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Denton County
Juli Luke
County Clerk

Instrument Number: 163543

Real Property Recordings

DECLARATION

Recorded On: November 30, 2022 10:59 AM

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********** THIS PAGE IS PART OF THE INSTRUMENT **********
Any provision herein which restricts the Sale, Rental or use of the described REAL PROPERTY because of color or race is invalid and unenforceable under federal law.

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189 ELM ST #101
LEWISVILLE TX 75057

STATE OF TEXAS
COUNTY OF DENTON

I hereby certify that this Instrument was FILED In the File Number sequence on the date/time printed hereon, and was duly RECORDED in the Official Records of Denton County, Texas.

Juli Luke
County Clerk
Denton County, TX

DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS FOR THE EAGLE RIDGE SUBDIVISION

THE STATE OF TEXAS COUNTY OF DENTON

THIS DECLARATION (herein so called) is made this 22nd day of November, 2022, by Bartonville South 1031, LLC dba Red Rock Communities.

WITNESSETH:

WHEREAS Declarant is the owner of the real property referred to in Article II hereof and described on Exhibit "A" attached hereto and made a part hereof for all purposes, and desires to create thereon a residential community including, but not limited to, residential lots, open spaces, landscaping, sprinkler system, streets, common lighting, fencing, drives, screening walls, and other common improvements for the benefit of the community; and

WHEREAS, Declarant desires to provide for, among other matters, the preservation of the values and amenities in said community and for the maintenance of said open spaces, landscaping, sprinkler systems, streets, common lighting, fencing, drives, screening walls, and any and all other common improvements; and, to this end, desires to subject the real property referred to in Article II, together with such additions as may hereafter be made thereto (as provided in Article II) to the covenants, conditions, restrictions, easements, charges and liens hereinafter set forth, each and all of which is and are for the benefit of said property and each and every owner of any part thereof,

NOW, THEREFORE, Declarant declares that the real property referred to in Article II, and such additions thereto as may hereafter be made pursuant to Article II hereof, is and shall be held, transferred, sold, conveyed and occupied only as expressly subject to the covenants, conditions, restrictions, easements, charges and liens (sometimes referred to as the "Declaration") hereinafter set forth.

ARTICLE I
DEFINITIONS

The following words when used in this Declaration or any Supplemental Declaration (unless the context shall otherwise prohibit) shall have the following meanings:

a. **"Association" or "HOA"** shall mean and refer to the Eagle Ridge Homeowners Association, a Texas Nonprofit corporation.

b. **"Architectural Control Committee"** or **"Committee"** shall mean and refer to the architectural control committee described in Article IV hereof.

c. **"Declarant"** means Bartonville South 1031, LLC, dba Red Rock Communities, a Texas limited liability company, and its successors and assigns as provided in Section 6.7 herein.

d. **"Development Period"** means the period of time beginning on the date when this Declaration has been Recorded, and ending on the earlier of: (i) fifteen (15) years after the Effective Date; (ii) twenty-four (24) months after Declarant no longer owns any portion of the Property or (iii) the

date Declarant terminates it powers as Declarant in writing. The Development Period is the period in which Declarant reserves the right to facilitate the development, construction, and marketing of the Property, and the right to direct the size, shape and composition of the Property.

e. "**Effective Date**" means the date of the recording of this Declaration

f. "**Lot**" shall mean and refer to any plot or tract of land shown upon any recorded Properties map(s) or plat(s) of the Properties, as amended from time to lime, which is designated as a lot thereon and which is or will be improved with a residential dwelling.

g. "**Owner**" shall mean and refer to every person or entity who is a record owner of a fee or undivided fee interest in any Lot which is subject to this Declaration. The foregoing is not intended to include persons or entities who hold an interest merely as security for the performance of an obligation.

h. "**Properties**" shall mean and refer to the Properties subject to this Declaration as described on Exhibit "A" attached hereto.

i. "**Residence**" shall mean a portion of an attached residence residing upon a Lot in conformance with this Declaration.

j. "**Town**" shall mean the Town of Bartonville, Texas.

ARTICLE II
PROPERTY SUBJECT TO THIS DECLARATION

2.1 **Existing Properties**. The Properties which are, and shall be, held, transferred, sold, conveyed, and occupied subject to this Declaration are located in Bartonville, Denton County, Texas, and are more particularly described on Exhibit "A" attached hereto and incorporated herein by reference for all purposes.

2.2 **Common Area**. The designation of real property as a Common Area is determined by the plat and this Declaration, and not by the ownership of the property. This Declaration contemplates that the Association will eventually hold title to every common area capable of independent ownership by the Association. Declarant may install, construct, or authorize certain improvements on Common Areas in connection with the initial development and the cost thereof is not a common expense of the Association. Thereafter, all costs attributable to Common Areas, including maintenance, property taxes, insurance, and enhancements, are automatically the responsibility of the Association, regardless of the nature of title to the Common Areas, unless this Declaration elsewhere provides for a different allocation for a specific Common Area.

2.3 **Acceptance**. By accepting an interest in or title to a Lot, each owner is deemed (1) to accept the Common Area, and any improvement thereon, in its then-existing "as is" condition; (2) to acknowledge the authority of the Association, acting through its Board of Directors, for all decisions pertaining to the Common Area; (3) to acknowledge that transfer of a Common Area's title to the Association by or through the Declarant is a ministerial task that does not require acceptance by the Association; and (4) to acknowledge the continuity of maintenance of the Common Area, regardless of changes in the Association's Board of Directors or management.

2.4 **Components.** The Common Area consists of the following components on or adjacent to the Property, even if located on a Lot or a public right-of-way:

a. The land described in Exhibit A as Common Area and all improvements thereon;

b. Any area shown on the plat as Common Area or an area to be maintained by the Association;

c. The formal entrances to the Eagle Ridge Subdivision, including the signage, landscaping, electrical and water installations, planter boxes and fencing (if any);

d. Any modification, replacement, or addition to any of the above-described areas and improvements. Personal property owned by the Association, such as books, and records, office equipment, and supplies.

2.5 Association Responsibility. The Association shall maintain and keep in good repair all improvements located on the Common Area, including but not limited to, any paved or concrete walkways, irrigation, landscaping as well as any other improvement later made on any part of the Common Areas. The Association shall have the right but not the obligation, to maintain property not owned by the Association where the Board has determined that such maintenance would benefit all Owners. Except as otherwise provided herein, all costs associated with maintenance, repair and replacement of the Common Area, shall be a common expense to be allocated among the Residences as part of the annual assessments. The maintenance of the well and fountain associated with any pond is the responsibility of the HOA. Any dredging of a pond, if needed, is a responsibility of the HOA.

ARTICLE III
USE OF PROPERTIES AND LOTS; PROTECTIVE COVENANTS

3.1 Residential Purposes. Each Lot (including land and improvements) shall be used and occupied for single family residential purposes only. No Owner or other occupant shall use or occupy such Owner's Lot, or permit the same or any part thereof to be used or occupied, for any purpose other than as a private single family detached residence for the Owner or such Owner's tenant and their families and domestic servants employed on the premises. As used herein the term "single family residential purposes" shall be deemed to prohibit specifically, but without limitation, the use of any Lot for a duplex, duplex apartment, garage apartment, or other apartment use, or commercial or professional use, including but not limited to Air BnB or other temporary rental or third-party vacation rental use.

3.2 Minimum Lot Area. No Lot shall be subdivided; provided, however, that Declarant shall have, and hereby reserves the right, at any time, or from time to time, upon the joinder and consent of the appropriate county and/or municipal authorities, and with the joinder and consent of the directly affected Owners to file a re-plat of the Property to effect a re-subdivision or reconfiguration of any Lots then owned by Declarant, so long as such re-plat results in each re-subdivided Lot containing not less than the minimum lot size prescribed by the zoning ordinances of the Town. Owners shall not unreasonably withhold or delay their joinder in or consent to the re-plat or amendments to the Plat. The privilege to re-plat Lots owned by Declarant reserved herein shall be exercisable only by the Declarant.

3.3 Minimum Floor Space. All floor areas referenced below are for air-conditioned floor areas, exclusive of porches, garages, patios. terraces or breezeways attached to the main dwelling. Each dwelling constructed on any Lot shall contain a minimum of 4,700 square feet of heat and air-conditioned floor space in the main residence.

3.4 Combining Lots. Any person owning two or more adjoining Lots may consolidate such Lots into a single building location for the purpose of constructing one (1) residential structure thereon (the plans and specifications therefore being approved as set forth in this Declaration) and such other improvements as are

permitted herein; provided, however, any such consolidation must comply with the rules, ordinances and regulation of any governmental authority having jurisdiction over the Properties and the Owner seeking such consolidation shall be solely responsible for any and all costs and expenses of such consolidation, including, but not limited to the costs of re-platting, governmental fees, and fees for professional services whether incurred by such Owner, Declarant or the Committee. In the event of any such consolidation, the consolidated Lots shall be deemed to be a single Lot for purposes of applying the provisions of this Declaration; provided, however, such Owner shall continue to pay assessments on such Lots as if such Lots had not been consolidated and shall be entitled to one vote for each Lot (determined prior to such consolidation) owned by such Owner. Any such consolidation shall give consideration to easements as shown and provided for on the Plat and any required abandonment or relocation of any such easements shall require the prior written approval of Declarant as well as the prior written approval of any utility company having the right to the use of such easements. Combining of portions of Lots into a single building site is prohibited.

3.5 Setback Requirements and Building Location. All front, side and rear setbacks must be approved by, and must meet the requirements of the Town's zoning ordinance and the requirements of the approved Plat. The location of the main residence of each Lot and the facing of the main elevation with respect to the street shall be subject to the written approval of the Architectural Control Committee. No building or structure of any type shall be erected on any Lot nearer to the property lines indicated by the minimum building setback line on the approved Plat.

3.6 Height. No building or structure on any Lot shall contain more than two (2) stories or exceed, in height, the maximum height allowed by the Town, such height to be measured and determined in accordance with the method approved by the Town.

3.7 Driveways. Each Lot must be accessible to the adjoining street by a driveway suitable for such purposes and approved in writing as to design, materials and location by the Architectural Control Committee before the residential structure located on such Lot may be occupied or used. The standard finish for the lead walk and driveway will be either salt finish or stamped concrete. Any other finish must be approved in writing by the Architectural Control Committee.

3.8 Access. No driveways or roadways may be constructed on any Lot to provide access to any adjoining Lot except as expressly provided on the Plat, or otherwise approved in writing by the Architectural Control Committee.

3.9 Drainage.. There shall be no interference with the established drainage patterns over any of the Property, including the Lots, except by Declarant, unless adequate provision is made for proper drainage and such provision is approved in advance by the Committee. Specifically, and not by way of limitation, no improvements, including fences, landscaping, playscapes, flatwork or outbuildings may be installed which impede the proper drainage of water between Lots. All drainage patterns applicable to each Lot must be maintained in accordance with applicable law, including, without limitation, required lot-to-lot drainage under the building ordinances applicable to the Property. All Owners are encouraged to review all applicable ordinances prior to preparation of plans for any construction of improvements in order to determine if there have been any amendments, modifications or updates to any ordinances that would affect their specific Lot drainage requirements or conditions.

3.10 Retaining Walls. Retaining walls shall be restricted to structurally engineered only if they are above 4-ft in height and designed walls made from masonry conforming with the guidelines established by the Committee. It shall be the intent of Declarant and the Architectural Control Committee to promote visual continuity in and around the Properties. No drains or conduits shall be located with or pass through any retaining wall without the prior written approval of the Committee. Note: Property Owner/Builder that cuts into the neighbors property will be required to build a retaining wall to support the dirt that they cut into.

3.11 Mailboxes and Address Plaques. In accordance with US Postal regulations, each individual Lot shall have a mailbox. Address plaques shall be attached to each residence prior to occupancy. All address plaques permanently fixed to a residence shall be made of pre-cast stone or brass. All mailboxes must be approved by the Architectural Control Committee.

3.12 Driveway Culverts Design, Location & Maintenance Responsibility of Swales. Driveway culverts shall be installed per approved plat and designed by a professional engineer to meet or exceed the Town of Bartonville's Engineering and Design ordinance. Maintenance of the swales adjacent to each lot will be the responsibility of the homeowner and will not be modified from approved design per plat to ensure no drainage impacts occur and to remain consistent with approved development design.

3.13 Water Quality Facilities, Drainage Facilities and Drainage Ponds. The Property includes, one or more water quality facilities, sedimentation, drainage and detention facilities, or ponds (the "Ponds") which serve all or a portion of the Property and maintained and administered by the Association in accordance with all Applicable Law. Access to these facilities and ponds is limited to persons engaged by the Association or its agents to periodically maintain such facilities. Each Owner is advised that the Ponds are an active utility feature integral to the proper operation of the Property and may periodically hold standing water. Each Owner is advised that entry into the Ponds may result in injury and is a violation of the Rules and Regulations, and Declaration. The Ponds shall not be used for any recreational activities, including, but not limited to, boating, fishing, swimming, or kayaking . Each Owner will indemnify, defend and hold the Association, the Declarant, and their respective officers, directors, employees and agents harmless from and against all claims and liabilities, including reasonable attorneys' fees, for personal injury and property damage to the extent caused by Owner's or its agent's, contractor's, tenant's, invitee's, licensee's or representative's entry onto the Ponds are use thereof.

3.14 Utilities.

a. Each residence situated on a Lot shall be connected to the water line and on-site sewer system as soon as practicable after same are available on the Lot. Only an approved septic tank shall be placed or maintained upon or in any Lot however, portable toilets will be required during building construction on each individual construction site.

b. The installation and use of any propane, butane, LP Gas or other gas tank, bottle or cylinder of any type (except portable gas grills), shall require the prior written approval of the Architectural Control Committee, and, if so approved, the Architectural Control Committee shall require that such tank, bottle or cylinder be installed underground. Any control boxes, valves, connections, utility risers or refilling or refueling devices shall be completely landscaped with shrubbery so as to obscure their visibility from the streets within or adjoining the Properties or from any other Lot.

3.15 Construction Requirements.

a. The exterior surface of all Residences shall be constructed of glass, stone, brick, brick veneer, stucco or other materials approved by the Architectural Control Committee. It is specifically required that the exterior wall area of each residence located within the Properties will have not less than eighty percent (80%) masonry coverage.

b. The Residences and buildings constructed on the Lots must have a roof approved by the Architectural Control Committee which shall be the following type: class 4 composition shingles, (30-year warranty or product of equal or greater specification) and the color must appear to be weathered wood shingles, black, slate, or such other neutral color approved by the Architectural

Control Committee. Slate, Tile or Metal roofs would also be acceptable, if consistent with the external design, color and appearance of other improvements within the subdivision. The roof pitch of any structure shall be 7" x 12" minimum. Any deviation of roof pitch or color must be approved in writing by the Architectural Control Committee. In specific cases through approval of the Architectural Control Committee, 0" x 12" minimum roof pitch will be considered for modern style homes and is aesthetically pleasing/consistent with the neighborhood style.

c. No above ground-level swimming pools shall be installed on any Lot.

d. All exterior construction of the primary Residence, garage, porches and any other appurtenances or appendages of every kind and character on any Lot and all interior construction (including, but not limited to, all electrical outlets in place and functional, all shall be covered by paint, wallpaper, paneling, or the like, and all floors covered by wood, carpet, tile or other similar floor covering) shall be completed not later than eighteen (18) months following the commencement of construction. For the purposes hereof, the term "commencement of construction" shall be deemed to mean the date on which the foundation forms are set.

e. Exterior finish of slab must be graded (or drop brick ledges must be used) so that no more than 15" of slab is exposed. All slabs must coated so post tension marks are not visible.

f. All exterior walls must be 2x6 and Zip-wall must be used.

g. Windows must be made of Fibrex, Fiberglass, Wood or Steel. Vinyl windows and doors will not be allowed. Bronze and Black windows are recommended but other neutral color options will be considered by the architectural committee.

h. Front doors must be a minimum of 42" wide and 8' tall. Exterior front doors must be Iron or wood.

i. Gutters must be 6" and downspouts must be round or square.

3.16 Garages and outbuildings. Each Residence erected on any Lot shall provide garage space for a minimum of four (4) conventional automobiles. All garage doors shall be closed at all times when not in use. Detached garages, outbuildings, carports, servant's quarters, and storage rooms are not allowed unless approved in writing by the Architectural Control Committee. All secondary buildings must be consistent with the exterior finishes of the main structure. Garage doors are to be decorative garage doors made of cedar or steel and glass. At least 50% of the garage doors must face the side of the property. No garage shall ever be changed, altered, reconstructed or otherwise converted for any purpose inconsistent with the garaging of automobiles. All garages shall have the prior written consent of the Architectural Control Committee.

3.17 Landscaping. Any and all plans for the landscaping of front yards and of side yards not enclosed by fencing and hedge, including alterations changes or additions thereto, shall be subject to the written approval of the Architectural Control Committee. Front yards must be fully landscaped. At least 1 acre must have sod. Sod must be Zoysia, Bermuda or St Augustine. Weather permitting, each Lot shall be fully landscaped within sixty (60) days after the occupancy of the residence constructed thereon. Each Lot Owner shall be responsible for maintaining his own landscaping in a healthy condition. Transformers must be visually screened with landscaping so they can't be seen from other lots or common areas. Each treeless lot must plant a minimum of 3 trees that are 5" caliper or larger and 3 trees that are 3" caliper or larger. Trees must be native, and they must meet the town requirements. All downspouts must go into 6" drainpipe and pipe must take water away from the home towards bar ditches and not neighboring properties. If retaining walls are installed it will the responsibility of the party

cutting the property to pay for the retaining wall (downhill side). All retaining walls must be made of stone that matches the other retaining walls and monument sign in the neighborhood or is consistent with the stone of the home being built on that lot. All retaining walls must be approved by the architectural committee. The following lots adjacent to FM 407and Lone Star Way will be required to plant 3" caliper Live Oaks at 50' on center at 10 feet in distance from the stone screening wall and/or wood fence within 60 days of occupancy. Distance between trees from lot to lot will be evenly spaced to be 50 feet apart and maintain consistency across the stretch of the following 9 lots: 1502 Clydesdale Road, Jefferson Court (Lots 1149, 1141,1133,1125,1117,1109,1101), Vera Court (1109, 1101, 1102), Pitner Court (1101, 1102).

3.18 Fences. No fence, wall or hedge shall be erected, placed or altered on any Lot without the prior written approval of the Architectural Control Committee and the design of and materials used in the construction of fences shall be subject to the prior written approval of the Architectural Control Committee. Design of fences and materials used in the construction of fences shall be in compliance with the Town's zoning ordinance. Fences will be wrought iron or other approved fencing by the architectural committee. Each corner of the fence must be made of a stone column that either matches the home or the other stone in the development (monument sign and developer stone walls).

3.19 Trash Receptacles and Collection. Each Lot Owner shall make or cause to be made appropriate arrangements with the Town, for collection and removal of garbage and trash on a regular basis and be consistent with the regulations or requirements promulgated by the Town, in connection with the storage and removal of trash and garbage. All Lots shall at all times be kept in a healthful, sanitary and attractive condition. No Lot shall be used or maintained as a dumping ground for garbage, trash, junk or other waste matter. All trash, garbage, or waste matter shall be kept in adequate containers which shall be constructed of metal or plastic, with tightly-fitting lids, or other containers approved by the Town, and which shall be maintained in a clean and sanitary condition. An Owner may place trash on the street curb abutting his Lot only on those days designated by the Town as trash collection days. No Lot shall be used for open storage of any materials whatsoever, except that new building materials used in the construction of improvements erected on any Lot may be placed upon such Lot at the time construction is commenced and may be maintained thereon for a reasonable time, so long as the construction progresses without unreasonable delay, until completion of the improvements, after which the materials shall either be removed from the Lot or stored in a suitable enclosure on the Lot. No garbage, trash, debris, or other waste matter of any kind shall be burned on any Lot.

3.20 Exterior Lighting. No exterior lighting, including landscape lighting, shall be installed or maintained on any Lot without prior written approval of the Architectural Control Committee. Further, and notwithstanding such prior written approval, upon being given notice by the Architectural Control Committee that any exterior light is objectionable, the Owner of the Lot on which same is located will immediately remove said light or shield the same in such a way that it is no longer objectionable.

3.21 Window Coolers. No window or wall type air-conditioners or water coolers shall be permitted to be used, erected, placed or maintained on or in any residential building on any part of the Properties.

3.22 Antennas Restrictions. No radio or television aerial wires or antennas shall be maintained on the outside of any building nor shall any free-standing antennas of any style be permitted. All radio or television aerial wires or antennas must be built within the main structure and must not be visible from outside of such structure. No satellite dish shall be permitted over 24" in diameter. Satellite dishes must not be visible from the road.

3.23 Solar Panels. Solar energy devices, including any related equipment or systems components (collectively, "Solar Panels") may only be installed after receiving the written approval of the Committee. Solar Panels may only be installed on the rear portion of the roof of a Residence or outbuildings. Exceptions to the location of the panels can be made by the architectural committee if the panels will not be visible from any other lots. Solar Panels

may not be installed on the front or side elevations of the Residence. Solar Panels shall: (i) not extend higher than or beyond the roofline; (2) conform to the slope of the roof; (3) have a top edge that is parallel to the roofline; and (4) have a frame, support bracket, or wiring that is black or painted to match the color of the roof tiles or shingles of the roof. Piping must be painted to match the surface to which it is attached, i.e., the soffit and wall. Panels must blend with the color of the roof to greatest extent possible.

3.24 Temporary Structures and Vehicles. No temporary structure of any kind shall be erected or placed upon any Lot. No trailer, mobile. modular or prefabricated home. tent. shack, barn or any other structure or building, other than the Residence to be built thereon, shall be placed on any Lot, either temporarily or permanently, and no Residence, house, garage or other structure appurtenant thereto shall be moved upon any Lot from another location, except for a sale, pre-sale or construction trailer; provided, however, that ancillary storage buildings may be allowed at the sole discretion and approval of the Architectural Control Committee. In no event will ancillary storage buildings be allowed without the prior written consent of the Architectural Control Committee.

Any truck, bus, boat, boat trailer, trailer, mobile home, camp mobile, camper or any vehicle other than a conventional automobile, if brought within the Properties, must be stored, placed, or parked within the garage of the appropriate Owner, or be screened from view by privacy fencing as described in item 3.16, and not to exceed a height of 8 feet.

3.25 Parking. Any truck, bus, boat, boat trailer, trailer, mobile home, camp-mobile, camper or any vehicle other than a conventional automobile, if brought within the Properties, must be stored, placed, or parked within the garage of the appropriate Owner, unless otherwise approved by the Committee.

All vehicles belonging to Owners must be parked overnight in the Owner's garage. All vehicles belonging to guests of Owners must be parked in the Owner's driveway. Parking in driveways, behind the front building setback line, is permitted. In no case may the vehicles of Owners, or guests of Owners, be parked in the streets of the Subdivision or within the improved yard of the Owners. Trucks with tonnage in excess of one half (1/2) ton shall not be permitted to park overnight on the streets, or driveways. No vehicle of any size which transports inflammatory explosive cargo may be parked or stored within the Property at any time.

Any truck, bus, boat, boat trailer, trailer, mobile home, camp-mobile, camper or any vehicle other than a conventional automobile belonging to Owners may be parked in the Owner's driveway or in the street in front of the Owner's house for the purpose of loading or unloading for a period of time not to exceed twenty four (24) hours. On-street parking is restricted to approved deliveries, pick-up or short-time guests and invitees and shall be subject to such reasonable rules and regulations as shall be adopted by the Board of Directors.

3.26 Signs and Flags. No signs shall be displayed to the public view on any Lot without the prior written approval of the Architectural Control Committee, with the following exceptions: (i) Declarant may erect and maintain a sign or signs for the construction, development, operation, promotion and sale of the Lots; (ii) an Owner may install political signs as allowed by Texas Property Code 202.009; (iii) Declarant and Owners may display holiday signs. Any and all signs, if allowed, shall comply with all sign standards of the Town, as such standards may be applicable to the Properties.

Except as expressly permitted pursuant to Section 202.012 of the Texas Property Code, no flag poles mounted or installed in the ground may be placed, allowed, erected or maintained on any lot. The United States flag ("Old Glory") must be displayed in accordance with 4 U.S.C. Sections 5-10 and the Texas state flag ("Lone Star Flag") must be displayed in accordance with Chapter 3100 of the Texas Government Code. An official or replica flag of any branch of the United States armed forces and/or flags denoting a holiday or special occasion or college affiliation may be displayed in a respectful manner on each lot in accordance with reasonable standards adopted by the Association, subject to the provisions of by Section 202.12 of the Texas Property Code. The Association

may adopt reasonable standards covering all matters for which the Association may adopt or enforce reasonable dedicatory instrument provisions pursuant to Section 202.12(b) of the Texas Property Code, including standards regulating the materials and finish used in the construction of a flagpoles, the maintenance and repair of flagpoles, the size, number and location of flagpoles on which flags are displayed, the height of flagpoles, the size of a displayed flag, the size, location and intensity of lights used to illuminate a displayed flags and the abatement of noise caused by an external halyard of a flagpole. All flags must be tastefully designed, professionally produced and manufactured and, except for Old Glory the Lone Star Flag and an official or replica flag of any branch of the United States armed forces, shall be subject to written approval of the Committee. All flag displays must comply with public flag laws. No flag containing any content (1) in the nature of a "protest" or complaint against the Property, Declarant or any builder, (2) that describes, maligns or refers to the reputation, character or building practices of the Declarant or any builder, (3) that discourages or otherwise impacts or attempts to impact anyone's decision to acquire a lot or home in the Property or elsewhere from Declarant or any builder, and/or (4) intended to create controversy, invite ridicule or disparagement, or interfere in any way with the exercise of the property rights, occupancy or permitted business activity of any owner, Declarant or builder, shall be displayed to the streets or common area or otherwise to the public view on any lot, home, structure or common area. No other types of flags, pennants, banners, kites, or similar types of displays are permitted on a lot if the display is visible from a street or common area or is otherwise displayed to public view on any lot, home, structure or common area.

3.27 Religious Displays. An Owner or resident may not display or affix a religious item on the Owner or resident's Residence or building except as permitted by Texas Property Code Section 202.018, and any guidelines established by the Association for the display of religious items.

3.28 Removal of Dirt. The digging of dirt or the removal of any dirt from any Lot is prohibited, except as necessary in conjunction with landscaping or construction of improvements thereon. Any dirt removed from a Lot shall be deposited in a location outside the subdivision. Minimum finished floor elevations established on the Plat shall be maintained.

3.29 Drilling and Mining Operations. No oil drilling, or development operations, oil refining, quarrying or mining operations of any kind shall be permitted upon or in any Lot, nor shall oil wells, water wells, tanks, tunnels, mineral excavations or shafts be permitted upon or in any Lot. No derrick or other structure designed for use in boring for oil or natural gas shall be erected, maintained or permitted upon any Lot.

3.30 Offensive Activities. No noxious or offensive activity shall be conducted on any Lot nor shall anything be done thereon which is or may become an annoyance or nuisance to the other Owners. All animals, livestock or poultry that are to be kept on any residential lot must comply with the Town's ordinances regarding animals and livestock.

The Association reserves the right to prohibit certain animals, livestock or poultry that become an annoyance or nuisance to the other homeowners.

3.31 Swimming. No wading or swimming shall be allowed in any water feature or drainage way situated within the Properties.

3.32 Duty of Maintenance. Owners and occupants (including lessees) of any Lot shall, jointly and severally, have the duty and responsibility, at their sole cost and expense, to keep the Lot so owned or occupied, including buildings, improvements grounds or drainage easements or other rights-of-way appurtenant thereto, and vacant land, in a well-maintained, safe, clean and attractive condition at all times. Such maintenance includes, but is not limited to, the following:

a. Prompt removal of all litter, trash, refuse and waste;

b. Lawn mowing on a regular basis;

c. Tree and shrub pruning;

d. Watering landscaped areas;

e. Keeping exterior lighting and maintenance facilities in working order;

f. Keeping lawn and garden areas alive and free of weeds and attractive;

g. Keeping parking areas, driveways, curbs and roads in good repair;

h. Complying with all government health and police requirements;

i. Repair of exterior damages to improvements;

j. Cleaning of landscaped areas lying between streets and Lot lines, unless such streets or landscaped areas are expressly designated to be Common Areas maintained by applicable governmental authorities; and

k. Repainting of improvements.

3.33 Tennis Courts. No tennis courts, sports courts or batting cages shall be erected, placed or altered on any Lot without the prior approval of the Architectural Control Committee.

3.34 Building Permits. No Owner shall commence construction of any improvements on the Lot owned by such Owner until the plans and specifications for the improvements to be constructed have been approved by the Architectural Control Committee in accordance with this Declaration and the Owner has obtained a building permit from the appropriate governmental authorities allowing the construction of such improvements.

3.35 Common Areas. All Common Areas within the land are hereby restricted as follows: No light fixtures, athletic fields, athletic scoring posts, or any other structures, improvements or amenities shall be installed, constructed or placed upon the Common Areas; save and except for the sprinkler systems and landscaping located upon such Common Areas as of the date hereof.

3.36 Outdoor Living Structures. Any outdoor living structure, like a pergola, arbor or children's play set, must be constructed to blend with the existing Residence by using materials similar to the Residence. All such structures must have prior written approval by the Architectural Control Committee.

ARTICLE IV
ARCHITECTURAL CONTROL COMMITTEE

4.1 Architectural Control Committee. The Architectural Control Committee, hereinafter called the "Committee", shall be composed of two (2) or more individuals selected and appointed by the Declarant until the termination of the Development Period. No sooner than thirty days and no later than forty five days after the termination of the Development Period, the Committee shall be composed of such individuals selected by vote of the Owners, who shall have one (1) vote for each Lot owned. The Committee shall use its best efforts to promote and ensure a high level of quality, harmony and conformity throughout the Properties. The Committee shall

function as the representative of the Owners for the purposes herein set forth as well as for all other purposes consistent with the creation and preservation of a first-class residential development.

A majority of the Committee may designate a representative to act for it. In the event of the death or resignation of any member of the Committee, the remaining members shall have full authority to designate and appoint a successor. No member of the Committee, nor their designated representative, shall be entitled to any compensation for services performed hereunder nor be liable for claims, causes or action or damages (except where occasioned by gross negligence or arbitrary and capricious conduct) arising out of services performed, actions taken or inaction in connection with any undertaking, responsibility, or activity hereunder or request for action hereunder. At any time the Declarant may delegate and assign to the Owners all of the Declarant's power and right to change the membership of the Committee, to withdraw or add powers and duties from or to the Committee, or to restore the powers and duties of the Committee. Such action by the Declarant shall be effective upon recordation of a written instrument properly reflecting same in the Office of the County Clerk of Denton County, Texas.

4.2 **Architectural Approval.** No Residence, building, structure, fence, wall or improvement of any kind or nature shall be erected, constructed, placed, altered, changed or modified on any Lot until the plot plan showing the location of such building, structure, paving or improvement, construction plans and specifications thereof and landscaping and grading plans therefore have been submitted to and approved in writing by the Committee as to: (i) location with respect to Lot lines; topography; finished grades elevation; effect of location and use on neighboring Lots and improvements situated thereon; and any drainage arrangement, (ii) conformity and harmony of external design, color, texture, type and appearance of exterior surfaces and landscaping with existing structures and existing landscaping, (iii) quality of workmanship and materials; adequacy of the site dimensions; adequacy of structural design; proper facing of main elevation with respect to nearby streets; and (iv) the other standards set forth within this Declaration (and any amendments hereto) or as may be set forth in bulletins promulgated by the Committee. The Committee is authorized to request the submission of samples of proposed construction materials or colors of proposed exterior surfaces. As long as Declarant holds title to any of the Lots, the Committee shall also approve, in writing, the individual or entity that will construct the single-family residence on any such Lot.

Final plans and specifications shall be submitted in duplicate to the Committee for approval or disapproval. At such time as the plans and specifications meet the approval of the Committee, one complete set of plans and specifications will be retained by the Committee and the other complete set of plans will be marked "Approved" and returned to the Owner. If found not to be in compliance with this Declaration and any promulgated design guidelines, one set of such plans and specifications shall be returned marked "Disapproved", accompanied by a reasonable statement of items found not to comply with these Declarations. Any modification or change to the approved set of plans and specifications which materially affects items (i) through (iv) of the preceding paragraph must again be submitted to the Committee for its inspection and approval. The Committee's approval or disapproval as required herein shall be in writing. If the Committee or its designated representative fails to approve or disapprove such plans and specifications within thirty (30) days after they have been submitted, then Committee approval shall be presumed.

The Committee is authorized and empowered to consider and review any and all aspects of Residence construction, construction of other improvements and location, quality and quantity of landscaping on the Lots, and may disapprove aspects thereof which may, in the reasonable opinion of the Committee, adversely affect the living enjoyment of one or more Owner (s) or the general value of the Residence. As an example, and not by way of limitation, the Committee may impose limits upon the location of window areas of one Residence which would overlook the enclosed patio area of an adjacent Residence. Also, the Committee is permitted to consider technological advances in design and materials and such comparable or alternative techniques, methods or materials may or may not be permitted, in accordance with the reasonable opinion of the Committee. The committee may, from time to time, publish and promulgate architectural standards bulletins ("**Design Guidelines**") which shall be fair, reasonable and uniformly applied and shall carry forward the spirit and intention of this Declaration. Such bulletins shall supplement this Declaration and are incorporated herein by reference. The Committee shall have the

authority to make final decisions in interpreting the general intent, effect and purpose of this Declaration.

It is the intent of Declarant that these Declarations and any Design Guidelines by the Committee promote harmonious design throughout the Properties. However, approval of the plans and specifications by the Committee and compliance with the bulletins issued by the Committee does not ensure compliance with the building code and other restrictions imposed by the applicable governmental authorities nor does it insure backyard privacy.

The Committee or the Board, as the case may be, may grant a variance or waiver of a restriction or rule on a case-by-case basis when unique circumstances dictate, and may limit or condition its grant. To be effective, a variance must be in writing. The grant of a variance does not effect a waiver or estoppel of the Association's right to deny a variance in other circumstances. Approval of a variance or waiver may not be deemed, implied, or presumed under any circumstance. When an owner receives a variance that will permanently affect the owner's lot, the owner may request that the variance be issued in recordable form and recorded, at the owner's expense, in the real property records of the county in which the Lot for which the variance is received is located.

4.3 Nonconforming and Unapproved Improvements. The Declarant may require any Owner to restore such Owner's improvements to the condition existing prior to the construction thereof (including, without limitation, the demolition and removal of any unapproved improvement) if such improvements were commenced or constructed in violation of this Declaration. In addition, the Declarant may, but has no obligation to do so, cause such restoration, demolition and removal and levy the amount of the cost thereof as a special individual assessment against the Lot upon which such improvements were commenced or constructed.

4.4 No Liability. Neither Declarant, the Committee, nor the officers, directors, members, employees and agents of any of them, shall be liable in damages to anyone submitting plans and specifications to any of them for approval, or to any Owner by reason of mistake in judgment, negligence, or nonfeasance arising out of or in connection with the approval or disapproval or failure to approve or disapprove any such plans or specifications. Every person who submits plans or specifications and every Owner agrees that he will not bring any action or suit against Declarant, the Committee, or the officers, directors, members, employees or agents of any of them, to recover any such damages and hereby releases and waives all claims, demands and causes of action arising out of or in connection with any judgment, negligence or nonfeasance and hereby waives the provisions of any law which provides a general release does not extend to claims, demands and causes of action not known at the time the release is given. Plans and specifications are not approved for engineering or structural design or adequacy of materials, and by approving such plans and specifications neither the Committee, the members of the Committee, nor the Declarant assumes liability or responsibility therefor, nor for any defect in any structure constructed from such plans and specifications.

ARTICLE V
EASEMENTS

5.1 General. The rights and duties of the Owners with respect to sanitary sewer, water, electricity, natural gas, telephone and cable television lines and drainage facilities shall be governed by the following:

a. Wherever (i) sanitary sewer or water service connections, (ii) natural gas, electricity, telephone or cable television lines, or (iii) drainage facilities are installed within the Properties, which connections, lines or facilities or any portion thereof lie in or upon Lots owned by any party other than the Owner of a Lot served by said connections, lines or facilities, such Owners of Lots served shall have the right and are hereby granted an easement to the full extent necessary therefore, to enter upon the Lots within or upon which said connections, line or facilities or any portion thereof lie to repair, replace and generally maintain said connections, lines or facilities as and when the

same may be necessary.

b. Wherever (i) sanitary sewer or water service connections, (ii) natural gas, electricity, telephone or cable television lines, or (iii) drainage facilities are installed within the Properties, which connections, lines or facilities serve more than one Lot, the Owner of each Lot served by said connections, lines or facilities shall be entitled to the full use and enjoyment of such portions of said connections, lines or facilities which service such Owner's Lot.

5.2 Reservation of Easements. Easements over the Lots and Properties for the installation and maintenance of electric, telephone, cable television, water, gas and sanitary sewer lines and drainage facilities are hereby reserved by the Declarant together with the right to grant and transfer same.

5.3 Surface Areas of Utility Easements. Easements for installation and maintenance of utilities are reserved as shown and provided for on the Plat. Underground electric, storm, sewer, on-site sanitary sewer facilities, water, natural gas and telephone service shall be available to all Lots in the subdivision. Easements for the underground service may be crossed by driveways, walkways, patios, brick walls and fences, provided the Declarant or builder makes prior arrangements with the utility companies furnishing electric, storm sewer, water, natural gas and telephone service and provides and installs any necessary conduit of approved type and size under such driveways, walkways, patios, brick walls or fences prior to construction thereof. Such easements for the underground service shall be kept clear of all other improvements, and neither the grantee nor any utility company using the easements shall be liable for any damage done by either of them or their assigns, their agents, employees or servants, to shrubbery, trees, flowers or other improvements (other than for damages caused in crossing driveways, walkways, patios, brick walls or fences, providing conduit has been installed as outlined above) of the Owner located on the Lot covered by said easements. In addition, the utility easements shall not be used as alleyways.

5.4 Emergency and Service Vehicles. An easement is hereby granted to all police, fire protection, ambulance and other emergency vehicles and other service vehicles to enter upon the Properties, including but not limited to private drives, in the performance of their duties.

5.5 Universal Easement. The Owner of each Lot (including Declarant so long as Declarant is the Owner of any Lot) is hereby granted an easement not to exceed one (1) foot in width over all adjoining Lots and Properties for the purpose of accommodating any encroachment due to engineering errors, errors in original construction, settlement or shifting of the building, or any other cause. There shall be easements for the maintenance of said encroachment, settling or shifting; provided, however, than in no event shall an easement for encroachment be created in favor of an Owner or Owners if said encroachment occurred due to willful misconduct of said Owner or Owners. Each of the easements hereinabove referred to shall be deemed to be established upon the recordation of the Declarant and shall be appurtenant to the Lot being serviced and shall pass with each conveyance of said Lot.

5.6 Improvement, Roadway and Utility Easements. Declarant hereby reserves unto itself and the Cross Timbers Water Supply Corporation, and their respective agents, assignees, and employees, a perpetual non-exclusive easement under, over and across the Easement Property, or any areas conveyed and maintained by the Declarant and/or the Cross Timbers Water Supply Corporation, including but not limited to any service area or any areas reserved or held as Common Area for the installation, operation, maintenance, repair, relocation, removal and/or modification of any water line improvements, roadways or any other water public utility function on, beneath or above the surface of the grounds that serve as the Easement Property. A metes and bounds description of the Easement Property is attached. This section may not be amended without the written consent of the Cross Timbers Water Supply Corporation.

5.7 Wetlands & Mitigation Easement. The Mitigation Easement area is to be maintained and dedicated in perpetuity as Wetland and Stream Mitigation Area associated with the construction of Eagle Ridge Residential Development. The Mitigation Easement shall be managed consistently with the requirements of USACE project number SWF-2021-00479 and shall not be disturbed except by those USACE-approved activities that would not adversely affect the intended extent, condition, and function of the mitigation area. Any change, modification, or disturbance of the dedicated Mitigation Easement shall require prior written approval by the District Engineer, USACE, Fort Worth District. The notice of restriction shall not be removed or revised without obtaining a modification of the aforementioned USACE authorization and/or prior written approval of the USACE. Permit modifications may be granted only by the USACE. Restricted activities include: mowing, landscape alterations of any kind, grading, filling, draining, equipment storage, tree removal, and excavation. Activities conducted without prior USACE approval could result in compliance actions taken associated with violation of Section 404 of the Clean Water Act. See exhibit B for copy of permit.

ARTICLE VI
GENERAL PROVISIONS

6.1 Duration. The Covenants and Restrictions set forth in this Declaration, as may be amended from time to time, shall run with and bind the land subject to this Declaration, and shall inure to the benefit of and be enforceable by the Declarant and/or any Owner, their respective legal representatives, heirs, successors and assigns, for a term of thirty-five (35) years from the date that this Declaration is recorded in the Office of the County Clerk of Denton County, Texas, after which time this Declaration shall be automatically extended for successive periods of ten (10) years unless an instrument signed by the Owners of eighty percent (80%) of the Lots in the subdivision has been recorded in the Office of the County Clerk of Denton County, Texas, agreeing to abolish or terminate this Declaration, provided, however, that no such agreements to abolish shall be effective unless made and recorded one (1) year in advance of the effective date of such abolishment.

6.2 Amendments. Prior to the expiration of the Development Period, this Declaration may be amended only by the Declarant. After the expiration of the Development Period, the Declaration may be amended by Owners entitled to cast at least sixty-seven percent (67%) of the total number of votes entitled to be cast by members of the Association. The foregoing sentence shall in no way be interpreted to mean sixty-seven percent (67%) of a quorum as established pursuant to the Bylaws. No amendment will be effective without the written consent of Declarant, its successors or assigns, prior to the expiration of the Development Period.

Any and all amendments to this Declaration shall be recorded in the Office of the County Clerk of Denton County, Texas. The Declarant may execute and record amendments to this Declaration without such consent or approval if the amendment is for the purpose of correcting technical or typographical errors or for clarification only.

6.3 Enforcement. Enforcement of this Declaration shall be by any proceeding at law or in equity against any person or persons violating or attempting to violate them, or to recover damages or to enforce any lien created by this Declaration; and failure by the Declarant or any Owner to enforce any covenant or restriction herein contained shall in no event be deemed a waiver of the right to do so thereafter.

6.4 Severability. Invalidation of any provision of this Declaration by judgment or court order shall in no wise affect any other provision of this Declaration or the remainder of these Covenants and Restrictions which shall remain in full force and effect

6.5 Headings. The headings contained in this Declaration are for reference purposes only and shall not in any way affect the meaning or interpretation of this Declaration.

6.6 Notices to Owners. Any notice required to be given to any Owner under the provisions of this Declaration shall be deemed to have been properly delivered when deposited in the United States mail, postage prepaid, addressed to the last known address of the person at the time of such mailing.

6.7 Termination of and Responsibility of Declarant. If Declarant shall convey all of its right, title and interest in and to the subdivision and assign all its rights, benefits and obligations as Declarant hereunder to any partnership, individual or individuals, corporation or corporations, then and in such event Declarant shall be relieved of the performance of any further duty or obligation hereunder, and such partnership, individual or individuals, corporation or corporations, shall be obligated to perform all such duties and obligations of the Declarant.

ARTICLE VII
MEMBERSHIP AND VOTING RIGHTS IN THE ASSOCIATION

7.1 Membership. The Association will have two classes of members as follows:

a. Class A. Class A members shall be all Owners, with the exception of the Declarant, and shall be entitled to one vote for each Lot Owner. When more than one person holds an interest or interests in any Lot, all such persons shall be members and the vote for such Lot shall be exercised as they, among themselves, determine, but in no event shall more than one vote be cast with respect to any one Lot.

b. Class B. The Class B member shall be Bartonville South 1031, LLC, and any entity which becomes the Declarant through assignment, succession, or otherwise. The Class B member shall be entitled to 15 votes for each Lot owned and 15 votes for each acre of the Properties owned or under option or under other means of control by said entity if the property has been annexed and subjected to the Declaration but not yet subdivided into Lots, including but not limited to the Properties Subject to Annexation. The Class B membership shall remain in place until the expiration or termination of the Development Period.

c. Owners of exempt Properties, such as all Properties dedicated and accepted by the local public authority and devoted to public use, shall be Members but shall not have voting rights.

7.2 Quorum, Notice and Voting Requirements.

a. At any meeting of the Association, the presence in person or by proxy of members of at least 10% of the votes that may be cast constitutes a quorum. Members present at a meeting at which a quorum is present may continue to transact business until adjournment, notwithstanding the withdrawal, during the course of the meeting, of members constituting a quorum. However, no action may be approved without the vote of at least a majority of members required for a quorum.

b. Not later than the 10th day or earlier than the 60th day before the date of an election or association vote, the Corporation shall give written notice of the election or association vote to each Owner. In the case of a special meeting or when otherwise required by statute or these Bylaws, the purpose or purposes for which the meeting is called shall be stated in the notice. No business shall be transacted at a special meeting except as stated in the notice.

c. As an alternative to the procedure set forth above, any action referred to in Paragraph (a) of this Section may be taken without a meeting if a consent in writing approving the action to be taken

is signed by all Members.

d. Except as otherwise specifically set forth.in this Declaration, notice, voting and quorum requirements for all actions to be taken by the Association shall be consistent with its Certificate of Formation and bylaws, as same may be amended from time to time.

e. During the period of time that the Association is unincorporated, the Declarant shall have the sole right and option to prescribe reasonable procedures for the meetings (if any) of the Members; provided, however, that prior to incorporation, without the written approval of the Declarant, no Member (other than Declarant) shall have a right to vote on any matter, or to call any meetings of the Members of the Association. Except as specifically set forth in this Declaration, notice, voting and quorum requirements for all action to be taken by the Association (as an incorporated entity) shall be consistent with its Certificate of Formation and Bylaws, as same may be amended from time to time.

ARTICLE VIII
COVENANTS AND ASSESSMENTS

8.1 Creation of the Lien and Personal Obligation of Assessments. Declarant, for each Lot owned by it, hereby covenants and agrees, and each purchaser of any Lot by acceptance of a deed or other conveyance document creating in such Owner the interest required to be deemed an Owner, whether or not it shall be so expressed in any such deed or other conveyance document, shall be deemed to covenant and agree (and such covenant and agreement shall be deemed to constitute a portion of the consideration and purchase money for the acquisition of the Lot), to pay the Association (or to an entity or collection agency designated by the Association): (1) annual maintenance assessments or charges (as specified in Section 8.4 hereof), such assessments to be fixed, established and collected from time to time as herein provided; (2) special assessments for capital improvements and other purposes (as specified in Section 8.5) hereof, such assessments to be fixed, established and collected from time to time as hereinafter provided; and (3) individual special assessments levied against one or more Owners to reimburse the Association for extra costs for maintenance and repairs caused by the willful or negligent acts or omissions of such Owner or Owners, his tenants (if applicable) and their respective family, agents, guests and invitees, and not caused by ordinary wear and tear (as specified in Section 8.5 hereof), all of such assessments to be fixed, established and collected from time to time as hereinafter provided. The annual maintenance, special capital, and special individual assessments described in this Section 8.1 (hereinafter, the "Assessment" or the Assessments"), together with interest thereon, attorneys' fees, court costs and other costs of collection thereof, as herein provided, shall be a charge on the land and shall be a continuing lien upon each Lot against which any such Assessment is made. Each such Assessment, together with interest thereon, attorneys' fees, court costs, and other costs of collection thereof shall also be the continuing personal obligation of the Owner of such Lot at the time when the assessment becomes due. Further, no Owner may exempt himself from liability for such Assessments or waive or otherwise escape liability for the Assessments by non-use of the Common Areas or abandonment of his Lot. Existing obligations of an Owner to pay assessments and other costs and charges shall not pass to bona fide first lien mortgagees which become Owners by reason of foreclosure proceedings or in action at law subsequent to the date the Assessment was due; provided; however, any such foreclosure proceeding or action at law shall not relieve such new Owner of such Lot from liability for the amount of any Assessment thereafter becoming due nor from the lien securing the payment of any subsequent Assessment.

8.2 Purpose of Assessments. The Assessments levied by the Association shall be used for (i) the purpose of promoting the recreation, comfort, health, safety and welfare of the Members and/or the residents of the Properties; (ii) maintaining the Common Areas; (iii) enhancing the quality of life in the Properties and the value of the Properties; (iv) improving and maintaining the Common Areas, the Properties, services, improvements and

facilities devoted to or directly related to the use and enjoyment of the Common Areas, including, but not limited to, the payment of taxes on the Common Areas and insurance in connection therewith and the repair, replacement and additions thereto; (v) paying the cost of labor, equipment (including the expense of leasing any equipment) and materials required for, and management and supervision of, the Common Areas; (vi) carrying out the powers and duties of the Board of Directors of the Association as set forth in this Declaration and the Bylaws of the Association;(vii) carrying out the powers and duties relating to the Architectural Control Committee, after Declarant has delegated or assigned such powers and duties to the Association, (ix) enforcing this Declaration and paying legal fees and other costs associated with enforcement of this Declaration.

8.3 Improvement and Maintenance of the Common Areas Prior to Assessments. Initially, the improvement of the Common Areas shall be the responsibility of the Declarant and shall be undertaken by Declarant at its sole cost and expense with no right to reimbursement from the Association. After the initial improvements to the Common Areas are substantially completed and until the date of the Assessments formally commence, the Declarant on behalf of the Association, shall have the responsibility and duty (but with right of reimbursement once Assessments begin) of maintaining the Common Areas, including, but not limited to, the payment of taxes on and insurance in connection with the Common Areas and the cost of repairs, replacements and additions thereto, and for paying the cost of labor, equipment (including the expense of leasing any equipment) and materials required for, and management and supervision of, the Common Areas.

8.4 Annual Maintenance Assessments.

a. The Board of Directors shall determine the amount of the annual maintenance assessments for each year, which assessment may include a reserve fund for working capital and for maintenance, repairs and replacements of the Common Areas.

b. Subject to the provisions of Section 8.4(c) hereof, the rate of annual maintenance assessments may be increased by the Board. The Board may, after consideration of current maintenance, operational and other costs and the future needs of the Association, fix the annual maintenance assessments for any year at a lesser amount than that of the previous year.

c. An increase in the rate of the annual maintenance assessments as authorized by Section 8.4(b) hereof in excess of twenty-five percent (25%) of the preceding year's annual maintenance assessments must be approved by the Members in accordance with Section 7.3 hereof.

d. Annual maintenance assessments shall be paid annually on a calendar year basis. Not later than thirty (30) days prior to the beginning of each fiscal year of the Association, the Board shall (i) estimate the total common expenses to be incurred by the Association for the forthcoming fiscal year, (ii) determine, in a manner consistent with the terms and provisions of this Declaration, the amount of the annual maintenance assessments to be paid by each Member and (iii) establish the date of commencement of the annual maintenance assessments. Written notice of the annual maintenance assessments to be paid by each Member and the date of commencement thereof shall be sent to every Member, but only to one (1) joint Owner. Each Member shall thereafter pay to the Association his annual maintenance assessment in such manner as determined by the Board of Directors.

8.5 Special Care Assessments and Special Individual Assessments.

a. In addition to the annual maintenance assessments authorized in Section 8.4 hereof, the Board of Directors of the Association may levy in any calendar assessment year a special capital assessment for the purpose of (i) defraying, in whole or in part, the cost of any construction or reconstruction,

repair or replacement of improvements upon the Properties or Common Areas, including the necessary fixtures and personal property related thereto (ii) maintaining portions of the Common Areas and improvements thereon, or (iii) carrying out other purposes of the Association; provided, however, that any such special capital assessment levied by the Association shall have the approval of the Members in accordance with Section 7.3 hereof. Any special capital assessment levied by the Association shall be paid by the Members directly to the Association on such date or dates as determined by the Board of Directors. All such amounts collected by the Association may only be used for the purposes set forth in this Section 8.5 and shall be deposited by the Board of Directors in a separate bank account to be held in trust for such purpose. These funds shall not be commingled with any other funds of the Association.

b. The Board of Directors of the Association may levy special individual assessments against one or more Owners for (I) reimbursement to the Association of the costs for repairs to the Properties or Common Areas and improvements thereto occasioned by the willful or negligent acts of such owner or Owners and not ordinary wear and tear, or (ii) for payment of fines, penalties or other charges imposed against an Owner or Owners relative to such Owner's failures to comply with the terms and provisions of this Declaration the Bylaws of the Association or any rules or regulation promulgated hereunder. Any special individual assessment levied by the Association shall be paid by the Owner or Owners directly to the Association. All amounts collected by the Association as special individual assessments under this Section 8.5 shall belong to and remain with the Association.

8.6 Working Capital Assessment. Upon acquisition of record title to a Lot by any subsequent Owner thereof (other than Declarant or a Builder), a one-time working capital contribution assessment shall be made by or on behalf of the Owner to the working capital of the Association equal to three (3) months of the annual maintenance assessments, which shall be paid to the Association at the closing of the purchase of the Lot by the Owner. This amount shall be in addition to, not in lieu of, the annual maintenance assessment and shall not be considered an advance payment of such annual maintenance assessment. The working capital assessment shall be disbursed to the Association for use in covering operating expenses and other expenses incurred by the Association pursuant to this Declaration and the Bylaws.

8.7 Date of Commencement of Assessments; Due Dates; No Offsets. The annual maintenance assessments provided for herein shall commence on the date fixed by the Board of Directors of the Association to be the date of commencement and, except as hereinafter provided, shall be payable annually, in advance, on the first day of each payment period thereafter, as the case may be and as the Board of Directors shall direct. The first annual maintenance assessment shall be made for the balance of the calendar year in which it is levied. The amount of the annual maintenance assessment which may be levied for the balance remaining in the first year of assessment shall be an amount which bears the same relationship to the annual maintenance assessment provided for in Section 8.4 hereof as the remaining number of months in that year bears to twelve; provided, however, that if the date of commencement falls on a day other than the first day of a month, annual maintenance assessment for such month shall be prorated by the number of days remaining in the month. All assessments shall be payable in the amount specified by the Association and no offsets against such amount shall be permitted for any reason.

8.8 Duties of the Board of Directors with Respect to Assessments.

a. The Board of Directors of the Association shall fix the date of commencement and the amount of the annual maintenance assessment against each Lot for each assessment period at least thirty (30) days in advance of such date or period and shall, at that time, prepare a roster of the Lots and assessments applicable thereto which shall be kept in the office of the Association and shall be open to inspection by any Owner.

b. Written notice of all assessments shall be delivered or mailed to every Owner subject thereto. Such notice shall be sent to each owner at the last address provided by each Owner, in writing, to the Association.

c. The omission of the Board of Directors to fix the assessments within the time period set forth above for any year shall not be deemed a waiver or modification in any respect of the provisions of this Declaration, or a release of any Owner from the obligation to pay the assessments, or any installment thereof for that or any subsequent year, but the assessment fixed for the preceding year shall continue until a new assessment is fixed.

8.9 Non-Payment of Assessment.

a. Delinquency. Any assessment, or installment thereof, which is not paid in full when due shall be delinquent on the day following the due date (herein, "delinquency date") as specified in the notice of such Assessment. The Association shall have the right to reject partial payment of an Assessment and demand full payment thereof. If any Assessment or part thereof is not paid within ten (10) days after the delinquency date, the unpaid amount of such Assessment shall bear interest form and after the delinquency date until paid at a rate equal to the lesser of (1) eighteen percent (18%) per annum or (ii) the maximum lawful rate.

b. Lien. The unpaid amount of any Assessment not paid by the delinquency date shall, together with the interest thereon as provided in Section 8.9(a) hereof and the cost of collection thereof, including reasonable attorney's fees, become a continuing lien and charge on the Lot of the non-paying Owner, which shall bind such Lot in the hands of the Owner, and his heirs, executors, administrators, devisees, personal representatives, successors and assigns. The lien shall be superior to all other liens and charges against the Lot, except only for tax liens and the lien of any bona fide first mortgage or first deed of trust now or hereafter placed upon such Lot. A subsequent sale or assignment of the Lot shall not relieve the Owner from liability for any Assessment made prior to the date of sale or assignment and thereafter becoming due nor from the lien of any such Assessment. The Board shall have the power to subordinate the lien securing the payment of any Assessment rendered by the Association to any other lien. Such power shall be entirely discretionary with the Board. As hereinbefore stated, the personal obligation of the Owner incurred at the time of such Assessment to pay such Assessment shall remain the personal obligation of such Owner and shall not pass to such Owner's successors in title unless expressly assumed by them in writing. Liens for unpaid Assessments shall not be affected by any sale or assignment of a Lot and shall continue in full force and effect. No Owner may exempt himself from liability for such assessment or waive or otherwise escape liability for the Assessments by non-use of the Common Areas or abandonment of his Lot. To evidence any lien, the Association shall prepare a written notice of lien setting forth the amount of the unpaid indebtedness, the name of the Owner of the Lot covered by such lien and a description of the Lot covered by such lien. Such notice shall be executed by one of the officers of the Association and shall be recorded in the Office of the County Clerk of Denton County, Texas.

c. Remedies. The lien securing the payment of the Assessments shall attach to the Lot belonging to such non-paying Owner with the priority set forth in this Section. Subsequent to the recording of a notice of the lien, the Association may institute an action at law against the Owner or Owners personally obligated to pay the Assessment and/or for the foreclosure of the aforesaid lien. In any foreclosure proceeding, the Owner shall be required to pay the costs, expenses and reasonable attorneys' fees incurred by the Association. In the event an action at law is instituted against the

Owner or Owners personally obligated to pay the Assessment there shall be added to the amount of any such Assessment.

i. the interest provided in this Section,

ii. the costs of preparing and filing the complaint in such action,

iii. the reasonable attorneys' fees incurred in connection with such action, and

iv. any other costs of collection;

Further, in the event a judgment is obtained, such judgment shall include interest on the Assessment as provided in this Section and a reasonable attorneys' fee to be fixed by the court, together with the costs of the action.

Each Owner, by acceptance of a deed to a Lot, hereby expressly vests in the Association or its agents or trustees the right and power to bring all actions against such Owner personally for the collection of such charges as a debt, and to enforce the aforesaid liens by all methods available for the enforcement of such liens, including non-judicial foreclosure pursuant to Section 209.0091 and 209.0092 of the Texas Property Code. Chapter 209 of the Texas Property Code, and such Owner hereby expressly grants to the Association the private power of sale in connection with said liens. The Association may also suspend the right to use the Common Areas of any Owner who is in default in payment of any Assessment in accordance with this Declaration and/or the Bylaws and may impose such other and further penalties as are not prohibited by the Texas Property Code.

d. Notice to Mortgagees. The Association may, and upon the written request of any mortgagee holding a prior lien on any part of the Properties, shall report to said mortgagee any Assessments remaining unpaid for longer than thirty (30) days after the delinquency date of such Assessment.

8.10 Subordination of the Lien to Mortgages. The lien securing the payment of the Assessments shall be subordinate and inferior to the lien of any bona fide first lien mortgage or deed of trust now or hereafter recorded against any Lot; provided, however, that such subordination shall apply only to the Assessments which have become due and payable prior to a sale, whether public or private, of such property pursuant to the terms and conditions of any such mortgage or deed of trust. Such sale shall not relieve the new Owner of such Lot from liability for the amount of any Assessment thereafter becoming due nor from the lien securing the payment of any subsequent Assessment

ARTICLE IX
PROVISIONS REQUIRED BY THE TOWN

9.1 Assumption of Maintenance. The Town will be allowed to take over the maintenance of Common Areas (including private recreation facilities, etc.) using Association funds, if such action becomes necessary due to nonperformance or inaction by the Association or if the Association goes defunct or ceases to exist.

9.2 Common Area Ownership. Should the Association go defunct or cease to exist, these CC&Rs specifically grant a limited Power of Attorney for real estate to the Mayor of the Town of Bartonville to execute a conveyance of ownership of the Common Areas to the Town. This conveyance of title will allow the Town to remove any improvements/amenities from the Common Areas and sell any buildable land area (as residential lots)

to recoup the Town's expenses for maintenance and/or demolition of the improvements. Any monies that remain after the Town has recovered all of its expenses shall be retained for future maintenance/upgrading of the streets, Common Areas (if any remain), screening walls, or other improvements within the subdivision. These provisions are not intended to allow the Town to profit in any way from taking over the Association's responsibilities/funds – they are only intended to allow the Town to recoup its actual incurred expenses such that the general public (i.e., the taxpayers of the Town) does not have to bear these costs.

9.3 Access to Common Area. Any governmental authority or agency, including, but not limited to, the Town and the County, their agents, and employees, shall have the right of immediate access to the Common Areas at all times if necessary for the preservation of public health, safety and welfare. Should the Association fail to maintain the Common Areas to Town specifications for an unreasonable time, not to exceed ninety (90) days after written request to do so, then the Town shall have the same right, power and authority to enforce the Association's rules and to levy Assessments necessary to maintain the Common Areas. The Town may elect to exercise the rights and powers of the Association or its Board, or to take any action required and levy any Assessment that the Association might have taken, either in the name of the Association or otherwise, to cover the cost of maintenance (or the possible demolition, if such becomes necessary to preserve public safety or to ease maintenance burden) of any Common Areas

9.4 Dissolution. The Association may not be dissolved without the prior written consent of the Town Council.

9.5 Amendments. No portion of the Association documents pertaining to the maintenance of Common Areas, and Assessments therefor, may be amended without the written consent of the Town Council.

ARTICLE X
DISPUTE RESOLUTION

10.1 Introductions And Definitions. The Association, the owners, Declarant, all persons subject to this Declaration, and any person not otherwise subject to this Declaration who agrees to submit to this Article (collectively, the "Parties") agree to encourage the amicable resolution of disputes involving the Property and to avoid the emotional and financial costs of litigation if at all possible. Accordingly, each Party hereby covenants and agrees that this Article applies to all claims as hereafter defined. As used in this Article only, the following words, when capitalized, have the following specified meanings:

a. "Claim" means any claim, grievance, or dispute between Parties involving the Properties, except Exempt Claims as defined below, and including without limitation:

  i. Claims arising out of or relating to the interpretation, application, or enforcement of the Declaration or any related documents.

  ii. Claims relating to the rights and/or duties of Declarant as Declarant under the Declaration or any related documents.

  iii. Claims relating to the design, construction, or maintenance of the Property.

b. "Claimant" means any Party having a Claim against any other Party.

c. "Exempt Claims" means the following claims or actions, which are exempt from this Article:

  i. The Association's claim for assessments, and any action by the Association to collect

assessments.

ii. An action by a Party to obtain a temporary restraining order or equivalent emergency equitable relief, and such other ancillary relief as the court deems necessary to maintain the status quo and preserve the Party's ability to enforce the provisions of this Declaration.

iii. Enforcement of the easements, architectural control, maintenance, and use restrictions of this Declaration.

iv. A suit to which an applicable statute of limitations would expire within the notice period of this Article, unless a Party against whom the Claim is made agrees to toll the statute of limitations as to the Claim for the period reasonably necessary to comply with this Article.

d. "Respondent" means the Party against whom the Claimant has a Claim.

10.2 Mandatory Procedures. Claimant may not file suit in any court or initiate any proceeding before any administrative tribunal seeking redress or resolution of its Claim until Claimant has complied with the procedures of this Article.

10.3 Notice. Claimant must notify Respondent in writing of the Claim (the "Notice"), stating plainly and concisely: (1) the nature of the Claim, including date, time, location, persons involved, and Respondent's role in the Claim; (2) the basis of the Claim (i.e., the provision of the Declaration or other authority out of which the Claim arises); (3) what Claimant wants Respondent to do or not do to resolve the Claim; and (4) that the Notice is given pursuant to this Section.

10.4 Negotiation. Claimant and Respondent will make every reasonable effort to meet in person to resolve the Claim by good faith negotiation. Within 60 days after Respondent's receipt of the Notice, Respondent and Claimant will meet at a mutually-acceptable place and time to discuss the Claim. At such meeting or at some other mutually-agreeable time, Respondent and Respondent's representatives will have full access to the property that is subject to the Claim for the purposes of inspecting the property. If Respondent elects to take corrective action, Claimant will provide Respondent and Respondent's representatives and agents with full access to the property to take and complete corrective action.

10.5 Mediation. If the parties negotiate but do not resolve the Claim through negotiation within 120 days from the date of the Notice (or within such other period as may be agreed on by the parties), Claimant will have 30 additional days within which to submit the Claim to mediation under the auspices of a mediation center or individual mediator on which the parties mutually agree. The mediator must have at least 5 years of experience serving as a mediator and must have technical knowledge or expertise appropriate to the subject matter of the Claim. If Claimant does not submit the Claim to mediation within the 30-day period, Claimant is deemed to have waived the Claim, and Respondent is released and discharged from any and all liability to Claimant on account of the Claim.

10.6 Termination Of Mediation. If the Parties do not settle the Claim within 30 days after submission to mediation, or within a time deemed reasonable by the mediator, the mediator will issue a notice of termination of the mediation proceedings indicating that the Parties are at an impasse and the date that mediation was terminated. Thereafter, Claimant may file suit or initiate administrative proceedings on the Claim, as appropriate.

10.7 Allocation Of Costs. Except as otherwise provided in this Section, each Party bears all of its own costs incurred prior to and during the proceedings described in the Notice, Negotiation, and Mediation sections above, including its attorneys' fees. Respondent and Claimant will equally divide all expenses and fees charged by the

mediator.

10.8 Enforcement Of Resolution. Any settlement of the Claim through negotiation or mediation will be documented in writing and signed by the Parties. If any Party thereafter fails to abide by the terms of the agreement, then the other Party may file suit or initiate administrative proceedings to enforce the agreement without the need to again comply with the procedures set forth in this Article. In that event, the Party taking action to enforce the agreement is entitled to recover from the non-complying Party all costs incurred in enforcing the agreement, including, without limitation, attorneys fees and court costs.

10.9 General Provisions. A release or discharge of Respondent from liability to Claimant on account of the Claim does not release Respondent from liability to persons who are not party to Claimant's Claim. A Party having an Exempt Claim may submit it to the procedures of this Article.

10.10 Litigation Approval And Settlement. To encourage the use of alternate dispute resolution and discourage the use of costly and uncertain litigation, the initiation of any judicial or administrative proceeding by the Association is subject to the following conditions in addition to and notwithstanding the above alternate dispute resolution procedures. In addition to and notwithstanding the above alternate dispute resolution procedures, the Association may not initiate any judicial or administrative proceeding without the prior approval of owners of at least a majority of the lots, except that no such approval is required (1) to enforce provisions of this Declaration, including collection of assessments; (2) to challenge condemnation proceedings; (3) to enforce a contract against a contractor, vendor, or supplier of goods or services to the Association; (4) to defend claims filed against the Association or to assert counterclaims in a proceedings instituted against the Association; or (5) to obtain a temporary restraining order or equivalent emergency equitable relief when circumstances do not provide sufficient time to obtain the prior consents of owners in order to preserve the status quo. The board, on behalf of the Association and without the consent of owners, is hereby authorized to negotiate settlement of litigation, and may execute any document related thereto, such as settlement agreements and waiver or release of claims. This Section may not be amended without the approval of owners of at least 75 percent of the lots.

10.11 Construction-Related Disputes. In addition to the above procedures, a claim relating to an alleged construction defect may be governed by Texas statutes relating to residential construction, such as Chapter 27 of the Texas Property Code, (the Residential Construction Liability Act), that provides that if an owner has a complaint concerning an alleged construction defect, and if the alleged defect has not been corrected through normal warranty service, the owner must provide the notice required by Chapter 27 of the Texas Property Code to the builder or contractor by certified mail, return receipt requested, not later than the 60th day before the date owner files suit to recover damages in a court of law or initiate arbitration. The notice must refer to Chapter 27 of the Texas Property Code and must describe the alleged construction defect. If requested by the builder or contractor, the owner must provide the builder or contractor an opportunity to inspect and cure the defect as provided by Section 27.004 of the Texas Property Code.

THE REMAINDER OF THIS PAGE IS LEFT BLANK INTENTIONALLY.

IN WITNESS WHEREOF, the Declarant caused this instrument to be executed as of the 22nd day of November, 2022.

Bartonville South 1031, LLC
dba Red Rock Communities
a Texas limited liability company

By: _____
Name: Omar Oweis
Its: Member and Manager

By: _____
Name: Basem Nimri
Its: Member and Manager

ACKNOWLEDGEMENTS

THE STATE OF TEXAS §
COUNTY OF DENTON §

This instrument was acknowledged before me, a Notary Public, on this 22nd day of November, 2022, by Omar Oweis, the Member & Manager of Bartonville South 1031, LLC, dba Red Rock Communities on behalf of said limited liability company.

ALICIA SCHWARZE
Notary ID #133771818
My Commission Expires
May 19, 2026

_____
Notary Public, State of Texas

Print Name Alicia Schwarze
My Commission expires: 5/19/26

THE STATE OF TEXAS §
COUNTY OF DENTON §

This instrument was acknowledged before me, a Notary Public, on this 22nd day of November, 2022, by Basem Nimri, the Member & Manager of Bartonville South 1031, LLC, dba Red Rock Communities on behalf of said limited liability company.

ALICIA SCHWARZE
Notary ID #133771818
My Commission Expires
May 19, 2026

_____
Notary Public, State of Texas

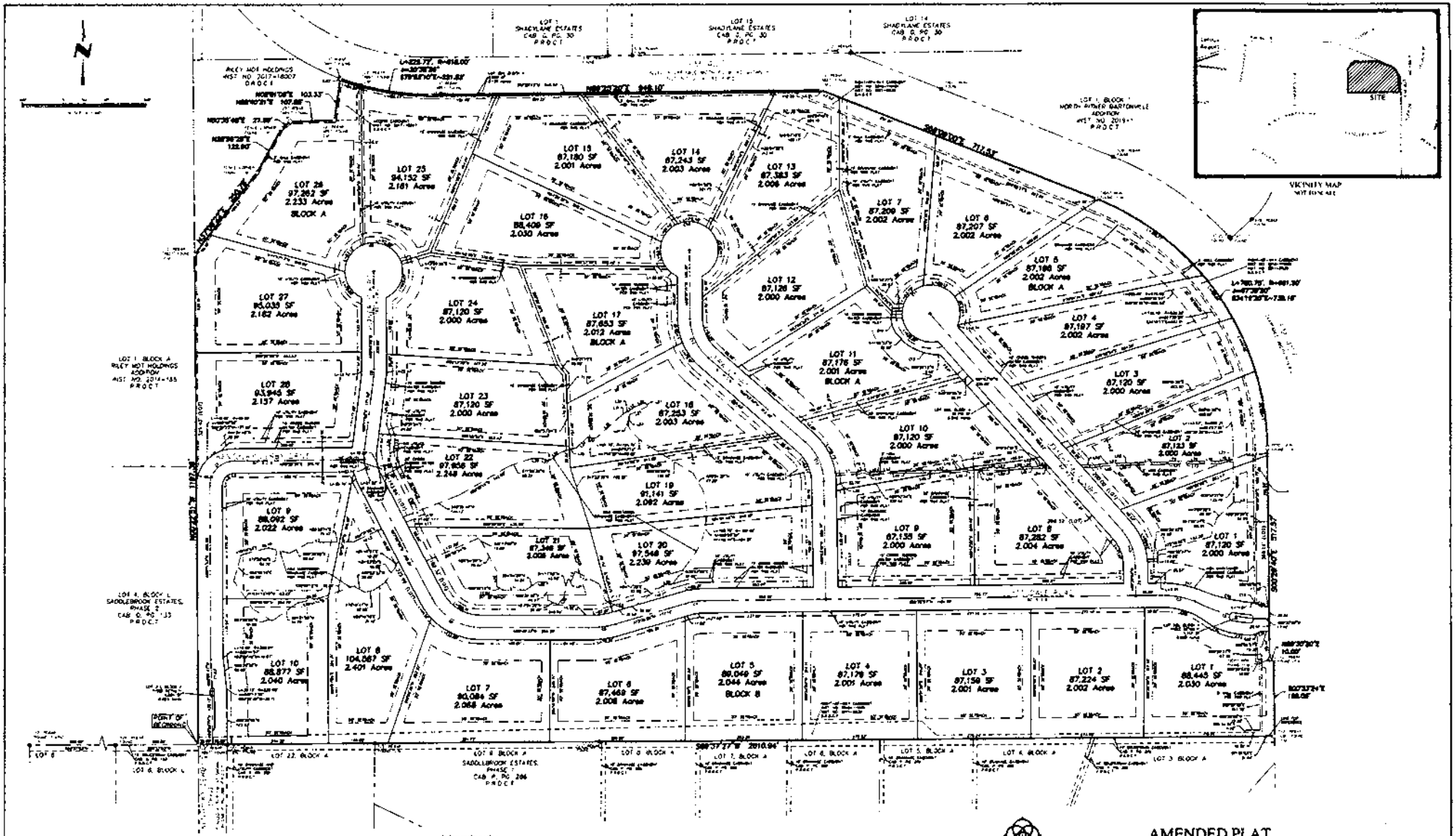
Print Name Alicia Schwarze
My Commission expires: 5/19/26

Exhibit A

Plat and Property Description

Exhibit B

U.S. Army Corps of Engineers, Fort Worth District
Project Number SWF-2021-00479, Eagle Ridge Nation 29 Permit



SURVEYOR NOTES

1. Bearings and distances are based on Texas State Plane Coordinate System, Texas North Central Zone 4202, North American Datum of 1983 (NAD 83) (2011 Values) with a combined scale factor of 1.00011156.10
2. This property lies within Zone "X" (unshaded) of the Flood Boundary and Floodway Map for Denton County, Texas and Incorporated Areas, map no. 48121C0410E, dated April 18, 2011, as scaled and located and graphic plotting.
3. Notice: Selling a portion of this subdivision by metes and bounds is a violation of City ordinance and state law, platting required prior to sale and building of address and building certificate.
4. The purpose of this plat is to create 38 residential lots and 3 HOA lots from a tract of land

ENGINEER
CHANNEL CHANNEL MARTIN ENGINEERING
2705 FM 407 Suite 309
Highland Village, Texas 75077
972-691-4433
Point of Contact: Cody Channel

OWNER/DEVELOPER
Pinter Bartonville Properties, L.P.
701 Lawsons Lane
Argyle, Texas 76226

WINDROSE
LAND SURVEYING | PLATTING
Point of Contact
Brittnee Calderon
972-370-3477
Last Revision Date: 01/25/2022

AMENDED PLAT
EAGLE RIDGE ADDITION
Being a 87.168 acre tract of land situated in the A.R. Loving Survey, Abstract Number 736, 38 Residential Lots and 3 HOA Lots Town of Bartonville, Denton County, Texas
- 2021

STATE OF TEXAS §

COUNTY OF DENTON §

WHEREAS, Bartonville South 1031, LLC are the owners of a 87.168 acre tract of land situated in the A.R. Loving Survey, Abstract Number 736 and being all of a tract described to Bartonville South 1031, LLC as recorded in Instrument Number 2021-[illegible], Deed Records, Denton County, Texas and being more particularly described by metes and bounds as follows: (Bearings and Distances are based on the State Plane Coordinate System, Texas North Central Zone (4202), North American Datum of 1983 [illegible]) [illegible]

BEGINNING at a 1/2 inch rebar capped "4857" found for the northeast corner of Lot [illegible], Block [illegible] of Saddlebrook Estates, Phase 2, an addition to the Town of Bartonville, as recorded in Cabinet Q, Page 133, Plat Records, Denton County, Texas, [illegible] Kentucky Derby Drive (called a 70 foot right-of-way as shown in Cabinet P, Page 286, Plat Records, Denton County, Texas);

THENCE North [illegible] degrees 22 minutes 51 seconds West, departing the northeast right-of-way line of said Kentucky Derby Drive [illegible] Riley MDT Holdings Addition, an addition to the Town of Bartonville, as recorded in Instrument Number 2014-165, Plat Records, Denton County, Texas a total distance of [illegible] feet to a 1/2 inch rebar capped "4857" found for the [illegible] corner of a tract of land described to Riley MDT Holdings by deed recorded in Instrument Number 2017-[illegible], Deed Records, Denton County, Texas;

THENCE North [illegible] degrees 09 minutes 22 seconds East, departing the east line of said Lot [illegible] a distance of 250.71 feet to a fence corner post found for corner;

THENCE North 28 degrees 36 minutes 25 seconds East, with a southeast line of said Riley tract, a distance of 172.60 feet to a fence corner post found for corner;

THENCE North 50 degrees 35 minutes 40 seconds East, with a southeast line of said Riley tract, a distance of 27.99 feet to a 1/2 inch rebar capped "4857" found for corner;

THENCE North 88 degrees 40 minutes 21 seconds East, with the [illegible] south line of said Riley tract, a distance of 107.55 feet to a 1/2 inch rebar capped "4857" found for the [illegible] southeast corner of said Riley tract;

THENCE North 00 degrees 01 minutes 05 seconds East, with the east line of said Riley tract, a distance of 103.15 feet to a 1/2 inch rebar capped "4857" found for the northeast corner of said Riley tract and lying on a southerly right-of-way line of FM 407 (Called a Variable Width Right-of-way, as shown in Instrument Number 2014-165, Plat Records, Denton County, Texas) and being the beginning of a curve to the left, with a radius of 618.00 feet, a central angle of 20 degrees [illegible] minutes [illegible] seconds and a chord bearing and distance of North 79 degrees 52 minutes 10 seconds East, a distance of 221.12 feet;

THENCE with said curve to the left, with a southerly right-of-way line of said FM 407, an arc length of 222.32 feet to a 1/2 inch rebar capped "4857" found for corner;

THENCE North 69 degrees 23 minutes 20 seconds East, with a southerly right-of-way line of said FM 407, a distance of 949.40 feet to a 1/2 inch rebar capped "4857" found for corner;

THENCE South 88 degrees 09 minutes 00 seconds East, with a southerly right-of-way line of said FM 407, a distance of 317.53 feet to a TXDOT Monument found for corner and being the beginning of a curve to the right, with a radius of 861.20 feet, a central angle of 61 degrees 39 minutes 20 seconds and a chord bearing and distance of South 34 degrees 19 minutes 20 seconds East, a distance of 736.44 feet;

THENCE with said curve to the right, with the southwestern right-of-way line of said FM 407, an arc length of 780.75 feet to a TXDOT Monument found for corner;

THENCE South 00 degrees 29 minutes 40 seconds East, with a west right-of-way line of said FM 407, a distance of 511.37 feet to a TXDOT Monument found for corner;

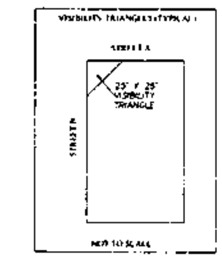
THENCE South 89 degrees 30 minutes 20 seconds East, with said FM 407, a distance of 10.00 feet to a 1/2 inch rebar found for corner;

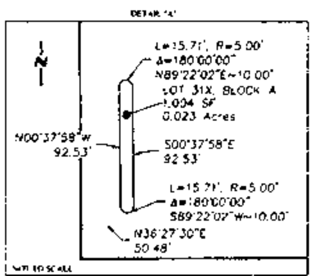
THENCE South 00 degrees 33 minutes 26 seconds East, with a west right-of-way line of said FM 407, a distance of 188.05 feet to a 1/2 inch rebar capped "CBG" found for the northeast corner of Lot 3, Block A of said Saddlebrook Estates, Phase 1;

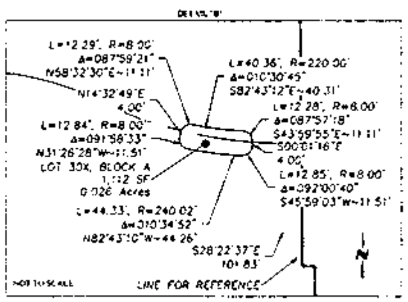
THENCE South 89 degrees 13 minutes 21 seconds West, departing a west right-of-way line of said FM 407, with the north line of Block A of said Saddlebrook Estates, Phase 1, a distance of 3410.94 feet to THE POINT OF BEGINNING and containing 3,797,[illegible] square feet or 87.168 acres of land, more or less.

Visibility, Access and Maintenance Easement Language

The area or areas shown on the plat as "VAM" (Visibility, Access and Maintenance) Easement(s) are hereby given and granted to the Town, its successors and assigns, as an easement to provide visibility, right of access for maintenance upon and across said VAM Easement. The Town shall have the right but not the obligation to maintain any and all landscaping within the VAM Easement. Should the Town exercise this maintenance right, then it shall be permitted to remove and dispose of any and all landscaping improvements, including without limitation, any trees, shrubs, flowers, ground cover and fixtures. The Town may withdraw maintenance of the VAM Easement at any time. The ultimate maintenance responsibility for the VAM Easement shall rest with the owners. No building, fence, shrub, tree or other improvements or growths, which in any way endanger or interfere with the visibility shall be constructed in, on, over or across the VAM Easement. The Town shall also have the right but not the obligation to add any landscape improvements to the VAM Easement, to erect any traffic control devices or signs on the VAM Easement and to remove any obstruction thereon. The Town, its successors, assigns, or agents shall have the right and privilege at all times to enter upon the VAM Easement or any part thereof for the purposes and with all rights and privileges set forth herein.







NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS:

THAT the Bartonville South 1031, LLC acting herein by and through its duly authorized officers, does hereby adopt this plat designating the hereinabove described property as Eagle Ridge Addition, an addition to the Town of Bartonville, Texas, and does hereby dedicate, in fee simple, to the public use forever the streets and easements shown thereon. [illegible]

This plat approved subject to all platting ordinances, rules, regulations and resolutions of the Town of Bartonville, Texas.

WITNESS my hand this the 25 day of January, 2022

Bartonville South 1031, LLC

By: [signature]
Authorized Representative - Signature

[signature]
Printed Name

Managing Partner
Title

[illegible] 22
Date

STATE OF TEXAS §
COUNTY OF Dallas §

BEFORE ME, the undersigned authority, a Notary Public in and for the State of Texas, on this day personally appeared [illegible], known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that the executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this 25 day of January, 2022

[signature]
Notary Public in and for the State of Texas

My Commission Expires On: 2-3-2024

KNOW ALL MEN BY THESE PRESENTS:

STATE OF TEXAS §
COUNTY OF DENTON §

That I, Mark N. Peeples, do hereby certify that I prepared this plat from an actual and accurate survey of the land and that the corner monuments shown thereon as set were properly placed under my personal supervision in accordance with the Development Ordinance of the Town of Bartonville.

[signature]
Mark N. Peeples, R.P.L.S.
No. 6443

STATE OF TEXAS §
COUNTY OF DENTON §

BEFORE ME, the undersigned authority, a Notary Public in and for the State of Texas, on this day personally appeared Mark N. Peeples, Land Surveyor, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that she executed the same for the purposes and considerations therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this 25 day of January, 2022.

[signature]
Notary Public in and for the State of Texas

My Commission Expires On: 2-3-2022

Line Data Table		
Line #	Distance	Bearing
L1	57.10'	N85°46'18"E
L2	8.64'	N88°22'31"E
L3	40.07'	N87°06'21"E
L4	23.34'	N18°14'35"E
L5	47.25'	S81°46'30"E
L6	43.38'	S14°56'44"E
L7	30.67'	S83°05'45"E
L8	20.79'	S75°11'00"E
L9	46.61'	N88°30'23"E
L10	36.45'	N01°23'23"E
L11	55.62'	S89°46'14"W
L12	20.00'	S06°47'60"W
L13	32.58'	S07°17'05"W
L14	47.30'	S10°01'32"E
L15	102.40'	S27°30'35"E
L16	47.02'	S08°44'46"E
L17	47.02'	S08°44'46"E
L18	102.38'	S27°30'55"E
L19	50.30'	S10°01'32"E
L20	31.40'	S07°17'05"W

Line Data Table		
Line #	Distance	Bearing
L21	10.86'	N76°21'46"W
L22	23.74'	N88°27'10"W
L23	34.97'	N12°20'53"E
L24	2.80'	N55°58'11"W
L25	46.98'	N85°40'40"E
L26	24.84'	S40°00'25"W
L27	10.20'	N48°34'46"W
L28	18.85'	N88°30'24"E
L29	24.48'	S06°44'30"W
L30	1.46'	N38°27'18"W
L31	24.15'	S54°30'33"W
L32	75.18'	S49°05'13"W
L33	21.98'	N67°02'46"W
L34	37.28'	S45°57'18"W
L35	37.27'	S75°00'15"W
L36	35.81'	S64°01'28"W
L37	22.67'	N75°53'44"W
L38	22.73'	S67°05'40"W
L39	27.03'	S22°30'01"E
L40	13.48'	S84°50'53"E

Line Data Table		
Line #	Distance	Bearing
L41	8.22'	S75°58'14"E
L42	10.34'	N77°52'10"E
L43	36.71'	N88°07'44"E
L44	33.62'	S88°47'32"E
L45	31.04'	N67°18'54"E
L46	30.40'	S89°07'22"E
L47	28.53'	N88°53'28"E
L48	18.63'	S86°57'13"E
L49	13.52'	N88°12'07"E
L50	8.12'	N74°30'54"E
L51	7.40'	N00°02'00"E
L52	7.40'	S88°18'32"E
L53	16.40'	N87°11'23"E
L54	8.14'	N84°53'17"E
L55	8.35'	N89°50'37"E
L56	43.63'	S89°30'08"E
L57	12.56'	N85°56'45"E
L58	10.38'	N78°30'25"E
L59	38.70'	N87°30'54"E
L60	8.75'	N40°53'35"E

Line Data Table		
Line #	Distance	Bearing
L61	14.06'	S89°50'22"E
L62	8.79'	N76°08'53"E
L63	11.58'	S80°18'14"E
L64	10.04'	S89°34'19"E
L65	32.15'	N88°30'38"W
L66	32.06'	S81°43'23"W
L67	47.40'	S87°40'12"W
L68	15.37'	N88°38'23"W
L69	10.34'	S86°00'06"W
L70	73.15'	S89°05'17"W
L71	15.18'	S84°11'09"W
L72	18.94'	S89°28'38"W
L73	41.00'	N88°53'35"W
L74	7.03'	S85°21'18"W
L75	36.80'	N88°53'54"W
L76	17.56'	S74°57'38"W
L77	15.87'	S89°09'11"W
L78	34.11'	N79°00'08"E
L79	31.42'	S79°50'08"W

Curve Data Table					
Curve #	Arc	Radius	Delta	Chord Bearing	Chord
C1	83.31'	59.84'	080°20'43"	N44°47'32"E	84.14'
C2	189.33'	552.15'	027°33'04"	N75°17'48"W	187.70'
C3	87.23'	230.02'	021°43'37"	N79°43'20"W	86.70'
C4	46.68'	134.68'	017°13'48"	S81°28'28"W	46.49'
C5	44.60'	225.07'	011°53'12"	S81°53'14"W	44.58'
C6	141.08'	132.58'	061°14'20"	N58°23'08"W	135.04'
C7	78.58'	130.00'	034°37'54"	N10°01'53"W	77.38'
C8	20.65'	108.53'	011°08'33"	N05°47'07"E	20.62'
C9	377.82'	70.00'	309°14'07"	N88°55'04"E	60.00'
C10	377.82'	70.00'	309°14'40"	N88°22'30"E	60.00'
C11	377.78'	70.00'	309°12'04"	N51°10'01"E	60.05'
C12	108.48'	129.78'	047°53'02"	N24°40'48"W	105.35'
C13	109.15'	130.00'	048°06'23"	N24°40'32"W	105.87'
C14	92.39'	130.63'	040°31'47"	N20°47'50"W	90.48'
C15	83.09'	132.55'	035°54'30"	N68°33'12"W	81.73'
C16	60.20'	62.33'	055°20'20"	N12°42'57"W	57.89'
C17	100.63'	280.02'	020°10'24"	S79°31'38"E	100.00'
C18	125.36'	442.00'	016°14'54"	S78°15'08"E	124.93'
C19	23.82'	38.00'	035°56'10"	S70°00'53"E	23.44'
C20	6.42'	10.00'	037°35'54"	S71°01'12"E	6.30'

Curve Data Table					
Curve #	Arc	Radius	Delta	Chord Bearing	Chord
C21	6.52'	10.06'	037°10'25"	N71°19'12"E	6.45'
C22	26.10'	38.20'	039°08'57"	N72°18'28"E	25.60'
C23	48.87'	264.47'	010°47'45"	S82°45'11"E	48.80'
C24	83.07'	171.78'	027°38'21"	S84°20'30"E	83.47'
C25	115.04'	173.27'	038°02'32"	S72°35'36"E	112.84'

APPROVED
FINAL PLAT

Approved by the Town of Bartonville for filing in the office of the County Clerk of Denton County, Texas

APPROVED BY: Planning and Zoning Commission
Town of Bartonville, Texas

[signature] Signature of Chairman — Date [illegible]

APPROVED BY: [illegible], Town of Bartonville, Texas

[signature] Signature of Mayor — Date [illegible]

ATTEST:

[signature] Town Secretary — Date [illegible]

Cross Timbers Water Authority

[signature] Signature — Date 4/28/22

[illegible] Printed Name

Cross Timbers Water

[illegible]

ENGINEER
GRANNELL GRANNELL MARTIN ENGINEERING
2570 FM 407, Suite 209
Highland Village, Texas 75077
972-691-6633
Point of Contact: Cody Grannell

OWNER/DEVELOPER
Bartonville South 1031, LLC
122 Loveley Lane
Argyle, Texas 76226

WINDROSE
LAND SURVEYING | PLATTING
[illegible]
Point of Contact
Grayson Callahan
972-370-5871
[illegible]
Last Revision Date: 01/26/2022

AMENDED PLAT
EAGLE RIDGE ADDITION
Being a 87.168 acre tract of land
situated in the A.R. Loving Survey,
Abstract Number 736,
38 Residential Lots and 3 HOA Lots
Town of Bartonville,
Denton County, Texas
2021

Filed for Record in the Official Records Of: Denton County
On: [illegible]
[illegible] PLAT Records
[illegible] BARTONVILLE ADDITION
Doc Number: 2022-[illegible]
Number of Pages: 1
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Order #: [illegible]
By: [illegible]

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, FORT WORTH DISTRICT
P. O. BOX 17300
FORT WORTH, TEXAS 76102-0300

February 23, 2022

Regulatory Division

SUBJECT: Project Number SWF-2021-00479, Eagle Ridge

Mr. Omar Oweis
Bartonville South 131 LLC
737 Evergreen Drive
Hurst, Texas 76054
omaroweis@gmail.com

Dear Mr. Oweis:

This letter is in regard to information received October 15, 2021, and subsequent information received November 17, and December 8, 2021, January 3, 2022, February 11, 15, 22, and 23, 2022, concerning a proposal by Bartonville South 131, LLC to construct a residential development located in the City of Bartonville, Denton County, Texas. This project has been assigned Project Number SWF-2021-00479. Please include this number in all future correspondence concerning this project.

Under Section 404 of the Clean Water Act, the U.S. Army Corps of Engineers (USACE) regulates the discharge of dredged and fill material into waters of the United States, including wetlands. USACE responsibility under Section 10 of the Rivers and Harbors Act of 1899 is to regulate any work in, or affecting, navigable waters of the United States. Based on the description of the proposed work, and other information available to us, we have determined this project will involve activities subject to the requirements of Section 404.

We have reviewed this project under the pre-construction notification procedures of Nationwide Permit General Condition 32 (Federal Register, Vol. 86, No. 8, Wednesday, January 13, 2021). We have determined the discharge of dredged or fill materials into waters of the United States associated with this project is authorized by Nationwide Permit 29 for Residential Developments. To use this permit, the permittee must ensure the work is in compliance with the specifications and conditions for the permit listed above, found at https://www.swf.usace.army.mil/Missions/Regulatory/Permitting/Nationwide-General-Permits/, and the special conditions listed below. Additionally, all activities must comply with the water quality certification conditions of the Texas Commission on Environmental Quality (TCEQ) located at https://www.swf.usace.army.mil/Portals/47/docs/regulatory/Permitting/General%20Permitting/TX_401_cert.pdf?ver=rle8wttu6MRCA2s6Q4QQMq%3d%3d.

The special conditions are as follows:

1) The permittee shall dedicate in perpetuity by easement, as a protected area, the remaining wetland, pond, and stream acreage. The easement area shall not be disturbed, except by those activities that would not adversely affect the extent, condition, and function of the easement area. The permittee shall survey the area, develop an appropriate real estate instrument for the surveyed area, submit the draft real estate instrument to the USACE for review and approval, and record the USACE approved real estate instrument with the County Clerk. The permittee shall provide a copy of the recorded real estate instrument to the USACE prior to commencing any ground-disturbing activity within the permit area. The real estate instrument shall not be removed from the deed or modified without written approval of the USACE and conveyance of any interest in the property must be subject to the real estate instrument. If you cannot comply with this condition, please contact this office for project evaluation under the Standard Individual Permit process.

2) The permittee shall implement and abide by the mitigation plan titled "Mitigation Plan, Proposed Eagle Ridge Development prepared by Groundwater & Environmental Services, Inc., dated December 2021 and Revised February 15, 2022. The permittee shall implement the mitigation plan prior to commencing any ground-disturbing activity within waters of the United States. Completion of all elements of this mitigation plan is a requirement of this permit.

3) The permittee shall debit 1.1 Riparian Buffer Credits from the Trinity River Mitigation Bank in compliance with the provisions of the "Mitigation Banking Instrument Agreement, Trinity River Mitigation Bank, Ltd., Tarrant County, Texas, Permit Application No.: 199800370," dated February 2001, revised August 2002.

4) The permittee shall debit 112.83 In-Channel Stream Credits from the Mill Branch Mitigation Bank in compliance with the provisions of the "Mill Branch Mitigation Bank Mitigation Banking Instrument" dated March 2012.

5) The permittee shall debit 0.7 Wetland Credits from the Bunker Sands Mitigation Bank in compliance with the provisions of the "Mitigation Banking Instrument, Bunker Sands Mitigation Bank, Kaufman County, Texas," dated April 30, 2008.

These debits shall compensate off-site for unavoidable adverse project impacts that would not be compensated for by on-site mitigation. The permittee shall complete the mitigation bank transactions and provide documentation to the USACE that the transactions have occurred prior to commencing any ground-disturbing activity within waters of the United States.

Failure to comply with these specifications and conditions invalidates the authorization and may result in a violation of the Clean Water Act.

Our verification for the construction of this activity under this nationwide permit is valid until March 14, 2026, unless prior to that date the nationwide permit is suspended, revoked, or modified such that the activity would no longer comply with the terms and conditions of the nationwide permit on a regional or national basis. The USACE will issue a public notice

announcing the changes when they occur. Furthermore, activities that have commenced, or are under contract to commence, in reliance on a nationwide permit will remain authorized provided the activity is completed within 12 months of the date of the nationwide permit's expiration, modification, or revocation, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend, or revoke the authorization in accordance with 33 CFR 330.4(e) and 33 CFR 330.5(c) or (d). Continued confirmation that an activity complies with the specifications and conditions, and any changes to the nationwide permit, is the responsibility of the permittee.

Our review of this project also addressed its effects on threatened and endangered species. Based on the information provided, we have determined this project will not affect any species listed as threatened or endangered by the U.S. Fish and Wildlife Service within our permit area. However, please note you are responsible for meeting the requirements of General Condition 18 on endangered species.

The permittee must sign and submit to us the enclosed certification that the work, including any proposed mitigation, was completed in compliance with the nationwide permit. The permittee should submit the certification within 30 days of the completion of work.

This permit should not be considered as an approval of the design features of any activity authorized or an implication that such construction is considered adequate for any purpose intended. It does not authorize any damages to private property, invasion of private rights, or any infringement of federal, state, or local laws or regulations.

Thank you for your interest in our nation's water resources. If you have any questions concerning our regulatory program, please refer to our website at http://www.swf.usace.army.mil/Missions/Regulatory or contact Mr. Frederick J. Land at the address above, by telephone (817) 886-1729, or by email Fred.J.Land@usace.army.mil, and refer to your assigned project number.

Please help the regulatory program improve its service by completing the survey on the following website: https://regulatory.ops.usace.army.mil/customer-service-survey/.

Sincerely,

For: Brandon W. Mobley
Chief, Regulatory Division

Enclosure

Copy Furnished:

Mr. Joseph Schwartz
jschwartz@gesonline.com

Groundwater & Environmental Services, Inc.
101 East Southwest Parkway, Suite 114
Lewisville, TX 75067

T. 800.871.6417

January 3, 2021

Mr. Fred Land
U.S. Army Corps of Engineers
Fort Worth District CESWF-PER-R
819 Taylor Street, Rm 3A37
Fort Worth, TX 76102-0300

Re: Revised Nationwide Permit 29 Application for Proposed Eagle Ridge Residential Development in Bartonville, Denton County, Texas (SWF-2021-00479)

Dear Mr. Land:

Enclosed please find the revised 2021 Nationwide Permit 29 Application and required attachments for the Proposed Eagle Ridge Residential Development in Bartonville, Denton County, Texas. All relevant information required for the Nationwide Permit is enclosed. Bartonville South 1031, LLC. is the Permittee and Groundwater & Environmental Services, Inc. (GES) is the wetland consultant and agent.

If you have any questions, please contact Joseph Schwartz at (800) 871-6417 extension 3404.

Groundwater & Environmental Services, Inc.

Sincerely,

Joseph Schwartz
Principal Environmental Scientist

Enclosure

U.S. Army Corps of Engineers (USACE)
Fort Worth District

Nationwide Permit (NWP) Pre-Construction Notification (PCN) Template

This application template integrates requirements of the Nationwide Permit Program within the Fort Worth District, including General and Regional Conditions. Please consult instructions included at the end prior to completing this template.

Contents

DESCRIPTION OF NWP 29 – RESIDENTIAL DEVELOPMENTS

Residential Developments. Discharges of dredged or fill material into non-tidal waters of the United States for the construction or expansion of a single residence, a multiple unit residential development, or a residential subdivision. This NWP authorizes the construction of building foundations and building pads and attendant features that are necessary for the use of the residence or residential development. Attendant features may include but are not limited to roads, parking lots, garages, yards, utility lines, storm water management facilities, septic fields, and recreation facilities such as playgrounds, playing fields, and golf courses (provided the golf course is an integral part of the residential development).

The discharge must not cause the loss of greater than 1/2-acre of non-tidal waters of the United States. This NWP does not authorize discharges of dredged or fill material into non-tidal wetlands adjacent to tidal waters.

Subdivisions. For residential subdivisions, the aggregate total loss of waters of U.S. authorized by this NWP cannot exceed 1/2-acre. This includes any loss of waters of the U.S. associated with development of individual subdivision lots.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 32.) (Sections 10 and 404)

Part I: NWP Conditions and Requirements Checklist

To ensure compliance with the General Conditions (GC), in order for an authorization by a NWP to be valid, please answer the following questions:

1. **Navigation (Applies to Section 10 waters [i.e. navigable waters of the U.S.], see instruction 4 for link to list):**
   - **a.** Does the project cause more than a minimal adverse effect on navigation?
     ☐ Yes ☐ No ☒ N/A
   - **b.** Does the project require the installation and maintenance of any safety lights and signals prescribed by the U.S. Coast Guard on authorized facilities in navigable waters of the U.S.?
     ☐ Yes ☐ No ☒ N/A
   - **c.** Does the Applicant understand and agree that if future operations by the U.S. require the removal, relocation, or other alteration of the structure or work herein authorized, or if, in the

opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the Applicant will be required, upon due notice from the USACE, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the U.S.; and no claim shall be made against the U.S. on account of any such removal or alteration?
☐ Yes ☐ No ☒ N/A

If you answered yes to question a. or b. above, or if you answered no to question c. above, please explain how the project would be in compliance with this GC or be aware that the project would require an individual permit application:

2. Aquatic Life Movements:

a. Does the project substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area? ☐ Yes ☒ No

b. Is the project's primary purpose to impound water? ☐ Yes ☒ No

c. Will culverts placed in streams be installed to maintain low flow conditions to sustain the movement of those aquatic species? ☒ Yes ☐ No ☐ N/A

If you answered yes to question a. or b. above, or if you answered no to question c. above, please explain how the project would be in compliance with this GC or be aware that the project would require an individual permit application:

3. Spawning Areas:

a. Does the project avoid spawning areas during the spawning season to the maximum extent practicable? ☒ Yes ☐ No ☐ N/A

b. Does the project result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area?
☐ Yes ☒ No ☐ N/A

If you answered no to question a. above, or if you answered yes to question b. above, please explain how the project would be in compliance with this GC or be aware that the project would require an individual permit application:

4. Migratory Bird Breeding Areas:

a. Does the project avoid waters of the U.S. that serve as breeding areas for migratory birds to the maximum extent practicable? ☒ Yes ☐ No ☐ N/A

If you answered no to question a. above, please explain how the project would be in compliance with this GC or be aware that the project would require an individual permit application:

5. Shellfish Beds:

a. Does the project occur in areas of concentrated shellfish populations? ☐ Yes ☒ No

If you answered yes to question a. above, please explain how the project would be in compliance with this GC or be aware that the project would require an individual permit application:

6. Suitable Material:

a. Does the project use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.)?
☐ Yes ☒ No

b. Is the material used for construction or discharged in a water of the U.S. free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act)? ☒ Yes ☐ No

If you answered yes to question a. above, or if you answered no to question b. above, please explain how the project would be in compliance with this GC or be aware that the project would require an individual permit application:

7. Water Supply Intakes:

a. Does the project occur in the proximity of a public water supply intake? ☐ Yes ☒ No

If you answered yes to question a. above, please explain how the project would be in compliance with this GC or be aware that the project would require an individual permit application:

8. Adverse Effects From Impoundments:

a. Does the project create an impoundment of water? ☐ Yes ☒ No

b. If you answered yes to question a. above, are the adverse effects (to the aquatic system due to accelerating the passage of water, and/or restricting its flow) minimized to the maximum extent practicable? ☐ Yes ☐ No ☒ N/A

If you answered no to question b. above, please explain how the project would be in compliance with this GC or be aware that the project would require an individual permit application:

9. Management of Water Flows:

a. Does the project maintain the pre-construction course, condition, capacity, and location of open waters to the maximum extent practicable, for each activity, including stream channelization and storm water management activities? ☒ Yes ☐ No

b. Will the project be constructed to withstand expected high flows? ☒ Yes ☐ No

c. Will the project restrict or impede the passage of normal or high flows? ☐ Yes ☒ No

If you answered no to question a. or b. above, or if you answered yes to question c. above, please explain how the project would be in compliance with this GC or be aware that the project would require an individual permit application:

10. Fills Within 100-Year Floodplains:

a. Does the project comply with applicable FEMA-approved state or local floodplain management requirements? ☒ Yes ☐ No ☐ N/A

If you answered no to question a. above, please explain how the project would be in compliance with this GC or be aware that the project would require an individual permit application:

11. Equipment:

a. Will heavy equipment working in wetlands or mudflats be placed on mats, or other measures be taken to minimize soil disturbance? ☒ Yes ☐ No ☐ N/A

If you answered no to question a. above, please explain how the project would be in compliance with this GC or be aware that the project would require an individual permit application:

12. Soil Erosion and Sediment Controls:

a. Will the project use appropriate soil erosion and sediment controls and maintain them in effective operating condition throughout construction? ☒ Yes ☐ No

b. Will all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, be permanently stabilized at the earliest practicable date? ☒ Yes ☐ No

c. Be aware that if work will be conducted within waters of the U.S., Applicants are encouraged to perform that work during periods of low-flow or no-flow.

If you answered no to question a. or b. above, please explain how the project would be in compliance with this GC or be aware that the project would require an individual permit application:

13. Removal of Temporary Fills:

a. Will temporary fills be removed in their entirety and the affected areas returned to pre-construction elevations? ☒ Yes ☐ No ☐ N/A

b. Will the affected areas be revegetated, as appropriate? ☒ Yes ☐ No ☐ N/A

If you answered no to question a. or b. above, please explain how the project would be in compliance with this GC or be aware that the project would require an individual permit application:

14. Proper Maintenance:

a. Will any authorized structure or fill be properly maintained, including maintenance to ensure public safety? ☒ Yes ☐ No

If you answered no to question a. above, please explain how the project would be in compliance with this GC or be aware that the project would require an individual permit application:

15. Single and Complete Project:

a. Does the Applicant certify that the project is a "single and complete project" as defined below? ☒ Yes ☐ No

Single and complete project:

Single and complete linear project: A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term "single and complete project" is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

Single and complete non-linear project: For non-linear projects, the term "single and complete project" is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and complete non-linear project must have independent utility (see definition of "independent utility"). Single and complete non-linear projects may not be "piecemealed" to avoid the limits in a NWP authorization.

Independent utility: Defined as a test to determine what constitutes a single and complete non-linear project in the Corps regulatory program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

16. Wild and Scenic River:

There are no Wild and Scenic Rivers within the geographic boundaries of the Fort Worth District. Therefore, this GC does not apply.

17. Tribal Rights:

a. Will the project or its operation impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights? ☐ Yes ☐ No ☒ N/A

If you answered yes to question a. above, please explain how the project would be in compliance with this GC or be aware that the project would require an individual permit application:

18. Endangered Species (see also Box 8 in Part III):

a. Is the project likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or will the project directly or indirectly destroy or adversely modify the critical habitat of such species? ☐ Yes ☒ No

b. Might the project affect any listed species or designated critical habitat? ☐ Yes ☒ No

c. Is any listed species or designated critical habitat in the vicinity of the project? ☐ Yes ☒ No

d. If the project "may affect" a listed species or critical habitat, has Section 7 or Section 10(a) ESA consultation addressing the effects of the proposed activity been completed? ☐ Yes ☐ No ☒ N/A

If you answered yes to question a. or b. or c. above, or if you answered no to question d. above, please explain how the project would be in compliance with this GC or be aware that the project would require an individual permit application:

19. Migratory Birds and Bald and Golden Eagles:

a. Does the project have the potential to impact nests, nesting sites, or rookeries of migratory birds, bald or golden eagles? ☐ Yes ☒ No ☐ N/A

If you answered yes to question a. above, you are responsible for contacting the appropriate local office of the U.S. Fish and Wildlife Service to obtain any "take" permits required under the U.S. Fish and Wildlife Service's regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act.

20. Historic Properties (see also Box 9 in Part III):

a. Does the project have the potential to cause effects to any historic properties listed, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties? ☐ Yes ☒ No ☐ N/A

If you answered yes to question a. above, please explain how the project would be in compliance with this GC or be aware that the project would require an individual permit application:

21. Discovery of Previously Unknown Remains and Artifacts:

If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, *you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed.* The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters:

a. Will the project impact critical resource waters, which include NOAA-designated marine sanctuaries, National Estuarine Research Reserves, state natural heritage sites, and

outstanding national resource waters or other waters officially designated by a state as having particular environmental or ecological significance and identified by the district engineer after notice and opportunity for public comment? ☐Yes ☒ No

If you answered yes to question a. above, be aware that discharges of dredged or fill material into waters of the U.S. are not authorized by NWP 29 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

23. Mitigation (see also Box 10 in Part III):

a. Will the project include appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal? ☐ Yes ☒ No

If you answered no to question a. above, please include an explanation in Box 10 of why no mitigation would be necessary in order to be in compliance with this GC or be aware that the project would require an individual permit application.

24. Safety of Impoundment Structures:

a. Has the impoundment structure been safely designed to comply with established state dam safety criteria or has it been designed by qualified persons? ☐ Yes ☐ No ☒ N/A

If you answered yes to question a above, non-federal applicants may be required to provide documentation that the design has been independently reviewed by similarly qualified persons with appropriate modifications to ensure safety. If you answered no, please include an explanation in Box 10 of why the structure is exempt from state dam safety criteria or be aware that the project may require an individual permit application.

25. Water Quality (see also Box 11 in Part III):

a. If in Texas, does the project comply with the conditions of the TCEQ water quality certification for NWP 29? ☒ Yes ☐ No ☐N/A

b. Will the project result in the loss of 1,500 linear feet or more of stream bed? ☐ Yes ☒ No

c. If in Louisiana, does the project comply with the conditions of the LDEQ water quality certification for NWP 29? ☐ Yes ☐ No ☒N/A

If you answered no to question a. or c. above, please be aware that the project would require an individual permit application. Additionally, if you answered yes to question b. above, please be aware that the project would require an individual TCEQ 401 water quality certification.

26. Coastal Zone Management:

The Fort Worth District does not cover any Coastal Zone; therefore, this GC does not apply.

27. Regional and Case-By-Case Conditions:

See the Regional Conditions checklist to ensure compliance with this GC.

28. Use of Multiple Nationwide Permits:

a. Does the project use more than one NWP for a single and complete project? ☐ Yes ☒ No

b. If you answered yes to question a. above, be aware that unless the project's acreage loss of waters of the U.S. authorized by the NWPs is below the acreage limit of the NWP with the highest specified acreage limit, no NWP can be issued and the project would require an individual permit application.

If you answered yes to question a. above, please explain how the project would be in compliance with this GC and what additional NWP number you intend to use:

29. Transfer of Nationwide Permit Verifications:

a. Does the Applicant agree that if he or she sells the property associated with the nationwide permit verification, the Applicant may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate USACE district office to validate the transfer?
☒ Yes ☐ No

30. Compliance Certification:

a. Does the Applicant agree that if he or she receives the NWP verification from the USACE, they must submit a signed certification regarding the completed work and any required mitigation (the certification form will be sent by the USACE with the NWP verification letter)?
☒ Yes ☐ No

31. Activities Affecting Structure or Works Built by the United States

a. Does the project temporarily or permanently alter and/or occupy a USACE federally authorized Civil Works project? ☐ Yes ☒ No

If you answered yes to question a. above, notification is required in accordance with general condition 32, for any activity that requires permission from the Corps. The district engineer may authorize activities under these NWPs only after a statement confirming that the project proponent has submitted a written request for section 408 permission from the Corps office having jurisdiction over that USACE project.

32. Pre-Construction Notification:
All activities under NWP 29 require a PCN submittal to the Fort Worth District.

To ensure compliance with the NWP 29-specific requirements please answer the following questions:

1. Does the project involve the construction or expansion of a single residence, a multiple-unit residential development, or a residential subdivision? ☒ Yes ☐ No

If you answered no to question 1. above, be aware that discharges of dredged or fill material into waters of the U.S. are not authorized by NWP 29 and would require an individual permit application.

2. Does the project (for residential subdivisions, including the development of individual subdivision lots) cause the loss of greater than 1/2-acre of non-tidal waters of the U.S.? ☐ Yes ☒ No

If you answered yes to question 2. above, be aware that discharges of dredged or fill material into waters of the U.S. are not authorized by NWP 29 and would require an individual permit application. Note: For residential subdivisions, the aggregate total loss of waters of the U.S. authorized by this NWP cannot exceed 1/2-acre, including any loss of waters of the U.S. associated with development of individual subdivision lots.

REGIONAL CONDITIONS CHECKLIST

To ensure compliance with the Regional Conditions within the Fort Worth District, in the State of Texas, in order for an authorization by a NWP to be valid, please answer the following questions (for projects in Texas only):

1. Does the project involve a discharge into any of the following habitat types?:

☐ Pitcher plant bogs ((*Sarracenia* spp.) and/or sundews (*Drosera* spp.) and/or Bald Cypress/Tupelo swamps ((*Taxodium distichum*) and/or water tupelo (*Nyssa aquatica*))?

☐ Karst Zones 1 and 2 located in Bexar, Travis and Williamson Counties (see https://www.fws.gov/southwest/es/AustinTexas/Maps_Data.html).

☐ Caddo Lake and associated areas that are designated as "Wetland of International Importance" under the Ramsar Convention (see http://caddolakedata.us/media/145/1996caddolakeramsar.pdf or http://caddolakedata.us/media/144/1996caddolakeramsar.jpg).

☐ Reaches of rivers (and their adjacent wetlands) that are included in the Nationwide Rivers Inventory (see https://www.nps.gov/subjects/rivers/nationwide-rivers-inventory.htm)/

If you answered yes to any of the above choices, notification of the District Engineer is required in accordance with NWP GC 32, and the USACE will coordinate with other resource agencies as specified in NWP GC 32(d).

2. Is the activity located at a site approved as a compensatory mitigation site (either permittee-responsible, mitigation bank and/or in lieu fee) under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899?

☐ Yes ☒ No

If you answered yes to question 2. above, notification of the District Engineer is required in accordance with NWP GC 32.

To ensure compliance with the Regional Conditions within the Fort Worth District, in the State of Louisiana, in order for an authorization by a NWP to be valid, please answer the following questions (for projects in Louisiana only):

1. This NWP, via disavowal of water quality certification by the Louisiana Department of Environmental Quality, is considered **denied** without prejudice for all developments except those associated with construction or expansion of a single residence. For all developments consisting of more than a single residence, individual requests for approval under this NWP will be considered on a case-by-case basis only after receipt by the appropriate Corps district of an individual water quality certification, waiver, or other approval by the Louisiana Department of Environmental Quality.

Additional Discussion:

Part II: Project Information (2021-00479)

Box 1. Project Name: Eagle Ridge	**Applicant Name** Bartonville South 1031, LLC.
Applicant Title	**Applicant Company, Agency, etc.** Bartonville South 1031, LLC.
Mailing Address 737 Evergreen Drive, Hurst, Texas 76054	Applicant's internal tracking number (if any)

Work Phone with area code	Cell Phone with area code	E-mail Address
	512-924-7279	omaroweis@gmail.com

Relationship of applicant to property:
☑ Owner ☐ Purchaser ☐ Lessee ☐ Other:

Application is hereby made for verification that subject regulated activities associated with subject project qualify for authorization under a USACE nationwide permit or permits as described herein. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief, such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities. I hereby grant to the agency to which this application is made the right to enter the above-described location to inspect the proposed, in-progress, or completed work. I agree to start work only after all necessary permits have been received.

Signature of applicant →	Date (mm/dd/yyyy) 2 1

Box 2. Authorized Agent/Operator Name and Signature:
(If an agent is acting for the applicant during the permit process)
Joseph Schwartz

Agent/Operator Title Principle Environmental Scientist	**Agent/Operator Company, Agency, etc.** Groundwater & Environmental Services, Inc.
Mailing Address 101 E. Southwest Pkwy, Suite 114, Lewisville, TX 75067	Agent's internal tracking number (if any)

Work Phone with area code	Cell Phone with area code	E-mail Address
800-871-6417 x3403		jschwartz@gesonline.com

I hereby authorize the above-named agent to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application. I understand that I am bound by the actions of my agent, and I understand that if a federal or state permit is issued, I, or my agent, must sign the permit.

Signature of applicant	Date (mm/dd/yyyy) 12/27/21

I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief, such information is true, complete, and accurate.

Signature of authorized agent	Date (mm/dd/yyyy) 1/3/22

Box 3. Name of property owner, if other than applicant:

☐ Multiple Current Owners (If multiple current property owners check here and include a list as an attachment)

Owner Title	**Owner Company, Agency, etc.**
Mailing Address	
Work Phone with area code	Home/Cell Phone with area code

Box 4. Project location, including street address, city, county, state, and zip code where proposed activity will occur: Located west of the intersection of FM 407 and Hilltop Road in Bartonville, Denton County, Texas.
Nature of Activity (Description of project; include all features; see instructions)**:**
Project Purpose (Description of the reason or purpose of the project; see instructions)**:** Development of a residential development in a growing area of Bartonville, Texas.
Has a delineation of waters of the U.S., including wetlands, been completed? (see instructions) ☒ Yes, Attached ☐ No If a delineation has been completed, has it been verified in writing by the USACE? ☐ Yes, Date of approved or preliminary jurisdictional determination (mm/dd/yyyy): USACE project: ☒ No
Are color photographs of the existing conditions available? ☒ Yes, Attached ☐ No Are aerial photographs available? ☒ Yes, Attached ☐ No
☒ **Multiple Waters of the U.S.** (If multiple waters of the U.S., check here and complete the table in Attachment D)
Waterbody(ies) (if known; otherwise enter "an unnamed tributary to")**:** Wetlands and an unnamed tributary to Loving Branch. Tributary(ies) to what known, downstream waterbody(ies): Loving Branch flows into Hickory Creek, which eventually drains into Elm Fork Trinity River.
Latitude & longitude (Decimal Degrees): 33.100265N, -97.134600W
USGS Quad map name(s): Argyle, Texas
Watershed(s) and other location descriptions, if known: Hickory Creek, which drains into Elm Fork Trinity River (Segment 0822)
Directions to the project location:

Part III: Project Impacts and Mitigation

Box 5. Reason(s) for Discharge into waters of the U.S.: Discharge of fill into wetlands and stream to allow for the building of single-family residential lots.
Type(s) of material being discharged and the amount of each type in cubic yards: 750 cubic yards of clean fill and 50 cubic yards of concrete culvert.
Total surface area (in acres) of wetlands or other waters of the U.S. to be filled: 0.459 acres of non-forested wetlands and 0.027 acres of ephemeral stream.

Indicate the proposed impacts to **waters of the U.S.** in ACRES (for all aquatic resources) and LINEAR FEET (for rivers and streams) and identify the impact(s) as permanent and/or temporary for each waterbody type listed below. The table below is intended as a tool to summarize impacts by resource type for planning compensatory mitigation and does not replace the table of waters of the U.S. in Attachment D for those projects with impacts to multiple waters of the U.S.

	Permanent			Temporary		
Waterbody Type	**Acres**	**Linear feet in length**	**Linear feet in width**	**Acres**	**Linear feet in length**	**Linear feet in width**
Emergent wetlands	0.459					
Scrub/Shrub wetlands						
Forested wetlands						
Perennial streams						
Intermittent streams						
Impoundments						
Other: Ephemeral stream	0.027	598				
Total:	0.486					

Potential indirect and/or cumulative impacts of proposed discharge (if any):
none

Required drawings (see instructions):
Vicinity map: ☒ Attached
To-scale plan view drawing(s): ☒ Attached
To-scale elevation and/or cross section drawing(s): ☒ Attached

Is any portion of the work already complete? ☐ Yes ☒ No
If yes, describe the work:

Box 6. Authority: (see instructions)
Is Section 10 of the Rivers and Harbors Act for projects affecting navigable waters applicable? ☐ Yes ☒ No **(see instructions for Fort Worth District Navigable Waters list)**

Is Section 404 of the Clean Water Act applicable? ☒ Yes ☐ No

Box 7. Larger Plan of Development:
Is the discharge of fill or dredged material for which Section 10/404 authorization is sought intended for a residential development project which is part of a larger plan of development?
☐ Yes ☒ No (If yes, please provide the information in the remainder of Box 7)

Does the residential development project have independent utility in addition to the larger plan of development? ☐ Yes ☐ No
If yes, explain:

If discharge of fill or dredged material is part of development, name and proposed schedule for that larger development (start-up, duration, and completion dates):

Location of larger development (If discharge of fill or dredged material is part of a plan of development, a map of suitable quality and detail for the entire project site should be included):

Total area in acres of entire project area (including larger plan of development, where applicable):

Box 8. Federally Threatened or Endangered Species (see instructions)

Please list any federally-listed (or proposed) threatened or endangered species or critical habitat potentially affected by the project (use scientific names (i.e., genus species), if known):
None

Have surveys, using U.S. Fish and Wildlife Service (USFWS) protocols, been conducted?
☒ Yes, Report attached ☐ No (explain):

If a federally-listed species would potentially be affected, please provide a description and a biological evaluation.
☐ Yes, Report attached ☐ Not attached

Has Section 7 ESA consultation been initiated by another federal agency?
☐ Yes, Initiation letter attached ☒ No

Has Section 10(a) ESA consultation been initiated for the proposed project?
☐ Yes, Initiation letter attached ☒ No

Has the USFWS issued a Biological Opinion?
☐ Yes, Report attached ☒ No
If yes, list date Opinion was issued (mm/dd/yyyy):

Box 9. Historic properties and cultural resources

Please list any historic properties listed (or eligible to be listed) on the National Register of Historic Places which the project has the potential to affect:
None.

Has an archaeological records search been conducted?
☐ Yes, Report attached ☒ No (explain): A review of the THC Historical Atlas indicated that no cultural resources are located on or near the project site.

Are any cultural resources of any type known to exist on-site?
☐ Yes ☒ No

Has an archaeological pedestrian survey been conducted for the site?
☐ Yes, Report attached ☒ No (explain): Due to the nature of the site and aquatic resources on site, it is very unlikely that historical or prehistorical resources are located on site.

Has Section 106 or SHPO consultation been initiated by another federal or state agency?
☐ Yes, Initiation letter attached ☒ No

Has a Section 106 MOA been signed by another federal agency and the SHPO?
☐ Yes, Attached ☒ No
If yes, list date MOA was signed (mm/dd/yyyy):

Box 10. Proposed Conceptual Mitigation Plan Summary (see instructions)

Measures taken to avoid and minimize impacts to waters of the U.S. (if any):
2.9 acres of wetlands, 2.971 acres of pond, and 0.035 acres of ephemeral stream will be preserved on site.

Applicant proposes combination of one or more of the following mitigation types:
☒ Mitigation Bank ☐ On-site ☐ Off-site (Number of sites:) ☐ None

Applicant proposes to purchase mitigation bank credits: ☒ Yes ☐ No
Mitigation Bank Name: MBMB, TRMB, BSMB
Number of Credits: MBMB: 93.1 ICC Credits; TRMB: 0.90 Legacy Credtis; BSMB: 0.7 low qualtiy wetland credits.

Indicate in ACRES (for all aquatic resources) and LINEAR FEET (for rivers and streams) the total quantity of waters of the U.S. proposed to be created, restored, enhanced, and/or preserved for purposes of providing compensatory mitigation. Indicate mitigation site type (on- or off-site) and number. Indicate waterbody type (emergent wetland, scrub/shrub wetland, forested wetland, perennial stream, intermittent stream, impoundment, other) or non-jurisdictional (uplands[1]).

Mitigation Site Type and Number	Waterbody Type	Created	Restored	Enhanced	Preserved
e.g., On-site 1	*Forested wetland*	*0.5 acre*			
e.g., Off-site 1	*Intermittent stream*		*500 LF*	*1000 LF*	
	Totals:				

[1] **For uplands, please indicate if designed as an upland buffer.**

Summary of Mitigation Work Plan (Describe the mitigation activities listed in the table above):
All mitigation for wetlands and stream impacts will be accomplished by the purchase of mitigation credits from a USACE-approved mitigation bank.

If no mitigation is proposed, provide a detailed explanation of why no mitigation would be necessary to ensure that adverse effects on the aquatic environment are minimal:

Has a conceptual mitigation plan been prepared in accordance with the USACE regulations and guidelines?
☒ Yes, Attached ☐ No (explain):

Mitigation site(s) latitude & longitude (Decimal Degrees):	USGS Quad map name(s):

Other location descriptions, if known:

Directions to the mitigation location(s):

Box 11. Water Quality Certification (see instructions)**:**

For Texas:
Does the project meet the conditions of the Texas Commission on Environmental Quality (TCEQ) Clean Water Act Section 401 certification for NWP 29? ☒ Yes ☐ No

Does the project include soil erosion control and sediment control Best Management Practices (BMPs)?
☒ Yes ☐ No

Does the project include BMPs for post-construction total suspended solids control?
☒ Yes ☐ No

Will the project result in the loss of 1,500 linear feet or more of stream bed? ☐ Yes ☒ No
If you answered yes to this question, you will need an individual TCEQ 401 certification review.

For Louisiana:
Individual water quality certification issued by LDEQ? ☐ Yes, Attached ☐ No
The project must have an individual water quality certification, waiver, or other approval by the Louisiana Department of Environmental Quality to be reviewed by the Fort Worth District.

Box 12. List of other certifications or approvals/denials received from other federal, state, or local agencies for work described in this application:

Agency	Approval Type[2]	Identification No.	Date Applied	Date Approved	Date Denied

[2] Would include but is not restricted to zoning, building, and floodplain permits.

Part IV: Attachments

	Included
A. Delineation of Waters of the U.S., Including Wetlands	☒
B. Color Photographs	☒
C. Table of Waters of the U.S. Impacted by the Proposed Project	☒
D. Required Drawings/Figures	☒
E. Threatened or Endangered Species Reports and/or Letters	☒
F. Historic Properties and Cultural Resources Reports and/or Letters	☐
G. Conceptual Mitigation Plan	☒
H. Other:	☐

End of Template

Attachments

Attachment A – Delineation of Waters of the U.S. Letter

Alpha Testing

Delineation of Waters of the United States

Proposed Development Site
West of the Intersection of FM 407 and Hilltop Road
Bartonville, Denton County, Texas

October 8, 2021
Revised December 30, 2021

Proposed Development Site

Delineation of Waters of the United States
West of the Intersection of FM 407 and Hilltop Road
Bartonville, Denton County, Texas

Prepared for:
Christopher Talamini
Alpha Testing
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Dallas, Texas 75229

Prepared by:
Groundwater & Environmental Services, Inc.
101 E. Southwest Parkway, Suite 114
Lewisville, Texas 75067
www.gesonline.com
GES Project:
4321084.92260.26002

Date:
October 8, 2021
Revised December 30, 2021

M. Peters

Madison Peters
Staff Environmental Scientist

Joseph Schwartz
Principal Environmental Scientist

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Appendices

1 Introduction

Groundwater and Environmental Services, Inc. (GES) performed a delineation of wetlands and other potential waters of the United States (as defined by the Clean Water Act) for an approximately 86.5-acre site in Bartonville, Denton County, Texas. Waters of the United States are referred to herein as "jurisdictional" waters, as they are potentially subject to federal regulation pursuant to Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899 under the jurisdiction of the U.S. Army Corps of Engineers (USACE). The delineation of Waters of the U.S. was performed by Ms. Madison Peters of GES on September 7, October 6, and December 14, 2021.

1.1 Project Site

The site is approximately 86.5 acres and is located west of the intersection of FM 407 and Hilltop Road in Bartonville, Denton County, Texas (**Figure 1**). The site is primarily undeveloped land currently used for horse pasture. A house, barn, and storage shed are located in the northwestern corner of the site. The site is bordered by Lone Star Way and FM 407 followed by residential development to the north, FM 407 followed by residential development to the east, residential development to the south, and an industrial facility and pond to the west.

2 Desktop Data Gathering and Analysis

Prior to the field assessments, background data were gathered and reviewed to preliminarily identify surface aquatic features on the site. The data gathered and reviewed are described below.

2.1 Federal Emergency Management Agency - Flood Hazard Zones Map

The Federal Emergency Management Agency (FEMA) Web Mapping Service (WMS) Web Server Data 2021 depicts the site as being located within "Zone X", areas determined to be outside of the 500-year floodplain (**Figure 2**).

2.2 United States Geologic Survey - Topographic Map

The United States Geologic Survey (USGS) topographic map for the project area (Denton County Mosaic, Natural Resource Conservation Service (NRCS 2021)) depicts a large pond in the western portion of the site (**Figure 3**). An unnamed stream is depicted flowing east from the pond through the central portion of the site. Elevation on the site ranges from 600 to 640 feet above mean sea level (msl).

2.3 United States Fish and Wildlife Service - National Wetlands Inventory

The United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) Wetlands Mapper depicts surface waters regardless of their federal or state jurisdiction. The USFWS National Wetlands Inventory Map is provided as **Figure 4** and depicts a Palustrine, Unconsolidated Bottom, Permanently Flooded, Diked/Impounded (PUBHh) feature and a Palustrine, Unconsolidated Bottom, Semipermanently Flooded, Diked/Impounded (PUBFh) feature in the western portion of the site. A Palustrine, Forested, Broad-Leaved Deciduous, Seasonally Flooded, Diked/Impounded (PFO1Ch) feature, followed by a Palustrine, Emergent, Persistent, Temporary Flooded, Diked/Impounded (PEM1Ah) feature, is depicted abutting the PUBHh feature. A Riverine, Intermittent, Streambed, Seasonally Flooded (R4SBC) feature connects the palustrine features and is depicted flowing east through the central portion of the site.

2.4 United States Department of Agriculture – Web Soil Survey

Soils on the site described in the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (WSS) were reviewed to characterize the project site soils. Six soil types and Water [W] are mapped on the site by the USDA. The USDA Soils Map is provided as **Figure 5.** The soil units mapped within the site are summarized below.

Map Unit Symbol	Map Unit Name	Major Component	Landform	Natural Drainage Class	Frequency of Ponding	Frequency of Flooding	Depth to Water Table	Hydric Soil Rating
13	Birome-Rayex-Aubrey complex, 2 to 15 percent slopes	Birome	Ridges	Well drained	None	None	More than 80 inches	No
		Rayex	Ridges	Well drained	None	None	More than 80 inches	No
		Aubrey	Ridges	Well drained	None	None	More than 80 inches	No
23	Callisburg fine sandy loam, 1 to 3 percent slopes	Callisburg	Ridges	Well drained	None	None	More than 80 inches	No
35	Gasil fine sandy loam, 1 to 3 percent slopes	Gasil	Ridges	Well drained	None	None	More than 80 inches	No
50	Konsil fine sandy loam, 1 to 3 percent slopes	Konsil	Ridges	Well drained	None	None	More than 80 inches	No
72	Silstid loamy fine sand, 1 to 5 percent slopes	Silstid	Ridges	Well drained	None	None	More than 80 inches	No
84	Wilson clay loam, 1 to 3 percent slopes	Wilson	Stream terraces	Moderately well drained	None	None	More than 80 inches	No

2.5 Agriculture Applied Climate Information System - Climatic Hydrology Index

NRCS Agriculture Applied Climate Information System (AgACIS) data were downloaded and reviewed using the Direct Antecedent Rainfall Evaluation Method (DAREM). The DAREM provided a wetland hydrology index of climatic conditions. Rainfall data were obtained from the DENTON 2 SE, TX weather station; which is the nearest weather station to the project with the range of historic data (1971 – 2021) available to calculate the DAREM. The DAREM indicated the project site experienced a normal hydrologic condition from the period of July to September 2021. The DAREM index data during the field assessment are summarized below.

Month Ranking	Month	WETS Percentile 30th	WETS Percentile 70th	Measured Rainfall[1]	Condition[2]	Weight[3]	Month Score
1st	September	1.23	3.74	0.09	1	3	3
2nd	August	1.1	2.89	6.33	3	2	6
3rd	July	0.87	2.69	3.09	3	1	3
						Total:	**12**

[1] Measured rainfall recorded at the weather station.

[2] Condition: 1 = monthly rainfall totals less than the 30-year Extreme Rainfall Distribution 30th percentile, 2 = monthly rainfall totals between the 30th and 70th percentile for the 30-year Extreme Rainfall Distribution, 3 = monthly rainfalls totals greater than the 70th percentile for the 30-year Extreme Rainfall Distribution.

[3]Monthly weights equal 3 for the prior month, 2 for the second prior month, and 1 for the third prior month.

DAREM Score (Observed Score)	6	7	8	9	10	11	**12**	13	14	15	16	17	18
DAREM Wetland Hydrologic Condition	Drier than normal				**Normal**					Wetter than normal			

3 Field Methodology

3.1 General

After review of background data, the field delineation was performed in accordance with the USACE Wetland Delineation Manual (USACE 1987), as later amended by USACE memoranda and the Regional Supplement for the Great Plains Region (USACE 2010).

Six delineation transects were selected to run perpendicular to the hydrological gradients and intercept suspected wetland areas and other jurisdictional features, based on the aforementioned review of desktop data. On each transect, a minimum of one plot was evaluated for each community type that was evidenced by a change in dominant vegetation type or hydrology. Visual observations of hydrology and vegetation were used to further characterize the size and extent of onsite jurisdictional features. Changes in community types denoting boundaries of jurisdictional features were mapped with the collection of GPS coordinates. This allows for jurisdictional features to be delineated in areas between delineation transects.

Field observations were recorded on a Corps of Engineers Wetland Determination Data Form – Great Plains Region (forms taken from USACE, 2010) (**Appendix A**), Stream Data Sheets (**Appendix B**), and North Carolina Division of Water Quality (NCDWQ) Stream Identification Forms (NCDWQ, 2005) (**Appendix C**). Photographs were taken from various positions at the site (**Appendix D**). Jurisdictional waters and delineation transects are shown on **Figure 6**.

3.2 Streams

Streams are identified as channels that have regular flow at a frequency and duration resulting in the formation of ordinary high water marks (OHWM). The OHWM is defined as "the line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas."

The North Carolina Division of Water Quality (NCDWQ) has published a Stream Identification Methodology to assist in the identification of ephemeral, intermittent, and perennial streams using geomorphic, hydrologic, and biological stream indicators. Identification of stream flow duration is accomplished by evaluating 26 different attributes of the stream and assigning a numeric score to each attribute. A scoring sheet (NCDWQ Stream Identification Form) is used to record the score for each attribute and determine the total numeric score for the stream under investigation. Scores less than 19.0 indicate ephemeral streams; scores 19.0 or greater provide sufficient evidence that at least an intermittent stream is present; and a score of 30.0 or more points may be used to determine the presence of a perennial stream.

3.3 Wetlands

Wetlands are defined as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include but are not limited to swamps, marshes, bogs, and similar areas. Wetlands have the following three diagnostic environmental characteristics: hydrophytic (or wetland) vegetation, wetland hydrology, and hydric soils. Evidence of all three parameters must be identified in order to make a positive wetland determination.

3.4 Vegetation

The plant species in each vegetation stratum in the immediate vicinity of the plot were identified and recorded. The plot radius for each stratum is indicated on the Wetland Determination Data Form. For rapid delineations in relatively simple plant communities, dominant species were selected visually using the 50/20 Rule as a general guide. Dominant species were chosen independently from each stratum of the community. In general, dominant species were the most abundant species that individually or collectively account for more than 50 percent of the total coverage of vegetation in the stratum, plus any other species that, by itself, accounts for at least 20 percent of the total. Absolute percent cover is the recommended abundance measure for plants in all vegetation strata.

Hydrophytic vegetation decisions were based on the wetland indicator status (Lichvar, et al 2016) of species that make up the plant community. The indicator status for vegetation in USACE National Wetland Plant List was recorded for each of the species listed. The following abbreviations were used on the data forms:

OBL:	Obligate wetland plants
FACW:	Facultative wetland plants
FAC:	Facultative plants
FACU:	Facultative upland plants
UPL:	Upland plants

The dominance test is the basic hydrophytic vegetation indicator, and is used in most situations. This test indicates that hydrophytic vegetation is present at the observation point when more than 50 percent of the dominant species have an indicator status of OBL, FACW, and/or FAC. If indicators of hydric soil and wetland hydrology are present on the site, but the vegetation initially fails the dominance test, then the prevalence index is used. The prevalence index is a weighted-average wetland indicator status of all plant species in the sampling plot, where each indicator status category is given a numeric code and weighting is by absolute percent cover.

For species listed as NI (reviewed but given no regional indicator) or NO (no known occurrence in the region at the time the list was compiled), the indicator status assigned to the species in the nearest adjacent region is applied. If the species is listed but no adjacent regional indicator is assigned, the species is not used to calculate hydrophytic vegetation indicators. Species that are not listed on the wetland plant list are considered to be UPL species.

3.5 Soils

Information regarding soils was recorded for each community at the site. A soil sample of at least the upper 16 inches was examined. The color of the matrix and any redox features in the sample were determined for each apparent layer in the sample using a soil color chart (Munsell, 2009). Indicators of iron and manganese reduction, translocation, or accumulation, sulfate reduction, or organic matter accumulation were recorded, if present. Soil characteristics were reported on the data form and checked against the mapped soil type to determine if the mapped soil type appeared to be accurate for the plot. A hydric soil indicator was chosen for the plot if the observed characteristics matched the conditions of the listed indicators for the Great Plains Region.

3.6 Hydrology

At each plot, visual indications of wetland hydrology were recorded. Wetland hydrology indicators fall into four groups:

1. Group A – Observation of surface water or saturated soils
2. Group B – Evidence of recent inundation
3. Group C – Evidence of current or recent soil saturation
4. Group D – Evidence from other site conditions or data

Additionally, the result of the FAC-neutral test was recorded. The FAC-neutral test is determined by first eliminating all FAC species from consideration. The FAC-Neutral test is positive if the number of remaining dominant species wetter than FAC (OBL, FACW) are greater than the number of dominant species drier than FAC (UPL, FACU). The FAC-neutral test is a Group D indicator.

3.7 Other Observations

Other observations pertinent to the outcome of the wetland delineation were recorded. Primarily, these observations were directed to land alterations that would impact hydrology, such as dams or other blockages, man-made drainage channels, or changes to on site or offsite topography that modify drainage patterns.

4 Results

The site is primarily undeveloped grassland currently used as horse pasture. Two ephemeral streams, four wetlands, and two open water features are located on site and are considered Waters of the United States. A non-jurisdictional roadside drainage is located along the eastern property boundary. Several wallows associated with agricultural use are located throughout the site. Some of these features met the definition of a wetland; however, these features are isolated, and are considered non-jurisdictional.

A summary of onsite jurisdictional waters of the United States is provided in **Table 1**. A map of waters of the United States and delineation transects for the site is provided as **Figure 6**. Routine Wetland Determination Data Forms for each observation location are included in **Appendix A**, Stream Data Sheets are included in **Appendix B**, and NCDWQ Stream Identification Forms are included as **Appendix C**. Photographs of plot locations are provided in **Appendix D**.

Four community types were identified on the project site:

Community Type A: Ephemeral Stream. This community type refers to the area between the OHWMs of the ephemeral streams located on the project site.

Community Type B: Open Water. This community type refers to the area between the OHWMs of the ponds located on the project site.

Community Type C: Emergent Wetland. This community refers to the emergent wetlands on site. Hydrophytic vegetation was dominant, wetland hydrology was observed, and hydric soils were present. Wetland vegetation was dominated by herbaceous (non-woody) plants.

Community Type D: Upland. This community refers to the majority of the site that is comprised of grassland and forested areas. These areas are not considered to be wetlands because they do not exhibit all three wetland characteristics.

Community Type A (**Table 1**) represents the area below the OHWMs of the ephemeral streams located on site. Tributary 1 originates onsite in the eastern portion of the property and flows generally east for approximately 61 linear feet (lf) with an average width between OHWMs of 1.25 ft. (0.002 acres) before exiting the site via a culvert at the eastern property boundary. Tributary 2 originates on site at Pond 1 and flows east for approximately 1,689 lf with an average width between OHWMs of 1.63 ft. (0.063 acres) before exiting the site via a culvert at the eastern property boundary. In addition to observations of a dry channel, the NCDWQ Stream Identification Form resulted in a score of 10.5 for Tributary 1, and scores of 8.5, and 17.25 for Tributary 2, supporting ephemeral determinations. Tributary 1 and Tributary 2 flow into Loving Branch. Loving Brach flows into Hickory Creek, which ultimately drains to the Elm Fork Trinity River, a traditionally navigable water.

Community Type B (**Table 1**) represents the area between the OHWMs of the ponds located on site. Pond 1 is an on-channel pond encompassing approximately 2.879 acres at the top of Tributary 2. Pond 1 receives flow from Pond 2 and Wetlands 3 and 4 and drains generally east

via Wetland 3 and Tributary 2. Pond 2 encompasses approximately 0.092 acres in the western portion of the site. Pond 2 appears to have previously drained via a culvert to the east but due to dense vegetation at the culvert outlet, Pond 2 now predominantly drains northeast via Wetland 4. Both ponds drain via Tributary 2 to Loving Branch.

Community Type C (**Table 1 and Table 2**) represents the emergent wetlands located on site. Wetland 1 is an emergent wetland fringe wetland encompassing 0.02 acres along Tributary 1 and along a portion of the fence line along the eastern property boundary. Wetland 1 drains east via a culvert at the eastern property boundary. Wetland 2 includes the emergent fringe wetlands along Tributary 2. Wetland 2 encompasses a total of 0.02 acres along Tributary 2 and drains east via Tributary 2. Wetland 3 is an emergent fringe wetland encompassing approximately 2.29 acres around Pond 1. Wetland 3 drains east via Tributary 2. Wetland 4 is an emergent linear and fringe wetland encompassing approximately 1.06 acres around Pond 2. Wetland 4 drains east via Wetland 3 and Pond 1. All wetlands drain off site into Loving Branch. Wetland vegetation was dominated by *Cynodon dactylon* (Bermuda grass), *Echinochloa colona* (barnyard grass), *Juncus effusus* (common rush), *Nelumbo lutea* (American lotus), *Paspalum dilatatum* (dallisgrass), *Paspalum urvillei* (Vasey's grass), and *Persicaria hydropiperoides* (swamp smartweed).

Community Type D (**Table 3**) is upland areas and represents the majority of the site. These areas were classified as upland because they do not exhibit all three wetland characteristics. Upland vegetation was dominated by *Ambrosia trifida* (giant ragweed), *Bromus arvensis* (field brome), *Chloris texensis* (Texas windmill grass), *Cynodon dactylon* (Bermuda grass), *Echinochloa colona* (barnyard grass), *Fraxinus pennsylvanica* (green ash), *Paspalum dilatatum* (dallisgrass), *Quercus marilandica* (blackjack oak), *Quercus stellata* (post oak), *Rubus trivialis* (southern dewberry), *Salix nigra* (black willow), *Setaria pumila* (yellow foxtail), *Smilax bona-nox* (saw greenbrier), *Sorghum halepense* (Johnson grass), *Tridens albescens* (white tridens), and *Ulmus americana* (American elm).

5 Summary and Conclusions

Two ephemeral streams (Tributaries 1 and 2), four emergent wetlands (Wetlands 1, 2, 3, and 4), and two open water features (Ponds 1 and 2) are located on site. These features drain offsite into Loving Branch, which flows into Hickory Creek, ultimately draining to the Elm Fork Trinity River, a traditionally navigable water. Tributary 1 (0.002 acres), Tributary 2 (0.063 acres), Wetland 1 (0.02 acres), Wetland 2 (0.02 acres), Wetland 3 (2.29 acres), Wetland 4 (1.06 acres), Pond 1 (2.897 acres), and Pond 2 (0.092 acres) are considered waters of the United States, and are therefore subject to Federal regulation under the jurisdiction of the USACE.

A non-jurisdictional roadside drainage is located along the eastern property boundary. Several wallows associated with agricultural use are located throughout the site. Some of these features met the definition of a wetland; however, these features are isolated, and are considered non-jurisdictional.

A summary of jurisdictional waters of the United States located on the project site is provided in **Table 1**. A map of waters of the United States and delineation transects for the project site is provided as **Figure 6**. The area measurements provided herein are estimates based on GIS and Garmin eTrex 32x handheld GPS measurements.

6 References Cited

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Tables

Table 1: Summary of Jurisdictional Waters for the Proposed Development Site, Bartonville, Denton County, Texas.

Ephemeral Stream			
Tributary 1	61	1.25	0.002
Tributary 2	1,689	1.63	0.063
EPHEMERAL STREAM TOTAL	**1,750**	**--**	**0.065**
Open Water			
Pond 1	--	--	2.879
Pond 2	--	--	0.092
OPEN WATER TOTAL	**--**	**--**	**2.971**
Emergent Wetland			
Wetland 1	--	--	0.02
Wetland 2	--	--	0.02
Wetland 3	--	--	2.29
Wetland 4	--	--	1.054
EMERGENT WETLAND TOTAL	**--**	**--**	**3.39**

Table 2 - Summary of Field Data for Community Type C – Wetland, Proposed Development Site, Bartonville, Denton County, Texas.

Dominant Vegetation - Status											
Cynodon dactylon (Bermuda grass) - FACU											•
Echinochloa colona (barnyard grass) - FACW			•	•	•						
Juncus effusus (common rush) - OBL								•	•		
Nelumbo lutea (American lotus) - OBL						•	•				
Paspalum dilatatum (dallisgrass) - FAC			•	•							
Paspalum urvillei (Vasey's grass) - FACW										•	•
Persicaria hydropiperoides (swamp smartweed) - OBL	•	•				•	•	•	•		
Hydric Soil											
Hydrogen Sulfide (A4)								•	•		
Depleted Matrix (F3)	•	•	•	•	•	•	•	•	•	•	•
Redox depressions (F8)	•	•	•	•	•	•	•			•	•
Hydrology											
Surface Water (A1)										•	
Saturation (A3)						•	•	•	•	•	
Hydrogen Sulfide Odor (C1)								•	•		
Thin Muck Surface (C7)								•	•		
Surface Soil Cracks (B6)					•						
Drainage Patterns (B10)	•	•								•	•
Saturation Visible on Aerial Imagery (C9)						•	•			•	•
Geomorphic Position (D2)	•	•	•	•	•	•	•	•	•	•	•
FAC-neutral Test (D5)	•	•	•	•	•	•	•	•	•	•	
Status											
Hydrophytic vegetation?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Hydric soils?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Wetland hydrology?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Table 3 - Summary of Field Data for Community Type D – Upland, Proposed Development Site, Bartonville, Denton County, Texas.

Dominant Vegetation - Status											
Ambrosia trifida (giant ragweed) - FAC								•	•		
Cynodon dactylon (Bermuda grass) - FACU	•	•	•	•	•					•	•
Echinochloa colona (barnyard grass) - FACW					•						
Paspalum dilatatum (dallisgrass) - FAC		•	•	•		•		•	•	•	•
Quercus marilandica (blackjack oak) - UPL							•				
Rubus trivialis (southern dewberry) - FACU							•				
Salix nigra (black willow) - FACW								•	•		
Setaria pumila (yellow foxtail) - FACU								•	•		
Smilax bona-nox (saw greenbrier) - FACU							•				
Sorghum halepense (Johnson grass) - FACU								•	•		
Tridens albescens (white tridens) - FAC	•										
Ulmus americana (American elm) - FAC								•	•		
Hydric Soils											
Depleted Matrix (F3)								•	•		
Hydrology											
Sparsely Vegetated Concave Surface (B8)					•						
Geomorphic Position (D2)					•			•	•		
Summary											
Hydrophytic vegetation?	N	N	N	N	N	Y	N	Y	Y	N	N
Hydric soils?	N	N	N	N	N	N	N	Y	Y	N	N
Wetland hydrology?	N	N	N	N	Y	N	N	N	N	N	N

Table 3 - Summary of Field Data for Community Type D – Upland, Continued.

Dominant Vegetation Status							
Bromus arvensis (field brome) - FACU			•				
Chloris texensis (Texas windmill grass) - UPL			•				
Cynodon dactylon (Bermuda grass) - FACU		•		•	•	•	•
Fraxinus pennsylvanica (green ash) - FAC			•				
Juncus effusus (common rush) - OBL							•
Paspalum dilatatum (dallisgrass) - FAC		•					•
Quercus stellata (post oak) - FACU			•				
Rubus trivialis (southern dewberry) - FACU			•				
Smilax bona-nox (saw greenbrier) - FACU			•				
Hydric Soils							
Depleted Matrix (F3)							•
Hydrology							
Geomorphic Position (D2)							•
Summary							
Hydrophytic vegetation?	N	N	N	N	N	N	Y
Hydric soils?	N	N	N	N	N	N	Y
Wetland hydrology?	N	N	N	N	N	N	N

Figures

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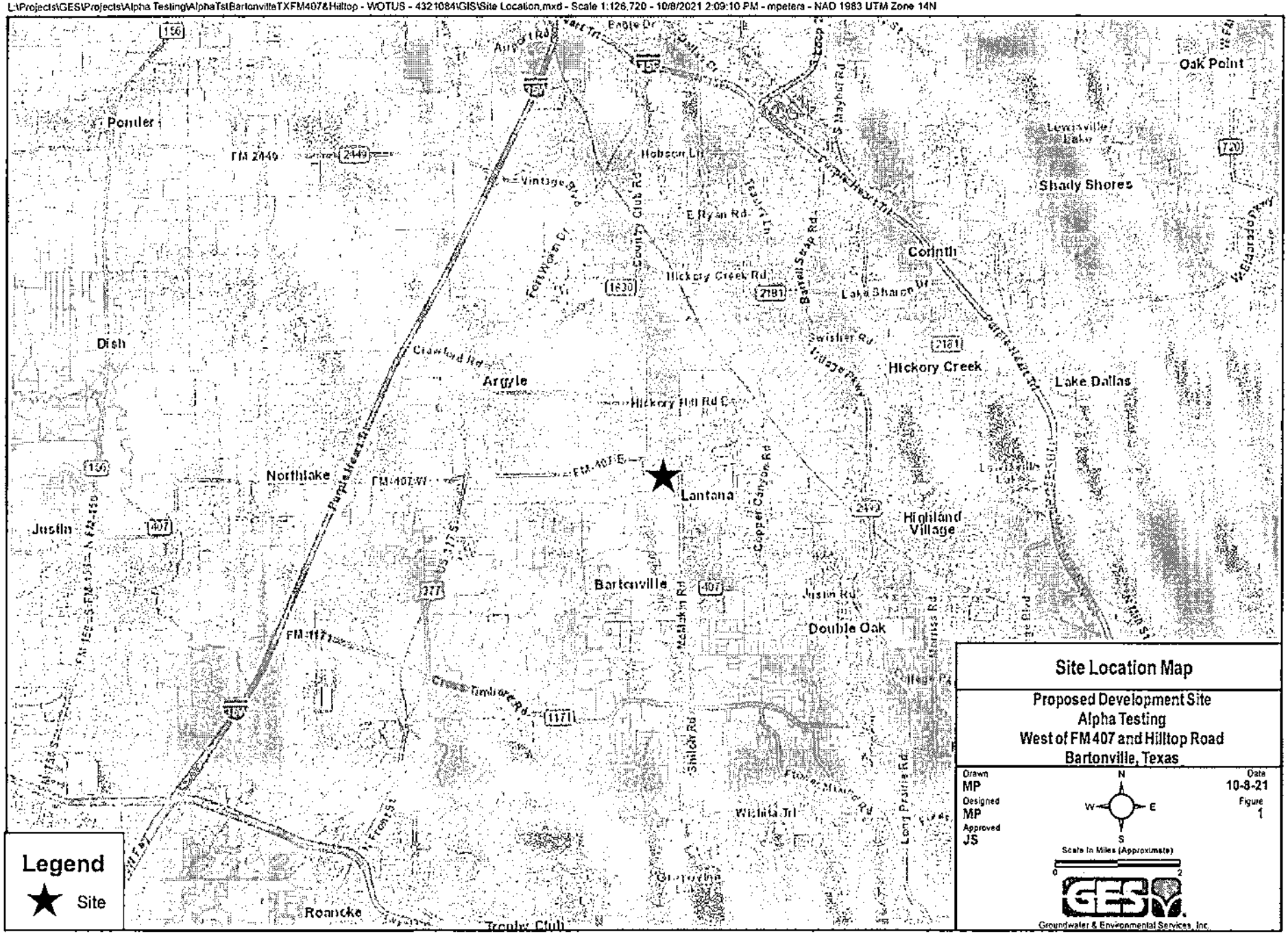

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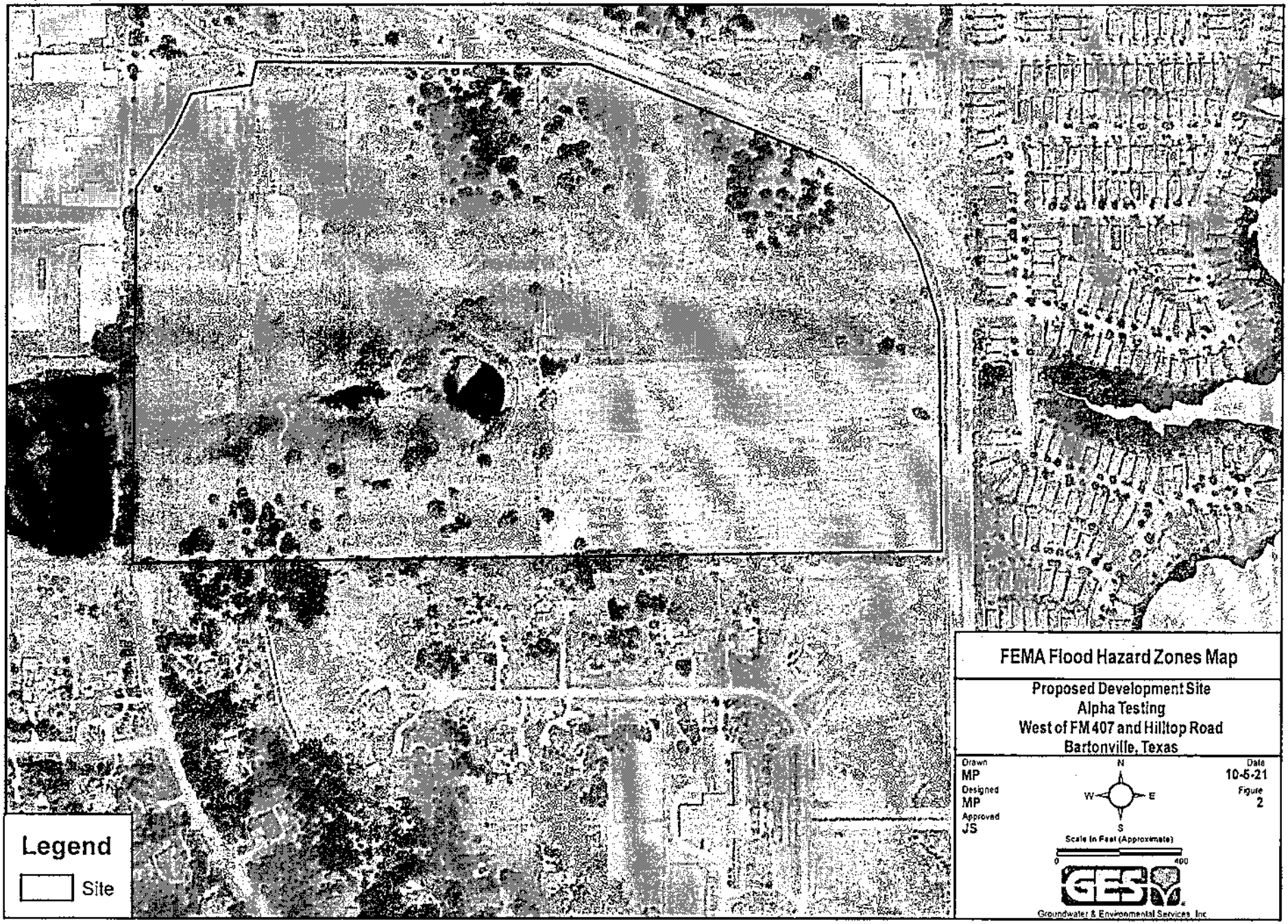

FEMA Flood Hazard Zones Map

Proposed Development Site
Alpha Testing
West of FM 407 and Hilltop Road
Bartonville, Texas

Drawn: MP
Designed: MP
Approved: JS
Date: 10-5-21
Figure: 2

N
W E
S

Scale in Feet (Approximate)
0 400

Groundwater & Environmental Services, Inc.

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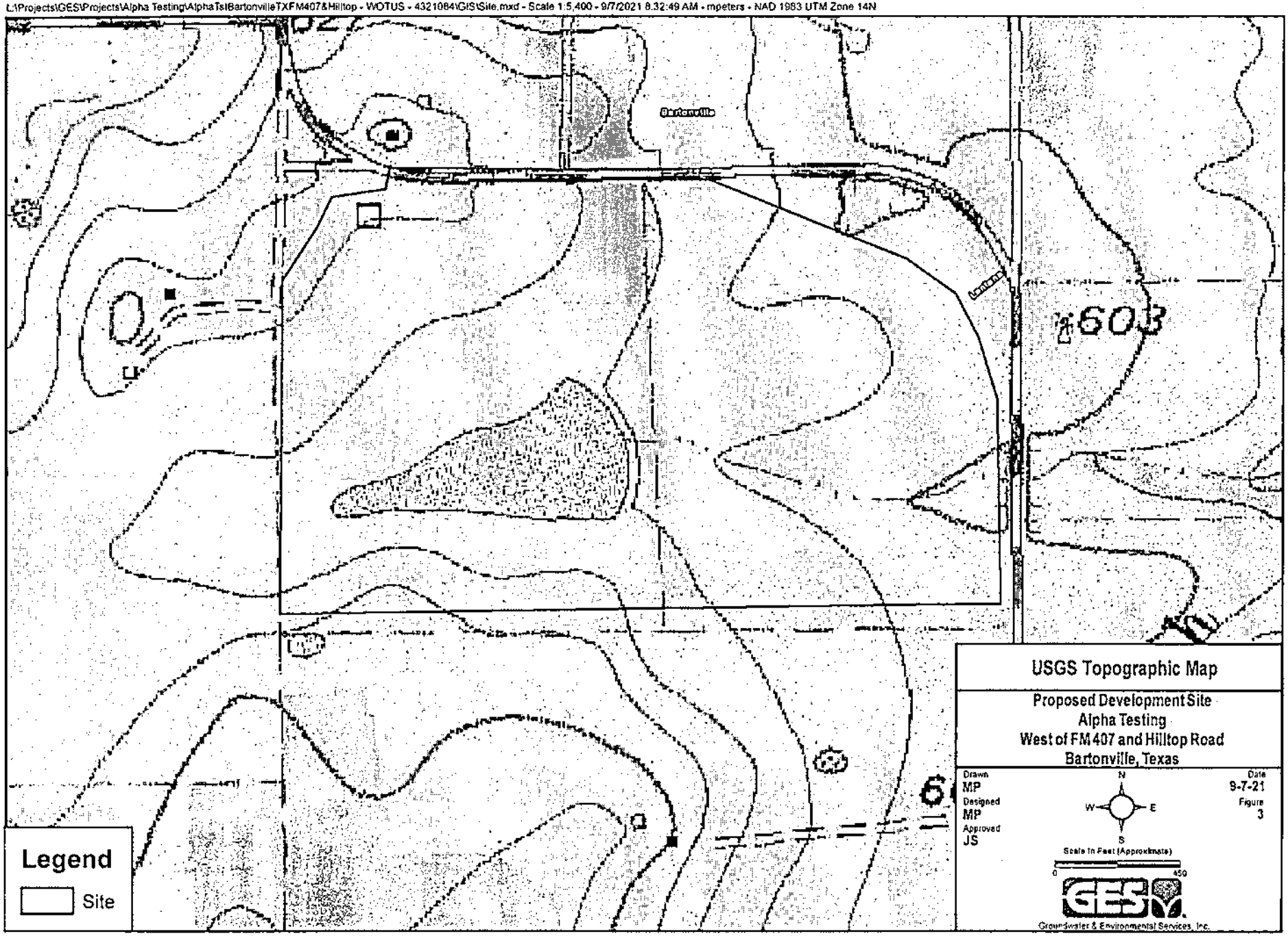

USGS Topographic Map

Proposed Development Site
Alpha Testing
West of FM 407 and Hilltop Road
Bartonville, Texas

Drawn	MP
Designed	MP
Approved	JS
Date	9-7-21
Figure	3

N
W E
S

Scale In Feet (Approximate)
0 450

GES
Groundwater & Environmental Services, Inc.

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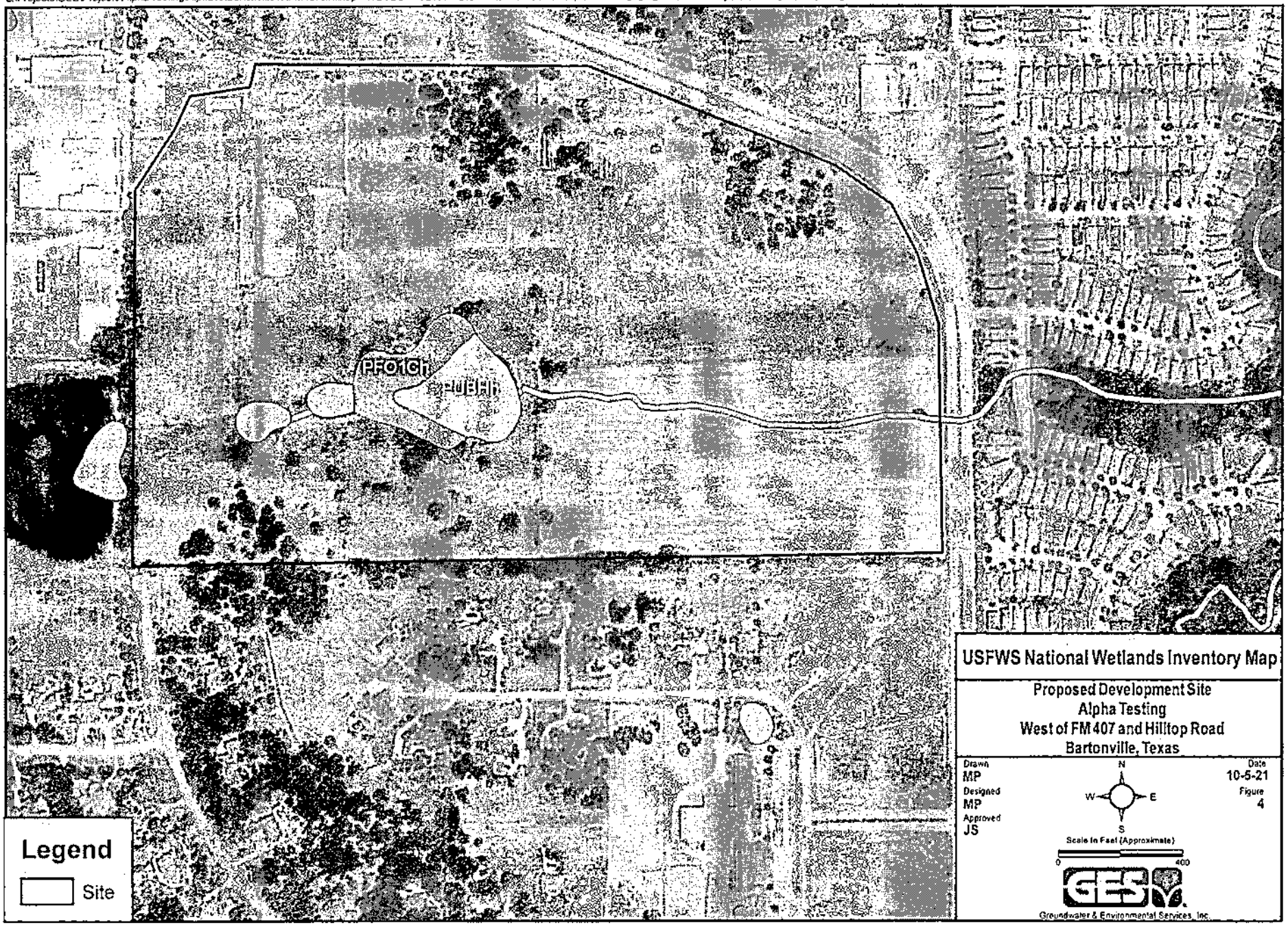

Legend

Site

USFWS National Wetlands Inventory Map

Proposed Development Site
Alpha Testing
West of FM 407 and Hilltop Road
Bartonville, Texas

Drawn: MP
Designed: MP
Approved: JS
Date: 10-5-21
Figure: 4

N
W E
S

Scale in Feet (Approximate)
0 400

Groundwater & Environmental Services, Inc.

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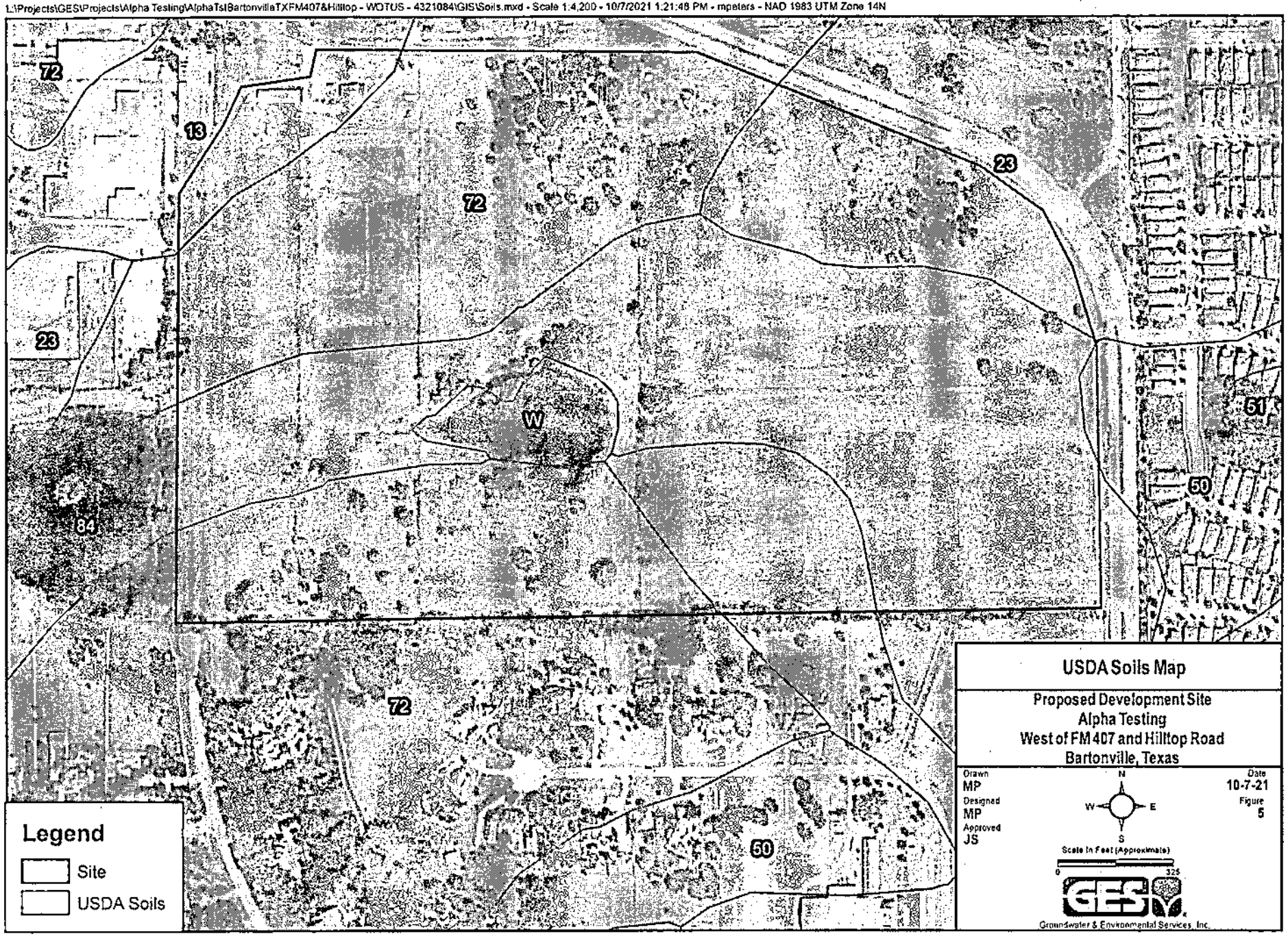

Legend

- Site
- USDA Soils

USDA Soils Map

Proposed Development Site
Alpha Testing
West of FM 407 and Hilltop Road
Bartonville, Texas

Drawn	MP
Designed	MP
Approved	JS
Date	10-7-21
Figure	5

N
W E
S

Scale In Feet (Approximate)
0 325

GES
Groundwater & Environmental Services, Inc.

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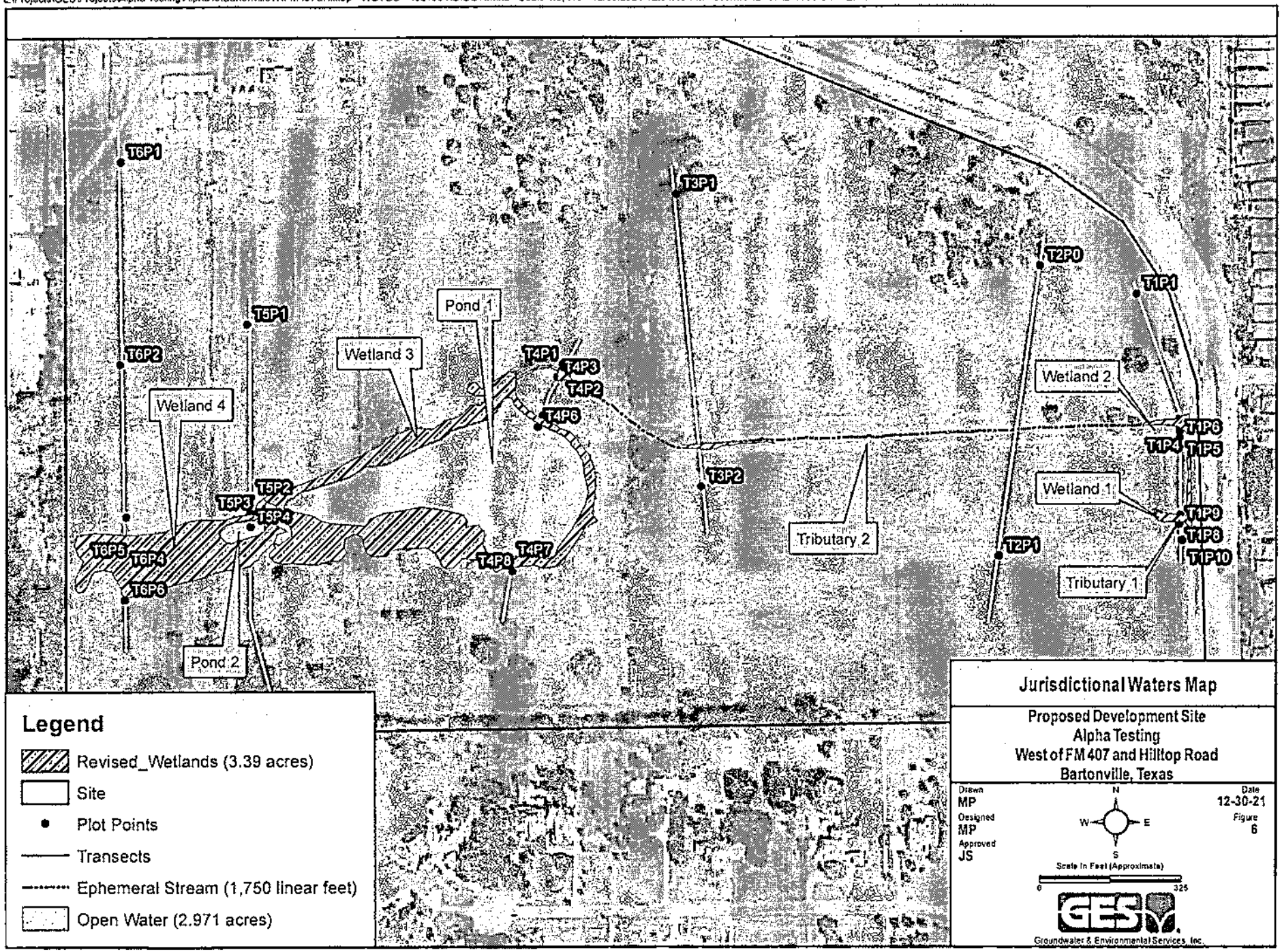


Appendix A – Routine Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Alpha Bartonville FM 407 City/County: Bartonville / Denton Sampling Date: 07-Sep-21

Applicant/Owner: State: Texas Sampling Point: T1P1

Investigator(s): MP Section, Township, Range: S T R

Landform (hillslope, terrace, etc.): Plain Local relief (concave, convex, none): flat Slope: 1.0 % / 0.6 °

Subregion (LRR): LRR J Lat.: 33.101204 Long.: -97.131784 Datum: NAD83

Soil Map Unit Name: Callisburg fine sandy loam, 1 to 3 percent slopes NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ○ No ◉	Is the Sampled Area
Hydric Soil Present? Yes ○ No ◉	within a Wetland? Yes ○ No ◉
Wetland Hydrology Present? Yes ○ No ◉	

Remarks:

VEGETATION - Use scientific names of plants

FWS Region: GP

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)				
1.	0	☐		
2.	0	☐		
3.	0	☐		
4.	0	☐		
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size:)				
1.	0	☐		
2.	0	☐		
3.	0	☐		
4.	0	☐		
5.	0	☐		
	0	= Total Cover		
Herb Stratum (Plot size: 5 ft)				
1. Cynodon dactylon	50	☑	50.0%	FACU
2. Tridens albescens	50	☑	50.0%	FAC
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	100	= Total Cover		
Woody Vine Stratum (Plot size:)				
1.	0	☐		
2.	0	☐		
	0	= Total Cover		

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	50	x 3 =	150
FACU species	50	x 4 =	200
UPL species	0	x 5 =	0
Column Totals:	100 (A)		350 (B)

Prevalence Index = B/A = 3.5

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks:

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: T1P1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 4/2	100					Silt	

[1]Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR F)
- ☐ 1 cm Muck (A9) (LRR F,G,H)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR F)
- ☐ Sandy Gleyed Matrix S4
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ High Plains Depressions (F16) (MLRA 72 and 73 of LRR H)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR I, J)
- ☐ Coastal Prairie Redox (A16) (LRR F, G, H)
- ☐ Dark Surface (S7) (LRR G)
- ☐ High Plains Depressions (F16) (LRR H outside of MLRA 72 and 73)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Compacted Soil

Depth (inches): 1

Hydric Soil Present? Yes ○ No ◉

Remarks:

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry Season Water Table (C2)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where not tilled)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where tilled)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ FAC-neutral Test (D5)
- ☐ Frost Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present?	Yes ○ No ◉	Depth (inches):	0
Water Table Present?	Yes ○ No ◉	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes ○ No ◉	Depth (inches):	0

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Alpha Bartonville FM 407 City/County: Bartonville / Denton Sampling Date: 07-Sep-21

Applicant/Owner: State: Texas Sampling Point: T1P2

Investigator(s): MP Section, Township, Range: S T R

Landform (hillslope, terrace, etc.): Plain Local relief (concave, convex, none): flat Slope: 1.0 % / 0.6 °

Subregion (LRR): LRR J Lat.: 33.100415 Long.: -97.131501 Datum: NAD83

Soil Map Unit Name: Konsil fine sandy loam, 1 to 3 percent slopes NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○	No ◉	Is the Sampled Area within a Wetland? Yes ○ No ◉
Hydric Soil Present?	Yes ○	No ◉	
Wetland Hydrology Present?	Yes ○	No ◉	

Remarks:

VEGETATION - Use scientific names of plants

FWS Region: GP

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)				
1.	0	☐		
2.	0	☐		
3.	0	☐		
4.	0	☐		
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size:)				
1.	0	☐		
2.	0	☐		
3.	0	☐		
4.	0	☐		
5.	0	☐		
	0	= Total Cover		
Herb Stratum (Plot size: 5 ft)				
1. Cynodon dactylon	50	☑	50.0%	FACU
2. Paspalum dilatatum	50	☑	50.0%	FAC
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	100	= Total Cover		
Woody Vine Stratum (Plot size:)				
1.	0	☐		
2.	0	☐		
	0	= Total Cover		

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	50	x 3 =	150	
FACU species	50	x 4 =	200	
UPL species	0	x 5 =	0	
Column Totals:	100	(A)	350	(B)

Prevalence Index = B/A = 3.5

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks:

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: T1P2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR	4/3	98	10YR	6/8	2	C	M	Silty Clay	

[1]Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR F)
- ☐ 1 cm Muck (A9) (LRR F,G,H)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR F)
- ☐ Sandy Gleyed Matrix S4
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ High Plains Depressions (F16) (MLRA 72 and 73 of LRR H)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR I, J)
- ☐ Coastal Prairie Redox (A16) (LRR F, G, H)
- ☐ Dark Surface (S7) (LRR G)
- ☐ High Plains Depressions (F16) (LRR H outside of MLRA 72 and 73)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ○ No ◉

Remarks:

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry Season Water Table (C2)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where not tilled)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where tilled)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ FAC-neutral Test (D5)
- ☐ Frost Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):	0
Water Table Present?	Yes ○	No ◉	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):	0

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Alpha Bartonville FM 407 City/County: Bartonville / Denton Sampling Date: 07-Sep-21

Applicant/Owner: State: Texas Sampling Point: T1P3

Investigator(s): MP Section, Township, Range: S T R

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): concave Slope: 2.0 % / 1.1 °

Subregion (LRR): LRR J Lat.: 33.100378 Long.: -97.131496 Datum: NAD83

Soil Map Unit Name: Konsil fine sandy loam, 1 to 3 percent slopes NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ◉ No ○

Hydric Soil Present? Yes ◉ No ○

Wetland Hydrology Present? Yes ◉ No ○

Is the Sampled Area within a Wetland? Yes ◉ No ○

Remarks:

VEGETATION - Use scientific names of plants

FWS Region: GP

	Absolute % Cover	Dominant Species? Rel.Strat. Cover		Indicator Status
Tree Stratum (Plot size:)				
1.	0	☐		
2.	0	☐		
3.	0	☐		
4.	0	☐		
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size:)				
1.	0	☐		
2.	0	☐		
3.	0	☐		
4.	0	☐		
5.	0	☐		
	0	= Total Cover		
Herb Stratum (Plot size: 5 ft)				
1. Persicaria hydropiperoides	80	☑	80.0%	OBL
2. Xanthium strumarium	10	☐	10.0%	FAC
3. Echinochloa colona	10	☐	10.0%	FACW
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	100	= Total Cover		
Woody Vine Stratum (Plot size:)				
1.	0	☐		
2.	0	☐		
	0	= Total Cover		

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	80	x 1 =	80	
FACW species	10	x 2 =	20	
FAC species	10	x 3 =	30	
FACU species	0	x 4 =	0	
UPL species	0	x 5 =	0	
Column Totals:	100	(A)	130	(B)

Prevalence Index = B/A = 1.3

Hydrophytic Vegetation Indicators:

- ☑ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks:

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: T1P3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 5/2	80	7.5YR 6/8	20	C	M	Silty Clay	

[1]Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR F)
- ☐ 1 cm Muck (A9) (LRR F,G,H)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR F)
- ☐ Sandy Gleyed Matrix S4
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☑ Redox depressions (F8)
- ☐ High Plains Depressions (F16) (MLRA 72 and 73 of LRR H)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR I, J)
- ☐ Coastal Prairie Redox (A16) (LRR F, G, H)
- ☐ Dark Surface (S7) (LRR G)
- ☐ High Plains Depressions (F16) (LRR H outside of MLRA 72 and 73)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ◉ No ○

Remarks:

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry Season Water Table (C2)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where not tilled)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☑ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where tilled)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☑ Geomorphic Position (D2)
- ☑ FAC-neutral Test (D5)
- ☐ Frost Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present?	Yes ○ No ◉	Depth (inches):	0
Water Table Present?	Yes ○ No ◉	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes ○ No ◉	Depth (inches):	0

Wetland Hydrology Present? Yes ◉ No ○

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Alpha Bartonville FM 407 City/County: Bartonville / Denton Sampling Date: 07-Sep-21

Applicant/Owner: State: Texas Sampling Point: T1P5

Investigator(s): MP Section, Township, Range: S T R

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): concave Slope: 2.0 % / 1.1 °

Subregion (LRR): LRR J Lat.: 33.100333 Long.: -97.131499 Datum: NAD83

Soil Map Unit Name: Konsil fine sandy loam, 1 to 3 percent slopes NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ◉ No ○

Hydric Soil Present? Yes ◉ No ○

Wetland Hydrology Present? Yes ◉ No ○

Is the Sampled Area within a Wetland? Yes ◉ No ○

Remarks:

VEGETATION - Use scientific names of plants

FWS Region: GP

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
3.	0	☐	
4.	0	☐	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
3.	0	☐	
4.	0	☐	
5.	0	☐	
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. Persicaria hydropiperoides	80	☑ 80.0%	OBL
2. Xanthium strumarium	10	☐ 10.0%	FAC
3. Echinochloa colona	10	☐ 10.0%	FACW
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
	0	= Total Cover	

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	80	x 1 =	80
FACW species	10	x 2 =	20
FAC species	10	x 3 =	30
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		130 (B)

Prevalence Index = B/A = 1.3

Hydrophytic Vegetation Indicators:

☑ 1 - Rapid Test for Hydrophytic Vegetation

☑ 2 - Dominance Test is > 50%

☑ 3 - Prevalence Index is ≤3.0[1]

☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks:

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: T1P5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR	5/2	80	7.5YR	6/8	20	C	M	Silty Clay	

[1]Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR F)
- ☐ 1 cm Muck (A9) (LRR F,G,H)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR F)
- ☐ Sandy Gleyed Matrix S4
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☑ Redox depressions (F8)
- ☐ High Plains Depressions (F16) (MLRA 72 and 73 of LRR H)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR I, J)
- ☐ Coastal Prairie Redox (A16) (LRR F, G, H)
- ☐ Dark Surface (S7) (LRR G)
- ☐ High Plains Depressions (F16) (LRR H outside of MLRA 72 and 73)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ◉ No ○

Remarks:

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry Season Water Table (C2)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where not tilled)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☑ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where tilled)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☑ Geomorphic Position (D2)
- ☑ FAC-neutral Test (D5)
- ☐ Frost Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): 0

Water Table Present? Yes ○ No ◉ Depth (inches): 0

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): 0

Wetland Hydrology Present? Yes ◉ No ○

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Alpha Bartonville FM 407 City/County: Bartonville / Denton Sampling Date: 07-Sep-21

Applicant/Owner: State: Texas Sampling Point: T1P6

Investigator(s): MP Section, Township, Range: S T R

Landform (hillslope, terrace, etc.): Plain Local relief (concave, convex, none): flat Slope: 1.0 % / 0.6 °

Subregion (LRR): LRR J Lat.: 33.100295 Long.: -97.131502 Datum: NAD83

Soil Map Unit Name: Konsil fine sandy loam, 1 to 3 percent slopes NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ○ No ◉

Hydric Soil Present? Yes ○ No ◉

Wetland Hydrology Present? Yes ○ No ◉

Is the Sampled Area within a Wetland? Yes ○ No ◉

Remarks:

VEGETATION - Use scientific names of plants

FWS Region: GP

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)				
1.	0	☐		
2.	0	☐		
3.	0	☐		
4.	0	☐		
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size:)				
1.	0	☐		
2.	0	☐		
3.	0	☐		
4.	0	☐		
5.	0	☐		
	0	= Total Cover		
Herb Stratum (Plot size: 5 ft)				
1. Cynodon dactylon	50	☑	50.0%	FACU
2. Paspalum dilatatum	50	☑	50.0%	FAC
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	100	= Total Cover		
Woody Vine Stratum (Plot size:)				
1.	0	☐		
2.	0	☐		
	0	= Total Cover		

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	50	x 3 =	150
FACU species	50	x 4 =	200
UPL species	0	x 5 =	0
Column Totals:	100 (A)		350 (B)

Prevalence Index = B/A = 3.5

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks:

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: T1P6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR	4/3	98	10YR	6/8	2	C	M	Silty Clay	

[1]Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR F)
- ☐ 1 cm Muck (A9) (LRR F,G,H)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR F)
- ☐ Sandy Gleyed Matrix S4
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ High Plains Depressions (F16) (MLRA 72 and 73 of LRR H)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR I, J)
- ☐ Coastal Prairie Redox (A16) (LRR F, G, H)
- ☐ Dark Surface (S7) (LRR G)
- ☐ High Plains Depressions (F16) (LRR H outside of MLRA 72 and 73)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ○ No ◉

Remarks:

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry Season Water Table (C2)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where not tilled)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where tilled)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ FAC-neutral Test (D5)
- ☐ Frost Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):	0
Water Table Present?	Yes ○	No ◉	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):	0

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Alpha Bartonville FM 407 City/County: Bartonville / Denton Sampling Date: 07-Sep-21

Applicant/Owner: State: Texas Sampling Point: T1P7

Investigator(s): MP Section, Township, Range: S T R

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): concave Slope: 2.0 % / 1.1 °

Subregion (LRR): LRR J Lat.: 33.099818 Long.: -97.131509 Datum: NAD83

Soil Map Unit Name: Wilson clay loam, 1 to 3 percent slopes NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ◉ No ○

Hydric Soil Present? Yes ◉ No ○

Wetland Hydrology Present? Yes ◉ No ○

Is the Sampled Area within a Wetland? Yes ◉ No ○

Remarks:

VEGETATION - Use scientific names of plants

FWS Region: GP

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
3.	0	☐	
4.	0	☐	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
3.	0	☐	
4.	0	☐	
5.	0	☐	
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. Paspalum dilatatum	60	☑ 63.2%	FAC
2. Echinochloa colona	35	☑ 36.8%	FACW
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	95	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
	0	= Total Cover	

% Bare Ground in Herb Stratum 5

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:	
OBL species	0	x 1 =	0
FACW species	35	x 2 =	70
FAC species	60	x 3 =	180
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	95 (A)		250 (B)

Prevalence Index = B/A = 2.632

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks:

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: T1P7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 5/2	90	10YR 6/8	10	C	M	Silty Clay	

[1]Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR F)
- ☐ 1 cm Muck (A9) (LRR F,G,H)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR F)
- ☐ Sandy Gleyed Matrix S4
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☑ Redox depressions (F8)
- ☐ High Plains Depressions (F16) (MLRA 72 and 73 of LRR H)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR I, J)
- ☐ Coastal Prairie Redox (A16) (LRR F, G, H)
- ☐ Dark Surface (S7) (LRR G)
- ☐ High Plains Depressions (F16) (LRR H outside of MLRA 72 and 73)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ◉ No ○

Remarks:

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry Season Water Table (C2)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where not tilled)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where tilled)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☑ Geomorphic Position (D2)
- ☑ FAC-neutral Test (D5)
- ☐ Frost Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): 0

Water Table Present? Yes ○ No ◉ Depth (inches): 0

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): 0

Wetland Hydrology Present? Yes ◉ No ○

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Alpha Bartonville FM 407 City/County: Bartonville / Denton Sampling Date: 07-Sep-21

Applicant/Owner: State: Texas Sampling Point: T1P9

Investigator(s): MP Section, Township, Range: S T R

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): concave Slope: 2.0 % / 1.1 °

Subregion (LRR): LRR J Lat.: 33.099744 Long.: -97.131510 Datum: NAD83

Soil Map Unit Name: Wilson clay loam, 1 to 3 percent slopes NWI classification: R4SBC

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ◉ No ○

Hydric Soil Present? Yes ◉ No ○

Wetland Hydrology Present? Yes ◉ No ○

Is the Sampled Area within a Wetland? Yes ◉ No ○

Remarks:

VEGETATION - Use scientific names of plants

FWS Region: GP

	Absolute % Cover	Dominant Species? Rel.Strat. Cover		Indicator Status
Tree Stratum (Plot size:)				
1.	0	☐		
2.	0	☐		
3.	0	☐		
4.	0	☐		
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size:)				
1.	0	☐		
2.	0	☐		
3.	0	☐		
4.	0	☐		
5.	0	☐		
	0	= Total Cover		
Herb Stratum (Plot size: 5 ft)				
1. Paspalum dilatatum	60	☑	63.2%	FAC
2. Echinochloa colona	35	☑	36.8%	FACW
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	95	= Total Cover		
Woody Vine Stratum (Plot size:)				
1.	0	☐		
2.	0	☐		
	0	= Total Cover		

% Bare Ground in Herb Stratum 5

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:	
OBL species	0	x 1 =	0
FACW species	35	x 2 =	70
FAC species	60	x 3 =	180
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	95 (A)		250 (B)

Prevalence Index = B/A = 2.632

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks:

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: T1P9

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 5/2	90	10YR 6/8	10	C	M	Silty Clay	

[1]Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR F)
- ☐ 1 cm Muck (A9) (LRR F,G,H)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR F)
- ☐ Sandy Gleyed Matrix S4
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☑ Redox depressions (F8)
- ☐ High Plains Depressions (F16) (MLRA 72 and 73 of LRR H)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR I, J)
- ☐ Coastal Prairie Redox (A16) (LRR F, G, H)
- ☐ Dark Surface (S7) (LRR G)
- ☐ High Plains Depressions (F16) (LRR H outside of MLRA 72 and 73)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ◉ No ○

Remarks:

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry Season Water Table (C2)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where not tilled)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where tilled)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☑ Geomorphic Position (D2)
- ☑ FAC-neutral Test (D5)
- ☐ Frost Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):	0
Water Table Present?	Yes ○	No ◉	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):	0

Wetland Hydrology Present? Yes ◉ No ○

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Alpha Bartonville FM 407 City/County: Bartonville / Denton Sampling Date: 07-Sep-21

Applicant/Owner: State: Texas Sampling Point: T1P10

Investigator(s): MP Section, Township, Range: S T R

Landform (hillslope, terrace, etc.): Plain Local relief (concave, convex, none): flat Slope: 1.0 % / 0.6 °

Subregion (LRR): LRR J Lat.: 33.099645 Long.: -97.131498 Datum: NAD83

Soil Map Unit Name: Wilson clay loam, 1 to 3 percent slopes NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ○ No ◉

Hydric Soil Present? Yes ○ No ◉

Wetland Hydrology Present? Yes ○ No ◉

Is the Sampled Area within a Wetland? Yes ○ No ◉

Remarks:

VEGETATION - Use scientific names of plants

FWS Region: GP

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
3.	0	☐	
4.	0	☐	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
3.	0	☐	
4.	0	☐	
5.	0	☐	
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. Cynodon dactylon	50	☑ 50.0%	FACU
2. Paspalum dilatatum	50	☑ 50.0%	FAC
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
	0	= Total Cover	

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	50	x 3 =	150
FACU species	50	x 4 =	200
UPL species	0	x 5 =	0
Column Totals:	100 (A)		350 (B)

Prevalence Index = B/A = 3.5

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks:

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: T1P10

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 4/3	98	10YR 6/8	2	C	M	Silty Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR F)
- ☐ 1 cm Muck (A9) (LRR F,G,H)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR F)
- ☐ Sandy Gleyed Matrix S4
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ High Plains Depressions (F16) (MLRA 72 and 73 of LRR H)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR I, J)
- ☐ Coastal Prairie Redox (A16) (LRR F, G, H)
- ☐ Dark Surface (S7) (LRR G)
- ☐ High Plains Depressions (F16) (LRR H outside of MLRA 72 and 73)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry Season Water Table (C2)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where not tilled)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where tilled)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ FAC-neutral Test (D5)
- ☐ Frost Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):	0
Water Table Present?	Yes ○	No ◉	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):	0

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Alpha Bartonville FM 407 City/County: Bartonville / Denton Sampling Date: 06-Oct-21

Applicant/Owner: State: Texas Sampling Point: T2P0

Investigator(s): MP Section, Township, Range: S T R

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): concave Slope: 1.0 % / 0.6 °

Subregion (LRR): LRR J Lat.: 33.101408 Long.: -97.132524 Datum: NAD83

Soil Map Unit Name: Callisburg fine sandy loam, 1 to 3 percent slopes NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ○ No ◉

Hydric Soil Present? Yes ○ No ◉

Wetland Hydrology Present? Yes ◉ No ○

Is the Sampled Area within a Wetland? Yes ○ No ◉

Remarks:

VEGETATION - Use scientific names of plants

FWS Region: GP

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)				
1.	0	☐		
2.	0	☐		
3.	0	☐		
4.	0	☐		
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size:)				
1.	0	☐		
2.	0	☐		
3.	0	☐		
4.	0	☐		
5.	0	☐		
	0	= Total Cover		
Herb Stratum (Plot size: 5 ft)				
1. Echinochloa colona	20	☑	66.7%	FACW
2. Cynodon dactylon	10	☑	33.3%	FACU
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	30	= Total Cover		
Woody Vine Stratum (Plot size:)				
1.	0	☐		
2.	0	☐		
	0	= Total Cover		

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	0	x 3 =	0
FACU species	10	x 4 =	40
UPL species	0	x 5 =	0
Column Totals:	30 (A)		80 (B)

Prevalence Index = B/A = 2.667

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks:

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: T2P0

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 4/2	99	7.5YR 4/6	1	C	M	Silty Clay	

[1]Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR F)
- ☐ 1 cm Muck (A9) (LRR F,G,H)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR F)
- ☐ Sandy Gleyed Matrix S4
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ High Plains Depressions (F16) (MLRA 72 and 73 of LRR H)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR I, J)
- ☐ Coastal Prairie Redox (A16) (LRR F, G, H)
- ☐ Dark Surface (S7) (LRR G)
- ☐ High Plains Depressions (F16) (LRR H outside of MLRA 72 and 73)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry Season Water Table (C2)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where not tilled)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☑ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where tilled)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☑ Geomorphic Position (D2)
- ☐ FAC-neutral Test (D5)
- ☐ Frost Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): 0

Water Table Present? Yes ○ No ◉ Depth (inches): 0

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): 0

Wetland Hydrology Present? Yes ◉ No ○

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Alpha Bartonville FM 407 City/County: Bartonville / Denton Sampling Date: 07-Sep-21

Applicant/Owner: State: Texas Sampling Point: T2P1

Investigator(s): MP Section, Township, Range: S T R

Landform (hillslope, terrace, etc.): Plain Local relief (concave, convex, none): flat Slope: 1.0 % / 0.6 °

Subregion (LRR): LRR J Lat.: 33.099570 Long.: -97.132864 Datum: NAD83

Soil Map Unit Name: Wilson clay loam, 1 to 3 percent slopes NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ◉ No ○

Hydric Soil Present? Yes ○ No ◉

Wetland Hydrology Present? Yes ○ No ◉

Is the Sampled Area within a Wetland? Yes ○ No ◉

Remarks:

VEGETATION - Use scientific names of plants

FWS Region: GP

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)				
1.	0	☐		
2.	0	☐		
3.	0	☐		
4.	0	☐		
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size:)				
1.	0	☐		
2.	0	☐		
3.	0	☐		
4.	0	☐		
5.	0	☐		
	0	= Total Cover		
Herb Stratum (Plot size: 5 ft)				
1. Paspalum dilatatum	90	☑	90.0%	FAC
2. Cynodon dactylon	10	☐	10.0%	FACU
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	100	= Total Cover		
Woody Vine Stratum (Plot size:)				
1.	0	☐		
2.	0	☐		
	0	= Total Cover		

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	90	x 3 =	270
FACU species	10	x 4 =	40
UPL species	0	x 5 =	0
Column Totals:	100 (A)		310 (B)

Prevalence Index = B/A = 3.1

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks:

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: T2P1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 4/2	100					Silt	

[1]Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR F)
- ☐ 1 cm Muck (A9) (LRR F,G,H)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR F)
- ☐ Sandy Gleyed Matrix S4
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ High Plains Depressions (F16) (MLRA 72 and 73 of LRR H)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR I, J)
- ☐ Coastal Prairie Redox (A16) (LRR F, G, H)
- ☐ Dark Surface (S7) (LRR G)
- ☐ High Plains Depressions (F16) (LRR H outside of MLRA 72 and 73)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Compacted Soil

Depth (inches): 2 inches

Hydric Soil Present? Yes ○ No ◉

Remarks:

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry Season Water Table (C2)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where not tilled)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where tilled)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ FAC-neutral Test (D5)
- ☐ Frost Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):	0
Water Table Present?	Yes ○	No ◉	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):	0

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Alpha Bartonville FM 407 City/County: Bartonville / Denton Sampling Date: 07-Sep-21

Applicant/Owner: State: Texas Sampling Point: T3P1

Investigator(s): MP Section, Township, Range: S T R

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): flat Slope: 1.0 % / 0.6 °

Subregion (LRR): LRR J Lat.: 33.101893 Long.: -97.135235 Datum: NAD83

Soil Map Unit Name: Silstid loamy fine sand, 1 to 5 percent slopes NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ○ No ◉

Hydric Soil Present? Yes ○ No ◉

Wetland Hydrology Present? Yes ○ No ◉

Is the Sampled Area within a Wetland? Yes ○ No ◉

Remarks:

VEGETATION - Use scientific names of plants

FWS Region: GP

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30 ft)			
1. Quercus marilandica	55	☑ 100.0%	UPL
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	55	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
3.	0	☐	
4.	0	☐	
5.	0	☐	
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. Rubus trivialis	10	☑ 100.0%	FACU
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	10	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1. Smilax bona-nox	15	☑ 100.0%	FACU
2.	0	☐ 0.0%	
	15	= Total Cover	

% Bare Ground in Herb Stratum 70

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	25	x 4 =	100
UPL species	55	x 5 =	275
Column Totals:	80 (A)		375 (B)

Prevalence Index = B/A = 4.688

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks:

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: T3P1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 4/3	100					Fine Silty Loam	

[1]Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR F)
- ☐ 1 cm Muck (A9) (LRR F,G,H)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR F)
- ☐ Sandy Gleyed Matrix S4
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ High Plains Depressions (F16) (MLRA 72 and 73 of LRR H)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR I, J)
- ☐ Coastal Prairie Redox (A16) (LRR F, G, H)
- ☐ Dark Surface (S7) (LRR G)
- ☐ High Plains Depressions (F16) (LRR H outside of MLRA 72 and 73)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry Season Water Table (C2)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where not tilled)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where tilled)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ FAC-neutral Test (D5)
- ☐ Frost Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):	0
Water Table Present?	Yes ○	No ◉	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):	0

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Alpha Bartonville FM 407 City/County: Bartonville / Denton Sampling Date: 07-Sep-21

Applicant/Owner: State: Texas Sampling Point: T3P2

Investigator(s): MP Section, Township, Range: S T R

Landform (hillslope, terrace, etc.): Microdepression Local relief (concave, convex, none): concave Slope: 1.0 % / 0.6 °

Subregion (LRR): LRR J Lat.: 33.100036 Long.: -97.135090 Datum: NAD83

Soil Map Unit Name: Wilson clay loam, 1 to 3 percent slopes NWI classification: R4SBC

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ◉ No ○

Hydric Soil Present? Yes ◉ No ○

Wetland Hydrology Present? Yes ◉ No ○

Is the Sampled Area within a Wetland? Yes ◉ No ○

Remarks:

VEGETATION - Use scientific names of plants

FWS Region: GP

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
3.	0	☐	
4.	0	☐	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
3.	0	☐	
4.	0	☐	
5.	0	☐	
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. Echinochloa colona	80	☑ 100.0%	FACW
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	80	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
	0	= Total Cover	

% Bare Ground in Herb Stratum 20

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:	
OBL species	0	x 1 =	0
FACW species	80	x 2 =	160
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	80 (A)		160 (B)

Prevalence Index = B/A = 2

Hydrophytic Vegetation Indicators:

- ☑ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks:

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: T3P2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 4/2	95	7.5YR 6/6	5	C	M and PL	Silty Clay	

[1]Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR F)
- ☐ 1 cm Muck (A9) (LRR F,G,H)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR F)
- ☐ Sandy Gleyed Matrix S4
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☑ Redox depressions (F8)
- ☐ High Plains Depressions (F16) (MLRA 72 and 73 of LRR H)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR I, J)
- ☐ Coastal Prairie Redox (A16) (LRR F, G, H)
- ☐ Dark Surface (S7) (LRR G)
- ☐ High Plains Depressions (F16) (LRR H outside of MLRA 72 and 73)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ◉ No ○

Remarks:

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry Season Water Table (C2)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where not tilled)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☑ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where tilled)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☑ Geomorphic Position (D2)
- ☑ FAC-neutral Test (D5)
- ☐ Frost Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches): 0
Water Table Present?	Yes ○	No ◉	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches): 0

Wetland Hydrology Present? Yes ◉ No ○

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Alpha Bartonville FM 407 City/County: Bartonville / Denton Sampling Date: 07-Sep-21

Applicant/Owner: State: Texas Sampling Point: T4P1

Investigator(s): MP Section, Township, Range: S T R

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): convex Slope: 2.0 % / 1.1 °

Subregion (LRR): LRR J Lat.: 33.100838 Long.: -97.136101 Datum: NAD83

Soil Map Unit Name: Wilson clay loam, 1 to 3 percent slopes NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ◉ No ○

Hydric Soil Present? Yes ◉ No ○

Wetland Hydrology Present? Yes ○ No ◉

Is the Sampled Area within a Wetland? Yes ○ No ◉

Remarks:

VEGETATION - Use scientific names of plants

FWS Region: GP

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30 ft)				
1. Salix nigra	25	☑	100.0%	FACW
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
	25	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)				
1. Ulmus americana	10	☑	100.0%	FAC
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	10	= Total Cover		
Herb Stratum (Plot size: 5 ft)				
1. Setaria pumila	15	☑	15.0%	FACU
2. Sorghum halepense	20	☑	20.0%	FACU
3. Iva annua	10	☐	10.0%	FAC
4. Paspalum dilatatum	20	☑	20.0%	FAC
5. Ambrosia trifida	15	☑	15.0%	FAC
6. Juncus effusus	10	☐	10.0%	OBL
7. Rubus trivialis	10	☐	10.0%	FACU
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	100	= Total Cover		
Woody Vine Stratum (Plot size:)				
1.	0	☐		
2.	0	☐		
	0	= Total Cover		

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:	
OBL species	10	x 1 =	10
FACW species	25	x 2 =	50
FAC species	55	x 3 =	165
FACU species	45	x 4 =	180
UPL species	0	x 5 =	0
Column Totals:	135 (A)		405 (B)

Prevalence Index = B/A = 3

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks:

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: T4P1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 4/2	95	7.5YR 4/6	5	C	M	Loam	

[1]Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR F)
- ☐ 1 cm Muck (A9) (LRR F,G,H)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR F)
- ☐ Sandy Gleyed Matrix S4
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ High Plains Depressions (F16) (MLRA 72 and 73 of LRR H)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR I, J)
- ☐ Coastal Prairie Redox (A16) (LRR F, G, H)
- ☐ Dark Surface (S7) (LRR G)
- ☐ High Plains Depressions (F16) (LRR H outside of MLRA 72 and 73)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ◉ No ○

Remarks:

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry Season Water Table (C2)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where not tilled)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where tilled)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☑ Geomorphic Position (D2)
- ☐ FAC-neutral Test (D5)
- ☐ Frost Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present?	Yes ○ No ◉	Depth (inches):	0
Water Table Present?	Yes ○ No ◉	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes ○ No ◉	Depth (inches):	0

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Alpha Bartonville FM 407 City/County: Bartonville / Denton Sampling Date: 07-Sep-21

Applicant/Owner: State: Texas Sampling Point: T4P3

Investigator(s): MP Section, Township, Range: S T R

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): convex Slope: 2.0 % / 1.1 °

Subregion (LRR): LRR J Lat.: 33.100749 Long.: -97.136145 Datum: NAD83

Soil Map Unit Name: Wilson clay loam, 1 to 3 percent slopes NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ◉ No ○

Hydric Soil Present? Yes ◉ No ○

Wetland Hydrology Present? Yes ○ No ◉

Is the Sampled Area within a Wetland? Yes ○ No ◉

Remarks:

VEGETATION - Use scientific names of plants

FWS Region: GP

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30 ft)				
1. Salix nigra	25	☑	100.0%	FACW
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
	25	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)				
1. Ulmus americana	10	☑	100.0%	FAC
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	10	= Total Cover		
Herb Stratum (Plot size: 5 ft)				
1. Setaria pumila	15	☑	15.0%	FACU
2. Sorghum halepense	20	☑	20.0%	FACU
3. Iva annua	10	☐	10.0%	FAC
4. Paspalum dilatatum	20	☑	20.0%	FAC
5. Ambrosia trifida	15	☑	15.0%	FAC
6. Juncus effusus	10	☐	10.0%	OBL
7. Rubus trivialis	10	☐	10.0%	FACU
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	100	= Total Cover		
Woody Vine Stratum (Plot size:)				
1.	0	☐		
2.	0	☐		
	0	= Total Cover		

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:	
OBL species	10	x 1 =	10
FACW species	25	x 2 =	50
FAC species	55	x 3 =	165
FACU species	45	x 4 =	180
UPL species	0	x 5 =	0
Column Totals:	135 (A)		405 (B)

Prevalence Index = B/A = 3

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks:

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: T4P3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR	4/2	95	7.5YR	4/6	5	C	M	Loam	

[1]Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR F)
- ☐ 1 cm Muck (A9) (LRR F,G,H)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR F)
- ☐ Sandy Gleyed Matrix S4
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ High Plains Depressions (F16) (MLRA 72 and 73 of LRR H)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR I, J)
- ☐ Coastal Prairie Redox (A16) (LRR F, G, H)
- ☐ Dark Surface (S7) (LRR G)
- ☐ High Plains Depressions (F16) (LRR H outside of MLRA 72 and 73)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ◉ No ○

Remarks:

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry Season Water Table (C2)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where not tilled)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where tilled)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☑ Geomorphic Position (D2)
- ☐ FAC-neutral Test (D5)
- ☐ Frost Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): 0

Water Table Present? Yes ○ No ◉ Depth (inches): 0

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): 0

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Alpha Bartonville FM 407 City/County: Bartonville / Denton Sampling Date: 07-Sep-21

Applicant/Owner: State: Texas Sampling Point: T4P4

Investigator(s): MP Section, Township, Range: S T R

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): convex Slope: 2.0 % / 1.1 °

Subregion (LRR): LRR J Lat.: 33.100516 Long.: -97.136256 Datum: NAD83

Soil Map Unit Name: Wilson clay loam, 1 to 3 percent slopes NWI classification: PUBHh

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ○ No ◉	Is the Sampled Area
Hydric Soil Present? Yes ○ No ◉	within a Wetland? Yes ○ No ◉
Wetland Hydrology Present? Yes ○ No ◉	

Remarks:

VEGETATION - Use scientific names of plants

FWS Region: GP

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
3.	0	☐	
4.	0	☐	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
3.	0	☐	
4.	0	☐	
5.	0	☐	
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. Paspalum dilatatum	25	☑ 25.0%	FAC
2. Cynodon dactylon	60	☑ 60.0%	FACU
3. Senecio flaccidus	15	☐ 15.0%	UPL
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
	0	= Total Cover	

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	25	x 3 =	75
FACU species	60	x 4 =	240
UPL species	15	x 5 =	75
Column Totals:	100 (A)		390 (B)

Prevalence Index = B/A = 3.9

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks:

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: T4P4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 4/2	100					Silt	

[1]Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR F)
- ☐ 1 cm Muck (A9) (LRR F,G,H)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR F)
- ☐ Sandy Gleyed Matrix S4
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ High Plains Depressions (F16) (MLRA 72 and 73 of LRR H)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR I, J)
- ☐ Coastal Prairie Redox (A16) (LRR F, G, H)
- ☐ Dark Surface (S7) (LRR G)
- ☐ High Plains Depressions (F16) (LRR H outside of MLRA 72 and 73)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Compacted Soil

Depth (inches): 2 inches

Hydric Soil Present? Yes ○ No ◉

Remarks:

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry Season Water Table (C2)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where not tilled)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where tilled)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ FAC-neutral Test (D5)
- ☐ Frost Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present?	Yes ○ No ◉	Depth (inches):	0
Water Table Present?	Yes ○ No ◉	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes ○ No ◉	Depth (inches):	0

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Alpha Bartonville FM 407 City/County: Bartonville / Denton Sampling Date: 07-Sep-21

Applicant/Owner: State: Texas Sampling Point: T4P5

Investigator(s): MP Section, Township, Range: S T R

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): concave Slope: 2.0 % / 1.1 °

Subregion (LRR): LRR J Lat.: 33.100493 Long.: -97.136273 Datum: NAD83

Soil Map Unit Name: Wilson clay loam, 1 to 3 percent slopes NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ◉ No ○	Is the Sampled Area
Hydric Soil Present? Yes ◉ No ○	within a Wetland? Yes ◉ No ○
Wetland Hydrology Present? Yes ◉ No ○	

Remarks:

VEGETATION - Use scientific names of plants

FWS Region: GP

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
3.	0	☐	
4.	0	☐	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
3.	0	☐	
4.	0	☐	
5.	0	☐	
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. Persicaria hydropiperoides	60	☑ 60.0%	OBL
2. Nelumbo lutea	40	☑ 40.0%	OBL
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
	0	= Total Cover	

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:	
OBL species	100	x 1 =	100
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		100 (B)

Prevalence Index = B/A = 1

Hydrophytic Vegetation Indicators:

- ☑ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks:

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: T4P5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR	5/2	60	7.5YR	4/8	40	C	PL and M	Silty Clay Loam

[1]Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR F)
- ☐ 1 cm Muck (A9) (LRR F,G,H)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR F)
- ☐ Sandy Gleyed Matrix S4
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☑ Redox depressions (F8)
- ☐ High Plains Depressions (F16) (MLRA 72 and 73 of LRR H)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR I, J)
- ☐ Coastal Prairie Redox (A16) (LRR F, G, H)
- ☐ Dark Surface (S7) (LRR G)
- ☐ High Plains Depressions (F16) (LRR H outside of MLRA 72 and 73)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ◉ No ○

Remarks:

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry Season Water Table (C2)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where not tilled)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where tilled)
- ☐ Crayfish Burrows (C8)
- ☑ Saturation Visible on Aerial Imagery (C9)
- ☑ Geomorphic Position (D2)
- ☑ FAC-neutral Test (D5)
- ☐ Frost Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):	0
Water Table Present?	Yes ○	No ◉	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes ◉	No ○	Depth (inches):	12

Wetland Hydrology Present? Yes ◉ No ○

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Alpha Bartonville FM 407 City/County: Bartonville / Denton Sampling Date: 07-Sep-21

Applicant/Owner: State: Texas Sampling Point: T4P7

Investigator(s): MP Section, Township, Range: S T R

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): concave Slope: 2.0 % / 1.1 °

Subregion (LRR): LRR J Lat.: 33.099596 Long.: -97.136525 Datum: NAD83

Soil Map Unit Name: Silstid loamy fine sand, 1 to 5 percent slopes NWI classification: PFO1Ch

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ◉ No ○

Hydric Soil Present? Yes ◉ No ○

Wetland Hydrology Present? Yes ◉ No ○

Is the Sampled Area within a Wetland? Yes ◉ No ○

Remarks:

VEGETATION - Use scientific names of plants

Dominant Species? FWS Region: GP

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)				
1.	0	☐		
2.	0	☐		
3.	0	☐		
4.	0	☐		
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size:)				
1.	0	☐		
2.	0	☐		
3.	0	☐		
4.	0	☐		
5.	0	☐		
	0	= Total Cover		
Herb Stratum (Plot size: 5 ft)				
1. Persicaria hydropiperoides	60	☑	60.0%	OBL
2. Nelumbo lutea	40	☑	40.0%	OBL
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	100	= Total Cover		
Woody Vine Stratum (Plot size:)				
1.	0	☐		
2.	0	☐		
	0	= Total Cover		

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:	
OBL species	100	x 1 =	100
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		100 (B)

Prevalence Index = B/A = 1

Hydrophytic Vegetation Indicators:

- ☑ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks:

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: T4P7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 5/2	60	7.5YR 4/8	40	C	PL and M	Silty Clay Loam	

[1]Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR F)
- ☐ 1 cm Muck (A9) (LRR F,G,H)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR F)
- ☐ Sandy Gleyed Matrix S4
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☑ Redox depressions (F8)
- ☐ High Plains Depressions (F16) (MLRA 72 and 73 of LRR H)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR I, J)
- ☐ Coastal Prairie Redox (A16) (LRR F, G, H)
- ☐ Dark Surface (S7) (LRR G)
- ☐ High Plains Depressions (F16) (LRR H outside of MLRA 72 and 73)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ◉ No ○

Remarks:

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry Season Water Table (C2)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where not tilled)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where tilled)
- ☐ Crayfish Burrows (C8)
- ☑ Saturation Visible on Aerial Imagery (C9)
- ☑ Geomorphic Position (D2)
- ☑ FAC-neutral Test (D5)
- ☐ Frost Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present?	Yes ○ No ◉	Depth (inches):	0
Water Table Present?	Yes ○ No ◉	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes ◉ No ○	Depth (inches):	12

Wetland Hydrology Present? Yes ◉ No ○

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Alpha Bartonville FM 407 City/County: Bartonville / Denton Sampling Date: 07-Sep-21

Applicant/Owner: State: Texas Sampling Point: T4P8

Investigator(s): MP Section, Township, Range: S T R

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): convex Slope: 2.0 % / 1.1 °

Subregion (LRR): LRR J Lat.: 33.099524 Long.: -97.136511 Datum: NAD83

Soil Map Unit Name: Silstid loamy fine sand, 1 to 5 percent slopes NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ○ No ◉

Hydric Soil Present? Yes ○ No ◉

Wetland Hydrology Present? Yes ○ No ◉

Is the Sampled Area within a Wetland? Yes ○ No ◉

Remarks:

VEGETATION - Use scientific names of plants

FWS Region: GP

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
3.	0	☐	
4.	0	☐	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
3.	0	☐	
4.	0	☐	
5.	0	☐	
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. Paspalum dilatatum	25	☑ 25.0%	FAC
2. Cynodon dactylon	60	☑ 60.0%	FACU
3. Senecio flaccidus	15	☐ 15.0%	UPL
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
	0	= Total Cover	

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	25	x 3 =	75
FACU species	60	x 4 =	240
UPL species	15	x 5 =	75
Column Totals:	100 (A)		390 (B)

Prevalence Index = B/A = 3.9

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks:

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: T4P8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 4/2	100					Silt	

[1]Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR F)
- ☐ 1 cm Muck (A9) (LRR F,G,H)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR F)
- ☐ Sandy Gleyed Matrix S4
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ High Plains Depressions (F16) (MLRA 72 and 73 of LRR H)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR I, J)
- ☐ Coastal Prairie Redox (A16) (LRR F, G, H)
- ☐ Dark Surface (S7) (LRR G)
- ☐ High Plains Depressions (F16) (LRR H outside of MLRA 72 and 73)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Compacted Soil

Depth (inches): 2 inches

Hydric Soil Present? Yes ○ No ◉

Remarks:

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry Season Water Table (C2)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where not tilled)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where tilled)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ FAC-neutral Test (D5)
- ☐ Frost Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):	0
Water Table Present?	Yes ○	No ◉	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):	0

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Alpha Bartonville FM 407 City/County: Bartonville / Denton Sampling Date: 07-Sep-21

Applicant/Owner: State: Texas Sampling Point: T5P1

Investigator(s): MP Section, Township, Range: S T R

Landform (hillslope, terrace, etc.): Plain Local relief (concave, convex, none): flat Slope: 1.0 % / 0.6 °

Subregion (LRR): LRR J Lat.: 33.101136 Long.: -97.138472 Datum: NAD83

Soil Map Unit Name: Wilson clay loam, 1 to 3 percent slopes NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☑, Soil ☑, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ○ No ◉

Hydric Soil Present? Yes ○ No ◉

Wetland Hydrology Present? Yes ○ No ◉

Is the Sampled Area within a Wetland? Yes ○ No ◉

Remarks: Area is horse corral. No vegetation and area has been sanded.

VEGETATION - Use scientific names of plants

FWS Region: GP

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
3.	0	☐	
4.	0	☐	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
3.	0	☐	
4.	0	☐	
5.	0	☐	
	0	= Total Cover	
Herb Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
	0	= Total Cover	

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = 0

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations [1](Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks:

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: T5P1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 6/4	100					Very fine sand	

[1]Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR F)
- ☐ 1 cm Muck (A9) (LRR F,G,H)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR F)
- ☐ Sandy Gleyed Matrix S4
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ High Plains Depressions (F16) (MLRA 72 and 73 of LRR H)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR I, J)
- ☐ Coastal Prairie Redox (A16) (LRR F, G, H)
- ☐ Dark Surface (S7) (LRR G)
- ☐ High Plains Depressions (F16) (LRR H outside of MLRA 72 and 73)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry Season Water Table (C2)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where not tilled)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where tilled)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ FAC-neutral Test (D5)
- ☐ Frost Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present?	Yes ○ No ◉	Depth (inches):	0
Water Table Present?	Yes ○ No ◉	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes ○ No ◉	Depth (inches):	0

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Alpha Bartonville FM 407 City/County: Bartonville / Denton Sampling Date: 07-Sep-21

Applicant/Owner: State: Texas Sampling Point: T5P2

Investigator(s): MP Section, Township, Range: S T R

Landform (hillslope, terrace, etc.): Plain Local relief (concave, convex, none): flat Slope: 1.0 % / 0.6 °

Subregion (LRR): LRR J Lat.: 33.100029 Long.: -97.138480 Datum: NAD83

Soil Map Unit Name: Wilson clay loam, 1 to 3 percent slopes NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ○ No ◉

Hydric Soil Present? Yes ○ No ◉

Wetland Hydrology Present? Yes ○ No ◉

Is the Sampled Area within a Wetland? Yes ○ No ◉

Remarks:

VEGETATION - Use scientific names of plants

FWS Region: GP

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
3.	0	☐	
4.	0	☐	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
3.	0	☐	
4.	0	☐	
5.	0	☐	
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. Cynodon dactylon	60	☑ 60.0%	FACU
2. Paspalum dilatatum	40	☑ 40.0%	FAC
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
	0	= Total Cover	

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	40	x 3 =	120
FACU species	60	x 4 =	240
UPL species	0	x 5 =	0
Column Totals:	100 (A)		360 (B)

Prevalence Index = B/A = 3.6

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks:

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: T5P2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 4/2	100					Loam	

[1]Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR F)
- ☐ 1 cm Muck (A9) (LRR F,G,H)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR F)
- ☐ Sandy Gleyed Matrix S4
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ High Plains Depressions (F16) (MLRA 72 and 73 of LRR H)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR I, J)
- ☐ Coastal Prairie Redox (A16) (LRR F, G, H)
- ☐ Dark Surface (S7) (LRR G)
- ☐ High Plains Depressions (F16) (LRR H outside of MLRA 72 and 73)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ○ No ◉

Remarks:

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry Season Water Table (C2)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where not tilled)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where tilled)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ FAC-neutral Test (D5)
- ☐ Frost Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):	0
Water Table Present?	Yes ○	No ◉	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):	0

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Alpha Bartonville FM 407 City/County: Bartonville / Denton Sampling Date: 07-Sep-21

Applicant/Owner: State: Texas Sampling Point: T5P3

Investigator(s): MP Section, Township, Range: S T R

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): flat Slope: 2.0 % / 1.1 °

Subregion (LRR): LRR J Lat.: 33.099934 Long.: -97.138479 Datum: NAD83

Soil Map Unit Name: Wilson clay loam, 1 to 3 percent slopes NWI classification: PUBFh

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ◉ No ○

Hydric Soil Present? Yes ◉ No ○

Wetland Hydrology Present? Yes ◉ No ○

Is the Sampled Area within a Wetland? Yes ◉ No ○

Remarks:

VEGETATION - Use scientific names of plants

FWS Region: GP

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)				
1.	0	☐		
2.	0	☐		
3.	0	☐		
4.	0	☐		
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size:)				
1.	0	☐		
2.	0	☐		
3.	0	☐		
4.	0	☐		
5.	0	☐		
	0	= Total Cover		
Herb Stratum (Plot size: 5 ft)				
1. Juncus effusus	40	☑	40.0%	OBL
2. Persicaria hydropiperoides	35	☑	35.0%	OBL
3. Andropogon glomeratus	15	☐	15.0%	FACW
4. Typha latifolia	10	☐	10.0%	OBL
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	100	= Total Cover		
Woody Vine Stratum (Plot size:)				
1.	0	☐		
2.	0	☐		
	0	= Total Cover		

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	85	x 1 =	85	
FACW species	15	x 2 =	30	
FAC species	0	x 3 =	0	
FACU species	0	x 4 =	0	
UPL species	0	x 5 =	0	
Column Totals:	100	(A)	115	(B)

Prevalence Index = B/A = 1.15

Hydrophytic Vegetation Indicators:

☑ 1 - Rapid Test for Hydrophytic Vegetation

☑ 2 - Dominance Test is > 50%

☑ 3 - Prevalence Index is ≤3.0[1]

☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks:

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: T5P3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 5/2	80	7.5YR 4/6	20	C	M	Silt Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☑ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR F)
- ☐ 1 cm Muck (A9) (LRR F,G,H)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR F)
- ☐ Sandy Gleyed Matrix S4
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ High Plains Depressions (F16) (MLRA 72 and 73 of LRR H)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR I, J)
- ☐ Coastal Prairie Redox (A16) (LRR F, G, H)
- ☐ Dark Surface (S7) (LRR G)
- ☐ High Plains Depressions (F16) (LRR H outside of MLRA 72 and 73)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ◉ No ○

Remarks:

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☑ Hydrogen Sulfide Odor (C1)
- ☐ Dry Season Water Table (C2)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where not tilled)
- ☐ Presence of Reduced Iron (C4)
- ☑ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where tilled)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☑ Geomorphic Position (D2)
- ☑ FAC-neutral Test (D5)
- ☐ Frost Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):	0
Water Table Present?	Yes ○	No ◉	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes ◉	No ○	Depth (inches):	At Surface

Wetland Hydrology Present? Yes ◉ No ○

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Alpha Bartonville FM 407 City/County: Bartonville / Denton Sampling Date: 07-Sep-21

Applicant/Owner: State: Texas Sampling Point: T5P5

Investigator(s): MP Section, Township, Range: S T R

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): flat Slope: 2.0 % / 1.1 °

Subregion (LRR): LRR J Lat.: 33.099671 Long.: -97.138474 Datum: NAD83

Soil Map Unit Name: Silstid loamy fine sand, 1 to 5 percent slopes NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ◉ No ○	Is the Sampled Area
Hydric Soil Present? Yes ◉ No ○	within a Wetland? Yes ◉ No ○
Wetland Hydrology Present? Yes ◉ No ○	

Remarks:

VEGETATION - Use scientific names of plants

FWS Region: GP

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
3.	0	☐	
4.	0	☐	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
3.	0	☐	
4.	0	☐	
5.	0	☐	
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. Juncus effusus	40	☑ 40.0%	OBL
2. Persicaria hydropiperoides	35	☑ 35.0%	OBL
3. Andropogon glomeratus	15	☐ 15.0%	FACW
4. Typha latifolia	10	☐ 10.0%	OBL
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
	0	= Total Cover	

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	85	x 1 =	85
FACW species	15	x 2 =	30
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		115 (B)

Prevalence Index = B/A = 1.15

Hydrophytic Vegetation Indicators:

- ☑ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks:

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: T5P5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 5/2	80	7.5YR 4/6	20	C	M	Silt Loam	

[1]Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☑ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR F)
- ☐ 1 cm Muck (A9) (LRR F,G,H)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR F)
- ☐ Sandy Gleyed Matrix S4
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ High Plains Depressions (F16) (MLRA 72 and 73 of LRR H)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR I, J)
- ☐ Coastal Prairie Redox (A16) (LRR F, G, H)
- ☐ Dark Surface (S7) (LRR G)
- ☐ High Plains Depressions (F16) (LRR H outside of MLRA 72 and 73)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ◉ No ○

Remarks:

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☑ Hydrogen Sulfide Odor (C1)
- ☐ Dry Season Water Table (C2)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where not tilled)
- ☐ Presence of Reduced Iron (C4)
- ☑ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where tilled)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☑ Geomorphic Position (D2)
- ☑ FAC-neutral Test (D5)
- ☐ Frost Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):	0
Water Table Present?	Yes ○	No ◉	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes ◉	No ○	Depth (inches):	At Surface

Wetland Hydrology Present? Yes ◉ No ○

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Alpha Bartonville FM 407 City/County: Bartonville / Denton Sampling Date: 07-Sep-21

Applicant/Owner: State: Texas Sampling Point: T5P6

Investigator(s): MP Section, Township, Range: S T R

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): flat Slope: 2.0 % / 1.1 °

Subregion (LRR): LRR J Lat.: 33.098633 Long.: -97.138284 Datum: NAD83

Soil Map Unit Name: Silstid loamy fine sand, 1 to 5 percent slopes NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ○ No ◉

Hydric Soil Present? Yes ○ No ◉

Wetland Hydrology Present? Yes ○ No ◉

Is the Sampled Area within a Wetland? Yes ○ No ◉

Remarks:

VEGETATION - Use scientific names of plants

FWS Region: GP

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30 ft)			
1. Quercus stellata	60	☑ 100.0%	FACU
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
	60	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. Fraxinus pennsylvanica	20	☑ 100.0%	FAC
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	20	= Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. Chloris texensis	30	☑ 60.0%	UPL
2. Rubus trivialis	10	☑ 20.0%	FACU
3. Bromus arvensis	10	☑ 20.0%	FACU
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	50	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1. Smilax bona-nox	10	☑ 100.0%	FACU
2.	0	☐ 0.0%	
	10	= Total Cover	

% Bare Ground in Herb Stratum 15

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 16.7% (A/B)

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	20	x 3 =	60
FACU species	90	x 4 =	360
UPL species	30	x 5 =	150
Column Totals:	140 (A)		570 (B)

Prevalence Index = B/A = 4.071

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks:

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: T5P6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 4/3	100					Fine Silty Loam	

[1]Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR F)
- ☐ 1 cm Muck (A9) (LRR F,G,H)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR F)
- ☐ Sandy Gleyed Matrix S4
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ High Plains Depressions (F16) (MLRA 72 and 73 of LRR H)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR I, J)
- ☐ Coastal Prairie Redox (A16) (LRR F, G, H)
- ☐ Dark Surface (S7) (LRR G)
- ☐ High Plains Depressions (F16) (LRR H outside of MLRA 72 and 73)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ○ No ◉

Remarks:

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry Season Water Table (C2)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where not tilled)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where tilled)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ FAC-neutral Test (D5)
- ☐ Frost Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): 0

Water Table Present? Yes ○ No ◉ Depth (inches): 0

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): 0

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Alpha Bartonville FM 407 City/County: Bartonville / Denton Sampling Date: 07-Sep-21

Applicant/Owner: State: Texas Sampling Point: T6P1

Investigator(s): MP Section, Township, Range: S T R

Landform (hillslope, terrace, etc.): Plain Local relief (concave, convex, none): flat Slope: 1.0 % / 0.6 °

Subregion (LRR): LRR J Lat.: 33.102169 Long.: -97.139391 Datum: NAD83

Soil Map Unit Name: Birome-Rayex-Aubrey complex, 2 to 15 percent slopes NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ○ No ◉

Hydric Soil Present? Yes ○ No ◉

Wetland Hydrology Present? Yes ○ No ◉

Is the Sampled Area within a Wetland? Yes ○ No ◉

Remarks:

VEGETATION - Use scientific names of plants

FWS Region: GP

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
3.	0	☐	
4.	0	☐	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
3.	0	☐	
4.	0	☐	
5.	0	☐	
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. Cynodon dactylon	100	☑ 100.0%	FACU
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
	0	= Total Cover	

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	100	x 4 =	400
UPL species	0	x 5 =	0
Column Totals:	100 (A)		400 (B)

Prevalence Index = B/A = 4

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks:

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: T6P1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 4/2	100					Loam	

[1]Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR F)
- ☐ 1 cm Muck (A9) (LRR F,G,H)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR F)
- ☐ Sandy Gleyed Matrix S4
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ High Plains Depressions (F16) (MLRA 72 and 73 of LRR H)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR I, J)
- ☐ Coastal Prairie Redox (A16) (LRR F, G, H)
- ☐ Dark Surface (S7) (LRR G)
- ☐ High Plains Depressions (F16) (LRR H outside of MLRA 72 and 73)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ○ No ◉

Remarks:

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry Season Water Table (C2)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where not tilled)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where tilled)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ FAC-neutral Test (D5)
- ☐ Frost Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):	0
Water Table Present?	Yes ○	No ◉	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):	0

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Alpha Bartonville FM 407 City/County: Bartonville / Denton Sampling Date: 07-Sep-21

Applicant/Owner: State: Texas Sampling Point: T6P2

Investigator(s): MP Section, Township, Range: S T R

Landform (hillslope, terrace, etc.): Plain Local relief (concave, convex, none): flat Slope: 1.0 % / 0.6 °

Subregion (LRR): LRR J Lat.: 33.100890 Long.: -97.139429 Datum: NAD83

Soil Map Unit Name: Silstid loamy fine sand, 1 to 5 percent slopes NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ○ No ◉	Is the Sampled Area
Hydric Soil Present? Yes ○ No ◉	within a Wetland? Yes ○ No ◉
Wetland Hydrology Present? Yes ○ No ◉	

Remarks:

VEGETATION - Use scientific names of plants

FWS Region: GP

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
3.	0	☐	
4.	0	☐	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
3.	0	☐	
4.	0	☐	
5.	0	☐	
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. Cynodon dactylon	100	☑ 100.0%	FACU
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
	0	= Total Cover	

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	100	x 4 =	400
UPL species	0	x 5 =	0
Column Totals:	100 (A)		400 (B)

Prevalence Index = B/A = 4

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks:

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: T6P2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 4/2	100					Loam	

[1]Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR F)
- ☐ 1 cm Muck (A9) (LRR F,G,H)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR F)
- ☐ Sandy Gleyed Matrix S4
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ High Plains Depressions (F16) (MLRA 72 and 73 of LRR H)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR I, J)
- ☐ Coastal Prairie Redox (A16) (LRR F, G, H)
- ☐ Dark Surface (S7) (LRR G)
- ☐ High Plains Depressions (F16) (LRR H outside of MLRA 72 and 73)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ○ No ◉

Remarks:

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry Season Water Table (C2)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where not tilled)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where tilled)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ FAC-neutral Test (D5)
- ☐ Frost Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):	0
Water Table Present?	Yes ○	No ◉	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):	0

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Alpha Bartonville FM 407 City/County: Bartonville / Denton Sampling Date: 07-Sep-21

Applicant/Owner: State: Texas Sampling Point: T6P3

Investigator(s): MP Section, Township, Range: S T R

Landform (hillslope, terrace, etc.): Plain Local relief (concave, convex, none): flat Slope: 1.0 % / 0.6 °

Subregion (LRR): LRR J Lat.: 33.099916 Long.: -97.139405 Datum: NAD83

Soil Map Unit Name: Wilson clay loam, 1 to 3 percent slopes NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ○ No ◉	Is the Sampled Area
Hydric Soil Present? Yes ○ No ◉	within a Wetland? Yes ○ No ◉
Wetland Hydrology Present? Yes ○ No ◉	

Remarks:

VEGETATION - Use scientific names of plants

FWS Region: GP

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
3.	0	☐	
4.	0	☐	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
3.	0	☐	
4.	0	☐	
5.	0	☐	
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. Cynodon dactylon	100	☑ 100.0%	FACU
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
	0	= Total Cover	

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	100	x 4 =	400
UPL species	0	x 5 =	0
Column Totals:	100 (A)		400 (B)

Prevalence Index = B/A = 4

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks:

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: T6P3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 4/2	100					Loam	

[1]Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR F)
- ☐ 1 cm Muck (A9) (LRR F,G,H)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR F)
- ☐ Sandy Gleyed Matrix S4
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ High Plains Depressions (F16) **(MLRA 72 and 73 of LRR H)**

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR I, J)
- ☐ Coastal Prairie Redox (A16) (LRR F, G, H)
- ☐ Dark Surface (S7) (LRR G)
- ☐ High Plains Depressions (F16) **(LRR H outside of MLRA 72 and 73)**
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ○ No ◉

Remarks:

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry Season Water Table (C2)
- ☐ Oxidized Rhizospheres on Living Roots (C3) **(where not tilled)**
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres on Living Roots (C3) **(where tilled)**
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ FAC-neutral Test (D5)
- ☐ Frost Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):	0
Water Table Present?	Yes ○	No ◉	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):	0

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Alpha Bartonville FM 407 City/County: Bartonville / Denton Sampling Date: 07-Sep-21

Applicant/Owner: State: Texas Sampling Point: T6P4

Investigator(s): MP Section, Township, Range: S T R

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): concave Slope: 2.0 % / 1.1 °

Subregion (LRR): LRR J Lat.: 33.099774 Long.: -97.139419 Datum: NAD83

Soil Map Unit Name: Wilson clay loam, 1 to 3 percent slopes NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ◉ No ○

Hydric Soil Present? Yes ◉ No ○

Wetland Hydrology Present? Yes ◉ No ○

Is the Sampled Area within a Wetland? Yes ◉ No ○

Remarks:

VEGETATION - Use scientific names of plants

FWS Region: GP

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
3.	0	☐	
4.	0	☐	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
3.	0	☐	
4.	0	☐	
5.	0	☐	
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. Paspalum urvillei	100	☑ 100.0%	FACW
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
	0	= Total Cover	

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:	
OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		200 (B)

Prevalence Index = B/A = 2

Hydrophytic Vegetation Indicators:

- ☑ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks:

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: T6P4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR	5/2	60	7.5YR	6/6	40	C	M and PL	Loam	

[1]Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR F)
- ☐ 1 cm Muck (A9) (LRR F,G,H)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR F)
- ☐ Sandy Gleyed Matrix S4
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☑ Redox depressions (F8)
- ☐ High Plains Depressions (F16) (MLRA 72 and 73 of LRR H)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR I, J)
- ☐ Coastal Prairie Redox (A16) (LRR F, G, H)
- ☐ Dark Surface (S7) (LRR G)
- ☐ High Plains Depressions (F16) (LRR H outside of MLRA 72 and 73)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ◉ No ○

Remarks:

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☑ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry Season Water Table (C2)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where not tilled)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☑ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where tilled)
- ☐ Crayfish Burrows (C8)
- ☑ Saturation Visible on Aerial Imagery (C9)
- ☑ Geomorphic Position (D2)
- ☑ FAC-neutral Test (D5)
- ☐ Frost Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present?	Yes ◉ No ○	Depth (inches):	1
Water Table Present?	Yes ○ No ◉	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes ◉ No ○	Depth (inches):	At Surface

Wetland Hydrology Present? Yes ◉ No ○

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Alpha Bartonville FM 407 City/County: Bartonville / Denton Sampling Date: 07-Sep-21

Applicant/Owner: State: Texas Sampling Point: T6P5

Investigator(s): MP Section, Township, Range: S T R

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): concave Slope: 1.0 % / 0.6 °

Subregion (LRR): LRR J Lat.: 33.099640 Long.: -97.139433 Datum: NAD83

Soil Map Unit Name: Wilson clay loam, 1 to 3 percent slopes NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ◉ No ○

Hydric Soil Present? Yes ◉ No ○

Wetland Hydrology Present? Yes ◉ No ○

Is the Sampled Area within a Wetland? Yes ◉ No ○

Remarks:

VEGETATION - Use scientific names of plants

FWS Region: GP

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
3.	0	☐	
4.	0	☐	
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
3.	0	☐	
4.	0	☐	
5.	0	☐	
	0 = Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. Paspalum urvillei	60	☑ 60.0%	FACW
2. Cynodon dactylon	40	☑ 40.0%	FACU
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	100 = Total Cover		
Woody Vine Stratum (Plot size:)			
1.	0	☐	
2.	0	☐	
	0 = Total Cover		

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:	
OBL species	0	x 1 =	0
FACW species	60	x 2 =	120
FAC species	0	x 3 =	0
FACU species	40	x 4 =	160
UPL species	0	x 5 =	0
Column Totals:	100 (A)		280 (B)

Prevalence Index = B/A = 2.8

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks:

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: T6P5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 5/2	90	7.5YR 6/6	10	C	PL and M	Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR F)
- ☐ 1 cm Muck (A9) (LRR F,G,H)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR F)
- ☐ Sandy Gleyed Matrix S4
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☑ Redox depressions (F8)
- ☐ High Plains Depressions (F16) (MLRA 72 and 73 of LRR H)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR I, J)
- ☐ Coastal Prairie Redox (A16) (LRR F, G, H)
- ☐ Dark Surface (S7) (LRR G)
- ☐ High Plains Depressions (F16) (LRR H outside of MLRA 72 and 73)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ◉ No ○

Remarks:

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry Season Water Table (C2)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where not tilled)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☑ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where tilled)
- ☐ Crayfish Burrows (C8)
- ☑ Saturation Visible on Aerial Imagery (C9)
- ☑ Geomorphic Position (D2)
- ☐ FAC-neutral Test (D5)
- ☐ Frost Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): 0

Water Table Present? Yes ○ No ◉ Depth (inches): 0

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): 0

Wetland Hydrology Present? Yes ◉ No ○

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Alpha Bartonville FM 407 City/County: Bartonville / Denton Sampling Date: 07-Sep-21

Applicant/Owner: State: Texas Sampling Point: T6P6

Investigator(s): MP Section, Township, Range: S T R

Landform (hillslope, terrace, etc.): Plain Local relief (concave, convex, none): flat Slope: 4.0 % / 2.3 °

Subregion (LRR): LRR J Lat.: 33.099387 Long.: -97.139433 Datum: NAD83

Soil Map Unit Name: Silstid loamy fine sand, 1 to 5 percent slopes NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ◉ No ○	Is the Sampled Area
Hydric Soil Present? Yes ◉ No ○	within a Wetland? Yes ○ No ◉
Wetland Hydrology Present? Yes ○ No ◉	

Remarks:

VEGETATION - Use scientific names of plants

FWS Region: GP

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)				
1.	0	☐		
2.	0	☐		
3.	0	☐		
4.	0	☐		
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size:)				
1.	0	☐		
2.	0	☐		
3.	0	☐		
4.	0	☐		
5.	0	☐		
	0	= Total Cover		
Herb Stratum (Plot size: 5 ft)				
1. Cynodon dactylon	40	☑	40.0%	FACU
2. Juncus effusus	20	☑	20.0%	OBL
3. Paspalum dilatatum	40	☑	40.0%	FAC
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
	100	= Total Cover		
Woody Vine Stratum (Plot size:)				
1.	0	☐		
2.	0	☐		
	0	= Total Cover		

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:	
OBL species	20	x 1 =	20
FACW species	0	x 2 =	0
FAC species	40	x 3 =	120
FACU species	40	x 4 =	160
UPL species	0	x 5 =	0
Column Totals:	100 (A)		300 (B)

Prevalence Index = B/A = 3

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks:

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: T6P6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 5/2	95	7.5YR 4/8	5	C	PL and M	Loam	

[1]Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR F)
- ☐ 1 cm Muck (A9) (LRR F,G,H)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR F)
- ☐ Sandy Gleyed Matrix S4
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox depressions (F8)
- ☐ High Plains Depressions (F16) (MLRA 72 and 73 of LRR H)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR I, J)
- ☐ Coastal Prairie Redox (A16) (LRR F, G, H)
- ☐ Dark Surface (S7) (LRR G)
- ☐ High Plains Depressions (F16) (LRR H outside of MLRA 72 and 73)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ◉ No ○

Remarks:

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry Season Water Table (C2)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where not tilled)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (where tilled)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☑ Geomorphic Position (D2)
- ☐ FAC-neutral Test (D5)
- ☐ Frost Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): 0

Water Table Present? Yes ○ No ◉ Depth (inches): 0

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): 0

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

Appendix B – Stream Data Sheets

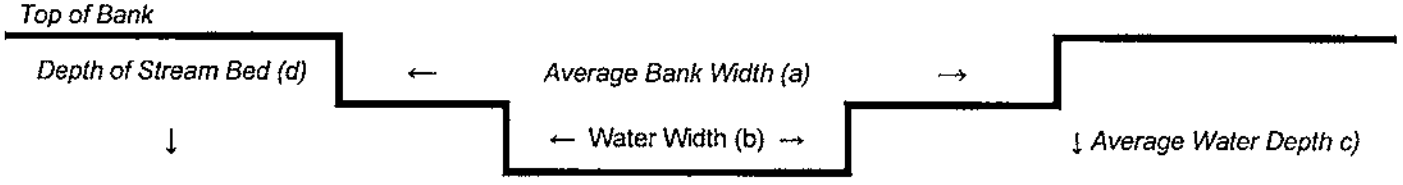
Stream Data Sheet

Stream #: T1P4	Date: 10/6/2021

Project Name: Bartonville FM 407 Delineation	Project #: 4321084
Location (County/State): Denton / TX	Field Crew: M. Peters
Stream Name: Tributary 2	

Stream Characteristics

a) Avg. Bank Width	2	In./(Ft.)	b) Average Width of Water	Dry	In./Ft.
c) Avg. Water Depth	Dry	In./Ft.	Min./Max Depth	Dry	In./Ft.
d) Depth of Streambed below top of bank	0.75	In./(Ft.)			
Stream flow:	☐ Perennial		☐ Intermittent	☒ Ephemeral	
OHWM Width	1.25	In./(Ft.)	Height of OHWM above streambed	0.25	In./(Ft.)



Substrate

☐ Bedrock	☐ Boulder	☐ Cobble	☐ Gravel	☐ Sand	☒ Silt/Clay
☐ Organic	☐ Concrete	☐ Other (Describe)			

Instream Cover

☐ Undercut Banks	☐ Logs/Brush	☒ Emergent	☐ Oxbows	☐ Boulders
☒ Overhanging Vegetation	☐ Deep Pools	☐ Shallows (in slow water)		

Riparian Zone (check all that are appropriate)

☐ Forest	☐ Scrub/Shrub	☐ Old-Field/ROW	☒ Pasture	☐ Row-Crop	☒ Wetland	☐ Paved
☐ Residential/Park	☐ Other					

(Describe other or differences between banks):

Width of Riparian Zone (Left or right bank looking downstream)	Left	100	In./(Ft.)	Right 100	In./(Ft.)

Notes/Comments:

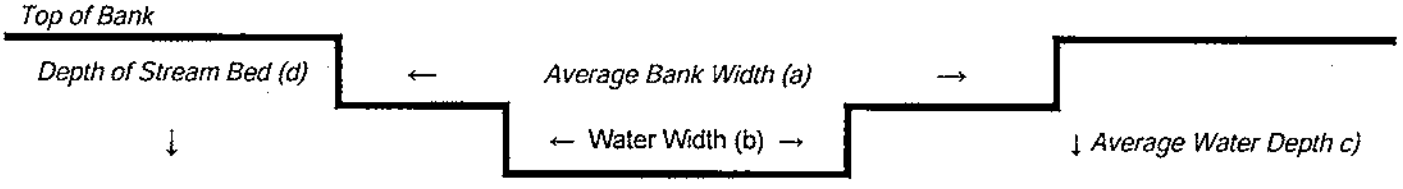
Stream Data Sheet

Stream #: T1P8	Date: 10/6/2021

Project Name: Bartonville FM 407 Delineation	Project #: 4321084
Location (County/State): Denton / TX	Field Crew: M. Peters
Stream Name: Tributary 1	

Stream Characteristics

a) Avg. Bank Width	2	In./(Ft.)	b) Average Width of Water	Dry	In./Ft.
c) Avg. Water Depth	Dry	In./Ft.	Min./Max Depth	Dry	In./Ft.
d) Depth of Streambed below top of bank	0.75	In./(Ft.)			
Stream flow:	☐ Perennial	☐ Intermittent	☒ Ephemeral		
OHWM Width	1.25	In./(Ft.)	Height of OHWM above streambed	0.25	In./(Ft.)



Substrate

	Artificial	Artificial			
☐ Bedrock	☒ Boulder	☒ Cobble	☐ Gravel	☐ Sand	☒ Silt/Clay
☐ Organic	☐ Concrete	☐ Other (Describe)			

Instream Cover

☐ Undercut Banks	☐ Logs/Brush	☒ Emergent	☐ Oxbows	☐ Boulders
☒ Overhanging Vegetation	☐ Deep Pools	☐ Shallows (in slow water)		

Riparian Zone (check all that are appropriate)

☐ Forest	☐ Scrub/Shrub	☐ Old-Field/ROW	☒ Pasture	☐ Row-Crop	☒ Wetland	☐ Paved
☐ Residential/Park	☐ Other					

(Describe other or differences between banks):

Width of Riparian Zone (Left or right bank looking downstream)	Left	100	In./(Ft.)	Right 100	In./(Ft.)

Notes/Comments:

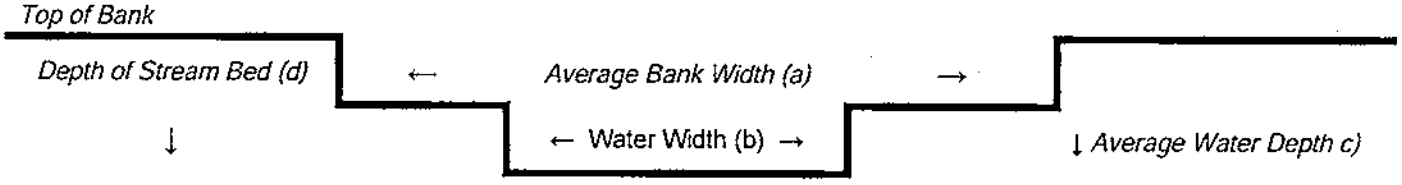
Stream Data Sheet

Stream #: T4P2	Date: 10/6/2021

Project Name: Bartonville FM 407 Delineation	Project #: 4321084
Location (County/State): Denton / TX	Field Crew: M. Peters
Stream Name: Tributary 2	

Stream Characteristics

a) Avg. Bank Width	3	In./(Ft.)	b) Average Width of Water	2	(In)/Ft.
c) Avg. Water Depth	1	(In)/Ft.	Min./Max Depth	0-1	(In)/Ft.
d) Depth of Streambed below top of bank	2	In./(Ft.)			
Stream flow:	☐ Perennial	☐ Intermittent	☒ Ephemeral		
OHWM Width	2	In./(Ft.)	Height of OHWM above streambed	0.5	In./(Ft.)



Substrate

☐ Bedrock	☐ Boulder	☐ Cobble	☐ Gravel	☒ Sand	☒ Silt/Clay
☐ Organic	☐ Concrete	☐ Other (Describe)			

Instream Cover

☐ Undercut Banks	☐ Logs/Brush	☒ Emergent	☐ Oxbows	☐ Boulders
☒ Overhanging Vegetation	☐ Deep Pools	☐ Shallows (in slow water)		

Riparian Zone (check all that are appropriate)

☐ Forest	☒ Scrub/Shrub	☐ Old-Field/ROW	☒ Pasture	☐ Row-Crop	☐ Wetland	☐ Paved
☐ Residential/Park	☐ Other					

(Describe other or differences between banks):

Width of Riparian Zone (Left or right bank looking downstream)	Left 100 In./(Ft.)	Right 100 In./(Ft.)

Notes/Comments: Stream is mostly dry, small pool at transect.

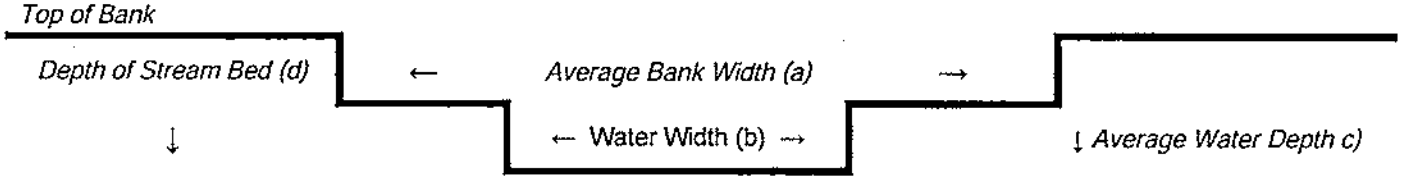
Stream Data Sheet

Stream #: T4P6	Date: 10/6/2021

Project Name: Bartonville FM 407 Delineation	Project #: 4321084
Location (County/State): Denton / TX	Field Crew: M. Peters
Stream Name: Pond 1	

Stream Characteristics

a) Avg. Bank Width 380 In./(Ft.)	b) Average Width of Water 350 (In.)/Ft.
c) Avg. Water Depth Unknown In./Ft.	Min./Max Depth Unknown In./Ft.
d) Depth of Streambed below top of bank Unknown In./Ft.	
Stream flow: [X] Perennial [ ] Intermittent [ ] Ephemeral	
OHWM Width 360 In./(Ft.)	Height of OHWM above streambed Unk. In./Ft.



Substrate

[ ] Bedrock	[ ] Boulder	[ ] Cobble	[ ] Gravel	[X] Sand	[X] Silt/Clay
[ ] Organic	[ ] Concrete	[ ] Other (Describe)			

Instream Cover

[ ] Undercut Banks	[X] Logs/Brush	[X] Emergent	[ ] Oxbows	[ ] Boulders
[X] Overhanging Vegetation	[ ] Deep Pools	[ ] Shallows (in slow water)		

Riparian Zone (check all that are appropriate)

[ ] Forest	[X] Scrub/Shrub	[ ] Old-Field/ROW	[X] Pasture	[ ] Row-Crop	[X] Wetland	[ ] Paved
[ ] Residential/Park	[ ] Other					

(Describe other or differences between banks):

Width of Riparian Zone (Left or right bank looking downstream)	Left 30 In./(Ft.)	Right 30 In./(Ft.)

Notes/Comments: On-channel pond, drains generally east via Tributary 2.

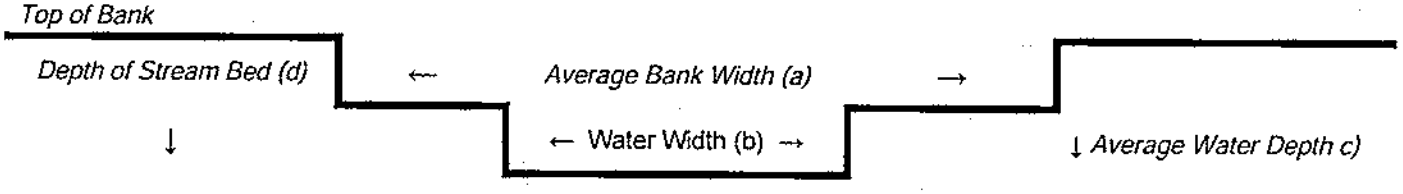
Stream Data Sheet

Stream #: T5P4	Date: 10/6/2021

Project Name: Bartonville FM 407 Delineation	Project #: 4321084
Location (County/State): Denton / TX	Field Crew: M. Peters
Stream Name: Pond 2	

Stream Characteristics

a) Avg. Bank Width	70	In./(Ft.)	b) Average Width of Water	20	In./(Ft.)
c) Avg. Water Depth	1.75	In./(Ft.)	Min./Max Depth	0-2	(In.)/Ft.
d) Depth of Streambed below top of bank	4.5	In./(Ft.)			
Stream flow:	[X] Perennial	[ ] Intermittent	[ ] Ephemeral		
OHWM Width	40	In./(Ft.)	Height of OHWM above streambed	3	In./(Ft.)



Substrate

[ ] Bedrock	[ ] Boulder	[ ] Cobble	[ ] Gravel	[X] Sand	[X] Silt/Clay
[ ] Organic	[ ] Concrete	[ ] Other (Describe)			

Instream Cover

[ ] Undercut Banks	[ ] Logs/Brush	[X] Emergent	[ ] Oxbows	[ ] Boulders
[X] Overhanging Vegetation	[ ] Deep Pools	[ ] Shallows (in slow water)		

Riparian Zone (check all that are appropriate)

[ ] Forest	[ ] Scrub/Shrub	[ ] Old-Field/ROW	[X] Pasture	[ ] Row-Crop	[X] Wetland	[ ] Paved
[ ] Residential/Park	[ ] Other					

(Describe other or differences between banks):

Width of Riparian Zone (Left or right bank looking downstream)	Left 30 In./(Ft.)	Right 30 In./(Ft.)

Notes/Comments: Small pond to west of Pond 1, occasionally drains via wetland and semi-blocked culvert to Pond 1

Appendix C – North Carolina Division of Water Quality Stream Identification Forms

NC DWQ Stream Identification Form Version 4.11

Date: 9/7/2021	**Project/Site:** Bartonville FM 407 Delineation (T1P4)	**Latitude:** 33.100363
Evaluator: M. Peters	**County:** Denton County	**Longitude:** -97.131498
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 8.5	**Stream Determination (circle one)** (Ephemeral) Intermittent Perennial	**Other** *e.g. Quad Name:*

A. Geomorphology (Subtotal = 1)	Absent	Weak	Moderate	Strong
1[a]. Continuity of channel bed and bank	0	(1)	2	3
2. Sinuosity of channel along thalweg	(0)	1	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	(0)	1	2	3
4. Particle size of stream substrate	(0)	1	2	3
5. Active/relict floodplain	(0)	1	2	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	(0)	1	2	3
8. Headcuts	(0)	1	2	3
9. Grade control	(0)	0.5	1	1.5
10. Natural valley	(0)	0.5	1	1.5
11. Second or greater order channel	(No = 0)		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 2)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	(1.5)	1	0.5	0
15. Sediment on plants or debris	0	(0.5)	1	1.5
16. Organic debris lines or piles	(0)	0.5	1	1.5
17. Soil-based evidence of high water table?	(No = 0)		Yes = 3	

C. Biology (Subtotal = 5.5)				
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	3	(2)	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = (1.5) Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

NC DWQ Stream Identification Form Version 4.11

Date: 9/7/2021	**Project/Site:** Bartonville FM 407 Delineation (T1P8)	**Latitude:** 33.099782
Evaluator: M. Peters	**County:** Denton County	**Longitude:** -97.131511
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 10.5	**Stream Determination (circle one)** (Ephemeral) Intermittent Perennial	**Other** *e.g. Quad Name:*

A. Geomorphology (Subtotal = 3)	Absent	Weak	Moderate	Strong
1[a]. Continuity of channel bed and bank	0	(1)	2	3
2. Sinuosity of channel along thalweg	(0)	1	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	(0)	1	2	3
4. Particle size of stream substrate	0	1	(2)	3
5. Active/relict floodplain	(0)	1	2	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	(0)	1	2	3
8. Headcuts	(0)	1	2	3
9. Grade control	(0)	0.5	1	1.5
10. Natural valley	(0)	0.5	1	1.5
11. Second or greater order channel	(No = 0)		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 2)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	(1.5)	1	0.5	0
15. Sediment on plants or debris	0	(0.5)	1	1.5
16. Organic debris lines or piles	(0)	0.5	1	1.5
17. Soil-based evidence of high water table?	(No = 0)		Yes = 3	

C. Biology (Subtotal = 5.5)				
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	3	(2)	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = (1.5) Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

NC DWQ Stream Identification Form Version 4.11

Date: 9/7/2021	**Project/Site:** Bartonville FM 407 Delineation (T4P2)	**Latitude:** 33.100793
Evaluator: M. Peters	**County:** Denton County	**Longitude:** -97.136123
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 17.25	**Stream Determination (circle one)** (Ephemeral) Intermittent Perennial	**Other** *e.g. Quad Name:*

A. Geomorphology (Subtotal = 5.5)	Absent	Weak	Moderate	Strong
1[a] Continuity of channel bed and bank	0	1	(2)	3
2. Sinuosity of channel along thalweg	0	(1)	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	(1)	2	3
4. Particle size of stream substrate	0	(1)	2	3
5. Active/relict floodplain	(0)	1	2	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	(0)	1	2	3
8. Headcuts	(0)	1	2	3
9. Grade control	0	(0.5)	1	1.5
10. Natural valley	(0)	0.5	1	1.5
11. Second or greater order channel	(No = 0)		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 6.5)				
12. Presence of Baseflow	0	(1)	2	3
13. Iron oxidizing bacteria	0	(1)	2	3
14. Leaf litter	1.5	(1)	0.5	0
15. Sediment on plants or debris	0	(0.5)	1	1.5
16. Organic debris lines or piles	(0)	0.5	1	1.5
17. Soil-based evidence of high water table?	No = 0		(Yes = 3)	

C. Biology (Subtotal = 5.25)				
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	3	(2)	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	0	(0.5)	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = (0.75) OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Appendix D – Site Photographs

Photo 1. View, facing west, of typical upland plot at T1P1.

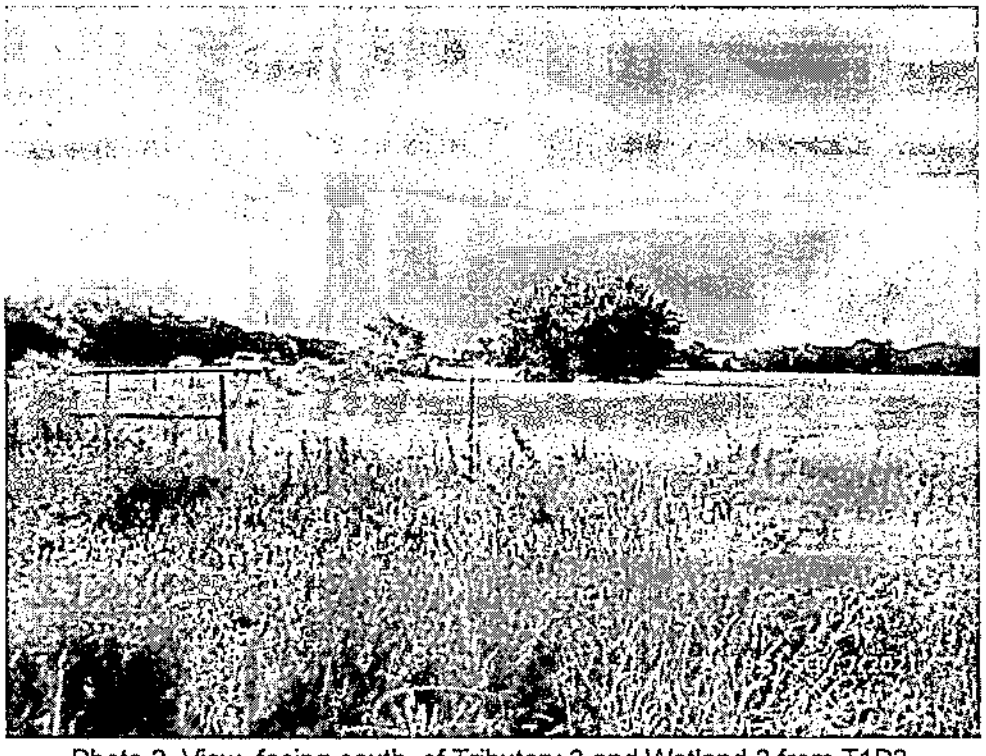


Photo 2. View, facing south, of Tributary 2 and Wetland 2 from T1P2.

Photo 3. View of Tributary 2 culvert at eastern property boundary.

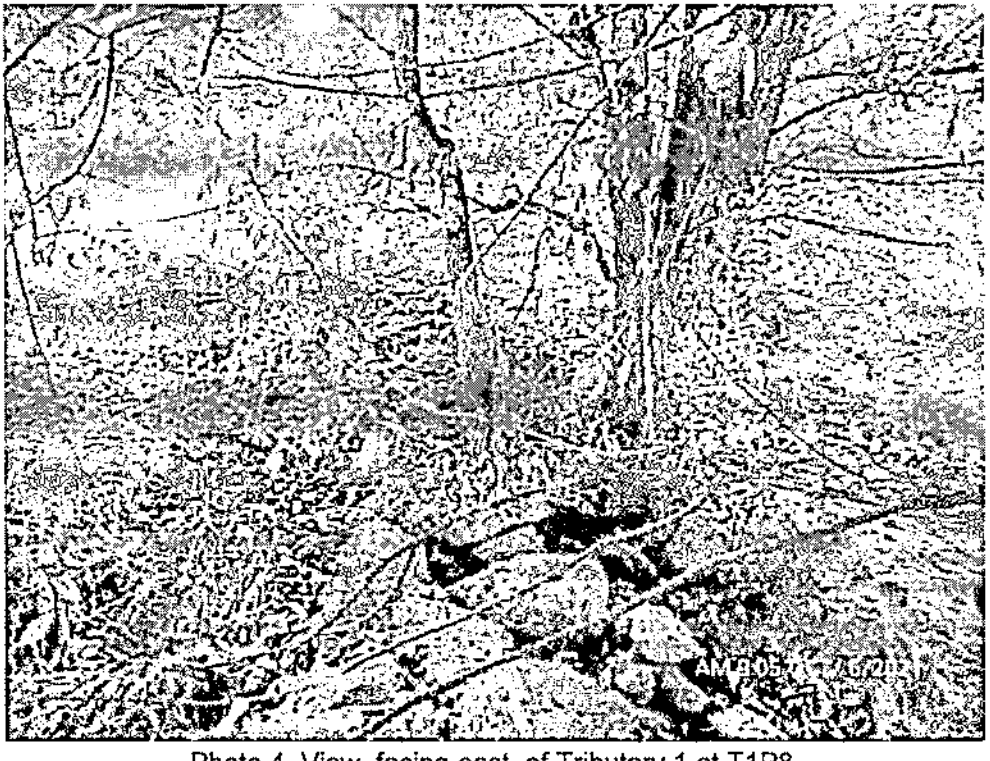


Photo 4. View, facing east, of Tributary 1 at T1P8.

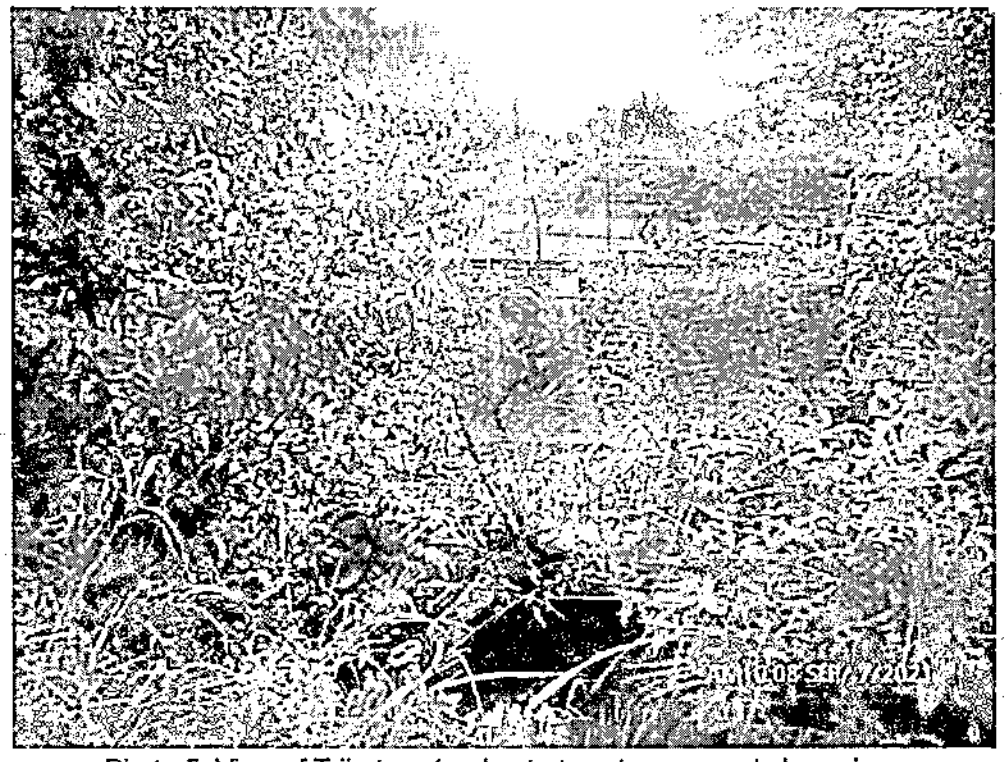


Photo 5. View of Tributary 1 culvert at eastern property boundary.

Photo 6. View of Tributary 2 and Wetland 2 at Transect 2.

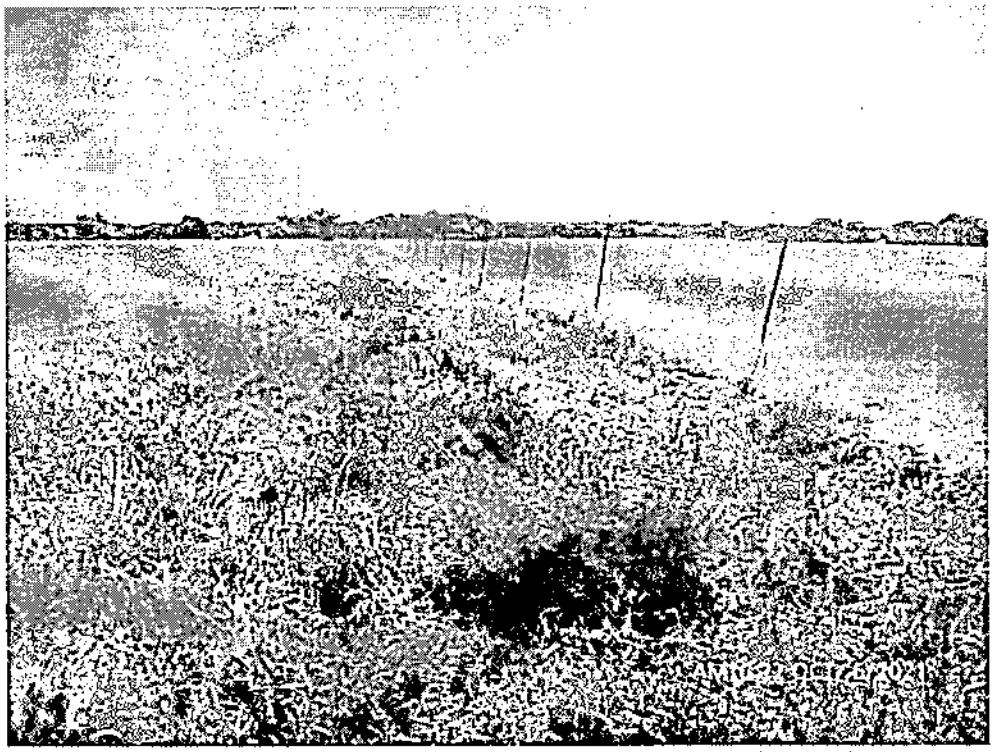


Photo 7. View, facing east, of Tributary 2 and Wetland 2 at Transect 3.

Photo 8. View, facing south, of isolated wallow at T3P2.

Photo 9. View, facing northwest, of Tributary 2 at T4P2.

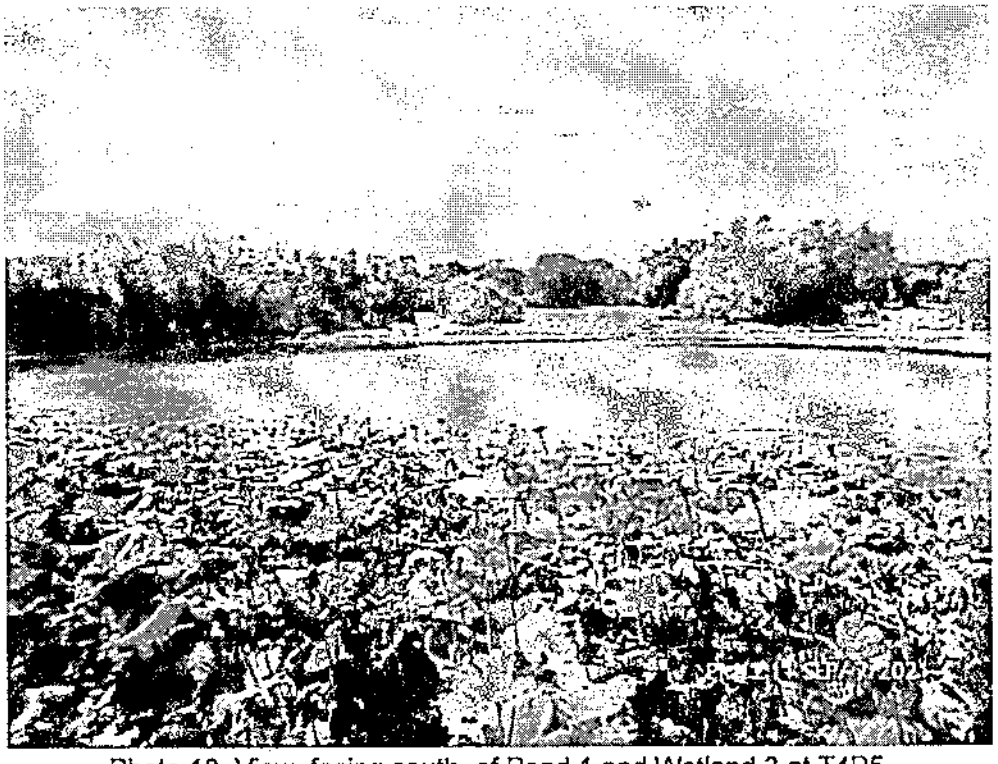


Photo 10. View, facing south, of Pond 1 and Wetland 3 at T4P5.

Photo 11. View, facing north, of horse corral and structures from T5P1.

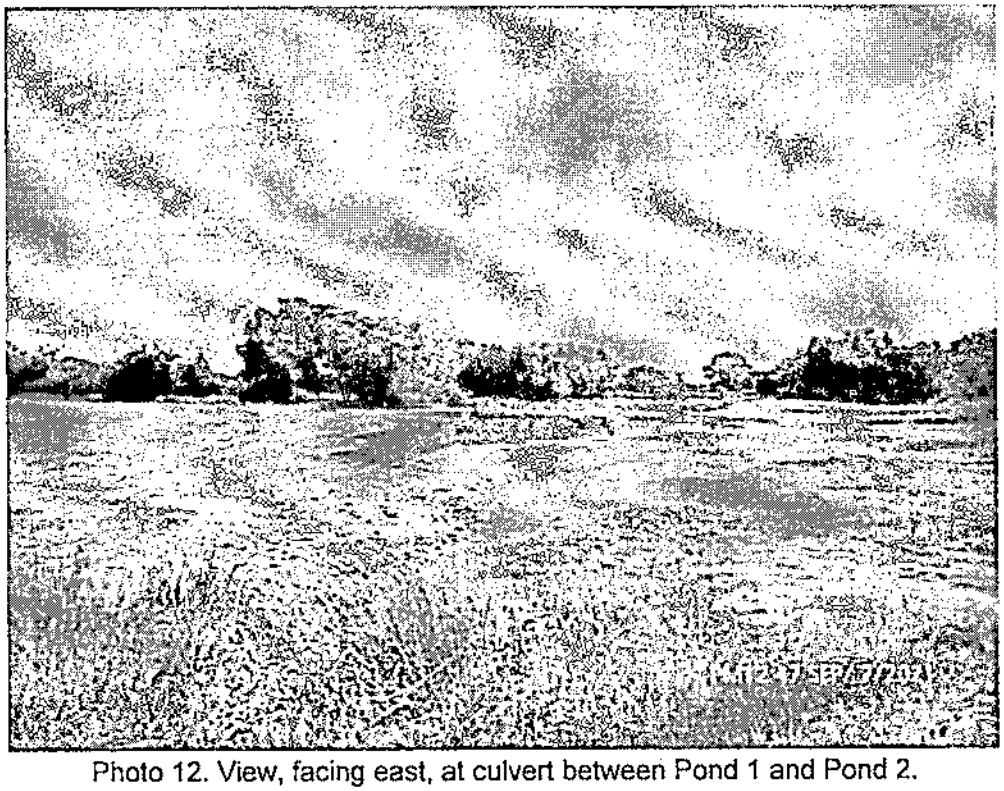


Photo 12. View, facing east, at culvert between Pond 1 and Pond 2.

Photo 13. View, facing west, of Pond 2 and Wetland 4 at culvert between Pond 1 and Pond 2.

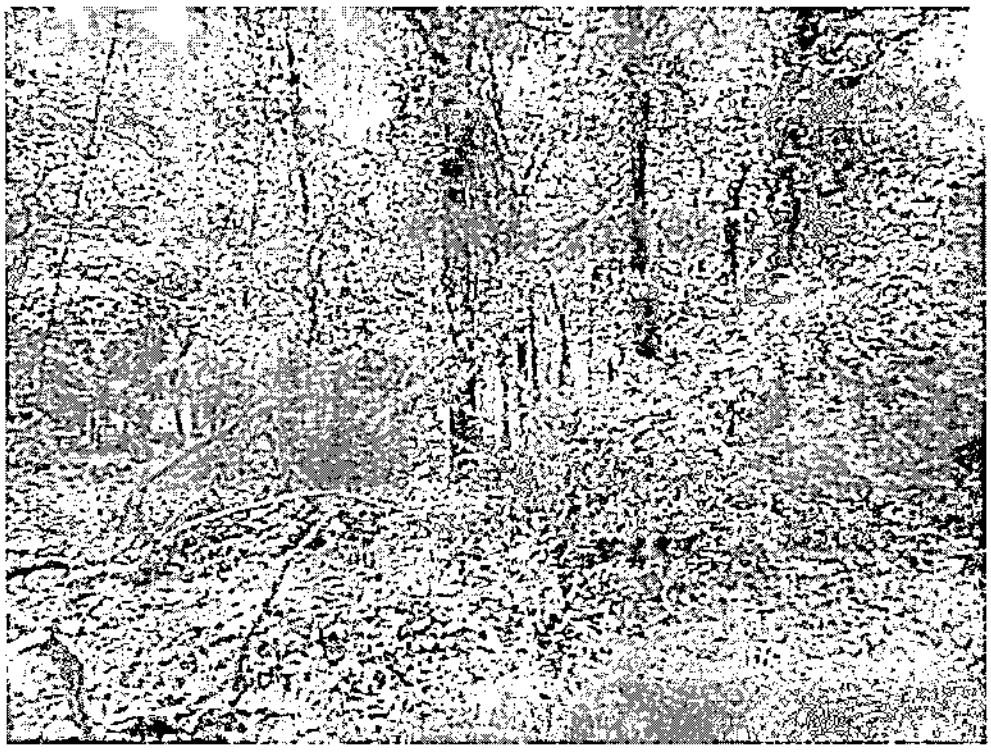


Photo 14. View, facing south, of typical upland forested area at T5P6.

Photo 15. View, facing north, of western portion of Wetland 4.

Photo 16. View, facing east, of Wetland 4 at T6P5.

Attachment B – Color Photographs

Photo 1. View, facing west, of typical upland plot at T1P1.

Photo 2. View, facing south, of Tributary 2 and Wetland 2 from T1P2.

Photo 3. View of Tributary 2 culvert at eastern property boundary.

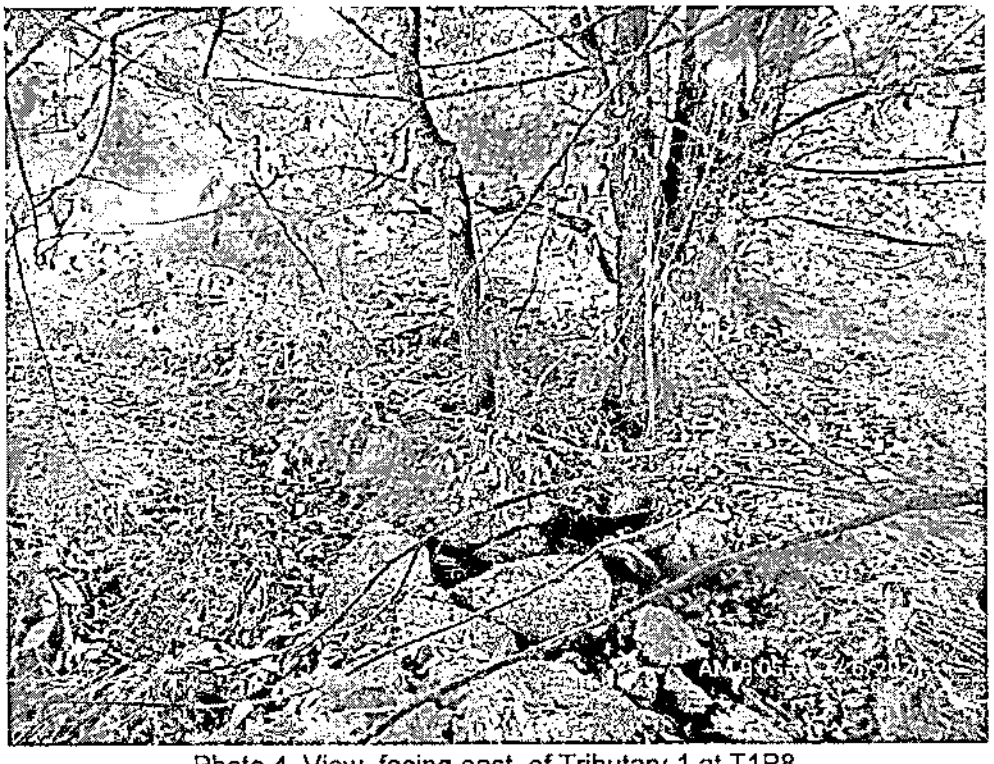


Photo 4. View, facing east, of Tributary 1 at T1P8.

Photo 5. View of Tributary 1 culvert at eastern property boundary.

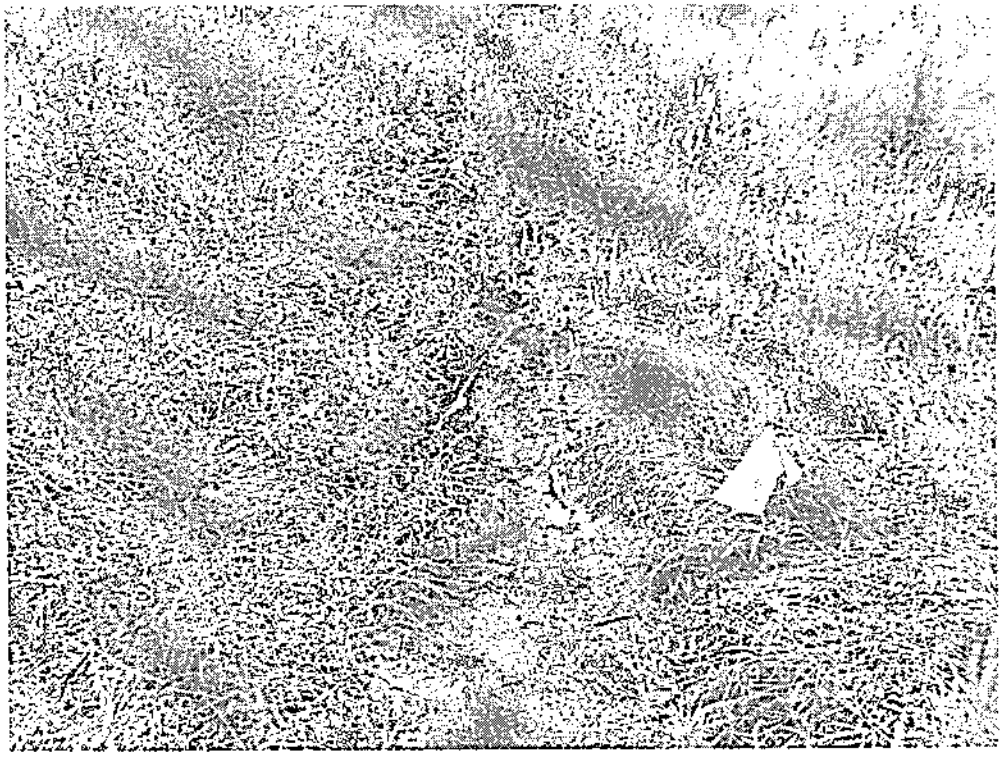


Photo 6. View of Tributary 2 and Wetland 2 at Transect 2.

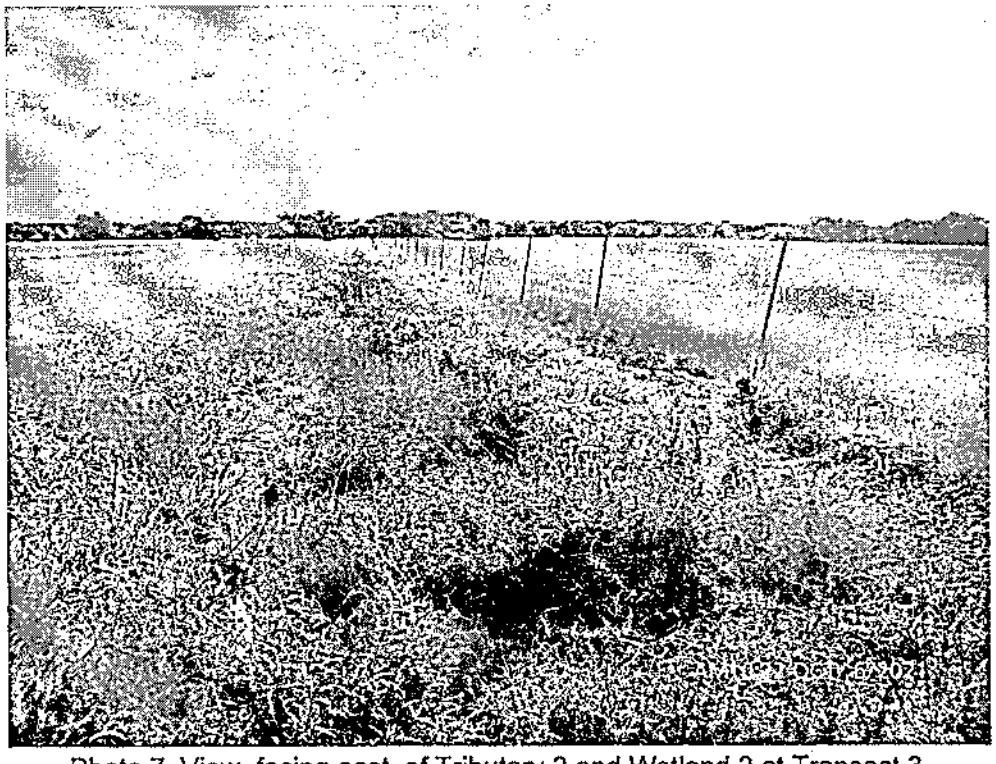


Photo 7. View, facing east, of Tributary 2 and Wetland 2 at Transect 3.

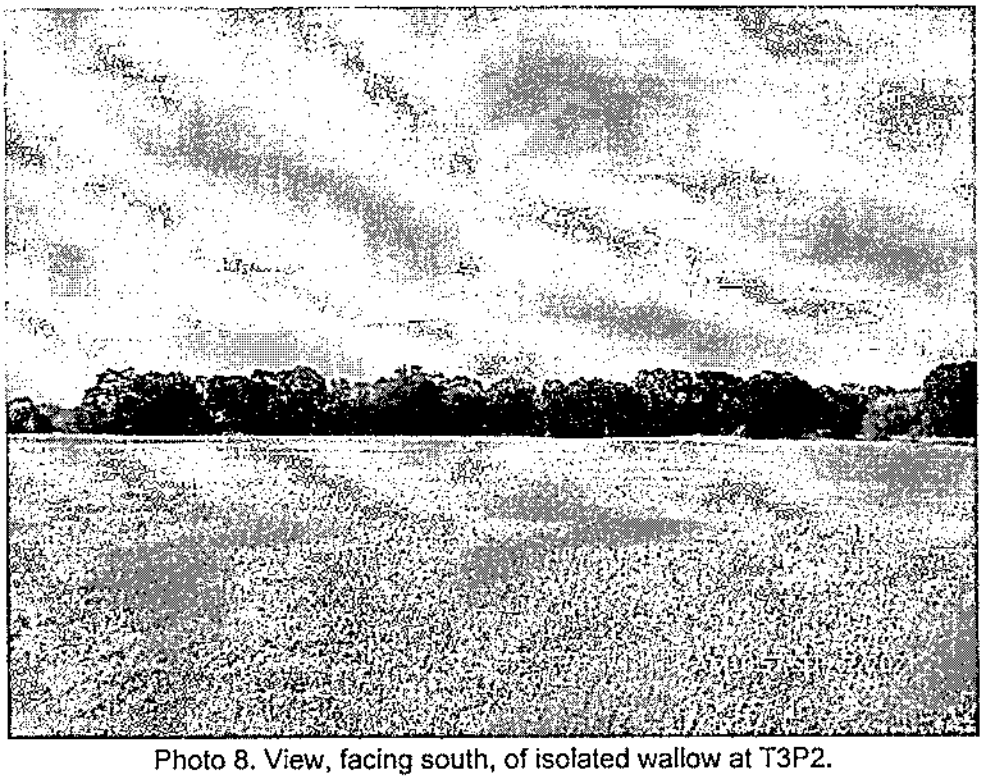


Photo 8. View, facing south, of isolated wallow at T3P2.

Photo 9. View, facing northwest, of Tributary 2 at T4P2.

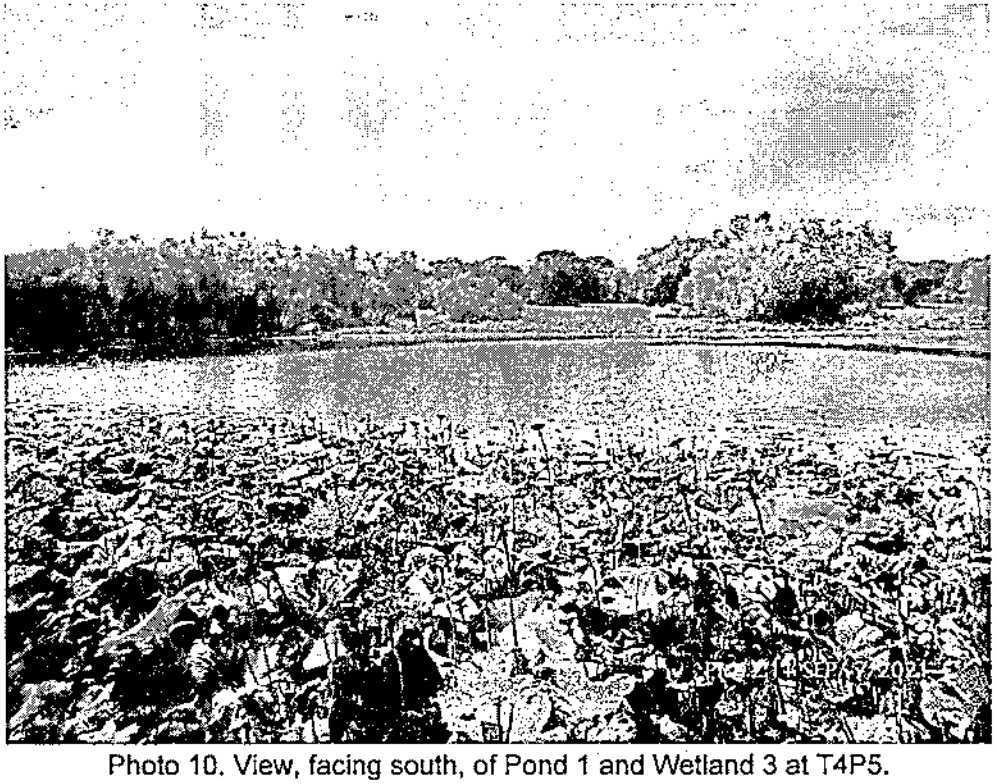


Photo 10. View, facing south, of Pond 1 and Wetland 3 at T4P5.

Photo 11. View, facing north, of horse corral and structures from T5P1.

Photo 12. View, facing east, at culvert between Pond 1 and Pond 2.

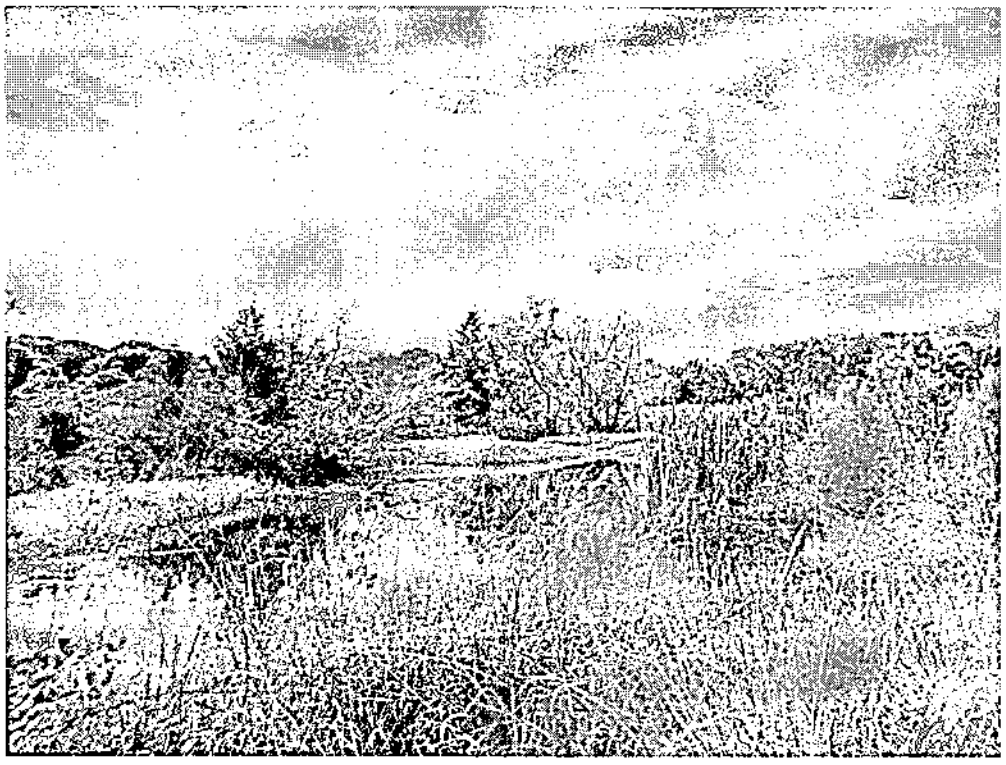


Photo 13. View, facing west, of Pond 2 and Wetland 4 at culvert between Pond 1 and Pond 2.

Photo 14. View, facing south, of typical upland forested area at T5P6.

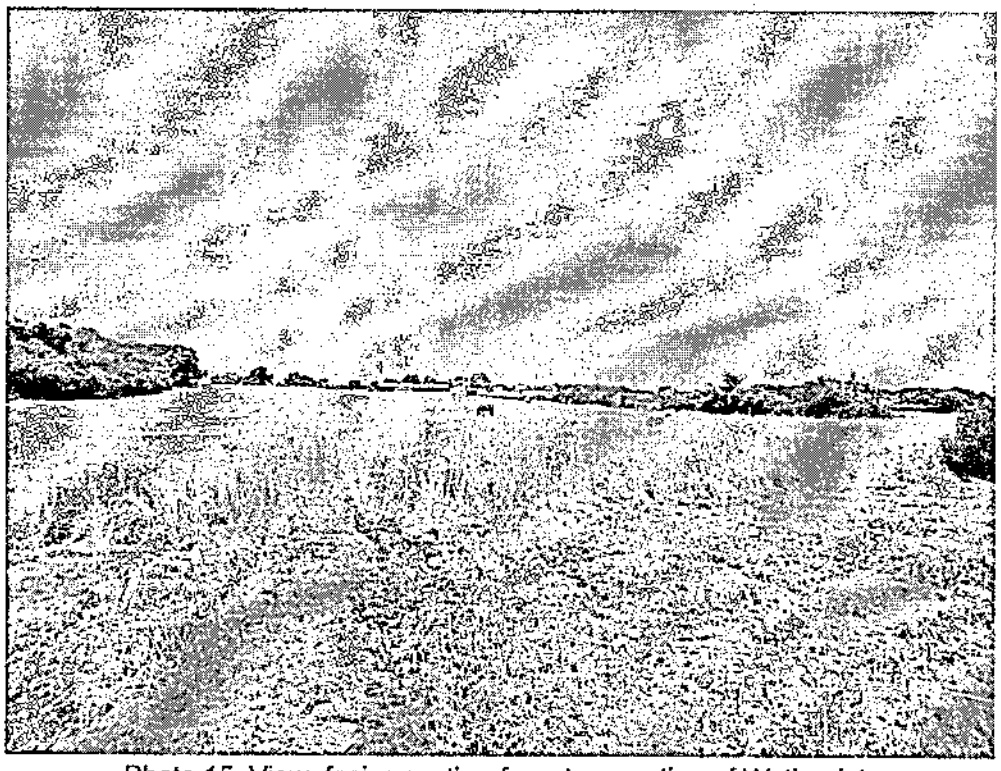


Photo 15. View, facing north, of western portion of Wetland 4.

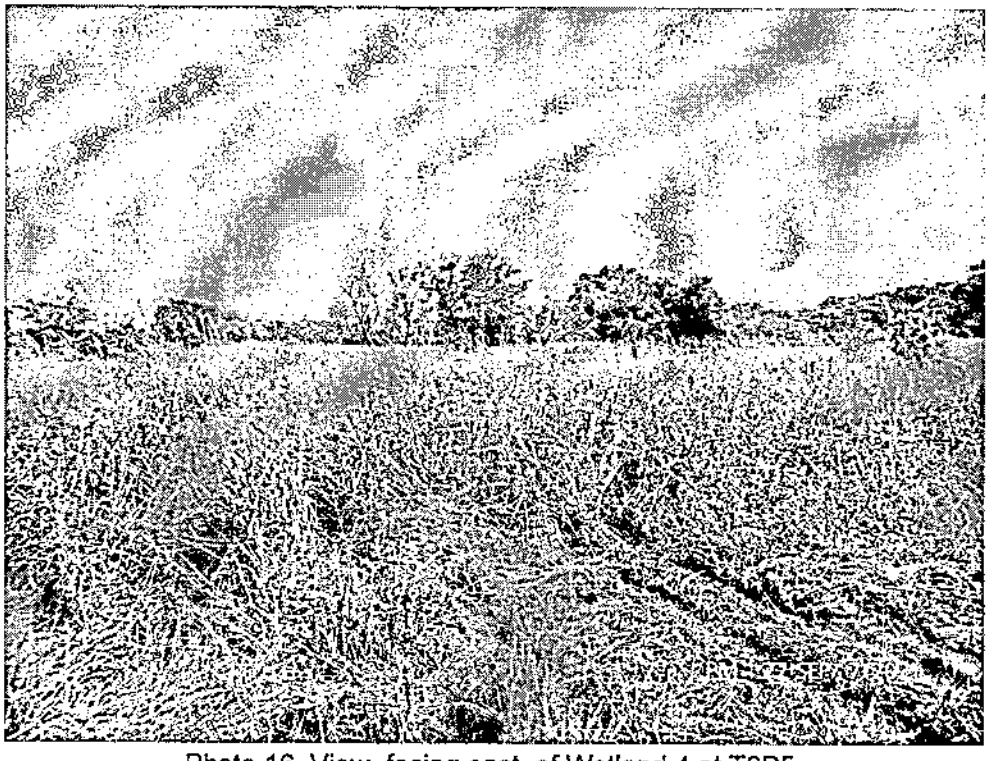


Photo 16. View, facing east, of Wetland 4 at T6P5.

Attachment C – Table of Waters of the U. S. Impacted by the Proposed Project

Attachment D: Table of Waters of the U.S. Impacted by the Proposed Project

Waterbody ID[1]	Latitude and Longitude (Decimal Degrees)	Resource Type[2]	Acres in Project Area	Impact Type[3]	Average Length of Impact	Average Width of Impact	Acres of Impact	Cubic Yards of Material to be Discharged
e.g. W-1	*32.755°N, -97.755°W*	*NFW*	*0.25*	*D-P*	-	-	*0.15*	*1210*
Wetland 1	33.099744 N, -97.131510 W	NFW	0.018	D-P	--	--	0.014	23
Wetland 2	33.100378 N, -97.131496 W	NFW	0.019	D-P	--	--	0.007	12
Wetland 3	33.099596 N, -97.136525 W	NFW	2.288	D-P	--	--	0.438	707
Wetland 4	33.099774 N, -97.139419 W	NFW	1.05	--	--	--	--	--
Pond 1	33.100493 N, -97.136273 W	I	2.879	--	--	--	--	--
Pond 2	33.099934 N, -97.138479 W	I	0.092	--	--	--	--	--
Tributary 1	33.099818 N, -97.131509 W	ES	0.002	D-P	61	2	0.002	3
Tributary 2	33.100749 N, -97.136145 W	ES	0.063	D-P	537	2	0.025	41

[1] Waterbody ID may be the name of a feature or an assigned label such as "W-1" for a wetland.

[2] Resource Types: EW – Emergent wetland, SW – Scrub/Shrub Wetland, FW – Forested wetland, PS – Perennial Stream, IS – Intermittent Stream, I – Impoundment

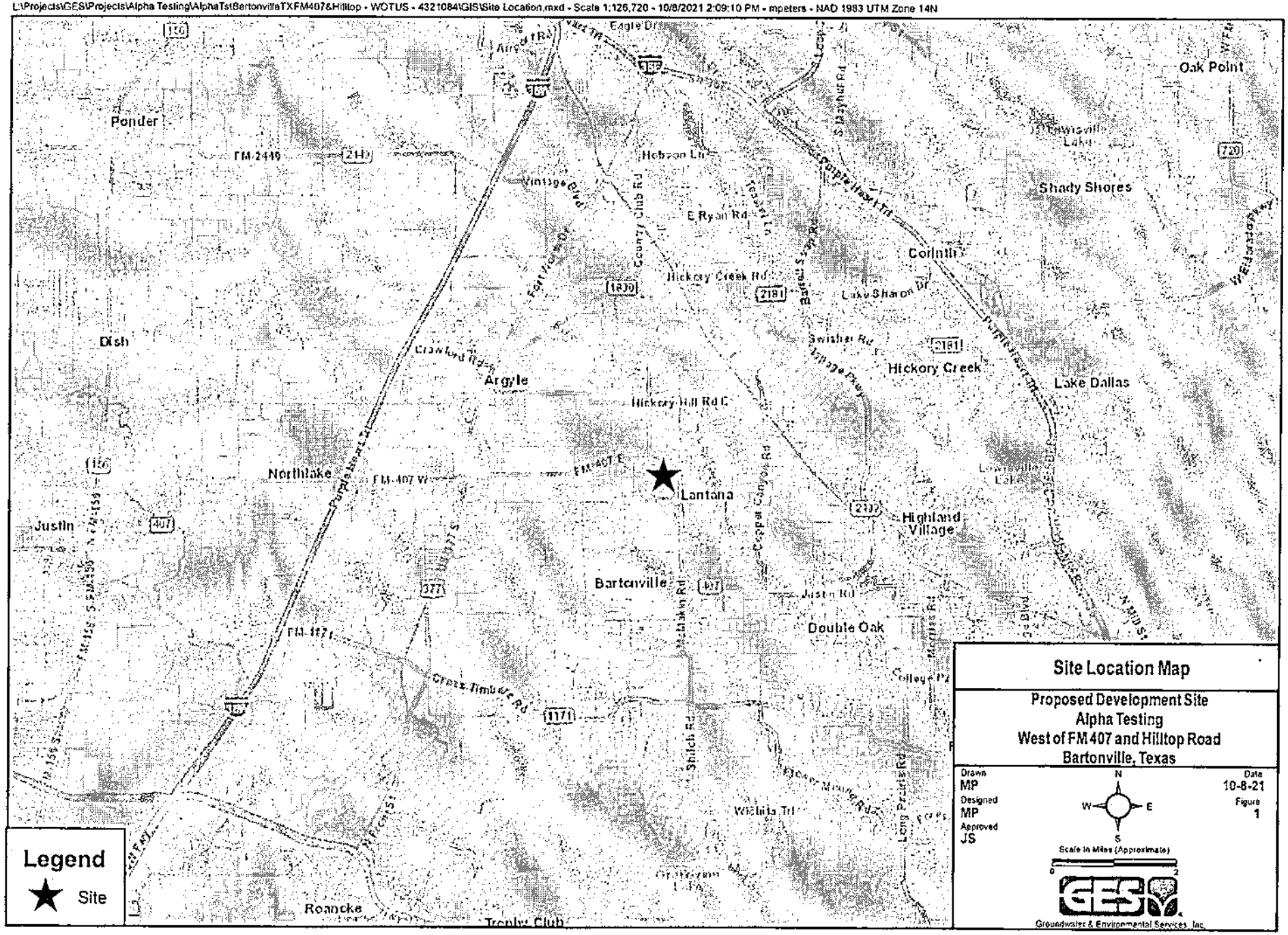
[3] Impact Types: D/P – Direct* and Permanent, D/T – Direct and Temporary, I/P – Indirect** and Permanent, I/T – Indirect and Temporary

* Direct impacts are here defined as those adverse affects caused by the proposed activity, such as discharge or excavation.

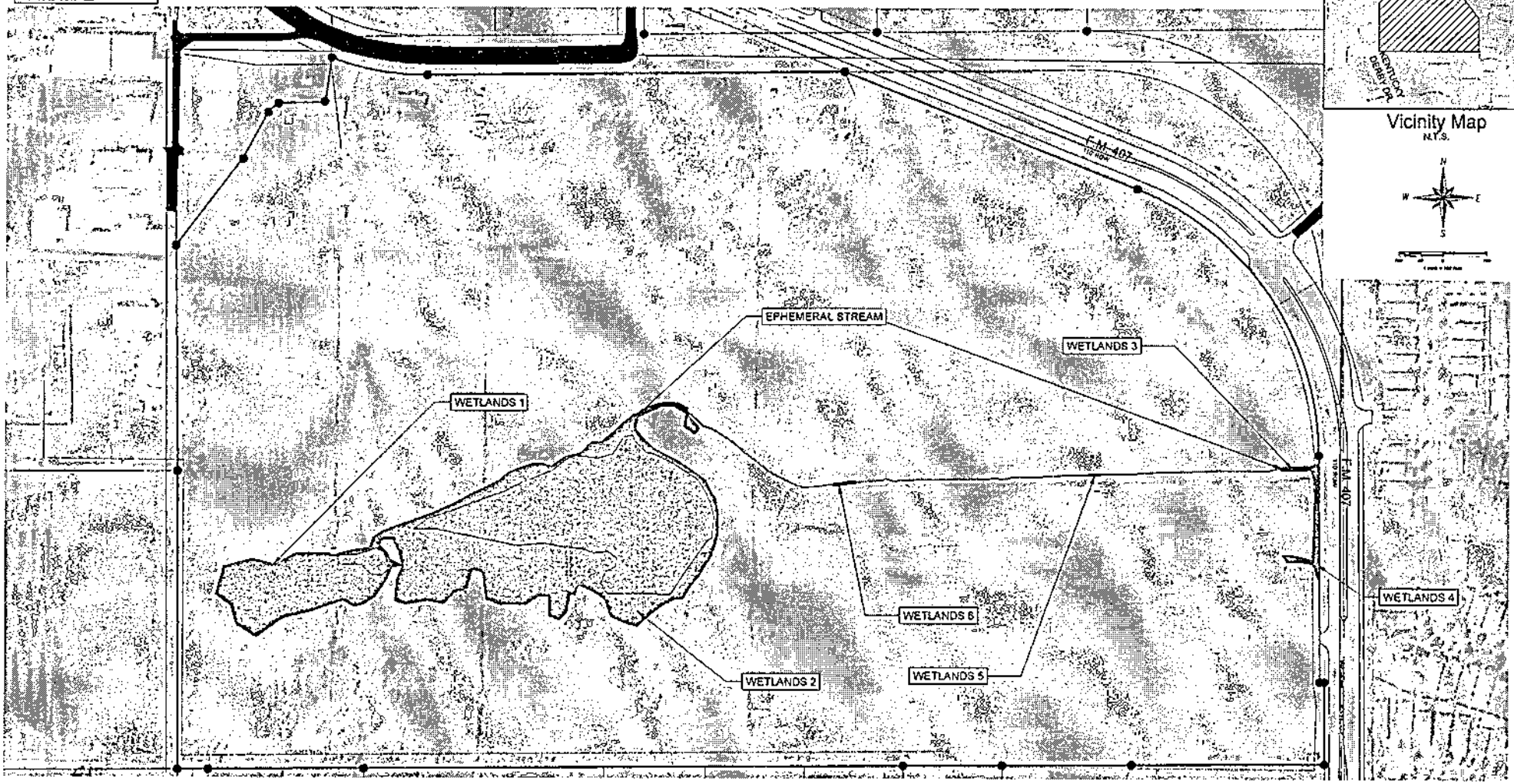
** Indirect impacts are here defined as those adverse affects caused subsequent to the proposed activity, such as flooding or effects of drainage on adjacent waters of the U.S.

Attachment D – Required Drawings/Figures

L:\Projects\GES\Projects\Alpha Testing\AlphaTstBartonvilleTXFM407&Hilltop - WOTUS - 4321084\GIS\Site Location.mxd - Scale 1:126,720 - 10/8/2021 2:09:10 PM - mpeters - NAD 1983 UTM Zone 14N



NOTE:
APPROPRIATE EROSION CONTROL MEASURES WILL BE USED IN PROPOSED DITCHES AND AT PROPOSED OUTFALLS



Vicinity Map
N.T.S.

LEGEND

- Ephemeral Stream (1,750 LF)
- Wetlands (3.39 acre)
- Open Water (2.24 acre)

JURISDICTIONAL WATERS MAP

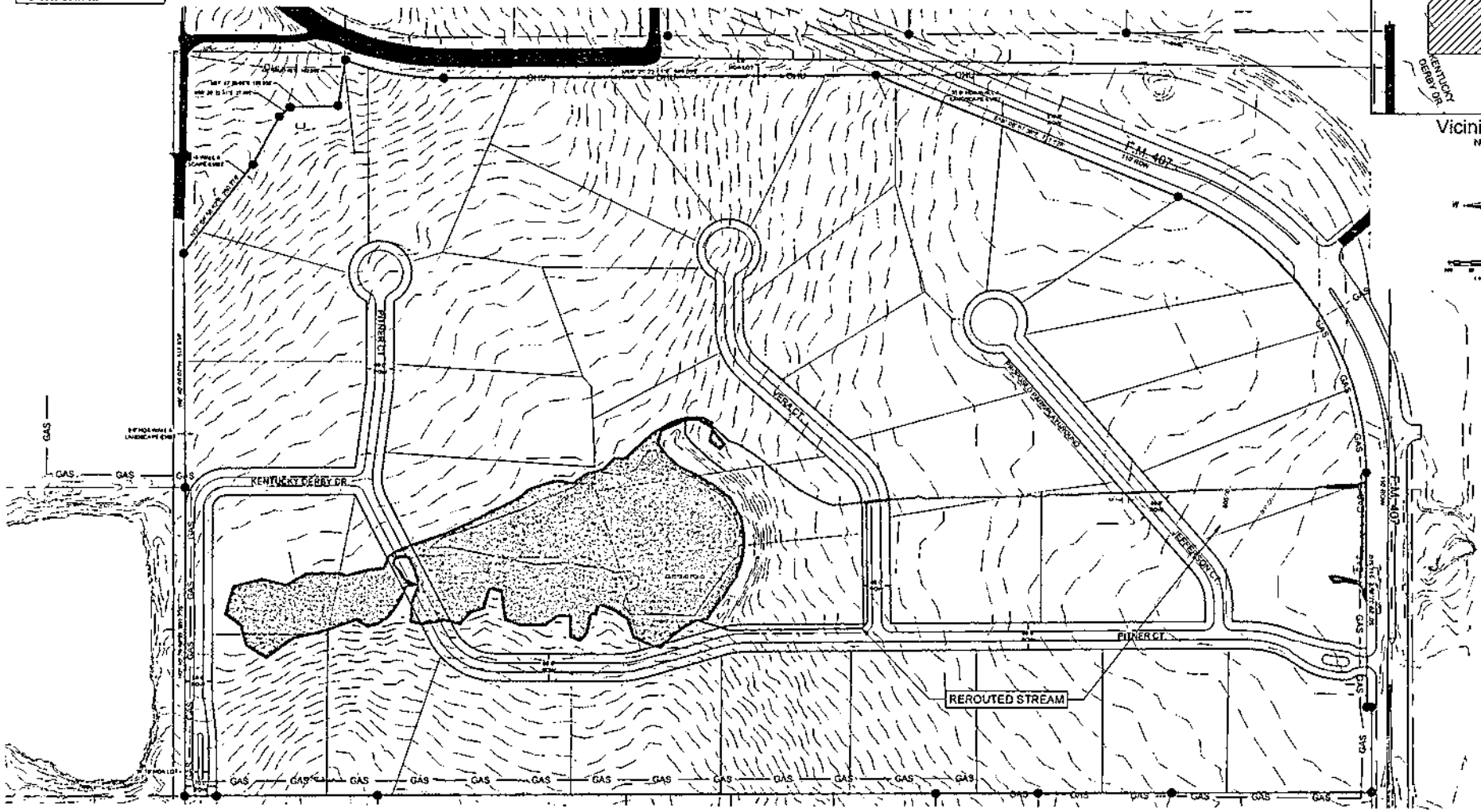
FOR

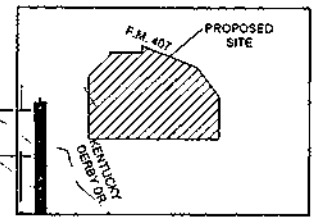
EAGLE RIDGE
2-ACRE LOTS
BARTONVILLE, TX
38 SINGLE FAMILY LOTS

BEING 87.123 ACRES IN THE
A.R. LOVING SURVEY, ABSTRACT NO. 736
TOWN OF BARTONVILLE, DENTON COUNTY TX

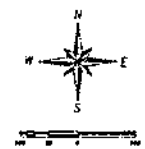
December 21th, 2021 1" = 100'

NOTE:
APPROPRIATE EROSION CONTROL MEASURES WILL BE USED IN PROPOSED DITCHES AND AT PROPOSED OUTFALLS





Vicinity Map
N.T.S.



LEGEND

- Ephemeral Stream (1,750 LF)
- Wetlands (3.39 acre)
- Open Water (2.24 acre)
- Rerouted Stream

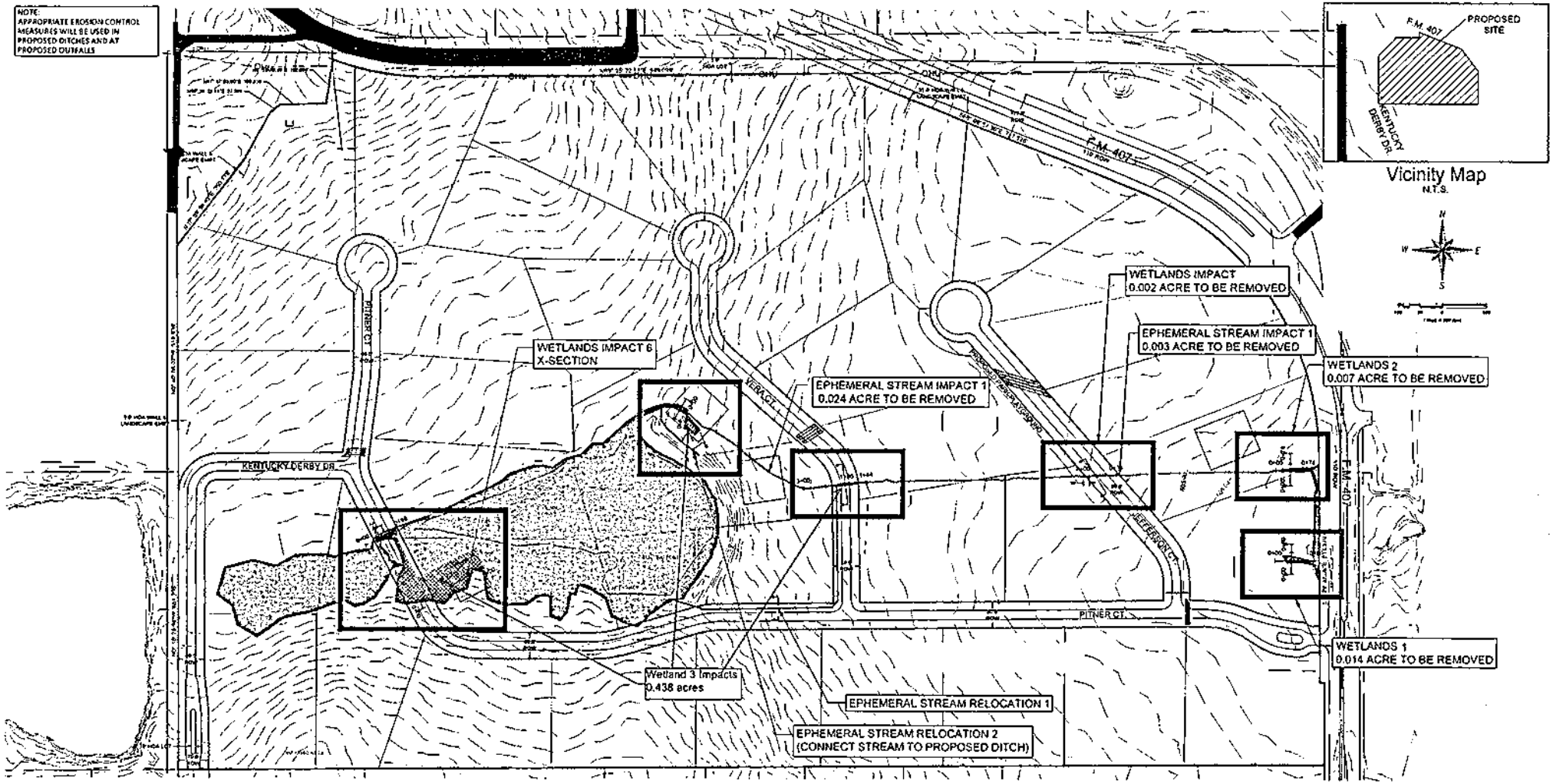
SITE PLAN

FOR

EAGLE RIDGE
2-ACRE LOTS
BARTONVILLE, TX
39 SINGLE FAMILY LOTS

BEING 87.123 ACRES IN THE
A.R. LOVING SURVEY, ABSTRACT NO. 736
TOWN OF BARTONVILLE, DENTON COUNTY TX

December 21th, 2021 1" = 100'



LEGEND

- Ephemeral Stream (1,750 LF)
- Wetlands (3.39 acre)
- Open Water (2.24 acre)
- Rerouted Stream
- Wetlands to be Removed
- Empemeral Stream to be Removed

TOTAL WETLANDS MITIGATED: 0.459 ACRE
TOTAL EPHEMERAL STREAM REMOVED: 0.027 ACRE
TOTAL AREAS IMPACTED: 0.486 ACRE

WETLANDS EXHIBIT

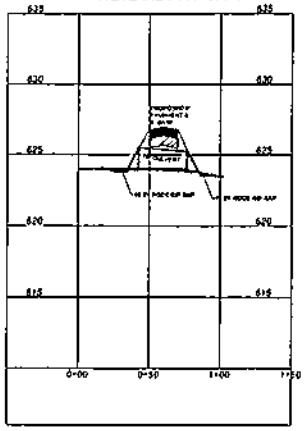
FOR

EAGLE RIDGE
2-ACRE LOTS
BARTONVILLE, TX
38 SINGLE FAMILY LOTS

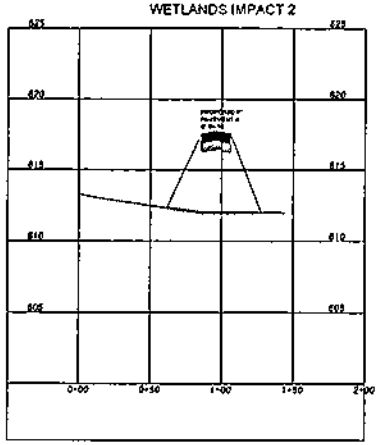
BEING 87.123 ACRES IN THE
A.R. LOVING SURVEY, ABSTRACT NO. 736
TOWN OF BARTONVILLE, DENTON COUNTY TX

December 21th, 2021 1" = 100'

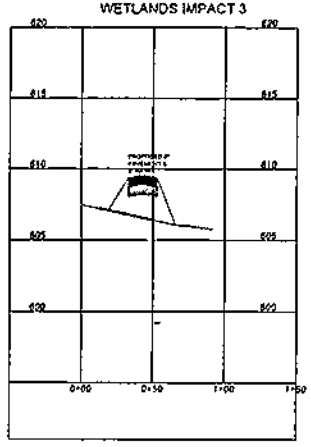
WETLANDS IMPACT 1



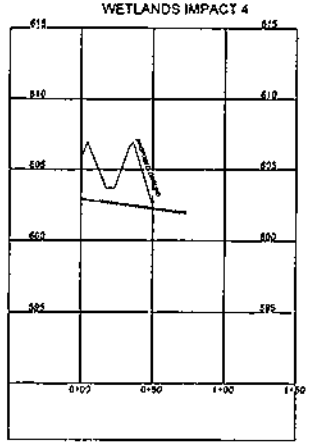
WETLANDS IMPACT 2



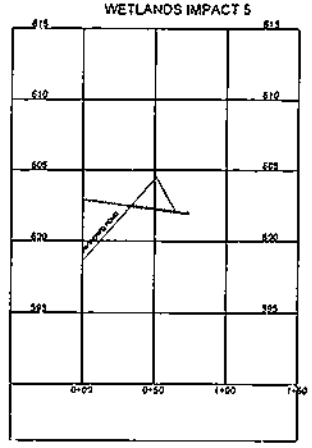
WETLANDS IMPACT 3



WETLANDS IMPACT 4



WETLANDS IMPACT 5



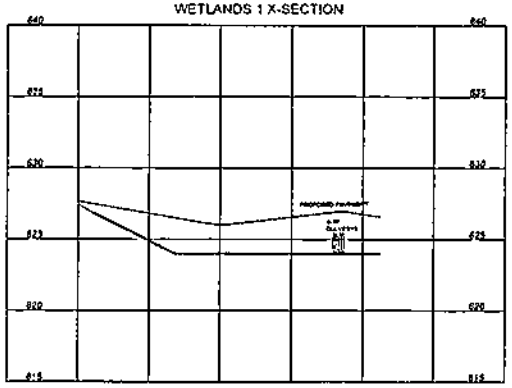
LEGEND

EXISTING GROUND

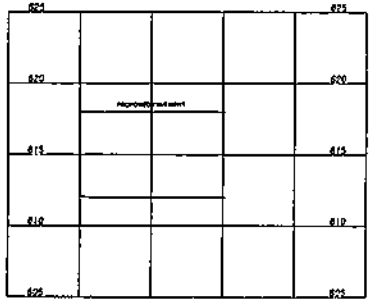
WETLANDS TO REMAIN

WETLANDS TO BE REMOVED

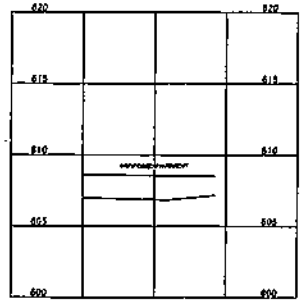
WETLANDS 1 X-SECTION



WETLANDS 2 X-SECTION



WETLANDS 3 X-SECTION



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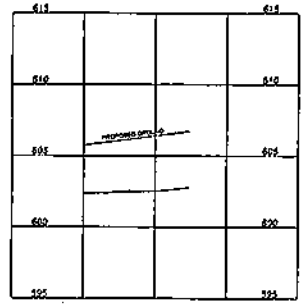

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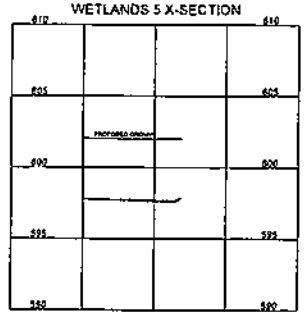

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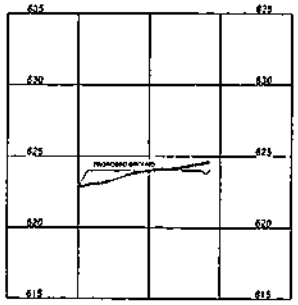

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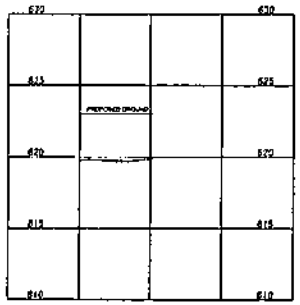
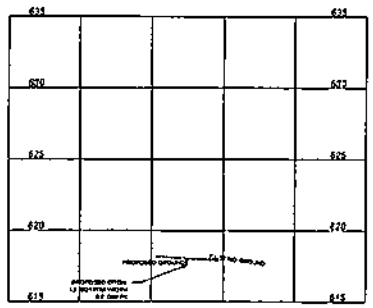
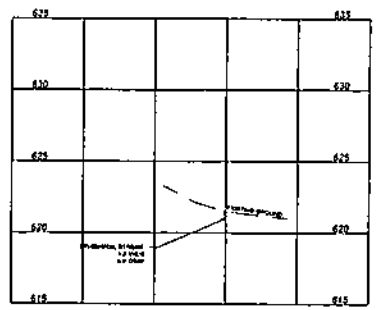


EPHEMERAL STREAM 1 TYPICAL X-SECTION



EPHEMERAL STREAM 2 TYPICAL X-SECTION



WETLANDS EXHIBIT

FOR

EAGLE RIDGE

2-ACRE LOTS

BARTONVILLE, TX

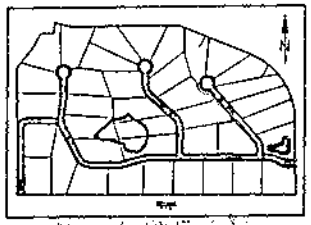
38 SINGLE FAMILY LOTS

BEING 87.123 ACRES IN THE

A.R. LOVING SURVEY, ABSTRACT NO. 736

TOWN OF BARTONVILLE, DENTON COUNTY TX

December 21th, 2021



NOTE:
CONTRACTOR TO STAY OUTSIDE OF DESIGNATED WETLAND, NOT SHOWN AS AREA TO DISTURB

CAUTION
UNDERGROUND & OVERHEAD UTILITIES

EXISTING UTILITIES AND UNDERGROUND FACILITIES INDICATED ON THESE PLANS WERE WITH LOCATED FROM RECORDS OR INFORMATION SUPPLIED BY VARIOUS OWNERS OF SUCH FACILITIES. THE ENGINEER DOES NOT ACCEPT THE RESPONSIBILITY FOR THE EXACT LOCATIONS SHOWN, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY BOTH HORIZONTALLY AND VERTICALLY THE LOCATION OF ALL EXISTING UTILITIES AND UNDERGROUND FACILITIES PRIOR TO CONSTRUCTION, TO HAVE NECESSARY MODIFICATIONS OR ORDER TO PROTECT ALL FACILITIES ENCOUNTERED, AND TO NOTIFY THE OWNERS PROPERLY OF ALL CONFLICTS OF THE WORK WITH EXISTING FACILITIES. THE CONTRACTOR SHALL PRESERVE AND PROTECT ALL EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION. ANY DAMAGE BY THE CONTRACTOR TO EXISTING UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.

CAUTION!!!
Existing underground/overhead utilities. Contractor is cautioned to verify locations and field-verify the location, depth and size of all existing utilities prior to excavation.

LEGEND
- DIRECTION OF FLOW
- EXISTING CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR

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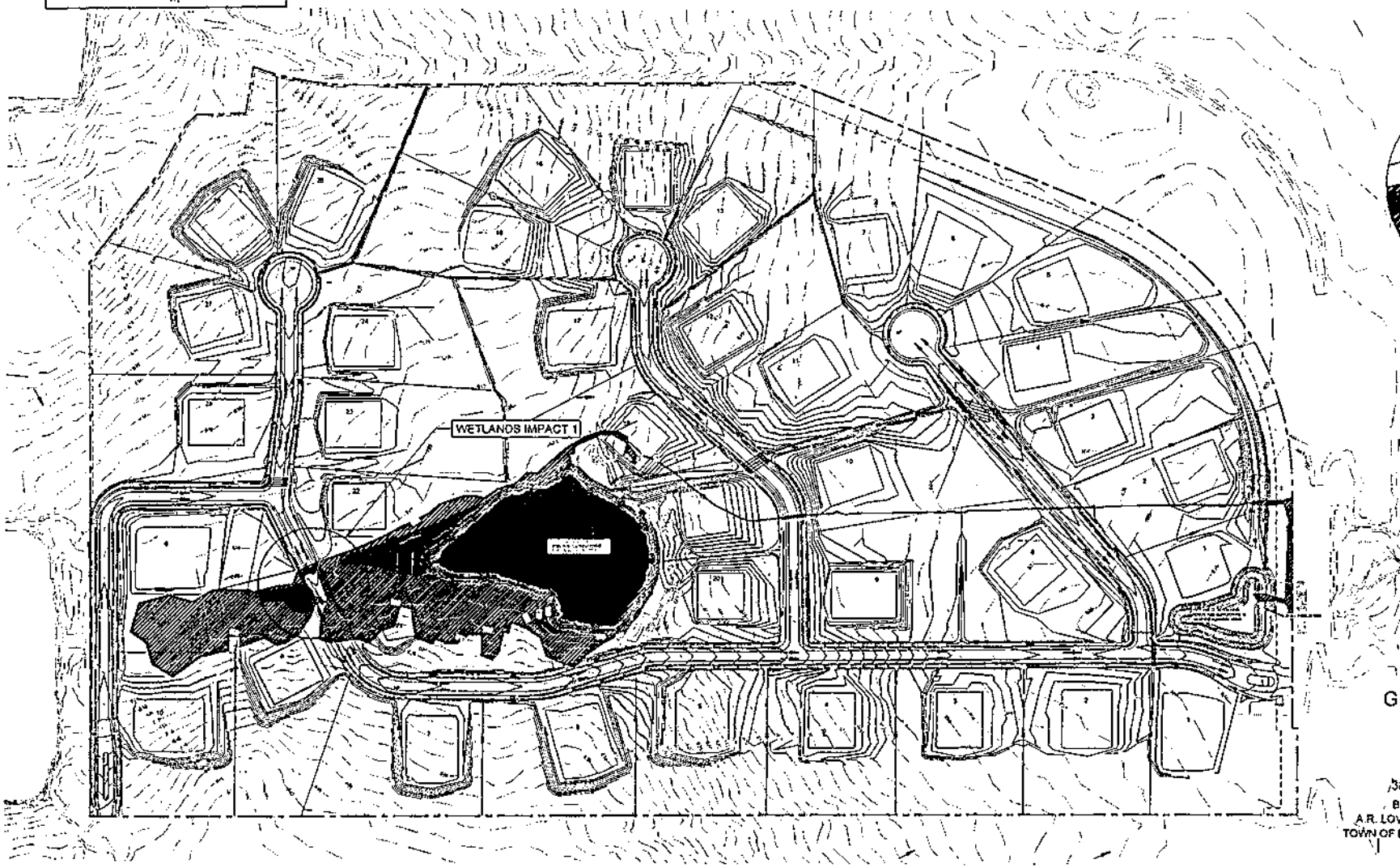
0 30 60 120
Scale: 1" = 60'



WETLANDS IMPACT 1

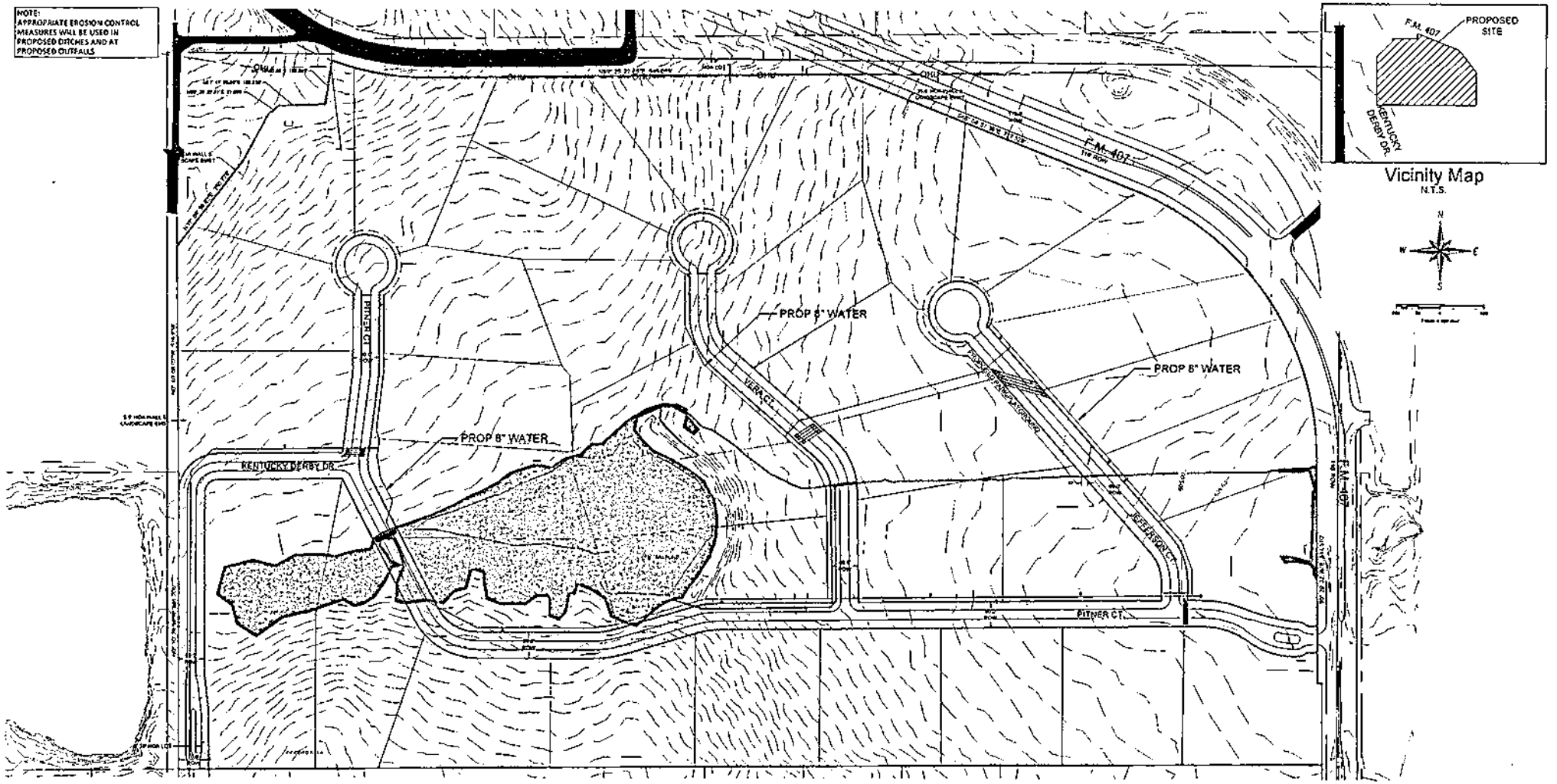
GRADING EXHIBIT

FOR

EAGLE RIDGE
2-ACRE LOTS
BARTONVILLE, TX
38 SINGLE FAMILY LOTS

BEING 87.123 ACRES IN THE
A.R. LOVING SURVEY, ABSTRACT NO. 736
TOWN OF BARTONVILLE, DENTON COUNTY TX

December 21th, 2021 1" = 100'



UTILITIES EXHIBIT

FOR

EAGLE RIDGE

2-ACRE LOTS

BARTONVILLE, TX

38 SINGLE FAMILY LOTS

BEING 87.123 ACRES IN THE

A.R. LOVING SURVEY, ABSTRACT NO. 736

TOWN OF BARTONVILLE, DENTON COUNTY TX

December 21th, 2021 1" = 100'

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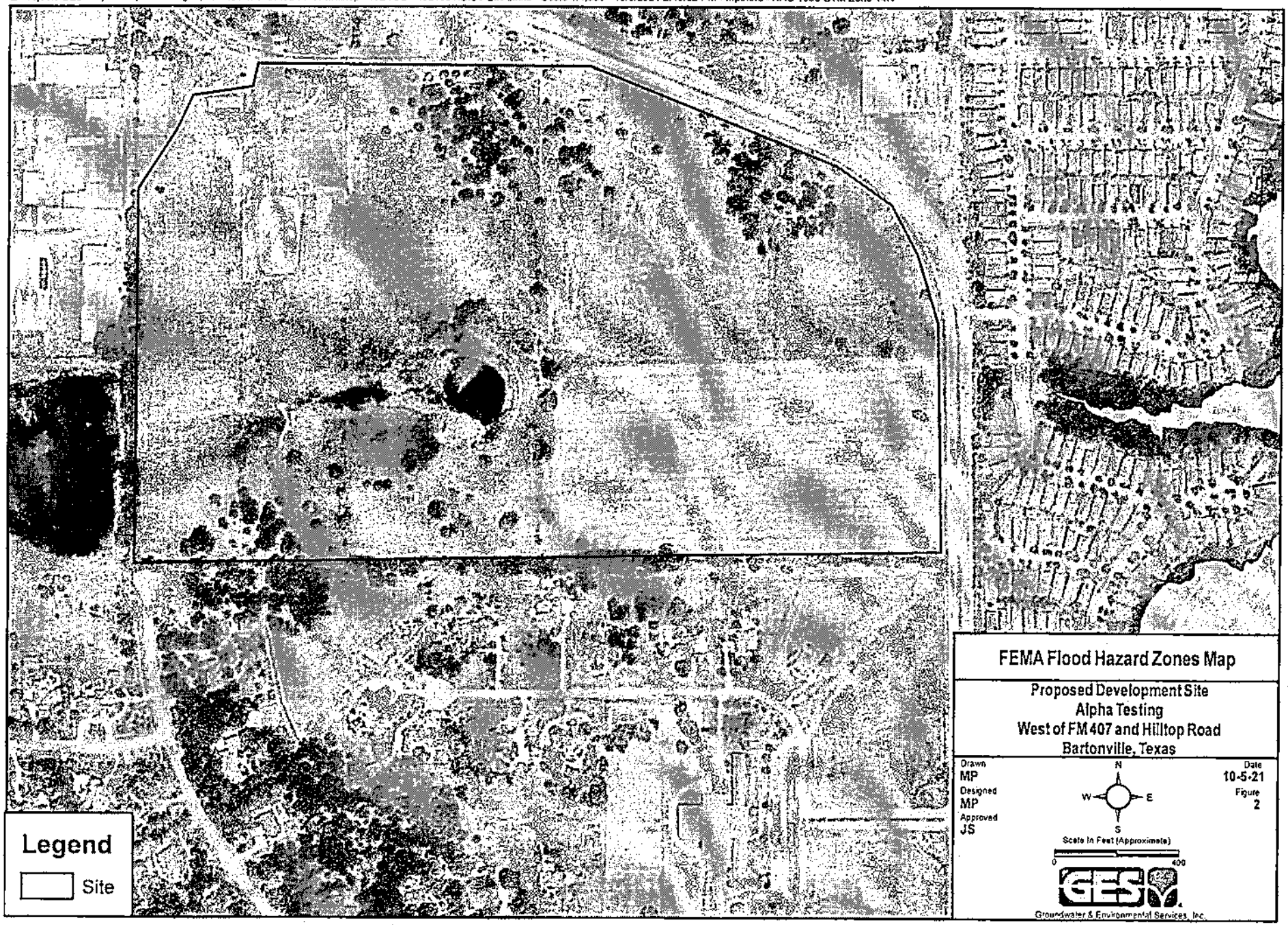

FEMA Flood Hazard Zones Map

Proposed Development Site
Alpha Testing
West of FM 407 and Hilltop Road
Bartonville, Texas

Drawn	MP
Designed	MP
Approved	JS
Date	10-5-21
Figure	2

N
W E
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Scale in Feet (Approximate)
0 400

GES
Groundwater & Environmental Services, Inc.

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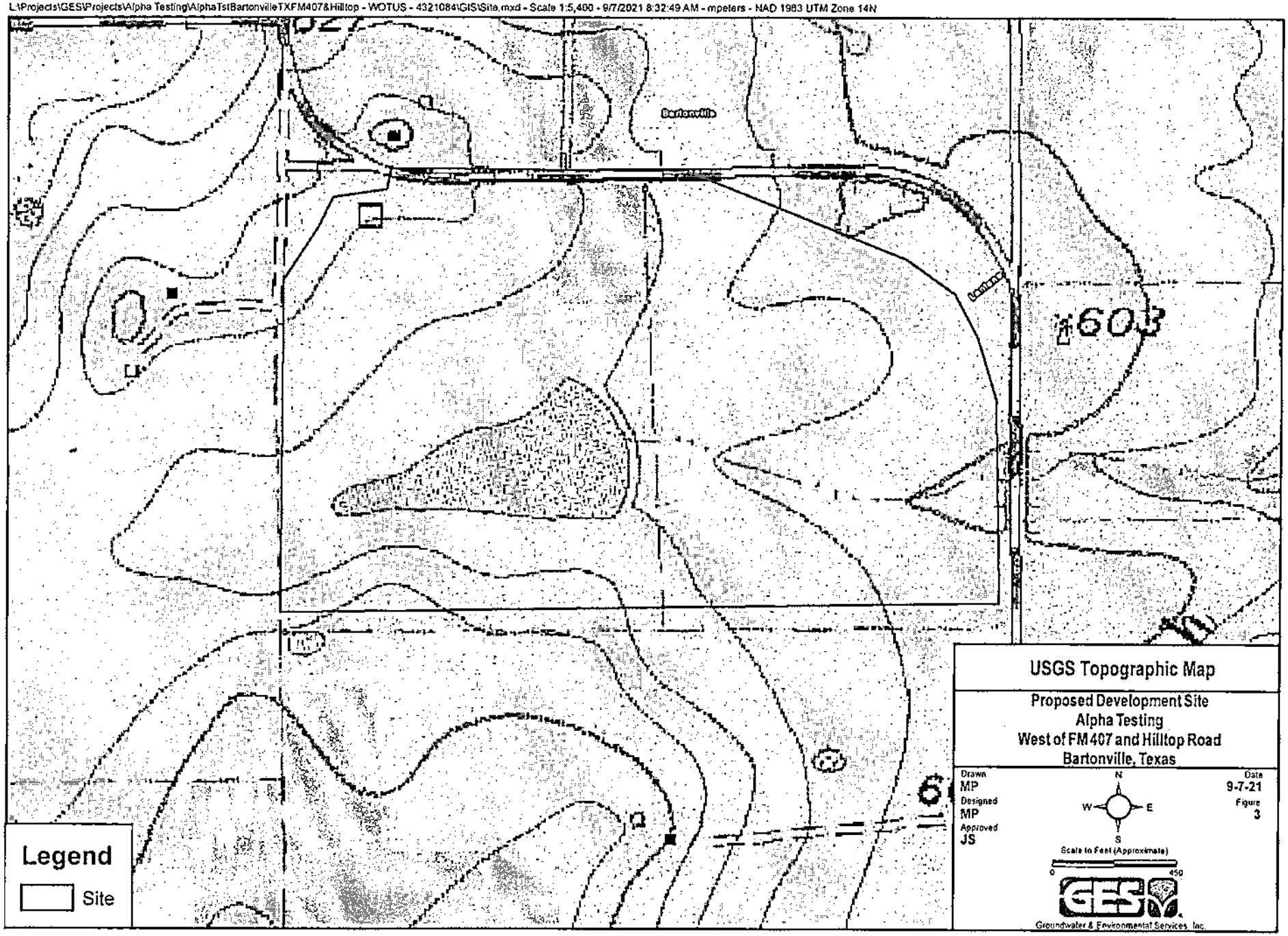

USGS Topographic Map

Proposed Development Site
Alpha Testing
West of FM 407 and Hilltop Road
Bartonville, Texas

Drawn	MP
Designed	MP
Approved	JS
Date	9-7-21
Figure	3

N W E S

Scale in Feet (Approximate)
0 450

Groundwater & Environmental Services, Inc.

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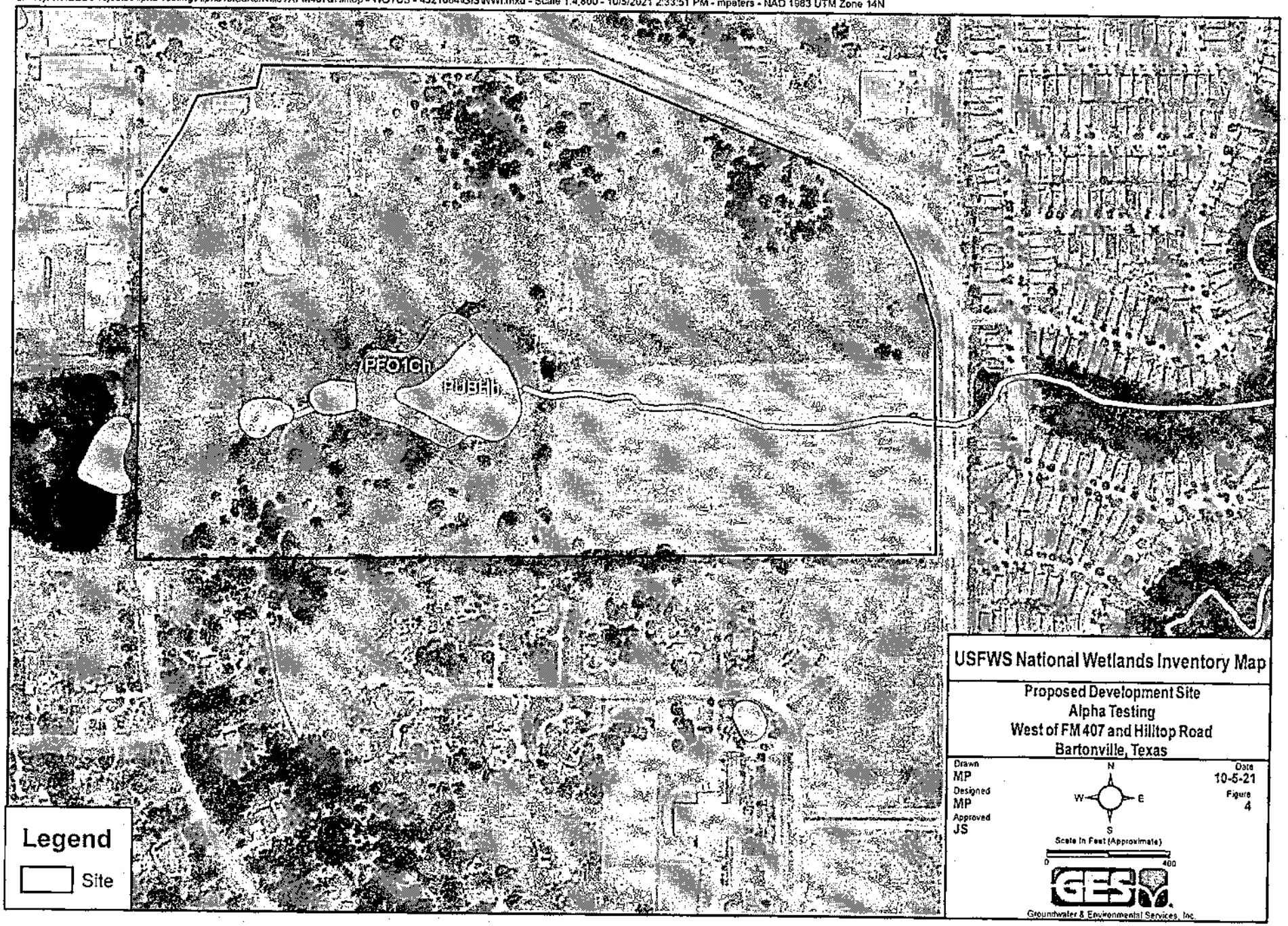

Legend

Site

USFWS National Wetlands Inventory Map

Proposed Development Site
Alpha Testing
West of FM 407 and Hilltop Road
Bartonville, Texas

Drawn	MP
Designed	MP
Approved	JS
Date	10-5-21
Figure	4

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Scale In Feet (Approximate)
0 400

Groundwater & Environmental Services, Inc.

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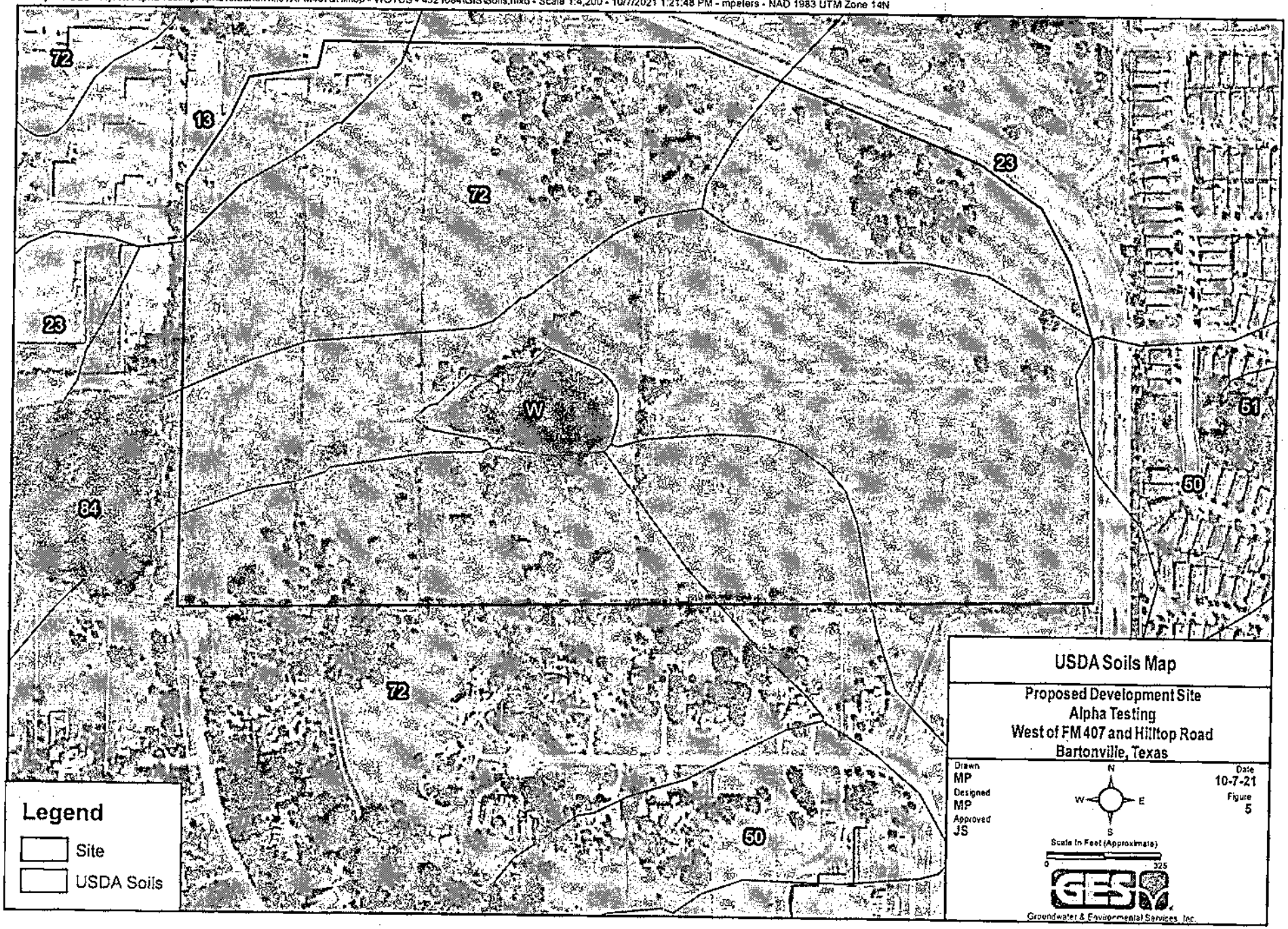

Legend

- Site
- USDA Soils

USDA Soils Map

Proposed Development Site
Alpha Testing
West of FM 407 and Hilltop Road
Bartonville, Texas

Drawn	MP
Designed	MP
Approved	JS
Date	10-7-21
Figure	5

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Scale In Feet (Approximate)
0 325

GES
Groundwater & Environmental Services, Inc.

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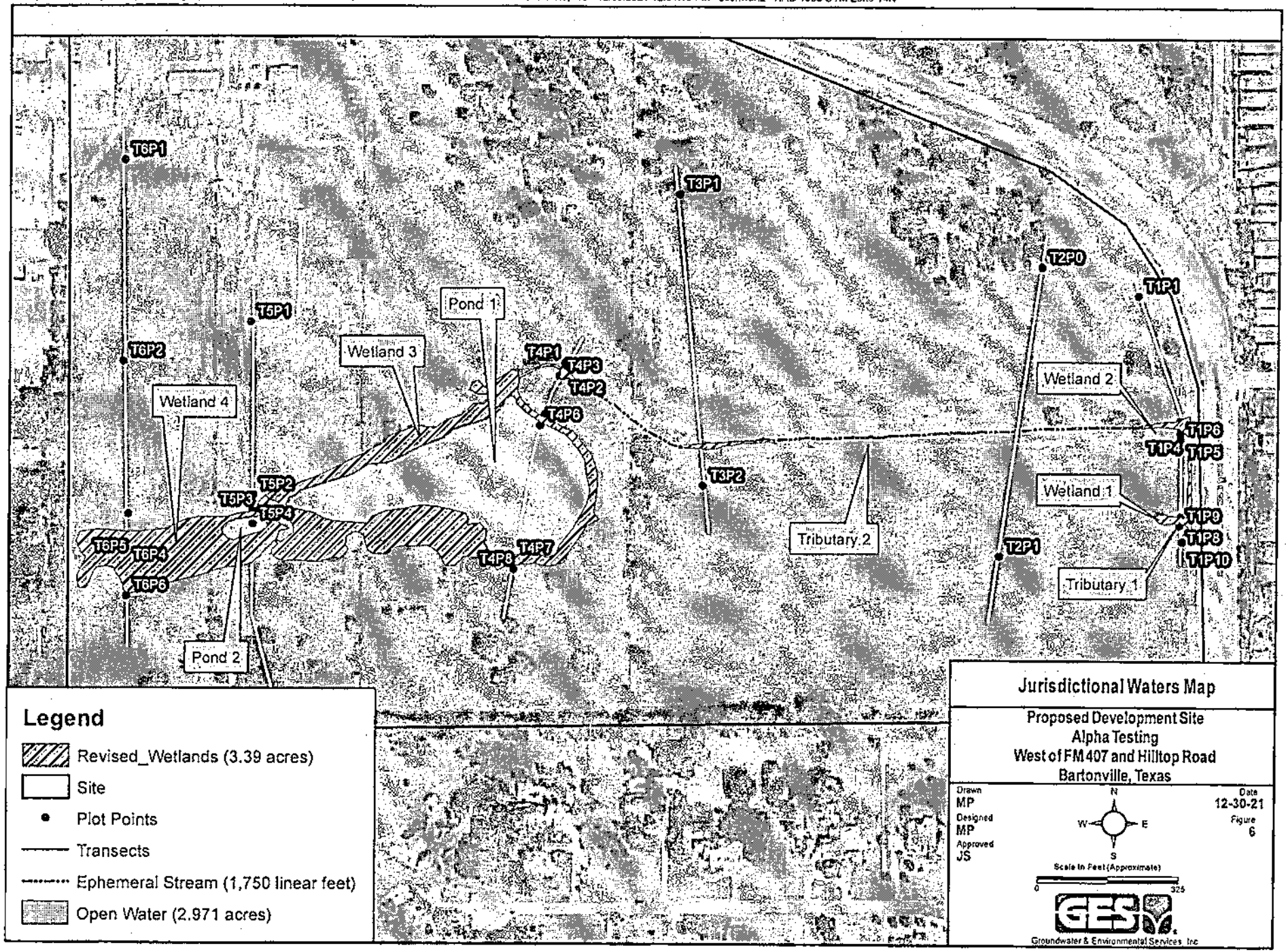

Legend

- Revised_Wetlands (3.39 acres)
- Site
- Plot Points
- Transects
- Ephemeral Stream (1,750 linear feet)
- Open Water (2.971 acres)

Jurisdictional Waters Map

Proposed Development Site
Alpha Testing
West of FM 407 and Hilltop Road
Bartonville, Texas

Drawn: MP
Designed: MP
Approved: JS
Date: 12-30-21
Figure: 6

N
W E
S

Scale in Feet (Approximate)
0 325

Groundwater & Environmental Services, Inc

Attachment E – Threatened and Endangered Species Letter

Groundwater & Environmental Services, Inc.
101 East Southwest Parkway, Suite 114
Lewisville, TX 75067
T. 800.871.6417

October 11, 2021

Chris Talamini
Alpha Testing
2209 Wisconsin Street
Suite 100
Dallas, Texas 75229

RE: Protected Species Habitat Evaluation for Proposed Eagle Ridge Development in Bartonville, Texas

Dear Mr. Talamini:

Groundwater & Environmental Services, Inc. (GES) has performed a threatened and endangered species habitat assessment for the approximately 86.5-acre site in Bartonville, Denton County, Texas. (**Figure 1**). The site was evaluated for the potential presence of three threatened, and/or endangered species identified as potentially present in Denton County by the U.S. Fish and Wildlife Service (USFWS), as well as the presence or absence of suitable habitat for these species.

SITE LOCATION

The site is approximately 86.5 acres and is located west of the intersection of FM 407 and Hilltop Road in Bartonville, Denton County, Texas (**Figure 1**). The site is primarily undeveloped land currently used for horse pasture. A house, barn, and storage shed are located in the northwestern corner of the site. The site is bordered by Lone Star Way and FM 407 followed by residential development to the north, FM 407 followed by residential development to the east, residential development to the south, and an industrial facility and pond to the west.

DESKTOP SURVEY

Prior to the site investigation, GES reviewed aerial imagery, U.S. Geological Survey (USGS) topographic maps, soil maps, floodplain maps, rivers and streams geographic information systems (GIS) layers, etc. to characterize the habitat onsite, as well as the proximity of the site to major water courses, riparian areas, urbanized areas, and other features that may affect the utilization of the site by a threatened or endangered species. The USFWS Endangered Species List for Denton County lists three threatened and/or endangered species as potentially present in Denton County. The designated species listed by the USFWS are shown in **Table 1**. The project site is not designated by the USFWS as critical habitat for any of the listed species.

SITE INVESTIGATION

The site investigation was performed by Madison Peters of GES on October 6, 2021. Weather conditions were partly cloudy with a temperature of approximately 80 degrees Fahrenheit, and winds ranging from 7 to 10 miles per hour.

Table 1: Threatened and/or Endangered Species Listed for Denton County, Texas

Species (Scientific Name) Federal Status	Species Habitat Description	Habitat Present	Effect	Pertinent Information
Birds				
Piping Plover (*Charadrius melodus*) T	Breeding area extends along the eastern coast of the United States south to southern Texas and includes the Great Lakes region, the northern Midwestern states, and south central Canada. The Piping Plover winters along the eastern Mexico coast. Piping Plovers nest on sandy beaches along the ocean or inland lakes; bare to sparsely vegetated areas on dredge-created and natural alluvial islands in rivers; gravel pits along rivers; and salt-encrusted bare areas of sand, gravel, or pebbly mud on alkaline interior lakes and ponds.	No	No	Conditional species, adversely affected with conditions or activities related to wind energy projects. No sandy beaches are located on site, nor is the project related to wind energy.
Red Knot (*Calidris canutus*) T	Migratory and may stopover in gulf coast. Breeding habitat consist of slightly vegetated land in tundra. Wintering habitats consist of large sandy tidal flats and coastlines.	No	No	Conditional species, adversely affected with conditions or activities related to wind energy projects. No sandy tidal flats or coastlines are located on site. The project is not related to wind energy.
Whooping Crane (*Grus americana*) E	Potential migrant via plains throughout most of the state to coast; winters in coastal marshes of Aransas, Calhoun, and Refugio counties.	Yes	No	Wetlands are located on site but the majority will be left intact; therefore, the project is not expected to impact this species.

T = Threatened
E = Endangered

The site is primarily undeveloped grassland currently used as horse pasture. Two ephemeral streams, four wetlands, and two open water features are located on site. Wetland vegetation was dominated by *Cynodon dactylon* (Bermuda grass), *Echinochloa colona* (barnyard grass), *Juncus*

effusus (common rush), *Nelumbo lutea* (American lotus), *Paspalum dilatatum* (dallisgrass), *Paspalum urvillei* (Vasey's grass), and *Persicaria hydropiperoides* (swamp smartweed).

The upland areas on the site were dominated by *Ambrosia trifida (giant ragweed), Bromus arvensis (field brome), Chloris texensis (Texas windmill grass), Cynodon dactylon, Echinochloa colona, Fraxinus pennsylvanica (green ash), Paspalum dilatatum, Quercus marilandica (blackjack oak), Quercus stellata (post oak), Rubus trivialis (southern dewberry), Salix nigra (black willow), Setaria pumila (yellow foxtail), Smilax bona-nox (saw greenbrier), Sorghum halepense (Johnson grass), Tridens albescens (white tridens), and Ulmus americana (American elm).*

Soils listed by the Natural Resource Conservation Service (NRCS) Soil Survey for Denton County on site include: Birome-Rayex complex, 2 to 15 percent slopes; Callisburg fine sandy loam, 1 to 3 percent slopes; Gasil fine sandy loam, 1 to 3 percent slopes; Konsil fine sandy loam, 1 to 3 percent slopes; Silstid loamy fine sand, 1 to 5 percent slopes; and Wilson clay, 1 to 3 percent slopes. Information regarding current site conditions and how they could affect the potential presence of a threatened and/or endangered species is included in **Table 1**.

SUMMARY AND CONCLUSIONS

Based on the evaluation of the habitat, it is GES' opinion that the site does not provide preferred habitat for any of the protected species listed as potentially present on the site. Additionally, none of these species were observed during the site visit. Furthermore, the project area is not identified by the USFWS as critical habitat for these federally listed species.

Given the lack of evidence that the species inhabit the project site, and the lack of suitable habitat on site, GES concludes that the proposed project will not affect any of the federally listed species.

GES further concludes that the proposed project will not pose the risk of a "take" (i.e. harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct) of any threatened and/or endangered species listed as potentially present in Denton County. Please let us know if additional information would be helpful.

Please let us know if additional information would be helpful.

Groundwater & Environmental Services, Inc.

Sincerely,

M. Peters

Madison Peters
Staff Environmental Scientist

Joseph Schwartz
Principal Environmental Scientist

Attachment G – Mitigation Plan

ATTACHMENT J

MITIGATION PLAN

Proposed Eagle Ridge Development
FM 407
Bartonville, Texas

Prepared by

Groundwater & Environmental Services, Inc.

December 2021

TABLE OF CONTENTS

MITIGATION PLAN

BASELINE INFORMATION

The site is approximately 86.5 acres and is located west of the intersection of FM 407 and Hilltop Road in Bartonville, Denton County, Texas. The site is primarily undeveloped land currently used for horse pasture. A house, barn, and storage shed are located in the northwestern corner of the site. The site is bordered by Lone Star Way and FM 407 followed by residential development to the north, FM 407 followed by residential development to the east, residential development to the south, and an industrial facility and pond to the west.

A Delineation of Waters of the United States was performed by GES on the project site in September, October, and December 2021 (**Attachment A of the Application**). The delineation identified two ephemeral streams (1,750 lf), four wetlands (3.39 acres), and two open water features (2.971 acres) located on site.

The proposed project entails developing the site as a residential development (**Figure 2 of the Application**). The proposed construction would fill approximately 0.459 acres of emergent wetland and 636 linear feet (0.029 acres) of ephemeral stream (**Figures 3 of the Application**). No additional fill in jurisdictional waters will occur during the project activities.

A TXRAM assessment has been conducted on the stream that is proposed to be impacted by this project to ascertain the number of credits that are necessary to compensate for the proposed stream impacts. TXRAM Scoring Sheets are included in **Appendix A of the Mitigation Plan**.

Riparian buffer impacts will be compensated by purchasing riparian buffer credits from Trinity River Mitigation Bank (TRMB). Based on TRMB's Banking Instrument, 0.90 riparian buffer credits are required to compensate for impacts to onsite streams (**Table 1**).

Table 1. Calculation of Required Trinity River Mitigation Bank (TRMB) Riparian Buffer Credits for the Proposed Development, Bartonville, Texas

Channel	SAR	Type	Length (linear feet)	Service Area Multiplier	Credits per Linear Foot	Riparian Buffer Credit Demand*
Tributary 1	1	ephemeral	61	1	0.003	0.09
Tributary 2	1	ephemeral	537	1	0.003	0.81
Total			**598**			**0.90**

*Note: Riparian Buffer Credit Demand = (1/2 Length) * Credits per Linear Foot

The remainder of the stream impacts will be compensated by purchasing in-channel credits from Mill Branch Mitigation Bank (MBMB). Based on the TXRAM assessment and MBMB's Banking Instrument, 93.1 in-channel credits are required to compensate for impacts to onsite streams (**Table 2**).

Table 2. Calculation of Required Mill Branch Mitigation Bank In-Channel Stream Credits for the Proposed Development, Bartonville, Texas

Channel	SAR	Type	TXRAM Loss	Length (linear feet)	Converted TXRAM Score*	Service Area Multiplier	TXRAM Credit Demand	In-Channel Credit Demand*
Tributary 1	1	ephemeral	33.83	61	20.64	1.0	20.64	10.32
Tributary 2	1	ephemeral	30.83	537	165.56	1.0	165.56	82.78
Total				**598**				**93.1**

*Note: Converted TXRAM Score = (TXRAM Loss*Length)/100
In Channel Credit Demand = 1/2 TXRAM Credit Demand

The wetlands impacts will be compensated by purchasing wetland credits from Bunker Sands Mitigation Bank (BSMB). Based on BSMB's Banking Instrument, 0.7 wetland credits are required to compensate for impacts to onsite wetlands (**Table 3**).

Table 3. Calculation of Required Bunker Sands Mitigation Bank (BSMB) Wetlands Credits for the Proposed Retail Development, McKinney, Texas

Name	Wetland Type	Total Impacted Area (acres)	Service Area Multiplier	Calculated Wetland Credit Demand*
Wetland 1	Emergent	0.014	1.5	0.021
Wetland 2	Emergent	0.007	1.5	0.0105
Wetland 3	Emergent	0.438	1.5	0.657
	Totals	**0.459**		**0.7**

*Note: Wetland credits sold at a minimum quantity of 0.1.

Avoidance and Minimization

The proposed construction plan would preserve 1,114 linear feet of ephemeral stream, 2.971 acres of ponds, and 2.9 acres of wetlands. Impacts to receiving waters downstream of the site and impacts to the aquatic resources that presently exist onsite will be avoided or minimized as follows:

1. Due to the nature and location of the waters of the US on site, the fill of jurisdictional waters on site is unavoidable.
2. Impacts to downstream habitat will be avoided by keeping away from these areas.
3. Every effort will be made to conduct the project during the dry season.
4. Construction of the project will be performed in compliance with a Storm Water Pollution Prevention Plan (SWPPP) and in compliance with Texas Commission on Environmental Quality (TCEQ) Storm Water General Permit for Construction Activities. Silt fences will be installed prior to the beginning of earth work. Additional BMPs to be employed may include hay bales and straw wattles. In particular, sediments and other pollutants will not be released offsite to streams during construction activities.

Direct and Indirect Permanent and Temporary Adverse Impacts

The following direct and indirect temporary adverse impacts to the aquatic environment will occur:

1. The function of the onsite ephemeral streams will be permanently impacted.
2. The function of the onsite emergent wetlands will be permanently impacted.

Liens and Encumbrances on the Mitigation Area

There are no identified lienholders or encumbrances on the project property.

SITE SELECTION

Alternatives

The following were identified as mitigation alternatives for the project:

1. On-site mitigation.
2. Off-site mitigation.
3. Purchase of mitigation credits from a U.S. Army Corps of Engineers (USACE) approved mitigation bank.

Analysis of Alternatives

Alternative 1: On-site mitigation would entail the creation of streams and wetlands on site to compensate for the impacts to jurisdictional waters by the proposed project. This alternative was rejected due to the USACE's rule establishing a preference for the use of mitigation bank credits.

Alternative 2: Off-site mitigation would entail the creation of streams and wetlands off site to compensate for the impacts to jurisdictional waters by the proposed project. This alternative was rejected due to the USACE's rule establishing a preference for the use of mitigation bank credits.

Alternative 3: The purchase of credits from a USACE-approved mitigation bank to compensate for impacts by the proposed project is the preferred alternative due to the USACE's rule establishing a preference for the use of mitigation bank credits for the compensation of impacts to jurisdictional waters.

Compatibility Issues

All compensation for impacts to onsite jurisdictional waters will be accomplished by the purchase of mitigation bank credits from USACE-approved mitigation banks. Compatibility issues relative to TRMB, MBMB and BSMB have been described in the banks' respective mitigation banking instruments and include:

- Hydrogeomorphology
- Land Use
- Watershed, Floodplain, and Water Quality Issues
- Mitigation Maintenance
- Nearby Ecosystem Features

- Chemical Contamination
- Hydrology
- Soils
- Vegetation
- Historic Properties/Cultural Resources
- Threatened and Endangered Species
- Safety

Contribution to Aquatic Resource Needs of the Watershed
All compensation for impacts to onsite jurisdictional waters will be accomplished by the purchase of mitigation bank credits from USACE-approved mitigation banks. The contribution of TRMB, MBMB, and BSMB to the aquatic resources needs of their respective watersheds has been reviewed by the USACE and documented in the Mitigation Banking Instruments for TRMB, MBMB, and BSMB.

Potential Threat to Aircraft
All compensation for impacts to onsite jurisdictional waters will be accomplished by the purchase of mitigation bank credits from USACE-approved mitigation banks. The potential threat to aircraft relevant to TRMB, MBMB, and BSMB has been reviewed by the USACE and documented in the Mitigation Banking Instrument for TRMB, MBMB, and BSMB.

GOALS AND OBJECTIVES OF THE MITIGATION PLAN

The goal of the Mitigation Plan is to compensate for the impacts of the proposed project on jurisdictional waters. The methods for measuring the effectiveness of the compensation have been accepted by the USACE and documented in the Mitigation Banking Instruments for TRMB, MBMB, and BSMB.

MITIGATION WORK PLAN

All compensation for impacts to onsite jurisdictional waters will be accomplished by the purchase of mitigation bank credits from USACE-approved mitigation banks. The mitigation work plans for TRMB, MBMB, and BSMB are described in the banks' respective Mitigation Banking Instruments and include:

- Protection of Aquatic Resources During Construction
- Hydrology (including expected future hydrology and impacts of site grading)
- Mitigation Area Substrate
- Mitigation Planting Plan
- Achievement of Mitigation Plan Goals and Objectives

Impacts to waters of the U.S. are proposed to be mitigated by the purchase of 0.95 mitigation bank credits from TRMB to compensate for half of the stream impacts, 106.66 credits from MBMB for the other half of the stream impacts, and 0.8 wetland credits from BSMB for the wetland impacts.

PERFORMANCE STANDARDS AND SUCCESS CRITERIA

All compensation for impacts to onsite jurisdictional waters will be accomplished by the purchase of mitigation credits from USACE-approved mitigation banks; therefore, the success criterial of the plan is the successful purchase of credits to compensate for onsite impacts. Performance standards and success criteria for the mitigation banks are described in the banks' respective banking instruments.

COMPLIANCE WITH OTHER LEGAL REQUIREMENTS

All compensation for impacts to onsite jurisdictional waters will be accomplished by the purchase of mitigation bank credits from USACE-approved mitigation banks. Compliance with other legal requirements for TRMB, MBMB, and BSMB are described in the banks' respective Mitigation Banking Instruments and include:

- Threatened and Endangered Species
- Historic Properties

LONG-TERM MANAGEMENT AND MONITORING

All compensation for impacts to onsite jurisdictional waters will be accomplished by the purchase of mitigation bank credits from USACE-approved mitigation banks. The long-term management and monitoring plans for TRMB, MBMB, and BSMB are described in the banks' respective Mitigation Banking Instruments and include:

- Long Term Operation and Management
- Mitigation Plan Implementation Schedule
- Mitigation Monitoring Plan
- Mitigation Monitoring Annual Compliance Reports

CONTINGENCY PLAN

All compensation for impacts to onsite jurisdictional waters will be accomplished by the purchase of mitigation bank credits from USACE-approved mitigation banks. The contingency plans for TRMB, MBMB, and BSMB have been reviewed and accepted by the USACE, and documented in the Mitigation Banking Instruments for TRMB, MBMB, and BSMB.

PROJECT SUCCESS/RESPONSIBLE PARTIES

All compensation for impacts to onsite jurisdictional waters will be accomplished by the purchase of mitigation bank credits from USACE-approved mitigation banks. The responsible personnel and success qualifications of the responsible parties for project success relative to mitigation at TRMB, MBMB, and BSMB have been reviewed and accepted by the USACE, and documented in the Mitigation Banking Instruments for TRMB, MBMB, and BSMB.

SITE PROTECTION

All compensation for impacts to onsite jurisdictional waters will be accomplished by the purchase of mitigation bank credits from USACE-approved mitigation banks. The required site protection at TRMB, MBMB, and BSMB has been reviewed by the USACE and documented in the Mitigation Banking Instruments for TRMB, MBMB, and BSMB.

SCHEDULE

The applicant will purchase credits from a USACE-approved mitigation bank prior to conducting any fill or construction activity in jurisdictional waters.

FINANCIAL ASSURANCE

All compensation for impacts to onsite jurisdictional waters will be accomplished by the purchase of mitigation bank credits from USACE-approved mitigation banks. The required financial assurance for TRMB, MBMB, and BSMB have been reviewed by the USACE and documented in the Mitigation Banking Instruments for TRMB, MBMB, and BSMB.

APPENDICES

APPENDIX A

TXRAM SCORING SHEETS

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TXRAM STREAM DATA SHEET

Project/Site Name/No.: Eagle Ridge Project Type: ☒ Fill/Impact (☐ Linear ☐ Non-linear) ☒ Mitigation/Conservation

Stream ID/Name: Tributary 1 SAR No.: 1 Size (LF): 61 Date: 10/6/21 Evaluator(s): MP

Stream Type: Ephemeral Ecoregion: Texas Blackland Prairies Delineation Performed: ☒ Previously ☐ Currently

8-Digit HUC: _____ Watershed Condition (developed, pasture, etc.): Various Watershed Size: _____

Aerial Photo Date and Source: 2021 Esri Aerial Basemap Site Photos: See Photo Log Representative: ☒ Yes ☐ No

Stressor(s): None Are normal climatic/hydrologic conditions present? ☒ Yes ☐ No (If no, explain in Notes)

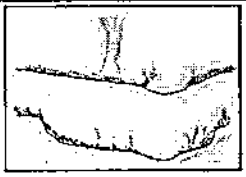
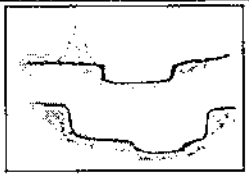
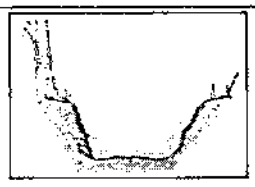
Stream Characteristics

Stream Width (Feet)	*Stream Height/Depth (Feet)*
Avg. Bank to Bank: 3	Avg. Banks: 2
Avg. Waters Edge: 0.25	Avg. Water: 0.1
Avg. OHWM: 2	Avg. OHWM: 0.5

Notes:
61 lf of SAR 1 on-site

CHANNEL CONDITION

Floodplain Connectivity

				
Very little incision and access to the original floodplain or fully developed wide bankfull benches.	Slight incision and likely having regular (i.e., at least once a year) access to bankfull benches or newly developed floodplains along majority of the reach.	Moderate incision and presence of near vertical/ undercut banks; irregular (i.e., greater than 2 year return interval) access to floodplain or possible access to floodplain or bankfull benches at isolated areas.	Overwidened or incised channel and likely to widen further; majority of both banks near vertical/undercut; unlikely/rarely having access to floodplain or bankfull benches.	Deeply incised channel or channelized flow; severe incision with flow contained within the banks; majority of banks vertical/undercut.
☐ 5	☐ 4	☐ 3	☑ 2	☐ 1

Score: 2

Bank Condition

Left Bank Active Erosion: 10 % Right Bank Active Erosion: 10 % Average: 10

Bank Protection/Stabilization: ☒ Natural ☐ Artificial: _____

Score: 4

Sediment Deposition

☒ Less than 20% of the bottom covered by excessive sediment deposition; bars with established vegetation (5)

☐ 20–40% of the bottom covered by excessive sediment deposition; some established bars with indicators of recently deposited sediments (4)

☐ 40–60% of the bottom covered by excessive sediment deposition; moderate deposition on old bars and creating new bars; moderate sediment deposits at in-stream structures; OR obstructed view of the channel bottom and a lack of other depositional features (3)

☐ 60–80% of the bottom covered by excessive sediment deposition; newly created bars prevalent; heavy sediment deposits at in-stream structures (2)

☐ Greater than 80% of the bottom covered by excessive sediment deposition resulting in aggrading channel (1)

Score: 5

RIPARIAN BUFFER CONDITION

Riparian Buffer - See Table 22 to determine appropriate buffer distance. Confirm in office review.

Identify each buffer type and score according to canopy cover, vegetation community, and land use (see section 3.3.2.1.3).

Left Bank — Buffer Distance: 26

Buffer Type	*Canopy Cover*	*Vegetation Community*	*Land Use*	*Score*	*Percentage of Area*	*Subtotal*
1. Grassland	0	Mixed	Low	2	40	0.8
2. Forest	35	Mixed	Low	3	60	1.8
3.						0
4.						0
5.						0

Score: 2.6

Right Bank

Buffer Type	*Canopy Cover*	*Vegetation Community*	*Land Use*	*Score*	*Percentage of Area*	*Subtotal*
1. Grassland	0	Mixed	Low	2	40	0.8
2. Forest	35	Mixed	Low	3	60	1.8
3.						0
4.						0
5.						0

Score: 2.6

IN-STREAM CONDITION

Substrate Composition (estimate percentages)

Boulder:	Gravel:	Fines (silt, clay, muck): 100	Artificial:
Cobble:	Sand:	Bedrock:	Other:

Score: 1

In-stream Habitat (check all habitat types that are present)

Habitat Type	*T1*	*T2*	*T3*	*T4*	*T5*	*T6*	*T7*	*T8*	*T9*	*T10*	*T11*	*T12*	*T13*
Undercut Banks													
Overhanging Vegetation													
Rootmats													
Rootwads													
Woody/Leafy Debris													
Boulders/Cobbles													
Aquatic Macrophytes													
Riffle/Pool Sequence													
Artificial Habitat Enhancement													
Other													
Total No. Present													

Average: _____ **Score:** 0

HYDROLOGIC CONDITION

Flow Regime

- ☐ Noticeable surface flow present (4)
- ☐ Continual pool of water but lacking noticeable flow (3)
- ☐ Isolated pools and interstitial (subsurface) flow (2)
- ☐ Isolated pools and no evidence of surface or interstitial flow (1)
- ☒ Dry channel and no observable pools or interstitial flow (0)

Score: 0

Channel Flow Status

- ☐ Water covering greater than 75% of the channel bottom width; less than 25% of channel substrate is exposed (4)
- ☐ Water covering 50–75% of the channel bottom width; 25–50% of channel substrate is exposed (3)
- ☐ Water covering 25–50% of the channel bottom width; 50–75% of channel substrate is exposed (2)
- ☐ Water present but covering less than 25% of the channel bottom width; greater than 75% of channel substrate is exposed (1)
- ☒ No water present in the channel; 100% of channel substrate exposed (0)

Score: 0

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TXRAM STREAM FINAL SCORING SHEET

Project/Site Name/No.: Eagle Ridge Project Type: ☒ Fill/Impact (☐ Linear ☐ Non-linear) ☒ Mitigation/Conservation

Stream ID/Name: Tributary 1 SAR No.: 1 Size (LF): 61 Date: 10/6/21 Evaluator(s): MP

Stream Type: Ephemeral Ecoregion: Texas Blackland Prairies Delineation Performed: ☒ Previously ☐ Currently

8-Digit HUC: _____ Watershed Condition (developed, pasture, etc.): Various Watershed Size: _____

Aerial Photo Date and Source: 2021 Esri Aerial Basemap Site Photos: See Photo Log Representative: ☒ Yes ☐ No

Stressor(s): None Are normal climatic/hydrologic conditions present? ☒ Yes ☐ No (If no, explain in Notes)

Notes: 61 lf of SAR 1 on-site

Stream Characteristics

Stream Width (Feet)	*Stream Height/Depth (Feet)*
Avg. Bank to Bank: 3	Avg. Banks: 2
Avg. Waters Edge: 0.25	Avg. Water: 0.1
Avg. OHWM: 2	Avg. OHWM: 0.5

Scoring Table

Core Element	*Metric*	*Metric Score*	*Core Element Score Calculation*	*Core Element Score*
Channel condition	Floodplain connectivity	2	Sum of metric scores / 15 x 25	18.33
	Bank condition	4		
	Sediment deposition	5		
Riparian buffer condition	Riparian buffer (left bank)	2.6	Sum of bank scores / 10 x 25	13.00
	Riparian buffer (right bank)	2.6		
In-stream condition	Substrate composition	1	Sum of metric scores / 10 x 25	2.50
	In-stream habitat	0		
Hydrologic condition	Flow regime	0	Sum of metric scores / 8 x 25	0.00
	Channel flow status	0		
			Sum of core element scores = overall TXRAM stream score	33.83
Additional points for limited habitats = overall TXRAM stream score x 0.025 for each bank (right/left) if: L R ☐ ☐ Dominated by native trees greater than 24-inch diameter at breast height ☐ ☐ Dominated by hard mast (i.e., acorns and nuts) producing native species in the tree strata				0.00
			Sum of overall TXRAM stream score and additional points = **total overall TXRAM stream score**	33.83

Representative Site Photograph:

[Insert Photograph]	*[Insert Photograph Description (e.g., direction, location)]*

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TXRAM STREAM DATA SHEET

Project/Site Name/No.: Eagle Ridge Project Type: ☒ Fill/Impact (☐ Linear ☐ Non-linear) ☒ Mitigation/Conservation

Stream ID/Name: Tributary 2 SAR No.: 1 Size (LF): 762 Date: 10/6/21 Evaluator(s): MP

Stream Type: Ephemeral Ecoregion: Texas Blackland Prairies Delineation Performed: ☒ Previously ☐ Currently

8-Digit HUC: _____ Watershed Condition (developed, pasture, etc.): Various Watershed Size: _____

Aerial Photo Date and Source: 2021 Esri Aerial Basemap Site Photos: See Photo Log Representative: ☒ Yes ☐ No

Stressor(s): None Are normal climatic/hydrologic conditions present? ☒ Yes ☐ No (If no, explain in Notes)

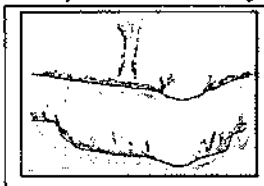
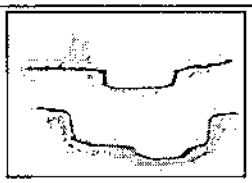
Stream Characteristics

Stream Width (Feet)	*Stream Height/Depth (Feet)*
Avg. Bank to Bank: 2	Avg. Banks: 0.75
Avg. Waters Edge: Dry	Avg. Water: Dry
Avg. OHWM: 1.25	Avg. OHWM: 0.25

Notes:
1,513 lf of SAR 1 on-site

CHANNEL CONDITION

Floodplain Connectivity

				
Very little incision and access to the original floodplain or fully developed wide bankfull benches.	Slight incision and likely having regular (i.e., at least once a year) access to bankfull benches or newly developed floodplains along majority of the reach.	Moderate incision and presence of near vertical/ undercut banks; irregular (i.e., greater than 2 year return interval) access to floodplain or possible access to floodplain or bankfull benches at isolated areas.	Overwidened or incised channel and likely to widen further; majority of both banks near vertical/undercut; unlikely/rarely having access to floodplain or bankfull benches.	Deeply incised channel or channelized flow; severe incision with flow contained within the banks; majority of banks vertical/undercut.
☐ 5	☐ 4	☐ 3	☑ 2	☐ 1

Score: 2

Bank Condition

Left Bank Active Erosion: 10 % Right Bank Active Erosion: 10 % Average: 10

Bank Protection/Stabilization: ☒ Natural ☐ Artificial: _____

Score: 4

Sediment Deposition

☒ Less than 20% of the bottom covered by excessive sediment deposition; bars with established vegetation (5)

☐ 20–40% of the bottom covered by excessive sediment deposition; some established bars with indicators of recently deposited sediments (4)

☐ 40–60% of the bottom covered by excessive sediment deposition; moderate deposition on old bars and creating new bars; moderate sediment deposits at in-stream structures; OR obstructed view of the channel bottom and a lack of other depositional features (3)

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☐ Greater than 80% of the bottom covered by excessive sediment deposition resulting in aggrading channel (1)

Score: 5

RIPARIAN BUFFER CONDITION

Riparian Buffer - See Table 22 to determine appropriate buffer distance. Confirm in office review.

Identify each buffer type and score according to canopy cover, vegetation community, and land use (see section 3.3.2.1.3).

Left Bank — Buffer Distance: 25.625

Buffer Type	Canopy Cover	Vegetation Community	Land Use	Score	Percentage of Area	Subtotal
1. Grassland	0	Mixed	Low	2	100	2
2.						0
3.						0
4.						0
5.						0

Score: 2

Right Bank

Buffer Type	Canopy Cover	Vegetation Community	Land Use	Score	Percentage of Area	Subtotal
1. Grassland	0	Mixed	Low	2	100	2
2.						0
3.						0
4.						0
5.						0

Score: 2

IN-STREAM CONDITION

Substrate Composition (estimate percentages)

Boulder:	Gravel:	Fines (silt, clay, muck): 100	Artificial:
Cobble:	Sand:	Bedrock:	Other:

Score: 1

In-stream Habitat (check all habitat types that are present)

Habitat Type	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12	T13
Undercut Banks													
Overhanging Vegetation													
Rootmats													
Rootwads													
Woody/Leafy Debris													
Boulders/Cobbles													
Aquatic Macrophytes													
Riffle/Pool Sequence													
Artificial Habitat Enhancement													
Other													
Total No. Present													

Average: _____ **Score:** 0

HYDROLOGIC CONDITION

Flow Regime

- ☐ Noticeable surface flow present (4)
- ☐ Continual pool of water but lacking noticeable flow (3)
- ☐ Isolated pools and interstitial (subsurface) flow (2)
- ☐ Isolated pools and no evidence of surface or interstitial flow (1)
- ☒ Dry channel and no observable pools or interstitial flow (0)

Score: 0

Channel Flow Status

- ☐ Water covering greater than 75% of the channel bottom width; less than 25% of channel substrate is exposed (4)
- ☐ Water covering 50–75% of the channel bottom width; 25–50% of channel substrate is exposed (3)
- ☐ Water covering 25–50% of the channel bottom width; 50–75% of channel substrate is exposed (2)
- ☐ Water present but covering less than 25% of the channel bottom width; greater than 75% of channel substrate is exposed (1)
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Score: 0

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8-Digit HUC: _____ Watershed Condition (developed, pasture, etc.): Various Watershed Size: _____

Aerial Photo Date and Source: 2021 Esri Aerial Basemap Site Photos: See Photo Log Representative: ☒ Yes ☐ No

Stressor(s): None Are normal climatic/hydrologic conditions present? ☒ Yes ☐ No (If no, explain in Notes)

Notes: 1,513 lf of SAR 1 on-site

Stream Characteristics

Stream Width (Feet)	*Stream Height/Depth (Feet)*
Avg. Bank to Bank: 2	Avg. Banks: 0.75
Avg. Waters Edge: Dry	Avg. Water: Dry
Avg. OHWM: 1.25	Avg. OHWM: 0.25

Scoring Table

Core Element	*Metric*	*Metric Score*	*Core Element Score Calculation*	*Core Element Score*
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	Bank condition	4		
	Sediment deposition	5		
Riparian buffer condition	Riparian buffer (left bank)	2	Sum of bank scores / 10 x 25	10.00
	Riparian buffer (right bank)	2		
In-stream condition	Substrate composition	1	Sum of metric scores / 10 x 25	2.50
	In-stream habitat	0		
Hydrologic condition	Flow regime	0	Sum of metric scores / 8 x 25	0.00
	Channel flow status	0		
			Sum of core element scores = overall TXRAM stream score	30.83
Additional points for limited habitats = overall TXRAM stream score x 0.025 for each bank (right/left) if: L R ☐ ☐ Dominated by native trees greater than 24-inch diameter at breast height ☐ ☐ Dominated by hard mast (i.e., acorns and nuts) producing native species in the tree strata				0.00
			Sum of overall TXRAM stream score and additional points = **total overall TXRAM stream score**	30.83

Representative Site Photograph:

[Insert Photograph]	*[Insert Photograph Description (e.g., direction, location)]*