedial action plan. Final concurrence has been issued and the case is closed.
20	Value Mart 6218 Oakclaire Dr.	PST #45197	This site was listed as an inactive retail fueling facility. Two, 10,000-gallon and one 8,000-gallon USTs were reported as removed from the ground in 2011.
21	Austin MTSO	PST #76252	This site is owned by AT&T Mobility LLC and has one active AST onsite.



Hazardous Materials Technical Report

Map ID	Address	Database ID	Summary of Site
	4400 Staggerbrush Rd.		The 4,000-gallon AST was installed in 2003 and contains diesel.
22	Target 1061 5300 S. MoPac Expy.	RCRAGR06 #TXR000066753	Target was classified as a discount department store currently listed as a small quantity generator of hazardous and universal waste with no evaluations, violations, or enforcements reported.
		IHW #90854	Target was listed as a small quantity generator of non-industrial and/or municipal waste. Target listed several waste streams as active. The waste, generated on site, was treated off site.
23	Seven Trent Laboratories Austin South 5307 Industrial Oaks Blvd, Suite 160	IHW #73360	Seven Trent Laboratories was listed as an inactive large quantity generator of non-industrial and/or municipal waste. Last update was provided in 2005 and all waste streams were listed as inactive.
24	4601 Southwest Pkway. Suite 104	DCR #RN104748116	This site had a drop station registration.
25	McCoy Bldg. Cent 5012 W. Highway 290	PST #27641	This site was listed in the PST database as an inactive retail fueling facility. This site had one, 1,000-gallon UST that was removed from the ground in 1989.
26	Oak Hill Quick & Save 6134 W. Highway 290	PST #19611	Oak Hill Quick & Save is listed as an active retail fueling facility with four active USTs. The site has one 12,000-gallon gasoline, two 4,000-gallon

Hazardous Materials Technical Report

Map ID	Address	Database ID	Summary of Site
			gasoline, and one 8,000-gallon diesel USTs.
27	Wal-Mart Store 2133 5017 W. Highway 290	IHW #88713	Wal-Mart, listed as a warehouse club and supercenter was listed as an active small quantity generator of hazardous waste.
		PST #76803	Wal-Mart had one active UST registered, a 1,000-gallon tank used as an oil/water separator. The PST database also listed one UST that was removed from the ground in 2007.
		IHW #74747	Wal-Mart was listed as an inactive conditionally exempt small quantity generator of non-industrial and/or municipal waste.
28	First Evangelical Free Church 4220 Monterey Oaks Blvd.	VCP #1272	This site entered the VCP in October 2000 for soils impacted by total petroleum hydrocarbons from a heating oil UST. A final certificate of completion was issued in December 2001. An institutional control was listed as maintain a cap.
	Heating Oil UST 4200 Monterey Oaks Blvd.	APAR #1272	The affected property assessment report for the First Evangelical Free Church heating oil UST. The VCP process has been completed.
29	Road & Bridge Office 6005 McCarty Ln.	LPST #0015853	An LPST was reported at this site in 1990, which resulted in soil contamination only. A full site assessment and remedial action plan was required. Final concurrence has been issued and the case is closed.



APPENDIX C. Historic Aerial Photographs



Historical Aerials Package

<http://www.geo-search.net/QuickMap/index.htm?DataID=Standard0000116199>

Click on link above to access the map and satellite view of current property

Target Property:
Oak Hill Parkway
Highway 290 & Texas 71
Austin, Travis County, Texas 78735

Prepared For:
HDR Engineering

Order #: 53152
Job #: 116199
Project #: 173570
Date: 07/31/2015

TARGET PROPERTY SUMMARY

Oak Hill Parkway

Highway 290 & Texas 71

Austin, Travis County, Texas 78735

USGS Quadrangle: **Bee Cave_2013, TX**

Target Property Geometry: **Area**

Target Property Longitude(s)/Latitude(s):

(-97.912542, 30.234005), (-97.912473, 30.234080), (-97.912462, 30.235691), (-97.910080, 30.235293),
(-97.908413, 30.234950), (-97.904814, 30.233721), (-97.901912, 30.232697), (-97.900552, 30.234344),
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County/Parish Covered:

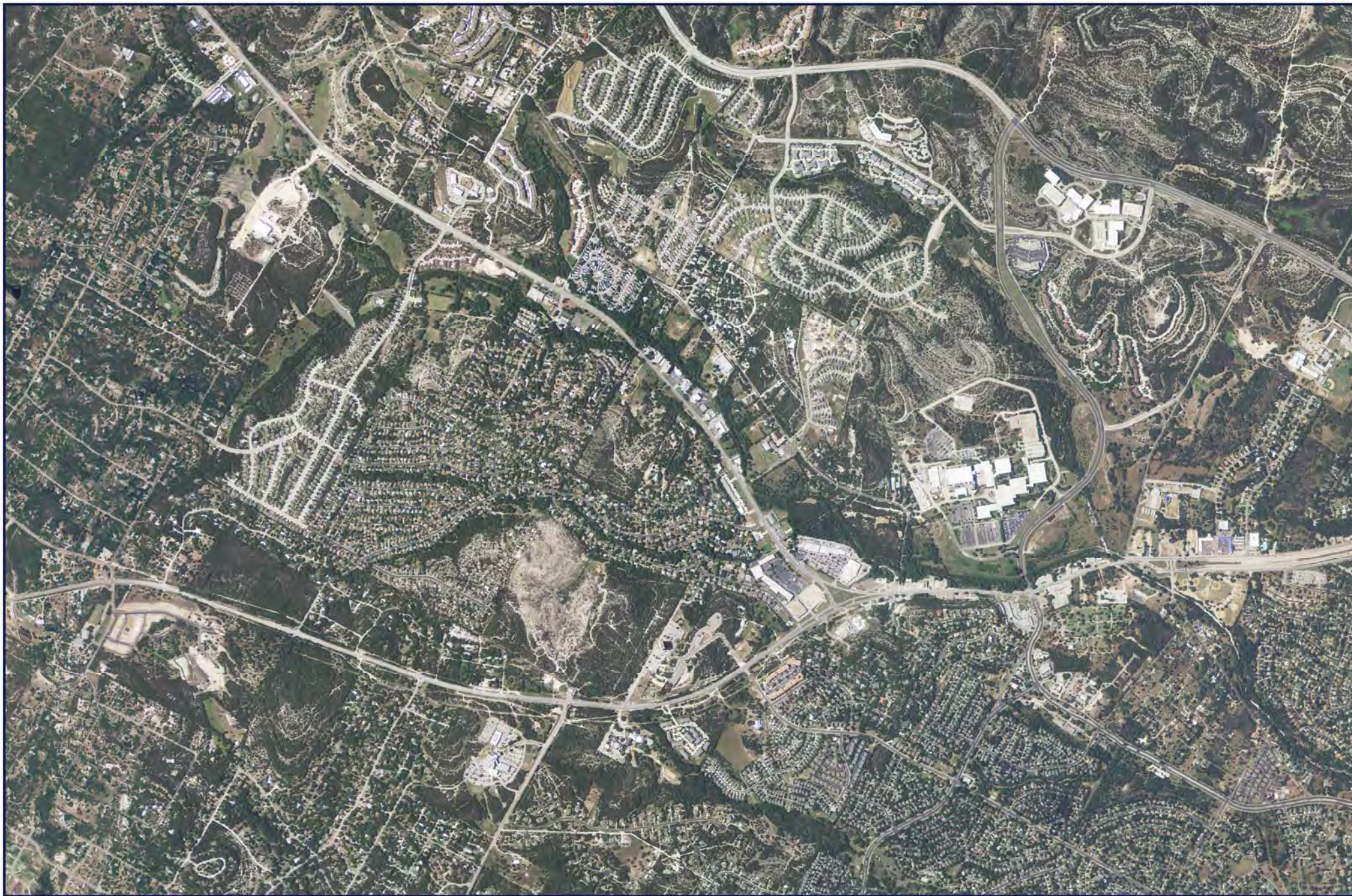
Travis (TX)

Zipcode(s) Covered:

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TARGET PROPERTY SUMMARY

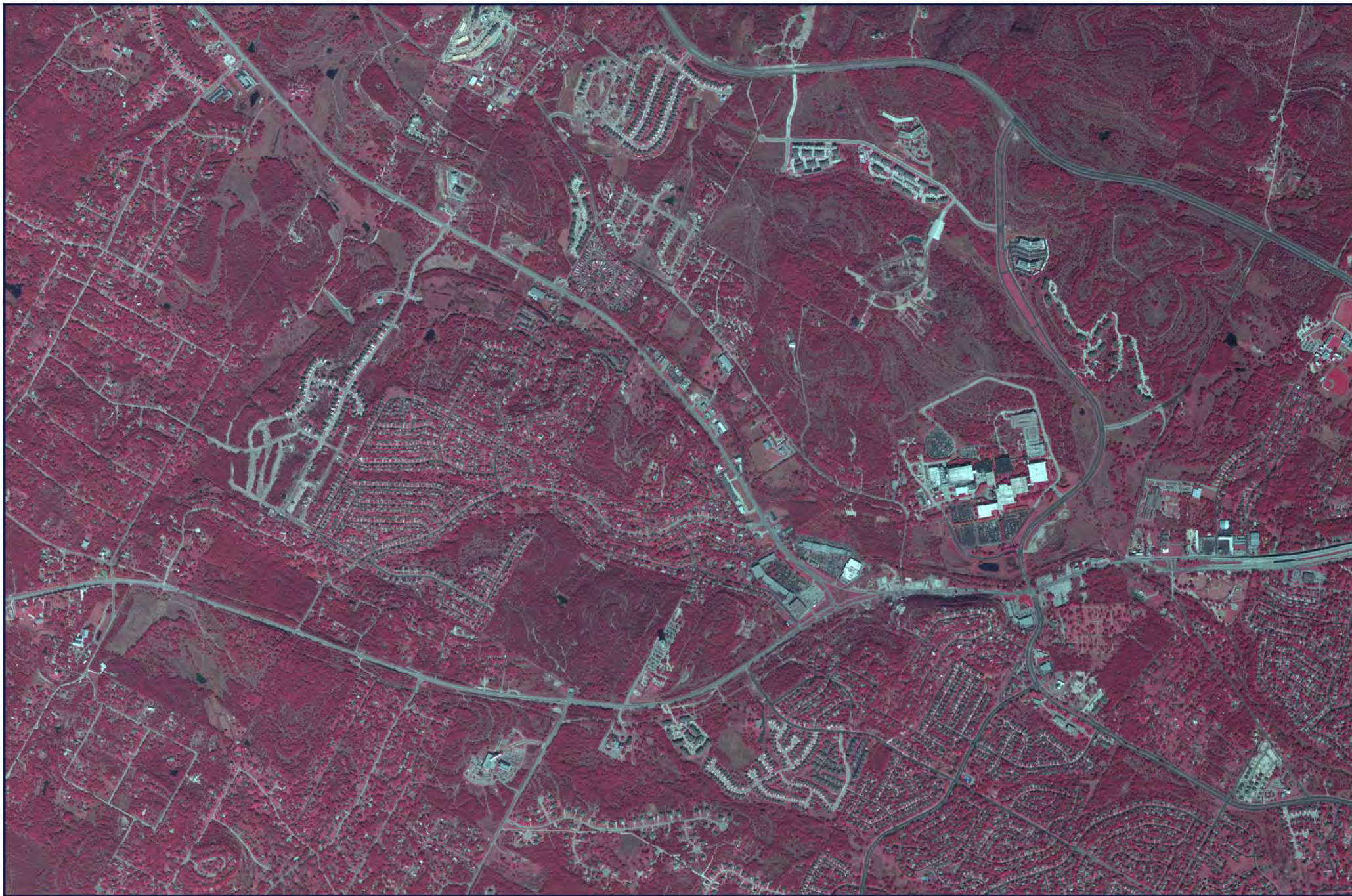
State(s) Covered:



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DATE: 2012
COUNTY: TRAVIS, TX
SCALE: 1" = 2,000'

GeoSearch



JOB #: 116199 - 7/31/2015

SITE: OAK HILL PARKWAY
SOURCE: USDA
DATE: 2004
COUNTY: TRAVIS, TX
SCALE: 1" = 2,000'

GeoSearch



JOB #: 116199 - 7/31/2015

SITE: OAK HILL PARKWAY
SOURCE: USGS
DATE: 1996
COUNTY: TRAVIS, TX
SCALE: 1" = 2,000'

GeoSearch



JOB #: 116199 - 7/31/2015

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SOURCE: TXDOT
DATE: 06-17-88
COUNTY: TRAVIS, TX
SCALE: 1" = 2,000'

GeoSearch



JOB #: 116199 - 7/31/2015

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COUNTY: TRAVIS, TX
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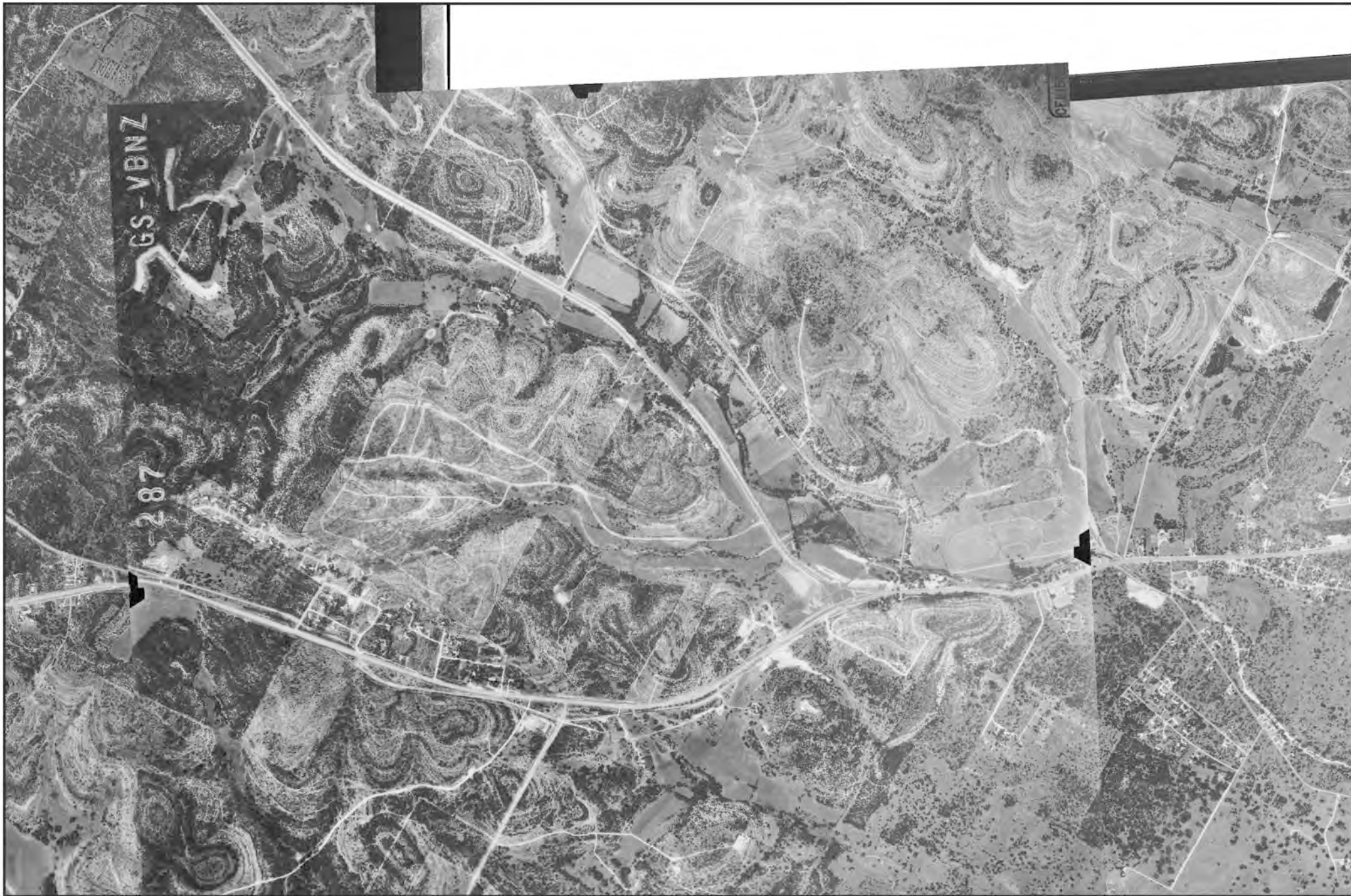
GeoSearch



JOB #: 116199 - 7/31/2015

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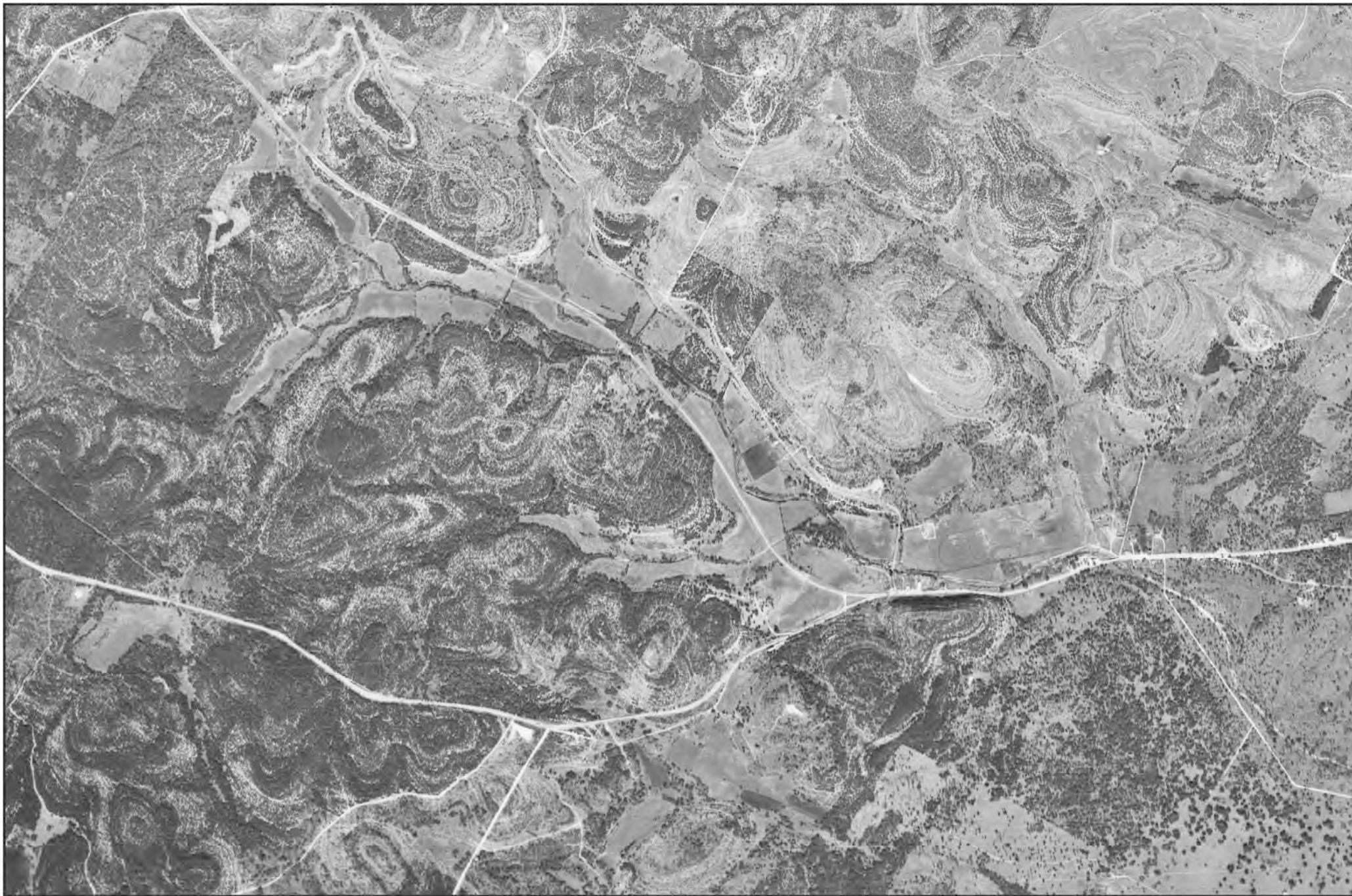
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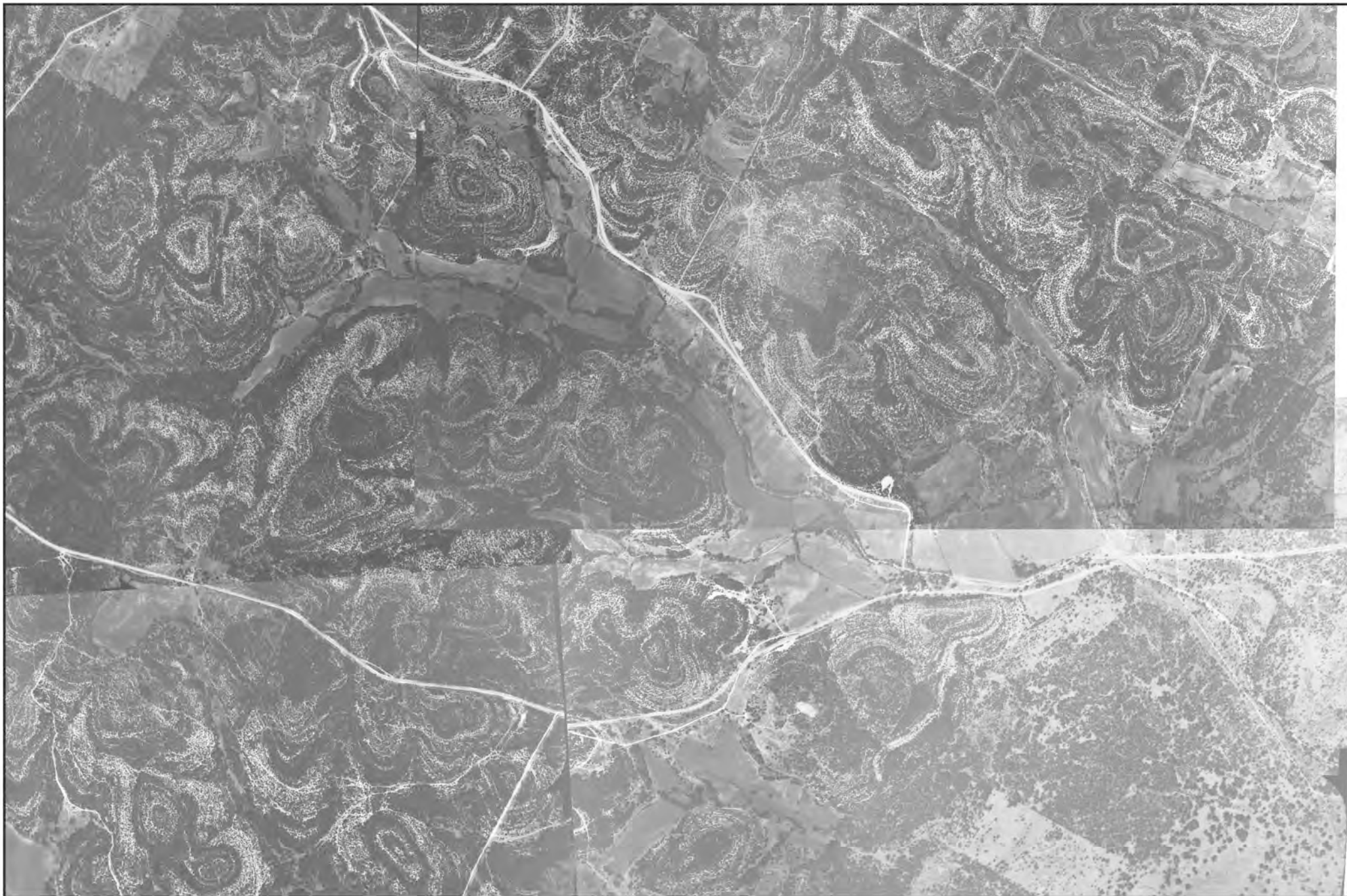
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JOB #: 116199 - 7/31/2015

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SCALE: 1" = 2,000'

GeoSearch



JOB #: 116199 - 7/31/2015

SITE: OAK HILL PARKWAY
SOURCE: ASCS
DATE: 09-26-40
COUNTY: TRAVIS, TX
SCALE: 1" = 2,000'

GeoSearch



APPENDIX D. Topographic Maps



Historical Topographic Maps

<http://www.geo-search.net/QuickMap/index.htm?DataID=Standard0000116197>

Click on link above to access the map and satellite view of current property

Target Property:
Oak Hill Parkway
Highway 290 & Texas 71
Austin, Travis County, Texas 78735

Prepared For:
HDR Engineering

Order #: 53152
Job #: 116197
Project #: 173570
Date: 07/30/2015

TARGET PROPERTY SUMMARY

Oak Hill Parkway

Highway 290 & Texas 71

Austin, Travis County, Texas 78735

USGS Quadrangle: **Bee Cave_2013, TX**

Target Property Geometry: **Area**

Target Property Longitude(s)/Latitude(s):

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County/Parish Covered:

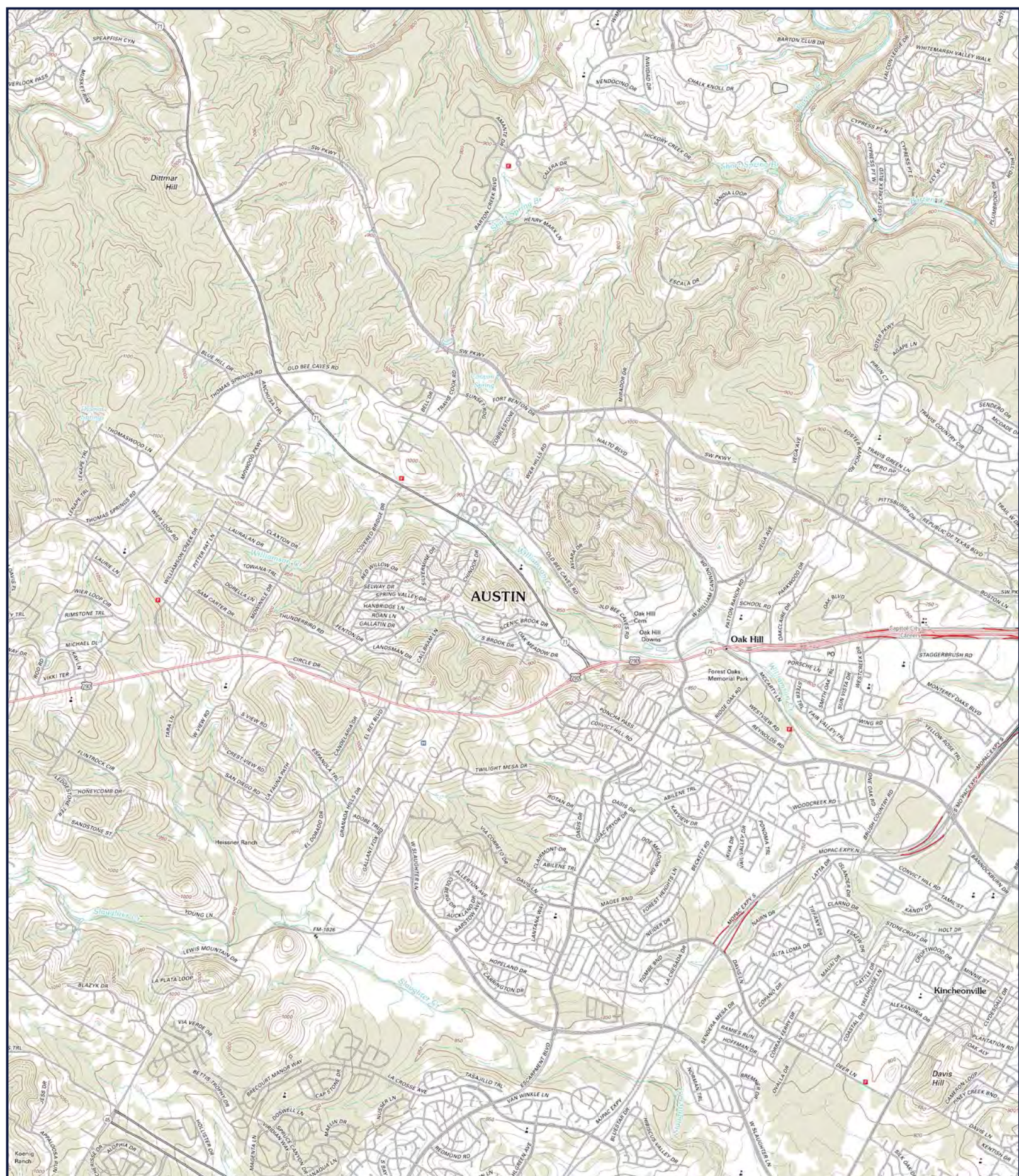
Travis (TX)

Zipcode(s) Covered:

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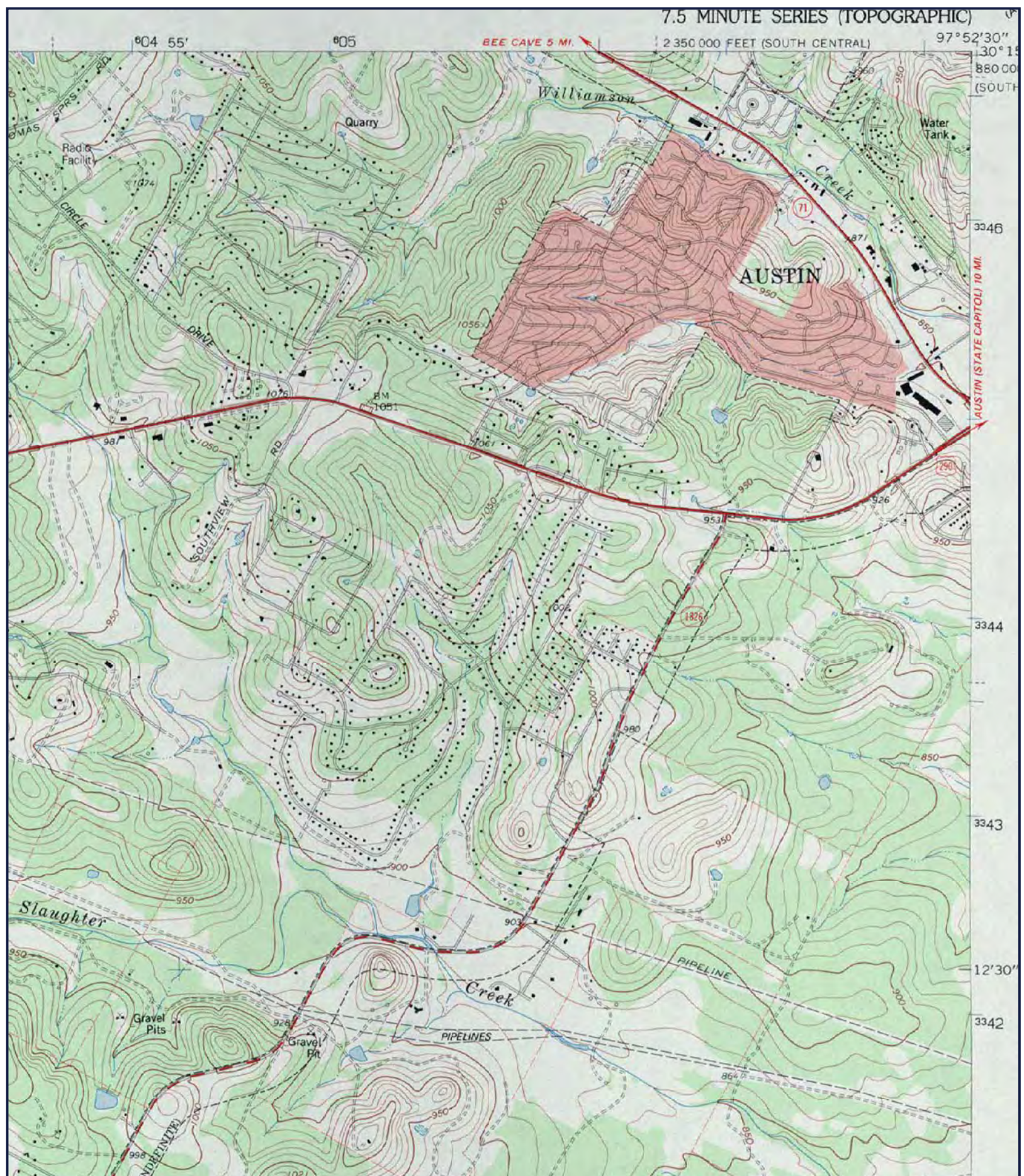
TARGET PROPERTY SUMMARY

State(s) Covered:

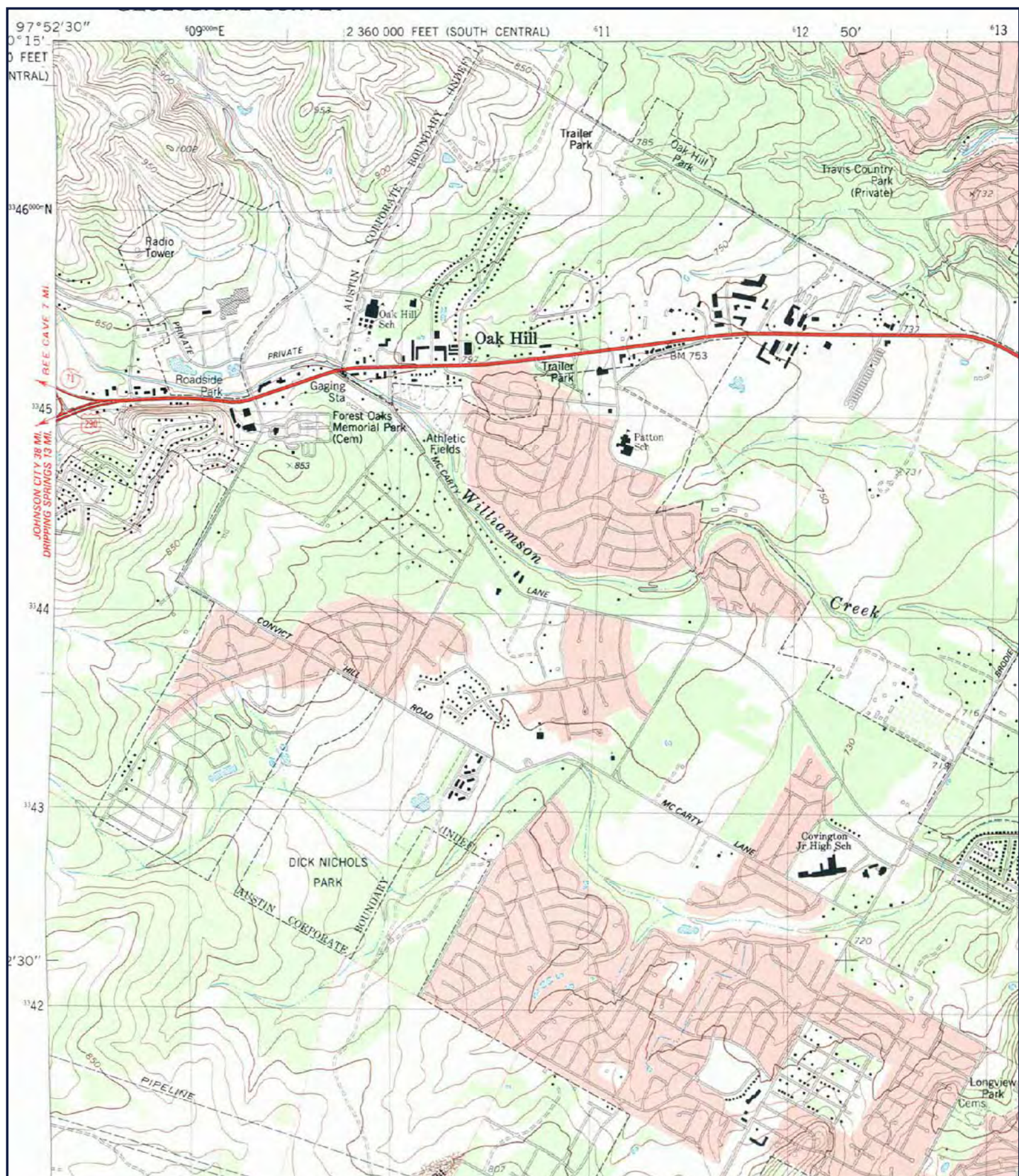


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GeoSearch

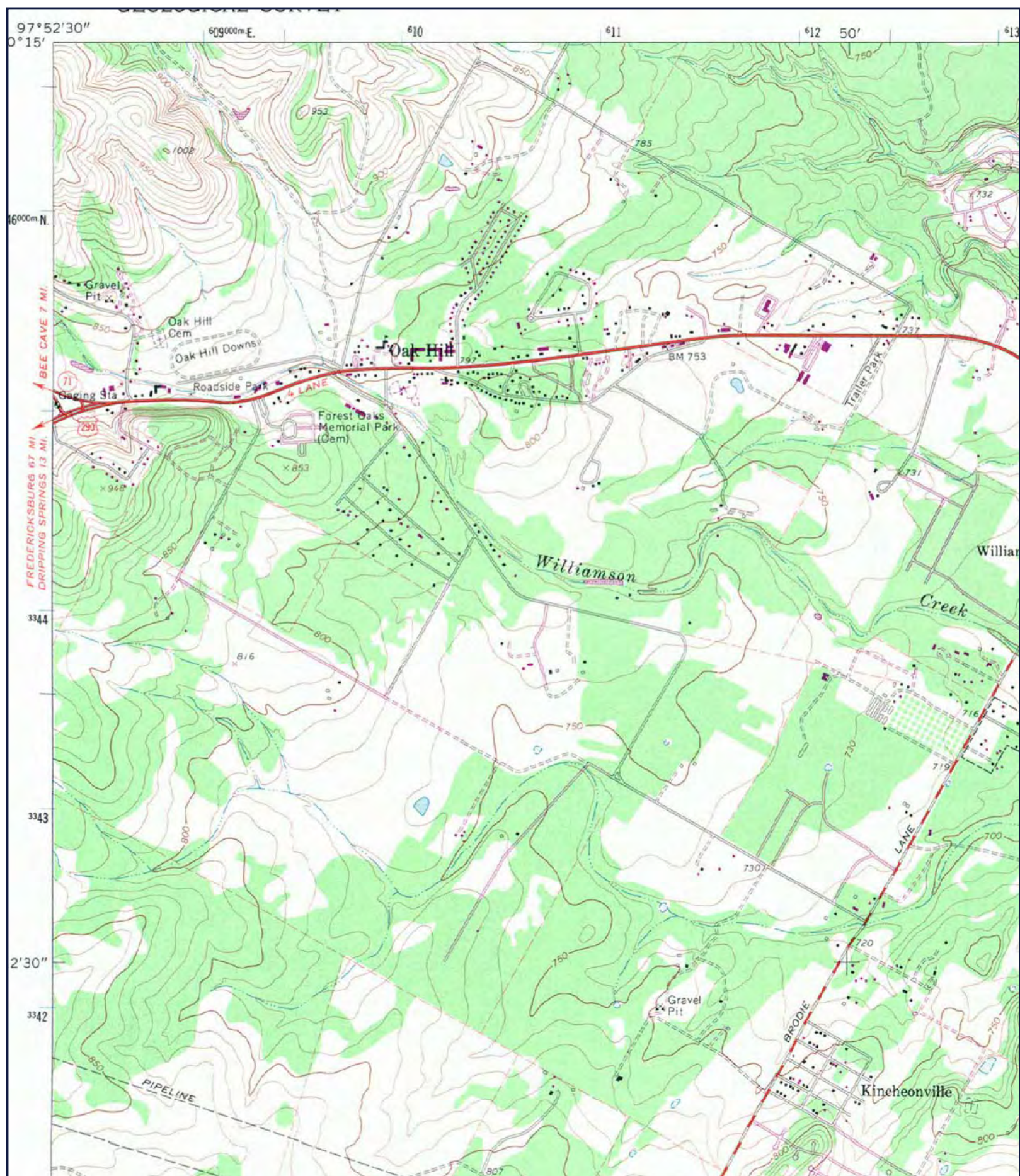


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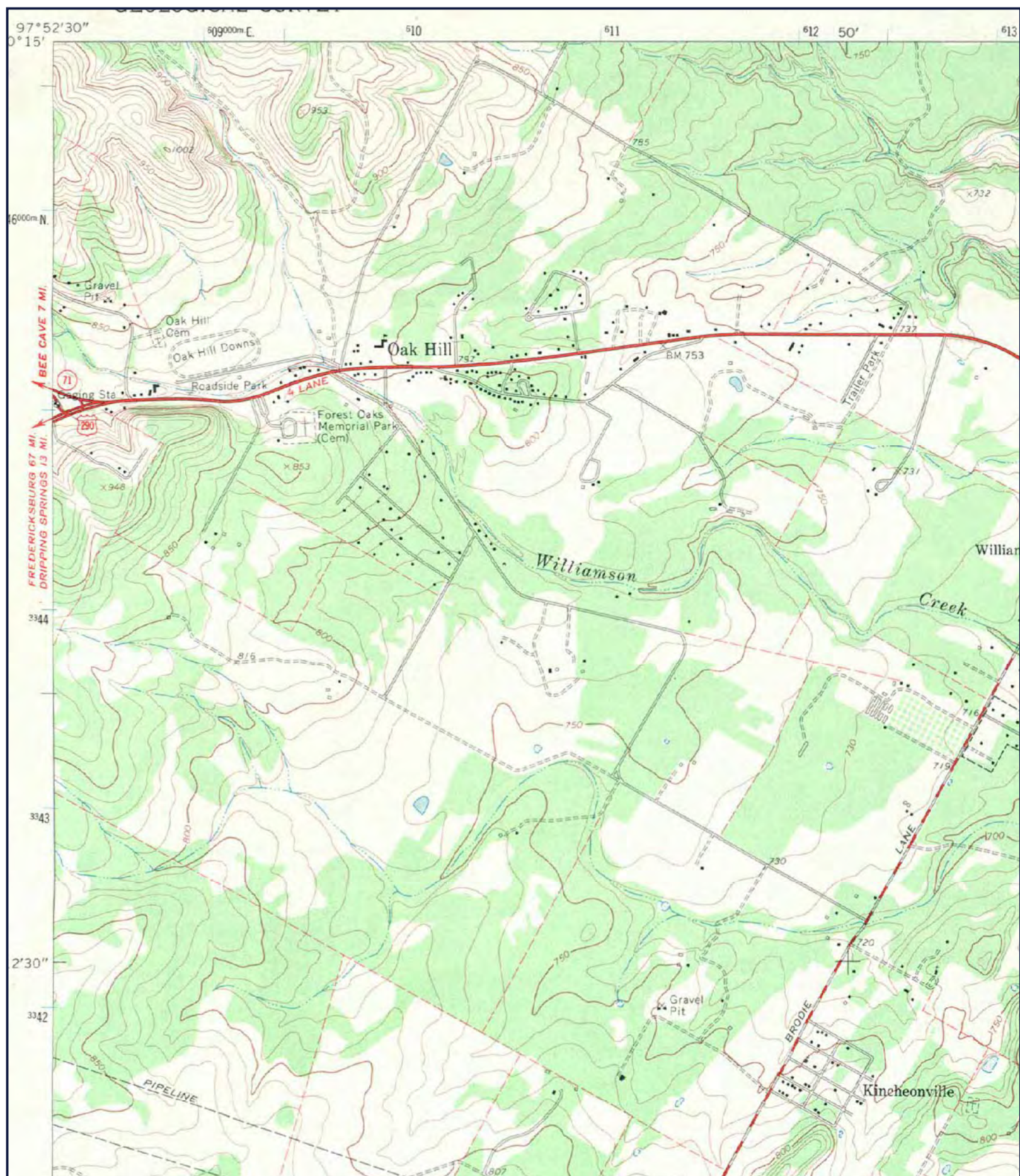
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GeoSearch



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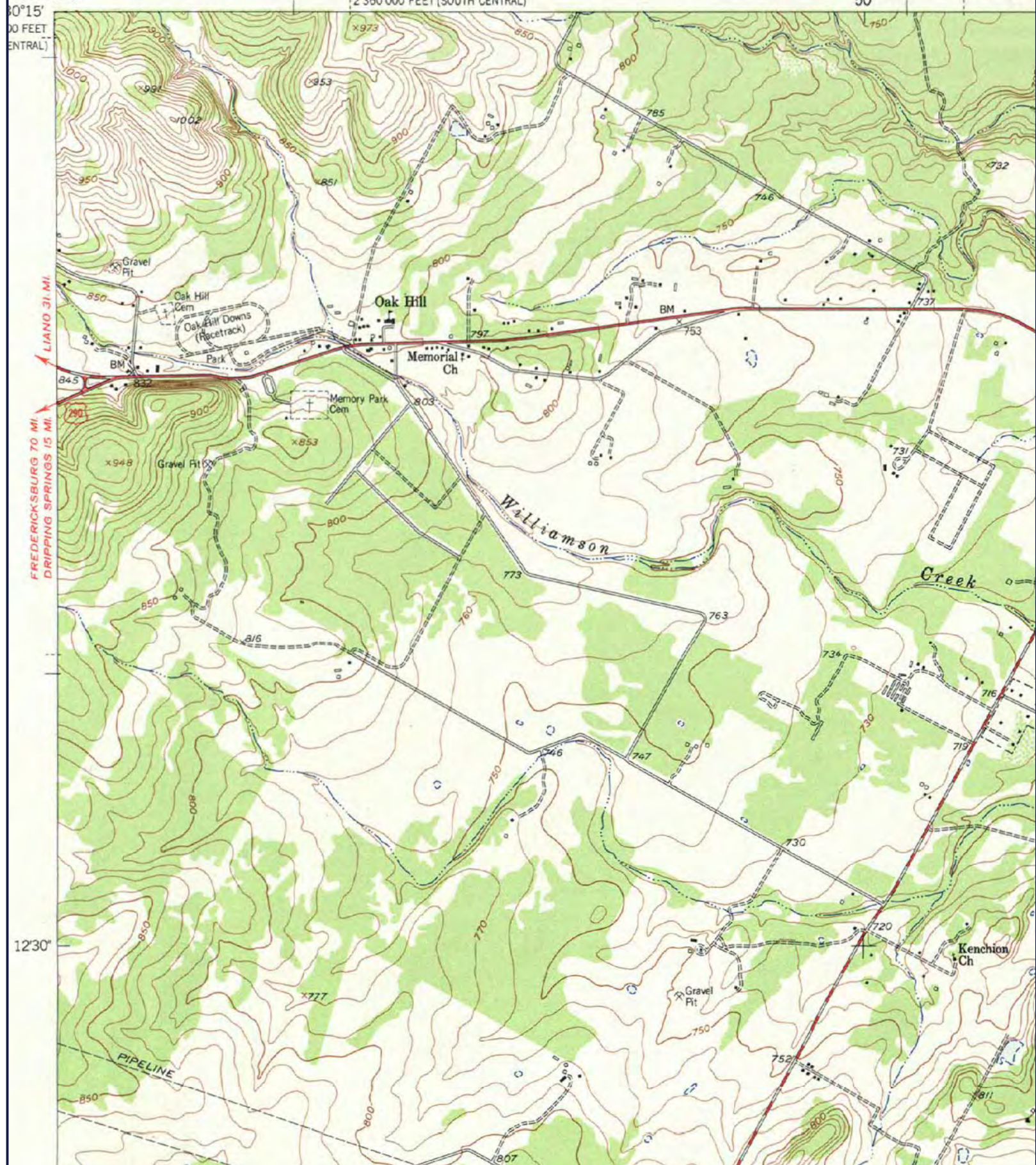
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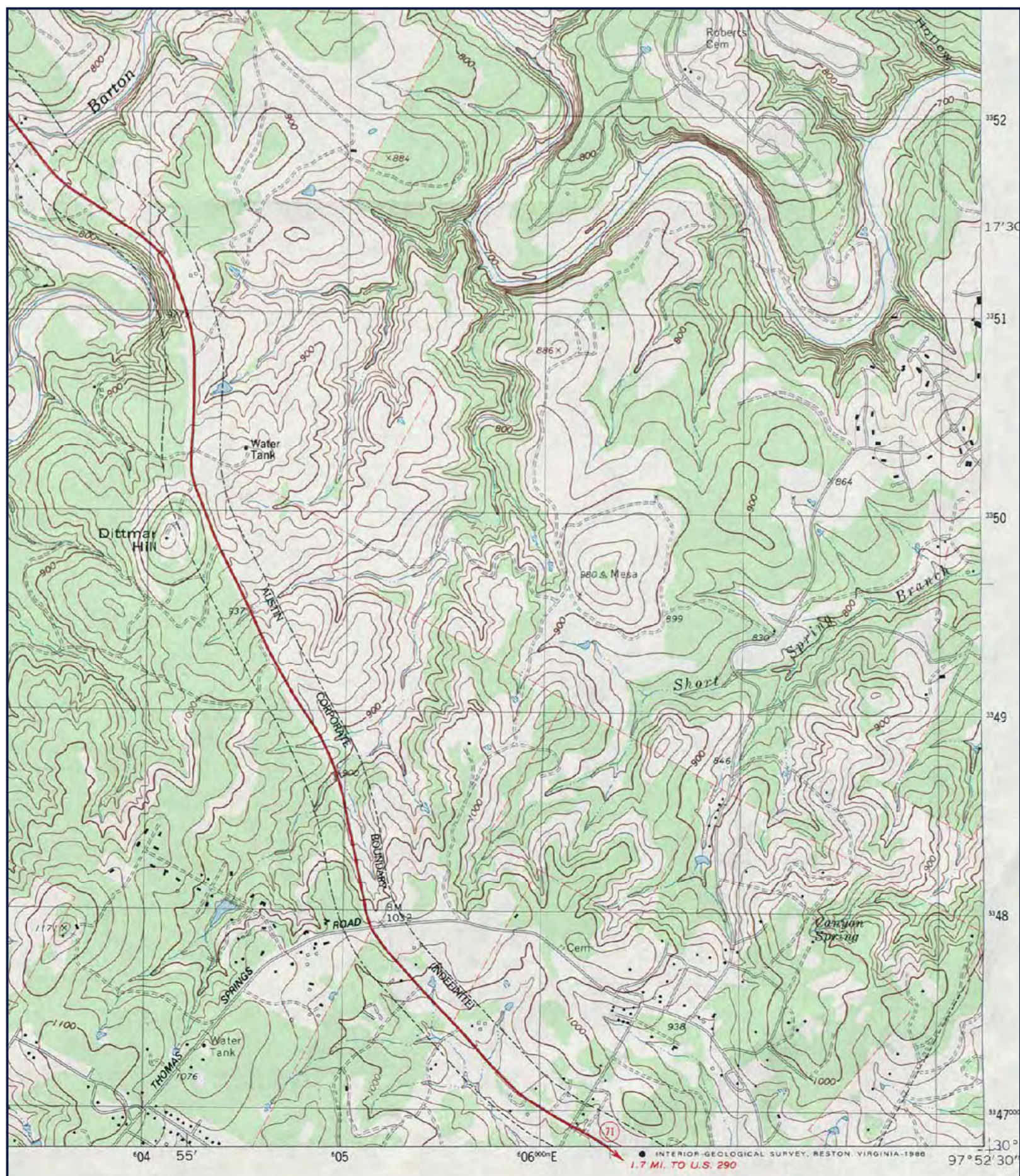
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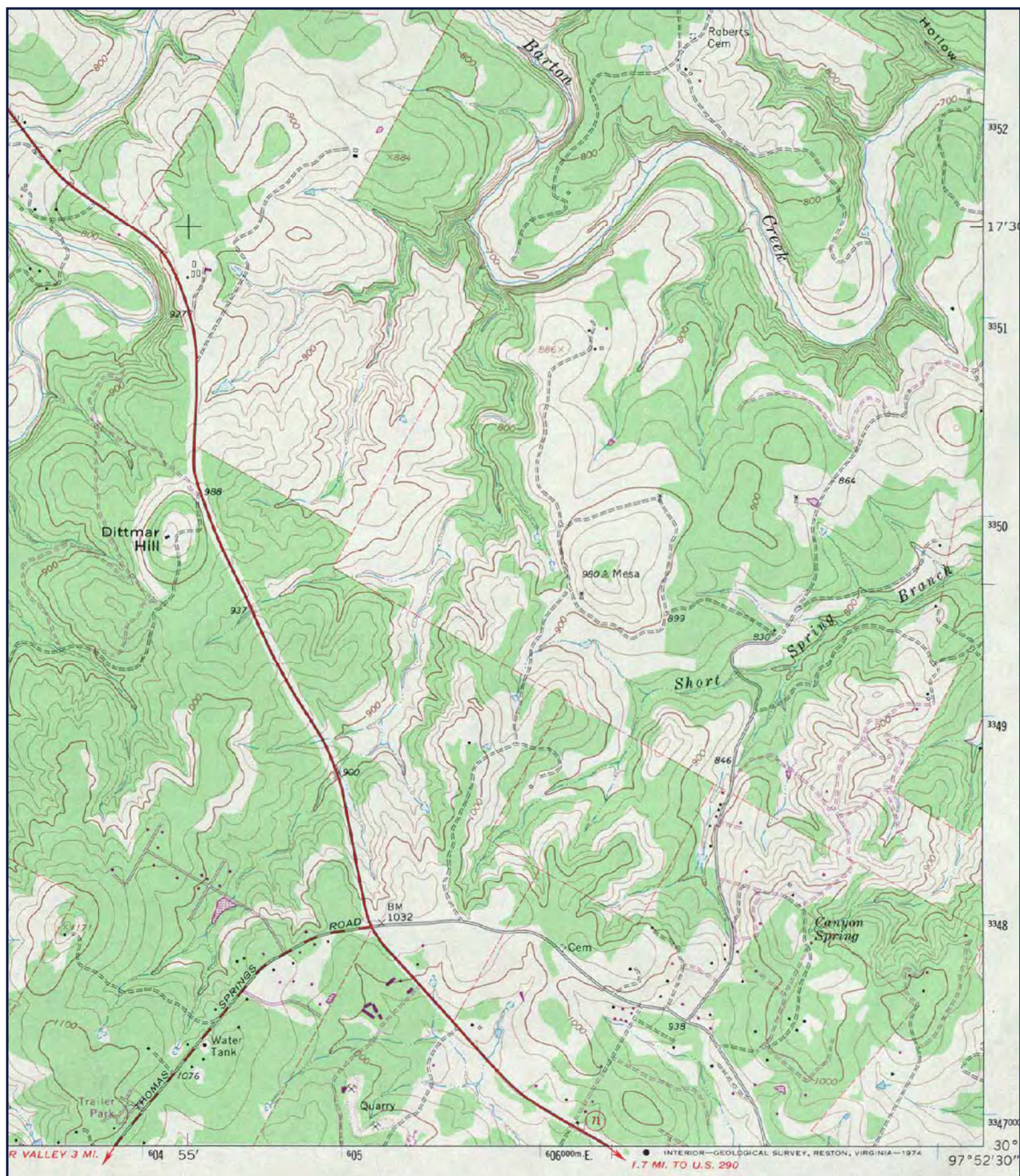
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JOB #: 116197 - 7/30/2015



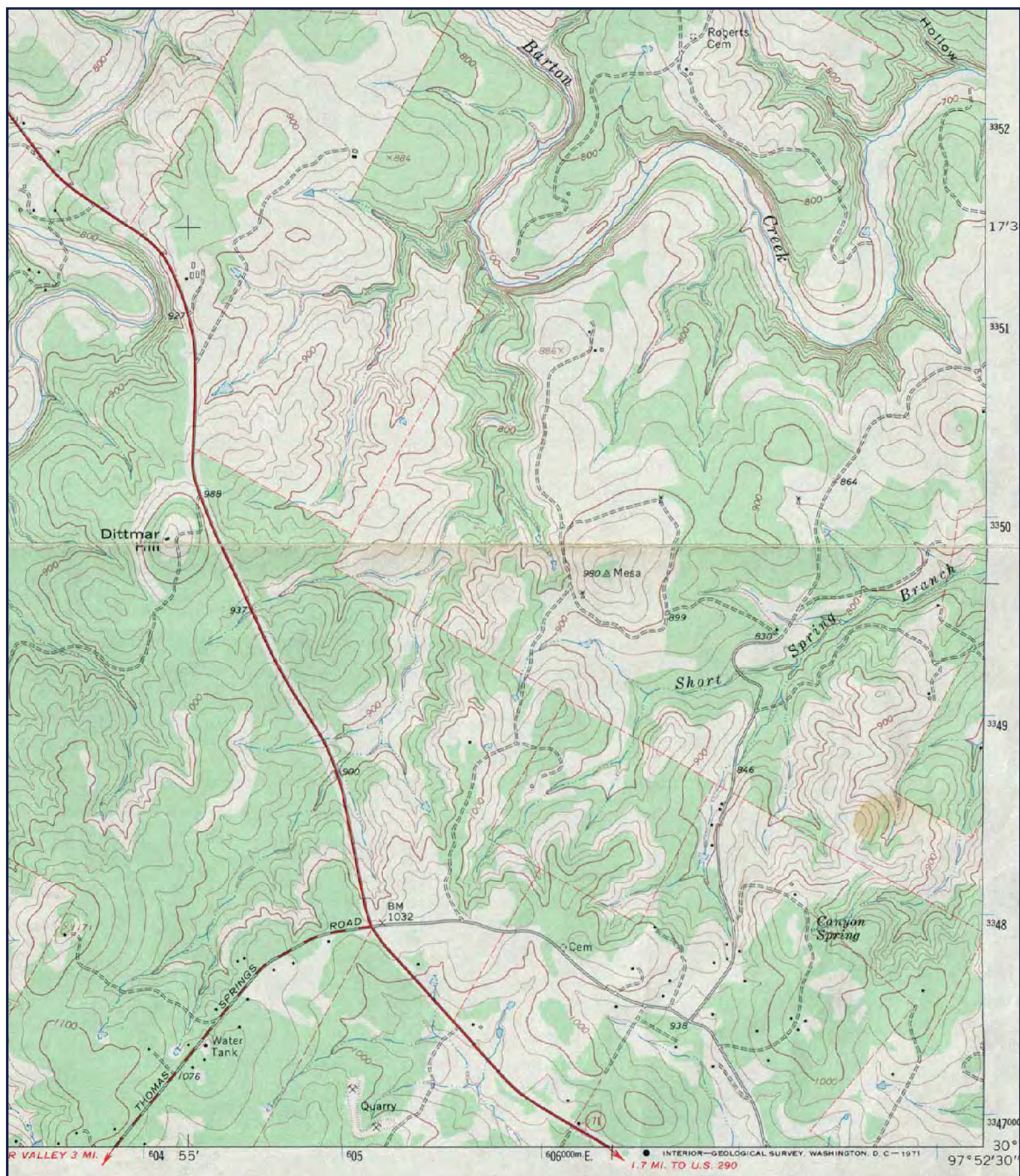
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GeoSearch



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DATE: 1968 PHOTOREVISED 1973
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GeoSearch



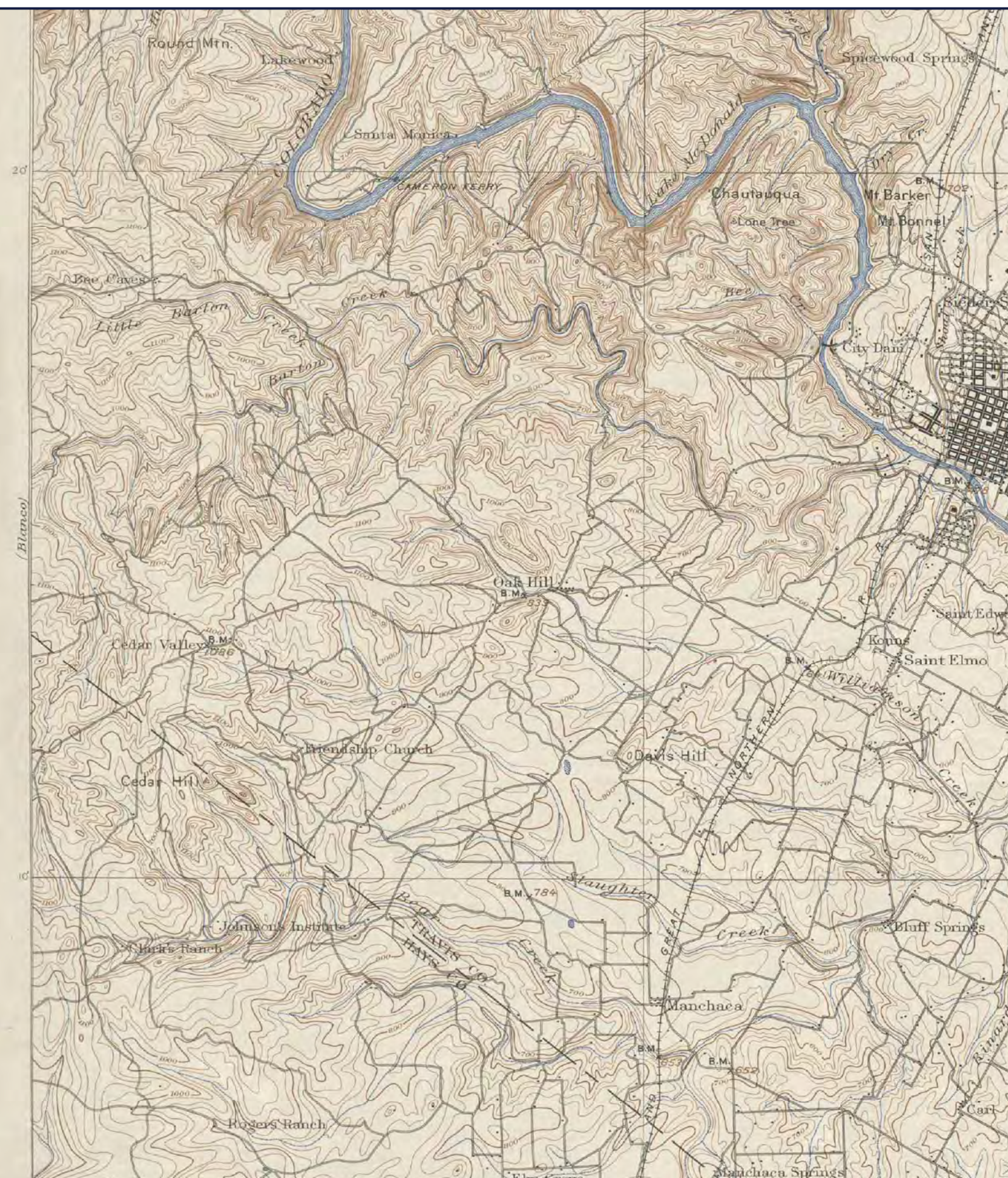
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GeoSearch



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DATE: 1910
SCALE: 1:125,000

GeoSearch



SITE: OAK HILL PARKWAY
QUAD: AUSTIN, TX
DATE: 1896
SCALE: 1:125,000

GeoSearch



APPENDIX E. Project Photographs



Photo 1: At US 290 and Boston Lane, facing east-northeast along westbound frontage road. Mopac in background.



Photo 2: Facing west along westbound frontage road of US 290, Phillips 66 station and commercial and retail development.



Photo 3: Coleman Lube facing northwest from US 290 frontage road.



Photo 4: Electrical substation on McCarty Lane just south of project corridor. Photograph taken facing west.



Photo 5: From US 290 and Circle Drive, facing east along project corridor.



Photo 6: Along SH 71 at Hill Meadows Drive, photograph taken facing south.