

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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Total Recording: \$858.00

# \*\*\*\*\*\*\*\* 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.

File Information:

Record and Return To:

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163543

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Recorded Date/Time: November 30, 2022 10:59 AM

User:

Kerry H

Station:

Station 4

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 22 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 <u>Article II</u> hereof and described on <u>Exhibit "A"</u> 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 <u>Article II</u>, together with such additions as may hereafter be made thereto (as provided in <u>Article II</u>) 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 <u>Article II</u>, and such additions thereto as may hereafter be made pursuant to <u>Article II</u> 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. <u>"Residence"</u> 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 replat 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 Ouality 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;
- 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.

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.
- 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 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.

- **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 <u>Section 7.3</u> 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 <u>Section 8.4</u> 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 nonpaying 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.
- e. 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 20 Vomber, 2022. Bartonville South 1031, LLC dba Red Rock Communities a Texas limited Hability company Bv: < Name: **ACKNOWLEDGEMENTS** THE STATE OF TEXAS COUNTY OF DENTON This instrument was acknowledged before me, a Notary Public, on this Ad day of 2022, by Comar Queis, the Member of Manage of Bartonville South 1031, LLC, dba Red Rock Communities on behalf of said limited liability company. Notary Public, State of Texas ALICIA SCHWARZE Notary ID #133771818 My Commission Expires Print Name May 19, 2026 My Commission expires: THE STATE OF TEXAS § COUNTY OF DENTON § This instrument was acknowledged before me, a Notary Public, on this 22 day of 2022, by Rasem Nimo, the Momber of Manager of Bartonville South 1031, LLC, dba Red Rock Communities on behalf of said limited liability company. Notary Public, State of Texas ALICIA SCHWARZE Print Name

My Commission expires:

Declaration of Covenants, Conditions and Restrictions For the Eagle Ridge Subdivision

Notary ID #133771818

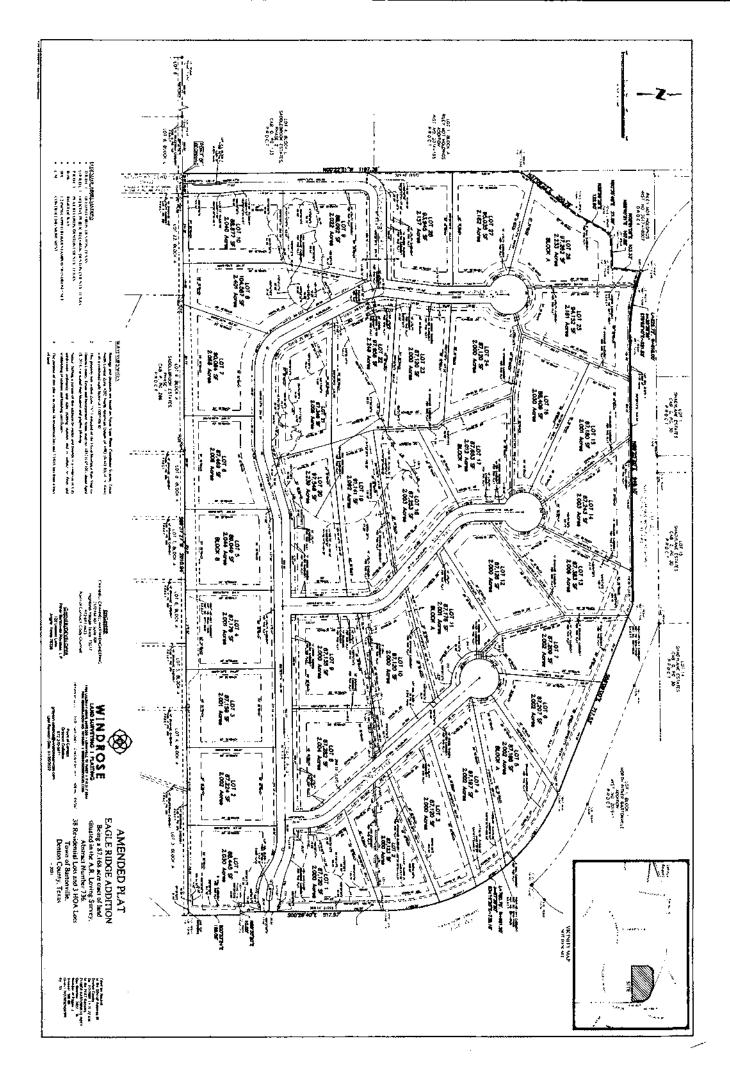
Commission Expires May 19, 2026

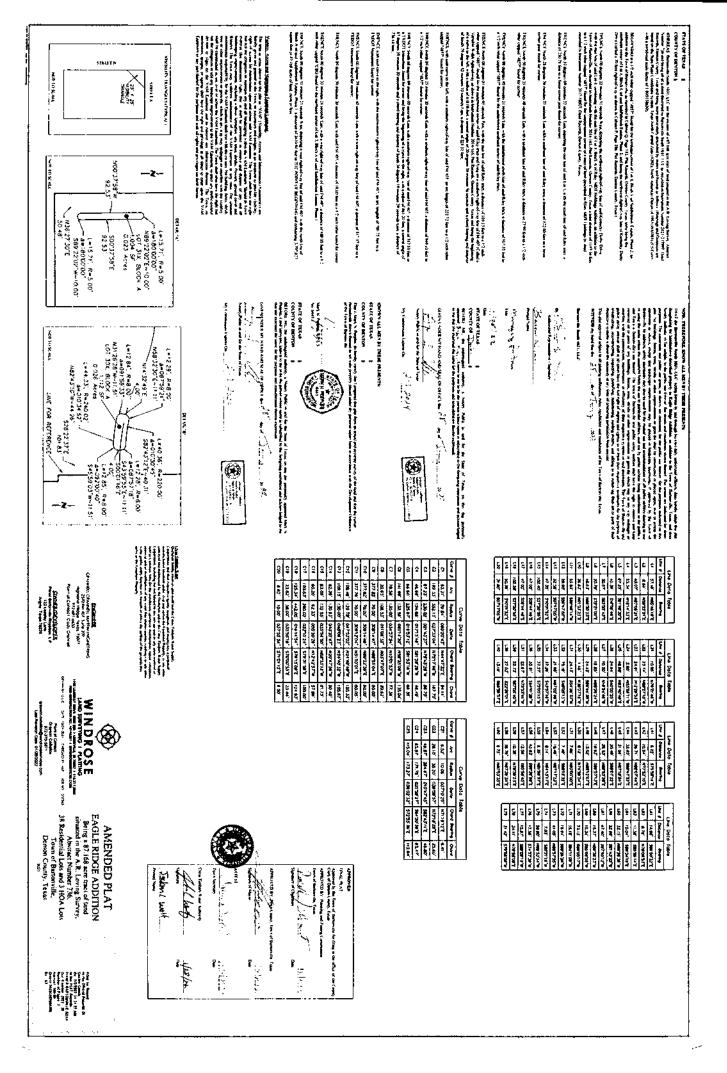
# Exhibit A

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







#### 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 <a href="https://www.swf.usace.army.mil/Missions/Regulatory/Permitting/Nationwide-General-Permits/">https://www.swf.usace.army.mil/Missions/Regulatory/Permitting/Nationwide-General-Permits/</a>, and the special conditions listed below. Additionally, all activities must comply with the water.

https://www.swt.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 <a href="http://www.swf.usace.army.mil/Missions/Regulatory">http://www.swf.usace.army.mil/Missions/Regulatory</a> or contact Mr. Frederick J. Land at the address above, by telephone (817) 886-1729, or by email <a href="mailto:Fred.J.Land@usace.army.mil">Fred.J.Land@usace.army.mil</a>, and refer to your assigned project number.

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

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

GESonline.com

# 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
- Part I: NWP Conditions and Requirements Checklist
  - General Conditions Checklist
  - NWP 29-Specific Requirements Checklist
  - o Regional Conditions Checklist
- Part II: Project Information
- · Part III: Project Impacts and Mitigation
- Part IV: Attachments
- Instructions

#### **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.] instruction 4 for link to list):	, see
	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 s	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. requi	re the
	removal, relocation, or other alteration of the structure or work herein authorized, or if.	in the

	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 \sum No \sim 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.	<ul> <li>Aquatic Life Movements:</li> <li>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</li> <li>b. Is the project's primary purpose to impound water? ☐ Yes ☐ No</li> <li>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</li> </ul>
	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.	<ul> <li>Spawning Areas:</li> <li>a. Does the project avoid spawning areas during the spawning season to the maximum extent practicable? ∑ Yes ∑ No ∑ N/A</li> <li>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?</li> <li>∑ Yes ∑ No ∑ N/A</li> </ul>
	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.	<ul> <li>Suitable Material:</li> <li>a. Does the project use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.)?  ☐ Yes ☐ No</li> <li>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</li> </ul>

	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.	<ul> <li>Adverse Effects From Impoundments:</li> <li>a. Does the project create an impoundment of water? ☐ Yes ☐ No</li> <li>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</li> </ul>
	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.	<ul> <li>Management of Water Flows:</li> <li>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</li> <li>b. Will the project be constructed to withstand expected high flows? ∑ Yes ☐ No</li> <li>c. Will the project restrict or impede the passage of normal or high flows? ☐ Yes ∑ No</li> </ul>
	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.	<ul> <li>Soil Erosion and Sediment Controls:</li> <li>a. Will the project use appropriate soil erosion and sediment controls and maintain them in effective operating condition throughout construction? ∑ Yes ☐ No</li> <li>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</li> <li>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.</li> </ul>

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.	<ul> <li>Removal of Temporary Filis:</li> <li>a. Will temporary fills be removed in their entirety and the affected areas returned to preconstruction elevations?   Yes □ No □ N/A</li> <li>b. Will the affected areas be revegetated, as appropriate?   Yes □ No □ N/A</li> </ul>
	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? X Yes

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? X Yes

#### 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.	<ul> <li>Endangered Species (see also Box 8 in Part III):</li> <li>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</li> <li>b. Might the project affect any listed species or designated critical habitat? ☐ Yes ☐ No</li> <li>c. Is any listed species or designated critical habitat in the vicinity of the project? ☐ Yes ☐ No</li> <li>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</li> </ul>
	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 ☐ N/A
	If you answered yes to question a. above, you are responsible for contacting the appropriate loca 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 of the Bald and Golden Eagle Protection Act.
20.	<ul> <li>Historic Properties (see also Box 9 in Part III):</li> <li>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 Nationa Register of Historic Places, including previously unidentified properties?</li> <li>☐ Yes ☒ No ☐ N/A</li> </ul>
	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.

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? $\square$ Yes $\square$ X 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.	<ul> <li>Water Quality (see also Box 11 in Part III):</li> <li>a. If in Texas, does the project comply with the conditions of the TCEQ water quality certification for NWP 29?  Yes  No N/A</li> <li>b. Will the project result in the loss of 1,500 linear feet or more of stream bed? Yes No</li> <li>c. If in Louisiana, does the project comply with the conditions of the LDEQ water quality certification for NWP 29? Yes No No N/A</li> </ul>
	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.	<ul> <li>Use of Multiple Nationwide Permits:</li> <li>a. Does the project use more than one NWP for a single and complete project? ☐ Yes ☐ No</li> <li>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.</li> </ul>
	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.	<ul> <li>Transfer of Nationwide Permit Verifications:</li> <li>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?</li> <li>☑ Yes ☐ No</li> </ul>
30.	<ul> <li>Compliance Certification:</li> <li>a. Does the Applicant agree that if he or she receives the NWP verification from the USAŒ, they must submit a signed certification regarding the completed work and any required mitigation (the certification form will be sent by the USAŒ with the NWP verification letter)?</li> <li>☑ Yes ☐ No</li> </ul>
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.
	ensure compliance with the NWP 29-specific requirements please answer the owing 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.
	SIONAL CONDITIONS CHECKLIST
in t	ensure compliance with the Regional Conditions within the Fort Worth District, he State of Texas, in order for an authorization by a NWP to be valid, please wer the following questions (for projects in Texas only):
1.	Does the project involve a discharge into any of the following habitat types?:
	<ul> <li>□ Pitcher plant bogs ((Sarracenia spp.) and/or sundews (Drosera spp.) and/or Baid Cypress/Tupelo swamps ((Taxodium distichum) and/or water tupelo (Nyssa aquatica))?</li> <li>□ Karst Zones 1 and 2 located in Bexar, Travis and Williamson Counties (see <a href="https://www.fws.gov/southwest/es/AustinTexas/Maps">https://www.fws.gov/southwest/es/AustinTexas/Maps</a> Data.html).</li> </ul>

	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 <a href="https://www.nps.gov/subjects/rivers/nationwide-rivers-inventory.htm">https://www.nps.gov/subjects/rivers/nationwide-rivers-inventory.htm</a> )/
	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)

		Applicant Name		
Eagle Ridge		Bartonville South 1031, LLC.		
Applicant Title		Applicant Company, Agency, etc.		
		Bartonville South 1031, LLC.		
Mailing Address		Applicant's internal tracking number (if any)		
737 Evergreen Drive, Hurst,	Texas 76054	1		
Work Phone with area code	Cell Phone with area coo	de E-mail Address		
:	512-924-7279	omaroweis@cmail.com		
Relationship of applicant to p Owner Purchaser Application is hereby made for	Lessee Other	er: regulated activities associated with subject project qualif permits as described herein. I certify that I am familia		
with the information contained information is true, complete, proposed activities. I hereby above-described location to in- after all necessar, parmits have	in this application, and and accurate. I further grant to the agency to spect the proposed, in-p	d that to the best of my knowledge and belief, such a certify that I possess the authority to undertake the which this application is made the right to enter the progress, or completed work. I agree to start work only		
Signature of applicant j	-, D	Date (mm/dt/yyyy)		
ب مسلم د. مسلم در د.	~~~			
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Box 2. Authorized Agent (If an agent is acting for the applic   Joseph Schwartz				
Agent/Operator Title	F	Agent/Operator Company, Agency, etc.		
Principle Environmental Scientific	ntist	Groundwater & Environmental Services, Inc.		
Mailing Address		Agent's internal tracking number (V any)		
101 E. Southwest Pkwy, Su 75067	ite 114, Lewisville, TX			
		de E-mail Address		
Work Phone with area code	Cell Phone with area coo	Oc i C-man Mouress		
800-871-6417 x3403		jschwartz@gesonline.com		
800-871-6417 x3403  I hereby authorize the above-right and to furmsh, upon request, am bound by the actions of my must sign the parmit.	named agent to act in my supplemental information	ischwartz@gesonline.com y behalf as my agent in the processing of this application in support of this permit application. I understand that that if a federal or state permit is issued, I, or my agent		
800-871-6417 x3403  I hereby authorize the above-rand to furmsh, upon request, am bound by the actions of my must sign the parmit.  Signature of applicant	named agent to act in my supplemental information agent, and I understand	pschwartz@gesonline.com y behalf as my agent in the processing of this application in support of this permit application. I understand that that if a federal or state permit is issued, I, or my agent  Date (mm/dd/yyyy)		
800-871-6417 x3403 I hereby authorize the abover and to furnish, upon request, am bound by the actions of my must sign the parmit.  Signature of applicant I certify that I am familiar w	named agent to act in my supplemental information agent, and I understand	ischwartz@gesonline.com   behalf as my agent in the processing of this application   in support of this permit application. I understand that   that if a federal or state permit is issued, I, or my agent   Date (mm/dd/yyyy)   2 / 2 / 7 / 2   tained in this application, and that to the best of my		
800-871-6417 x3403  I hereby authorize the above-rand to furmsh, upon request, am bound by the actions of my must sign the parmit.  Signature of applicant  I certify that I am familiar we knowledge and belief, such info	named agent to act in my supplemental information agent, and I understand the information continued in the information continuation is true, complete	pschwartz@gesonline.com y behalf as my agent in the processing of this application in support of this permit application. I understand that that if a federal or state permit is issued, I, or my agent  Date (mm/dd/yyyy)  12 12 7/2  tained in this application, and that to the best of me and accurate.		
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800-871-6417 x3403  I hereby authorize the abover and to furnish, upon request, am bound by the actions of my must sign the parmit.  Signature of applicant  I certify that I am familiar with knowledge and belief, such info Signature of authorized at Box 3. Name of property	named agent to act in my supplemental information agent, and I understand with the information contemption is true, complete agent.	pschwartz@gesonline.com y behalf as my agent in the processing of this application in support of this permit application. I understand that that if a federal or state permit is issued, I, or my agent  Date (mm/dd/yyyy) 2 / 2 7 / 2  tained in this application, and that to the best of my and accurate.  Date (mm/dd/yyyy) 2 / 2 7 / 2  Date (mm/dd/yyyy) 2 / 2 7 / 2  Date (mm/dd/yyyy) 3 / 2 7 / 2		
800-871-6417 x3403  I hereby authorize the abover and to furmsh, upon request, sam bound by the actions of my must sign the parmit.  Signature of applicant  I certify that I am familiar with knowledge and belief such info Signature of authorized at Box 3. Name of property  Multiple Current Owners	named agent to act in my supplemental information agent, and I understand with the information contemption is true, complete agent.	pschwartz@gesonline.com  y behalf as my agent in the processing of this application in support of this permit application. I understand that that if a federal or state permit is issued, I, or my agent  Date (mm/dd/yyyy)  2 /2 7/ 2  tained in this application, and that to the best of my and accurate.  Date (mm/dd/yyyy)  2 /2 7/ 2  The applicant:		
800-871-6417 x3403  I hereby authorize the abover and to furnish, upon request, am bound by the actions of my must sign the parmit.  Signature of applicant  I certify that I am familiar with knowledge and belief, such info Signature of authorized at Box 3. Name of property	named agent to act in my supplemental information agent, and I understand with the information contemption is true, complete agent.	pschwartz@gesonline.com y behalf as my agent in the processing of this application in support of this permit application. I understand that that if a federal or state permit is issued, I, or my agent  Date (mm/dd/yyyy) 2 / 2 7 / 2  tained in this application, and that to the best of my and accurate.  Date (mm/dd/yyyy) 2 / 2 7 / 2  Date (mm/dd/yyyy) 2 / 2 7 / 2  Date (mm/dd/yyyy) 3 / 2 7 / 2		
800-871-6417 x3403  I hereby authorize the abover and to furmsh, upon request, sam bound by the actions of my must sign the parmit.  Signature of applicant  I certify that I am familiar with knowledge and belief such info Signature of authorized at Box 3. Name of property  Multiple Current Owners	named agent to act in my supplemental information agent, and I understand with the information contemption is true, complete agent.	pschwartz@gesonline.com  y behalf as my agent in the processing of this application in support of this permit application. I understand that that if a federal or state permit is issued, I, or my agent  Date (mm/dd/yyyy)  2 /2 7/ 2  tained in this application, and that to the best of my and accurate.  Date (mm/dd/yyyy)  2 /2 7/ 2  The applicant:		

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  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:
Directions to the project location.
Part III: Project Impacts and Mitigation  Box 5. Reason(s) for Discharge into waters of the U.S.:
war as standard to modern 30 mile standard in and

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	<u> </u>		Temporary	7
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					
none Required drawing Vicinity map:  To-scale plan vie To-scale elevatio Is any portion of	Attached w drawing(s) n and/or cros	: X Attached			-	···
If yes, describe t		ady complete	? ∐ Yes	NO		<u> </u>
Box 6. Authori Is Section 10 o ☐ Yes ☑ No Is Section 404 of	f the Rivers (see instruct	and Harbors ions for Fort We	orth District Navig	ts affecti gable Wate	ing navigable w ers list)	raters applicable?
Box 7. Larger I	Pian of Dov	lonmont				
Is the discharge for a residential o ☐ Yes ☐ No	of fill or dred development (If yes, plea	dged material project which se provide the	is part of a large information in t	er plan of the remain	development? nder of Box 7)	sought intended
Does the resider development? [ If yes, explain:			have independe	ent utility	in addition to the	he larger plan of
If discharge of fi larger developme					e and proposed	schedule for that

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):
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 \( \int \) 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):
ar feet not need signed (mildelyfff).
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:
Applicant proposes combination of one of more of the following mitigation types:  ☐ Mitigation Bank ☐ On-site ☐ Off-site (Number of sites: ) ☐ None
Applicant proposes to purchase mitigation bank credits: X Yes No Mitigation Bank Name: MBMB, TRMB, BSMB
Number of Credits: MBMB: 93.1 ICC Credits; TRMB: 0.90 Legacy Credits; BSMB: 0.7 low quality
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<sup>1</sup>).

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	- ·
		5329,833		40 KH2	
			·		
		A STATE OF			
	Totals:				
	e indicate if designed as a				
All mitigation for credits from a USA	ation Work Plan (Describe wetlands and stream in ACE-approved mitigation proposed, provide a de	impacts will be bank.	oe accomplishe	d by the purchas	
ensure that advers	se effects on the aquation	c environment	are minimal:	<b>5</b>	, <b></b>
guidelines?  Xi Yes, Attached	mitigation plan been  No (explain): atitude & longitude		accordance v		regulations and
(Decimal Degrees):	onder a jonghade	0	JOS Quau mup	name(s).	
<del></del>	criptions, if known:		*		<del></del>
Directions to the n	nitigation location(s):		<del></del>	<u> </u>	<del>.</del>
	· · · · · · · · · · · · · · · · · · ·				~^ <u> </u>
For Texas: Does the project r	Quality Certification ( neet the conditions of t 401 certification for NW	he Texas Con	nmission on En	vironmental Qualii	cy (TCEQ) Clean
Does the project in ☑ Yes ☐ No	nclude soil erosion cont	rol and sedim	ent control Be	t Management Pr	ractices (BMPs)?
Does the project in	nclude BMPs for post-co	nstruction tot	al suspended s	olids control?	
	esult in the loss of 1,5 es to this question, you				
The project must ha	uality certification issue ave an individual water que ronmental Quality to be n	iality certificat	ion, waiver, or o	ther approval by th	e Louisiana

## 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 <sup>2</sup>	Identification No.	Date Applied	Date Approved	Date Denied
		1971	·		
		440			,

### **Part IV: Attachments**

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

Nationwide Permit 29 Eagle Ridge Proposed Development Bartonville, Texas



### **Attachments**

Nationwide Permit 29 Proposed Eagle Ridge Development Bartonville, Texas



## 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

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Date: October 8, 2021 Revised December 30, 2021

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#### **Tables**

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

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

#### **Figures**

Figure 1 - Site Location Map

Figure 2 - FEMA Flood Hazard Zones Map



Figure 3 - USGS Topographic Map

Figure 4 - USFWS National Wetlands Inventory Map

Figure 5 - USDA Soils Map

Figure 6 - Jurisdictional Waters Map

### **Appendices**

Appendix A - Routine Wetland Determination Data Forms

Appendix B - Stream Data Sheets

Appendix C - North Carolina Division of Water Quality Stream Identification Forms

Appendix D - Site Photographs



#### 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-	Birome	Ridges	Well drained	None	None	More than 80 inches	No
	Aubrey complex, 2 to 15	Rayex	Ridges	Well drained	None	None	More than 80 inches	No
	slopes	Aubrey	Ridges	Weil 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	Gasif 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		WETS Percentile		Measured	Candida 2	101-7-1-43	Month
Ranking	Month	30 <sup>th</sup>	70 <sup>th</sup>	Rainfall <sup>1</sup>	Condition <sup>2</sup>	Weight <sup>3</sup>	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
				<del></del>		Total:	12

Measured rainfall recorded at the weather station.

<sup>&</sup>lt;sup>3</sup>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	<u>12</u>	13	14	15	16	17	18
DAREM Wetland Hydrologic Condition	Dri	er tha	חסח ת	mal			Norma	]		w	etter tha	מחסת חו	nal

<sup>&</sup>lt;sup>2</sup> 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 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 defineated 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 (If) 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 If 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.

· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·
Company of the Compan			
Ephemieral Stream	25.144 SARABE		
Tributary 1	61	1.25	0.002
Tributary 2	1,689	1.63	0.063
EPHEMERAL STREAM TOTAL	1,750		0.065
Open Water see to be a see that the	******************************		A AND THE SECOND
Pond 1	•••	***	2.879
Pond 2	****		0.092
OPEN WATER TOTAL		-	2.971
Emergenty/etand #2228488888888			
Wetland 1			0.02
Wetland 2			0.02
Wetland 3		<u>-</u>	2.29
Wetland 4	<del>-</del> -		1.054
EMERGENT WETLAND TOTAL	***		3.39
			9.93
			:



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

					•						
Portuni vojeni postalis			1				34.			1	
Cynodon dactylon (Bermuda grass) - FACU		[				1			37.07.07	**: **********************************	
Echinochloa colona (bamyard grass) - FACW		-	•	•	<del>  -</del>		<del> </del>	<del>                                     </del>	<del> </del> -	╁	+
Juncus effusus (common rush) - OBL	-		<del> </del>			<del>  -</del>			┤ •		+
Nelumbo lutea (American lotus) - OBL	+			<del> </del>	┼	١.	-	<u> </u>	_	<del> </del>	$\vdash$
Paspalum dilatatum (dallisgrass) - FAC	+		-		┼			<del> </del>			+
Paspalum urvillei (Vasey's grass) - FACW				<del> </del>	-		_		<del> </del> -	├-	.
Persicaria hydropiperoides (swamp smartweed) - OBL	1.	•			-	•	•	•	•		-
Hydrogen Sulfide (A4)						<b>1</b>					
Depleted Matrix (F3)	+-	_	-		-	-	-	H.		-	-
Redox depressions (F8)	+-	•		١.	-		•	ļ -	Ť	i.	<del>  </del>
								N. T. P.			
Surface Water (A1)		15			12	252		- Ke (1)			
Saturation (A3)		ļ Ī	-			-	├.	<u> </u>	_	<u> </u>	<u> </u>
Hydrogen Sulfide Odor (C1)	-	<u> </u>	<del> -</del>				-	<u> </u>			$\vdash$
Thin Muck Surface (C7)	+	ļ [	<del>                                     </del>		├		-	<u> </u>	<u> </u>		
Surface Soil Cracks (B6)	_			<del> </del>			<del> </del>	<u> </u>	ļ -		<del> </del>
Drainage Patterns (B10)	-				<u> </u>	_	ļ		<u> </u>		
Saturation Visible on Aerial Imagery (C9)	+		<del> </del> -	<u> </u>			<u> </u>			•	<u>-</u>
Geomorphic Position (D2)	<u> </u>	_	-	_	<u> </u>	•	•			-	ŀ
FAC-neutral Test (D5)	+		<u> </u>		<u> </u>	<u> </u>	•		<u> </u>	•	<u> </u>
		or experience			TOTAL TRACKS						No.
Hydrophytic vegetation?		Y	Y	Y	Y	Y	Y	Y	Y	Y Y	
Hydric soils?	'	Y	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Y	Y	Y	Y	Y	Y	Y	Y
Wetland hydrology?	<del>  '</del>	- <u>'</u> -	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.

			_								
Domitan Viscanion estativ									8 B B B		
Ambrosia trifida (giant ragweed) - FAC	transfer and the	2 - 20 H	<b>Series</b> : 1.88	1	7 - 7 - 7 - 7		98885.4C	3 559 762 544		A STATE OF THE PARTY OF THE PAR	**************************************
Cynodon dactylon (Bermuda grass) - FACU	•	١.	•	+-	•	<del> </del>	1		<del>                                     </del>	١.	+-
Echinochloa colona (barnyard grass) - FACW	<del>                                     </del>	<del> </del>		<del>                                     </del>	١.		<del> </del>		├-	<del> </del>	+
Paspalum dilatatum (dallisgrass) - FAC		<b> </b> •		٠.	╁	+		+-		╽.	<del>                                     </del>
Quercus marilandica (blackjack oak) - UPL	<del> </del>			<del> </del>		$\vdash$	┼-	$\vdash$	├	-	╁─
Rubus trivialis (southern dewberry) - FACU		<u> </u>		<del>                                     </del>	-		<del>  .</del>			<u> </u>	
Salix nigra (black willow) - FACW		<u> </u>	<u> </u>	-	$\vdash$		<del>                                     </del>		-		+
Setaria pumila (yellow foxtail) - FACU					<del> </del>	<del>                                     </del>		<b> </b> •			╁┈
Smilax bona-nox (saw greenbrier) - FACU	+			├	-		<del>  .</del>	<u> </u>	-	├-	-
Sorghum halepense (Johnson grass) - FACU			-			-	<u> </u>	-	-		┼
Tridens albescens (white tridens) - FAC				<del>                                     </del>	-	$\vdash$	├			<del> </del>	╁
Ulmus americana (American eim) - FAC	1	├		ļ	╁	$\vdash$	<u> </u>	<del>  .</del> -	-		$\vdash$
uace of the same o											
Depleted Matrix (F3)										2 · · · · · · · · · · · · · · · · · · ·	
Br.Crolody		9707									
Sparsely Vegetated Concave Surface (B8)							20017.519				
Geomorphic Position (D2)	-}		<u> </u>	-	١.		<u> </u>	-	<del>  .</del>	ļ	<del>                                     </del>
Summary estimates										 	
Hydrophytic vegetation?	N N	N N	N	N	N N	<b>***</b>	N	Y	Y	N	N
Hydric soils?	N N	N	N	N	N	N N	N	' <u>'</u>	Y	N N	N
Wetland hydrology?	N N	N	N	N	Y	N	N	L'N	N N	N	N

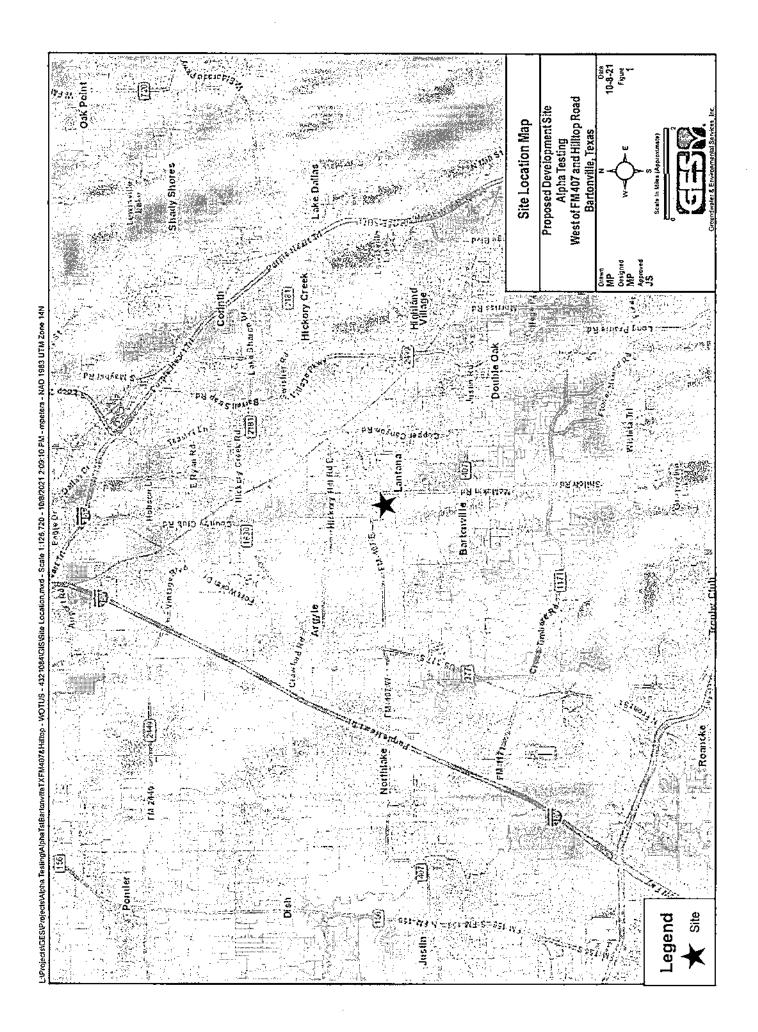


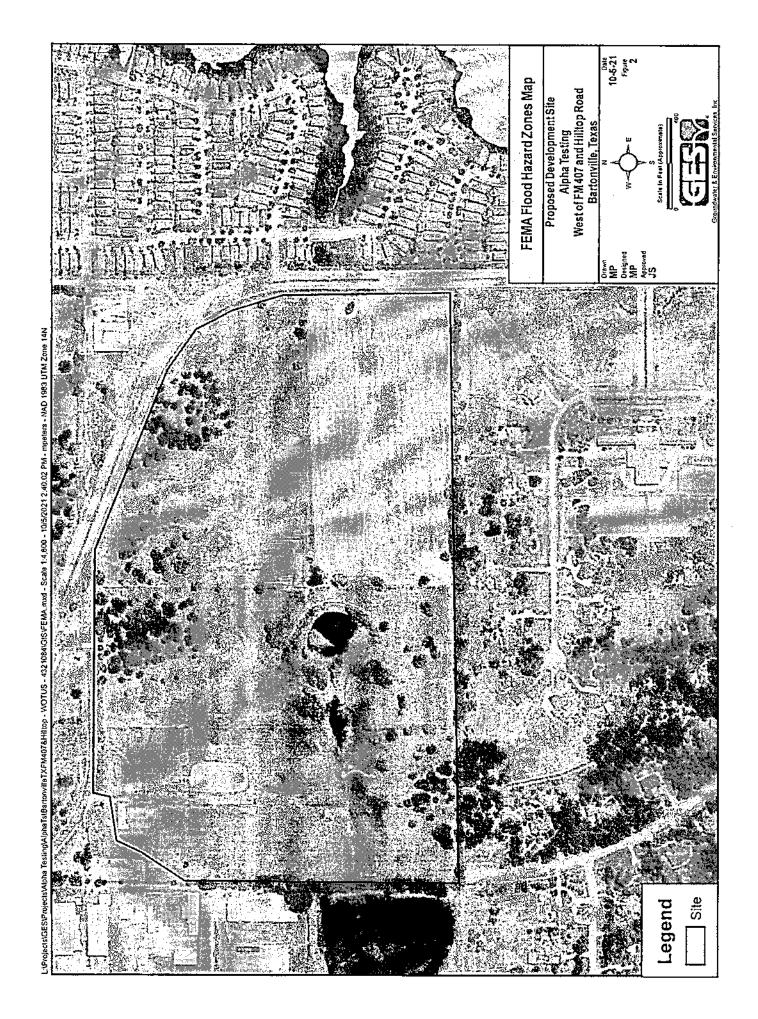
Table 3 - Summary of Field Data for Community Type D - Upland, Continued.

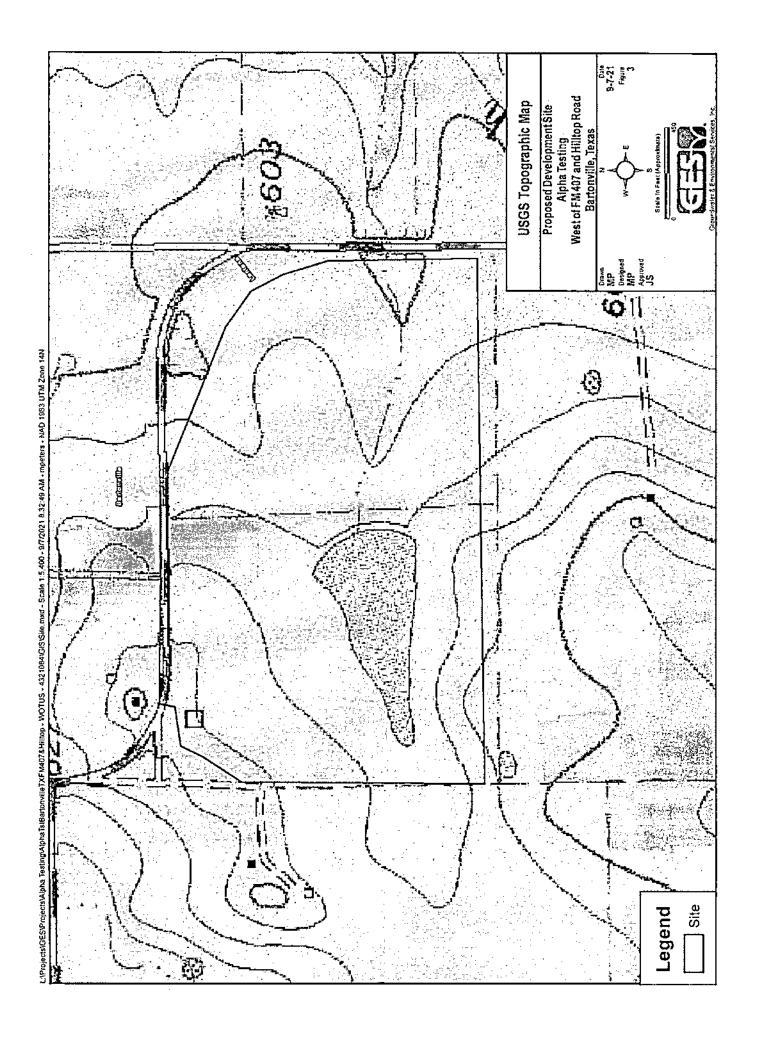
Dominan Vegerijon samt				4.1			
Bromus arvensis (field brome) - FACU		- Salarian	•			A 100	19248294
Chloris texensis (Texas windmill grass) - UPL	<del>                                     </del>		<b> </b> •		<u> </u>	<del>                                     </del>	
Cynodon dactylon (Bermuda grass) - FACU		† <b>.</b>		.	•	•	•
Fraxinus pennsylvanica (green ash) - FAC	<del>                                     </del>		•	<u> </u>	<del>                                     </del>		$\vdash$
Juncus effusus (common rush) - OBL		<del> </del>		<del> </del>		┼	١.
Paspalum dilatatum (dallisgrass) - FAC		<b> </b>			<del> </del>	_	-
Quercus stellata (post oak) - FACU	<del>                                     </del>		<del>  •</del>	$\vdash$	<del>                                     </del>	<del> </del>	<del>                                     </del>
Rubus trivialis (southern dewberry) - FACU	<del>                                     </del>	<del>                                     </del>	•	-	<u> </u>		<del> </del> -
Smilax bona-nox (saw greenbrier) - FACU	<del> </del>	<del> </del>	-	_	_	-	ļ
Notice Solls							
Depleted Matrix (F3)	* P3***********			1259		645 x 83	## 54 /K
Third in the second of the sec	37.14						
Geomorphic Position (D2)	s por contra				<b>(186</b> 4)	3 100	
Summer							
Hydrophytic vegetation?	N	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

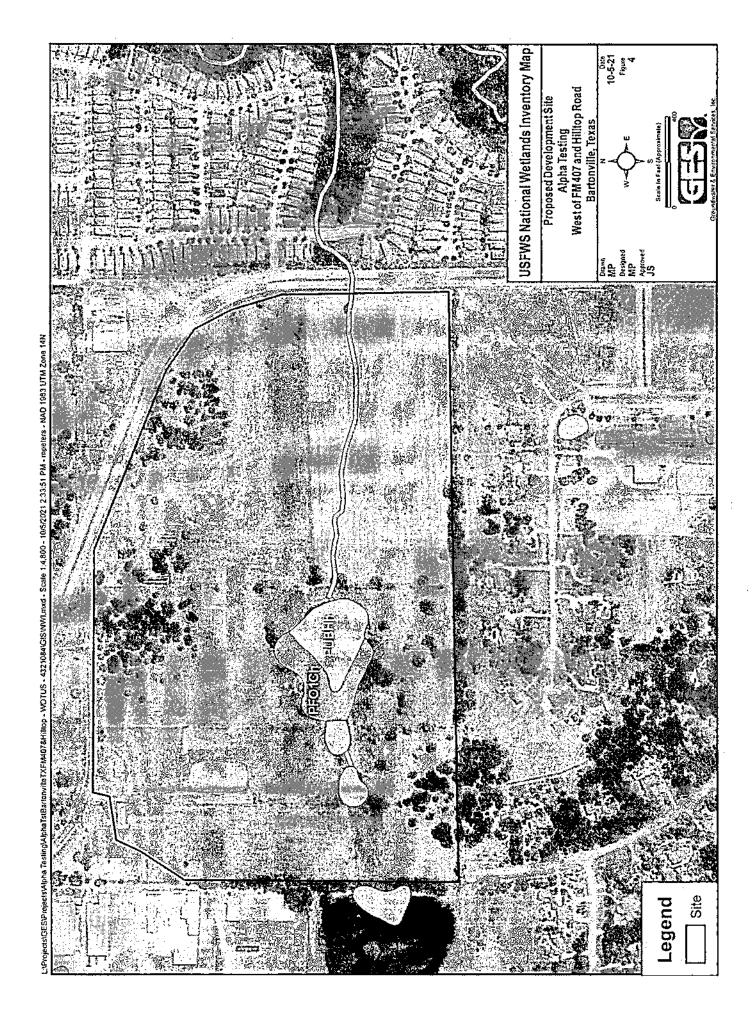


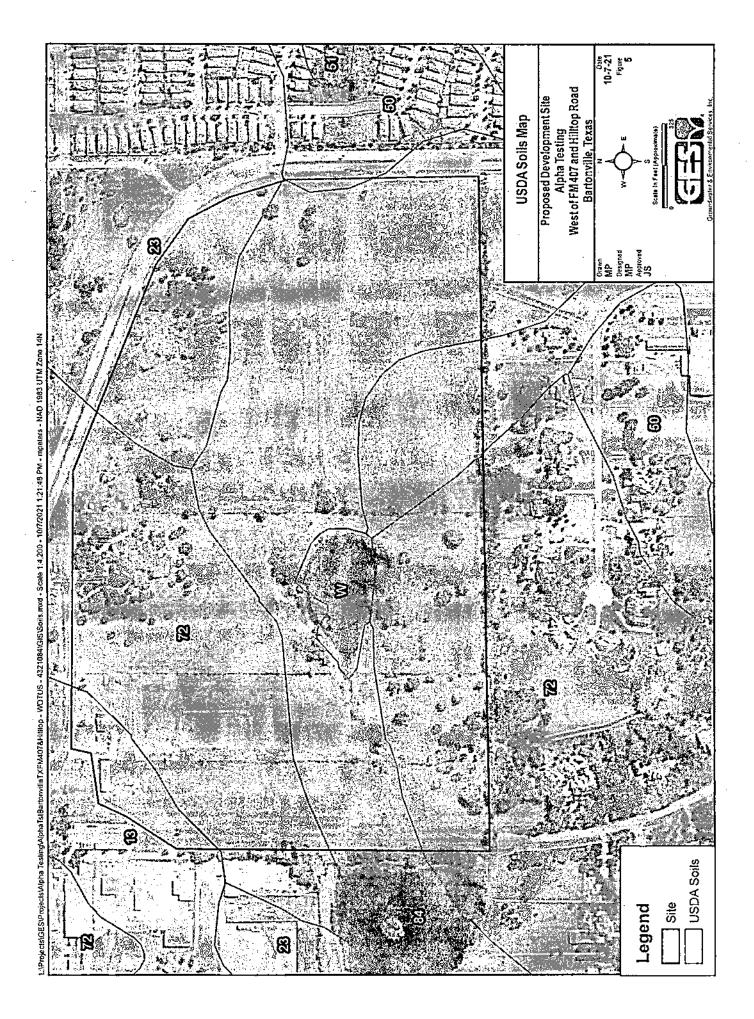
## **Figures**











-Projects/GES/Projects/Apha Testing/AbhaTstBarton/ile/TXFM407&Hilliop - WOTUS - 4321084/G/SUW/mxd - Scale 1.3,415 - 12/30/2021 12:01:18 PM - Jschwarz - NAD 1983 UTM Zone 14N

Delineation of Waters of the United States Proposed Development Site Bartonville, Denton County, Texas



# Appendix A – Routine Wetland Determination Data Forms

roject/Site: Alpha Bartonville FM 407		City/County: Bartonville	/ Denton Sampling Date: 07-Sep-21
pplicant/Owner:		State	: Texas Sampling Point: T1P1
	W 2		ange: S T R
Landform (hillslope, terrace, etc.):	Pfain	Local relief (concave,	convex, none): flat Slope: 1.0 % / 0.
ibregion (ERR): LRR 3		Lat.: 33.101204	Long.: -97.131784 Datum: NAD83
il Map Unit Name: Callisburg fine s	andy loam, 1 to 3 percen	t slopes	NWI classification: none
climatic/hydrologic conditions on Are Vegetation, Soil	the site typical for th	is time of year? Yes  No  significantly disturbed? Are	O (If no, explain in Remarks.)  Normal Circumstances* present? Yes  No O
Are Vegetation , Soil .	, or Hydrology 🗌	••	eded, explain any answers in Remarks.) cations, transects, important features, et
ydrophytic Vegetation Present?	Yes O No •		
Hydric Soil Present?	Yes ○ No ⑨	Is the Sampled	
Vetland Hydrology Present?	Yes O No 🖲	within a Wetfan	d? Yes ○ No ③
Remarks:		slants Dominant FWS Re	egion: GP
/EGETATION - Use scien	coric names or p	Species?	
Tree Stratum (Plot size:		Absolute Rel.Strat. Indicator % Cover Cover Status	Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)
2		_;	Total Number of Dominant Species Across All Strata: 2 (B)
4	<del></del>	0	Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)
Sapling/Shrub Stratum (Plot size:	-	o 🗆	Prevalence Index worksheet:
2			Total % Cover of: Multiply by:
3			OBL species 0 x 1 = 0
4		_, 🖺	FACW species 0 x 2 = 0
5			FAC species
		= Total Cover	FACU species
Herb Stratum (Plot size: 5 ft	)	_	UPL species0x 5 =0
1. Cynodon dactylon			Column Totals: 100 (A) 350 (B)
2. Tridens albescens 3.		<u>50</u>	Prevalence Index = B/A = 3.5
4.	·	0 0.0%	Hydrophytic Vegetation Indicators:
5.		0 0.0%	Hydrophytic vegetation indicators:
6		0 0.0%	1 - Rapid Test for Hydrophytic Vegetation
7.		0_ 🔲 _0.0%	2 - Dominance Test is > 50%
8.	<del></del>		☐ 3 - Prevalence Index is ≤3.0 1
10.	· · · · · · · · · · · · · · · · · · ·	0	. 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
		0 L 0.0% 100 = Total Cover	Problematic Hydrophytic Vegetation¹ (Explain)
Woody Vine Stratum (Plot size:	)		Indicators of hydric soil and wetland hydrology must be present.
1			,
4.		0	. Hydrophytic
% Bare Ground in Herb Stratum	.0	= Total Cover	Vegetation Present? Yes O No

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<sup>\*</sup>Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

	iption: (Descrit Ma:Ma		aepth nee		t the indicator or co fox Features	mum the	absence of indicators.	;	
Depth (inches)	Color (moi		%	Color (moist)	% Type 1	Loc2	Texture	R	emarks
0-16			100				Silt		
					· ·				
	<del></del>		<del></del>	<del></del>	•		·	*****	
				<del></del>			<u></u>		
					·		<u> </u>		
			<del></del>		·		-		
	<del></del>			<del></del>	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·		
				<del></del>	- <del> </del>				<del></del>
						ains ?Loca	ation: PL=Pore Uning. M		
<del>-</del>		plicable t	o all LRRs	, unless otherwis			Indicators for Pro	-	: Soils3:
Histosol (	,			Sandy Gleyed			i on Muck (A9)	-	
	pedon (A2)			Sandy Redox			_	Redox (A16) (LRR	F, G, H)
Black Hist	• /			Stripped Matr			☐ Dark Surface (S☐ High Plains Deg		
	: Suifide (A4) Layers (A5) (LRR	E		Loamy Gleyed			•	ide of MURA 72	and 73\
=	k (A9) (LRR F,G,I	•		Depleted Mat			Reduced Vertic		and 73)
	Below Dark Surfa			Redox Dark S	` '		Red Parent Mat	• •	
_ ·	k Surface (A12)			_	k Surface (F7)		= .	ena (372) ark Surface (77512	١
=	rck Mineral (S1)			Redox depres	sions (F8)		Other (Explain	•	,
=	ucky Peat or Peat	(S2) (LRR	G, H)	High Plains D	epressions (F16)		<sup>3</sup> Indicators of hydron	-	and wetland
S cm Muc	ky Peat or Peat (	53) (LRR F	)	(MLRA 72	and 73 of LRR H)				turbed or problematic.
Restrictive L	ayer (if presen	::::::::::::::::::::::::::::::::::::::							
	omparted Soil							_	_
Depth (inc							Hydric Soil Present	Yes 🔾	No 👁
Remarks:		<u></u>	~				-* <del></del>		
TQTI KATION									
							<u>.</u>		
tydrolog	У	•							
	rology Indicat			·			Secondary Ind	icators (minimu	ım of two required)
			required:	check all that ap	(vla			oil Cracks (86)	
_	Water (A1)	,,,, o, o,,,	, regaries,	Salt Crust (				legetated Concav	e Surface (B8)
=	ter Table (A2)				vertebrates (B13)		= ' '	Patterns (B10)	e sanda (sa)
_ `					Sulfide Odor (C1)				Living Roots (C3)
Saturation	arks (B1)			· ·	Water Table (C2)			ere tilled)	String Hoods (CO)
_	arks (B1) t Deposits (B2)				hizospheres on Living	Roots (C3)	Crayfish i		
	osits (B3)				not tilled)	110015 (00)	enters .	r Visible on Aerial	i Imaneo (C9)
= '	• •			_ `	f Reduced Iron (C4)		_	hic Position (D2)	iningery (C)
= -	t or Crust (84)			_				rai Test (DS)	
	oosits (BS)		(03)	_	Surface (C7)		_	ve Hummocks (D	7) /( DD E)
_	on Visible on Aen		/ (B/)	Otyer (Exb	lain in Remarks)		L' Float nea	ve nummous (D	7) (GK F)
<u></u> Water-S	tained Leaves (BS	}							
Field Observ	vations:					1			
Surface Water	r Present?	Yes O		Depth (in	xthes):0	<b>→</b>			
Water Table 9	Present?	Yes O	No 👁	Depth (in	iches): 0	_		V O	No ⊙
Saturation Pro		Yes O	No 👁	Depth (in	iches): 0	Wet	fand Hydrology Presen	t? Yes O	NO S
(includes capi						<del></del> l	f a vallable.		
Describe Re	corded Data (s	tream gar	ige, monit	or well, aerial pr	notos, previous insp	ections), i	r avaliable:		
						•			
Remarks:									

Soil

Sampling Point: T1P1

roject/Site: Alpha Bartonville FM 407			c	ity/County:	Bartonville /	Denton Sampl	ing Date: 07-Sep-21
pplicant/Owner:					State:	Texas Sampling Point:	T1P2
						nge: S T	R
Landform (hillslope, terrace, etc.):					(concave, c	onvex, none): flat	Slope: 1.0 % / 0.6
ubregion (LRR): LRR )			Lat.: 33,	100415		Long.: -97.131501	Datum: NAD83
oil Map Unit Name: Konsil fine sand					<del></del>	-	one
e climatic/hydrologic conditions on	the site tv	pical for this	s time of year?	Ye	s 💿 No C	<del></del>	
Are Vegetation 7 , Soil 7			significantly (		Are "No	ormal Groumstances" present?	Yes 🏵 No 🔾
Are Vegetation . , Soil .	or Hyd	rology 🗍	naturally proj	blematic?		ded, explain any answers in Rem	
					•		
Summary of Findings - At			nowing sa	mpling p	oint loca	ations, transects, impo	tant reatures, etc.
lydrophytic Vegetation Present?	Yes O	No 👁		Is the	Sampled A	rea	
Hydric Soil Present?	Yes O	No 👁		within	a Wetland	<sub>!?</sub> Yes O No 💿	
Wetland Hydrology Present?	Yes O	No 🕞				· · · · · · · · · · · · · · · · · · ·	
Remarks:							
					<del></del>		
VEGETATION - Use scien	tific nar	nes of pl	lants	Dominant	FWS Re	gion: GP	
	<del>—</del>	<del></del>		-Species? Rel.Strat	Indicator	Dominance Test worksheet:	······································
Tree Stratum (Plot size:	)		% Cover		Status	Number of Dominant Species	•
1				<u> </u>	<b></b>	That are OBL, FACW, or FAC:	1(A)
2	_			님		Total Number of Dominant	
3. 4.				H		Species Across All Strata:	
· · · · · · · · · · · · · · · · · · ·		<u> </u>	0			Percent of dominant Species	
Sapling/Shrub Stratum (Plot size:		}}		- 10th C	Nei	That Are OBL, FACW, or FAC:	50.0% (A/8)
1	-					Prevalence Index worksheet:	
2				<u></u>		Total % Cover of: M	ultiply by:
3				<u> </u>		OBL species 0 x	1 = 0
4			_	<b>\ </b>		FACW species 0 x	2 =0
J				⊏ Total C			3 =150
Herb Stratum (Plot size: 5 ft	1			⇒ 10an C	<b>346</b> 1		4 =
1. Cynodon dactylon			50	<b>☑</b> 50.0%	FACU	UPL species x	5 = 0
Paspalum dilatatum				50.0%	FAC	Column Totals: 100 (	A) <u>350</u> (B)
3			0	0.0%	<del></del>	Prevalence Index = B/A =	<u>3.5</u>
4	•••			0.0%	<del></del>	Hydrophytic Vegetation Indicat	ors:
5. 6.		· ·	$\frac{0}{0}$	0.0%		1 - Rapid Test for Hydrophy	tic Vegetation
7.	<del>-</del>			0.0%	- <del></del>	2 - Dominance Test Is > 50	•
8.				0.0%		3 - Prevalence Index is ≤3.	o¹
9.			0	0.0%		A - Morphological Adaptatio	ons <sup>1</sup> (Provide supporting
			— <u> </u>	=	<del></del>	La 4 - Hot priorogram Habbara	
10.				0.0%		data in Remarks or on a	eparate sheet)
10.				5	over	data in Remarks or on a s	eparate sheet) egetation <sup>1</sup> (Explain)
		)	100	0.0%	over	data in Remarks or on a	eparate sheet) egetation <sup>1</sup> (Explain)
. Woody Vine Stratum (Plot size:			0 100	0.0%	over	data in Remarks or on a self-control of the Problematic Hydrophytic V  I Indicators of hydric soil and	eparate sheet) egetation <sup>1</sup> (Explain)
. Woody Vine Stratum (Plot size:			0 100			data in Remarks or on a s Problematic Hydrophytic V Indicators of hydric soil and be present.	eparate sheet) egetation <sup>1</sup> (Explain)
. Woody Vine Stratum (Plot size:			0 100	0.0%		data in Remarks or on a self-control of the Problematic Hydrophytic V  I Indicators of hydric soil and	eparate sheet) egetation <sup>1</sup> (Explain) wetland hydrology must

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<sup>\*</sup>Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

-	
	A+1
	wii

Sampling Point: T1P2

Depth . (inches)	Color (	Matrix moist)	_%	Color (	moist)	x Featu _%	Type 1	Loc2	Texture	Remarks
0-16	10YR	4/3	98	10YR	6/8	2	c	М	Silty Clay	• • •
<del></del>		<del></del>								<del></del>
	·····									
<del></del> ·					<del></del> .				· ····	
	·····	**********							<u></u>	
<u> </u>		<del>~~~`~~</del>	n. RM=Reduc	<del></del>				ins <sup>2</sup> Loca	ation: PL=Pore Lining. M=Matrix	
		(Applicab	ie to ali LRI			_	1		Indicators for Problematic H	lydric Solls <sup>3</sup> :
Histosol (A	-			_	idy Gleyed M				1 cm Muck (A9) (LRR I, J)	
Histic Epipe Black Histic				_	idy Redox (9 pped Matrix				Coastal Prairie Redox (A16)	(LRR F, G, H)
	. (AS) Sulfide (A4)				my Mucky M		1)		☐ Dark Surface (S7) (LRR G) ☐ High Plains Depressions (F.	561
	ayers (AS) (			_	my Gleyed N				(LRR H outside of MLR	
	(A9) (LRR I			_	eleted Matrix	-	.,		C	A 72 and 733
	elow Dark S		1)	_	lox Dark Sur				Reduced Vertic (F18)	
-	Surface (A1	-	•	=	oleted Dark S	٠,			Red Parent Material (TF2)  Very Shallow Dark Surface	CCC+2)
Sandy Muc	k Mineral (S	1)		Rec	lox depressi	ons (F8)			Other (Explain in Remarks)	• •
2.5 cm Mu	cky Peat or	Peat (S2) (	LRR G, H)	☐ Hig	h Plains Dep	ressions	(F16)		3Indicators of hydrophytic veget	
5 cm Muck	y Peat or Pe	eat (\$3) <b>(L</b> R	RRF)		(MLRA 72 a	and 73 of	f LRR H)		hydrology must be present, unle	
	yer (if pre	sent):		•	•					
îype:									Hydric Soil Present? Yes	O No ⊕
Death (inch										
marks:	es):		<del></del>						istance sometimes (es.	- 100
					•				Total Solit Feeder   165	
marks: drology										
marks: drology	ology Indi	cators:	one require	i; check a	ii that appi	iy).			Secondary Indicators (m	inimum of two require
marks: drology dand Hydr mary Indic	ology Indi ators (min	cators:	one required						Secondary Indicators (m	inimum of two require
Irology  Jand Hydr  mary Indic  Surface W	ology Indi ators (min ater (A1)	cators:	one required	□s	alt Crust (B1	1)	(813)		Secondary Indicators (mi	inimum of two require 16) oncave Surface (B8)
Irology Iand Hydr nary Indic Surface W High Wate	ology Indi ators (min ater (A1) ir Table (A2)	cators:	one required	□ s □ A	alt Crust (B1 quatic Inver	ii) tebrates (			Secondary Indicators (mi Surface Soil Cracks (E Sparsely Vegetated C Drainage Patterns (Bi	inimum of two require (6) oncave Surface (B8) (0)
Irology  Jand Hydr  nary Indic  Surface W  High Wate  Saturation	ology Indi ators (min ater (A1) ir Table (A2 (A3)	cators:	one required		alt Crust (Bi quatic Inver ydrogen Sul	i1) tebrates ( fide Odor	(C1)		Secondary Indicators (mi	inimum of two require (6) oncave Surface (B8)
Irology  Iand Hydr nary Indic Surface W High Wate Saturation Water Mar	ology Indi ators (min ater (A1) ir Table (A2) (A3) ks (B1)	cators: imum of (	one required	S	alt Crust (B1 quatic Inver ydrogen Sul ry Season W	i1) tebrates ( fide Odor Vater Tab	(C1) le (C2)	oots (C3)	Secondary Indicators (mi Surface Soil Cracks (B Sparsely Vegetated C Drainage Patterns (Bi Oxidized Rhizosphere (where tilled)	inimum of two require (6) oncave Surface (B8) (0) s on Living Roots (C3)
Irology Jand Hydr nary Indic Surface W High Wate Saturation Water Mar Sediment	ology Indi ators (min ater (A1) r Table (A2) (A3) ks (B1) Deposits (B	cators: imum of (	one required	S	alt Crust (B1 quatic Inven ydrogen Sul ry Season W pddized Rhiz	ii) tebrates ( fide Odor /ater Tab cospheres	(C1) le (C2) on Living 9	oots (C3)	Secondary Indicators (m Surface Soil Cracks (B Sparsely Vegetated O Drainage Patterns (Bi Oxidized Rhizosphere (where tilled) Crayfish Burrows (C8)	inimum of two require (6) oncave Surface (B8) (0) s on Living Roots (C3)
Irology Iand Hydr nary Indic Surface W High Wate Saturation Water Mar Sediment I Drift depor	ology Indi ators (min ater (A1) ir Table (A2) (A3) ks (B1) Deposits (B3)	cators: imum of (	one required	S   A   D   D   C   C   C   C   C   C   C   C	alt Crust (B) quatic Inver ydrogen Sul ry Season W xidized Rhiz (where n	ii) tebrates ( fide Odor Vater Tab cospheres of tilled)	(C1) le (C2) on Living 9	oots (C3)	Secondary Indicators (m. Surface Soil Cracks (B. Sparsely Vegetated O. Drainage Patterns (B. Oxidized Rhizosphere (where tilled) Crayfish Burrows (C8) Saturation Visible on	inimum of two require (6) oncave Surface (B8) (0) s on Living Roots (C3) (C3) Aerial Imagery (C9)
Irology Iand Hydr nary Indic Surface W High Wate Saturation Water Mar Sediment I Drift depor	ology Indi ators (min ater (A1) or Table (A2) (A3) ks (B1) Deposits (B3) or Crust (B4)	cators: imum of (	one required	S   A   A   A   A   A   A   A   A   A	att Crust (B) quatic Inver- ydrogen Sul ny Season W pxidized Rhiz (where n resence of R	tebrates ( fide Odor later Tab ospheres of tilled)	r (C1) le (C2) on Living A ) ron (C4)	oots (C3)	Secondary Indicators (m. Surface Soil Cracks (B. Sparsely Vegetated C. Drainage Patterns (B. Oxidized Rhizosphere (where tilled) Crayfish Burrows (C8) Saturation Visible on Geomorphic Position	inimum of two require  6)  oncave Surface (B8)  10)  s on Living Roots (C3)  Aerial Imagery (C9)  (D2)
Irology Jand Hydr nary Indic Surface W High Wate Saturation Water Mar Sediment I Drift depor	ology Indi ators (min ater (A1) or Table (A2) (A3) ks (B1) Deposits (B3) sits (B3) or Crust (B4 sits (B5)	cators: imum of o		S   A   A   A   A   A   A   A   A   A	att Crust (B1 quatic Inver- ydrogen Sul ry Season W oxidized Rhiz (where n resence of R hin Muck Su	tebrates (fide Odor Vater Tab cospheres of tilled) teduced in	r (C1) le (C2) on Living 9 ron (C4)	oots (C3)	Secondary Indicators (mi Surface Soil Cracks (B Sparsely Vegetated C Drainage Patterns (Bi Oxidized Rhizosphere (where tilled) Crayfish Burrows (CB) Saturation Visible on Geomorphic Position FAC-neutral Test (DS)	inimum of two require  6)  oncave Surface (B8)  10)  s on Living Roots (C3)  Aerial Imagery (C9)  (D2)
Irology land Hydr nary Indic Surface W High Wate Saturation Water Mar Sediment I Drift depo: Algal Mat I Iron Depo Inundation	ology Indi ators (min ater (A1) or Table (A2) (A3) ks (B1) Deposits (B3) or Crust (B4) sits (B5) or Visible on	cators: imum of o		S   A   A   A   A   A   A   A   A   A	att Crust (B) quatic Inver- ydrogen Sul ny Season W pxidized Rhiz (where n resence of R	tebrates (fide Odor Vater Tab cospheres of tilled) teduced in	r (C1) le (C2) on Living 9 ron (C4)	oots (C3)	Secondary Indicators (m. Surface Soil Cracks (B. Sparsely Vegetated C. Drainage Patterns (B. Oxidized Rhizosphere (where tilled) Crayfish Burrows (C8) Saturation Visible on Geomorphic Position	inimum of two require 6) oncave Surface (B8) 10) s on Living Roots (C3) Aerial Imagery (C9) (D2)
Irology land Hydr nary Indic Surface W High Wate Saturation Water Mar Sediment I Drift depor Algal Mat Iron Depo Inundatior Water-Sta	ology Indi ators (min ater (A1) ir Table (A2) (A3) ks (B1) Deposits (B3) or Crust (B4) sits (B5) ir Visible on ined Leaves	cators: imum of o		S   A   A   A   A   A   A   A   A   A	att Crust (B1 quatic Inver- ydrogen Sul ry Season W oxidized Rhiz (where n resence of R hin Muck Su	tebrates (fide Odor Vater Tab cospheres of tilled) teduced in	r (C1) le (C2) on Living 9 ron (C4)	oots (C3)	Secondary Indicators (mi Surface Soil Cracks (B Sparsely Vegetated C Drainage Patterns (Bi Oxidized Rhizosphere (where tilled) Crayfish Burrows (CB) Saturation Visible on Geomorphic Position FAC-neutral Test (DS)	inimum of two requin 6) oncave Surface (B8) 10) s on Living Roots (C3) Aerial Imagery (C9) (D2)
Irology Iand Hydr nary Indic Surface W High Wate Saturation Water Mar Sediment I Drift depor Algal Mat Iron Depo Inundation Water-Sta d Observa	ology Indi ators (min ater (A1) or Table (A2) (A3) ks (B1) Deposits (B3) or Crust (B4 sits (B5) or Visible on ined Leaves tions:	cators: )  2)  Aerial Imag (89)	gery (B7)	S A A B D D D D D D D D D D D D D D D D D	aft Crust (B1 quatic Inver- ydrogen Sul ry Season W xidized Rhiz (where n resence of R hin Muck Su ther (Explain	it) tebrates ( fide Odor Vater Tab cospheres of tillied) teduced In inface (C7 in in Remai	r (C1) le (C2) on Living 9 ron (C4) ) arks)	oots (C3)	Secondary Indicators (mi Surface Soil Cracks (B Sparsely Vegetated C Drainage Patterns (Bi Oxidized Rhizosphere (where tilled) Crayfish Burrows (CB) Saturation Visible on Geomorphic Position FAC-neutral Test (DS)	inimum of two require  6)  oncave Surface (B8)  10)  s on Living Roots (C3)  Aerial Imagery (C9)  (D2)
Irology  Jand Hydr  Mary Indic  Surface W  High Wate  Saturation  Water Mar  Sediment I  Drift depor  Algal Mat  Iron Depo  Inundation  Water-Sta  d Observa  ace Water I	ology Indi ators (min ater (A1) or Table (A2) (A3) ks (B1) Deposits (B3) or Crust (B4 sits (B5) a Visible on ined Leaves tions: Present?	cators: imum of (  )  2)  Aerial Imag (89)	gery (B7)	S   A   A   A   A   A   A   A   A   A	aft Crust (B1 quatic Inverty ydrogen Sul ny Season W yxidized Rhiz (where n resence of R hin Muck Su ther (Explain Depth (inch	tebrates ( fide Odor  Vater Tab  rospheres  ot tilled)  teduced I  riface (C7  n in Rema	r (C1) le (C2) con Living 9 ron (C4) } arks)	oots (C3)	Secondary Indicators (mi Surface Soil Cracks (B Sparsely Vegetated C Drainage Patterns (Bi Oxidized Rhizosphere (where tilled) Crayfish Burrows (CB) Saturation Visible on Geomorphic Position FAC-neutral Test (DS)	inimum of two require (6) oncave Surface (B8) (0) s on Living Roots (C3) Aerial Imagery (C9) (D2)
Irology  Jand Hydr  Mary Indic  Surface W  High Wate  Saturation  Water Mar  Sediment I  Drift depor  Algal Mat  Iron Depo  Inundation  Water-Sta  d Observa  ace Water F  er Table Presention Presention	ology Indi ators (min ater (A1) or Table (A2) (A3) ks (B1) Deposits (B3) or Crust (B4 sits (B5) a Visible on ined Leaves tions: Present? esent?	cators: imum of (  )  Aerial Imag (89)  Yes Yes	Gery (87)  No (9)	S	aft Crust (B1 quatic Inver- ydrogen Sul ry Season W xidized Rhiz (where n resence of R hin Muck Su ther (Explair  Depth (inch	tebrates ( fide Odor Vater Tab vospheres out tillied) teduced in viriace (C7 n in Remai	r (C1) le (C2) on Living 9 ron (C4) ) arks)	-	Secondary Indicators (mm	inimum of two require  6)  oncave Surface (B8)  10)  s on Living Roots (C3)  Aerial Imagery (C9)  (D2)
drology thand Hydr mary Indic Surface W High Water Saturation Water Mar Sediment I Drift depor Algal Mat Iron Depo Inundation Water-Sta Id Observa Iace Water F Ier Table Pre- Iration Pres- Indes capilla	ology Indi ators (min ater (A1) or Table (A2) (A3) ks (B1) Deposits (B3) or Crust (B4 sits (B5) a Visible on ined Leaves tions: Present? esent? ent? ent?	cators: imum of (  )  2)  Aerial Imag (89)  Yes Yes Yes	gery (87)	S   A   A   A   A   A   A   A   A   A	aft Crust (B1 quatic Invert ydrogen Sul ry Season W pxidized Rhiz (where n resence of R hin Muck Su ther (Explair Depth (inch Depth (inch	tebrates ( fide Odor /ater Tab /ospheres of tilled) leduced in face (C/ n in Remai	(C1) le (C2) can Living 9 ron (C4) ) arks)  0 0	- Wetl	Secondary Indicators (mi Surface Soil Cracks (B Sparsely Vegetated C Drainage Patterns (Bi Oxidized Rhizosphere (where tilled) Crayfish Burrows (CB) Saturation Visible on Geomorphic Position FAC-neutral Test (DS) Frost Heave Hummod	inimum of two require (6) oncave Surface (B8) (0) s on Living Roots (C3) Aerial Imagery (C9) (D2) ) ks (D7) (LRR F)
drology tland Hydr mary Indic Surface W High Wate Saturation Water Mar Sediment I Drift depo: Algal Mat Iron Depo Inundation Water-Sta Id Observa face Water F ter Table Pre uration Pres	ology Indi ators (min ater (A1) or Table (A2) (A3) ks (B1) Deposits (B3) or Crust (B4 sits (B5) a Visible on ined Leaves tions: Present? esent? ent? ent?	cators: imum of (  )  2)  Aerial Imag (89)  Yes Yes Yes	Gery (87)  No (9)	S   A   A   A   A   A   A   A   A   A	aft Crust (B1 quatic Invert ydrogen Sul ry Season W pxidized Rhiz (where n resence of R hin Muck Su ther (Explair Depth (inch Depth (inch	tebrates ( fide Odor /ater Tab /ospheres of tilled) leduced in face (C/ n in Remai	(C1) le (C2) can Living 9 ron (C4) ) arks)  0 0	- Wetl	Secondary Indicators (mi Surface Soil Cracks (B Sparsely Vegetated C Drainage Patterns (Bi Oxidized Rhizosphere (where tilled) Crayfish Burrows (CB) Saturation Visible on Geomorphic Position FAC-neutral Test (DS) Frost Heave Hummod	inimum of two require (6) oncave Surface (B8) (0) s on Living Roots (C3) Aerial Imagery (C9) (D2) ) ks (D7) (LRR F)
drology tland Hydr mary Indic Surface W High Wate Saturation Water Mar Sediment I Drift depo: Algal Mat Iron Depo Inundation Water-Sta Id Observa face Water F ter Table Pre uration Pres	ology Indi ators (min ater (A1) or Table (A2) (A3) ks (B1) Deposits (B3) or Crust (B4 sits (B5) a Visible on ined Leaves tions: Present? esent? ent? ent?	cators: imum of (  )  2)  Aerial Imag (89)  Yes Yes Yes	gery (87)	S   A   A   A   A   A   A   A   A   A	aft Crust (B1 quatic Invert ydrogen Sul ry Season W pxidized Rhiz (where n resence of R hin Muck Su ther (Explair Depth (inch Depth (inch	tebrates ( fide Odor /ater Tab /ospheres of tilled) leduced in face (C/ n in Remai	(C1) le (C2) can Living 9 ron (C4) ) arks)  0 0	- Wetl	Secondary Indicators (mi Surface Soil Cracks (B Sparsely Vegetated C Drainage Patterns (Bi Oxidized Rhizosphere (where tilled) Crayfish Burrows (CB) Saturation Visible on Geomorphic Position FAC-neutral Test (DS) Frost Heave Hummod	inimum of two require (6) oncave Surface (B8) (0) s on Living Roots (C3) Aerial Imagery (C9) (D2) ) ks (D7) (LRR F)
drology tland Hydr mary Indic Surface W High Water Saturation Water Mar Sediment I Drift depor Algal Mater Iron Depo Inundation Water-Sta Id Observa Id Observa Increase Water F Ider Table Pro Irration Press Indes capilla	ology Indi ators (min ater (A1) or Table (A2) (A3) ks (B1) Deposits (B3) or Crust (B4 sits (B5) a Visible on ined Leaves tions: Present? esent? ent? ent?	cators: imum of (  )  2)  Aerial Imag (89)  Yes Yes Yes	gery (87)	S   A   A   A   A   A   A   A   A   A	aft Crust (B1 quatic Invert ydrogen Sul ry Season W pxidized Rhiz (where n resence of R hin Muck Su ther (Explair Depth (inch Depth (inch	tebrates ( fide Odor /ater Tab /ospheres of tilled) leduced in face (C/ n in Remai	(C1) le (C2) can Living 9 ron (C4) ) arks)  0 0	- Weti	Secondary Indicators (mi Surface Soil Cracks (B Sparsely Vegetated C Drainage Patterns (Bi Oxidized Rhizosphere (where tilled) Crayfish Burrows (CB) Saturation Visible on Geomorphic Position FAC-neutral Test (DS) Frost Heave Hummod	inimum of two require (6) oncave Surface (B8) (0) s on Living Roots (C3) Aerial Imagery (C9) (D2) ) ks (D7) (LRR F)

i.at.: 33. at slopes by this time of year? by significantly of naturally prof p showing sa  by plants	Section, Township, R Local relief (concave, 100378  Yes No disturbed? Are * blematic? (If no mpling point lo  Is the Sampled within a Wetlan  Dominant Species? Rel.Strat. Indicato	Long.: -97.131496 Datum: NAD83  NWI classification: none  (If no, explain in Remarks.) Normal Circumstances* present? Yes No Ceeded, explain any answers in Remarks.)  cations, transects, important features, etc.  Area  and? Yes No Ceeded.
Lat.: 33. at slopes or this time of year? significantly of naturally prof p showing sa  of plants  Absolute % Cover 0	Section, Township, R Local relief (concave, 100378  Yes No disturbed? Are * blematic? (If no mpling point lo  Is the Sampled within a Wetlan  Dominant Species? Rel.Strat. Indicato	Range: 5 T R , convex, none): concave Slope: 2.0 % / 1.1 c  Long.: -97.131496 Datum: NAD83  NWI classification: none  (If no, explain in Remarks.)  Normal Circumstances* present? Yes No ceded, explain any answers in Remarks.)  cations, transects, important features, etc.  Area  and? Yes No cedence No cedenc
i.at.: 33.  at slopes  In this time of year?  In significantly of paturally prolong  p showing sa  of plants  Absolute % Cover 0	Yes No	Long.: -97.131496 Datum: NAD83  NWI classification: none  (If no, explain in Remarks.)  Normal Circumstances" present? Yes No Ceeded, explain any answers in Remarks.)  Cations, transects, important features, etc.  Area  ad? Yes No Ceeded.
i.at.: 33.  at slopes  In this time of year?  In significantly of paturally prolong  p showing sa  of plants  Absolute % Cover 0	Yes No	Long.: -97.131496  NWI classification: none  (If no, explain in Remarks.)  Normal Circumstances* present? Yes  No  eeded, explain any answers in Remarks.)  cations, transects, important features, etc.  Area  ad? Yes  No  No
of plants  Absolute  Absolute  According to the significantly of plants  Absolute  According to the significantly of plants	Yes No	NWI classification: none  (If no, explain in Remarks.)  Normal Circumstances" present? Yes  No  eeded, explain any answers in Remarks.)  cations, transects, important features, etc.  Area  ad? Yes  No  egion: GP
r this time of year?  significantly of naturally prole p showing sa  figure prole Absolute 6 Cover 0	blematic? (If no mpling point lo Is the Sampled within a Wetlan Dominant Species? Rel.Strat. Indicato	(If no, explain in Remarks.)  Normal Circumstances* present? Yes  No  eeded, explain any answers in Remarks.)  cations, transects, important features, etc.  Area  and? Yes  No
significantly of naturally profession of plants  Absolute 6 Cover 0	blematic? (If no mpling point lo Is the Sampled within a Wetlan Dominant Species? Rel.Strat. Indicato	Normal Circumstances" present? Yes  No Ceeded, explain any answers in Remarks.)  cations, transects, important features, etc.  Area  nd? Yes  No Ceeded, explain any answers in Remarks.)
p showing sa  p	mpling point lo  Is the Sampled within a Wettar  Dominant Species? Rel.Strat. Indicato	cations, transects, important features, etc.  Area  Area  egion: GP
p showing sa ) ) of plants Absolute % Cover 0	Is the Sampled within a Wetlan  Dominant Species? Rel.Strat. Indicato	cations, transects, important features, etc.  Area ad7 Yes No O
of plants  Absolute  Cover	Is the Sampled within a Wetlan  Dominant FWS R  Species?  Rel.Strat. Indicato	Area  Area  Pres No O  President of the second of the seco
of plants  Absolute  Cover  0	Dominant FWS R-Species?	egion: GP
of plants  Absolute  Cover  0	Dominant FWS R-Species?	egion: GP
of plants Absolute 6 Cover	Dominant FWS R -Species? Rel.Strat. Indicato	egion: GP
Absolute % Cover 0	-Species?	
<u>% Cover</u> 0		
	<b>[</b>	Number of Dominant Species
ń	<u></u>	That are OSL, FACW, or FAC:
	□	Total Number of Dominant
	<u></u>	Species Across All Strata:
	U	Percent of dominant Species
0	= Total Cover	That Are OBL, FACW, or FAC:100.0% (AVB)
	П	Prevalence Index worksheet:
0		Total % Cover of: Multiply by:
		OBL species 80 x 1 = 80
		FACW species 10 x 2 = 20
		FAC species 10 x 3 = 30
0	= Total Cover	FACU species 0 x 4 m 0
		UPL species 0 x 5 = 0
<del></del>	<u></u>	Column Totals:100 (A)130 (B)
		Prevalence Index = B/A = 1.3
0	0.0%	
	0.0%	Hydrophytic Vegetation Indicators:
		1 - Rapid Test for Hydrophytic Vegetation
<u> </u>	0.0%	2 - Dominance Test is > 50%
<del></del>		3 - Prevalence Index is ≤3.0 <sup>1</sup>
		4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)
		Problematic Hydrophytic Vegetation (Explain)
	· · · · · · · · · · · · · · · ·	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
0	П	be present.
<del></del>	= Total Cover	Hydrophytic
		Vegetation Present? Yes • No •
	80 10 10 0 0 0 0 0 0 0 0 0	0

<sup>\*</sup>Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Profile Descri	ption: (Describe	to the depth	needed to doc	ument the indi	cator or co	nfirm the	absence of indicators.)	
Depth .	Matrix			Redox Feats			=	
(inches)	Color (maist)	_%	Color (mo	<u>ist) %</u>	Type I	Loc2	Texture	Remarks
0-16	10YR 5/2	80	7.5YR	6/8 20	c	М	Silty Clay	
						<del></del>		
						<del>-</del>		<del></del> -
<del></del> .	·	<del>_</del>					<del></del>	
	<del> </del>	<del></del>					<del></del>	<del> </del>
								<del>*</del>
Trans: C=Con	rentestion D=Oosl	otion PM-Po	furnet Mateix CE	-Covered or Cook	od Sand Cm		etion: PL=Pore Lining, M=Mat	
	ndicators: (Appli					#15 -LOC		
Histosof (A		Capie to an I		Gleyed Matrix S4	,		Indicators for Problem  I on Muck (A9) (LRF	
Histic Epip	•			Redox (SS)			= ' ' ' '	(
Black Histi				ed Matrix (S6)		•	Dark Surface (S7) (L	
] Hydrogen :	Sulfide (A4)		Loamy	Mucky Mineral (F	1)		High Plains Depressi	·
_	Layers (A5) (LRR F)			Gleyed Matrix (F.	2)		(LRR H outside o	of MLRA 72 and 73)
_	(A9) (LRR F,G,H)			ed Matrix (F3)			Reduced Vertic (F18)	) <sub>.</sub>
• '	Befow Dark Surface	(A11)	_	Dark Surface (F6)	-		Red Parent Material	(TF2)
_	: Surface (A12) :k Mineral (S1)			ed Dark Surface ( depressions (F8)	F7)		Very Shallow Dark St	
<u> </u>	cky Peat or Peat (S)	3) (1 DD C H)	_	depressions (78) lains Depressions	(E16)		Other (Explain in Re	•
_	ry Peat or Peat (S3)			LRA 72 and 73 o			<sup>3</sup> Indicators of hydrophytic	vegetation and wetland t, unless disturbed or problem
		(==1,,					Trychology mast be present	ic, unless disturbed or problem
	yer (if present):							
Type:				<del></del>			Hydric Soil Present?	Yes   No
	nes):		<del></del>			····	Tryand bon i Tesenti	ies O NO O
emarks:								
				•				•
drology				···········				
		···					· · · · · · · · · · · · · · · · · · ·	
-	rology Indicators:						· —	rs (minimum of two requir
	ators (minimum	of one requi					Surface Soil Cra	• •
Surface W				Crust (B11)				ated Concave Surface (B8)
7	er Table (A2)			tic Invertebrates			Drainage Patte	ms (B10)
	- •		_	ogen Sulfide Odo			Oxidized Rhizo	spheres on Living Roots (C3)
Water Mar				Season Water Tab	` '		(where til	•
١	Deposits (B2)			ized Rhizospheres	_	.cots (C3)	Crayfish Burrov	
J Drift depo ⊃	•			where not tilled	-		_	ole on Aerial Imagery (C9)
<b>-</b> '	or Crust (B4)			ence of Reduced I			Geomorphic Po	: :
J Iron Depo	• •		_	Muck Surface (C7	-		FAC-neutral Te	· •
J Inundation	n Visible on Aerial Ir	magery (B7)	☐ Othe	r (Explain in Rem	arks)		☐ Frost Heave Ho	immocks (D7) (LRR F)
٦	ined Leaves (89)							
] Water-Sta	inted bedres (O3)							
	itions:							
ield Observa	itions:	es O No	<b>⊙</b> Dep	oth (inches):	0	_		
Water-Sta  ield Observa  urface Water i  vater Table Pro	rtions: Present? Ye	es O No	<u> </u>	oth (inches):	0	-		Yes  ● No O

Saturation Present? (includes capillary fringe)

Remarks:

Yes ○ No ⑨

Depth (inches):

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

0

Project/Site: Alpha Bartonville FM 407	<del></del> .			ity/County:	Bartonville	/ Denton Sampling Date: 07-Sep-21
Applicant/Owner:					State	:: Texas Sampling Point: T1P5
Investigator(s): MP			·	Section, To		
Landform (hillslope, terrace, etc.):	Depression	<u>.                                    </u>		Local relief	(concave,	convex, none): concave Slope: 2.0 % / 1.1
Subregion (LRR): LRR ]			Lat: 33.	.100333		Long.: -97.131499 Datum: NAD83
ioil Map Unit Name: Konsil fine sandy	loam, 1 to	3 percent st	pes		<del></del>	NWI dassification: none
e climatic/hydrologic conditions on	the site ty	pical for th	is time of year?	Yes	s 💿 No 🤇	
Are Vegetation 🔲 , Soil 📋	, or Hyd	rology 🔲	significantly o	disturbed?	Are *N	Normal Circumstances* present? Yes  No O
Are Vegetation 🔲 , Soil 🗌	, or Hyd	rology 🔲	naturally proi	blematic?	(If ne	eded, explain any answers in Remarks.)
Summary of Findings - At	tach sit	e man s	howing sa	molina o		cations, transects, important features, etc.
Hydrophytic Vegetation Present?	Yes ①	No O		urbinia b		sations, transects, important reatures, etc.
Hydric Soil Present?	Yes ⊙	No O			Sampled #	
Wetland Hydrology Present?	Yes 💿			within	ı a Wetland	d? Yes 🏵 No 🗅
Remarks:			··· <del>·····</del>			<del></del>
		•				
VECETATION II.					FLUC D	
VEGETATION - Use scient	uric nar	nes or p	<del>· · · · · · · · · · · · · · · · · · · </del>	Dominant -Species?	<u> </u>	gion: GP
Tree Stratum (Plot size:	}}		Absolute % Cover	Rel.Strat. Cover	Indicator Status	<u> </u> .
1						Number of Dominant Species That are OBL, FACW, or FAC:1(A)
2					·	
3.	<del></del> -			□		Total Number of Dominant Species Across All Strata: 1 (8)
4	<del></del>	<del></del>	<u></u>	□	·	Payment of deminant Francisco
Sapling/Shrub Stratum (Plot size:		)	0	≃ Total Co	ver	Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
1						Prevalence Index worksheet:
2						Total % Cover of: Multiply by:
3						OBL species 80 x 1 = 80
4. 5.				뭐ㅡ	·——	FACW species 10 x 2 = 20
5	<del></del>			لــا		FAC species 10 x 3 = 30
Herb Stratum (Plot size: 5 ft	}			= Total Co	ver	FACU species0 x 4 =0
1. Persicaria hydropiperoides			80	<b>₩</b> 80.0%	OBL ·	UPL species 0 x 5 = 0
2. Xanthium strumarium			10	10.0%	FAC	Column Totals: 100 (A) 130 (B)
3. Echinochioa colona			10	10.0%	FACW	Prevalence Index = B/A = 1.3
4. 5.				0.0%		Hydrophytic Vegetation Indicators:
6.	·	<del></del>	<u> </u>	0.0%		☑ 1 - Rapid Test for Hydrophytic Vegetation
7.				0.0%		✓ 2 - Dominance Test is > 50%
8.			<u> </u>	0.0%		☑ 3 - Prevalence Index is ≤3.01
9.			0	0.0%		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
10.	··· ···			0.0%	<del></del>	data in Remarks or on a separate sheet)
101-4			100	= Total Co	ver	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:	··· ·	—·'	_			Indicators of hydric soil and wetland hydrology must be present.
1 2		<del></del>		Ľ <u>.</u>		
<u></u> -		· ·		L.I		
					VAF	Hydrophytic
% Bare Ground in Herb Stratum	.0			= Total Co	ver	Hydrophytic Vegetation Present? Yes  No  No

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	~	t	ŀ
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Sampling Point: T1P5

Depth (inches)		Matrix noist)		Color	Redo (moist)		Type 1	1	•		_	
( <u>inches)</u> 0-16	10YR	•	<u>%</u> _					<u> 1003</u>	Text	<u>ure</u>	R	emarks.
0-10			<del></del>	7.5YR	- 6/8		<u> </u>		Silty Clay			<del></del>
	<del></del>					<del></del>	<del></del> •					<u> </u>
		<del></del> .			<del></del> -		<b>.</b>					
									·			
<del></del>						·	<del></del> -					
						<del></del>				<del></del>		-v-m
<del></del>			<del></del> -			<del></del> -						
ype: C=Con	centration. E	=Depletion	. RM=Reduc	ed Matrix	, CS=Covered	d or Coate	d Sand Grai	ins ²Loc	etion: PL=Pore	Lining, M≕Ma	itrix	
dric Soil I	ndicators:	(Applicable	to all LRI	Rs, unles	s otherwise	noted.)			···	s for Proble		Soils <sup>3</sup> :
Histosol (A	(1)			☐ Sa	ndy Gleyed N	fatrix \$4			_	Muck (A9) (LF		
Histic Epip					ndy Redox (S					tal Prairie Redo		F, G, H)
Black Histi	, ,				ripped Matrix				☐ Dark	Surface (S7) (	LRR G)	
	Sulfide (A4)				amy Mucky N		-		☐ High	Plains Depress	sions (F16)	
	.ayers (A5) (8				amy Gleyed I		)		*	RR H outside		and 73)
	(A9) (LRR F Below Dark S				pleted Matrio dox Dark Sur					ced Vertic (F1		
	Surface (A1)		,	_	pleted Dark Sur	, ,	7)		==	Parent Materia	, ,	
	k Mineral (S	•			dox depressi		′,			Shallow Dark		+
	cky Peat or F		R G, H)		gh Plains Dep		F16)			r (Explain in R	•	
5 cm Muck	y Peat or Pea	at (S3) (LRR	:F)	_	(MLRA 72 a				hydrology	s of hydrophyti must be prese	ic vegetation a int. unless dist	nd wetland urbed or problemi
trictive La	yer (if pres	ent):									•	
									}			
Туре:	· · · · · · · · · · · · · · · · · · ·								1		_	
Type: Depth (inch	es):								Hydric Soil	Present?	Yes 💿	No O
Depth (incl	es):		<del></del>						Hydric Soil	Present?	Yes 💿	No O
	es):				•			<del></del>	Hydric Soil	Present?	Yes 💿	No O
Depth (incl	es):		<del> </del>	<del></del>			,,,,		Hydric Soll	Present?	Yes ①	No O
Depth (incl	es):								Hydric Soli	Present?	Yes 🏵	No O
Depth (inch marks:			<del> </del>						Hydric Soil	Present?	Yes ①	No O
Depth (ind marks: drology		ators:			-							
Depth (ind marks: drology tiand Hydi	ology Indic		ne requirec	l; check :	all that appl	iv)			Secon		ors (minimu	
Depth (ind marks: drology tiand Hydi	ology Indicators (mini		ne requirec		all that appl				Secon	ndary Indicat Surface Soil C	ors (minimu iracks (86)	n of two require
Depth (inch marks: drology tiand Hydi mary Indic Surface W	ology Indicators (mini	mum of or	ne requirec			11)	813)		Secon	ndary Indicat Surface Soil C Sparsely Vege	ors (minimu racks (86) rated Concave	n of two require
Depth (inch marks: drology tiand Hydi mary Indic Surface W	ology Indicators (minifater (A1)	mum of or	ne required		Salt Crust (B1 Aquatic Inver	(1) tebrates (f			Secon	ndary Indicat Surface Soil C Sparsely Vege Drainage Patt	ors (minimum oracks (86) etated Concave erns (810)	n of two require Surface (B8)
Depth (inch marks: drology tiand Hydi mary Indic Surface W High Wate	rology Indic cators (mini later (A1) er Table (A2)	mum of or	ne requirec		Salt Crust (81 Aquatic Inver Hydrogen Sul	l1) tebrates (f fide Odor	(C1)		Secon	ndary Indicat Surface Soil C Sparsely Vege Drainage Patt Oxidized Rhiz	ors (minimum racks (86) rtated Concave erns (810) ospheres on Li	n of two requir
Depth (inch marks: drology tiand Hydromary Indic Surface W High Water Saturation Water Mar	ology Indicators (mini later (A1) er Table (A2) (A3) rks (B1)	mum of or	ne requirec		Salt Crust (B1 Aquatic Inver Hydrogen Sul Dry Season W	(1) tebrates (f fide Odor Vater Table	(C1) e (C2)	oots (C3)	Secon	ndary Indicat Surface Soil C Sparsely Vege Drainage Patt Oxidized Rhiz (Where I	ors (minimum racks (86) stated Concave erns (810) ospheres on Litiled)	n of two require Surface (B8)
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drology  tland Hydrimary Indic  Surface W  High Water Mar  Sediment  Drift depo  Algal Mat  Iron Depo  Inundation  Water-Sta  Id Observater  ter Table Preservater	ology Indicators (mini- fater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) or Crust (B4) sits (B5) or Visible on A- ined Leaves ( titons: Present?	mum of or )  verial Image (B9)	ry (B7) No <b>ⓒ</b>		Salt Crust (BI Aquatic Inver- Hydrogen Sul Dry Season W Dxidized Rhiz (where n Presence of R Thin Muck Su Other (Explain	tebrates (i fide Odor Vater Tabli ospheres ot tilled) teduced In trace (C7) n in Rema-	(C1) e (C2) on Living Re on (C4) rks)		Secon	odary Indicat Surface Soil C Sparsely Vege Drainage Patt Oxidized Rhiz (where I Crayfish Burro Saturation Vis Geomorphic P FAC-neutral T Frost Heave H	ors (minimum racks (86) stated Concave erns (810) ospheres on Li tilled) ows (C8) sible on Aerial rosition (D2) est (D5) lummocks (D7	m of two require Surface (B8) ving Roots (C3) Imagery (C9) ) (LRR F)
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Application   Continue   Contin	Project/Site: Alpha Bartonville FM 407			(	ity/Count	y: Bartonville	/ Denton Samplin	g Date: 07-Sep-21
Earnelform (nillistope, terrace, etc.): Plain	Applicant/Owner:					State	: Texas Sampling Point: 3	ſ1 <b>P</b> 6
LandGram (hillstope, terrace, etc.):Plain						Township, Ra		
Submegion (LRR): LRR					Local reli	ef (concave,	convex, none): flat S	
re climatic/hydrologic conditions on the site typical for this time of year?  Are Vegetation	Subregion (LRR): LRR J			Lat.: 33,	100295			
e climatic/hydrologic conditions on the site typical for this time of year? Yes ◎ No ○ (If no, explain in Remarks.)  Are Vestetation ☐ , soil ☐ , or Hydrology ☐ algoritantly disturbed? Are "fromal Circumstances" present? Yes ◎ No ○ Are Vestetation ☐ , soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)  Summary of Findings - Attack site map showing sampling point locations, transects, important features, etc Hydrophytic Vegetation Present? Yes ○ No ◎ Is the Sampled Area within a Wetland? Yes ○ No ◎ Is No Is the Sampled Area within a Wetland? Yes ○ No ◎ Is No Is the Sampled Area	oil Map Unit Name: Konsil fine sand	loam, 1 to	3 percent slop	es			NWI classification: no	ne .
Are Vegetation						res 💿 No 🤇		<u></u>
Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc hydrophytic Vegetation Present? Yes \( \) No \( \oldsymbol{\oldsymbol								Yes 🏵 No 🔾
Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes \ No \( \oldots \)  Hydric Soil Present? Yes \ No \( \oldots \)  Wetsand Hydrology Present? Yes \ No \( \oldots \)  Remarks:   VEGETATION - Use scientific names of plants  VEGETATION - Use scientific names of plants  Dominant FWS Region: GP Species?  Absolute Rel.Strat.  Species?  Indicator Species?  Indicator Species?  Total Rumber of Dominant Species That are OBL, FACW, or FAC 1 (A)  Total Number of Dominant Species That are OBL, FACW, or FAC 1 (A)  Total Number of Dominant Species That Are OBL, FACW, or FAC 1 (A)  Total Species Aross Al Sintas: 2 (B)  Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/E)  Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/E)  The Are OBL, FACW, or FAC: 50.0% (A/E)  Prevalence Index worksheet: Total % Cover of Multiply by:  OBL Species 0 x 1 = 0  Prevalence Index worksheet:  Additional stratum (Plot size: 5 0)  Indicator Species 50 x 4 = 200  UPL Species 50 x 4 = 200  UPL Species 50 x 4 = 200  UPL Species 0 x 5 = 0  O 0.0%  UPL Species 0 x 5 = 0  O 0.0%  Hydrophytic Vegetation Indicators:	Are Vegetation . , Soil .	, or Hyd	rology 🔲	naturally pro	biematic?			rke.)
Hydrophytic Vegetation Present?   Yes							* •	
No ⊕   No ⊕   Wetland Hydrology Present?   Yes				lowing sa	urbunā	- Polite IOC	ations, transects, import	ant reatures, etc.
Wethand Hydrology Present?   Yes   No					Is t	he Sampled A	леа	
VEGETATION - Use scientific names of plants	-	_			witi	hin a Wetland	yes O No 💿	
VEGETATION - Use scientific names of plants   Species?   Species?   Species?   Species?   Species?   Species?   Species?   Status   Status   Status   Status   Status   Species   Species?   Status   Status   Status   Status   Status   Status   Species   Status   Status   Status   Species   Status   Status   Species   Status   Status   Species   Status   Status   Species		1es 🗸	NO G					
Absolute   Species   Statum   Plot size:     Absolute   Section   Section   Status   Section   Status   Section   Status   Section   Status   Section   Status   Section   Status   Section   Section   Status   Section   Secti	Remarks:							
Absolute   Species   Statum   Plot size:     Absolute   Species   Status   Number of Dominant Species   That are OBL, FACW, or FAC   1 (A)							•	
Absolute   Species   Statum   Plot size:     Absolute   Species   Status   Species				<del></del>				
Absolute   Cover   Status   Dominance Test worksheet	VEGETATION - Use scien	tific nan	nes of pl	ants			gion: GP	
1.	Tree Stratum (Plot size:	1			Rel.Strat	Indicator	Dominance Test worksheet:	<del></del>
2.						<u> saus</u>		1 (6)
3.	2			0				
Percent of dominant Species   That Are OBL FACW, or FAC:	3			0				7 (B)
That Are OBL, FACW, or FAC:   50.0%   (A/B)								
1.     0	new Police in the Police in th		,		= Total	Cover		50.0% (A/B)
2				0	П		<u> </u>	
0					H			
A	3.		·		<u> </u>			
FAC species   50   x 3 - 150	4						l ——	
Herb Stratum (Plot size: 5 ft   )	5		<del></del>	0_			· ·	
1. Cynodon dactylon 2. Paspalum dilatatum 3.	100 - 1 - 1 - 1 - 1 - 4 A	,			= Total	Cover		
2. Paspalum dilatatum		<del></del> }			[ <b>7</b> ]		UPL species x 5	
3.				_ —		<del></del>	Column Totals:100 (A)	350(B)
4.							Prevalence Index = B/A =	3.5
0					0.0%	<u></u>	Hydronbytic Vegetation Indicators	
7.								
8.		-					I <b>_</b>	_
9.		<del></del>				<u> </u>	l <b>=</b>	
Moody Vine Stratum (Plot size: )   0				- <b>-</b>	$\equiv$	<del></del>	I I	
Woody Vine Stratum (Plot size: ) 1 Indicators of hydric soil and wetland hydrology must be present.  2. 0	10.		<u>.</u>		0.0%	6	data in Remarks or on a sep	parate sheet)
1. 0				100	= Yotal	Cover	Problematic Hydrophytic Veg	etation <sup>(</sup> (Explain)
2. 0 Hydrophytic	Woody Vine Stratum (Plot size:		)					tland hydrology must
0 = Total Cover Hydrophytic			<del></del>			<del></del>	De present.	
	<u> </u>		•	0	П <u></u>	<del></del>	***	
Present? Tes O NO	% Bare Ground in Hack Stratum			0	= Total	Cover	Vegetation	
Remarks:		U	<del>_</del>				Present? Tes V No V	

<sup>\*</sup>Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

	ion: (Deceribe to t	the death ear	adad to document	the indi-		ntions ob -	Sampling Point absence of indicators.)	
*	*	tile depth nei				mm the	ausence of indicators.)	
Depth (inches)	Matrix Color (moist)	<u>%</u>	Color (moist)	ox Featu -%	_Ivpe.i	_Loc2_	Texture	Remarks
		98		_	C C			
0-16	10YR 4/3		10YR 6/8	<u> </u>	·——	M	Silty Clay	
<del></del>	<del> </del>							
<del></del>			• • • • • • • • • • • • • • • • • • • •			· · · · · · · · · · · · · · · · · · ·	***********	
<del></del>	<del></del>		<del></del>		·	<del></del>	· · · · · · · · · · · · · · · · · · ·	
<del></del>	·····			-		<del></del>		
	···							
			•	,				
	<del></del>							
<del></del>						<del></del>		
						ins <sup>2</sup> Loca	ation: PL=Pore Lining, M=Matri	× .
		oie to all LRR	s, unless otherwis	•	ı		Indicators for Problema	itic Hydric Soils <sup>3</sup> :
Histosof (A1)			Sandy Gleyed				1 cm Muck (A9) (LRR	• •
☐ Histic Epipedo			Sandy Redox (				Coastal Prairie Redox	
Black Histic (/ ☐ Hydrogen Sul	-		Stripped Matrix Loamy Mucky I		• • • • • • • • • • • • • • • • • • • •		Dark Surface (S7) (LR	•
	rers (AS) (LRR F)		Loamy Gleyed		•		High Plains Depression	
<u> </u>	49) (LRR F,G,H)		Depleted Matri	-	• •		_ `	MLRA 72 and 73)
_	ow Dark Surface (A1	1)	Redox Dark Su				Reduced Vertic (F18) Red Parent Material (1	
Thick Dark Su	urface (A12)	-	Depleted Dark				Very Shallow Dark Su	
Sandy Muck N	Mineral (S1)		Redox depress	ions (F8)			Other (Explain in Rem	
2.5 cm Mucky	y Peat or Peat (S2) (	(LRR G, H)	High Plains De	pressions	(F16)		<sup>3</sup> Indicators of hydrophytic v	•
🗌 5 cm Mucky F	Peat or Peat (S3) (LF	RRF)	(MLRA 72	and 73 c	f LRR H)			, uniess disturbed or problem
Restrictive Laye	er (if present):						T	
Type:	(a presum,							
Depth (inches)	١.				,		Hydric Soil Present?	Yes ○ No ⊙
			_				1 '	
		-						
		-					-	
								· · · · · · · · · · · · · · · · · · ·
		-						
temarks;		-						
emarks:							Secondary Indicator	s (minimum of two requir
emarks:  ydrology  /etland Hydrolo	ogy Indicators:	one required:	check all that app	niv)				
ydrology Yetland Hydrolo Ynimary Indicate	ogy Indicators: ors (minimum of	one required;	check all that app				Surface Soit Crac	cks (86)
ydrology Vetland Hydrolo Timary Indicate  Surface Wate	ogy Indicators: ors (minimum of er (A1)	one required;	Salt Crust (8	11)	(B13)		Surface Soil Crac	cks (86) ted Concave Surface (88)
ydrology Vetland Hydrolo Timary Indicate Surface Water T High Water T	ogy Indicators: ors (minimum of er (A1) Table (A2)	one required;	Salt Crust (8	11) rtebrates			Surface Soil Crad Sparsely Vegeta Drainage Pattern	cks (86) ted Concave Surface (88) ns (810)
Ydrology  Vetland Hydrolo  Timary Indicate  Surface Water T  High Water T  Saturation (A	ogy Indicators: ors (minimum of er (A1) Table (A2) A3)	one required;	Salt Crust (8 Aquatic Inve	11) rtebrates ilfide Odor	(C1)		Surface Soif Crac Sparsely Vegeta Drainage Patter Oxidized Rhizos	cks (86) ted Concave Surface (88) ns (810) pheres on Living Roots (C3)
Ydrology  Yetland Hydrolo  Surface Wate  High Water T  Saturation (A  Water Marks	ogy Indicators: ors (minimum of er (A1) Table (A2) A3) (81)	one required:	Salt Crust (8 Aquatic Inve	11) rtebrates ulfide Odor Water Tab	(C1) le (C2)	oots (CD)	Surface Soif Crac Sparsely Vegeta Drainage Patten Oxidized Rhizos (where till	cks (86) ted Concave Surface (88) ns (810) pheres on Living Roots (C3) ed)
Ydrology  Vetland Hydrolo  Surface Wate  High Water T  Saturation (A  Water Marks  Sediment De	ogy Indicators: ors (minimum of er (A1) Table (A2) A3) (B1) eposits (B2)	one required;	Salt Crust (B Aquatic Inve Hydrogen St Dry Season \ Oxidized Rhi	ill) rtebrates ulfide Odoi Water Tab izospheres	(C1) le (C2) on Living F	oots (C3)	Surface Soif Crac Sparsely Vegeta Drainage Patten Oxidized Rhizos (where till	cks (86) ted Concave Surface (88) ns (810) pheres on Living Roots (C3) ed) s (C8)
Ydrology  Vetland Hydrology  Vetland Hydrology  Surface Wate  High Water T  Saturation (A  Water Marks  Sediment De  Drift deposits	ogy Indicators: ors (minimum of er (A1) Table (A2) A3) (B1) eposits (B2) s (B3)	one required;	Salt Crust (B Aquatic Inve Hydrogen St Dry Season Oxidized Rhi (where	ill) rtebrates ulfide Odoi Water Tab izospheres not tilled	(C1) Je (C2) on Living F	oots (C3)	Surface Soif Crac Sparsely Vegeta Drainage Patten Oxidized Rhizos (where till Crayfish Burrows Saturation Visibi	cks (86) ted Concave Surface (88) ns (810) pheres on Living Roots (C3) ed) s (C8) e on Aerial Imagery (C9)
Ydrology  Yetland Hydrolo Primary Indicate  Surface Water High Water T  Saturation (A  Water Marks Sediment De  Drift deposits Algal Mat or	ogy Indicators: cors (minimum of er (A1) Table (A2) A3) (B1) eposits (B2) s (B3) Crust (B4)	one required;	Salk Crust (B Aquatic Inve Hydrogen St Dry Season Oxidized Rhi (where	rtebrates ulfide Odor Water Tab izospheres not tilled Reduced I	r (C1) le (C2) on Living F · ron (C4)	oots (C3)	Surface Soif Crai  Sparsely Vegeta  Drainage Patten  Oxidized Rhizos  (where till  Crayfish Burrows  Saturation Visibl  Geomorphic Pos	cks (86) ted Concave Surface (88) ns (810) pheres on Living Roots (C3) ed) s (C8) e on Aerial Imagery (C9) ition (D2)
Iydrology  Vetland Hydrology  Vetland Hydrology  Surface Wate High Water T Saturation (A Water Marks Sediment De Drift deposits Algal Mat or I	ogy Indicators: ors (minimum of er (A1) Table (A2) A3) (B1) eposits (B2) s (B3) Crust (B4) s (B5)		Salk Crust (B Aquatic Inve Hydrogen St Dry Season \ Oxidized Rhi (where Presence of t	rtebrates iffide Odor Water Tab izospheres not tilled Reduced I urface (C7	r (C1) le (C2) on Living F i · ron (C4)	oots (C3)	Surface Soif Crai  Sparsely Vegeta  Drainage Patten  Oxidized Rhizos  (where till  Crayfish Burrows  Saturation Visibl  Geomorphic Pos  FAC-neutral Tes	cks (86) ted Concave Surface (88) ns (810) pheres on Living Roots (C3) ed) s (C8) e on Aerial Imagery (C9) ition (D2) t (D5)
Remarks:  Iydrology  Wetland Hydrolo Primary Indicate  Surface Wate High Water T Saturation (A Water Marks Sediment De Drift deposits Algal Mat or I	ogy Indicators: cors (minimum of er (A1) Table (A2) A3) (B1) eposits (B2) s (B3) Crust (B4)		Salk Crust (B Aquatic Inve Hydrogen St Dry Season Oxidized Rhi (where	rtebrates iffide Odor Water Tab izospheres not tilled Reduced I urface (C7	r (C1) le (C2) on Living F i · ron (C4)	oots (C3)	Surface Soif Crai  Sparsely Vegeta  Drainage Patten  Oxidized Rhizos  (where till  Crayfish Burrows  Saturation Visibl  Geomorphic Pos  FAC-neutral Tes	cks (86) ted Concave Surface (88) ns (810) pheres on Living Roots (C3) ed) s (C8) e on Aerial Imagery (C9) ition (D2)
Remarks:  Iydrology  Wetland Hydrolo Primary Indicate Surface Wate High Water T Saturation (A Water Marks Sediment De Drift deposits Algal Mat or I Iron Deposits Inundation V	ogy Indicators: ors (minimum of er (A1) Table (A2) A3) (B1) eposits (B2) s (B3) Crust (B4) s (B5)		Salk Crust (B Aquatic Inve Hydrogen St Dry Season \ Oxidized Rhi (where Presence of t	rtebrates iffide Odor Water Tab izospheres not tilled Reduced I urface (C7	r (C1) le (C2) on Living F i · ron (C4)	oots (C3)	Surface Soif Crai  Sparsely Vegeta  Drainage Patten  Oxidized Rhizos  (where till  Crayfish Burrows  Saturation Visibl  Geomorphic Pos  FAC-neutral Tes	cks (86) ted Concave Surface (88) ns (810) pheres on Living Roots (C3) ed) s (C8) e on Aerial Imagery (C9) ition (D2) t (D5)
Vetland Hydrology Vetland Hydrology Surface Water High Water T Saturation (A Water Marks Sediment De Drift deposits Algal Mat or Iron Deposits Inundation V Water-Staine	ogy Indicators: fors (minimum of ser (A1) Table (A2) A3) (B1) eposits (B2) s (B3) Crust (B4) s (B5) //isible on Aerial Imaged Leaves (B9) ons:	gery (87)	Salk Crust (B Aquatic Inve Hydrogen St Dry Season \ Oxidized Rhi (where Presence of t	rtebrates iffide Odor Water Tab izospheres not tilled Reduced I urface (C7	r (C1) le (C2) on Living F i · ron (C4)	oots (C3)	Surface Soif Crai  Sparsely Vegeta  Drainage Patten  Oxidized Rhizos  (where till  Crayfish Burrows  Saturation Visibl  Geomorphic Pos  FAC-neutral Tes	cks (86) ted Concave Surface (88) ns (810) pheres on Living Roots (C3) ed) s (C8) e on Aerial Imagery (C9) ition (D2) t (D5)
Remarks:  Iydrology  Wetland Hydrology  Wetland Hydrology  Surface Wate  High Water T  Saturation (A  Water Marks  Sediment De  Drift deposits  Algal Mat or use fron Deposits  Inundation V  Water-Staine	ogy Indicators: ors (minimum of er (A1) Table (A2) A3) (B1) eposits (B2) s (B3) Crust (B4) s (B5) //sible on Aerial Imaged Leaves (B9) ons:	gery (87)	Salk Crust (B Aquatic Inve Hydrogen St Dry Season \ Oxidized Rhi (where Presence of t	itti) intebrates ilfide Odoi Water Tab izospheres not tilled Reduced I urface (C7	r (C1) le (C2) on Living F i · ron (C4)	oots (C3)	Surface Soif Crai  Sparsely Vegeta  Drainage Patten  Oxidized Rhizos  (where till  Crayfish Burrows  Saturation Visibl  Geomorphic Pos  FAC-neutral Tes	cks (86) ted Concave Surface (88) ns (810) pheres on Living Roots (C3) ed) s (C8) e on Aerial Imagery (C9) ition (D2) t (D5)
Remarks:  Iydrology  Wetland Hydrology  Wetland Hydrology  Surface Wate High Water T Saturation (A Water Marks Sediment De Drift deposits Algal Mat or I Iron Deposits Inundation V Water-Staine  Field Observation	ogy Indicators: ors (minimum of er (A1) Table (A2) A3) (B1) eposits (B2) s (B3) Crust (B4) s (B5) //sible on Aerial Imaged Leaves (B9) ons: esent? Yes	gery (B7)	Salt Crust (B Aquatic Inve Hydrogen St Dry Season \ Oxidized Rhi (where Presence of Thin Muck S Other (Expla	rtebrates affice Odos Water Tab izospheres not tilled Reduced I urface (C7 in in Remines):	r (C1) Je (C2) on Living F cron (C4) ) aarks)	oots (C3)	Surface Soif Crai  Sparsely Vegeta  Drainage Patten  Oxidized Rhizos  (where till  Crayfish Burrows  Saturation Visibl  Geomorphic Pos  FAC-neutral Tes	ted Concave Surface (B8) ns (B10) pheres on Living Roots (C3) ed) s (C8) e on Aerial Imagery (C9) ition (D2) t (D5)
Remarks:  Iydrology  Wetland Hydrology  Wetland Hydrology  Surface Wate  High Water T  Saturation (A  Water Marks  Sediment De  Drift deposits  Algal Mat or use fron Deposits  Inundation V  Water-Staine	ogy Indicators: fors (minimum of er (A1) Table (A2) A3) (B1) eposits (B2) s (B3) Crust (B4) s (B5) /isible on Aerial Imaged Leaves (B9) pors: esent? Yes	gery (87)  No  No  No  No	Salt Crust (B Aquatic Inve Hydrogen St Dry Season \ Oxidized Rhi (where Presence of Thin Muck S	rtebrates affice Odos Water Tab izospheres not tilled Reduced I urface (C7 in in Remines):	r (C1) le (C2) on Living F ron (C4) ) arks)	-	Surface Soif Crai  Sparsely Vegeta  Drainage Patten  Oxidized Rhizos  (where till  Crayfish Burrows  Saturation Visibl  Geomorphic Pos  FAC-neutral Tes	cks (86) ted Concave Surface (88) ns (810) pheres on Living Roots (C3) ed) s (C8) e on Aerial Imagery (C9) ition (D2) t (D5)

Remarks:

Project/Site: Alpha Bartonville FM 403	,	City/e	County: Bartonville	/ Denton	Samp	oling Date: <u>07-Sep-21</u>
Applicant/Owner:			State:	: Texas	Sampling Point:	
Investigator(s): MP		_	tion, Township, Ra		T	R
Landform (hillslope, terrace, etc.)			al relief (concave, o	convex, none):	concave	Slope: 2.0 % / 1.1
Subregion (LRR): LRR J		Lat.: 33.0998	318	Long.: -97.13	31509	Datum: NAD83
Soil Map Unit Name: Wilson clay loar	n. 1 to 3 gerrent signes			· · · · · ·	<del>~~~</del>	none
re climatic/hydrologic conditions or			Yes  No		oplain in Remarks	
Are Vegetation [ , Soil [		significantly distu			ances" present?	Yes   No ○
Are Vegetation , Soil .		naturally problem			y answers in Rer	
				* -		
Summary of Findings - A		owing samp	ling point loc	ations, trai	nsects, impo	rtant features, etc
Hydrophytic Vegetation Present?	Yes 💿 No 🔾 🕖	•	Is the Sampled A	\rea		
Hydric Soil Present?	Yes 💿 No 🔾		within a Wetland		.0	
Wetland Hydrology Present?	Yes 💿 No 🔾		WICHT & WEGGIE			
Remarks:					- 1 1 - 1 - 1	
<b>VEGETATION</b> - Use scien	itific names of pla			gion: GP		
		Absolute Rei	cies? ———— .5trat. Indicator	Dominance To	est worksheet:	
Tree Stratum (Plot size:		% Cover Cov	ver Status	Number of Don	ninant Species	
1				That are OBL, 8	FACW, or FAC:	2 (A)
2				Total Number o		
4.			<del></del>	Species Across	All Strata:	<u> </u>
<del></del>			Total Cover		minant Species	
Sapling/Shrub Stratum (Plot size	1	•		That Are OBL	, FACW, or FAC:	100.0%(A/B)
1	<del></del>			Prevalence In	dex worksheet:	
2	<del> </del>	프 딮	<del></del>	Total %	Cover of: N	Aultiply by:
3 4.				OBL species	-	(1 = _0_
5.				FACW specie		( 2 <b>=</b>
			Total Cover	FAC species		3 = <u>180</u>
Herb Stratum (Plot size: 5 ft	)			FACU specie	_	κ4
1. Paspalum dilatatum		60_ 🗹	63.2% FAC	UPL species		
2. Echinochtoa colona	<del>_</del>	35_ 🗹	36.8% FACW	Column Tota		(A) <u>250</u> (B)
3. 4.	<del></del>	- 🔑 📙	0.0%	Prevalence	ce Index = B/A =	2.632
5.			0.0%	Hydrophytic V	egetation Indical	ors:
6.	· ···		0.0%	1 - Rapid	Test for Hydroph	ytic Vegetation
7.			0.0%	2 - Domin	nance Test is > 50	1º/c
8.			0.0%	3 - Preval	lence Index is ≤3	.01
10.		_ 🔑 📙	0.0%	4 - Morph	ological Adaptati	ons <sup>1</sup> (Provide supporting
			Total Cover		Remarks or on a	separate sheet) (egetation <sup>1</sup> (Explain)
Attackers on 10 of 10 of the state	1	95 =	Total Cover	-	, , ,	
Woody Vine Stratum (Plot size:	<del> </del>	. $\Box$		be present.	or nyaric soil and	wetland hydrology must
		<u>_0</u> U_				
			Total Cover	Hydrophytic		
% Bare Ground in Herb Stratum	5	<del>- V</del> +	, yan witt	Vegetation Present?	Yes 💿 No	0
	<del></del>			er es eur		•
Remarks:						
1						

<sup>\*</sup>Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

				<u>-</u>		Sampling Point: T1P7
Profile Desc	•	the depth i	needed to document	the indicator or	confirm the	absence of indicators.)
Depth	. Matrix	·.		ox Features		
(inches)	Color (moist)		Color (moist)	_%Type_1	_Loc2	Texture Remarks
0-16	10YR 5/2	<u>. 90</u>	10YR 6/8	10 C	M	Silty Clay
	<del></del>	<del></del>	• • • • • • • • • • • • • • • • • • • •		<del></del>	
		<del></del>				
				<u> </u>		
			<del></del>		<del></del>	<del></del>
	<del></del>		<del></del>			
						· · · · · · · · · · · · · · · · · · ·
iType: C=Co	oncentration. D=Deplet	ion. RM=Red	uced Matrix, CS=Covere	ed or Coated Sand (	Grains <sup>2</sup> Loca	ition: PL=Pore Lining. M=Matrix
Hydric Soil	Indicators: (Application	able to all LF	Rs, unless otherwis	e noted.).		Indicators for Problematic Hydric Soils 3:
Histosol	(A1)		Sandy Gleyed I	Matrix S4		1 cm Muck (A9) (LRR I, J)
= `	ipedon (A2)		Sandy Redox (	S5)		Coastal Prairie Redox (A16) (LRR F, G, H)
⊒ Black His	, ,		Stripped Matro			Dark Surface (S7) (LRR G)
	n Sulfide (A4)		Loamy Mucky i			High Plains Depressions (F16)
_	Layers (A5) (LRR F)		Loamy Gleyed			(LRR H outside of MLRA 72 and 73)
_	ck (A9) (LRR F,G,H)		Depleted Matri	` '		Reduced Vertic (F18)
-	l Below Dark Surface (/ irk Surface (A12)	111)	Redox Dark Su  Depleted Dark			Red Parent Material (TF2)
	uck Mineral (S1) ···		Redox depress			
	fucky Peat or Peat (S2)	(14 3) 99 t)	High Plains De	,		Other (Explain in Remarks)
_	dky Peat or Peat (S3) (			and 73 of LRR H)		<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic
			(			nyarology mast be present, aness assorbed at propertion
			· · · · · · · · · · · · · · · · · · ·			Ť
	Layer (if present):					
Туре:					····	Mudain Sail Bassant 2 Van (6) No
Туре:	Layer (if present):				····	Hydric Soil Present? Yes  No
Type: Depth (in					····-	Hydric Soil Present? Yes  No
Type: Depth (in						Hydric Soil Present? Yes  No
Type: Depth (in						Hydric Soil Present? Yes  No
Type: _ Depth (in: Remarks:	ches):				,	Hydric Soil Present? Yes  No
Type: Depth (in: Remarks:	ches):					Hydric Soil Present? Yes  No
Type: Depth (in Remarks:	ches):					
Type:	thes):  IY  drology Indicators:	f one require	eri- check all that and	ntv\		Secondary Indicators (minimum of two required
Type:	thes);  IY  drology Indicators: dicators (minimum o	f one require	ed; check all that app			Secondary Indicators (minimum of two required Surface Soil Cracks (86)
Type:	dres):  drology Indicators: ficators (minimum o	f one require	Salt Crust (8	11)		Secondary Indicators (minimum of two required Surface Soil Cracks (86) Sparsely Vegetated Concave Surface (88)
Type:	dres):  drology Indicators: dicators (minimum o Water (A1) ster Table (A2)	f one require	Saft Crust (8	11) rtebrates (B13)		Secondary Indicators (minimum of two required Surface Soil Cracks (86) Sparsely Vegetated Concave Surface (88) Drainage Patterns (810)
Type:	drology Indicators: dicators (minimum o Water (A1) ster Table (A2) on (A3)	f one require	Salt Crust (8 Aquatic Inve	itebrates (B13) olfide Odor (C1)		Secondary Indicators (minimum of two required Surface Soil Cracks (86) Sparsely Vegetated Concave Surface (88) Drainage Patterns (810) Oxidized Rhizospheres on Living Roots (C3)
Type: Depth (initial points)  Remarks:    ydrolog  Vetland Hyther   Surface     High Water Mater	drology Indicators: dicators (minimum o Water (A1) ster Table (A2) on (A3) larks (B1)	f one require	Salt Crust (8 Aquatic Inve	itebrates (B13) olfide Odor (C1) Water Table (C2)		Secondary Indicators (minimum of two required Surface Soil Cracks (86) Sparsely Vegetated Concave Surface (88) Drainage Patterns (810) Oxidized Rhizospheres on Living Roots (C3) (where tilled)
Type:	drology Indicators: ficators (minimum o Water (A1) oter Table (A2) on (A3) tarks (B1) ot Deposits (B2)	f one require	Salt Crust (B Aquatic Inve Hydrogen Su Dry Season N Oxidized Rhi	11) rtebrates (B13) ilfide Odor (C1) Water Table (C2) 20spheres on Livin	Roots (C3)	Secondary Indicators (minimum of two required  Surface Soil Cracks (86)  Sparsely Vegetated Concave Surface (88)  Drainage Patterns (810)  Oxidized Rhizospheres on Living Roots (C3)  (where tilled)  Crayfish Burrows (C8)
Type:	drology Indicators: dicators (minimum o Water (A1) on (A3) darks (B1) on Deposits (B2) posits (B3)	f one require	Salt Crust (8 Aquatic Inve Hydrogen Su Dry Season N Oxidized Rhi (where I	nti) rtebrates (B13) rifide Odor (C1) Water Table (C2) respheres on Living	Roots (C3)	Secondary Indicators (minimum of two required Surface Soil Cracks (86) Sparsely Vegetated Concave Surface (88) Drainage Patterns (810) Oxidized Rhizospheres on Living Roots (C3) (where tilled) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
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Type:	drology Indicators: dicators (minimum o Water (A1) eter Table (A2) on (A3) darks (B1) et Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	·	Salt Crust (8 Aquatic Inve Hydrogen Su Dry Season N Oxidized Rhi (where I	rtebrates (B13) iffide Odor (C1) Water Table (C2) cospheres on Living not tilled) Reduced Iron (C4)	Roots (C3)	Secondary Indicators (minimum of two required Surface Soil Cracks (86) Sparsely Vegetated Concave Surface (88) Drainage Patterns (810) Oxidized Rhizospheres on Living Roots (C3) (where tilled) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) FAC-neutral Test (D5)
Type:	drology Indicators: dicators (minimum o Water (A1) ster Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)	·	Salt Crust (8 Aquatic Inve Hydrogen Su Oxidized Rhi (where I Presence of I Thin Muck Si	rtebrates (B13) iffide Odor (C1) Water Table (C2) cospheres on Living not tilled) Reduced Iron (C4)	Roots (C3)	Secondary Indicators (minimum of two required  Surface Soil Cracks (86) Sparsely Vegetated Concave Surface (88) Drainage Patterns (810) Oxidized Rhizospheres on Living Roots (C3) (where tilled) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2)
Type:	drology Indicators: dicators (minimum o Water (A1) eter Table (A2) on (A3) darks (B1) et Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	·	Salt Crust (8 Aquatic Inve Hydrogen Su Oxidized Rhi (where I Presence of I Thin Muck Si	rtebrates (B13) iffide Odor (C1) Water Table (C2) zospheres on Living not tilled) Reduced Iron (C4) urface (C7)	Roots (C3)	Secondary Indicators (minimum of two required Surface Soil Cracks (86) Sparsely Vegetated Concave Surface (88) Drainage Patterns (810) Oxidized Rhizospheres on Living Roots (C3) (where tilled) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) FAC-neutral Test (D5)
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Type:	drology Indicators: dicators (minimum o Water (A1) ater Table (A2) on (A3) darks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial Im Itained Leaves (B9) vations:	·	Salt Crust (8 Aquatic Inve Hydrogen Su Oxidized Rhi (where I Presence of i Thin Muck Si Other (Expla	rtebrates (B13)  offide Odor (C1)  Water Table (C2)  zospheres on Living  not tilled)  Reduced Iron (C4)  urface (C7)  with in Remarks)	Roots (C3)	Secondary Indicators (minimum of two required  Surface Soil Cracks (86)  Sparsely Vegetated Concave Surface (88)  Drainage Patterns (810)  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)
Type:	drology Indicators: dicators (minimum o Water (A1) eter Table (A2) on (A3) darks (B1) et Deposits (B2) posits (B3) et or Crust (B4) posits (B5) ion Visible on Aerial Im Itained Leaves (B9) vations: er Present?  Yes	agery (87)	Salt Crust (8 Aquatic Inve Hydrogen Su Oxidized Rhi (where i Presence of i Thin Muck Si Other (Expla	rtebrates (B13)  Iffide Odor (C1)  Water Table (C2)  zospheres on Living  not tilled)  Reduced Iron (C4)  urface (C7)  in in Remarks)  hes):  ()	) Roots (C3)	Secondary Indicators (minimum of two required  Surface Soil Cracks (86)  Sparsely Vegetated Concave Surface (88)  Drainage Patterns (810)  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)
Type:	drology Indicators: dicators (minimum o Water (A1) on (A3) darks (B1) on (Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial Imitained Leaves (B9) vations: or Present? Yes	надегу (87)	Salt Crust (8 Aquatic Inve Hydrogen Su Dry Season \ Oxidized Rhi (where I Presence of i Thin Muck Si Other (Expla	rtebrates (B13)  Iffide Odor (C1)  Water Table (C2)  zospheres on Living  not tilled)  Reduced Iron (C4)  urface (C7)  in in Remarks)  hes):  ()	_	Secondary Indicators (minimum of two required  Surface Soil Cracks (86)  Sparsely Vegetated Concave Surface (88)  Drainage Patterns (810)  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)

Remarks:

Are Vegetation , Soil , or Hyd  Summary of Findings - Attach sit  Hydrophytic Vegetation Present? Yes  Hydric Soil Present? Yes  Wetland Hydrology Present? Yes  Remarks:  VEGETATION - Use scientific nar	rent slopes pical for this rology  relogy  relogy  No  No  No  No  No  No  No  No  No  No	Lat.: 33. time of years significantly of naturally profession	Section, Township, Local relief (concave 099744  Yes No disturbed? Are blematic? (If n mpling point lo  Is the Sampled within a Wetla	NWI classification: R4SBC  (Xf no, explain in Remarks.)  "Normal Circumstances" present? Yes No needed, explain any answers in Remarks.)
Landform (hillstope, terrace, etc.): Depression Subregion (LRR): LRR ]  coil Map Unit Name: Wilson day loam, 1 to 3 percential day loam, 1 to	rent slopes pical for this rology  relogy  relogy  No  No  No  No  No  No  No  No  No  No	Lat.: 33. time of years significantly of naturally profession	Yes No  Notisturbed? Are blematic? (If noting point to within a Wetland)  Dominant FWS 8	e, convex, none): concave Slope: 2.0 % / 1.1  Long.: -97.131510 Datum: NAD83  NWI classification: R4SBC  (If no, explain in Remarks.)  "Normal Circumstances" present? Yes No No needed, explain any answers in Remarks.)  ccations, transects, important features, etc.
Landform (hillstope, terrace, etc.): Depression (arbregion (LRR): LRR J oil Map Unit Name: Wilson day loam, 1 to 3 perce climatic/hydrologic conditions on the site ty. Are Vegetation , Soil , or Hyd Are Vegetation , Soil , or Hyd Summary of Findings - Attach site Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes Hydric Soil Present? Yes Remarks:	cent slopes pical for this rology  rology  relogy  rology  No O No O No O	Lat: 33. time of year? significantly a naturally prof	Yes No Sisturbed? Are blematic? (If no mpling point lo  Is the Sampled within a Wetland	NWI classification: R4SBC  (XI no, explain in Remarks.)  "Normal Circumstances" present? Yes No No needed, explain any answers in Remarks.)  (Cations, transects, important features, etc.)  (I Area and? Yes No
oil Map Unit Name: Wilson day loam, 1 to 3 perce climatic/hydrologic conditions on the site ty.  Are Vegetation  , Soil  , or Hyd.  Are Vegetation  , Soil  , or Hyd.  Bummary of Findings - Attach sit.  Hydrophytic Vegetation Present? Yes   Hydric Soil Present? Yes   Wetland Hydrology Present? Yes   Remarks:  VEGETATION - Use scientific nar	pical for this rology  rology  re map sh  No O  No O  No O	time of years significantly on naturally prof nowing sa	Yes No disturbed? Are blematic? (If n mpling point lo  Is the Sampled within a Wetla	NWI classification: R4SBC  (If no, explain in Remarks.)  "Normal Circumstances" present? Yes No No needed, explain any answers in Remarks.)  cations, transects, important features, etc.
Are Vegetation . Soil . or Hyd Are Vegetation . Soil . or Hyd Are Vegetation . Soil . or Hyd Summary of Findings - Attach sit Hydrophytic Vegetation Present? Yes . Hydric Soil Present? Yes . Wetland Hydrology Present? Yes . Remarks:  VEGETATION - Use scientific nar	pical for this rology  rology  re map sh  No O  No O  No O	time of year? significantly e naturally prof owing sa	plematic? (Xf n mpling point lo  Is the Sampled within a Wetla	NWI classification: R4SBC  (Xf no, explain in Remarks.)  "Normal Circumstances" present? Yes No No needed, explain any answers in Remarks.)  (Cations, transects, important features, etc.)  (Area and? Yes No
Are Vegetation . Soil . , or Hyd Are Vegetation . Soil . , or Hyd Are Vegetation . Soil . , or Hyd Summary of Findings - Attach sit Hydrophytic Vegetation Present? Yes . Hydric Soil Present? Yes . Wetland Hydrology Present? Yes . Remarks:	pical for this rology  rology  re map sh  No O  No O  No O	time of year? significantly e naturally prof owing sa	plematic? (Xf n mpling point lo  Is the Sampled within a Wetla	(Xf no, explain in Remarks.) "Normal Circumstances" present? Yes  No  No  needed, explain any answers in Remarks.) Docations, transects, important features, etc. I Area and? Yes  No
Are Vegetation , 50il , or Hyd Are Vegetation , 50il , or Hyd Summary of Findings - Attach sit Hydrophytic Vegetation Present? Yes  Hydric Soil Present? Yes  Wetland Hydrology Present? Yes  Remarks:  VEGETATION - Use scientific nar	rology  rology  relogy  No O No O No O	significantly on naturally projections on the naturally projections on the naturally projections on the natural natura natu	plematic? (Xf n mpling point lo  Is the Sampled within a Wetla	"Normal Circumstances" present? Yes  No  No  needed, explain any answers in Remarks.)  Docations, transects, important features, etc.  I Area  Ind? Yes  No
Are Vegetation , Soil , or Hyd  Summary of Findings - Attach sit  Hydrophytic Vegetation Present? Yes  Hydric Soil Present? Yes  Wetland Hydrology Present? Yes  Remarks:  VEGETATION - Use scientific nar	re map sh No O No O No O	naturally prol nowing sa	Is the Sampled within a Wetla.  Dominant FWS 8	needed, explain any answers in Remarks.)  Ocations, transects, important features, etc.  I Area  and? Yes   No
Bummary of Findings - Attach sites of Hydrophytic Vegetation Present? Yes  Hydric Soil Present? Yes  Wetland Hydrology Present? Yes  Remarks:  VEGETATION - Use scientific nar	No O No O No O	owing sa	Is the Sampled within a Wetla	ocations, transects, important features, etc.  I Area  nd7 Yes   No
Hydrophytic Vegetation Present? Yes  Hydric Soil Present? Yes  Wetland Hydrology Present? Yes  Remarks:  VEGETATION - Use scientific nar	No O No O No O	ants	Is the Sampled within a Wetla	1 Area nd7 Yes
Hydric Soil Present? Yes  Wetland Hydrology Present? Yes  Remarks:  VEGETATION - Use scientific nar	No O No O		within a Wetla	nd7 Yes  No  O
Wetland Hydrology Present? Yes  Remarks:  VEGETATION - Use scientific nar	No O		Dominant FWS 8	
Remarks: VEGETATION - Use scientific nar	· · · · · · · · · · · · · · · · · · ·		Dominant FWS 8	
VEGETATION - Use scientific nar	nes of pl			Region: GP
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	nes of pl			Region: GP
/Ol- * ** 1				
			Rel.Strat. Indicato	· · · · · · · · · · · · · · · · · · ·
Tree Stratum (Plot size:)		<u>% Cover</u> 0	Cover Status	Number of Dominant Species
2			<u> </u>	That are OBL, FACW, or FAC
3.		0		Total Number of Dominant Species Across All Strata: 2 (B)
4.		0		
		0	= Total Cover	Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
Sapling/Shrub Stratum (Plot size:	•			That Are OBL, FACW, or FAC:
1			<u> </u>	Prevalence Index worksheet:
2			<u> </u>	Total % Cover of: Multiply by:
4		_		OBL species 0 x 1 = 0  - FACW species 35 x 2 = 70
5		0		- FAC species 60 x 3 = 180
		0	= Total Cover	FACU species 0 x 4 = 0
Herb Stratum (Plot size: 5 ft )				UPL species 0 x 5 = 0
1. Paspalum dilatatum		60	<b>✓</b> 63.2% FAC	Column Totals: 95 (A) 250 (B)
2. Echinochtoa colona 3.		<u>35</u> 0	36.8% FACW 0.0%	Prevalence Index = B/A = 2.632
4.			0.0%	- <u> </u>
			0.0%	Hydrophytic Vegetation Indicators:
6.			0.0%	1 - Rapid Test for Hydrophytic Vegetation
7. 8.		0_	0.0%	2 - Dominance Test is > 50%
9.		→ <u>· o</u>	0.0%	☑ 3 - Prevalence Index is ≤3.0¹
10.		→ <del>- 0</del>	0.0%	4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)
		95	= Total Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:	}}			1 Indicators of hydric soil and wetland hydrology must
1			Ü	be present.
2				_
		0	= Total Cover	Hydrophytic Vegetation
% Bare Ground in Herb Stratum 5				Present? Yes  No
Remarks:			<del>.</del>	

<sup>\*</sup>Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Troing Desait	intion: (Describe to	the death ear	teeminoh at hebe	the indicate	e or confirm th	Sampling Point te absence of Indicators.)		
Donth	Matrix	ene acpai ne		ox Features		ic doscrice or indicators.)		
Depth . _(inches)	Color (moist)	<u>%</u> _	Color (moist)		ype <sup>I</sup> Loc²	TextureRemarks		
0-16	10YR 5/2	90	10YR 6/8	10	СМ	Silty Clay		
						<del>, , , , , , , , , , , , , , , , , , , </del>		
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					and Grains 26.0	xation: Pt.=Pore Lining. M=Matri		
_	ndicators: (Applica	ble to all LRR				Indicators for Problema	•	
Histosol (#	A1) Sedon (A2)		Sandy Gleyed			1 cm Muck (A9) (LRR	• •	
Black Histi	• •		Sandy Redox ( Stripped Matrix			Coastal Prairie Redox Dark Surface (S7) (LR		
	Sulfide (A4)		Loamy Mucky			High Plains Depression		
	Layers (A5) (LRR F)		Loamy Gleyed			(LRR H outside of		
	k (A9) (LRR F,G,H)		Depleted Matri	ix (F3)		Reduced Vertic (F18)	·······	
	Below Dark Surface (A	11)	Redox Dark Su			Red Parent Material (1	TF2)	
_	k Surface (A12)		Depleted Dark			Very Shallow Dark Sur	face (TF12)	
	ck Mineral (S1)		Redox depress			Other (Explain in Rem	arks)	
	ucky Peat or Peat (S2)	•	High Plains De		•	<sup>3</sup> Indicators of hydrophytic v		
	ky Peat or Peat (S3) (L	rak r)	(MDGA 7Z	and 73 of LR	к п; —————	nydrology must be present,	unless disturbed or problemati	
	ayer (if present):							
Type:						Hydric Soil Present?	′es	
Depth (inch	hes):		<del></del>			Tryanc son Frescher	100	
Remarks:								
			•					
					<del></del>			
	y							
lydrology							· Iminimum of hua convicad	
• • •	rology Indicators:					Secondary Indicator	timinimon or two regared	
Wetland Hydi	rology Indicators: cators (minimum of	one required;	check all that app	oly)		Secondary Indicator  Surface Soil Crac		
Wetland Hydi	cators (minimum of	one required,	check all that app			Surface Soil Crac		
Wetland Hydi Primary Indic Surface W	cators (minimum of	one required;	Salt Crust (8			Surface Soil Crac	ks (86) ed Concave Surface (88)	
Wetland Hydi Primary Indic Surface W	cators (minimum of Vater (A1) er Table (A2)	one required;	Salt Crust (8	11) rtebrates (B13		Surface Soil Crac Sparsely Vegetal Drainage Pattern	ks (86) ed Concave Surface (88)	
Wetland Hydi Primary Indic Surface W	cators (minimum of Vater (A1) er Table (A2) n (A3)	one required;	Salt Crust (8 Aquatic Inve	11) rtebrates (B13	1)	Surface Soil Crac Sparsely Vegetal Drainage Pattern	ks (B6) ed Concave Surface (B8) as (B10) aberes on Living Roots (C3)	
Wetland Hydromary Indice Surface Well High Water Saturation Water Mail Sediment	cators (minimum of Vater (A1) er Table (A2) n (A3) irks (B1) Deposits (B2)	one required,	Salt Crust (8 Aquatic Inve	:11) rtebrates (B13 alfide Odor (C! Water Table (G	1)	Surface Soil Crac Sparsely Vegetal Drainage Pattern Oxidized Rhizosi (where ttlli	ks (B6) ed Concave Surface (B8) as (B10) sheres on Living Roots (C3) ed)	
Wetland Hydromary Indice Surface William High Water Saturation Water Mai Sediment Drift depo	cators (minimum of Vater (A1) er Table (A2) n (A3) erks (B1) Deposits (B2) osits (B3)	one required,	Salt Crust (8 Aquatic Inve Hydrogen St Dry Season 1 Oxidized Rhi	:11) rtebrates (B13 alfide Odor (C! Water Table (G	1) <sup>22</sup> )	Surface Soil Crac Sparsely Vegetal Drainage Pattern Oxidized Rhizosp (where till) Crayfish Burrows	ks (B6) ed Concave Surface (B8) is (B10) sheres on Living Roots (C3) ed)	
Wetland Hydromary Indice Primary Indice Surface Welligh Water Saturation Water Mai Sediment Drift depo	cators (minimum of Vater (A1) er Table (A2) in (A3) erks (B1) Deposits (B2) osits (B3) or Crust (B4)	one required,	Salt Crust (B Aquatic Inve Hydrogen St Dry Season Oxidized Rhi (where	it1) rtebrates (B13 ilfide Odor (Ci Water Table (G izospheres on	I) [2] Living Roots (C3)	Surface Soil Crac Sparsely Vegetal Drainage Pattern Oxidized Rhizosp (where till) Crayfish Burrows	ks (B6) ed Concave Surface (B8) as (B10) sheres on Living Roots (C3) ed) c (C8) e on Aerial Imagery (C9)	
Wetland Hydromary Indice Surface William High Water Saturation Water Mai Sediment Drift depo	cators (minimum of Vater (A1) er Table (A2) in (A3) erks (B1) Deposits (B2) osits (B3) or Crust (B4)	one required,	Salt Crust (B Aquatic Inve Hydrogen St Dry Season Oxidized Rhi (where	rtebrates (B13 ulfide Odor (C! Water Table (C izospheres on not tilled) Reduced Iron	I) [2] Living Roots (C3)	Surface Soil Crac Sparsely Vegetal Drainage Pattern Oxidized Rhizosp (where till) Crayfish Burrows Saturation Visible	ks (B6) ed Concave Surface (B8) ss (B10) sheres on Living Roots (C3) ed) e (C8) e on Aerial Imagery (C9) tion (D2)	
Wetland Hydromary Indice   Surface Water Mail   Water Mail   Sediment   Drift depo	cators (minimum of Vater (A1) er Table (A2) in (A3) erks (B1) Deposits (B2) osits (B3) or Crust (B4)		Salt Crust (8 Aquatic Inve Hydrogen St Dry Season 1 Oxidized Rhi (where Presence of	rtebrates (B13 ulfide Odor (C! Water Table (C izospheres on not tilled) Reduced Iron	1) (C2) Living Roots (C3)	Surface Soil Crac Sparsely Vegetal Drainage Pattern Oxidized Rhizosp (where till) Crayfish Burrows Saturation Visible Geomorphic Pos	ks (B6) ed Concave Surface (B8) ss (B10) sheres on Living Roots (C3) ed) e (C8) e on Aerial Imagery (C9) tion (D2)	
Wetland Hydromary Indice Primary Indice Surface Welligh Water Saturation Water Mai Sediment Drift depo Algal Mat Iron Depo Inundatio	cators (minimum of Vater (A1) er Table (A2) in (A3) inks (B1) Deposits (B2) osits (B3) or Crust (B4) osits (B5)		Salt Crust (8 Aquatic Inve Hydrogen St Dry Season 1 Oxidized Rhi (where Presence of	ntebrates (B13 difide Odor (C1 Water Table (C2 20spheres on not tilled) Reduced Iron curface (C7)	1) (C2) Living Roots (C3)	Surface Soil Crac Sparsely Vegetal Drainage Pattern Oxidized Rhizosp (where till) Crayfish Burrows Saturation Visible Geomorphic Pos	iks (B6) ed Concave Surface (B8) as (B10) aberes on Living Roots (C3) ed) a (C8) e on Aerial Imagery (C9) tion (D2)	
Wetland Hydromary Indice Surface Welling High Water Saturation Water Mai Sediment Drift depo Algal Mat Iron Depo Inundatio Water-Sta	cators (minimum of Vater (A1) er Table (A2) in (A3) irks (B1) Deposits (B2) Desits (B3) or Crust (B4) Desits (B5) on Visible on Aerial Imalained Leaves (B9) attions:	igery (87)	Salt Crust (8 Aquatic Inve Hydrogen St Dry Season 1 Oxidized Rhi (where Presence of	ntebrates (B13 difide Odor (C1 Water Table (C2 20spheres on not tilled) Reduced Iron curface (C7)	1) (C2) Living Roots (C3)	Surface Soil Crac Sparsely Vegetal Drainage Pattern Oxidized Rhizosp (where till) Crayfish Burrows Saturation Visible Geomorphic Pos	iks (B6) ed Concave Surface (B8) as (B10) aberes on Living Roots (C3) ed) f (C8) e on Aerial Imagery (C9) tion (D2)	
Wetland Hydromary Indice Primary Indice Surface Welligh Water Saturation Water Mai Sediment Drift depo Algal Mat Iron Depo Inundation Water-Sta Field Observa	cators (minimum of Vater (A1) er Table (A2) in (A3) irks (B1) Deposits (B2) Dists (B3) or Crust (B4) Dists (B5) Din Visible on Aerial Imagained Leaves (B9) attors:	igery (87)	Salt Crust (8 Aquatic Inve Hydrogen St Dry Season 1 Oxidized Rhi (where Presence of	rtebrates (B13 lifide Odor (Ci Water Table (Ci zospheres on not tilled) Reduced Iron urface (C7) in in Remarks	1) (C2) Living Roots (C3)	Surface Soil Crac Sparsely Vegetal Drainage Pattern Oxidized Rhizosp (where till) Crayfish Burrows Saturation Visible Geomorphic Pos	iks (B6)  ed Concave Surface (B8)  is (B10)  wheres on Living Roots (C3)  ed)  i (C8)  e on Aerial Imagery (C9)  tion (D2)  i (D5)	
Primary India Surface W High Water Water Mai Sediment Drift depo Algal Mat Iron Depo Inundatio.	cators (minimum of Vater (A1) er Table (A2) in (A3) inks (B1) Deposits (B2) posits (B3) or Crust (B4) posits (B5) in Visible on Aerial Imalained Leaves (B9) ations: Present? Yes	gery (87)	Salt Crust (8 Aquatic Inve Hydrogen Si Dry Season Oxidized Rhi (where Presence of Thin Muck S	ntebrates (B13 iffide Odor (C1 Water Table (C2 zospheres on not tilled) Reduced Iron urface (C7) in in Remarks hes):	t) (22) Living Roots (C3) (C4)	Surface Soil Crac Sparsely Vegetal Drainage Pattern Oxidized Rhizosp (where till) Crayfish Burrows Saturation Visible Geomorphic Pos	iks (B6)  ed Concave Surface (B8)  is (B10)  wheres on Living Roots (C3)  ed)  i (C8)  e on Aerial Imagery (C9)  tion (D2)  i (D5)	

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

Remarks:

Project/Site: Alpha Bartonville FM 407	•	City/	County: Bartonville	/ Denton Samp	oling Date: <u>07-Sep-21</u>				
pplicant/Owner:		:	State	T1P10					
			ction, Township, Ra						
Landform (hillslope, terrace, etc.):			cal relief (concave,	convex, none): flat	Slope: 1.0 % / 0.6				
subregion (LRR): LRR J		Lat.: 33.099	645	Long.: -97.131498	Datum: NAD83				
oil Map Unit Name: Wilson clay loan		***********	· ··· · · · · · · · · · · · · · · · ·		none				
e climatic/hydrologic conditions on			Yes 💿 No 🤇						
Are Vegetation, Soil	, or Hydrologγ			iormal Circumstances" present?					
Are Vegetation . Soil	, or Hydrology			eded, explain any answers in Rer					
· · · · · · · · · · · · · · · · · · ·			•		,				
Summary of Findings - A		showing samp	oling point loc	ations, transects, impo	rtant features, etc.				
Hydrophytic Vegetation Present?	Yes O No 🛈		Is the Sampled A	Area					
Hydric Soil Present?	Yes O No 🛈		within a Wetland? Yes O No						
Wetland Hydrology Present?	Yes O No 🕞		MILL E FFC BIK						
Remarks:				• •					
			•	: '					
VEGETATION - Use scien	tific names of	niante Do	minant FWS Re	gion: GP					
		Sp	ecies? ————————————————————————————————————		<del> </del>				
Tree Stratum (Plot size:	}}	% Cover Co		Number of Dominant Species					
1		<u> </u>	· · · · · · · · · · · · · · · · · · ·	That are OBL, FACW, or FAC:	1(A)				
2			·	· Total Number of Dominant					
3.				Species Across All Strata:					
4			•	Dozensk of dominant Consiss					
Sapling/Shrub Stratum (Plot size:	1	=	Total Cover	Percent of dominant Species That Are OBL, FACW, or FAC:	50.0%(A/8)				
	•	٥ 🗆							
1 2				Prevalence Index worksheet:	4 Jez-1., t.,,				
3		<del></del>	<del></del>		fultiply by:				
4.				}	. 2 = 0				
5.				1	(3 = <u>150</u>				
	•	<u> </u>	Total Cover		200				
Herb Stratum (Plot size: 5 ft	)	_			(5 = <u>0</u>				
1. Cynodon dactylon				or a specifical services	(A) <u>350</u> (B)				
2- Paspalum dilatatum 3.			50.0% FAC						
Δ			0.0%	Prevalence Index = B/A =	3.5				
5.			0.0%	Hydrophytic Vegetation Indica	ors:				
6.	,	<u> </u>	0.0%	1 - Rapid Test for Hydroph	ytic Vegetation				
7.			0.0%	2 - Dominance Test Is > 5	)%				
8.			0.0%	3 - Prevalence Index is ≤3	.0 <sup>1</sup>				
9. 10.			0.0%	4 - Morphological Adaptati	ons <sup>1</sup> (Provide supporting				
***			0.0%	data in Remarks or on a  Problematic Hydrophytic V					
IAL		100 =	Total Cover						
Woody Vine Stratum (Plot size:				Indicators of hydric soil and be present.	wetland hydrology must				
1 2.			<del></del>						
۷			·	Hydrophytic					
		0 ≃	Total Cover						
% Bare Smund in Hark Stratum	0	<del></del>		Vegetation Vec () No.	( <b>a</b> )				
% Bare Ground in Herb Stratum	0			Present? Yes No	<u> </u>				
% Bare Ground in Herb Stratum Remarks:	.0				<u> </u>				

Soil									Sampling Point: T1P10
Profile Desc	ription: (Descri	be to the	depth nee	ded to	document	the indi	cator or co	onfirm the	absence of indicators.)
Depth		strix			Red	ox Feat		•	<b>→</b>
(inches)	Color (mo		<u>%</u>	Color (		<u>•/o</u>	.Type.1	Loc2	Texture Remarks
0.16	10YR	4/3	98	10YR	6/8	2	c	M	Silty Clay
	<del></del>	<del></del>							·
			· ·			·			
			<u> </u>						•
<del></del>		<del></del>	— –			-			<del>-</del>
	<del></del>								<u> </u>
					<del></del>	<u></u>	<u></u>		<u> </u>
1Type: C≂Co	ncentration. D=0	Depletion. R	M=Reduced	1 Matrix,	CS#Covere	ed or Coat	ed Sand Gr	ains ²Łoc	ation: PL=Pore Lining, M=Matrix
Hydric Soil	Indicators: (A	pplicable t	o all LRRs	, unless	otherwis	e noted.	)		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (	• •			_	ndy Gleyed				1 cm Muck (A9) (LRR I, J)
	ipedon (A2)			_	ndy Redox ( ipped Matri				Coastal Prairie Redox (A16) (LRR F, G, H)
Black His	n Sulfide (A4)			=	my Mucky		31		☐ Dark Surface (S7) (URR G) ☐ High Plains Depressions (F16)
	Layers (A5) (LRF	₹ <b>F</b> )		_	my Gleyed	-	•		(LRR H outside of MLRA 72 and 73)
_	ck (A9) (LRR F,G,	-		De De	pleted Matr	ix (F3)			Reduced Vertic (F18)
_	Selow Dark Surf.	ace (Ali)		_	łox Dark Su	•	•		Red Parent Material (TF2)
	rk Surface (A12)				pleted Dark				Very Shallow Dark Surface (TF12)
-	uck Mineral (S1) lucky Peat or Pea	►/C2\ (( DD	C 11)	_	iox depress In Plains De				Other (Explain in Remarks)
	cky Peat or Peat (	- • •	-		(MLRA 72				<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
	•								ayoungy most of present uness distribes of prosentation
Type:	ayer (if presen	ıc).							
I '' -	thes):	<del></del> -						•	Hydric Soil Present? Yes O No 💿
Remarks:	<u> </u>		***						
	<del> </del>								
Hydrolog	У								
Wetland Hyd	drology Indicat	ors:							Secondary Indicators (minimum of two required)
	licators (minim	um of one	required;				<del>~~~</del>		
l ~	Water (A1)			_	alt Crust (B	-			Sparsely Vegetated Concave Surface (B8)
== =	ter Table (A2)			_	quatic Inve		-		Drainage Patterns (B10)
Saturatio	•			_	lydrogen Si		• /		Oxidized Rhizospheres on Living Roots (C3)
	arks (81) et Deposits (82)			_	ry Season		oie (CZ) s on Living :	Dante (C3)	(where tilled)
_	osits (B3)			υ,		not tilled	•	10003 (03)	Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
	it or Crust (B4)			Пе	resence of		•		Geomorphic Position (D2)
	osits (B5)				hin Muck S			•	FAC-neutral Test (D5)
Inundati	ion Visible on Aer	iai Imagery	(87)	_	Other (Expla	-			Frost Heave Hummocks (D7) (LRR F)
☐ Water•S	tained Leaves (BS	€)			• •		•		
Field Observ	rations:								
Surface Water		Yes 🔾	No 🕥		Depth (inc	hes):	0		
Water Table 9	Present?	Yes O	No 💿		Depth (inc	hec):	0	_	
Saturation Pro		Yes O	No 💿			· -	0	−   Wet	dand Hydrology Present? Yes 🔾 No 🖲
(includes capi					Depth (inc			<u> </u>	
Describe Re	corded Data (s	tream qau	qe, moniti	or well,	aerial pho	otos, pre	vious insp	ections}, i	Lavaliable:
Domaster									
Remarks:									

Depression			Sect	tion, Tov	vnship, Ra	· · · · · · · · · · · · · · · · · · ·
Depression			Sect	tion, Tov		nge: S T R
Depression				1 -nline f		· · · · · · · · · · · · · · · · · · ·
				n resser (	concave, c	convex, none): concave Slope: 1.0 % / 0.6
		 Lat.: 33.	1014	108		Long.: -97.132524 Datum: NAD83
sandy loam, 1						NWI classification: none
			,	Yes	⊙ No C	
					Are "N	ormal Circumstances" present? Yes   No
-	- · · <u>-</u>					
, or nyu	TOIDGY [	пасигану рго	olema	atic?	(11 nee	ded, explain any answers in Remarks.)
ttach sit	e map sh	owing sa	mpl	ling po	oint loca	ations, transects, important features, etc
Yes O	No 💿		Ī	To the	famulad &	
Yes 🔾	No 💿		.		•	•
Yes 👁	No O			, within	a Wetland	7 16 0 100
,			_			
atific nar	noc of ni	ante	Don	ninant	FWS Res	gion: GP
TCITIC HOT	nes or pr	<del>:</del>	_Spe	cies? _		
}						Dominance Test worksheet:
						Number of Dominant Species That are OBL, FACW, or FAC:1(A)
			$\Box_{-}$			Total Number of Dominant
		:	<u></u>			Species Across All Strata:2(8)
						Dozansk of dominant Coorden
	1	0	<b>≃</b> 1	Total Co	er	Percent of dominant Species That Are OBL, FACW, or FAC:
		٥				
		_	$\Box$	<del></del>		Prevalence Index worksheet:
				<del></del>		0BL species 0 x 1 = 0
						FACW species 20 x 2 = 40
						FAC species 0 x 3 - 0
		0	= 1	Total Co	ver	FACU species 10 x 4 - 40
}}						UPL species0 x 5 =0
	<del></del>					Column Totals: <u>30</u> (A) <u>80</u> (B)
		<del></del>	<u> </u>		PACO	Prevalence Index = B/A = 2.667
		<u> </u>		0.0%	<del></del>	Hydrophytic Vegetation Indicators:
				0.0%		
		<u> </u>	$\square$	0.0%		1 - Rapid Test for Hydrophytic Vegetation
			片	<del></del>		2 - Dominance Test is > 50%  ✓ 3 - Prevalence Index is ≤ 3.01
			H-			
			$\Box$	0.0%		4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
		30	= 1	Total Co	ver	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
:	}	<del></del>				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
		0 .				be present.
		0	=	Total Co	ver	Hydrophytic
						Vegetation Present? Yes O No 🗩
0						Present? Yes O NO G
0						Present? Tes O NO O
0	<u> </u>					Present? 165 0 NO 0
	, or Hyd , or Hyd  Attach sit  Yes O Yes O  Yes O  Yes O	, or Hydrology   , or Hydrology   Attach site map shapes   Yes  No   Yes  No   Yes  No   Yes  No    The state of place    The state	, or Hydrology  significantly of the provided stack site map showing sate of the provided stack site of	, or Hydrology  significantly disture of Hydrology  naturally problem naturally prob	, or Hydrology	, or Hydrology ☐ naturally problematic? (If nee Attach site map showing sampling point loc  Yes ☐ No ⑥

<sup>\*</sup>Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil							Sampling Point: T2P0
Profile Descripti	on: (Describe to th	e depth need	led to document	the indicate	or or conf	firm the a	absence of Indicators.)
Depth	<u>Matrix</u>		Red	ox Features			
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u> _1	ype !	Loc2	Texture Remarks
0-16	10YR 4/2	99 7.	5YR 4/6	1	С	M	Silty Clay
				,			
<del></del>			<del></del>		<del></del>	·····	<u> </u>
<i>-</i> -		<del></del>	<del></del>		<del></del>		
<b> </b>					<del></del>		
			<u> </u>			·	
	,						
			<del></del> <del></del>				
1Tues: 6-51155	- D-Donlotion	DM-Dadward	Matrix CC-Covers	d an Cooked (	Cond Cools	- 31 n m t	tion: PL=Pore Lining. M=Matrix
					Sano Grain	5 -LDC8	
Histosof (A1)	cators: (Applicable	to all LKKS,	□ Sandy Gleyed I	_			Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosof (A1)	na (A2)		Sandy Redox (				1 cm Muck (A9) (LRR I, J) Coastal Prairie Redox (A16) (LRR F, G, H)
Black Histic (#	• •		Stripped Matrix				Dark Surface (S7) (URR G)
Hydrogen Sult	•		Loamy Mucky I				High Plains Depressions (F16)
· — ·	ers (AS) (LRR F)		Loamy Gleyed	Matrix (F2)			(LRR H outside of MLRA 72 and 73)
1 🚍	9) (LRR F,G,H)		Depleted Matri				Reduced Vertic (F18)
	w Dark Surface (A11)		Redox Dark Su	· · · · ·			Red Parent Material (TF2)
Thick Dark Su			□ Depleted Dark     □ Redox depress				Very Shallow Dark Surface (TF12)
Sandy Muck M	nineral (S1) Peat or Peat (S2) (LR	o G H)	☐ Redox depress ☐ High Plains De	• ,	6)		U Other (Explain in Remarks)
I <del></del>	Peat or Peat (53) (LRR			and 73 of Li			<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
	- , ,	••,	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	UIA 75 01 B		•	hydrology mass or present, uness distribed of problematic.
Restrictive Layer	r (ir present):	•					
Type:		<del></del>	······································	·····			Hydric Soil Present? Yes No 💿
Depth (inches)	!: <u></u>	<del></del>	<del>-</del>			<del></del>	165 0 116 0
Remarks:							
Hydrology							
	·				<del> </del>	<del></del>	······································
Wetland Hydrold							Secondary Indicators (minimum of two required)
l'—	ors (minimum of or	<u>ie required; c</u>					Surface Soil Cracks (B6)
Surface Wate	, ,		Salt Crust (B	-			Sparsely Vegetated Concave Surface (B8)
High Water T	` -		_	rtebrates (BI			☐ Orainage Patterns (810)
Saturation (A	•		= '.'	iffide Odor (C	•		Oxidized Rhizospheres on Living Roots (C3)
Water Marks			Dry Season 1		-	-L- (CT)	(where tilled)
Sediment De			Oxidized Rhi	•	Cyling Kol	ots (C3)	Crayfish Burrows (C8)
Drift deposits			· —	not tilled)	ton		Saturation Visible on Aerial Imagery (C9)
Algal Mat or •	• •		Presence of I		(C4)	•	Geomorphic Position (DZ)
l 🚍	- •		Thin Muck S		_		FAC-neutral Test (D5)
l —	isible on Aerial Image	ry (B7)	U Other (Expla	in In Remarks	5)		Frost Heave Hummocks (D7) (LRR F)
☐ Water-Staine	d Leaves (89)						
Field Observatio		6					
Surface Water Pre-	sent? Yes	No 🕞	Depth (inc	hes):	0		
Water Table Prese	nt? Yes C	No 📵	Depth (ind	hes):	0		
Saturation Present	YAC	No 💿	Depth (ind	hes).	0	Wetta	ınd Hydrology Present? Yes    No ○
(includes capillary	itinge/				<del></del>	<u>.                                    </u>	
Describe Record	ied Data (stream ga	auge, monito	r well, aerial pho	tos, previou	is_inspect	ions), if	available:
<u></u>							· · · · · · · · · · · · · · · · · · ·
Remarks:							
1							

Sampling Date: 07-Sep-21
opling Point: T2P1
YR
Slope: 1.0 % / 0.6
Datum: NAD83
ssification: none
in Remarks.)
s" present? Yes 💿 No 🔾
swers in Remarks.)
cts, important features, etc
cts, important reatures, etc
<del>*************************************</del>
• .
orksheet:
Species , or FAC: 1 (A)
ninant rata: 1 (B)
nt Species W, or FAC: 100.0% (A/B)
vorksheet:
er of; Multiply by;
0 x 1 = 0
10 x 4 = 40
0 x s = 0
iex = B/A = 3.1
ation Indicators:
for Hydrophytic Vegetation
Test is > 50%
Index is ≤3.0 1
ical Adaptations <sup>I</sup> (Provide supporting arks or on a separate sheet)
ydrophytic Vegetation <sup>1</sup> (Explain)
dric soil and wetland hydrology must
es 💿 No 🔘
•
e -

e absence of indicators.)  Texture Remarks
Texture Remarks
Texture Remarks
Silt
<u> </u>
* ************************************
-
_ '
antina Bi-Bara Data Makasta
cation: PL=Pore Uning, M=Matrix
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)
<sup>3</sup> Indicators of hydrophytic vegetation and wetland
hydrology must be present, unless disturbed or problemati
1
Hydric Soil Present? Yes No 🖲
<u> </u>
·
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 (DZ)
FAC-neutral Test (D5)
Frost Heave Hummocks (D7) (LRR F)
dand Hydrology Present? Yes O No 💿
tland Hydrology Present? Yes O No 🖭
tland Hydrology Present? Yes O No 💿

Project/Site: Alpha Bartonville FM 407	•		(	City/County: Bartony	ille / Denton Samp	ling Date: 07-Sep-21
pplicant/Owner:				Sta	ate: <u>Texas</u> Sampling Point:	T3P1
			<del></del>	Section, Township,	Range: S T	R
Landform (hillstope, terrace, etc.):				Local relief (concav	e, convex, none): flat	Slope: 1.0 % / 0.6
ubregion (LRR): LRR )			Lat: 33	.101893	Long.: -97.135235	Datum: NAD83
oil Map Unit Name: Silstid loamy fine					NWI classification:	none
e climatic/hydrologic conditions or					<del>-</del>	
Are Vegetation, Soil			significantly		"Normal Circumstances" present?	Yes   ● No  ○
Are Vegetation . Soil		rology 🔲			needed, explain any answers in Ren	narks.)
					·	
			nowing sa	mpling point i	ocations, transects, impo	rtant reatures, etc
Hydrophytic Vegetation Present?	Yes O	No <b>⊙</b>		Is the Sample	d Area	
Hydric Soil Present?	Yes O	No ⊙		within a Weti	and? Yes O No 💿	
Wetland Hydrology Present?	Yes O	No 💿				
Remarks:		•				
VEGETATION - Use scien	tific nar	nes of p	lants		Region: GP	
		<del></del>	Absolute	_Species? Ref.Strat. Indicat	tor Dominance Test worksheet:	
<u>Tree Stratum</u> (Plot size: 30 ft	}}		.% Cover	Cover Status		
				100.0% UPL		(A)
2				0.0%	Total Number of Dominant	
4.				0.0%	→ Species Across All Strata:	<u>3</u> (B)
			<u>. 0</u> . 55	□ Total Cover	Percent of dominant Species	
Sapling/Shrub Stratum (Plot size:		)	33	- Ittal Cover	That Are OBL, FACW, or FAC:	0.0% (A/B)
1		·		□	Prevalence Index worksheet:	
2				□	Total % Cover of: M	lultiply by:
3	<del></del>			<u></u>	OBL species <u>O</u> x	1 - 0
4. 5.				<u> </u>	FACW species0 x	2 =0
V			<del>0</del>	□ Total Cover	· · · — —	3 - 0
Herb Stratum (Plot size: 5 ft	}			- Total Core		4 = 100
1. Rubus trivialis			10	☑ 100.0% FACU	UPL speciesx	: 5 <u>275</u>
2.				0.0%	Column Totals: 80 (	(A) <u>375</u> (B)
3				0.0%	Prevalence Index = B/A =	4.688
4. 5.				0.0%	Hydrophytic Vegetation Indicat	ors:
6.				0.0%	1 - Rapid Test for Hydrophy	etic Vegetation
7.			0	0.0%	2 - Dominance Test is > 50	•
8.				0.0%	☐ 3 - Prevalence Index is ≤3.	
9.				0.0%	4 - Morphological Adaptatio	ons <sup>1</sup> (Provide supporting
10.					_ data in Remarks or on a s	•
			10	= Total Cover	Problematic Hydrophytic V	egetation (Explain)
					I Indicators of hydric soil and	wetland hydrology must
Woody Vine Stratum (Plot size:	30 ft	,		_	be present.	
1 Smilax bona-nox	30 ft	}	15	☑ 100.0% FACU	be present.	
· · · · · · · · · · · · · · · · · · ·	30 ft	}	0	0.0%	_	<u>,                                      </u>
1. Smilax bona-nox 2.					Hydrophytic	
1. Smilax bona-nox	30 ft			0.0%	- Hydrophytic	•

Soil	٠				•		Sampling Poin	t: T3P1
Profile Description:	(Describe to t	he depth n	eeded to document	the ind	icator or co	ifirm the	absence of indicators.)	
Depth	Matrix			ox Feat		<del></del>	,	
	or (moist)_	_%	Color (moist)	<u>%</u>	_Type_1	Tocs	Texture	Remarks
0-16 10YF	4/3	100			<del></del>		Fine Silty Loam	
<u> </u>								-
							<del></del>	
<del> </del>					- <del></del>		· · · · · · · · · · · · · · · · · · ·	<del></del>
	<del></del>	<del></del>	· · · · · · · · · · · · · · · · · · ·				<del></del>	<del></del>
	<del></del>		<del></del> -			···		
				·			·	
	<del>,-</del>				<del></del>			····
*Type: C=Concentratio	n D-Donletion	DM=Dadu	cad Matrix CS=Couper	od on Cool	end Sand Cm	- · ·	ation: PL=Pore Lining, M=Matri	
Hydric Soll Indicato			~~~~~			115 *110(2		
Histosol (A1)	із: (Аррисан	e wan LR	Sandy Gleyed		•		Indicators for Problems	•
Histic Epipedon (A	2)		Sandy Redox (				1 cm Muck (A9) (LRR Coastal Prairie Redox	
Black Histic (A3)	•		Stripped Matrix				Dark Surface (S7) (LF	
Hydrogen Sulfide (	A4)		Loamy Mucky I	Mineral (f	1)		☐ High Plains Depressio	
Stratified Layers (A			Loamy Gleyed	•	2)			MLRA 72 and 73)
1 cm Muck (A9) (L			Depleted Matri				Reduced Vertic (F18)	
Depleted Below Da  Thick Dark Surface	•	<b>:</b> }	Redox Dark Su				Red Parent Material (	FF2)
Sandy Muck Minera			Depleted Dark Redox depress				Very Shallow Dark Su	` '
2.5 cm Mucky Peat	- /	BR G. H)	High Plains De				U Other (Explain in Ren	•
S on Mucky Peat of			(MLRA 72				<sup>3</sup> Indicators of hydrophytic	vegetation and wetland , unless disturbed or problematic.
		,					Tryatology most be present	, orness disturbed or problematic.
Restrictive Layer (if: Type:	presenty.							
Depth (inches):	·····		******				Hydric Soil Present?	Yes O No 💿
Remarks:	<del>"</del>		<del></del>				1	
ACHIOLAS.								
Hydrology	-12			-	· ···		<del></del>	*** 1.5.
	· · ·						<del></del>	
Wetland Hydrology 1		-					Secondary Indicator	s (minimum of two required)
Primary Indicators (		ne required	i; check all that app	íy)			Surface Soil Cra	cks (B6)
Surface Water (A1			Salt Crust (B				Sparsely Vegeta	ted Concave Surface (B8)
High Water Table	(A2)		Aquatic Inve				Drainage Patter	- •
Saturation (A3)			Hydrogen Su				Oxidized Rhizos	pheres on Living Roots (C3)
Water Marks (81)			Dry Season V		- •		(where till	ed)
Sediment Deposits			Oxodized Rhi		_	oots (C3)	Crayfish Burrow	• •
☐ Drift deposits (B3)			_ `	not tilled	-		_	e on Aerial Imagery (C9)
Algal Mat or Crust			Presence of I				Geomorphic Pos	• •
Iron Deposits (85)			Thin Muck Si				FAC-neutral Tes	· ·
Inundation Visible		ery (B7)	U Other (Explai	in in Rem	arks)		Frost Heave Hui	nmocks (D7) (LRR F)
Water-Stained Lea	ves (B9)					,		
Field Observations:	/	<b>.</b>				1		
Surface Water Present?	Yes (		Depth (inc	1es):	0	. 1		
Water Table Present?	Yes (	) No €	Depth (incl	nes):	0			
Saturation Present?	, Yes	O No €			0	Wetla	and Hydrology Present?	Yes O No 👁
(includes capillary fring	) 165	- 40 G	Depth (incr	<sub>тем</sub> —				

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

Remarks:

Project/Site: Aipha Bartonville FM 407	· <u>-</u>	(	City/County: Barton	nville / Denton	Samp	fing Date: 07-Sep-21
Applicant/Owner:	· · · · · · · · · · · · · · · · · · ·			State: Texas	Sampling Point:	•
			Section, Townshi	<del></del>	_	R
Landform (hillslope, terrace, etc.):			Local relief (conc	ave, convex, none	): concave	Slope: 1.0 % / 0.6
Subregion (LRR): [RR]		Lat.: 33,	.100036	Long.: -97.	.135090	Datum: NAD83
oil Map Unit Name: Wilson clay loan					NWI classification: [	<del></del>
e climatic/hydrologic conditions on					explain in Remarks.	
Are Vegetation . , Soil	, or Hydrology 🔲 🥫	significantly	disturbed? A	re "Normal Circum	stances" present?	Yes   No
Are Vegetation . , Soil .	, or Hydrology 🔲 1	naturally pro			any answers in Ren	
Summary of Findings - A			·			
Hydrophytic Vegetation Present?	Yes  No  O	Owing sa	mpmig pome	Totalions, tr	- misecus, mipo	tant leatures, etc.
Hydric Soil Present?	Yes ® No O		Is the Samp			
	Yes  No  O		within a We	<sub>itland?</sub> Yes 💿 I	No O	
Wetland Hydrology Present?  Remarks:	TES © NO C			. <u>.</u>		<del> </del>
			·		<del>-</del> · · · · · · · · · · · · · · · · · · ·	<del></del>
VEGETATION - Use scien	tific names of pla	ints	Dominant FW: -Species?	S Region: GP		
Tree Stratum (Plot size:			Rel.Strat. Indic		Test worksheet:	
1		<u>% Cover</u> 0	Cover State	Number of D	ominant Species	
2			H	That are OBL	, FACW, or FAC:	1(A)
3.		_			or of Dominant	4 (0)
4.		0		Species Acros	S All Strata:	
		0	= Total Cover	Percent of a	dominant Species	100.0% (A/B)
Sapling/Shrub Stratum (Plot size:			_	That Are Or	BL, FACW, or FAC:	
1			님	1	Index worksheet:	
2 3		0	片	I		ultiply by:
4			H	OBL specie		1 - 0
5		0		FACW speci	<del></del>	2 =160
			= Total Cover	FAC specie		3 - <u>0</u>
Herb Stratum (Plot size: 5 ft	)			FACU speci		,
1. Echinochloa colona	·	80	☑ 100.0% FACV	VPL specie		,
2. 3.			0.0%			A) <u>160</u> (B)
4.		<u> </u>	0.0%	Prevale	ence Index = B/A =	2
5.	·	- 0	0.0%	- Hydrophytic	: Vegetation Indicate	ors:
6.		0	0.0%	🗹 🗹 1 - Rapi	id Test for Hydrophy	tic Vegetation
7.			0.0%	🗹 🗹 2 - рол	ninance Test is > 50	%o
8.			0.0%	🗹 3 - Prev	valence Index is ≤3.	o <sup>1</sup>
10.			0.0%		phological Adaptation In Remarks or on a s	ons <sup>1</sup> (Provide supporting
		<u> </u>	= Total Cover	— I <u> </u>	natic Hydrophytic Ve	
Woody Vine Stratum (Plot size:	· .		= 70an cover	1 -		wetland hydrology must
1	,	a		be present.		wedand nydrology must
2.	<del></del>	0 .	<u> П</u>	_ [		
<del></del>	· · ·		= Total Cover	—   Hydrophyti		
% Bare Ground in Herb Stratum	20			Vegetation Present?		0
Remarks:	<del></del>		<del></del>	11036141		
				•		

<sup>\*</sup>Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil	

Sampling Point: Y3P2

Depth .	Color (n	Matrix	5/-	Colem	Redo				Taratura -
inches) 0-16	10YR	4/2	_% 95	7.5YR	(moist) 6/6	- <u>-%</u> - 5	_Type_1	<u>loc²</u> ,	Texture Remarks
		<del></del>		7,31K			<u>c</u>	M and PL	Silty Clay
						<del>- · · · · ·</del>	<del></del>		
		,			<del></del> .				
		<del></del>					<del></del>		
<del></del> -		<del></del>				•	<del></del>		
·			<del></del>			<del></del>			
							d Sand Gra	ins ²Loca	ition: PL=Pore Lining. M=Matrix
		Applicabl	e to all LR	Rs, unies	s otherwise	noted.)			Indicators for Problematic Hydric Soils 3:
Histosol (A	,			_	ndy Gleyed M				1 cm Muck (A9) (LRR I, J)
Histic Epipe					ndy Redox (5				Coastal Prairie Redox (A16) (LRR F, G, H)
Black Histor					ripped Matrix				Dark Surface (S7) (LRR G)
	Sulfide (A4)	· ·		_	amy Mucky M	-	-		High Plains Depressions (F16)
	ayers (A5) (L (A9) (LRR F,				amy Gleyed I		)		(LRR H outside of MLRA 72 and 73)
	(M9) (LRR P, Jelow Dark St				pleted Matrix				Reduced Vertic (F18)
-	Surface (A12	•	,	_	dox Dark Sur pleted Dark !		71		Red Parent Material (TF2)
	k Mineral (S1			_	dox depressi	•	′′		☐ Very Shallow Dark Surface (TF12)
	dky Peat or P		RR G. HY		gh Plains Dep		F16\		Other (Explain in Remarks)
	y Peat or Pea			٠	(MLRA 72 a				<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problems
<del>laieti</del> va La									· · · · · · · · · · · · · · · · · · ·
AILUYG LO	yer (if pres	ent):							
	yer (if pres	•							
Type: Depth (inch		ent):			<del></del> -		<u></u>		Hydric Soil Present? Yes • No O
Type: Depth (inch		•							Hydric Soil Present? Yes • No O
Туре:		•		·	<u>-</u>				Hydric Soil Present? Yes  No O
Type: Depth (inch		•		·	······································				Hydric Soil Present? Yes  No
Type: Depth (inch		•		·	· · · · · · · · · · · · · · · · · · ·				Hydric Soil Present? Yes  No
Type: Depth (inche marks:	es):	•		·					Hydric Soil Present? Yes  No
Type:	ප):								
Type:	es):	ators:							Secondary Indicators (minimum of two require
Type:	es): ology Indic ators (minit	ators:			all that appl				Secondary Indicators (minimum of two require  Surface Soil Cracks (86)
Type:	ology Indic ators (mininater (A1)	ators:			Salt Crust (B1	1)			Secondary Indicators (minimum of two require
Type:	ology Indic ators (minin ater (A1) r Table (A2)	ators:			Salt Crust (B1 Aquatic Inver	1) tebrates (E			Secondary Indicators (minimum of two require  Surface Soil Cracks (86)  Sparsely Vegetated Concave Surface (88)  Drainage Patterns (810)
Type:	ology Indic ators (minimater (A1) r Table (A2)	ators:			Salt Crust (B1 Aquatic Inverl Hydrogen Sul	1) tebrates (I fide Odor	(C1)		Secondary Indicators (minimum of two require  Surface Soil Cracks (86)  Sparsely Vegetated Concave Surface (88)
Type:	ology Indic ators (mininater (A1) r Table (A2) (A3) ks (B1)	ators:			Salt Crust (B1 Aquatic Inver Hydrogen Sul Dry Season W	1) tebrates (E fide Odor /ater Table	(C1) e (C2)		Secondary Indicators (minimum of two require  Surface Soil Cracks (86)  Sparsely Vegetated Concave Surface (88)  Drainage Patterns (810)
Irology Idand Hydri mary Indic Surface Wate Saturation Water Mari Sediment i	ology Indic ators (minimater (A1) r Table (A2) (A3) ks (B1) Deposits (B2)	ators:			Salt Crust (B1 Aquatic Inverl Hydrogen Sul	1) tebrates (E fide Odor /ater Table	(C1) e (C2)		Secondary Indicators (minimum of two require  Surface Soil Cracks (86)  Sparsely Vegetated Concave Surface (88)  Drainage Patterns (810)  Oxidized Rhizospheres on Living Roots (C3)
Type:	ology Indic ators (minimater (A1) r Table (A2) (A3) ks (B1) Deposits (B2)	ators:			Salt Crust (B1 Aquatic Inver Hydrogen Sul Dry Season W	1) tebrates (E fide Odor I /ater Table ospheres (	(C1) e (C2)	.oots (C3)	Secondary Indicators (minimum of two require  Surface Soil Cracks (86)  Sparsely Vegetated Concave Surface (88)  Drainage Patterns (810)  Oxidized Rhizospheres on Living Roots (C3)  (where tilled)
Type:	ology Indic ators (minimater (A1) r Table (A2) (A3) ks (B1) Deposits (B2)	ators: num of o			Salt Crust (81 Aquatic Inven Hydrogen Sul Dry Season W Dxidized Rhiz	tebrates (E fide Odor later Table ospheres o ot tilled)	(C1) e (C2) on Living F	ioots (C3)	Secondary Indicators (minimum of two require  ✓ Surface Soil Cracks (86)  ☐ Sparsely Vegetated Concave Surface (88)  ☐ Drainage Patterns (810)  ☐ Oxidized Rhizospheres on Living Roots (C3)  (where tilled)  ☐ Crayfish Burrows (C8)
Type:	ology Indic ators (minin ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4)	ators: num of o			Salt Crust (B1 Aquatic Inven Hydrogen Sul Dry Season W Dxidized Rhiz (where n	tebrates (Fifde Odor Vater Table ospheres of tilled)	(C1) e (C2) on Living F on (C4)	loots (C3)	Secondary Indicators (minimum of two require  Surface Soil Cracks (86)  Sparsely Vegetated Concave Surface (88)  Drainage Patterns (810)  Oxidized Rhizospheres on Living Roots (C3)  (where tilled)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)
Type:	ology Indic ators (minit ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5)	ators: num of o	ne required		Salt Crust (B1 Aquatic Invert Hydrogen Sul Dry Season W Dxidized Rhiz (where n Presence of R Thin Muck Su	tebrates (E fide Odor later Table ospheres o ot tilled) deduced In-	(C1) e (C2) on Living F on (C4)	loots (C3)	Secondary Indicators (minimum of two require  Surface Soil Cracks (86)  Sparsely Vegetated Concave Surface (88)  Drainage Patterns (810)  Oxidized Rhizospheres on Living Roots (C3)  (where tilled)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  FAC-neutral Test (D5)
Irology dand Hydromary Indic Surface Water Mart Sediment if Drift depose Algai Mat of Iron Depose Inundation	ology Indicators (minimater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) a Visible on A	ators: rum of o	ne required		Salt Crust (B) Aquatic Inventydrogen Sul Dry Season W Dxidized Rhiz (where n Presence of R	tebrates (E fide Odor later Table ospheres o ot tilled) deduced In-	(C1) e (C2) on Living F on (C4)	coots (C3)	Secondary Indicators (minimum of two require  Surface Soil Cracks (86)  Sparsely Vegetated Concave Surface (88)  Drainage Patterns (810)  Oxidized Rhizospheres on Living Roots (C3)  (where tilled)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)
Type:	ology Indicators (minimater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) or Visible on A ined Leaves (	ators: rum of o	ne required		Salt Crust (Bi Aquatic Invert Hydrogen Sul Dry Season W Dxidized Rhiz (where n Presence of R Thin Muck Su	tebrates (E fide Odor later Table ospheres o ot tilled) deduced In-	(C1) e (C2) on Living F on (C4)	200ts (C3)	Secondary Indicators (minimum of two require  Surface Soil Cracks (86)  Sparsely Vegetated Concave Surface (88)  Drainage Patterns (810)  Oxidized Rhizospheres on Living Roots (C3)  (where tilled)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  FAC-neutral Test (D5)
Type:	ology Indic ators (minimater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) o Visible on A ined Leaves (	ators: rum of o	ne required		Salt Crust (B1 Aquatic Inventlydrogen Sul Ory Season W Oxidized Rhiz (where n Presence of R Thin Muck Su Other (Explain	tebrates (Effide Odor l'ater Table ospheres o ot tilled) leduced Infrace (C7) n in Reman	(C1) e (C2) on Living F on (C4)	coots (C3)	Secondary Indicators (minimum of two require  Surface Soil Cracks (86)  Sparsely Vegetated Concave Surface (88)  Drainage Patterns (810)  Oxidized Rhizospheres on Living Roots (C3)  (where tilled)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  FAC-neutral Test (D5)
Irology dand Hydre mary Indic Surface Water Saturation Water Mari Sediment if Drift depos Algal Mat c Iron Depos Inundation Water-Stai d Observar	ology Indic ators (minimater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) o Visible on A ined Leaves (	ators: num of o erial Imag 89)	ne required		Salt Crust (Bi Aquatic Invert Hydrogen Sul Dry Season W Dxidized Rhiz (where n Presence of R Thin Muck Su	tebrates (Effide Odor l'ater Table ospheres o ot tilled) leduced Infrace (C7) n in Reman	(C1) e (C2) on Living F on (C4)	coots (C3)	Secondary Indicators (minimum of two require  Surface Soil Cracks (86)  Sparsely Vegetated Concave Surface (88)  Drainage Patterns (810)  Oxidized Rhizospheres on Living Roots (C3)  (where tilled)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  FAC-neutral Test (D5)
Type:	ology Indicators (minitators (minitators (minitators (minitator (A1))) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) or Visible on A ined Leaves ( tions: Present?	ators: rum of o	ne required		Salt Crust (B1 Aquatic Inventlydrogen Sul Ory Season W Oxidized Rhiz (where n Presence of R Thin Muck Su Other (Explain	tebrates (Effice Odor Vater Table ospheres of tilled) reduced Interface (C7) in in Remains.	(C1) e (C2) on Living F on (C4)	-	Secondary Indicators (minimum of two requires  Surface Soil Cracks (86)  Sparsely Vegetated Concave Surface (88)  Drainage Patterns (810)  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)
Type:	ology Indicators (minitators (minitators (minitators (minitator (A1))) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) or Visible on A ined Leaves ( tions: Present? esent?	ators: rum of o erial Imag 89) Yes (	ne required  Eny (B7)  No ©		Salt Crust (B1 Aquatic Invented Advisor Sulphy Aquatic Invented Advisor Sulphy Aquatic Invented Advisor Sulphy Aquatic Invented Advisor Invented In	tebrates (Fide Odor Vater Table ospheres of tilled) leduced Irriface (C7) in in Remailes):	(C1) e (C2) on Living F on (C4)	-	Secondary Indicators (minimum of two require  Surface Soil Cracks (86)  Sparsely Vegetated Concave Surface (88)  Drainage Patterns (810)  Oxidized Rhizospheres on Living Roots (C3)  (where tilled)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  FAC-neutral Test (D5)
Type:	ology Indic ators (minit ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) or Visible on A ined Leaves ( tions: Present? esent? ent? ent?	ators: num of o erial Imag 89) Yes ( Yes (	ne required  Property (B7)  No ②  No ③		Salt Crust (B1 Aquatic Invert Hydrogen Sul Dry Season W Dxidized Rhiz (where n Presence of R Thin Muck Su Dther (Explain Depth (inch Depth (inch	tebrates (Fifide Odor Vater Table ospheres of tilled) educed Irri rface (C7) in in Remailes):	(C1) e (C2) on Living F on (C4) rks)  0 0	- Wetla	Secondary Indicators (minimum of two require  Surface Soil Cracks (86)  Sparsely Vegetated Concave Surface (88)  Drainage Patterns (810)  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)
Type:	ology Indic ators (minit ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) or Visible on A ined Leaves ( tions: Present? esent? ent? ent?	ators: num of o erial Imag 89) Yes ( Yes (	ne required  Property (B7)  No ②  No ③		Salt Crust (B1 Aquatic Invented Advisor Sulphy Aquatic Invented Advisor Sulphy Aquatic Invented Advisor Sulphy Aquatic Invented Advisor Invented In	tebrates (Fifide Odor Vater Table ospheres of tilled) educed Irri rface (C7) in in Remailes):	(C1) e (C2) on Living F on (C4) rks)  0 0	- Wetla	Secondary Indicators (minimum of two require  Surface Soil Cracks (86)  Sparsely Vegetated Concave Surface (88)  Drainage Patterns (810)  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)
Type:	ology Indic ators (minit ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) or Visible on A ined Leaves ( tions: Present? esent? ent? ent?	ators: num of o erial Imag 89) Yes ( Yes (	ne required  Property (B7)  No ②  No ③		Salt Crust (B1 Aquatic Invert Hydrogen Sul Dry Season W Dxidized Rhiz (where n Presence of R Thin Muck Su Dther (Explain Depth (inch Depth (inch	tebrates (Fifide Odor Vater Table ospheres of tilled) educed Irri rface (C7) in in Remailes):	(C1) e (C2) on Living F on (C4) rks)  0 0	- Wetla	Secondary Indicators (minimum of two require  Surface Soil Cracks (86)  Sparsely Vegetated Concave Surface (88)  Drainage Patterns (810)  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)
Type:	ology Indic ators (minit ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) or Visible on A ined Leaves ( tions: Present? esent? ent? ent?	ators: num of o erial Imag 89) Yes ( Yes (	ne required  Property (B7)  No ②  No ③		Salt Crust (B1 Aquatic Invert Hydrogen Sul Dry Season W Dxidized Rhiz (where n Presence of R Thin Muck Su Dther (Explain Depth (inch Depth (inch	tebrates (Fifide Odor Vater Table ospheres of tilled) educed Irri rface (C7) in in Remailes):	(C1) e (C2) on Living F on (C4) rks)  0 0	- Wetla	Secondary Indicators (minimum of two require  Surface Soil Cracks (86)  Sparsely Vegetated Concave Surface (88)  Drainage Patterns (810)  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)

Project/Site: Alpha Bartonville FM 407			city/County: Bartonville	/ Denton Sampling Date: _07-Sep-21
Applicant/Owner:	· ·		State	: Texas Sampling Point: T4P1
	<del>.</del>		Section, Township, Ra	· · · · · · · · · · · · · · · · · · ·
Landform (hillslope, terrace, etc.):			Local relief (concave,	convex, none): convex Stope: 2.0 % / 1.1
Subregion (LRR): LRR J		Lat.: 33,	100838	Long.: -97.136101 Datum: NAD83
ioil Map Unit Name: Wilson day loam	**** *****			NWI classification: none
e climatic/hydrologic conditions on			Yes ® No C	<del></del>
Are Vegetation , Soil	, or Hydrology 🔲	· ·		lormal Circumstances" present? Yes ⊙ No ○
Are Vegetation, Soil	, or Hydrology 🔲	•		······································
• – –				eded, explain any answers in Remarks.)
Summary of Findings - At	tach site map s	howing sa	mpling point loc	ations, transects, important features, etc.
Hydrophytic Vegetation Present?	Yes   ● No ○		Is the Sampled A	araa.
Hydric Soil Present?	Yes 💿 No 🔾			17 Yes ○ No
Wetland Hydrology Present?	Yes 🔾 No 🕞		within a Wetland	17 16 C 110 C
Remarks:	~			
			· .	
VEGETATION - Use scien	tific names of n	lante	Dominant FWS Re	gion: GP
			-Species?	· · · · · · · · · · · · · · · · · · ·
Tree Stratum (Plot size: 30 ft	)	. % Cover	Rel.Strat. Indicator Cover Status	
1. Salix nigra		25	100.0% FACW	Number of Dominant Species That are OBL, FACW, or FAC: 4 (A)
2				Total Number of Dominant
3.			0.0%	Species Across All Strata: 6 (B)
4			0.0%	Parant of days and Caran
Sapling/Shrub Stratum (Plot size:	15 ft }	25		Percent of dominant Species That Are OBL, FACW, or FAC:66.7% (A/B)
1. Ulmus americana		10	<b>☑</b> 100.0% FAC	
2	· · · · · · · · · · · · · · · · · · ·		0.0%	Prevalence Index worksheet:
3.			0.0%	
4			0.0%	FACW species
5			0.0%	FAC species 55 x 3 = 165
		10	= Total Cover	FACU species 45 x 4 = 180
	)	•		UPL species 0 x 5 = 0
1. Setaria pumila			15.0% FACU	Column Totals: <u>135</u> (A) <u>405</u> (B)
2. Sorghum halepense 3. Iva annua			20.0% FACU 10.0% FAC	Prevalence Index = B/A = 3
4. Paspalum dilatatum			20.0% FAC	
5		15	☑ 15.0% FAC	Hydrophytic Vegetation Indicators:
6. Junaus effusus		10	10.0% OBL	1 - Rapid Test for Hydrophytic Vegetation
7. Rubus trivialis 8.		10	10.0% FACU	✓ 2 - Dominance Test is > 50%
9	<del> </del>		0.0%	3 - Prevalence Index is ≤3.01
10.	· · · · · · · · · · · · · · · · · · ·		0.0%	4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)
		100	= Total Cover	Problematic Hydrophytic Vegetation (Explain)
Woody Vine Stratum (Plot size:	}		- rotal cover	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
_		0		be present.
1 2.		<u></u>	<u></u>	
			= Total Cover	Hydrophytic
% Bare Ground in Herb Stratum	0	<del></del> -		Vegetation Yes No No
% Bare Ground in Herb Stratum	_0		<del> </del>	Present? Yes No O

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J	<i>,</i> , ,

Sampling Point: T4P1

Depth	Matrix or (moist)		Color (mo	Redox Fe		Loc2	Tavhura	Domastes
							Texture	Remarks
0-16 10Y	4/2	<del>95</del>	7.5YR	4/6 5	<u>c</u>	M	Loam	
<del></del>	<del></del>				<del></del>			
					<del></del>			
						<del></del>		
		<del></del>						
			<del></del>		<del></del>			
		Did Dadwa	.4.16=1===				ation: PL=Pore Lining, M=Matrix	
dric Soil Indicate				· · · · · · · · · · · · · · · · · · ·		ains +LDCa	Indicators for Problematic	Atudia Calla3.
Histosof (A1)	is: (whhireans	e to bit the	_	Gleyed Matrix	•		1 cm Muck (A9) (LRR I,	•
Histic Epipedon (A	.2)		_ `	Redox (SS)			Coastal Prairie Redox (A	•
Black Histic (A3)	•		_	ed Matrix (S6)			Dark Surface (S7) (LRR (	
Hydrogen Sulfide	. ,		Loamy	Mucky Minera	af (F1)		High Plains Depressions	(F16)
Stratified Layers (			= '	Gleyed Matro	,		(LRR H outside of M	URA 72 and 73)
1 cm Muck (A9) (I		,	_	ted Matrix (F3)			Reduced Vertic (F18)	
Depleted Below D Thick Dark Surface		}		Dark Surface ted Dark Surfa			Red Parent Material (TF2	
Sandy Muck Miner				depressions (		•	Very Shallow Dark Surfa	
2.5 cm Mucky Pea		RR G, H)	_	lains Depressi	•		Other (Explain in Remark	•
5 cm Mucky Peat				LRA 72 and 7			<sup>3</sup> Indicators of hydrophytic veg hydrology must be present, u	etation and wetland niess disturbed or noblema
trictive Layer (if	present):							
Туре:			<del> </del>			-	Hydric Soil Present? Ye	s
Depth (inches):	<del> </del>	<del> </del>					Hydric Son Presence 16	S NO C
emarks:								
drology							· · · · · · · · · · · · · · · · · · ·	<del></del> -
tiand Hydrology	Indicators:						Secondary Indicators (	minimum of two require
mary Indicators (		ne required:	check all t	hat apply)			Surface Soil Cracks	
Surface Water (A				Crust (811)				Concave Surface (88)
High Water Table	•			atic Invertebra	tes (813)		Drainage Patterns	
Saturation (A3)	(-)			rogen Sulfide (			<b>=</b> . *	eres on Living Roots (C3)
Water Marks (B1)			_	Season Water			(where tilled	•
Sediment Deposit					eres on Living F	Roots (C3)	Crayfish Burrows (	
Drift deposits (B3				(where not ti		` .		n Aerial Imagery (C9)
Algal Mat or Crus	(B4)			ence of Reduc	-		Geomorphic Positio	
Iron Deposits (B5	)		_	Muck Surface			FAC-neutral Test (I	- •
Inundation Visible	on Aerial Image	ery (B7)	_	er (Explain in 9			Frost Heave Humn	•
Water-Stained Le	aves (B9)				,			
fd Observations:	<del></del>							•
face Water Present	Yes	O No O	De	epth (inches):	0			
ter Table Present?	Yes	_		•		<del>-</del>		
uration Present?				pth (inches):		→   Wetta	and Hydrology Present? Y	es O No 💿
cludes capillary frinc	e) Yes	O No 🕞	De	pth (inches):	0	_ [		
escribe Recorded I	Data (stream o	auge, monit	or well, ae	nal photos, i	previous inspe	ctions), if	available:	•
	<del></del>							
en neko:								
marks:							•	
narks:		Š						
narks:		ì						

roject/Site: Alpha Bartonville FM 407	<u></u>	City/County: B	artonville / Denton	Sampling Date: 07-Sep-21
pplicant/Owner:			State: Texas	Sampling Point: T4P3
			nship, Range: S	TR
Landform (hillslope, terrace, etc.):	Hillslope	Local relief (c	oncave, convex, non	e): convex Slope: 2.0 % / 1.1 °
ubregion (LRR): LRR )		Lat.: 33,100749	Long.: -9)	7.136145 Datum: NAD83
off Map Unit Name: Wilson day loam,				NWI classification: none
climatic/hydrologic conditions on			No O (If no	, explain in Remarks.)
Are Vegetation, Soit	, or Hydrology 🔲			mstances* present? Yes  No
Are Vegetation . Soil .		naturally problematic?		n any answers in Remarks.)
iummary of Findings - At		showing sampling po	int locations, t	ransects, important features, etc.
lydrophytic Vegetation Present?	Yes  No O	Is the S	ampled Area	
Hydric Soil Present?	Yes 🏵 No 🔾	within a	Wetland? Yes	No ●
Wetland Hydrology Present?	Yes O No 💿	With the second		
Remarks:				
/FOFTATION	tifia anno os of t	elamba Bawinant	FWS Region: GP	
VEGETATION - Use scien	unc names or p	Species?	<del></del>	
Tree Stratum (Plot size: 30 ft	) · · ·		Status	e Test worksheet:
1. Salix nigra				Dominant Species .  BL, FACW, or FAC:4 (A)
2.				
3.				per of Dominant ross All Strata:6(B)
4		0	<u> </u>	
in the same of the	164	25 = Total Cove		f dominant Species OBL, FACW, or FAC:66.7% (A/B)
Sapling/Shrub Stratum (Plot size:		10 🔽 100.0%		
Ulmus americana				e Index worksheet:
2. 3.	<del></del>	0 0.0%	CBL spec	al % Cover of: Multiply by: les10 x 1 +10
4.		<del>_</del>	FACW Spe	<del></del>
5.		0 🔲	FAC spec	
		10 = Total Cov		
Herb Stratum (Plot size: 5 ft	)	<del></del>	UPL spec	les <u>0 x 5 = 0</u>
1. Setaria pumila			FACU Column T	otals: <u>135</u> (A) <u>405</u> (B)
Sorghum halepense     Iya annua	······	20 <u>20.0%</u> 20.0%	FACU Preva	elence Index = B/A =3
4. Paspalum dilatatum		<del>_</del>	EAC	tic Vegetation Indicators:
5. Ambrosia trifida		15 🗹 15.0%	FAC	The second secon
6. Juncus effusus				plid Test for Hydrophytic Vegetation
7. Rubus trivialis 8.				ominance Test is > 50% evalence Index is ≤3.0 <sup>1</sup>
9.		0 0.0%	<del></del>	· ·
10.	<del>.</del>	0 0.0%		orphological Adaptations <sup>1</sup> (Provide supporting a in Remarks or on a separate sheet)
		100 = Total Cov	er Probl	ematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:	)	<u> </u>		ors of hydric soil and wetland hydrology must
1		0	be presen	
2.				
		0 = Total Cov	er Hydrophy	
		0 - 10000		
% Bare Ground in Herb Stratum	_0		Vegetation Present?	

US Army Corps of Engineers

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

Great Plains - Version 2.0

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Sampling Point: T4P3

Depth (inches)	Color (	noist)	%	Color	Redo		Type i	Loci	Yaut			·····
0-16	10YR	4/2	95	7.5YR	4/6	<u>%.</u> 5	C	Loc².	Texture	<u> </u>	Re	marks
<u></u>	- 101K	4/2	·- <del></del> -	7.31K	4/0	<u> </u>	·	<u>M</u>	Loam			
<del></del>	<del></del>							<del></del>				
										<del></del>		·
<del></del>		<del></del>			<del></del>	·			<del></del>			
		·	<del></del> +				· ·					<del></del>
							••••••		·	*******		· · · · · · · · · · · · · · · · · · ·
			<del></del> -		·				<del> </del>			
	ncentration. D	- Dantatio		and Makes	·				Phone District			
	indicators:							INS *LOC	ition: PL=Pore Lining.  Indicators for I		<u></u>	Snile3.
Histosof (		C			ndy Gleyed M				1 cm Muck (		•	W4113* 1
Histic Epi	pedon (A2)				ndy Redox (S				Coastal Prair			F, G, H)
Black Hist					ripped Matrix				Dark Surface	2 (S7) (LR	RG)	
	Sulfide (A4)				amy Mucky M		-		High Plains I	Depressio	ns (F16)	
-	Layers (AS) (I				amy Gleyed I		2)			_	MLRA 72 a	nd 73)
	k (A9) (LRR f Below Dark S		n		pleted Matro dox Dark Sur		ı		Reduced Ver			
	k Surface (A1)	•	•,	_	pleted Dark :				Red Parent i		-	
	ck Mineral (S	•		_	dox depressi				Very Shallow			
	ucky Peat or F		RR G, H)	_	gh Plains Deg		(F16)		Other (Expla		•	
5 cm Muc	ky Peat or Pe	et (S3) (LR	RF)		(MLRA 72 8	and 73 of	FURR H)		<sup>3</sup> Indicators of hyd hydrology must b			
	ayer (if pres	ent):	· · · · · · · · · · · · · · · · · · ·									
trictive L		ent):			·							. 0
trictive L Type: Depth (inc	ayer (if pres	ent):							Hydric Soil Prese	nt?	Yes 🏵 1	No O
	ayer (if pres	ent):	· · · · · · · · · · · · · · · · · · ·						Hydric Soil Prese	nt? '	Yes 💿 1	via O
trictive L Type: Depth (inc	ayer (if pres	ent):							Hydrîc Soil Prese	nt? '	Yes	via O
trictive L Type: Depth (inc marks:	ayer (if pres	ent):							Hydrîc Soil Prese	nt? '	Yes	Na O
rictive L  Type: Depth (inconarks:  Irology  Jand Hyd	ayer (if pres	cators:							· · · · · · · · · · · · · · · · · · ·			-
rictive L ype: Depth (incharks: Irolog	ayer (if pres	cators:		d; check s	ell that appl	у)			Secondary I		s (minimun	-
rictive L Type: Depth (included) Depth size Depth s	ayer (if pres	cators:			ali that appl				Secondary I	Indicator	s (minimun cks (B6)	-
irctive L iype: Depth (incharks: irclog land Hyd nary Indi Surface V	hes):	cators:		Ω:		1)	(813)		Secondary I	Indicator	s (minimun :ks (B6) ted Concave	n of two requir
frictive L fype: Depth (inclinarks:  Irologiand Hyd mary Indi Surface V	rology India cators (mini vater (A1) er Table (A2)	cators:			Salt Crust (81	1) tebrates (			Secondary I Surface Sparse Draina	Indicator e Soil Crac lly Vegeta ge Pattern	s (minimun cks (B6) ted Concave rs (B10)	n of two require Surface (88)
rictive L ype: Depth (incharks: Irologi land Hyd nary Indi Surface V High Wat Saturatio Water Ma	rology Indic cators (mini- vater (A1) er Table (A2) n (A3) arks (B1)	ators:			Salt Crust (81 Aquatic Inver Hydrogen Sul Dry Season W	1) tebrates ( fide Odor /ater Tab	r (C1) le (C2)		Secondary I Surface Sparse Draina Oxidize	Indicatori e Soil Crad dy Vegeta ge Pattern ed Rhizosj where tilli	s (minimun cks (B6) ted Concave rs (B10) pheres on Lived)	n of two requir Surface (88)
irictive L iype: Depth (inc) narks: Irologi land Hyd nary Indi Surface V High Wat Saturatio Water Ma	rology Indicators (mini- vater (A1) er Table (A2)	ators:			Salt Crust (81 Aquatic Inver Hydrogen Sul	1) tebrates ( fide Odor /ater Tab	r (C1) le (C2)	oots (G)	Secondary I Surface Sparse Draina Oxidize	Indicatori e Soil Crad dy Vegeta ge Pattern ed Rhizosj where tilli	s (minimun cks (B6) ted Concave rs (B10) pheres on Lived)	n of two requir Surface (88)
irctive L fype: Depth (inc) narks:  irolog land Hyd nary Indi Surface V High Wat Saturatio Water Ma	rology Indicators (mini- vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2	ators:			Salt Crust (81 Aquatic Inver Hydrogen Sul Dry Season W	tebrates ( fide Odor /ater Tab ospheres	r (CI) le (C2) on Living Ri	oots (C3)	Secondary I Surface Sparse Draina Oxidize (v	Indicatori e Soil Crac ly Vegeta ge Pattern ed Rhizos where till in Burrows	s (minimun cks (B6) ted Concave rs (B10) pheres on Lived)	1 of two requir Surface (88) ring Roots (C3)
irictive L  Type: Depth (incident of the content of the conten	rology India cators (mini vater (A1) er Table (A2) in (A3) orks (B1) Deposits (B2) osits (B3) or Crust (B4)	cators: mum of c			Saft Crust (81 Aquatic Inver Hydrogen Sul Dry Season W Oxidized Rhiz	tebrates ( fide Odor /ater Tab ospheres of tilled)	r (C1) le (C2) on Living Ri	oots (C3)	Secondary I Surface Sparse Draina Oxidize (v Crayfis	Indicator e Soil Crac ly Vegeta ge Pattern ed Rhizos where till th Burrows tion Visibl	s (minimun cks (B6) ted Concave rs (B10) oheres on Lin ed) s (C8)	1 of two require Surface (88) ring Roots (C3)
irictive L  Type: Depth (incident of the content of the conten	rology Indiacators (mini- vater (A1) er Table (A2) in (A3) inks (B1) Deposits (B2) sits (B3)	cators: mum of c			Salt Crust (B1 Aquatic Inver Hydrogen Sul Dry Season W Dxidized Rhiz (Where n	tebrates ( fide Odor later Tab ospheres of tilled) educed I	r (C1) le (C2) on Living Ri l ron (C4)	cots (C3)	Secondary I Surface Sparse Draina Oxidize (v Crayfis Satura: V Geome	Indicator e Soil Crac ly Vegeta ge Pattern ed Rhizos where till th Burrows tion Visibl	s (minimun cks (B6) ted Concave as (B10) otheres on Lin ed) s (C8) e on Aerial I ition (D2)	1 of two require Surface (88) ring Roots (C3)
irology land Hyd nary Indi Surface V High Wat Saturatio Water Ma Sediment Drift depo	rology India cators (mini vater (A1) er Table (A2) in (A3) orks (B1) Deposits (B2) osits (B3) or Crust (B4)	cators: mum of c	one required		Salt Crust (B1 Aquatic Inver Hydrogen Sul Dry Season W Dxidized Rhiz (Where n Presence of R	tebrates (fide Odor /ater Tab ospheres of tilled) educed Inface (C7	r (C\$) le (C2) on Living Ri l ron (C4)	oots (G)	Secondary I Surface Sparse Draina Oxidize (v Crayfis Satura V Geome	indicator e Soil Crac ge Pattern ed Rhizosp where till th Burrows tion Visibl orphic Pos eutral Test	s (minimun cks (B6) ted Concave as (B10) otheres on Lin ed) s (C8) e on Aerial I ition (D2)	1 of two requir Surface (88) ring Roots (C3) magery (C9)
irotive L  Type: Depth (inc) Parks:  Irolog Iand Hyd Parks High Wat Saturatio Water Me Sediment Drift depth Algal Mat Iron Dep Inundation	rology India cators (mini vater (A1) er Table (A2) in (A3) inks (B1) Deposits (B2) osits (B3) or Crust (B4) osits (B5)	cators: mum of c	one required		Salt Crust (B1 Aquatic Inver Hydrogen Sul Dry Season W Dxidized Rhiz (where n Presence of R Chin Muck Su	tebrates (fide Odor /ater Tab ospheres of tilled) educed Inface (C7	r (C\$) le (C2) on Living Ri l ron (C4)	oots (C3)	Secondary I Surface Sparse Draina Oxidize (v Crayfis Satura V Geome	indicator e Soil Crac ge Pattern ed Rhizosp where till th Burrows tion Visibl orphic Pos eutral Test	s (minimun tks (B6) ted Concave rs (B10) otheres on Lin ed) s (C8) e on Aerial I ition (D2)	1 of two requir Surface (88) ring Roots (C3) magery (C9)
Depth (inconarks:  Irologiand Hydrace V High Water Mater Mat	rology Indicators (minimum (A3) roks (B1) Deposits (B2) or Crust (B4) osits (B5) on Visible on A sined Leaves	eators: mum of c	one required		Salt Crust (B1 Aquatic Inver Hydrogen Sul Dry Season W Dxidized Rhiz (where n Presence of R Chin Muck Su	tebrates (fide Odor /ater Tab ospheres of tilled) educed Inface (C7	r (C\$) le (C2) on Living Ri l ron (C4)	oots (C3)	Secondary I Surface Sparse Draina Oxidize (v Crayfis Satura V Geome	indicator e Soil Crac ge Pattern ed Rhizosp where till th Burrows tion Visibl orphic Pos eutral Test	s (minimun tks (B6) ted Concave rs (B10) otheres on Lin ed) s (C8) e on Aerial I ition (D2)	1 of two require Surface (88) ring Roots (C3) magery (C9)
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trictive L Type: Depth (inc marks:  drolog tland Hyd mary Indi Surface V High Wat Saturatio Water Ma Sediment Dofft dep Algal Mat Iron Dep Inundatic Water-St d Observ ace Water er Table Paration Pre	rology India cators (mini vater (A1) er Table (A2) in (A3) or Crust (B4) osits (B3) or Crust (B4) osits (B5) in Visible on A gined Leaves ations: Present? resent?	cators: mum of c  lenal Imag (B9)  Yes (	ery (87)  No ② No ③		Salt Crust (B1 Aquatic Inver- Hydrogen Sul Ony Season W Oxidized Rhiz (where in Presence of R Chin Muck Su Other (Explain Depth (Inch	tebrates ( fide Odor /ater Tab ospheres of tilled) educed In face (C7 n in Rema	r (C1) le (C2) on Living Ri ron (C4) ) arks)		Secondary I Surface Sparse Draina Oxidize (v Crayfis Satura V Geome	indicator e Soil Crac ge Pattern ed Rhizosp where till th Burrows tion Visibl orphic Pos eutral Test leave Hur	s (minimun tks (B6) ted Concave rs (B10) otheres on Lin ed) s (C8) e on Aerial I ition (D2)	1 of two require Surface (B8) ring Roots (C3) magery (C9)
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trictive L Type: Depth (inc marks:  drolog dand Hyd mary Indi Surface V High Wat Saturatio Water Ma Sediment Drift dep Algal Mat Iron Dep Inundatic Water-St d Observ ace Water er Table Poration Pre- ludes capil	rology India cators (mini vater (A1) er Table (A2) in (A3) or Crust (B4) osits (B3) or Crust (B4) osits (B5) in Visible on A gined Leaves ations: Present? resent? sent? ary fringe)	cators: mum of c  lenal Imag (B9)  Yes ( Yes (	ery (87)  No ②  No ③		Salt Crust (B1 Aquatic Inver- riydrogen Sul Dry Season W Dxidized Rhiz (where in Presence of R Phin Muck Su Other (Explain Depth (Inch Depth (inch	tebrates (fide Odor /ater Tab ospheres of tilled) educed Inface (C7 in in Remains):	(C1) le (C2) con Living Ri ron (C4) ) arks)  0 0	Wetla	Secondary I Surface Sparse Draina Oxidize (v Crayfis Satura: Geome FAC-ne Frost I	indicator e Soil Crac ge Pattern ed Rhizosp where till th Burrows tion Visibl orphic Pos eutral Test leave Hur	s (minimun cks (B6) ted Concave is (B10) pheres on Lived) is (C8) e on Aerial II ition (D2) t (D5) nmocks (D7)	n of two require Surface (88) ring Roots (C3) magery (C9)

Yes No (If ne ling point localist the Sampled)	convex, none): convex  Long.: -97.136256  NWX classification: PUBHh  (If no, explain in Remarks.)  Normal Circumstances" present? Yes No Conseded, explain any answers in Remarks.)  cations, transects, important features, etc.  Area  d? Yes No O
Yes No No Irbed? Are "No atic? (If ne ling point local within a Wetland within a Wetland FWS Reacies? Strat. Indicator Status	ange: S T R  convex, none): convex Slope: 2.0 % / 1.1  Long.: -97.136256 Datum: NAO83  NWX classification: PUBHh  (If no, explain in Remarks.)  Normal Circumstances" present? Yes No Contained any answers in Remarks.)  cations, transects, important features, etc.  Area  d? Yes No O  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:
Yes No No No Irbed? Are "No Irbed? Are "No Irbed? Are "No Irbed? Are "No Irbed? (If ne	NWX classification: PUBHh  (Xf no, explain in Remarks.)  Normal Circumstances" present? Yes No Cations, transects, important features, etc.  Area d? Yes No   Dominance Test worksheet:  Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)  Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)  Prevalence Index worksheet:
Yes No No No Note of No No Note of No	NWX classification: PUBHh  (If no, explain in Remarks.)  Normal Circumstances" present? Yes No Cations, transects, important features, etc.  Area  d? Yes No Cations  Dominance Test worksheet:  Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)  Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)  Prevalence Index worksheet:
Yes No No No Note of No No Note of No	NWX classification: PUBHh  (Xf no, explain in Remarks.)  Normal Circumstances" present? Yes No Contended, explain any answers in Remarks.)  Cations, transects, important features, etc.  Area d? Yes No   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:
rbed? Are "Natic? (If ne ling point loc lis the Sampled within a Wetland within a Wetland FWS Receives? Indicator Status	(Xf no, explain in Remarks.)  Normal Circumstances* present? Yes  No  No  No  No  No  No  No  No  No  N
rbed? Are "Natic? (If ne ling point loc lis the Sampled within a Wetland within a Wetland FWS Receives? Indicator Status	Area  egion: GP  Dominance Test worksheet:  Number of Dominant Species That are OBL, FACW, or FAC:  Percent of dominant Species That Are OBL, FACW, or FAC:  Percent of dominant Species That Are OBL, FACW, or FAC:  Percent of dominant Species That Are OBL, FACW, or FAC:  Percent of dominant Species That Are OBL, FACW, or FAC:  Percent of dominant Species That Are OBL, FACW, or FAC:  Prevalence Index worksheet:
Is the Sampled within a Wetlan within a Wetlan FWS Resident Status	Percent of dominant Species That Are OBL, FACW, or FAC:  Percent of dominant Species That Are OBL, FACW, or FAC:  Percent of dominant Species That Are OBL, FACW, or FAC:  Percent of dominant Species That Are OBL, FACW, or FAC:  Percent of dominant Species That Are OBL, FACW, or FAC:  Prevalence Index worksheet:
Is the Sampled within a Wetland  minant ecies? Strat. Indicator Status	egion: GP  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:
Is the Sampled within a Wetland  minant ecies? Strat. Indicator Status	Area d? Yes O No O  egion: GP  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:
minant FWS Recies? Strat. Indicator	egion: GP  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:
minant FWS Recies? Strat. Indicator	egion: GP  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:
minant FWS Rescies? Strat. Indicator Status	Pegion: GP  Dominance Test worksheet:  Number of Dominant Species That are OBL, FACW, or FAC:  Total Number of Dominant Species Across All Strata:  Percent of dominant Species That Are OBL, FACW, or FAC:  Prevalence Index worksheet:
strat. Indicator er Status	Dominance Test worksheet:  Number of Dominant Species That are OBL, FACW, or FAC:  Total Number of Dominant Species Across All Strata:  Percent of dominant Species That Are OBL, FACW, or FAC:  Dominant Species That Are OBL, FACW, or FAC:  Prevalence Index worksheet:
strat. Indicator er Status	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:
strat. Indicator er Status	Dominance Test worksheet:  Number of Dominant Species That are OBL, FACW, or FAC:  Total Number of Dominant Species Across All Strata:  Percent of dominant Species That Are OBL, FACW, or FAC:  Dominant Species That Are OBL, FACW, or FAC:  Prevalence Index worksheet:
strat. Indicator er Status	Dominance Test worksheet:  Number of Dominant Species That are OBL, FACW, or FAC:  Total Number of Dominant Species Across All Strata:  Percent of dominant Species That Are OBL, FACW, or FAC:  Dominant Species That Are OBL, FACW, or FAC:  Prevalence Index worksheet:
Strat. Indicator	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:
ver Status	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	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	Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)  Prevalence Index worksheet:
Total Cover	Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)  Prevalence Index worksheet:
Total Cover	That Are OBL, FACW, or FAC:50.0% (A/B)  Prevalence Index worksheet:
Total Cover	That Are OBL, FACW, or FAC: 50.0% (A/B)  Prevalence Index worksheet:
• • • • • • • • • • • • • • • • • • • •	
	OBL species 0 x 1 = 0
	FACW species 0 x 2 = 0
	FAC specifes
Total Cover	FACU species 60 x 4 = 240
25.0% FAC	UPL species
25.0% FACU 60.0% FACU	Column Totals: 100 (A) 390 (B)
15.0% UPL	Prevalence Index = B/A = 3.9
0.0%	Hydrophytic Vegetation Indicators:
0.0%	
0.0%	1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is > 50%
0.0%	2 - Donmance Test is > 50%  3 - Prevalence Index is ≤3.0¹
0.0%	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
0.0%	data in Remarks or on a separate sheet)
Total Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
	1 Indicators of hydric soil and wetland hydrology must
	be present.
· .	
· · · · · · · · · · · · · · · · · · ·	
Total Cover	Hydrophytic Vecetation
Total Cover	Hydrophytic Vegetation Present?  Yes O No
	·

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Sampling Point: T4P4

Depth (inches)	Color 6	Matrix noist)	.%		x Features	•	•
0-2	10YR			Color Imoisti	% IVpe	_Loc2	TextureRemarks
<del></del>			100	<del></del>	<del></del>		Sift
				<del></del>		<del> </del>	
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		<del></del>	<del></del>	<del></del>	<del></del>	- <del></del>	
<del></del>							
				•			
ype: C=Co	ncentration. [	=Depletion.	. RM=Reduce	d Matrix, CS=Covered	or Coated Sand (	rains <sup>2</sup> Loca	ation: PL=Pore Uning. M=Matrix
				, unless otherwise			Indicators for Problematic Hydric Solls <sup>3</sup> :
Histosol (				Sandy Gleyed M	•		1 cm Muck (A9) (LRR I, I)
Histic Epi	pedon (A2)			Sandy Redox (S			Coastal Prairie Redox (A16) (LRR F, G, H)
Black His	, ,			Stripped Matrix	(S6)		Dark Surface (S7) (LRR G)
	Sulfide (A4)			Loamy Mucky M			High Plains Depressions (F16)
	Layers (A5) (I			Loamy Gleyed M			(LRR H outside of MLRA 72 and 73)
	k (A9) (LRR F			Depleted Matrix			Reduced Vertic (F18)
	Below Dark S k Surface (A1)			Redox Dark Surf			Red Parent Material (TF2)
	rck Mineral (S:	•		Depleted Dark S Redox depression			Very Shallow Dark Surface (TF12)
	ucky Peat or F		. /H D.Q	High Plains Dep			Uther (Explain in Remarks)
	ky Peat or Pe		-		nd 73 of LRR H)		<sup>3</sup> Indicators of hydrophytic vegetation and wetland
	<u> </u>		<del>-'</del>	(11341720		<u> </u>	hydrology must be present, unless disturbed or proble
	ayer (if pres	-		•			
	ompacted Si		<del></del>	<del></del>		<del></del>	thurster sett Processed as a Company of the Company
	hes): 2 inch	<u>×</u>		<del></del>			Hydric Soil Present? Yes O No
marks:							
drolog		<del></del>	<del></del> .	<del></del> - " ,		· · ·	· · · · · · · · · · · · · · · · · · ·
	<del></del>						
-	rology Indic						Secondary Indicators (minimum of two requ
		<u>mum of on</u>	e required;	check all that apply	4		Surface Soil Cracks (86)
Surface V	Vater (A1)			Salt Crust (81)	1)		Sparsely Vegetated Concave Surface (B8)
High Wat	er Table (A2)			Aquatic Invert	ebrates (B13)		Drainage Patterns (B10)
Saturatio	n (A3)			Hydrogen Sulfi			Oxidized Rhizospheres on Living Roots (C3)
Water Ma	rks (81)			Dry Season Wa	ater Table (C2)		(where tilled)
Sediment	Deposits (82	)		Oxidized Rhizo	spheres on Living	Roots (C3)	Crayfish Burrows (C8)
Drift depr	osits (B3)			(where no	t tilled)		Saturation Visible on Aerial Imagery (C9)
Algai Mat	or Crust (B4)			Presence of Re	educed Iron (C4)		Geomorphic Position (D2)
Iron Dep	osits (B\$)			Thin Muck Sun	face (C7)		FAC-neutral Test (DS)
Inundatio	n Visible on A	erial Imagei	y (87)	Other (Explain	• •		Frost Heave Hummocks (D7) (LRR F)
	ained Leaves (	_					
d Observ		· <u>í.</u>		<del> </del>		<del>- T</del>	
ace Water		Yes C	No ⊕	Depth (inche	e). 0	į	•
				vepor (mate	· · · · · · · · · · · · · · · · · · ·	-	
er Table Pr		Yes C		Depth (inche	s): <u> </u>	_	and Hydrology Present? Yes O No 🕥
iration Pre: ludes capill	sent? lary fringe)	Yes O	No 💿	Depth (inche	s): 0	Wetta	and Hydrology Present? Yes O No 🕙
				or well, aerial photo	<del></del>	ections) if	availables
		<u></u>	C-FCF THOUNK	so vicin device priore	or bicerous inst	ections, n	OTORBOICS.
arks:	·-·					-	<del></del>
arks:							····
arks:							
arks:							

Project/Site: Alpha Bartonville FM 407	7	Cit	y/County: Bartonville	e / Denton Sampling Date: 07-Sep-21
Applicant/Owner:			State	e: Texas Sampling Point: T4P5
Investigator(s): MP	<u> </u>		Section, Township, R	
Landform (hillslope, terrace, etc.)			ocal relief (concave,	convex, none): concave Slope: 2,0 % / 1,1
Subregion (LRR): LRR )				Long.: -97.136273 Datum: NAD83
oil Map Unit Name: Wilson day loan	<del></del>			NWI classification: none
			Yes  No	(If no, explain in Remarks.)
Are Vegetation . , Soil .	, or Hydrology 🔲	significantly dis	·	Normal Circumstances" present? Yes  No O
Are Vegetation , Soil ,	, or Hydrology	naturally proble		eeded, explain any answers in Remarks.)
				cations, transects, important features, etc
Hydrophytic Vegetation Present?	Yes <sup>⊙</sup> No <sup>○</sup>		<u> </u>	
Hydric Soil Present?	Yes   ● No O		Is the Sampled A	·
Wetland Hydrology Present?	Yes   ● No  ○		within a Wetland	d? Yes   No
Remarks:				<del></del>
VEGETATION - Use scien	tific names of p	ants r	Dominant FWS Re	egion: GP
Tree Stratum (Plot size:	3	Absolute R	tel.Strat. Indicator	Dominance Test worksheet:
1		0	]	Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)
2				
3.	·			Total Number of Dominant Species Across All Strata: 2 (B)
4	<del> </del>	[	Ĵ	
Sapling/Shrub Stratum (Plot size:	}		= Total Cover	Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
1		۰ ۵	כ	Prevalence Index worksheet:
2			5	Total % Cover of: Multiply by:
3	·····		3	OBL species 100 x 1 = 100
4 5.			]	FACW species 0 x 2 = 0
J	<u> </u>	L	J	FAC species0 x 3 =0
Herb Stratum (Plot size: 5 ft	1		≂ Total Cover	FACU species
Persicaria hydropiperoides	<del></del> *	60 💆	60.0% OBL	UPL species0 x 5 =0
2. Nelumbo lutea		40		Column Totals: 100 (A) 100 (B)
3			0.0%	Prevalence Index = B/A =1
4. 5.	<del></del>		0.0%	Hydrophytic Vegetation Indicators:
6.	<del></del>	→ <u> </u>	J0.0% ]	✓ 1 - Rapid Test for Hydrophytic Vegetation
7.		- 👶 📙	0.0%	✓ 2 - Dominance Test is > 50%
8.			0.0%	✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
9.	· · · · · ·		0.0%	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
10,			0.0%	data in Remarks or on a separate sheet)
		100	≔ Total Cover	Problematic Hydrophytic Vegetation (Explain)
Woody Vine Stratum (Plot size:	)		<b>.</b>	Indicators of hydric soil and wetland hydrology must be present.
2.	·· ·· .		J	
, <u>-</u>			J	Hydrophytic
% Bare Ground in Herb Stratum	0	-0 :	= Total Cover	Vegetation Present? Yes  No

US Army Corps of Engineers

<sup>\*</sup>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.) Deoth Matrix Redox Features (inches) Color (moist) Color (moist) \_Type 1 \_9/0... Lor2 Texture 0-16 10YR 5/2 60 7.5YR 4/8 40 PL and M Silty Clay Loam 1Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains 2Location: PL=Pore Lining, M=Matrix Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils3: Histosol (A1) Sandy Gleyed Matrix 54 1 cm Muck (A9) (LRR I, J) Histic Epipedon (A2) Sandy Redox (SS) Coastal Prairie Redox (A16) (LRR F, G, H) Black Histic (A3) Stripped Matrix (S6) Dark Surface (S7) (LRR G) ☐ Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) High Plains Depressions (F16) Stratified Layers (AS) (LRR F) Loamy Gleyed Matrix (F2) (LRR H outside of MLRA 72 and 73) 1 cm Muck (A9) (LRR F,G,H) Depleted Matrix (F3) Reduced Vertic (F18) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Red Parent Material (TF2) Thick Dark Surface (A12) Depleted Dark Surface (F7) Very Shallow Dark Surface (TF12) Sandy Muck Mineral (S1) Redox depressions (F8) Other (Explain in Remarks) 2.5 cm Mucky Peat or Peat (S2) (LRR G, H) High Plains Depressions (F16) <sup>3</sup>Indicators of hydrophytic vegetation and wetland 5 cm Mucky Peat or Peat (S3) (LRR F) (MLRA 72 and 73 of LRR H) hydrology must be present, unless disturbed or problematic. Restrictive Layer (if present): Type: Hydric Soil Present? Yes 

No Depth (inches): Remarks: Hydrology Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Salt Crust (B11) Sparsely Vegetated Concave Surface (88) High Water Table (A2) Aquatic Invertebrates (B13) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3) Water Marks (81) Dry Season Water Table (C2) (where tilled) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Crayfish Burrows (C8) Drift deposits (B3) (where not tilled) Saturation Visible on Aerial Imagery (C9) Algal Mat or Crust (84) Presence of Reduced Iron (C4) Geomorphic Position (D2) Iron Deposits (BS) ☐ Thin Muck Surface (C7) FAC-neutral Test (D5) ☐ Inundation Visible on Aerial Imagery (87) Other (Explain in Remarks) Frost Heave Hummocks (D7) (LRR F) Water-Stained Leaves (89) Field Observations: Yes 🔘 - No 👁 Surface Water Present? Depth (inches): Yes O No 🕞 Water Table Present? Depth (inches): Yes 👁 No 🔾 Wetland Hydrology Present? Saturation Present?

12

Depth (inches):

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

(includes capillary fringe)

Remarks:

Yes 🛈

No O

roject/Site: Alpha Bartonville FM 407	,			City/County	/: Bartonville	2 / Denton Sampling Date: 07-Sep-21
pplicant/Owner:						
ivestigator(s): MP						tange: S T R
andform (hillslope, terrace, etc.):			<del></del>		· .	convex, none): concave Slope: 2.0 % / 1
bregion (LRR): LRR 3	<u> </u>	· ·	lat.: 33	.099596	•	
il Map Unit Name: Silstid loamy fin	e sand 1 to	5 percent slo	<del>_</del>	.055555	<del></del>	Long.: -97.136525 Datum: NAD83
climatic/hydrologic conditions on					es 💿 No (	NWI classification: PFO1Ch
Are Vegetation, Soil		rology 🗍				, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
			significantly			Normal Circumstances" present? Yes  No O
		rology 🔲	naturally pro			eeded, explain any answers in Remarks.)
ımmary of Findings - At			howing sa	mpling	point loc	cations, transects, important features, et
ydrophytic Vegetation Present?		No O		15 171	e Sampled /	Araa
Hydric Soil Present?	Yes 🖲	No O			-	d7 Yes  No
etland Hydrology Present?	Yes 💿	No O.		With	in a Wetiani	d7 IS O NO O
Remarks:			·			· · · · · · · · · · · · · · · · · · ·
			•			
EGETATION - Use scien	titia nas				EMC 0*	
LOCIATION - 036 SCIEN	une nar	nes or p	<del></del>	Dominant -Species?	<del></del>	egion: GP
Tree Stratum (Plot size:	)		Absolute <u>% Cover</u>	Rel.Strat. Cover	Indicator Status	Į.
1		<u> </u>	0			Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)
2						
3						Total Number of Dominant Species Across All Strata: 2 (B)
f		<del></del>				
apling/Shrub Stratum (Plot size:		1	. 0	= Total C	over	Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
		<del></del>	_	<b>ر</b>		THAT ARE OBL, PACY, OF PAC: 100:078 (AV)
1 2			<u>D</u>	片	<del></del>	Prevalence Index worksheet:
3	•	<del></del>		H		Total % Cover of: Multiply by:
4		· -	0			0BL species 100 x 1 = 100
5						FACW species 0 x 2 = 0
				= Total Co	over	FACU species 0 x 3 = 0
Herb Stratum (Plot size: 5 ft	)		-			
1. Persicana hydropiperoides			60	60.0%	08L	
2. Nelumbo lutea 3.		<del></del>		40.0%	OBL	Column Totals: 100 (A) 100 (B)
4.		· · · · ·		0.0%		Prevalence Index = B/A = 1
5				0.0%		Hydrophytic Vegetation Indicators:
6				0.0%	<del></del>	☑ 1 - Rapid Test for Hydrophytic Vegetation
7				0.0%		2 - Dominance Test is > 50%
8.				0.0%	·	☑ 3 - Prevalence Index is ≤3.01
0		<del></del>		0.0%		4 - Morphological Adaptations (Provide supporting
	<del></del>	<del></del>				data in Remarks or on a separate sheet)
Woody Vine Stratum (Plot size:			100	= Total Co	nagt	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum [Fiot size: _	··	<b></b> '.				Indicators of hydric soil and wetland hydrology must be present.
. ————		· · · · ·	- 0	⊔ <u></u>		
2.				LJ.—	· · · · · · · · · · · · · · · · · · ·	] .
2				_ W.L		Hydronbytic
	Λ.			= Total Co	over	Hydrophytic Vegetation
	0	₹		= Total Co	over	

US Army Corps of Engineers

<sup>\*</sup>Indicator suffix = National status or professional decision assigned because Regional status not defined by PWS.

	atrix		Redox For (moist) 9	eatures	Locz	Texture	Remarks
ches) Color (ms	oist) %. 5/2 60			20. <u>¥345=.</u> 40 C	PL and M	Silty Clay Loam	
-16 10YR	3/2 . 00						
<del></del>	·····						
<del></del>	<del></del>		<del></del>	<del></del>		<del></del>	
<del></del>		<del></del>	<del></del>	<del></del>		<del></del>	
				<del> </del>		<del></del>	<del></del>
<del></del>			<del></del>			· <del></del>	
<del></del>	<del></del>			<del></del>		· <del>· · · · · · · · · · · · · · · · · · </del>	<del></del>
		<del></del> . <del></del>				. <del> </del>	
pe: C=Concentration. D=					ains ²Loca	ation: PL=Pore Lining. M=M	
ric Soil Indicators: (/	Applicable to	ali LRRS, u	nless otherwise no	eted.)		Indicators for Proble	
Histosol (A1)		느	Sandy Gleyed Matri	ix S4		1 om Muck (A9) (L	RR 1, J) fox (A16) (LRR F, G, H)
Histic Epipedon (AZ)		<u> </u>		ς <b>\</b>		Dark Surface (\$7)	• • •
Black Histic (A3) Hydrogen Sulfide (A4)		ř	Loamy Mucky Mine			High Plains Depre	•
Stratified Layers (AS) (U	<b>रह</b> ह)	Ō	Loamy Gleyed Mat			(LRR H outsid	e of MLRA 72 and 73)
1 cm Muck (A9) (LRR F,C	-	<u> </u>	Depleted Matrix (F	3)		Reduced Vertic (F	18)
Depleted Below Dark Su	rface (A11)		Redox Dark Surfac			Red Parent Materi	• •
Thick Dark Surface (A12)	•	Ļ	Depleted Dark Surf			Very Shallow Dark	
Sandy Muck Mineral (S1)		=	Redox depressions High Plains Depres	- •		Other (Explain In I	
2.5 cm Mucky Peat or Pea 5 cm Mucky Peat or Pea		,,, .		73 of LRR H)		*Indicators of hydrophy hydrology must be pres	tic vegetation and wetland ient, unless disturbed or problen
trictive Layer (if prese			<u> </u>		<del></del>	<u> </u>	<del> </del>
	ancj.						
I VOE:					<del></del>	_ I	🖎 🔿
· · · · · · · · · · · · · · · · · · ·			<del></del>			Hydric Soil Present?	Yes  No O
Type: Depth (inches): marks:						Hydric Soil Present?	Yes <sup>®</sup> No <sup>©</sup>
Depth (inches):						Hydric Soil Present?	Yes  No O
Depth (inches):						Hydric Soil Present?	Yes  No  O
Depth (inches): marks:			-			Hydric Soil Present?	Yes  No O
Depth (inches): narks: drology							
Depth (inches): marks:  drology tland Hydrology Indic		oquirod: cl	hook all that applice			Secondary Indic	etors (minimum of two requ
Depth (inches): marks: drology tland Hydrology Indic mary Indicators (mini		eguired; d				Secondary Indic	ators (minimum of two requi Cracks (B6)
Depth (inches):	mum of one r	eguired; d	Salt Crust (B11)			Secondary Indic	ators (minimum of two requi Cracks (B6) getated Concave Surface (B8)
Depth (inches):	mum of one r	equired; d	Salt Crust (B11) Aquatic Invertet	brates (B13)		Secondary Indice Surface Soil Sparsely Ve Drainage Pa	otors (minimum of two requi Cracks (B6) getated Concave Surface (B8) itterns (B10)
Depth (inches):	mum of one r	eguired; d	Salt Crust (B11) Aquatic Invertet Hydrogen Sulfid	brates (B13) le Odor (C1)		Secondary Indic	otors (minimum of two requi Cracks (B6) getated Concave Surface (B8) itterns (B10)
Depth (inches):	mum of one r	eguired; d	Salt Crust (B11) Aquatic Invertet	brates (B13) de Odor (C1) ter Table (C2)	) Roots (C3)	Secondary Indic Surface Soil Sparsely Ve Drainage Pa Oxidized Rh (where	ators (minimum of two requi Cracks (86) getated Concave Surface (88) litems (810) izospheres on Living Roots (C3)
Depth (inches):	mum of one r	eguired; d	Salt Crust (B11) Aquatic Invertet Hydrogen Sulfid Dry Season Wat Oxidized Rhizos	brates (B13) le Odor (C1) ter Table (C2) spheres on Living	) Roots (C3)	Secondary Indic Surface Soil Sparsely Ve Drainage Pa Oxidized Rh (when	ators (minimum of two requi Cracks (86) getated Concave Surface (88) litterns (810) izospheres on Living Roots (C3)
drology tland Hydrology Indic mary Indicators (mini Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift deposits (B3)	mum of one r	eguired; d	Salt Crust (B11) Aquatic Invertet Hydrogen Sulfid Dry Season Wat	brates (B13) le Odor (C1) ter Table (C2) spheres on Living	) Roots (C3)	Secondary Indic Surface Soil Sparsely Ve Drainage Pa Oxidized Rh (when	ators (minimum of two requi Cracks (B6) getated Concave Surface (B8) ittems (B10) itzospheres on Living Roots (C3) tillad) rrows (C8) /isible on Aerial Imagery (C9)
Depth (inches):	mum of one r	eguired; d	Salt Crust (B11) Aquatic Invertet Hydrogen Suifid Dry Season Wat Oxidized Rhizos (where not	prates (B13) le Odor (C1) ter Table (C2) spheres on Living tilled) duced Iron (C4)	) Roots (C3)	Secondary Indice Surface Soil Sparsely Ve Drainage Pa Oxidized Rh (when	ators (minimum of two requi Cracks (86) getated Concave Surface (88) ittems (810) itzospheres on Living Roots (C3) a tilled) rrows (C8) //sible on Aerial Imagery (C9)
Depth (inches): marks:  drology thand Hydrology Indice mary Indicators (mining 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)	mum of one r		Salt Crust (B11) Aquatic Invertet Hydrogen Sulfid Dry Season Wat Oxidized Rhizos (where not	brates (B13) le Odor (C1) ter Table (C2) spheres on Living tilled) duced Iron (C4) acc (C7)	) Roots (C3)	Secondary Indice Surface Soil Sparsely Ve Drainage Pa Oxidized Rh (when Crayfish Bu Saturation V Geomorphic	ators (minimum of two requi Cracks (86) getated Concave Surface (88) ittems (810) itzospheres on Living Roots (C3) a tilled) rrows (C8) /isible on Aerial Imagery (C9)
Depth (inches): marks:  drology tland Hydrology Indic mary Indicators (minii 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 A	mum of one r		Salt Crust (B11) Aquatic Invertet Hydrogen Sulfid Dry Season Wat Oxidized Rhizos (where not Presence of Rec Thin Muck Surfa	brates (B13) le Odor (C1) ter Table (C2) spheres on Living tilled) duced Iron (C4) acc (C7)	) Roots (C3)	Secondary Indice Surface Soil Sparsely Ve Drainage Pa Oxidized Rh (when Crayfish Bu Saturation V Geomorphic	cracks (minimum of two requicances (86) getated Concave Surface (88) ittems (810) itzospheres on Living Roots (C3) a tilled) rrows (C8) //sible on Aerial Imagery (C9) a Position (D2) Test (D5)
Depth (inches): marks:  drology  tland Hydrology Indic mary Indicators (minic 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 A Water-Stained Leaves	mum of one r		Salt Crust (B11) Aquatic Invertet Hydrogen Sulfid Dry Season Wat Oxidized Rhizos (where not Presence of Rec Thin Muck Surfa	brates (B13) le Odor (C1) ter Table (C2) spheres on Living tilled) duced Iron (C4) acc (C7)	) Roots (C3)	Secondary Indice Surface Soil Sparsely Ve Drainage Pa Oxidized Rh (when Crayfish Bu Saturation V Geomorphic	cracks (minimum of two requicances (B6) getated Concave Surface (B8) atterns (B10) atterns (B10) atterns (B10) atterns (B10) atterns (C3) atterns (C3) atterns (C3) atterns (C3) brishe on Aerial Imagery (C9) atterns (C5) brishe on Aerial Imagery (C9) atterns (C5)
drology ttand Hydrology Indice mary Indicators (minicators (minica	mum of one r		Salt Crust (B11) Aquatic Invertet Hydrogen Sulfid Dry Season Wat Oxidized Rhizos (where not Presence of Rec Thin Muck Surfa	brates (B13) de Odor (C1) ter Table (C2) spheres on Living tilled) duced Iron (C4) ace (C7) in Remarks)	) Roots (C3)	Secondary Indice Surface Soil Sparsely Ve Drainage Pa Oxidized Rh (when Crayfish Bu Saturation V Geomorphic	ators (minimum of two requi Cracks (86) getated Concave Surface (88) attems (810) attems (810) attems (810) rows (C3) rows (C8) risible on Aerial Imagery (C9) exposition (D2)
Depth (inches): marks:  drology  tland Hydrology Indic mary Indicators (minin Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift deposits (B3) Algal Mat or Crust (B4) I ron Deposits (B5) I nundation Visible on A Water-Stained Leaves of the Constructions: Inface Water Present?	Nerial Imagery (	87) No <b>⊕</b>	Salt Crust (B11) Aquatic Invertet Hydrogen Sulfid Dry Season Wat Oxidized Rhizos (where not Presence of Rec Thin Muck Surfa Other (Explain i	brates (B13) le Odor (C1) ter Table (C2) pheres on Living tilled) duced Iron (C4) ace (C7) in Remarks)	) Roots (C3)	Secondary Indice Surface Soil Sparsely Ve Drainage Pa Oxidized Rh (when Crayfish Bu Saturation V Geomorphic	etors (minimum of two requi Cracks (B6) getated Concave Surface (B8) atterns (B10) atterns (B10) atterns (B10) atterns (B10) atterns (C3) attilied) arrows (C8) Asible on Aerial Imagery (C9) atterns (D2) atterns (D2) atterns (D2) atterns (D3) atterns (D
Depth (inches): marks:  drology  tland Hydrology Indice mary Indicators (mining) 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 A Water-Stained Leaves of the Control of th	Aerial Imagery ( (B9)  Yes  Yes	87) No ⊕ No ⊕	Salt Crust (B11) Aquatic Invertet Hydrogen Sulfid Dry Season Wat Oxidized Rhizos (where not Presence of Rec Thin Muck Surfa Other (Explain i	brates (B13) de Odor (C1) ter Table (C2) spheres on Living tilled) duced Iron (C4) duced Iron (C4) in Remarks)  (5): 6 (5): 0		Secondary Indice Surface Soil Sparsely Ve Drainage Pa Oxidized Rh (when Crayfish Bu Saturation V Geomorphic	cracks (B6) getated Concave Surface (B8) ittems (B10) itzospheres on Living Roots (C3) e tilled) rrows (C8) //sible on Aerial Imagery (C9) e Position (D2) Test (D5) e Hummocks (D7) (LRR F)
Depth (inches): marks:  drology  tland Hydrology Indic mary Indicators (minic 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 A Water-Stained Leaves of the Company of the C	Nerial Imagery ((B9)  Yes O Yes O Yes O	87) No	Salt Crust (B11) Aquatic Invertet Hydrogen Sulfid Dry Season Wat Oxidized Rhizos (where not Presence of Rec Thin Muck Surfa Other (Explain i	brates (B13) le Odor (C1) ter Table (C2) spheres on Living tilled) duced Iron (C4) ace (C7) in Remarks)  (i): 0 (ii): 0 (iii): 12	We	Secondary Indice Surface Soil Sparsely Ve Drainage Pa Oxidized Rh (when Crayfish Bu Saturation V Geomorphic FAC-neutra Frost Heave	cracks (B6) getated Concave Surface (B8) ittems (B10) itzospheres on Living Roots (C3) e tilled) rrows (C8) //sible on Aerial Imagery (C9) e Position (D2) I Test (D5) e Hummocks (D7) (LRR F)
Depth (inches): marks:  drology  tland Hydrology Indic mary Indicators (mini) 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 A Water-Stained Leaves eld Observations:	Nerial Imagery ((B9)  Yes O Yes O Yes O	87) No	Salt Crust (B11) Aquatic Invertet Hydrogen Sulfid Dry Season Wat Oxidized Rhizos (where not Presence of Rec Thin Muck Surfa Other (Explain i	brates (B13) le Odor (C1) ter Table (C2) spheres on Living tilled) duced Iron (C4) ace (C7) in Remarks)  (i): 0 (ii): 0 (iii): 12	We	Secondary Indice Surface Soil Sparsely Ve Drainage Pa Oxidized Rh (when Crayfish Bu Saturation V Geomorphic FAC-neutra Frost Heave	cracks (B6) getated Concave Surface (B8) ittems (B10) itzospheres on Living Roots (C3) e tilled) rrows (C8) //sible on Aerial Imagery (C9) e Position (D2) Test (D5) e Hummocks (D7) (LRR F)

Sampling Point: T4P7

Are Vegetation , Soil , or Hydrology	Section, Township, Ra  Local relief (concave, of the local sellief)  Lat.: 33,099524  les  time of year? Yes  No  Significantly disturbed? Are "No	Long.: -97.136511 Datum: NAD83  NWI classification: none  (If no, explain in Remarks.)
vestigator(s): MP andform (hillslope, terrace, etc.): Hillslope bregion (LRR): LRR J  I Map Unit Name: Silstid loamy fine sand, 1 to 5 percent slop climatic/hydrologic conditions on the site typical for this Are Vegetation ( , Soil  , or Hydrology ( ) Are Vegetation ( , Soil  , or Hydrology ( )	Section, Township, Ra  Local relief (concave, or section)  Lat.: 33.099524  les  time of year? Yes  No  Significantly disturbed? Are "No	Long.: -97.136511 Datum: NAD83  NWI classification: none  (If no, explain in Remarks.)
andform (hillslope, terrace, etc.): Hillslope bregion (LRR): LRR J  I Map Unit Name: Slistid loamy fine sand, 1 to 5 percent slop climatic/hydrologic conditions on the site typical for this Are Vegetation ( , Soil  , or Hydrology ( ) Are Vegetation ( , Soil  , or Hydrology ( )	Lat.: 33,099524  es  time of year?  Significantly disturbed?  Are "N	NWI classification: none  (If no, explain in Remarks.)
bregion (LRR): LRR J  1 Map Unit Name: Silstid loamy fine sand, 1 to 5 percent slop climatic/hydrologic conditions on the site typical for this tre Vegetation , Soil , or Hydrology  Are Vegetation , Soil , or Hydrology	time of year? Yes  No  Significantly disturbed? Are "N	NWI classification: none  (If no, explain in Remarks.)
I Map Unit Name: Slistid loamy fine sand, 1 to 5 percent slop climatic/hydrologic conditions on the site typical for this are Vegetation . Soil . , or Hydrology  Are Vegetation . , Soil . , or Hydrology	time of year? Yes  No  Significantly disturbed? Are "N	(If no, explain in Remarks.)
climatic/hydrologic conditions on the site typical for this  Are Vegetation	time of year? Yes  No  Significantly disturbed? Are *N	
Are Vegetation . , Soil . , or Hydrology	significantly disturbed? Are "N	~ ~
Are Vegetation . , Soil . , or Hydrology .	•	ormal Greumstances" present? Yes 🏵 No 🗅
	Mathralit brookinger. (	eded, explain any answers in Remarks.)
immary of Findings - Attach site map sh		
annual for them. 22 Menant out the bar	lowing sampling point loc	ations, transects, important features, etc
ydrophytic Vegetation Present? Yes O No 🗨	Is the Sampled	Area
Hydric Soil Present? Yes O No 💿		d? Yes ○ No ⑨
retland Hydrology Present? Yes O No 🗨	Within a Wedan	
Remarks:	<u> </u>	<del></del>
	<u> </u>	
EGETATION - Use scientific names of pl	ants Dominant FWS Re	egion: GP
LOCIATION OSC SCICILITO NAMES OF P.	Species? ————————————————————————————————————	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover Cover Status	Number of Dominant Species
1		That are OBL, FACW, or FAC: 1 (A)
2		Total Number of Dominant
3.		Species Across All Strata: 2 (B)
4.	□	Percent of dominant Species
(Director)	0 = Total Cover	That Are OBL, FACW, or FAC: 50.0% (A/B)
Sapling/Shrub Stratum (Plot size: )	, I	B
1		Prevalence Index worksheet: Total % Cover of: Multiply by:
2		Total % Cover of: Multiply by:  OBL species 0 x 1 = 0
4.		FACW species 0 x 2 = 0
5.		FAC species 25 x 3 = 75
	0 = Total Cover	FACU species 60 x 4 = 240
Herb Stratum (Plot size: 5 ft )	<del></del>	UPL species
1. Paspalum dilatatum	25	Column Totals: 100 (A) 390 (B)
2. Cynodon dactylon	60 🗹 60.0% FACU	
3. Senecio flaccidus	15	Prevalence Index = 8/A = 3.9
5.	0 1 1 0 000	Hydrophytic Vegetation Indicators:
· · · · · · · · · · · · · · · · · · ·		1 - Rapid Test for Hydrophytic Vegetation
7.		2 - Dominance Test is > 50%
8.		3 - Prevalence Index is ≤3.01
9.		4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)
10.	0	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
	100 = Total Cover	ļ <del>-</del>
Woody Vine Stratum (Plot size:)	_	Indicators of hydric soil and wetland hydrology must be present.
1		-
2		- Lindaga Nadio
	= Total Cover	Hydrophytic Vegetation Pracent? Yes No  No
% Bare Ground in Herb Stratum 0		Present? Yes O No O
Remarks:		

US Army Corps of Engineers

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

	<u>trix</u>	Redox Features Color (moist) % Type 1	Loc2.	Texture Remar	ks
nches) Color (moi	st) % 4/2 100	ONO THIOSELL AVE.		Silt	
0-2 1011	<u>,,, , , , , , , , , , , , , , , , , , </u>				<del></del>
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			_ <del></del>	<u> </u>	
				<del></del>	<u> </u>
voe: C=Concentration, D=E	Deoletion, RM=Reduced	Matrix, CS=Covered or Coated Sand Gra	ns ²Locat	ion: PL=Pore Lining. M=Matrix	
dric Soil Indicators: (A	oplicable to all LRRs,	unless otherwise noted.)		Indicators for Problematic Hydric Soil	s <sup>3</sup> :
Histosof (A1)		Sandy Gleyed Matrix S4		i on Muck (A9) (LRR I, J)	
Histic Epipedon (A2)		Sandy Redox (S5)		Coastal Prairie Redox (A16) (LRR F, G	, H)
Black Histic (A3)		Stripped Matrix (S6)		Dark Surface (S7) (LRR G)	
Hydrogen Sulfide (A4)		Loamy Mucky Mineral (F1)		High Plains Depressions (F16) (LRR H outside of MLRA 72 and	731
Stratified Layers (A5) (LRF		Loamy Gleyed Matrix (F2)		_ `	,,,
1 cm Muck (A9) (LRR F,G,		Depleted Matrix (F3) Redox Dark Surface (F6)		Reduced Vertic (F18)	
Depleted Below Dark Surf	ace (AII)	Depleted Dark Surface (F7)		Red Parent Material (TF2)  Very Shallow Dark Surface (TF12)	
Thick Dark Surface (A12)		Redox depressions (F8)		Other (Explain in Remarks)	
J Sandy Muck Mineral (S1) ] 2.5 cm Mucky Peat or Pea	ot (52) (LBB G. H.)	High Plains Depressions (F16)		<sup>3</sup> Indicators of hydrophytic vegetation and h	wetland
5 cm Mucky Peat or Peat		(MLRA 72 and 73 of LRR H)		hydrology must be present, unless disturbi	ed or problem
strictive Layer (if preser	nt):	<u> </u>			
Type: Compacted Soil	L			Hydric Soil Present? Yes O No	<b>(a)</b>
Depth (inches): 2 inches		<u> </u>		Hydric Soil Present? Yes O No	<u>.</u>
emarks:		<del></del>			
CISAIRO.					
· · · · · · · · · · · · · · · · · · ·		<u> </u>			
drology					
etland Hydrology Indica		at a displication of the	····	Secondary Indicators (minimum o	of two requir
etland Hydrology Indica				Surface Soil Cracks (86)	
etland Hydrology Indica rimary Indicators (minim Surface Water (A1)		Salt Crust (B11)		Surface Soil Cracks (86) Sparsely Vegetated Concave Su	
etland Hydrology Indica		Salt Crust (B11) Aquatic Invertebrates (B13)		Surface Soil Cracks (86) Sparsely Vegetated Concave Su Drainage Patterns (810)	irface (B8)
etland Hydrology Indica himary Indicators (minim Surface Water (A1) High Water Table (A2) Saturation (A3)		Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	,	Surface Soil Cracks (86) Sparsely Vegetated Concave Su Drainage Patterns (810) Oxidized Rhizospheres on Livin	irface (B8)
etland Hydrology Indica himary Indicators (minim Surface Water (A1) High Water Table (A2)		Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry Season Water Table (C2)		Surface Soil Cracks (86)  Sparsely Vegetated Concave Su Drainage Patterns (810) Oxidized Rhizospheres on Livin (where tilled)	irface (B8)
etland Hydrology Indica nimary Indicators (minim Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)		Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry Season Water Table (C2) Oxidized Rhizospheres on Living	Roots (C3)	Surface Soil Cracks (86)  Sparsely Vegetated Concave Su Drainage Patterns (810) Oxidized Rhizospheres on Livin (where tilled) Crayfish Burrows (C8)	irface (B8) g Roots (C3)
etland Hydrology Indica nimary Indicators (minim Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)		Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry Season Water Table (C2)	Roots (C3)	Surface Soil Cracks (86)  Sparsely Vegetated Concave Su Drainage Patterns (810) Oxidized Rhizospheres on Livin (where tilled) Crayfish Burrows (C8) Saturation Visible on Aerial Image	urface (B8) g Roots (C3)
etland Hydrology Indica rimary Indicators (minim Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)		Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry Season Water Table (C2) Oxidized Rhizospheres on Living	Roots (C3)	Surface Soil Cracks (86)  Sparsely Vegetated Concave Su Drainage Patterns (810) Oxidized Rhizospheres on Livin (where tilled) Crayfish Burrows (C8) Saturation Visible on Aerial Ima	irface (B8) g Roots (C3)
etland Hydrology Indicationary Indicators (minim  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift deposits (B3)		Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry Season Water Table (C2) Oxidized Rhizospheres on Living (Where not tilfed)	Roots (C3)	Surface Soil Cracks (86)  Sparsely Vegetated Concave Su Drainage Patterns (B10) Oxidized Rhizospheres on Livin (where tilled) Crayfish Burrows (C8) Saturation Visible on Aerial Ima Geomorphic Position (D2) FAC-neutral Test (D5)	g Roots (C3)
etland Hydrology Indicationary Indicators (minimary Indicators (minimary Indicators (minimary Indicators (minimary Indicators (minimary Indicators (May)    High Water Table (A2)   Saturation (A3)   Water Marks (B1)   Sediment Deposits (B2)   Drift deposits (B3)   Algal Mat or Crust (B4)	num of one required;	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry Season Water Table (C2) Oxidized Rhizospheres on Living (where not tilled) Presence of Reduced Iron (C4)	Roots (C3)	Surface Soil Cracks (86)  Sparsely Vegetated Concave Su Drainage Patterns (810) Oxidized Rhizospheres on Livin (where tilled) Crayfish Burrows (C8) Saturation Visible on Aerial Ima	g Roots (C3)
etland Hydrology Indica nimary Indicators (minim 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)	erial Imagery (87)	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry Season Water Table (C2) Oxidized Rhizospheres on Living (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7)	Roots (C3)	Surface Soil Cracks (86)  Sparsely Vegetated Concave Su Drainage Patterns (B10) Oxidized Rhizospheres on Livin (where tilled) Crayfish Burrows (C8) Saturation Visible on Aerial Ima Geomorphic Position (D2) FAC-neutral Test (D5)	g Roots (C3)
etland Hydrology Indications (minimary Indicators (minimary Indicators (minimary Indicators (minimary Indicators (minimary Indicators (MI)    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 Active Mater-Stained Leaves (MI)	erial Imagery (87)	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry Season Water Table (C2) Oxidized Rhizospheres on Living (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7)	Roots (C3)	Surface Soil Cracks (86)  Sparsely Vegetated Concave Su Drainage Patterns (B10) Oxidized Rhizospheres on Livin (where tilled) Crayfish Burrows (C8) Saturation Visible on Aerial Ima Geomorphic Position (D2) FAC-neutral Test (D5)	g Roots (C3)
etland Hydrology Indicationary Indicators (minim    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 A6     Water-Stained Leaves (B1)     Iteld Observations:	erial Imagery (87)	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry Season Water Table (C2) Oxidized Rhizospheres on Living (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7)	Roots (C3)	Surface Soil Cracks (86)  Sparsely Vegetated Concave Su Drainage Patterns (B10) Oxidized Rhizospheres on Livin (where tilled) Crayfish Burrows (C8) Saturation Visible on Aerial Ima Geomorphic Position (D2) FAC-neutral Test (D5)	g Roots (C3)
etland Hydrology Indications (minimary Indicators (minimary Indicators (minimary Indicators (minimary Indicators (minimary Indicators (minimary Indicators (Max)    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 Active Mater-Stained Leaves (Mater-Stained Leaves (Mate	erial Imagery (87)	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry Season Water Table (C2) Oxidized Rhizospheres on Living (where not tilfed) Presence of Reduced Iron (C4) Thin Muck Surface (C7) Other (Explain in Remarks)	- T	Surface Soil Cracks (86)  Sparsely Vegetated Concave Su Drainage Patterns (B10) Oxidized Rhizospheres on Livin (where tilled) Crayfish Burrows (C8) Saturation Visible on Aerial Ima Geomorphic Position (D2) FAC-neutral Test (D5) Frost Heave Hummocks (D7) (1	g Roots (C3) agery (C9) LRR F)
etland Hydrology Indications (minimary Indicators (minimary Indicators (minimary Indicators (minimary Indicators (minimary Indicators (minimary Indicators (Max)    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 A6   Water-Stained Leaves (B1)   Water-Stained Leaves (B2)   Water Table Present?	erial Imagery (B7) B9) Yes O No	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry Season Water Table (C2) Oxidized Rhizospheres on Living (where not tilfed) Presence of Reduced Iron (C4) Thin Muck Surface (C7) Other (Explain in Remarks)	- T	Surface Soil Cracks (86)  Sparsely Vegetated Concave Su Drainage Patterns (B10) Oxidized Rhizospheres on Livin (where tilled) Crayfish Burrows (C8) Saturation Visible on Aerial Ima Geomorphic Position (D2) FAC-neutral Test (D5)	g Roots (C3) agery (C9) LRR F)
etland Hydrology Indicationary Indicators (minim    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 Active Water-Stained Leaves (Bater Constitution of Constitution Con	erial Imagery (B7) B9)  Yes O No  Yes O No  Yes O No  Yes O No  Yes O No	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry Season Water Table (C2) Oxidized Rhizospheres on Living (where not tilfed) Presence of Reduced Iron (C4) Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): 0	Weti	Surface Soil Cracks (86)  Sparsely Vegetated Concave Su Drainage Patterns (B10) Oxidized Rhizospheres on Livin (where tilled) Crayfish Burrows (C8) Saturation Visible on Aerial Ima Geomorphic Position (D2) FAC-neutral Test (D5) Frost Heave Hummocks (D7) (1	g Roots (C3) agery (C9) LRR F)
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 Activation Visible Vi	erial Imagery (B7) B9)  Yes O No  Yes O No  Yes O No  Yes O No  Yes O No	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry Season Water Table (C2) Oxidized Rhizospheres on Living (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): Depth (inches): Depth (inches): Depth (inches):	Weti	Surface Soil Cracks (86)  Sparsely Vegetated Concave Su Drainage Patterns (B10) Oxidized Rhizospheres on Livin (where tilled) Crayfish Burrows (C8) Saturation Visible on Aerial Ima Geomorphic Position (D2) FAC-neutral Test (D5) Frost Heave Hummocks (D7) (1	g Roots (C3) agery (C9) LRR F)

olicant/Owner:  vestigator(s): MP  andform (hillslope, terrace, etc.): Plain  pregion (LRR): LRR ]  La  Map Unit Name: Wilson clay loam, 1 to 3 percent slopes  climatic/hydrologic conditions on the site typical for this time of the Vegetation ✓ , Soil ✓ , or Hydrology ☐ significative Vegetation ☐ , Soil ☐ , or Hydrology ☐ natural timmary of Findings - Attach site map showing the Hydric Soil Present? Yes ○ No ④  Hydric Soil Present? Yes ○ No ④  Hydric Soil Present? Yes ○ No ④  Vetland Hydrology Present? Yes ○ No ④  Remarks: Area is horse corral. No vegetation and area has been sanded  **Tree Stratum**  **Plot size:	Section Local Loca	Yes No Ced? Are "No ic? (If need in a Wetland)  In the Sampled Are within a Wetland;  FWS Reflees? Indicator	ded, explain any answers in Remarks.) ations, transects, important features, etc rea rea gives O No   gion: GP
restigator(s): MP andform (hilistope, terrace, etc.): Plain  pregion (LRR): LRR ]  La  I Map Unit Name: Wilson clay loam, 1 to 3 percent slopes climatic/hydrologic conditions on the site typical for this time of the Vegetation    Are Vegetation    Soil    Or Hydrology    natural immary of Findings - Attach site map showing the Vegetation Present? Yes    No    Hydric Soil Present? Yes    No    Petland Hydrology Present? Yes    No    Petland Hydrology Present? No vegetation and area has been sanded the Vegetation    Tree Stratum (Plot size:    Tree Stratum (Plot size:    Tree Stratum (Plot size:    Tree Stratum (Plot size:    Attach site map showing    Attach site map showing    Attach site map showing    Petland Hydrology Present? Yes    No    Tree Stratum (Plot size:    Tree	Section Local Loca	Yes No Oed? Are No ic? (If need within a Wetland FWS Refles? Indicator	nonvex, none): flat Slope: 1.0 % / 0.6  Long.: -97.138472 Datum: NAD83  NWI classification: none  (If no, explain in Remarks.)  ormal Circumstances* present? Yes No O  ded, explain any answers in Remarks.)  ations, transects, important features, etc  rea  Yes No O  Dominance Test worksheet:  Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)  Total Number of Dominant
andform (hilistope, terrace, etc.): Plain  Dregion (LRR): LRR ]  I Map Unit Name: Wilson clay loam, 1 to 3 percent slopes  Climatic/hydrologic conditions on the site typical for this time of the Vegetation V , Soil V , or Hydrology Significative Vegetation V , Soil V , or Hydrology natural natural name of Findings - Attach site map showing hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Hydrology Present? Yes No Pretiand Hydrology Present? Yes No P	Local at.: 33,10113 of year? cantly disturb ally problemat ng sampli d. Dom Spec bsolute Rel.5 6 Cover Cove	Yes No Oed? Are "No ic? (If needing point local is the Sampled Arwithin a Wetland inant FWS Register.	NWI classification: none  (If no, explain in Remarks.)  ormal Circumstances* present? Yes No oded, explain any answers in Remarks.)  ations, transects, important features, etc.  rea  gon: GP  Dominance Test worksheet:  Number of Dominant Species That are OBL, FACW, or FAC:
Map Unit Name: Wison clay loam, 1 to 3 percent slopes climatic/hydrologic conditions on the site typical for this time o Are Vegetation ♥ , Soil ♥ , or Hydrology □ signific Are Vegetation □ , Soil □ , or Hydrology □ natura Attach site map Showin Aydrophytic Vegetation Present? Yes ○ No ● Hydric Soil Present? Yes ○ No ● Hydric Soil Present? Yes ○ No ●  Attach Hydrology Present? Yes ○ No ●  Attach Hydrology Present? Yes ○ No ●  Attach Site map Showin  Attach site site site site site site site site	cantly disturbally problemating samplide.  Domestic Specific Specific Cover Co	Yes No Oed? Are "No ic? (If need no point local is the Sampled Are within a Wedand' FWS Refles? Indicator	NWI classification: none  (If no, explain in Remarks.)  ormal Circumstances* present? Yes No oded, explain any answers in Remarks.)  ations, transects, important features, etc.  rea  Yes No o  Dominance Test worksheet:  Number of Dominant Species That are OBL, FACW, or FAC:
Map Unit Name: Wison clay loam, 1 to 3 percent slopes climatic/hydrologic conditions on the site typical for this time o Are Vegetation ♥ , Soil ♥ , or Hydrology □ signific Are Vegetation □ , Soil □ , or Hydrology □ natura Attach site map Showin Aydrophytic Vegetation Present? Yes ○ No ● Hydric Soil Present? Yes ○ No ● Hydric Soil Present? Yes ○ No ●  Attach Hydrology Present? Yes ○ No ●  Attach Hydrology Present? Yes ○ No ●  Attach Site map Showin  Attach site site site site site site site site	cantly disturbally problemating samplide.  Domestic Specific Specific Cover Co	Yes No Oed? Are "No ic? (If need no point local is the Sampled Are within a Wetland inant FWS Register)  FWS Registers? Indicator	(If no, explain in Remarks.)  ormal Circumstances* present? Yes  No  oded, explain any answers in Remarks.)  ations, transects, important features, etc.  rea  gion: GP  Dominance Test worksheet:  Number of Dominant Species That are OBL, FACW, or FAC:
climatic/hydrologic conditions on the site typical for this time of the Vegetation . Soil . Or Hydrology . Significative Vegetation . Soil . Or Hydrology . Inatural cummary of Findings - Attach site map showing typication Present? Yes . No . Hydric Soil Present? Yes . No . No . Wetland Hydrology Present? Yes . No . N	cantly disturbable problemating samplified.  Domestock Specific Specific Cover Cover	ed? Are No ic? (If need ing point loca  Is the Sampled Are within a Wetland inant FWS Reg ies? Itrat. Indicator	ded, explain any answers in Remarks.)  ations, transects, important features, etc  rea  gion: GP  Dominance Test worksheet:  Number of Dominant Species That are OBL, FACW, or FAC:
Are Vegetation , Soil , or Hydrology significative Vegetation , Soil , or Hydrology natural ammary of Findings - Attach site map showing hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Vetland Hydrology Present? Yes No Vetland Hydrology Present? Yes No Vegetation and area has been sanded Remarks: Area is horse corral. No vegetation and area has been sanded regetation and area has been sanded regetation. At Yes Stratum (Plot size:	d.  Dom Spec bsolute Rel.5 6 Cover Cove	ed? Are No ic? (If need ing point loca  Is the Sampled Are within a Wetland inant FWS Reg ies? Itrat. Indicator	ded, explain any answers in Remarks.)  ations, transects, important features, etc  rea  gion: GP  Dominance Test worksheet:  Number of Dominant Species That are OBL, FACW, or FAC:
Are Vegetation . Soil . , or Hydrology . natural	d. Dom Specibsolute Rel.s	ic? (If needing point local Is the Sampled Arwithin a Wetland inant FWS Register? Itrat. Indicator	gion: GP  Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC:
Attach site map showing sydrophytic Vegetation Present? Yes No   Hydric Soil Present? Yes No   Petland Hydrology Present? Yes No   Remarks: Area is horse corral. No vegetation and area has been sanded   PEGETATION - Use scientific names of plants  Tree Stratum (Plot size:	d. Dom Specibsolute Rel.s 6 Cover Cove	Is the Sampled Arwithin a Wetland  inant FWS Register.  Indicator	gion: GP  Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC:
ydrophytic Vegetation Present? Yes No  Hydric Soil Present? Yes No  Vetland Hydrology Present? Yes No  Remarks: Area is horse corral. No vegetation and area has been sanded  VEGETATION - Use scientific names of plants  Tree Stratum (Plot size:	Dom Spec bsolute Rel.5 6 Cover Cove	Is the Sampled Arwithin a Wetland  Inant FWS Refles?  Indicator	gion: GP  Dominance Test worksheet:  Number of Dominant Species That are OBL, FACW, or FAC:  Total Number of Dominant
Hydric Soil Present?  Yes No   No   No   Remarks: Area is horse corral. No vegetation and area has been sanded  YEGETATION - Use scientific names of plants  Tree Stratum  (Plot size:	d. Dom Spec bsolute Rel.5 6 Cover Cove	inant FWS Registrat. Indicator	gion: GP  Dominance Test worksheet:  Number of Dominant Species That are OBL, FACW, or FAC:  Total Number of Dominant
/EGETATION - Use scientific names of plants  Tree Stratum (Plot size:)  1	d. Dom Spec bsolute Rel.s 6 Cover Cove	inant FWS Regies?	gion: GP  Dominance Test worksheet:  Number of Dominant Species That are OBL, FACW, or FAC:  Total Number of Dominant
Remarks: Area is horse corral. No vegetation and area has been sanded  /EGETATION - Use scientific names of plants	d. Dom Spec bsolute Rel.s 6 Cover Cove	inant FWS Regies?	gion: GP  Dominance Test worksheet:  Number of Dominant Species That are OBL, FACW, or FAC:  Total Number of Dominant
/EGETATION - Use scientific names of plants	Dom Spec bsolute Rel.5 6 Cover Cove	ies? ————————————————————————————————————	Dominance Test worksheet:  Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)  Total Number of Dominant
Tree Stratum (Plot size:)	Spec bsolute Rel.5 6 Cover Cove	ies? ————————————————————————————————————	Dominance Test worksheet:  Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)  Total Number of Dominant
Tree Stratum (Plot size:)	Spec bsolute Rel.5 6 Cover Cove	ies? ————————————————————————————————————	Dominance Test worksheet:  Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)  Total Number of Dominant
Tree Stratum (Plot size:)	Spec bsolute Rel.5 6 Cover Cove	ies? ————————————————————————————————————	Dominance Test worksheet:  Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)  Total Number of Dominant
Tree Stratum     (Plot size:	6 Cover Cove	trat. Indicator	Number of Dominant Species That are OBL, FACW, or FAC:  1 (A) Total Number of Dominant
1	<u> </u>		That are OBL, FACW, or FAC: 1 (A)  Total Number of Dominant
3.			Total Number of Dominant
3			
	0 = T	otal Cover	Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)
Sapling/Shrub Stratum (Plot size:)	<del></del> -		
1	<u>-</u> H-		Prevalence Index worksheet:
2	<u></u>	<del></del>	Total % Cover of; Multiply by:  OBL species 0 x 1 = 0
3	급 급		FACW species 0 x2 = 0
4			FAC species 0 x 3 = 0
	0 =7	otal Cover	FACU species 0 x 4 = 0
Herb Stratum (Plot size:)	<del></del> -		UPL species 0 x 5 = 0
1.	<u> </u>	0.0%	Column Totals: 0 (A) 0 (B)
2	<u> </u>	0.0%	, , , , , , , , , , , , , , , , , , ,
3	H-	0.0%	170730760 7703
5.		0.0%	Hydrophytic Vegetation Indicators:
6.		0.0%	1 - Rapid Test for Hydrophytic Vegetation
7.		0.0%	2 - Dominance Test is > 50%
8.		0.0%	3 - Prevalence Index is ≤3.01
9.	님.	0.0%	4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
10.	_0_ U.	0.0%	Problematic Hydrophytic Vegetation (Explain)
	100 =	Total Cover	1 Indicators of hydric soil and wetland hydrology mus
Woody Vine Stratum (Plot size:)			be present.
1	<u> </u>	<del></del>	
2	_e, L.	Total Cover	Hydrophytic
-	=	I ULGI COVET	Vegetation Present? Yes No   No
% Bare Ground in Herb Stratum 0			brezeitt.

US Army Corps of Engineers

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

rofile Description: (Describe to the	depth needed to document the Indicator or confirm th	Sampling Point: T5P1 ne absence of Indicators.)
Depth Matrix		<del>_</del>
DED01 ————————————————————————————————————	% Color (moist) % Type 1 10c2	•
	100	Very fine sand
Deposition to	RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup> L	ocation: PL=Pore Lining, M=Matrix
	to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils 3:
Histosol (A1)	Sandy Gleyed Matrix S4	1 cm Muck (A9) (LRR I, J)
Histic Epipedon (A2)	Sandy Redox (S5)	Coastal Prairie Redox (A16) (LRR F, G, H)
Black Histic (A3)	Stripped Matrix (S6)	Dark Surface (S7) (LRR G)
T Black Histic (43)	Loamy Mucky Mineral (F1)	High Plains Depressions (F16)
Hydrogen Sulfide (A4)	Togus More Lange (1.1)	
<b>=</b>	Loamy Gleyed Matrix (F2)	(LRR H outside of MLRA 72 and 73)
Hydrogen Sulfide (A4) Stratified Layers (A5) (LRR F)	=	(LRR H outside of MLRA 72 and 73)  Reduced Vertic (F18)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	
Hydrogen Sulfide (A4) Stratified Layers (A5) (LRR F) 1 cm Muck (A9) (LRR F,G,H) Depleted Below Dark Surface (A11)	Loamy Gleyed Matrix (F2)  Depleted Matrix (F3)	Reduced Vertic (F18)
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)	Loamy Gleyed Matrix (F2)  Depleted Matrix (F3)  Redox Dark Surface (F6)	Reduced Vertic (F18) Red Parent Material (TF2)
Hydrogen Sulfide (A4) Stratified Layers (A5) (LRR F) 1 cm Muck (A9) (LRR F,G,H) Depleted Below Dark Surface (A11)	Loamy Gleyed Matrix (F2)  Depleted Matrix (F3)  Redox Dark Surface (F6)  Depleted Dark Surface (F7)  Redox depressions (F8)  R G, H)  High Plains Depressions (F16)	Reduced Vertic (F18) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
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) (LRF	Loamy Gleyed Matrix (F2)  Depleted Matrix (F3)  Redox Dark Surface (F6)  Depleted Dark Surface (F7)  Redox depressions (F8)  R G, H)  High Plains Depressions (F16)	Reduced Vertic (F18) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)

łydrology				<u> </u>			
Wetland Hydrology Indica	tors:		<del></del>			rs (minimum of two required)	
Primary Indicators (minis		equired;	heck all that apply)		Surface Soil Cra	acks (86)	
Surface Water (A1)			Salt Crust (B11)		Sparsely Vegeta	ated Concave Surface (B8)	
High Water Table (A2)			Aquatic Invertebrates (B13)		Drainage Patte	ms (B10)	
Saturation (A3)			Hydrogen Sulfide Odor (C1)		Oxidized Rhizo:	spheres on Living Roots (C3)	
Water Marks (81)			Dry Season Water Table (C2)		(where til	ited)	
Sediment Deposits (82)			Oxidized Rhizospheres on Livin	ng Roots (C3)	Crayfish Burrov	vs (C8)	
Orift deposits (83)			(where not tilled)		Saturation Visit	ole on Aerial Imagery (C9)	
Algal Mat or Crust (B4)			Presence of Reduced Iron (C4	)	Geomorphic Po	sition (D2)	
☐ Iron Deposits (BS)					FAC-neutral Test (D5)		
☐ Inundation Visible on A	erial Imagery (	(87)	Other (Explain in Remarks)		Frost Heave Hu	ummocks (D7) (LRR F)	
Water-Stained Leaves (							
Field Observations:							
Surface Water Present?	Yes 🔾	No 👁	Depth (inches): 0				
Water Table Present?	Yes 🔾	No 💿	Depth (inches): 0	Wottand	Hydrology Present?	Yes ○ No 👁	
Saturation Present? (includes capillary fringe)	Yes O	No 💿	Depth (inches): 0				
Describe Recorded Data	(stream gau	ge, monit	or well, aerial photos, previous in	spections), if ava	lable:		
Remarks:			<del></del> -	·			
1							

Remarks:

oject/Site: Alpha Bartonville FM 407		City/Count	y: Bartonville / I	Denton Sa	ampling Date: <u>07-Sep-21</u>
plicant/Owner:			State:	Texas Sampling Po	int: T5P2
vestigator(s): MP			Township, Ran	ige: 5 T	R
andform (hilistope, terrace, etc.):			ef (concave, co	onvex, none): flat	Slope: <u>1.0</u> % / <u>0.6</u>
bregion (LRR): LRR )	· · · · · · · · · · · · · · · · · · ·	Lat.: 33.100029		Long.: -97.138480	Datum: NAD83
I Map Unit Name: Wilson clay loam				NWI classification	on: none
climatic/hydrologic conditions on	the site typical for thi	s time of year?	res 💿 No 🔾	(If no, explain in Rem	arks.)
Are Vegetation, Soil	, or Hydrology		? Are "No	ermal Circumstances" preser	nt? Yes 🏵 No 🔾
	_	naturally problematic?		ded, explain any answers in	Remarks.)
	•		•		
ummary of Findings - At	<del></del>	howing sampling	point ioca	itions, transects, in	portant readures, etc
ydrophytic Vegetation Present?	Yes O No 🛈	Is t	the Sampled Ar	rea	
Hydric Soil Present?	Yes O No 💿	wit	hin a Wetland	7 Yes ○ No ④	
/etland Hydrology Present?	Yes O No 💿				
Remarks:					
					<del></del>
/EGETATION - Use scien	tific names of p	olants Domina		gion: GP	
		Absolute Rel.Stra	t. Indicator	Dominance Test workshee	t
Tree Stratum (Plot size:		% Cover Cover	Status	Number of Dominant Species	1 (A)
1		. li	·	That are OBL, FACW, or FAC	
2		<u> </u>		Total Number of Dominant Species Across All Strata:	2(B)
3. 4.	<del></del>		<del></del> _	Species Ad uss All Buoto.	<u>, , , , , , , , , , , , , , , , , , , </u>
···	<u> </u>	0 = Tota	Cover	Percent of dominant Speci That Are OBL, FACW, or F	
Sapling/Shrub Stratum (Plot size:	)			Tildt Ale Obc, FACTI, OF T	
1	<del></del>		<del></del>	Prevalence Index workshe	
2				Total % Cover of:  OBL species 0	Multiply by:
3			<del></del>	FACW species 0	<u> </u>
				FAC species 40	
<u> </u>			il Cover	FACU species 60	
Herb Stratum (Plot size: 5 ft	)			UPL species 0	_
1. Cynodon dactylon			0% FACU	Column Totals: _ 100	_ (A) <u>360</u> (B)
2 Paspalum dilatatum	<u>.                                    </u>	40 2 40.9	0% <u>FAC</u> 0%	Prevalence Index = B	
3. 4.	<del> </del>		0%	Hydrophytic Vegetation In	
5.			0%	1	
6.			<u> </u>	1 - Rapid Test for Hyd	
7. 8.		=	0%	2 - Dominance Test is 3 - Prevalence Index	
9.	<del></del>	=	0%	1 <del></del>	
10.		=_	0%		aptations <sup>1</sup> (Provide supporting on a separate sheet)
		100 = Tota	al Cover	Problematic Hydroph	ytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size	: (,)	<del></del>			il and wetland hydrology must
1				be present.	<del></del>
				ļ	
		0 = Tot	al Cover	Hydrophytic	_
				Vegetation	(3)
% Bare Ground in Herb Stratum	0		_	Vegetation Present? Yes	No 🖭

US Army Corps of Engineers

<sup>\*</sup>Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

	Matri			Redox Features  lor (moist) % Type 1	Loc2	Texture	
ches)	Color (moist			0071111015117911425_	<u></u>	Loam	
-16	10YR 4/3		<u>'</u> — —	<del></del>	<del></del>		
			<del></del>	<del></del>			· · · · · · · · · · · · · · · · · · ·
					<del></del>	<del></del>	<del> </del>
				<del></del>			· · · · · · · · · · · · · · · · · · ·
						<u> </u>	<u> </u>
	<del>- ~</del>		<del></del>				
<del></del>			<del></del>			<del>, , , , , , , , , , , , , , , , , , , </del>	
<del></del> -			On the said to	Ishiri CS-Cayarad or Castad Sand	Graine 31 ora	tion: PL=Pore Uning, M=Ma	ltrix
				hatrix, CS=Covered or Coated Sand	Grants - COCO	Indicators for Proble	<del></del>
		ilcable to	an LKKS, D	niess otherwise noted.)  Sandy Gleyed Matrix \$4		i cm Muck (A9) (U	-
Histosol (	A1) pedon (A2)		Ϊ	Sandy Redox (SS)		= ', ', '	ox (A16) (LRR F, G, H)
Black Hist			Ĭ	Stripped Matrix (S6)		Dark Surface (S7)	
	Sulfide (A4)		Ō	Loamy Mucky Mineral (F1)		High Plains Depres	sions (F16)
	Layers (A5) (URR E	F)	[	Loamy Gleyed Matrix (F2)		(LRR H outside	of MLRA 72 and 73)
	k (A9) (LRR F,G,H)			Depleted Matrix (F3)		Reduced Vertic (F1	8)
Depleted	Below Dark Surfac	e (A11)	يا	Redox Dark Surface (F6)		Red Parent Materia	I (TF2)
Thick Đar	rk Surface (A12)		Ļ	Depleted Dark Surface (F7)		Very Shallow Dark	
•	ick Mineral (S1)		L	Redox depressions (F8)		Other (Explain in 9	•
	lucky Peat or Peat (		i, H) L	High Plains Depressions (F16) (MLRA 72 and 73 of LRR H	١	3 Indicators of hydrophyl	tic vegetation and wetland ent, unless disturbed or problem
5 cm Muc	tky Peat or Peat (S	3) (UK F)		(PILIN 72 010 73 01 DN 11		injuridity indicate pres	
trictive L	ayer (if present)						
Туре:	<del></del>			<del> </del>	<del></del>	Hydric Soll Present?	Yes 🔾 No 🖲
						1170112	
	thes);			<del>- ,,</del> .			100 100
Depth (inc marks:	thes):			<del></del>	<u> </u>		
	ches):		<u></u> -	<del>- ,, </del>			
	ches):		<u></u>	<del></del>			133 143
marks:							
marks: drolog	ıy						
drolog	I <b>Y</b> drotogy Indicato	rs:	equired: d	heck all that apply)			tors (minimum of two requir
drolog	Y drology Indicato licators (minimu	rs:	equired; d	heck all that apply)		Secondary Indica	tors (minimum of two requir Cracks (86)
drolog thand Hye mary Ind	drotogy Indicato ficators (minimu Water (A1)	rs:	equired; d	Salt Crust (811)		Secondary Indica Surface Soil Sparsely Veg	tors (minimum of two requir Cracks (86) Jetated Concave Surface (88)
drolog tland Hyd mary Ind Surface High Wa	drology Indicato dicators (minimul Water (A1) ater Table (A2)	rs:	equired; d	Salt Crust (B11) Aquatic Invertebrates (B13)		Secondary Indica Surface Soil Sparsely Veg Drainage Pa	tors (minimum of two requir Cracks (86) Jetated Concave Surface (88)
drolog thand Hydimary Indi Surface High Wa	drotogy Indicato dicators (minimul Water (A1) ater Table (A2) on (A3)	rs:	equired; d	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)		Secondary Indica Surface Soil Sparsely Veg Drainage Pa Oxidized Rhi	tors (minimum of two requir Cracks (86) Jetated Concave Surface (88) Items (810) Zospheres on Living Roots (C3)
drolog thand Hyu mary Ind Surface High Wa Saturatii Water M	drotogy Indicato dicators (minimul Water (A1) ater Table (A2) on (A3) farks (B1)	rs:	equired; d	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry Season Water Table (C2)	ing Roots (C3)	Secondary Indica Surface Soil Sparsely Veg Drainage Pa	tors (minimum of two requir Cracks (86) Jetated Concave Surface (88) Ettems (810) Zospheres on Living Roots (C3)
drolog ttand Hyu mary Ind Surface High Wa Saturatii Water M Sedimer	drotogy Indicato dicators (minimul Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2)	rs:	equired; d	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry Season Water Table (C2) Oxidized Rhizospheres on Livi	ing Roots (C3)	Secondary Indica Surface Soil Sparsely Veg Drainage Pa Oxidized Rhi (where	tors (minimum of two requir Cracks (86) Jetated Concave Surface (88) Ettems (810) Zospheres on Living Roots (C3)
drolog tland Hyd mary Ind Surface High Wa Saturatii Water M Sedimer Drift dej	drology Indicato ficators (minimus Water (A1) eter Table (A2) on (A3) tarks (B1) nt Deposits (B2) posits (B3)	rs:	equired; d	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry Season Water Table (C2) Oxidized Rhizospheres on Livi (where not tilled)		Secondary Indica Surface Soil Sparsely Veg Drainage Pa Oxidized Rhi (where	tors (minimum of two require Cracks (86) Jetated Concave Surface (88) Items (810) Zospheres on Living Roots (C3) Itilied) rows (C8) Jisible on Aerial Imagery (C9)
drolog tland Hyd mary Ind Surface High Wa Saturatii Water M Sedimer Drift dej Algal Ma	drology Indicato ficators (minimus Water (A1) eter Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) et or Crust (B4)	rs:	equired; d	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry Season Water Table (C2) Oxidized Rhizospheres on Livi (where not tilled) Presence of Reduced Iron (C4)		Secondary Indica Surface Soil Sparsely Veg Drainage Pa Oxidized Rhi (where Crayfish Bur Saturation V	tors (minimum of two require Cracks (86) etated Concave Surface (88) etems (810) zospheres on Living Roots (C3) etilled) rows (C8) lisible on Aerial Imagery (C9) Position (D2)
drolog tland Hyd mary Ind Surface High Wa Saturatii Water M Sedimer Onft dej Algal Ma	drotogy Indicato ficators (minimum water (A1) ater Table (A2) on (A3) farks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	rs: m of one		Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry Season Water Table (C2) Oxidized Rhizospheres on Livi (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7)		Secondary Indica Surface Soil Sparsely Veg Drainage Pa Oxidized Rhi (where Crayfish Bur Saturation V Geomorphic	tors (minimum of two require Cracks (86) jetated Concave Surface (88) ittems (810) zospheres on Living Roots (C3) tilled) rows (C8) isible on Aerial Imagery (C9) Position (D2) Test (D5)
drolog tland Hyd mary Ind Surface High Wa Saturatii Water M Sedimer Drift dej Algal Ma I ron Dej I nundat	drotogy Indicato ficators (minimul Water (A1) ater Table (A2) on (A3) farks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) clion Visible on Aeric	n of one t		Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry Season Water Table (C2) Oxidized Rhizospheres on Livi (where not tilled) Presence of Reduced Iron (C4)		Secondary Indica Surface Soil Sparsely Veg Drainage Pa Oxidized Rhi (where Crayfish Bur Saturation V Geomorphic	tors (minimum of two require Cracks (86) etated Concave Surface (88) etems (810) zospheres on Living Roots (C3) tilled) rows (C8) lisible on Aerial Imagery (C9) Position (D2)
drolog ttand Hyu mary Ind Surface High Wa Saturatii Water M Sedimer Drift dej Algal Ma I ron De, I nundat Water-S	drotogy Indicato dicators (minimus Water (A1) eter Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) et or Crust (B4) posits (B5) ition Visible on Aeris Stained Leaves (B9)	n of one t		Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry Season Water Table (C2) Oxidized Rhizospheres on Livi (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7)		Secondary Indica Surface Soil Sparsely Veg Drainage Pa Oxidized Rhi (where Crayfish Bur Saturation V Geomorphic	tors (minimum of two require Cracks (86) jetated Concave Surface (88) ittems (810) zospheres on Living Roots (C3) tilled) rows (C8) isible on Aerial Imagery (C9) Position (D2) Test (D5)
drolog tland Hyu mary Ind Surface High Wa Saturatii Water M Sedimer Onift dej Algal Ma Iron De, Inundat Water-S	drotogy Indicato ficators (minimus Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) tion Visible on Aeric Stained Leaves (B9)	m of one a	(87)	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry Season Water Table (C2) Oxidized Rhizospheres on Livi (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7) Other (Explain in Remarks)		Secondary Indica Surface Soil Sparsely Veg Drainage Pa Oxidized Rhi (where Crayfish Bur Saturation V Geomorphic	tors (minimum of two require Cracks (86) jetated Concave Surface (88) ittems (810) zospheres on Living Roots (C3) tilled) rows (C8) isible on Aerial Imagery (C9) Position (D2) Test (D5)
drolog stland Hys imary Ind Surface High Wa Saturatii Water M Sedimer Drift dej Algal Ma Iron De, Inundat Water-S	drotogy Indicato dicators (minimus Water (A1) eter Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) et or Crust (B4) posits (B5) ition Visible on Aeris Stained Leaves (B9)	rs: m of one r al Imagery	(87) No 💿	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry Season Water Table (C2) Oxidized Rhizospheres on Livi (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7) Other (Explain in Remarks)		Secondary Indica Surface Soil Sparsely Veg Drainage Pa Oxidized Rhi (where Crayfish Bur Saturation V Geomorphic	tors (minimum of two require Cracks (86) jetated Concave Surface (88) ittems (810) zospheres on Living Roots (C3) tilled) rows (C8) isible on Aerial Imagery (C9) Position (D2) Test (D5)
drolog stland Hys imary Ind Surface High Wa Saturatii Water M Sedimer Drift dej Algal Ma Iron De, Inundat Water-S	drology Indicato ficators (minimus water (A1) ater Table (A2) on (A3) farks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) cion Visible on Aeric stained Leaves (B9) vations: er Present?	m of one a	(87)	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry Season Water Table (C2) Oxidized Rhizospheres on Livi (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7) Other (Explain in Remarks)	i)	Secondary Indica Surface Soil Sparsely Veg Drainage Pa Oxidized Rhi (where Crayfish Bur Saturation V Geornorphic FAC-neutral Frost Heave	tors (minimum of two require Cracks (86) getated Concave Surface (88) ttems (810) zospheres on Living Roots (C3) ttilled) rows (C8) isible on Aerial Imagery (C9) Position (D2) Test (D5) Hummocks (D7) (LRR F)
drolog  tland Hydimary Ind  Surface  High Wa  Sedimer  Doift dej  Iron Dej  Inundat  Water-Seld Obser  rface Wate  ster Table  turation Pet	drology Indicato ficators (minimus water (A1) ater Table (A2) on (A3) farks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) cion Visible on Aeric stained Leaves (B9) vations: er Present? Present?	rs: m of one r al Imagery	(87) No 💿	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry Season Water Table (C2) Oxidized Rhizospheres on Livi (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7) Other (Explain in Remarks)	i)	Secondary Indica Surface Soil Sparsely Veg Drainage Pa Oxidized Rhi (where Crayfish Bur Saturation V Geomorphic	tors (minimum of two require Cracks (86) getated Concave Surface (88) ttems (810) zospheres on Living Roots (C3) ttilled) rows (C8) isible on Aerial Imagery (C9) Position (D2) Test (D5) Hummocks (D7) (LRR F)
drolog  thand Hyu mary Ind Surface High Wa Saturatin Water M Sedimer Drift dep Algal Ma I non De, I nundat Water-S ald Obser rface Wate ster Table turation Procludes cap	drotogy Indicato ficators (minimus Water (A1) ster Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) st or Crust (B4) posits (B5) cion Visible on Aeric Stained Leaves (B9) vations: er Present? Present? resent?	al Imagery  Yes O  Yes O	(87) No	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry Season Water Table (C2) Oxidized Rhizospheres on Livi (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): 0 Depth (inches): 0 Depth (inches): 0	Wet	Secondary Indica Surface Soil Sparsely Veg Drainage Pa Oxidized Rhi (where Saturation V Geomorphic FAC-neutral Frost Heave	tors (minimum of two require Cracks (86) getated Concave Surface (88) ttems (810) zospheres on Living Roots (C3) ttilled) rows (C8) isible on Aerial Imagery (C9) Position (D2) Test (D5) Hummocks (D7) (LRR F)
drolog  stland Hyu imary Ind  Surface  High Wa  Saturatin  Water M  Inundat  Inundat  Water-S  ald Obser  water Table  turation Procludes cap	drotogy Indicato ficators (minimus Water (A1) ster Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) st or Crust (B4) posits (B5) cion Visible on Aeric Stained Leaves (B9) vations: er Present? Present? resent?	al Imagery  Yes O  Yes O	(87) No	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry Season Water Table (C2) Oxidized Rhizospheres on Livi (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): 0	Wet	Secondary Indica Surface Soil Sparsely Veg Drainage Pa Oxidized Rhi (where Saturation V Geomorphic FAC-neutral Frost Heave	tors (minimum of two require Cracks (86) getated Concave Surface (88) etterns (810) zospheres on Living Roots (C3) titlled) rows (C8) isible on Aerial Imagery (C9) Position (D2) Test (D5) Hummocks (D7) (LRR F)

oject/Site: Alpha Bartonville FM 407		<del>, , , , , , , , , , , , , , , , , , , </del>	Ci	ty/County:	Bartonville /	Denton Samp	ling Date: 07-Sep-21
plicant/Owner:					State:	Texas Sampling Point:	
vestigator(s): MP					waship, Rar	nge: S T	R
andform (hillstope, terrace, etc.):				Local relief	(concave, co	onvex, none): flat	Slope: 2.0 % / 1.1
bregion (LRR): LRR J			Lat: 33.0	099934		Long.: -97.138479	Datum: NAD83
! Map Unit Name: Wilson clay loam	1 to 3 perc	ent slopes				<del></del>	PU8Fh
climatic/hydrologic conditions on	the site typ	ical for thi	s time of year?	Yes	s 🖲 No 🔾	(If no, explain in Remarks	
Are Vegetation . , Soil .			significantly d		Are "No	rmal Circumstances* present?	Yes 🏵 No 🗅
Are Vegetation . , Soii	, or Hydr	rology 🔲	naturally prob	lematic?	(If nee	ded, explain any answers in Re	marks.)
ummary of Findings - At	tach site	e map s	howing sar	mpling p	oint loca	ations, transects, impo	ortant features, etc
ydrophytic Vegetation Present?	Yes ①	No O	<del></del>				
Hydric Soil Present?	Yes 💿	No O			Sampled A		
Vedand Hydrology Present?	Yes 🖲			withir	a Wetland	, Yes 🏵 No 🔾	
Remarks:			<del> </del>		<del></del> -		
Remarks.							
				Dominant	FWS Bes	gion: GP	
/EGETATION - Use scien	tiric nar	nes or p		-Species?		Dominance Test worksheet:	
Tree Stratum (Plot size:	)		Absolute % Cover	Rel.Strat. Cover	Indicator Status		
1						Number of Dominant Species That are OBL, FACW, or FAC:	(A)
2.						Table of Comment	
3.						Total Number of Dominant Species Across All Strata:	(B)
4.	<u> </u>					On any of the selection of the selection	
		,		= Total C	over	Percent of dominant Species That Are OBL, FACW, or FAC:	100.0%(A/8)
Sapling/Shrub Stratum (Plot size:	· .	,					
1				<u></u>	<del></del>	Prevalence Index worksheet:	Multiply byo
2				<u> </u>		Total % Cover of:  OBL species 85	Multiply by: x 1 = 85_
3					<del></del>		x 2 = 30
5.		<u></u>	0				x 3 =
	<u> </u>		0	≃ Total C	over	FACU species	x 4 = 0
Herb Stratum (Plot size: 5 ft	)		•			UPL species 0	x 5 - 0
1. Junais effusus			40	40.0%	08L	Column Totals: 100	(A) <u>115</u> (B)
Persicaria hydropiperoides			35	35.0%	<del>-,</del>	1	
3. Andropogon glomeratus				15.0%		Prevalence Index = B/A :	= 1.15
4. Typha fatifolia 5.			_	10.0%		Hydrophytic Vegetation Indic	ators:
				0.0%		1 - Rapid Test for Hydrop	hytic Vegetation
				0.0%		2 - Dominance Test is >	
8.				0.0%		<b>☑</b> 3 - Prevalence Index is ≤	
9.				0.0%		4 - Morphological Adapta data in Remarks or on	tions <sup>1</sup> (Provide supporting
10.				0.0%		data in Remarks or on a	
			100	= Total (	"over	1 Indicators of hydric soil an	
Woody Vine Stratum (Plot size						be present.	en wengun ulandingk uzazi
1				<u> </u>	<del></del>		
2		·····				Hydrophytic	
41 41.11 = 1			0	= Total	COVEL	Vegetation (a)	lo ()
% Bare Ground in Herb Stratum	.0					Present? Yes	· ·
% Bare Ground in Herb Science						<del></del>	· · · · · · · · · · · · · · · · · · ·

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<sup>\*</sup>Indicator surfix = National status or professional decision assigned because Regional status not defined by FWS.

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Sampling Point: T5P3

Depth .	Color (m)	abix	0/4	Color	<u>Redo</u> (moist)	<u>%</u>	Type.1	Loc2	Texture		Ren	parks
inches)			<u>%</u> _			_ <del>_78.</del> 28	C	<u>.100-</u> M	Silt Loam	<del></del>	AGE	13541-15-2
)-16	10YR	5/2	80	7.5YR	4/6	20	<del></del> .	- 171	- Six Eddins	<del></del>		<del></del>
			<del></del>		·							<del></del>
			<del></del>		·			<del></del>				
					<del>,</del>		, <u>,</u>					*
	-											
<del></del>							·					
<del></del>						<del></del> -	·- <del></del>		<del></del>			
<del></del>					· <del></del> ·	<del></del> .	· · · · · · · · · · · · · · · · · · ·	<del></del>	· · · · · · · · · · · · · · · · · · ·	· · · ·		······
								<del></del>				
·								ins <sup>2</sup> Loca	tion: PL=Pore Lini			3
dric Soil I	ndicators: (A	pplicable	e to all LRI	_			)		Indicators fo		•	oils»;
Histosol (A	-			_	indy Gleyed M				_	1x (A9) (LRR		C UI
• •	pedon (A2)			_	indy Redox (S ripped Matrix					raine Kedox face (S7) (Li	(A16) (LRR F.	G, n)
Black Histi	Suifide (A4)			_	amy Mucky M		1)		_	ns Depressio		
	Layers (A5) (LR	R F)			amy Gleyed t	_	-				f MLRA 72 ar	d 73)
	k (A9) (LRR F,G			_	epleted Matrix				Reduced			-
Depieted i	Below Dark Sur	face (A11	)`	☐ Re	edox Dark Sur	face (F6)	·		_	nt Material (		
Thick Dari	k Surface (A12)			□ ₽	epleted Dark !	Surface (I	F7)		☐ Very Shall	llow Dark St	urface (TF12)	
	ck Mineral (S1)			=	edox depressi				Other (E)	kplain in Rer	narks)	
	ucky Peat or Pe			∐ Hi	igh Plains Der		' '		<sup>3</sup> Indicators of	hydrophytic	vegetation an	d wetland
5 cm Muc	ky Peat or Peat	(\$3) (LRF	RF)		(MLRA 72 a	and 7.3 0	T LKK H)		hydrology mus	st de presen	t, uniess distu	rbed or problemat
trictive L	ayer (if prese	nt):										
strictive L Type:	ayer (if prese	nt):				.,			Hudric Coil Bre	acant7	Vac 📵 - K	la O
	<u> </u>	nt):	· _ ·	<del></del>					Hydric Soil Pro	esent?	Yes 🖲 N	lo O
Type: Depth (inc	<u> </u>	nt):							Hydric Soil Pre	esent?	Yes 💿 N	lo O
Type: Depth (inc	hes):	nt):		····		,						
Type:	y Yeology Indica	ators:							Seconda	ry Indicato	rs (minimun	o of two require
Type:	hes):	ators:	one require						Seconda Sur	ry Indicato	rs (minimum acks (86)	of two require
Type: Depth (incomarks:  drologination Hydemary India	y Yeology Indica	ators:	one require		Salt Crust (8	11)			Seconda Sur	ry Indicato face Soil Cr arsely Veget	rs (minimum acks (86) ated Concave	of two require
Type:	y Y Irology Indica icators (minin	ators:	one require		Salt Crust (8 Aquatic Inve	11) rtebrates			Seconda Sur	ry Indicato face Soil Cr arsely Veget ainage Patte	rs (minimum acks (86) ated Concave ms (810)	o of two required
Type:	y  Irology Indications (mining Water (A1) ter Table (A2)	ators:	one require		Salt Crust (8 Aquatic Inver Hydrogen Su	11) rtebrates ilfide Odo	or (CI)		Seconda Sur	ry Indicato face Soil Cr arsely Veget sinage Patte idized Rhizo	rs (minimum acks (86) ated Concave ms (810) spheres on Liv	of two require
Type:	y Irology Indicaticators (minin Nater (A1) ter Table (A2) un (A3) arks (B1)	ators: num of o	one require		Salt Crust (8 Aquatic Inver Hydrogen Su Dry Season V	11) rtebrates ifide Odo Water Tal	or (CI) ble (C2)		Seconda Sur Spr Dra Ox	ry Indicato face Soil Cr arsely Veget ainage Patte idized Rhizo (where ti	rs (minimum acks (86) ated Concave ms (810) spheres on Liv	o of two required
Type:	y Irology Indicaticators (minin Nater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2)	ators: num of o	one require		Salt Crust (8 Aquatic Inver Hydrogen Su Dry Season V Oxidized Rhi	11) rtebrates ilfide Odo Water Tal zosphere	or (C1) ble (C2) s on Living I	Roots (C3)	Seconda: Seconda: Sur Spr Dra Ox	ry Indicato face Soil Or arsely Veget ainage Patte idized Rhizo (where ti ayfish Burroy	rs (minimum acks (86) ated Concave ms (810) spheres on Liv lied) vs (C8)	of two require Surface (B8) ing Roots (C3)
Type:	y  Irology Indicaticators (minin Nater (A1) ter Table (A2) un (A3) arks (B1) t Deposits (B2) ossits (B3)	ators: num of o	one require		Salt Crust (8 Aquatic Inver Hydrogen Su Dry Season V Oxidized Rhii (where t	11) rtebrates ilfide Odo Water Tal zosphere: not tilled	or (CI) ble (C2) s on Living I	Roots (C3)	Seconda: Sur Spr Dra Ox	ry Indicato face Soil Or arsely Veget ainage Patte idized Rhizo (where ti ayfish Burrov turation Visi	rs (minimum acks (86) ated Concave rns (810) spheres on Liv (18d) vs (C8) ole on Aerial I	of two required Surface (B8) ing Roots (C3)
Type:	y  Irology Indicaticators (minimal Nater (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4)	ators: num of o	one require		Salt Crust (B Aquatic Inver Hydrogen Su Dry Season V Oxidized Rhii (where the Presence of the	11) rtebrates ilfide Odo Water Tal zosphere not tilled Reduced	or (C1) ble (C2) s on Living I I' Iron (C4)	coots (C3)	Seconda Sur Spr Dra Ox Cra Sar	ry Indicato face Soil Crearsely Veget sinage Patte idized Rhizo (where ti ayfish Burron turation Visi omorphic Po	rs (minimum acks (86) ated Concave rns (810) spheres on Liv Illed) ws (C8) ole on Aerial I	of two required Surface (B8) ing Roots (C3)
Type:	y  Irology Indicaticators (minin Nater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) iosits (B3) t or Crust (B4) iosits (B5)	stors: num of g			Salt Crust (8 Aquatic Inver Hydrogen Su Dry Season V Oxidized Rhii (where I Presence of I Thin Muck St	11) rtebrates ilfide Odo Water Tal zosphere not tilled Reduced	or (C1) ble (C2) s on Living I i) Iron (C4)	Roots (C3)	Seconda: Sur Sur Sur Sur Sur Cra Cra Sar Y Ge	ry Indicato face Soil Crearsely Veget sinage Patte idized Rhizo (where ti ayfish Burrow turation Visi omorphic Pr C-neutral Te	rs (minimum acks (86) ated Concave rns (810) spheres on Liv Illed) vs (C8) ole on Aerial I sistion (D2)	o of two required Surface (B8) ing Roots (C3) magery (C9)
Type:	Y Irology Indicaticators (minin Nater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) iosits (B3) t or Crust (B4) iosits (B5) on Visible on A	ators: num of o			Salt Crust (B Aquatic Inver Hydrogen Su Dry Season V Oxidized Rhii (where the Presence of the	11) rtebrates ilfide Odo Water Tal zosphere not tilled Reduced	or (C1) ble (C2) s on Living I i) Iron (C4)	Roots (C3)	Seconda: Sur Sur Sur Sur Sur Cra Cra Sar Y Ge	ry Indicato face Soil Crearsely Veget sinage Patte idized Rhizo (where ti ayfish Burrow turation Visi omorphic Pr C-neutral Te	rs (minimum acks (86) ated Concave rns (810) spheres on Liv Illed) ws (C8) ole on Aerial I	o of two require Surface (B8) ing Roots (C3) magery (C9)
Type:	y  Irology Indicaticators (minin Nater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) iosits (B3) t or Crust (B4) iosits (B5)	ators: num of o			Salt Crust (8 Aquatic Inver Hydrogen Su Dry Season V Oxidized Rhii (where I Presence of I Thin Muck St	11) rtebrates ilfide Odo Water Tal zosphere not tilled Reduced	or (C1) ble (C2) s on Living I i) Iron (C4)	Roots (C3)	Seconda: Sur Sur Sur Sur Sur Cra Cra Sar Y Ge	ry Indicato face Soil Crearsely Veget sinage Patte idized Rhizo (where ti ayfish Burrow turation Visi omorphic Pr C-neutral Te	rs (minimum acks (86) ated Concave rns (810) spheres on Liv Illed) vs (C8) ole on Aerial I sistion (D2)	o of two require Surface (B8) ing Roots (C3) magery (C9)
Type:	y Irology Indicaticators (minin Nater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) iosits (B3) t or Crust (B4) iosits (B5) on Visible on Ai tained Leaves (I	erial Imag	iery (B7)		Salt Crust (8 Aquatic Inver Hydrogen Su Dry Season V Oxidized Rhii (where t Presence of i Thin Muck St Other (Expla	11) rtebrates ilfide Odo Water Tal zosphere not tilled Reduced urface (C in in Rem	or (C1) ble (C2) s on Living I ) Iron (C4)  7) narks)	Roots (C3)	Seconda: Sur Sur Sur Sur Sur Cra Cra Sar Y Ge	ry Indicato face Soil Crearsely Veget sinage Patte idized Rhizo (where ti ayfish Burrow turation Visi omorphic Pr C-neutral Te	rs (minimum acks (86) ated Concave rns (810) spheres on Liv Illed) vs (C8) ole on Aerial I sistion (D2)	o of two require Surface (B8) ing Roots (C3) magery (C9)
Type:	y  Irology Indicaticators (minimal Nater (A1)) ter Table (A2) in (A3) arks (B1) t Deposits (B2) iosits (B3) t or Crust (B4) iosits (B5) on Visible on Aitained Leaves (Irolations:	erial Imag 89)	ery (B7)		Salt Crust (8 Aquatic Inver Hydrogen Su Dry Season V Oxidized Rhii (where I Presence of I Thin Muck St	11) rtebrates ilfide Odo Water Tal zosphere not tilled Reduced urface (C in in Rem	or (C1) ble (C2) s on Living I i) Iron (C4)	coots (C3)	Seconda: Sur Sur Sur Sur Sur Cra Cra Sar Y Ge	ry Indicato face Soil Crearsely Veget sinage Patte idized Rhizo (where ti ayfish Burrow turation Visi omorphic Pr C-neutral Te	rs (minimum acks (86) ated Concave rns (810) spheres on Liv Illed) vs (C8) ole on Aerial I sistion (D2)	o of two require Surface (B8) ing Roots (C3) magery (C9)
Depth (incomarks:  drologication Hydrologication Hydrologication Hydrologication Hydrologication High Water Mills Sediment Drift depth High Water Mills Sediment High Water-Steld Observifiace Water Mills High Water-Steld Observifia Mills High Water-Steld Observifia Mills High Water-	y  Irology Indicaticators (minin Nater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) iosits (B3) t or Crust (B4) iosits (B5) on Visible on Ai tained Leaves (I vations: r Present?	erial Imag	ery (B7)		Salt Crust (8 Aquatic Inver Hydrogen Su Dry Season V Oxidized Rhii (where t Presence of i Thin Muck St Other (Expla	ntebrates iffide Odo Water Tal zosphere not tilled Reduced urface (Cl in in Ren hes):	or (C1) ble (C2) s on Living I ) Iron (C4)  7) narks)		Seconda Sur Sur Sur Sur Sur Cra Sar Fro	ry Indicato face Soil Crearsely Veget sinage Patte idized Rhizo (where ti ayfish Burron turation Visi omorphic Po C-neutral Te ost Heave H	rs (minimum acks (86) ated Concave rns (810) spheres on Liv Iled) vs (C8) ole on Aerial I psition (D2) st (D5) ummocks (D7)	n of two required Surface (B8) ing Roots (C3) magery (C9)
Type:	y  Irology Indicaticators (minin Nater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) iosits (B3) t or Crust (B4) iosits (B5) on Visible on Ai tained Leaves (I vations: r Present? Present?	erial Imag 89) Yes (	iery (B7)  No (		Salt Crust (8 Aquatic Inver Hydrogen Su Dry Season V Oxidized Rhit (where t Presence of i Thin Muck St Other (fixpla  Depth (ind	ntebrates  If de Odo  Water Tal  zosphere:  not tilled  Reduced  urface (C  in in Rem  hes):  hes):	or (C1) ble (C2) s on Living I ) iron (C4) 7) harks)	_	Seconda: Sur Sur Sur Sur Sur Cra Cra Sar Y Ge	ry Indicato face Soil Crearsely Veget sinage Patte idized Rhizo (where ti ayfish Burron turation Visi omorphic Po C-neutral Te ost Heave H	rs (minimum acks (86) ated Concave rns (810) spheres on Liv Illed) vs (C8) ole on Aerial I sistion (D2)	o of two required Surface (B8) ing Roots (C3) magery (C9)
Depth (incommarks:  drolog: etland Hyde imary Inde Surface V High Water M Sediment Onfit dep Algal Mai Iron Dep Inundati Water-St eld Observation face Water atter Table F	y  Irology Indica icators (minin Nater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) iosits (B3) t or Crust (B4) iosits (B5) ion Visible on Ai tained Leaves (I vations: r Present? Present? esent?	erial Imag 89) Yes (	O No ( No ( No ( No (		Salt Crust (8 Aquatic Inver Hydrogen Su Dry Season V Oxidized Rhii (where I Presence of I Thin Muck St Other (Expla  Depth (incl  Depth (incl  Depth (incl	ntebrates  Iffide Odo  Water Tal  zosphere: not tilled  Reduced  urface (Ci in in Ren  hes): hes):	or (C1) ble (C2) s on Living I ) Tron (C4) 7) harks)  0  0  At Surface	- Wet	Seconda: Sui Sui Spi Ox Cra Sai Fro	ry Indicato face Soil Crearsely Veget sinage Patte idized Rhizo (where ti ayfish Burron turation Visi omorphic Po C-neutral Te ost Heave H	rs (minimum acks (86) ated Concave rns (810) spheres on Liv Iled) vs (C8) ole on Aerial I psition (D2) st (D5) ummocks (D7)	n of two required Surface (B8) ing Roots (C3) magery (C9)
Depth (incommarks:  drolog: etland Hyde imary Inde Surface V High Water Martin Sediment Onift dep Algal Martin Iron Dep Inundati Water-St eld Observation Water Table F turation Pro- indudes capi	y  Irology Indicaticators (minin Nater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) iosits (B3) t or Crust (B4) iosits (B5) on Visible on Ai tained Leaves (I vations: r Present? Present?	erial Imag 89) Yes (	O No ( No ( No ( No (		Salt Crust (8 Aquatic Inver Hydrogen Su Dry Season V Oxidized Rhii (where I Presence of I Thin Muck St Other (Expla  Depth (incl  Depth (incl  Depth (incl	ntebrates  Iffide Odo  Water Tal  zosphere: not tilled  Reduced  urface (Ci in in Ren  hes): hes):	or (C1) ble (C2) s on Living I ) Tron (C4) 7) harks)  0  0  At Surface	- Wet	Seconda: Sui Sui Spi Ox Cra Sai Fro	ry Indicato face Soil Crearsely Veget sinage Patte idized Rhizo (where ti ayfish Burron turation Visi omorphic Po C-neutral Te ost Heave H	rs (minimum acks (86) ated Concave rns (810) spheres on Liv Iled) vs (C8) ole on Aerial I psition (D2) st (D5) ummocks (D7)	n of two required Surface (B8) ing Roots (C3) magery (C9)
Depth (incommarks:  drolog: etland Hyde imary Inde Surface V High Water Martin Sediment Onift dep Algal Martin Iron Dep Inundati Water-St eld Observation Water Table F turation Pro- indudes capi	y  Irology Indica icators (minin Nater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) iosits (B3) t or Crust (B4) iosits (B5) ion Visible on Ai tained Leaves (I vations: r Present? Present? esent?	erial Imag 89) Yes (	O No ( No ( No ( No (		Salt Crust (8 Aquatic Inver Hydrogen Su Dry Season V Oxidized Rhii (where I Presence of I Thin Muck St Other (Expla  Depth (incl  Depth (incl  Depth (incl	ntebrates  Iffide Odo  Water Tal  zosphere: not tilled  Reduced  urface (Ci in in Ren  hes): hes):	or (C1) ble (C2) s on Living I ) Tron (C4) 7) harks)  0  0  At Surface	- Wet	Seconda: Sui Sui Spi Ox Cra Sai Fro	ry Indicato face Soil Crearsely Veget sinage Patte idized Rhizo (where ti ayfish Burron turation Visi omorphic Po C-neutral Te ost Heave H	rs (minimum acks (86) ated Concave rns (810) spheres on Liv Iled) vs (C8) ole on Aerial I psition (D2) st (D5) ummocks (D7)	n of two required Surface (B8) ing Roots (C3) magery (C9)

oject/Site: Alpha Bartonville FM 407			City/County: Bartonville	/ Denton Sampling Date: 07-Sep	21
plicant/Owner:			State	Texas Sampling Point: T5P5	
vestigator(s): MP		<del></del>	Section, Township, Ra	inge: S T R R	
andform (hillslope, terrace, etc.):				convex, none): flat Slope: 2.0 %	·/1.1
bregion (LRR): LRR )		Lat.: 3:	3.099671	Long.: -97.138474 Datum: NA	D83
Map Unit Name: Silstid loamy fine				NWI classification: none	
climatic/hydrologic conditions on	the site typical	for this time of yea	r? Yes 🛈 No 🤇	(If no, explain in Remarks.)	
Are Vegetation . Soil .	, or Hydrolog		disturbed? Are "N	formal Circumstances" present? Yes 🏵 No	0
	, or Hydrolog	y naturally pr	oblematic? (If ne	eded, explain any answers in Remarks.)	
				ations, transects, important feature	es, etc
ydrophytic Vegetation Present?		0			•
Hydric Soil Present?	Yes 💿 No	,0	Is the Sampled		
Vetland Hydrology Present?	Yes 💿 No	0	within a Wetlan	<sub>d?</sub> Yes     No ○	
Remarks:	<u> </u>			*	
'EGETATION - Use scien	tific names	s of plants	Dominant FWS Re	egion: GP	
/Planeiro			e Rel.Strat. Indicator	1	
Tree Stratum (Plot size:			Cover Status	Number of Dominant Species That are ORL FACW, or FAC: 2	(A)
1			<u> </u>	That are OBL, FACW, or FAC:	(*)
3.		<del></del>		Total Number of Dominant Species Across All Strata: 2	(B)
4.	·				
		0	= Total Cover	Percent of dominant Species That Are OBL, FACW, or FAC: 100.0%	(A/B)
Sapling/Shrub Stratum (Plot size:					
1			. ;; <del></del>	Prevalence Index worksheet:	
2					-
4				FACY species 15 x 2 = 30	
5.		0		FAC species 0 x 3 - 0	
		0	= Total Cover	FACU species 0 x 4 = 0	•
Herb Stratum (Plot size: 5 ft	}}		=	UPL species0 x 5 = _0	•
1 Junous effosus	<del> </del>		✓ 40.0% OBL ✓ 35.0% OBL	Column Totals:100(A)115	(B)
Persicaria hydropiperoides     Andropogon glomeratus	<del></del>		35.0% OBL 15.0% FACW	Prevalence Index = B/A = 1.15	
Typha latifolia			10.0% OBL	Hydrophytic Vegetation Indicators:	
5.		_	0.0%	.	
6		- 0		1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is > 50%	
7. 8.	·		0.0%	3 - Prevalence Index is ≤3.0 <sup>1</sup>	
9.	<del></del>		0.0%	4 - Morphological Adaptations <sup>1</sup> (Provide su	portina
10.		0	0.0%	data in Remarks or on a separate sheet)	
	•	100	= Total Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Expl	in)
		1		1 Indicators of hydric soil and wetland hydrolo	gy must
Woody Vine Stratum (Plot size				be present.	
1			. 🛚	be present.	
		0 0	Total Course	-	
1			= Total Cover	be present.  Hydrophytic Vegetation Present?  Yes  No	

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<sup>\*</sup>Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

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-	٠	
	1	

Sampling Point: T5P5

Depth (inches)	Color (m	oist)_	<u>%</u>	Color (	moist)	<u>•/o</u>	Type I	<u>Loc²</u>		ture		Remark	<u> </u>
0-16	10YR	5/2	80	7.5YR	4/6	20	c	_ M	Silt Loam				
								_		_			
		<del></del>						<del></del>		<del></del>			
		<b></b>			<del></del>								~~~
<del>_</del>						-					••••		
	ncentration. D=							s ²Loca	·	re Lining. M=M			
dric Soil	Indicators: (/	Applicable	e to all LRR	_			+		_	ors for Proble		iric Soils	<sup>3</sup> :
Histosol (				_	ndy Gleyed Ma				_	m Muck (A9) (L			
	pedon (A2)			_	ndy Redox (S! ripped Matrix (	-			_	astal Prairie Red rk Surface (S7)		LKR F, G, F	1)
Black Hist	uc (A3) 1 Sulfide (A4)			_	apped Haddy Mi amy Mucky Mi		13		=	h Plains Depre		)	
	Layers (A5) (LF	RF)		_	amy Gleved M					(LRR H outsid	•		)
	k (A9) (LRR F,0			_	pleted Matrix	•	-		_	duced Vertic (F.			-
Depleted	Below Dark Su	face (A11)	)	Re:	dox Dark Surf	ace (F6)			_	d Parent Materi	-		
	rk Surface (A12)			_	pleted Dark S	-	F7)		=	y Shallow Dark		F12)	
	.ck Minerai (S1)			=	dox depressio	٠, ,	(51.5)		Oti	ner (Explain in I	Remarks)		
	lucky Peat or Pe		-	[] H:q	gh Plains Depi (MLRA 72 a)					ors of hydrophy by must be pres			
5 On Piuc	cky Peat or Peal	(23) (EKN	(F)		(1100 / 2 6	16 73 01			1 Trycholog	ly must be pre-	ent, uncs	0.501000	or proporting
	ayer (if prese	nt):											
Туре:		nt):	<del>-</del> //1-			_,_			Hydric Si	oil Present?	Yes @	) No C	)
Type: Depth (inc		nt):				<del>-,-</del>			Hydric S	oil Present?	Yes 🖲	No C	)
Туре:		nt):	<del></del>	<del></del> .		<del>-,-</del>			Hydric S	oil Present?	Yes 🤄	No C	
Type: Depth (inc		ent):		<del></del> .		<del>-,-</del>			Hydric S	oil Present?	Yes 🖲	No C	)
Type: Depth (inc		nt):		<del></del> .	AU				Hydric S	pil Present?	Yes 🤄	No C	
Type: Depth (incernarks:	ches):	ent):					, , , , , , , , , , , , , , , , , , , ,		Hydric S	pil Present?	Yes 🧿	) No C	
Type:	thes):								1				
Type: Depth (incemarks: rdrolog	thes):	ators:	no roquiros	Li charle	all that anni				1	ondary Indica	ators (min	imum of t	
Type:	ry drology Indicaticators (minin	ators:	ne requirec						1	ondary Indica	ators (min Cracks (86	imum of t	wo require
Type:	Y drology Indicators (mining Water (A1)	ators:	ne requirec		Salt Crust (Bi	1)	(B13)		1	ondary Indica Surface Soil	ators (min Cracks (B6 getated Cor	i <u>mum of 1</u> ) Icave Surfa	wo require
Type:	drology Indications (mining Water (A1) ster Table (A2)	ators:	ne requirec		Salt Crust (81 Aquatic Invert	1) ebrates (			1	ondary Indica Surface Soil Sparsely Ver Drainage Pa	ators (min Cracks (B6 getated Cor tterns (B10	imum of t ) ncave Surfa )	wo require
Type:	drology Indicaticators (mining Water (A1) ster Table (A2) on (A3)	ators:	ne requirec		Salt Crust (B1 Aquatic Invert Hydrogen Sulf	1) ebrates ( fide Odor	r (C1)		1	ondary Indica Surface Soil Sparsely Ved Drainage Pa Oxidized Rh	ators (min Cracks (B6 getated Cor Items (B10 izospheres	imum of t ) ncave Surfa )	wo require
Type:	drology Indicaticators (mining Water (A1) ster Table (A2) on (A3) larks (B1)	ators: num of o	ne required		Salt Crust (B1 Aquatic Invert Hydrogen Sull Dry Season W	1) lebrates ( fide Odor later Tab	r (C1) ole (C2)	oots (C3)	1	ondary Indica Surface Soil Sparsely Ved Drainage Pa Oxidized Rh (where	ators (min Cracks (B6 getated Cor Items (B10 izospheres	imum of t ) ncave Surfa )	wo require
Type:	drology Indicaticators (mining Water (A1) ster Table (A2) on (A3) larks (B1) at Deposits (B2)	ators: num of o	ne required		Salt Crust (B1 Aquatic Invert Hydrogen Sulf Dry Season W Oxidized Rhizi	1) debrates ( fide Odor dater Tab ospheres	r (C1) ble (C2) s on Living Ri	oots (C3)	1	ondary Indica Surface Soil Sparsely Ver Drainage Pa Oxidized Rh (where Crayfish Bur	etors (min Cracks (86 getated Cor Itterns (810 izospheres etilled) rows (C8)	imum of I ) Icave Surfa ) on Living F	wo require ce (B8)
Type:	drology Indicaticators (mining Water (A1) on (A2) on (A3) larks (B1) on toposits (B2) cosits (B3)	ators: num of o	ne required		Salt Crust (B1 Aquatic Invert Hydrogen Sulf Dry Season W Oxidized Rhizo (where n	1) tebrates ( fide Odor rater Tab ospheres of tilled)	r (C1) ble (C2) s on Living Ro )	oots (C3)		ondary Indical Surface Soil Sparsely Ver Drainage Pa Oxidized Rh (where Crayfish Bur	etors (min Cracks (86 getated Cor Itterns (810 izospheres etilled) rows (C8)	imum of f ) ncave Surfa ) on Living R erial Image	wo require ce (B8)
Type:	drology Indicaticators (mining Water (A1) on (A3) larks (B1) on Deposits (B2) on to Crust (B4)	ators: num of o	ne requirec		Salt Crust (81 Aquatic Invert Hydrogen Sulf Dry Season W Oxidized Rhizo (Where no Presence of R	1) sebrates ( fide Odor later Tab ospheres of tilled) educed I	r (C1) ple (C2) s on Living Ro ) (ron (C4)	oots (C3)		ondary Indica  Surface Soil  Sparsely Vec  Drainage Pa  Oxidized Rh  (whent  Crayfish Bur  Saturation V	etors (min Cracks (86 getated Cor ttems (810 izospheres tilled) rows (C8) fisible on A Position (E	imum of f ) ncave Surfa ) on Living R erial Image	wo require ce (B8) coots (C3)
Type:	drology Indicaticators (mining Water (A1) on (A3) larks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) posits (B5)	ators: num of o			Salt Crust (B1 Aquatic Invert Hydrogen Sult Dry Season W Oxidized Rhiz (where ru Presence of R Thin Muck Su	1) debrates ( fide Odor later Tab ospheres of tilled) educed I rface (C7	r (C1) ple (C2) s on Living Ro ) (ron (C4)	oots (C3)		ondary Indicates Surface Soil Sparsely Vec Drainage Pa Oxidized Rh (where Crayfish Bur Saturation V Geomorphic	ators (min Cracks (86 getated Cor Items (810 izospheres tilled) rows (C8) fisible on Ar Position (D	imum of () ) ncave Surfa ) on Living R erial Image )2)	wo require ce (B8) coots (C3) ry (C9)
Type:	drology Indicaticators (mining Water (A1) ster Table (A2) on (A3) larks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on A	stors: num of o			Salt Crust (81 Aquatic Invert Hydrogen Sulf Dry Season W Oxidized Rhizo (Where no Presence of R	1) debrates ( fide Odor later Tab ospheres of tilled) educed I rface (C7	r (C1) ple (C2) s on Living Ro ) (ron (C4)	oots (C3)		ondary Indica  Surface Soil  Sparsely Vec  Drainage Pa  Oxidized Rh  (whent  Crayfish Bur  Saturation V	ators (min Cracks (86 getated Cor Items (810 izospheres tilled) rows (C8) fisible on Ar Position (D	imum of () ) ncave Surfa ) on Living R erial Image )2)	wo require ce (B8) coots (C3) ry (C9)
Depth (incomarks:  drologetland Hydimary Ind Surface   High Water M Sedimen   Drift dep   Algal Ma   Iron Dep   Inundat   Water-S	drology Indicaticators (mining Water (A1) ster Table (A2) on (A3) larks (B1) at Deposits (B3) at or Crust (B4) posits (B5) ion Visible on A tained Leaves (	stors: num of o			Salt Crust (B1 Aquatic Invert Hydrogen Sult Dry Season W Oxidized Rhiz (where ru Presence of R Thin Muck Su	1) debrates ( fide Odor later Tab ospheres of tilled) educed I rface (C7	r (C1) ple (C2) s on Living Ro ) (ron (C4)	oots (C3)		ondary Indicates Surface Soil Sparsely Vec Drainage Pa Oxidized Rh (where Crayfish Bur Saturation V Geomorphic	ators (min Cracks (86 getated Cor Items (810 izospheres tilled) rows (C8) fisible on Ar Position (D	imum of () ) ncave Surfa ) on Living R erial Image )2)	wo require ce (B8) coots (C3) ry (C9)
Depth (incomarks:  drolog etland Hydimary Ind Surface   High Wa Saturatio Water M J Sedimen Drift dep I non Dep I nondat Water-Seld Observed	drology Indicaticators (minimum (A2) on (A3) larks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) posits (B5) ion Visible on A trained Leaves (wations:	ators: num of o erial Image B9)	ery (B7)		Salt Crust (B1 Aquatic Invert Hydrogen Sulf Dry Season W Oxidized Rhiz (where no Presence of R Thin Muck Sul	tipe the separates of the odor odor od	r (C1) ple (C2) s on Living Ro ) (ron (C4)	oots (C3)		ondary Indicates Surface Soil Sparsely Vec Drainage Pa Oxidized Rh (where Crayfish Bur Saturation V Geomorphic	ators (min Cracks (86 getated Cor Items (810 izospheres tilled) rows (C8) fisible on Ar Position (D	imum of () ) ncave Surfa ) on Living R erial Image )2)	wo require ce (B8) coots (C3) ry (C9)
Depth (incomparks:  rdrolog etland Hydimary Indi Surface High Wa Sediment Drift dep Inundat Inundat Water-Seld Observariace Water	drology Indicaticators (mining Water (A1) and (A2) and (A3) and (A	ators: num of o	ery (B7) No •		Salt Crust (B1 Aquatic Invert Hydrogen Sulf Dry Season W Oxidized Rhize (where ru Presence of R Thin Muck Sul Other (Explain	1) rebrates ( fide Odor rater Tab ospheres of tilled) educed I rface (C7 o in Rem es):	r (C1) ple (C2) s on Living Re ) tron (C4) r) parks)	oots (C3)		ondary Indicates Surface Soil Sparsely Vec Drainage Pa Oxidized Rh (where Crayfish Bur Saturation V Geomorphic	ators (min Cracks (86 getated Cor Items (810 izospheres tilled) rows (C8) fisible on Ar Position (D	imum of () ) ncave Surfa ) on Living R erial Image )2)	wo require ce (B8) coots (C3) ry (C9)
Type:	drology Indicaticators (mining Water (A1) on (A3) larks (B1) on the Deposits (B2) posits (B3) on Visible on A tained Leaves (Wations: or Present?	erial Image 89) Yes (	ery (B7) O No @		Salt Crust (B1 Aquatic Invert Hydrogen Sulf Dry Season W Oxidized Rhiz (where no Presence of R Thin Muck Sul	1) lebrates ( fide Odor later Tab ospheres ot tilled) educed I rrface (C7 n in Rem es): es):	r (C1) ple (C2) s on Living Ro living (C4) r) parks) 0			ondary Indicates Surface Soil Sparsely Vec Drainage Pa Oxidized Rh (where Crayfish Bur Saturation V Geomorphic	etors (min Cracks (86 getated Cor ttems (810 izospheres tilled) rows (C8) fisible on A Position (D Test (D5)	imum of f ) ncave Surfa ) on Living F erial Image 32) s (D7) (LRF	wo require ce (B8) coots (C3) ry (C9)
Type:	drology Indicaticators (mining Water (A1) on (A3) larks (B1) on to Deposits (B2) posits (B3) on Visible on A stained Leaves (Wations: It Present?	ators: num of o	ery (B7) O No @		Salt Crust (B1 Aquatic Invert Hydrogen Sulf Dry Season W Oxidized Rhize (where ru Presence of R Thin Muck Sul Other (Explain	1) lebrates ( fide Odor later Tab lospheres lot tilled) leduced I liface (C7 liface (C7 liface) less): less):	r (C1) ple (C2) s on Living Re ) tron (C4) r) parks)			ondary Indical Surface Soil Sparsely Vec Drainage Pa Oxidized Rh (where Crayfish Bur Saturation V Geomorphic FAC-neutral Frost Heave	etors (min Cracks (86 getated Cor ttems (810 izospheres tilled) rows (C8) fisible on A Position (D Test (D5)	imum of f ) ncave Surfa ) on Living F erial Image 32) s (D7) (LRF	wo require ce (B8) coots (C3) ry (C9)
Type:	drology Indicaticators (mining Water (A1) ster Table (A2) on (A3) larks (B1) at Deposits (B3) on Visible on A stained Leaves (wations: or Present? Present?	erial Image 89) Yes ( Yes (	ery (B7)  No (a)  No (a)  No (a)		Salt Crust (B1 Aquatic Invert Hydrogen Sulf Dry Season W Oxidized Rhize (where ru Presence of R Thin Muck Sul Other (Explain Depth (inche) Depth (inche)	1) lebrates ( fide Odor later Tab lospheres lot tilled) educed I liface (C7 liface (C7 liface) es): es): es):	r (C1) sle (C2) s on Living Ri ) tron (C4) 7) harks)  0  0  At Surface	Web	Sec	ondary Indical Surface Soil Sparsely Vec Drainage Pa Oxidized Rh (where Crayfish Bur Saturation V Geomorphic FAC-neutral Frost Heave	etors (min Cracks (86 getated Cor ttems (810 izospheres tilled) rows (C8) fisible on A Position (D Test (D5)	imum of f ) ncave Surfa ) on Living F erial Image 32) s (D7) (LRF	wo require ce (B8) coots (C3) ry (C9)
Depth (incommarks:  primarks:  primarks:  primary Individual Sectional Mater M	drology Indicaticators (mining Water (A1) on (A3) larks (B1) on to Deposits (B2) posits (B3) on Visible on A stained Leaves (Wations: or Present?	erial Image 89) Yes ( Yes (	ery (B7)  No (a)  No (a)  No (a)		Salt Crust (B1 Aquatic Invert Hydrogen Sulf Dry Season W Oxidized Rhize (where ru Presence of R Thin Muck Sul Other (Explain Depth (inche) Depth (inche)	1) lebrates ( fide Odor later Tab lospheres lot tilled) educed I liface (C7 liface (C7 liface) es): es): es):	r (C1) sle (C2) s on Living Ri ) tron (C4) 7) harks)  0  0  At Surface	Web	Sec	ondary Indical Surface Soil Sparsely Vec Drainage Pa Oxidized Rh (where Crayfish Bur Saturation V Geomorphic FAC-neutral Frost Heave	etors (min Cracks (86 getated Cor ttems (810 izospheres tilled) rows (C8) fisible on A Position (D Test (D5)	imum of f ) ncave Surfa ) on Living F erial Image 32) s (D7) (LRF	wo require ce (B8) coots (C3) ry (C9)
Depth (incommarks:  Primarks:  Primarks:  Primarks:  Primary Individual High Water Marter Mar	drology Indicaticators (mining Water (A1) ster Table (A2) on (A3) larks (B1) at Deposits (B3) on Visible on A stained Leaves (wations: or Present? Present?	erial Image 89) Yes ( Yes (	ery (B7)  No (a)  No (a)  No (a)		Salt Crust (B1 Aquatic Invert Hydrogen Sulf Dry Season W Oxidized Rhize (where ru Presence of R Thin Muck Sul Other (Explain Depth (inche) Depth (inche)	1) lebrates ( fide Odor later Tab lospheres lot tilled) educed I liface (C7 liface (C7 liface) es): es): es):	r (C1) sle (C2) s on Living Ri ) tron (C4) 7) harks)  0  0  At Surface	Web	Sec	ondary Indical Surface Soil Sparsely Vec Drainage Pa Oxidized Rh (where Crayfish Bur Saturation V Geomorphic FAC-neutral Frost Heave	etors (min Cracks (86 getated Cor ttems (810 izospheres tilled) rows (C8) fisible on A Position (D Test (D5)	imum of f ) ncave Surfa ) on Living F erial Image 32) s (D7) (LRF	wo require ce (B8) coots (C3) ry (C9)
Depth (incernarks:  rdrolog etland Hydrimary Ind Surface High Water M Sedimen Drift dep Inundati Hon Dep Inundati Water-S eld Observation Produces cap escribe Re	drology Indicaticators (mining Water (A1) ster Table (A2) on (A3) larks (B1) at Deposits (B3) on Visible on A stained Leaves (wations: or Present? Present?	erial Image 89) Yes ( Yes (	ery (B7)  No (a)  No (a)  No (a)		Salt Crust (B1 Aquatic Invert Hydrogen Sulf Dry Season W Oxidized Rhize (where ru Presence of R Thin Muck Sul Other (Explain Depth (inche) Depth (inche)	1) lebrates ( fide Odor later Tab lospheres lot tilled) educed I liface (C7 liface (C7 liface) es): es): es):	r (C1) sle (C2) s on Living Ri ) tron (C4) 7) harks)  0  0  At Surface	Web	Sec	ondary Indical Surface Soil Sparsely Vec Drainage Pa Oxidized Rh (where Crayfish Bur Saturation V Geomorphic FAC-neutral Frost Heave	etors (min Cracks (86 getated Cor ttems (810 izospheres tilled) rows (C8) fisible on A Position (D Test (D5)	imum of f ) ncave Surfa ) on Living F erial Image 32) s (D7) (LRF	wo require ce (B8) coots (C3) ry (C9)

oject/Site: Alpha Bartonville FM 407			cr	ty/County: Bartonville /	Denton Sampling	Date: 07-Sep-21
plicant/Owner:		<u> </u>		State:	Texas Sampling Point:	T5P6
vestigator(s): MP				Section, Township, Ra	nge: S TR_	<u> </u>
andform (hillslope, terrace, etc.):						pe: <u>2.0</u> % / <u>1.1</u>
bregion (LRR): LRR J			Lat.: 33.(	098633	Long.: -97,138284	Datum: NAD83
I Map Unit Name: Silstid loamy fine					NWI classification: none	
climatic/hydrologic conditions on	the site ty:	pical for this	time of year?	Yes 🖲 No C	(If no, explain in Remarks.)	
Are Vegetation, Soil			significantly d		ormal Circumstances" present? Y	es 🏵 No 🔾
Are Vegetation . , Soil .			naturally prob		eded, explain any answers in Remark	s.)
<b>,</b> —		_		•		
<del> </del>	Yes O	e map sr No ⊙	- Towing Sai	inplining point loc	ations, transects, importa	
ydrophytic Vegetation Present?	Yes ○ Yes ○	No 🏵		Is the Sampled A		
Hydric Soil Present?	Yes O			within a Wetland	17 Yes O No 👁	
/etland Hydrology Present?	Yes O	No 🕓			<del></del>	<u> </u>
Remarks:						
/EGETATION - Use scien	tific nar	mes of p			gion: GP	<u> </u>
		<u> </u>		-Species? ————— Rel.Strat. Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size: 30 ft	)		% Cover	Cover Status	Number of Dominant Species	
1. Quercus stellata		<del></del>		100.0% FACU	That are OBL, FACW, or FAC:	(A)
2					Total Number of Dominant	
3		<del></del>		0.0%	Species Across All Strata:	<u>6</u> (8)
4	<del></del>				Percent of dominant Species	
Sapling/Shrub Stratum (Plot size:	15 ft	3	60	= Total Cover	That Are OBL, FACW, or FAC:	16.7% (A/B)
•		<del></del> '	20	☑ 100.0% FAC	Prevalence Index worksheet:	
2			_ <del>_</del>	0.0%	1	iply by:
3.				0.0%	OBL species 0 x 1	<b>=</b> _0
4				0.0%	FACW species0 x 2	<u> </u>
5					FAC species20 x 3	<del>-</del> <u>60</u> .
			20	= Total Cover	FACU species 90 x 4	
Herb Stratum (Plot size: 5 ft	}			<b>2</b>	UPL species30 x 5	150
1. Chioris texensis				✓ 60.0% UPL  ✓ 20.0% FACU	Column Totals: 140 (A)	<u>_570</u> (B)
Rubus trivialis     Bromus arvensis	<del></del>		10	<b>20.0%</b> FACU	Prevalence Index = 8/A =	4.071
4.		•		0.0%	Hydrophytic Vegetation Indicators	
5.				0.0%		
6.				0.0%	1 - Rapid Test for Hydrophytic	
77						
7		<del></del>		0.0%	2 - Dominance Test is > 50%	
8.		<del>.</del>		0.0%	3 - Prevalence Index is ≤3.01	
8. 9.			<u> </u>	=	—	: <sup>1</sup> (Provide supporting
8.				0.0%	3 - Prevalence Index is ≤3.01	: <sup>1</sup> (Provide supporting parate sheet)
8. 9. 10.	: 30 ft	}	0 0	0.0%	3 - Prevalence Index is ≤3.01 4 - Morphological Adaptations data in Remarks or on a sep  Problematic Hydrophytic Veget 1 Indicators of hydric soil and we	s <sup>1</sup> (Provide supporting arate sheet) etation <sup>1</sup> (Explain)
9. 10	: 30 ft		0 0 0 50	0.0% 0.0% 0.0% Total Cover	3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations data in Remarks or on a sep  □ Problematic Hydrophytic Vege	s <sup>1</sup> (Provide supporting arate sheet) etation <sup>1</sup> (Explain)
8. 9. 10.	: 30 ft		0 0	0.0%	3 - Prevalence Index is ≤3.01 4 - Morphological Adaptations data in Remarks or on a sep  Problematic Hydrophytic Veget 1 Indicators of hydric soil and we	s <sup>1</sup> (Provide supporting arate sheet) etation <sup>1</sup> (Explain)
9. 10. Woody Vine Stratum (Plot size 1. Smilax bona-nox	: 30 ft		0 0 0 50	0.0% 0.0% 0.0%  Total Cover	3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations data in Remarks or on a sep □ Problematic Hydrophytic Vege ¹ Indicators of hydric soil and we be present.  Hydrophytic	s <sup>1</sup> (Provide supporting earate sheet) etation <sup>1</sup> (Explain) etland hydrology must
9. 10. Woody Vine Stratum (Plot size 1. Smilax bona-nox	: 30 ft		0 0 0 50	0.0% 0.0% 0.0%  Total Cover  100.0% FACU 0.0%	3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations data in Remarks or on a sep □ Problematic Hydrophytic Vege ¹ Indicators of hydric soil and we be present.	s <sup>1</sup> (Provide supporting earate sheet) etation <sup>1</sup> (Explain) etland hydrology must

US Army Corps of Engineers

<sup>\*</sup>Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Sampling Point: T5P6

Depth	Mat Color (mois			Red	%	Type 1	Locz	Tex	ture.	Re	marks.
inches)				SIOS CITIOISE?	_70,	_1105.		Fine Silty L			
0-16	1018 4	/3 100	<u> </u>		·						· · · · · · · · · · · · · · · · · · ·
									· · · · · · · · · · · · · · · · · · ·		
	<del></del> .										
	<u></u>				<del></del>					·	<del></del>
				fatrix, CS=Covere			ains <sup>2</sup> Loca				
		plicable to a	ili LRRs, L	inless otherwis		l		_	ors for Problet	•	Soits3:
Histosol (A1)			إ	Sandy Gleyed 1				_	m Muck (A9) (LF		
Histic Epipedo			L T					_	astal Prairie Redo rk Surface (S7) (		-, G, P)
Black Histic (/ Hydrogen Sul			i F	Surpped Madry I		13		_	th Plains Depres		
, .	ers (A5) (LRR	F)	ř	Loamy Gleyed	•	•			(LRR H outside		nd 73)
	49) (LRR F,G,H		Ĭ	Depleted Matri		,		_	duced Vertic (F1)		· · · · · •
Depleted Belo	ow Dark Surfa	ce (A11)	[	Redox Dark St	rface (F6)	ı			d Parent Materia	•	
Thick Dark St	urface (A12)		<u>ַ</u>	Depleted Dark	Surface (f	7)		_	ry Shallow Dark		
Sandy Muck i	Mineral (S1)		[	Redox depress				Oti	her (Explain in R	emarks)	
	y Peat or Peat	•	.H) [	High Plains De	•	٠			ors of hydrophyt		
5 cm Mucky f	Peat or Peat (9	53) (LRR F)		(MLRA 72	and 73 o	( LRR H)		hydrolog	gy must be prese	ent, unless disti	urbed or problema
								1			
strictive Laye	er (if present	:):									
strictive Laye Type:		t):						13 veteta F	uil Dunnauti	<b>V</b> ()	u- (a)
Type: Depth (inches	<del>.</del>	-		·				Hydric S	pil Present?	Yes O	No 🕞
Type: Depth (inches emarks:	<del>.</del>	-						Hydric S	pil Present?	Yes O	No 🏵
Depth (inches emarks:	():								/		
Type:	logy Indicate	ors:		heck all that ap	oly)				/	tors (minimu	
Type:	logy Indicate	ors:		heck all that ap					condary Indical	tors (minimur Cracks (86)	n of two require
Type:	logy Indicate	ors:		Salt Crust (E	311)	(B13)			condary Indical Surface Soil ( Sparsely Veg	tors (minimur Cracks (B6) etated Concave	n of two require
Type:  Depth (inches emarks:  drology  etland Hydrol fimary Indicat  Surface Wat  High Water	logy Indicate tors (minimuser (A1)	ors:		Salt Crust (E	311) ertebrates				condary Indical  Surface Soil (  Sparsely Veg  Drainage Pat	tors (minimur Cracks (B6) etated Concave tems (B10)	n of two require
Type:	logy Indicate tors (minimuser (A1) Table (A2)	ors:		Salt Crust (E Aquatic Inve	311) ertebrates ulfide Odo	r (C1)			condary Indical  Surface Soil (  Sparsely Veg  Drainage Pat  Oxidized Rhiz	tors (minimur Cracks (86) etated Concave terns (810) zospheres on Li	n of two require Surface (B8)
Depth (inches marks:  drology etland Hydrol imary Indicat   Surface Wat   High Water     Saturation (i)   Water Marks	logy Indicate tors (minimuser (A1) Table (A2) A3) s (B1)	ors:		Salt Crust (E Aquatic Inve Hydrogen S Dry Season	811) ertebrates ulfide Odo Water Tat	r (C1) ole (C2)	Roots (C3)		condary Indical  Surface Soil (  Sparsely Veg  Drainage Pat  Oxidized Rhiz	tors (minimur Cracks (B6) etated Concave tems (B10) zospheres on U	n of two require Surface (B8)
Type:	logy Indicate tors (minimumer (A1) Table (A2) A3) s (B1) eposits (B2)	ors:		Salt Crust (E Aquatic Inve Hydrogen Si Dry Season Oxidized Rh	311) ertebrates ulfide Odo Water Tat izospheres	r (C1) ole (C2) s on Living	Roots (C3)		ondary Indical Surface Soil ( Sparsely Veg Drainage Pat Oxidized Rhiz (where	tors (minimur Cracks (B6) etated Concave tems (B10) zospheres on U	n of two require Surface (B8) ving Roots (C3)
Depth (inches marks:  drology etland Hydrol imary Indical Surface Water High Water Saturation (i) Water Marks Sediment De Drift deposit	togy Indicate tors (minimuser (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3)	ors:		Salt Crust (E Aquatic Inve Hydrogen Si Dry Season Oxidized Rh	ertebrates uifide Odo Water Tab izospheres not tilled	r (C1) ble (C2) s on Living )	Roots (C3)		ondary Indical Surface Soil ( Sparsely Veg Drainage Pat Oxidized Rhiz (where Crayfish Burn Saturation Vi	tors (minimum Cracks (86) etated Concave terns (810) cospheres on Li tilled) ows (C8)	n of two require Surface (B8) ving Roots (C3)
Type: Depth (inches emarks:  drology etland Hydrol imary Indicat   Surface Wat   High Water   Saturation (i)   Water Marks   Sediment De   Drift deposit   Algal Mat or	logy Indicate tors (minimuser (A1) Table (A2) A3) is (B1) eposits (B2) ts (B3) ir Crust (B4)	ors:		Sait Crust (E Aquatic Inve Hydrogen S Dry Season Oxidized Rh (where	ott) ertebrates uifide Odo Water Tab izospheres not tilled Reduced I	r (C1) ole (C2) s on Living ) Iron (C4)	Roots (C3)		ondary Indical Surface Soil ( Sparsely Veg Drainage Pat Oxidized Rhiz (where Crayfish Burn Saturation Vi	tors (minimum Cracks (B6) etated Concave terns (B10) zospheres on Li tilled) ows (C8) sible on Aerial Position (D2)	n of two require Surface (B8) ving Roots (C3)
Type:	logy Indicate tors (minimuser (A1) Table (A2) (A3) s (B1) eposits (B2) ts (B3) r Crust (B4) ts (B5)	ors: ım of one re	equired; d	Sait Crust (E Aquatic Inve Hydrogen S Dry Season Oxidized Rh (where Presence of Thin Muck S	att) ertebrates uifide Odo Water Tab izospheres not tilled Reduced I iurface (Ci	r (C1) ble (C2) s on Living  Tron (C4)	Roots (C3)		ondary Indical Surface Soil ( Sparsely Veg Drainage Pat Oxidized Rhiz (where Crayfish Burn Saturation Vi Geomorphic	tors (minimum Cracks (B6) etated Concave terns (B10) zospheres on Li tilled) ows (C8) sible on Aerial Position (D2)	n of two require Surface (B8) ving Roots (C3) Imagery (C9)
Type:  Depth (inches marks:  drology  etland Hydrol imary Indicat  High Water  Saturation (i)  Water Marks  Sediment Drift deposit  Algal Mat or  Iron Deposit  Inundation	logy Indicate tors (minimuser (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) r Crust (B4) ts (B5) Visible on Aeri	ors: ım of one re	equired; d	Sait Crust (E Aquatic Inve Hydrogen S Dry Season Oxidized Rh (where	att) ertebrates uifide Odo Water Tab izospheres not tilled Reduced I iurface (Ci	r (C1) ble (C2) s on Living  Tron (C4)	Roots (C3)		ondary Indical Surface Soil ( Sparsely Veg Drainage Pat Oxidized Rhiz (where Crayfish Burn Saturation Vi Geomorphic	tors (minimur Cracks (86) etated Concave tems (810) tospheres on Li tifled) ows (C8) sible on Aerial Position (D2) fest (D5)	n of two require Surface (B8) ving Roots (C3) Imagery (C9)
Depth (inches marks:  drology etiand Hydrol imary Indicat   Surface Wat   High Water     Saturation (i)   Water Marks   Sediment Deposit   Algal Mat or     Iron Deposit   Inundation Nature Stain	logy Indicate tors (minimuser (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) r Crust (B4) ts (B5) Visible on Aeri led Leaves (B9	ors: ım of one re	equired; d	Sait Crust (E Aquatic Inve Hydrogen S Dry Season Oxidized Rh (where Presence of Thin Muck S	att) ertebrates uifide Odo Water Tab izospheres not tilled Reduced I iurface (Ci	r (C1) ble (C2) s on Living  Tron (C4)	Roots (C3)		ondary Indical Surface Soil ( Sparsely Veg Drainage Pat Oxidized Rhiz (where Crayfish Burn Saturation Vi Geomorphic	tors (minimur Cracks (86) etated Concave tems (810) tospheres on Li tifled) ows (C8) sible on Aerial Position (D2) fest (D5)	n of two require Surface (B8) ving Roots (C3) Imagery (C9)
Depth (inches marks:  drology etland Hydrol imary Indicat Surface Wat High Water Saturation (i) Water Marks Sediment Do Drift deposit Algal Mat or Iron Deposit Inundation (i) Water-Stain	logy Indicate tors (minimuser (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) r Crust (B4) ts (B5) Visible on Aeri led Leaves (B9) lons:	ors: Im of one re ial Imagery (F	equired; d	Salt Crust (E Aquatic Inve Hydrogen Si Dry Season Oxidized Rh (where Presence of Thin Muck S Other (Expl	att) ertebrates ulfide Odo Water Tat izospheres not tilled Reduced I furface (Cz sin in Rem	r (C1) ple (C2) s on Living ) (ron (C4) r) parks)	Roots (C3)		ondary Indical Surface Soil ( Sparsely Veg Drainage Pat Oxidized Rhiz (where Crayfish Burn Saturation Vi Geomorphic	tors (minimur Cracks (86) etated Concave tems (810) tospheres on Li tifled) ows (C8) sible on Aerial Position (D2) fest (D5)	n of two require Surface (B8) ving Roots (C3) Imagery (C9)
Type: Depth (inches emarks:  rdrology etland Hydrol imary Indicat High Water Saturation (i) Water Marks Sediment Do Drift deposit Algal Mat or Iron Deposit Inundation (i) Water-Stain eld Observati	logy Indicate tors (minimuser (A1) Table (A2) (A3) s (B1) eposits (B2) ts (B3) r Crust (B4) ts (B5) Visible on Aeri led Leaves (B9)	ors: um of one re ial Imagery (6	equired; d	Salt Crust (E Aquatic Inve Hydrogen S Dry Season Oxidized Rh (where Presence of Thin Muck S Other (Expl	entebrates utilide Odo Water Tab izospheres not tilled Reduced I isurface (Ciain in Remembers):	r (C1) sle (C2) s on Living from (C4) from (C4) from (C4)	Roots (C3)		ondary Indical Surface Soil ( Sparsely Veg Drainage Pat Oxidized Rhiz (where Crayfish Burn Saturation Vi Geomorphic	tors (minimur Cracks (86) etated Concave tems (810) tospheres on Li tifled) ows (C8) sible on Aerial Position (D2) fest (D5)	n of two require Surface (B8) ving Roots (C3) Imagery (C9)
Type: Depth (inches emarks:  /drology etland Hydrol rimary Indicat   High Water     Saturation (i) Water Marks   Sediment Drift deposit   Algal Mat or     Iron Deposit   Inundation (i) Water-Stain   Water-Stain   Water Stain   Water Table Pres	logy Indicate tors (minimuser (A1) Table (A2) (A3) (B1) eposits (B2) ts (B3) or Crust (B4) ts (B5) Visible on Aeri led Leaves (B5) lons: esent?	ors: um of one re ial Imagery (6 ))  Yes  Yes  Yes	equired; co	Salt Crust (E Aquatic Inve Hydrogen Si Dry Season Oxidized Rh (where Presence of Thin Muck S Other (Expl	entebrates utilide Odo Water Tab izospheres not tilled Reduced I isurface (Ciain in Remembers):	r (C1) ple (C2) s on Living ) (ron (C4) r) parks)			ondary Indical Surface Soil ( Sparsely Veg Drainage Pat Oxidized Rhin (where Crayfish Burn Saturation Vi Geomorphic FAC-neutral Frost Heave	tors (minimur Cracks (86) etated Concave tems (810) tospheres on Li tifled) ows (C8) sible on Aerial Position (D2) fest (D5)	n of two required Surface (B8) ving Roots (C3) Imagery (C9)
Type: Depth (inches emarks:  /drology etland Hydrol mary Indicat Surface Water Saturation (i) Water Marks Sediment Do Drift deposit Algal Mat or Iron Deposit Inundation v Water-Stain eld Observati urface Water Pro- Vater Table Presentedudes capillar	logy Indicate tors (minimuser (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) r Crust (B4) ts (B5) Visible on Aeri and Leaves (B9) ions: esent? sent? y fringe)	ors: um of one re ial Imagery (6 )  Yes   Yes   Yes   Yes	equired; d	Sait Crust (E Aquatic Inve Hydrogen Si Dry Season Oxidized Rh (where Presence of Thin Muck S Other (Expli	ertebrates ulfide Odo Water Tat izospheres not tilled Reduced I iurface (Cr ain in Rem thes): thes):	r (C1) r (C1) lole (C2) s on Living ) Iron (C4) 7) earks) 0 0	Wet	Sex E C C C C C C C C C C C C C C C C C C	ondary Indical Surface Soil ( Sparsely Veg Drainage Pat Oxidized Rhiz (where Crayfish Burn Saturation Vi Geomorphic	tors (minimum Cracks (B6) etated Concave tems (B10) cospheres on Li tilled) ows (C8) sible on Aerial Position (D2) Fest (D5) Hummocks (D7	n of two require Surface (B8) ving Roots (C3) Imagery (C9)
Type:	logy Indicate tors (minimuser (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) r Crust (B4) ts (B5) Visible on Aeri and Leaves (B9) ions: esent? sent? y fringe)	ors: um of one re ial Imagery (6 )  Yes   Yes   Yes   Yes	equired; d	Salt Crust (E Aquatic Inve Hydrogen Si Dry Season Oxidized Rh (where Presence of Thin Muck S Other (Expl	ertebrates ulfide Odo Water Tat izospheres not tilled Reduced I iurface (Cr ain in Rem thes): thes):	r (C1) r (C1) lole (C2) s on Living ) Iron (C4) 7) earks) 0 0	Wet	Sex E C C C C C C C C C C C C C C C C C C	ondary Indical Surface Soil ( Sparsely Veg Drainage Pat Oxidized Rhin (where Crayfish Burn Saturation Vi Geomorphic FAC-neutral Frost Heave	tors (minimum Cracks (B6) etated Concave tems (B10) cospheres on Li tilled) ows (C8) sible on Aerial Position (D2) Fest (D5) Hummocks (D7	n of two require Surface (B8) ving Roots (C3) Imagery (C9)
Type:	logy Indicate tors (minimuser (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) r Crust (B4) ts (B5) Visible on Aeri and Leaves (B9) ions: esent? sent? y fringe)	ors: um of one re ial Imagery (6 )  Yes   Yes   Yes   Yes	equired; d	Sait Crust (E Aquatic Inve Hydrogen Si Dry Season Oxidized Rh (where Presence of Thin Muck S Other (Expli	ertebrates ulfide Odo Water Tat izospheres not tilled Reduced I iurface (Cr ain in Rem thes): thes):	r (C1) r (C1) lole (C2) s on Living ) Iron (C4) 7) earks) 0 0	Wet	Sex E C C C C C C C C C C C C C C C C C C	ondary Indical Surface Soil ( Sparsely Veg Drainage Pat Oxidized Rhin (where Crayfish Burn Saturation Vi Geomorphic FAC-neutral Frost Heave	tors (minimum Cracks (B6) etated Concave tems (B10) cospheres on Li tilled) ows (C8) sible on Aerial Position (D2) Fest (D5) Hummocks (D7	n of two require Surface (B8) ving Roots (C3) Imagery (C9)

oject/Site: Alpha Bartonville FM 407			Cî	ty/County:	Bartonville /	Denton Samp	ling Date: 07-Sep-21	
plicant/Owner:					State:	Texas Sampling Point:	T6P1	
				Section, To		nge: ST_	R	
andform (hillslope, terrace, etc.):				Local relief	(concave, c	onvex, none): flat	Slope: 1.0 % / 0.6	
:bregion (LRR): LRR J	•		Lat.: 33,	102169		Long.: -97.139391	Datum: NAD83	
il Map Unit Name: Birome-Rayex-Au	brey complex	, 2 to 15 pe	rcent slopes	ent slopes NWI classification: none				
climatic/hydrologic conditions on					No C	(If no, explain in Remarks	.)	
Are Vegetation . Soil .		_	significantly d		Are "No	ormal Circumstances* present?	Yes 🏵 No 🔾	
Are Vegetation . , Soil .	, or Hydr	ology []	naturally prob	lematic?	(If nee	ded, explain any answers in Ren	narks.)	
ummary of Findings - At			• • • • • • •		-			
<del></del>			HOWING Sal	inpinig p	<u> </u>	ations, transects, impo	Traine readures, etca	
lydrophytic Vegetation Present?	Yes O Yes O	No ⊙ No ⊙			Sampled A			
Hydric Soil Present?	_	_		within	a Wetland	, Yes O No 🏵		
Vetland Hydrology Present?	Yes O	No G	<del></del>					
Remarks:								
						•		
		-			EWS Do	gion: GP		
/EGETATION - Use scien	turic nan	nes or p	<del> </del>	Dominant Species?		Dominance Test worksheet	<del></del>	
Tree Stratum (Plot size:			Absolute % Cover	Rel.Strat. Cover	Indicator Status			
1						Number of Dominant Species That are OBL, FACW, or FAC:	(A)	
2						W		
3.			_			Total Number of Dominant Species Across All Strata:	1(B)	
4.				O				
(Manager)		,		≃ Total Co	ver	Percent of dominant Species That Are OBL, FACW, or FAC:	(A/B)	
Sapling/Shrub Stratum (Plot size:			^	П				
1				h	·	Prevalence Index worksheet:	المناطعات المناط	
2			<del></del>	<u> </u>			Multiply by: × 1 == 0	
4						· · · · · · · · · · · · · · · · · · ·	x 2 =0	
5.							x 3 =0	
			0	= Total Co	уег		× 4 = 400	
Herb Stratum (Plot size: 5 ft	}			_			x 5 =	
Cynodon dactylon				100.0%	FACU	I '	(A) <u>400</u> (B)	
2				0.0%		Prevalence Index = B/A =		
3. 4.		·		0.0%				
5.			— <del>- 0</del>	0.0%		Hydrophytic Vegetation Indica	tors:	
6.	-			0.0%	· · · · · · · · · · · · · · · · · · ·	1 - Rapid Test for Hydroph	ytic Vegetation	
7.				0.0%		2 - Dominance Test is > 5		
8.	<del></del>	···	<u> </u>	0.0%		3 - Prevalence Index is ≤		
9. 10.				0.0%		4 - Morphological Adaptat data in Remarks or on a	ions <sup>1</sup> (Provide supporting	
10						Problematic Hydrophytic		
IDlot eige		,		- IDIAI C		<sup>1</sup> Indicators of hydric soil and		
Woody Vine Stratum (Plot size:			^	п.		be present.	,	
1 2					<del></del>			
<u> </u>	-			= Total C	nver	Hydrophytic		
				→ ruiai t				
% Bare Ground in Herb Stratum	0					Vegetation Yes No	. 💿	

US Army Corps of Engineers

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

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JU	1	

Sampling Point: T6P1

Depth . inches) .	Mi	ist)	%	Color (moist)	% Type i	Locz	Texture	Remarks
0-16	10YR	4/2	100	- TOPINE THIRD IN CO.			Loam	
<del>-10</del> .	1018	<del>-1/2</del>				<del></del>		
<del></del>				<del></del>				<del></del>
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	<del>-</del>		<del>-</del>	·	. — — —	•	· **	
				<del></del>	·	<del></del>		<del></del>
pe: C≠Con	centration. D=	Deptetion	. RM=Reduci	ed Matrix, CS=Coveri	ed or Coated Sand Gr	ins <sup>2</sup> Loca	tion: PL=Pore Lining, M=P	fatrix
				s, unless otherwis				ematic Hydric Solls <sup>3</sup> :
Histosol (A	u)			Sandy Gleyed	Matrix \$4		1 cm Muck (A9) (1	LRR I, J)
Histic Epip	edon (A2)			Sandy Redox	(S5)		Coastal Prairle Re	dox (A16) (LRR F, G, H)
Black Hist	c (A3)			Stripped Matri	tx (S6)		Dark Surface (\$7)	
Hydrogen	Sulfide (A4)			Loamy Mucky	Mineral (F1)		High Plains Depre	essions (F16)
Stratified I	Layers (A5) (LR	RF)		Loamy Gleyed	l Matrix (F2)		(LRR H outsid	le of MLRA 72 and 73}
1 cm Muck	( (A9) (LRR F,G	,H)		Depleted Mate	rix (F3)		Reduced Vertic (F	18)
Depleted I	Below Dark Sun	face (All	)	Redox Dark S	urface (F6)		Red Parent Mater	ial (TF2)
Thick Dark	Surface (A12)			Depleted Dari	k Surface (F7)		☐ Very Shallow Dark	k Surface (TF12)
Sandy Mud	ck Mineral (S1)			Redox depres	sions (F8) ,		Other (Explain in	
2.5 cm Mu	icky Peat or Pe	at (S2) (LI	RR G, H)	High Plains D	epressions (F16)			tic vegetation and wetland
5 cm Mucl	ky Peat or Peat	(S3) (LRF	(F)	(MLRA 72	and 73 of LRR H)		hydrology must be pre	sent, unless disturbed or problema
1-4/ 1-		<del> </del>						
Curre D	ayer (if prese	nt):					1	
_	ayer (if prese					<del></del>	Ward to Soil Brancount?	V () N. (8)
Type:	es):				,		Hydric Soil Present?	Yes ○ No ⑨
Туре:					.,		Hydric Soil Present?	Yes ○ No ⑨
Type: Depth (incl					,,		Hydric Soil Present?	Yes ○ No •
Type: Depth (inc							Hydric Soil Present?	Yes ○ No ④
Type: Depth (inci marks:	nes):						Hydric Soil Present?	Yes ○ No •
Type: Depth (inclination marks: drology	nes):/ / rology Indica	tors:					Secondary Indic	ators (minimum of two require
Type: Depth (inclination marks: drology	nes):/ / rology Indica	tors:		l; check all that ap	(vlgr		Secondary Indic	
Type: Depth (ind marks: drology tland Hyd mary Indi	nes): / rology Indica cators (minin	tors:					Secondary Indic	ators (minimum of two require Cracks (86)
Type: Depth (indimarks:  drology tland Hyd mary Indi Surface V	rology Indica cators (minim	tors:		l; check ail that ap	B11)		Secondary Indic	ators (minimum of two require Cracks (86) getated Concave Surface (88)
Type:	rology Indica cators (minim vater (A1) er Table (A2)	tors:		l; check ail that ap	B11) ertebrates (B13)		Secondary Indic Surface Soil Sparsely Ve Drainage Pa	ators (minimum of two require Cracks (86) getated Concave Surface (88) atterns (810)
Type:	rology Indica cators (minim Vater (A1) er Table (A2) n (A3)	tors:		l; check ail that ap Salt Crust (i Aquatic Inv	B11) ertebrates (B13) Sulfide Odor (C1)		Secondary Indic Surface Soil Sparsely Ve Drainage Po Oxidized Ri	ators (minimum of two require Cracks (86) getated Concave Surface (88) atterns (810) nizospheres on Living Roots (C3)
Type:	rology Indica cators (minim Vater (A1) er Table (A2) n (A3) orks (B1)	tors:		l; check ail that ap Salt Crust (i Aquatic Inv	B11) ertebrates (B13) Sulfide Odor (C1) Water Table (C2)		Secondary Indic Surface Soil Sparsely Ve Drainage Po Oxidized Ri (when	ators (minimum of two require Cracks (86) getated Concave Surface (88) atterns (810) hizospheres on Living Roots (C3) e tilled)
Type:	rology Indica cators (minim Vater (A1) er Table (A2) n (A3) orks (B1) : Deposits (B2)	tors:		l; check all that ap Salt Crust ( Aquatic Inv Hydrogen S Dry Season Oxidized RI	B11) ertebrates (B13) Sulfide Odor (C1) I Water Table (C2) hizospheres on Living	Roots (C3)	Secondary Indic  Surface Soil  Sparsely Ve  Drainage Pa  Oxidized Ri  (when	ators (minimum of two require Cracks (86) getated Concave Surface (88) atterns (810) nizospheres on Living Roots (C3) e tilled) rrows (C8)
Type:	rology Indica cators (minim Vater (A1) er Table (A2) n (A3) orks (B1) : Deposits (B2) osits (B3)	tors:		; check all that ap   Salt Crust (i   Aquatic Inv   Hydrogen S   Dry Season   Oxidized Ri	B11) entebrates (B13) Sulfide Odor (C1) I Water Table (C2) hizospheres on Living e not tilled)	Roots (C3)	Secondary Indic Surface Soil Sparsely Ve Drainage Pa Oxidized Ri (when Crayfish Bu	ators (minimum of two require Cracks (86) getated Concave Surface (88) atterns (810) hizospheres on Living Roots (©3) e tilled) prows (C8) Visible on Aerial Imagery (C9)
Type:	rology Indica cators (minim Vater (A1) er Table (A2) n (A3) orks (B1) : Deposits (B2)	tors:		; check all that ap   Salt Crust (i   Aquatic Inv   Hydrogen S   Dry Season   Oxidized Ri	B11) ertebrates (B13) Sulfide Odor (C1) I Water Table (C2) hizospheres on Living	Reots (C3)	Secondary Indic Surface Soil Sparsely Ve Drainage Pa Oxidized Ri (when Crayfish Bu	ators (minimum of two require Cracks (86) getated Concave Surface (88) atterns (810) nizospheres on Living Roots (C3) e tilled) rrows (C8)
Type:	rology Indica cators (minim Vater (A1) er Table (A2) n (A3) orks (B1) : Deposits (B2) osits (B3)	tors:		; check all that ap   Salt Crust (I   Aquatic Inv   Hydrogen S   Dry Season   Oxidized RI (where	B11) rertebrates (B13) Sulfide Odor (C1) I Water Table (C2) hizospheres on Living In not tilled) I Reduced Iron (C4)	Roots (C3)	Secondary Indic Surface Soil Sparsely Ve Drainage Pa Oxidized Ri (when Crayfish Bu	ators (minimum of two require Cracks (86) getated Concave Surface (88) atterns (810) hizospheres on Living Roots (C3) e tilled) rrows (C8) visible on Aerial Imagery (C9) c Position (D2)
Type:	rology Indica cators (minim Vater (A1) or Table (A2) or (A3) orks (B1) : Deposits (B2) posits (B3) or Crust (B4) osits (B5)	tors:	ne requirec	l; check all that ap Salt Crust ( Aquatic Inv Hydrogen S Dry Season Oxidzed Ri (where	B11) rettebrates (B13) Sulfide Odor (C1) Water Table (C2) hizospheres on Living e not tilled) f Reduced Iron (C4) Surface (C7)	Roots (C3)	Secondary Indic  Surface Soil  Sparsely Ve  Drainage Pi  Oxidized Ri  (when  Crayfish Bu  Saturation V  Geomorphi  FAC-neutra	ators (minimum of two require Cracks (86) getated Concave Surface (88) atterns (810) hizospheres on Living Roots (C3) e tilled) rrows (C8) visible on Aerial Imagery (C9) c Position (D2)
Type:	rology Indica cators (minim Vater (A1) rer Table (A2) n (A3) rks (B1) Deposits (B2) posits (B3) or Crust (B4) osits (B5) on Visible on Ae	tors: num of o	ne requirec	l; check all that ap Salt Crust ( Aquatic Inv Hydrogen S Dry Season Oxidzed Ri (where	B11) rertebrates (B13) Sulfide Odor (C1) I Water Table (C2) hizospheres on Living In not tilled) I Reduced Iron (C4)	Roots (C3)	Secondary Indic  Surface Soil  Sparsely Ve  Drainage Pi  Oxidized Ri  (when  Crayfish Bu  Saturation V  Geomorphi  FAC-neutra	ators (minimum of two require Cracks (86) getated Concave Surface (88) atterns (810) nizospheres on Living Roots (C3) e tilled) mows (C8) Visible on Aerial Imagery (C9) c Position (D2)
Type:	rology Indica cators (minim Vater (A1) er Table (A2) n (A3) orks (B1) c Deposits (B2) osits (B3) c or Crust (B4) osits (B5) on Visible on Ae ained Leaves (E	tors: num of o	ne requirec	l; check all that ap Salt Crust ( Aquatic Inv Hydrogen S Dry Season Oxidzed Ri (where	B11) rettebrates (B13) Sulfide Odor (C1) Water Table (C2) hizospheres on Living e not tilled) f Reduced Iron (C4) Surface (C7)	Roots (C3)	Secondary Indic  Surface Soil  Sparsely Ve  Drainage Pi  Oxidized Ri  (when  Crayfish Bu  Saturation V  Geomorphi  FAC-neutra	ators (minimum of two require Cracks (86) getated Concave Surface (88) atterns (810) nizospheres on Living Roots (C3) e tilled) mows (C8) Visible on Aerial Imagery (C9) c Position (D2)
Type:	rology Indica cators (minim Vater (A1) er Table (A2) in (A3) orks (B1) : Deposits (B2) osits (B3) or Crust (B4) osits (B5) on Visible on Ae ained Leaves (B ations:	tors: num of o	ne required	; check all that ap   Salt Crust (i   Aquatic Inv   Hydrogen S   Dry Season   Oxidized Ri   (where   Presence of   Thin Muck s	B11) ertebrates (B13) Sulfide Odor (C1) I Water Table (C2) hizospheres on Living e not tilled) f Reduced Iron (C4) Surface (C7) lain in Remarks)	Roots (C3)	Secondary Indic  Surface Soil  Sparsely Ve  Drainage Pi  Oxidized Ri  (when  Crayfish Bu  Saturation V  Geomorphi  FAC-neutra	ators (minimum of two require Cracks (86) getated Concave Surface (88) atterns (810) nizospheres on Living Roots (C3) e tilled) mows (C8) Visible on Aerial Imagery (C9) c Position (D2)
Type:	rology Indica cators (minim Vater (A1) er Table (A2) in (A3) orks (B1) : Deposits (B2) osits (B3) or Crust (B4) osits (B5) on Visible on Ae ained Leaves (B ations:	tors: num of o	ne required	; check all that ap     Salt Crust (i)     Aquatic Inv     Hydrogen S     Dry Season     Oxidized Ri   (where     Presence of     Thin Muck:     Other (Expl	B11) ertebrates (B13) Sulfide Odor (C1) I Water Table (C2) hizospheres on Living e not tilled) f Reduced Iron (C4) Surface (C7) lain in Remarks)	Roots (C3)	Secondary Indic  Surface Soil  Sparsely Ve  Drainage Pi  Oxidized Ri  (when  Crayfish Bu  Saturation V  Geomorphi  FAC-neutra	ators (minimum of two require Cracks (86) getated Concave Surface (88) atterns (810) nizospheres on Living Roots (C3) e tilled) nrows (C8) Visible on Aerial Imagery (C9) c Position (D2)
Type:	rology Indica cators (mining Vater (A1) for Table (A2) in (A3) for	tors: num of o	ery (B7)  No ©	; check all that ap   Salt Crust (  Aquatic Inv   Hydrogen S   Dry Season   Oxidized RI (where   Presence of   Thin Muck:   Other (Expl	B11) retrebrates (B13) Sulfide Odor (C1) Water Table (C2) hizospheres on Living a not tilled) If Reduced Iron (C4) Surface (C7) Itain in Remarks)	-	Secondary Indic Surface Soil Sparsely Ve Drainage Pa Oxidized Ri (when Crayfish Bu Saturation Geomorphi FAC-neutra Frost Heave	ators (minimum of two require Cracks (86) getated Concave Surface (88) atterns (810) hizospheres on Living Roots (C3) e tilled) rrows (C8) Visible on Aerial Imagery (C9) c Position (D2) I Test (D5) e Hummocks (D7) (LRR F)
Depth (indimarks:  drology  etland Hyd imary Indi    Surface V   High Wat   Saturation   Water Ma   Sediment   Onft depi   Algal Mat   Iron Depo   Inundation	rology Indica cators (minim Vater (A1) for Table (A2) in (A3) orks (B1) in Deposits (B2) posits (B3) in or Crust (B4) posits (B5) on Visible on Ae ained Leaves (E ations: Present?	tors: num of o	ery (B7)  No ©	; check all that ap   Salt Crust (  Aquatic Inv   Hydrogen S   Dry Season   Oxidized RI (where   Presence of   Thin Muck:   Other (Expl	B11) entebrates (B13) Sulfide Odor (C1) I Water Table (C2) hizospheres on Living e not tilled) I Reduced Iron (C4) Surface (C7) Itain in Remarks) Inches):  0	-	Secondary Indic  Surface Soil  Sparsely Ve  Drainage Pi  Oxidized Ri  (when  Crayfish Bu  Saturation V  Geomorphi  FAC-neutra	ators (minimum of two require Cracks (86) getated Concave Surface (88) atterns (810) hizospheres on Living Roots (C3) e tilled) rrows (C8) Visible on Aerial Imagery (C9) c Position (D2) I Test (D5) e Hummocks (D7) (LRR F)
Depth (incommarks:  drology etland Hyd imary Indi Surface V High Water Ma Sediment Onift depo Inundation Water-St etd Observ rface Water ater Table P turation Pre cludes capil	rology Indica cators (minim Vater (A1) er Table (A2) in (A3) orks (B1) in Deposits (B2) osits (B3) in Crust (B4) osits (B5) on Visible on Ae ained Leaves (B ations: Present? resent? sent? lary fringe)	tors: num of o	ery (B7)  No  No  No	; check all that ap     Salt Crust (i)     Aquatic Inv     Hydrogen S     Dry Season     Oxidized Ri     (where     Presence of     Thin Muck:     Other (Expl	B11) entebrates (B13) Sulfide Odor (C1) I Water Table (C2) hizospheres on Living e not tilled) I Reduced Iron (C4) Surface (C7) Itain in Remarks) Inches):  0	Weti	Secondary Indic Surface Soil Sparsely Ve Drainage Pi Oxidized Ri (when Crayfish Bu Saturation Geomorphi FAC-neutra Frost Heave	ators (minimum of two required Cracks (86) getated Concave Surface (88) atterns (810) hizospheres on Living Roots (C3) e tilled) prows (C8) Visible on Aerial Imagery (C9) to Position (D2) I Test (D5) e Hummocks (D7) (LRR F)
Depth (indimarks:  drology etland Hyd imary Indi   Surface V   High Wat   Saturation   Water Ma   Sediment   Onft depi   Algal Mat   Iron Depo   Inundation   Water-St etd Observ efface Water eter Table P turation Pre cludes capil	rology Indica cators (minim Vater (A1) er Table (A2) in (A3) orks (B1) in Deposits (B2) osits (B3) in Crust (B4) osits (B5) on Visible on Ae ained Leaves (B ations: Present? resent? sent? lary fringe)	tors: num of o	ery (B7)  No ② No ③	; check all that ap     Salt Crust (i)     Aquatic Inv     Hydrogen S     Dry Season     Oxidized Ri     (where     Presence of     Thin Muck:     Other (Expl	B11) ertebrates (B13) Sulfide Odor (C1) I Water Table (C2) hizospheres on Living In not tilled) I Reduced Iron (C4) Surface (C7) Itain in Remarks) Inches):  O Inches): O Inches	Weti	Secondary Indic Surface Soil Sparsely Ve Drainage Pi Oxidized Ri (when Crayfish Bu Saturation Geomorphi FAC-neutra Frost Heave	ators (minimum of two required Cracks (86) getated Concave Surface (88) atterns (810) hizospheres on Living Roots (C3) e tilled) prows (C8) Visible on Aerial Imagery (C9) to Position (D2) I Test (D5) e Hummocks (D7) (LRR F)
Depth (incommarks:  drology etland Hyd imary Indi Surface V High Water Ma Sediment Onift depo Inundation Water-St etd Observ rface Water ater Table P turation Pre cludes capil	rology Indica cators (minim Vater (A1) er Table (A2) in (A3) orks (B1) in Deposits (B2) osits (B3) in Crust (B4) osits (B5) on Visible on Ae ained Leaves (B ations: Present? resent? sent? lary fringe)	tors: num of o	ery (B7)  No ② No ③	; check all that ap     Salt Crust (i)     Aquatic Inv     Hydrogen S     Dry Season     Oxidized Ri     (where     Presence of     Thin Muck:     Other (Expl	B11) ertebrates (B13) Sulfide Odor (C1) I Water Table (C2) hizospheres on Living In not tilled) I Reduced Iron (C4) Surface (C7) Itain in Remarks) Inches):  O Inches): O Inches	Weti	Secondary Indic Surface Soil Sparsely Ve Drainage Pi Oxidized Ri (when Crayfish Bu Saturation Geomorphi FAC-neutra Frost Heave	ators (minimum of two required Cracks (86) getated Concave Surface (88) atterns (810) hizospheres on Living Roots (C3) e tilled) prows (C8) Visible on Aerial Imagery (C9) to Position (D2) I Test (D5) e Hummocks (D7) (LRR F)

Landform (hillstope, terrace, etc.): Plain   Local relief (concave, convex, none): flat	Sampling Date: <u>07-Sep-21</u>
Landform (hillslope, terrace, etc.): Plain	Point: T6P2
Landform (hillslope, terrace, etc.): Plain  Local relief (concave, convex, none): flat  Labregion (LRR): LRR]	R .
Net   Name   Siletid   Ioamy fine   Sand, 1 to 5 percent   slopes   Name   Name   Siletid   Ioamy fine   Sand, 1 to 5 percent   slopes   Name   Na	Slope: 1.0 % / 0.6
re climatic/hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in F Are Vegetation	Datum: NAD83
Are Vegetation	ation: none
Are Vegetation	emarks.)
tummary of Findings - Attach site map showing sampling point locations, transects, lydrophytic Vegetation Present? Yes ○ No ⑨ Is the Sampled Area within a Wetland? Yes ○ No ⑨ within a Wetland? Yes ○ No ⑨ Is the Sampled Area within a Wetland? Yes ○ No ⑨ Nominant Species Indicator Species Aross All Stratus. Yes ○ No ⑩ within a Wetland? Yes ○ No ⑩ Nominant Species Aross All Stratus. Yes ○ No ⑩ within a Wetland? Yes ○ No ⑩ Nominant Species Aross All Stratus. Yes ○ No ⑩ within a Wetland? Yes ○ No ⑩ Nominant Species Aross All Stratus. Yes ○ No ⑩ within a Wetland? Yes ○ No ⑩ Nominant Species Aross All Stratus. Yes ○ No ⑩ within a Wetland? Yes ○ No ⑩ Nominant Species Aross All Stratus. Yes ○ No ⑩ within a Wetland? Yes ○ No ⑩ Nominant Species Aross All Stratus. Yes ○ No ⑩ within a Wetland? Yes ○ No ⑩ Nominant Species Aross All Stratus. Yes ○ No ⑩ within a Wetland? Yes ○ No ⑩ Nominant Species Aross All Stratus. Yes ○ No ⑩ within a Wetland? Yes ○ No ⑩ Nominant Species Aross All Stratus. Yes ○ No ⑩ Nominant Species Aross All Stratus. Yes ○ No ⑩ Nominant Species Aross All Stratus. Yes ○ No ⑩ Nominant Species Aross All Stratus. Yes ○ No ⑩ Nominant Species Aross All Stratus. Yes ○ No ⑩ Nominant Species Aross All Stratus. Yes ○ No ⑩ Nominant Species Aross All Stratus. Yes ○ No ⑩ Nominant Species Aross All Stratus. Yes ○ No ⑩ Nominant Species Aross All Stratus. Yes ○ No ⑩ Nominant Species Aross All Stratus. Yes ○ No ⑩ Nominant Species Aross All Stratus. Yes	ssent? Yes 💿 No 🔾
### Attach site map showing sampling point locations, transects, hydrophytic Vegetation Present? Yes ○ No ④ Is the Sampled Area within a Wetland? Yes ○ No ④ Nominant Species Indicator Species Access All Stratary of Dominant Species Access Access All Stratary of Dominant Species Access Access All Stratary of Dominant Species Access Access All Stratary of	; in Remarks.)
Sappling/Shrub Stratum   (Plot size:	
Hydric Soil Present? Yes ○ No ⊕  Wetland Hydrology Present? Yes ○ No ⊕  Wetland? Yes ○ No ⊕  Within a Wetland? Yes ○ No ⊕  Wetland? Yes ○ No ⊕  Within a Wetland? Yes ○ No ⊕  Dominant Species?  Indicator Stratus Indicator Species?  Number of Dominant Species?  Number of Dominant Species Across All Strata:  0 □ □ Total Cover Percent of dominant Species Across All Strata:  0 □ □ Total Cover Percent of dominant Species Across All Strata:  1. □ □ □ □ Prevalence Index work  Total % Cover of OBL Species  FACW species □ UPL s	
Wetland Hydrology Present?   Yes   No   Within a Wetland?   Yes   No   No   Within a Wetland?   Yes   No   No   No   No   No   No   No   N	
VEGETATION - Use scientific names of plants   Species7   Species7   Status   Indicator   Indicator   Status   Indicator   Status   Indicator   I	
FWS Region: GP   Species   Specie	
Species   Species   Species   Species   Species   Species   Status   Stat	
Species   Species   Species   Species   Species   Species   Status   Stat	
Species   Species   Species   Species   Species   Species   Status   Stat	
Tree Stratum   Plot size:	
1.       0       □       That are OBL, FACW, or That are OBL, FACW, or That are OBL, FACW, or Species Across All Strata:         2.       0       □       Total Number of Dominan Species Across All Strata:         4.       0       □       Percent of dominant Species That Are OBL, FACW, or That	ieet:
2.	
3.   0	
1.   0	1 (B)
That Are OBL, FACW, Cover of total Cover   That Are OBL, FACW, Cover of total Cover   Total % Cover of tot	(D)
1.	
2	TPAC:
3.	iheet:
4.	
5.       O       — Total Cover       FAC species         FACU species       1         1. Cynodon dactylon       100       ✓ 100.0%       FACU species       1         2.       0 0.0%       Prevalence Index:         4.       0 0.0%       Hydrophytic Vegetation         5.       0 0.0%       Hydrophytic Vegetation         7.       0 0.0%       1 - Rapid Test for I         7.       0 0.0%       1 - Problematic Test for I         9.       0 0.0%       1 - Prevalence Ind         9.       0 0.0%       1 - Prevalence Ind         9.       0 0.0%       1 - Prevalence Ind         10.       0 0.0%       Prevalence Ind         10.       10.0%       Prevalence Ind         10.       10.0%       Prevalence Ind         10.       10.       10.       10.       10. </td <td><del></del></td>	<del></del>
Herb Stratum   (Plot size: 5 ft   )	
Herb Stratum   Plot size: 5 ft   1	
1. Cynodon dactylon 2. 0 0.0% FACU 2. 0 0.0% Prevalence Index: 4. 0 0.0% Hydrophytic Vegetation 5. 0 0.0% 1. Rapid Test for to the control of the control o	00 x 4 = 400 0 x 5 = 0
2.	
4. 0 □ 0.0% Hydrophytic Vegetation 5. 0 □ 0.0% □ 1 - Rapid Test for 1 7. 0 □ 0.0% □ 2 - Dominance Tes 8. 0 □ 0.0% □ 3 - Prevalence Ind 9. 0 □ 0.0% □ 4 - Morphological data in Remarks 100 = Total Cover □ Problematic Hydro	
5.         0         0.0%         Hydrophytic Vegetation           6.         0         0.0%         1 - Rapid Test for I           7.         0         0.0%         2 - Dominance Test           8.         0         0.0%         3 - Prevalence Ind           9.         0         0.0%         4 - Morphological data in Remarks           10.         = Total Cover         Problematic Hydro	: B/A =
6. 0 0.0% 1 - Rapid Test for U 7. 0 0.0% 2 - Dominance Test 8. 0 0.0% 3 - Prevalence Xnd 9. 0 0.0% 4 - Morphological data in Remarks 100 = Total Cover Problematic Hydro	Indicators:
7.	lydrophytic Vegetation
9.	t is > 50%
10. 0 0.0% data in Remarks  100 = Total Cover Problematic Hydro	ex is ≤3.0 <sup>1</sup>
100 = Total Cover Problematic Hydro	idaptations <sup>1</sup> (Provide supporting
be present.	soil and wetland hydrology must
1	
2. O Total Cover Hydrophytic	
Vegetation	) No ⊚
% Bare Ground In Herb Stratum 0 Present? Yes	, no G
Remarks:	

US Army Corps of Engineers

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

	takan (Barana)	. Also d	anded to drawns-t	the indicates or co	nfirm the	Sampling Pol absence of indicators.)	nr 1984	
		tne aeptn n			шин ше	ausence of mulcators.)		
Depth (inches)	Depth Matrix (inches) Color (moist) %		Color (moist)	ox Features Type <sup>1</sup>	Loc*	Texture	Remarks.	
		20, _	COID! TIMOISE?		,	Loam	· · · · · · · · · · · · · · · · · · ·	
0-16	10YR 4/2		<del></del>	<del></del>		-		
		_ <del></del> .		<del> </del>	<del></del>		<del></del>	
	711							
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	<del> </del>			<del></del>		· <del>-~</del>		
				<del></del>		<del></del>		
						. <u> </u>		
Type: C=Co	oncentration. D=Deplet	ion. RM≖Redu	iced Matrix, CS=Covere	d or Coated Sand Gr	ains <sup>a</sup> Loca	ation: PL=Pore Uning. M=Ma	trix	
tydric Soil	Indicators: (Applica	sble to all LR	Rs, unless otherwis	e noted.)		Indicators for Probler	natic Hydric Soils 3:	
🗋 Histosol (	(A1)		Sandy Gleyed I	Matrix S4		1 cm Muck (A9) (LR	- •	
Histic Epi	ipedon (A2)		Sandy Redox (	•		= ****	x (A16) (LRR F, G, H)	
Black His			Stripped Matrix	- /		Dark Surface (\$7) (	•	
=	n Sulfide (A4)		Loamy Mucky I			High Plains Depress	, ,	
_	Layers (AS) (LRR F)		Loamy Gleyed	, -		`	of MLRA 72 and 73)	
=	ck (A9) (LRR F,G,H) I Below Dark Surface (A	2117	Depleted Matri Redox Dark St			Reduced Vertic (F1)	•	
=	rk Surface (A12)	,	Depleted Dark			Red Parent Material  Very Shallow Dark	- •	
_	uck Mineral (S1)		Redox depress			Other (Explain in R		
_ ·	flucky Peat or Peat (S2)	(LRR G, H)	High Plains De	pressions (F16)		` '	c vegetation and wetland	
=	icky Peat or Peat (S3) (1		(MLRA 72	and 73 of LRR H)			nt, unless disturbed or problema	
testrictive I	Layer (if present):					1	· · · · · · · · · · · · · · · · · · ·	
Туре: _							0 0	
Depth (in	ches):					Hydric Soil Present?	Yes O No 💿	
Remarks:		·	<u> </u>					
			<u>, </u>			<del></del> ,		
ydrolog	3 <b>y</b>							
Vetland Hy	drology Indicators:	•	<del> </del>			Secondary Indicat	ors (minimum of two require	
-	dicators (minimum o	of one require	ed; check all that app	oiy)		Surface Soil (		
Surface	Water (A1)		Salt Crust (B	311)		☐ Sparsely Vege	etated Concave Surface (B8)	
= ' ' '	ater Table (A2)		Aquatic Inve	ertebrates (B13)		☐ Drainage Pati	terns (810)	
_ `	ion (A3)		_	ulfide Odor (C1)		_	ospheres on Living Roots (C3)	
	Marks (B1)			Water Table (C2)		(where		
Water N	nt Deposits (B2)			izospheres on Living	Roots (C3)		•	
_						_ `		
Sedime			fwhere	not tilled)		Saturation vi	sible on Aenal Imagery (C9)	
Sedimei	posits (B3)		_ `	not tilled) Reduced Iron (C4)		_	sible on Aerial Imagery (C9) Position (D2)	
Sedimei Drift de Algal Mi			_ `	Reduced Iron (C4)		Geomorphic (	Position (DZ)	

Water-Stained Leaves (B9)

Yes O No 🖲

Yes O No 🖲

Yes O No 💿

Depth (inches):

Depth (inches):

Depth (inches):

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

0

Wetland Hydrology Present?

Field Observations:

Surface Water Present?

Water Table Present?

Remarks:

Saturation Present? (includes capillary fringe) Yes O No 💿

pplicant/Owner:nvestigator(s): MP					State:	Texas Sampling Point:	Т6Р3
				Section, To	wnship, Rat	nge: S T	R
Landform (hillslope, terrace, etc.): [				Local relief	(concave, o	onvex, none): flat	Slope: 1.0 % / 0.6 °
ubregion (LRR): LRR J			Lat.: 33.	099916		Long.: -97.139405	Datum: NAD83
oil Map Unit Name: Wilson day loam,					<u> </u>	NWI classification:	none
re climatic/hydrologic conditions o			this time of yea	ar? Yes	: <b>⊙</b> № ○	(If no, explain in Remarks	<b>i.)</b>
Are Vegetation, Soil		rology [	significantly o		Are "No	ormal Circumstances" present?	Yes 🏵 No 🔾
Are Vegetation . , Soil .	, or Hydi	rology 🔲	naturally prof	slematic?	(If nee	ded, explain any answers in Rer	narks.)
Summary of Findings - At	tach sit	e map s	howing sa	mpling p	oint loca	ations, transects, impo	rtant features, etc.
Hydrophytic Vegetation Present?	Yes O	No 💿					
Hydric Soil Present?	Yes O	No 💿			Sampled A		
Wedand Hydrology Present?	Yes O	No 👁		within	a Wetland	, Yes O No 🖲	
Remarks:							<u> </u>
					EINC Do	gion: GP	
VEGETATION - Use scien	titic nar	nes or p	lants	Dominant Species?	1 847 1/68	- <del>, , , , , , , , , , , , , , , , , ,</del>	<del></del>
/Diot size:	1	9		Rel.Strat.	Indicator Status	Dominance Test worksheet:	
Tree Stratum. (Plot size:			<u>.% Соvег</u> 0	COVE:		Number of Dominant Species	G (A)
2				<u> </u>	·- <del>-</del>	That are OBL, FACW, or FAC:	(\( \lambda \)
_					·	Total Number of Dominant	1 (B)
3. 4.	·					Species Across All Strata:	(6)
<del></del>			0	= Total Co	ver	Percent of dominant Species	0.0% (A/B)
Sapling/Shrub Stratum (Plot size:		}}				That Are OBL, FACW, or FAC:	(A/B)
1	<u> </u>					Prevalence Index worksheet:	
2				<u> </u>		Total % Cover of:	Multiply by:
3				<u>L</u>		OBL species 0	x 1 =
4				<u> </u>		FACW species0	x 2 =0
5				= Total C			× 3 +
(Plot size: 5 ft			<del>. 0</del>	= 10124 C	yer	FACU species . 100	x 4 = <u>400</u>
Herb Stratum (Plot size: 5 ft			100	100.0%	GACT1	UPL species -0	x 5 =
Cynodon dactylon 2.				0.0%		Column Totals:100_	(A) <u>400</u> (B)
3.	•			0.0%		Prevalence Index = 8/A =	: <u>4</u>
4				0.0%		Hydrophytic Vegetation Indica	itors:
5				0.0%		1	
6				0.0%		1 - Rapid Test for Hydropl	
7 8.	,,,			0.0%	- ·	2 - Dominance Test is > 5  3 - Prevalence Index is ≤	
9.				0.0%	<del></del>	1 =	
10.			<u></u>	0.0%		4 - Morphological Adaptat data in Remarks or on a	separate sheet)
· · · · · · · · · · · · · · · · · · ·		··	100_	= Total C	over	Problematic Hydrophytic	Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:		}}	<del></del>			1 Indicators of hydric soil and	d wetland hydrology must
1.			0	<u> </u>		be present	
2.							
			0	= Total C	over	Hydrophytic	
% Bare Ground in Herb Stratum	0					Present? Yes No	, ⊙
<del></del>	-		,		,	<del> </del>	<del></del>
Remarks:							

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<sup>\*</sup>Indicator suffix = National status or professional decision assigned because Regional status not defined by PWS.

-	- 11
	<b>₹II</b>
•	<b>711</b>

Sampling Point: T6P3

DepthColor (n	<u>latrix</u> loist) % .	Redox Features Color (moist) % Type	Loc2	Texture	Remarks
0-16 10YR	4/2 100			Loam	
<del> </del>	······································				
<del></del>	<del></del>	<del></del>	<del></del>		
<del></del>	<del></del>		<del></del>		<del></del>
<del></del>	<del></del>		<del></del>		
<del></del>			<del></del>	· • · · · · · · · · · · · · · · · · · ·	·
Type: C=Concentration. D	=Depletion. RM=Red	uced Matrix, CS=Covered or Coated Sand	Grains <sup>2</sup> Lota	ation: PL=Pore Lining. M=Matrix	
		IRs, unless otherwise noted.)		Indicators for Problemati	c Hydric Soils <sup>3</sup> :
Histosol (A1)		Sandy Gleyed Matrix S4		1 cm Muck (A9) (LRR I,	J)
Histic Epipedon (A2)		Sandy Redox (S5)		Coastal Prairie Redox (/	* *
Black Histic (A3)		Stripped Matrix (S6)		Dark Surface (S7) (LRR	G)
Hydrogen Sulfide (A4)		Loamy Mucky Mineral (F1)		High Plains Depressions	(F16)
Stratified Layers (A5) (i	RR F)	Loamy Gleyed Matrix (F2)		(LRR H outside of I	1LRA 72 and 73)
📘 1 cm Muck (A9) (LRR F	G,H)	Depleted Matrix (F3)		Reduced Vertic (F18)	
Depleted Below Dark S	ırface (A11)	Redox Dark Surface (F6)		Red Parent Material (TF	2)
Thick Dark Surface (A1)	2)	Depleted Dark Surface (F7)		Very Shallow Dark Surfa	•
Sandy Muck Mineral (Si	)	Redox depressions (F8)		Other (Explain in Rema	
2.5 cm Mucky Peat or P	eat (S2) (LRR G, H)	High Plains Depressions (F16)		3Indicators of hydrophytic ve	
5 cm Mucky Peat or Pe	it (S3) (LRR F)	(MLRA 72 and 73 of LRR H	)	hydrology must be present,	inless disturbed or problema
estrictive Layer (if pres	ent):	<del></del>			
Түре:	<u> </u>	<del></del>		I that is Gall Busereth V	es ○ No ⊙
Depth (inches):				Hydric Soil Present? You	es C No C
lydrology	<u></u>		<del></del>		
Vetland Hydrology Indi	ators:	•			(minimum of two require
Primary Indicators (min	mum of one requir	ed; check ali that apply)		Surface Soil Crack	s (B6)
Surface Water (A1)		Salt Crust (B11)		Sparsely Vegetate	d Concave Surface (B8)
High Water Table (A2)		Aquatic Invertebrates (B13)		☐ Drainage Patterns	(810)
Saturation (A3)		Hydrogen Sulfide Odor (C1)		=	heres on Living Roots (C3)
_		Dry Season Water Table (C2)		(where tille	2 , ,
Water Marks (81) □ Codiment Consolts (81)	۸.	Oxidized Rhizospheres on Livis	nn Boote (C3)	Crayfish Burrows	•
Sediment Deposits (B)	3		ig noots (w)		
Drift deposits (B3)		(where not tilled)		- <u>-</u> -	on Aerial Imagery (C9)
Algai Mat or Crust (84)	)	Presence of Reduced Iron (C4)	)	Geomorphic Posit	
Iron Deposits (BS)		Thin Muck Surface (C7)		FAC-neutral Test	(D5)
Inundation Visible on.	Aerial Imagery (87)	Other (Explain in Remarks)		Frost Heave Hum	mocks (D7) (LRR F)
☐ Water-Stained Leaves	(B9)			······································	
Field Observations:		~			
Surface Water Present?	Yes O No	· · · · · <del></del>			
Water Table Present?	Yes O No	Depth (inches):0	wat	tand Hydrology Present?	Yes ○ No ⑨
Saturation Present? (includes capillary fringe)	Yes O No	Depth (inches): 0		and the order	
	(stream gauge, m	unitor well, aerial photos, previous in	spections), i	f available:	
Remarks:					
Remarks:					

roject/Site: Alpha Bartonville FM 407		City/Co	ounty: Bartonville /	/ Denton Sam	pling Date: 07-Sep-21
pplicant/Owner:			State:	: Texas Sampling Poin	т6Р4
			ion, Yownship, Ra	inge: S T	R
Landform (hillslope, terrace, etc.):	Depression	Local	relief (concave, c	convex, none): concave	Slope: 2.0 % / 1.1 °
ubregion (LRR): LRR J		Lat: 33,0997	74	Long.: -97.139419	Datum: NAD83
oil Map Unit Name: Wilson clay loam	, 1 to 3 percent slopes	<del></del>		NWI classification	none
climatic/hydrologic conditions on			Yes  No	(If no, explain in Remark	s.)
Are Vegetation, Soil	, or Hydrology		bed? Are "N	ormal Circumstances" present?	
Are Vegetation . , Soil	, or Hydrology	•		eded, explain any answers in Re	
<b>.</b> – –	· · · · · · ·	•••	,		
Summary of Findings - At		howing sampl	ing point loc	ations, transects, imp	ortant features, etc.
Hydrophytic Vegetation Present?	Yes   No		Is the Sampled A	krea	
Hydric Soil Present?	Yes   ● No O		within a Wetland	17 Yes 🖲 No 🔾	
Wetland Hydrology Present?	Yes   No				
Remarks:					
	<del></del>				<u> </u>
VEGETATION - Use scien	tific names of p	lants Dom	inant FWS Re	gion: GP	
		Absolute Rel.	des?	Dominance Test worksheet:	<del> </del>
Tree Stratum (Plot size:	}}	% Cover Cove		Number of Dominant Species	
1				That are OBL, FACW, or FAC:	(A)
2			<del></del>	Total Number of Dominant	
3. 4.			<del></del>	Species Across All Strata:	1(B)
۲				Percent of dominant Species	
Sapling/Shrub Stratum (Plot size:	)	<u> </u>	otal Cover	That Are OBL, FACW, or FAC	(A/B)
1		o . 🗆		Prevalence Index worksheet:	
2				Total % Cover of:	Multiply by:
3	· · · · · · · · · · · · · · · · · · ·			OBL species 0	x1= 0
4			<del></del>	FACW species 100	x 2 = <u>200</u>
5				FAC species0_	x 3 =
Herb Stratum (Plot size: 5 ft	1		Total Cover	FACU species0	x 4 =
1. Paspalum urvillei	······································	100	100.0% FACW	UPL speciesO	x 5 =
2.			0.0%	Column Totals:100	(A) <u>200</u> (B)
3.			0.0%	Prevalence Index = B/A	= 2
4.			0.0%	Hydrophytic Vegetation India	ators:
5	<u></u>		0.0%	1 - Rapid Test for Hydron	Autie Vacatation
6. 7.			0.0%	2 - Dominance Test is >	• -
8.			0.0%	✓ 3 - Prevalence Index is ±	
9.			0.0%	4 - Morphological Adapta	
10.			0.0%	data in Remarks or on	a separate sheet)
		100 =	Cotal Cover	Problematic Hydrophytic	Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:	1			1 Indicators of hydric soil ar	d wetland hydrology must
1			<u></u>	be present.	······································
2			<del></del>		
		0 = 7	Total Cover	Hydrophytic	
				Vegetation ~	^
% Bare Ground in Herb Stratum	0			Vegetation Present?  Yes   N	• O
% Bare Ground in Herb Stratum Remarks:	0				· O

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Sampling Point: T6P4

DepthCol	Matrix_ or (moist)	<u>%</u>	Color (m		x Featur <u>%</u>	Type 1	Loc2	Text	ure		Remarks	
0-16 1019		60	7.5YR	6/6	40	C	M and PL	Loam				
1011						<del></del>	***************************************					
<del></del>			<del></del> -									
									<u> </u>			
								•				
						• •		-				
				<del></del>		•	<del></del>	-	<del></del>	<u> </u>		
· · ·	<u>.</u>				·	·			·			
rpe: C=Concentrati							ains <sup>2</sup> Loca					
dric Soil Indicate	rs: (Applicat	ole to all LRF	_		_				rs for Proble	•	ric Soils <sup>3</sup> :	
Histosol (A1)	3\			y Gleyed M				_	n Muck (A9) (L			
Histic Epipedon (A Black Histic (A3)	2)			y Redox (Si ped Matrix i	•			_	stal Prairie Red		RR F, G, H)	
Hydrogen Sulfide	(44)		_	y Mucky M	-	ı <b>y</b>			(Surface (S7) Plains Depre			
Stratified Layers (			_~~	y Gleyed M	-	-			LRR H outsid			
1 cm Muck (A9) (I			_	ted Matrix		,			uced Vertic (F			
Depleted Below D	ark Surface (A1	1)	_ ·	x Đark Surf				-	Parent Materi	-		
Thick Dark Surface	(A12)			eted Dark S		7)		_	Shallow Dark		12)	
Sandy Muck Miner			==	x depressio				Oth	er (Explain in I	Remarks)		
2.5 cm Mucky Pea			_	Plains Dep		-					n and wetland	
5 cm Mucky Peat	or Peat (S3) (U	RRF)	()	MLRA 72 a	nd 73 of	(LRR H)		hydrology	must be pres	ent, unless	disturbed or pr	oblema
Туре:								1				
17pc								]		_	_	
								Hydric So	il Present?	Yes 💿	No O	
Depth (inches):			<del></del>					Hydric So	il Present?	Yes 💿	No O	
Depth (inches):			·				····	Hydric So	il Present?	Yes 💿	No O	
Depth (inches):								Hydric So	il Present?	Yes 💿	No O	
Depth (inches):								Hydric So	il Present?	Yes 💿	No O	
Depth (inches): emarks:								Hydric So	il Present?	Yes <sup>©</sup>	No O	
Depth (inches):												aquiro
Depth (inches):	Indicators:			that appl					ondary Indica	ators (minir	No O	equire
Depth (inches):	Indicators: (minimum of		; check all						ndary Indica Surface Soil	ators (minia Cracks (B6)	num of two r	
Depth (inches):	Indicators: (minimum of		; check ail	t Crust (B1	1)	(042)		Secc	ondary Indica Surface Soil Sparsely Veg	ators (minis Cracks (B6) getated Conc	num of two r	
Depth (inches):	Indicators: (minimum of		; check ail	t Crust (B1 uatic Invert	1) tebrates (				ondary Indica Surface Soil Sparsely Veg Drainage Pa	ators (minir Cracks (B6) getated Cond tterns (B10)	num of two r zave Surface (B	8)
emarks:  edrology  ettand Hydrology  imary Indicators  Surface Water (A  High Water Table  Saturation (A3)	Indicators: 'minimum of I) (A2)		; check ail Sall	t Crust (B1 uatic Invert drogen Sull	1) tebrates ( fide Odor	(C1)		Secc	ondary Indica Surface Soil Sparsety Veg Drainage Pa Oxidized Rh	ators (minir Cracks (B6) getated Cond tterns (B10) izospheres o	num of two r	8)
Depth (inches):	Indicators: (minimum of 1) (A2)		; check ail	t Crust (B1 uatic Invert drogen Sull y Season W	1) tebrates ( fide Odor rater Tab	(C1) le (C2)	Poots (C3)		ondary Indica Surface Soil Sparsely Veg Drainage Pa Oxidized Rh (where	ators (minir Cracks (B6) getated Cond tterns (B10) izospheres o	num of two r zave Surface (B	8)
erdrology ettand Hydrology imary Indicators.  Surface Water (A High Water Table Saturation (A3) Water Marks (81) Sediment Deposit	Indicators: minimum of i) (A2)		; check ail	t Crust (B1 uatic Invert drogen Sull y Season W idized Rhiz	1) tebrates ( fide Odor rater Tablo ospheres	(C1) le (C2) on Living	Roots (C3)		ondary Indica Surface Soil Sparsely Veg Drainage Pa Oxidized Rh (where Crayfish Bur	ntors (minin Cracks (B6) petated Cond tterns (B10) izospheres o tilled) rows (C8)	num of two r ave Surface (B in Living Roots	8) (C3)
drology etand Hydrology imary Indicators.  Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposit Drift deposits (B3)	Indicators: (minimum of 1) (A2) (s (B2)		; check ail Sali Aqu Hyc	t Crust (B1 uatic Invert drogen Sull y Season W idized Rhizi (where n	1) tebrates ( fide Odor rater Tab ospheres of tilled)	(C1) le (C2) on Living	Roots (C3)		ondary Indica Surface Soil Sparsely Veg Drainage Pa Oxidized Rh (where Crayfish Bur Saturation V	ators (minis Cracks (86) getated Cond tterns (810) izospheres o ttilled) rows (C8) isible on Aes	num of two r rave Surface (B in Living Roots rial Imagery (C	8) (C3)
emarks:  cdrology  ettand Hydrology imary Indicators.  Surface Water (A  High Water Table Saturation (A3)  Water Marks (B1) Sediment Deposit Drift deposits (B3)  Algal Mat or Crus	Indicators: (minimum of 1) (A2) (s (B2) ) t (B4)		; check ail Sali	t Crust (B1 uatic Invert drogen Sull y Season W idized Rhiz- (where no esence of R	1) tebrates ( fide Odor rater Tab ospheres of tilled) educed I	(C1) le (C2) on Living ron (C4)	Roots (C3)	Section Sectio	ondary Indica Surface Soil Sparsely Veg Drainage Pa Oxidized Rh (where Crayfish Bur Saturation V Geomorphic	ators (minis Cracks (B6) getated Cond ttems (B10) izospheres of tilled) rows (C8) isible on Aei Position (D2	num of two r rave Surface (B in Living Roots rial Imagery (C	8) (C3)
pepth (inches):	Indicators: (minimum of 1) (A2) (s (B2) ) t (B4)	one required	; check ail   Salt   Aqu	t Crust (B1 uatic Invert drogen Sull y Season W idized Rhiz- (where n esence of R in Muck Su	1) tebrates ( fide Odor rater Tab ospheres of tilled) educed I rface (C7	(C1) de (C2) on Living ron (C4)	Roots (C3)		ondary Indica Surface Soil Sparsely Veg Drainage Pa Oxidized Rh (where Crayfish Bur Saturation V Geomorphic FAC-neutral	ators (minis Cracks (B6) getated Cond tterns (B10) izospheres of tilled) rows (C8) isible on Aer Position (D2	num of two r rave Surface (B in Living Roots rial Imagery (C	8) (C3)
emarks:  Prdrology  ettand Hydrology imary Indicators  Surface Water (A  High Water Table  Saturation (A3)  Water Marks (B1)  Sediment Deposit  Drift deposits (B3)  Algal Mat or Crus  Iron Deposits (B3)  Inundation Visibl	Indicators:  Iminimum of  (A2)  (S (B2)  (B4)  (O)  On Aerial Ima	one required	; check ail   Salt   Aqu	t Crust (B1 uatic Invert drogen Sull y Season W idized Rhiz- (where no esence of R	1) tebrates ( fide Odor rater Tab ospheres of tilled) educed I rface (C7	(C1) de (C2) on Living ron (C4)	Roots (C3)	Section Sectio	ondary Indica Surface Soil Sparsely Veg Drainage Pa Oxidized Rh (where Crayfish Bur Saturation V Geomorphic FAC-neutral	ators (minis Cracks (B6) getated Cond tterns (B10) izospheres of tilled) rows (C8) isible on Aer Position (D2	num of two r rave Surface (B in Living Roots rial Imagery (C	8) (C3)
emarks:  edrology  ettand Hydrology  ettand Hydrology  imary Indicators (  Surface Water (A  High Water Table  Saturation (A3)  Water Marks (81)  Sediment Deposits (B3)  Algal Mat or Crus  Iron Deposits (B3)	Indicators:  Iminimum of  (A2)  (S (B2)  (B4)  (O)  On Aerial Ima	one required	; check ail   Salt   Aqu	t Crust (B1 uatic Invert drogen Sull y Season W idized Rhiz- (where n esence of R in Muck Su	1) tebrates ( fide Odor rater Tab ospheres of tilled) educed I rface (C7	(C1) de (C2) on Living ron (C4)	Roots (C3)	Section Sectio	ondary Indica Surface Soil Sparsely Veg Drainage Pa Oxidized Rh (where Crayfish Bur Saturation V Geomorphic FAC-neutral	ators (minis Cracks (B6) getated Cond tterns (B10) izospheres of tilled) rows (C8) isible on Aer Position (D2	num of two r rave Surface (B in Living Roots rial Imagery (C	8) (C3)
emarks:  edrology  ettand Hydrology  imary Indicators.  Surface Water (A  High Water Table  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B3)  Algal Mat or Crus  Iron Deposits (B3)  Inundation Visible  Water-Stained Le	Indicators: Iminimum of I) (A2) Is (B2) It (B4) It (B4) It con Aerial Imalaves (B9)	one required	; check ail   Salt   Aqu   Hyc	t Crust (B1 uatic Invert drogen Sull y Season W idized Rhiz- (where n esence of R in Muck Su	1) tebrates ( fide Odor rater Tab ospheres of tilled) educed I rface (C7	(C1) de (C2) on Living ron (C4)	Roots (C3)	Section Sectio	ondary Indica Surface Soil Sparsely Veg Drainage Pa Oxidized Rh (where Crayfish Bur Saturation V Geomorphic FAC-neutral	ators (minis Cracks (B6) getated Cond tterns (B10) izospheres of tilled) rows (C8) isible on Aer Position (D2	num of two r rave Surface (B in Living Roots rial Imagery (C	8) (C3)
drology etland Hydrology etland Hydrology imary Indicators.  Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crus Iron Deposits (B3) Inundation Visibl Water-Stained Le	Indicators:  minimum of  i)  (A2)  is (B2)  it (B4)  iv)  is on Aerial Imalaves (B9)  Yes	one required gery (B7)  No C	; check ail Salt Aqu Dry Oxi	t Crust (B1 uatic Invert drogen Sull y Season W idized Rhiz- (where n esence of R in Muck Su	1) tebrates (fide Odor (ater Tab) ospheres of tilled) educed I rface (C7 in in Remains)	(C1) de (C2) on Living ron (C4)	Roots (C3)	Section Sectio	ondary Indica Surface Soil Sparsely Veg Drainage Pa Oxidized Rh (where Crayfish Bur Saturation V Geomorphic FAC-neutral	ators (minis Cracks (B6) getated Cond tterns (B10) izospheres of tilled) rows (C8) isible on Aer Position (D2	num of two r rave Surface (B in Living Roots rial Imagery (C	8) (C3)
etand Hydrology etiand Hydrology etiand Hydrology etiand Hydrology imary Indicators  Surface Water (A  High Water Table Saturation (A3) Water Marks (B1) Sediment Deposit Drift deposits (B3) Algal Mat or Crus Iron Deposits (B3) Inundation Visibl Water-Stained Le eld Observations: rface Water Present	Indicators:  Indic	one required gery (B7)  No C	; check ail   Salt   Aqu   Pre   Out	t Crust (B1 uatic Invert drogen Sull y Season W idized Rhiz- (where n esence of R in Muck Su her (Explain	1) . tebrates (fide Odor (ater Tablospheres of tilled) educed I rface (C7 in in Remains):	(C1) de (C2) on Living ron (C4)			ondary Indica Surface Soil Sparsely Veg Drainage Pa Oxidized Rh (where Crayfish Bur Saturation V Geomorphic FAC-neutral Frost Heave	etors (minin Cracks (B6) petated Cond tterns (B10) izospheres o tilled) rows (C8) isible on Aei Position (D2 Test (D5) Hummocks	mum of two r rave Surface (B in Living Roots rial Imagery (CS 2)	8) (C3)
pepth (inches):	Indicators:  Indicators: Indic	gery (B7)  No C	; check ail   Salt   Aqu   Dry   Oxi   Thi   Out	t Crust (B1 uatic Invert drogen Sull y Season W idized Rhiz (where n esence of R in Muck Su her (Explain beepth (inch-	1) . tebrates (fide Odor rater Tab ospheres of tilled) educed I rface (C7 n in Remains):	(C1) le (C2) on Living ron (C4) ) arks)			ondary Indica Surface Soil Sparsely Veg Drainage Pa Oxidized Rh (where Crayfish Bur Saturation V Geomorphic FAC-neutral	ators (minis Cracks (B6) getated Cond tterns (B10) izospheres of tilled) rows (C8) isible on Aer Position (D2	mum of two r rave Surface (B in Living Roots rial Imagery (CS 2)	8) (C3)
pepth (inches): pemarks:  /drology  etiand Hydrology  mary Indicators. Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crus Iron Deposits (B3) Inundation Visible Water-Stained Le eld Observations: arface Water Present? attration Present? includes capillary frin	Indicators:  Indicators: Indic	gery (B7)  No C  No C	; check ail Salt Hyc Dry Oxi	t Crust (B1 uatic Invert drogen Sull y Season W idized Rhiz (where n esence of R in Muck Su her (Explain Depth (inch- Depth (inch-	tebrates ( fide Odor rater Tab ospheres of tilled) educed I rface (C7 n in Remai	(C1) le (C2) on Living ron (C4) ) arks)  1 0  At Surface		Section Sectin Section Section Section Section Section Section Section Section	ondary Indica Surface Soil Sparsely Veg Drainage Pa Oxidized Rh (where Crayfish Bur Saturation V Geomorphic FAC-neutral Frost Heave	etors (minin Cracks (B6) petated Cond tterns (B10) izospheres o tilled) rows (C8) isible on Aei Position (D2 Test (D5) Hummocks	mum of two r rave Surface (B in Living Roots rial Imagery (CS 2)	8) (C3)
pepth (inches):emarks:  ydrology  etiand Hydrology  mary Indicators.  Surface Water (A  High Water Table  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B3)  Inundation Visibl  Water-Stained Le  eld Observations:  urface Water Present?  aturation Present?  aturation Present?  aturation Present?	Indicators:  Indicators: Indic	gery (B7)  No C  No C	; check ail Salt Hyc Dry Oxi	t Crust (B1 uatic Invert drogen Sull y Season W idized Rhiz (where n esence of R in Muck Su her (Explain Depth (inch- Depth (inch-	tebrates ( fide Odor rater Tab ospheres of tilled) educed I rface (C7 n in Remai	(C1) le (C2) on Living ron (C4) ) arks)  1 0  At Surface		Section Sectin Section Section Section Section Section Section Section Section	ondary Indica Surface Soil Sparsely Veg Drainage Pa Oxidized Rh (where Crayfish Bur Saturation V Geomorphic FAC-neutral Frost Heave	etors (minin Cracks (B6) petated Cond tterns (B10) izospheres o tilled) rows (C8) isible on Aei Position (D2 Test (D5) Hummocks	mum of two r rave Surface (B in Living Roots rial Imagery (CS 2)	8) (C3)
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roject/Site: Alpha Bartonville FM 407		Cit	y/County: Bartonville	/ Denton Sampli	ing Date: 07-Sep-21
oplicant/Owner:			State	: Texas Sampling Point:	T6P5
			Section, Township, Ra	ange: 5 T	R
Landform (hillslope, terrace, etc.):			ocal relief (concave,	convex, none): concave	Slope: 1.0 % / 0.6
•		Lat.: 33.09	99640	Long.: -97.139433	Datum: NAD83
il Map Unit Name: Wilson clay loan				NWI classification: no	one
climatic/hydrologic conditions on			Yes ® No		
Are Vegetation 🗍 🔒 , Soil 📗		y 🔲 significantly dis	<u>.</u>	Normal Groumstances* present?	Yes 🏵 No 🔾
Are Vegetation . , Soil .	, or Hydrologi	y 📋 naturally proble	ematic? (If ne	eded, explain any answers in Rem	arks.)
<u>-</u>				cations, transects, impor	
<u> </u>	Yes ① No	·	ipinig ponte ioc	addital natioesmy unper	tanciculary co
ydrophytic Vegetation Present?	Yes ③ No		Is the Sampled /		
Hydric Soil Present?	Yes 🕙 No		within a Wetland	d? Yes 🏵 No 🔾	
Vetland Hydrology Present?  Remarks:	162 0 110				
Kemarks:					
			•		
EGETATION - Use scien	tific names		pominant FWS Re Species? ————	egion: GP	
_Tree Stratum {Plot size:	-		Rel.Strat. Indicator	Dominance Test worksheet:	
1		_		Number of Dominant Species That are OBL, FACW, or FAC:	1 (A)
2			<u></u>	Black are Obey Chorry or Lines	
3.		0		Total Number of Dominant Species Across All Strata:	2 (8)
4.			3	Species Adoss All Sauca.	. <u></u> (V)
			= Total Cover	Percent of dominant Species That Are OBL, FACW, or FAC:	50.0% (A/B)
Sapling/Shrub Stratum (Plot size:		_	_		
1			<b>┤</b>	Prevalence Index worksheet:	
2		<u></u>	╡──		ultiply by:
3			≒	· ——	1 = 0
5			<u> </u>		2 = <u>120</u>
			= Total Cover	1	3 = <u>0</u> 4 = <u>160</u>
Herb Stratum (Plot size: 5 ft	};				5 m O
Paspalum urvillel			₹ 60.0% FACW	!	,
2. Cynodon dactylon			40.0% FACU	-	, ,, ,, ,
3. 4.			0.0%	Prevalence Index = B/A =	
5.		<u> </u>	0.0%	Hydrophytic Vegetation Indicato	ers:
6.			0.0%	1 - Rapid Test for Hydrophy	tic Vegetation
7.			0.0%	2 - Dominance Test is > 509	
8.				1 m	n1
_			0.0%	✓ 3 - Prevalence Index is ≤3.0	•
9.			0.0%	.	ns <sup>1</sup> (Provide supporting
	· · ·	0 0	0.0%	4 - Morphological Adaptatio data in Remarks or on a se	ns <sup>1</sup> (Provide supporting eparate sheet)
10.			0.0%	4 - Morphological Adaptatio data in Remarks or on a se	ns <sup>1</sup> (Provide supporting eparate sheet) egetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:		0 0 0	0.0%	4 - Morphological Adaptatio data in Remarks or on a se	ns <sup>1</sup> (Provide supporting eparate sheet) egetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:		0 [	0.0%	4 - Morphological Adaptatio data in Remarks or on a se Problematic Hydrophytic Ve  1 Indicators of hydric soil and v	ns <sup>1</sup> (Provide supporting eparate sheet) egetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:		0 0 100	0.0% 0.0% = Total Cover	4 - Morphological Adaptatio data in Remarks or on a seminary problematic Hydrophytic Ve  1 Indicators of hydric soil and was present.	ns <sup>1</sup> (Provide supporting eparate sheet) egetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:		0 [	0.0%	4 - Morphological Adaptatio data in Remarks or on a se Problematic Hydrophytic Ve  1 Indicators of hydric soil and v	ns <sup>1</sup> (Provide supporting eparate sheet) getation <sup>1</sup> (Explain) wetland hydrology must

US Army Corps of Engineers

<sup>\*</sup>Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

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Sampling Point: T6P5

Depth	. Matri						14	_		_	
inches)	Color (moist)		Color (n		<u>%</u> .	_Type.1	Toc <sub>y</sub>		ture	F	temarks
0-16		90	7.5YR	6/6	10	. <u>.</u>	PL and M	Loam			
						-		**			
	<del></del>		<del></del>	<del></del>		•		-			<u> </u>
									_		
		<del></del>				•					
		<del></del>						-			
··			,								•
Vpe: C=Cor	centration. D=Dep	etion. RM=Redu	ced Matrix.	CS=Covered	or Coate	ed Sand Gr	ains <sup>2</sup> Loca	tion: PL=Por	e Lining. M=M	atrix	
	ndicators: (Appl							•	ors for Proble		: Soils <sup>3</sup> :
Histosol (		Cable to all an		dy Gleyed Mi		,		_	n Muck (A9) (L	•	
•	pedon (A2)			dy Redox (S				_	stal Prairie Rec		E G. HI
Black Hist				pped Matrix (	•			_	k Surface (S7)		., 0, 11,
	Sulfide (A4)		_	my Mucky Mi		1)		_	h Plains Depres		
	Layers (A5) (LRR F)		_	my Gleyed M		•			LRR H outside		and 73)
	k (A9) (LRR F,G,H)		_	leted Matrix	-	•			luced Vertic (F)		
	Below Dark Surface	(A11)	:	ox Dark Surf	- /	<b>;</b>			Parent Materia	-	
•	k Surface (A12)	•	_	leted Dark S				=	y Shallow Dark		•
	ck Mineral (S1)		✓ Red	ox depressio	ns (F8)	•			er (Explain in F	-	,
	icky Peat or Peat (S	2) (LRR G, H)	_	h Plains Dep		(F16)			rs of hydrophy	•	and watland
,	ky Peat or Peat (S3)			(MLRA 72 a							ano wettand turbed or problemal
	ayer (if present):			<del></del>				<del>,                                    </del>	<u> </u>		
strictive L	aver in presenti:							:			
Tuna								1			
Type:								Hydric So	il Present?	Yes 💿	No O
Depth (inc			<del></del>				-	Hydric So	il Present?	Yes 💿	No O
Depth (inc	nes):				· · ·			Hydric So	il Present?	Yes 💿	No O
Depth (inc emarks:	nes):										
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Depth (incommarks:  /drolog etland Hyd imary Indi	nes):  rology Indicators cators (minimum	:					-		ondary Indica Surface Soit	tors (minimu Cracks (B6)	am of two required
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Depth (incomarks:  drologiatiand Hydimary Indi  Surface V  High Wat	rology Indicators cators (minimum Vater (A1) er Table (A2)	:	□ Sá	alt Crust (B1 quatic Invert	1) ebrates	-			ondary Indica Surface Soil Sparsety Veg Drainage Pal	tors (minimt Cracks (B6) Jetated Concav Iterns (B10)	um of two require re Surface (B8)
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Depth (incomarks:  drologiatiand Hydimary Indi  Surface V  High Wat	rology Indicators cators (minimum Vater (A1) er Table (A2) n (A3)	:	□ sa □ aa □ B	alt Crust (B1 quatic Invert	1) ebrates ide Odo	r (C1)	-		ondary Indica   Surface Soit   Sparsely Veg   Drainage Pal   Oxidized Rhi   Where	tors (minimu Cracks (B6) letated Concav ttems (B10) zospheres on	um of two require re Surface (B8)
Depth (incomarks:  drologi etland Hyd imary Indi   Surface V   High Wai   Saturatio   Water Ma	rology Indicators cators (minimum Vater (A1) er Table (A2) n (A3)	:	S:   A:   H:   D	alt Crust (B1 quatic Invert ydrogen Sulf	1) ebrates ide Odo ater Tab	r (C1) ole (C2)	Roots (C3)		ondary Indica   Surface Soit   Sparsely Veg   Drainage Pal   Oxidized Rhi   Where	tors (minimu Cracks (B6) letated Concav ttems (B10) zospheres on tilled)	um of two require re Surface (B8)
Depth (incomarks:  drologi etland Hyd imary Indi   Surface V   High Wat   Saturatio   Water Ma   Sediment	rology Indicators cators (minimum Vater (A1) er Table (A2) n (A3) irks (B1)	:	S:   A:   H:   D	alt Crust (B1 quatic Invert ydrogen Sulf ry Season W	1) ebrates ide Odo ater Tab ospheres	r (C1) ole (C2) on Living	Roots (C3)		ondary Indica Surface Soit Sparsely Veg Drainage Pal Oxidized Rhi (where Crayfish Burn	tors (minimu Cracks (B6) jetated Concav tterns (B10) zospheres on t tilled) rows (C8)	um of two require re Surface (B8)
drolog  trand Hydimary Indi Surface V High Wat Saturatio Water Ma Sediment Drift dep	rology Indicators Cators (minimum Vater (A1) er Table (A2) n (A3) irks (B1) Deposits (B2)	:	Si   Ai   Hi   D	ait Crust (B1 quatic Invert ydrogen Sulf ry Season W xidized Rhize	til)  abrates  ide Odo  ater Tab  ospheres  ot tilled	r (C1) ole (C2) s on Living )	Roots (C3)		ondary Indica Surface Soit Sparsely Veg Drainage Pal Oxidized Rhi (where Crayfish Burn Saturation V	tors (minimu Cracks (B6) jetated Concav tterns (B10) zospheres on t tilled) rows (C8)	am of two require re Surface (B8) Living Roots (C3)
drolog ettand Hyd imary Indi Surface V High Water Ma Sediment Drift dep Algal Mal	rology Indicators cators (minimum Vater (A1) er Table (A2) n (A3) irks (B1) Deposits (B2) oosits (B3) or Crust (B4)	:	Si   Ai   Hi   D   O	eit Crust (B1 quatic Invert ydrogen Sulf ry Season W xidized Rhizo (where no resence of R	1) ebrates fide Odor ater Tab ospheres of tilled educed I	r (C1) ble (C2) s on Living ) Iron (C4)	Roots (C3)		ondary Indica  Surface Soil  Sparsely Veg  Drainage Pal  Oxidized Rhi  (where  Crayfish Burn  Saturation V  Geomorphic	tors (minimum Cracks (B6) Jetated Concav Iterns (B10) Zospheres on I tilled) Tows (C8) Jesible on Aerial Position (D2)	am of two required re Surface (B8) Living Roots (C3)
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drologiation Hydrologia Surface V High Water Ma Sediment Drift dep Algal Mal I tron Dep Inundation Water-St	rology Indicators Cators (minimum Vater (A1) er Table (A2) in (A3) irks (B1) : Deposits (B2) posits (B3) : or Crust (B4) posits (B5) por Visible on Aerial ained Leaves (B9)	: of one require	Si   Ai   Hi   D   O	alt Crust (B1: quatic Invert ydrogen Sulf ny Season W xidized Rhize (where no resence of Re hin Muck Sul	1) ebrates ide Odo ater Tab ospheres ot tilled educed I	r (C1) ele (C2) s on Living ) iron (C4)	Roots (C3)		ondary Indica  Surface Soit  Sparsely Veg  Drainage Pal  Oxidized Rhi  (where  Crayfish Burn  Saturation V  Geomorphic  FAC-neutral	tors (minimu Cracks (B6) letated Concav iterns (B10) zospheres on I tilled) rows (C8) isible on Aerial Position (D2) Test (D5)	e Surface (B8) Living Roots (C3) Imagery (C9)
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Depth (incommarks:  vdrology  etland Hyd  imary Indi  Surface V  High Wat  Saturatio  Water Ma  Sediment  Drift dep  Algal Mai  tron Dep  Inundatia  Water-St  eld Observe	rology Indicators Cators (minimum Vater (A1) er Table (A2) n (A3) irks (B1) Deposits (B2) osits (B3) or Crust (B4) osits (B5) on Visible on Aerial ained Leaves (B9) ations: Present?	of one require	Si   Ai   Hi   D   C   O	alt Crust (B1: quatic Invert ydrogen Sulf ny Season W xidized Rhize (where no resence of Re hin Muck Sul	1) ebrates fide Odor ater Tab ospheres of tilled educed I fface (C7 o in Rem	r (C1) ele (C2) s on Living ) iron (C4)	Roots (C3)		ondary Indica  Surface Soit  Sparsely Veg  Drainage Pal  Oxidized Rhi  (where  Crayfish Burn  Saturation V  Geomorphic  FAC-neutral	tors (minimu Cracks (B6) letated Concav iterns (B10) zospheres on I tilled) rows (C8) isible on Aerial Position (D2) Test (D5)	e Surface (B8) Living Roots (C3) Imagery (C9)
Depth (incommarks:  /drolog: etland Hydrimary Indi   Surface V   High Water Ma   Sediment   Drift dep   Algal Mail   Iron Dep   Inundation   Water-St eld Observer of the commarks of the comm	rology Indicators Cators (minimum Vater (A1) er Table (A2) n (A3) irks (B1) Deposits (B2) osits (B3) or Crust (B4) osits (B5) on Visible on Aerial ained Leaves (B9) ations: Present?	of one require	Si   Ai   Di   Di   Di   Ti   Di	alt Crust (B1 quatic Invert ydrogen Sulf ry Season W xidized Rhizo (where no resence of Ro hin Muck Sur ther (Explain	1) ebrates ide Odo ater Tab ospheres ot tilled educed I face (C7 o in Rem	r (C1) ple (C2) s on Living fron (C4) r) arks)			ondary Indica  Surface Soil  Sparsety Veg  Drainage Pal  Oxidized Rhi  (where  Crayfish Burn  Saturation V  Geomorphic  FAC-neutral  Frost Heave	tors (minimu Cracks (B6) letated Concav tterns (B10) zospheres on tilled) rows (C8) isible on Aerial Position (D2) Test (DS) Hummocks (O	em of two required re Surface (B8) Living Roots (C3) Imagery (C9)
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oplicant/Owner: ovestigator(s):_MP					State:	Texas Sampling Point	: T6P6
				Section, To	ownship, Ra	inge: S T	R
.andform (hillslope, terrace, etc.): P				Local relief	(concave,	convex, none): flat	Slope: 4.0 % / 2.3
bregion (LRR): LRR )			Lat: 33.	099387		Long.: -97.139433	Datum: NAD83
il Map Unit Name: Silstid loamy fine	sand, 1 to 5	percent stop	es			NWI classification:	none
climatic/hydrologic conditions on	the site typ	rical for this	time of year?	Ye	s 💿 No 🤇	(If no, explain in Remark	s.)
Are Vegetation [ , Soil [			significantly (		Are "N	ormal Circumstances" present?	Yes 🏵 No 🔾
Are Vegetation , Soil			naturally prol			eded, explain any answers in Re	
					•	- •	·
ummary of Findings - Att			lowing sa	աեուսն ն	oint lec	ations, transects, impo	ortant features, etc
ydrophytic Vegetation Present?	Yes 💿	No O		Is the	e Sampled A	irea	
Hydric Soil Present?	Yes 💿	No O		withi	n a Wetland	<sub>1?</sub> Yes○No⊙	
Yetland Hydrology Present?	Yes O	No 💿				· <del> · · · · · · · · · · · · · · · · ·</del>	
Remarks:							
							•
<del></del>							
/EGETATION - Use scient	ific nan	nes of pl	ants	Dominant	FWS Re	gion: GP	
(5)				-Species? Rel.Strat.		Dominance Test worksheet:	
Tree Stratum (Plot size:			.%.Cover	Cover	Status	Number of Dominant Species	
1				├	- <del></del>	That are OBL, FACW, or FAC:	(A)
2. 3.		<del></del>		<u> </u>	••	Total Number of Dominant	• (0)
4.				<u> </u>	<del></del>	Species Across All Strata:	<u>3</u> (8)
			0	= Total C	over	Percent of dominant Species	CC 30/ (N/0)
Sapling/Shrub Stratum (Plot size:		}}	<del>*************************************</del>			That Are OBL, FACW, or FAC:	66.7% (A/8)
1			0	□		Prevalence Index worksheet:	
2		····		片	<del></del>	Total % Cover of:	Multiply by:
3			_	片	·		x 1 == <u>20</u>
5.			_ <del>0</del>	H	··	i ——	x 2 =0
· · · · · · · · · · · · · · · · · · ·				= Total C	over		x 3 = 120
Herb Stratum (Plot size: 5 ft	j						× 4 = <u>160</u> × 5 =0
1. Cynodon dactylon			40	40.0%	FACU		~ 3
2. Juncus effusus				20.0%	OBL		(A) <u>300</u> (B)
3. Paspalum dilatatum				40.0%	FAC	Prevalence Index = B/A =	<u> 3</u>
4		<del>-</del> ····	→ <u>· </u>	0.0%		Hydrophytic Vegetation Indica	itors:
6.			- <del>- 0</del>	0.0%		1 - Rapid Test for Hydrop	hytic Vegetation
7.				0.0%		2 - Dominance Test is > 5	0%
8.	· · · · · · · · · · · · · · · · · · ·		0	0.0%		3 - Prevalence Index is ≤:	3.0 <sup>1</sup>
9. 10.				0.0%		4 - Morphological Adaptat	ions <sup>1</sup> (Provide supporting
IV.				0.0%	<del></del>	data in Remarks or on a	
783 A. I			100	⇒ Total C	over	Problematic Hydrophytic	
Woody Vine Stratum (Plot size:		<sub>}</sub>				Indicators of hydric soil and be present.	s wetland hydrology must
1 2.				<u> </u>			
<i></i>				L		Hydrophytic	
% Bare Ground in Herb Stratum	0		0	≕ Total C	over	Vegetation	,0
o vare Ground in nei D Strattiff	0	_				Present? Yes V	. <u> </u>

US Army Corps of Engineers

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Sampling Point: T6P6

Depth	Matri			•	fox Featu			<b>.</b>	****	_	
inches)	Color (moist)			or (moist)	<u> </u>	.Type.1	<u>Locz</u>		ture	R:	emarks
0-16	10YR 5/2	, <del>9</del> 5	- 7,5Y	R 4/8	5	с	PL and M	Loam			
<del></del>						·					
	••						•	-			
					• •	<del>-</del>	•		· · · · ·		
				<del></del>						<del></del>	
									. '		
Car CaConcar	ntration. D=Dep	etion PM=P	aduced Ma	triv CS=Cover	ed or Coat	ad Sand Co	oior 2loca	tion: Di Do	ra Linina M-M	atriv .	
<del> </del>	icators: (Appl		<del></del>				ans tuxa		re Lining. M=Ma		Calla 3.
Histosof (A1)		Cable to an	LROKS, DE	Sandy Gleyed	-	,		_	ors for Proble	-	20112.2
Histic Epiped			<u> </u>	Sandy Redox					n Muck (A9) (U stal Prairie Red		E C W
Black Histic (				Stripped Matri				_	k Surface (S7)		r, 0, m
Hydrogen Su	•			Loamy Mucky		1)		_	h Plains Depres		
	ers (A5) (LRR F)			Loamy Gleyed				_	LRR H outside		and 73)
1 cm Muck (/	(LRR F,G,H)		₹	Depleted Mati	rix (F3)				uced Vertic (F1		
	ow Dark Surface	(A11)		Redox Dark S	urface (F6)	)		_	Parent Materia		
Thick Dark St			<u> </u>	Depleted Dark	-	F7)		☐ Ver	y Shallow Dark	Surface (YF12)	
Sandy Muck I			<u> </u>	Redox depres	. ,			Oth	er (Explain in 8	lemarks)	
	y Peat or Peat (S		} ⊑	High Plains De	•				rs of hydrophyt		
5 cm Mucky i	Peat or Peat (S3)	(LRR F)		(MLRA 72	and 73 o	r LRR H)		hydrolog	y must be pres	ent, unless dist	urbed or problema
	### ##										
trictive Laye	r (it present):										
	er (ir present):										🔿
Type: Depth (inches			<del></del> .					Hydric 50	il Present?	Yes 💿	No O
•• •								Hydric 50	il Present?	Yes 💿	No O
Type: Depth (inches								Hydric 50	il Present?	Yes 💿	№ О
Type: Depth (inches			· · · · · ·				······································	Hydric 50	il Present?	Yes 💿	No O
Type: Depth (inches			<del></del> .					Hydric So	il Present?	Yes ①	No O
Type: Depth (inches marks:							······································	Hydric So	il Present?	Yes ①	No O
Type: Depth (inches narks: drology	):							I ·			
Type:	): ogy Indicators		ired: che	xck aii that ao				I ·	ondary Indica	tors (minimu	
Type: Depth (inches narks: drology tland Hydrol mary Indicat	ogy Indicators							I ·	ondary Indica Surface Soil (	tors (minimul Cracks (86)	n of two require
Type:	ogy Indicators ors (minimum er (A1)			Salt Crust (6	311)	(813)		I ·	ondary Indica Surface Soil ( Sparsely Veg	tors (minimul Cracks (B6) etated Concave	n of two require
Type:	ogy Indicators ors (minimum er (A1) Table (A2)			Salt Crust (6	B11) ertebrates			I ·	ondary Indica Surface Soil ( Sparsely Veg Drainage Pat	tors (minimul Cracks (B6) etated Concave tems (B10)	n of two require
Type:	ogy Indicators ors (minimum er (A1) Table (A2)			Sait Crust (6 Aquatic Inve Hydrogen S	311) ertebrates ulfide Odo	r (C1)		I ·	ondary Indica Surface Soil ( Sparsely Veg Drainage Pat Oxidized Rhia	tors (minimus Cracks (B6) etated Concave tems (B10) zospheres on Li	n of two require
Irology  land Hydrol mary Indicat Surface Wate High Water Saturation ( Water Marks	ogy Indicators ors (minimum er (A1) Table (A2) A3)		( ( ( (	Salt Crust (E Aquatic Inve Hydrogen S Dry Season	311) ertebrates ulfide Odo Water Tab	r (C1) ole (C2)	Poots (C3)	I ·	ondary Indica Surface Soil ( Sparsely Veg Drainage Pat Oxidized Rhii (where	tors (minimul Cracks (B6) etated Concave terns (B10) zospheres on Li tilled)	n of two require
Irology Iand Hydrol Mary Indicat Surface Wate High Water Saturation ( Water Marks Sediment De	ogy Indicators ors (minimum er (A1) Table (A2) A3) (B1) sposits (B2)		( ( ( (	Salt Crust (E Aquatic Inve Hydrogen Si Dry Season Oxidized Rh	311) ertebrates ulfide Odo Water Tab izospheres	r (C1) ole (C2) s on Living	Roots (C3)	I ·	ondary Indica Surface Soil ( Sparsely Veg Drainage Pat Oxidized Rhia (where Crayfish Burn	tors (minimul Cracks (86) etated Concave terns (810) rospheres on Li tilled) ows (C8)	n of two require Surface (B8) ving Roots (C3)
Irology  Irology  Iand Hydrol mary Indicat Surface Wate High Water Saturation ( Water Marks Sediment De Drift deposit	ogy Indicators ors (minimum er (A1) Table (A2) A3) (B1) eposits (B2) s (B3)		[	Salt Crust (E Aquatic Inve Hydrogen S Dry Season Oxidized Rh (where	311) ertebrates ulfide Odo Water Tab izospheres not tilled	r (C1) ble (C2) s on Living	Roots (C3)		ondary Indica Surface Soil ( Sparsely Veg Drainage Pat Oxidized Rhia (where Crayfish Burn Saturation Vi	tors (minimul Cracks (86) etated Concave terns (810) zospheres on Li tilled) ows (C8) sible on Aerial	n of two require Surface (B8) ving Roots (C3)
Type: Depth (inches marks:  drology  Itland Hydrol mary Indicat Surface Wate High Water Saturation (// Water Marks Sediment De Orift deposit Algal Mat or	ogy Indicators ors (minimum er (A1) Table (A2) A3) (B1) eposits (B2) s (B3) Crust (B4)		[ [ [	Salt Crust (E Aquatic Inve Hydrogen S Dry Season Oxidized Rh (where Presence of	B11) ertebrates ulfide Odo Water Tab izospheres not tilled Reduced 1	r (C1) ole (C2) s on Living ) Iron (C4)	Roots (C3)	I ·	ondary Indica Surface Soil ( Sparsely Veg Drainage Pat Oxidized Rhis (where Crayfish Burn Saturation Vi Geomorphic	tors (minimul Cracks (86) etated Concave terns (810) rospheres on Li tilled) ows (C8) sible on Aerial Position (D2)	n of two require Surface (B8) ving Roots (C3)
Type: Depth (inches marks:  drology  tland Hydrol mary Indicat Surface Water Marks Saturation (i) Water Marks Sediment De Drift deposit Algal Mat or Iron Deposit	ogy Indicators ors (minimum er (A1) Table (A2) A3) (B1) eposits (B2) s (B3) Crust (B4) s (B5)	of one requ	[ [ [	Salt Crust (E Aquatic Inve Hydrogen S Dry Season Oxidized Rh (where Presence of Thin Muck S	B11) ertebrates ulfide Odo Water Tab izospheres not tilled Reduced I Surface (C7	r (C1) tole (C2) s on Living fron (C4)	Roots (C3)		ondary Indica Surface Soil ( Sparsely Veg Drainage Pat Oxidized Rhia (where Crayfish Burn Saturation Vi Geomorphic FAC-neutral	tors (minimul Cracks (86) etated Concave tems (810) cospheres on Li tilled) ows (C8) sible on Aerial Position (D2)	n of two require Surface (B8) ving Roots (C3)
Type: Depth (inches narks:  drology tland Hydrol mary Indicat Surface Wate High Water Saturation ( Water Marks Sediment De Drift deposit Algal Mat or Iron Deposit Inundation (	ogy Indicators ors (minimum er (A1) Table (A2) A3) (B1) eposits (B2) s (B3) Crust (B4) s (B5) //sible on Aerial	of one requ	[ [ [	Salt Crust (E Aquatic Inve Hydrogen S Dry Season Oxidized Rh (where Presence of	B11) ertebrates ulfide Odo Water Tab izospheres not tilled Reduced I Surface (C7	r (C1) tole (C2) s on Living fron (C4)	Roots (C3)		ondary Indica Surface Soil ( Sparsely Veg Drainage Pat Oxidized Rhia (where Crayfish Burn Saturation Vi Geomorphic FAC-neutral	tors (minimul Cracks (86) etated Concave terns (810) rospheres on Li tilled) ows (C8) sible on Aerial Position (D2)	n of two require Surface (B8) ving Roots (C3)
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Type: Depth (inches narks:  drology  tland Hydrol mary Indicat Surface Wate High Water Saturation (/ Water Marks Sediment De Drift deposit Algal Mat or Iron Deposit Inundation (/ Water-Stains	ogy Indicators ors (minimum er (A1) Table (A2) A3) (B1) eposits (B2) s (B3) Crust (B4) s (B5) //isible on Aerial i	of one requ		Salt Crust (6 Aquatic Inve Hydrogen S Dry Season Oxidized Rh (where Presence of Thin Muck S Other (Expli	B11) ertebrates ulfide Odo Water Tat izospheres not tilled Reduced I Surface (C7	r (C1) tole (C2) s on Living fron (C4)	Roots (C3)		ondary Indica Surface Soil ( Sparsely Veg Drainage Pat Oxidized Rhia (where Crayfish Burn Saturation Vi Geomorphic FAC-neutral	tors (minimul Cracks (86) etated Concave tems (810) cospheres on Li tilled) ows (C8) sible on Aerial Position (D2)	n of two require Surface (B8) ving Roots (C3)
Type: Depth (inches narks:  drology  Itland Hydrol mary Indicat Surface Wate High Water Saturation (// Water Marks Sediment De Drift deposit Algal Mat or Iron Deposit Inundation \( \text{Water-Stained} \)  Water-Stained dobservation	ogy Indicators ors (minimum er (A1) Table (A2) A3) (B1) eposits (B2) s (B3) Crust (B4) s (B5) risible on Aerial 1 ed Leaves (B9) ons: esent? Y	magery (B7)	[] [] [] []	Salt Crust (E Aquatic Inve Hydrogen S Dry Season Oxidized Rh (where Presence of Thin Muck S	B11) ertebrates ulfide Odo Water Tat izospheres not tilled Reduced I Surface (C7	r (C1) tole (C2) s on Living fron (C4)	Roots (C3)		ondary Indica Surface Soil ( Sparsely Veg Drainage Pat Oxidized Rhia (where Crayfish Burn Saturation Vi Geomorphic FAC-neutral	tors (minimul Cracks (86) etated Concave tems (810) cospheres on Li tilled) ows (C8) sible on Aerial Position (D2)	n of two require Surface (B8) ving Roots (C3)
Type: Depth (inches narks:  drology  tland Hydrol mary Indicat Surface Water High Water Saturation (i) Water Marks Sediment De Drift deposit Algal Mat or Iron Deposit Inundation (i) Water-Staine Id Observation in Water Pre	ogy Indicators ors (minimum er (A1) Table (A2) A3) (B1) eposits (B2) s (B3) Crust (B4) s (B5) risible on Aerial 1 ed Leaves (B9) ons: esent? Y	magery (87)		Salt Crust (E Aquatic Inve Hydrogen S Dry Season Oxidized Rh (where Presence of Thin Muck S Other (Expli	B11) ertebrates ulfide Odo Water Tat izospheres not tilled Reduced I Surface (C7 ain in Rem	r (C1) ole (C2) s on Living ) Iron (C4) r) larks)	Roots (C3)		ondary Indica Surface Soil ( Sparsely Veg Drainage Pat Oxidized Rhia (where Crayfish Burn Saturation Vi Geomorphic FAC-neutral	tors (minimul Cracks (B6) etated Concave tems (B10) rospheres on Li tilled) ows (C8) sible on Aerial Position (D2) Fest (D5) Hummocks (D7	n of two require Surface (B8) ving Roots (C3) Imagery (C9)
Type: Depth (inches marks:  drology tland Hydrol mary Indicat Surface Water High Water Saturation (inches water Marks Sediment Deposit Inundation Water-Staine Id Observatiface Water Presenter Table Presental Serial Presental Inches Inches Presental Inches Presental Inches Inc	ogy Indicators ors (minimum er (A1) Table (A2) A3) (B1) eposits (B2) s (B3) Crust (B4) s (B5) //isible on Aerial i ed Leaves (B9) ons: esent? Y	magery (87)		Salt Crust (E Aquatic Inve Hydrogen S Dry Season Oxidized Rh (where Presence of Thin Muck S Other (Expli	B11) ertebrates ulfide Odo Water Tat nizospheres not tilled Reduced I Surface (C7 ain in Rem thes):	r (C1) ole (C2) s on Living ) Iron (C4) ?) aarks)			ondary Indica Surface Soil ( Sparsely Veg Drainage Pat Oxidized Rhia (where Crayfish Burn Saturation Vi Geomorphic FAC-neutral	tors (minimul Cracks (86) etated Concave tems (810) cospheres on Li tilled) ows (C8) sible on Aerial Position (D2)	n of two require Surface (B8) ving Roots (C3)
Type: Depth (inches marks:  drology tland Hydrol mary Indicat Surface Water High Water Saturation (i Water Marks Sediment De Drift deposit Algal Mat or Iron Deposit Inundation \(\) Water-Staine Id Observation face Water Presenuation Presen	ogy Indicators ors (minimum er (A1) Table (A2) A3) (B1) eposits (B2) s (B3) Crust (B4) s (B5) fisible on Aerial ( ed Leaves (B9) ons: esent? Y ent? Y	magery (67)	[] [] [] []	Salt Crust (E Aquatic Inve Hydrogen S Dry Season Oxidized Rh (where Presence of Thin Muck S Other (Expli	B11) ertebrates ulfide Odo Water Tat nizospheres not tilled Reduced I Surface (C7 ain in Rem thes):	r (C1) ple (C2) s on Living ) Iron (C4) ) parks)			ondary Indica Surface Soil ( Sparsely Veg Drainage Pat Oxidized Rhis (where Crayfish Burn Saturation Vi Geomorphic FAC-neutral	tors (minimul Cracks (B6) etated Concave tems (B10) rospheres on Li tilled) ows (C8) sible on Aerial Position (D2) Fest (D5) Hummocks (D7	n of two require Surface (B8) ving Roots (C3) Imagery (C9)
Type: Depth (inches marks:  drology  ctland Hydrol imary Indicat Surface Water High Water Saturation (i) Water Marks Sediment De Drift deposit Algal Mat or I ron Deposit Table Presenter Table Presenter Table Presented Seapillary	ogy Indicators ors (minimum er (A1) Table (A2) A3) (B1) eposits (B2) s (B3) Crust (B4) s (B5) fisible on Aerial ( ed Leaves (B9) ons: esent? Y ent? Y	magery (67) es O No es O No		Salt Crust (E Aquatic Inve Hydrogen S Dry Season Oxidized Rh (where Presence of Thin Muck S Other (Expli	B11) ertebrates ulfide Odo Water Tab izospheres not tilled Reduced I Surface (C7 ain in Rem thes):	r (C1) lole (C2) s on Living ) (ron (C4) //) larks)  0 0	— Wetta	Second Community of the	ondary Indica Surface Soil ( Sparsely Veg Drainage Pat Oxidized Rhis (where Crayfish Burn Saturation Vi Geomorphic FAC-neutral	tors (minimul Cracks (B6) etated Concave tems (B10) rospheres on Li tilled) ows (C8) sible on Aerial Position (D2) Fest (D5) Hummocks (D7	n of two require Surface (B8) ving Roots (C3) Imagery (C9)
Type:  Depth (inches marks:  drology  tland Hydrol mary Indicat  Surface Water High Water Saturation (i) Water Marks Sediment De Drift deposit Algal Mat or Iron Deposit Inundation \(\) Water-Staine Id Observation face Water Presentation Presentudes capillary	ogy Indicators ors (minimum er (A1) Table (A2) A3) (B1) sposits (B2) s (B3) Crust (B4) s (B5) risible on Aerial 1 ed Leaves (B9) ons: esent? Y fringe) Y	magery (67) es O No es O No		Salt Crust (E Aquatic Inve Hydrogen S Dry Season Oxidized Rh (where Presence of Thin Muck S Other (Expli	B11) ertebrates ulfide Odo Water Tab izospheres not tilled Reduced I Surface (C7 ain in Rem thes):	r (C1) lole (C2) s on Living ) (ron (C4) //) larks)  0 0	— Wetta	Second Community of the	ondary Indica Surface Soil ( Sparsely Veg Drainage Pat Oxidized Rhis (where Crayfish Burn Saturation Vi Geomorphic FAC-neutral	tors (minimul Cracks (B6) etated Concave tems (B10) rospheres on Li tilled) ows (C8) sible on Aerial Position (D2) Fest (D5) Hummocks (D7	n of two require Surface (B8) ving Roots (C3) Imagery (C9)
Type: Depth (inches marks:  drology  tland Hydrol mary Indicat Surface Water High Water Saturation (inches water Marks Sediment Deposit Inundation Water-Staine Id Observatiface Water Presentation Presentation Presentation Presentations Records	ogy Indicators ors (minimum er (A1) Table (A2) A3) (B1) sposits (B2) s (B3) Crust (B4) s (B5) risible on Aerial 1 ed Leaves (B9) ons: esent? Y fringe) Y	magery (67) es O No es O No		Salt Crust (E Aquatic Inve Hydrogen S Dry Season Oxidized Rh (where Presence of Thin Muck S Other (Expli	B11) ertebrates ulfide Odo Water Tab izospheres not tilled Reduced I Surface (C7 ain in Rem thes):	r (C1) lole (C2) s on Living ) (ron (C4) //) larks)  0 0	— Wetta	Second Community of the	ondary Indica Surface Soil ( Sparsely Veg Drainage Pat Oxidized Rhis (where Crayfish Burn Saturation Vi Geomorphic FAC-neutral	tors (minimul Cracks (B6) etated Concave tems (B10) rospheres on Li tilled) ows (C8) sible on Aerial Position (D2) Fest (D5) Hummocks (D7	n of two require Surface (B8) ving Roots (C3) Imagery (C9)
Type: Depth (inches marks:  drology tland Hydrol mary Indicat Surface Water High Water Saturation (i) Water Marks Sediment De Drift deposit Algal Mat or Iron Deposit Inundation \(\) Water-Staine Id Observatit face Water Presentation Presentudes capillary	ogy Indicators ors (minimum er (A1) Table (A2) A3) (B1) sposits (B2) s (B3) Crust (B4) s (B5) risible on Aerial 1 ed Leaves (B9) ons: esent? Y fringe) Y	magery (67) es O No es O No		Salt Crust (E Aquatic Inve Hydrogen S Dry Season Oxidized Rh (where Presence of Thin Muck S Other (Expli	B11) ertebrates ulfide Odo Water Tab izospheres not tilled Reduced I Surface (C7 ain in Rem thes):	r (C1) lole (C2) s on Living ) (ron (C4) //) larks)  0 0	— Wetta	Second Community of the	ondary Indica Surface Soil ( Sparsely Veg Drainage Pat Oxidized Rhis (where Crayfish Burn Saturation Vi Geomorphic FAC-neutral	tors (minimul Cracks (B6) etated Concave tems (B10) rospheres on Li tilled) ows (C8) sible on Aerial Position (D2) Fest (D5) Hummocks (D7	n of two require Surface (B8) ving Roots (C3) Imagery (C9)

Delineation of Waters of the United States Proposed Development Site Bartonville, Denton County, Texas



## 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: Peren	inial Intermittent X Ephemeral
OHWM Width 1.25 In.(Ft)	Height of OHWM above streambed 0.25 In.(Ft)
Top of Bank	
Depth of Stream Bed (d) ← Average	e Bank Width (a) →
↓ ← Wat	ter Width (b) → ↓ Average Water Depth c)
Substrate	· · · · · · · · · · · · · · · · · · ·
Bedrock Boulder Cobl	ble Gravel Sand X Silt/Clay
Organic Concrete Ot	ther (Describe)
Instream Cover	
Undercut Banks Logs/Bru	ash X Emergent Oxbows Boulders
X Overhanging Vegetation Dee Pools	" I ( National the cloth mater)
Riparian Zone (check all that are appropriate)	
Forest Scrub/Shrub Old-Field/ROW	W 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 100 In. Ft Right 100 In. Ft
Notes/Comments:	

Stream Data Sheet			Stream #: T1P	Date:	10/6/2021
Project Name: Bartonville	FM 407 D	elineation	Project #: 43210	84	<del> </del>
Location (County/State):	Denton / T	X	Field Crew: M. I	Peters	
Stream Name: Tributary 1		· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·	
Stream Characteristics				<del></del>	······································
a) Avg. Bank Width 2	I	n.(Ft.)	b) Average Width	of Water Dry	In./Ft.
c) Avg. Water Depth Dry	I	n./Ft.	Min./Max Depth	Dry	In./Ft.
d) Depth of Streambed below	top of bar	nk 0.72	5 In.(Ft.)	· · · · · · · · · · · · · · · · · · ·	
Stream flow:		Perennial	Intermit	tent	X Ephemeral
OHWM Width 1.2	5 In.(	ED)	Height of OHWM	above streambed	i 0.25 In.(Ft)
Top of Bank					
Depth of Stream Bed (d)	←	Average Bar	k Width (a)	<b>→</b>	
<u>.</u>		← Water W	idth (b) →	1 Ave.	rage Water Depth c)
·		<u> </u>		•	•
Substrate Art	ficial	Artificial	<del></del>		
	Boulder	X Cobble	Gravel	Sand	X Silt/Clay
Organic	Concrete	Other	(Describe)		
Instream Cover	<del></del>			<del></del>	· · · · · · · · · · · · · · · · · · ·
Undercut Bank	S	Logs/Brush	X Emergent	Oxbows	Boulders
X Overhanging Veget	ation	Deep Pools	Shallows (in sle	ow water)	
Riparian Zone (check all th	at are app	эгоргіate)			
Forest Scrub/Shru	b 🔲 Old	-Field/ROW	X Pasture Ro	w-Crop XW	etland Paved
Residential/Park	Oth	er			
(Describe other or difference	s between	banks):			
Width of Riparian Zone (Lef	t or right b	ank looking dov	vnstream) Left	100 In.Æt.	Right 100 In.Ft
Notes/Comments:					
<del></del>					

Stream I	Data Si	ieet			Stream #	#: T4P2	2	Date:	10/6	5/202	1
Project Nam	e: Barto	onville FN	1 407 De	lineation	Project #:	432108	34	-	<del></del> -		<del>'4.</del> -
Location (Co	ounty/Sta	te): De	nton / TX		Field Crew	M. F	eters	<del></del>			
Stream Nam	e: Trib	utary 2									
Stream Cha	racterist	ies		<del>L</del>		<u>-</u>				_	· · · · · · · · · · · · · · · · · · ·
a) Avg. Banl	k Width	3	Ir	ı.(Ft)	b) Average	Width o	of Wate	er 2		(In	УFt.
c) Avg. Water Depth 1 (In)/Ft.			Min./Max I	Depth	0-1		(	În/Ft.			
d) Depth of	Streambe	d below to	op of bar	ık 2		In.Æt.					
	Stream f	low:		Perennial		ntermit	tent		<b>X</b> ]	Ephem	eral
OHWM V	Vidth	2	In.(	<u>)</u>	Height of (	DHWM	above	streamb	ed 0.	5 In	.(Ft)
Top of Bank  Depth of St	ream Bed ;	(d)	<b>←</b> →	Average Ban ← Water W	, , ,	·	→ ·	Į Av	erage V	Vater D	epth c)
Substrate	<del></del>			· · · · · · · · · · · · · · · · · · ·	<del></del>	<u> </u>			<u> </u>		
Bedr	ock	Во	oulder	Cobble	Grave	el	X	Sand		X S	ilt/Clay
Orga	anic	☐ Co	ncrete	Other	(Describe)						
Instream Co	over										
	] Undercu	t Banks		Logs/Brush	X Emerge	nt		Oxbow	/s	□ в	oulders
X Ov	erhanging	Vegetati	on	Deep Pools	Shallow	/s (in slo	ow wat	er)	<u> </u>		
Riparian Zo	one (chec	k all that	are app					· · ·			~~~ · · ·
Forest	XScru	b/Shrub	Old	-Field/ROW	XPasture	Rov	w-Crop	, []\	Vetland	d 🗌	Paved
Residenti	al/Park		Oth	er	<del></del>			-w <u>-</u> 4		!	
(Describe ot	her or difi	ferences b	etween l	oanks):							
Width of Rip	oarian Zoi	ne (Left o	r right ba	ınk looking dow	nstream)	Left	100	In.Æt.	Right	100	In.(Ft.)
Notes/Comr	nents: S	tream is n	nostly dr	y, small pool at	transect.						
				_	<u> </u>						

Stream Data Sh	eet		Stream #: T4P	6	Date: 10/	6/2021
Project Name: Barto	nville FM 407 De	lineation	Project #: 43210	)84		
Location (County/State	e): Denton / T)	ζ	Field Crew: M.	Peters		
Stream Name: Pond	1					
Stream Characteristi	cs				•	
a) Avg. Bank Width	380 II	1. <b>(Ft.</b> )	b) Average Width	of Water	350	(In)/Ft.
c) Avg. Water Depth	Unknown I	n./Ft.	Min./Max Depth	Unknov	Vn	In./Ft.
d) Depth of Streambed	i below top of bar	ık Unk	tnown In./Ft.			
Stream fl	ow:	X Perennial	Intermi	ittent		Ephemeral
OHWM Width	360 In.(1	<u> </u>	Height of OHWM	1 above st	reambed L	Jnk. In./Ft.
Top of Bank						
Depth of Stream Bed (	(d) ←	Average Ban	k Width (a)	~ <del>~~</del>		
ţ		← Water Wi	dth (b) →	<del></del>	.↓ Average	Water Depth c)
			<u></u>			
Substrate						<del></del>
Bedrock	Boulder	Cobble	Gravel	X	Sand	X Silt/Cla
Organic	Concrete	Other (	(Describe)			
Instream Cover						
Undercu	t Banks	X Logs/Brush	X Emergent		Oxbows	Boulder
X Overhanging	Vegetation	Deep Pools	Shallows (in s	low water	;)	
Riparian Zone (check	k all that are app	ropriate)				
Forest XScrul	b/Shrub Old	-Field/ROW	X Pasture Ro	ow-Сгор	XWetla	nd Paved
Residential/Park	Oth	ег				
(Describe other or diff	erences between	banks):				
Width of Riparian Zon	e (Left or right b	ank looking dow	vnstream) Lef	t 30 I	n.Æt. Righ	t 30 In.(E
Notes/Comments: O	n-channel pond, c	lrains generally	east via Tributary 2.	•		

Stream Data Shee	et		Stream #:	T5P4	Date: 10	)/6/2021
Project Name: Bartonvi	ille FM 407 De	lineation	Project #: 4	321084	<del></del>	
Location (County/State):	Denton / T	ζ.	Field Crew:	M. Peters		· · · · · · · · · · · · · · · · · · ·
Stream Name: Pond 2	<del></del>		<u></u>			
Stream Characteristics		'"	<del> </del>	····		
a) Avg. Bank Width	70 II	1. <b>(Ft</b> )	b) Average W	/idth of Wate	r 20	In.(Ft)
c) Avg. Water Depth	1.75 In	n.(Ft)	Min./Max De	pth 0-2		In/Ft.
d) Depth of Streambed be	elow top of bar	ık 4.5	Ir	(Ft)		
Stream flow	7:	X Perennial	Int	ermittent		] Ephemeral
OHWM Width	40 In.(I	1	Height of OH	IWM above s	treambed	3 In.(Ft)
Top of Bank						
Depth of Stream Bed (d)	<b>→</b>	Average Ban	k Width (a)	 →		<del>-</del> , <u>.</u> :-
Į.		— Water Wi	F			e Water Depth c)
<b>*</b>		- Valor VI	3(0)		1 Average	e water bepinc)
Substrate				<del> </del>		
Bedrock	Boulder	Cobble	Gravel	[x]	Sand	X Silt/Clay
Organic	Concrete		Describe)	<u> </u>		
Instream Cover	<del>_</del>				<del></del>	<del></del> .
Undercut Ba	anks	Logs/Brush	X Emergent		Oxbows	Boulders
X Overhanging Ve	egetation	Deep Pools	Shallows	(in slow wate	er)	<del>'</del>
Riparian Zone (check al	ll that are app	·—	·			<del>-</del>
Forest Scrub/S	hrub Old	-Field/ROW	X Pasture	Row-Crop	XWetla	and Paved
Residential/Park	Oth	er	, <u>l, `</u> ,		_,	
(Describe other or differe	nces between l	oanks):			<del></del>	· .
Width of Riparian Zone (	Left or right ba	nk looking dow	nstream)	Left 30	In.(Ft.) Rigi	ht 30 In.(Ft)
Notes/Comments: Small	pond to west of	Pond 1, occasio	nally drains via	wetland and	<del></del>	<del>-</del>
***				<u></u>		<del></del>

Delineation of Waters of the United States Proposed Development Site Bartonville, Denton County, Texas



# Appendix C – North Carolina Division of Water Quality Stream Identification Forms

## NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.11

INC DWQ Stream Identification Form Version 4.1)	n Identification Form Version 4.11
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Total Points:	County: Dent Stream Determ phemeral Int  Absent  0  0  0  0  0  0	ton County  nination (circle one) termittent Perennial  Weak  D  1  1	Longitude: -9 Other e.g. Quad Name:  Moderate 2 2	
Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*  A. Geomorphology (Subtotal = 1 )  1ª Continuity of channel bed and bank  2. Sinuosity of channel along thalweg  3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence  4. Particle size of stream substrate  5. Active/relict floodplain  6. Depositional bars or benches  7. Recent alluvial deposits  8. Headcuts  9. Grade control	Absent  O  O  O  O  O  O  O  O  O  O  O  O  O	Weak 0 1	Moderate 2 2	Strong 3
A. Geomorphology (Subtotal = 1 )  1ª Continuity of channel bed and bank  2. Sinuosity of channel along thalweg  3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence  4. Particle size of stream substrate  5. Active/relict floodplain  6. Depositional bars or benches  7. Recent alluvial deposits  8. Headcuts  9. Grade control	Absent  O  O  O  O  O  O  O  O  O  O  O  O  O	Weak 0 1	Moderate 2 2	Strong 3
1ª Continuity of channel bed and bank 2. Sinuosity of channel along thalweg 3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence 4. Particle size of stream substrate 5. Active/relict floodplain 6. Depositional bars or benches 7. Recent alluvial deposits 8. Headcuts 9. Grade control	0 0 0 0 0	1 1	2 2	3
1ª Continuity of channel bed and bank 2. Sinuosity of channel along thalweg 3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence 4. Particle size of stream substrate 5. Active/relict floodplain 6. Depositional bars or benches 7. Recent alluvial deposits 8. Headcuts 9. Grade control	0 0 0 0 0	1 1	2 2	3
2. Sinuosity of channel along thalweg 3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence 4. Particle size of stream substrate 5. Active/relict floodplain 6. Depositional bars or benches 7. Recent alluvial deposits 8. Headcuts 9. Grade control	Ø Ø Ø Ø	1 1	2	
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence 4. Particle size of stream substrate 5. Active/relict floodplain 6. Depositional bars or benches 7. Recent alluvial deposits 8. Headcuts 9. Grade control	0 0 0	1		
5. Active/relict floodplain 6. Depositional bars or benches 7. Recent alluvial deposits 8. Headcuts 9. Grade control	<u>0</u>	1	2	3
6. Depositional bars or benches 7. Recent alluvial deposits 8. Headcuts 9. Grade control	<u>0</u>	1 + I	2	3
7. Recent alluvial deposits 8. Headcuts 9. Grade control	<u>(0</u>	1	2	3
8. Headcuts 9. Grade control		1	2	3
9. Grade control		1		3
	<u> </u>	1	2	3
	<u> </u>	0.5	1	1.5
10. Hattiai vancy	Ö	0.5	1	1.5
11. Second or greater order channel		<u>10≅0</u> )	— . Yes ≃	<del></del>
artificial ditches are not rated; see discussions in manual		2. Statement of the state of th		· <u> </u>
B. Hydrology (Subtotal =2)	4,	<del></del>		
12. Presence of Baseflow	0	1 1	2	3
13. Iron oxidizing bacteria	9	1	2	3
14. Leaf litter	<b>(E3)</b>	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?		lā≣0)	Yes≔	
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	Ø	1	2	3
22. Fish	0	0.5	1	1.5
23. Crayfish	<u> </u>	0.5	<del></del>	1.5
24. Amphibians	0	0.5	1	1.5
25. Algae	<u> </u>	0.5	1	1.5
26. Wetland plants in streambed		FACW = 0.75; OBL		1.0
*perennial streams may also be identified using other methods. Se	en 35 of manu	el	<u>(1:3)</u> Other - 0	<del>-</del> ~
Notes:	20 p. 00 01 manu	· · · · · · · · · · · · · · · · · · ·		<del></del>
	<del></del>		<del></del>	
Sketch:	<del></del>		····	<del></del>

## NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.11

Date: 9/7/2021		Bartonville FM 407 Delineation (T1P8)	Latitude: 33.099782						
Evaluator: M. Peters	County: Dentor		Longitude: -97.131511						
Total Points: Stream is at least intermittent 10.5 if ≥ 19 or perennial if ≥ 30*	Stream Determin	Stream Determination (circle one) (Ephemeral) Intermittent Perennial e.g. Quad Name:							
A. Geomorphology (Subtotal = 3 )	Absent	Weak	Moderate	Strong					
1ª. Continuity of channel bed and bank	0	0	2	3					
2. Sinuosity of channel along thalweg	0	1	2	3					
In-channel structure: ex. riffle-pool, step-pool, npple-pool sequence	0	1	2	3					
Particle size of stream substrate	0	1	<b>Ø</b>	3					
5. Active/relict floodplain	0	1	2	3					
6. Depositional bars or benches	0	1	2	3					
7. Recent alluvial deposits		1	2	3					
B. Headcuts	0	1	2	3					
9. Grade control		0.5	1	1.5					
10. Natural valley	<b>Ø</b>	0.5	1	1.5					
11. Second or greater order channel	No	=0	Yes =	Yes = 3					
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	£5	1	0.5	0					
15. Sediment on plants or debris	0	03	1	1.5					
16. Organic debris lines or piles	Ø	0.5	1 1.5						
7. Soil-based evidence of high water table?	No	No≅0							
C. Biology (Subtotal =5.5)		<u> </u>	<del></del>	·					
18. Fibrous roots in streambed	3	0	1	0					
9. Rooted upland plants in streambed	3	0	1	0					
20. Macrobenthos (note diversity and abundance)	0	1	. 2	3					
21. Aquatic Mollusks	<b>(</b> 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	<b></b>	0.5	1 1.5						
6. Wetland plants in streambed		FACW = 0.75; OB	L = (15) Other = 0						
perennial streams may also be identified using other met	hods. See p. 35 of manual.								
lotes:									
	··········	<del>~ ~ ~ .</del>	<del></del>						

# NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.11

NC DWO	Stream	Identification	Form	Version 4.11	

	Project/Site:	Bartonville FM 407 Delineation (T4P2)	Latitude: 33.100793					
Evaluator: M. Peters	County: Dento	on County	Longitude: -97,136123					
Total Points:  Stream is at least intermittent 17.25 if ≥ 19 or perennial if ≥ 30*	Stream Determ	ination (circle one) ermittent Perennial	Other e.g. Quad Name:					
A. Geomorphology (Subtotal = 5.5 )	Absent	Weak	Moderate	Strong				
1a Continuity of channel bed and bank	0	1	0	3				
Sinuosity of channel along thalweg	Ö	<b>3</b>	2	3				
In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	Ð	2	3				
Particle size of stream substrate	0	0	2	3				
5. Active/relict floodplain	0	· 1	2	3				
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	<b>6</b> 75	1	1.5				
10. Natural valley	<b>(D)</b>	0.5	1 ]	1.5				
11. Second or greater order channel	<u> </u>	0≡0	Yes =	3				
artificial ditches are not rated; see discussions in manual								
B. Hydrology (Subtotal =6.5 )	<del></del>							
12. Presence of Baseflow	0	<b>9</b>	2	3				
13. Iron oxidizing bacteria	0	0	2	3				
14. Leaf litter	1.5	<u> </u>	0.5	0				
15. Sediment on plants or debris	0	0.5	1	1,5				
16. Organic debris lines or piles	<u>(0</u>	0.5	1	1.5				
17. Soil-based evidence of high water table?	No	o = 0	Yes 3					
C. Biology (Subtotal = 5.25 )								
	1	2	1	0				
18. Fibrous roots in streambed	3							
18. Fibrous roots in streambed 19. Rooted upland plants in streambed	3	Ø .	1	0				
Fibrous roots in streambed     Rooted upland plants in streambed     Macrobenthos (note diversity and abundance)	3 <b>0</b>		···					
18. Fibrous roots in streambed 19. Rooted upland plants in streambed 20. Macrobenthos (note diversity and abundance) 21. Aquatic Mollusks	3 Ø Ø	0	1	0				
18. Fibrous roots in streambed 19. Rooted upland plants in streambed 20. Macrobenthos (note diversity and abundance) 21. Aquatic Mollusks 22. Fish	3 0 0	1	1 2	0 3				
18. Fibrous roots in streambed 19. Rooted upland plants in streambed 20. Macrobenthos (note diversity and abundance) 21. Aquatic Mollusks 22. Fish 23. Crayfish	3 Ø Ø	1 1 0.5 0.5	1 2 2	0 3 3				
18. Fibrous roots in streambed 19. Rooted upland plants in streambed 20. Macrobenthos (note diversity and abundance) 21. Aquatic Mollusks 22. Fish 23. Crayfish 24. Amphibians	3 0 0 0 0 0	0 1 1 0.5 0.5 0.5	1 2 2 1	0 3 3 1,5				
18. Fibrous roots in streambed 19. Rooted upland plants in streambed 20. Macrobenthos (note diversity and abundance) 21. Aquatic Mollusks 22. Fish 23. Crayfish 24. Amphibians 25. Algae	3 0 0 0 0	0.5 0.5 0.5 0.5	1 2 2 1 1 1 1	0 3 3 1.5 1.5				
18. Fibrous roots in streambed 19. Rooted upland plants in streambed 20. Macrobenthos (note diversity and abundance) 21. Aquatic Mollusks 22. Fish 23. Crayfish 24. Amphibians 25. Algae 26. Wetland plants in streambed	3 0 0 0 0 0	0.5 0.5 0.5 0.5 FACW=0.75 OBL	1 2 2 1 1 1 1	0 3 3 1.5 1.5				
18. Fibrous roots in streambed 19. Rooted upland plants in streambed 20. Macrobenthos (note diversity and abundance) 21. Aquatic Mollusks 22. Fish 23. Crayfish 24. Amphibians 25. Algae	3 0 0 0 0 0	0.5 0.5 0.5 0.5 FACW=0.75 OBL	1 2 2 1 1 1 1	0 3 3 1.5 1.5				

Delineation of Waters of the United States Proposed Development Site Bartonville, Denton County, Texas



## Appendix D – Site Photographs



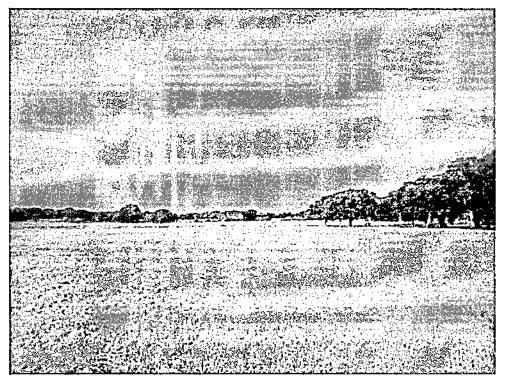


Photo 1. View, facing west, of typical upland plot at T1P1.



Photo 2. View, facing south, of Tributary 2 and Wetland 2 from T1P2.





Photo 3. View of Tributary 2 culvert at eastern property boundary.

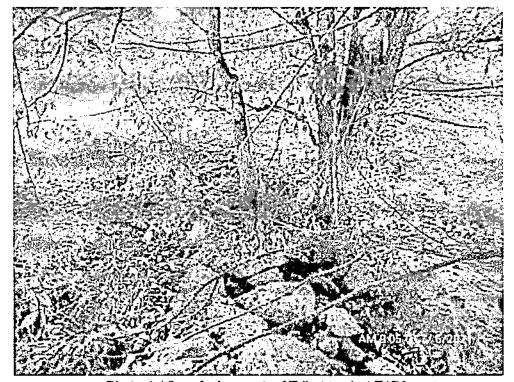


Photo 4. View, facing east, of Tributary 1 at T1P8.



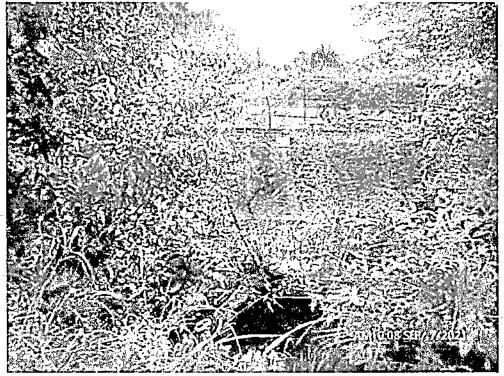


Photo 5. View of Tributary 1 culvert at eastern property boundary.



Photo 6. View of Tributary 2 and Wetland 2 at Transect 2.



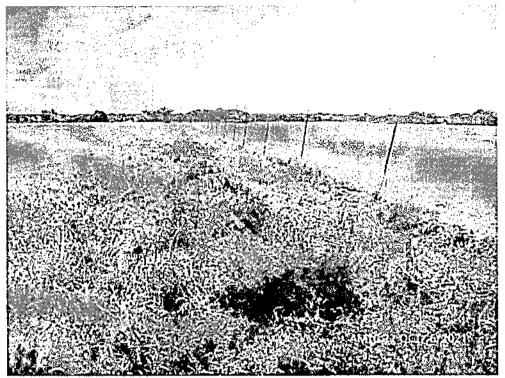


Photo 7. View, facing east, of Tributary 2 and Wetland 2 at Transect 3.



Photo 8. View, facing south, of isolated wallow at T3P2.



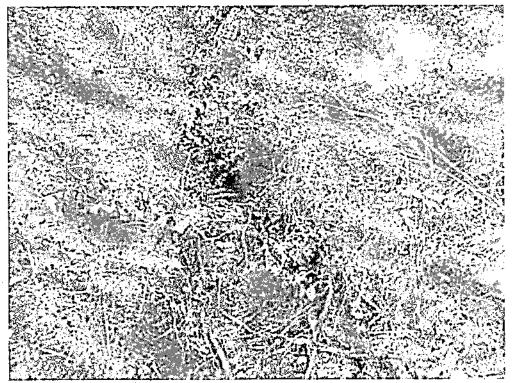


Photo 9. View, facing northwest, of Tributary 2 at T4P2.

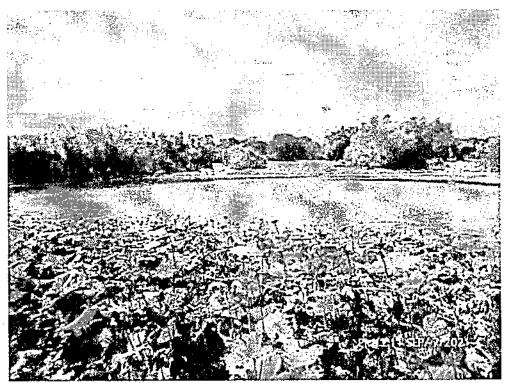


Photo 10. View, facing south, of Pond 1 and Wetland 3 at T4P5.



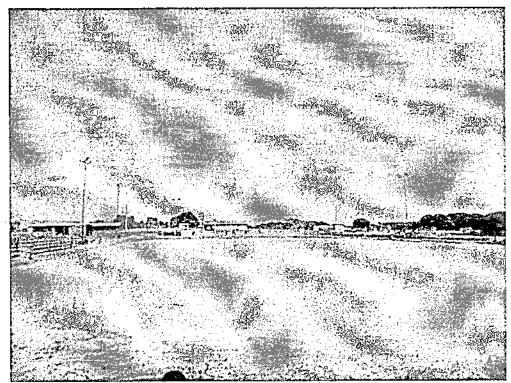


Photo 11. View, facing north, of horse corral and structures from T5P1.

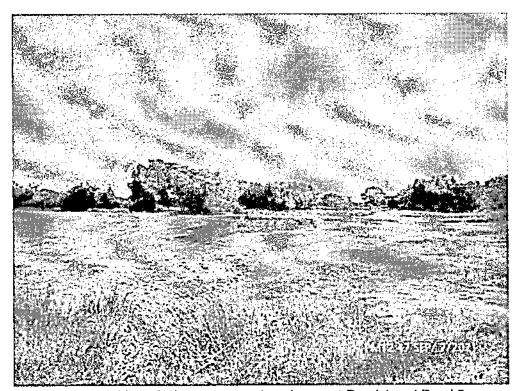


Photo 12. View, facing east, at culvert between Pond 1 and Pond 2.



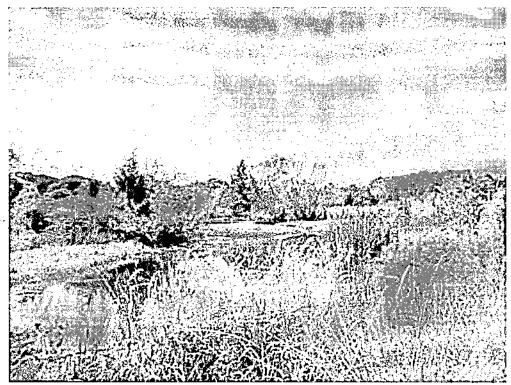


Photo 13. View, facing west, of Pond 2 and Wetland 4 at culvert between Pond 1 and Pond 2.



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



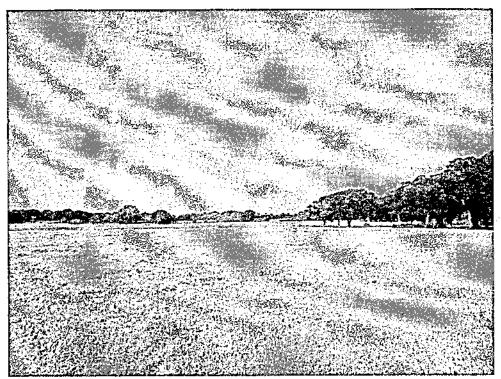


Photo 1. View, facing west, of typical upland plot at T1P1.



Photo 2. View, facing south, of Tributary 2 and Wetland 2 from T1P2.





Photo 3. View of Tributary 2 culvert at eastern property boundary.

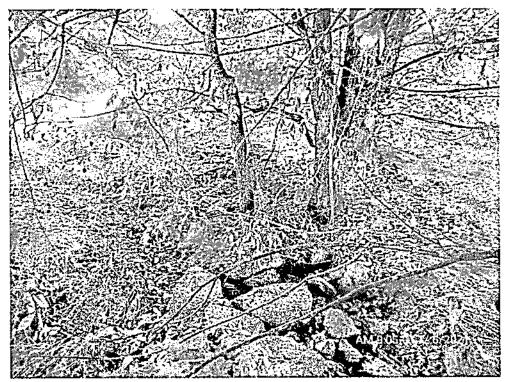


Photo 4. View, facing east, of Tributary 1 at T1P8.



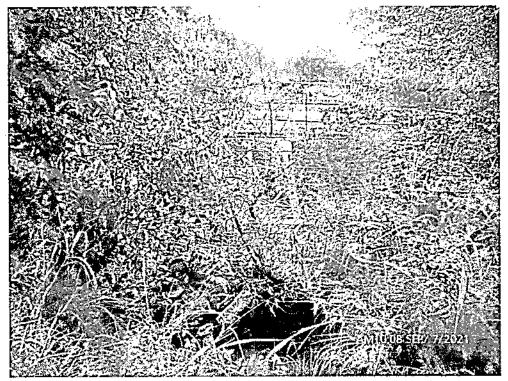


Photo 5. View of Tributary 1 culvert at eastern property boundary.

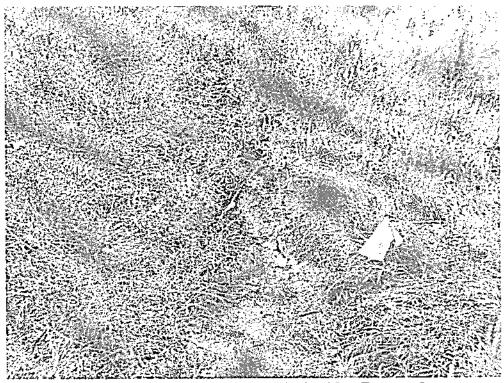


Photo 6. View of Tributary 2 and Wetland 2 at Transect 2.





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.

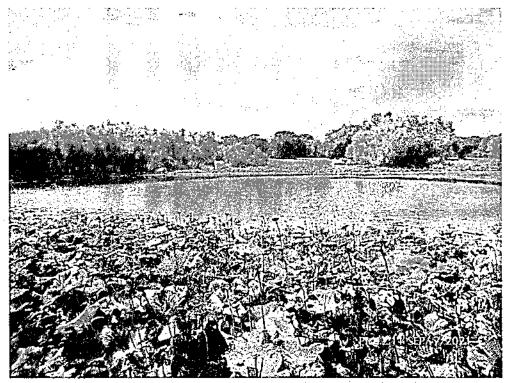


Photo 10. View, facing south, of Pond 1 and Wetland 3 at T4P5.



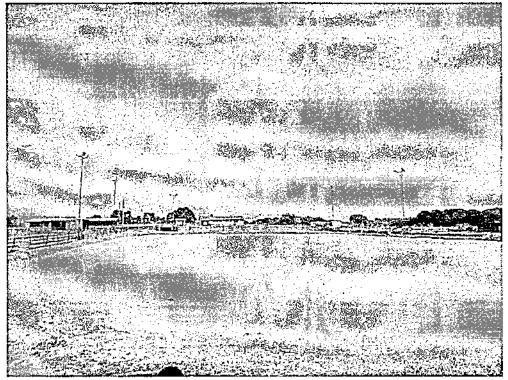


Photo 11. View, facing north, of horse corral and structures from T5P1.



Photo 12. View, facing east, at culvert between Pond 1 and Pond 2.



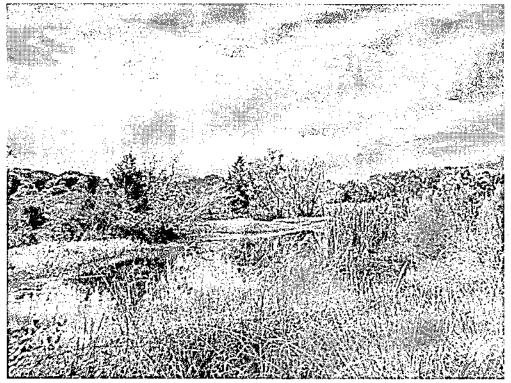


Photo 13. View, facing west, of Pond 2 and Wetland 4 at culvert between Pond 1 and Pond 2.

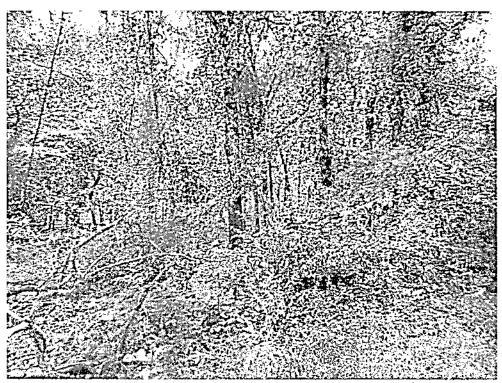


Photo 14. View, facing south, of typical upland forested area at T5P6.



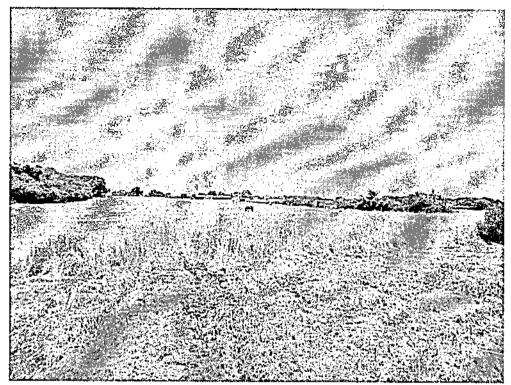


Photo 15. View, facing north, of western portion of Wetland 4.

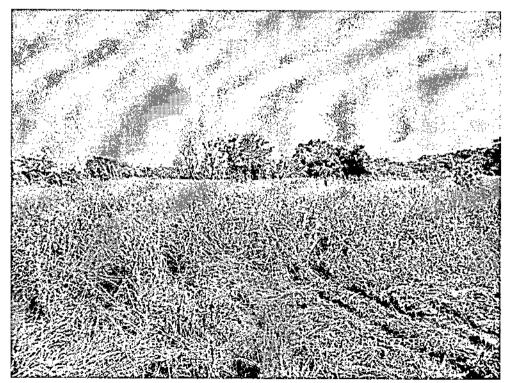


Photo 16. View, facing east, of Wetland 4 at T6P5.

Nationwide Permit 29 Proposed Eagle Ridge Development Bartonville, Texas



# 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

Cubic Yards of Material to	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	23377	12 To	707	が活動を発音を	を対している。 のは、 のは、 のは、 のは、 のは、 のは、 のは、 のは、		大学のでは、まりには、大学のでは、たいでは、大学のでは、大学のでは、大学のでは、大学のでは、大学のでは、大学のでは、大学のでは、大学のでは、大学のでは、大学のでは、まりには、大学のでは、大学のでは、大学のでは、大学のでは、大学のでは、大学のでは、大学のでは、大学のでは、大学のでは、大学のでは、大学のでは、大学のでは、大学のでは、大学のでは、大学のでは、大学のでは、大学のでは、大学のでは、大学のいいは、大学のでは、大学のいいは、大学のは、大学のは、大学のは、大学のは、大学のは、大学のは、大学のは、大学の		である。 では、 では、 では、 では、 では、 では、 では、 では、	語の意思を表する	新七年の一部では、一時代の	明文経路は記述ははない	はいるのでは、これはは、	在我就是是不是	選供送後 選手 野ながれた	<b>原列を対象が必然のではない</b>	路網接頭級路接對路	是一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个	選手がは 選手が のかっぱんかい	素が必要を持つないという。
Acres of Impect	0.15	0.014	0.007	0.438	1 .	;	1	0.002	0.025				:								
Average Width of Impact						19年後年 17年後年 17年後年 17年後年 17年4 17年4 17年4 17年4 17年4 17年4 17年4 17年			2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		<b>建筑域的数据数据</b>	<b>国的发展的自己的影响</b>	<b>美国和国际的企业的</b>	等的是一种的一种的一种的一种的一种的一种的一种的一种的一种的一种的一种的一种的一种的一	· · · · · · · · · · · · · · · · · · ·	通過過過過一個	一般の理解を表する。 大きないのでは、	の形式の大学の一個などの	がいているのでは、一般のでは、	からない はいかいまとは はいません はない	高麗の意思を表現の大名
Average Length of		¢	:	:	‡ •	:	*	61	537												
3 p s c t T y p s c s c t T y p s c s c t T y p s c s c t T y p s c c t T y p s c c t T y p s c c t T y p s c c t T y p s c c c t T y p s c c c t T y p s c c c c c c c c c c c c c c c c c c	Section of the sectio		The state of the s	FILE DIP SELVI					d:0;		<b>医乳腺炎炎炎炎炎炎炎</b>	是一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个	では、これのでは、これでは、これでは、これでは、これでは、これでは、これでは、これでは、これ	がある。 は は は は は は は は は は は は は	<b>加克亚人类和特别的基础</b>			<b>医脂类素等等的增加的</b>	<b>ジスを開ける場合は</b>	<b>医医院</b>	· · · · · · · · · · · · · · · · · · ·
Acres in Project Area	0.25	0,018	0.019	2.288	1.05	2.879	0.092	0.002	0.063				3	-							
Resource Type <sup>2</sup>	WW.	NEW SAY	NFW I	WIN NEW	NEW			ES	E CESTA	言語があれるでは	無限を <b>はない。</b> を表する。 をまする。 をまる。 をまる。 をまる。 をまる。 をまる。 をまる。 をまる。 をまる。 をまる。 をまる。 をまる。 をまる。 をも。 をもる。 をも。 をも。 をもる。 をもる。 をも。 をも。 をもる。 をもる。	ではなるとは、	が、一般のでは、	<b>高温度</b>	<b>电影影响的</b>	<b>建筑建筑水水</b>	存在は一個のない。		次の経過を持ち	法を記憶を対象	強調を必然
Lectrode and Longitude (Decima)	32.755°W. -97.755°W	33.099744 N, -97.131510 W	33,100378 N. -97,131496 W	33.099596 N, -97,136525 W	33.099774 N, -97,139419 W	33.100493 N, -97.136273 W	33.099934 N, -97.138479 W	33.099818 N, -97.131509 W	33.100749 N. -97.136145 W			3				3		3			***************************************
Waterbody		Wettend	Wottond 2	Wetler 3	Wettend	F puod accompany	Pond 2	Tribute 1	Constant of the second of the	· · · · · · · · · · · · · · · · · · ·	ではなる。	<b>阿拉拉斯斯斯斯斯斯斯斯斯斯斯斯斯斯斯斯斯斯斯斯斯斯斯斯斯斯斯斯斯斯斯斯斯斯斯</b>	<b>的现在分词的</b>	の問題が対象を対象がある。		では、日本のでは、日本	さい かんしゅう はんしゅう はんしゅん はんしゃ はんしゃん はんし	ないが、大きないのでは、一つのでは、大きないのでは、それには、大きないのでは、それには、これには、これには、これには、これには、これには、これには、これには、こ	解する では できる できる できる できる できる できる できる できる かんしゅう かんしゅ かんしゅう かんしゅう かんしゅ かんしゅう かんしゅう かんしゅう かんしゅう かんしゅう かんしゅう かんしゅん しゅん しゅん しゅん しゃ ない	を できる できる できる かんかん かんかん かんかん かんかん かんかん かんかん かんかん かん	一般のでは、

1 Waterbody ID may be the name of a feature or an assigned label such as "W-1" for a wetland.

<sup>2</sup> Resource Types: EW-Emergent wetland, SW-Scrub/Snrub Wetland, FW-Forested wetland, PS-Perennial Stream, IS-Intermittent Stream, I-Impoundment

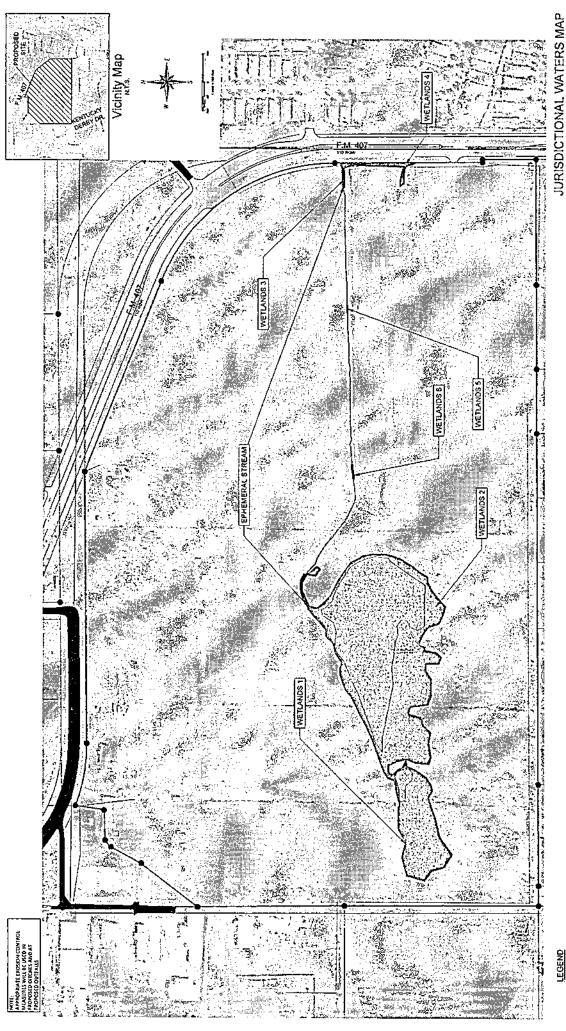
D/P - Direct \* and Permanant, D/T - Direct and Temporary, I/P - Indirect \*\* and Parmanant, I/T - Indirect and Temporary \* Direct Impacts are here defined as thoso adverse affects caused by the proposed activity, such as discharge or excavation. 3 Impace Types:

 $^{**}$  Indirect impacts are hare defined as those adverse affects caused subsequent to the proposed activity, such as flooding or affects of drainage on adjacent waters of the U.S.

Nationwide Permit 29 Proposed Eagle Ridge Development Bartonville, Texas



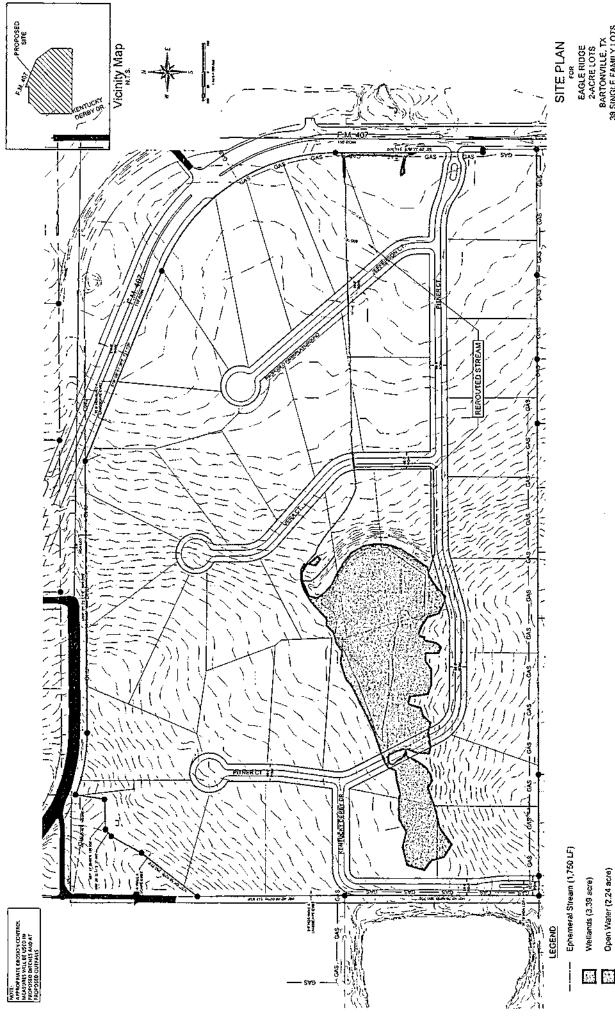
### Attachment D - Required Drawings/Figures



EAGLE RIDGE
2-ACRE LOTS
8-ARTONVILLE, TX
38 SINGLE FAMILY LOTS
BEING X.T3 ACRES IN THE
A.R. LOWIN GS SUNYEY, ABSTRACT NO. 738
TOWN OF BRATONVILLE, DENTON COUNTY TX

Ephemeral Stream (1,750 LF)

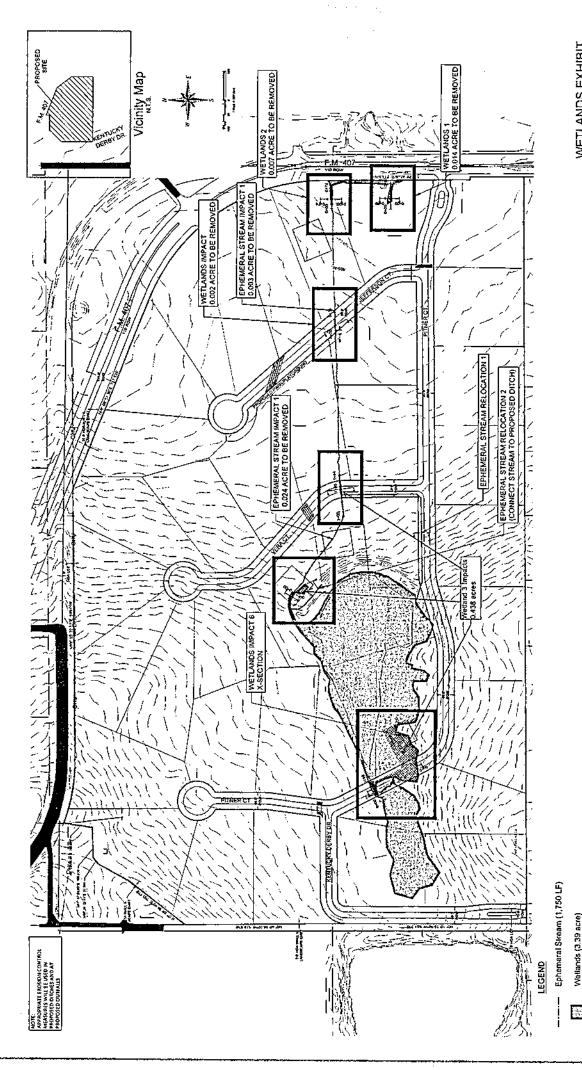
Wellands (3.39 acre) Open Waler (2.24 acre) December 210, 2021 1"= 100



EAGLE RIDGE
2-ACRE LOTS
2-ACRE LOTS
BARTONVILLE, TX
38 SINGLE FAMILY LOTS
6EINO 37.723 AGRES IN THE
AR. LOVING SURVEY, ABRIRACT NO, 736
TOWN OF BARTONVILLE, DENTON COLNITY TX

Rerouted Stream

December 218t, 2021 5' + 100



WETLANDS EXHIBIT

BEING 87.123 ACRES IN THE A.R. LOVING SURVEY, ABSTRACT NO. 736 TOWN OF BARTONVILLE, DENTON COUNTY TX 38 SINGLE FAMILY LOTS EAGLE RIDGE 2-ACRE LOTS BARTONVILLE, TX

December 21th, 2021 1" = 100

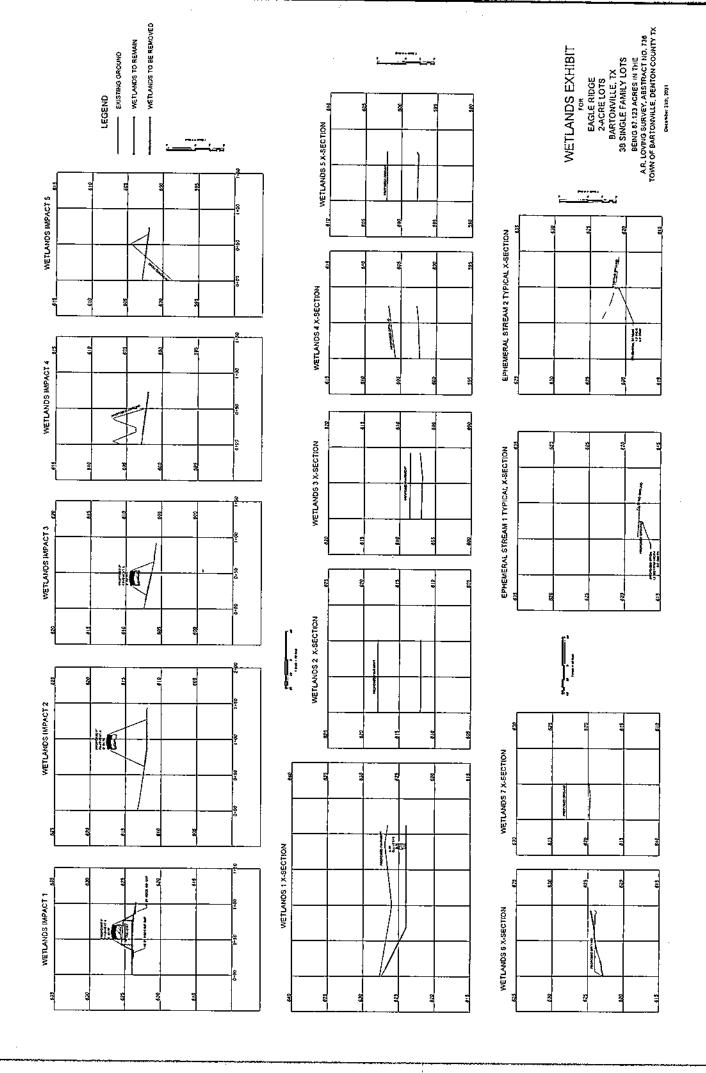
Wellands to be Removed

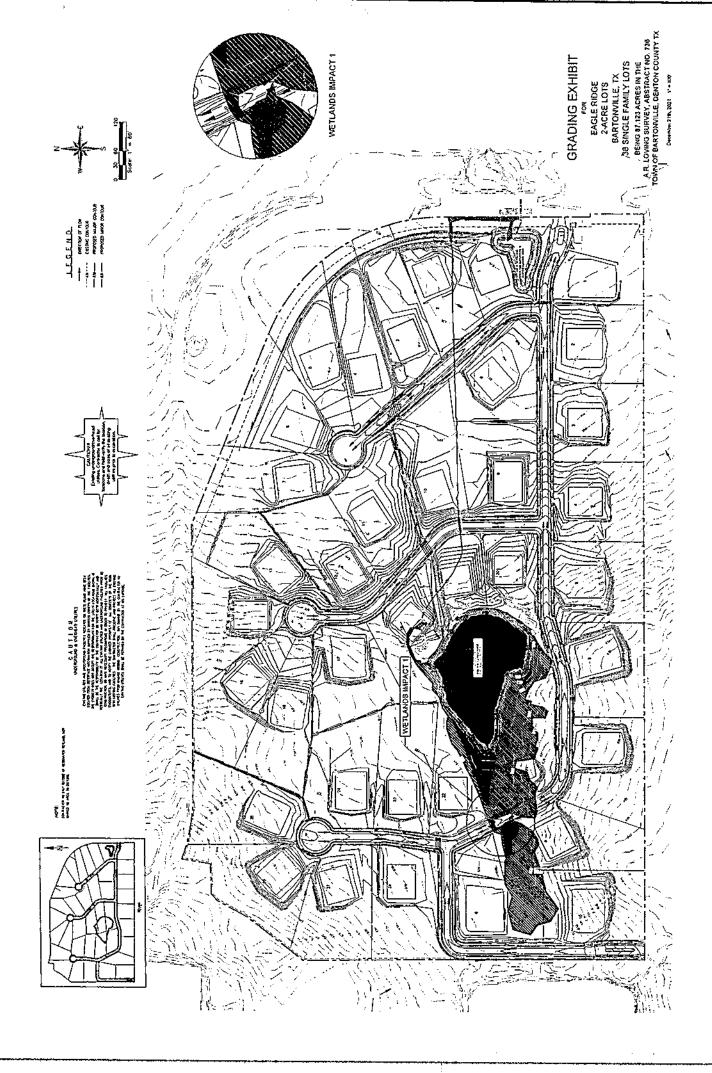
Open Waler (2.24 acre)

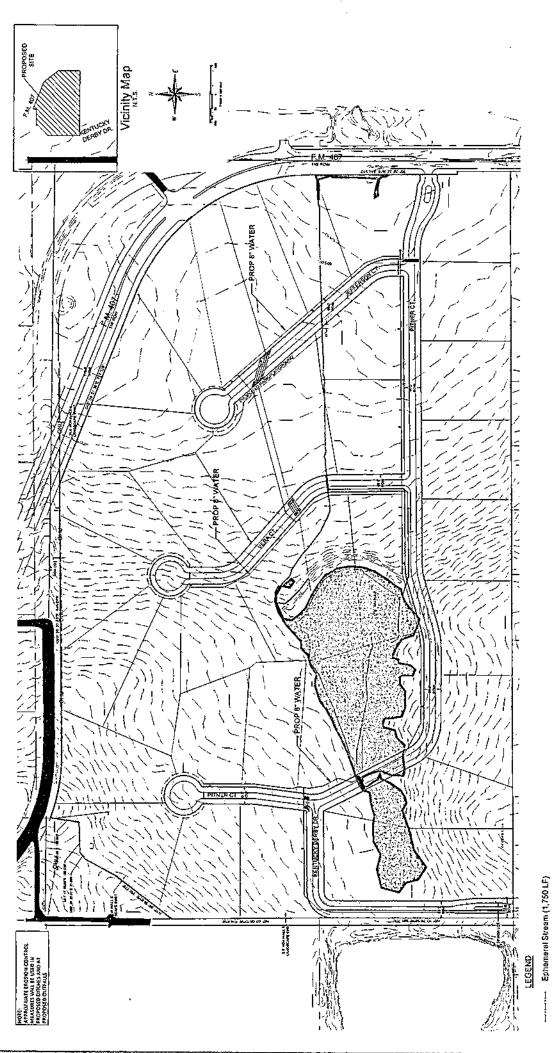
Rerouted Stream

TOTAL WETLANDS MITIGATED: 0.459 ACRE TOTAL EPHEMERAL STREAM REMOVED: 0.027 ACRE TOTAL AREAS IMPACTED: 0.485 ACRE

Empemeral Stream to be Removed







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

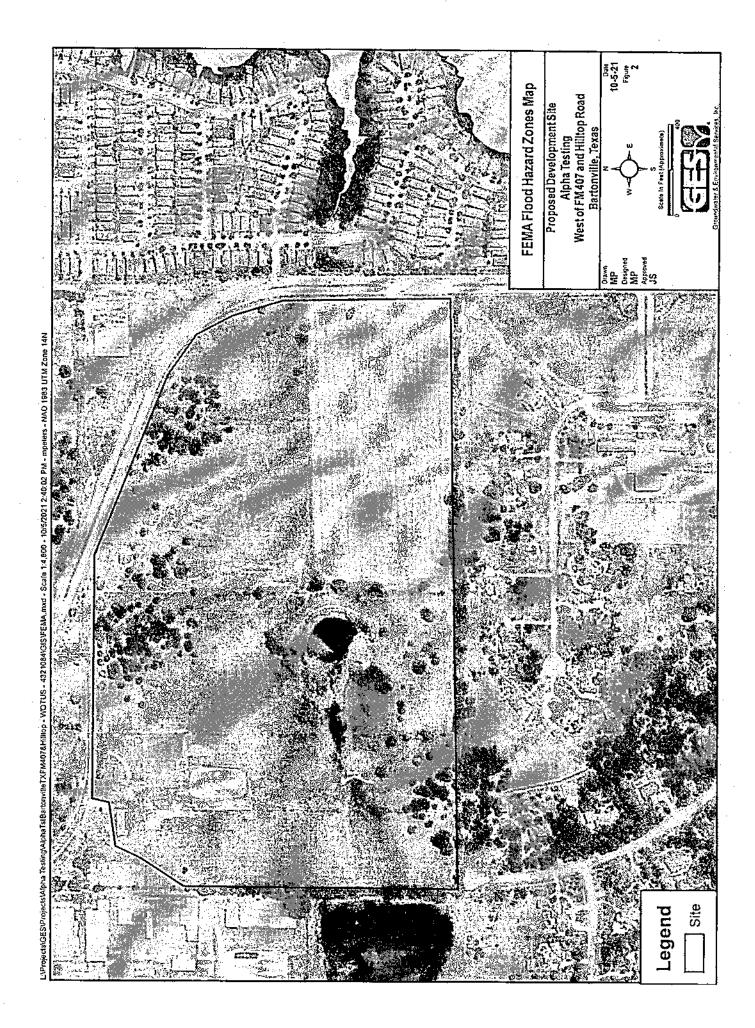
December 21th, 2021 1" = 100\*

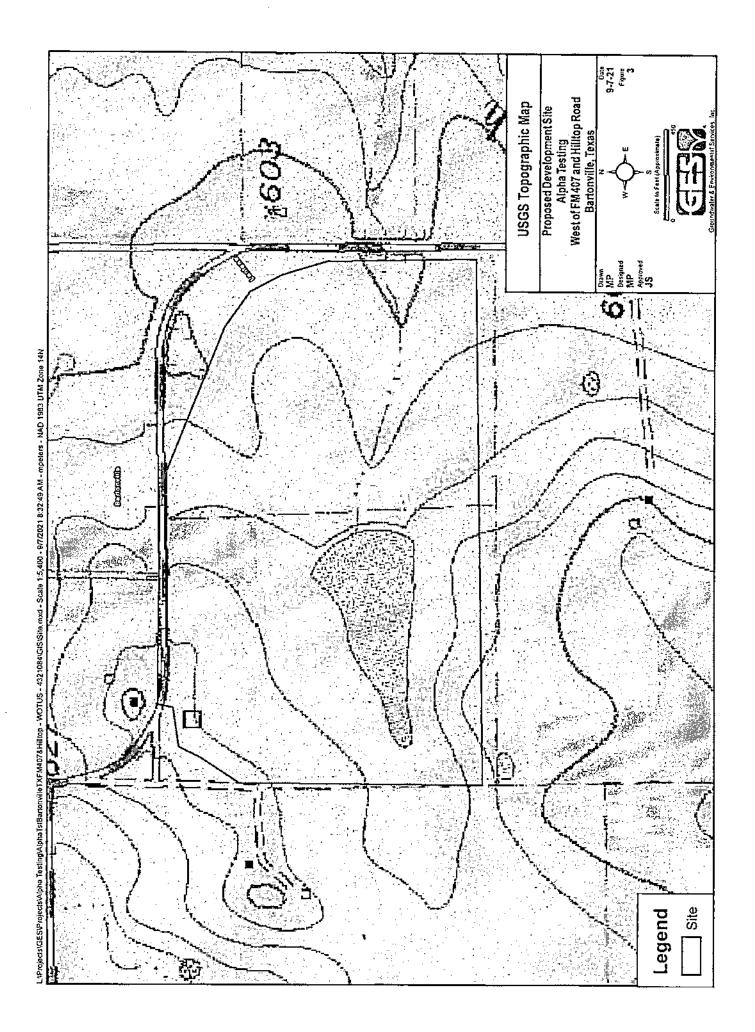
Empameral Stream to be Removed

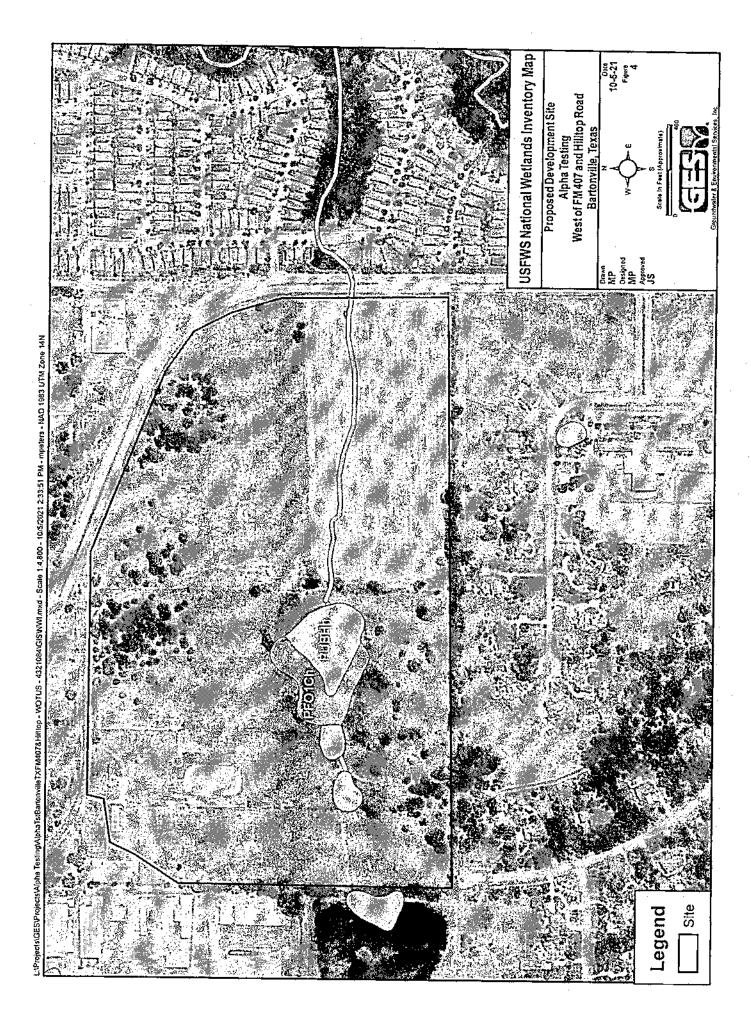
Wellands to be Removed

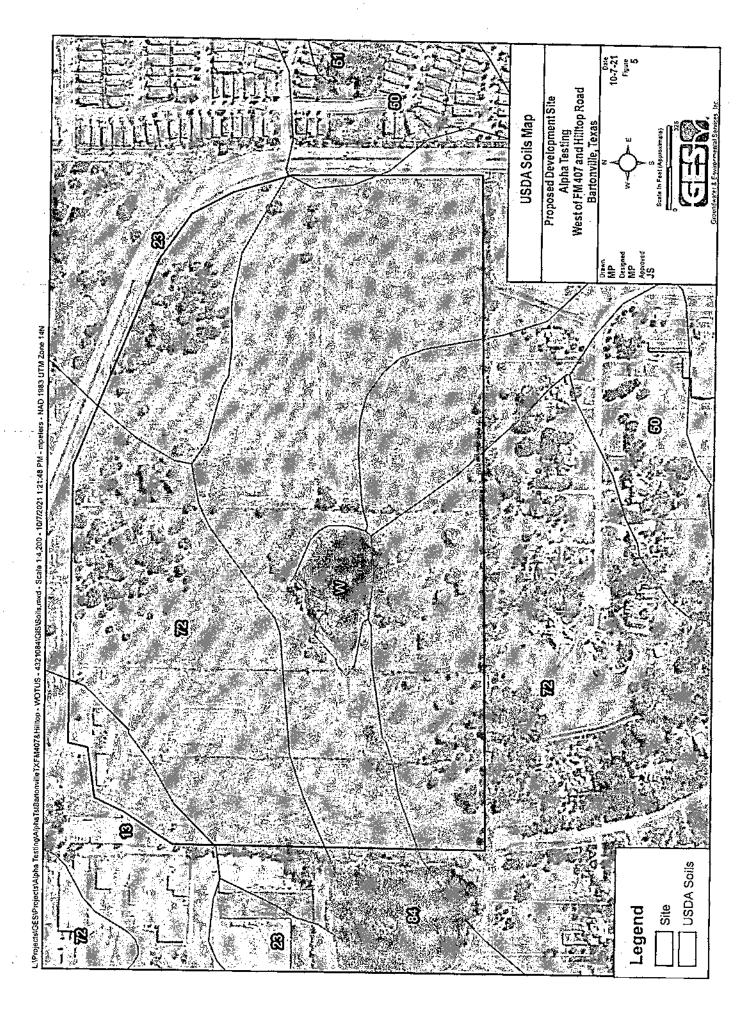
Rerouled Stream

Open Water (2.24 acre) Wellands (2.94 acre)



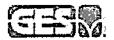






LiProjects/GES/Projects/Alpha Testing/Alpha Testing/Alpha

Nationwide Permit 29 Proposed Eagle Ridge Development Bartonville, Texas



# 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

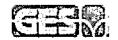
		m' more uni ampi	Terretoria de Carte de Liberto.	and the reserve and the second of the second
Species (Galentilie Name) Referal Sintus	Spelialička Danidon		. Bied	Renthemulatormetido
	Birds			
Piping Plover (Charadrius melodus) T	Breeding area extends along the eastern coast of the United States south 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 saltencrusted 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

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* 

E = Endangered

Proposed Development Protected Species Habital Evaluation Bartonville, Denton County, Texas



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; 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,

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



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SCHEDULE	
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Appendix 1:

**TXRAM Scoring Sheets** 



#### 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

<sup>\*</sup>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	Туре	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	1			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 ensite 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

<sup>\*</sup>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.
- 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

# Version 1.0 - Final Draft TXRAM STREAM DATA SHEET

Project/Site Name/No.: Ea	gle Ridge	Proj	ect Type	: 🗵 Fill/Impact ([	Linear [	] Non-linear) [2	Mitigation/	Conservation
Stream ID/Name: Tributary								
Stream Type: Ephemeral		Ecoregion: Tex	as Blacki	and Prairies	Delineation	on Performed: 🛭		☐ Currently
8-Digit HUC:	, Wate	ershed Conditio	n (devel	oped, pasture, etc	c.): Various	Wate	rshed Size:	
Aerial Photo Date and Sou	ce: 2021 E	sri Aerial Baser	nap	Site Photos: S	See Photo L	og Repre	esentative: 🛭	∄Yes □ No
Stressor(s): None		Are normal	climatic/	hydrologic conditi	ons presen	t? 🗵 Yes 🔲 N	o (If no, expl	ain in Notes)
Stream Characteristics							<u> </u>	
Stream Width (Feet)		·		Stream Heig		Feet)	<del>-</del>	
Avg. Bank to Bank: 3				Avg. Bank				
Avg. Waters Edge: 0.25				Avg. Wate			<del> </del>	
Avg. OHWM: 2				Avg. OHV	VIVI: 0.5		<del></del>	
CHANNEL CONDITION		<del></del>					·································	
Floodplain Connectivity					·		·	
Very little incision and access to the original floodplain or fully developed wide bankfull benches.	having regu once a ye bankfuli be developed fi	sion and likely lar (i.e., at least ear) access to nches or newly loodplains along of the reach.	present undercut greater interval) or po floodplait	erate incision and lice of near vertical/ banks; irregular (i.e., than 2 year return access to floodplain ossible access to nor bankfull benches isolated areas.	channel a further; maj near ve unlikely/rar to floods	ened or incised nd likely to widen ority of both banks ritical/undercut; ely having access plain or bankfulli enches.	channelized incision with within the ba	sed channel or d flow; severe flow contained nks; majority of ical/undercut.
5		4		3	<b>✓</b>	2		1
Bank Condition  Left Bank Active Erosion: Bank Protection/Stabiliza				tive Erosion: 10		_% Average: 1	0	Score: _2
Sediment Deposition						^^ ^-		<del></del>
ĭ Less than 20% of the		•						
20–40% of the bottom sediments (4)	covered by	y excessive sec	diment d	eposition; some e	established	bars with indica	itors of recer	itly deposited
40-60% of the bottor moderate sediment depo features (3)	n covered l sits at in-st	by excessive some structure	ediment s; OR ob	deposition; mode ostructed view of	erate depos the channe	ition on old bar I bottom and a	s and creati lack of other	ng new bars; depositional
60–80% of the botton in-stream structures (2)	n covered t	y excessive se	ediment o	deposition; newly	created ba	rs prevalent; he	avy sedimer	st deposits at
Greater than 80% of t	he bottom o	overed by exce	essive se	diment deposition	n resulting i	n aggrading cha		
								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

eft Bank											Buffer D	istance:	26
Buffer Type				Cano		Vegetation Community		Land Use	S	core	Percenta of Are		ublota
1. Grassland						Mixed	···-y	Low		2	40	_	0.8
2. Forest				35		Mixed		Low		3	60		1.8
3.			<del>~~</del>	1	T								0
4.				<b></b>				<del> </del>		~ -			0
5.				<u> </u>				<u> </u>	<del> </del>				0
				<del></del>				·				Score:	26
ight Bank				Cano	<del></del> Τ	Vegeta	fion	Land			Percent	20e C	ubtota
Buffer Typ	e			Cov		Commu		Use	3	core	of Are		ubiola
1. Grassland	··		·	0		Mixed		Low		2	40		0.8
2. Forest				35		Mixed		Low		3	60		1,8
3.				<u> </u>				1					0
4.				†				<u> </u>					0
5.	~			1				<del>                                     </del>					0
N-STREAM CONDITION Substrate Composition (estima	•		s)		<del></del>				····	<u> </u>		Score:	
Boulder:	Gravel	:		<del></del> -		Fines (silt, clay, muck				Artifici			
Cobble:	Sand:					Bedrock:				Other:			
n-stream Habitat (check all hat	oitat typ	es that	are pre	sent)								Score:	•
Habitat Type	71	T2	<i>T3</i>	T4	T5	T6	77	T8	<i>T9</i>	T10	7 T11	T12	T13
Undercut Banks			1	[					<del> </del>		*	1	
Overhanging Vegetation								1					1
Rootmats			ĺ			1 -	<u> </u>		Ţ			T"	Ţ
Rootwads	İ -		<u> </u>	<u> </u>						<del> </del>	1	1	
Woody/Leafy Debris	†	<u> </u>	·							1	_	1	<u> </u>
Boulders/Cobbles	<del>  ~ ~</del>							1	1			1	<del>                                     </del>
Aquatic Macrophytes	ţ	i				<b>†</b> ~						1	1
Riffle/Pool Sequence	ţ						<u> </u>					~	<del>                                     </del>
Artificial Habitat Enhancement	<del> </del>		<del> </del>	1			<u> </u>		<del>                                     </del>	+-	_	<del> </del>	†
Other	1						ļ		†	<b>†</b> ~~	<u> </u>		1
Total No. Present	1		f			1		<del>- </del>	$\vdash$				<del></del>
· · · · · · · · · · · · · · · · · · ·		1	.1	لـــــــــــــــــــــــــــــــــــــ		_ <u></u>		t	<u> </u>	verage	<u></u>	Score:	0
HYDROLOGIC CONDITION Flow Regime													
☐ Noticeable surface flow pres	ent (4)				[] Is	solated po	oois a	nd no evi	dence	of surfa	ace or int	erstitial :	flow (1
Continual pool of water but la		oticeabl	le flow (	3)	$\boxtimes$	ry chann	el and	d no obse	rvable	pools (	or intersti	tial flow	(0)
☐ Isolated pools and interstitial	_			•		•				•			
T toototoo booto otto mitoromitor											-	Score	. 0
<del></del>	(00000											000.0	` <del>`</del>
Channel Flow Status	(00000)												
****	<u>.</u>	the char	nnel hot	tom widt	in: les	s than 25	% of	channel s	ubstra	te is ev	posed (4	<u> </u>	
☐ Water covering greater than	75% of										posed (4	)	
☐ Water covering greater than ☐ Water covering 50–75% of the	75% of	nel botto	om width	ı; 25 <b>–</b> 50	% of	channel s	ubstra	ate is exp	osed (	3)	posed (4	)	
☐ Water covering greater than	75% of ne chann	nel botto nel botto	om width om width	ı; 25–50 ı; 50–75	% of : % of :	channel s channel s	ubstra ubstra	ate is exp ate is exp	osed ( osed (	3) 2)			(4)

Score: 0

# Version 1.0 - Final Draft TXRAM STREAM FINAL SCORING SHEET

Project/Site Name/No.: Eag	le Ridge Project Type	e: 🗵 Fill/Impact (	(🗌 Linear 🔲 Non-linear). 🖾	Mitigation/Conservation
Stream ID/Name: Tributary 1	SAR No.: 1 Siz	e (LF): <u>61</u>	Date: 10/6/21 Evaluate	or(s): MP
Stream Type: Ephemeral	Ecoregion: Texas Black	land Prairies	_ Delineation Performed: 🗵	Previously Currently
8-Digit HUC:	Watershed Condition (deve	loped, pasture, e	etc.): Various Waters	shed Size:
•	e: 2021 Esri Aerial Basemap			
Stressor(s): None	Are normal climatic	hvarologic condi	itions present? ⊠ Yes ☐ No	(If no, explain in Notes)
Notes: 61 If of SAR 1 on-s		, ,		
Stream Characteristics	· · · · · · · · · · · · · · · · · · ·			
Stream Width (Feet)	<del></del>	Stream He	eight/Depth (Feet)	
Avg. Bank to Bank: 3		Avg. Bar		
Avg. Waters Edge: 0.25		Avg. Wa		
Avg. OHWM: 2	····	Avg. OH	<del></del>	
Scoring Table				
Core Element	Metric	Metric Score	Core Element Score Calculation	Core Element Score
	Floodplain connectivity	2		
Channel condition	Bank condition	4	Sum of metric scores / 15 x 25	18.33
	Sediment deposition	5		
	Riparian buffer (left bank)	2,6	Sum of bank scores / 10	
Riparian buffer condition	Riparian buffer (right bank)	2.6	x 25	13.00
	Substrate composition	1	Sum of metric scores / 10	
In-stream condition	In-stream habitat	0	x 25	2.50
	Flow regime	0	Sum of metric scores / 8	
Hydrologic condition	Channel flow status	0	× 25	0.00
	CALL TO SERVICE STREET		0.5	
	Sum of core el	ement scores = o	overall TXRAM stream score	33.83
L R	habitats = overall TXRAM stream trees greater than 24-inch diame hast (i.e., acoms and nuts) produ	eter at breast hei	ght	0.00
Sum of overall TXF	RAM stream score and additional	points = total ov	verall TXRAM stream score	33.83
Representative Site Photo	graph:			

# Version 1.0 - Final Draft TXRAM STREAM DATA SHEET

Project/Site Na	ame/No.: Eag	gle Ridg	e Pro	ject Type: 🗵	Fill/Impact ([	Linear [	Non-linear)	☑ Mitigatio	n/Conservation	
			SAR No.: _							
Stream Type:	Ephemeral		_ Ecoregion: Te	kas Blackland F	Prairies	Delineati	on Performed: [	☑ Previous	sly 🗌 Currently	
8-Digit HUC: _		v	atershed Condition	on (developed	l, pasture, etc	c.): <u>Various</u>	SWate	ershed Size	e:	
Aerial Photo D	ate and Sour	ce: 202	l Esri Aerial Base	map s	ite Photos: S	See Photo L	.og Repr	esentative:	:⊠Yes □ No	
Stressor(s): N	one		Are normal	climatic/hydro	ologic conditi	ons preser	nt?⊠Yes 🔲 N	lo (If no, e	xplain in Notes)	
Stream Chara	cteristics									
Stream Width	<del></del>				Stream Heig		Feet)			
	Avg. Bank to Bank: 2 Avg. Banks: 0.75									
Avg. Water					Avg. Wate					
Avg. OHW!	VI: 1.25				Avg. OHW	VM: 0.25		<del> </del>		
CHANNE	NUCLTICAL					<b></b>				
CHANNEL CO										
to the original fully developed bench	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 bankfull benches at isolated areas.  Deeply incised channel or channelized flow, severe further, majority of both banks or near vertical/undercut, unlikely/rarely having access to floodplain or bankfull benches.									
5			4	[ ]	<u> </u>	. ✓	2		1	
1	tive Erosion:		% Right Natural [] Artific	Bank Active E	Erosion: 10		_% Average: _1	0	Score: 2	
Sediment De	position								<del></del>	
20–40% sediments (4	of the bottom i) of the bottom	covered	overed by excess by excessive se d by excessive s -stream structure	diment depos ediment depo	ition; some e	stablished rate depos	bars with indica	itors of rec	ating new bars;	
features (3)  [] 60-80% in-stream str		covered	d by excessive se	ediment depos	sition; newly	created ba	ers prevalent; he	eavy sedim	nent deposits at	
☐ Greater t	han 80% of th	e bottor	n covered by exc	essive sedime	ent deposition	resulting	in aggrading cha	annel (1)		
				<del></del>					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

1. Grassland	Buffer Тур	Buffer Type					Vegetation Community		Land Use	Sco	ore	Percenta of Area		Subtota
3.	1. Grassland				О	+			Low	2			$\neg$	2
3.	2.				†				1					
Score: 2  Right Bank    Canopy   Conmunity   Use   Score   Percentage   Subtraction   Continuous   Use   Continuous   Continuous   Use   Continuous   Use   Continuous   Use   Continuous   Continuous   Use   Continuous   Conti									1	1				0
Score: 2  Right Bank    Canopy   Conmunity   Use   Score   Percentage   Subtraction   Continuous   Use   Continuous   Continuous   Use   Continuous   Use   Continuous   Use   Continuous   Continuous   Use   Continuous   Conti					<del>                                     </del>				1	<del>                                     </del>				
Right Bank    Buffer Type					<del> </del>		<del>                                     </del>		+	+			_	
Right Bank   Buffer Type   Canopy   Cover   Community   Use   Score   Percentage   Subto   Of Area   Of Mixed   Low   2   100   2   2   3   0   0   3   0   0   0   0   0   0	<del></del>				<del></del>				<u> </u>			<u> </u>	Score	: ?
Buffer Type	Right Bank													•
2.		Buffer Type								Sco	ore			Subtota
3.	1. Grassland				0		Mixed		Low	2		100		2
4	2.				<b></b>				1				$\neg$	0
Scre: 2  N-STREAM CONDITION Substrate Composition (estimate percentages)  Boulder: Gravel: Fines (silt, clay, muck): 100 Artificial:  Cobble: Sand: Bedrock: Other:  Score: 1  Instream Habitat (check all habitat types that are present)  Habitat Type T1 T2 T3 T4 T5 T6 T7 T8 T9 T10 T11 T12 T  Undercut Banks  Overhanging Vegetation  Rootmats  Noodyleafy Debris  Boulders/Cobbles  Aquatic Macrophytes  Riffle/Pool Sequence	3.				<b>†</b>				1					0
STREAM CONDITION Substrate Composition (estimate percentages)  Boulder: Gravel: Fines (silt, clay, muck): 100 Artificial:  Cobble: Sand: Bedrock: Other:  Score: 1  Instream Habitat (check all habitat types that are present)  Habitat Type T1 T2 T3 T4 T5 T6 T7 T8 T9 T10 T11 T12 T  Undercut Banks  Overhanging Vegetation  Rootmats  Rootwads  Woodyfically Debris  Boulders/Cobbles  Aquatic Macrophytes  Riffle/Pool Sequence  Aquatic Macrophytes  Riffle/Pool	4,				†		<del>                                     </del>		<del>                                     </del>	1		-	$\neg \uparrow$	0
N-STREAM CONDITION Substrate Composition (estimate percentages)  Boulder: Gravel: Fines (silt, clay, muck): 100 Artificial: Cobble: Sand: Bedrock: Other:  In-stream Habitat (check all habitat types that are present)  Habitat Type				<del>.</del>	1				1	<del> </del> ^ _				0
N-STREAM CONDITION Substrate Composition (estimate percentages)  Soulder:   Gravel:   Fines (silt, clay, muck): 100   Artificial:   Cobble:   Sand:   Bedrock:   Other:    In-stream Habitat (check all habitat types that are present)  Habitat Type   T1   T2   T3   T4   T5   T6   T7   T8   T9   T10   T11   T12   T1   T12   T1   Undercut Banks                               Undercut Banks                                 Undercut Banks		_ <del></del>			<u> </u>		1			ــــــــــــــــــــــــــــــــــــــ		Ł	Score	
Score: :	Boulder.	Boulder. Gravel:				_		clay, r	muck): 100					
### Abilat Type	Cobbie.	L 341.4.								Ł~			Score	: 1
Habitat Type	lo-stream Habitat (check all ha	hitat tvo	es that	are pre	sent)								00010	•
Undercut Banks  Overhanging Vegetation  Rootmats  Rootmats  Rootmads  Woody/Leafy Debris  Boulders/Cobbles  Aquatic Macrophytes  Affilie/Pool Sequence  Artificial Habitat Enhancement  Other  Total No. Present  Average: Score: o  HYDROLOGIC CONDITION  Flow Regime  Noticeable surface flow present (4)   Isolated pools and no evidence of surface or interstitial flow (0)  Isolated pools and interstitial (subsurface) flow (2)  Channel Flow Status  Water covering greater than 75% of the channel bottom width; less than 25% of channel substrate is exposed (4)  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)  Water present but covering less than 25% of the channel bottom width; greater than 75% of channel substrate is exposed (1)  Water present but covering less than 25% of the channel bottom width; greater than 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)						75	T6	T 77	78	<i>T</i> 9	T1	0 T11	T12	T13
Overhanging Vegetation Rootmats Rootwads Woody/Leafy Debris Boulders/Cobbles Aquatic Macrophytes Riffle/Pool Sequence Artificial Habitat Enhancement Other Total No. Present  Noticeable surface flow present (4) Continual pool of water but lacking noticeable flow (3) Isolated pools and interstitial (subsurface) flow (2)  Channel Flow Status  Water covering greater than 75% of the channel bottom width; 125–50% of channel substrate is exposed (4) 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) Water present but covering less than 25% of the channel bottom width; greater than 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) Water present but covering less than 25% of the channel bottom width; greater than 75% of channel substrate is exposed (2)	<i>,</i> ,	<del> </del>	ļ <del></del>				+	<del>                                     </del>			<del> </del> -		<del> </del>	_
Rootwads  Woody/Leafy Debris  Boulders/Cobbles Aquatic Macrophytes Riffle/Pool Sequence Artificial Habitat Enhancement Other Total No. Present  Average: Score: o  HYDROLOGIC CONDITION Flow Regime  Noticeable surface flow present (4)   Isolated pools and no evidence of surface or interstitial flow (0) Isolated pools and interstitial (subsurface) flow (2)  Channel Flow Status  Water covering greater than 75% of the channel bottom width; less than 25% of channel substrate is exposed (4) 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) Water present but covering less than 25% of the channel bottom width; greater than 75% of channel substrate is exposed (2)		<del> </del>	<del> </del>	-	<u> </u>	<del> </del>	<del>- </del> -	+	<del>-}</del> +				<del> </del>	<del> </del>
Rootwads  Woody/Leafy Debris  Boulders/Cobbles  Aquatic Macrophytes  Riffle/Pool Sequence  Artificial Habitat Enhancement  Other  Total No. Present  Average: Score: o  HYDROLOGIC CONDITION  Flow Regime  Noticeable surface flow present (4)   Isolated pools and no evidence of surface or interstitial flow (0)  Isolated pools and interstitial (subsurface) flow (2)  Score: o  Channel Flow Status  Water covering greater than 75% of the channel bottom width; less than 25% of channel substrate is exposed (4)  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)  Water present but covering less than 25% of the channel bottom width; greater than 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)		<del> </del>	<del> </del>	-	ļ	├──	<del></del>	1	<del></del>		<del></del>		┼	<del></del>
Woody/Leafy Debris  Boulders/Cobbles  Aquatic Macrophytes  Riffle/Pool Sequence  Artificial Habitat Enhancement  Other  Total No. Present  Average:Score; output  HYDROLOGIC CONDITION  Flow Regime  Noticeable surface flow present (4)			<del>                                     </del>		<del> </del> -	<del> </del>	<del></del>	┼				<del></del>	┼	<del></del>
Boulders/Cobbles Aquatic Macrophytes Riffle/Pool Sequence Artificial Habitat Enhancement Other Total No. Present  Average: Score:   HYDROLOGIC CONDITION Flow Regime  Noticeable surface flow present (4)		<del> </del>		<del> </del>	-	ļ		+	1		-	<del></del>	┿┈╌	
Aquatic Macrophytes  Riffle/Pool Sequence  Artificial Habitat Enhancement Other  Total No. Present  Average: Score:   HYDROLOGIC CONDITION  Flow Regime  Noticeable surface flow present (4) Isolated pools and no evidence of surface or interstitial flow (0)  Continual pool of water but lacking noticeable flow (3) In pry channel and no observable pools or interstitial flow (0)  Isolated pools and interstitial (subsurface) flow (2)  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 (2)  Water present but covering less than 25% of the channel bottom width; greater than 75% of channel substrate is exposed (1)	· - · - · - · - · - · - · - · - · · · ·	<del></del>	<b></b>	<del></del>	<del> </del>	-		┼			├		<del> </del>	-
Riffle/Pool Sequence Artificial Habitat Enhancement Other Total No. Present  Average: Scoret o  HYDROLOGIC CONDITION Flow Regime Noticeable surface flow present (4) Isolated pools and no evidence of surface or interstitial flow (0) Isolated pools and interstitial (subsurface) flow (2)  Score: o  Channel Flow Status Water covering greater than 75% of the channel bottom width; less than 25% of channel substrate is exposed (4) 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 substrate is exposed (1) Water present but covering less than 25% of the channel substrate is exposed (2)			<u> </u>		ļ	<u> </u>		<del> </del>			<u> </u>		—	<del>- </del>
Artificial Habitat Enhancement Other  Total No. Present  Average: Score:   HYDROLOGIC CONDITION  Flow Regime  Noticeable surface flow present (4) Isolated pools and no evidence of surface or interstitial flow (0) Isolated pools and interstitial (subsurface) flow (2)  Channel Flow Status  Water covering greater than 75% of the channel bottom width; tess than 25% of channel substrate is exposed (4) 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)  Water present but covering less than 25% of the channel bottom width; greater than 75% of channel substrate is exposed (1)	· <u>-</u>	<del> </del>	ļ	ļ	<b></b>	<u> </u>		<b>↓</b>			-		—	<u> </u>
Other Total No. Present  Average: Score:   Average: Score:   HYDROLOGIC CONDITION  Flow Regime  Noticeable surface flow present (4) Isolated pools and no evidence of surface or interstitial flow (0)  Isolated pools and interstitial (subsurface) flow (2)  Channel Flow Status  Water covering greater than 75% of the channel bottom width; less than 25% of channel substrate is exposed (4)  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)	· ·	<u> </u>	ļ	<u> </u>	<u> </u>	ļ		<u> </u>			ļ		<del> </del>	<del>                                     </del>
Total No. Present  Average: Score: o		<b>↓</b>	Ļ	<u> </u>		<u> </u>		<u> </u>			ļ		<u> </u>	
Average: Score:   HYDROLOGIC CONDITION  Flow Regime  Noticeable surface flow present (4) Isolated pools and no evidence of surface or interstitial flow (0)  Continual pool of water but lacking noticeable flow (3) Dry channel and no observable pools or interstitial flow (0)  Isolated pools and interstitial (subsurface) flow (2)  Score:   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)							_		_				<u> </u>	
HYDROLOGIC CONDITION  Flow Regime  Noticeable surface flow present (4) Continual pool of water but lacking noticeable flow (3) Isolated pools and no evidence of surface or interstitial flow (0) Isolated pools and interstitial (subsurface) flow (2)  Score:  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)	Total No. Present					<u> </u>		<u> </u>					<u> </u>	
Continual pool of water but lacking noticeable flow (3)  Isolated pools and interstitial (subsurface) flow (2)  Score: o  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)									<del></del> -	Ave	erage	9: <u></u>	Score	<u>.; o                                    </u>
Isolated pools and interstitial (subsurface) flow (2)  Score:  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)	☐ Noticeable surface flow pres	ent (4)					lsolated p	ools a	and no evide	ence of	fsurf	ace or inte	rstitial	flow (1)
Isolated pools and interstitial (subsurface) flow (2)   Score: o   Channel Flow Status	Continual pool of water but I	acking n	oticeabi	ie flow (3	3}	$\boxtimes$ 1	Dry chanr	nel and	d no observ	/able p	ools	or interstiti	al flow	/ (O)
Score: O  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)		_			•	_	-			·				
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)			1050, 110			~							Score	»- n
☐ 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)	Channel Flow Status												<u> </u>	, <u>,                                   </u>
☐ 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)	Water covering greater than	75% of 1	the chai	nnel bot	tom wid	lth; le:	ss than 2	5% of	channel su	bstrate	is e	xposed (4)	ı	
☐ 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)	☐ Water covering 50–75% of t	he chant	nel botto	om width	າ; 25⊶50	)% of	channel s	substr	ate is expo	sed (3)				
Water present but covering less than 25% of the channel bottom width; greater than 75% of channel substrate is exposed (1)	•													
	_											ibstrate is	exnos	ed (1)
										. 401 (441)	00		<del></del>	(.)

Score: o

# Version 1.0 - Final Draft TXRAM STREAM FINAL SCORING SHEET

Project/Site Name/No.: Eagle Ridge Project Type: X Fill/Impact ( Linear Non-linear) X Mitig	igation/Conservation											
Stream ID/Name: Tributary 2 SAR No.: 1 Size (LF): 762 Date: 10/6/21 Evaluator(s)	s): <u>MP</u>											
Stream Type: Ephemeral Ecoregion: Texas Blackland Prairies Delineation Performed: 🗵 Previously 🗀 Currently												
3-Digit HUC: Watershed Condition (developed, pasture, etc.): Various Watershed Size:												
Aerial Photo Date and Source: 2021 Esri Aerial Basemap Site Photos: See Photo Log Representa	tative: ⊠ Yes □ No											
Stressor(s): None Are normal climatic/hydrologic conditions present? ☒ Yes ☐ No (If n												
Notes: 1,513 If of SAR 1 on-site	<b></b>											
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												
Cora Flament Scare	Core Element Score											
Floodplain connectivity 2												
Channel condition Bank condition 4 Sum of metric scores / 15	18.33											
Sediment deposition 5												
Riparian buffer (left bank) 2 Sum of bank scores / 10												
Riparian buffer condition Riparian buffer (right bank) 2 ×25	10.00											
Substrate composition 1 Sum of metric scores / 10												
In-stream condition In-stream habitat 0 x 25	2.50											
Flow regime 0 Sum of metric scores / 8												
Channel flow status 0 x 25	0.00											
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	0.00											
Dominated by hard mast (i.e., acoms and nuts) producing native species in the tree strata												
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., direc	ection (ocation))											
Interior and Control of the Control	sunor, rodanory,											
}												
}												
	ļ											
}												