U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov
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Environmental Assessment
Determinations and Compliance Findings
for HUD-assisted Projects
24 CFR Part 58

Project Information

Project Name: Burkburnett-Royal-Gardens

HEROS Number: 900000010427327

Start Date: 09/24/2024

Project Location: Taylor Pathway, Burkburnett, TX 76354

Additional Location Information:
Project Coordinates: Latitude 34.086359, Longitude -98.575691 Approximately 5 acres along D.W. Taylor Pathway Burkburnett, Wichita County, Texas 76354

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]:
The proposed project, Burkburnett Royal Gardens, includes new construction of an 80-unit LIHTC/market rate multifamily development. The complex will include one, two, and three-bedroom units in three (3) multi-story garden-style residential buildings on approximately 5 acres. The residential units will include six restricted to households earning 30 percent of the area median income (AMI), or less, 14 will be restricted to households earning 50 percent of the AMI, or less, 48 will be restricted to households earning 60 percent of the AMI, or less, and the remaining 12 units will be unrestricted market rate units. Site amenities will include a business center/computer lab, central laundry facility, clubhouse, courtyard, on-site management, pavilions with barbeque pits and picnic tables, fitness center, playground, horseshoe pits, and recreation areas. Residential units will consist of one-bedroom (650-654 SF), two-bedroom (926-932 SF), and three-bedroom (1,052 SF) units with a full kitchen and private entrances from an interior hallway. The project will include 171 parking spaces, which is higher than required.

Funding Information

Grant Number	HUD Program	Program Name	
22220	Community Planning and Development (CPD)	HOME Program	$2,649,000.00

Estimated Total HUD Funded Amount: $2,649,000.00

Estimated Total Project Cost [24 CFR 58.2 (a) (5)]: $13,437,473.00

Mitigation Measures and Conditions [CFR 1505.2(c)]:

Summarized below are all mitigation measures adopted by the Responsible Entity to reduce, avoid or eliminate adverse environmental impacts and to avoid non-compliance or non-conformance with the above-listed authorities and factors. These measures/conditions must be incorporated into project contracts, development agreements and other relevant documents. The staff responsible for implementing and monitoring mitigation measures should be clearly identified in the mitigation plan.

Law, Authority, or Factor	Mitigation Measure or Condition
Contamination and Toxic Substances	The property has been entered into the TCEQ Industrial Hazardous Waste Corrective Action (IHW-CA) program. Ongoing investigations are underway with oversight by TCEQ. The project's environmental consultant, HKC & Associates is recommending Risk-based corrective action (RBCA) with incomplete removal of contamination. Recommended mitigation includes: 1) utilizing impervious concrete parking, drive areas and building foundations to minimize direct soil contact with contaminated soils, 2) soil vapor barriers beneath future structures to reduce potential for vapor intrusion into the buildings, and 3) groundwater monitoring for one year to ensure groundwater remains protective of human health and the environment.
Permits, reviews, and approvals	All construction permits must be obtained from the local regulating jurisdiction, as required.
Environmental Justice	Environmental Justice considerations cannot be finalized until after onsite remediation activities have been completed.

Project Mitigation Plan

Please see above mitigation measures.

Determination:

☒	Finding of No Significant Impact [24 CFR 58.40(g)(1); 40 CFR 1508.13] The project will not result in a significant impact on the quality of human environment
☐	Finding of Significant Impact

Preparer Signature: Jaclyn Leasure **Date:** 4/2/2025

Name / Title/ Organization: Jaclyn Leasure / / TEXAS DEPARTMENT OF HOUSING AND COMMUNITY AFFAIRS

Certifying Officer Signature: **Date:** 4/2/2025

Name/ Title: Brenda Hull, Program Services Manager

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environment Review Record (ERR) for the activity / project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

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Start Date: 09/24/2024

Responsible Entity (RE): TEXAS DEPARTMENT OF HOUSING AND COMMUNITY AFFAIRS, PO Box 13941 Austin TX, 78711

RE Preparer: Jaclyn Leasure

State / Local Identifier: TDHCA #21040 & 22220

Certifying Officer: Brenda Hull

Grant Recipient (if different than Responsible Entity):

Point of Contact:

Consultant (if applicable): PHASE ENGINEERING, INC.

Point of Contact: Tracy Watson

40 CFR 1506.5(b)(4): The lead agency or, where appropriate, a cooperating agency shall prepare a disclosure statement for the contractor's execution specifying that the contractor has no financial or other interest in the outcome of the action. Such statement need not include privileged or confidential trade secrets or other confidential business information.

By checking this box, I attest that as a preparer, I have no financial or other interest in the outcome of the undertaking assessed in this environmental review.

Project Location: Taylor Pathway, Burkburnett, TX 76354

Additional Location Information:
Project Coordinates: Latitude 34.086359, Longitude -98.575691 Approximately 5 acres along D.W. Taylor Pathway Burkburnett, Wichita County, Texas 76354

Direct Comments to:

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]:
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Statement of Purpose and Need for the Proposal [40 CFR 1508.9(b)]:
There is a shortage of new, safe, modern affordable housing in the city of Burkburnett. Burkburnett Royal Gardens will significantly affect the need of affordable housing in the area. The new complex will increase economic development in the area in addition to the quality of social services. The project will provide rent based on income ranging from 30% to 60% AMI for the 68 income restricted units.

Existing Conditions and Trends [24 CFR 58.40(a)]:
The subject property is currently an undeveloped field covered with mowed grass and no trees. The property is bound by Overton Ray Elementary School to the south, single family residential properties to the west, a Masonic Lodge to the north, and a large undeveloped field to the east. Historically, the property and adjoining properties to the north and east were developed as a oil and gas refinery from the early-1940s to the mid-1980s. The property has undergone remediation activities through the Texas Commission of Environmental Quality (TCEQ) Corrective Action Program. As per the

Bureau of Labor Statistics, the unemployment rate has significantly decreased from 5.3% in 2014 to overall 2.9% for the Wichita Falls area by February 2024. According to the U.S. Census Bureau, the city's growth rate of around 0.56% a year. The median family income is considered to be around $62K which is slightly lower than average for USA and Texas. According to the Market Feasibility Study, in 2021, approximately 64 percent of the renter population in the area earned less than $40,000, indicating a need for affordable housing. The total housing units in the area in 2021 was 37,416, while only 1,272 were affordable housing units, with most having a wait list. According to research, the low-Income developments will directly benefit lower Income households. The location of the subject property in the city center of Burkburnett offers convenient access to transportation options, with proximity to shopping, cultural activities and public services Including emergency health care, fire, and police services.

Maps, photographs, and other documentation of project location and description:

Topo Map.pdf
Site Sketch.pdf
Site Plan.pdf
Location Map.pdf
Royal Garden BURKBURNETT Photos.pdf

Determination:

✓	Finding of No Significant Impact [24 CFR 58.40(g)(1); 40 CFR 1508.13] The project will not result in a significant impact on the quality of human environment
	Finding of Significant Impact

Approval Documents:

7015.15 certified by Certifying Officer on:

7015.16 certified by Authorizing Officer on:

Funding Information

Grant / Project Identification Number	HUD Program	Program Name	Funding Amount

22220	Community Planning and Development (CPD)	HOME Program	$2,649,000.00

Estimated Total HUD Funded, Assisted or Insured Amount: $2,649,000.00

Estimated Total Project Cost [24 CFR 58.2 (a)(5)]: $13,437,473.00

Compliance with 24 CFR §50.4, §58.5 and §58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §50.4, §58.5, and §58.6	Are formal compliance steps or mitigation required?	Compliance determination (See Appendix A for source determinations)
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR §50.4 & § 58.6		
Airport Hazards Clear Zones and Accident Potential Zones; 24 CFR Part 51 Subpart D	☐ Yes ☑ No	The project site is not within 15,000 feet of a military airport or 2,500 feet of a civilian airport. The project is in compliance with Airport Hazards requirements.
Coastal Barrier Resources Act Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	☐ Yes ☑ No	This project is not located in a CBRS Unit. Therefore, this project has no potential to impact a CBRS Unit and is in compliance with the Coastal Barrier Resources Act.
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	☐ Yes ☑ No	The subject property is located in Unshaded Zone X (Outside the 100 and 500-year floodplains) as delineated on the FEMA FIRM Map Number 48485C0180G effective date February 2, 2010. Flood insurance is not required, and the project is in compliance with the flood insurance requirements.
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR §50.4 & § 58.5		
Air Quality Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	☐ Yes ☑ No	The subject property is located in Wichita County which is in attainment with all criteria pollutants according to the National Ambient Air Quality Standards (NAAQS).

Coastal Zone Management Act Coastal Zone Management Act, sections 307(c) & (d)	☐ Yes ☑ No	This project is not located in or does not affect a Coastal Zone as defined in the state Coastal Management Plan. The project is in compliance with the Coastal Zone Management Act.
Contamination and Toxic Substances 24 CFR 50.3(i) & 58.5(i)(2)]	☑ Yes ☐ No	A Phase I Environmental Site Assessment (ESA), prepared by Phase Engineering, LLC, was completed for the subject property dated February 22, 2022. The ESA report was completed in accordance with the ASTM Standard Practice E1527-21, the EPA Rule on All Appropriate Inquiries and HUD's policy at 24 CFR 58.5(i)(2). The assessment revealed a recognized environmental condition (REC) and vapor encroachment condition (VEC) in connection with the property due to historical use of the property and adjoining properties as an oil / gas refinery from the early 1940s to mid-1980s. A Limited Subsurface Investigation/Phase II ESA was completed for the subject property by Phase Engineering, LLC dated September 30, 2022. The purpose of the Phase II ESA was to evaluate the presence of chemicals of concern (COC) within the soils and groundwater as a result of potential release of hazardous substances or petroleum products due to the historic oil / gas refinery. Five (5) soil borings were completed to a depth of 12-18 feet in select areas of the property most likely to have been affected by an undocumented release by the former uses of the subject property and adjoining properties. Soil samples were collected from the borings prior to converting them to temporary monitoring wells for the collection of groundwater samples. In addition, four soil vapor monitoring ports were installed in select areas for the purpose of collecting soil vapor samples. Laboratory analysis of the

		samples collected reported evidence of petroleum products and metals in the soil and groundwater above their respective regulatory action levels. In addition, the soil vapor analytical results indicate there is potential for vapor intrusion in two locations on the subject property. The concentrations of petroleum hydrocarbons and metals in the soil and groundwater represent a reportable release and subject to reporting under the Texas Risk Reduction Program (TRRP) and the potential for vapor intrusion requires mitigation for any future onsite structures. An Affected Property Assessment Report (APAR) was prepared by HKC & Associates and submitted to the TCEQ in December 2023. The property was entered into the TCEQ Industrial Hazardous Waste Corrective Action (IHW-CA) program with case number T3840. Ongoing investigations are underway with oversight by TCEQ. The project's environmental consultant, HKC & Associates is recommending Risk-based corrective action (RBCA) with incomplete removal of contamination. Recommended mitigation includes: 1) utilizing impervious concrete parking, drive areas and building foundations to minimize direct soil contact with contaminated soils, 2) soil vapor barriers beneath future structures to reduce potential for vapor intrusion into the buildings, and 3) groundwater monitoring for one year to ensure groundwater remains protective of human health and the environment. The file is currently active and undergoing review and oversight by the TCEQ. Final review and approval by TCEQ is pending. Radon testing data from the CDC Environmental Public Health Tracking Network map shows data for

		Wichita County, which is the smallest area for which data is available. The radon data indicates more than 10 tests have been conducted over the last 10 years with an annual mean pre-mitigation radon measurement of 0.8 pCi/L. Science-based data is available for the project area which documents low potential for indoor radon levels above the EPA recommended action level of 4.0 pCi/L.
Endangered Species Act Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	☐ Yes ☑ No	A request was submitted to the U.S. Fish & Wildlife Service (USFWS) to identify Endangered and Threatened Species and Critical Habitat in the project area. Review of the official list provided by the USFWS identified five (6) threatened, endangered, or candidate species known to occur in the county. The property or nearby properties do not include critical habitat. Two of the protected species include migrating birds which must be evaluated for wind energy-related projects only, which does not include the proposed project. The two listed mammals are the Texas kangaroo Rat and Tricolored Bat which both require vegetation for roosting and burrowing, the project location is cleared of all vegetation; therefore, is not suitable for these species. The Whooping Crane and Monarch Butterfly will not be affected since the subject property is already cleared with no vegetation to attract these species. No habitat for any of the listed species occur on or near the property and none of the species are likely to be found on the property. A review of each species' habitat and why none will be impacted by the project can be found in the supporting documentation. A review of state-listed and known reported occurrences of threatened or endangered species in the project vicinity was completed by consultation

		with the Texas Natural Diversity Database (TXNDD) and Texas Parks and Wildlife Department. Results of the inquiry determined that the subject property is within the Texas kangaroo Bat and River Pupfish known areas of occurrence; however, there is no suitable habitat on the subject property for either of these species. As proposed, the project will have No Effect on federally listed species.
Explosive and Flammable Hazards Above-Ground Tanks)[24 CFR Part 51 Subpart C	☐ Yes ☑ No	The subject property is not a hazardous facility. Several off-site explosive or flammable hazards were identified including a 500-gallon propane tank, a diked diesel tank, and a 1,700-gallon produced water tank. Each of these hazards were determined to be located at an Acceptable Separation Distance (ASD) from the subject property based on calculations from HUD's Acceptable Separation Distance tool. No other hazards were identified. The project is in compliance with explosive and flammable hazard requirements.
Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	☐ Yes ☑ No	The project will Include new construction on currently undeveloped land within the Burkburnett Urban Area. However, the property does not meet the definition of farmland per the Farmland Protection Policy Act (FPPA) Since it is located within an ''urbanized area (UA)'' per the US Census Bureau TigerWeb Map. In addition, all soils for the subject property area are not considered prime farmland per the NRCS Web Soil Survey. This project is exempt from provisions of the Farmland Protection Policy Act and is in compliance with this part.
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	☐ Yes ☑ No	This project does not occur in the FFRMS floodplain. CISA reports are only available for coastal areas. The project is in compliance with Executive Orders 11988 and 13690.

Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	☐ Yes ☑ No	On behalf of the TDHCA , A request for Section 106 review was sent to the SHPO on September 1, 2022, by Phase Engineering LLC, with a follow up email sent on April 18, 2024, regarding a boundary change. The SHPO / Texas Historical Commission (THC) responded on May 10, 2024, indicating no historic properties present or affected considering both above-ground resources and archeology resources. However, if buried cultural materials are encountered, work should cease in the immediate area; work can continue where no cultural materials are present. Please contact the THC's Archology Division at 512-463-6096 to consult on further actions that may be necessary to protect the cultural remains.'' An invitation to consult was submitted to the Wichita County Historical Commission on April 18, 2024. To-date, no response from this office has been received. Five (5) Native American tribes have shown an interest in new developments within Wichita County according to HUD's Tribal Directory Assessment Tool (TDAT). Consultation with all six of the tribes was initiated by letters from TDHCA on September 6, 2022. To-date no responses have been received from tribal consultations and the consultation period has expired.
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	☐ Yes ☑ No	A noise study prepared for the proposed development identified a railroad as the only noise generating feature within the preliminary search distances from the subject property. Based on the site plan, the outdoor amenities, and the eastern facade of the residential building will be the closest noise-sensitive receptors to the railroad, thus it was selected as a Noise Assessment Location (NAL) for the analysis. HUD's Day/Night Noise Level (DNL) Electronic Assessment Tool, was utilized to measure the noise level at

		this location. * NAL #1 - Outdoor Amenities: 48 dB -Acceptable * NAL #2 - Eastern Facade of Building: 48 dB - Acceptable The calculated noise value for the selected NAL falls within the range of below 65 dB, which is considered ''Acceptable'' based on the HUD guidelines. Within this range, the site is considered in compliance.
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	☐ Yes ☑ No	The project is not located on a sole source aquifer area. The project is in compliance with Sole Source Aquifer requirements.
Wetlands Protection Executive Order 11990, particularly sections 2 and 5	☐ Yes ☑ No	Based on a review of the National Wetlands Inventory (NWI) map, there are no mapped wetland areas on the subject property. An on-site review of the subject property found no wetland areas on the property and no adjacent wetlands areas. Since no wetland areas will be impacted, this project is in compliance with Executive Order 11990.
Wild and Scenic Rivers Act Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	☐ Yes ☑ No	This project is not within proximity of a NWSRS river. The project is in compliance with the Wild and Scenic Rivers Act.
HUD HOUSING ENVIRONMENTAL STANDARDS		
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	☐ Yes ☑ No	No adverse environmental impacts were identified in the project's total environmental review. The project is in compliance with Executive Order 12898.

Environmental Assessment Factors [24 CFR 58.40; Ref. 40 CFR 1508.8 &1508.27]

Impact Codes: An impact code from the following list has been used to make the determination of impact for each factor.
(1) Minor beneficial impact
(2) No impact anticipated
(3) Minor Adverse Impact – May require mitigation
(4) Significant or potentially significant impact requiring avoidance or modification which may require an Environmental Impact Statement.

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
		LAND DEVELOPMENT	
Conformance with Plans / Compatible Land Use and Zoning / Scale and Urban Design	2	The subject property is currently zoned as MF - Multifamily. The MF district is an attached residential district intended to provide a residential density of 21 dwelling units per acre. The permitted land uses will include ''low- and mid-rise multiple-family dwellings and garden apartments''. The proposed development's residential density per acre and all other ordinances conform to zoning requirements. The subject property is surrounded by compatible base zoning categories, urban design, and land uses.	
Soil Suitability / Slope/ Erosion / Drainage and Storm Water Runoff	2	Soil Stability: Soil components at the subject property have been defined by the NRCS as Tipton loam. This soil type is classified as moderately drained with a high shrink-swell potential and a reinforced concrete slab rating of ''Somewhat Limited.'' Due to previous development, unnatural soils and base material may be present and will need to be replaced with an acceptable structural fill material for increased stability and low maintenance. Construction plans should refer to a soil geotechnical report, if available. Slope: Surface elevation for the subject property is approximately 1046-1048 feet above mean sea level (msl), with slight sloping of 0 to 2 percent across the subject property to the east. There are no significant slope concerns on the property. Erosion: There are no active signs of erosion and no waterbodies are located on or adjacent to the subject property. The project activities will involve demolition and ground disturbance such as grading and construction of underground utilities and structural foundations. Therefore, the subject property may be susceptible to soil erosion during construction activities. Best management practices should be employed to control runoff from the construction site	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
		to prevent detrimental impacts to surface and ground water. Drainage/ Stormwater Runoff: A proposed stormwater detention area is located in the southeast corner of the subject property to reduce the drainage runoff to the pre-developed rate. The use of porous pavement may help to reduce water runoff and protect the local ecosystem.	
Hazards and Nuisances including Site Safety and Site-Generated Noise	2	The project will not be affected by nearby natural or man-made hazards. No major highways, intersections, railroads, or hazardous facilities are located near the project area.	
SOCIOECONOMIC			
Employment and Income Patterns	1	According to the US Census the surrounding area is 24% low income with a 4% unemployment rate. The planned development may increase the employment and income in the area by utilizing local workers temporarily during construction. The development is funded with federal tax credits and will assist residents find employment, which will help the local economy. The construction of a new complex and associated activities will positively impact the employment and income patterns in the area.	
Demographic Character Changes / Displacement	1	The census tract containing Burkburnett Royal Gardens has a low concentration of low-income persons; the complex will assist in closing any income segregation gap. The residential density of the immediate area will increase with the addition of 80 new units. However, the surrounding area is densely populated, and the demographic characteristics of the neighborhood will not be greatly impacted. The new construction activities will be on previously developed, non-occupied land. Therefore, no displacement of residential or commercial establishments will occur.	
Environmental Justice EA Factor	2	No adverse environmental conditions were identified in the total environmental review	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
		that will disproportionately impact a low-income or minority community. The subject property is undeveloped and is not known to have local or cultural significance. The addition of the 80 affordable/market-rate housing units is expected to positively impact the community by providing safe, modern housing and access to community resources.	
COMMUNITY FACILITIES AND SERVICES			
Educational and Cultural Facilities (Access and Capacity)	2	Schools: According to the National Multi-Family Housing Council, the complex will have an estimated 18 school-aged students. The subject property is served by the Burkburnett Independent School District. School-aged children will attend Overton Ray Elementary School, Burkburnett Middle School, and Burkburnett High School. The student to teacher ratio is 13.7:1 which is lower than the Texas average of 15:1. A public information request was submitted to Burkburnett ISD on April 23, 2024, regarding the district's ability to accommodate future children of the development. To date, no response has been received. However, it is expected that due to the district's high turnover rate of 14%, the schools will be able to properly accommodate future children. The Elementary, and High School are located across D. W Taylor Pathway, and the middle school is a 0.9-mile walk, that only crosses County Road and S Ave D which have traffic lights. Crosswalks are available from the subject property to the school's location, and bus transportation is provided by Burkburnett ISD. Based on this assessment, safe access is available to all the nearby schools. Vernon College- Century City Center is the nearest community college, located 18.4 miles south of the subject property. Vernon College is a two-year community college with a variety of college	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
		transfer and technical programs. Cultural Facilities: The subject property is located 2.3 miles from a Historical Marker of The Red River. The historical marker includes the story of the Red River and the legal fight between Oklahoma and Texas for ownership of it. The MKT Train Depot-Burkburnett Historical Society is located 0.7 miles from the subject property at 108 West 3rd Street. The historical society displays the heritage and history of Burkburnett through tours, collections, properties, and activities. The nearest library to the subject property is the Burkburnett City Library at 215 East 4th Street. The library is 1.1 miles from the subject property and offers book clubs, computer classes, English learning, citizenship classes, and workforce training. The Backdoor Theatre is a performing arts theater located 14.1 miles from the subject property at 501 Indiana Avenue. The theatre features local productions on 2 stages and offers dinner shows.	
Commercial Facilities (Access and Proximity)	1	The subject property is close to a wide variety of amenities, including grocery stores, pharmacies, and banks. United Supermarkets is 0.6 miles and Burk Market & Cafe is 1.4 miles from the subject property. Nearby pharmacy options include United Supermarkets (0.6 miles) and Boomtown Drug (1.0 miles). Many banks are also located near the subject property, including First Bank (0.9 miles), Prosperity Bank (0.6 miles), and Union Square (1.3 miles). The subject property is located in a populated suburban area close to plenty of shopping. Burk Plaza is a small retail strip mall located 0.4 miles from the subject property with clothing and dining options. Burkburnett Antique Mall is 0.8 miles from the subject property at 119 East 3rd Street.	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
Health Care / Social Services (Access and Capacity)	2	Health Care: The nearest full-service general hospital is United Regional Hospital, 14.3 miles south of the subject property at 1600 11th Street. The hospital provides medical services to a nine-county area and is the area's only Level II Trauma Center as well as the Primary Stroke Center for the region. Nearby urgent care facilities include URPG Burkburnett Clinic, 0.9 miles to the east of the subject property. The clinic provides primary care services, a wide range of specialties, and serves as a walk-in clinic for minor injuries and illnesses. 18.9 miles south of the subject is Community Med Family Urgent Care- Wichita Falls. The Texoma Family Clinic is a nearby primary care provider located 1.3 miles southeast of the subject property. Boomtown Vision is only 0.5 miles from the subject property. Social Services: Residents of the new development will have easy access to support services in the local community. Several food distribution centers are within a ten-minute drive from the subject property, including at Grace Ministries (0.9 miles) and Jubilee Restoration Center (0.5 miles). Two senior assisted living facilities are within a 3-mile radius including Evergreen Healthcare and Pioneer Crossing Burkburnett. The Wichita County Public Health (WIC) Clinic is 14 miles from the subject property at 1700 3rd Street. Qualifying families receive nutrition education, supplemental foods, breastfeeding assistance, medical referrals, counseling, and health screenings. The Salvation Army is an international evangelical church and charitable organization with a service center in Wichita Falls. The center is located 14.5 miles from the subject property and provides job training, disaster relief, homeless shelters, alcohol and drug rehab, after-school	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
		programs, and a food pantry (2900 Seymour Highway).	
Solid Waste Disposal and Recycling (Feasibility and Capacity)	2	The City of Burkburnett Solid Waste and Recycling Division offers commercial dumpster collection and will likely service the new complex. Any construction waste accumulated during complex construction should be properly disposed of in accordance with applicable local, state, and federal environmental permits, statutes, and regulations. The city of Burkburnet has a Citizen Collection station, which is also the city landfill, located at 2172 Fairview Road, which is open every Saturday.	
Waste Water and Sanitary Sewers (Feasibility and Capacity)	2	The City of Burkburnett will provide wastewater and sewer services to the newly built complex via existing 6-inch sanitary sewer line along the north property line. The existing line appears to be at an adequate depth to serve the development. A lift station should not be necessary.	
Water Supply (Feasibility and Capacity)	2	The City of Burkburnett will provide water services to the newly built complex via an existing 6-inch water line on the east side of County Road. A 6-inch water line will be added to extend onto the existing line along County Road. Two proposed fire hydrants are located in the middle of the subject property a new tap will need to be created in order to tie into the existing water line. A water meter will also need to be installed. According to the 2022 City of Burkburnett Drinking Water Quality Report, all regulated contaminants tested below the level of violation and in compliance with state and federal guidelines.	
Public Safety - Police, Fire and Emergency Medical	2	Police Services: The nearest Burkburnett Police Department is located at 101 East College, approximately 0.7 miles from the subject property. An email was sent to the department on April 24, 2024, regarding average response time to emergency calls for the new development. Phase	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
		Engineering received a response on May 1, 2024, with no objection to the proposed project. Based on the drive time from the police station to the property at posted speed limits, the response time would be approximately 2 minutes. The proposed development is not likely to have a significant impact on policing services. Fire Services: The nearest fire station to the subject property is Burkburnett Fire Station #3, which is 0.9 miles from the subject property at 100 Tommy Thornton Way. An email was sent to the department on April 24, 2024, regarding average response time to emergency calls for the new development. Phase Engineering received a response on April 25, 2024, with no objection to the proposed project. Based on drive time from the fire station to the subject property, response time would be approximately three minutes at the posted speed limits. The proposed development is not anticipated to have a significant impact on the fire department. Emergency Health Care: The nearest full-service hospital with 24-hour emergency care is provided by United Regional (14.3 miles, 1600 11th Street). United Regional is a general acute care hospital with a focus on surgery and emergency care. Emergency medical transport for residents will be provided by the Burkburnett Fire Department Station #3. The proposed complex is not anticipated to generate an increased demand on EMS services.	
Parks, Open Space and Recreation (Access and Capacity)	2	According to the site plan, the new development will include a courtyard, outdoor amenity area, and clubhouse. Many small neighborhood parks are located within a two-mile radius of the subject property, including Friendship Park (0.8 miles), Freeman Park (1.0 miles), and Permian Park (0.8 miles). The Burkburnett	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
		Community Center is located next to Friendship Community Park. The Community Center provides indoor recreational space, a variety of sports options, and the convenience of being located next to a park. Additionally, part of the Community Center includes a skate park which is located across the street. Boomtown Bay Family Aquatic Center is located 0.9 miles south of the subject property and is a seasonal water park for all ages.	
Transportation and Accessibility (Access and Capacity)	2	Transportation: There are no public transportation services provided by the city of Burkburnett. However, the Wichita Falls Transit System, Falls Ride, provides public transportation for the City of Wichita Falls and deviations from the seven routes are available. The nearest bus stop is located 7.5 miles south of the subject property at Missile Road. The central location of the subject property is ideal for walking, biking or short car rides to residents needs throughout the city. The property will offer onsite parking, 1.75 spaces for each one-bedroom unit, 2 spaces for each two-bedroom unit, and 2.5 spaces for each three-bedroom unit. The complex will also be ADA compliant with ramps and handicap parking spots. A Greyhound bus stop is located at Sheppard Air Force Base, 10.2 miles from the subject property. Inexpensive tickets are available with direct routes to Fort Worth, San Antonio, and Sparks. Dallas-Fort Worth International Airport (DFW) is located approximately 130 miles southeast from the subject property and is the largest hub for American Airlines, which is headquartered nearby. DFW provides service to 260 destinations, including 67 international and 193 domestic destinations. Accessibility: The subject property is located in an expanding area of	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
		Burkburnett with easy access to Interstate 44 and State Highway 240. Wichita Falls is a 15- minute drive and downtown Fort Worth is a 2- hour drive. Wichita Falls Regional Airport is a small, local airport located 12.5 miles southeast.	
NATURAL FEATURES			
Unique Natural Features /Water Resources	2	No unique natural features are located on or near the subject property, including caves, cliffs, vistas, canyons, waterfalls, sand dunes, or tree stands, based on observations during site visits and review of topographic maps. Since the project will not utilize water wells or septic systems and is not located near a natural waterbody, it will not adversely affect water resources.	
Vegetation / Wildlife (Introduction, Modification, Removal, Disruption, etc.)	2	The subject property consists of plowed land with no trees or vegetation. Migratory birds that nest on the ground may be present among tall grasses; therefore, ground disturbance should occur outside of the peak nesting period of March through August to avoid destruction of individuals or eggs. However, if land clearing activities must be conducted during this time, a survey for all active nests should be conducted by a qualified biologist no more than 7-10 days prior to commencing work. The complex will include 15% of the acreage as useable open space. The use of native, non-invasive plant species is preferred. In addition, the planned construction activities will not create a favorable habitat for pests or invasive species.	
Other Factors 1	2	The subject property is located within a well-developed suburban area. Vehicle exhaust from the surrounding surface streets will have an impact on air quality at the subject property. However, air quality at the property is expected to be in-line with much of the Burkburnett area. Residents of the complex will not be exposed to lower air quality than an average resident of the area.	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
Other Factors 2	2	No other known environmental factors are affected by the proposed development.	
CLIMATE AND ENERGY			
Climate Change	2	According to FEMA's National Risk Index for the subject property's census tract, overall risk from natural hazards is considered ''Relatively Moderate'' and includes hail, ice storms, riverine flooding, and tornado. However, community resilience is considered ''Relatively High'' and the community is prepared for natural hazards, can adapt to the changing conditions, and recover quicker from disruptions.	
Energy Efficiency	2	The City of Burkburnett has adopted the 2012 International Energy Conservation Code. The planned development will meet or surpass all energy efficiency and conservation codes required by the city and state. Additionally, the complex will feature energy efficient lighting and appliances.	

Supporting documentation
EA Factors - Land Development.pdf
EA Factors - Community Facilities and Services.pdf

Additional Studies Performed:
ASTM Phase I ESA, by Phase Engineering, dated February 22, 2022 ASTM Phase 2, ESA, by Phase Engineering, dated September 30, 2022 APAR, by HKC & Associates, dated December 2023

IHW_CA 3840 APAR UPDATE2 24_08_12(1).pdf
202209001 South of Williams Drive BURKBURNETT PII(1).pdf
202201183 South of Williams Drive BURKBURNETT TDHCA Phase 1(1).pdf

Field Inspection [Optional]: Date and completed by:
Derek Prunty 2/9/2022 12:00:00 AM

Royal Garden BURKBURNETT Photos.pdf

List of Sources, Agencies and Persons Consulted [40 CFR 1508.9(b)]:

National Park Service Texas Parks and Wildlife Texas Natural Diversity Database (TXNDD) United States Fish and Wildlife Service Mr. Mark Wolfe, State Historic Preservation Officer, Texas Historical Commission Wichita County Historical Commission USDA Natural Resource Conservation Service Federal Emergency Management Agency U.S. Department of Housing and Urban Development SHPO Guidance Memo: http://www.thc.texas.gov/ U.S. Fish & Wildlife Service: https://www.fws.gov/ U.S. Department of Agriculture NRCS: https://www.nrcs.usda.gov/wps/portal/nrcs/site/national/home/ Federal Emergency Management Agency: https://www.fema.gov/ U.S. Geological Survey: https://www.usgs.gov/ U.S Environmental Protection Agency EJSCREEN: https://www.epa.gov/ejscreen U.S. Census Bureau: https://www.census.gov/ National Wild and Scenic Rivers System: https://www.rivers.gov/ DNL Calculator: https://www.hudexchange.info/environmental-review/dnl-calculator/ Railroad Commission of Texas: http://www.rrc.state.tx.us/ Texas Commission on Environmental Quality: https://www.tceq.texas.gov/ Texas Commission on Environmental Quality Air Quality: https://www.tceq.texas.gov/airquality/ Texas Historical Commission: http://www.thc.texas.gov/ Texas Water Development Board: http://www.twdb.texas.gov/ TCEQ Sole Surface Aquifers: http://tceq.maps.arcgis.com/ Texas Education Agency: https://tea.texas.gov/2017accountability.aspx

List of Permits Obtained:

All construction permits must be obtained from the local regulating jurisdiction, as required.

Public Outreach [24 CFR 58.43]:

A combined Notice of Finding of No Significant Impact (FONSI) and Intent to Request a Release of Funds (RROF) will be published upon completion of the environmental review.

Cumulative Impact Analysis [24 CFR 58.32]:

There is a great demand for affordable housing for residents with discounted house rent. Future developments of affordable as well as market rate housing will be eventually developed to meet the demand. The new construction will provide low-income residents of the Burkburnett area with the opportunity to have an overall better-quality living conditions while maintaining affordability and offering residents a variety of housing options.

Alternatives [24 CFR 58.40(e); 40 CFR 1508.9]

Alternative 2: Constructing the proposed project in a different location The idea and purpose for the proposed development was created from a need to serve the community of Burkburnett, with the location being in the center of the city to better serve the housing needs for their clients. This neighborhood is close proximity to all the services in the city and has easy access to Wichita Falls. Selecting a different location would Increase the project costs and impact the availability of affordable living in Burkburnett, therefore it is not a preferred option. Alternative 3: Constructing the project in the proposed location Constructing the development as proposed at the subject property is the preferred option. The property is an ideal location for an affordable housing development with access to shopping, grocery stores, banks, restaurants, recreational facilities, transportation, healthcare and social services. Design of the building will allow for enough accessible parking and safe access for the disabled and seniors, with onsite community amenities.

No Action Alternative [24 CFR 58.40(e)]

Alternative 1: No Action The subject property consists of primarily undeveloped land, the implementation will bring long-term benefits to future residents. Without this project, there will continue to be a shortage of affordable and supportive housing in the City of Burkburnett, especially considering the public housing waiting list for low-Income housing units.

Summary of Findings and Conclusions:

The proposed project contemplates the development and construction of a multifamily property known as Burkburnett Royal Gardens. The proposed project Includes the development of a tract of vacant, undeveloped land into a mixed-Income, multi-family development. The purpose is to provide affordable and workforce housing to a city undergoing revitalization with little affordable housing stock. The total environmental review suggests negative environmental impacts will be minimal. Since the project includes new construction of a residential development in exceedance of four units, it is not exempt or categorically excluded under 50.19 or 50.20 this ERR has been classified as an Environmental Assessment. The project has not been determined to have a potentially significant impact on the human environment, thus an Environmental Impact Statement is not required.

Mitigation Measures and Conditions [CFR 1505.2(c)]:

Summarized below are all mitigation measures adopted by the Responsible Entity to reduce, avoid or eliminate adverse environmental impacts and to avoid non-compliance or non-conformance with the above-listed authorities and factors. These measures/conditions must be incorporated into project contracts, development agreements and other relevant documents. The staff responsible for implementing and monitoring mitigation measures should be clearly identified in the mitigation plan.

Law, Authority, or Factor	Mitigation Measure or Condition	Comments on Completed Measures	Mitigation Plan	Complete
Contamination and Toxic Substances	The property has been entered into the TCEQ Industrial Hazardous Waste Corrective Action (IHW-CA) program. Ongoing investigations are underway with oversight by TCEQ. The project's environmental consultant, HKC & Associates is recommending Risk-based corrective action (RBCA) with incomplete removal of contamination. Recommended mitigation includes: 1) utilizing impervious concrete parking, drive areas and building foundations to minimize direct soil contact with contaminated soils, 2) soil vapor barriers beneath future structures to reduce potential for vapor intrusion into the buildings, and 3) groundwater monitoring for one year to ensure groundwater remains protective of human health and the environment.	N/A	A No Further Action Letter (NFA) from the TCEQ must be obtained and included in HEROS. Any conditions such as Engineering or Institutional Controls (EC/IC) must be incorporated into an Operations and Maintenance (O&M) Plan or filed in property deed records.	
Environmental Justice	Environmental Justice considerations cannot be finalized until after onsite remediation activities have been completed.	N/A	Environmental Justice shall be evaluated after the onsite remediation activities have been completed.	

Project Mitigation Plan

Please see above mitigation measures.

Supporting documentation on completed measures

APPENDIX A: Related Federal Laws and Authorities

Airport Hazards

General policy	Legislation	Regulation
It is HUD's policy to apply standards to prevent incompatible development around civil airports and military airfields.		24 CFR Part 51 Subpart D

1. To ensure compatible land use development, you must determine your site's proximity to civil and military airports. Is your project within 15,000 feet of a military airport or 2,500 feet of a civilian airport?

✓ **No**

Based on the response, the review is in compliance with this section. Document and upload the map showing that the site is not within the applicable distances to a military or civilian airport below

Yes

Screen Summary

Compliance Determination

The project site is not within 15,000 feet of a military airport or 2,500 feet of a civilian airport. The project is in compliance with Airport Hazards requirements.

Supporting documentation

Airport_Hazards.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Coastal Barrier Resources

General requirements	Legislation	Regulation
HUD financial assistance may not be used for most activities in units of the Coastal Barrier Resources System (CBRS). See 16 USC 3504 for limitations on federal expenditures affecting the CBRS.	Coastal Barrier Resources Act (CBRA) of 1982, as amended by the Coastal Barrier Improvement Act of 1990 (16 USC 3501)	

1. Is the project located in a CBRS Unit?

✓ No

Document and upload map and documentation below.

Yes

Compliance Determination

This project is not located in a CBRS Unit. Therefore, this project has no potential to impact a CBRS Unit and is in compliance with the Coastal Barrier Resources Act.

Supporting documentation

Coastal Barrier Resources.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Flood Insurance

General requirements	Legislation	Regulation
Certain types of federal financial assistance may not be used in floodplains unless the community participates in National Flood Insurance Program and flood insurance is both obtained and maintained.	Flood Disaster Protection Act of 1973 as amended (42 USC 4001-4128)	24 CFR 50.4(b)(1) and 24 CFR 58.6(a) and (b); 24 CFR 55.1(b).

1. Does this project involve financial assistance for construction, rehabilitation, or acquisition of a mobile home, building, or insurable personal property?

No. This project does not require flood insurance or is excepted from flood insurance.

✓ Yes

2. Upload a FEMA/FIRM map showing the site here:

FEMA_NFHL.pdf

The Federal Emergency Management Agency (FEMA) designates floodplains. The FEMA Map Service Center provides this information in the form of FEMA Flood Insurance Rate Maps (FIRMs). For projects in areas not mapped by FEMA, use the best available information to determine floodplain information. Include documentation, including a discussion of why this is the best available information for the site. Provide FEMA/FIRM floodplain zone designation, panel number, and date within your documentation.

Is the structure, part of the structure, or insurable property located in a FEMA-designated Special Flood Hazard Area?

✓ No

Based on the response, the review is in compliance with this section.

Yes

4. While flood insurance is not mandatory for this project, HUD strongly recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). Will flood insurance be required as a mitigation measure or condition?

Yes

✓ No

Screen Summary

Compliance Determination

The subject property is located in Unshaded Zone X (Outside the 100 and 500-year floodplains) as delineated on the FEMA FIRM Map Number 48485C0180G effective date February 2, 2010. Flood insurance is not required, and the project is in compliance with the flood insurance requirements.

Supporting documentation

FM48485C0180G.pdf
FEMA_NFHL(1).pdf
Community Status.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Air Quality

General requirements	Legislation	Regulation
The Clean Air Act is administered by the U.S. Environmental Protection Agency (EPA), which sets national standards on ambient pollutants. In addition, the Clean Air Act is administered by States, which must develop State Implementation Plans (SIPs) to regulate their state air quality. Projects funded by HUD must demonstrate that they conform to the appropriate SIP.	Clean Air Act (42 USC 7401 et seq.) as amended particularly Section 176(c) and (d) (42 USC 7506(c) and (d))	40 CFR Parts 6, 51 and 93

1. Does your project include new construction or conversion of land use facilitating the development of public, commercial, or industrial facilities OR five or more dwelling units?

✓ Yes

No

Air Quality Attainment Status of Project's County or Air Quality Management District

2. Is your project's air quality management district or county in non-attainment or maintenance status for any criteria pollutants?

✓ No, project's county or air quality management district is in attainment status for all criteria pollutants.

Yes, project's management district or county is in non-attainment or maintenance status for the following criteria pollutants (check all that apply):

Screen Summary

Compliance Determination

The subject property is located in Wichita County which is in attainment with all criteria pollutants according to the National Ambient Air Quality Standards (NAAQS).

Supporting documentation

EPA-TEXAS_Nonattainment areas_List_07312024.pdf

Burkburnett-Royal-Gardens	Burkburnett, TX	900000010427327

EPA- TEXAS_Nonattainment areas_Map_07312024.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Coastal Zone Management Act

General requirements	Legislation	Regulation
Federal assistance to applicant agencies for activities affecting any coastal use or resource is granted only when such activities are consistent with federally approved State Coastal Zone Management Act Plans.	Coastal Zone Management Act (16 USC 1451-1464), particularly section 307(c) and (d) (16 USC 1456(c) and (d))	15 CFR Part 930

1. Is the project located in, or does it affect, a Coastal Zone as defined in your state Coastal Management Plan?

Yes

✓ No

Based on the response, the review is in compliance with this section. Document and upload all documents used to make your determination below.

Screen Summary

Compliance Determination

This project is not located in or does not affect a Coastal Zone as defined in the state Coastal Management Plan. The project is in compliance with the Coastal Zone Management Act.

Supporting documentation

Coastal Mgmt Zone.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Contamination and Toxic Substances

General Requirements	Legislation	Regulations
It is HUD policy that all properties that are being proposed for use in HUD programs be free of hazardous materials, contamination, toxic chemicals and gases, and radioactive substances, where a hazard could affect the health and safety of the occupants or conflict with the intended utilization of the property.		24 CFR 58.5(i)(2) 24 CFR 50.3(i)
Reference		
https://www.onecpd.info/environmental-review/site-contamination		

1. How was site contamination evaluated?* Select all that apply.

- ✓ ASTM Phase I ESA
- ✓ ASTM Phase II ESA
- ✓ Remediation or clean-up plan
- ✓ ASTM Vapor Encroachment Screening.
- None of the above

* HUD regulations at 24 CFR § 58.5(i)(2)(ii) require that the environmental review for multifamily housing with five or more dwelling units or non-residential property include the evaluation of previous uses of the site or other evidence of contamination on or near the site.
For acquisition and new construction of multifamily and nonresidential properties HUD strongly advises the review include an ASTM Phase I Environmental Site Assessment (ESA) to meet real estate transaction standards of due diligence and to help ensure compliance with HUD's toxic policy at 24 CFR §58.5(i) and 24 CFR §50.3(i). Also note that some HUD programs require an ASTM Phase I ESA.

2. Were any on-site or nearby toxic, hazardous, or radioactive substances* (excluding radon) found that could affect the health and safety of project occupants or conflict with the intended use of the property? (Were any recognized environmental conditions or RECs identified in a Phase I ESA and confirmed in a Phase II ESA?)

Provide a map or other documentation of absence or presence of contamination** and explain evaluation of site contamination in the Screen Summary at the bottom of this screen.

No

Explain:

✓ Yes

* This question covers the presence of radioactive substances excluding radon. Radon is addressed in the Radon Exempt Question.
** Utilize EPA's Enviromapper, NEPAssist, or state/tribal databases to identify nearby dumps, junk yards, landfills, hazardous waste sites, and industrial sites, including EPA National Priorities List Sites (Superfund sites), CERCLA or state-equivalent sites, RCRA Corrective Action sites with release(s) or suspected release(s) requiring clean-up action and/or further investigation. Additional supporting documentation may include other inspections and reports.

3. Evaluate the building(s) for radon. Do all buildings meet any of the exemptions* from having to consider radon in the contamination analysis listed in CPD Notice CPD-23-103?

Yes

Explain:

✓ No

* Notes:
- Buildings with no enclosed areas having ground contact.
- Buildings containing crawlspaces, utility tunnels, or parking garages would not be exempt, however buildings built on piers would be exempt, provided that there is open air between the lowest floor of the building and the ground.
- Buildings that are not residential and will not be occupied for more than 4 hours per day.
- Buildings with existing radon mitigation systems - document radon levels are below 4 pCi/L with test results dated within two years of submitting the application for HUD assistance and document the system includes an ongoing maintenance plan that includes periodic testing to ensure the system continues to meet the current EPA recommended levels. If the project does not require an application, document test results dated within two years of the date the environmental review is certified. Refer to program office guidance to ensure compliance with program requirements.
- Buildings tested within five years of the submission of application for HUD assistance: test results document indoor radon levels are below current the EPA's recommended action levels of 4.0 pCi/L. For buildings with test data older than five years, any new environmental review must include a consideration of radon using one of the methods in Section A below.

4. Is the proposed project new construction or substantial rehabilitation where testing will

be conducted but cannot yet occur because building construction has not been completed?

✓ Yes

Compliance with this section is conditioned on post-construction testing being conducted, followed by mitigation, if needed. Radon test results, along with any needed mitigation plan, must be uploaded to the mitigation section within this screen.

No

8. Mitigation

Document the mitigation needed according to the requirements of the appropriate federal, state, tribal, or local oversight agency. If the adverse environmental impacts cannot be mitigated, then HUD assistance may not be used for the project at this site.

For instances where radon mitigation is required (i.e. where test results demonstrated radon levels at 4.0 pCi/L and above), then you must include a radon mitigation plan*.

Can all adverse environmental impacts be mitigated?

No, all adverse environmental impacts cannot feasibly be mitigated. Project cannot proceed at this location.

✓ Yes, all adverse environmental impacts can be eliminated through mitigation, and/or consideration of radon and radon mitigation, if needed, will occur following construction.
Provide all mitigation requirements** and documents in the Screen Summary at the bottom of this screen.

* Refer to CPD Notice CPD-23-103 for additional information on radon mitigation plans.
** Mitigation requirements include all clean-up requirements required by applicable federal, state, tribal, or local law. Additionally, please upload, as applicable, the long-term operations and maintenance plan, Remedial Action Work Plan, and other equivalent documents.

9. Describe how compliance was achieved. Include any of the following that apply: State Voluntary Clean-up Program, a No Further Action letter, use of engineering controls*, or use of institutional controls.**

The property has been entered into the TCEQ Industrial Hazardous Waste

Corrective Action (IHW-CA) program. Ongoing investigations are underway with oversight by TCEQ. The project's environmental consultant, HKC & Associates is recommending Risk-based corrective action (RBCA) with incomplete removal of contamination. Recommended mitigation includes: 1) utilizing impervious concrete parking, drive areas and building foundations to minimize direct soil contact with contaminated soils, 2) soil vapor barriers beneath future structures to reduce potential for vapor intrusion into the buildings, and 3) groundwater monitoring for one year to ensure groundwater remains protective of human health and the environment.

If a remediation plan or clean-up program was necessary, which standard does it follow?

Complete removal

✓ Risk-based corrective action (RBCA)

Other

* Engineering controls are any physical mechanism used to contain or stabilize contamination or ensure the effectiveness of a remedial action. Engineering controls may include, caps, covers, dikes, trenches, leachate collection systems, radon mitigation systems, signs, fences, physical access controls, ground water monitoring systems and ground water containment systems including, slurry walls and ground water pumping systems.
** Institutional controls are mechanisms used to limit human activities at or near a contaminated site, or to ensure the effectiveness of the remedial action over time, when contaminants remain at a site at levels above the applicable remediation standard which would allow for unrestricted use of the property. Institutional controls may include structure, land, and natural resource use restrictions, well restriction areas, classification exception areas, deed notices, and declarations of environmental restrictions.

Screen Summary

Compliance Determination

A Phase I Environmental Site Assessment (ESA), prepared by Phase Engineering, LLC, was completed for the subject property dated February 22, 2022. The ESA report was completed in accordance with the ASTM Standard Practice E1527-21, the EPA Rule on All Appropriate Inquiries and HUD's policy at 24 CFR 58.5(i)(2). The assessment revealed a recognized environmental condition (REC) and vapor encroachment condition (VEC) in connection with the property due to historical use of the property and adjoining properties as an oil / gas refinery from the early 1940s to mid-1980s. A Limited Subsurface Investigation/Phase II ESA was completed for the subject

property by Phase Engineering, LLC dated September 30, 2022. The purpose of the Phase II ESA was to evaluate the presence of chemicals of concern (COC) within the soils and groundwater as a result of potential release of hazardous substances or petroleum products due to the historic oil / gas refinery. Five (5) soil borings were completed to a depth of 12-18 feet in select areas of the property most likely to have been affected by an undocumented release by the former uses of the subject property and adjoining properties. Soil samples were collected from the borings prior to converting them to temporary monitoring wells for the collection of groundwater samples. In addition, four soil vapor monitoring ports were installed in select areas for the purpose of collecting soil vapor samples. Laboratory analysis of the samples collected reported evidence of petroleum products and metals in the soil and groundwater above their respective regulatory action levels. In addition, the soil vapor analytical results indicate there is potential for vapor intrusion in two locations on the subject property. The concentrations of petroleum hydrocarbons and metals in the soil and groundwater represent a reportable release and subject to reporting under the Texas Risk Reduction Program (TRRP) and the potential for vapor intrusion requires mitigation for any future onsite structures. An Affected Property Assessment Report (APAR) was prepared by HKC & Associates and submitted to the TCEQ in December 2023. The property was entered into the TCEQ Industrial Hazardous Waste Corrective Action (IHW-CA) program with case number T3840. Ongoing investigations are underway with oversight by TCEQ. The project's environmental consultant, HKC & Associates is recommending Risk-based corrective action (RBCA) with incomplete removal of contamination. Recommended mitigation includes: 1) utilizing impervious concrete parking, drive areas and building foundations to minimize direct soil contact with contaminated soils, 2) soil vapor barriers beneath future structures to reduce potential for vapor intrusion into the buildings, and 3) groundwater monitoring for one year to ensure groundwater remains protective of human health and the environment. The file is currently active and undergoing review and oversight by the TCEQ. Final review and approval by TCEQ is pending. Radon testing data from the CDC Environmental Public Health Tracking Network map shows data for Wichita County, which is the smallest area for which data is available. The radon data indicates more than 10 tests have been conducted over the last 10 years with an annual mean pre-mitigation radon measurement of 0.8 pCi/L. Science-based data is available for the project area which documents low potential for indoor radon levels above the EPA recommended action level of 4.0 pCi/L.

Supporting documentation

08 lHWCA_T3840_OUT_20250321_COMMENTS.pdf
08 IHW CA 3840 RAP 25 02 26.pdf
08 IHW CA 3840 RAP 25 02 26.pdf

CDC Radon map Witchita.pdf
202201183 South of Williams Drive BURKBURNETT TDHCA Phase 1.pdf
IHW_CA 3840 APAR UPDATE2 24_08_12.pdf
202209001 South of Williams Drive BURKBURNETT PII.pdf

Are formal compliance steps or mitigation required?

- ✓ Yes
- No

Endangered Species

General requirements	ESA Legislation	Regulations
Section 7 of the Endangered Species Act (ESA) mandates that federal agencies ensure that actions that they authorize, fund, or carry out shall not jeopardize the continued existence of federally listed plants and animals or result in the adverse modification or destruction of designated critical habitat. Where their actions may affect resources protected by the ESA, agencies must consult with the Fish and Wildlife Service and/or the National Marine Fisheries Service ("FWS" and "NMFS" or "the Services").	The Endangered Species Act of 1973 (16 U.S.C. 1531 *et seq*.); particularly section 7 (16 USC 1536).	50 CFR Part 402

1. Does the project involve any activities that have the potential to affect specifies or habitats?

No, the project will have No Effect due to the nature of the activities involved in the project.

No, the project will have No Effect based on a letter of understanding, memorandum of agreement, programmatic agreement, or checklist provided by local HUD office

✓ Yes, the activities involved in the project have the potential to affect species and/or habitats.

2. Are federally listed species or designated critical habitats present in the action area?

No, the project will have No Effect due to the absence of federally listed species and designated critical habitat

✓ Yes, there are federally listed species or designated critical habitats present in the action area.

3. What effects, if any, will your project have on federally listed species or designated critical habitat?

✓ No Effect: Based on the specifics of both the project and any federally listed species in the action area, you have determined that the project will have absolutely no effect on listed species or critical habitat. in the action area.

Document and upload all documents used to make your determination below. Documentation should include a species list and explanation of your conclusion, and may require maps, photographs, and surveys as appropriate

May Affect, Not Likely to Adversely Affect: Any effects that the project may have on federally listed species or critical habitats would be beneficial, discountable, or insignificant.

Likely to Adversely Affect: The project may have negative effects on one or more listed species or critical habitat.

6. For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation. This information will be automatically included in the Mitigation summary for the environmental review. If negative effects cannot be mitigated, cancel the project using the button at the bottom of this screen.

Mitigation as follows will be implemented:

✓ No mitigation is necessary.

Explain why mitigation will not be made here:

No effect on federally listed species or designated critical habitat.

Screen Summary
Compliance Determination

A request was submitted to the U.S. Fish & Wildlife Service (USFWS) to identify Endangered and Threatened Species and Critical Habitat in the project area. Review of the official list provided by the USFWS identified five (6) threatened, endangered, or candidate species known to occur in the county. The property or nearby properties do not include critical habitat. Two of the protected species include migrating birds which must be evaluated for wind energy-related projects only, which does not include the proposed project. The two listed mammals are the Texas kangaroo Rat and Tricolored Bat which both require vegetation for roosting and burrowing, the project location is cleared of all vegetation; therefore, is not suitable for these species. The Whooping Crane and Monarch Butterfly will not be affected since the subject property is already cleared with no vegetation to attract these species. No habitat for any of the listed species occur on or near the property and none of the species are likely to be found on the property. A review of each species' habitat and why none will be impacted by the project can be found in the supporting documentation. A review of state-listed and known reported occurrences of threatened or endangered species in the project vicinity was completed by consultation with the Texas Natural Diversity Database (TXNDD) and Texas Parks and Wildlife Department. Results of the inquiry determined that the subject property is within the Texas kangaroo Bat and River Pupfish known areas of occurrence; however, there is no suitable habitat on the subject property for either of these species. As proposed, the project will have No Effect on federally listed species.

Supporting documentation

Wichita County_April 2024.pdf
TXNDDmap.pdf
Species List_ Arlington Ecological Services Field Office.pdf
Critical_Habitat.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Explosive and Flammable Hazards

General requirements	Legislation	Regulation
HUD-assisted projects must meet Acceptable Separation Distance (ASD) requirements to protect them from explosive and flammable hazards.	N/A	24 CFR Part 51 Subpart C

1. Is the proposed HUD-assisted project itself the development of a hazardous facility (a facility that mainly stores, handles or processes flammable or combustible chemicals such as bulk fuel storage facilities and refineries)?

✓ No

Yes

2. Does this project include any of the following activities: development, construction, rehabilitation that will increase residential densities, or conversion?

No

✓ Yes

3. Within 1 mile of the project site, are there any current or planned stationary aboveground storage containers that are covered by 24 CFR 51C? Containers that are NOT covered under the regulation include:

- **Containers 100 gallons or less in capacity, containing common liquid industrial fuels OR**
- **Containers of liquified petroleum gas (LPG) or propane with a water volume capacity of 1,000 gallons or less that meet the requirements of the 2017 or later version of National Fire Protection Association (NFPA) Code 58.**

If all containers within the search area fit the above criteria, answer "No." For any other type of aboveground storage container within the search area that holds one of the flammable or explosive materials listed in Appendix I of 24 CFR part 51 subpart C, answer "Yes."

No

✓ Yes

4. Based on the analysis, is the proposed HUD-assisted project located at or beyond the required separation distance from all covered tanks?

✓ Yes

Based on the response, the review is in compliance with this section.

No

Screen Summary

Compliance Determination

The subject property is not a hazardous facility. Several off-site explosive or flammable hazards were identified including a 500-gallon propane tank, a diked diesel tank, and a 1,700-gallon produced water tank. Each of these hazards were determined to be located at an Acceptable Separation Distance (ASD) from the subject property based on calculations from HUD's Acceptable Separation Distance tool. No other hazards were identified. The project is in compliance with explosive and flammable hazard requirements.

Supporting documentation

Explosive_and_Flammable_Assesment.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Farmlands Protection

General requirements	Legislation	Regulation
The Farmland Protection Policy Act (FPPA) discourages federal activities that would convert farmland to nonagricultural purposes.	Farmland Protection Policy Act of 1981 (7 U.S.C. 4201 et seq.)	7 CFR Part 658

1. Does your project include any activities, including new construction, acquisition of undeveloped land or conversion, that could convert agricultural land to a non-agricultural use?

✓ Yes

No

2. Does your project meet one of the following exemptions?

- Construction limited to on-farm structures needed for farm operations.
- Construction limited to new minor secondary (accessory) structures such as a garage or storage shed
- Project on land already in or committed to urban development or used for water storage. (7 CFR 658.2(a))

Yes

✓ No

3. Does "important farmland," including prime farmland, unique farmland, or farmland of statewide or local importance regulated under the Farmland Protection Policy Act, occur on the project site?

- Utilize USDA Natural Resources Conservation Service's (NRCS) Web Soil Survey http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm
- Check with your city or county's planning department and ask them to document if the project is on land regulated by the FPPA (zoning important farmland as non-agricultural does not exempt it from FPPA requirements)
- Contact NRCS at the local USDA service center http://offices.sc.egov.usda.gov/locator/app?agency=nrcs or your NRCS state soil scientist https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/contact/states/ for assistance

✓ No

Based on the response, the review is in compliance with this section. Document and upload all documents used to make your determination below.

Yes

Screen Summary

Compliance Determination

The project will Include new construction on currently undeveloped land within the Burkburnett Urban Area. However, the property does not meet the definition of farmland per the Farmland Protection Policy Act (FPPA) Since it is located within an ''urbanized area (UA)'' per the US Census Bureau TigerWeb Map. In addition, all soils for the subject property area are not considered prime farmland per the NRCS Web Soil Survey. This project is exempt from provisions of the Farmland Protection Policy Act and is in compliance with this part.

Supporting documentation

Urban_Areas.pdf
20240419_09054309038_8_Farmland_Classification.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Burkburnett-Royal-Gardens	Burkburnett, TX	900000010427327

Floodplain Management

General Requirements	Legislation	Regulation
Executive Order 11988, Floodplain Management, requires Federal activities to avoid impacts to floodplains and to avoid direct and indirect support of floodplain development to the extent practicable.	Executive Order 11988 * Executive Order 13690 * 42 USC 4001-4128 * 42 USC 5154a * only applies to screen 2047 and not 2046	24 CFR 55

1. Does this project meet an exemption at 24 CFR 55.12 from compliance with HUD's floodplain management regulations in Part 55?

Yes

(a) HUD-assisted activities described in 24 CFR 58.34 and 58.35(b).

(b) HUD-assisted activities described in 24 CFR 50.19, except as otherwise indicated in § 50.19.

(c) The approval of financial assistance for restoring and preserving the natural and beneficial functions and values of floodplains and wetlands, including through acquisition of such floodplain and wetland property, where a permanent covenant or comparable restriction is place on the property's continued use for flood control, wetland projection, open space, or park land, but only if:
(1) The property is cleared of all existing buildings and walled structures; and
(2) The property is cleared of related improvements except those which:
(i) Are directly related to flood control, wetland protection, open space, or park land (including playgrounds and recreation areas);
(ii) Do not modify existing wetland areas or involve fill, paving, or other ground disturbance beyond minimal trails or paths; and
(iii) Are designed to be compatible with the beneficial floodplain or wetland function of the property.

(d) An action involving a repossession, receivership, foreclosure, or similar acquisition of property to protect or enforce HUD's financial interests under previously approved loans, grants, mortgage insurance,

or other HUD assistance.

(e) Policy-level actions described at 24 CFR 50.16 that do not involve site-based decisions.

(f) A minor amendment to a previously approved action with no additional adverse impact on or from a floodplain or wetland.

(g) HUD's or the responsible entity's approval of a project site, an incidental portion of which is situated in the FFRMS floodplain (not including the floodway, LiMWA, or coastal high hazard area) but only if: (1) The proposed project site does not include any existing or proposed buildings or improvements that modify or occupy the FFRMS floodplain except de minimis improvements such as recreation areas and trails; and (2) the proposed project will not result in any new construction in or modifications of a wetland .

(h) Issuance or use of Housing Vouchers, or other forms of rental subsidy where HUD, the awarding community, or the public housing agency that administers the contract awards rental subsidies that are not project-based (i.e., do not involve site-specific subsidies).

(i) Special projects directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and persons with disabilities.

Describe:

✓ No

2. Does the project include a Critical Action? Examples of Critical Actions include projects involving hospitals, fire and police stations, nursing homes, hazardous chemical storage, storage of valuable records, and utility plants.

Yes

Describe:

✓ No

3. Determine the extent of the FFRMS floodplain and provide mapping documentation in support of that determination

The extent of the FFRMS floodplain can be determined using a Climate Informed Science Approach (CISA), 0.2 percent flood approach (0.2 PFA), or freeboard value approach (FVA). For projects in areas without available CISA data or without FEMA Flood Insurance Rate Maps (FIRMs), Flood Insurance Studies (FISs) or Advisory Base Flood Elevations (ABFEs), use the best available information[1] to determine flood elevation. Include documentation and an explanation of why this is the best available information[2] for the site. Note that newly constructed and substantially improved[3] structures must be elevated to the FFRMS floodplain regardless of the approach chosen to determine the floodplain.

Select one of the following three options:

CISA for non-critical actions. If using a local tool , data, or resources, ensure that the FFRMS elevation is higher than would have been determined using the 0.2 PFA or the FVA.

✓ 0.2-PFA. Where FEMA has defined the 0.2-percent-annual-chance floodplain, the FFRMS floodplain is the area that FEMA has designated as within the 0.2-percent-annual-chance floodplain.

FVA. If neither CISA nor 0.2-PFA is available, for non-critical actions, the FFRMS floodplain is the area that results from adding two feet to the base flood elevation as established by the effective FIRM or FIS or — if available — a FEMA-provided preliminary or pending FIRM or FIS or advisory base flood elevations, whether regulatory or informational in nature. However, an interim or preliminary FEMA map cannot be used if it is lower than the current FIRM or FIS.

[1] Sources which merit investigation include the files and studies of other federal agencies, such as the U. S. Army Corps of Engineers, the Tennessee Valley Authority, the Soil Conservation Service and the U. S. Geological Survey. These agencies have prepared flood hazard studies for several thousand localities and, through their technical assistance programs, hydrologic studies, soil surveys, and other investigations have collected or developed other floodplain information for numerous sites and areas. States and communities are also sources of information on past flood 'experiences within their boundaries and are particularly knowledgeable about areas subject to high-risk flood hazards such as alluvial fans, high velocity flows, mudflows and mudslides, ice jams, subsidence and liquefaction.

[2] If you are using best available information, select the FVA option below and provide supporting documentation in the screen summary. Contact your local environmental officer with additional compliance questions.

[3] Substantial improvement means any repair or improvement of a structure which costs at least 50 percent of the market value of the structure before repair or improvement or results in an increase of more than 20 percent of the number of dwelling units. The full definition can be found at 24 CFR 55.2(b)(12).

5. Does your project occur in the FFRMS floodplain?

Yes

✓ No

Screen Summary

Compliance Determination

This project does not occur in the FFRMS floodplain. CISA reports are only available for coastal areas. The project is in compliance with Executive Orders 11988 and 13690.

Supporting documentation

FM48485C0180G(1).pdf
FEMA_NFHL(2).pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Historic Preservation

General requirements	Legislation	Regulation
Regulations under Section 106 of the National Historic Preservation Act (NHPA) require a consultative process to identify historic properties, assess project impacts on them, and avoid, minimize, or mitigate adverse effects	Section 106 of the National Historic Preservation Act (16 U.S.C. 470f)	36 CFR 800 "Protection of Historic Properties" https://www.govinfo.gov/content/pkg/CFR-2012-title36-vol3/pdf/CFR-2012-title36-vol3-part800.pdf

Threshold

Is Section 106 review required for your project?

No, because the project consists solely of activities listed as exempt in a Programmatic Agreement (PA). (See the PA Database to find applicable PAs.)
No, because the project consists solely of activities included in a No Potential to Cause Effects memo or other determination [36 CFR 800.3(a)(1)].
✓ Yes, because the project includes activities with potential to cause effects (direct or indirect).

Step 1 – Initiate Consultation

Select all consulting parties below (check all that apply):

✓ State Historic Preservation Offer (SHPO) Completed

✓ Indian Tribes, including Tribal Historic Preservation Officers (THPOs) or Native Hawaiian Organizations (NHOs)

✓ Apache Tribe of Oklahoma Response Period Elapsed
✓ Caddo Nation of Oklahoma Response Period Elapsed
✓ Comanche Nation, Oklahoma Response Period Elapsed

- ✓ Tonkawa Tribe of Indians of Oklahoma — Response Period Elapsed
- ✓ Wichita and Affiliated Tribes — Response Period Elapsed

✓ Other Consulting Parties

- ✓ Witchita County Historical Commission — Response Period Elapsed

Describe the process of selecting consulting parties and initiating consultation here:

The local consulting party was identified by consulting the most current list of Certified Local Government (CLG) Program Contact List or County Historical Commission Chairs, as listed on the Texas Historical Commission's website. If a contact is not listed, then a local historical preservation office / person was identified by consulting the city or county directly.

Document and upload all correspondence, notices and notes (including comments and objections received below).

Was the Section 106 Lender Delegation Memo used for Section 106 consultation?

Yes
No

Step 2 – Identify and Evaluate Historic Properties

1. **Define the Area of Potential Effect (APE), either by entering the address(es) or uploading a map depicting the APE below:**
   Subject property and all areas within a 100-foot buffer of the property.

   In the chart below, list historic properties identified and evaluated in the APE. Every historic property that may be affected by the project should be included in the chart.

   Upload the documentation (survey forms, Register nominations, concurrence(s) and/or objection(s), notes, and photos) that justify your National Register Status determination

below.

Address / Location / District	National Register Status	SHPO Concurrence	Sensitive Information

Additional Notes:

No historic properties were identified within the APE.

2. **Was a survey of historic buildings and/or archeological sites done as part of the project?**

Yes

✓ No

Step 3 –Assess Effects of the Project on Historic Properties

Only properties that are listed on or eligible for the National Register of Historic Places receive further consideration under Section 106. Assess the effect(s) of the project by applying the Criteria of Adverse Effect. (36 CFR 800.5)] Consider direct and indirect effects as applicable as per guidance on direct and indirect effects.

Choose one of the findings below - No Historic Properties Affected, No Adverse Effect, or Adverse Effect; and seek concurrence from consulting parties.

✓ No Historic Properties Affected

Based on the response, the review is in compliance with this section. Document and upload concurrence(s) or objection(s) below.

Document reason for finding:

✓ No historic properties present.

Historic properties present, but project will have no effect upon them.

No Adverse Effect

Adverse Effect

Screen Summary

Compliance Determination

On behalf of the TDHCA , A request for Section 106 review was sent to the SHPO on September 1, 2022, by Phase Engineering LLC, with a follow up email sent on April 18, 2024, regarding a boundary change. The SHPO / Texas Historical Commission (THC) responded on May 10, 2024, indicating no historic properties present or affected considering both above-ground resources and archeology resources. However, if buried cultural materials are encountered, work should cease in the immediate area; work can continue where no cultural materials are present. Please contact the THC's Archology Division at 512-463-6096 to consult on further actions that may be necessary to protect the cultural remains.'' An invitation to consult was submitted to the Wichita County Historical Commission on April 18, 2024. To-date, no response from this office has been received. Five (5) Native American tribes have shown an interest in new developments within Wichita County according to HUD's Tribal Directory Assessment Tool (TDAT). Consultation with all six of the tribes was initiated by letters from TDHCA on September 6, 2022. To-date no responses have been received from tribal consultations and the consultation period has expired.

Supporting documentation

Tribal Consultations_Burkburnett_ALL.pdf
SHPO_CONCURRENCE.pdf
Sec106_Burkburnett.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Noise Abatement and Control

General requirements	Legislation	Regulation
HUD's noise regulations protect residential properties from excessive noise exposure. HUD encourages mitigation as appropriate.	Noise Control Act of 1972 General Services Administration Federal Management Circular 75-2: "Compatible Land Uses at Federal Airfields"	Title 24 CFR 51 Subpart B

1. What activities does your project involve? Check all that apply:

✓ New construction for residential use

NOTE: HUD assistance to new construction projects is generally prohibited if they are located in an Unacceptable zone, and HUD discourages assistance for new construction projects in Normally Unacceptable zones. See 24 CFR 51.101(a)(3) for further details.

Rehabilitation of an existing residential property

A research demonstration project which does not result in new construction or reconstruction

An interstate land sales registration

Any timely emergency assistance under disaster assistance provision or appropriations which are provided to save lives, protect property, protect public health and safety, remove debris and wreckage, or assistance that has the effect of restoring facilities substantially as they existed prior to the disaster
None of the above

4**. Complete the Preliminary Screening to identify potential noise generators in the vicinity (1000' from a major road, 3000' from a railroad, or 15 miles from an airport).**

Indicate the findings of the Preliminary Screening below:

There are no noise generators found within the threshold distances above.

✓ Noise generators were found within the threshold distances.

5. **Complete the Preliminary Screening to identify potential noise generators in the**

✓ Acceptable: (65 decibels or less; the ceiling may be shifted to 70 decibels in circumstances described in §24 CFR 51.105(a))

Indicate noise level here: 48

Based on the response, the review is in compliance with this section. Document and upload noise analysis, including noise level and data used to complete the analysis below.

Normally Unacceptable: (Above 65 decibels but not exceeding 75 decibels; the floor may be shifted to 70 decibels in circumstances described in §24 CFR 51.105(a))

Unacceptable: (Above 75 decibels)

HUD strongly encourages conversion of noise-exposed sites to land uses compatible with high noise levels.

Check here to affirm that you have considered converting this property to a non-residential use compatible with high noise levels.

Indicate noise level here: 48

Document and upload noise analysis, including noise level and data used to complete the analysis below.

Screen Summary

Compliance Determination

A noise study prepared for the proposed development identified a railroad as the only noise generating feature within the preliminary search distances from the subject property. Based on the site plan, the outdoor amenities, and the eastern facade of the residential building will be the closest noise-sensitive receptors to the railroad, thus it was selected as a Noise Assessment Location (NAL) for the analysis. HUD's Day/Night

Noise Level (DNL) Electronic Assessment Tool, was utilized to measure the noise level at this location. * NAL #1 - Outdoor Amenities: 48 dB -Acceptable * NAL #2 - Eastern Facade of Building: 48 dB -Acceptable The calculated noise value for the selected NAL falls within the range of below 65 dB, which is considered ''Acceptable'' based on the HUD guidelines. Within this range, the site is considered in compliance.

Supporting documentation

Noise Assesment.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Sole Source Aquifers

General requirements	Legislation	Regulation
The Safe Drinking Water Act of 1974 protects drinking water systems which are the sole or principal drinking water source for an area and which, if contaminated, would create a significant hazard to public health.	Safe Drinking Water Act of 1974 (42 U.S.C. 201, 300f et seq., and 21 U.S.C. 349)	40 CFR Part 149

1. Does the project consist solely of acquisition, leasing, or rehabilitation of an existing building(s)?

Yes

✓ No

2. Is the project located on a sole source aquifer (SSA)?

A sole source aquifer is defined as an aquifer that supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer. This includes streamflow source areas, which are upstream areas of losing streams that flow into the recharge area.

✓ No

Based on the response, the review is in compliance with this section. Document and upload documentation used to make your determination, such as a map of your project (or jurisdiction, if appropriate) in relation to the nearest SSA and its source area, below.

Yes

Screen Summary

Compliance Determination

The project is not located on a sole source aquifer area. The project is in compliance with Sole Source Aquifer requirements.

Burkburnett-Royal-Gardens	Burkburnett, TX	900000010427327

Supporting documentation

TX_21SoleSourceAquiferRechargeArea.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Wetlands Protection

General requirements	Legislation	Regulation
Executive Order 11990 discourages direct or indirect support of new construction impacting wetlands wherever there is a practicable alternative. The Fish and Wildlife Service's National Wetlands Inventory can be used as a primary screening tool, but observed or known wetlands not indicated on NWI maps must also be processed Off-site impacts that result in draining, impounding, or destroying wetlands must also be processed.	Executive Order 11990	24 CFR 55.20 can be used for general guidance regarding the 8 Step Process.

1. Does this project involve new construction as defined in Executive Order 11990, expansion of a building's footprint, or ground disturbance? The term "new construction" shall include draining, dredging, channelizing, filling, diking, impounding, and related activities and any structures or facilities begun or authorized after the effective date of the Order

No

✓ Yes

2. Will the new construction or other ground disturbance impact an on- or off-site wetland? The term "wetlands" means those areas that are inundated by surface or ground water with a frequency sufficient to support, and under normal circumstances does or would support, a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds.

"Wetlands under E.O. 11990 include isolated and non-jurisdictional wetlands."

✓ No, a wetland will not be impacted in terms of E.O. 11990's definition of new construction.

Based on the response, the review is in compliance with this section. Document and upload a map or any other relevant documentation below which explains your determination

Yes, there is a wetland that be impacted in terms of E.O. 11990's definition of new construction.

Screen Summary

Burkburnett-Royal-Gardens	Burkburnett, TX	900000010427327

Compliance Determination

Based on a review of the National Wetlands Inventory (NWI) map, there are no mapped wetland areas on the subject property. An on-site review of the subject property found no wetland areas on the property and no adjacent wetlands areas. Since no wetland areas will be impacted, this project is in compliance with Executive Order 11990.

Supporting documentation

Wetland.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Wild and Scenic Rivers Act

General requirements	Legislation	Regulation
The Wild and Scenic Rivers Act provides federal protection for certain free-flowing, wild, scenic and recreational rivers designated as components or potential components of the National Wild and Scenic Rivers System (NWSRS) from the effects of construction or development.	The Wild and Scenic Rivers Act (16 U.S.C. 1271-1287), particularly section 7(b) and (c) (16 U.S.C. 1278(b) and (c))	36 CFR Part 297

1. Is your project within proximity of a NWSRS river?

✓ No

Yes, the project is in proximity of a Designated Wild and Scenic River or Study Wild and Scenic River.
Yes, the project is in proximity of a Nationwide Rivers Inventory (NRI) River.

Screen Summary

Compliance Determination

This project is not within proximity of a NWSRS river. The project is in compliance with the Wild and Scenic Rivers Act.

Supporting documentation

Wild_Scenic_Rivers.pdf
National_Rivers_Inventory.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Environmental Justice

General requirements	Legislation	Regulation
Determine if the project creates adverse environmental impacts upon a low-income or minority community. If it does, engage the community in meaningful participation about mitigating the impacts or move the project.	Executive Order 12898	

HUD strongly encourages starting the Environmental Justice analysis only after all other laws and authorities, including Environmental Assessment factors if necessary, have been completed.

1. Were any adverse environmental impacts identified in any other compliance review portion of this project's total environmental review?

Yes

✓ No

Based on the response, the review is in compliance with this section.

Screen Summary

Compliance Determination

No adverse environmental impacts were identified in the project's total environmental review. The project is in compliance with Executive Order 12898.

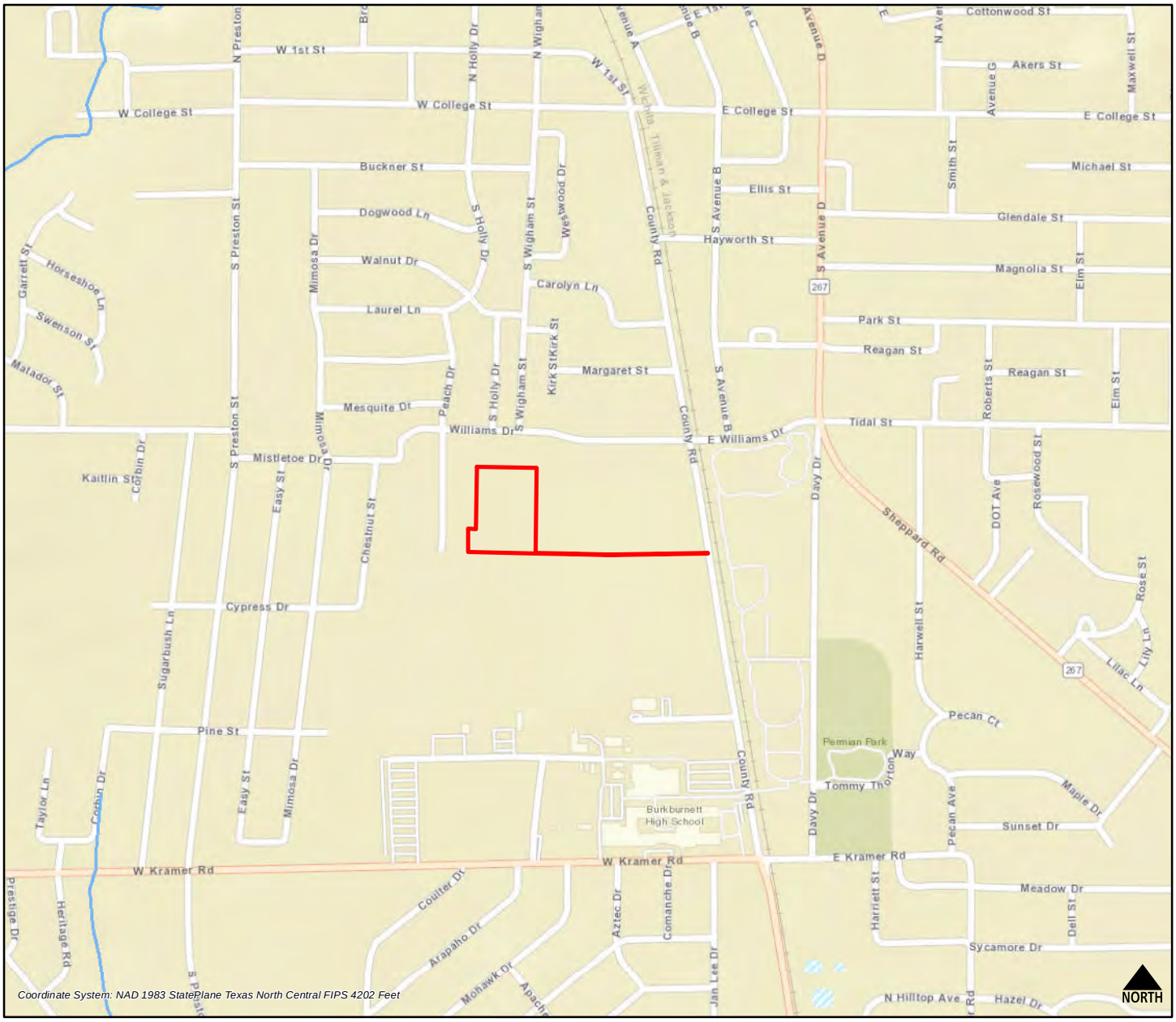
Supporting documentation

EJScreen Community Report.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No



Source: USGS NHL

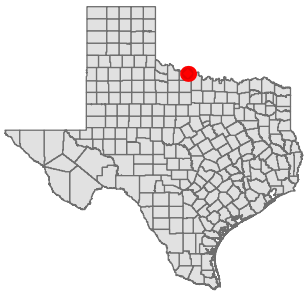
Property boundary and locations are representative only.

0 500 1,000 2,000 3,000 4,000 Feet

1:12,000

Location Map

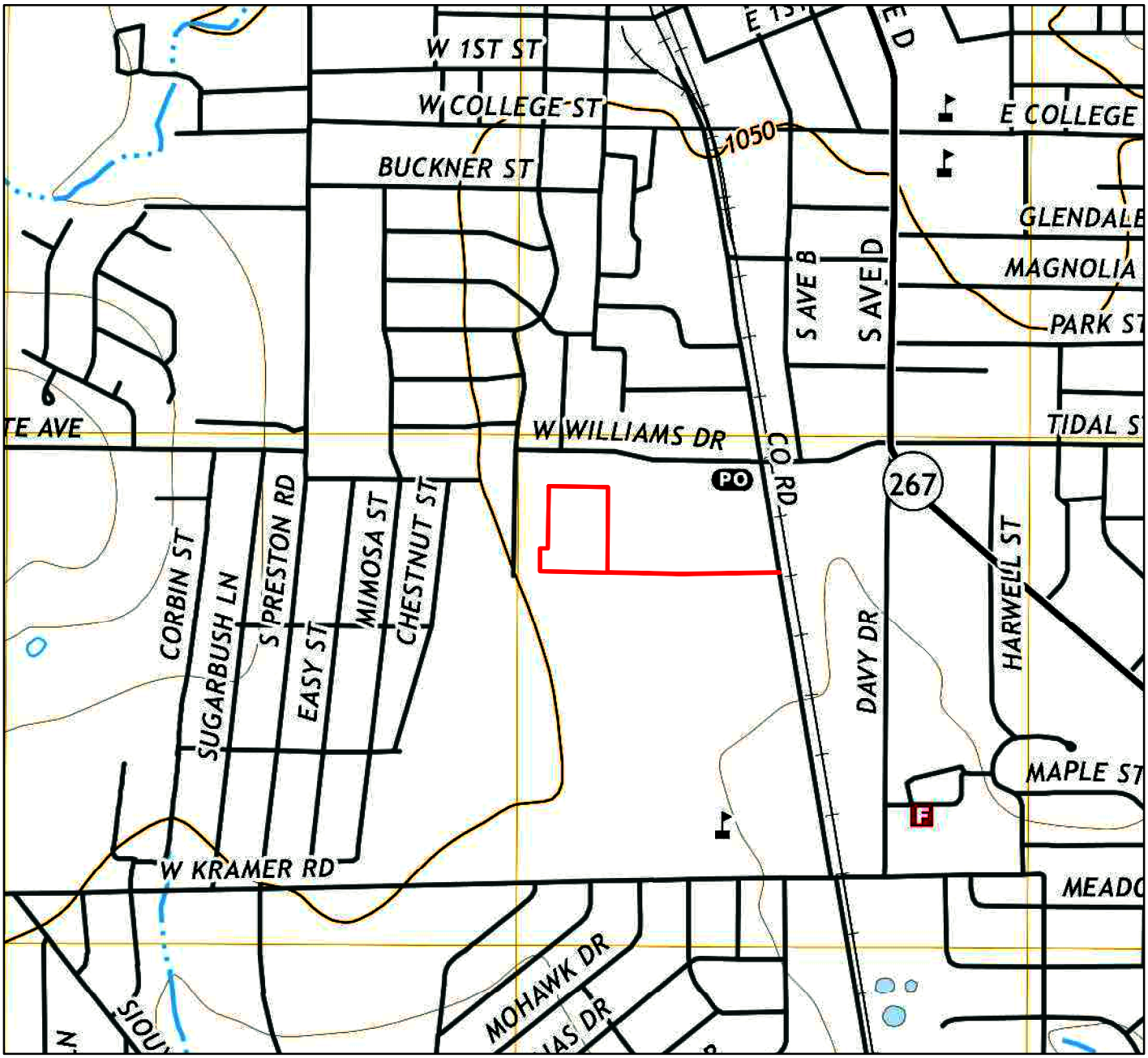
Texas



Location: 5.14 acres along D. W. Taylor Pathway
Burkburnett, TX 76354
Wichita County

PHASE
TRUSTED ENVIRONMENTAL SOLUTIONS

PE Project No: 202402008



Topographic Map

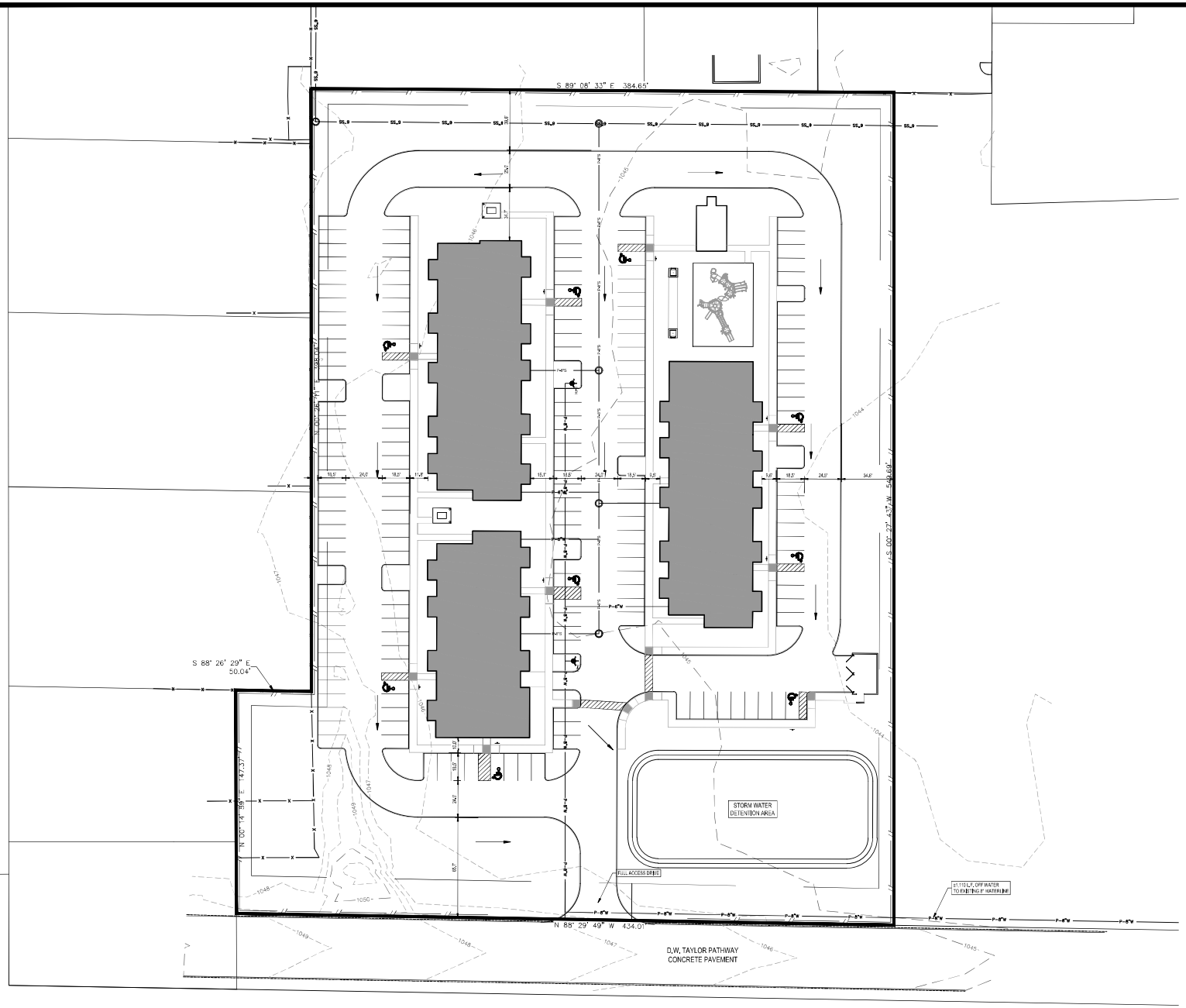
The U.S. Geological Survey (USGS) produced its first topographic map in 1879, the same year it was established. Today, more than 100 years and millions of map copies later, topographic mapping is still a central activity for the USGS. The topographic map remains an indispensable tool for government, science, industry, and leisure.

Topographic maps usually portray both natural and manmade features. They show and name works of nature including mountains, valleys, plains, lakes, rivers, and vegetation. They also identify the principal works of man, such as roads, boundaries, transmission lines, and major buildings. The colors represent the following: Contours - brown, Hydrography - blue, Public Land Survey System and other surveys - red, Updates - purple/magenta, Miscellaneous - black, and Vegetation - green.

USGS 7.5 Minute Topographic Series
Burkburnett, 2019

PHASE ENGINEERING, INC.
ENVIRONMENTAL CONSULTANTS

PEI Project No: 202208134



N

811 Know what's below. Call before you dig.

0 10' 20' 30' 60'

1"=30'

LEGEND

E- INDICATES EXISTING
P- INDICATES PROPOSED

INDICATES EXISTING OR PROPOSED — E-6"W / P-6"W — INDICATES TYPE OF LINE, INDICATES SIZE OF LINE

- PROPOSED FIRE HYDRANT
- PROPOSED MANHOLE
- W — WATER LINE
- S — SANITARY SEWER
- PROPERTY BOUNDARY
- BL — BUILDING SETBACK

NOTES

1. THE ENGINEER HAS RESEARCHED CODES, ORDINANCES, AND OTHER DEVELOPMENTAL REQUIREMENTS OF LOCAL GOVERNMENT, INCLUDING FIRE, WITH JURISDICTION OVER THE SITE, AND VERIFIES THAT THE SITE PLAN CONFORMS TO ALL APPLICABLE ZONING, SITE DEVELOPMENT, AND BUILDING CODED ORDINANCES.
2. THERE ARE NO KNOWN VARIANCES THAT WILL BE REQUIRED FOR THIS PROJECT.
3. DIMENSIONS ARE TO BACK OF CURB. RADII ARE TO BACK OF CURB, OR CENTER OF STRIPING UNLESS NOTED OTHERWISE.
4. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF BUILDING EXIT PORCHES, RAMPS, SIDEWALKS, DOWN SPOUTS AND OTHER APPURTENANCES WHEN ARE CONNECTED TO THE BUILDING. PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY LOCATIONS.
5. CONTRACTOR SHALL REFER TO ELECTRICAL PLANS FOR TYPES OF LIGHT FIXTURES AND CONDUIT ROUTING.
6. ALL FACE OF CURB RADIUSES NOT NOTED SHALL BE 2,0' RADIUS.
7. CONTRACTOR SHALL PROVIDE FIRE LANE STRIPING AS PER GOVERNING ENTITY.
8. TOPOGRAPHIC INFORMATION WAS OBTAINED FROM CORLETT, PROBST & BOYD, PLLC.
9. THE MINIMUM HORIZONTAL SEPARATION BETWEEN PARALLEL WATER AND SEWER LINES IS NINE (9) FEET, OR MINIMUM VERTICAL SEPARATION BETWEEN CROSSING WATER AND SEWER LINES IS EIGHTEEN (18) INCHES.
10. STORM WATER DETENTION IS ANTICIPATED FOR THIS DEVELOPMENT.
11. RETAINING WALLS ARE NOT ANTICIPATED FOR THIS SITE.
12. ACCESSIBLE ROUTES SHALL BE PROVIDED IN COMPLIANCE AND IN ACCORDANCE TO THE FAIR HOUSING DESIGN MANUAL.
13. SUBJECT PROPERTY APPEARS TO BE SITUATED WITHIN THE FLOOD ZONE "X" (AREAS DETERMINED TO BE OUTSIDE THE LIMITS OF THE 100-yr AND 500-yr FLOOD) AS INDICATED ON THE FOLLOWING FLOOD INSURANCE RATE MAP: 48485C0180G, EFFECTIVE DATE: FEBRUARY 3, 2010 BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY FOR WICHITA COUNTY, TEXAS.
14. SETBACKS
    FRONT - 30
    SIDE - 15
    REAR - 25
    HEIGHT - 3 STORIES / 45'

PARKING REQUIREMENT CHART

NUMBER OF BEDROOMS	UNITS	PARKING CALCULATION	PARKING REQUIRED	PARKING PROVIDED
1 BEDROOM	36	1.75 SPACE PER UNIT	63	
2 BEDROOM	40	2 SPACE PER UNIT	80	
3 BEDROOM	4	2.5 SPACE PER UNIT	10	
		TOTAL	153	171

BURKBURNETT ROYAL GARDEN
D.W. TAYLOR PATHWAY
BURKBURNETT, TEXAS

PRELIMINARY SITE PLAN

ISSUED FOR REVIEW

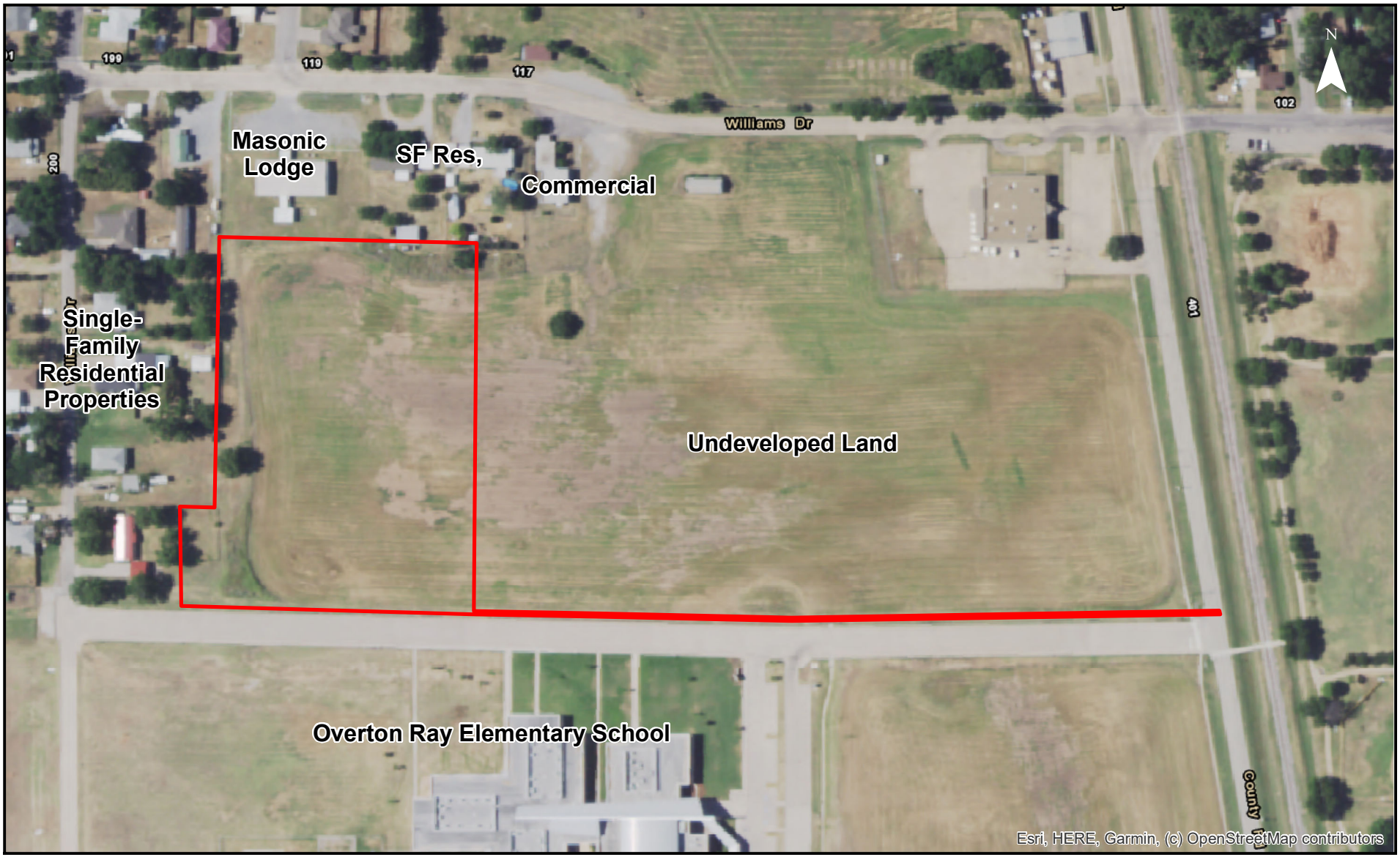
CARNEY ENGINEERING, PLLC.
5700 GRANITE PARKWAY, SUITE 200
Plano, Texas 75024
PH (469) 443-0861
FAX (469) 443-0863

STATE OF TEXAS
T. CRAIG CARNEY
55714
PROFESSIONAL ENGINEER
2/17/2022

TBPE FIRM REGISTRATION NO. F-9328

DRAWN BY:	TCP
CHECKED BY:	JAH
START DATE:	03/04/2021
SCALE:	1" = 30'
PROJECT NO.:	2004-161

SHT
C1.0



Note: Property location and boundary are representative only.

0 195 390 780 Feet

SITE SKETCH - 2020 NAIP Aerial Imagery

Subject Property

Location: 5.14 acres along D. W. Taylor Pathway
Burkburnett, TX 76354
Wichita County

PHASE
TRUSTED ENVIRONMENTAL SOLUTIONS

PE Project No: 202402008

View west along the northern property boundary

East adjoining property (undeveloped land)

View north along the eastern property boundary

View northeast across subject property

South adjoining property (Overton Ray Elementary School)

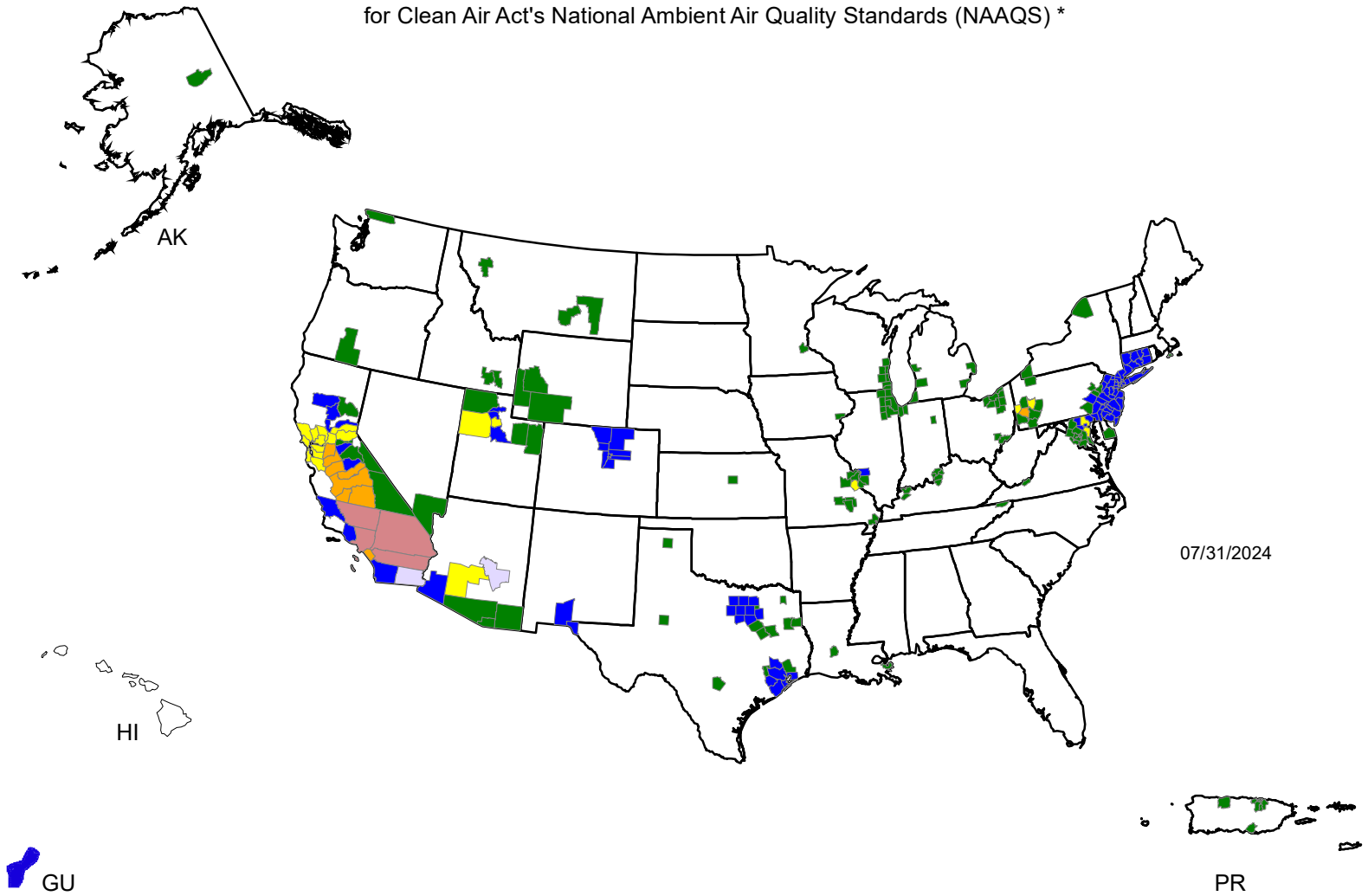
View east along the southern property boundary

View south along the western property boundary

West adjoining property (single-family residential property)

Counties Designated "Nonattainment"

for Clean Air Act's National Ambient Air Quality Standards (NAAQS) *



Legend **

- County Designated Nonattainment for 6 NAAQS Pollutants
- County Designated Nonattainment for 5 NAAQS Pollutants
- County Designated Nonattainment for 4 NAAQS Pollutants
- County Designated Nonattainment for 3 NAAQS Pollutants
- County Designated Nonattainment for 2 NAAQS Pollutants
- County Designated Nonattainment for 1 NAAQS Pollutant

* The National Ambient Air Quality Standards (NAAQS) are health standards for Carbon Monoxide, Lead (1978 and 2008), Nitrogen Dioxide, 8-hour Ozone (2008), Particulate Matter (PM-10 and PM-2.5 (1997, 2006 and 2012), and Sulfur Dioxide.(1971 and 2010)

** Included in the counts are counties designated for NAAQS and revised NAAQS pollutants. Revoked 1-hour (1979) and 8-hour Ozone (1997) are excluded. Partial counties, those with part of the county designated nonattainment and part attainment, are shown as full counties on the map.

Current Nonattainment Counties for All Criteria Pollutants – Texas

As of July 31, 2024

Listed by State, County then Pollutant - * Part County NA

TEXAS

Anderson County

Sulfur Dioxide (2010)	*	Freestone and Anderson Counties, TX

Bexar County

8-Hour Ozone (2015)	San Antonio, TX - (Serious)

Brazoria County

8-Hour Ozone (2008)	Houston-Galveston-Brazoria, TX - (Severe 15)
8-Hour Ozone (2015)	Houston-Galveston-Brazoria, TX - (Serious)

Chambers County

8-Hour Ozone (2008)	Houston-Galveston-Brazoria, TX - (Severe 15)
8-Hour Ozone (2015)	Houston-Galveston-Brazoria, TX - (Serious)

Collin County

8-Hour Ozone (2008)	Dallas-Fort Worth, TX - (Severe 15)
8-Hour Ozone (2015)	Dallas-Fort Worth, TX - (Serious)

Dallas County

8-Hour Ozone (2008)	Dallas-Fort Worth, TX - (Severe 15)
8-Hour Ozone (2015)	Dallas-Fort Worth, TX - (Serious)

Denton County

8-Hour Ozone (2008)	Dallas-Fort Worth, TX - (Severe 15)
8-Hour Ozone (2015)	Dallas-Fort Worth, TX - (Serious)

El Paso County

PM-10 (1987)	*	El Paso County, TX - (Moderate)
8-Hour Ozone (2015)		El Paso-Las Cruces, TX-NM - (Marginal)

Ellis County

8-Hour Ozone (2008)	Dallas-Fort Worth, TX - (Severe 15)
8-Hour Ozone (2015)	Dallas-Fort Worth, TX - (Serious)

Current Nonattainment Counties for All Criteria Pollutants – Texas

As of July 31, 2024

Listed by State, County then Pollutant - * Part County NA

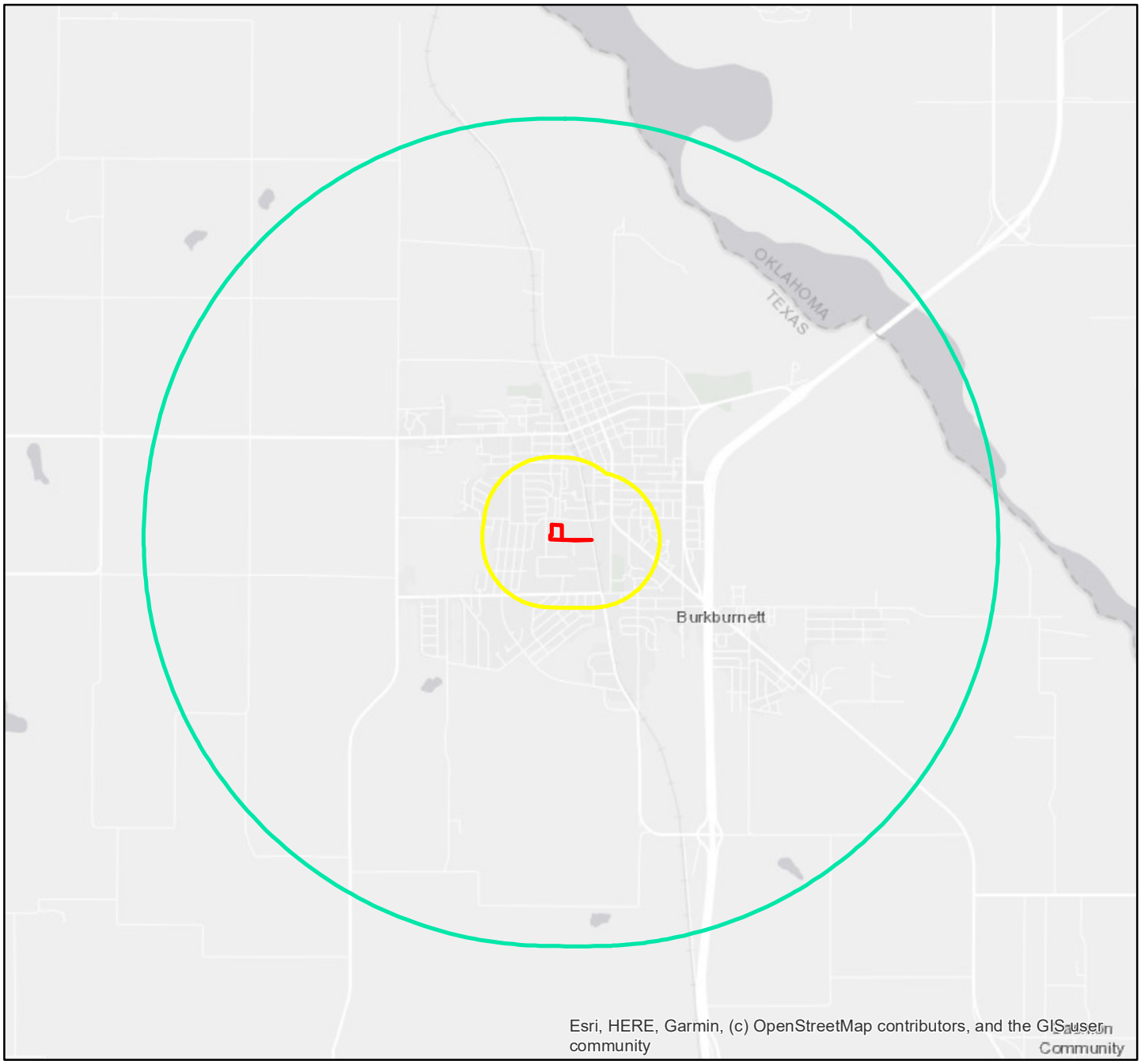
Fort Bend County		
8-Hour Ozone (2008)		Houston-Galveston-Brazoria, TX - (Severe 15)
8-Hour Ozone (2015)		Houston-Galveston-Brazoria, TX - (Serious)
Freestone County		
Sulfur Dioxide (2010)	*	Freestone and Anderson Counties, TX
Galveston County		
8-Hour Ozone (2008)		Houston-Galveston-Brazoria, TX - (Severe 15)
8-Hour Ozone (2015)		Houston-Galveston-Brazoria, TX - (Serious)
Harris County		
8-Hour Ozone (2008)		Houston-Galveston-Brazoria, TX - (Severe 15)
8-Hour Ozone (2015)		Houston-Galveston-Brazoria, TX - (Serious)
Howard County		
Sulfur Dioxide (2010)	*	Howard County, TX
Hutchinson County		
Sulfur Dioxide (2010)	*	Hutchinson County, TX
Johnson County		
8-Hour Ozone (2008)		Dallas-Fort Worth, TX - (Severe 15)
8-Hour Ozone (2015)		Dallas-Fort Worth, TX - (Serious)
Kaufman County		
8-Hour Ozone (2008)		Dallas-Fort Worth, TX - (Severe 15)
8-Hour Ozone (2015)		Dallas-Fort Worth, TX - (Serious)
Liberty County		
8-Hour Ozone (2008)		Houston-Galveston-Brazoria, TX - (Severe 15)
Montgomery County		
8-Hour Ozone (2008)		Houston-Galveston-Brazoria, TX - (Severe 15)
8-Hour Ozone (2015)		Houston-Galveston-Brazoria, TX - (Serious)

Current Nonattainment Counties for All Criteria Pollutants – Texas

As of July 31, 2024

Listed by State, County then Pollutant - * Part County NA

Navarro County		
Sulfur Dioxide (2010)	*	Navarro County, TX
Panola County		
Sulfur Dioxide (2010)	*	Rusk and Panola Counties, TX
Parker County		
8-Hour Ozone (2008)		Dallas-Fort Worth, TX - (Severe 15)
8-Hour Ozone (2015)		Dallas-Fort Worth, TX - (Serious)
Rockwall County		
8-Hour Ozone (2008)		Dallas-Fort Worth, TX - (Severe 15)
Rusk County		
Sulfur Dioxide (2010)	*	Rusk and Panola Counties, TX
Tarrant County		
8-Hour Ozone (2008)		Dallas-Fort Worth, TX - (Severe 15)
8-Hour Ozone (2015)		Dallas-Fort Worth, TX - (Serious)
Titus County		
Sulfur Dioxide (2010)	*	Titus County, TX
Waller County		
8-Hour Ozone (2008)		Houston-Galveston-Brazoria, TX - (Severe 15)
Wise County		
8-Hour Ozone (2008)		Dallas-Fort Worth, TX - (Severe 15)
8-Hour Ozone (2015)		Dallas-Fort Worth, TX - (Serious)



Sources: Federal Aviation Administration, Department of Defense, National Transportation Atlas, TxDOT

Property boundary and locations are representative only.

0 0.325 0.65 1.3 1.95 2.6 Miles

1:67,275

NORTH

Texas Airport Hazards

- Subject Property
- 2,500 ft. Radius
- 15,000 ft. Radius

Bureau of Transportation - Airports

- Airport
- Giderport
- Heliport
- Seaplane Base
- Ultralight

Runway

Texas Airport Boundaries

USDOT Military Bases

- AF Active
- AF Guard
- Army Active
- Army Guard
- Army Reserve
- Navy Active

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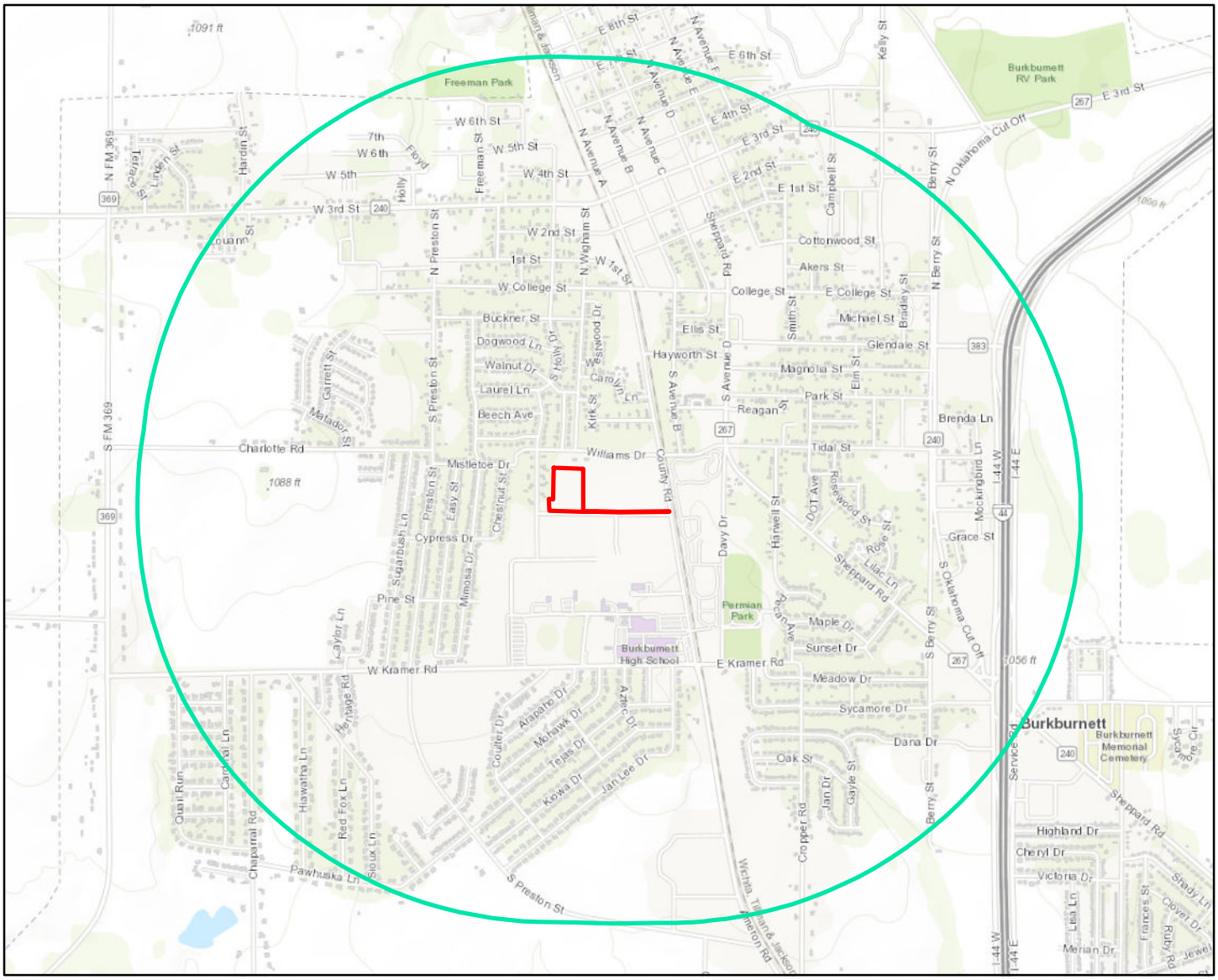
PE Project No: 202402008



Source: US Fish & Wildlife, NOAA

0 0.15 0.3 0.6 0.9 1.2 Miles

1:24,827

NORTH

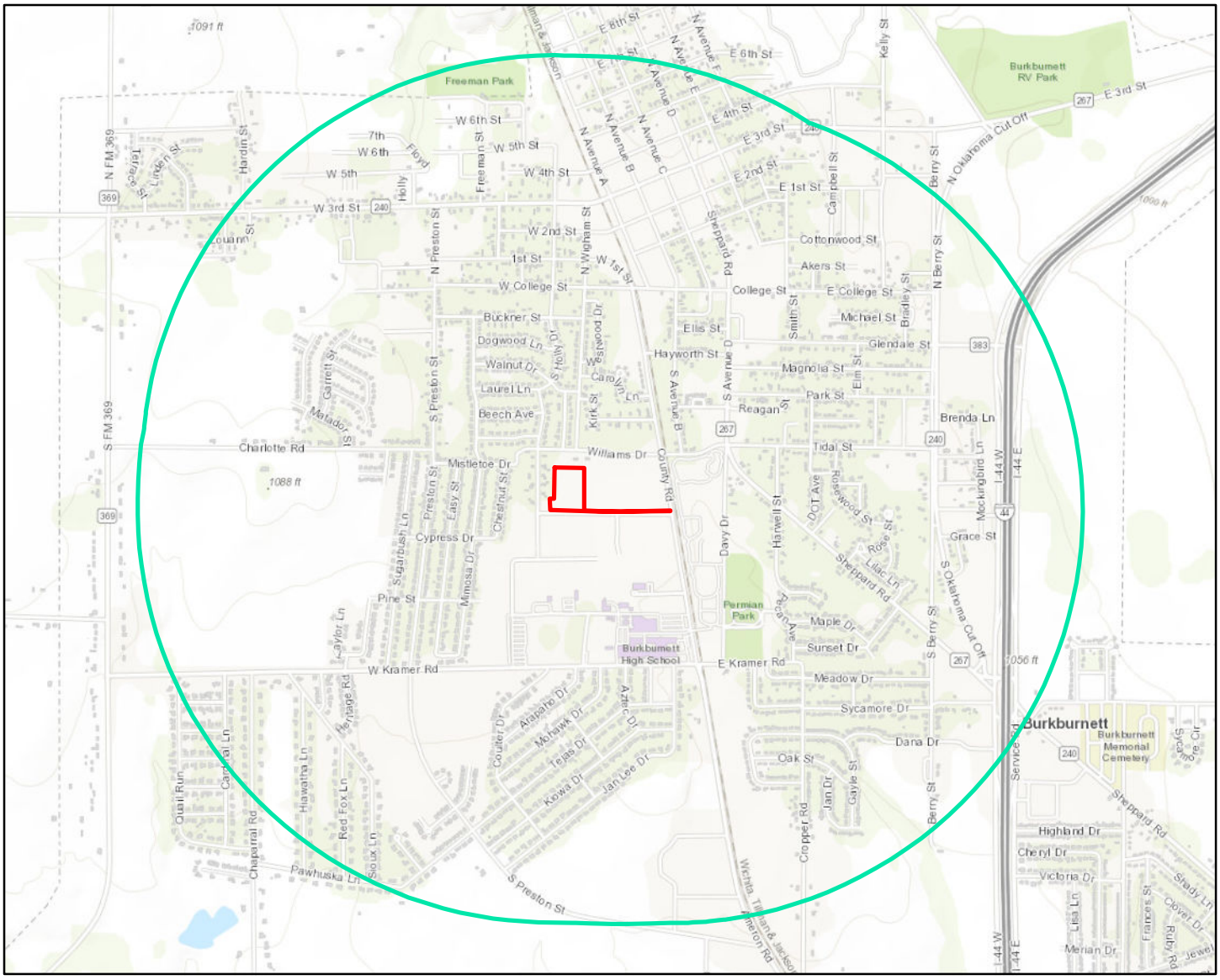
John H. Chafee Coastal Barrier Resources System (CBRS)

This Coastal Barrier Resources Act (CBRA) of 1982 and subsequent amendments established the John H. Chafee Coastal Barrier Resources System (CBRS). The CBRS consists of relatively undeveloped coastal barriers and other areas located along the Atlantic, Gulf of Mexico,

- Subject Property
- 1 Mile Buffer
- Coastal Barrier Resources System

PHASE
TRUSTED ENVIRONMENTAL SOLUTIONS

PE Project No: 202402008



Source: National Oceanic and Atmospheric Administration Office for Coastal Management

0 0.15 0.3 0.6 0.9 1.2 Miles

1:24,827

NORTH

Coastal Zone Management Act Boundary for the United States and US Territories

This data represents the extent of the nation's coastal zone as defined by the individual states and territiries under the Coastal Zone Management Act of 1972 (CZMA). The CZMA was established to preserve, protect, develop, and where possible, to restore or enhance the resources of the nation's coastal zone. The zone generally extends seaward to the boundary of the Submerged Lands Act. State jurisdiction extends to 3nm, except for Texas, Puerto Rico and florida's Gulf coast extends to 9 nm.

- Subject Property
- 1 Mile Buffer
- Coastal Zone
- Federal Consistency

PHASE
TRUSTED ENVIRONMENTAL SOLUTIONS

PE Project No: 202402008

Texas Commission on Environmental Quality

Remediation Division Correspondence Identification Form

SITE & PROGRAM AREA IDENTIFICATION

SITE LOCATION

Site Name:	Approximately 5.0-Acres of Vacant Land
Address 1:	South of Williams Drive
Address 2:	
Burkburnett	State: Texas
Zip Code: 76354	County: Wichita
TCEQ Region:	Abilene -3

REMEDIATION DIVISION PROGRAM AND FACILITY IDENTIFICATION

Is This Site Being Managed Under A State Lead Contract? ☐ Yes ☑ No

Program Area: IHW Corrective Action

Mail Code: MC-127 (IHW)

Is This A New Site To This Program Area? ☑ Yes ☐ No

Additional Information: IHW-CA 3840

Additional Information:

DOCUMENT(S) IDENTIFICATION

PHASE OF REMEDIATION	DOCUMENT NAME
1. Remediation	Priliminary Remedial Action Plan (RAP)
2. Please select a phase of remediatic	
3. Please select a phase of remediatic	
4. Please select a phase of remediatic	
5. Please select a phase of remediatic	

CONTACT INFORMATION

☑ I attest that all work has been done in accordance with TCEQ rules ☑ I certify that I am aware misrepresentation of any claim is a violation.

RESPONSIBLE PARTY/APPLICANT/CUSTOMER INFORMATION (IF APPLICABLE)

Noorallah Jooma	Carrollton	(469) 855-6662	
Burkburnett Royal Gardens,			
PO Box 113267	Texas	noorjooma@gmail.com	
	75011		

ENVIRONMENTAL CONSULTANT/REPORT PREPARER/AGENT

Hassan Chamseddin, PE	HKC & Associates, Inc.	Dallas	75234
Hassan Chamseddin, PE	2655 Villa Creek Drive	hchamseddin@outlook.com	972-406-8039
0238	Suite 205	Texas	972-406-8040
Hassan Chamseddin, PE	0702	972-406-8039	hchamseddin@outlook.com
HKC & Associates, Inc.		972-406-8040	

SIGNATURES

Noorallah Jooma	2/26/25	Hassan Chamseddin, PE	02/26/2	Hassan Chamseddin, PE	02/26/2

DATABASE CODES

Document No.	TCEQ Database Term	Document No.	TCEQ Database Term
1.		4.	
2.		5.	
3.			

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
Response Action Plan

Cover Page

Regulatory ID number (Solid waste registration number, VCP ID number, etc) T3840
check one: X Initial submittal for this on-site property ___ Subsequent submittal for this on-site property
Report date: February 26, 2025 TCEQ Region No.: 3

TCEQ Program (check one)

X	Corrective Action (Mail Code 127)		Superfund PRP Lead (Mail Code 143)
	Voluntary Cleanup Program (Mail Code 221)		Municipal Solid Waste Permits (Mail Code 124)
	RPR Section (Mail Code 137)		

On-Site Property Information

On-Site Property Name: Approximately 5.0-Acres of Vacant Land
Street no. ___ Pre dir: ___ Street name ___ Street type: ___ Post dir: ___
City: Burkburnett County: Wichita County Code: 243 Zip: 76354
Nearest street intersection or location description: 5.0-Acre of vacant land, south of 119 West Williams Drive

Latitude: Degrees, Minutes, Seconds OR Decimal Degrees (circle one) North 34.086407
Longitude: Degrees, Minutes, Seconds OR Decimal Degrees (circle one) West -98.575895

Off-Site Affected Property Information

Off-Site Affected Property Name:
Physical Address:
Street no. ___ Pre dir: ___ Street name ___ Street type: ___ Post dir: ___
City: ___ County: ___ County Code: ___ Zip: ___

[X] Check if no off-site properties affected

Contact Person Information and Acknowledgement

Person (or company) Name: Burkburnett Royal Gardens
Contact Person: Mr. Noorallah Jooma Title:
Mailing Address: P.O. Box 113267
City: Carrollton State: TX Zip: 75011 E-mail address noorjooma@gmail.com
Phone: (469) 855-6662 Fax:

By my signature below, I acknowledge the requirement of §350.2(a) that no person shall submit information to the executive director or to parties who are required to be provided information under this chapter which they know or reasonably should have known to be false or intentionally misleading, or fail to submit available information which is critical to the understanding of the matter at hand or to the basis of critical decisions which reasonably would have been influenced by that information. Violation of this rule may subject a person to the imposition of civil, criminal, or administrative penalties.

Signature of Person Noorallah Jooma Name, print: Noorallah Jooma Date: 2/26/25

RAP Executive Summary	ID No.: T-3840
	Report Date: February 2025

Use this worksheet to summarize the report. Be sure to complete and submit the Checklist for Report Completeness. ***Attach a chronology of activities associated with the affected property.***

Briefly describe the affected property and PCLE zones, the conclusions from the assessment activities, identify any affected or threatened receptors, and describe any other major considerations taken into account when developing this response action plan. If any portion of the response action is necessitated due to an aesthetic or nuisance condition, identify the nature of that condition and identify that portion of the response action proposed to address it. If any media that contains a PCLE zone is not addressed in this RAP, provide justification.

Burkburnett Royal Gardens, is the prospective purchaser of the ~ 5.0 Acres undeveloped land south of Williams Drive, Burkburnett, Wichita County, Texas (property), to develop the land as a multifamily housing that will be senior housing living apartments complex. The project is being funded by the US Department of House and Urban Development (HUD) which requested TCEQ approval of the proposed abatement measures described in this RAP, prior to releasing any funds for the project.

Currently, the responsible party (Burkburnett Royal Garden) does not own the property, and the project is in the preliminary design phase pending funding. The RP is seeking approval for the preliminary Response Action Plan (RAP) to be able to get the funds, complete the design of the project. Based on the completed design (buildings layout out, buildings footing, utilities locations, subsurface drainage system, concrete covered area, planters' areas, Etc..). The actual RAP will be prepared to be implemented. At this point of time, there are many variables that are undetermined.

The following is the plan to implement the following plans during construction:

Health and Safety plan- This plan shall identify all anticipated to encounter contaminants of concern (COCs), and the appropriate measures to be taken in case of encounter including chain of command, required OSHA training and certification, identification of personal protective equipment (PPE), determination of exclusion zones, decontamination zones and support zones, identification of decontamination and monitoring procedures.

Engineering Controls- Currently, there is no access to any of the impacted media. However, during construction, the soil will be disturbed during subsurface utilities installation which may provide exposure to the impacted media. Safe work practice with engineering controls will minimize any exposure such as no basement constructed, limiting the excavation depths to less than 10 ft. below grade and for subsurface utilities only. Using narrow buckets on excavation equipment for the necessary width of trenches. Installation of a geotechnical barrier on the surface before placing concrete for buildings floors.

Remedial Action Plan- This plan is to identify the procedures to handle any impacted soil that is excavated during the construction activities. The plan will include procedures for onsite storage, waste characterization, required laboratory analysis to determine appropriate transportation procedures and disposal location.

Monitoring Program plan- Upon completion of construction, a monitoring plan shall be implemented which includes procedures to inspect the geotechnical barrier, groundwater monitoring and any vapor monitoring if needed based on observed conditions during construction.

Based on the above, and due to the uncertainty, the following documentation, although required, are not provided in this RAP.

- Attachment 2A* Response Action Diagrams and Component/Equipment Descriptions
- Attachment 2B* Proposed Well Design
- Attachment 4A* Map of Confirmation Sampling Points
- Appendix 3* Studies and Tests Documentation
- Appendix 4* Proposed Institutional Controls
- Appendix 5* Landowner Concurrence

Summary

HKC & Associates, Inc. (HKC) utilized the previous subsurface investigation conducted by Phase Engineering LLC (PEL) to assist in the development of this assessment investigation conducted at the ±5.0-acre undeveloped agricultural land south of Williams Drive in Burkburnett, Wichita County, Texas (Property). HKC was retained by the prospective purchaser of the Property to develop the Property into multi-apartment senior housing residential properties.

Based on the subsurface Investigation, the soil analytical results identified TPH C_6-C_{12}, >C_{12}-C_{28}, Over C_6-C_8 aliphatics, Over C_{12}-C_{16} aliphatics, Over C_8-C_{10} aromatics, Over C_{10}-C_{12} aromatics, Over C_{12}-C_{16} aromatics, Over C_{16}-C_{21} aromatics, Bromodichloromethane, Carbon tetrachloride, Dibromochloromethane, 1,2-Dibromo-3-Chloropropane, 1,2-Dibromoethane, 1,2-Dichloroethane, 1,2-Dichloropropane, 1,1-Dichloropropene, trans-1,3-Dichloropropene, Naphthalene, N-Propylbenzene, 1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane, Trichloroethene, 1,2,3-Trichloropropane, and 2-Methylnaphthalene at concentrations greater than the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program (TRRP) Tier 1 Residential Protective Concentration Levels (PCLs) for a 30-acre source area within the surface soils (0-15 feet bgs). In the subsurface soils only TPH >C_{12}-C_{28} had a concentration greater than the TCEQ Tier 1 Residential PCLs for a 30-acre source area in one soil sample (MW-2 from 24- 25 feet bgs). All the other analytes were either less than the laboratory method detection limit or the TCEQ Tier 1 Residential PCL for a 30-acre source area. None of the TPH, VOCs, and/or SVOCs were detected in the groundwater at concentrations either above the laboratory method detection limit and/or Tier 1 Residential PCL and therefore, appear to be protective of groundwater. It is important to note the time of historical operation and the lack of constituents of concern (COCs) within the groundwater.

As part of PEL's and HKC's soil investigation at the Property the only metal with a concentration greater than the TCEQ TRRP Tier 1 Residential PCL for a 30 acre source area was lead. The highest soil concentration was observed in PEL's soil sample SB-4 (1-3 ft) with a concentration of 35.5 mg/kg. A background soil concentration was calculated for arsenic, barium, lead, and mercury on the adjacent Overton Ray Elementary School property (IHW ID No. T3497). The lead Tier 2 calculation from the adjacent Overton Ray Elementary School property was calculated as 650 mg/kg; therefore, the total soil combined PCL of 500 mg/kg was utilized as the Tier 1 Residential PCL.

The groundwater investigation did not identify any COCs above the Residential PCL in groundwater except barium in MW-5 during the initial groundwater sampling event. The barium concentration in

MW-5 was 5.53 mg/l which is greater than the TCEQ TRRP Tier 1 Residential PCL of 2.0 mg/l ($^{GW}GW_{Ing}$). During the June 2024 groundwater sampling event, TPH C_6-C_{12} and barium were greater than the TCEQ TRRP Tier 1 applicable PCL in MW-5. The TPH C_6-C_{12} concentration in MW-5 was 2.13J. *HKC notes during future groundwater sampling events, if TPH is detected again. TPH 1006 will be run on the groundwater sample in order to establish a Tier 2 PCL for the groundwater at the Property.* The barium concentration in MW-5 was 2.11 mg/l which is greater than the TCEQ TRRP Tier 1 Residential PCL of 2.0 mg/l ($^{GW}GW_{Ing}$). However, the barium concentration decreased by approximately 62% from the groundwater sampling event conducted in August 2023.

NAPL Discussion

According to the TCEQ TRRP Tier 1 TPH PCL Calculator for TCEQ Method 1006 Data, the Theoretical soil saturation limit is exceeded for one or more TPH fractions and indicates NAPL is indicated. However, during the site assessment, NAPL was not observed within the soil and/or groundwater. The oil/gas refinery operated from the early 1940s until the mid-1980s. The two southern ASTs appeared to have been removed by the mid-1990s, approximately 30 years ago. The TPH fraction concentrations do not exceed the $^{Air}GW\text{-}Soil_{Inh\text{-}V}$ and the groundwater concentration is less than the Tier 1 Residential PCL. The soil concentrations exceeding the theoretical soil saturation limit are encountered at a depth of 10 -12 feet bgs and are not migrating and not mobile. The potential NAPL is not creating a nuisance or aesthetic impact and is not in contact with Class 1 or 2 groundwater, surface water, or sediment. Therefore, NAPL management is not required at the Property.

HKC collected a total of 15 soil samples that were analyzed for TPH 1005. Eight (8) soil samples exceeded the C_6 to C_{12} Tier 1 Residential PCL of 33 mg/kg. Ten (10) soil samples exceeded the C_{12} to C_{28} Tier 1 Residential PCL of 99 mg/kg. HKC selected the highest total TPH 1005 concentration from each sample location to further analyze for TPH 1006 in order to calculate a site-specific TPH Critical PCL. A site-specific TPH PCL (Tier 2 PCL) was derived using the TPH Method 1006 utilizing the TCEQ TPH PCL Calculator Spreadsheet. A summary of the calculated TPH Tier 2 PCL is provided in the following table:

Sample Location	**MW-1**	**MW-2**	**MW-3**	**MW-4**	**MW-5**
Sample Depth	**10-12 ft.**	**14-16 ft.**	**10-12 ft.**	**10-12 ft.**	**10-12 ft.**
Unit	**mg/kg**				
Total TPH 1005 C_6-C_{35}	5,400	3,740	359	958	16,800
Total TPH 1006 C_6-C_{35} Aromatics & Aliphatics	5,742	3,170.90	466.8	921.9	11,070.30
30 Acre Residential Tier 1 $^{Tot}Soil_{Comb}$ $PCL_{TPH\ Mix}$	**9,570**	**6,870**	**10,600**	**8,680**	**9,480**
Tier 1 $^{GW}Soil_{Ing}$ $PCL_{\ TPH\ Mix}$	Not Needed (HI <10)	Not Needed (HI<10)	Not Needed (HI<10)	Not Needed (HI<10)	Not Needed (HI<10)

Notes: The orange highlighted cell is the lowest Tier 1 $^{Tot}Soil_{Comb}$ $PCL_{TPH\ Mix}$.

The results of the TPH PCL Calculator Spreadsheet indicate that based on the composition of the material present at the Property, the soil-to-groundwater (^{GW}Soil) pathway is not a significant concern for this material and does not need a PCL. Therefore, the default Tier 1 TPH PCL which is based on the Tier 1 ^{GW}Soil pathway is not applicable for the Property and the derived Site specific TPH PCL becomes the health-based ($^{Tot}Soil_{Comb}$) critical PCL (CPCL) or Tier 2 PCL. Based on all the TPH 1006 analyses, the Site-specific Tier 2 PCL for the total TPH is the lowest of all five locations with a concentration of 6,870 mg/kg. Only six (6) of 28 soil samples exceeded the Tier 2 calculated PCL, which included HKC soil samples MW-5 (10-12 ft.) and MW-5 (12-14 ft.) and Phase Engineering soil samples SB-1 (7-9 ft.), SB-2 (10-12 ft.), SB-3 (7-9 ft.), and SB-4 (5-7 ft.). *HKC notes Phase Engineering's sample locations SB-1 and SB-4 are located off site of the subject property.*

Response Actions and Recommendations

Several VOCs, SVOCs, and TPH soil concentrations exceeded the TCEQ TRRP Tier 1 PCL at depths of 5-14 feet below ground surface (bgs). The soil concentrations appear to be protective of groundwater since none of the COCs were detected within the groundwater, except potentially barium and TPH C_6-C_{12}. However, barium was not a COC detected in the surface or subsurface soils at concentrations greater than the Tier 1 PCL. The soil vapor concentrations at the Property were not protective of the EPA Residential VISLs.

Surface/Subsurface Soils

The potential purchaser of the Property is proposing to develop the Property into as a multifamily housing that will be senior housing living apartments complex. As a remedy to the soil exceedances, HKC proposes utilizing the concrete parking and drive areas and the building as an impermeable cover in order to minimize continued vertical migration of the soil contamination (if any).

During construction, the soil will be disturbed during subsurface utilities installation which may provide exposure to the impacted media. Safe work practice with engineering controls will minimize any exposure such as no basement constructed, limiting the excavation depths to less than 10 ft. below grade and for subsurface utilities only. Using narrow buckets on excavation equipment for the necessary width of trenches.

Vapor Intrusion

HKC is recommending to the potential purchaser to install a passive vapor barrier beneath the building(s) to reduce the potential of vapor migration into the building.

Groundwater

Since the Property is to be developed, HKC will plug and abandoned the current monitoring wells prior to development. Following the development of the Property, HKC will re-install the monitoring wells in the immediate vicinity of the original monitoring wells and will conduct groundwater monitoring as deemed necessary by the TCEQ to ensure groundwater concentrations continue to be protective of human health and the environment.

RAP Executive Summary	ID No.: T-3840
	Report Date: February 2025

What is the selected remedy standard for this affected property? ___ A X B

List all media that contains a PCLE zone and specify the proposed response action for each media. Indicate the type of removal, decontamination, physical control and/or institutional control action that is proposed.

Media	COCs[1]	Removal	Decontamination	Control			
				Physical Control	Modified Groundwater Response Objective[2]		
					PMZ	WCU	TI
Surface soil	VOCs, SVOCs, TPH			X			
Subsurface	VOCs and TPH			X			
Groundwater	Barium, TPH			X			
Soil Vapor	Potentially VOCs, SVOCs, and TPH			X			

Is there a media that contains a PCLE zone that is not addressed in this RAP? ____ yes X no

If yes, provide justification for not addressing the PCLE zone in this RAP.

On-site land use: [X] Residential [ ] Commercial/Industrial

Off-site land use: [X] Residential [ ] Commercial/Industrial (check all that apply)

Is this a re-submittal or revision of a previous RAP? ___ Yes X No

If yes, explain why the RAP is being revised or resubmitted.

Were all the appropriate notifications made in accordance with §350.55? ___ Yes ___ No

If no, explain why notifications were not made:

Not Applicable

[1] Specify either a specific COC or, if the response action is the same for all COCs in one type, specify the type of COC (for example, VOCs, SVOCs, metals).

[2] If a modified groundwater response objective is proposed, check the type(s) of proposed modifications.

RAP Executive Summary	ID No.: T-3840
	Report Date: February 2025

Chronology

On-site investigations were completed as part of a comprehensive study to define the potential source, nature and extent of potential organic constituent detected in soil and groundwater. The following is a summary of the investigations that were conducted at the site:

Date	Activity
February 2022	**Phase I ESA** – Based on Phase Engineering, LLC historical information, the Property along with the north and east adjoining properties were previously occupied by an oil / gas refinery from the early-1940s to the mid-1980s. ASTs were indicated throughout the refinery. Waste disposal pits were indicated near the northeastern corner of the Property on the north and east adjoining properties near the Property. Multiple large-scale waste reserve / disposal berms and pits were indicated at the east adjoining property. The client provided title commitment indicates that there is a Right-of-Way granted to Gulf Pipeline Company located on the subject property. No indication of this pipeline was indicated in the aerial photographs or topographic maps.
September 2022	**Phase II ESA –** Phase Engineering, LLC installed five soil borings and four soil vapor monitoring ports. A total of 13 soil samples, three groundwater samples, and four soil vapor samples were collected. The soil and groundwater samples were analyzed for VOCs, TPH, barium, lead, and selenium, chloride, and/or pH. The soil vapor samples were analyzed for VOCs. The soil analytical results indicated lead and TPH concentrations were greater than the TCEQ Tier 1 Residential PCLs. The groundwater analytical results indicated that chloride, barium, and TPH concentrations were greater than the TCEQ Tier 1 Residential PCLs. The soil vapor analytical results indicated 1,3-butadiene and 2-propanol were detected with concentrations greater than their perspective EPA Vapor Intrusion Screening Levels.
August/September 2023	**Affected Property Assessment Investigation –** HKC installed five monitoring wells to 25 feet bgs. A total of 15 soil samples and four groundwater samples were collected and analyzed for VOCs, TPH 1005/1006, SVOCs, RCRA Metals, Chloride, and/or TDS. The soil analytical results indicated TPH C_6-C_{12}, >C_{12}-C_{28}, Over C_6-C_8 aliphatics, Over C_{12}-C_{16} aliphatics, Over C_8-C_{10} aromatics, Over C_{10}-C_{12} aromatics, Over C_{12}-C_{16} aromatics, Over C_{16}-C_{21} aromatics, Bromodichloromethane, Carbon tetrachloride, Dibromochloromethane, 1,2-Dibromo-3-Chloropropane, 1,2-Dibromoethane, 1,2-Dichloroethane, 1,2-Dichloropropane, 1,1-Dichloropropene, trans-1,3- Dichloropropene, Naphthalene, N-Propylbenzene, 1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane, Trichloroethene, 1,2,3-Trichloropropane, and 2-Methylnaphthalene at concentrations greater than the TCEQ Tier 1 Residential PCLs for a 30-acre source area. Monitoring well MW-4 was dry during the groundwater sampling event and it was not sampled. The groundwater analytical results indicated barium had a concentration greater than the TCEQ Tier 1 Residential PCL in one groundwater sample collected from MW-5. Groundwater was encountered between 11 and 14 feet below the top of casing. Groundwater gradient was calculated to be to the east-northeast at a rate of 0.0256 ft/ft.

	TDS samples ranged from 1,680 mg/l (MW-2) to 5,520 mg/l (MW-5). The yield test indicated the northern portion of the Property has a well yield of 2,342 gallons per day (gpd). However, in the central and southeastern portion of the Property the well yield is less than 15 gpd (MW-3 – 8.6 gpd and MW-5 – 12.05 gpd). The Property has a geometric mean of 62 gallons per day.
June/August 2024	**Affected Property Assessment Update –** One GW monitoring event was performed. The event included all 5 on-site wells. Five water samples were analyzed for VOCs, TPH 1005, and 8 RCRA Metals. In addition, one water sample was analyzed for SVOCs. VOCs were detected in some of the water samples. However, all detected concentrations were either below the analytical method detection limits or below the TCEQ Tier 1 Residential PCL and they are not considered as a concern. TPH was detected in two water samples MW-2 and MW-5. At MW-2, TPH was detected in the C_{12}-C_{28} range. The detected concentration in MW-2 was 0.894 mg/l and in MW-5 was 2.13J. The groundwater sample collected from MW-2 was further analyzed for SVOCs. The SVOC analytical results were all below the analytical method detection limits. 8 RCRA Metals were detected in the water samples. Barium was detected at 2.11 mg/l which is above the TCEQ Tier 1 Residential PCL of 2.00 mg/l in MW-5. Barium concentration decreased by 62% from the previous event (August 2023). All other RCRA metals concentrations including barium in the other wells were either below the analytical method detection limits or the TCEQ Tier 1 Residential PCLs and they are not considered as a concern.

Checklist for Report Completeness

ID No.: T-3840

Report Date: February 2025

Use this checklist to determine the portions of the form that must be submitted for this report. Answer all questions by checking Yes or No. If the answer is Yes include that portion of the report. If the answer is No, do not complete or submit that portion of the report. All form contents that are marked "Required" must be submitted. Form contents marked with an asterisk (*) are not included in the blank form and are to be provided by the person.

				Report Contents
		Required	**Cover Page**	√
		Required	**Executive Summary**	√
		Required	**Checklist for Report Completeness**	√
		Required	**Worksheet 1.0** Response Action Objectives	√
No √	Have new data been collected that was not previously submitted?	☐ Yes	**Attachment 1A*** Maps and Cross Sections	☐
			Attachment 1B* Graphs of Concentration versus Time	☐
		Required-**Not Available**	**Worksheet 2.0** Response Action Design	√
		Required-**Not Available**	**Attachment 2A*** Response Action Diagrams and Component/Equipment Descriptions	√
		Required-**Not Available**	**Attachment 2B*** Proposed Well Design	√
No √	Is an ecological services analysis or compensatory restoration plan part of the proposed response action?	☐ Yes	**Attachment 2C*** ESA and Compensatory Restoration Plan	☐
No ☐	Is a plume management zone proposed as part of the response action?	☐ Yes	**Worksheet 2.1** Plume Management Zone	☐
			Attachment 2D* Plume Management Zone Map	☐
			Attachment 2E* Attenuation Action Levels Determination	☐
No √	Is a waste control unit proposed as part of the response action?	☐ Yes	**Worksheet 2.2** Waste Control Unit	☐
			Attachment 2F* Map of Waste Control Unit	☐
No √	Is a technical impracticability area proposed as part of the response action?	☐ Yes	**Worksheet 2.3** Technical Impracticability	☐
			Attachment 2G* Map of Technical Impracticability Area	☐

Checklist for Report Completeness	ID No.: T-3840
	Report Date: February 2025

				Report Contents
No ☐	Is the response action a remedy standard B?	√ Yes →	**Worksheet 2.4** Institutional Controls	√
		Required	**Worksheet 3.0** Performance Measures and Potential Problems	√
		Required	**Worksheet 3.1** Monitoring and Sampling	√
		Required	**Attachment 3A*** Map of Monitoring and Sampling Points	√
		Required	**Worksheet 3.2** Operation and Maintenance	√
		Required	**Worksheet 4.0** Confirmation Sampling Plan	√
		Required-**Not Available**	**Attachment 4A*** Map of Confirmation Sampling Points	√
No ☐	Is the response action a Remedy Standard B?	√ Yes →	**Worksheet 5.0** Post Response Action Care	√
		→	**Attachment 5A*** Map of PRAC Monitoring and Sampling Points	√
		→	**Attachment 5B*** PRAC Costs	√
No √	Does the person, who is a small business, desire to modify the financial assurance requirement?	☐ Yes →	**Attachment 5C*** Small Business Affidavit	☐
		Required	**Worksheet 6.0** Implementation Schedule	√
		Required	**Appendix 1*** References	√
No √	Was any data collected that was not previously reported?	☐ Yes →	**Appendix 2*** Data Tables and Boring Logs	☐
No √	Were any studies or tests conducted?	☐ Yes →	**Appendix 3*** Studies and Tests Documentation	☐
No √	Is the response action a Remedy Standard B?	√ Yes →	**Appendix 4*** Proposed Institutional Controls	☐
No √	Are any institutional controls proposed/required on property not owned by the person?	√ Yes →	**Appendix 5*** Landowner Concurrence	☐
No √	Are any of the sample collection or handling procedures different from those reporting in the APAR or other previously submitted report?	☐ Yes →	**Appendix 6*** Sampling Procedures	☐
No √	Are statistics or geostatistics proposed to be used as part of the response action?	☐ Yes →	**Appendix 7*** Statistical Methodology	☐
No √	Was approval received from the TCEQ regarding the use of different rules to address a media?	☐ Yes →	**Appendix 8*** Split Media Approval	☐

Checklist for Report Completeness	ID No.: T-3840
	Report Date: February 2025

Form contents marked with an asterisk (*) are not included in the blank form.

Response Action Objectives Associated Information: Attachment 1A, 1B	RAP Worksheet 1.0 Page ___ of ____	
	ID No.: T-3840	Report Date: February 2025

Use this worksheet to describe the objectives for the response action in each media.

Response Action Objectives

List the environmental media to which this applies: Surface and Subsurface Soils, Groundwater, Soil Vapor

Repeat this section for each medium that has a different response action objective.

State the property-specific response objectives for the PCLE zone in each media in the context of the response objectives set forth in §350.32 or §350.33 as applicable. Explain how the response action is appropriate based on the hydrogeologic characteristics, COC characteristics, and potential unprotective conditions that could continue or result during the remedial period.

The table below summarizes the Remedy Standard B general human health response objectives with an explanation on how the response action is appropriate for the site:

Response Objective	Rule Citation	Explanation
Persons must, within a reasonable time frame given the particular circumstances of an affected property, remove, decontaminate, and/or control the surface soil, subsurface soil and/or groundwater human health PCLE zones, other environmental media, and hazardous and non-hazardous waste in accordance with the provisions of this section such that humans will not be exposed to concentrations of COCs in the exposure media in excess of the residential or commercial/industrial critical human health PCLs, as applicable at the prescribed, or any approved alternate human points of exposure (POEs) established for environmental media in accordance with §350.37.	§350.33 (a)(1) §350.33 (b)(2) §350.37	<u>Surface and Subsurface Soil(s):</u> The future use of the site is residential, a Senior Living Center, therefore, the surface soils are considered 0 to 15 feet bgs. HKC is proposing the concrete parking and drive area and concrete building foundation(s) be a control or impermeable cover to not only limit the potential exposure to the surface soils greater than the TRRP Tier 1 Residential PCLs but also to minimize continued vertical migration of the soil contamination (if any). Due to the lack of groundwater contamination found within the majority of the monitoring wells it appears the TPH and other constituents of concern (COCs) concentrations continue to be absorbed onto the underlying soils with minimal or no leaching into the groundwater and appear to be protective of groundwater. During construction activities, it is anticipated that surface soils will be disturbed as part of the underground utility installation activities. Safe work practices with engineering controls will minimize any exposure such as no basement constructed, limiting the excavation depths to less than 10 ft. below grade and for subsurface utilities only. Using narrow buckets on excavation equipment for the necessary width of trenches. HKC will encourage the developer to install subsurface utilities along the western portion of the site. *Construction workers will be informed of the potential hazards at the site by a Soil*

Response Objective	Rule Citation	Explanation
		Management Plan. <u>Groundwater:</u> Monitoring well MW-5 is the only monitoring well that has barium and most recently TPH at concentrations greater than the TRRP Tier 1 PCL. The city of Burkburnett Administrative Code §53.40 water wells, prohibits the use of groundwater for domestic use. HKC is recommending re-installing the monitoring wells at the site following construction in order to assess whether the TPH and/or barium concentrations are stable to decreasing. *It is important to note the site is located within the footprint of a former refinery and therefore, there is a potential for additional source(s) of contamination off-site*. <u>Soil Vapor:</u> Even though the surface soils, subsurface soils, and groundwater concentrations are less than the $^{Air}Soil_{Inh\text{-}V}$ Tier 1 Residential PCL for a 30-acre source area, there is a potential for the vapor from the media to enter the buildings. Therefore, HKC is proposing to the install a passive vapor barrier under the buildings and around the underground utilities, so vapors do not accumulate and enter the building.
Remedy Standard B is not self-implementing. TCEQ's written approval of an APAR and a RAP is required before a person can implement a response action.	§350.33(d)	The original APAR was submitted to the TCEQ in August 2023. An updated APAR was submitted to the TCEQ in August 2024.
Remedial alternatives must be appropriate considering the hydrogeologic characteristics of an affected property, COC characteristics, and the potential for unprotective exposure conditions to continue or result during the remedial period. MNA, or an in-situ technology, may be a decontamination or a control remedy depending upon the circumstances.	§350.33 (b)(2)	See above.

Response Objective	Rule Citation	Explanation
Class 1 groundwater PCLE zones must be removed and/or decontaminated to the critical groundwater PCL for each COC except in the circumstance when the affected property qualifies for a modified groundwater response.	§350.33(b)	See above. *Note: based on the groundwater pumping tests conducted at the site, the groundwater classification beneath the site is Class 2.*
An institutional control is required under Remedy Standard B for both residential and commercial/industrial land uses.	§350.31(g)	HKC proposes to deed restrict the concrete parking and drive areas along with the concrete foundations as an impermeable cover to the surface and subsurface soils and groundwater.

Based on the Tier 1 Ecological Exclusion checklist, as part of the APAR, there are no ecological receptor at the site.

Response Objective	Rule Citation	Explanation
Persons must use an active approach or MNA to reduce the concentration of COCs to the critical groundwater PCLs throughout the groundwater PCLE zone	§350.33(f)(1)(A)	Following construction of the senior living center, the monitoring wells will be re-installed, developed, and groundwater samples will be collected quarterly as deemed necessary by the TCEQ to assess the groundwater beneath the site. The only COC detected in the initial groundwater sampling event was barium, which decreased in concentration by 62% by the second groundwater sampling event (5.53 mg/l to 2.11 mg/l). The TPH C_6-C_{12} concentration in MW-5 was 2.13J mg/l during the second groundwater sampling event, which was greater than the PCL of 0.98 mg/l. *HKC notes during future groundwater sampling events, if TPH is detected again. TPH 1006 will be run on the groundwater sample in order to establish a Tier 2 PCL for the groundwater at the Property.*
Persons must prevent concentrations above critical groundwater PCLs from migrating beyond the existing boundary of the groundwater PCLE zone	§350.33(f)(1)(B)	Currently, only monitoring well MW-5 has COCs (barium and TPH) greater than the applicable PCLs, which is located on the southeast boundary of the site. HKC is proposing groundwater sampling as deemed necessary by the TCEQ to assess potential groundwater contamination and/or stability. *It is important to note the site is located within the footprint of a former refinery and therefore, there is a potential for additional source(s) of*

Response Objective	Rule Citation	Explanation
		contamination off-site.
Persons must prevent COCs from migrating to air at concentrations above $^{Air}Air_{Inh}$	§350.33(f)(1)(C)	It is proposed to install an impermeable barrier (concrete) over the site to prevent COCs from migrating to air at concentrations greater than $^{Air}Air_{Inh}$ PCLs. Additionally, there are currently no groundwater concentrations that exceed the $^{Air}Air_{Inh}$ PCL.
Persons must prevent COCs from migrating to surface water at concentrations above the PCLs for groundwater discharges to surface water (^{SW}GW)	§350.33(f)(1)(D)	There are no surface water bodies and/or sediments affected at the site and no evidence of migration to surface water and/or sediments. No creeks, lowlands, or any natural ecological features were observed within the 500 foot radius of the site except an unnamed concrete lined drainage ditch located approximately 250 feet north (across Williams Drive) and runs in an east-west direction. HKC reviewed the U.S. Fish and Wildlife (USFW), Critical Habitat for Threatened and Endangered Species website and there were no threatened or endangered habitat located within 500 feet of the Property. Additionally, HKC reviewed the Texas Parks & Wildlife, Rare Threatened, and Endangered Species of Texas interactive map and there are no threatened or endangered species located at the Property.
Persons must prevent human and ecological receptor exposure to the groundwater PCLE zone	§350.33(f)(1)(E)	The depth to groundwater is between 11 and 17 feet bgs. The impermeable barrier and passive vapor barrier will impede the potential for human and ecological receptor exposure.

Explain how the COCs will be handled, treated, disposed, or transferred to another media and document that the response action will not result in any additional potential exposure conditions due to response action activities.

There is currently no plan to excavate and/or dispose of any of the surface soils, subsurface soils, and/or groundwater at the site. However, if any soils were excavated for utilities installation, the soil will be characterized to be transported off-site, all local, state, and federal regulations will be followed. HKC proposes to prepare a Soil Management Plan for the developer, which will address the potential for any soil removal and/or transportation off-site.

State the proposed "reasonable time frame" and provide the justification for that time frame in the context of any potential for unprotective exposures to exist or develop, COC characteristics, hydrogeologic and affected property characteristics. If the reasonable time frame is different for the different affected media or for particular tracts of land, be sure to discuss that. Provide how the proposed response action will meet the objectives in a reasonable timeframe.

It is HKC's understanding that upon TCEQ's approval of this Response Action Plan (RAP), funds will be released from Texas Department of Housing and Urban Development (HUD) for the prospective purchaser to purchase the land and begin construction activities. It is assumed that the construction activities will not take more than 8 months to a year followed by the re-installation of the monitoring wells and conducting groundwater monitoring for another year to 2 years or as deemed necessary by the TCEQ to assess whether the groundwater is impacted and/or ensure stability of the groundwater concentration(s) within MW-5. It is HKC's opinion that a maximum of three (3) years following the approval of this RAP meets the objective of a reasonable timeframe.

Soil Response Action Objectives

When using removal and/or decontamination with controls or controls only, demonstrate how that physical control or combination of measures will reliably contain COCs within and/or derived from the surface soil and subsurface soil PCLE zone materials over time.

The oil/gas refinery operated from the early 1940s until the late 1950s. Based on local interviews, there was an explosion on the property adjacent north (Burkburnett Masonic Lodge) of the Property in the late 1950s to early 1960s and the oil/gas refinery operations ceased. It appears the horizontal ASTs located in the central portion of the Property were removed by the early 1970s. The two southern ASTs appeared to have been removed by the mid-1990s. Based on the property history, all impact to the soil and groundwater is more than 60 years old.

HKC proposes utilizing the concrete parking and drive areas and the building as an impermeable cover in order to minimize continued vertical migration of the soil contamination (if any). Additionally, HKC recommends a soil vapor barrier be installed beneath the building to reduce the potential of vapor migration into the building.

Explain how the removal or decontamination action will reduce the concentration of COCs to the critical surface soil and subsurface soil PCL throughout the soil PCLE zone and prevent COC concentrations above the critical soil PCLs from migrating beyond the existing boundary of the soil PCLE zone.

Not Applicable. *Control is the only action being proposed. Based on the length of time the contamination has been in place, at least 60 years and the relatively minimal migration of the soil contamination and lack of COCs within the groundwater, the geological setting and soils characteristics are contributing to the lack of migration of the COCs within the subsurface and groundwater*.

Response Action Objectives Associated Information: Attachment 1A, 1B	RAP Worksheet 1.0 Page ___ of ____	
	ID No.: T-3840	Report Date: February 2025

Groundwater Response Action Objectives

Name of groundwater-bearing unit to which this information applies: Perched Groundwater Bearing Unit

Repeat this section for each groundwater-bearing unit for which a different response action is proposed.

Groundwater classification ____ 1 __X__ 2 ____ 3

Is a modified groundwater response action being proposed for any part of the groundwater PCLE zone (§350.33(f)(2), (3), or (4))? X ___ Yes ___ No

If yes, does the affected property meet the qualifying criteria for a modified groundwater response action using a waste control unit, plume management zone, or technical impracticability? ___Yes ___No

If yes, complete the appropriate portions of this report.
If no to either question, complete the following:

Explain how the removal or decontamination action will reduce the concentration of COCs to the critical groundwater PCL throughout the groundwater PCLE zone and prevent COC concentrations above the critical groundwater PCL from migrating beyond the existing boundary of the groundwater PCLE zone.

Not applicable.

Explain how the response action will prevent COCs from migrating to air at concentrations above the PCLs for air if the groundwater-to-air PCLs ($^{Air}GW_{Inh-V}$) is exceeded.

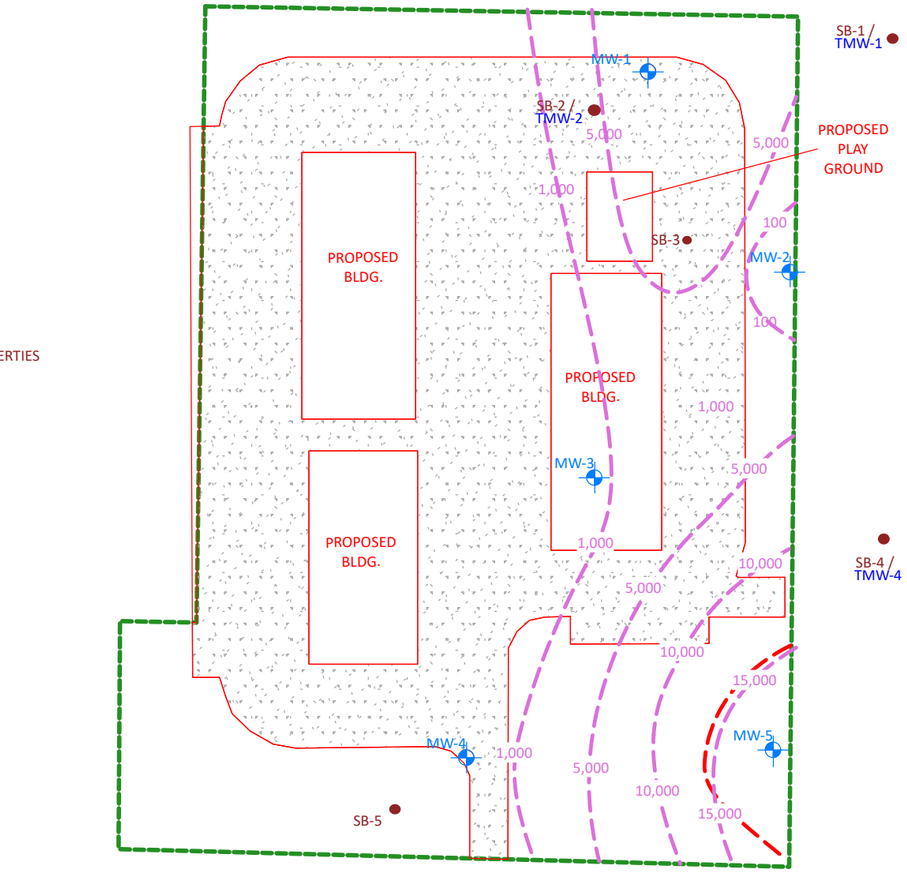
Barium does not have a groundwater-to-air PCL ($^{Air}GW_{Inh-V}$) and the TPH concentration is less than the $^{Air}GW_{Inh-V}$.

Explain how the response action will prevent COCs from migrating to surface water at concentrations above the PCLs for groundwater discharges to surface water if surface water is a factor.

There are no surface water bodies and/or sediments affected at the site and no evidence of migration to surface water and/or sediments. No creeks, lowlands, or any natural ecological features were observed within the 500 foot radius of the site except an unnamed concrete lined drainage ditch located approximately 250 feet north (across Williams Drive) and runs in an east-west direction.
HKC reviewed the U.S. Fish and Wildlife (USFW), Critical Habitat for Threatened and Endangered Species website and there were no threatened or endangered habitat located within 500 feet of the Property. Additionally, HKC reviewed the Texas Parks & Wildlife, Rare Threatened, and Endangered Species of Texas interactive map and there are no threatened or endangered species located at the Property.

Explain how the response action will prevent human and ecological receptor exposure to the groundwater PCLE zone.

The depth to groundwater is between 11 and 17 feet bgs. The impermeable barrier and passive vapor barrier will impede the potential for human and ecological receptor exposure.



LEGEND

- Property Line Based on Survey
- GW Monitoring Well
- Soil Sample Location / Temporary GW Well
- Subsurface Soil Concentration Map Based on TPH 1005. COCs concentrations follow same trend for a lesser extent (mg/kg)
- Impacted Area Based on TPH 1005. COCs concentrations follow same trend for a lesser extent (mg/kg)
- Impacted Area Based on Metals (Barium) and TPH. All other COCs concentrations were below applicable limits (mg/l)

Design and Layout of the vapor collection system will be determined after completion of the buildings design and utilites layout.

STATE OF TEXAS
H.K. CHAMSEDDIN
79472
REGISTERED PROFESSIONAL ENGINEER

2/20/2025

F-11343 Exp. 07/31/25

N

0 100 200

Approximate Scale 1" = 100 ft

HKC & Associates, Inc.
2655 Villa Creek Drive, Suite 205
Dallas, TX 75234
Tel: (972) 406-8039

IHW-CA T No: 3840
RN No.: 111755963
Date: 02/13/2025
Project Number: 225006
Ver.: 4.01

~5 Acres of Vacant Land
South of Williams Drive
Burkburnett, Texas 76354

RESPONSE ACTION PLAN
February 2025

ATTACHMENT 1A
Site map showing proposed buildings layout, soil, GW Sample Locations and identifed Plumes

Response Action Design	RAP Worksheet 2.0 Page ___ of ____	
Associated Information: Attachment 2A, 2B, 2C	ID No.: T-3840	Report Date: February 2025

Response Action Design

Use this worksheet to provide detailed descriptions of the response action. Attach design and layout drawings and equipment specifications in Attachment 2A.

Media: Soil Vapor

List all media to which this information applies. If the response action is different for another media, complete a separate worksheet.

Provide a detailed description of the response action. Describe the removal action, decontamination, treatment system(s), and/or physical or institutional control actions that are proposed for each media and discuss the reasons for choosing the response action(s). Identify and describe any ecological services analysis and compensatory restoration plan that will be utilized (if so, include the complete ESA and compensatory restoration plan in Attachment 2C).

"Three primary factors drive the occurrence of vapor intrusion (VI) in buildings:

- contaminant properties, concentrations and locations,
- potential entry routes (e.g., floor drains, French drains, sumps, seams or cracks in the floor slab, utility penetrations, and open top blocks in the foundation walls) and
- pressure differentials between the building and the subsurface that could draw contaminants from the soil into the building"[1].

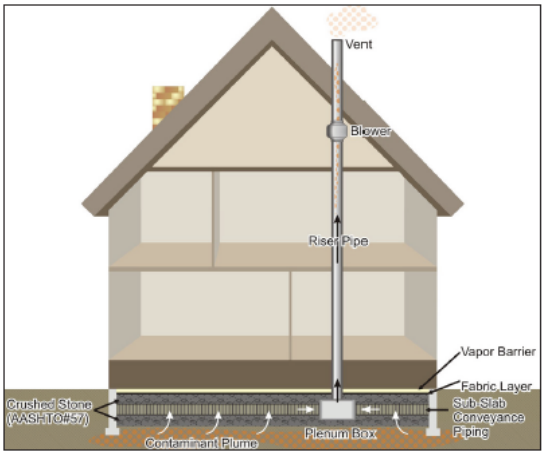
HKC is proposing a passive vapor barrier and will coordinate with the building civil engineer in the design and installation of the passive vapor barrier.

"There are five basic components to effective VI resistant construction:

- permeable sub-slab support material (e.g., gravel),
- venting all sub-slab areas below occupied spaces,
- properly-sized sub-slab and riser piping,
- a sealed vapor barrier, and
- if an active system is specified, a properly-sized blower to maintain sufficient negative pressure beneath the slab.

Passive venting systems typically have the first four components above, but do not have a blower to mechanically draw soil gases from sub-slab collection piping to above the roof. Rather, they rely on thermal and atmospheric effects to draw the soil gases into the piping and vent it outside. … A typical active mitigation system is illustrated below. A passive system would be similar but would not include a blower."[2]

[1]Naval Facilities Engineering Command, Vapor Intrusion Mitigation in Construction of New Buildings Fact Sheet
[2]Naval Facilities Engineering Command, Vapor Intrusion Mitigation in Construction of New Buildings Fact Sheet



Source: Figure 1 of the Naval Facilities Engineering Command, Vapor Intrusion Mitigation in Construction of New Buildings Fact Sheet

After the ground has been "proof-rolled" by removing undesirable items, drying, leveling and compacting the soil, a permeable layer of crushed stone will be installed (AASHTO #57 is preferred). Perforated ventilation pipes will run beneath the slab and direct the vapors to a centrally located plenum box, which is connected to vertical riser piping that transports soil gases to vent above the roof line. Sizing the conveyance pipe is based on the square feet of the area to be vented and the number of pipe fittings used between the sub-slab plenum box and the cent termination point. It will be recommended a filter fabric layer be laid down prior to the 10-mil polyethylene or polyolefin VI barrier. ***The most important part of the effectiveness of any vapor barrier system is achieving a tight seal to foundation walls and around utility penetrations through the membrane.*** The concrete slab installer will be monitored to ensure there are no puncture(s) in the vapor barrier and to drain off extra water that may be associated with the concrete finishing process.

Describe all major treatment system components and equipment of the response action. Illustrate the response action design and provide equipment specifications in Attachment 2A.

See above.

List permits or registrations needed to construct or implement the response action, including permits or registrations needed to conduct studies or tests. For VCP sites, list the permits that would be required if the site was not in the VCP (required by the VCP).

Permitting/Registration Authority	Type of permit/registration	Permit or registration number if already issued	Anticipated application date
None anticipated			

Identify and discuss the results of any studies or tests, such as pilot studies, feasibility studies, technical impracticability studies, treatability studies, and/or toxicity studies conducted or proposed to be conducted at the affected property. Discuss the reason for the study or test and how it verifies the effectiveness and appropriateness of the chosen response action or documents that a particular response action is not appropriate for the affected property. Describe how the results of completed studies or tests determined the design or choice of response action. Attach any separate reports and supporting documentation in Appendix 3.

No studies or tests, such as pilot studies, feasibility studies, technical impracticability studies, treatability studies, and/or toxicity studies conducted or proposed to be conducted at the affected property. However, included in **Appendix 3** is a copy of the Naval Facilities Engineering Command, Vapor Intrusion Mitigation in Construction of New Buildings Fact Sheet, which is referenced throughout this RAP.

Institutional Control	RAP Worksheet 2.4 Page ___ of ____	
Associated Information: Appendices 4, 5	ID No.: T-3840	Report Date: February 2025

Complete this worksheet if an institutional control will be used as part of the response action. Include a draft of the proposed institutional controls in Appendix 4. Provide a list of landowners from whom landowner concurrence will be requested, as necessary, in Appendix 5.

Specify the property for which this applies. Approximately 5.0-Acres of Vacant Land

Repeat this worksheet for each different property for which an institutional control will be used.

Institutional Control	Type of Institutional Control[1]				Property Ownership		Anticipated Filing Date[2]
	Deed Notice	Restrictive Covenant	VCP Certificate of Completion	Equivalent zoning or governmental ordinance	Check if pertinent tract of land is owned by the person	Check if the pertinent tract of land is owned by an innocent owner or operator	
Document use of commercial/industrial land use (§350.31(g))							
Document use of physical or institutional control under Remedy Standard B §350.31(g))	X				Potential Purchaser		120 days following the approval of the RAP
Document notice of on-going long term response action (§350.31(h))	X				Potential Purchaser		120 days following the approval of the RAP
Document use of occupational inhalation criteria as RBELs (§350.74(b)(1))							
Document variance from the default exposure factors (§350.74(j)(2)(L))							
Document the use of a non-default soil exposure area (§350.51(l)(3)&(4))	X				Potential Purchaser		120 days following the approval of the RAP
Document WCU exclusion area (§350.33(f)(2))							
Document establishing a PMZ (§350.33(f)(4)(C)(I))							
Document the demonstration of technical impracticability							

[1] Check the appropriate box(es) to indicate the type of institutional control required for the proposed response action.
[2] Specify date or amount of time after RAP approval.

Institutional Control	RAP Worksheet 2.4 Page ___ of ____	
Associated Information: Appendices 4, 5	ID No.: T-3840	Report Date: February 2025

Institutional Control	Type of Institutional Control[1]				Property Ownership		Anticipated Filing Date[2]
	Deed Notice	Restrictive Covenant	VCP Certificate of Completion	Equivalent zoning or governmental ordinance	Check if pertinent tract of land is owned by the person	Check if the pertinent tract of land is owned by an innocent owner or operator	
(§350.33(f)(3)(F))							
Relocation of soils containing COCs for reuse (§350.36(b)(4) and (c)(4))							

Performance Measures and Potential Problems	RAP Worksheet 3.0 Page ___ of ___	
	ID No.:	Report Date:

Performance Measures

List and describe the performance measures for each environmental medium containing a PCLE zone that will be used to determine if reasonable progress is being made by the response action in a timely manner. Use these measures to document effectiveness of the response action in the RAER.

Not applicable. Following the development of the proposed senior living facility, one to 2 years or as deemed necessary by the TCEQ groundwater sampling will be conducted to ensure the groundwater has not been impacted and/or if the groundwater concentration(s) are stable.
In addition, air samples will be collected over a period of 24 hours at the plenum box to determine effectiveness of the passive air venting system.

Potential Problems

Complete the table for the response action. When the response action consists of several components or multiple actions, complete one table for each major component or action.

Response Action Name/Designation: Vapor Barrier

List the potential problems that might be reasonably anticipated for the response action, describe the impact of each problem, and the response to the problem.

Description of the Potential Problem	Impact	Will this cause a response action failure?		Corrective Response
		Yes	No	
Vapor barrier puncture	Reduces the effectiveness of the vapor barrier.		X	Promptly repair the barrier using appropriate patching materials and techniques specific to the barrier type
Cracks or gaps around foundation walls	Reduces the effectiveness of the vapor barrier.		X	Promptly seal any and all gaps using appropriate patching materials and techniques specific to the barrier type
Water intrusion detected	Reduces the effectiveness of the vapor barrier.		X	Identify the source and take corrective measures to prevent future issues.

Monitoring and Sampling Associated Information: Attachment 3A	RAP Worksheet 3.1 Page ___ of ____	
	ID No.: T-3840	Report Date: February 2025

List the monitoring and sampling of COC concentrations or other parameters that will be conducted during the response action. Illustrate the monitoring or sampling locations in Attachment 3A. If statistics or geostatistics will be used, provide details in Appendix 7. If monitoring or observation wells will be constructed for the response action, provide well construction details in Attachment 2B if not previously provided.

Monitored Media	COC[1]	Other parameter (specify)	Sampling Method[2]	Sampling points or locations[3]	Depth/Height[4] (ft.)	Analytical or Field Screening Method	Sampling or Monitoring Frequency[5]
Surface Soil							
Subsurface Soil							
Groundwater	VOCs		Same as APAR	Re-installed MW-1 through MW-5	NA	NA	Quarterly for 1-2 years or as deemed necessary by the TCEQ
	SVOCs						
	Barium						
	TPH						
Surface water							
Sediment							
Air							
Other Media (specify)							

Explain the reasons for the above-listed monitoring and sampling plan.

HKC is recommending re-installing the monitoring wells at the site following construction in order to assess whether the TPH and/or barium concentrations are stable to decreasing.

[1] Specify the COCs to be monitored in this media. List either type of COC (such as VOCs, metals) if all the COCs of that type will be monitored the same way.
[2] Describe the sampling or monitoring methods and QC procedures in Appendix 1 unless the proposed sampling or monitoring procedure is the same as the sampling or monitoring procedure described in the APAR.
[3] Specify the sampling or monitoring point, such as the specific monitor well or general sampling or monitoring location.
[4] Specify the depth or height of the sampling or monitoring points.
[5] Specify the frequency at which this monitoring or sampling will occur.

Operation and Maintenance	RAP Worksheet 3.2	Page ___ of ____
	ID No.:	Report Date:

Use this worksheet to describe the operation and maintenance (O&M) activities for each response action. In situations where the response action consists of more than one major component, for clarity one worksheet can be completed for each major component.

Response Action Name/Designation: Vapor Barrier

List all portions of the response action to which this information applies.

Describe the O&M and inspection activities that will be required to operate and maintain response action components.

Due to the fact that the passive vapor barrier does not have any mechanical devices, there are no operation and maintenance components, other than visual inspections of the concrete (i.e., cracks), and collection of air samples at the plenum box.

List and discuss the key operating parameters for a properly functioning response action. Address how changes in these parameters will result in operating changes, providing sufficient detail to explain how the operator will know the component is functioning properly.

No applicable.

List the routine tasks required to operate the response action.

None.

List the routine tasks required to maintain the response action, including scheduled inspections, maintenance, and component replacement.

Visual inspections of the impermeable cover (i.e., concrete) will be conducted annually.

Confirmation Sampling Plan Associated Information: Attachment 4A	RAP Worksheet 4.0 Page ___ of ___ ID No.: Report Date:

List the COCs and other parameters that will be sampled to confirm completion of the response action. Illustrate the monitoring or sampling locations in Attachment 4A. If monitoring or observation wells will be constructed for the response action, provide well construction details in Attachment 2B if not previously provided. If needed, describe the sample collection and handling methods, if not previously provided, in Appendix 6.

Media	COC[1]	Other parameter (specify)	Sampling Method	Sampling points[2]	Depth/height (ft.)	Analytical Method	Sampling Frequency
Surface Soil							
Subsurface Soil							
Groundwater	VOCs	NA	Same as APAR	Re-installed MW-1 through MW-5	NA	EPA 8260B	Quarterly for 1-2 years or as deemed necessary by the TCEQ
	SVOCs					EPA 8270C	
	Barium					EPA 6020B	
	TPH					TX 1005	
Surface water							
Sediment							
Air							
Other media (specify)							

Explain the reasons for the above-listed sampling plan. Discuss statistical or geostatistical methodology(ies) which will be applied, if any, in the data collection process. Discuss any assumptions made in the statistical/geostatistical assessment, and how they will be met.

HKC is recommending re-installing the monitoring wells at the site following construction in order to assess whether the TPH and/or barium concentrations are stable to decreasing. *It is important to note the site is located within the footprint of a former refinery and therefore, there is a potential for additional source(s) of contamination off-site*. No groundwater concentrations exceed the $^{Air}Air_{Inh}$ PCL.

[1] Specify either a specific COC or type of COC (such as VOCs, metals).
[2] Specify the sampling point to the degree it is known, (for example, MW-1, or near former boring #2).

Post-Response Action Care Associated Information: Attachments 5A-5C	RAP Worksheet 5.0 Page ___ of ____ ID No.: T-3840	Report date: February 2025

Complete this worksheet only if Remedy Standard B will be used.

What is the proposed initial post-response action care period? (default 30 yr.) 30 years

If the proposed initial post-response action care period is less than 30 years, provide a technical justification in accordance with §350.33(h).

Not applicable.

What is the foreseeable land use during the post-response action care period? Residential

Describe how the future use of the property will not compromise the integrity of the physical controls, will not interfere with the function of the monitoring systems, will not pose a threat to human health or the environment, and will be in accordance with any institutional controls.

The future use of the property is proposed to be a senior living facility and will not compromise the integrity of the physical control currently proposed for the site.

Briefly describe the proposed post-response action care activities. Describe the type of monitoring and/or inspections to be performed. Discuss the rationale for not including COC(s) analyzed during the response action, monitoring or sampling point location, frequency of monitoring and/or inspections, and the duration of the monitoring program.

Following installation of the passive vapor barrier, annual inspections of the concrete will be conducted. A passive vapor barrier system inspection log will include details like the date, inspector's name, location inspected, building type, area inspected (slab perimeter), sealing around penetrations, any signs of damage or deterioration, areas requiring repair, and a summary of findings with recommendations for corrective actions.

Will PRAC sampling procedures be the same as those as previously documented for monitoring and/ or confirmation sampling? NA ____ Yes ____ No

If no, provide in Appendix 6 a description of the monitoring or sampling collection procedures to be conducted during the post-response action care period.

Cost Estimate

Complete this portion of the form only if a physical control is proposed (installed hydraulic control system, slurry wall, cap, etc.). Provide in Attachment 5B a detailed cost estimate for a third party to operate and maintain the physical control during the PRAC period, based on current dollar amount.

Specify the physical control to which this information applies Passive Vapor Barrier

Complete this worksheet for each physical control that will be used as part of the response action.

What is the total estimated annual cost of O&M for the PRAC period? $ To be Determined By Contractor

What is the total estimated cost for a third party to perform PRAC activities? $ To be Determined

Identify the type of financial assurance mechanism to be used, and the contact person managing fiduciary responsibility, if known.

Not available at this time. Upon approval of the RAP, and HUD provide the funds, the responsible party

will purchase the property, complete the design of the proposed development and then will provide the insurance mechanism for it.

Does the person meet the criteria and definition of a small business? (see §350.33(n)) ___Yes ___No
If yes and the person desires to pursue the reduced amount of financial assurance, provide a legally binding affidavit as Attachment 5C. Include in the affidavit the information requested in 30 TAC §350.33(l), (m), and (n). An example affidavit is attached in the instructions.

Implementation Schedule	RAP Worksheet 6.0 Page ___ of ____	
	ID No.: T-3840	Report Date: February 2025

Document the proposed schedule for implementing the response action. Include all major response action activities through the life of the project, including all removal, decontamination, and control actions, component installations, O&M, monitoring, and post-response action care activities.

Implementation of Response Action (specify component or action)	**Start**	**Finish**	**Duration**
Purchase of property, finalization of civil plans	Summer 2025	December 2025	6 months
Construction of senior living facility with passive vapor barrier	Winter -fall 2026	Fall 2026	1 year
Groundwater monitoring well installation and groundwater sampling events.	Fall 2026	Fall 2027	1 year
RACR	Fall 2027	winter 2028	3 months

List the proposed schedule for report submittals. Add additional lines if more reports than listed will be needed to complete the response action.

Reports	**Submittal date**
Response Action Effectiveness Report (RAER)	
RAER submittal number 1	
RAER submittal number 2	
RAER submittal number 3	
Response Action Completion Report (RACR)	**December 2028**
Post-Response Action Care Report (PRACR)	
PRACR submittal number 1	December 2038
PRACR submittal number 2	December 2048
PRACR submittal number 3	December 2058

APPENDIX 3 Vapor Intrusion Mitigation in Construction of New Buildings Fact Sheet

APPENDIX 3

NAVFAC
Naval Facilities Engineering Command

ENVIRONMENTAL RESTORATION

Vapor Intrusion Mitigation in Construction of New Buildings Fact Sheet

Introduction

Vapor intrusion (VI) is the migration of volatile chemicals from subsurface soil and/or groundwater into the indoor air of overlying buildings. Most VI events occur when volatile organic compounds (VOCs) are released into the subsurface from sources such as underground storage tanks, dry cleaners, gasoline stations, or industrial processes such as degreasing metals. VOCs typically associated with VI are chlorinated solvents, including carbon tetrachloride, tetrachloroethene (PCE), trichloroethene (TCE), and methylene chloride, and gasoline derivatives such as benzene. Hazards presented by these chemicals are typically chronic human health effects such as cancer, organ toxicity, or reproductive toxicity. Gases, such as methane migrating from landfills, may also present potential explosive hazards.

If the contaminants present in the subsurface are predicted to result in indoor air concentrations above acceptable risk levels, VI mitigation measures should be incorporated into the design of any new buildings. This fact sheet provides an overview of VI mitigation methods used in new buildings along with important factors to consider when selecting and designing these mitigation systems. In new construction, VI mitigation can include passive methods such as vapor barriers and natural venting systems; active systems such as sub-slab depressurization (SSD) systems; or a combination of passive and active methods. VI mitigation systems integrated during construction of new buildings are more cost effective, function better and are less obtrusive than mitigation systems retrofitted into existing buildings.

This fact sheet was prepared by the Navy Alternative Restoration Technology Team (ARTT) workgroup for use by Navy personnel such as remedial project managers (RPMs) and planners. RPMs may want to consider it for inclusion in Land Use Controls (LUCs) or provide it to base personnel or the public for informational purposes. Typically, Environmental Restoration, Navy (ER,N) funds shall not be used to install VI mitigation systems for new construction; however, RPMs and other Navy personnel should consult the Navy Environmental Restoration Program (NERP)/Defense Environmental Restoration Program (DERP) manuals for the latest guidance.

Key Factors When Considering VI Mitigation

Once the vapor sources have been assessed and it has been determined that there is potential for VI to pose an unacceptable risk in buildings constructed on the site, the next step is to select which preconstruction mitigation strategies should be implemented to prevent VI. Three primary factors drive the occurrence of VI in buildings:

- contaminant properties, concentrations and locations,
- potential entry routes (e.g., floor drains, French drains, sumps, seams or cracks in the floor slab, utility penetrations, and open top blocks in the foundation walls) and
- pressure differentials between the building and the subsurface that could draw contaminants from the soil into the building.

Understanding these components and the effects that they have on the transfer of subsurface VOCs to indoor air will help to determine which VI mitigation strategies should be integrated into the construction of a new building.

Prevention of VI in New Construction

New construction provides many opportunities to prevent VI that are not available for existing buildings. For example, at some sites, the area most likely to produce unacceptable VI can be avoided and set aside for another purpose such as green space. Also, new buildings can sometimes be designed to include a highly ventilated, low occupancy area at ground level, such as an open parking garage. It should be noted, however, that if contaminated areas of the site are to be covered with pavement, the resultant effects on migration of vapors should be considered in order to avoid effects on adjacent structures.

Methods for VI mitigation in new construction can be passive (such as vapor barriers and natural venting systems) or active (using blowers to depressurize the sub-slab area). Frequently in new construction, elements of both passive and active methods are combined (e.g., a vapor barrier may be installed along with active SSD) or a passive ventilation system may be designed to allow for conversion to an active system (e.g., by adding blowers) at a later time if the passive system fails to prevent VI.

For construction of new buildings, there are five basic components to effective VI resistant construction:

- permeable sub-slab support material (e.g., gravel),
- venting all sub-slab areas below occupied spaces,
- properly-sized sub-slab and riser piping,
- a sealed vapor barrier, and
- if an active system is specified, a properly-sized blower to maintain sufficient negative pressure beneath the slab.

Passive venting systems typically have the first four components above, but do not have a blower to mechanically draw soil gases from sub-slab collection piping to above the roof. Rather, they rely on thermal and atmospheric effects to draw the soil gases into the piping and vent it outside. Active SSD systems are powered by blowers that create a vacuum beneath the slab and actively vent sub-slab gases through solid conveyance piping to above the roof line. A typical active mitigation system is illustrated in Figure 1. A passive system would be similar but would not include a blower.

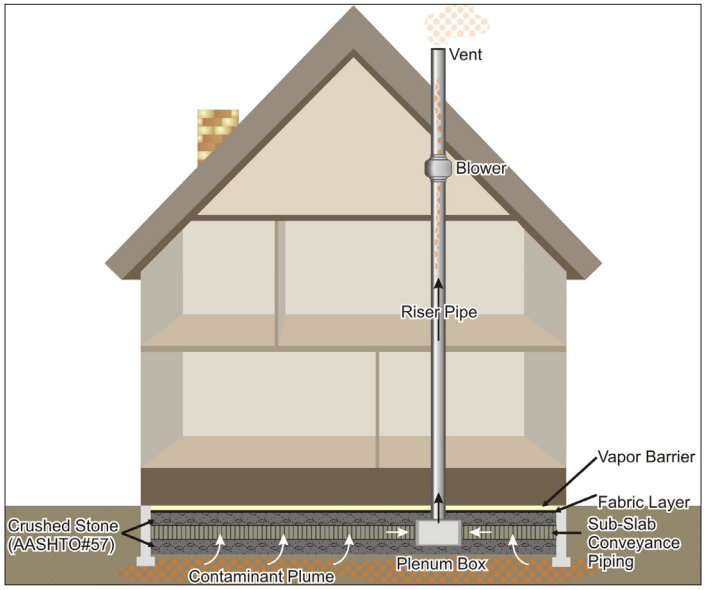


Figure 1. VI mitigation system with a vapor barrier and active SSD.

Permeable Sub-slab Support Material

After the ground has been proof-rolled by removing undesirable items, drying, leveling and compacting the soil, a permeable layer of crushed stone should be installed (Figure 2).

Figure 2. Proof-rolled ground covered with 8 inches AASHTO #57 stone.

Eight inches or more of a highly permeable, coarse aggregate such as American Association of State Highway and Transportation Officials (AASHTO) #57 stone is preferred. There should be a minimum of 2 inches of crushed stone above and below any sub-slab conveyance pipe to prevent slab cracking. If 6-inch pipe is used, the ground beneath the pipe may need to be trenched to ensure sufficient crushed stone for slab support (Figure 3).

Figure 3. Gravel placed over proof-rolled site with trenching for vent piping.

Venting

The most efficient way to vent sub-slab soil gas is using perforated ventilation pipes that run beneath the slab and direct the vapors to a centrally located plenum box. The plenum box is constructed of hollow concrete blocks turned on their sides with an empty space in the center (Figure 4).

Figure 4. Connecting isolated slab areas with a central plenum box.

The box is connected to vertical riser piping that transports soil gases to vents above the roof line. There should be a minimum of 8 inches of crushed stone beneath and beside the plenum box. All slab areas within the occupied portions of the building need to be included in the sub-slab vapor collection system and connected to the plenum. Footings at grade changes and thickened slabs beneath concrete masonry walls often create isolated sub-slab areas (Figure 5). These isolated areas need to be addressed by placing adequate gravel below them or adding ventilation pipe to connect them to the system. Commercial venting products such as those consisting of a thick rectangular-shaped roll-out plastic and fabric-covered conveyance plenum, or perforated collection pipe can provide a conduit to connect isolated slab areas to a central sub-slab plenum box (Figure 6).

Figure 5. Isolated gravel beds.

Figure 6. Commercial venting product has properties similar to 4-inch PVC pipe with lower installation costs.

Sizing the conveyance pipe is based on the square feet of the area to be vented and the number of pipe fittings used between the sub-slab plenum box and the vent termination point. Drag coefficient tables exist for different pipe diameters and assorted fittings. Since coordinated drawings are usually not part of the design phase, the person designing the system should plan for twice the number of pipe fittings when calculating the pressure drop associated with a riser pipe system. The most commonly used riser pipe material is polyvinyl chloride (PVC) because of its availability, low cost, and low airflow drag coefficients. No-hub cast iron pipe is used when there is concern of exceeding the flame spread or smoke index. This is a concern when conveyance piping passes through a return air plenum. Protective pipe enclosures or steel pipe is used in areas of vehicle or fork lift traffic.

Conveyance piping can be joined together beneath the slab to minimize vertical risers (Figure 7). A 3-inch riser pipe can service up to 1,500 ft^2, a 4-inch riser can service up to 4,000 ft^2 and 6-inch riser pipe can service up to 15,000 ft^2. Sub-slab conveyance pipe should have 5/8-inch condensate drain holes that face down at 4-inch intervals. If factory perforated pipe is used, one set of holes should face down.

Figure 7. Risers grouped for future pairing and efficient construction.

Vapor Barriers

Selecting the right vapor barrier is a critical part of the VI mitigation system and the vapor barrier can be the most expensive part of the system. The type of vapor barrier and the quality of the seal will determine the efficiency and effectiveness of the protective measure. After the contaminants of concern (COCs) have been identified, the protective qualities of the vapor barrier material should be matched to the identified compounds to minimize potential for chemical breakthrough. The types of vapor barriers available and their advantages and disadvantages are summarized in Table 1.

The most important part of the effectiveness of any vapor barrier system is achieving a tight seal to foundation walls and around utility penetrations through the membrane. A filter fabric layer is recommended to protect all vapor barriers from punctures associated with construction debris and the underlying stone. The concrete slab installer must not be allowed to puncture the vapor barrier to drain off extra water that may be associated with the concrete finishing process.

Table 1. Types of vapor barriers used in VI mitigation.

Vapor Barrier Material	Advantages	Disadvantages
6-mil polyethylene or polyolefin (Figure 8).	• Inexpensive • Often made from post-consumer recycled materials.	• Permeance water vapor transmission rate (WVTR) is between 0.1 to 0.3 perms; considered a vapor retarder not a true vapor barrier - slows down vapor transmission but does not completely block vapors • May not be chemically resistant • Difficult to seal at walls and utility penetrations • Low puncture and tear resistance compared to reinforced materials • Standard applications with unsealed seams are only partially effective for preventing VI • Not recommended for most VI applications.
>10-mil polyethylene or polyolefin (Figure 9).	• Relatively inexpensive • Permeance WVTR is <0.1 perms (considered a true vapor barrier; almost completely blocks vapors) • Often made from post-consumer recycled materials.	• May not be chemically resistant • Difficult to seal at perimeter walls and utility penetrations • Low puncture and tear resistance compared to reinforced materials of similar thickness.

Table 1. Types of vapor barriers used in VI mitigation. (continued)

Vapor Barrier Material	Advantages	Disadvantages
Cross laminate polyethylene or polyolefin; generally 3-ply materials with woven scrim between two polyethylene sheets.	• Permeance WVTR is <0.1 perms (considered a true vapor barrier; almost completely blocks vapors) • Puncture/tear resistance up to 50 times greater than 6-mil polyethylene/polyolefin vapor retarder. • Improved sealing at perimeter walls and utility penetrations because manufacturer-supplied tapes and cloth binders are generally used.	• Moderately expensive • May not be chemically resistant.
Spray-applied vapor barrier: Non-woven geotextile fabric base over stone layer followed by a spray-applied coating. The coating material binds to the support fabric, column pads, side foundation walls; minimum thickness of 60 mil; total thickness including support fabric is 73 mil (see Figures 10, 11, and 12).	• Permeance WVTR is <0.1 perms (considered a true vapor barrier; almost completely blocks vapors) • Provides a nearly gas-tight seal since coating material binds to column pads and side foundation walls. • Leak test is performed following installation and any leaks are repaired. • Installers must be licensed by manufacturer. • Coating selected for chemical resistance to specific contaminants.	• Generally more expensive than other types of barriers.

Note: Information on the chemical resistance and ability of a particular vapor barrier material to block a particular contaminant should be obtained from the manufacturer of the specific product being considered. Some information may be available on the Web sites for specific vapor barrier products.

Figure 8. Standard vapor barrier with unsealed seams.

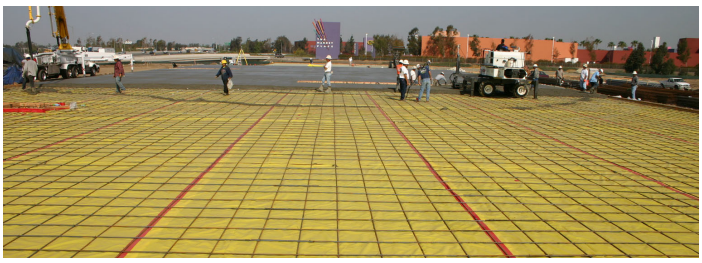


Figure 9. Polyolefin vapor barrier with sealed seams shown with rebar and concrete slab being installed over top.

Figure 10. Geotextile fabric is placed over stone followed by spray application of the sealant.

Figure 11. Spraying an emulsified asphalt latex barrier.

Figure 12. Installation of a spray-applied barrier at a large site.

Active VI Mitigation Systems

Active VI mitigation systems in new construction generally consist of a sub-slab depressurization system with ventilation piping connected to a blower that depressurizes the sub-slab and vents the vapor above the roof level. Depending on the leakage associated with the vapor barrier, the configuration of the sub-slab conveyance piping and the design of the plenum box, a single properly-sized collection system can service up to 15,000 ft^2 of floor space. The design goal is to create a minimum sub-slab negative pressure of -0.02 inches of water column (in. w.c.) at the area that is most distant from the plenum box using a blower that consumes no more than 140 watts and can move 200 cubic feet per minute (CFM) at 1.0 in. w.c. static pressure. Even though lower pressure differentials may be able to successfully arrest the soil gases, a pressure of -0.02 in. w.c. is recommended as a design goal to provide a safety factor for construction conditions that could potentially reduce the efficiency of vacuum distribution (e.g., sand particles mixed in with the crushed stone, elevated sub-slab utility conduits, presence of overburden from trenching, and conveyance piping that has been crushed or distorted by unscheduled vehicle traffic).

When designing a depressurization system and specifying blowers, it is important to include the projected piping pressure losses. Speculating the final active system airflow is one of the most difficult parts of the design process. Airflow is a function of blower capacity, piping size, fittings and layout, sub-slab aggregate resistance, soil permeability and slab and foundation leakage. The performance required from the blower to achieve the specified vacuum field is largely determined by the slab leakage and quality of the vapor barrier seal. If there is clean crushed stone and 4-inch conveyance piping, a blower that can move 200 CFM at -1.0 in. w.c. can create a vacuum field of -0.02 in. w.c. or greater over a 4,000 ft^2 area. Reducing the slab leakage can significantly increase the coverage area. The primary design goal should always be highly permeable sub-slab material and minimal slab leakage.

During the construction phase, soil probes should be embedded in the crushed stone to allow testing of system effectiveness after the slab has been poured (Figure 13). Probes are embedded because drilling through the concrete creates an unnecessary risk of damaging sub-slab utilities and will void most vapor barrier warranties. Probes should be located distant from the plenum box near the projected end of the negative pressure field. These probes are typically made of heavily perforated PVC pipe that is 2 inches in diameter or less and connected to rigid, smaller diameter pipe that extends to a sampling port above the slab. Typically, this is 0.5-inch gas pipe that is embedded into a column pocket to protect it from damage during the concrete pour and power trowel process. Depending on the potential for soil vapor entry, these probes could be as numerous as one per isolated foundation area. At least one probe should be installed per 5,000 ft^2 of slab area and for each different slab elevation. Each blower system should have at least one soil probe.

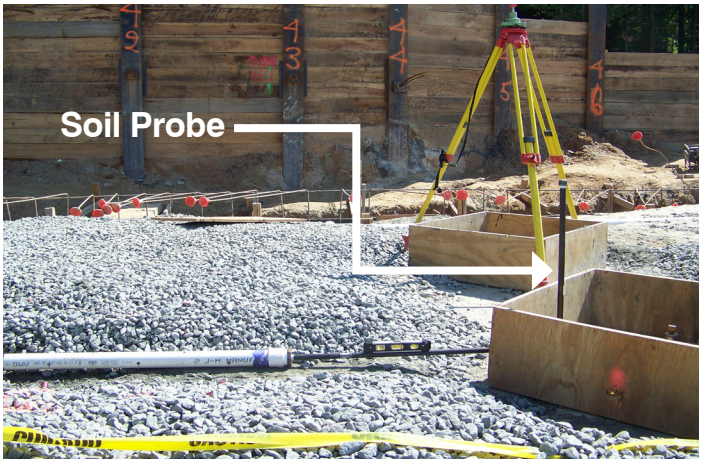


Figure 13. Forms for vertical column support pad with embedded soil probes.

The effectiveness of any soil depressurization system should be quantified after the slab is poured and allowed to cure for at least 14 days. The test is performed by temporarily installing the specified blower and measuring the extension of the negative pressure field. The efficiency of the system is measured by temporarily activating the system after hooking up the blower that has been specified for permanent installation. The pressure field extensions should be measured at the sample ports that are at the end of the embedded probes. A micromanometer that can measure to a sensitivity of -0.001 in. w.c. should be used. If vacuum field measurements at the probe most distant from the blower exceed 0.036 in. w.c. (9 pascals), the top of the acceptable vacuum range specified by ASTM, the procedure can be repeated with a blower that uses less electricity. If favorable test results are obtained, the blower can be downgraded to a lower wattage blower that will save energy and reduce operating expenses. The minimum induced sub-slab vacuum field in an unfinished, unheated building should be -0.02 in. w.c. The selected blower model, vacuum field and exhaust airflow values should be recorded and included in the construction documents that are presented at the end of the project. Sampling for indoor air contaminant concentrations should occur once the building is weather tight and the air handling systems are operational.

Passive Mitigation Systems

As noted above, passive VI mitigation methods do not require an electrical power source to operate. These include physical vapor barriers and piping systems that rely on natural ventilation to move air from the subsurface to prevent the buildup of contaminated vapors. The integrity of the vapor barrier and efficiency of a passive vent system are two main variables in determining the effectiveness of a passive system. Punctures or tears in the vapor barrier that can occur during the construction process will diminish the effectiveness of a passive system. Efficiency of passive venting can be affected by weather, functioning better in some conditions than others. However, the benefit of a well-designed passive system is that it can be converted to an active system if indoor air concentrations are determined to exceed acceptable risk levels.

It should be noted that passive mitigation methods alone may not be acceptable to state regulators when human health risk is above acceptable limits. For example, in California, the installation of a vapor barrier alone is not an acceptable VI mitigation method where indoor air risk is greater than or equal to 1×10^{-6} or the hazard index is greater than or equal to 1.0. In these situations, a vapor barrier can only be used in combination with an active VI mitigation system such as SSD.

Energy and Sustainability Considerations

When designing a system to prevent VI, long-term energy considerations need to be factored into the design. Greater design efficiency reduces operational costs and extends the time that an active venting system can be sustained for a fixed capital expenditure. A streamlined sub-slab collection plenum system with minimal conveyance piping fittings will increase the efficiency of sub-slab vacuum distribution and reduce the energy required by the blower. Three components need to be considered when attempting to lower the operational energy costs of a VI mitigation system. They are: the cost of operating the blower(s) that will maintain the negative pressure beneath the slab, the cost of the heat that is being drawn out of the building and the cost of the cooled conditioned air that is being drawn out of the building. An additional cost that must be considered is the cost of replacing the blowers themselves. Additional blowers will result in higher operations and maintenance costs. Selecting a sealed vapor barrier system that minimizes leakage is the largest variable in reducing ongoing energy costs. The cost to heat or cool the conditioned air that is drawn into the collection system can be a greater operational expense than the electrical cost to operate the blowers. Installing a tightly-sealed vapor barrier system and optimizing the blower size can save up to $1,000 annually in heating, cooling and electric costs per 10,000 ft^2 of floor space. Also, a new type of mitigation control system is currently being piloted that will optimize the blower speed on active mitigation systems. This new control system has pressure sensors in the soil and in the building and uses software to adjust the blower speed to attain the targeted pressure differential between building and soil. This allows the blower to run at reduced speeds while still achieving the desired mitigation results. Optimizing the blower speed in this way is expected to reduce energy costs of active mitigation systems by as much as 50 percent. These systems are expected to be commercially available soon.

Cost for VI Mitigation Systems in New Construction

Designing and implementing a VI mitigation system as part of planning and construction is far more cost effective than a retrofit installation midway through construction or after construction is complete. The cost of installing a VI mitigation system during construction can vary significantly based on the COCs, the soil properties, and construction style of the building. The design and installation costs can range from $2.50/$ft^2$ to $6.75/$ft^2$; however, for most buildings, the cost of a combination vapor barrier/venting system is in the $3.00/$ft^2$ to $4.00/$ft^2$ range. For comparison, installation costs to retrofit mitigation systems into existing buildings typically range from $5/$ft^2$ to $8/$ft^2$.

Several variables affect these costs and every building will be different. The type of vapor barrier required and construction style of the building are the variables that have the greatest impacts on cost. For example, spray-applied asphalt latex vapor barriers, which are extremely effective, can be eight times the per square foot cost of 10 mil polyethylene. However, polyethylene may not be an effective option for some COCs. The soil variables to consider are the concentrations of the COCs, the permeability of the soil and the potential for the contaminant plume to move toward the building after construction. The primary construction variable is the area of the open foundation, since smaller segmented foundation areas and frequent utility penetrations will drive up the labor cost of sealing the vapor barrier. Also, the type of riser pipe used on the interior of the building affects cost. PVC riser pipes are more economical; however, metal riser pipes may be required to meet smoke index and flame spread requirements. There are greater costs associated with piping through a multistory building when compared to a single story building. Whether the system will be active or passive is another cost variable. The more gas tight a vapor barrier is, the greater the energy savings and the lower the long-term operational cost. It is best to plan out each component with a mitigation expert, select the materials and venting options, then calculate the costs.

Case Study for Joint Expeditionary Base Little Creek

This case study describes a VI mitigation system installed at Joint Expeditionary Base (JEB) Little Creek, Virginia during construction of its new Commissary (Building 3445). The Commissary is a supermarket-style building with approximately 150,000 to 200,000 ft^2 of floor space. The VI mitigation system includes both a passive soil venting system and a spray-applied elastomeric urethane vapor barrier.

Background

Site 12 is the location of the former Navy Exchange laundry/dry cleaning facility (Building 3323), which was demolished in 1987. The site is situated in the eastern portion of JEB Little Creek just south of the new Commissary (Figure 14). In the 1970s, dry cleaning wastes, including PCE sludges, were discharged from Building 3323 to the storm sewer. Environmental investigations of Site 12 indicated that the groundwater contained VOCs including PCE and its breakdown products; TCE, cis-1,2-dichloroethene (cis-1,2-DCE), and vinyl chloride. The highest concentrations of VOCs were present beneath the planned parking lot next to the location of the new Commissary, although the plume did not extend beneath the Commissary itself (Figure 15). Because of this close proximity to the plume, it was decided that a VI mitigation system should be installed during construction of the new Commissary as a precautionary measure.

Figure 14. Location of Site 12 on JEB Little Creek.

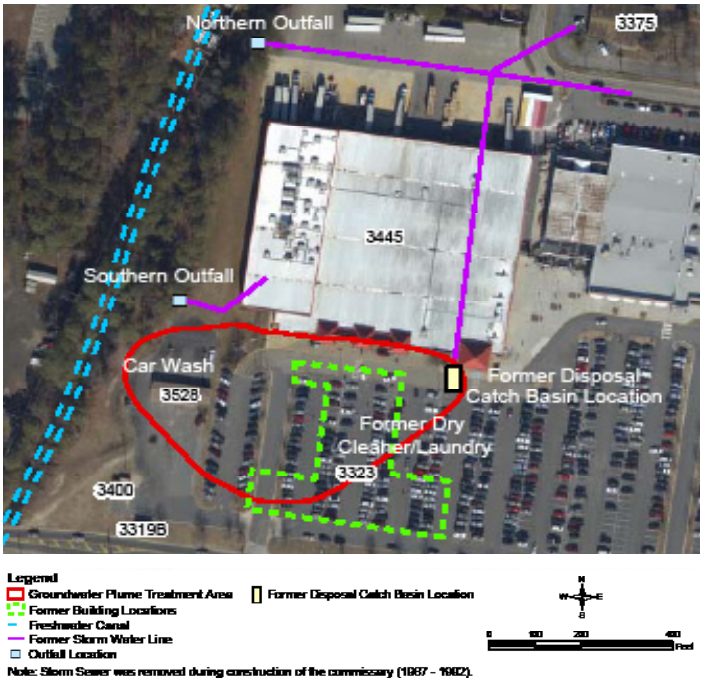


Figure 15. Arial photo of Building 3445 adjacent to Site 12 groundwater plume.

Mitigation System

The VI mitigation system included a passive subsurface venting system installed under the floor of the new Commissary to depressurize the subsurface and prevent the intrusion of VOC vapors into the building. The venting system installed beneath the Commissary consists of five rows of 4-inch perforated PVC piping running north-south at 60-ft intervals. The piping was placed in a layer of gravel (#57 stone) and surrounded by filter fabric. The piping connects to three riser pipes, which extend through the roof and are topped with wind-driven turbines to create a slight negative pressure in the vent system (Figure 16). A spray-on elastomeric urethane vapor barrier was applied above the soil gas venting layer before the building's concrete slab was poured. The slab is approximately 8 inches thick. Additionally, all new sewer manholes were sealed with waterproofing, and any existing sanitary sewer lines that were to be abandoned were grouted in place.

In addition to the mitigation system in the Commissary, groundwater remediation has been implemented to treat the source and reduce the extent of the groundwater plume beneath the adjacent parking lot. The selected remedial action was enhanced reductive dechlorination using injection of a trademarked emulsified oil substrate along with land use controls and groundwater monitoring.

Figure 16. Roof vents fitted with wind turbines provide slight depressurization of the sub-slab area and prevent the buildup of contaminants beneath the building.

In the Commissary's VI mitigation system, the vapor barrier is the principal component for preventing VI. Its purpose is to prevent the diffusion of soil gas and associated contaminants into the building. The passive venting system serves as augmentation for the vapor barrier, rather than as the primary mitigation measure. This passive system is suitable for a site such as Site 12 where the plume is not immediately beneath the building and is not causing a significant threat to the building occupants and where remedial action is underway to further reduce the potential risk to occupants in the future. In situations where there are high VOC concentrations below the building and human health risks are predicted to be significant, an active system such as an SSD with blowers would most likely be required.

Post-Mitigation Inspection

A site inspection of the VI mitigation system at the Commissary was conducted several years after installation. This inspection found that the concrete slab was competent with no apparent penetrations that could be conduits for intrusion of subsurface vapor. The rooftop wind turbines exhibited some corrosion and would spin intermittently in a wind of about 10 mph, rather than spinning freely. Maintenance such as lubricating the shaft and bearings of the turbines or, if necessary, replacement with aluminum turbines would improve the functionality of the venting system. However, in the future, if groundwater sampling indicates that the remedial action is effective in reducing the VOC contaminants, these inspections and maintenance may no longer be necessary for protection of human health.

Resources

Additional information on VI mitigation for new construction can be found in the following sources:

California Department of Toxic Substances Control. 2009. Vapor Intrusion Mitigation Advisory. http://www.dtsc.ca.gov/sitecleanup/upload/VI_Mitigation_Advisory_Apr09.pdf

Interstate Technology and Regulatory Council (ITRC). 2007. Vapor Intrusion Pathway: A Practical Guideline. http://www.itrcweb.org/Documents/VI-1.pdf

U.S. Environmental Protection Agency. 2008. Engineering Issue: Indoor Air Vapor Intrusion Mitigation Approaches. EPA/600/R-08-115. http://www.clu-in.org/download/char/600r08115.pdf

Photos and drawings throughout provided courtesy of Clean Vapor, LLC, CETCO, and CH2M Hill.

For the most current information, please contact the NAVFAC Alternative Restoration Technology Team or e-mail the NAVFAC Engineering Service Center at **PRTH_NFESCT2@navy.mil**.

Operation and Maintenance Manuals for Sub-Slab Depressurization Systems

Vapor mitigation systems including passive or active sub-slab depressurization systems (SSDSs) to mitigate the intrusion of contaminated vapors into on-site buildings are a common requirement for the issuance of No Further Action letters and Certificates of Completion under DOEE programs. If continued operation of an SSDS is a condition of site closure, an Operation and Maintenance (O&M) Manual must be approved by DOEE prior to issuance of the closure letter. The O&M Manual must contain the following components:

Site and System Description

- Property description including site address, lot, and parcel number
- Overview of system design goals and locations of system components within building
    - Passive systems: locations of sub-slab piping, vapor barriers (if present), exhaust stacks, etc.
    - Active systems: same as passive systems plus locations of electric connections, fuses, control panels, manometers, pressure gauges, fans, etc.
- For passive systems, conditions which may trigger conversion to an active system

Inspection and Maintenance

- Schedules describing frequency of inspection and maintenance intervals for fans/vents/blowers
- List of components to be inspected and inspection log components (including verification of floor integrity if sub-slab concentrations exceed applicable criteria)
- Process for corrective action if components are not operating within specification and documentation process for maintenance log
- On-site location for inspection logs
- List of persons and/or position responsible for maintenance of the O&M log
- Provision for notification of DOEE regarding system failures that interrupted effective operation of SSDS

System Monitoring

- Frequency and documentation of pressure readings from gauges and/or manometers
- If continued sub-slab and/or indoor air sampling is required, describe:
    - Frequency and duration of sampling
    - Sampling methods
    - Documentation of sampling activities and reporting frequency to DOEE
- Action levels that trigger reevaluation of the system

Contacts and Notifications

- Name and contact information for property owner, consultant, and DOEE project manager
- Process for notifying DOEE of any change in property use, ownership, or system changes
- Process for mitigating risk of damage to the system by future construction activities

Attachments

- Plan-view figures illustrating site location, locations of residual contamination (if applicable), and system layout within building
- Cross-section figures illustrating SSDS extraction point through floor (indicate depth of slab, diameter of slab penetration, etc.) and location of vapor barrier
- Representative images of installation activities and key components

DOEE may impose additional requirements for the O&M Manual based on site-specific factors. Additional guidance on O&M of vapor mitigation systems can be found here.

VAPOR INTRUSION MITIGATION SYSTEM OPERATION, MONITORING, AND MAINTENANCE CHECKLIST

Scope of Checklist: The purpose of this checklist is to guide the user during the inspection of a vapor intrusion mitigation system (VIMS) to (1) verify that the VIMS is operating as designed and (2) determine if certain operation, maintenance, and monitoring (OM&M) activities are necessary for continued operation and effectiveness of the system. This checklist is intended to provide factors to consider when documenting that the VIMS is operating and is effectively mitigating the vapor intrusion pathway during the lifecycle of its operation. Not all the information presented below is necessary to document system operation for all types of systems on all types of buildings, and some items may not be needed during every monitoring event. The user should be able to identify which criteria below best represent effective operation and responsible maintenance of their specific VIMS and if the conceptual site model (under which the system was designed) is still valid.

Prior to completing the inspection, it is recommended that the user review previously prepared OM&M plans. As-built drawings and performance (baseline) criteria are needed when conducting inspections of a VIMS. Monitoring scope, schedule, and methods may follow applicable agency requirements, which may be amended on a case-by-case basis through regulatory negotiation and approval. Where applicable, the monitoring and inspections must also comply with standards of practice and applicable codes (electrical code, building code).

In some situations, OM&M plans may not exist or be available or were not provided to a new operator or new building owner. Thus, the original as-built drawings and possibly the original performance criteria may not be known. In these cases, the checklist below can still be used to assist in developing the appropriate ongoing OM&M parameters for that particular site, although additional effort may be appropriate depending on the complexity of the building and site conditions.

1. SITE INSPECTION INFORMATION

Address inspected:_____

Date of inspection: _____ Date of last inspection: _____

Inspector(s): _____ Title:_____ Company:_____

Building contact:_____ Phone number:_____

Frequency of inspections:
____ Annual____ Semi-annual ___ Quarterly ___ Monthly ___Other (specify) _____

Type of system being inspected: _____

2. MITIGATION SYSTEM OPERATION

2.1. Was the mitigation system functioning as designed and operating upon arrival? ☐ Yes ☐ No ☐ NA

If "no," explain in Section 5, Observations and Corrective Actions, why the system was not operational and steps taken to correct the problem.

If "no" and the cause of the system shutdown is determined, follow the start-up procedures as detailed in the system OM&M plan and complete the remainder of the checklist.

2.2. Has the mitigation system been altered from what is shown in the as-built drawings? ☐ Yes ☐ No ☐ NA

If yes, discuss in Section 5 changes and possible impacts.

2.3. Has the mitigation system operated continuously since the last OM&M event? ☐ Yes ☐ No ☐ NA

If no, discuss in Section 5 changes and possible impacts.

2.4. Have procedures and equipment been checked for proper operation? ☐ Yes ☐ No ☐ NA

If no, discuss in Section 5 changes and possible impacts.

2.5. Are labels identifying the system components in place and legible? ☐ Yes ☐ No ☐ NA

If no, specify the date of replacement.

2.6. Conduct a visual inspection of accessible system piping and pipe seals, including membrane seals (if applicable), connections, etc. Were any cracks/gaps or any changes in the system configuration observed? ☐ Yes ☐ No ☐ NA

If yes, list the inspection results in Section 5 and document the corrections to fix these problems.

3. BUILDING CONDITIONS AND USE

3.1. Is the building's heating system or heating, ventilating, and air conditioning (HVAC) system operating? ☐ Yes ☐ No ☐ NA

If yes, provide a summary below and explain in Section 5 if the HVAC system operation could impact the effectiveness of the mitigation system.

*Hours/day of HVAC operation*_____

Climate controlled? ☐ Yes ☐ No ☐ NA

3.1.1. Is the building's heating system or HVAC system on during this OM&M event? ☐ Yes ☐ No ☐ NA

3.1.2. Is the building's heating system or HVAC system equipped with outside dampers? ☐ Yes ☐ No ☐ NA

If yes, how many? _____ % opened _____

3.2. Has the building had a change in use since the system began operation? (i.e., Are the exposure assumptions still appropriate?) ☐ Yes ☐ No ☐ NA

If yes, explain in Section 5 what these changes are and how they may impact the effectiveness of the mitigation system.

3.3. Has the building undergone any physical modifications (building additions, change to interior walls, new sumps or French drains, any new permits filed, etc.)? ☐ Yes ☐ No ☐ NA

If yes, explain in Section 5 the building changes and how they may impact the effectiveness of the passive mitigation system.

3.4. Has the condition of the basement (lowest floor) walls, floors, sumps, and utility penetrations been inspected for cracks, gaps, or seal failure? ☐ Yes ☐ No ☐ NA

If yes, list the inspection results in Section 5 and document the corrections (if necessary) to fix any problems.

3.5. Has a visual inspection been conducted assessing the presence of moisture and/or efflorescence as crystalline deposits in the basement or lowest floor, including any crawlspaces? ☐ Yes ☐ No ☐ NA

If evidence of moisture or efflorescence was found, list the inspection results in Section 5 and document the corrections to fix these problems.

4. MONITORING AND DIAGNOSTIC MEASUREMENTS

4.1. Record vacuum and air flow at the suction point(s) and compare to baseline values (if applicable). Note: Field instruments such as a micromanometer can be used if in-line gauges/displays are not built-in. ☐ Yes ☐ No ☐ NA

Prepare and attach monitoring data table to summarize the results.

If consistent, note the conclusion in Section 5.
If not consistent, explain discrepancies in Section 5 and whether further corrective steps are necessary for the VIMS or actions taken.

4.2. Record fan or blower/fan air flow and vacuum and compare to baseline values (if applicable). Note: Field instruments such as a hot-wire anemometer can be used if in-line gauges/displays are not built-in. ☐ Yes ☐ No ☐ NA

Prepare and attach monitoring data table to summarize the results.
If consistent, note the conclusion in Section 5.

If not consistent, explain discrepancies in Section 5 and whether further corrective steps are necessary for the VIMS or actions taken.

4.3. Are telemetry systems indicating normal operating conditions? ☐ Yes ☐ No ☐ NA

If no, describe issues and any mitigative actions in Section 5.

Type of telemetry: _____
Location: _____
Summary of operating conditions: _____
_____

4.4. Did any telemetry system data show irregular entries or shutdown? ☐ Yes ☐ No ☐ NA

If yes, describe issues and any mitigative actions in Section 5.

4.5. Conduct vapor concentration monitoring within system (if applicable). Field instruments need to be calibrated and meet detection levels of vapors being monitored. If no sampling ports are built into the system, conduct monitoring at the piping discharge/exhaust. Monitoring options include:

a) field screening with a photoionization detector (PID) for total ionizable VOCs or flame ionization detector (FID) for total hydrocarbons, including methane
b) b) landfill gas monitoring for oxygen, carbon dioxide, and methane to assess cross-slab leakage, and sub-slab ventilation rates
c) whole gas (Tedlar bag, Summa canister, Bottle-Vac, etc., for analysis by USEPA Method TO-15 or similar) or sorbent sample (pumped ATD tube and TO-17 analysis). Holding time requirements of VOC samples for laboratory analysis need to be followed.

Has there been a significant increase or decrease in concentrations since the previous monitoring event(s)? ☐ Yes ☐ No ☐ NA

Multiply the concentration(s) by the flow rate to calculate mass emission rates.

- If the emission rates are higher than permit discharge limits, if present, consider off-gas treatment, taller stack, permit variance, or other options.
- If there has been a building depressurization test, is the initial mass removal rate from the system greater than the mass emissions through the building during depressurization?
- If the rate of mass removal from the system is too low to pose a potential risk to indoor air quality (i.e., the product of vent pipe concentrations multiplied by vent pipe flow rate is less than the product of the indoor air screening

level multiplied by the building volume and air exchange rate), consider whether it may be appropriate to transition to a sub-slab ventilation system, semi-passive system (wind or solar fans), passive system (no fan, but open vent-pipes) or a decommissioned system.

Record the monitoring results in Section 5 or the attached monitoring data tables.

Discuss in Section 5 the reason(s) for any significant changes observed.

4.6. Record differential pressure (between sub-slab and indoor air) at monitoring points beneath the building floor slab if appropriate. Is the minimum differential pressure recorded at all monitoring points? ☐ Yes ☐ No ☐ NA

Record the monitoring results in the attached monitoring data tables.

Discuss in Section 5 the reason(s) for any significant changes observed.

Conduct a periodic leak check of the sampling probes if collecting soil gas samples.

For locations where the minimum vacuum is not observed, consider additional data collection.

a) Connect a digital micromanometer to the probe, set data logging to a 1-second frequency and cycle the fan on and off (e.g., one minute on and then off, or until the micromanometer readings have stabilized). Repeat this cycle at least two times. Does the trend show a characteristic saw-toothed pattern with a magnitude similar to the target vacuum level? ☐ Yes ☐ No ☐ NA

b) Hold a smoke pen over the probe when open. Is the smoke drawn strongly into the probe? ☐ Yes ☐ No ☐ NA

c) Consider collecting a soil gas sample from the probe. If the vapor concentrations are below conservative sub-slab screening levels, it may not be necessary or appropriate to modify the system to exert additional vacuum to this location.

4.7. Were indoor air samples collected for laboratory analysis as performance metrics? ☐ Yes ☐ No ☐ NA

If yes, summarize in Section 5 the results for COCs and any mitigative actions.

Background sources (consumer products and building materials inside buildings and ambient outdoor air VOCs) are a common confounding factor and must be explicitly considered when interpreting indoor air samples.

4.8. Has a smoke test been conducted (if necessary) to verify the continued integrity of the liner? ☐ Yes ☐ No ☐ NA

If yes, summarize in Section 5 the results and any corrective actions.

4.9. Has the appropriate frequency for system inspections been completed to date? ☐ Yes ☐ No ☐ NA

If no, explain the discrepancy in Section 5.

*Current frequency of inspections*_____.

4.10. Were batteries replaced in any battery-powered alarms (if needed)? ☐ Yes ☐ No ☐ NA

4.11. Were additional items inspected? ☐ Yes ☐ No ☐ NA

If yes, explain in Section 5 the item(s) inspected and the findings from the inspection

4.12. Was system component maintenance completed per equipment manufacturer specifications? ☐ Yes ☐ No ☐ NA

If yes, explain in Section 5 the maintenance completed.

.

5. OBSERVATIONS AND CORRECTIVE ACTIONS

Document observations and corrective actions or modifications made or planned to be made to the VIMS, and the results obtained to verify the effectiveness of the actions or modifications. Refer to the specific item number above for each observation or corrective action. Use additional pages as necessary.

6. PHOTOGRAPHIC LOG

Photographs taken and included as attachment? ☐ Yes ☐ No ☐ NA

7. OVERALL VI MITIGATION SYSTEM ASSESSMENT

Is the mitigation system still protective? ☐ Yes ☐ No

8. INSPECTOR INFORMATION

Name: _____

Signature: _____

Date: _____

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

March 21, 2025

Mr. Noorallah Jooma
Burkburnett Royal Gardens
P.O. Box 113267
Carrollton, Texas 75011

Re: Comments
Response Action Plan, dated February 26, 2025
Affected Property Assessment Report
Approximately 5 Acres of Vacant Land
South of Williams Drive
Burkburnett, Wichita County
T No. 3840, RN111755963, CN606150472

Dear Mr. Jooma,

The Texas Commission on Environmental Quality (TCEQ) has reviewed the above-referenced response action plan (RAP). The recommendations in the RAP include: 1) using the concrete parking area of the proposed new building as a physical control for affected soil; 2) installing a vapor barrier beneath the proposed new building; 3) filing an institutional control; and 4) continued groundwater monitoring. The TCEQ understands that the responsible party is requesting an expedited review of this RAP and issuance of an approval letter because the Department of Housing and Urban Development funding for the property development will expire soon.

Comments

1. The additional groundwater assessment requested by the TCEQ in its December 12, 2024 letter was not completed. The responsible party proposes to plug the current monitor wells prior to the property development, install replacement monitor wells after the property development, and complete the additional groundwater assessment requested in the TCEQ's December 12, 2024 letter. This approach is approved by the TCEQ.

2. The information provided in the RAP that addressed the physical control, institutional control, and installation of the vapor barrier did not provide the necessary information to adequately evaluate the proposed response actions. However, if the response actions are correctly implemented, they will be adequate measures to address the affected soil and potential vapor intrusion. A complete RAP should be submitted following the improvements at the site.

Questions concerning this letter should be directed to me at

Michael.Duffin@tceq.texas.gov. When responding by mail, please submit one paper and electronic copy (on USB or disc) of all correspondence and reports to the TCEQ Remediation Division at Mail Code MC-127. An additional copy should be submitted in electronic format to the local TCEQ Region Office. The information in the reference block should be included in all submittals. Note that the electronic and hard copies should be identical, complete copies. A Correspondence ID Form (TCEQ Form 20428) must accompany each document submitted to the Remediation Division and should be affixed to the front of your submittal. The Correspondence ID Form helps ensure that your documents are identified correctly and are routed to the applicable program for a timely response.

Sincerely,

Mike Duffin, Ph.D., P.G.
VCP-CA Section
Remediation Division
Texas Commission on Environmental Quality

EJScreen Community Report

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

Burkburnett, TX

1 mile Ring Centered at 34.086014,-98.576095
Population: 6,696
Area in square miles: 3.14

A3 Landscape

COMMUNITY INFORMATION

- Low income: 24 percent
- People of color: 22 percent
- Less than high school education: 9 percent
- Limited English households: 3 percent
- Unemployment: 4 percent
- Persons with disabilities: 21 percent
- Male: 48 percent
- Female: 52 percent
- 75 years — Average life expectancy
- $28,495 — Per capita income
- Number of households: 2,698
- Owner occupied: 73 percent

BREAKDOWN BY RACE

- White: 78%
- Black: 2%
- American Indian: 0%
- Asian: 1%
- Hawaiian/Pacific Islander: 0%
- Other race: 1%
- Two or more races: 4%
- Hispanic: 14%

BREAKDOWN BY AGE

From Ages 1 to 4	6%
From Ages 1 to 18	20%
From Ages 18 and up	80%
From Ages 65 and up	23%

LIMITED ENGLISH SPEAKING BREAKDOWN

Speak Spanish	42%
Speak Other Indo-European Languages	58%
Speak Asian-Pacific Island Languages	0%
Speak Other Languages	0%

Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race.
Source: U.S. Census Bureau, American Community Survey (ACS) 2017 -2021. Life expectancy data comes from the Centers for Disease Control.

LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	97%
Spanish	3%
Other Indo-European	1%
Total Non-English	3%

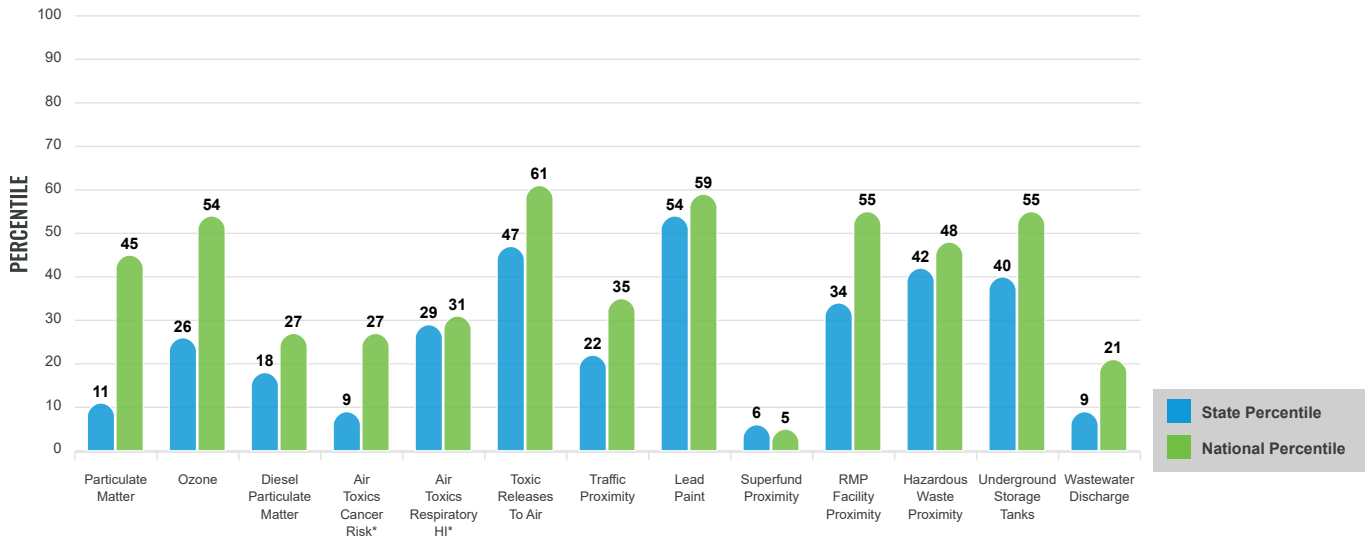
Environmental Justice & Supplemental Indexes

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the EJScreen website.

EJ INDEXES

The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

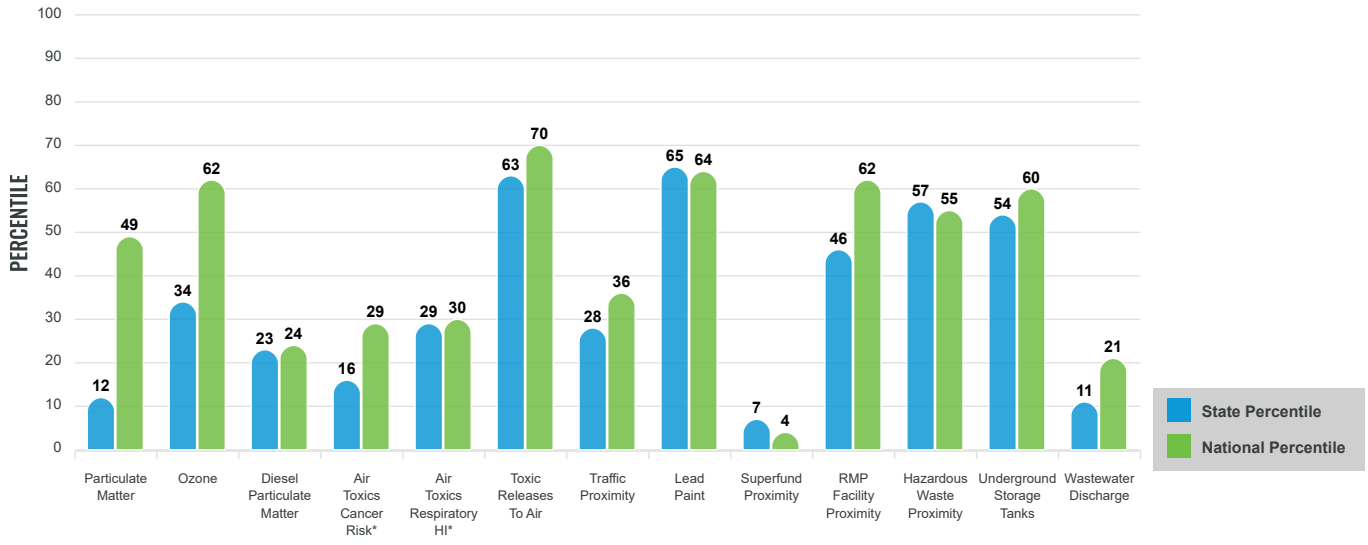
EJ INDEXES FOR THE SELECTED LOCATION



SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.

SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

Report for 1 mile Ring Centered at 34.086014,-98.576095

EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
POLLUTION AND SOURCES					
Particulate Matter (µg/m^3)	8.04	9.11	13	8.08	45
Ozone (ppb)	62.4	64.6	31	61.6	59
Diesel Particulate Matter (µg/m^3)	0.117	0.218	23	0.261	21
Air Toxics Cancer Risk* (lifetime risk per million)	20	28	1	25	5
Air Toxics Respiratory HI*	0.23	0.3	1	0.31	4
Toxic Releases to Air	2,200	12,000	71	4,600	74
Traffic Proximity (daily traffic count/distance to road)	30	150	25	210	30
Lead Paint (% Pre-1960 Housing)	0.36	0.17	81	0.3	63
Superfund Proximity (site count/km distance)	0.01	0.085	7	0.13	4
RMP Facility Proximity (facility count/km distance)	0.26	0.63	48	0.43	65
Hazardous Waste Proximity (facility count/km distance)	0.61	0.75	65	1.9	53
Underground Storage Tanks (count/km^2)	2.1	2.3	60	3.9	60
Wastewater Discharge (toxicity-weighted concentration/m distance)	6.1E-05	0.91	21	22	27
SOCIOECONOMIC INDICATORS					
Demographic Index	23%	46%	19	35%	38
Supplemental Demographic Index	12%	17%	37	14%	46
People of Color	22%	58%	15	39%	40
Low Income	24%	34%	38	31%	44
Unemployment Rate	4%	5%	51	6%	49
Limited English Speaking Households	2%	8%	49	5%	66
Less Than High School Education	9%	16%	41	12%	52
Under Age 5	6%	6%	53	6%	61
Over Age 64	23%	14%	82	17%	75
Low Life Expectancy	23%	20%	80	20%	79

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: https://www.epa.gov/haps/air-toxics-data-update.

Sites reporting to EPA within defined area:

Superfund	0
Hazardous Waste, Treatment, Storage, and Disposal Facilities	0
Water Dischargers	5
Air Pollution	0
Brownfields	0
Toxic Release Inventory	0

Other community features within defined area:

Schools	4
Hospitals	0
Places of Worship	11

Other environmental data:

Air Non-attainment	No
Impaired Waters	No

Selected location contains American Indian Reservation Lands*	No
Selected location contains a "Justice40 (CEJST)" disadvantaged community	No
Selected location contains an EPA IRA disadvantaged community	Yes

Report for 1 mile Ring Centered at 34.086014,-98.576095

EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	23%	20%	80	20%	79
Heart Disease	7.2	5.9	72	6.1	71
Asthma	9.5	9.2	64	10	40
Cancer	6.7	5.2	81	6.1	62
Persons with Disabilities	21%	12.3%	91	13.4%	88

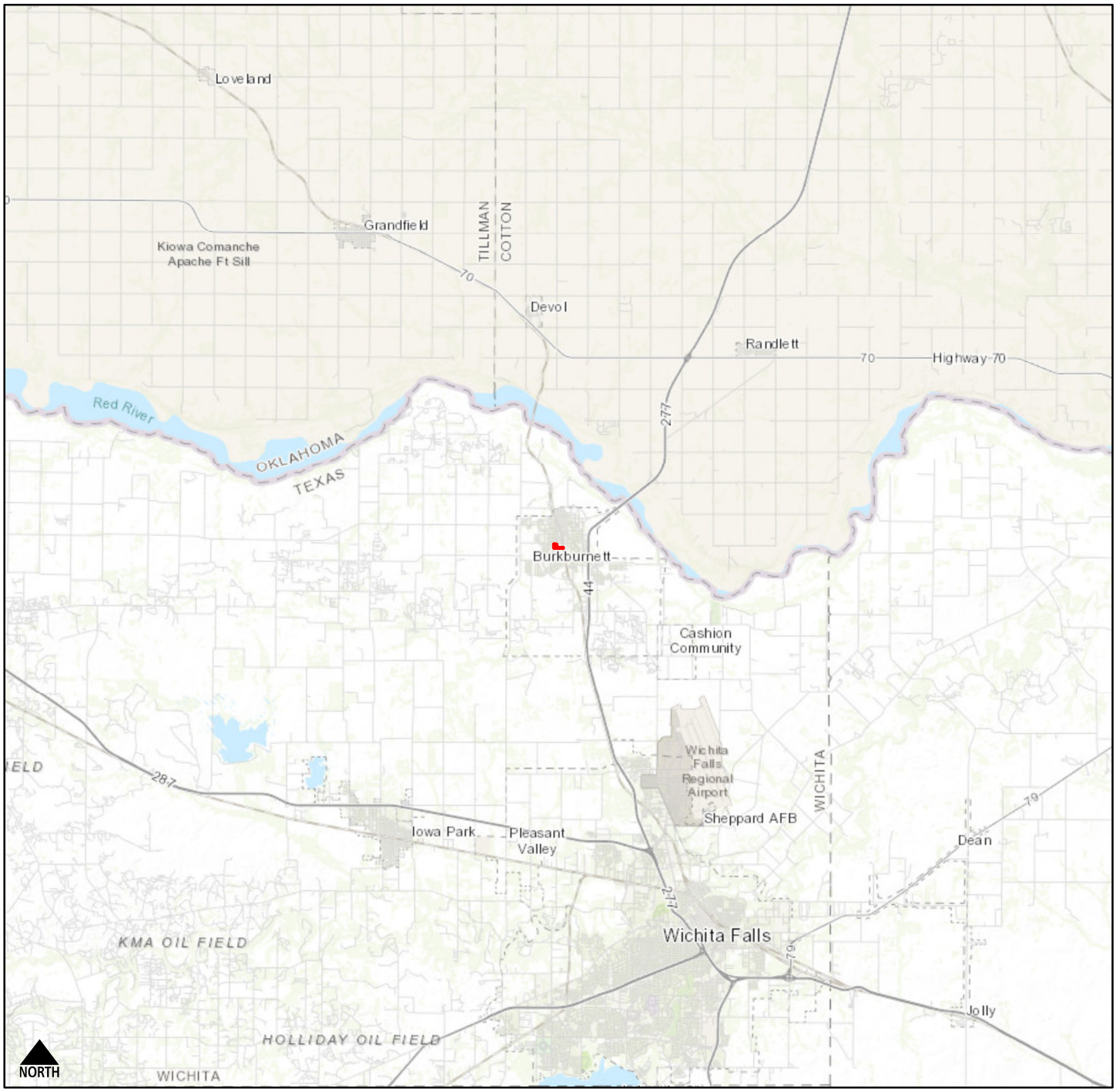
CLIMATE INDICATORS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	2%	10%	35	12%	26
Wildfire Risk	98%	30%	89	14%	94

CRITICAL SERVICE GAPS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	14%	15%	58	14%	60
Lack of Health Insurance	21%	18%	64	9%	93
Housing Burden	No	N/A	N/A	N/A	N/A
Transportation Access	Yes	N/A	N/A	N/A	N/A
Food Desert	Yes	N/A	N/A	N/A	N/A

Report for 1 mile Ring Centered at 34.086014,-98.576095



Source: U.S. Fish and Wildlife Service

0 4 8 16 Miles

1:300,000

U.S. FWS Threatened & Endangered Species Active Critical Habitats

Critical habitat is a term defined and used in the Act. It is a specific geographic area(s) that is essential for the conservation of a threatened or endangered species and that may require special management and protection. Critical habitat may include an area that is not currently occupied by the species but that will be needed for its recovery. An area is designated as “critical habitat”.

An area designated as critical habitat is not a refuge or sanctuary for the species. Listed species and their habitat are protected by the Act whether or not they are in an area designated as critical habitat.

- Critical Habitat - Linear Features - Final
- Critical Habitat - Linear Features - Proposed
- Critical Habitat - Polygon Features - Final
- Critical Habitat - Polygon Features - Proposed

PHASE
TRUSTED ENVIRONMENTAL SOLUTIONS

PE Project No: 202402008

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Arlington Ecological Services Field Office
501 West Felix Street
Suite 1105
Fort Worth, TX 76115-3410
Phone: (817) 277-1100 Fax: (817) 277-1129
Email Address: arles@fws.gov

In Reply Refer To: 04/19/2024 13:59:34 UTC
Project Code: 2024-0079423
Project Name: 202402008 Burkburnett Royal Gardens

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, which may occur within the boundary of your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under section 7(a)(1) of the Act, Federal agencies are directed to utilize their authorities to carry out programs for the conservation of threatened and endangered species. Under and 7(a)(2) and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to determine whether their actions may affect threatened and endangered species and/or designated critical habitat. A Federal action is an activity or program authorized, funded, or carried out, in whole or in part, by a Federal agency (50 CFR 402.02).

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For Federal actions other than major construction activities, the Service suggests that a biological evaluation (similar to a Biological Assessment) be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

After evaluating the potential effects of a proposed action on federally listed species, one of the following determinations should be made by the Federal agency:

1. *No effect* - the appropriate determination when a project, as proposed, is anticipated to have no effects to listed species or critical habitat. A "no effect" determination does not require section 7 consultation and no coordination or contact with the Service is necessary. However, the action agency should maintain a complete record of their evaluation, including the steps leading to the determination of affect, the qualified personnel conducting the evaluation, habitat conditions, site photographs, and any other related information.
2. *May affect, but is not likely to adversely affect* - the appropriate determination when a proposed action's anticipated effects to listed species or critical habitat are insignificant, discountable, or completely beneficial. Insignificant effects relate to the size of the impact and should never reach the scale where "take" of a listed species occurs. Discountable effects are those extremely unlikely to occur. Based on best judgment, a person would not be able to meaningfully measure, detect, or evaluate insignificant effects, or expect discountable effects to occur. This determination requires written concurrence from the Service. A biological evaluation or other supporting information justifying this determination should be submitted with a request for written concurrence.
3. *May affect, is likely to adversely affect* - the appropriate determination if any adverse effect to listed species or critical habitat may occur as a consequence of the proposed action, and the effect is not discountable or insignificant. This determination requires formal section 7 consultation.

The Service has performed up-front analysis for certain project types and species in your project area. These analyses have been compiled into *determination keys*, which allows an action agency, or its designated non-federal representative, to initiate a streamlined process for determining a proposed project's potential effects on federally listed species. The determination keys can be accessed through IPaC.

The Service recommends that candidate species, proposed species, and proposed critical habitat be addressed should consultation be necessary. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found at: https://www.fws.gov/service/section-7-consultations

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.), and projects affecting these species may require development of an eagle conservation plan (https://www.fws.gov/library/collections/bald-and-golden-eagle-management). Additionally, wind energy projects should follow the wind energy guidelines (https://www.fws.gov/media/land-based-wind-energy-guidelines) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: https://www.fws.gov/media/recommended-best-practices-communication-tower-design-siting-construction-operation. The Federal Aviation Administration (FAA) released specifications for and made mandatory flashing L-810 lights on new towers 150-350 feet AGL, and the elimination of L-810 steady-burning side lights on towers above 350 feet AGL. While the FAA made these changes to reduce the number of migratory bird collisions (by as much as 70%), extinguishing steady-burning side lights also reduces maintenance costs to tower owners. For additional information concerning migratory birds and eagle conservation plans, please contact the Service's Migratory Bird Office at 505-248-7882.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Arlington Ecological Services Field Office
501 West Felix Street
Suite 1105
Fort Worth, TX 76115-3410
(817) 277-1100

PROJECT SUMMARY

Project Code: 2024-0079423
Project Name: 202402008 Burkburnett Royal Gardens
Project Type: Residential Construction
Project Description: The proposed project, , is a new 80-unit LIHTC/market rate multifamily development that will offer one, two, and three-bedroom units in two three-story and one two to three-story garden-style residential buildings on approximately 5 acres.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@34.086413449999995,-98.57594038650858,14z

Counties: Wichita County, Texas

ENDANGERED SPECIES ACT SPECIES

There is a total of 6 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 3 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Texas Kangaroo Rat *Dipodomys elator* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2985	Proposed Endangered
Tricolored Bat *Perimyotis subflavus* No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: ▪ This species only needs to be considered if the project includes wind turbine operations. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

BIRDS

NAME	STATUS
Piping Plover *Charadrius melodus* Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is **final** critical habitat for this species. Your location does not overlap the critical habitat. This species only needs to be considered under the following conditions: ▪ Wind Energy Projects Species profile: https://ecos.fws.gov/ecp/species/6039	Threatened
Rufa Red Knot *Calidris canutus rufa* There is **proposed** critical habitat for this species. This species only needs to be considered under the following conditions: ▪ Wind Energy Projects Species profile: https://ecos.fws.gov/ecp/species/1864	Threatened
Whooping Crane *Grus americana* Population: Wherever found, except where listed as an experimental population There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/758	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act[1] and the Migratory Bird Treaty Act[2].

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats[3], should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

---

1. The Bald and Golden Eagle Protection Act of 1940.
2. The Migratory Birds Treaty Act of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

THERE ARE NO BALD AND GOLDEN EAGLES WITHIN THE VICINITY OF YOUR PROJECT AREA.

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

---

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE

SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Lesser Yellowlegs *Tringa flavipes* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Pectoral Sandpiper *Calidris melanotos* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9561	Breeds elsewhere
Red-headed Woodpecker *Melanerpes erythrocephalus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398	Breeds May 10 to Sep 10

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (▪)

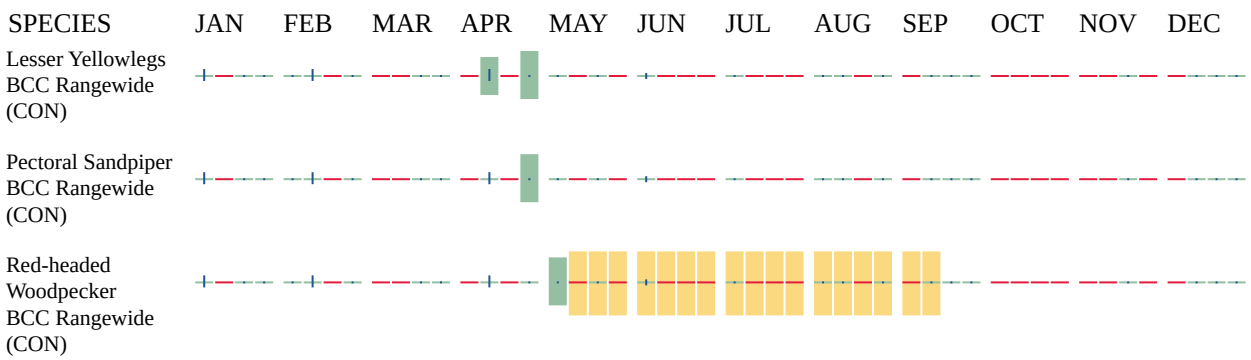
Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (▪)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

▪ probability of presence ▪ breeding season | survey effort – no data



Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

WETLANDS

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

IPAC USER CONTACT INFORMATION

Agency: Phase Engineering
Name: Phase Engineering
Address: 12414 Nacogdoches Road
City: San Antonio
State: TX
Zip: 78217
Email hope@phaseengineering.com
Phone: 8324852227

Source: TPWD, ESRI

Property boundary and locations are representative only.

0 1,750 3,500 7,000 10,500 14,000 Feet

1:48,000

NORTH

Texas Natural Diversity Database

The Texas Natural Diversity Database (TXNDD), established in 1983, is the Texas Parks and Wildlife Department's (TPWD) most comprehensive source of information on rare, threatened, and endangered plants, animals, natural communitites, and animal aggregrations. The Mission of the TXNDD is to manage and disseminate scientific information on rare species, native plant communities, and animal aggregrations for defensible effective conservation action. The TXNDD and the expertise of its staff facilitate conservation planning, natural resources management, and the design and implemention of ecologically sound development projects.

Legend

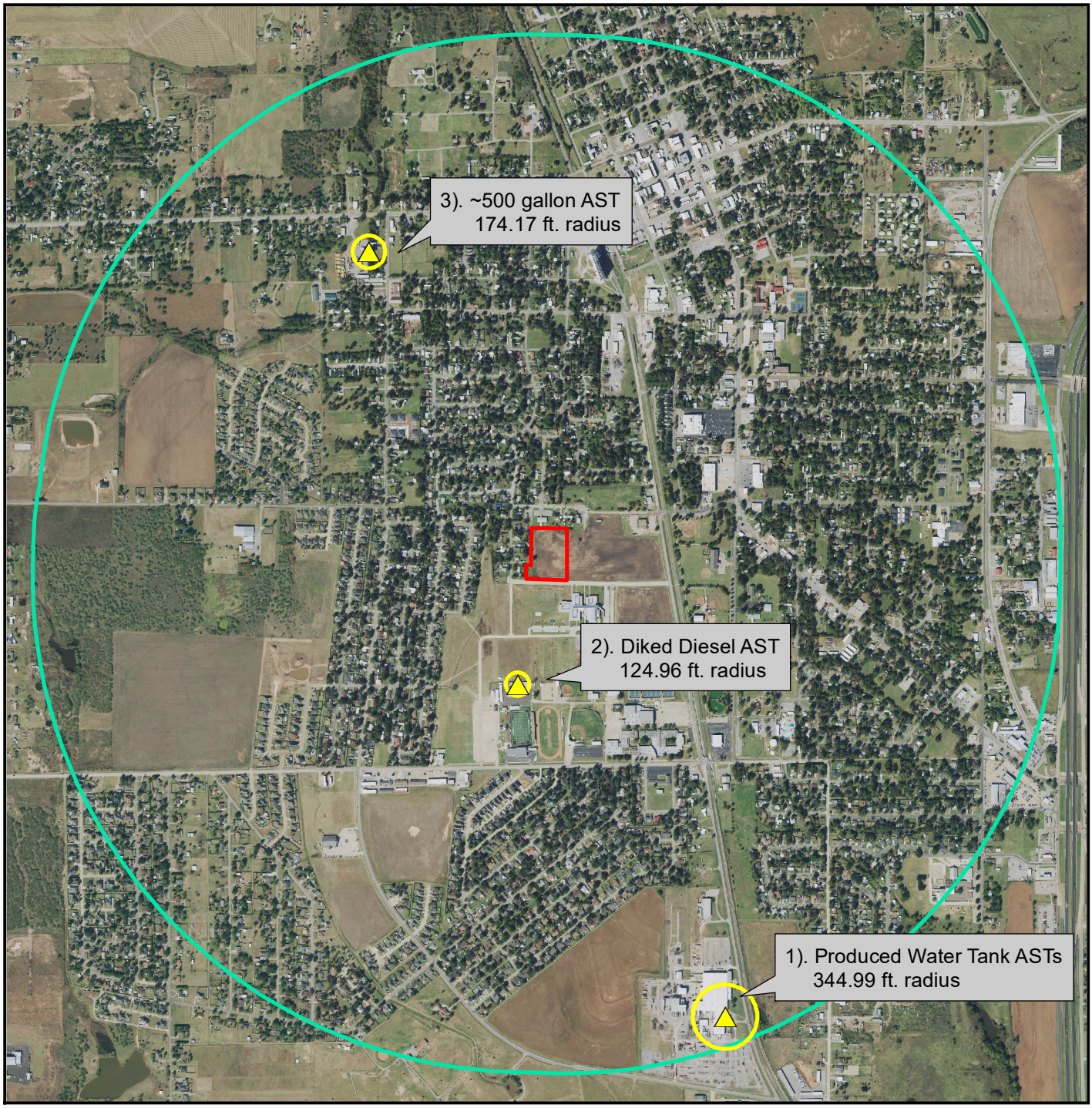
- Subject
- Animal Assemblage
- International Vegetation Classification - Natural
- Invertebrate Animal
- Terrestrial Community - Other Classification
- Vascular Plant
- Vertebrate Animal

PHASE
TRUSTED ENVIRONMENTAL SOLUTIONS

PE Project No: 202402008

Species Name - Common (Scientific)	Listing Status	General Habitat Description*	Habitat Present
Federally Listed (http://www.fws.gov/southwest/es/EndangeredSpecies_Main.html)			
Texas kangaroo Rat (*Dipodomys elator)*	Proposed Endangered	They live in underground dens with the entrance at the base or roots of a small mesquite tree. They make trails to their burrows. Texas Kangaroo Rats are highly nocturnal, only coming out when it is completely dark.	No, the vegetation on the subject property has been cleared and does not contain suitable habitat.
Tricolored Bat (*Perimyotis subflavus*)	Proposed Endangered	Known to roost in caves, mines, and road-associated culverts.	No. The subject property does not contain suitable habitat for this species.
Piping Plover (*Charadrius melodus*)	Threatened (Wind Energy Projects Only)	Wintering migrant along the Texas Gulf Coast; beaches and bayside mud or salt flats	No. The Project does not include wind energy.
Red Knot (*Calidris canutus rufa*)	Threatened (Wind Energy Projects Only)	Migrant of 1,500 miles or more twice annually. Requires stopover habitats rich in easily digested foods of small invertebrates with thin or no shells.	No. The Project does not include wind energy.
Whooping crane (*Grus americana*)	Endangered	Potential migrant via plains throughout most of state to coast. A variety habitats are used during migration, however, wetland mosaics appear to be the most suitable. Winters in coastal marshes of Aransas, Calhoun, and Refugio counties	No. The subject property has no vegetation to attract these large birds.
Monarch Butterfly (*Danaus plexippus*)	Candidate	Milkweed obligate found throughout Texas.	No. The subject property consists of an ag field that is heavily disturbed and would not contain suitable habitat.
Migratory Birds	Many migratory birds may occur at the subject property. During construction, all active nests should be avoided and if found, a qualified biologist with the USFWS should be notified.		

*Habitat Descriptions from the TPWD (http://www.tpwd.state.tx.us/huntwild/wild/species/) and USFWS (http://ecos.fws.gov/speciesProfile/)



source: TCEQ, TX RRC, ESRI

Note: Property location and boundary are representative only.

0 0.075 0.15 0.3 0.45 0.6 Miles

1:19,000

NORTH

Explosive and Flammable Facilities

Acceptable Separate Distance (ASD) from Explosive and Flammable Operations

Subject Property **ASD for People** **1 Mile Radius**

PHASE
TRUSTED ENVIRONMENTAL SOLUTIONS

PE Project No: 202402008

Explosives Table

	Facility Address	Capacity (gallons)	Pressurized	Diked/ Undiked	Size of Dike (sq ft)	Contents	Distance to Site (feet)	ASD (feet)	Pass
1	NOV Fiber Glass Systems 1004 Ameron Road, Burkburnett, TX 76354	1,700	No	Undiked	NA	Produced Water Tanks	5,018	344.99	Yes
2	Bulldog Stadium Coutler Dr., Burkburnett, TX 76354	Unknown	No	Diked	30’ X 20’	Diesel	1,185	124.96	Yes
3	C&C Self Storage 510 West 3rd Street, Burkburnett, TX 76354	500	Yes	Undiked	NA	Propane	3,645	174.17	Yes

Acceptable Separation Distance (ASD) Electronic Assessment Tool

The Environmental Planning Division (EPD) has developed an electronic-based assessment tool that calculates the Acceptable Separation Distance (ASD) from stationary hazards. The ASD is the distance from above ground stationary containerized hazards of an explosive or fire prone nature, to where a HUD assisted project can be located. The ASD is consistent with the Department's standards of blast overpressure (0.5 psi-buildings) and thermal radiation (450 BTU/ft^2 - hr - people and 10,000 BTU/ft^2 - hr - buildings). Calculation of the ASD is the first step to assess site suitability for proposed HUD-assisted projects near stationary hazards. Additional guidance on ASDs is available in the Department's guidebook "Siting of HUD-Assisted Projects Near Hazardous Facilities" and the regulation 24 CFR Part 51, Subpart C, Sitting of HUD-Assisted Projects Near Hazardous Operations Handling Conventional Fuels or Chemicals of an Explosive or Flammable Nature.

Note: Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the ASD result fields with the mouse.

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☐ **No:** ☑
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☐
Is the container diked?	**Yes:** ☐ **No:** ☑
What is the volume (gal) of the container?	1700
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	
Calculate Acceptable Separation Distance	
Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	
ASD for Thermal Radiation for People (ASDPPU)	344.99
ASD for Thermal Radiation for Buildings (ASDBPU)	64.26
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

For mitigation options, please click on the following link: Mitigation Options (/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/)

Providing Feedback & Corrections

After using the ASD Assessment Tool following the directions in this User Guide, users are encouraged to provide feedback on how the ASD Assessment Tool may be improved. Users are also encouraged to send comments or corrections for the improvement of the tool.

Please send comments or other input using the **Contact Us (https://www.hudexchange.info/contact-us/)** form.

Related Information

- **ASD User Guide (/resource/3839/acceptable-separation-distance-asd-assessment-tool-user-guide/)**
- **ASD Flow Chart (/resource/3840/acceptable-separation-distance-asd-flowchart/)**

Acceptable Separation Distance (ASD) Electronic Assessment Tool

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Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☐ **No:** ☑
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☐
Is the container diked?	**Yes:** ☑ **No:** ☐
What is the volume (gal) of the container?	
What is the Diked Area Length (ft)?	30
What is the Diked Area Width (ft)?	20
Calculate Acceptable Separation Distance	
Diked Area (sqft)	600
ASD for Blast Over Pressure (ASDBOP)	
ASD for Thermal Radiation for People (ASDPPU)	
ASD for Thermal Radiation for Buildings (ASDBPU)	
ASD for Thermal Radiation for People (ASDPNPD)	124.96
ASD for Thermal Radiation for Buildings (ASDBNPD)	20.98

For mitigation options, please click on the following link: Mitigation Options (/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/)

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- **ASD Flow Chart (/resource/3840/acceptable-separation-distance-asd-flowchart/)**

Acceptable Separation Distance (ASD) Electronic Assessment Tool

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Note: Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the ASD result fields with the mouse.

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☑ **No:** ☐
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☑
Is the container diked?	**Yes:** ☐ **No:** ☐
What is the volume (gal) of the container?	500
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	
Calculate Acceptable Separation Distance	
Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	174.17
ASD for Thermal Radiation for People (ASDPPU)	207.20
ASD for Thermal Radiation for Buildings (ASDBPU)	36.50
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

For mitigation options, please click on the following link: Mitigation Options (/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/)

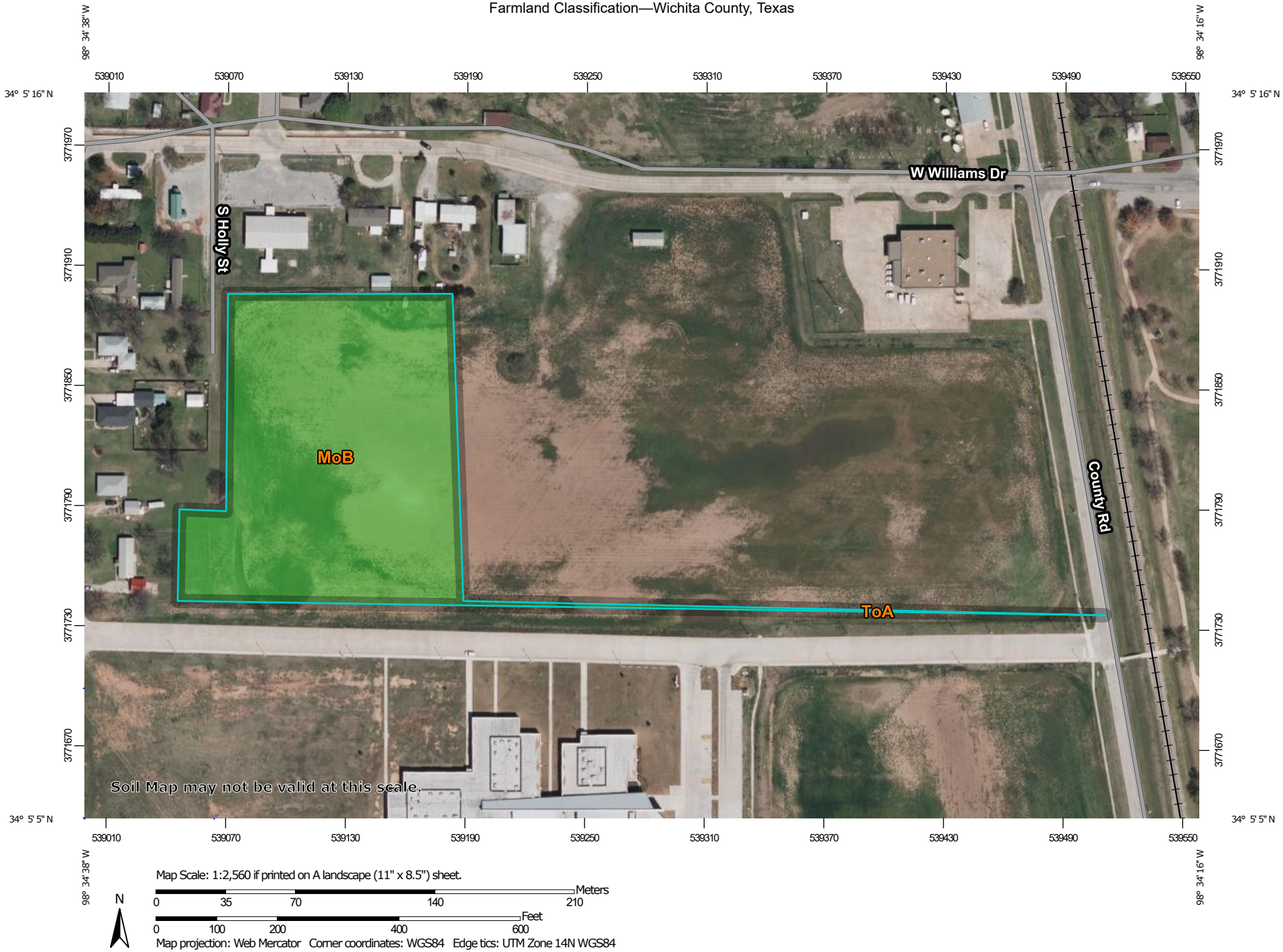
Providing Feedback & Corrections

After using the ASD Assessment Tool following the directions in this User Guide, users are encouraged to provide feedback on how the ASD Assessment Tool may be improved. Users are also encouraged to send comments or corrections for the improvement of the tool.

Please send comments or other input using the **Contact Us (https://www.hudexchange.info/contact-us/)** form.

Related Information

- **ASD User Guide (/resource/3839/acceptable-separation-distance-asd-assessment-tool-user-guide/)**
- **ASD Flow Chart (/resource/3840/acceptable-separation-distance-asd-flowchart/)**



Map Scale: 1:2,560 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 35 70 140 210

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 14N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

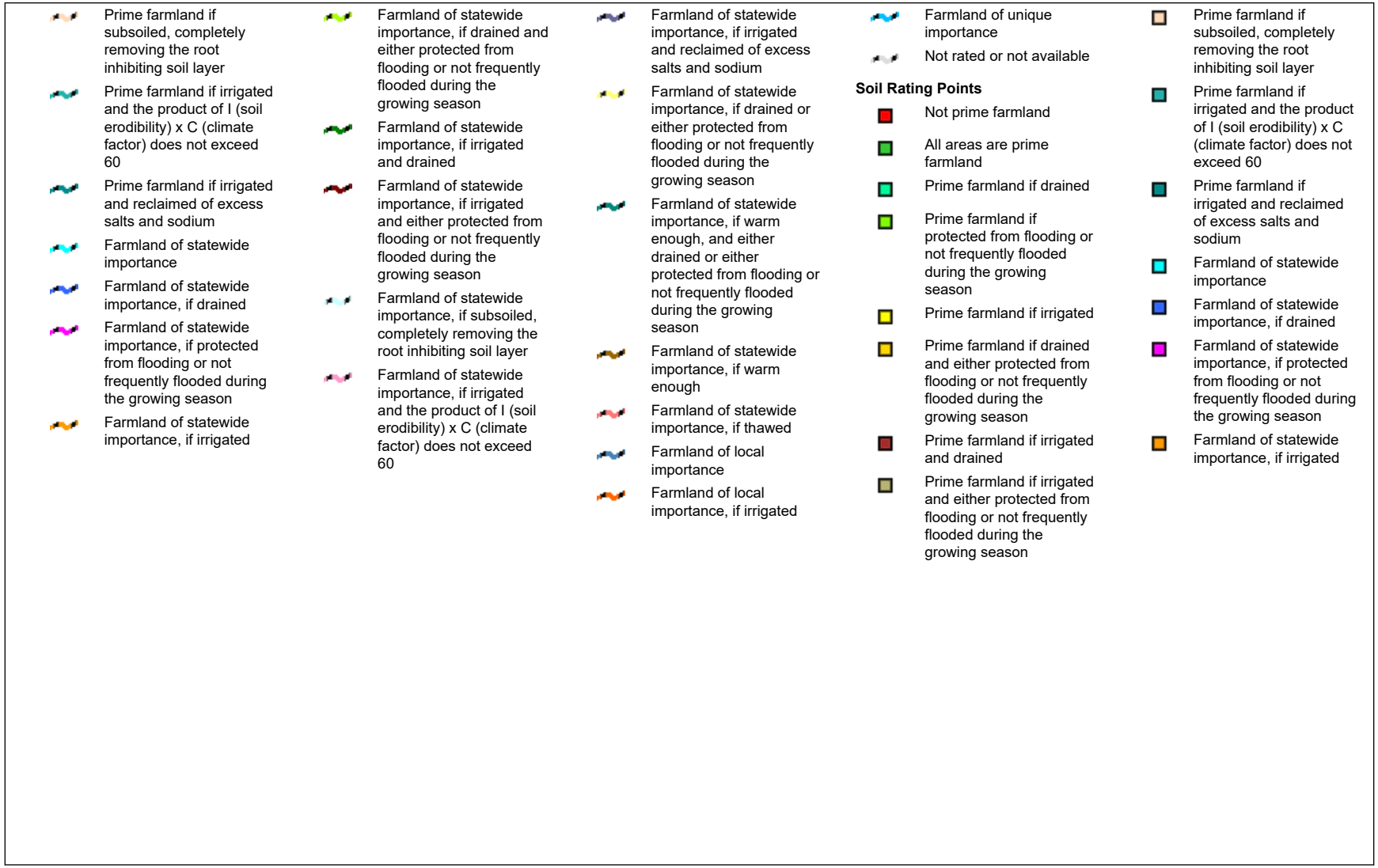
Soils

Soil Rating Polygons

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of statewide importance, if drained
- Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated
- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough
- Farmland of statewide importance, if thawed
- Farmland of local importance
- Farmland of local importance, if irrigated
- Farmland of unique importance
- Not rated or not available

Soil Rating Lines

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season


Prime farmland if subsoiled, completely removing the root inhibiting soil layer
Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
Prime farmland if irrigated and reclaimed of excess salts and sodium
Farmland of statewide importance
Farmland of statewide importance, if drained
Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if irrigated
Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if irrigated and drained
Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if warm enough
Farmland of statewide importance, if thawed
Farmland of local importance
Farmland of local importance, if irrigated
Farmland of unique importance
Not rated or not available
Soil Rating Points
Not prime farmland
All areas are prime farmland
Prime farmland if drained
Prime farmland if protected from flooding or not frequently flooded during the growing season
Prime farmland if irrigated
Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
Prime farmland if irrigated and drained
Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
Prime farmland if subsoiled, completely removing the root inhibiting soil layer
Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
Prime farmland if irrigated and reclaimed of excess salts and sodium
Farmland of statewide importance
Farmland of statewide importance, if drained
Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if irrigated

- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough
- Farmland of statewide importance, if thawed
- Farmland of local importance
- Farmland of local importance, if irrigated
- Farmland of unique importance
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Wichita County, Texas
Survey Area Data: Version 20, Sep 5, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 27, 2021—Mar 28, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Farmland Classification

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
MoB	Tipton loam, 1 to 3 percent slopes	All areas are prime farmland	4.7	98.7%
ToA	Tipton loam, 0 to 1 percent slopes	All areas are prime farmland	0.1	1.3%
Totals for Area of Interest			**4.8**	**100.0%**

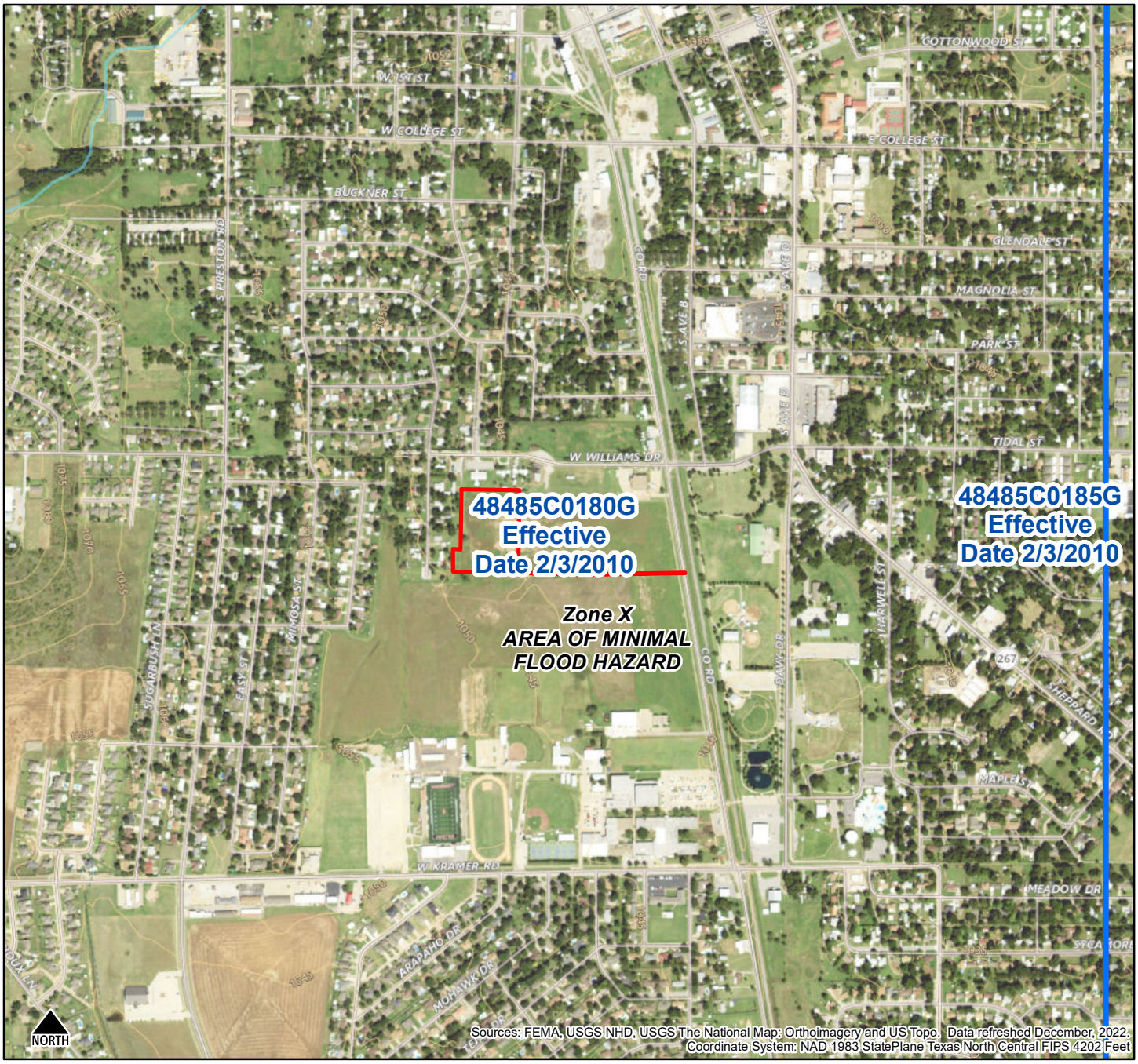
Description

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Rating Options

Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower



Property boundary and locations are representative only.

1:12,000

0 500 1,000 2,000 3,000 4,000 Feet

FEMA National Flood Hazard Layer (NFHL) Map

Special Flood Hazard Areas (SFHA)

SFHAs, labeled beginning with the letters 'A' or 'V,' are the areas that will be inundated by a flood event having a 1% chance of being equaled or exceeded in any given year. The 1% annual chance flood is also referred to as the base flood or 100-year flood.

- **1% Annual Chance Flood Hazard** *Zone A, AE, AH, AO, AR A99, V, VE*
- **Regulatory Floodway**

FEMA FIRM Panel

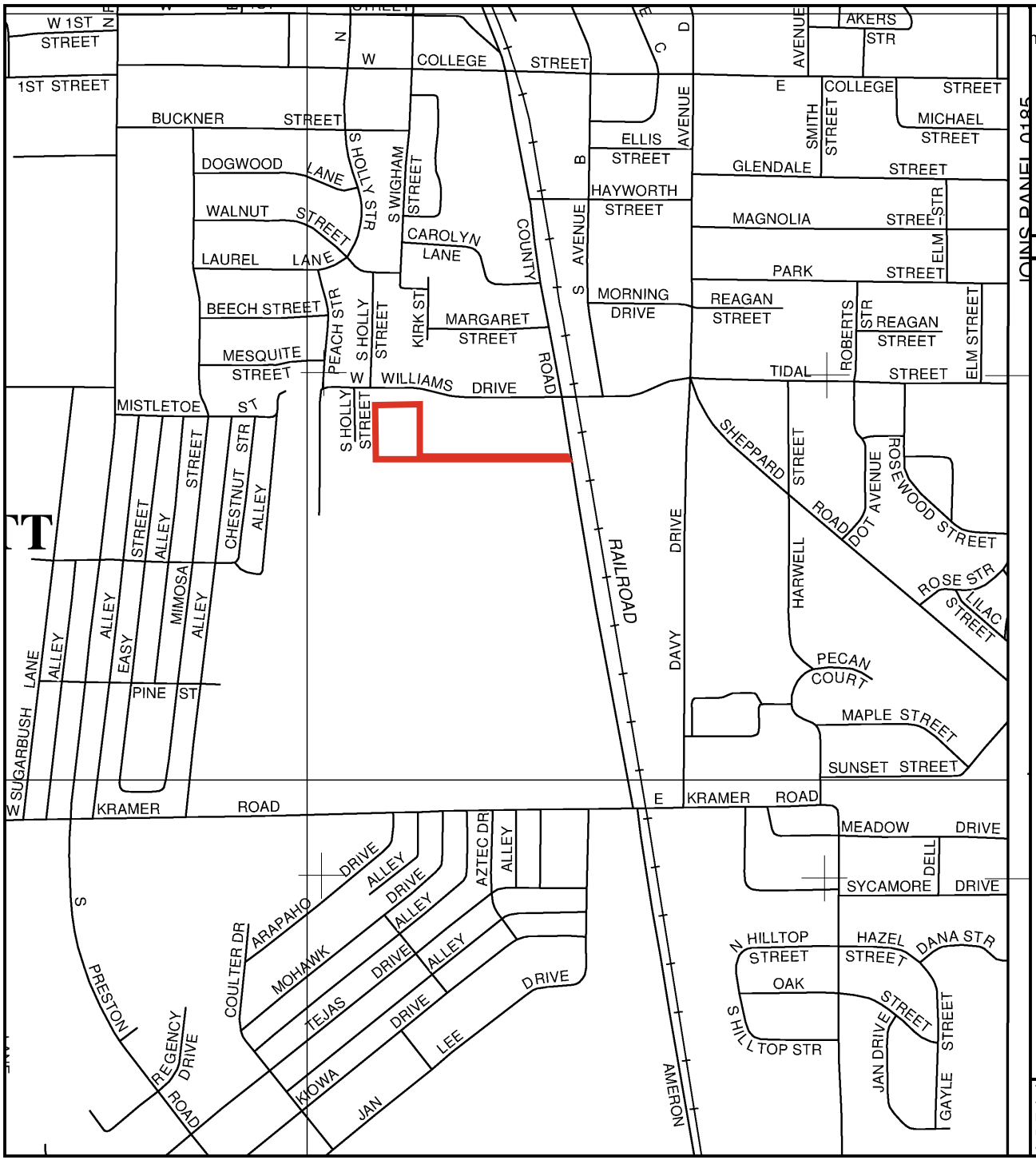
Other Areas of Flood

- **Moderate Flood Hazard** *Zone X (Shaded)*
- **Future Conditions 1% Annual Chance Flood Hazard** *Zone X (Shaded)*
- **Area With Reduced Flood Risk Due to** *Zone X (Shaded)*
- **Area of Undetermined Flood Hazard / Area with Flood Risk due to Levee** *Zone D*

NO SCREEN **Area of Minimal Flood Hazard** *Zone X (Unshaded)*

PHASE
TRUSTED ENVIRONMENTAL SOLUTIONS

PE Project No: 202402008



if flood insurance is available in this community, contact the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 1000'

500 0 1000 2000 FEET

300 0 300 600 METERS

PANEL 0180G

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

FIRM

FLOOD INSURANCE RATE MAP

WICHITA COUNTY, TEXAS

AND INCORPORATED AREAS

PANEL 180 OF 475

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

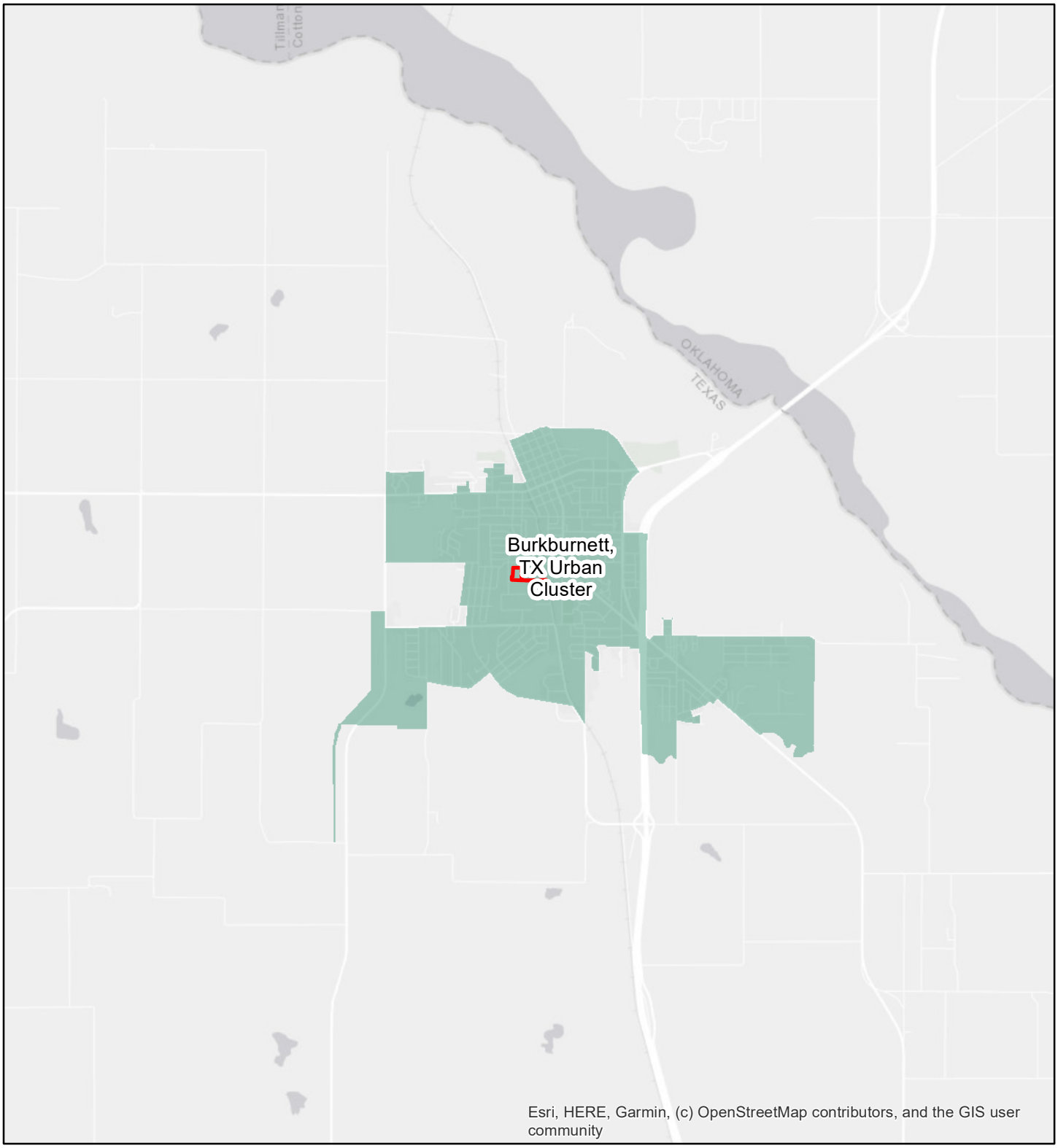
COMMUNITY	NUMBER	PANEL	SUFFIX
WICHITA COUNTY	481189	0180	G
BURKBURNETT, CITY OF	480658	0180	G

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
48485C0180G

EFFECTIVE DATE
FEBRUARY 3, 2010

Federal Emergency Management Agency



Source: US Census Bureau TigerWEB

0 0.375 0.75 1.5 2.25 3 Miles

1:75,000

NORTH

US Census Bureau - Urban Areas & Urban Clusters

Urban Areas

Urban Clusters

PHASE
TRUSTED ENVIRONMENTAL SOLUTIONS

PE Project No: 202402008

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-7000

OFFICE OF COMMUNITY PLANNING
AND DEVELOPMENT

MEMORANDUM FOR: State Historic Preservation Officers (SHPO) and Tribal Historic Preservation Officers (THPO), MAP- and OHP-approved Lenders

FROM: Kristin Fontenot, Director, Office of Environment and Energy
Department Environmental Clearance Officer

KRISTIN FONTENOT Digitally signed by KRISTIN FONTENOT Date: 2022.12.29 13:34:14 -05'00'

SUBJECT: Authorization of MAP- and OHP-approved Lenders and Their Authorized Representatives to Initiate Section 106 Consultation For HUD Office of Housing Programs

EFFECTIVE DATES: January 1, 2023, to December 31, 2027

The Office of Housing at the U.S. Department of Housing and Urban Development (HUD) operates the Federal Housing Administration (FHA), providing mortgage insurance on mortgages for Single Family homes, Multifamily properties, and Healthcare facilities. Within Housing, the Office of Multifamily Housing Programs is responsible for the overall management, development, direction and administration of HUD's Multifamily Housing Programs, and the Office of Health Care Programs is responsible for the administration of HUD's Residential Care programs and Hospital Programs. HUD's FHA Programs are identified by section of the National Housing Act. (The Act.) Sections 220, 221(d)(4), 231, 213 and 241(a) of the Act provide FHA multifamily mortgage insurance for the new construction or substantial rehabilitation of multifamily rental housing. Sections 232 and 242 provide FHA mortgage insurance for new construction or substantial rehabilitation of healthcare facilities and hospitals. The Section 207/223(f) program insures mortgages for the purchase or refinancing of existing rental housing or healthcare facilities which may have been financed originally with conventional mortgages or equity. The Section 223(a)(7) program provides for streamlined refinancing of currently insured FHA loans.

All FHA Multifamily Housing and Healthcare programs must comply with provisions of Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations, 36 CFR Part 800. In these projects, HUD receives applications from lenders and is responsible for completing environmental and Section 106 reviews under HUD's environmental regulations in 24 CFR Part 50 as part of its underwriting process. Early consideration of Section 106 is necessary to meet program timelines which often overlap with other funding and tax credit deadlines. In order to facilitate the review process, HUD has determined that it is consistent with 36 CFR 800.2(c)(4) for the lenders applying for mortgage insurance under these Programs to initiate Section 106 consultation with State Historic Preservation Officers (SHPOs) and other consulting parties, except for Indian Tribes. Only HUD may conduct consultation with Indian Tribes. For the purposes of this Memorandum, Section 106 consultation may begin once HUD has issued an FHA number.

Effective immediately, the Department authorizes Multifamily Accelerated Processing (MAP)- and Office of Healthcare Program (OHP)-approved lenders and their authorized representatives to act on behalf of HUD to consult with SHPOs and other consulting parties, except for Indian Tribes, to initiate the Section 106 review process, identify and evaluate historic properties, and assess effects. Lenders using this option must include a copy of this Memorandum with their submission to SHPO.

If a project involves demolition of a building over 45 years old, new construction in or adjacent to a listed or eligible historic district, substantial ground disturbance[1], or exterior rehabilitation of a building more than 45 years old, lenders must retain a Qualified Historic Preservation Professional[2] in the discipline relevant to the project activities to prepare submissions to SHPO and manage consultation with interested parties and the public, as well as coordinate with HUD on HUD's consultation with Indian Tribes.

When consulting with the SHPO and others, the lenders or authorized representatives shall identify their project by the HUD program followed by the section of the Act and provide an appropriate contact person at both the lender's organization and the authorized representative hired to coordinate the review.

The lender or authorized representative shall prepare documentation that meets 36 CFR 800.11 (d) or (e) and submit to SHPO for review and concurrence following HUD program guidance (MAP Guide Chapter 9 or Healthcare Mortgage Insurance Program Handbook (4232.1) Chapter 7) and specific SHPO protocols. If SHPO concurs with the finding of effect, the lender may enter the concurrence and supporting documentation into HUD's Environmental Review Online System (HEROS) unless any of the considerations below apply.

HUD will conduct consultation with Indian Tribes following the guidance on tribal consultation in HUD Notice CPD-12-006 and supplemental memorandum[3] and in the MAP Guide and Healthcare Mortgage Insurance Handbook. HUD will consider all tribal comments and will ensure those comments are incorporated into the Section 106 process.

HUD Office of Housing will remain legally responsible for all findings and determinations and will finalize the Section 106 review when completing the environmental review in HEROS.

---

[1] Does not include minor ground disturbance for installing posts for a fence, deck, ramp, handrail, etc.; routine landscaping; or repaving a parking lot or sidewalk.

[2] A Qualified Historic Preservation Professional is one who meets the Secretary of the Interior's Professional Qualifications Standards for Archeology, History, Architectural History, Architecture, or Historic Architecture and has substantial experience in conducting Section 106 reviews of historic properties.

[3] HUD Notice CPD-12-006 and the Supplemental Memorandum can be found under the heading "Memos and Notices" at https://www.hudexchange.info/programs/environmental-review/historic-preservation/

HUD Office of Housing will participate in the SHPO consultation when:

- It is determined during review that, in accordance with the *Criteria of Adverse Effect,* there may be an adverse effect on a historic property;
- There is a disagreement between the lender or their authorized representatives and the SHPO and/or THPO regarding identification and evaluation of historic properties and/or assessment of effects;
- There is an objection from tribes, consulting parties or the public regarding assessment of effects, the implementation of agreed upon provisions, or their involvement in a Section 106 review;
- There is the potential for a foreclosure situation per 36 CFR 800.9(b) or anticipatory demolition as specified in Section 110(k) of the National Historic Preservation Act; or
- HUD deems the consultation record inadequate.

It is important that Section 106 reviews be conducted within the timeframes set forth in 36 CFR Part 800 and in the Housing Multifamily and Healthcare FHA programs and that the exchange of documentation and consultations between the consulting parties be carried out in a consistent and predictable manner. To this end, HUD will coordinate with its MAP- and OHP-approved lenders to carry out the process set forth in this memorandum. HUD will provide guidance and periodic training on the implementation of the authorization. HUD will also monitor compliance with the authorization and prepare an annual report that summarizes the activities conducted under this authorization and make it publicly available on the HUD website.

If you have any questions regarding compliance with this Memorandum, please contact Sara Jensen, Housing Program Environmental Clearance Officer, at sara.jensen@hud.gov or 206-220-5226. If you have any questions regarding HUD's Historic Preservation Program, please contact HUD's Federal Preservation Officer at EnvironmentalPlanningDivision@hud.gov.

Affirmed by ETHAN HANDELMAN Digitally signed by ETHAN HANDELMAN Date: 2022.12.23 08:34:43 -05'00' Date_____

Ethan D. Handelman
Deputy Assistant Secretary, Office of Multifamily Housing

Affirmed by ROGER LUKOFF Digitally signed by: ROGER LUKOFF DN: CN = ROGER.LUKOFF C = US O = U.S. Government OU = Department of Housing and Urban Development, Office of Housing Date: 2022.12.22 11:41:49 -05'00' Date_____

Roger M. Lukoff
Deputy Assistant Secretary, FHA Office of Healthcare Programs

TEXAS HISTORICAL COMMISSION

REQUEST FOR SHPO CONSULTATION:
Section 106 of the National Historic Preservation Act and/or the Antiquities Code of Texas

Please see instructions for completing this form and additional information on Section 106 and Antiquities Code consultation on the Texas Historical Commission website at http://www.thc.state.tx.us/crm/crmsend.shtml.

☐ This is a new submission.

☒ This is additional information relating to THC tracking number(s): 202300032

Project Information

PROJECT NAME
Burkburnett Royal GardenS

PROJECT ADDRESS	PROJECT CITY	PROJECT ZIP CODE(S)
5.14 acres south of Williams Drive	**Burkburnett**	**76354**

PROJECT COUNTY OR COUNTIES
Wichita County

PROJECT TYPE (Check all that apply)

- ☐ Road/Highway Construction or Improvement
- ☐ Site Excavation
- ☐ Utilities and Infrastructure
- ☒ New Construction
- ☐ Repair, Rehabilitation, or Renovation of Structure(s)
- ☐ Addition to Existing Structure(s)
- ☐ Demolition or Relocation of Existing Structure(s)
- ☐ None of these

BRIEF PROJECT DESCRIPTION: Please explain the project in one or two sentences. More details should be included as an attachment to this form.
Resubmitting due to changes in property boundary. New construction of 80-unit multi-family complex on approximately 5 acres of previously developed, vacant land. The project will include two 3-story residential buildings and one 2 to 3-story garden-style residential building. Other site developments will include a business center/clubhouse, laundry facility, courtyard area with a pavilion and barbecue pit, fitness center, playground, and recreational areas.

Project Contact Information

PROJECT CONTACT NAME	TITLE	ORGANIZATION	
Ryan Starr	**Special Projects Manager**	**Phase Engineering, LLC.**	
ADDRESS	CITY	STATE	ZIP CODE
5524 Cornish Street	**Houston**	**TX**	**77007**
PHONE	EMAIL		
	Ryan@phaseengineering.com		

Federal Involvement (Section 106 of the National Historic Preservation Act)

Does this project involve approval, funding, permit, or license from a federal agency?

☒ Yes (Please complete this section) ☐ No (Skip to next section)

FEDERAL AGENCY	FEDERAL PROGRAM, FUNDING, OR PERMIT TYPE
U.S. Department of Housing and Urban Development (HUD)	**HUD HOME TDHCA**
CONTACT PERSON	PHONE
ADDRESS	EMAIL

State Involvement (Antiquities Code of Texas)

Does this project occur on land or property owned by the State of Texas or a political subdivision of the state?

☐ Yes (Please complete this section) ☒ No (Skip to next section)

CURRENT OR FUTURE OWNER OF THE PUBLIC LAND

CONTACT PERSON	PHONE
ADDRESS	EMAIL

Identification of Historic Properties: Archeology

Does this project involve ground-disturbing activity?

☑ Yes (Please complete this section) ☐ No (Skip to next section)

Describe the nature of the ground-disturbing activity, including but not limited to depth, width, and length.

Construction of underground utilities, roads, driveways, and concrete foundations.

Describe the previous and current land use, conditions, and disturbances.

Subject Property (SP) is currently vacant land with no improvements since at least mid- 1980s. The property is bound to the north by Burkburnett Masonic Lodge, single-family residential property, and auto facilities; the east by undeveloped land; to the south by Overton Ray Elementary School; and to the west by single-family residential properties.

Identification of Historic Properties: Structures

Does the project area or area of potential effects include buildings, structures, or designed landscape features (such as parks or cemeteries) that are 45 years of age or older?

☑ Yes (Please complete this section) ☐ No (Skip to next section)

Is the project area or area of potential effects within or adjacent to a property or district that is listed in or eligible for listing in the National Register of Historic Places?

☑ Yes, name of property or district: **Burkburnett Masonic Lodge 1027** ☐ No ☐ Unknown

In the space below or as an attachment, describe each building, structure, or landscape feature within the project area or area of potential effect that is 45 years of age or older.

ADDRESS	DATE OF CONSTRUCTION	SOURCE FOR CONSTRUCTION DATE
203-213 (odds) West Williams Drive (West Adjoining)	**1930-1950**	**Wichita County Appraisal Dist.**
ADDRESS	DATE OF CONSTRUCTION	SOURCE FOR CONSTRUCTION DATE
ADDRESS	DATE OF CONSTRUCTION	SOURCE FOR CONSTRUCTION DATE

Attachments

Please see detailed instructions regarding attachments.

Include the following with each submission:

☑ Project Work Description
☑ Maps
☑ Identification of Historic Properties
☑ Photographs

For Section 106 reviews only, also include:

☑ Consulting Parties/Public Notification
☑ Area of Potential Effects
☐ Determination of Eligibility
☐ Determination of Effect

Submit completed form and attachments to the address below. Faxes and email are not acceptable.

Mark Wolfe
State Historic Preservation Officer
Texas Historical Commission
P.O. Box 12276, Austin, TX 78711-2276 (mail service)
108 W. 16th Street, Austin, TX 78701 (courier service)

For SHPO Use Only

From: noreply@thc.state.tx.us
To: Hailey Farmer; reviews@thc.state.tx.us
Subject: Section 106 Submission
Date: Friday, September 9, 2022 7:04:56 AM

Re: Project Review under Section 106 of the National Historic Preservation Act
THC Tracking #202300032
Date: 09/09/2022
Burkburnett Royal Garden
5 acres south of Williams Drive
Burkburnett,TX 76354

Description: New construction of 80-unit multi-family complex on 5 acres previously developed, vacant land.

Dear Hailey Farmer:
Thank you for your submittal regarding the above-referenced project. This response represents the comments of the State Historic Preservation Officer, the Executive Director of the Texas Historical Commission (THC), pursuant to review under Section 106 of the National Historic Preservation Act.

The review staff, led by Charles Peveto and Arlo McKee, has completed its review and has made the following determinations based on the information submitted for review:

Above-Ground Resources

- No historic properties are present or affected by the project as proposed. However, if historic properties are discovered or unanticipated effects on historic properties are found, work should cease in the immediate area; work can continue where no historic properties are present. Please contact the THC's History Programs Division at 512-463-5853 to consult on further actions that may be necessary to protect historic properties.

Archeology Comments

- No historic properties affected. However, if cultural materials are encountered during construction or disturbance activities, work should cease in the immediate area; work can continue where no cultural materials are present. Please contact the THC's Archeology Division at 512-463-6096 to consult on further actions that may be necessary to protect the cultural remains.

We look forward to further consultation with your office and hope to maintain a partnership that will foster effective historic preservation. Thank you for your cooperation in this review process, and for your efforts to preserve the irreplaceable heritage of Texas. If the project changes, or if new historic properties are found, please contact the review staff. If you have any questions concerning our review or if we can be of further assistance, please email the

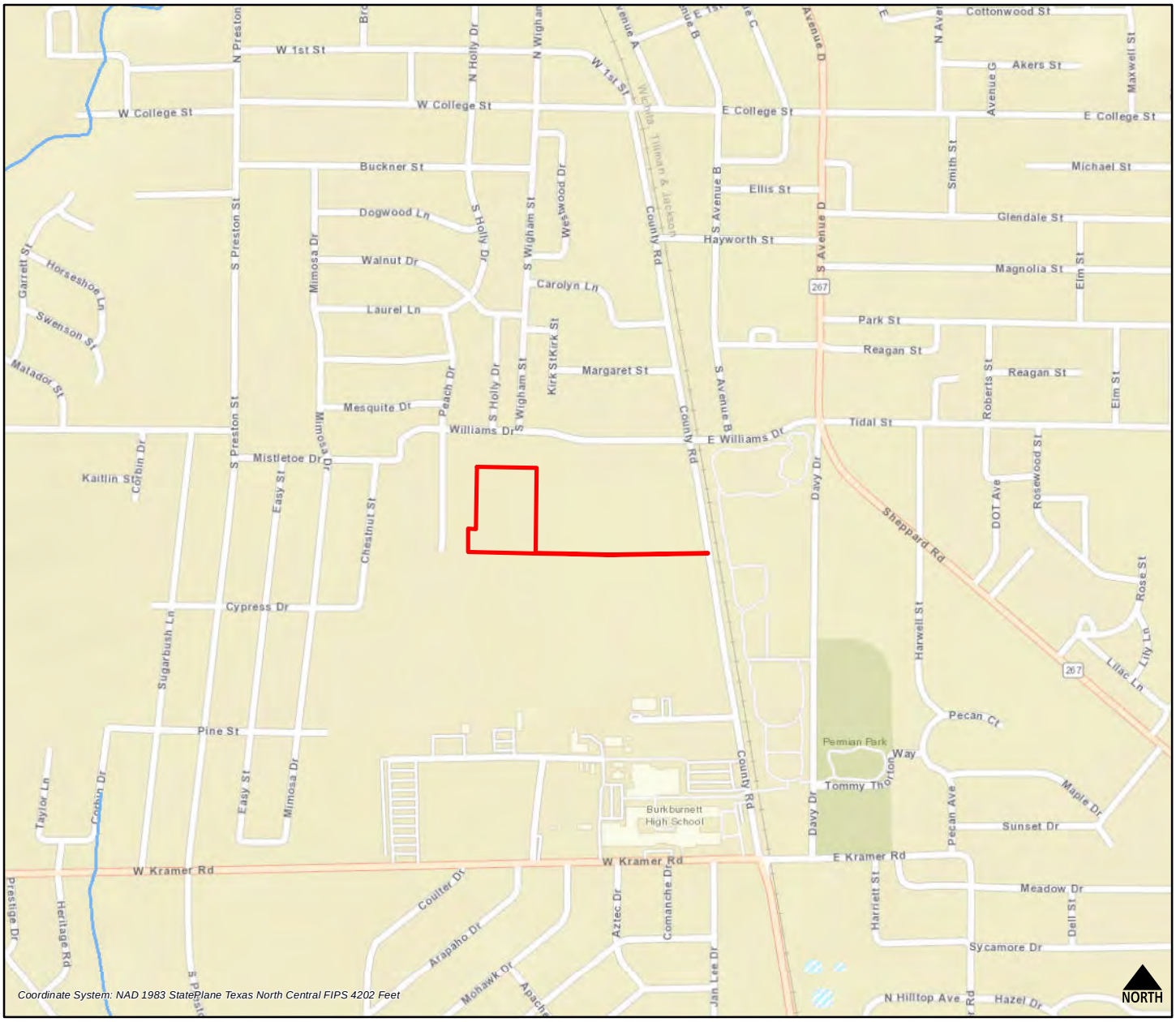
following reviewers: charles.peveto@thc.texas.gov, Arlo.McKee@thc.texas.gov.

This response has been sent through the electronic THC review and compliance system (eTRAC). Submitting your project via eTRAC eliminates mailing delays and allows you to check the status of the review, receive an electronic response, and generate reports on your submissions. For more information, visit http://thc.texas.gov/etrac-system.

Sincerely,

for Mark Wolfe, State Historic Preservation Officer
Executive Director, Texas Historical Commission

Please do not respond to this email.



Source: USGS NHL

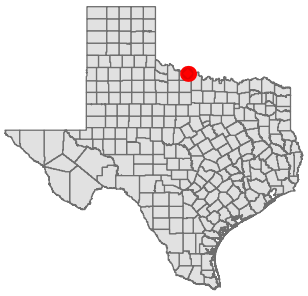
Property boundary and locations are representative only.

0 500 1,000 2,000 3,000 4,000 Feet

1:12,000

Location Map

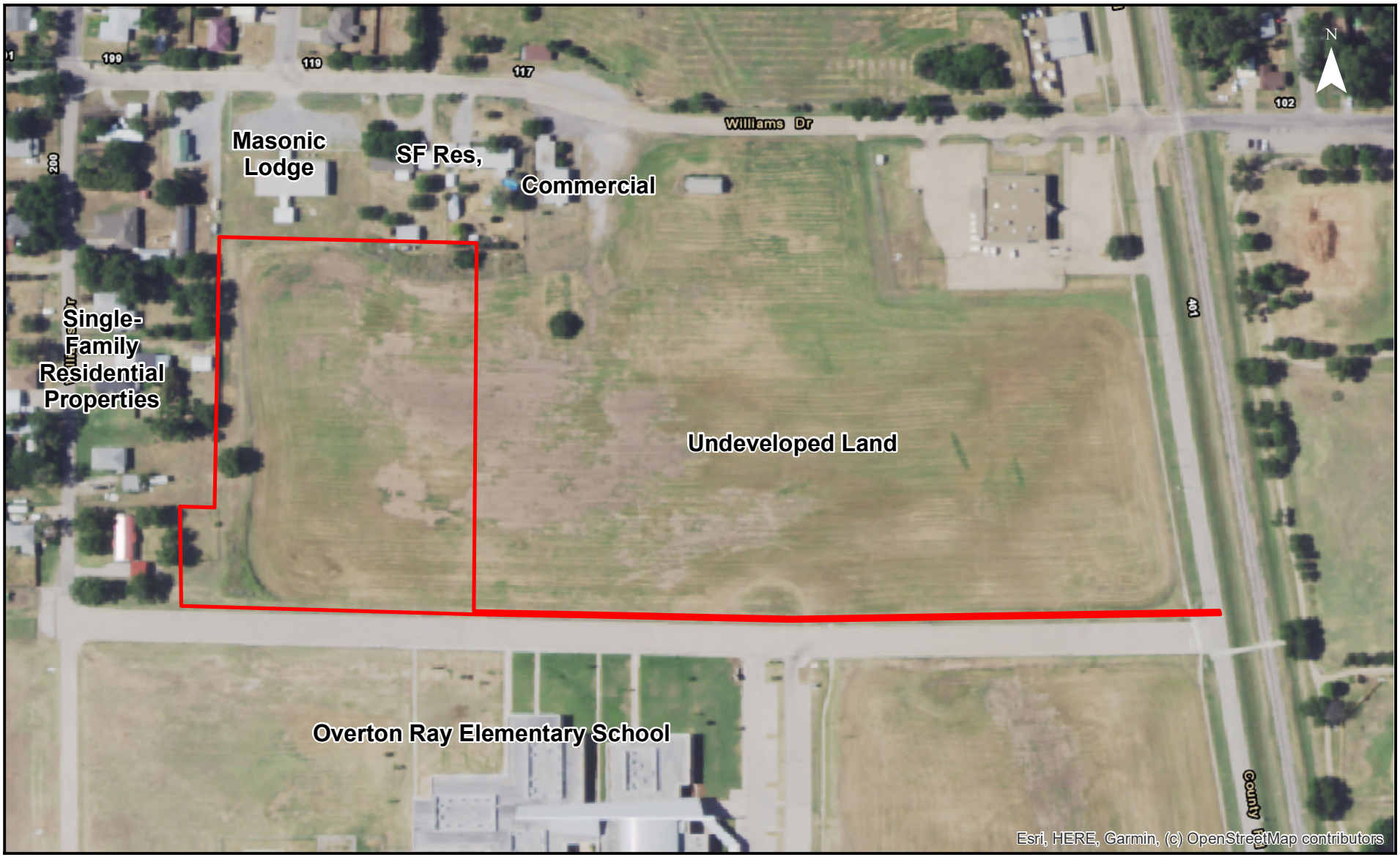
Texas



Location: 5.14 acres along D. W. Taylor Pathway
Burkburnett, TX 76354
Wichita County

PHASE
TRUSTED ENVIRONMENTAL SOLUTIONS

PE Project No: 202402008



Note: Property location and boundary are representative only.

0 195 390 780 Feet

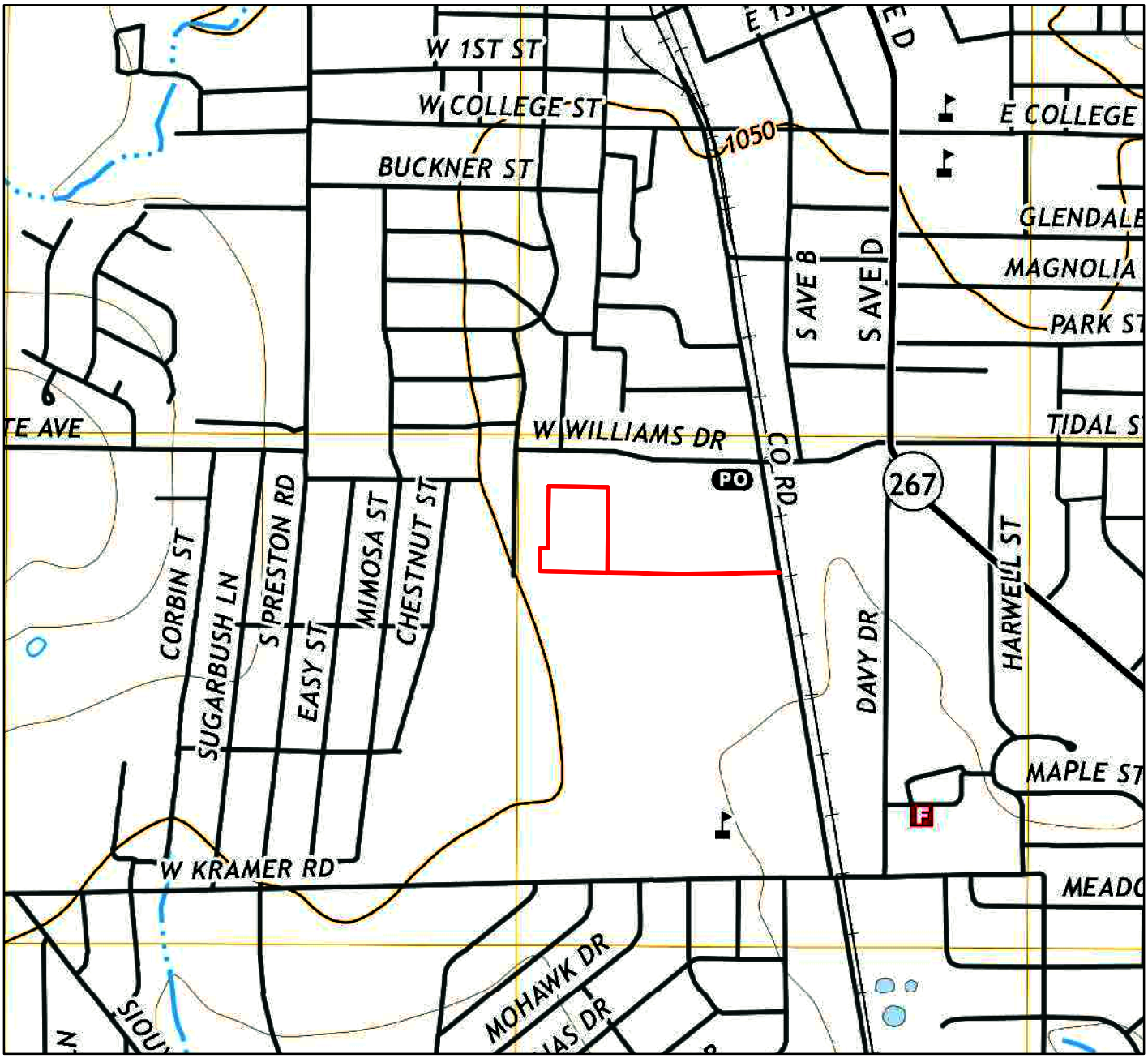
SITE SKETCH - 2020 NAIP Aerial Imagery

Subject Property

Location: 5.14 acres along D. W. Taylor Pathway
Burkburnett, TX 76354
Wichita County

PHASE
TRUSTED ENVIRONMENTAL SOLUTIONS

PE Project No: 202402008



Topographic Map

The U.S. Geological Survey (USGS) produced its first topographic map in 1879, the same year it was established. Today, more than 100 years and millions of map copies later, topographic mapping is still a central activity for the USGS. The topographic map remains an indispensable tool for government, science, industry, and leisure.

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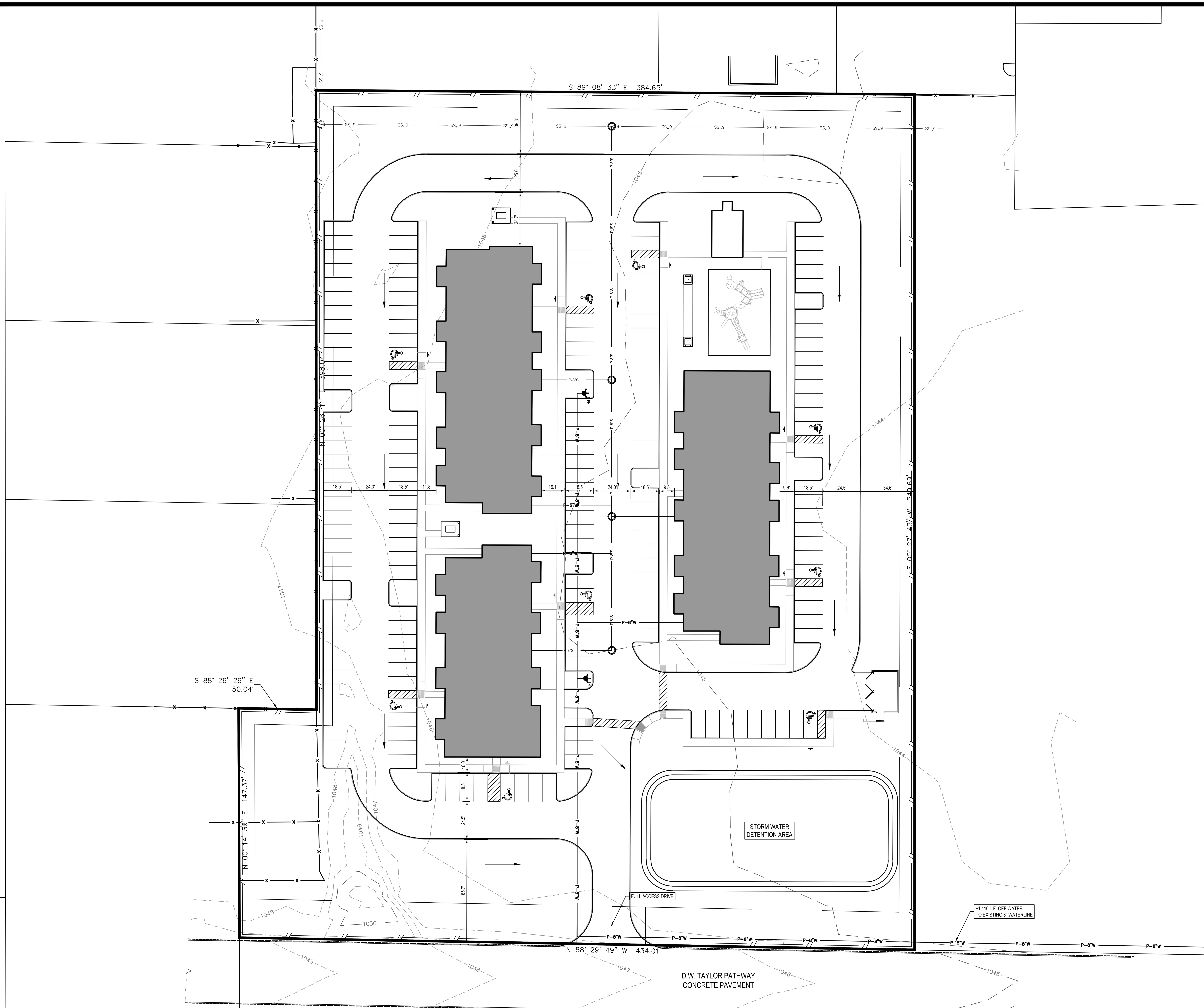
USGS 7.5 Minute Topographic Series
Burkburnett, 2019

PHASE ENGINEERING, INC.
ENVIRONMENTAL CONSULTANTS

PEI Project No: 202208134



Know what's **below.**
Call before you dig.

0 10' 20' 30' 60'
1"=30'

LEGEND

E- INDICATES EXISTING P- INDICATES PROPOSED	INDICATES EXISTING OR PROPOSED — E-6"W — INDICATES TYPE OF LINE; INDICATES SIZE OF LINE
	PROPOSED FIRE HYDRANT
	PROPOSED MANHOLE
— W —	WATER LINE
— S —	SANITARY SEWER
	PROPERTY BOUNDARY
— — BL — —	BUILDING SETBACK

NOTES

1. THE ENGINEER HAS RESEARCHED CODES, ORDINANCES, AND OTHER DEVELOPMENTAL REQUIREMENTS OF LOCAL GOVERNMENT, INCLUDING FIRE, WITH JURISDICTION OVER THE SITE, AND VERIFIES THAT THE SITE PLAN CONFORMS TO ALL APPLICABLE ZONING, SITE DEVELOPMENT, AND BUILDING CODED ORDINANCES.
2. THERE ARE NO KNOWN VARIANCES THAT WILL BE REQUIRED FOR THIS PROJECT.
3. DIMENSIONS ARE TO BACK OF CURB. RADII ARE TO BACK OF CURB, OR CENTER OF STRIPING UNLESS NOTED OTHERWISE.
4. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF BUILDING EXIT PORCHES, RAMPS, SIDEWALKS, DOWN SPOUTS AND OTHER APPURTENANCES WHICH ARE CONNECTED TO THE BUILDING, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY LOCATIONS.
5. CONTRACTOR SHALL REFER TO ELECTRICAL PLANS FOR TYPES OF LIGHT FIXTURES AND CONDUIT ROUTING.
6. ALL FACE OF CURB RADIUSES NOT NOTED SHALL BE 2.0' RADIUS.
7. CONTRACTOR SHALL PROVIDE FIRE LANE STRIPING AS PER GOVERNING ENTITY.
8. TOPOGRAPHIC INFORMATION WAS OBTAINED FROM CORLETT, PROBST & BOYD, PLLC.
9. THE MINIMUM HORIZONTAL SEPARATION BETWEEN PARALLEL WATER AND SEWER LINES IS NINE (9) FEET, OR MINIMUM VERTICAL SEPARATION BETWEEN CROSSING WATER AND SEWER LINES IS EIGHTEEN (18) INCHES.
10. STORM WATER DETENTION IS ANTICIPATED FOR THIS DEVELOPMENT.
11. RETAINING WALLS ARE NOT ANTICIPATED FOR THIS SITE.
12. ACCESSIBLE ROUTES SHALL BE PROVIDED IN COMPLIANCE AND IN ACCORDANCE TO THE FAIR HOUSING DESIGN MANUAL.
13. SUBJECT PROPERTY APPEARS TO BE SITUATED WITHIN THE FLOOD ZONE "X" (AREAS DETERMINED TO BE OUTSIDE THE LIMITS OF THE 100-yr AND 500-yr FLOOD) AS INDICATED ON THE FOLLOWING FLOOD INSURANCE RATE MAP: 48485C0180G, EFFECTIVE DATE: FEBRUARY 3, 2010 BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY FOR WICHITA COUNTY, TEXAS.
14. SETBACKS
    FRONT - 30
    SIDE - 15
    REAR - 25
    HEIGHT - 3 STORIES / 45'

PARKING REQUIREMENT CHART

NUMBER OF BEDROOMS	UNITS	PARKING CALCULATION	PARKING REQUIRED	PARKING PROVIDED
1 BEDROOM	36	1.75 SPACE PER UNIT	63	
2 BEDROOM	40	2 SPACE PER UNIT	80	
3 BEDROOM	4	2.5 SPACE PER UNIT	10	
		TOTAL	153	171

REVISIONS

BURKBURNETT ROYAL GARDEN
D.W. TAYLOR PATHWAY
BURKBURNETT, TEXAS

PRELIMINARY SITE PLAN

ISSUED FOR REVIEW

CARNEY
ENGINEERING,
PLLC.
5700 GRANITE PARKWAY, SUITE 200
Plano, Texas 75024
PH (469) 443-0861
FAX (469) 443-0863

STATE OF TEXAS
T. CRAIG CARNEY
55714
REGISTERED
PROFESSIONAL ENGINEER
2/26/2022

TBPE FIRM REGISTRATION NO.: F-5033

DRAWN BY:	TCP
CHECKED BY:	JAH
START DATE:	03/04/2021
SCALE:	1" = 30'
PROJECT NO.:	2068-181

SHEET
C1.0

1. North adjoining property (Burkburnett Masonic Lodge)

2. West adjoining property (single-family residential property)

3. View south along the western property boundary

4. View east along the southern property boundary

5. South adjoining property (Overton Ray Elementary School)

6. View northeast across subject property

7. View north along the eastern property boundary

8. East adjoining property (undeveloped land)

9. North adjoining property (single-family residential property)

10. View west along the northern property boundary

11. North adjoining property (Vacant office building)

12. West adjoining property (single-family residential property)

13. View south along the western property boundary

14. West adjoining property (single-family residential property)

Source: TNRIS

Property boundary and locations are representative only.

0 105 210 420 630 840 Feet

1:4,000

NORTH

2015 TOP Orthoimagery

PHASE ENGINEERING, INC.
ENVIRONMENTAL CONSULTANTS

PEI Project No: 202208134

Source: USDA NRCS Geospatial Data Gateway

Property boundary and locations are representative only.

0 105 210 420 630 840 Feet

1:4,000

NORTH

1995 Digital Orthophoto Mosaic

PHASE ENGINEERING, INC.
ENVIRONMENTAL CONSULTANTS

PEI Project No: 202208134

Source: USGS Earth Explorer

Property boundaries are approximate only.

0 0.025 0.05 0.1 0.15 0.2 Miles

1:4,000

NORTH

1983 Aerial Photograph

PHASE ENGINEERING, INC.
ENVIRONMENTAL CONSULTANTS

PEI Project No: 202208134

Source: USGS Earth Explorer

Property boundaries are approximate only.

0 0.025 0.05 0.1 0.15 0.2 Miles

1:4,000

NORTH

1971 Aerial Photograph

PHASE ENGINEERING, INC.
ENVIRONMENTAL CONSULTANTS

PEI Project No: 202208134

Source: USGS Earth Explorer

Property boundaries are approximate only.

0 0.025 0.05 0.1 0.15 0.2 Miles

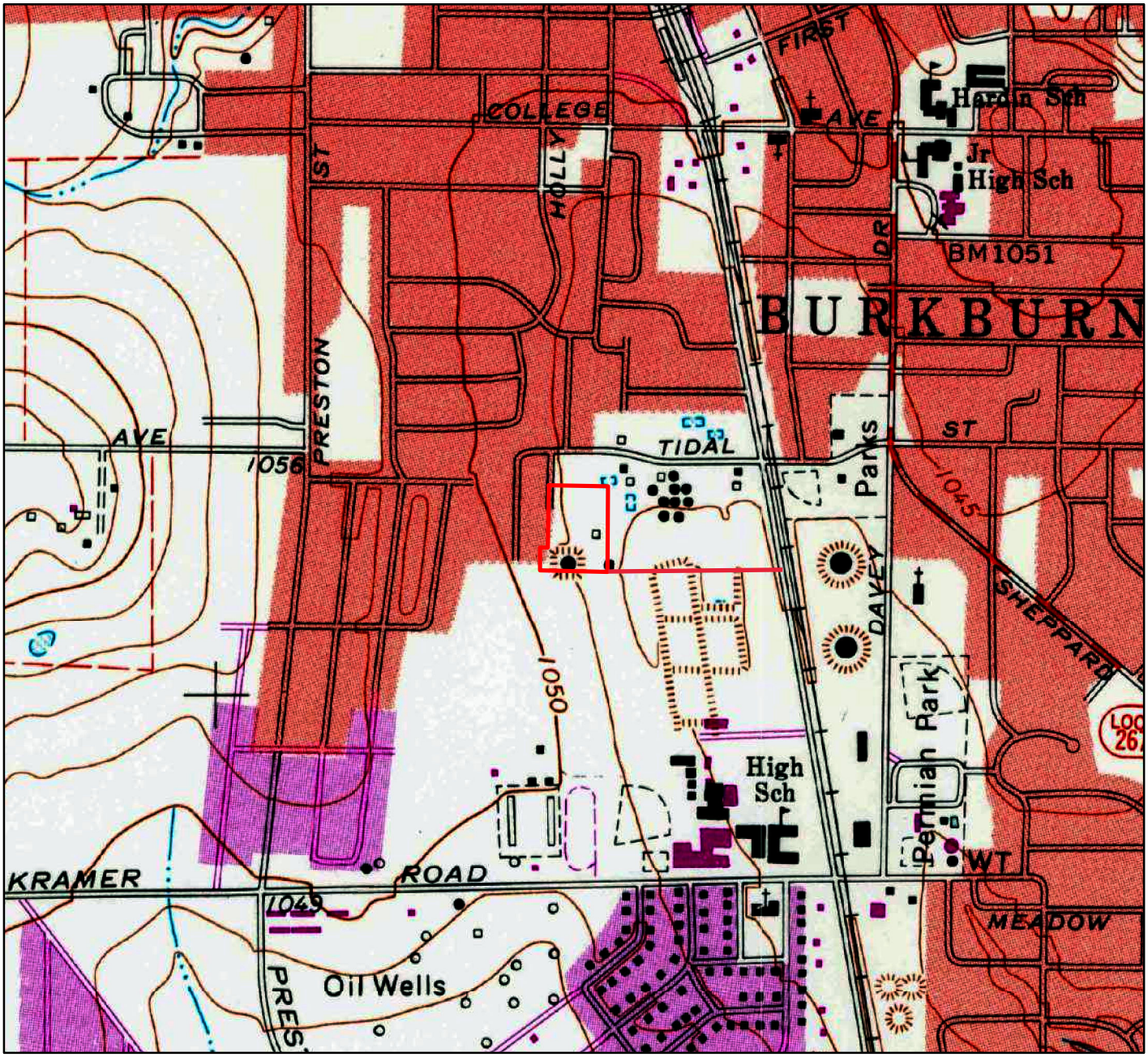
1:4,000

NORTH

1953 Aerial Photograph

PHASE ENGINEERING, INC.
ENVIRONMENTAL CONSULTANTS

PEI Project No: 202208134



Source: TopoView

Property boundary and locations are representative only.

Miles
0 0.05 0.1 0.2 0.3 0.4 0.5

1:12,000

NORTH

Topographic Map

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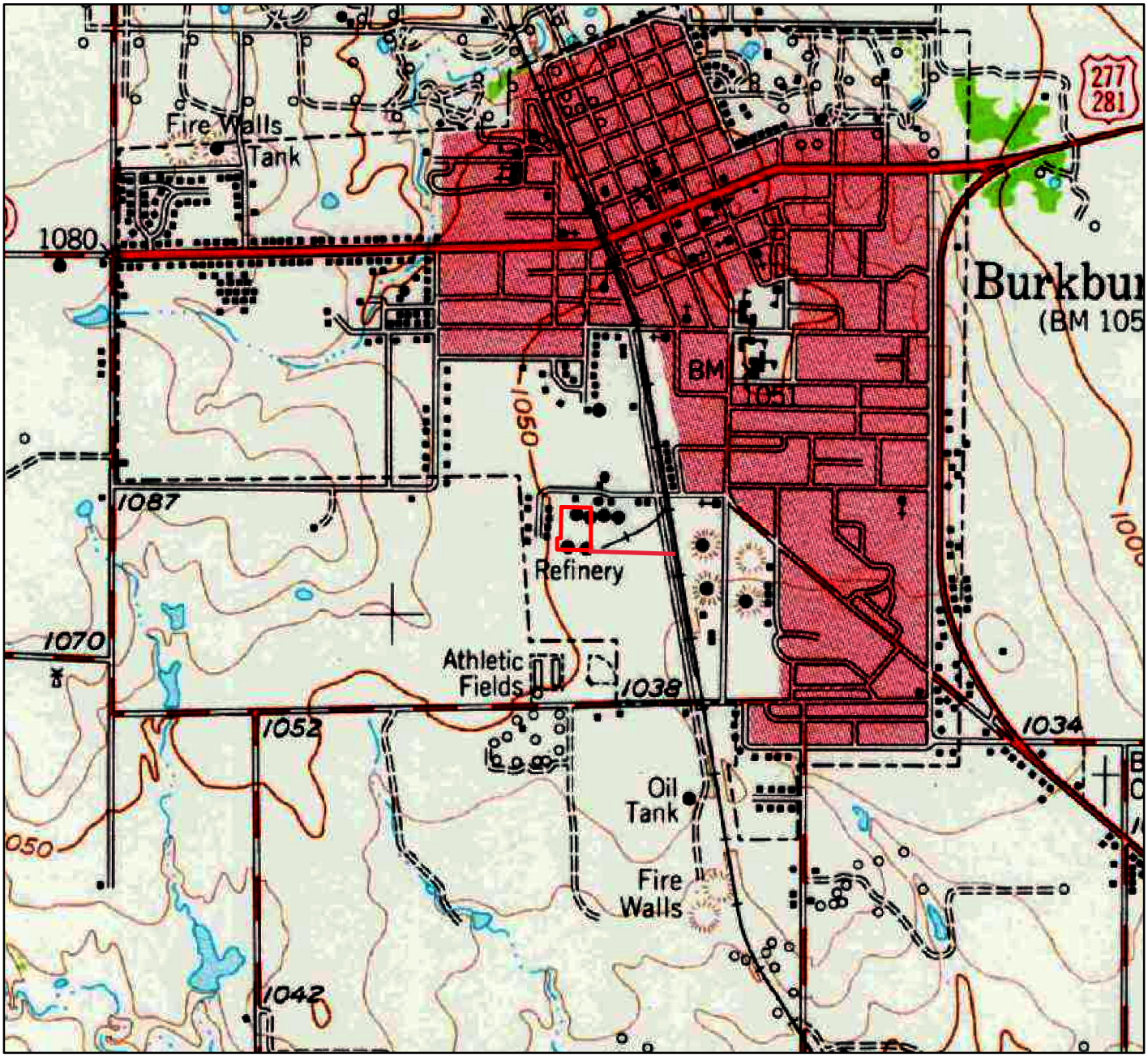
USGS 7.5 Minute Topographic Series
Burkburnett, 1981

PHASE ENGINEERING, INC.
ENVIRONMENTAL CONSULTANTS

PEI Project No: 202208134



Source: TopoView

Property boundary and locations are representative only.

0 0.1 0.2 0.4 0.6 0.8 1 Miles

1:24,000

NORTH

Topographic Map

The U.S. Geological Survey (USGS) produced its first topographic map in 1879, the same year it was established. Today, more than 100 years and millions of map copies later, topographic mapping is still a central activity for the USGS. The topographic map remains an indispensable tool for government, science, industry, and leisure.

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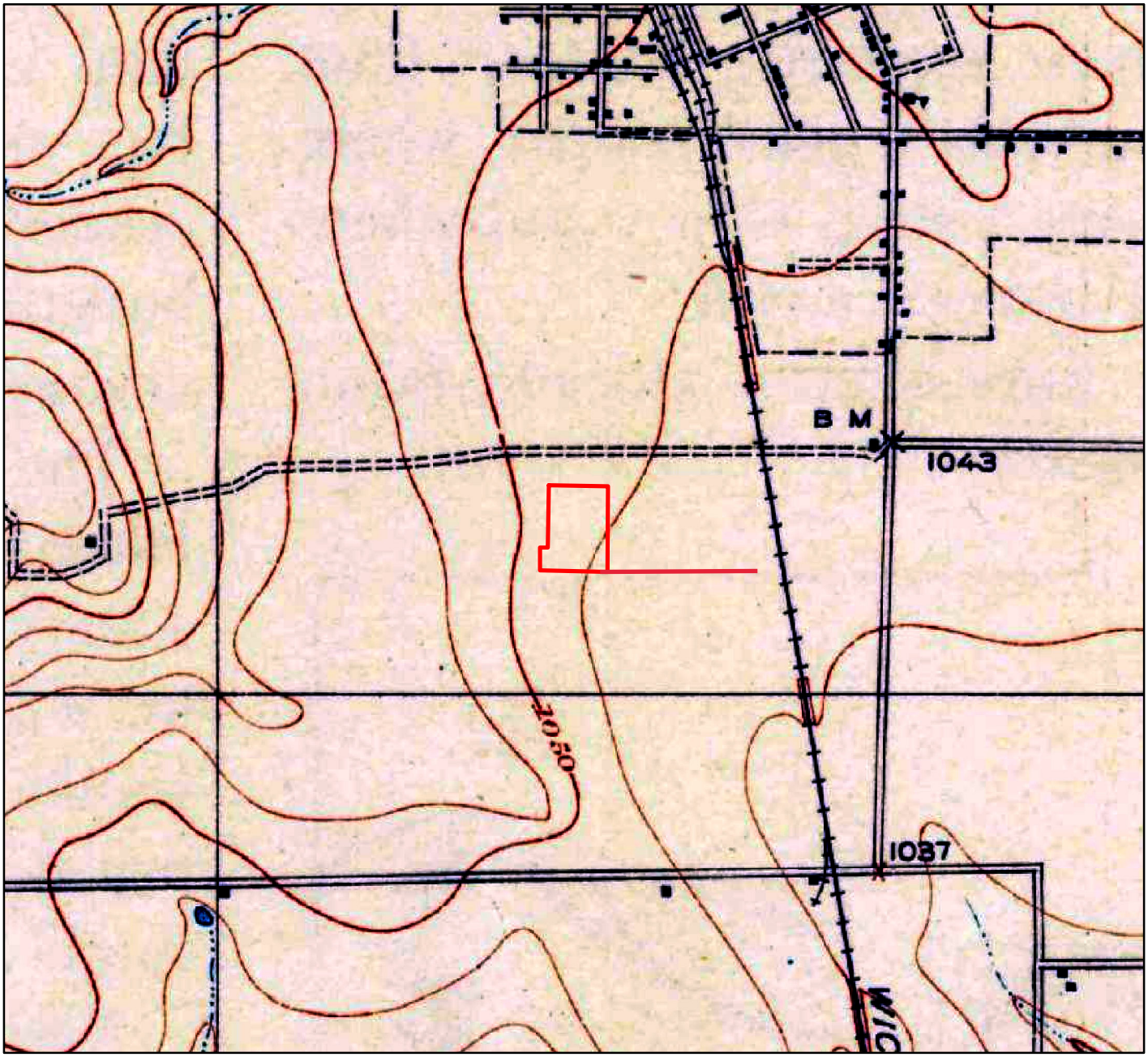
USGS 15 Minute Topographic Series
Burkburnett, 1957

PHASE ENGINEERING, INC.
ENVIRONMENTAL CONSULTANTS

PEI Project No: 202208134



Source: TopoView

Property boundary and locations are representative only.

0 0.05 0.1 0.2 0.3 0.4 0.5 Miles

1:12,000

NORTH

Topographic Map

The U.S. Geological Survey (USGS) produced its first topographic map in 1879, the same year it was established. Today, more than 100 years and millions of map copies later, topographic mapping is still a central activity for the USGS. The topographic map remains an indispensable tool for government, science, industry, and leisure.

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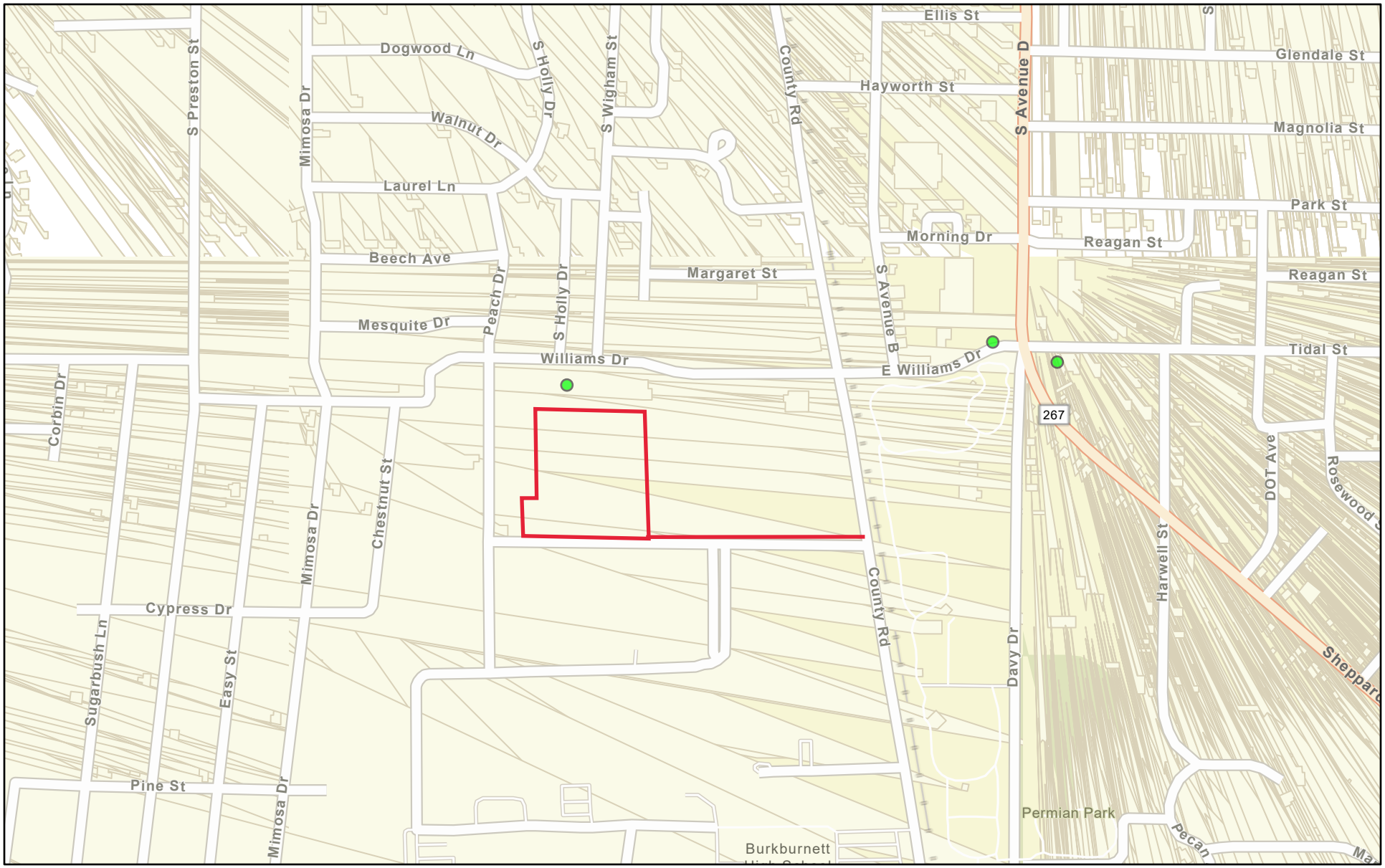
USGS 7.5 Minute Topographic Series
Buckburnett, 1918

PHASE ENGINEERING, INC.
ENVIRONMENTAL CONSULTANTS

PEI Project No: 202208134

Burkburnett Royal Gardens- 202208134



September 1, 2022

Historical Marker

1:9,028

0 0.05 0.1 0.2 mi

0 0.1 0.2 0.4 km

Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Details for Burkburnett Masonic Lodge 1027

Historical Marker — Atlas Number 5507018161

Data

Marker Number	18161
Atlas Number	5507018161
Marker Title	Burkburnett Masonic Lodge 1027
Index Entry	Burkburnett Masonic Lodge 1027
Address	119 W. Williams Dr
City	Burkburnett
County	Wichita
UTM Zone	
UTM Easting	
UTM Northing	
Subject Codes	counties
Marker Year	2015
Recorded Texas Historic Landmark	No
Private Property	No
Marker Location	
Marker Condition	In Situ
Marker Size	18" x 28" with post
Marker Text	The Burkburnett Masonic Lodge no. 1027 AF & AM was chartered in 1910, only three years after the city's founding. J.A.D. Smith, W.O. Willingham and S. Hawkins were among the founders. Eastern Star formed in 1921. By the 1930s, it could claim 400 members in a town of only 3200. Eight District Deputy Grand Masters and an imperial potentate of the shrine came from the Burkburnett Lodge. The lodge continues a tradition of community service through education and charitable activities locally and statewide. It laid cornerstones at six buildings in Burkburnett, including First United Methodist Church, Burkburnett Library and Burkburnett Schools.

ATLAS_NUM=5507018161

Location Map

TEXAS DEPARTMENT of TRANSPORTATION

Historic Districts & Properties of Texas

119 W Williams Dr, Burkburnett,

Show search results for **119 W Willia...**

Search result

119 W Williams Dr, Burkburnett, TX, 76354, USA

Zoom to

Legend

Historic Properties (PT)

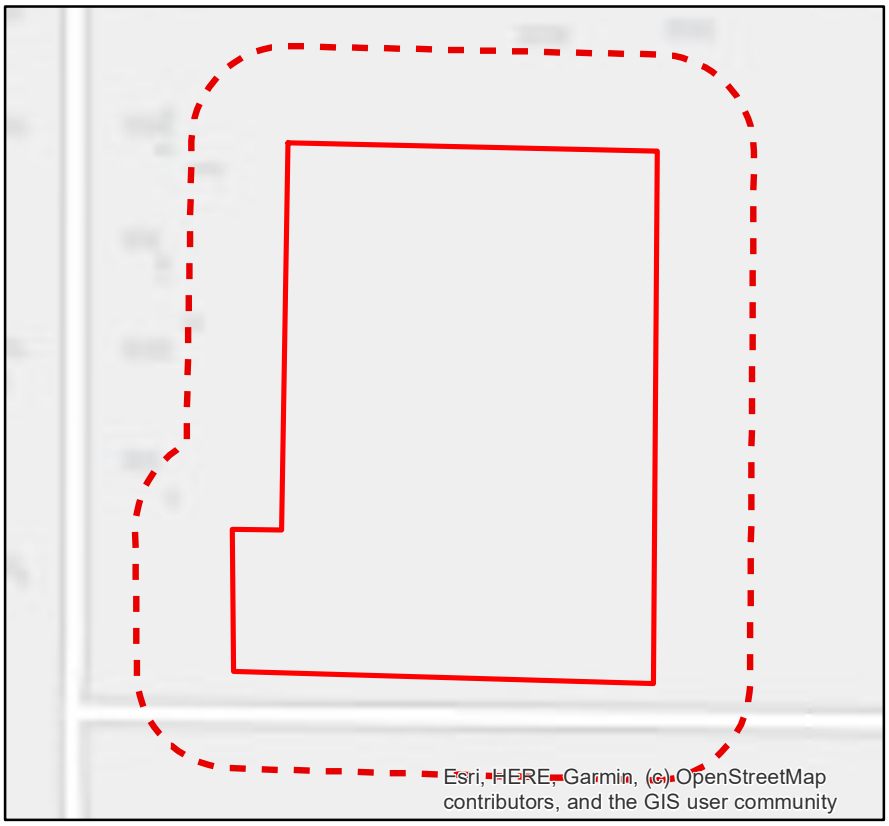
- SAL
- NHL
- NRHP Listed
- RTHL
- Centennial Marker
- NRHP Eligible
- Contributing

Historic Properties (LINE)

- NRHP Listed
- NRHP Eligible
- Contributing

Historic Districts (POLY)

- SAL
- NHL
- NRHP Listed District
- NRHP Eligible District
- Local / Potential District
- Contributing



Sources:Texas Historical Commission ATLAS

Texas Historical Commission

Archaeological Projects 2020

Areas surveys to locate archaeological sites. Includes project areas, transmission lines and pipelines. Includes projects mapped since 2001.

Archeological Projects - Linear

Archaeological Projects - Polygon

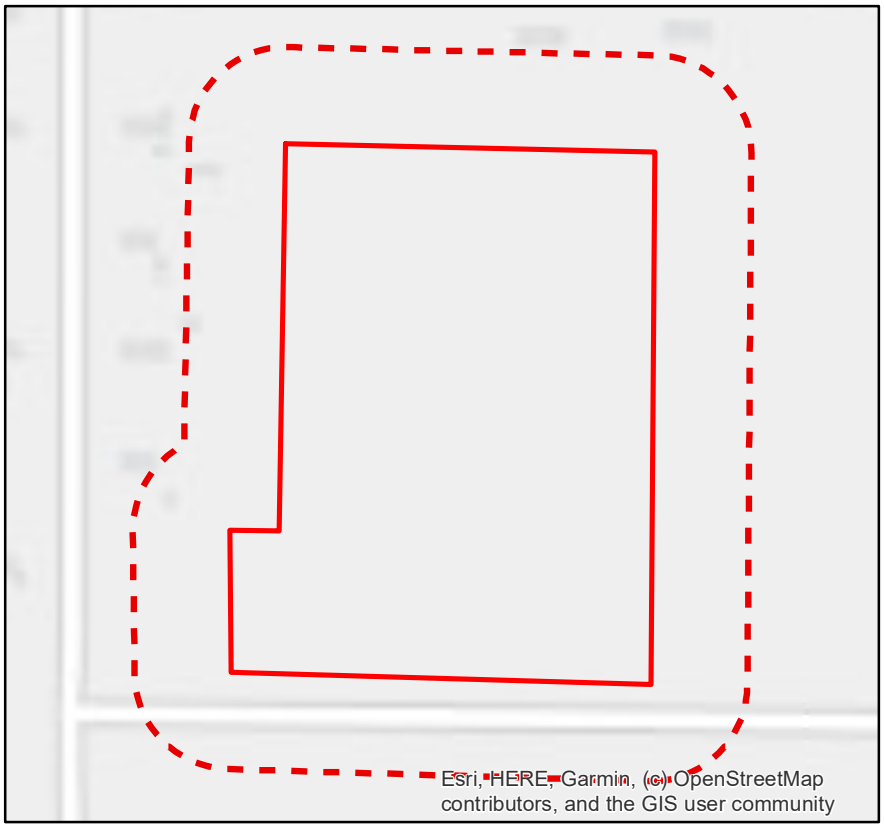
Subject Property

100 Foot Area of Interest

NORTH

0 0.0075 0.015 0.03 0.045 0.06 Miles

1:2,381.81



Sources:Texas Historical Commission ATLAS

Texas Historical Commission

Neighborhood Surveys 2021

Point data showing locations of resources located by any of several resources surveys. Most of the locations afor older surveys were determined by address geocoding. The locations for some ofo the more recent surveys were determined by GPS.

Neighborhood Survey

Subject Property

100 Foot Area of Interest

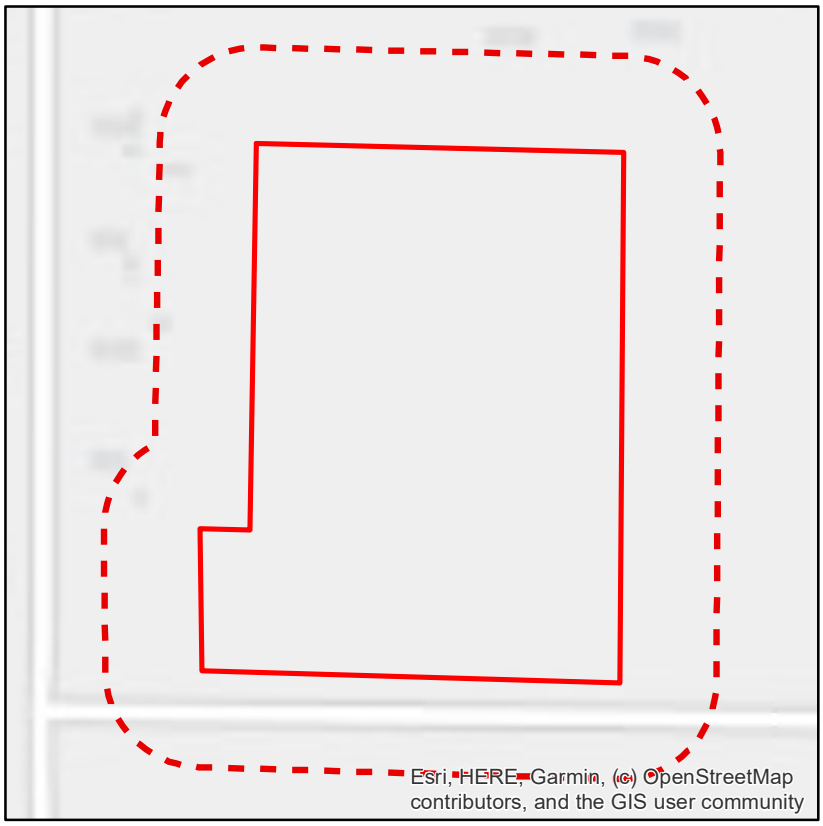
NORTH

0 0.01 0.02 0.04 0.06 0.08 Miles

1:2,382

PHASE ENGINEERING, LLC
ENVIRONMENTAL CONSULTANTS

PE Project No: 202208134



Sources:Texas Historical Commission, ATLAS
NPS IRMA

Texas Historical Commission and NPS National Register of Historic Places

Properties in Texas located on the National Register of Historic Places maintained by the National Park Service. NPS: Stutts M. 2014. National Register of Historic Places. National Register properties are located throughout the United States and their associated territories around the globe.

THC Historic Places - Point
THC Historic Places - Properties

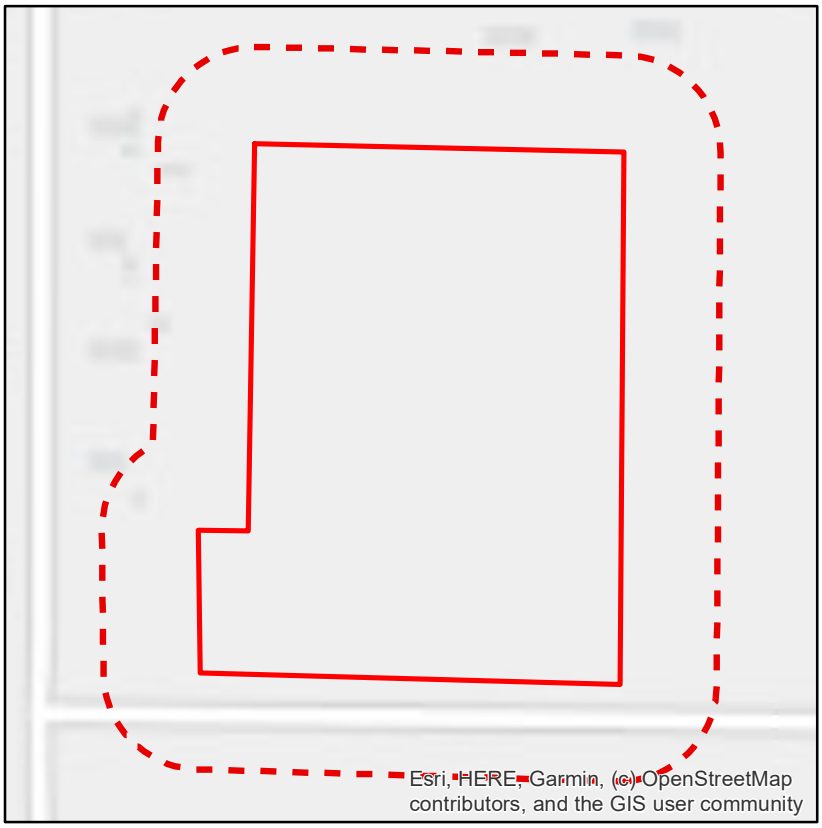
National Park Service Cultural Resources

Structure
Structure
Site
Site
Building
Building
Object
Object
District
District

Subject Property
100 Foot Area of Interest

NORTH
0 0.01 0.02 0.04 0.06 0.08 Miles

1:2,390.35



Sources:Texas Historical Commission ATLAS

Texas Historical Commission

Cemeteries, County Courthouses, Museums, Historic Sites, and Historic Highway Routes

Data showing locations of official Texas Historical Markers, historic highways as determined by surveys, and cemeteries that have received the Historic Texas Cemetery designation or have been located during surveys by the THC staff.

Museums
County Courthouse
Historic Highways Routes
State Historic Sites
Cemeteries

Subject Property
100 Foot Area of Interest

NORTH
0 0.0075 0.015 0.03 0.045 0.06 Miles

1:2,381

PHASE ENGINEERING, LLC
ENVIRONMENTAL CONSULTANTS

PE Project No: 202208134

PHASE ENGINEERING,LLC
ENVIRONMENTAL CONSULTANTS
5524 Cornish Street Houston, Texas 77007 Office 713.476.9844 Toll Free 800.419.888 Fax 713-476-9797 www.PhaseEngineering.com

September 1, 2022

Wichita County
Robert Palmer
Wichita County Historical Commission
1500 Quail Valley Road
Iowa Park, Texas 76367
robertpalmerfarms@yahoo.com

Re: Invitation to Comment as a Consulting Party
Burkburnett Royal Garden, 5 acres south of Williams Drive, Burkburnett, Wichita County, Texas 76354; Phase Engineering Project No. 202208134

Dear Mr. Palmer:

The Texas Department of Housing and Community Affairs (TDHCA) is considering funding the project listed above with federal funds from the U.S. Department of Housing and Urban Development (HUD). Under HUD regulation 24 CFR 58.4, the TDHCA has assumed HUD's environmental review responsibilities for the project, including consultation related to historic properties.

On behalf of the TDHCA, Phase Engineering, LLC is conducting a review of this project to comply with Section 106 of the National Historic Preservation Act and its implementing regulations 36 CFR Part 800. We would like to invite you to be a consulting party in this review to help identify historic properties in the project area, and if such properties exist, to help assess how the project might affect them. If the project might have an adverse effect, we would like to discuss possible ways to avoid, minimize or mitigate potential adverse effects.

Enclosed is a map that shows the project area and, if applicable, an additional area of potential indirect effects. The proposed project, Burkburnett Royal Gardens, is an 80-unit residential development for families with mixed incomes at or below 60% of the area median, as well as market-rate units. The project will include two 3-story residential buildings and one 2 to 3-story garden-style residential building. Other site developments will include a business center/clubhouse, laundry facility, courtyard area with a pavilion and barbeque pit, fitness center, playground, and recreational areas. The development will also include 171 spots of flat surface parking and a detention pond. The property is currently undeveloped land bound to the north by Burkburnett Masonic Lodge, single-family residential property, and auto facilities; the east by undeveloped land; to the south by Overton Ray Elementary School; and to the west by single-family residential properties.

To meet project timeframes, if you would like to be a consulting party on this project, can you please let us know of your interest within 30 days? If you have any initial concerns with impacts of the project on religious or cultural properties, can you please note them in your response? More information on the Section 106 review process is available at http://www.onecpd.info/environmental-review/historic-preservation/.

Thank you very much. We value your assistance and look forward to consulting further if there are historic properties that may be affected by this project.

Sincerely,

Hailey Farmer
Special Projects Analyst
Phase Engineering, LLC
832-485-2249
haileyf@phaseengineering.com

cc: SHPO

Attachments:

Site Location Maps

Wichita CAD

Property Search > 119869 EVERETT JAMIE R for Year 2022

Tax Year: 2022

Property

Account

Property ID:	119869	Legal Description:	LOT 8 BLK 1 WILLIAMS PET. CO.
Geographic ID:	5M010090000	Zoning:	SF - 6 - SINGLE FAMILY-6 (6000 SF LOTS)
Type:	Real	Agent Code:	
Property Use Code:			
Property Use Description:			

Location

Address:	203 W WILLIAMS DR	Mapsco:	38-58
Neighborhood:	ORIGINAL TOWN BURK	Map ID:	
Neighborhood CD:	500		

Owner

Name:	EVERETT JAMIE R	Owner ID:	91780
Mailing Address:	203 W WILLIAMS DR BURKBURNETT, TX 76354	% Ownership:	100.0000000000%
		Exemptions:	HS

Values

(+) Improvement Homesite Value:	+	$104,825		
(+) Improvement Non-Homesite Value:	+	$0		
(+) Land Homesite Value:	+	$5,796		
(+) Land Non-Homesite Value:	+	$0	Ag / Timber Use Value	
(+) Agricultural Market Valuation:	+	$0	$0	
(+) Timber Market Valuation:	+	$0	$0	

(=) Market Value:	=	$110,621		
(–) Ag or Timber Use Value Reduction:	–	$0		

(=) Appraised Value:	=	$110,621		
(–) HS Cap:	–	$11,915		

(=) Assessed Value:	=	$98,706		

Taxing Jurisdiction

Owner: EVERETT JAMIE R
% Ownership: 100.0000000000%
Total Value: $110,621

Entity	Description	Tax Rate	Appraised Value	Taxable Value	Estimated Tax
03	BURKBURNETT CITY	0.714521	$110,621	$98,706	$705.27
04	BURKBURNETT ISD	1.340000	$110,621	$58,706	$786.66
12	WICHITA COUNTY	0.613841	$110,621	$98,706	$605.90
CAD	WICHITA CAD	0.000000	$110,621	$98,706	$0.00
	Total Tax Rate:	2.668362			
				Taxes w/Current Exemptions:	$2,097.83
				Taxes w/o Exemptions:	$2,951.77

Improvement / Building

Improvement #1: SINGLE FAMILY **State Code:** A1 **Living Area:** 1790.0 sqft **Value:** $104,825

Type	Description	Class CD	Exterior Wall	Year Built	SQFT
LV	LIVING AREA	WV - 03		1950	1790.0
AG	ATTACHED GARAGE	WV - 03		1950	560.0
DG	DETACHED GARAGE	S - 01		1950	800.0
PCVP	COVERED PORCH	WV - 03			112.0
ORUB	UTILITY BLDG	* - UTL			80.0
IMHV	MH HOOKUP	INF - *		0	1.0

Land

#	Type	Description	Acres	Sqft	Eff Front	Eff Depth	Market Value	Prod. Value
1	A1	SINGLE FAMILY	0.5785	25199.46	126.00	200.00	$5,796	$0

Roll Value History

Year	Improvements	Land Market	Ag Valuation	Appraised	HS Cap	Assessed
2023	N/A	N/A	N/A	N/A	N/A	N/A
2022	$104,825	$5,796	0	110,621	$11,915	$98,706
2021	$84,894	$5,796	0	90,690	$957	$89,733
2020	$75,779	$5,796	0	81,575	$0	$81,575
2019	$73,925	$5,796	0	79,721	$0	$79,721
2018	$71,375	$5,796	0	77,171	$0	$77,171
2017	$71,867	$5,796	0	77,663	$0	$77,663
2016	$72,775	$9,702	0	82,477	$0	$82,477
2015	$72,763	$9,702	0	82,465	$0	$82,465
2014	$73,498	$9,702	0	83,200	$0	$83,200
2013	$74,114	$9,702	0	83,816	$0	$83,816
2012	$74,114	$9,702	0	83,816	$0	$83,816
2011	$74,796	$10,672	0	85,468	$0	$85,468
2010	$73,166	$10,672	0	83,838	$0	$83,838
2009	$73,166	$10,672	0	83,838	$0	$83,838

Deed History - (Last 3 Deed Transactions)

#	Deed Date	Type	Description	Grantor	Grantee	Volume	Page	Deed Number
1	6/5/2014	WD	WARRANTY DEED	SLAYDEN MARY SUZANNE	EVERETT JAMIE R	3979	51	8111
2	6/3/2009	AH	AFFIDAVIT OF HEIRSHIP	BURNETT BILLIE J	SLAYDEN MARY SUZANNE	3965	332	5617
3	1/1/1990	WD	WARRANTY DEED	BURNETT BILLIE J & M	BURNETT BILLIE J	1525	29	99288

Tax Due

Property Tax Information as of 09/01/2022

Amount Due if Paid on:

Year	Taxing Jurisdiction	Taxable Value	Base Tax	Base Taxes Paid	Base Tax Due	Discount / Penalty & Interest	Attorney Fees	Amount Due

NOTE: Penalty & Interest accrues every month on the unpaid tax and is added to the balance. Attorney fees may also increase your tax liability if not paid by July 1. If you plan to submit payment on a future date, make sure you enter the date and RECALCULATE to obtain the correct total amount due.

Questions Please Call (940) 322-2435

Wichita CAD

Property Search > 119870 KELLY SUE A for Year 2022

Tax Year: 2022

Property

Account

Property ID:	119870	Legal Description:	LOT 9 BLK 1 WILLIAMS PET. CO.
Geographic ID:	5M010100000	Zoning:	SF - 6 - SINGLE FAMILY-6 (6000 SF LOTS)
Type:	Real	Agent Code:	
Property Use Code:			
Property Use Description:			

Location

Address:	207 W WILLIAMS DR	Mapsco:	38-58
Neighborhood:	ORIGINAL TOWN BURK	Map ID:	
Neighborhood CD:	500		

Owner

Name:	KELLY SUE A	Owner ID:	108812
Mailing Address:	207 W WILLIAMS DR BURKBURNETT, TX 76354-2606	% Ownership:	100.0000000000%
		Exemptions:	HS, OTHER

Values

(+) Improvement Homesite Value:	+	$71,853	
(+) Improvement Non-Homesite Value:	+	$0	
(+) Land Homesite Value:	+	$5,520	
(+) Land Non-Homesite Value:	+	$0	Ag / Timber Use Value
(+) Agricultural Market Valuation:	+	$0	$0
(+) Timber Market Valuation:	+	$0	$0
(=) Market Value:	=	$77,373	
(–) Ag or Timber Use Value Reduction:	–	$0	
(=) Appraised Value:	=	$77,373	
(–) HS Cap:	–	$7,879	
(=) Assessed Value:	=	$69,494	

Taxing Jurisdiction

Owner: KELLY SUE A
% Ownership: 100.0000000000%
Total Value: $77,373

Entity	Description	Tax Rate	Appraised Value	Taxable Value	Estimated Tax	Tax Ceiling
03	BURKBURNETT CITY	0.714521	$77,373	$61,994	$442.96	
04	BURKBURNETT ISD	1.340000	$77,373	$19,494	$261.22	$471.85
12	WICHITA COUNTY	0.613841	$77,373	$51,494	$316.09	
CAD	WICHITA CAD	0.000000	$77,373	$69,494	$0.00	
	Total Tax Rate:	2.668362				
				Taxes w/Current Exemptions:	$1,020.27	
				Taxes w/o Exemptions:	$2,064.59	

Improvement / Building

Improvement #1: SINGLE FAMILY **State Code:** A1 **Living Area:** 1472.0 sqft **Value:** $71,853

Type	Description	Class CD	Exterior Wall	Year Built	SQFT
LV	LIVING AREA	WW - 03		1930	1472.0
AG	ATTACHED GARAGE	WW - 03		1930	288.0

Land

#	Type	Description	Acres	Sqft	Eff Front	Eff Depth	Market Value	Prod. Value
1	A1	SINGLE FAMILY	0.5280	22999.68	115.00	200.00	$5,520	$0

Roll Value History

Year	Improvements	Land Market	Ag Valuation	Appraised	HS Cap	Assessed
2023	N/A	N/A	N/A	N/A	N/A	N/A
2022	$71,853	$5,520	0	77,373	$7,879	$69,494
2021	$58,165	$5,520	0	63,685	$509	$63,176
2020	$51,913	$5,520	0	57,433	$0	$57,433
2019	$50,961	$5,520	0	56,481	$0	$56,481
2018	$49,155	$5,520	0	54,675	$0	$54,675
2017	$49,675	$5,520	0	55,195	$0	$55,195
2016	$62,237	$8,855	0	71,092	$0	$71,092
2015	$62,334	$8,855	0	71,189	$0	$71,189
2014	$62,964	$8,855	0	71,819	$0	$71,819
2013	$61,815	$8,855	0	70,670	$0	$70,670
2012	$62,685	$8,855	0	71,540	$0	$71,540
2011	$61,721	$9,298	0	71,019	$0	$71,019
2010	$63,265	$9,298	0	72,563	$0	$72,563
2009	$32,836	$9,298	0	42,134	$0	$42,134

Deed History - (Last 3 Deed Transactions)

#	Deed Date	Type	Description	Grantor	Grantee	Volume	Page	Deed Number
1	5/19/2010	WD	WARRANTY DEED	MULLINS HOMES LLC	KELLY SUE	3492	280	8723
2	3/31/2009	WD	WARRANTY DEED	PARISH GLORIA	MULLINS HOMES LLC	3351	738	6139
3	9/1/1983	WD	WARRANTY DEED	MARTIN TERRY EUGENE	PARISH GLORIA	1363	506	90993

Tax Due

Property Tax Information as of 09/01/2022

Amount Due if Paid on:

Year	Taxing Jurisdiction	Taxable Value	Base Tax	Base Taxes Paid	Base Tax Due	Discount / Penalty & Interest	Attorney Fees	Amount Due

NOTE: Penalty & Interest accrues every month on the unpaid tax and is added to the balance. Attorney fees may also increase your tax liability if not paid by July 1. If you plan to submit payment on a future date, make sure you enter the date and RECALCULATE to obtain the correct total amount due.

Questions Please Call (940) 322-2435

Wichita CAD

Property Search > 119871 JACKSON GEORGE W JR ETUX LINDA (L/E) for Year 2022

Tax Year: 2022

Property

Account

Property ID:	119871	Legal Description:	LOT 10 BLK 1 WILLIAMS PET. CO.
Geographic ID:	5M010110000	Zoning:	SF - 6 - SINGLE FAMILY-6 (6000 SF LOTS)
Type:	Real	Agent Code:	
Property Use Code:			
Property Use Description:			

Location

Address:	209 W WILLIAMS DR	Mapsco:	38-58
Neighborhood:	ORIGINAL TOWN BURK	Map ID:	
Neighborhood CD:	500		

Owner

Name:	JACKSON GEORGE W JR ETUX LINDA (L/E)	Owner ID:	251217
Mailing Address:	209 W WILLIAMS BURKBURNETT, TX 76354	% Ownership:	100.0000000000%
		Exemptions:	HS, OTHER

Values

(+) Improvement Homesite Value:	+	$87,772		
(+) Improvement Non-Homesite Value:	+	$0		
(+) Land Homesite Value:	+	$5,520		
(+) Land Non-Homesite Value:	+	$0	Ag / Timber Use Value	
(+) Agricultural Market Valuation:	+	$0	$0	
(+) Timber Market Valuation:	+	$0	$0	

(=) Market Value:	=	$93,292		
(–) Ag or Timber Use Value Reduction:	–	$0		

(=) Appraised Value:	=	$93,292		
(–) HS Cap:	–	$8,846		

(=) Assessed Value:	=	$84,446		

Taxing Jurisdiction

Owner: JACKSON GEORGE W JR ETUX LINDA (L/E)
% Ownership: 100.0000000000%
Total Value: $93,292

Entity	Description	Tax Rate	Appraised Value	Taxable Value	Estimated Tax	Tax Ceiling
03	BURKBURNETT CITY	0.714521	$93,292	$76,946	$549.80	
04	BURKBURNETT ISD	1.340000	$93,292	$34,446	$0.00	$0.00
12	WICHITA COUNTY	0.613841	$93,292	$66,446	$407.87	
CAD	WICHITA CAD	0.000000	$93,292	$84,446	$0.00	
	Total Tax Rate:	2.668362				
				Taxes w/Current Exemptions:	$957.67	
				Taxes w/o Exemptions:	$2,489.37	

Improvement / Building

Improvement #1: SINGLE FAMILY **State Code:** A1 **Living Area:** 1624.0 sqft **Value:** $87,772

Type	Description	Class CD	Exterior Wall	Year Built	SQFT
LV	LIVING AREA	WW - 03		1940	1624.0
DG	DETACHED GARAGE	WW - 02		1940	616.0
CCP	CARPORT	FAIR - *		0	400.0
PCVP	COVERED PORCH	WW - 03			60.0
PCVP	COVERED PORCH	WW - 03			15.0
IMHV	MH HOOKUP	INF - *		0	1.0
CCP	CARPORT	LOW - *		2018	540.0

Land

#	Type	Description	Acres	Sqft	Eff Front	Eff Depth	Market Value	Prod. Value
1	A1	SINGLE FAMILY	0.5280	22999.68	115.00	200.00	$5,520	$0

Roll Value History

Year	Improvements	Land Market	Ag Valuation	Appraised	HS Cap	Assessed
2023	N/A	N/A	N/A	N/A	N/A	N/A
2022	$87,772	$5,520	0	93,292	$8,846	$84,446
2021	$71,249	$5,520	0	76,769	$0	$76,769
2020	$64,411	$5,520	0	69,931	$0	$69,931
2019	$63,726	$5,520	0	69,246	$0	$69,246
2018	$57,703	$5,520	0	63,223	$0	$63,223
2017	$58,030	$5,520	0	63,550	$0	$63,550
2016	$55,764	$8,855	0	64,619	$0	$64,619
2015	$55,924	$8,855	0	64,779	$0	$64,779
2014	$56,489	$8,855	0	65,344	$0	$65,344
2013	$56,104	$8,855	0	64,959	$0	$64,959
2012	$56,180	$8,855	0	65,035	$0	$65,035
2011	$56,696	$9,741	0	66,437	$0	$66,437
2010	$57,193	$9,741	0	66,934	$0	$66,934
2009	$57,193	$9,741	0	66,934	$0	$66,934

Deed History - (Last 3 Deed Transactions)

#	Deed Date	Type	Description	Grantor	Grantee	Volume	Page	Deed Number
1	4/18/2016	WD	WARRANTY DEED	JACKSON GEORGE W JR ETUX LINDA	JACKSON GEORGE W JR ETUX LINDA (L/E)			6286
2	4/18/2016	WD	WARRANTY DEED	HOWELL CECIL R & LESLIE D HOWELL	JACKSON GEORGE W JR ETUX LINDA			6285
3	7/9/2010	WD	WARRANTY DEED	HOWELL CECIL RAY	HOWELL CECIL R & LESLIE D HOWELL	3510	568	12219

Tax Due

Property Tax Information as of 09/01/2022

Amount Due if Paid on:

Year	Taxing Jurisdiction	Taxable Value	Base Tax	Base Taxes Paid	Base Tax Due	Discount / Penalty & Interest	Attorney Fees	Amount Due

Wichita CAD

Property Search > 119872 KOCSIS STEPHEN for Year 2022

Tax Year: 2022

Property

Account

Property ID:	119872	Legal Description:	LOT 11 BLK 1 WILLIAMS PET. CO.
Geographic ID:	5M010120000	Zoning:	SF - 6 - SINGLE FAMILY-6 (6000 SF LOTS)
Type:	Real	Agent Code:	
Property Use Code:			
Property Use Description:			

Location

Address:	213 W WILLIAMS DR	Mapsco:	38-58
Neighborhood:	ORIGINAL TOWN BURK	Map ID:	
Neighborhood CD:	500		

Owner

Name:	KOCSIS STEPHEN	Owner ID:	36624
Mailing Address:	213 W WILLIAMS DR BURKBURNETT, TX 76354-2607	% Ownership:	100.0000000000%
		Exemptions:	OTHER, HS

Values

(+) Improvement Homesite Value:	+	$55,899	
(+) Improvement Non-Homesite Value:	+	$0	
(+) Land Homesite Value:	+	$6,026	
(+) Land Non-Homesite Value:	+	$0	Ag / Timber Use Value
(+) Agricultural Market Valuation:	+	$0	$0
(+) Timber Market Valuation:	+	$0	$0

(=) Market Value:	=	$61,925	
(–) Ag or Timber Use Value Reduction:	–	$0	

(=) Appraised Value:	=	$61,925	
(–) HS Cap:	–	$5,977	

(=) Assessed Value:	=	$55,948	

Taxing Jurisdiction

Owner: KOCSIS STEPHEN
% Ownership: 100.0000000000%
Total Value: $61,925

Entity	Description	Tax Rate	Appraised Value	Taxable Value	Estimated Tax	Tax Ceiling
03	BURKBURNETT CITY	0.714521	$61,925	$48,448	$346.17	
04	BURKBURNETT ISD	1.340000	$61,925	$5,948	$0.00	$0.00
12	WICHITA COUNTY	0.613841	$61,925	$37,948	$232.94	
CAD	WICHITA CAD	0.000000	$61,925	$55,948	$0.00	
	Total Tax Rate:	2.668362				
				Taxes w/Current Exemptions:	$579.11	
				Taxes w/o Exemptions:	$1,652.38	

Improvement / Building

Improvement #1: SINGLE FAMILY **State Code:** A1 **Living Area:** 1232.0 sqft **Value:** $55,899

Type	Description	Class CD	Exterior Wall	Year Built	SQFT
LV	LIVING AREA	WW - 02.5		1940	1232.0
DG	DETACHED GARAGE	WW - 02		1940	484.0

Land

#	Type	Description	Acres	Sqft	Eff Front	Eff Depth	Market Value	Prod. Value
1	A1	SINGLE FAMILY	0.6015	26201.34	131.00	200.00	$6,026	$0

Roll Value History

Year	Improvements	Land Market	Ag Valuation	Appraised	HS Cap	Assessed
2023	N/A	N/A	N/A	N/A	N/A	N/A
2022	$55,899	$6,026	0	61,925	$5,977	$55,948
2021	$48,683	$6,026	0	54,709	$3,847	$50,862
2020	$40,212	$6,026	0	46,238	$0	$46,238
2019	$39,825	$6,026	0	45,851	$0	$45,851
2018	$38,952	$6,026	0	44,978	$0	$44,978
2017	$38,107	$6,026	0	44,133	$0	$44,133
2016	$35,701	$10,087	0	45,788	$0	$45,788
2015	$35,776	$10,087	0	45,863	$0	$45,863
2014	$36,137	$10,087	0	46,224	$0	$46,224
2013	$36,182	$10,087	0	46,269	$0	$46,269
2012	$36,182	$10,087	0	46,269	$0	$46,269
2011	$36,487	$11,096	0	47,583	$0	$47,583
2010	$36,849	$11,096	0	47,945	$0	$47,945
2009	$36,849	$11,096	0	47,945	$654	$47,291

Deed History - (Last 3 Deed Transactions)

#	Deed Date	Type	Description	Grantor	Grantee	Volume	Page	Deed Number
1	7/16/2022	WD	WARRANTY DEED	KOCSIS STEPHEN	KOCSIS STEPHEN (L/E)			202210537
2	4/1/1996	WD	WARRANTY DEED	KOCSIS STEPHEN ETUX	KOCSIS STEPHEN	1858	151	8672
3	4/1/1985	WD	WARRANTY DEED	JOHNSON CURTIS L	KOCSIS STEPHEN ETUX LEONA	1403	155	93092

Tax Due

Property Tax Information as of 09/01/2022

Amount Due if Paid on:

Year	Taxing Jurisdiction	Taxable Value	Base Tax	Base Taxes Paid	Base Tax Due	Discount / Penalty & Interest	Attorney Fees	Amount Due

NOTE: Penalty & Interest accrues every month on the unpaid tax and is added to the balance. Attorney fees may also increase your tax liability if not paid by July 1. If you plan to submit payment on a future date, make sure you enter the date and RECALCULATE to obtain the correct total amount due.

Questions Please Call (940) 322-2435

Tribal Directory Assessment Information

Contact Information for Tribes with Interests in Wichita County, Texas

	Tribal Name	County Name
−	Apache Tribe of Oklahoma	Wichita

Contact Name	Title	Mailing Address	Work Phone	Fax Number	Cell Phone	Email Address	URL
Bobby Komardley	Chairman	PO Box 1330 Anadarko, OK 73005	(405) 247-9493	(405) 247-2763		bkomardley@outlook.com	http://www.apachetribe.org/

−	Caddo Nation of Oklahoma	Wichita

Contact Name	Title	Mailing Address	Work Phone	Fax Number	Cell Phone	Email Address	URL
Jonathan Rohrer	THPO	PO Box 487 Binger, OK 73009	(405) 656-0970, ext. 2070			jrohrer@mycaddonation.com	
Tamara Francis	Chairperson	PO Box 487 Binger, OK 73009	(405) 656-2344	(405) 656-2892		tffourkiller.cn@gmail.com	

−	Comanche Nation, Oklahoma	Wichita

Contact Name	Title	Mailing Address	Work Phone	Fax Number	Cell Phone	Email Address	URL
Mark Woommavovah	Chairman	PO Box 908 Lawton, OK 73502	(580) 492-3240			jennifer.rodriguez@comanchenation.com	www.comanchenation.com
Martina Minthorn	THPO	6 SW D Avenue Lawton, OK 73502	(580)595-9618	(580) 595-9733		martina.minthorn@comanchenation.com	www.comanchenation.com

−	Tonkawa Tribe of Indians of Oklahoma	Wichita

Contact Name	Title	Mailing Address	Work Phone	Fax Number	Cell Phone	Email Address	URL
Russell Martin	President	1 Rush Buffalo Road Tonkawa, OK 74653	(580) 628-2561	(580) 628-3378		rmartin@tonkawatribe.com	http://www.tonkawatribe.com/
Lauren Norman-Brown	THPO	1 Rush Buffalo Road Tonkawa, OK 74653	(580) 628-7027	(580) 628-7027		lbrown@tonkawatribe.com	http://www.tonkawatribe.com/

−	Wichita and Affiliated Tribes (Wichita, Keechi, Waco & Tawakonie), Oklahoma	Wichita

Contact Name	Title	Mailing Address	Work Phone	Fax Number	Cell Phone	Email Address	URL
Terri Parton	President	PO Box 729 Anadarko, OK 73005	(405) 247-2425	(405) 247-2430		Terri.Parton@wichitatribe.com	http://www.wichitatribe.com/
Gary McAdams	THPO	Wichita and Affiliated Tribes PO Box 729 Anadarko, OK 73005	(405) 247-8695 ext. 200			gary.mcadams@wichitatribe.com	http://www.wichitatribe.com/

Ryan Starr

From: noreply@thc.state.tx.us
Sent: Friday, May 10, 2024 10:30 AM
To: Ryan Starr; reviews@thc.state.tx.us
Subject: Burkburnett Royal Gardens

TEXAS HISTORICAL COMMISSION
real places telling real stories

Re: Project Review under Section 106 of the National Historic Preservation Act
THC Tracking #202409510
Date: 05/10/2024
Burkburnett Royal Gardens
5.14 acres South of Williams Drive
Burkburnett,TX 76354

Description: This is an updated request from THC No. 202300032 - our firm submitted this Sec106, however we no longer have access to that account. Boundary now include "tail" for water utility connection.

Dear Ryan Starr:
Thank you for your submittal regarding the above-referenced project. This response represents the comments of the State Historic Preservation Officer, the Executive Director of the Texas Historical Commission (THC), pursuant to review under Section 106 of the National Historic Preservation Act.

The review staff, led by Charles Peveto and Danielle Julien, has completed its review and has made the following determinations based on the information submitted for review:

Above-Ground Resources

- No historic properties are present or affected by the project as proposed. However, if historic properties are discovered or unanticipated effects on historic properties are found, work should cease in the immediate area; work can continue where no historic properties are present. Please contact the THC's History Programs Division at 512-463-5853 to consult on further actions that may be necessary to protect historic properties.

Archeology Comments

- No historic properties affected. However, if cultural materials are encountered during construction or disturbance activities, work should cease in the immediate area; work can continue where no cultural materials are present. Please contact the THC's Archeology Division at 512-463-6096 to consult on further actions that may be necessary to protect the cultural remains.

We look forward to further consultation with your office and hope to maintain a partnership that will foster effective historic preservation. Thank you for your cooperation in this review process, and for your efforts to preserve the irreplaceable heritage of Texas. If the project changes, or if new historic properties are found, please contact the review staff. If you have any questions concerning our review or if we can be of further assistance, please email the following reviewers: charles.peveto@thc.texas.gov, danielle.julien@thc.texas.gov.

This response has been sent through the electronic THC review and compliance system (eTRAC). Submitting your project via eTRAC eliminates mailing delays and allows you to check the status of the review, receive an electronic response, and generate reports on your submissions. For more information, visit http://thc.texas.gov/etrac-system.

Sincerely,

for Bradford Patterson
Chief Deputy State Historic Preservation Officer

Please do not respond to this email.

Tracy Watson

From: Hailey Farmer
Sent: Tuesday, September 6, 2022 2:06 PM
To: durellcooper05@gmail.com
Cc: Tracy Watson; Ryan Starr
Subject: Section 106- Invitation to Comment- Burkburnett Royal Garden (PE 202208134)
Attachments: Burkburnett -Apache.pdf; Attachments.pdf

Chairman Cooper,

The Texas Department of Housing and Urban Development (TDHCA) is considering funding the below project. As part of the environmental assessment, consultation with all interested Tribal entities is encouraged.

- **Burkburnett Royal Garden, 5 acres south of Williams Drive, Burkburnett, Wichita County, TX 76354**

Included in the attachments is a formal letter addressed to your attention, a site location map, and site sketch of the project area. If you would like to be a consulting party on this project, would you please let us know of your interest within 30 days? If you do not have an interest in consulting, or find no concerns with the project, please advise. Should you have a question, please contact me by phone or email.

If you would prefer to have a hard copy of the attached letter, please let me know. Thank you very much in advance for your consideration and assistance with this project. Have a wonderful day!

Best,

Hailey Farmer
Phase Engineering, LLC.
5524 Cornish Street • Houston, Texas 77007
Office 832.485.2249 • 630.815.8115 Cell
haileyf@phaseengineering.com

PHASE ENGINEERING, LLC
ENVIRONMENTAL CONSULTANTS

TEXAS DEPARTMENT OF HOUSING AND COMMUNITY AFFAIRS

www.tdhca.state.tx.us

Greg Abbott
GOVERNOR

BOARD MEMBERS
Leo Vasquez, *Chair*
Brandon Batch, Member
Anna Maria Farías, Member
Kenny Marchant, Member
Ajay Thomas, Member

September 6, 2022

Phone: 512-475-3033
environmental@tdhca.state.tx.us

Durell Cooper, Chairman
Apache Tribe of Oklahoma
PO Box 1330
Anadarko, OK 73005
durellcooper05@gmail.com

RE: Burkburnett Royal Garden, 5 acres south of Williams Drive, Burkburnett, Wichita County, Texas 76354
HOME funds through TDHCA #22220, Phase Engineering, LLC. Job No. 202208134

Dear Chairman Cooper:

The Texas Department of Housing and Community Affairs (TDHCA) is considering funding the project listed above with federal funds from the U.S. Department of Housing and Urban Development (HUD). Under HUD regulation 24 CFR 58.4, the TDHCA has assumed HUD's environmental review responsibilities for the project, including tribal consultation related to historic properties. Historic properties include archeological sites, burial grounds, sacred landscapes or features, ceremonial areas, traditional cultural places and landscapes, plant and animal communities, and buildings and structures with significant tribal association.

Phase Engineering, Inc., on behalf of TDHCA, will conduct a review of this project to comply with Section 106 of the National Historic Preservation Act and its implementing regulations 36 CFR Part 800. The TDHCA has authorized Phase Engineering, Inc. to contact your tribe on the Agency's behalf. We would like to invite you to be a consulting party in this review to help identify historic properties in the project area that may have religious and cultural significance to your tribe, and if such properties exist, to help assess how the project might affect them. If the project might have an adverse effect, we would like to discuss possible ways to avoid, minimize or mitigate potential adverse effects.

To meet project timeframes, if you would like to be a consulting party on this project, can you please let us know of your interest within 30 days? If you have any initial concerns with impacts of the project on religious or cultural properties, can you please note them in your response?

Enclosed is a map that shows the project area and, if applicable, an additional area of potential indirect effects. The project known as "Burkburnett Royal Garden" involves new construction of a 80-unit multifamily residential development. The project will include two 3-story residential buildings and

one 2 to 3-story garden-style residential building. Other site developments will include a business center/clubhouse, laundry facility, courtyard area with a pavilion and barbeque pit, fitness center, playground, and recreational areas. The development will also include 171 spots of flat surface parking and a detention pond. The property is currently vacant land bound to the north by Burkburnett Masonic Lodge, single-family residential property, and auto facilities; the east by undeveloped land; to the south by Overton Ray Elementary School; and to the west by single-family residential properties.

More information on the Section 106 review process is available at http://www.onecpd.info/environmental-review/historic-preservation/. HUD's process for tribal consultation under Section 106 is described in a Notice available at http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/environment/atec .

If you do not wish to consult on this project, can you please inform us? If you do wish to consult, can you please include in your reply the name and contact information for the tribe's principal representative in the consultation?

Thank you very much. We value your assistance and look forward to consulting further if there are historic properties of religious and cultural significance to your tribe that may be affected by this project.

Sincerely,

Brenda Hull
Program Services Manager

BH/TW

cc: SHPO

Attachments:
Site Location Map

Tracy Watson

From: Hailey Farmer
Sent: Tuesday, September 6, 2022 2:06 PM
To: section106@mycaddonation.com
Cc: Tracy Watson; Ryan Starr
Subject: Section 106- Invitation to Comment- Burkburnett Royal Garden (PE 202208134)
Attachments: Burkburnett -Caddo.pdf; Attachments.pdf

Mr. Rohrer:

The Texas Department of Housing and Urban Development (TDHCA) is considering funding the below project. As part of the environmental assessment, consultation with all interested Tribal entities is encouraged.

- **Burkburnett Royal Garden, 5 acres south of Williams Drive, Burkburnett, Wichita County, TX 76354**

Included in the attachments is a formal letter addressed to your attention, a site location map, and site sketch of the project area. If you would like to be a consulting party on this project, would you please let us know of your interest within 30 days? If you do not have an interest in consulting, or find no concerns with the project, please advise. Should you have a question, please contact me by phone or email.

If you would prefer to have a hard copy of the attached letter, please let me know. Thank you very much in advance for your consideration and assistance with this project. Have a wonderful day!

Best,

Hailey Farmer
Phase Engineering, LLC.
5524 Cornish Street • Houston, Texas 77007
Office 832.485.2249 • 630.815.8115 Cell
haileyf@phaseengineering.com

PHASE ENGINEERING, LLC
ENVIRONMENTAL CONSULTANTS

TEXAS DEPARTMENT OF HOUSING AND COMMUNITY AFFAIRS

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Greg Abbott
GOVERNOR

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Brandon Batch, Member
Anna Maria Farías, Member
Kenny Marchant, Member
Ajay Thomas, Member

September 6, 2022

Phone: 512-475-3033
environmental@tdhca.state.tx.us

Jonathan Rohrer, THPO
Caddo Nation of Oklahoma
PO Box 487
Binger, OK 73009
Section106@mycaddonation.com

RE: HOME funds through TDHCA #22220, New Construction of Multifamily Residential Development/Burkburnett Royal Garden, 5 acres south of Williams Drive, Burkburnett, Wichita County, Texas 76354

Dear Mr. Rohrer,

The Texas Department of Housing and Community Affairs (TDHCA) is considering funding the project listed above with federal funds from the U.S. Department of Housing and Urban Development (HUD). Under HUD regulation 24 CFR 58.4, the TDHCA has assumed HUD's environmental review responsibilities for the project, including tribal consultation related to historic properties. Historic properties include archeological sites, burial grounds, sacred landscapes or features, ceremonial areas, traditional cultural places and landscapes, plant and animal communities, and buildings and structures with significant tribal association.

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Sincerely,

Brenda Hull
Program Services Manager

BH/TW

cc: SHPO

Attachments:
Site Location Map

Tracy Watson

From: Hailey Farmer
Sent: Tuesday, September 6, 2022 2:06 PM
To: jennifer.rodriquez@comanchenation.com; martina.minthorn@comanchenation.com
Cc: Tracy Watson; Ryan Starr
Subject: Section 106- Invitation to Comment- Burkburnett Royal Garden (PE 202208134)
Attachments: Burkburnett -Comanche.pdf; Attachments.pdf

Chairman Woommavovah:

The Texas Department of Housing and Urban Development (TDHCA) is considering funding the below project. As part of the environmental assessment, consultation with all interested Tribal entities is encouraged.

- **Burkburnett Royal Garden, 5 acres south of Williams Drive, Burkburnett, Wichita County, TX 76354**

Included in the attachments is a formal letter addressed to your attention, a site location map, and site sketch of the project area. If you would like to be a consulting party on this project, would you please let us know of your interest within 30 days? If you do not have an interest in consulting, or find no concerns with the project, please advise. Should you have a question, please contact me by phone or email.

If you would prefer to have a hard copy of the attached letter, please let me know. Thank you very much in advance for your consideration and assistance with this project. Have a wonderful day!

Best,

Hailey Farmer
Phase Engineering, LLC.
5524 Cornish Street • Houston, Texas 77007
Office 832.485.2249 • 630.815.8115 Cell
haileyf@phaseengineering.com

PHASE ENGINEERING, LLC
ENVIRONMENTAL CONSULTANTS

TEXAS DEPARTMENT OF HOUSING AND COMMUNITY AFFAIRS

www.tdhca.state.tx.us

Greg Abbott
GOVERNOR

BOARD MEMBERS
Leo Vasquez, *Chair*
Brandon Batch, Member
Anna Maria Farías, Member
Kenny Marchant, Member
Ajay Thomas, Member

September 6, 2022

Phone: 512-475-3033
environmental@tdhca.state.tx.us

Mark Woommavovah, Chairman
Comanche Nation of Oklahoma
PO Box 908
Lawton, OK 73502
jennifer.rodriguez@comanchenation.com

RE: Burkburnett Royal Garden, 5 acres south of Williams Drive, Burkburnett, Wichita County, Texas 76354
HOME funds through TDHCA #22220, Phase Engineering, LLC. Job No. 202208134

Dear Chairman Woommavovah:

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Sincerely,

Brenda Hull
Program Services Manager

BH/TW

cc: SHPO
Martina Minthorn, THPO, martina.minthorn@comachenation.com

Attachments:
Site Location Map

Tracy Watson

From: Hailey Farmer
Sent: Tuesday, September 6, 2022 2:06 PM
To: Rmartin@tonkawatribe.com; Brown, Lauren
Cc: Tracy Watson; Ryan Starr
Subject: Section 106- Invitation to Comment- Burkburnett Royal Garden (PE 202208134)
Attachments: Attachments.pdf; Burkburnett -Tonkawa.pdf

President Martin:

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- **Burkburnett Royal Garden, 5 acres south of Williams Drive, Burkburnett, Wichita County, TX 76354**

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Office 832.485.2249 • 630.815.8115 Cell
haileyf@phaseengineering.com

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September 6, 2022

Phone: 512-475-3033
environmental@tdhca.state.tx.us

Russell Martin, President
Tonkawa Tribe of Indians of Oklahoma
1 Rush Buffalo Road
Tonkawa, Oklahoma 74653
Rmartin@tonkawatribe.com

RE: Burkburnett Royal Garden, 5 acres south of Williams Drive, Burkburnett, Wichita County, Texas 76354
HOME funds through TDHCA #22220, Phase Engineering, LLC. Job No. 202208134

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Brenda Hull
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BH/TW

cc: SHPO
Lauren Norman-Brown, THPO, lbrown@tonkawatribe.com

Attachments:
Site Location Map

Tracy Watson

From: Hailey Farmer
Sent: Tuesday, September 6, 2022 2:06 PM
To: Terri.Parton@wichitatribe.com; gary.mcadams@wichitatribe.com
Cc: Tracy Watson; Ryan Starr
Subject: Section 106- Invitation to Comment- Burkburnett Royal Garden (PE 202208134)
Attachments: Attachments.pdf; Burkburnett -Wichita.pdf

President Parton:

Mr. Rohrer:

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September 6, 2022

Phone: 512-475-3033
environmental@tdhca.state.tx.us

Terri Parton, President
Wichita and Affiliated Tribes (Wichita, Keechi, Waco, & Tawakonie) of Oklahoma
PO Box 729
Anadarko, Oklahoma 73005
Terri.Parton@wichitatribe.com

RE: Burkburnett Royal Garden, 5 acres south of Williams Drive, Burkburnett, Wichita County, Texas 76354
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BH/TW

cc: SHPO
Gary McAdams, THPO, gary.mcadams@wichitatribe.com

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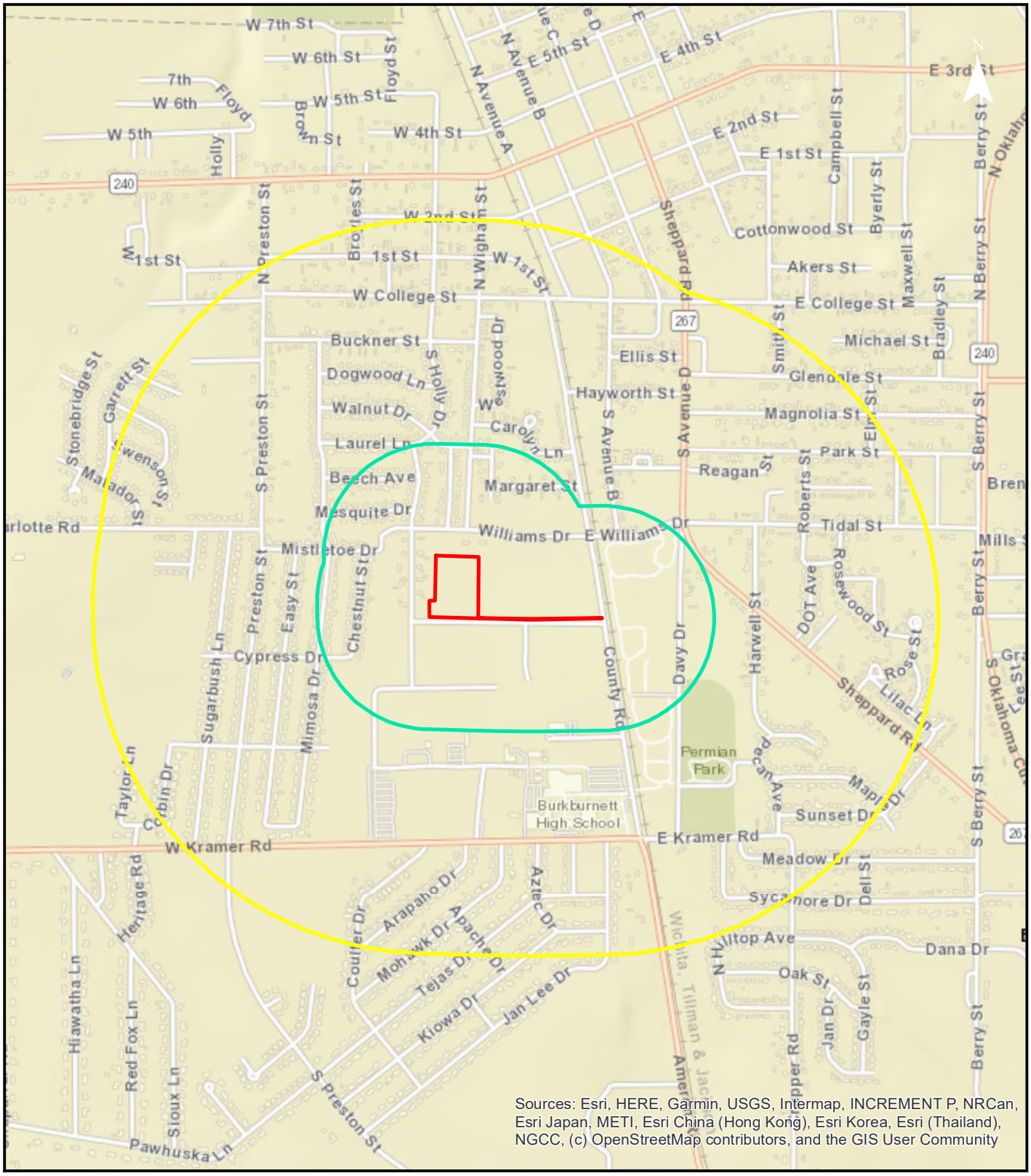


Note: Property location and boundary are representative only.

0 0.05 0.1 0.2 0.3 0.4 Miles

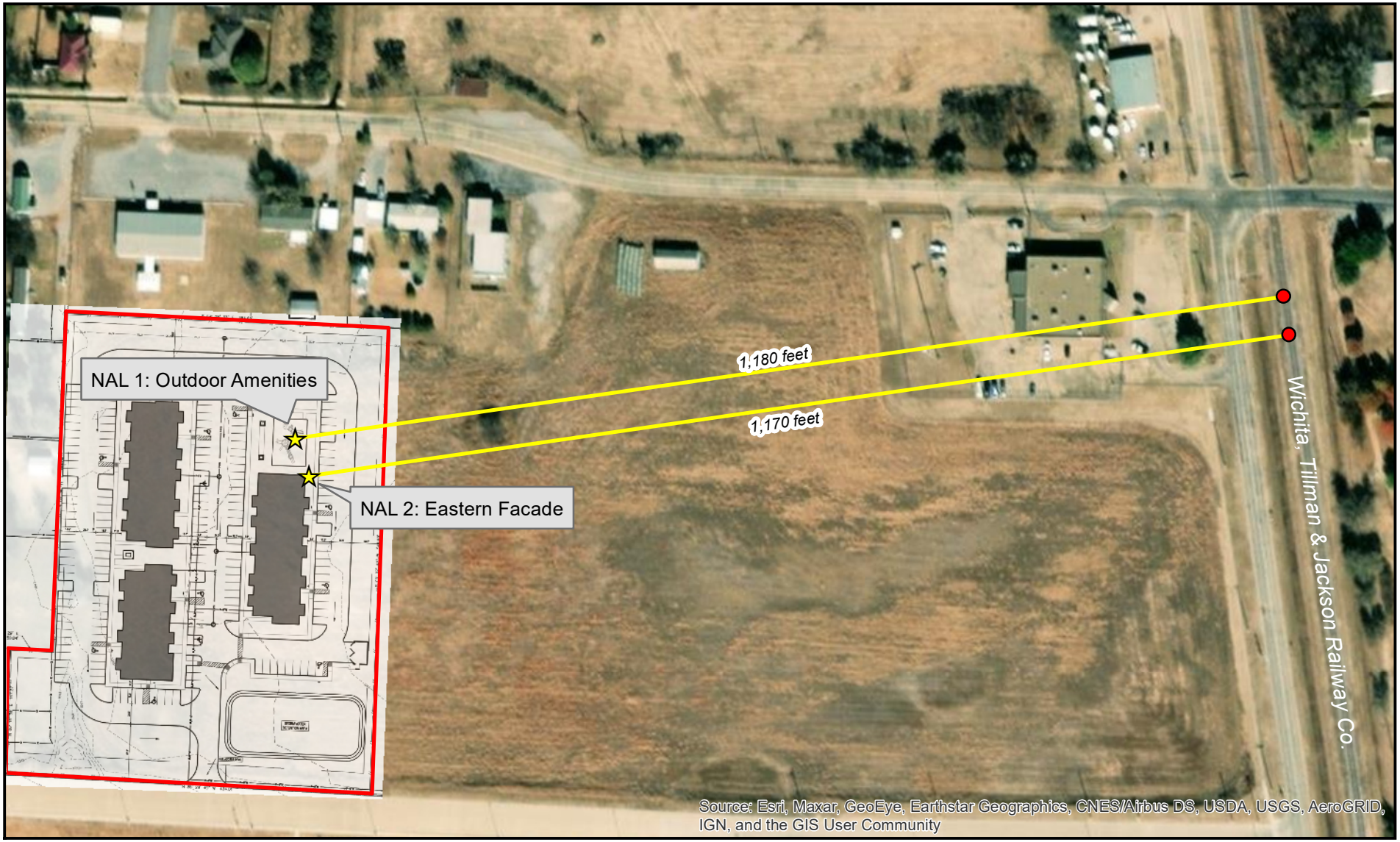
NORTH

Noise Sources Map

Subject Property **1000 foot radius** **3000 foot radius**

PHASE
TRUSTED ENVIRONMENTAL SOLUTIONS

PE Project No: 202402008



Note: Property location and boundary are representative only.

0 125 250 500 Feet

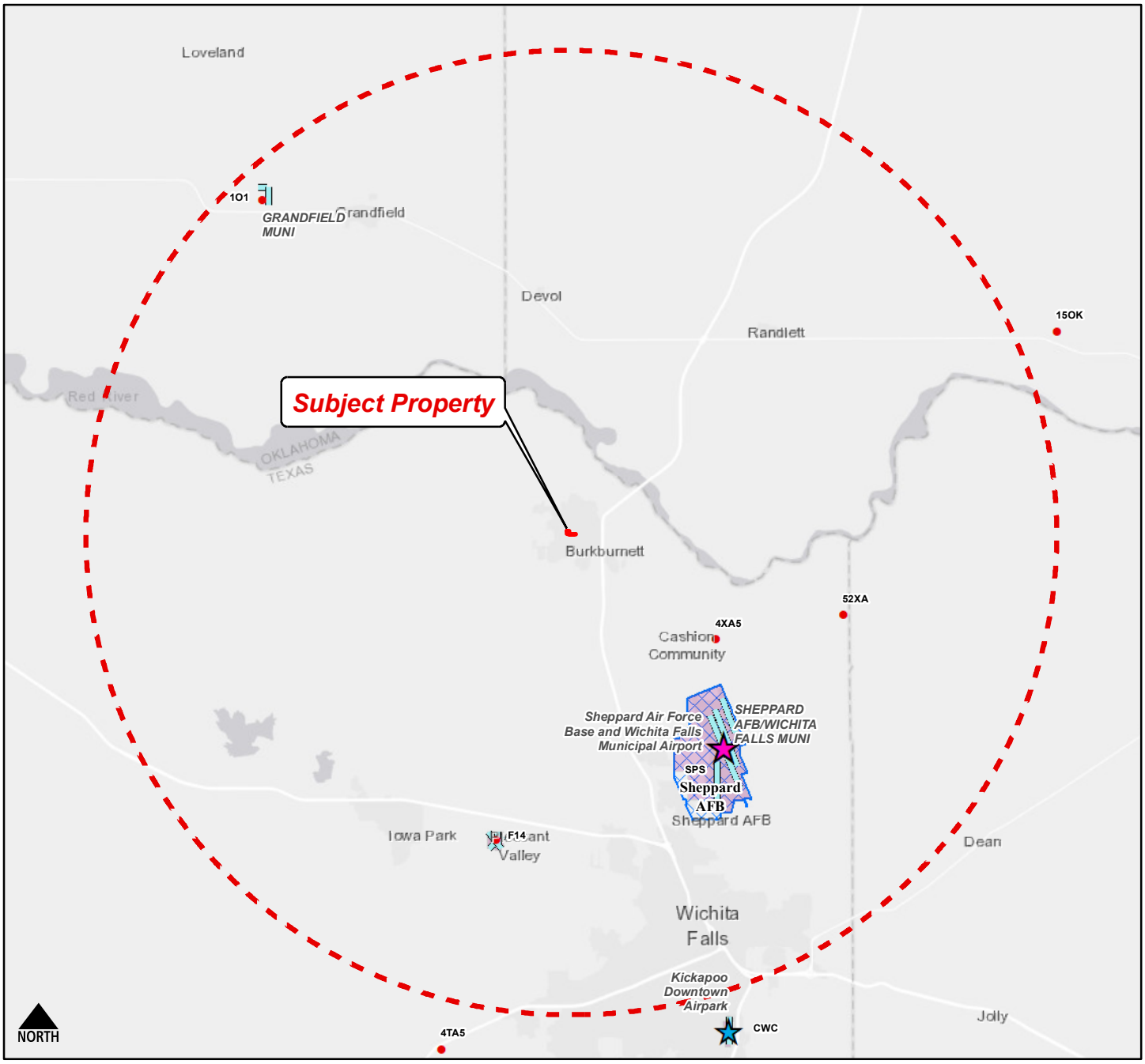
NORTH

Noise Assessment Location (NAL) Map

PHASE
TRUSTED ENVIRONMENTAL SOLUTIONS

- Subject Property
- NAL
- Noise Sources

PE Project No: 202402008



Sources: Federal Aviation Administration, Department of Defense, National Transportation Atlas, TxDOT, ESRI, HERE, (c) OpenStreetMap contributors, and the GIS user community

Property boundary and locations are representative only.

0 1.25 2.5 5 7.5 10 Miles

1:300,000

Airport Noise Map

- Subject Property
- 15 Mile Radius

- Airport Boundary
- Runway
- Spaceport
- Airport
- Ballonport
- Gliderport
- Heliport
- Seaplane Base
- Ultralight Field

2023-2027 NPIAS Airports

- Major Airport - This category includes all civil airports with a minimum of 9,000 emplanements annually
- Minor Airport - Includes all nonprimary public airports which are not considered as a major noise source

Military Installations, Ranges and Training Areas

- Air Force Active
- Air Force Reserve
- Air National Guard
- Army Active
- Army Reserve
- Army National Guard
- Marine Corps Active
- Marine Corps Reserve
- Navy Active
- Other Federal Administration

PHASE
TRUSTED ENVIRONMENTAL SOLUTIONS

PE Project No: 202402008

Burkburnett Royal Gardens: Noise Calculation Data

			Projected 2% Annual Growth										10-Year
Road		Percent [2]	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
County Road	Gross Total ADT												
Over 1K Feet	Total Cars												
Truck Traffic[1] =	Total Medium Trucks												
	Total Heavy Trucks												

Railroad	Train ATO	% Night Traffic	Typical Speed Over Crossing	Within 1/4 Mile of At-Grade Crossing?	Bolted Tracks?
Wichita, Tillman & Jackson Railway Co. II	2	none	25	yes	yes

Airport		Distance	Outside Noise Countours
Sheppard AFB		6.5 miles	Yes

Noise Assement Locations (NAL)

	NAL 1: Outdoor Amenities		NAL 2: Eastern Façade	
Noise Sources	Effective Distance (feet)	10-year DNL	Effective Distance (feet)	10-year DNL
Wichita, Tillman & Jackson Railway Co. II	1,180	48	1,170	48
County Road	1,115	NA	1,105	NA
NAL Combined DNL:		**48**		**48**

ADT = Average Daily Traffic Count
DNL = Day/Night Noise Level

Criteria
Acceptable: 65 or less
Normally Not Acceptable: 66-75
Not Acceptable: greater than 75

Site ID	Burkburnett Royal Gardens - NAL 1: Outdoor Amenities
Record Date	04/24/2024
User's Name	Phase Engineering - HH

Railroad #1 Track Identifier:	**Wichita, TIlman & Jackson Railway Co. II**

Rail # 1

Train Type	**Electric** ☐	**Diesel** ☑
Effective Distance		1180
Average Train Speed		25
Engines per Train		2
Railway cars per Train		50
Average Train Operations (ATO)		2
Night Fraction of ATO		0
Railway whistles or horns?	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Bolted Tracks?	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Train DNL	0	48
Calculate Rail #1 DNL	48	Reset

Add Road Source | Add Rail Source

Airport Noise Level	
Loud Impulse Sounds?	◯**Yes** ◯**No**
Combined DNL for all Road and Rail sources	**48**
Combined DNL including Airport	**N/A**
Site DNL with Loud Impulse Sound	

Calculate Reset

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative**: Cancel the project at this location
- **Other Reasonable Alternatives**: Choose an alternate site
- **Mitigation**
  - **Contact your Field or Regional Environmental Officer (/programs/environmental-review/hud-environmental-staff-contacts/)**
  - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
  - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses
  - Incorporate natural or man-made barriers. See ***The Noise Guidebook (/resource/313/hud-noise-guidebook/)***
  - Construct noise barrier. See the **Barrier Performance Module (/programs/environmental-review/bpm-calculator/)**

Tools and Guidance

Day/Night Noise Level Assessment Tool User Guide (/resource/3822/day-night-noise-level-assessment-tool-user-guide/)

Day/Night Noise Level Assessment Tool Flowcharts (/resource/3823/day-night-noise-level-

Site ID	Burkburnett Royal Gardens - NAL 2: Eastern Facade
Record Date	04/24/2024
User's Name	Phase Engineering - HH

Railroad #1 Track Identifier:	**Wichita, TIlman & Jackson Railway Co. II**

Rail # 1

Train Type	**Electric** ☐	**Diesel** ☑
Effective Distance		1180
Average Train Speed		25
Engines per Train		2
Railway cars per Train		50
Average Train Operations (ATO)		2
Night Fraction of ATO		0
Railway whistles or horns?	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Bolted Tracks?	Yes: ☐ No: ☐	Yes: ☑ No: ☐
Train DNL	0	48
Calculate Rail #1 DNL	48	Reset

Add Road Source | Add Rail Source

Airport Noise Level	
Loud Impulse Sounds?	◯**Yes** ◯**No**
Combined DNL for all Road and Rail sources	**48**
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Site DNL with Loud Impulse Sound	

Calculate Reset

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U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date *(MM/DD/YYYY)*: 10 / 14 / 2022

B. Reporting Agency: ☐ Railroad ☐ Transit ☒ State ☐ Other

C. Reason for Update *(Select only one)*: ☒ Change in Data ☐ New Crossing ☐ Closed ☐ No Train Traffic ☐ Quiet Zone Update ☐ Re-Open ☐ Date Change Only ☐ Change in Primary Operating RR ☐ Admin. Correction

D. DOT Crossing Inventory Number: 415484P

Part I: Location and Classification Information

1. Primary Operating Railroad: WICHITA, TILLMAN & JACKSON RAILWAY COMPANY, I

2. State: TEXAS

3. County: WICHITA

4. City / Municipality: ☒ In ☐ Near BURKBURNETT

5. Street/Road Name & Block Number: WILLIAMS ST | *(Street/Road Name)* | ** (Block Number)*

6. Highway Type & No.: ST 0000

7. Do Other Railroads Operate a Separate Track at Crossing? ☐ Yes ☒ No
If Yes, Specify RR

8. Do Other Railroads Operate Over Your Track at Crossing? ☐ Yes ☒ No
If Yes, Specify RR

9. Railroad Division or Region: ☒ None

10. Railroad Subdivision or District: ☐ None red river

11. Branch or Line Name: ☒ None

12. RR Milepost: | 0013.40 | *(prefix) | (nnnn.nnn) | (suffix)*

13. Line Segment ***:

14. Nearest RR Timetable Station ***: WICHITA FALLS

15. Parent RR *(if applicable)*: ☒ N/A

16. Crossing Owner *(if applicable)*: ☒ N/A

17. Crossing Type: ☒ Public ☐ Private

18. Crossing Purpose: ☒ Highway ☐ Pathway, Ped. ☐ Station, Ped.

19. Crossing Position: ☒ At Grade ☐ RR Under ☐ RR Over

20. Public Access *(if Private Crossing)*: ☐ Yes ☐ No

21. Type of Train: ☒ Freight ☐ Intercity Passenger ☐ Commuter ☐ Transit ☐ Shared Use Transit ☐ Tourist/Other

22. Average Passenger Train Count Per Day: ☐ Less Than One Per Day ☐ Number Per Day 0

23. Type of Land Use: ☐ Open Space ☐ Farm ☒ Residential ☐ Commercial ☐ Industrial ☐ Institutional ☐ Recreational ☐ RR Yard

24. Is there an Adjacent Crossing with a Separate Number?: ☐ Yes ☒ No If Yes, Provide Crossing Number

25. Quiet Zone *(FRA provided)*: ☒ No ☐ 24 Hr ☐ Partial ☐ Chicago Excused Date Established

26. HSR Corridor ID: ☒ N/A

27. Latitude in decimal degrees *(WGS84 std: nn.nnnnnnn)*: 34.0876273

28. Longitude in decimal degrees *(WGS84 std: -nnn.nnnnnnn)*: -98.5718142

29. Lat/Long Source: ☐ Actual ☒ Estimated

30.A. Railroad Use ***:

30.B. Railroad Use ***:

30.C. Railroad Use ***:

30.D. Railroad Use ***:

31.A. State Use ***:

31.B. State Use ***:

31.C. State Use ***: State Phone# updated - date updated: 2018-08-16

31.D. State Use ***:

32.A. Narrative *(Railroad Use)* ***:

32.B. Narrative *(State Use)* ***:

33. Emergency Notification Telephone No. *(posted)*: 866-777-3388

34. Railroad Contact *(Telephone No.)*: 940-733-1246

35. State Contact *(Telephone No.)*: 512-416-2635

Part II: Railroad Information

1. Estimated Number of Daily Train Movements

1.A. Total Day Thru Trains *(6 AM to 6 PM)*	1.B. Total Night Thru Trains *(6 PM to 6 AM)*	1.C. Total Switching Trains	1.D. Total Transit Trains	1.E. Check if Less Than One Movement Per Day ☐ How many trains per week?
0	0	2	0	

2. Year of Train Count Data *(YYYY)*: 2017

3. Speed of Train at Crossing
3.A. Maximum Timetable Speed *(mph)*: 25
3.B. Typical Speed Range Over Crossing *(mph)* From 20 to 25

4. Type and Count of Tracks
Main 1 Siding 0 Yard 0 Transit 0 Industry 0

5. Train Detection *(Main Track only)*
☐ Constant Warning Time ☐ Motion Detection ☐AFO ☐ PTC ☒ DC ☐ Other ☐ None

6. Is Track Signaled? ☐ Yes ☒ No

7.A. Event Recorder ☐ Yes ☐ No

7.B. Remote Health Monitoring ☐ Yes ☐ No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date *(MM/DD/YYYY)*	PAGE 2	D. Crossing Inventory Number *(7 char.)*
10/14/2022		415484P

Part III: Highway or Pathway Traffic Control Device Information

1. Are there Signs or Signals? ☒ Yes ☐ No

2. Types of Passive Traffic Control Devices associated with the Crossing

2.A. Crossbuck Assemblies *(count)*	2.B. STOP Signs *(R1-1)* *(count)*	2.C. YIELD Signs *(R1-2)* *(count)*	2.D. Advance Warning Signs *(Check all that apply; include count)* ☒ None
3	0		☐ W10-1 _____ ☐ W10-3 _____ ☐ W10-11 _____ ☐ W10-2 _____ ☐ W10-4 _____ ☐ W10-12 _____

2.E. Low Ground Clearance Sign *(W10-5)*	2.F. Pavement Markings	2.G. Channelization Devices/Medians	2.H. EXEMPT Sign *(R15-3)*	2.I. ENS Sign *(I-13)* Displayed
☐ Yes *(count_____)* ☐ No	☒ Stop Lines ☐ Dynamic Envelope ☒ RR Xing Symbols ☐ None	☐ All Approaches ☐ Median ☐ One Approach ☐ None	☐ Yes ☐ No	☐ Yes ☐ No

2.J. Other MUTCD Signs	2.K. Private Crossing Signs *(if private)*	2.L. LED Enhanced Signs *(List types)*
☐ Yes ☒ No Specify Type _____ Count _____ Specify Type _____ Count _____ Specify Type _____ Count _____	☐ Yes ☐ No	

3. Types of Train Activated Warning Devices at the Grade Crossing *(specify count of each device for all that apply)*

3.A. Gate Arms *(count)*	3.B. Gate Configuration	3.C. Cantilevered *(or Bridged)* Flashing Light Structures *(count)*	3.D. Mast Mounted Flashing Lights *(count of masts)* 0	3.E. Total Count of Flashing Light Pairs
Roadway 0 Pedestrian _____	☐ 2 Quad ☐ Full *(Barrier)* Resistance ☐ 3 Quad ☐ 4 Quad ☐ Median Gates	Over Traffic Lane 0 ☐ Incandescent Not Over Traffic Lane 0 ☐ LED	☐ Incandescent ☐ LED ☐ Back Lights Included ☐ Side Lights Included	0

3.F. Installation Date of Current Active Warning Devices: *(MM/YYYY)*	3.G. Wayside Horn	3.H. Highway Traffic Signals Controlling Crossing	3.I. Bells *(count)*
_____/_____ ☐ Not Required	☐ Yes Installed on *(MM/YYYY)* _____/_____ ☐ No	☐ Yes ☒ No	0

3.J. Non-Train Active Warning	3.K. Other Flashing Lights or Warning Devices
☐ Flagging/Flagman ☐ Manually Operated Signals ☐ Watchman ☐ Floodlighting ☐ None	Count 0 Specify type _____

4.A. Does nearby Hwy Intersection have Traffic Signals?	4.B. Hwy Traffic Signal Interconnection	4.C. Hwy Traffic Signal Preemption	5. Highway Traffic Pre-Signals	6. Highway Monitoring Devices *(Check all that apply)*
☐ Yes ☐ No	☐ Not Interconnected ☐ For Traffic Signals ☐ For Warning Signs	☐ Simultaneous ☐ Advance	☐ Yes ☐ No Storage Distance * _____ Stop Line Distance * _____	☐ Yes - Photo/Video Recording ☐ Yes – Vehicle Presence Detection ☐ None

Part IV: Physical Characteristics

1. Traffic Lanes Crossing Railroad	2. Is Roadway/Pathway Paved?	3. Does Track Run Down a Street?	4. Is Crossing Illuminated? *(Street lights within approx. 50 feet from nearest rail)*
☐ One-way Traffic ☒ Two-way Traffic Number of Lanes 2 ☐ Divided Traffic	☒ Yes ☐ No	☐ Yes ☒ No	☐ Yes ☐ No

5. Crossing Surface *(on Main Track, multiple types allowed)* Installation Date * *(MM/YYYY)* _____/_____ Width * _____ Length * _____
☐ 1 Timber ☒ 2 Asphalt ☐ 3 Asphalt and Timber ☐ 4 Concrete ☐ 5 Concrete and Rubber ☐ 6 Rubber ☐ 7 Metal
☐ 8 Unconsolidated ☐ 9 Composite ☐ 10 Other *(specify)* _____

6. Intersecting Roadway within 500 feet?	7. Smallest Crossing Angle	8. Is Commercial Power Available? *
☒ Yes ☐ No If Yes, Approximate Distance *(feet)* _____	☐ 0° – 29° ☐ 30° – 59° ☒ 60° - 90°	☒ Yes ☐ No

Part V: Public Highway Information

1. Highway System	2. Functional Classification of Road at Crossing	3. Is Crossing on State Highway System?	4. Highway Speed Limit
☐ (01) Interstate Highway System ☐ (02) Other Nat Hwy System (NHS) ☐ (03) Federal AID, Not NHS ☒ (08) Non-Federal Aid	☐ (0) Rural ☒ (1) Urban ☐ (1) Interstate ☒ (5) Major Collector ☐ (2) Other Freeways and Expressways ☐ (3) Other Principal Arterial ☐ (6) Minor Collector ☐ (4) Minor Arterial ☐ (7) Local	☐ Yes ☒ No	30 MPH ☒ Posted ☐ Statutory

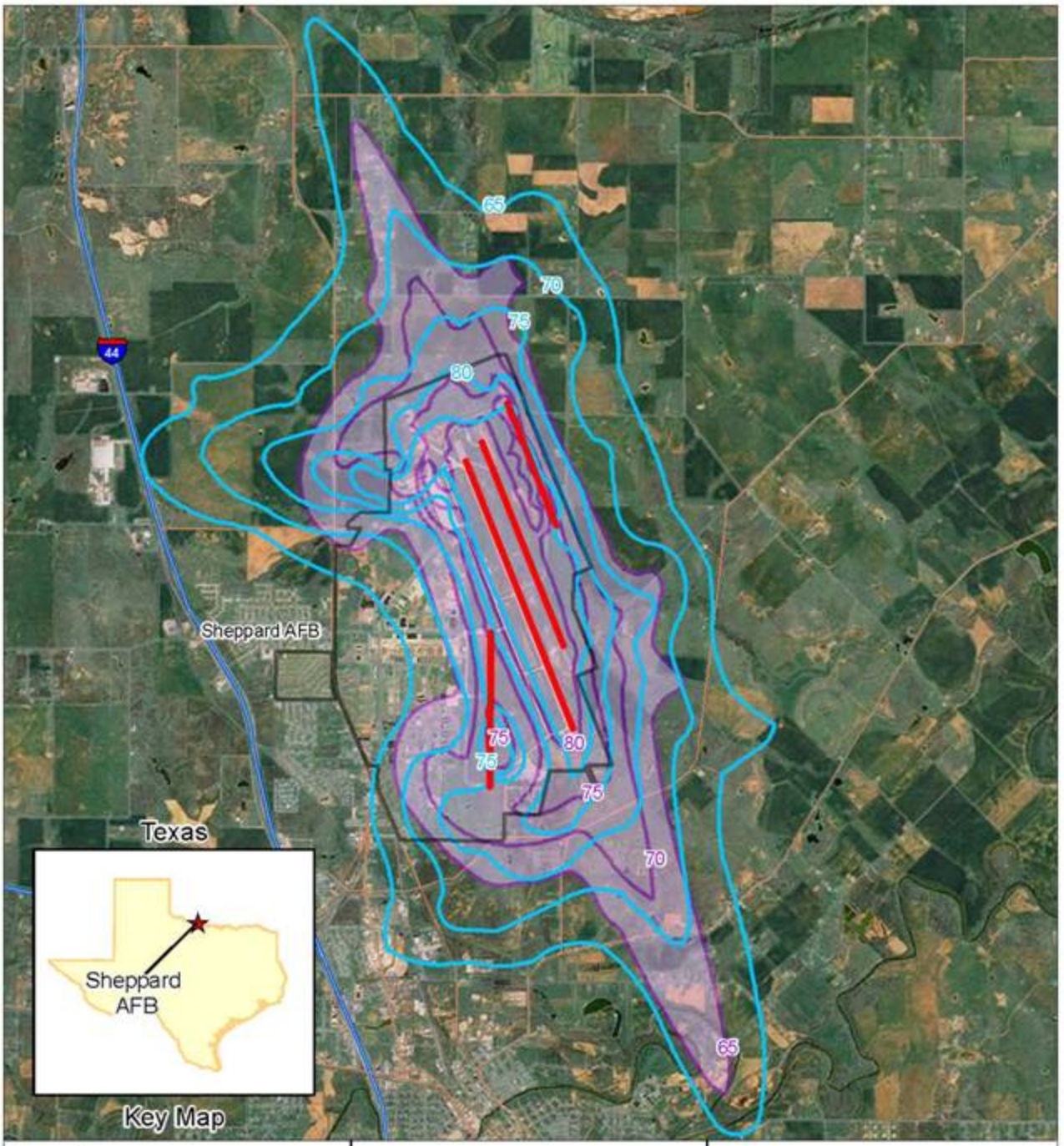
5. Linear Referencing System *(LRS Route ID)* *

6. LRS Milepost *

7. Annual Average Daily Traffic *(AADT)*	8. Estimated Percent Trucks	9. Regularly Used by School Buses?	10. Emergency Services Route
Year 2019 AADT 2273	3 %	☒ Yes ☐ No Average Number per Day 9	☐ Yes ☐ No

Submission Information - *This information is used for administrative purposes and is not available on the public website.*

Submitted by _____ Organization _____ Phone _____ Date _____



Legend

- Sheppard Air Force Base
- Runway
- 1999 Noise Contour
- 2011 Noise Contour
- Roads
- Major Road
- Interstate

N

0 1 2

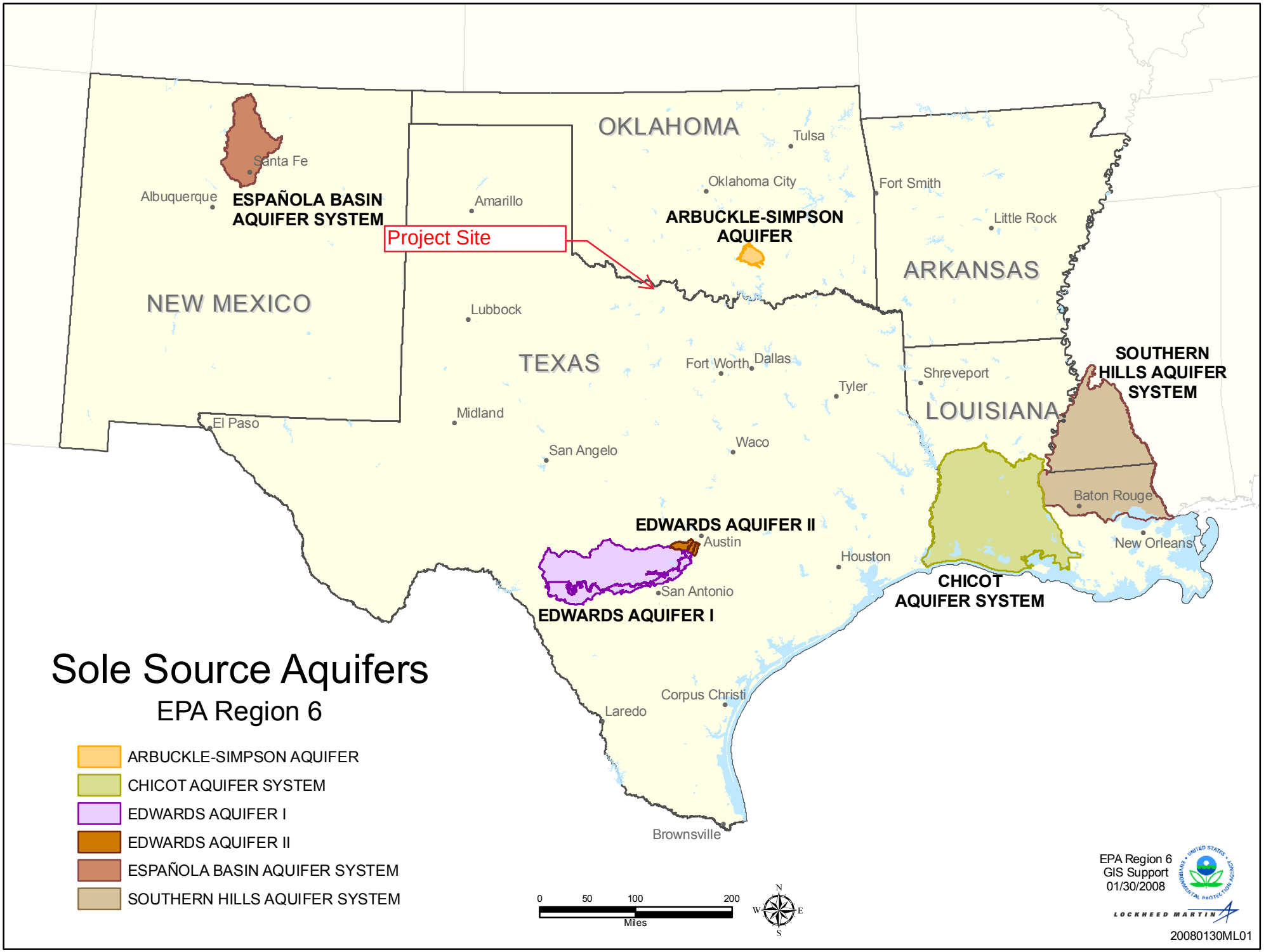
Miles

Figure 4-4

Comparison of 2011 AICUZ Study and 1999 AICUZ Study Noise Contours

Sheppard Air Force Base
Wichita Falls, TX

File: \\Fsted02\TIC\AETC\Sheppard\mxd\AICUZ_Report_2010\1999_2010_noise_contour_comparison.mxd, 13-May-11 10:22, rickse


OKLAHOMA
Tulsa
Oklahoma City
Fort Smith
Little Rock
ARKANSAS
Santa Fe
Albuquerque
ESPAÑOLA BASIN
AQUIFER SYSTEM
Amarillo
Project Site
ARBUCKLE-SIMPSON
AQUIFER
NEW MEXICO
Lubbock
TEXAS
Fort Worth
Dallas
Shreveport
Tyler
LOUISIANA
SOUTHERN
HILLS AQUIFER
SYSTEM
Midland
El Paso
San Angelo
Waco
Baton Rouge
EDWARDS AQUIFER II
Austin
Houston
New Orleans
CHICOT
AQUIFER SYSTEM
San Antonio
EDWARDS AQUIFER I
Corpus Christi
Laredo
Brownsville
Sole Source Aquifers
EPA Region 6
ARBUCKLE-SIMPSON AQUIFER
CHICOT AQUIFER SYSTEM
EDWARDS AQUIFER I
EDWARDS AQUIFER II
ESPAÑOLA BASIN AQUIFER SYSTEM
SOUTHERN HILLS AQUIFER SYSTEM
0
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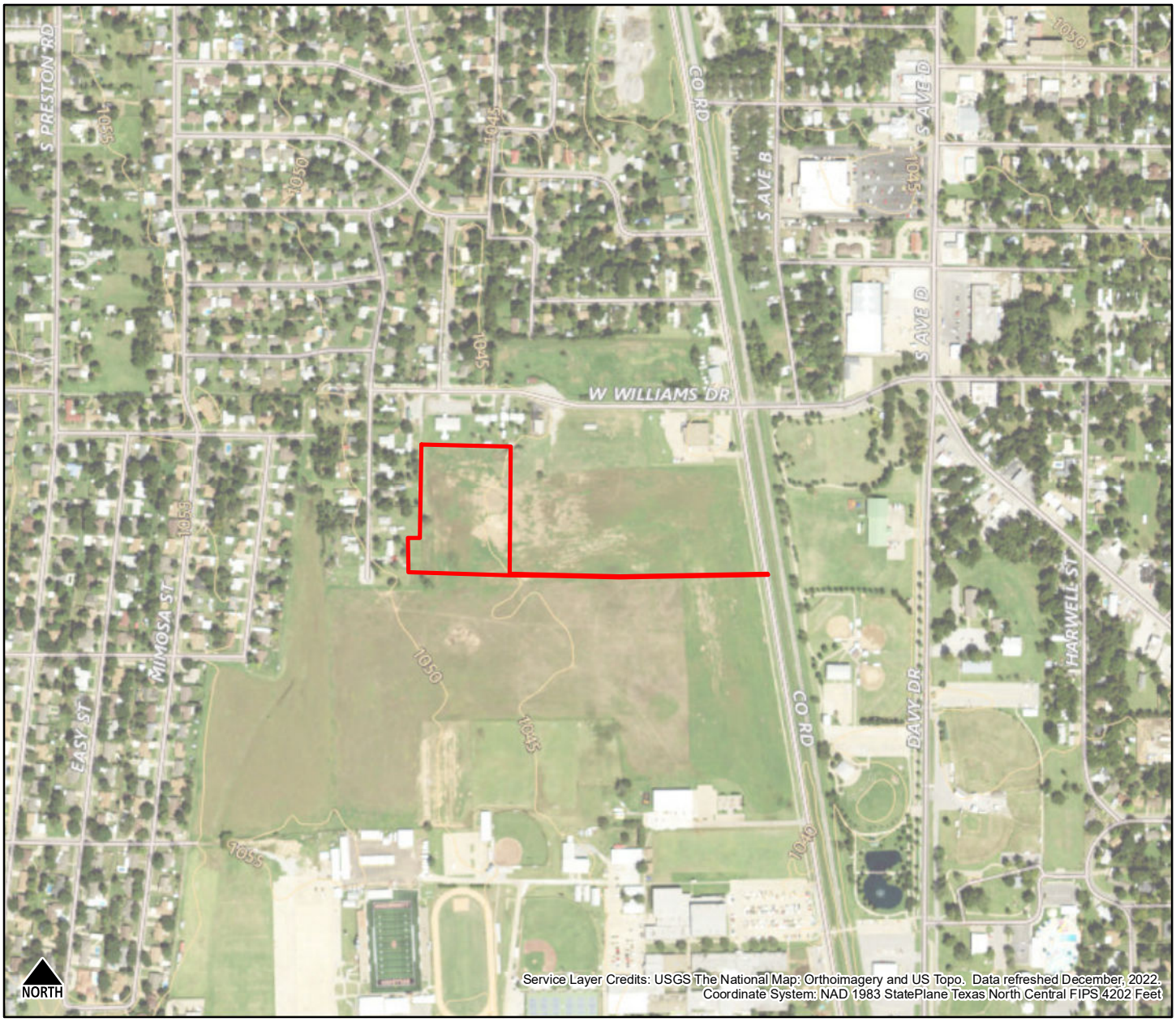
S
EPA Region 6
GIS Support
01/30/2008
LOCKHEED MARTIN
20080130ML01



Source: USF&WS

Property boundaries and locations are approximate only.

0 0.0325 0.065 0.13 0.195 0.26 0.325 Miles

1:8,000

US F&WS National Wetlands Inventory and Riparian Habitats

The U.S. Fish and Wildlife Service is the principal Federal agency that provides information to the public on the extent and status of the Nation's wetlands. These data delineate the areal extent of wetlands and surface waters as defined by Cowardin et al. (1979). Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation, some deepwater reef communities (coral or tuberficid worm reefs), and certain types of "farmed wetlands". Riparian areas are lands that occur along watercourses and water bodies. Typical examples include flood plains and streambanks. They are distinctly different from surrounding lands because of unique soil and vegetation characteristics that are strongly influenced by the presence of water. (Oct 2023)

Wetland and Deepwater Habitats

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

Riparian Habitats

- Other
- Forested/Shrub Riparian
- Herbaceous Riparian

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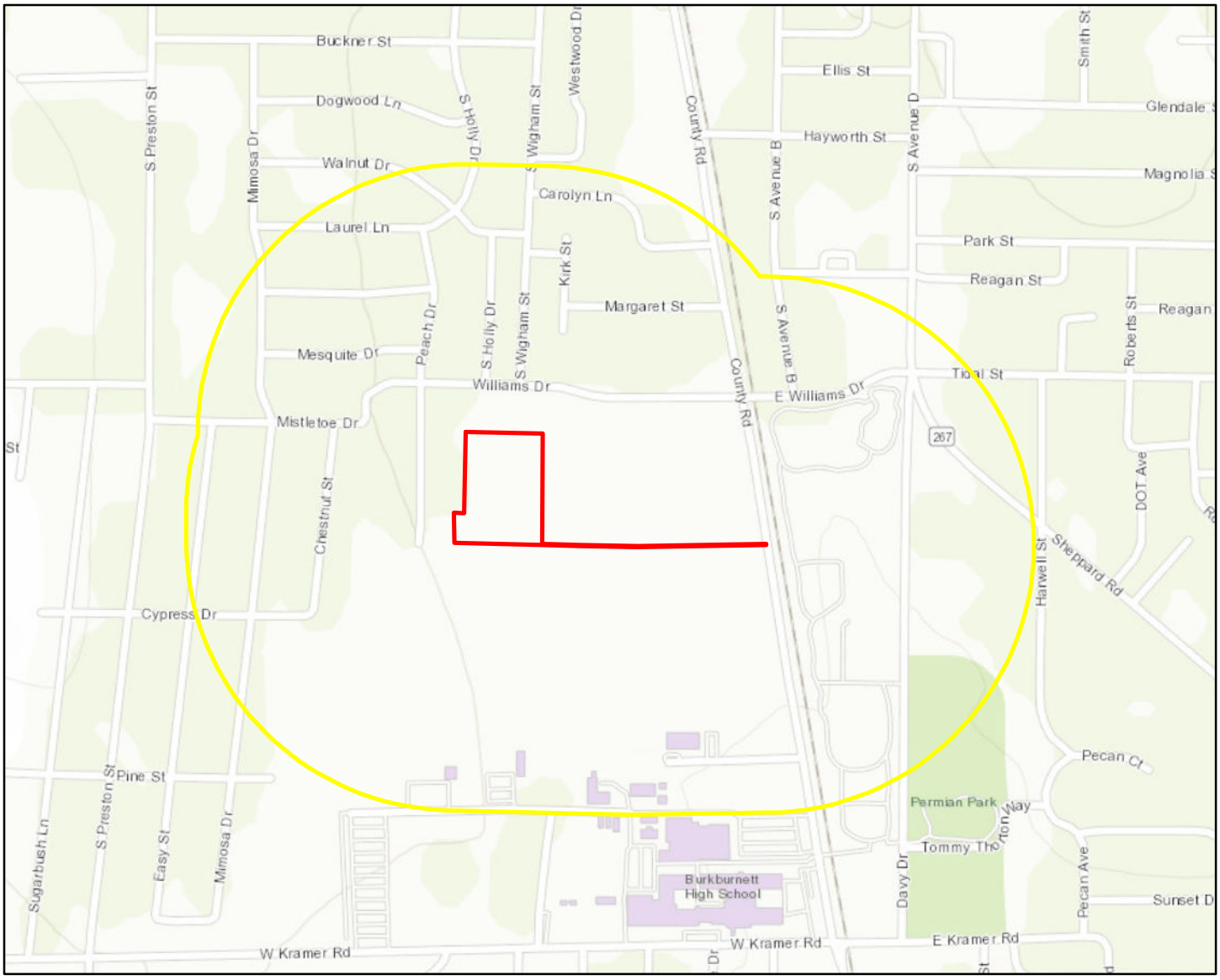
TRUSTED ENVIRONMENTAL SOLUTIONS

PE Project No: 202402008



Source: USDA Forest Service
FS Geodata Clearinghouse

0 0.05 0.1 0.2 0.3 0.4 Miles

1:9,560

NORTH

Nat'l Wild & Scenic Rivers System

The National Wild and Scenic Rivers System was created by Congress in 1968 (Public Law 90-542; 16 U.S.C. 1271 et seq.) to preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations. The Act is notable for safeguarding the special character of these rivers, while also recognizing the potential for their appropriate use and development. It encourages river management that crosses political boundaries and promotes public participation in developing goals for river protection.

- Quarter Mile Buffer Around Subject Property
- Wild Scenic River Segment Classification
- Wild Scenic River Corridor
- Wild Scenic River Areas

Wild Scenic River Status

- Final
- Provisional, Subject to Change

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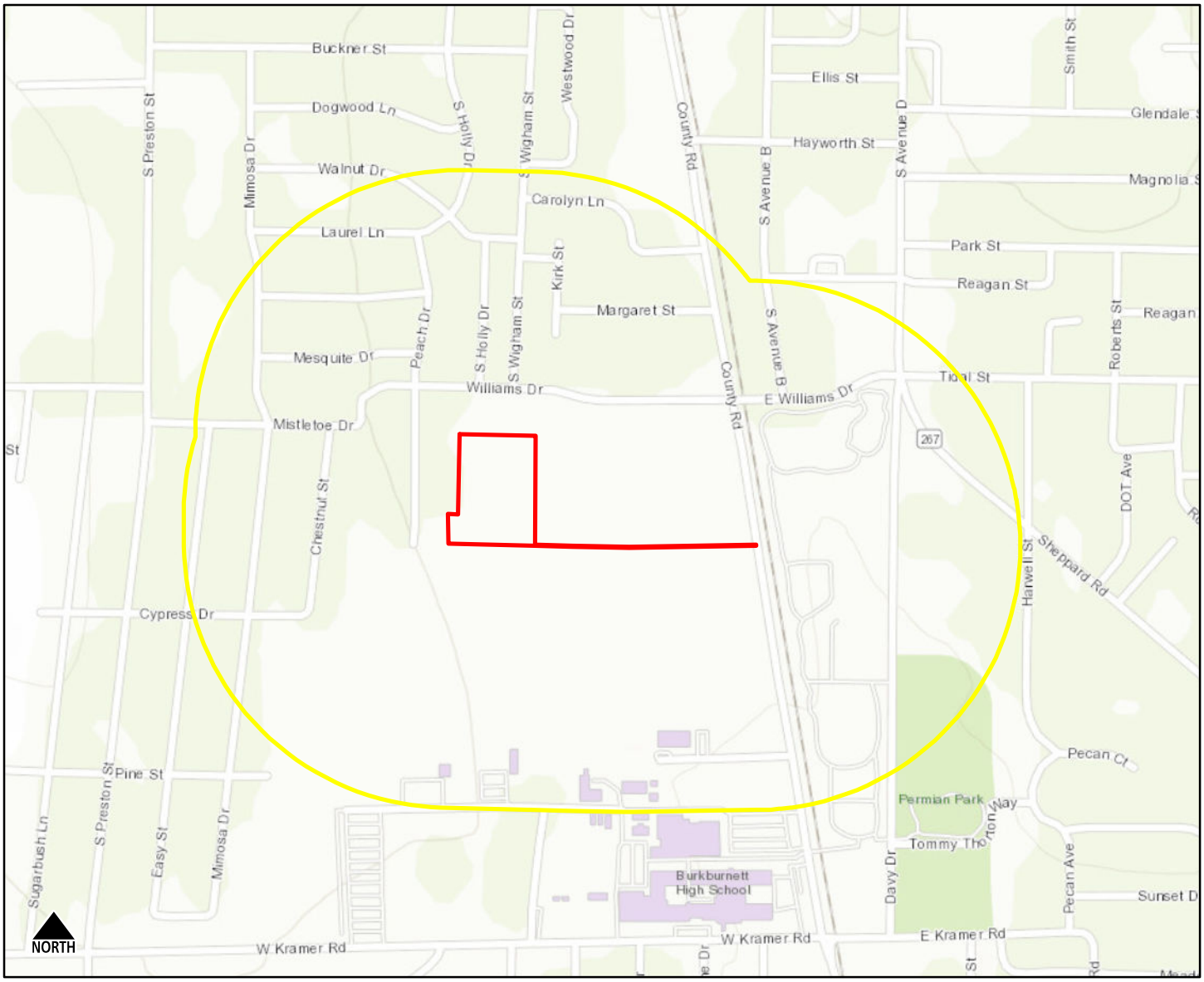
TRUSTED ENVIRONMENTAL SOLUTIONS

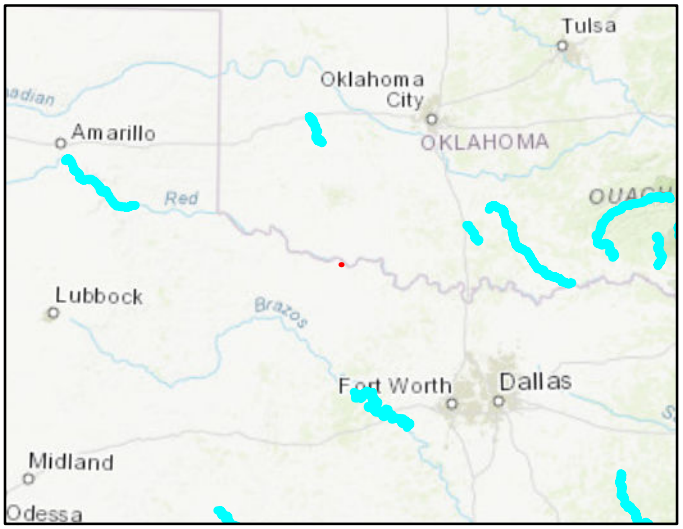
PE Project No: 202402008



Source: NPS NRI Data Store, ESRI

0 0.05 0.1 0.2 0.3 0.4 Miles

1:9,560



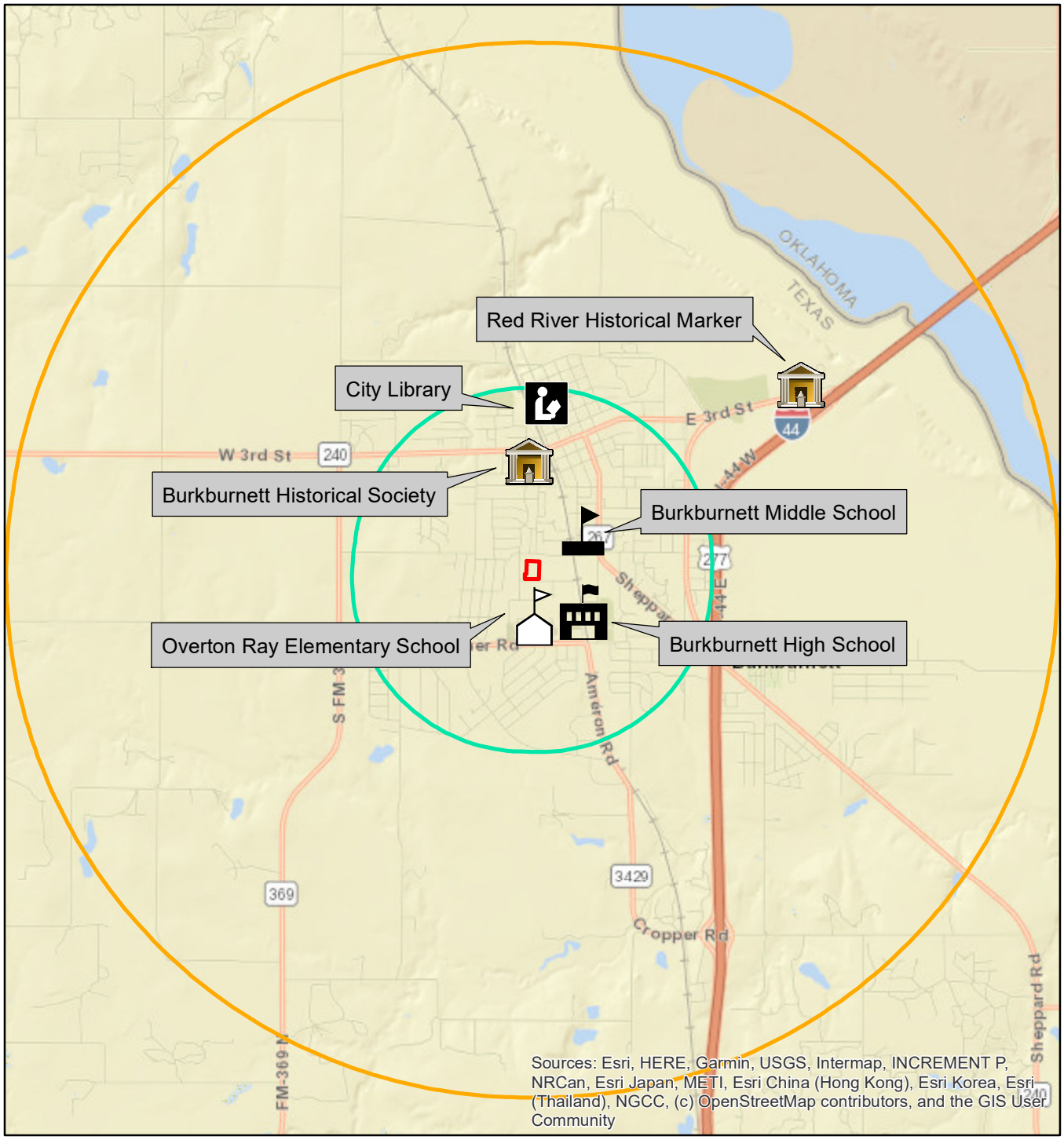
NPS Nationwide Rivers Inventory

The Nationwide Rivers Inventory (NRI) is a listing of more than 3,200 free-flowing river segments in the United States that are believed to possess one or more "outstandingly remarkable" natural or cultural values judged to be of more than local or regional significance. Under a 1979 Presidential Directive, and related Council on Environmental Quality procedures, all federal agencies must seek to avoid or mitigate actions that would adversely affect one or more NRI segments. The NRI is managed by the Rivers, Trails, & Conservation Assistance Program.

- Subject Property
- Quarter Mile Buffer
- Nationwide Rivers Inventory

PHASE
TRUSTED ENVIRONMENTAL SOLUTIONS

PE Project No: 202402008



Property boundary and locations are representative only.

Sources: NRCS NAIP WMS, Texas Education Agency, TIGER, ESRI

0 0.475 0.95 1.9 2.85 Miles

1:55,269

NORTH

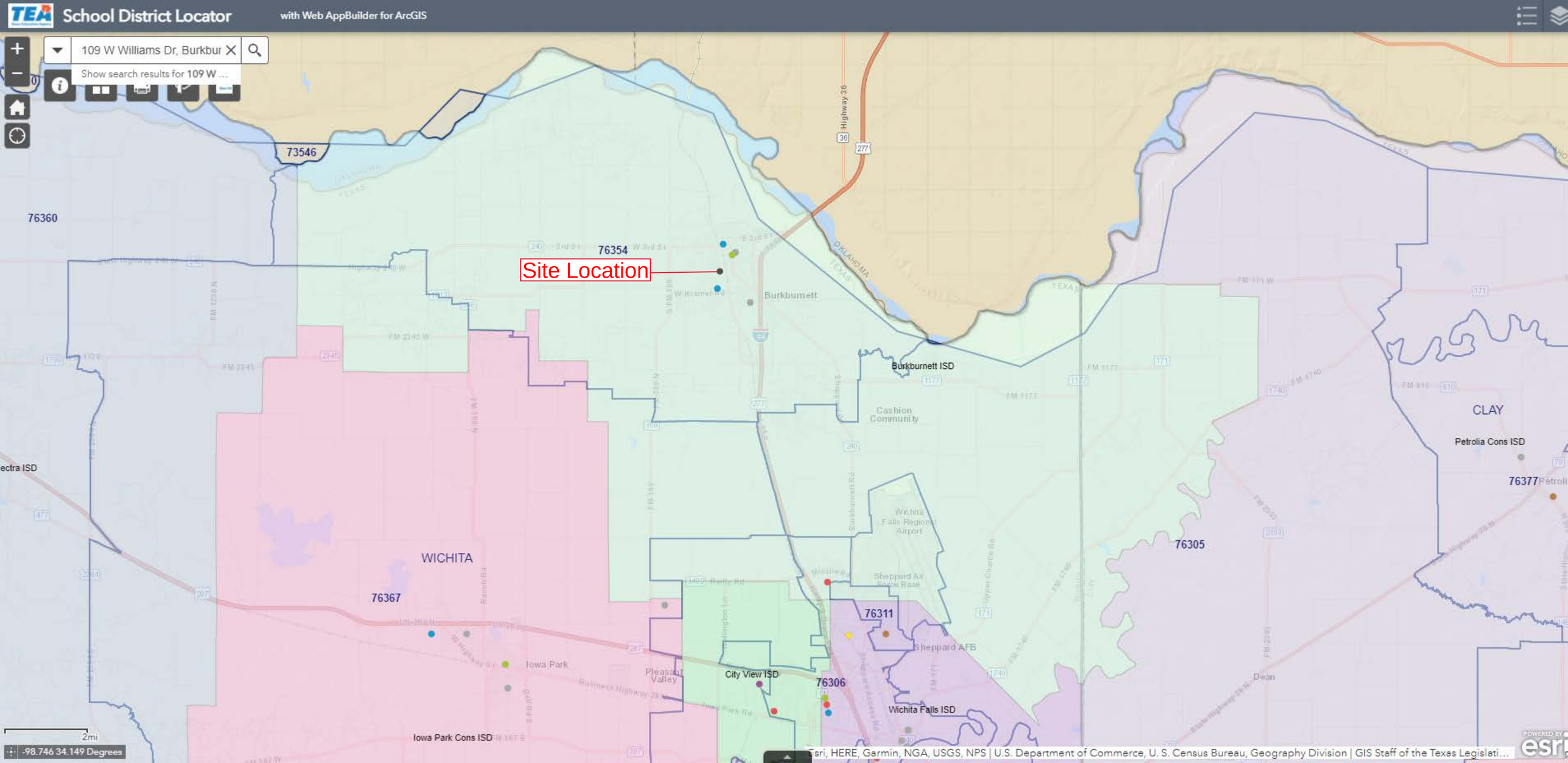
Education & Cultural Resources

- 1 Mile Radius
- 3 Mile Radius

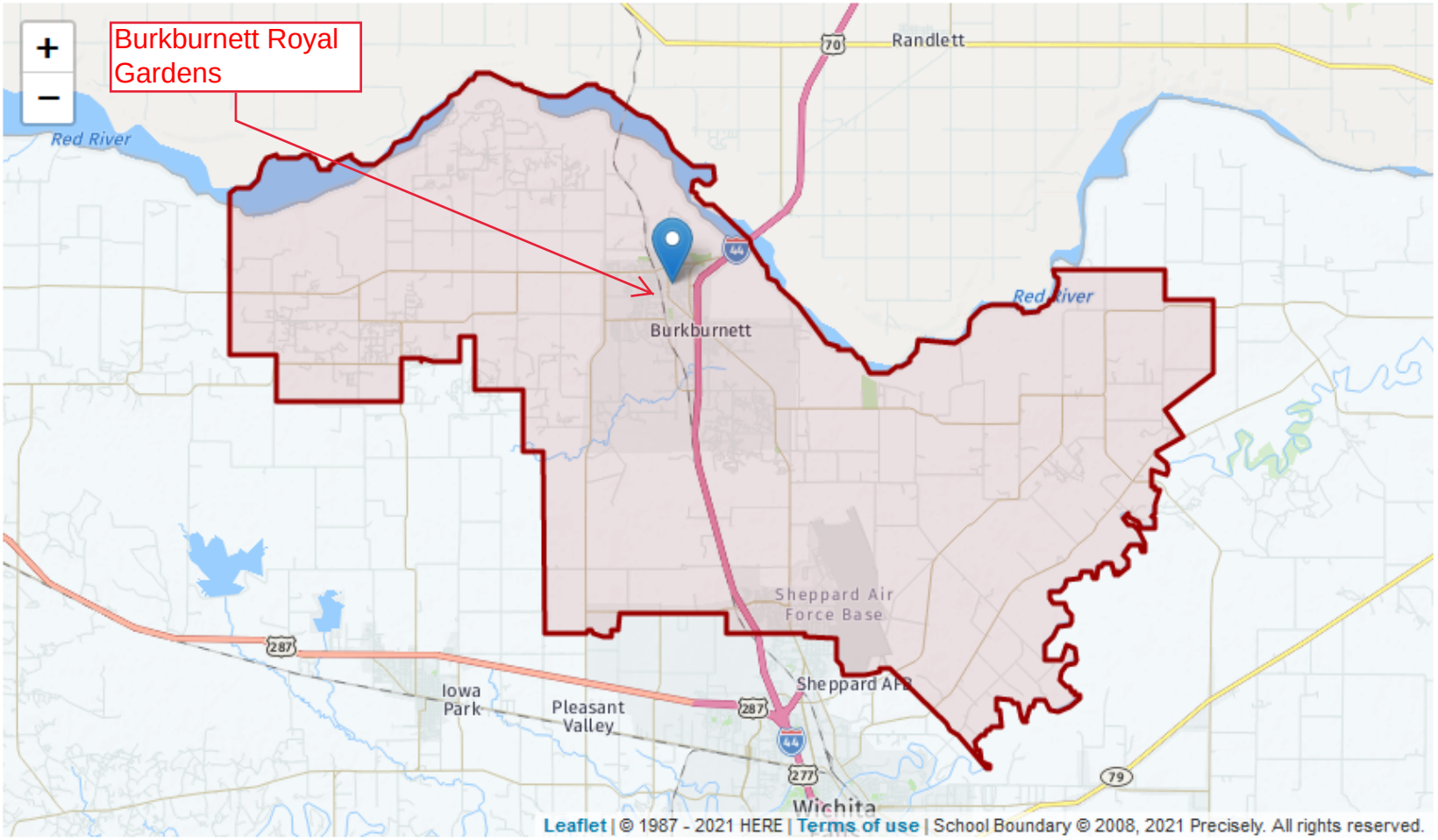
Museum | High School | Middle School | Elementary School | Library

PHASE ENGINEERING,LLC.
ENVIRONMENTAL CONSULTANTS

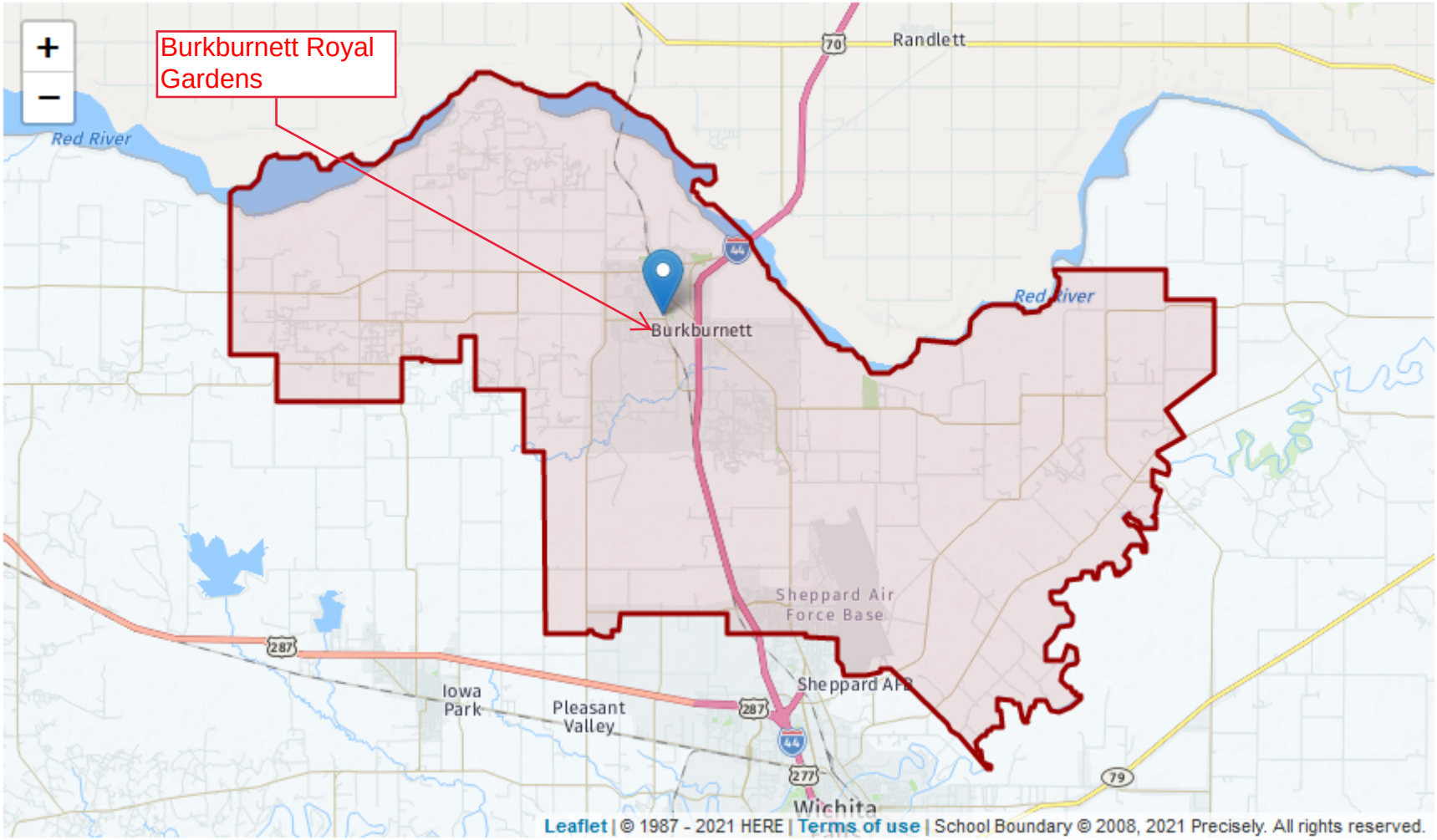
PE Project No: 202402008


School District Locator
with Web AppBuilder for ArcGIS
109 W Williams Dr, Burkbur
Show search results for 109 W ...
73546
76360
76354
Site Location
Burkburnett
Burkburnett ISD
Cashion Community
Wichita Falls Regional Airport
Sheppard Air Force Base
Sheppard AFB
76311
76305
CLAY
Petrolia Cons ISD
76377
WICHITA
76367
Iowa Park
Pleasant Valley
City View ISD
76306
Wichita Falls ISD
Dean
Iowa Park Cons ISD
Highway 36
277
2mi
-98.746 34.149 Degrees
Esri, HERE, Garmin, NGA, USGS, NPS | U.S. Department of Commerce, U.S. Census Bureau, Geography Division | GIS Staff of the Texas Legislati...

Burkburnett Middle - School Boundaries Map (School Attendance Zone)



Burkburnett H S - School Boundaries Map (School Attendance Zone)



School-Age Children per 100 Households				
All Households	Single-Family Renter Households	Single-Family Owner Households	Multifamily Renter Households	Multifamily Owner Households
38.6	56.7	41.9	20.8	11.1

Source: NMHC tabulations of 2022 American Community Survey microdata, US Census Bureau. Updated 11/2023. Note: School-Age children are household members between the ages of 6-17.

Re: [NOTICE] School District Ability to Serve Future Development, Burkburnett Royal Gardens (PE # 202402008)

Brad Owen <brad.owen@burkburnettisd.org>

Wed 4/24/2024 9:08 AM

To:Hope Hernandez <Hope@phaseengineering.com>

Hope,
Yes, I can confirm that there is sufficient capacity for the students in each of the schools.

Thank you,

Dr. Brad Owen
Superintendent of Schools for BISD
940-569-3326

From: Hope Hernandez <Hope@phaseengineering.com>
Sent: Tuesday, April 23, 2024 3:55 PM
To: elaine.davis <elaine.davis@burkburnettisd.org>
Cc: Tracy Watson <Tracy@phaseengineering.com>
Subject: [NOTICE] School District Ability to Serve Future Development, Burkburnett Royal Gardens (PE # 202402008)

Our firm is preparing an environmental assessment for a proposed apartment complex to be located at 350 DW Taylor Pathway, Burkburnett, Texas. Since the complex is seeking funding from the U.S. Department of Housing and Urban Development, we must ensure there is sufficient capacity and access to the neighborhood public schools.

The new development will have 88 units and based on National Multifamily Housing Council, we estimate there we be approximately 18 school-aged children living at the complex. I've also attached a preliminary site plan and location map of the new development.

Can you please confirm there will be sufficient capacity for the students in the schools zoned for this property?

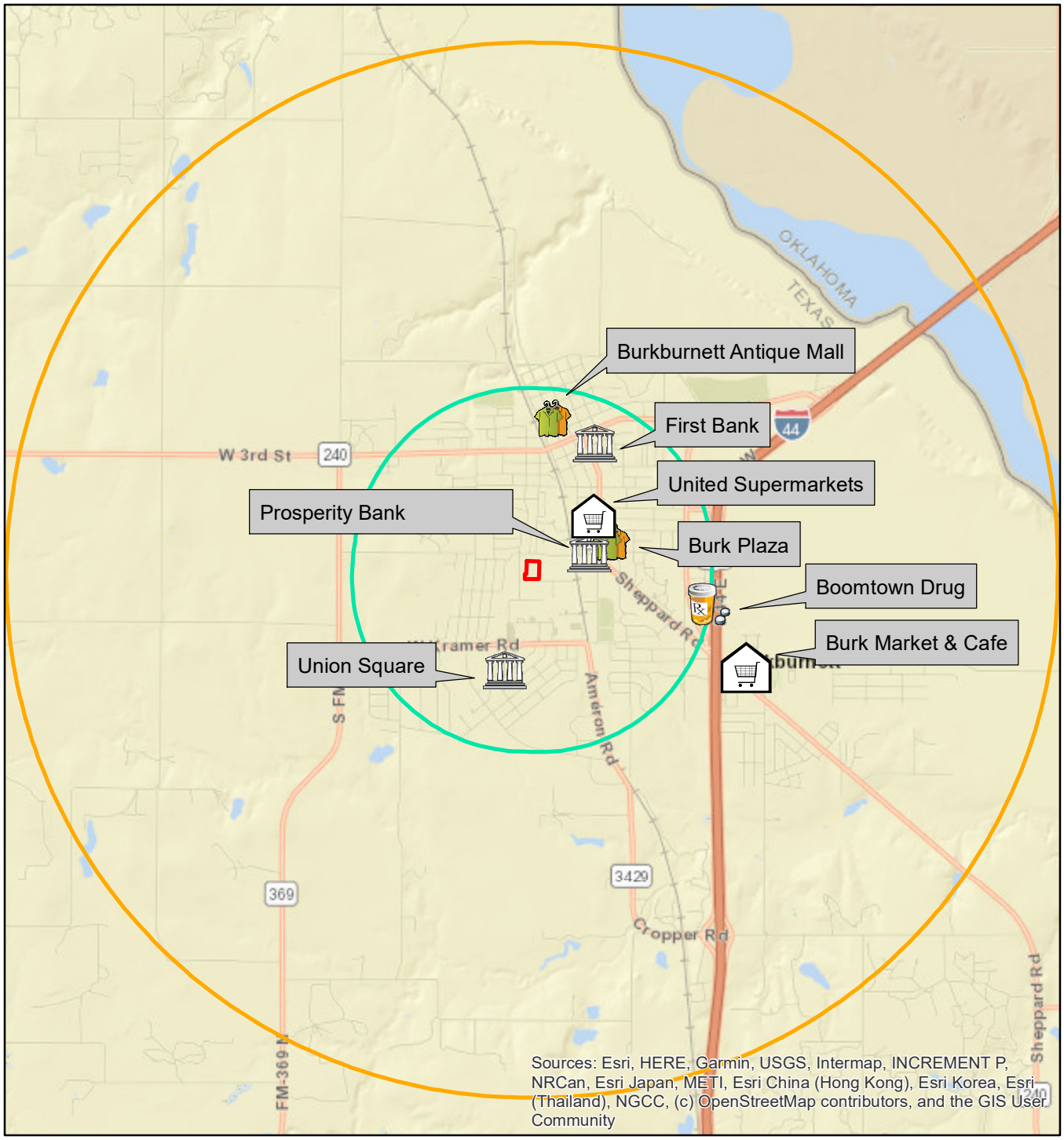
Overton Ray Elementary School
Burkburnett Middle School
Burkburnett High School

Please let me know if you need any additional information. I look forward to hearing from you.

Thank you!

Hope Hernandez-Huerta / Special Projects Manager
Hope@phaseengineering.com / 915.245.5842 Cell

Phase Engineering
832.485.2227 Office
12414 Nacogdoches Road, Suite 150, San Antonio, TX 78217
phaseengineering.com



Property boundary and locations are representative only.

Sources: NRCS NAIP WMS, Texas Education Agency, TIGER, ESRI

0 0.475 0.95 1.9 2.85 Miles

1:55,269

NORTH

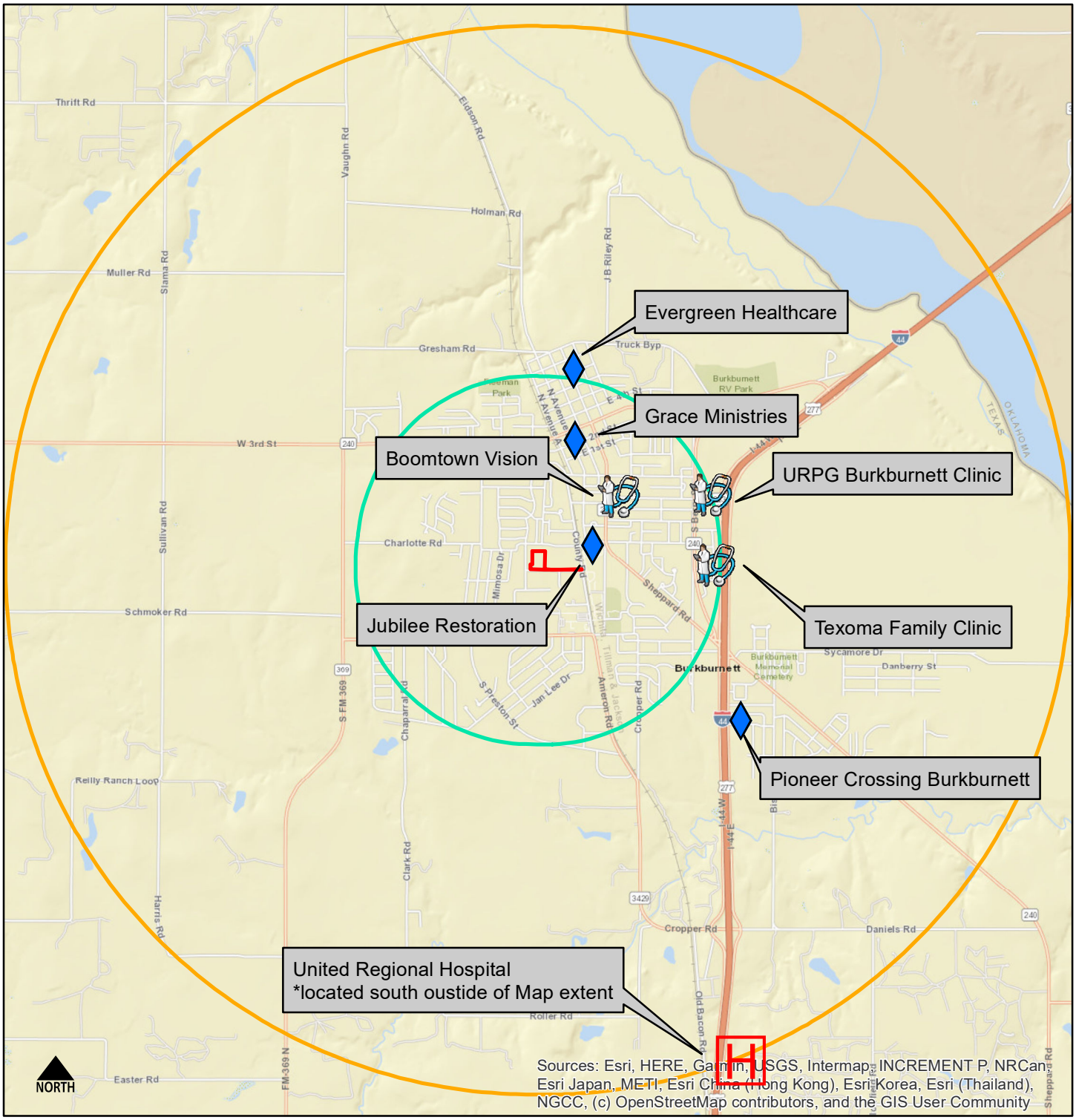
Commercial Facilities

- 1 Mile Radius
- 3 Mile Radius

Bank | Pharmacy | Grocery Store | Retail

PHASE ENGINEERING, LLC.
ENVIRONMENTAL CONSULTANTS

PE Project No: 202402008



Property boundary and locations are representative only.

0 0.45 0.9 1.8 2.7 Miles

1:51,584

Health Care & Social Services

- 1 Mile Radius
- 3 Mile Radius

Hospital | Social Services | Clinic | Urgent Care | Child Care

PHASE
TRUSTED ENVIRONMENTAL SOLUTIONS

PE Project No: 202208134

E. Drainage

The site has been located on the Flood Insurance Rate Map (FIRM) No. 48485C0180G effective date February 3, 2010 and is in the "X" flood zone. Detention will be required if determined through a drainage analysis the downstream may be adversely impacted by the subject development.

F. Utilities

- Existing 6-inch sanitary sewer line along north property line.
- An existing 6-inch water on the east side of County Road which is ± 1,100 feet to the east
- City of Burkburnett provides both services.

Overhead electrical (both single and 3-phase) is available at the property. Natural gas is available near the site.

G. Fire Department Requirements

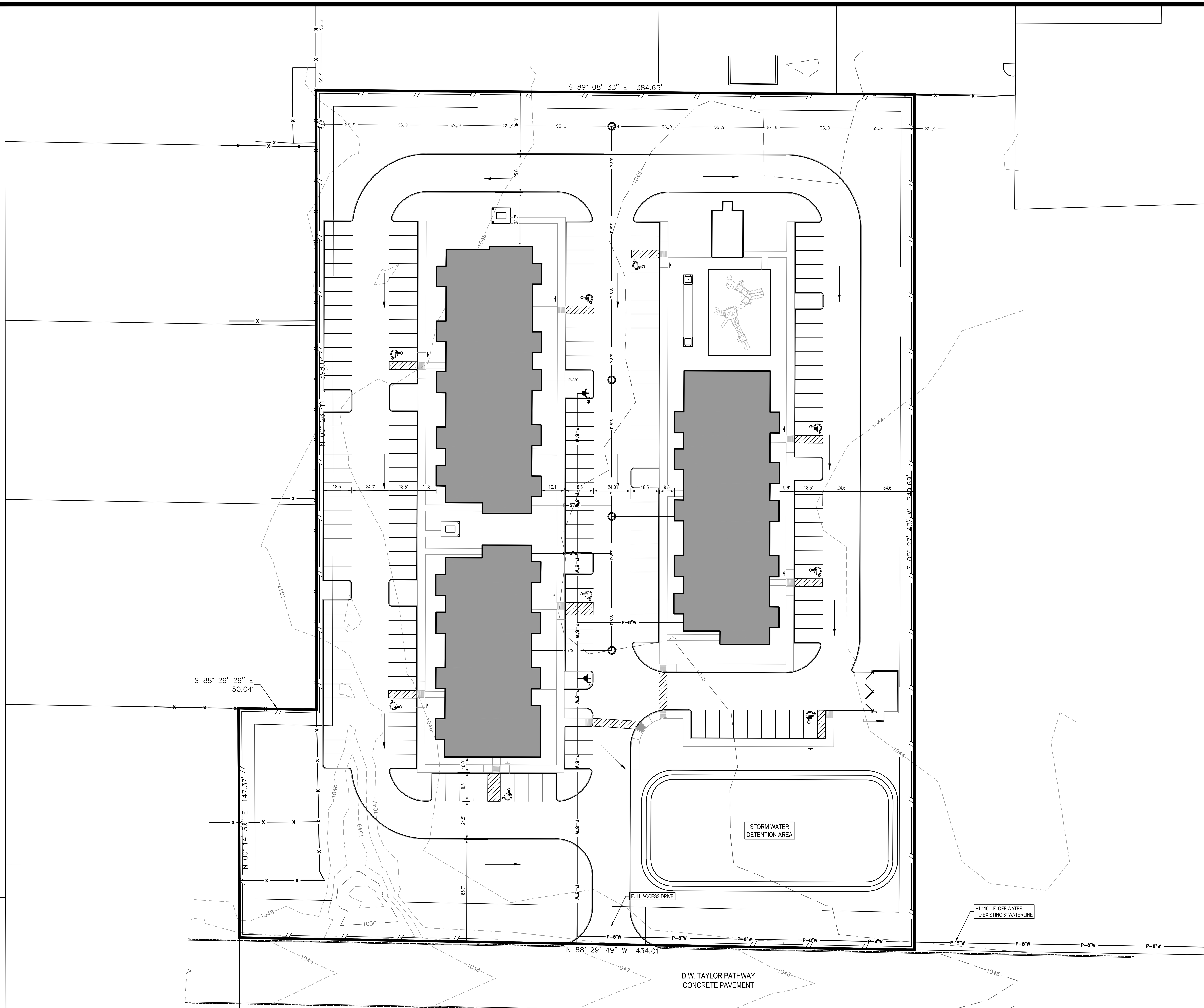
- The fire department requires (2012 IFC) the following per the Ordinance:
- Fire hydrants shall be located in such a manner that it is no farther than 500 feet from any lot within the subdivision 300 feet for commercial subdivision).
- Fire hydrants shall be located on a looped water main having a minimum diameter of six inches.
- Fire Lane Min Width – 24' and 26' for 3 stories
- Min radius – 30'
- A fire hydrant is required within 200 feet of a Fire Department Connection.

H. Proposed Offsite Improvements

A 6-inch water line will be extended approximately 1,100 LF to the existing line on the east side of County Road

I. Ingress & Egress

- The site will be accessed from D. W. Taylor Pathway
- D.W. Taylor Pathway is a 2-lane concrete curb and gutter street.
- The City will issue a driveway permit.



N

811

Know what's **below.**
Call before you dig.

0 10' 20' 30' 60'
1"=30'

LEGEND

E- INDICATES EXISTING
P- INDICATES PROPOSED

INDICATES EXISTING OR PROPOSED — E-6"W — INDICATES TYPE OF LINE / INDICATES SIZE OF LINE

	PROPOSED FIRE HYDRANT
(SS)	PROPOSED MANHOLE
— W —	WATER LINE
— S —	SANITARY SEWER
— — —	PROPERTY BOUNDARY
— — BL — —	BUILDING SETBACK

NOTES

1. THE ENGINEER HAS RESEARCHED CODES, ORDINANCES, AND OTHER DEVELOPMENTAL REQUIREMENTS OF LOCAL GOVERNMENT, INCLUDING FIRE, WITH JURISDICTION OVER THE SITE, AND VERIFIES THAT THE SITE PLAN CONFORMS TO ALL APPLICABLE ZONING, SITE DEVELOPMENT, AND BUILDING CODED ORDINANCES.
2. THERE ARE NO KNOWN VARIANCES THAT WILL BE REQUIRED FOR THIS PROJECT.
3. DIMENSIONS ARE TO BACK OF CURB. RADII ARE TO BACK OF CURB, OR CENTER OF STRIPING UNLESS NOTED OTHERWISE.
4. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF BUILDING EXIT PORCHES, RAMPS, SIDEWALKS, DOWN SPOUTS AND OTHER APPURTENANCES WHICH ARE CONNECTED TO THE BUILDING, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY LOCATIONS.
5. CONTRACTOR SHALL REFER TO ELECTRICAL PLANS FOR TYPES OF LIGHT FIXTURES AND CONDUIT ROUTING.
6. ALL FACE OF CURB RADIUSES NOT NOTED SHALL BE 2.0' RADIUS.
7. CONTRACTOR SHALL PROVIDE FIRE LANE STRIPING AS PER GOVERNING ENTITY.
8. TOPOGRAPHIC INFORMATION WAS OBTAINED FROM CORLETT, PROBST & BOYD, PLLC.
9. THE MINIMUM HORIZONTAL SEPARATION BETWEEN PARALLEL WATER AND SEWER LINES IS NINE (9) FEET, OR MINIMUM VERTICAL SEPARATION BETWEEN CROSSING WATER AND SEWER LINES IS EIGHTEEN (18) INCHES.
10. STORM WATER DETENTION IS ANTICIPATED FOR THIS DEVELOPMENT.
11. RETAINING WALLS ARE NOT ANTICIPATED FOR THIS SITE.
12. ACCESSIBLE ROUTES SHALL BE PROVIDED IN COMPLIANCE AND IN ACCORDANCE TO THE FAIR HOUSING DESIGN MANUAL.
13. SUBJECT PROPERTY APPEARS TO BE SITUATED WITHIN THE FLOOD ZONE "X" (AREAS DETERMINED TO BE OUTSIDE THE LIMITS OF THE 100-yr AND 500-yr FLOOD) AS INDICATED ON THE FOLLOWING FLOOD INSURANCE RATE MAP: 48485C0180G, EFFECTIVE DATE: FEBRUARY 3, 2010 BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY FOR WICHITA COUNTY, TEXAS.
14. SETBACKS
    FRONT - 30
    SIDE - 15
    REAR - 25
    HEIGHT - 3 STORIES / 45'

PARKING REQUIREMENT CHART

NUMBER OF BEDROOMS	UNITS	PARKING CALCULATION	PARKING REQUIRED	PARKING PROVIDED
1 BEDROOM	36	1.75 SPACE PER UNIT	63	
2 BEDROOM	40	2 SPACE PER UNIT	80	
3 BEDROOM	4	2.5 SPACE PER UNIT	10	
		TOTAL	153	171

REVISIONS

BURKBURNETT ROYAL GARDEN
D.W. TAYLOR PATHWAY
BURKBURNETT, TEXAS

PRELIMINARY SITE PLAN

ISSUED FOR REVIEW

CARNEY
ENGINEERING,
PLLC.
5700 GRANITE PARKWAY, SUITE 200
Plano, Texas 75024
PH (469) 443-0861
FAX (469) 443-0863

STATE OF TEXAS
T. CRAIG CARNEY
55714
REGISTERED
PROFESSIONAL ENGINEER
2/26/2022

TBPE FIRM REGISTRATION NO. F-5033

DRAWN BY:	TCP
CHECKED BY:	JAH
START DATE:	03/04/2021
SCALE:	1" = 30'
PROJECT NO.:	2068-181

SHEET
C1.0

City of Burkburnett
501 Sheppard Rd.
Burkburnett, Texas 76354

PRSRT STD
US POSTAGE
PAID
LUBBOCK TX
PERMIT #49

ECRWSS

*********ECRWSSEDDM****

Postal Customer

2022 DRINKING WATER QUALITY REPORT

(Consumer Confidence Report)
CITY OF BURKBURNETT
Phone Number 940-569-2263

The City of Burkburnett purchases supplemental water from the City of Wichita Falls, TX . The City of Wichita Falls obtains surface water from Lake Arrowhead, Lake Kemp via the Wichita River to lake, Lake Kickapoo, located in Wichita County. Mark Southard, Purification Superintendent, with the City of Wichita Falls can be reached at (940) 691-1153.

2022 DRINKING WATER QUALITY REPORT

(Consumer Confidence Report)
CITY OF BURKBURNETT
Phone Number 940-569-2263
PWS ID Number: TX2430005
PWS Name: CITY OF BURKBURNETT

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

For more information regarding this report contact:
Name: Mike Whaley
Phone: 940-569-2263

Este reporte incluye información importante sobre el agua para tomar.
Para asistencia en español, favor de llamar al telefono (940) 569-2263.

CITY OF BURKBURNETT
Sources of drinking water are Ground Water & Purchased Surface Water

Annual Water Quality Report for the period of January 1 to December 31, 2022

Sources of Drinking Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPAs Safe Drinking Water Hotline at (800) 426-4791.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems.

FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact the system's business office.

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly, or immunocompromised persons such as those undergoing chemotherapy for cancer; persons who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders, can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care providers. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline (800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high quality drinking water, but we cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

The TCEQ completed an assessment of your source water, and results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for your water system is based on this susceptibility and previous sample data. Any detections of these contaminants will be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system contact Mike Whaley, (940) 569-2263.

Opportunities for public participation in decision making about the quality of the water will be held at the regularly scheduled Board of Commissioners meeting. The BOC meetings are held every third Monday of every month at 7 PM in the Council Chambers of Burkburnett City Hall.
For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL: http://www.tceq.texas.gov/gis/swaview.
Further details about sources and source-water assessments are available in Drinking Water Watch at the following URL: http://dww2.tceq.texas.gov/DWW/.

Definitions: The following tables contain scientific terms and measures, some of which may require explanation.

Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.
Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
Maximum Contaminant Level or MCL: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
Maximum Contaminant Level Goal or MCLG: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
Maximum residual disinfectant level or MRDL: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
Maximum residual disinfectant level goal or MRDLG: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
MFL: million fibers per liter (a measure of asbestos)
mrem: millirems per year (a measure of radiation absorbed by the body)
na: not applicable.
NTU: nephelometric turbidity units (a measure of turbidity)
pCi/L: picocuries per liter (a measure of radioactivity)
ppb: micrograms per liter or parts per billion
ppm: milligrams per liter or parts per million
ppq: parts per quadrillion, or picograms per liter (pg/L)
ppt: parts per trillion, or nanograms per liter (ng/L)
Treatment Technique or TT: A required process intended to reduce the level of a contaminant in drinking water.

Information About Source Water Assessments

Source Water Name	Type of Water	Report Status	Location
BULLDOG #10	GW	Active	Seymour Aquifer
BULLDOG #11	GW	Active	Seymour Aquifer
BULLDOG #13	GW	Active	Seymour Aquifer
BULLDOG #14 - CR705	GW	Active	Seymour Aquifer
BULLDOG #16A - CR705	GW	Active	Seymour Aquifer
BULLDOG #17A	GW	Active	Seymour Aquifer
BULLDOG #18A	GW	Active	Seymour Aquifer
BULLDOG #21 - CR705	GW	Active	Seymour Aquifer
BULLDOG #22	GW	Active	Seymour Aquifer
BULLDOG #2A - CR705	GW	Active	Seymour Aquifer
BULLDOG #3 - CR705	GW	Active	Seymour Aquifer
BULLDOG #3A	GW	Active	Seymour Aquifer
BULLDOG #4A	GW	Active	Seymour Aquifer
BULLDOG #5 - CR705	GW	Active	Seymour Aquifer
BULLDOG #7	GW	Active	Seymour Aquifer
BULLDOG #8 - CR705	GW	Active	Seymour Aquifer
BULLDOG #9	GW	Active	Seymour Aquifer
BURK #1	GW	Active	Seymour Aquifer
BURK #2	GW	Active	Seymour Aquifer
BURK #3	GW	Active	Seymour Aquifer
BURK #4	GW	Active	Seymour Aquifer
BURK #6	GW	Active	Seymour Aquifer
BURK #7	GW	Active	Seymour Aquifer
BURK #8	GW	Active	Seymour Aquifer
BURK #9	GW	Active	Seymour Aquifer
BURK #10	GW	Active	Seymour Aquifer
CAFFEE #2	GW	Active	Seymour Aquifer
CAFFEE #3	GW	Active	Seymour Aquifer
CAFFEE #4	GW	Active	Seymour Aquifer
CAFFEE #5	GW	Active	Seymour Aquifer
CAFFEE #6	GW	Active	Seymour Aquifer
CARNES #4	GW	Active	Seymour Aquifer
CARNES #5	GW	Active	Seymour Aquifer
CARNES #6	GW	Active	Seymour Aquifer
CARNES #6A	GW	Active	Seymour Aquifer
CARNES ALLEY #1	GW	Active	Seymour Aquifer
CARNES ALLEY #2	GW	Active	Seymour Aquifer
COOPER #1	GW	Active	Seymour Aquifer
COOPER #2	GW	Active	Seymour Aquifer
COOPER #3	GW	Active	Seymour Aquifer
COOPER #4	GW	Active	Seymour Aquifer
ELLIS #1	GW	Active	Seymour Aquifer
ELLIS #2	GW	Active	Seymour Aquifer
ELLIS #3	GW	Active	Seymour Aquifer
ELLIS #4	GW	Active	Seymour Aquifer
ELLIS #5	GW	Active	Seymour Aquifer
ELLIS #6	GW	Active	Seymour Aquifer
ELLIS #7	GW	Active	Seymour Aquifer
ELLIS #8	GW	Active	Seymour Aquifer
ELLIS RODEO #2	GW	Active	Seymour Aquifer
ELLIS RODEO #3	GW	Active	Seymour Aquifer
FRIENDSHIP TRAIL	GW	Active	Seymour Aquifer
HURD H #1	GW	Active	Seymour Aquifer
HURD H #2	GW	Active	Seymour Aquifer
HURD H #3	GW	Active	Seymour Aquifer
HURD H #4	GW	Active	Seymour Aquifer
HURD T #1	GW	Active	Seymour Aquifer
HURD T #2	GW	Active	Seymour Aquifer
HURD T #3	GW	Active	Seymour Aquifer
HURD T #4	GW	Active	Seymour Aquifer
MARTON #1	GW	Active	Seymour Aquifer
MARTON #2	GW	Active	Seymour Aquifer
MARTON #3	GW	Active	Seymour Aquifer
MCCLURE #1	GW	Active	Seymour Aquifer
MCCLURE #2	GW	Active	Seymour Aquifer
MCCLURE #3	GW	Active	Seymour Aquifer
MCCLURE #4	GW	Active	Seymour Aquifer
PRESCOTT #1	GW	Active	Seymour Aquifer
PRESCOTT #2	GW	Active	Seymour Aquifer
PRESCOTT #3	GW	Active	Seymour Aquifer
PRESCOTT #5	GW	Active	Seymour Aquifer
PRESCOTT #6	GW	Active	Seymour Aquifer
PRESCOTT #7	GW	Active	Seymour Aquifer
PRESCOTT #8	GW	Active	Seymour Aquifer
PRESCOTT #9	GW	Inactive	Seymour Aquifer
PRESCOTT #10	GW	Active	Seymour Aquifer
SLAMA #1	GW	Active	Seymour Aquifer
SLAMA #2	GW	Active	Seymour Aquifer
SLAMA GREEN #1	GW	Active	Seymour Aquifer
SLAMA GREEN #2	GW	Active	Seymour Aquifer
SLAMA GREEN #3	GW	Active	Seymour Aquifer
SW FROM WICHITA FALLS CC FROM TX2430001 CITY OF	SW	Active	Lake Kickapoo

2022 Regulated Contaminants Detected

Lead and Copper Definitions:

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2022	1.3	1.3	0.1733	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead	2022	0	15	4.9	1	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

City of Burkburnett Regulated Contaminants

Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2022	8	0 - 12.3	No goal for the total	60	ppb	N	By-product of drinking water disinfection.

*The value in the Highest Level or Average Detected column is the highest average of all HAA5 sample results collected at a location over a year

Total Trihalomethanes (TTHM)	2022	33	4.44 - 45	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

*The value in the Highest Level or Average Detected column is the highest average of all TTHM sample results collected at a location over a year

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2022	0.33	0.33 - 0.33	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	06/02/2020	0.395	0.395 - 0.395	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2022	28	2.57 - 28.4	10	10	ppm	Y	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Radioactive Contaminants	**Collection Date**	**Highest Level Detected**	**Range of Individual Samples**	**MCLG**	**MCL**	**Units**	**Violation**	**Likely Source of Contamination**
Beta/photon emitters	2022	42.2	42.2 - 42.2	0	50	pCi/L*	N	Erosion of natural deposits.

*EPA considers 50 pCi/L to be the level of concern for beta particles.

Water Quality Test Results

Disinfectant Residual

Disinfectant Residual	Year	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Violation (Y/N)	Source in Drinking Water
Chlorine	2022	2.69		4	4	mg/l	N	Water additive used to control microbes.

Violations

Nitrate [measured as Nitrogen]

Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

Violation Type	Violation Begin	Violation End	Violation Explanation
MCL, SINGLE SAMPLE	04/01/2022	06/30/2022	A water sample showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.
MCL, SINGLE SAMPLE	07/01/2022	09/01/2022	A water sample showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.

City of Wichita Falls

Regulated Contaminants

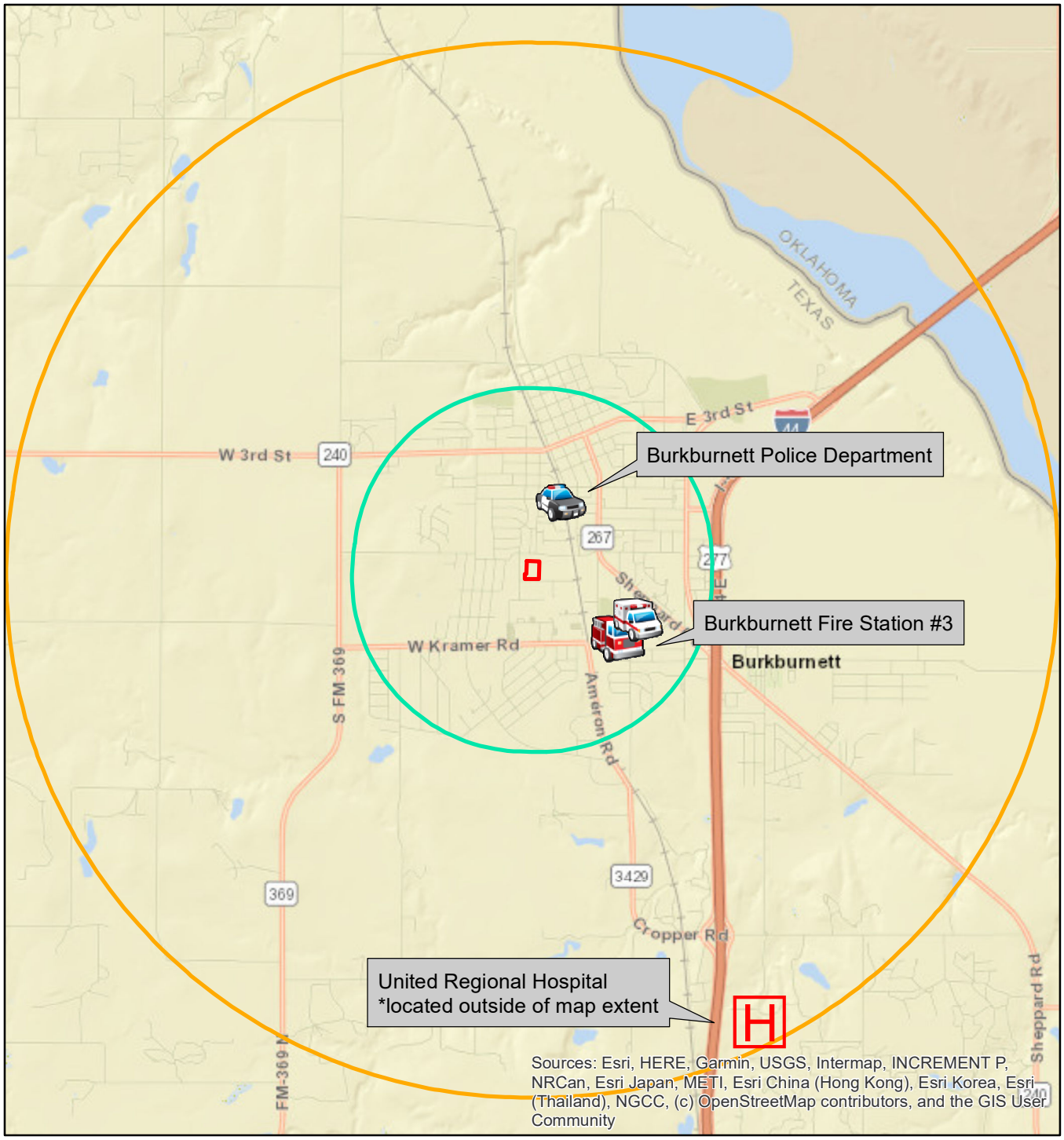
Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorite	2022	0.68	0 - 0.68	0	1	ppm		By-product of drinking water disinfection.
Haloacetic Acids (HAA5)*	2022	16	8.4 - 17.2	0	60	ppb		By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2022	26	9.08 - 32.4	0	80	ppb		By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2022	0.043	0.033 - 0.043	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2022	0.705	0.702 - 0.705	4	4	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2022	0.13	0.09 - 0.13	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Nitrite [measured as Nitrogen]	2022	0.14	<0.0008 - 0.14	1	1	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	2021	9.5	9.5	0	50	pCi/L*	N	Decay of natural and man-made deposits.

*EPA considers 50 pCi/L to be the level of concern for beta particles.

Combined Radium 226/228	2011	1	1 - 1	0	5	pCi/L*	N	Erosion of natural deposits.

Total Organic Carbon

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.



Property boundary and locations are representative only.

Sources: NRCS NAIP WMS, Texas Education Agency, TIGER, ESRI

0 0.475 0.95 1.9 2.85 Miles

1:55,269

NORTH

Police, Fire & Emergency Medical

1 Mile Radius

3 Mile Radius

Fire Station

Police Station

EMS

Hospital

PHASE ENGINEERING,LLC.
ENVIRONMENTAL CONSULTANTS

PE Project No: 202402008

Burkburnett Texas
Police Department
101 East College Street
Burkburnett, Texas 76354
Phone: (940) 569-2231 Fax: (940)-569-1102
https://www.burkburnett.org/police-department

May 1, 2024

Hope Hernandez-Huerta

12414 Nacogdoches Road Suite 150

San Antonio, Texas 78217

The Burkburnett Police Department received a request for information on April 24, 2024, requesting the following information:

1. Does your department have sufficient capacity to adequately service this new development without increasing staff? Yes.

2. What would be the estimated response time to the project location? In 2023 the Burkburnett Police Department's average response time was 00:05:48.

3. Are you aware of any existing conditions which would restrict emergency response access to the project location? No.

4. The Burkburnett Police Department does not have any further information to provide.

Shane Culp 05/01/2024

Shane Culp, Captain

RE: Fire Dept Inquiry: Ability to Serve Future Development, Burkburnett Royal Gardens (PE 202402008)

Dan King <dking@burkburnett.org>

Thu 4/25/2024 12:47 PM

To:Hope Hernandez <Hope@phaseengineering.com>
Cc:Melinda Dyer <mdyer@burkburnett.org>

Good afternoon, below are my responses and I've cc'd our planning and zoning director to keep them in the loop.

1. Yes
2. 2-3 min
3. Yes
4. No
5. Nothing to add

Dan King
Fire Chief
Burkburnett Fire Dept.

Phone 940-569-3553 **Mobile** 940-631-0547
Email dking@burkburnett.org
501 Sheppard Rd. Burkburnett, Tx. 76354

From: Hope Hernandez <Hope@phaseengineering.com>
Sent: Wednesday, April 24, 2024 8:24 AM
To: Dan King <dking@burkburnett.org>
Cc: Ryan Starr <Ryan@phaseengineering.com>
Subject: Fire Dept Inquiry: Ability to Serve Future Development, Burkburnett Royal Gardens (PE 202402008)

We are requesting information on behalf of the U.S. Department of Housing and Urban Development (HUD) in connection with an environmental review for the proposed Royal Gardens multifamily development. The project will be located be located at 350 DW Taylor

Pathway, Burkburnett, Texas. The project involves new construction of an 88-unit multifamily housing development. A location map is attached.

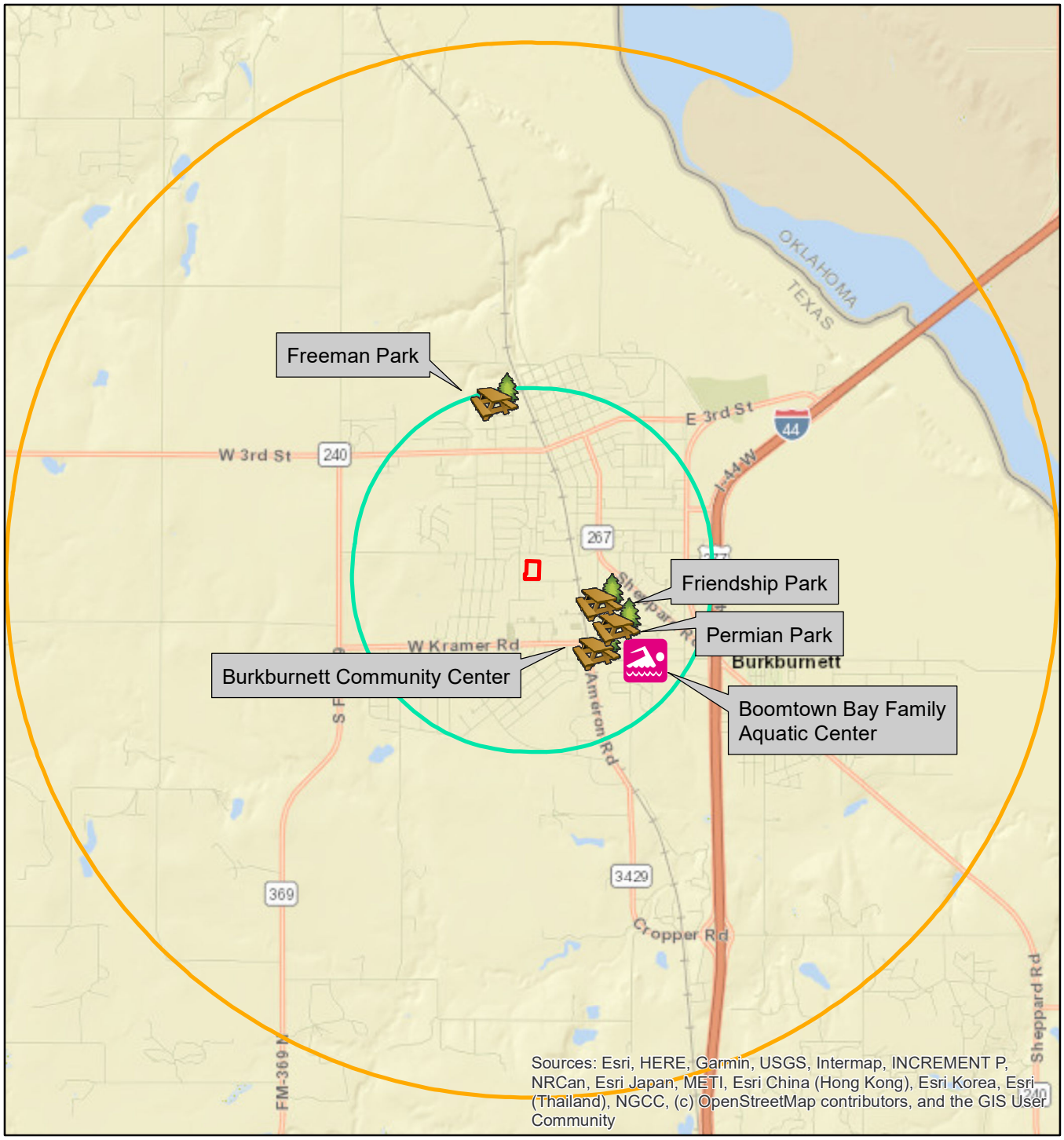
Please provide the following information:

1. Does your department have sufficient capacity to adequately service this new development without increasing staff?
2. What would be the estimated response time for fire and medical emergencies to the project location?
3. Are you aware if existing firefighting protection services will be adequate and equipped to service this project?
4. Are you aware of any existing conditions which would restrict emergency response access to the project location?
5. Any other information that may be helpful related to public safety for this proposed development.

Thank you for your assistance. If there are any questions, please contact me.

Hope Hernandez-Huerta / Special Projects Manager
Hope@phaseengineering.com / 915.245.5842 Cell

Phase Engineering
832.485.2227 Office
12414 Nacogdoches Road, Suite 150, San Antonio, TX 78217
phaseengineering.com



Property boundary and locations are representative only.

Sources: NRCS NAIP WMS, Texas Education Agency, TIGER, ESRI

0 0.475 0.95 1.9 2.85 Miles

1:55,269

NORTH

Parks, Open Space & Recreation

1 Mile Radius

3 Mile Radius

Swimming

Park

PHASE ENGINEERING,LLC.
ENVIRONMENTAL CONSULTANTS

PE Project No: 202402008

BURKBURNETT Texas
You're Home Now!

February 7, 2022

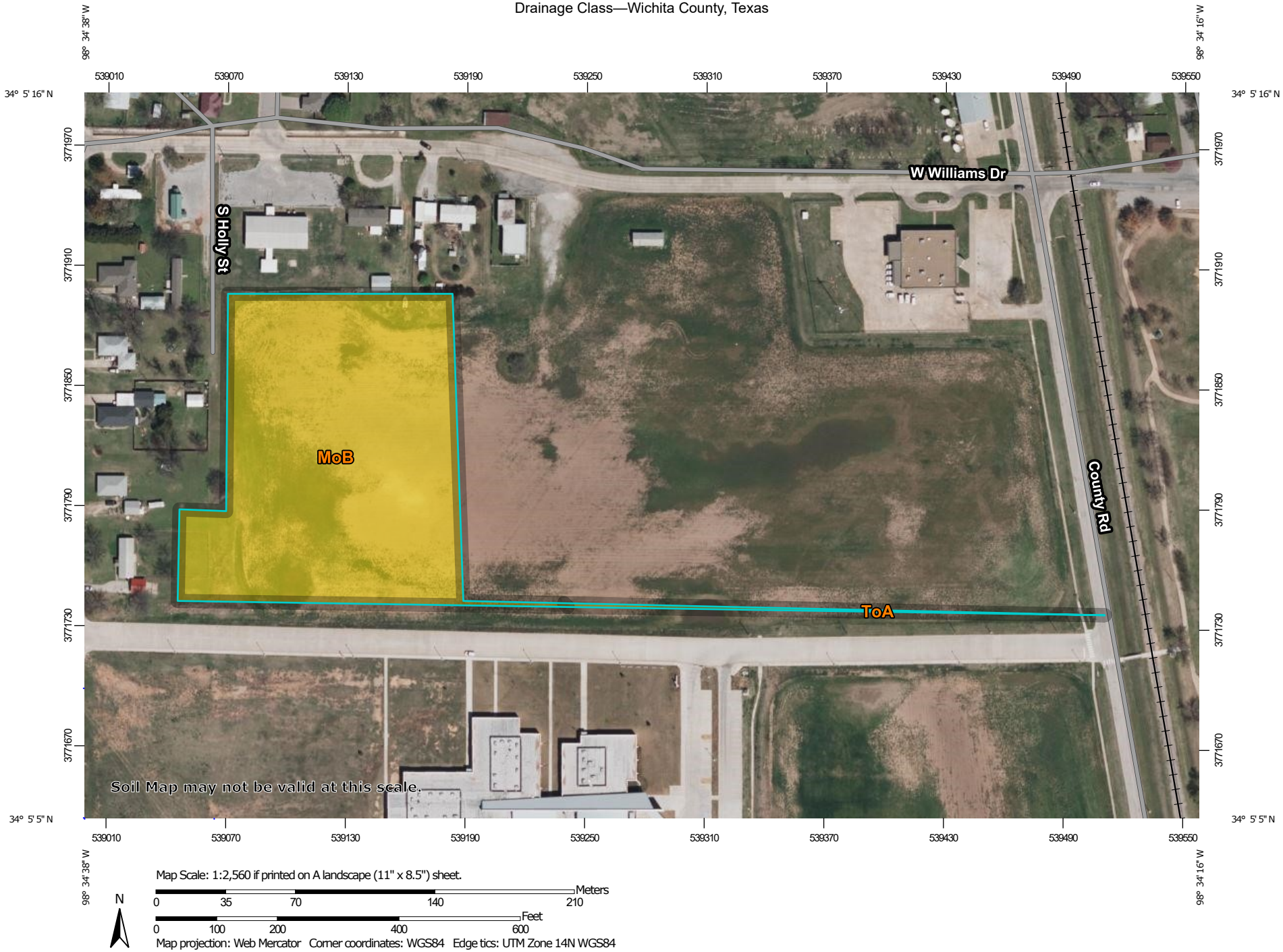
Burkburnett Royal Gardens
812 San Antonio
Suite L-14
Austin, TX 78701

Mr. Beard,

Concerning the property located at approx. 305 D.W. Taylor Pathway, Burkburnett, TX 76354 (legal description APPROXIMATELY 5 ACRES OUT OF 16.62 AC ABST 3 S ANDERSON), this property is currently zoned MF (Multi-Family). The MF, Multi-Family Residential, district is an attached residential district intended to provide a residential density of twenty-one (21) dwelling units per acre. The principal permitted land uses will include low- and mid-rise multiple-family dwellings and garden apartments.

Regards,

Sarah Culp
Director of Community Planning



Map Scale: 1:2,560 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 35 70 140 210

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 14N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

- Excessively drained
- Somewhat excessively drained
- Well drained
- Moderately well drained
- Somewhat poorly drained
- Poorly drained
- Very poorly drained
- Subaqueous
- Not rated or not available

Soil Rating Lines

- Excessively drained
- Somewhat excessively drained
- Well drained
- Moderately well drained
- Somewhat poorly drained
- Poorly drained
- Very poorly drained
- Subaqueous
- Not rated or not available

Soil Rating Points

- Excessively drained
- Somewhat excessively drained
- Well drained
- Moderately well drained
- Somewhat poorly drained
- Poorly drained
- Very poorly drained
- Subaqueous
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Wichita County, Texas
Survey Area Data: Version 20, Sep 5, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 27, 2021—Mar 28, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Drainage Class

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
MoB	Tipton loam, 1 to 3 percent slopes	Well drained	4.7	98.7%
ToA	Tipton loam, 0 to 1 percent slopes	Well drained	0.1	1.3%
Totals for Area of Interest			**4.8**	**100.0%**

Description

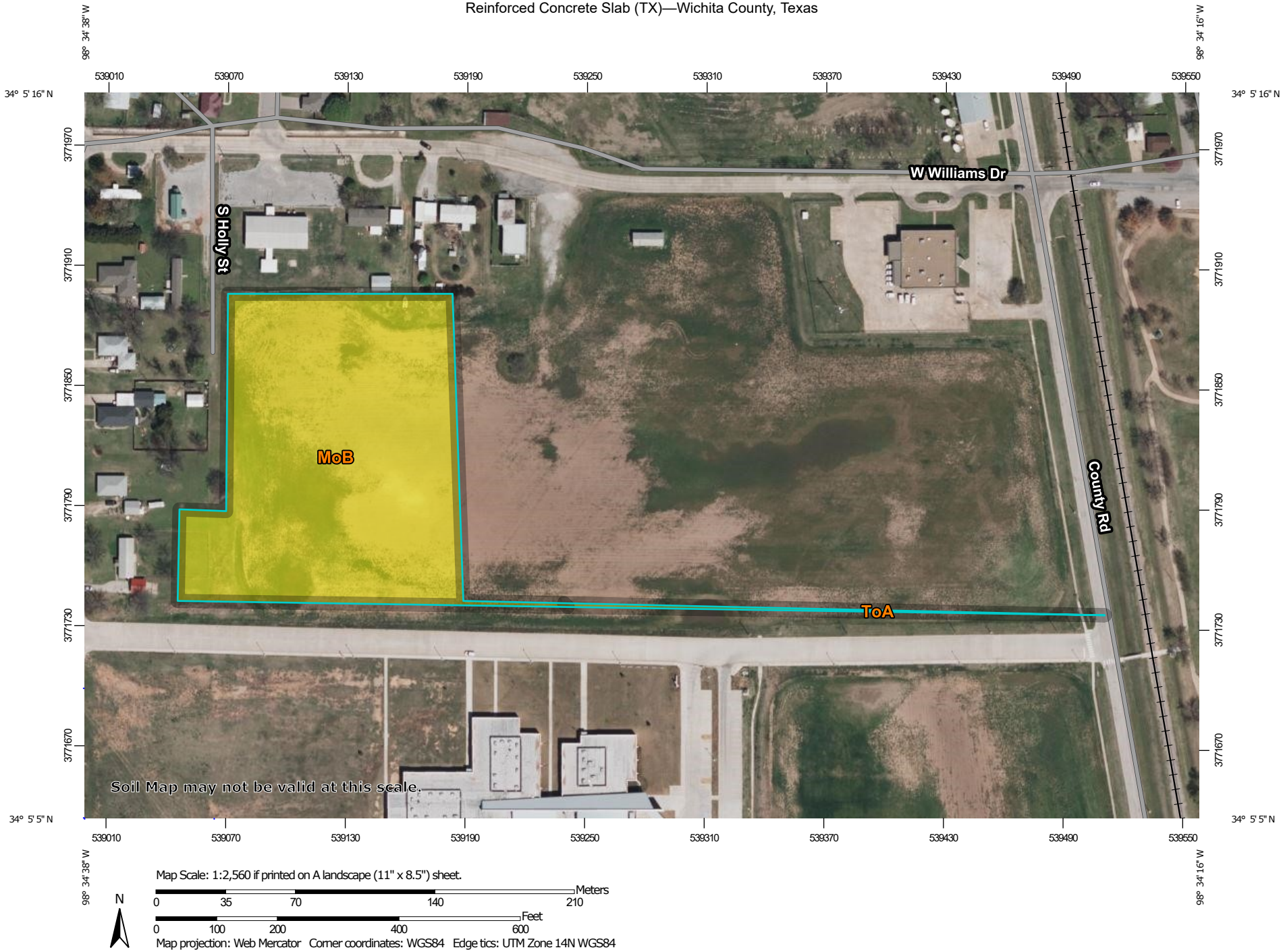
"Drainage class (natural)" refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized-excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained, and very poorly drained. These classes are defined in the "Soil Survey Manual."

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher



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Feet: 0 100 200 400 600

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MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- Very limited
- Somewhat limited
- Not limited
- Not rated or not available

Soil Rating Lines
- Very limited
- Somewhat limited
- Not limited
- Not rated or not available

Soil Rating Points
- Very limited
- Somewhat limited
- Not limited
- Not rated or not available

Water Features
- Streams and Canals

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- Rails
- Interstate Highways
- US Routes
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Reinforced Concrete Slab (TX)

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
MoB	Tipton loam, 1 to 3 percent slopes	Somewhat limited	Tipton (80%)	High shrink-swell (0.14)	4.7	98.7%
ToA	Tipton loam, 0 to 1 percent slopes	Somewhat limited	Tipton (80%)	High shrink-swell (0.14)	0.1	1.3%
Totals for Area of Interest					**4.8**	**100.0%**

Rating	Acres in AOI	Percent of AOI
Somewhat limited	4.8	100.0%
Totals for Area of Interest	**4.8**	**100.0%**

Description

Reinforced concrete slabs are 4 to 8 inches thick and built on undisturbed soil graded to a depth of 1 to 2 feet.

Ratings for reinforced concrete slabs are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification of the soil. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

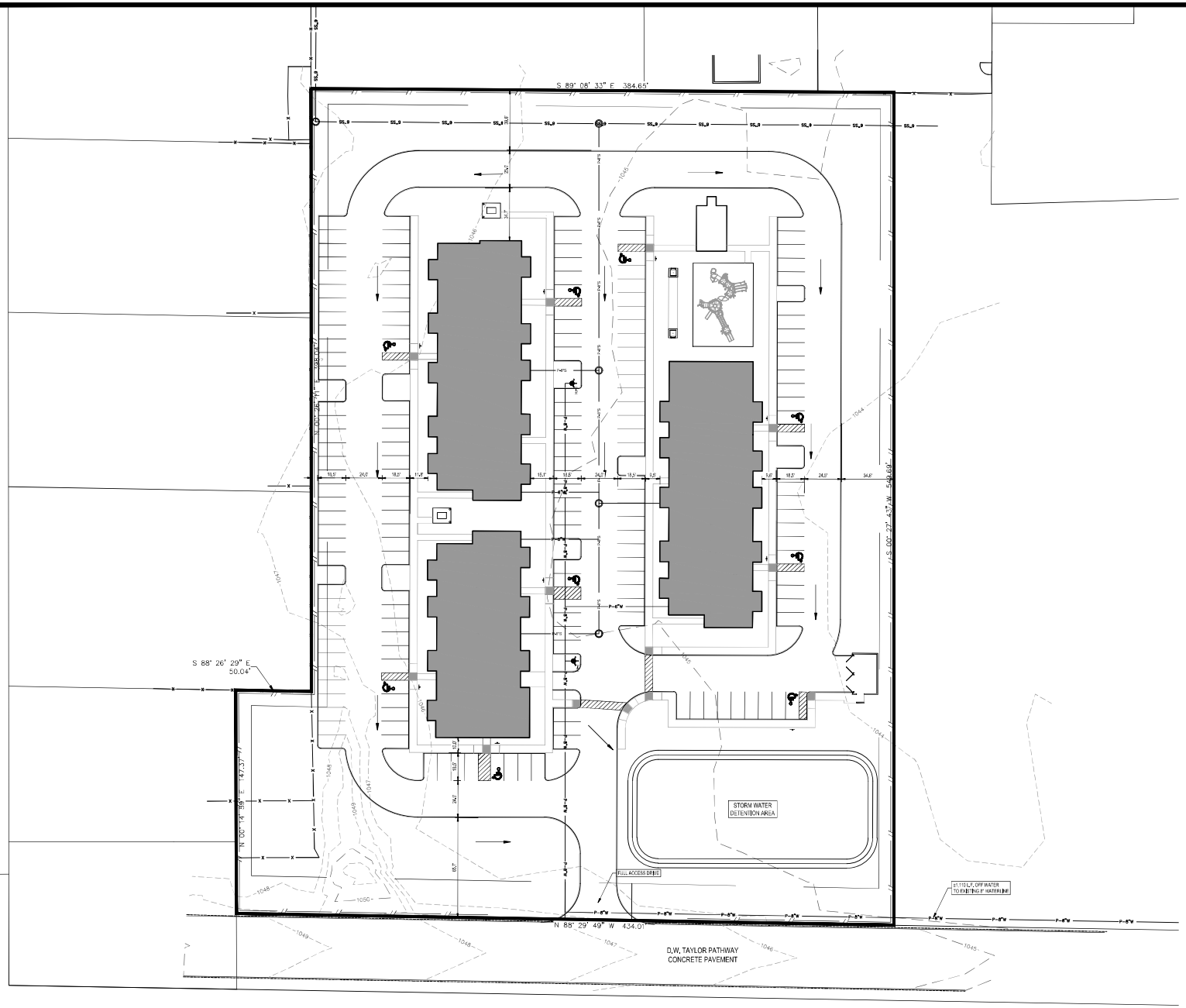
Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as the one shown for the map unit. The percent composition of each component in a particular map unit is given to help the user better understand the extent to which the rating applies to the map unit.

Other components with different ratings may occur in each map unit. The ratings for all components, regardless the aggregated rating of the map unit, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.

Rating Options

Aggregation Method: Dominant Condition



N

811 Know what's below. Call before you dig.

0 10' 20' 30' 60'

1"=30'

LEGEND

E- INDICATES EXISTING
P- INDICATES PROPOSED

INDICATES EXISTING OR PROPOSED — E-6"W / P-6"W — INDICATES TYPE OF LINE, INDICATES SIZE OF LINE

- PROPOSED FIRE HYDRANT
- PROPOSED MANHOLE
- W — WATER LINE
- S — SANITARY SEWER
- PROPERTY BOUNDARY
- BL — BUILDING SETBACK

NOTES

1. THE ENGINEER HAS RESEARCHED CODES, ORDINANCES, AND OTHER DEVELOPMENTAL REQUIREMENTS OF LOCAL GOVERNMENT, INCLUDING FIRE, WITH JURISDICTION OVER THE SITE, AND VERIFIES THAT THE SITE PLAN CONFORMS TO ALL APPLICABLE ZONING, SITE DEVELOPMENT, AND BUILDING CODED ORDINANCES.
2. THERE ARE NO KNOWN VARIANCES THAT WILL BE REQUIRED FOR THIS PROJECT.
3. DIMENSIONS ARE TO BACK OF CURB. RADII ARE TO BACK OF CURB, OR CENTER OF STRIPING UNLESS NOTED OTHERWISE.
4. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF BUILDING EXIT PORCHES, RAMPS, SIDEWALKS, DOWN SPOUTS AND OTHER APPURTENANCES WHEN ARE CONNECTED TO THE BUILDING. PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY LOCATIONS.
5. CONTRACTOR SHALL REFER TO ELECTRICAL PLANS FOR TYPES OF LIGHT FIXTURES AND CONDUIT ROUTING.
6. ALL FACE OF CURB RADIUSES NOT NOTED SHALL BE 2,0' RADIUS.
7. CONTRACTOR SHALL PROVIDE FIRE LANE STRIPING AS PER GOVERNING ENTITY.
8. TOPOGRAPHIC INFORMATION WAS OBTAINED FROM CORLETT, PROBST & BOYD, PLLC.
9. THE MINIMUM HORIZONTAL SEPARATION BETWEEN PARALLEL WATER AND SEWER LINES IS NINE (9) FEET, OR MINIMUM VERTICAL SEPARATION BETWEEN CROSSING WATER AND SEWER LINES IS EIGHTEEN (18) INCHES.
10. STORM WATER DETENTION IS ANTICIPATED FOR THIS DEVELOPMENT.
11. RETAINING WALLS ARE NOT ANTICIPATED FOR THIS SITE.
12. ACCESSIBLE ROUTES SHALL BE PROVIDED IN COMPLIANCE AND IN ACCORDANCE TO THE FAIR HOUSING DESIGN MANUAL.
13. SUBJECT PROPERTY APPEARS TO BE SITUATED WITHIN THE FLOOD ZONE "X" (AREAS DETERMINED TO BE OUTSIDE THE LIMITS OF THE 100-yr AND 500-yr FLOOD) AS INDICATED ON THE FOLLOWING FLOOD INSURANCE RATE MAP: 48485C0180G, EFFECTIVE DATE: FEBRUARY 3, 2010 BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY FOR WICHITA COUNTY, TEXAS.
14. SETBACKS
    FRONT - 30
    SIDE - 15
    REAR - 25
    HEIGHT - 3 STORIES / 45'

PARKING REQUIREMENT CHART

NUMBER OF BEDROOMS	UNITS	PARKING CALCULATION	PARKING REQUIRED	PARKING PROVIDED
1 BEDROOM	36	1.75 SPACE PER UNIT	63	
2 BEDROOM	40	2 SPACE PER UNIT	80	
3 BEDROOM	4	2.5 SPACE PER UNIT	10	
		TOTAL	153	171

BURKBURNETT ROYAL GARDEN
D.W. TAYLOR PATHWAY
BURKBURNETT, TEXAS

PRELIMINARY SITE PLAN

ISSUED FOR REVIEW

CARNEY ENGINEERING, PLLC.
5700 GRANITE PARKWAY, SUITE 200
Plano, Texas 75024
PH (469) 443-0861
FAX (469) 443-0863

STATE OF TEXAS
T. CRAIG CARNEY
55714
REGISTERED PROFESSIONAL ENGINEER
2/17/2022

TBPE FIRM REGISTRATION NO. F-9228

DRAWN BY:	TCP
CHECKED BY:	JAH
START DATE:	03/04/2021
SCALE:	1" = 30'
PROJECT NO.:	2004-161

SHT
C1.0