



City of Broken Arrow
Meeting Agenda
Planning Commission

Robert Goranson Chairman
Jason Coan Vice Chairman
Jaylee Klempa Commissioner
Jonathan Townsend Commissioner
Mindy Payne Commissioner

Thursday, January 8, 2026

5:30 PM

City of Broken Arrow
Council Chambers
220 South 1st Street
Broken Arrow, OK
74012

1. Call To Order

2. Roll Call

3. Old Business

4. Consideration of Consent Agenda

- A. [26-134](#) Approval of Planning Commission meeting minutes of December 18, 2025

Attachments: [12-18-2025 Minutes](#)

- B. [26-135](#) Approval of PT-002580-2025|PR-000809-2025, Preliminary Plat, Harvest Church BA, approximately 4.56 acres, 1 Lot, AG (Agricultural) to CG (Commercial General) via BAZ-002238-2025, and SP-002459-2025, located at the northwest corner of New Orleans Street (101st Street) and 9th Street (177th E. Avenue/Lynn Lane Road)

Attachments: [2-Preliminary Plat](#)
[3-Checklist](#)

5. Consideration of Items Removed from Consent Agenda

6. Public Hearings

- A. [26-133](#) Public hearing, consideration, and possible action regarding BAZ-002565-2025 (Rezoning), Oneta 71, LLC, approximately 16.875 acres, AG (Agricultural) to CG (Commercial General) located approximately one-tenth mile north of the northwest corner of E. Kenosha Street (71st Street) and Oneta Road (241st E. Avenue).

Attachments: [BAZ-002565-2025 1a Case Map](#)
[BAZ-002565-2025 1b Aerial Map](#)
[BAZ-002565-2025 1c Legal Description](#)

- B. [26-145](#) Public hearing, consideration, and possible action regarding PUD-002514-2025 (Planned Unit Development) and BAZ-002575-2025 (Rezoning), Pediatrics Plus, 14.55 acres, RS (Residential Single-Family) and RM (Residential Multi-Family) to AG (Agricultural) and CG (Commercial General), located just south of Washington St (91st Street) and just east of Aspen Ave (145th E Avenue)

Attachments: [2 - Case Map](#)
[3 - Aerial Photo](#)
[4 - Pediatric Plus Development Outline](#)
[5 - Applicant Statement](#)

- C. [26-150](#) Public hearing, consideration, and possible action regarding PUD-002550-2025 (Planned Unit Development) and BAZ-002374-2025 (Rezoning), D&B Processing, 9.15 acres, AG (Agricultural) to IL (Industrial Light)/PUD-002550-2025, abrogation of PUD-193, located one-half mile south of Washington Street (91st Street), one-half mile east of the Creek Turnpike

Attachments: [2-Case Map](#)
[3-Aerial](#)
[4-Comprehensive Plan](#)
[5-PUD-002550-2025 Design Statement](#)

7. Appeals

8. General Commission Business

9. Remarks, Inquiries and Comments by Planning Commission and Staff (No Action)

10. Adjournment

NOTICE:

- 1. ALL MATTERS UNDER “CONSENT” ARE CONSIDERED BY THE PLANNING COMMISSION TO BE ROUTINE AND WILL BE ENACTED BY ONE MOTION. HOWEVER, ANY CONSENT ITEM CAN BE REMOVED FOR DISCUSSION, UPON REQUEST.**
- 2. IF YOU HAVE A DISABILITY AND NEED ACCOMMODATION IN ORDER TO PARTICIPATE IN THE MEETING, PLEASE CONTACT THE COMMUNITY DEVELOPMENT DEPARTMENT AT 918-259-8412, TO MAKE ARRANGEMENTS.**
- 3. EXHIBITS, PETITIONS, PICTURES, ETC. PRESENTED TO THE PLANNING COMMISSION MAY BE RECEIVED AND DEPOSITED IN CASE FILES TO BE MAINTAINED AT BROKEN ARROW CITY HALL.**
- 4. RINGING/SOUND ON ALL CELL PHONES AND PAGERS MUST BE TURNED OFF DURING THE PLANNING COMMISSION MEETING.**

A paper copy of this agenda is available upon request.

POSTED this ____ day of _____, _____, at _____ a.m./p.m.

City Clerk



City of Broken Arrow

Request for Action

File #: 26-134, **Version:** 1

**Broken Arrow Planning Commission
01-08-2026**

To: Chairman and Commission Members
From: Community Development Department
Title:

Approval of Planning Commission meeting minutes of December 18, 2025

Background: Minutes recorded for the Broken Arrow Planning Commission meeting.

Attachments: 12 18 2025 Planning Commission Minutes

Recommendation: Approve minutes of Planning Commission meeting held December 18, 2025.

Reviewed By: Jane Wyrick

Approved By: Rocky Henkel



City of Broken Arrow

Minutes

Planning Commission

Robert Goranson Chairman
Jason Coan Vice Chairman
Jaylee Klempa Commissioner
Jonathan Townsend Commissioner
Mindy Payne Commissioner

City of Broken Arrow
220 South 1st Street
Broken Arrow, OK
74012

Thursday, December 18, 2025

5:30 p.m.

Council Chambers

1. Call to Order

Chairman Robert Goranson called the meeting to order at 5:33 p.m.

2. Roll Call

Present: 5 - Mindy Payne, Jonathan Townsend, Jaylee Klempa, Jason Coan, Robert Goranson

3. Old Business - NONE

4. Consideration of Consent Agenda

- A. 25-1761 Approval of Planning Commission meeting minutes of November 20, 2025
- B. 25-1762 Approval of Planning Commission meeting minutes of December 4, 2025
- C. 26-76 Approve LOT-002536 Ninth College Rentals, LLC Lot Line Adjustment 0.40 acres, 2 lots to 2 lots, RMD (Residential Medium Density), approximately one-half mile south of East Kenosha Street (71st Street), east of 9th Street (177th East Avenue, Lynn Lane Road)
- D. 26-89 Approval of PT-002546-2025|PR-000762-2024, Conditional Final Plat for Ferguson Kia, 6.37 acres, RMF (Residential Multifamily) to CH (Commercial Heavy)/PUD-236A via BAZ-2071 and PUD-001972-2025 via BAZ-001971-2025, one-half mile north of Kenosha Street (71st Street), one-quarter mile east of Elm Place (161st E. Avenue), south of the Broken Arrow Expressway

MOTION: A motion was made by Robert Goranson, seconded by Jaylee Klempa
Move to Approve Consent Agenda

The motion carried by the following vote:

Aye: 5 - Mindy Payne, Jonathan Townsend, Jaylee Klempa, Jason Coan, Robert Goranson

5. Consideration of Items Removed from Consent Agenda - NONE

6. Public Hearings

- A. 25-1716 **Public hearing, consideration, and possible action regarding COMP-002532-2025, Comprehensive Plan Change, (Case Number) (Comprehensive Plan Change), Oneta71, LLC, 8.8 acres from Level 1 (Rural Residential/Greenway/Floodplain) to Level 4 (Commercial/Employment Nodes) located approximately one-tenth mile north of the northwest corner of E. Kenosha Street (71st Street) and Oneta Road (241st E. Avenue).**

Rebecca Blaine, Planning Section Manager, presented Item 25-1716. A Comprehensive Plan Change COMP-002532-2025 for an 8.8-acre portion of a larger 16.39-acre site at the northwest corner of East Kenosha Street and Onetta Road, requesting a change from Level One Rural Residential/Greenway Floodplain to Level Four Commercial Employment Nodes to allow for future commercial development. The applicant intends to follow approval with a rezoning request to Commercial General, consistent with the Level Four designations already applied to adjacent properties to the south and east. While the surrounding land remains largely agricultural or residential estate use, and part of the site lies within the FEMA 100-year floodplain, utilities are available, and the requested designation aligns with the Comprehensive Plan's development pattern for the area. Based on these factors, the staff recommended approval of the plan amendment, contingent upon the property being platted.

Lou Reynolds of Eller & Deitrich, the applicant, explained that the purpose of the comprehensive plan amendment is to allow development of a grocery store on the site, noting that a previous proposal for mini storage was considered about 18 months ago but is no longer

the intent. Mr. Reynolds stated agreement with the staff recommendation and offered to answer any questions from the board.

Colten Jay, a nearby resident, spoke in opposition to the proposed comprehensive plan change, explaining that he lives directly across the street from the site with his family and that he had spoken with several neighbors who share similar concerns. He cited anticipated increases in traffic and extended operating hours, pedestrian safety risks for children and pets, noise and light pollution, and the limited capacity of the existing two-lane road. Mr. Jay also raised concerns about declining property values, proximity to existing grocery and convenience stores, loss of rural residential character, impacts on privacy and quality of life, litter, livestock welfare, potential stormwater contamination, and vehicle headlights shining into nearby homes. He stated that these issues led him and his neighbors to oppose the proposed change.

During the discussion of the proposed comprehensive plan amendment, Mr. Jay clarified that his property lies directly east of the site along Onetta Road. He reiterated concerns about traffic, lighting, and quality-of-life impacts. The applicant, Mr. Reynolds, responded that the project is a grocery store, not a convenience store or mini storage, and stated that stormwater will be entirely handled under city regulations, sidewalks will be required along Kenosha and Onetta, lighting will be contained on site, and traffic impacts will be addressed through platting and engineering review, noting the intersection is already signalized for commercial growth. City staff explained that access points will meet ordinance requirements, including minimum spacing from intersections, and that a detailed site plan will be reviewed later through the engineering process. After confirming that the proposal is conceptual at this stage and that the staff were comfortable proceeding, the board indicated it was appropriate to consider action on the item.

MOTION: A motion was made by Jonathan Townsend, Robert Goranson
Move to Approve Item 25-1716 COMP-002532-2025, Comprehensive Plan Change, (Case Number) (Comprehensive Plan Change), Oneta71, LLC, 8.8 acres from Level 1 (Rural Residential/Greenway/Floodplain) to Level 4 (Commercial/Employment Nodes) located approximately one-tenth mile north of the northwest corner of E. Kenosha Street (71st Street) and Oneta Road (241st E. Avenue).

The motion carried by the following vote:

Aye: 3 - Jonathan Townsend, Jaylee Klempa, Robert Goranson
Nay: 2 - Mindy Payne, Jason Coan

B. 26-82 Public hearing, consideration, and possible action regarding PUD-002490-2025 (Planned Unit Development) and BAZ-002489-2025 (Rezoning), American Storage of BA, approximately 24.9 acres, A-1 (Agricultural) to PUD (Planned Unit Development) located west of the Creek Turnpike, east of South 209th East Avenue (N. 37th Street), and north of East Houston Street (East 81st Street)

Rebecca Blaine, Planning Section Manager, presented Item 26-82. A Rezoning Request BAZ-002489-2025, which proposes changing the property's zoning from A-1 Agricultural to a Planned Unit Development, allowing Commercial Heavy and Industrial Light uses. The request would permit retail, warehouse, office, and storage development on the northern portion of the site and mini-storage on the southern portion. Staff explained that Commercial Heavy is appropriate within Level Six of the Comprehensive Plan and that Industrial Light uses are allowed when incorporated into a PUD. With surrounding properties also designated Level Six and largely undeveloped agricultural land, staff found the request consistent with the Comprehensive Plan and recommended approval of the rezoning and associated PUD, subject to the property being platted.

During the discussion of the rezoning and PUD request, Nicole Wallace of Wallace Design Collective agreed with the staff's recommendation to approve. Board members asked for clarification on landscaping requirements, specifically the difference between landscape buffers in Development Areas A and B along the Creek Turnpike. Ms. Wallace explained that the intent is to provide a consistent 50-foot landscape buffer with trees along the turnpike for both areas, with additional buffering for the mini-storage area. After reviewing the PUD tables and exhibits, it was acknowledged that the language could be clarified to reflect the intent better, and Ms. Wallace confirmed the applicant's willingness to address any inconsistencies.

MOTION: A motion was made by Mindy Payne, seconded by Jason Coan
Move to Approve Item 26-82 PUD-002490-2025 (Planned Unit Development) and BAZ-002489-2025 (Rezoning), American Storage of BA, approximately 24.9 acres, A-1 (Agricultural) to PUD (Planned Unit Development) located west of the Creek Turnpike, east of South 209th East Avenue (N. 37th Street), and north of East Houston Street (East 81st Street)

The motion carried by the following vote:

Aye: 5 - Mindy Payne, Jonathan Townsend, Jaylee Klempa, Jason Coan, Robert Goranson

Public hearing, consideration, and possible action regarding BAZ-002469-2025 (Rezoning) and SP-002526-2025 (Conditional Use Permit), Islamic Center of Tulsa, 15.06 acres, AG (Agricultural) and FD (Floodplain) to CG (Commercial General) and FD (Floodplain), located approximately ½ mile north of Tucson Street (121st Street) and just east of Olive Avenue (129th E. Avenue)

Jose Jimenez, Planner II, presented Item 25-1766. A a rezoning request and conditional use permit for a 15.06-acre property owned by the Islamic Center of Tulsa, proposing to change the zoning from agricultural and floodplain to Commercial General and floodplain to allow a mixed development consisting of a commercial retail center along Olive Avenue, an Islamic Center in the central portion of the site, and a rear area reserved for a retention pond and undeveloped floodplain land. The property is designated Level Six in the Comprehensive Plan, which supports Commercial General zoning, and access is planned from Olive Avenue near the Creek Turnpike interchange. A conditional use permit is required for the place of assembly, with parking to be finalized through site plan review, though a conceptual layout shows 726 spaces. Surrounding properties are largely vacant or agricultural, with some nearby assembly and residential uses, and all development will comply with city and FEMA floodplain regulations. Based on plan consistency, location, and surrounding land uses, staff recommended approval of both the rezoning and the conditional use permit.

Rick Brown, the architect representing the Tulsa Islamic Association, explained that the project is planned as a multi-phase development on the agriculturally zoned site, noting that similar places of assembly already exist nearby, including a church, establishing precedent for the proposed use. He described Phase One as the construction of the prayer hall and support spaces, Phase Two as the completion of the second-floor classrooms and a women's prayer area, and a later phase as the addition of a gym. Mr. Brown stated that while the mosque could be built under agricultural zoning with a conditional use permit, the long-term plan includes a future 20,000-square-foot retail and office component along Olive Avenue, which necessitates Commercial General zoning. However, that commercial portion is not expected to be developed immediately.

During the discussion of the rezoning and conditional use permit for the Islamic Center of Tulsa, board members focused on timing, traffic, parking, noise, and future commercial development. Staff clarified that the rezoning would not take effect until platting occurs and that the conditional use permit would expire if the applicant does not actively pursue permits within the required timeframe, independent of any future retail development. Mr. Brown explained the phased construction plan for the mosque, anticipated peak activity primarily during Friday midday services, use of onsite traffic control during busy periods, and minimal daily traffic otherwise. He emphasized that all prayers occur inside the building, with no external speakers or amplified calls to prayer, noting that operations would comply with the city's noise ordinance and be comparable to those of nearby churches. The discussion acknowledged that many concerns raised would be further evaluated during the site plan and engineering review processes.

Uslam Saed identified himself as a longtime attendee and leader at the Islamic Society of Tulsa and explained that for more than 25 years, the mosque he attends has operated within a residential neighborhood without using outdoor speakers or generating noise complaints. He emphasized that daily prayers are conducted quietly inside the building and that the community has never considered broadcasting prayers externally. Mr. Saed stated that, given this experience and the proposed site's location next to a church and near the turnpike, he does not anticipate noise or neighborhood impacts from the planned Islamic Center.

During the discussion, board members addressed public concerns raised online about noise, operations, and neighborhood impacts associated with the proposed Islamic Center, noting that conditions could be added to a conditional use permit if approved. Mr. Saed explained that, for more than 25 years, the Islamic Society of Tulsa has operated quietly within a residential neighborhood, emphasizing respect for neighbors, the use of no outdoor speakers, and internal messaging to minimize impacts. He clarified that the Broken Arrow facility would not replace the existing Tulsa mosque but operate alongside it to relieve overcrowding and parking pressure, particularly during Ramadan, and that the new site's larger parking supply is intended to meet long-term needs. Mr. Saed also noted that fencing and gating would be added in the future, as was done at the Tulsa location. He reaffirmed that the organization's growth and timeline have been driven by gradual fundraising and increased community demand.

Further discussion focused on clarifying the scope, timing, and impacts of the proposed Islamic Center rezoning and conditional use permit, with board members emphasizing that the actions before them are limited to zoning and the CUP rather than final site design. Mr. Brown and Mr. Saed explained that the project will be built in phases as funding is raised, with Phase One intended to be a complete, finished structure, and that similar projects have not stalled or become nuisances. Peak traffic is expected primarily on Friday afternoons, with minimal daily activity otherwise, and traffic control measures would be used as needed. There will be no

external speakers or amplified calls to prayer, and operations will comply with the city's noise ordinance. Questions about parking, sewer service, and floodplain treatment were addressed, noting that septic will be used initially due to the lack of nearby sewer service, with a potential future connection if the infrastructure extends. The board clarified that rezoning and the conditional use permit are separate actions, that approvals would expire if not actively pursued. That detailed design, traffic, drainage, and engineering issues would be handled later through the formal site plan and permitting processes.

Phil Armstrong, president and CEO of OCCJ, urged approval of the project as more than a land-use decision, framing it as a statement about community, inclusion, and shared values. Drawing on his experience leading Greenwood Rising amid controversy, he emphasized that meaningful civic spaces can foster understanding, resilience, and unity. Mr. Armstrong highlighted the contributions of Muslim residents to the region. He described the proposed center as a place not only for worship, but for dialogue, connection, and cross-cultural relationships. He argued that approving the project would affirm Broken Arrow as a city that embraces diversity as a strength and chooses understanding, compassion, and community over fear and division.

Colby Palmer spoke in support of the project, emphasizing the importance of religious freedom and mutual respect among people of different faiths. Drawing on his lifelong ties to Broken Arrow and Christian upbringing, he shared positive experiences with members of the Muslim community, describing them as charitable and supportive of the broader community. Palmer concluded that supporting the project aligns with shared values of loving one's neighbor and upholding the right of all people to practice their faith freely.

Cherie Thomas spoke in opposition to the proposed Islamic Center, arguing that she believes such developments represent a broader ideological threat rather than a simple religious facility. She expressed concerns that Islam is incompatible with American laws, culture, and the Constitution, warned against what she described as the creation of "no-go zones," and urged officials to prioritize protecting local culture, legal systems, and citizens' rights. While stating that individuals should be treated with kindness, she called on the city to reject the project based on her view that Islamic ideology is hostile to Western civilization.

Shawn Murray spoke in opposition to the project, framing his concerns as cultural and ideological rather than logistical. He argued that Islam is incompatible with the U.S. Constitution and American values, particularly citing fears about women's rights and cultural influence on children. Mr. Murray stated that he does not want what he views as Islamic ideology imposed on his family or community, asserted that many residents share these concerns, and urged officials to consider constituent opposition and the broader cultural impact rather than focusing solely on infrastructure or land-use issues.

Mersadies Clewien spoke in support of the project, sharing her background growing up Christian in rural Oklahoma, and how exposure to people of other faiths in college taught her that those who practice different religions are not hateful or evil, just different. She emphasized that Muslims, like Christians, are diverse individuals and that some of the kindest people she has known in Broken Arrow are Muslim. She argued that freedom of religion must apply equally to all faiths, noting the stark imbalance between the hundreds of Christian churches in the Tulsa metro area and the tiny number of mosques, which forces Muslims in Broken Arrow to travel to Tulsa to worship. She described this as a double standard and affirmed that, although she is not Muslim, she stands with the Muslim community and believes they deserve the same rights and opportunities to worship as any other Americans.

Gabrielle McKinley spoke in opposition to the project, expressing fears based on international examples of extremist groups such as the Taliban, Hamas, Boko Haram, and ISIS, which she described as having declared Islamic states governed by Sharia law and rejecting existing national laws and borders. She argued that these groups use tactics such as immigration, population growth, and cultural pressure to gain control over regions and impose religious law. Ms. McKinley asserted that Islam views Sharia law as supreme over civil law and questioned whether a mosque could have a hidden agenda to undermine local, state, or federal laws. She asked what actions the city would take if a mosque were found to be attempting to introduce or enforce Sharia law in Broken Arrow.

Randall Stigney, a retired physician and Broken Arrow resident, spoke in opposition to the proposed mosque and related zoning, arguing that Oklahoma law requires commercial zoning changes to demonstrably enhance the surrounding community. He questioned whether a mosque would improve nearby property values, attract adjacent businesses, or be welcomed by residents if located near their homes. He expressed distrust of assurances given by proponents, citing the concept of *taqiyya*, which he claimed allows deception in Islam, and raised concerns about potential calls to prayer. Mr. Stigney characterized Islam as a violent, misogynistic culture rather than a religion, referenced historical and contemporary examples of violence committed by extremist groups, alleged unequal treatment of women under Sharia law, and

argued that Islam is incompatible with American values and constitutional principles. He urged the commission to consider these cultural and societal impacts in its decision.

Phil Byers spoke in opposition to the rezoning, stating that opponents deserved equal opportunity to express their concerns after supporters had spoken at length. He focused on rezoning impacts and cultural issues, particularly skepticism about assurances that calls to prayer would remain indoors, citing what he described as the Islamic doctrine of *taqiyya* and expressing distrust that noise ordinances would be enforced, citing examples from other cities. He argued that a mosque would not truly serve all people, claimed Islamic texts are hostile to Christians and Jews, and asserted that Islam does not support freedom of religion, free speech, or the U.S. Constitution. Mr. Byers also raised practical concerns about potential wetlands on the property that could restrict development and concluded by stating that American soldiers died to uphold constitutional freedoms, which he believes Muslims do not support.

Kevin Egley opposed the proposal, citing concerns about increased traffic congestion near the Creek Turnpike interchange and questioning whether planned infrastructure improvements will address it. He argued that city planning decisions also shape community culture and warned that allowing a mosque would negatively affect Broken Arrow in the long term. Drawing on his military service and experiences living overseas, as well as examples from cities like Minneapolis, Dearborn, and New York, he claimed that Islamic communities initially integrate peacefully but later seek political influence, which he believes conflicts with the U.S. Constitution. He urged city leaders to prioritize constitutional principles over political correctness and emphasized that their decision would have long-term consequences for the community.

Heidi Martinez, a 25-year resident of Broken Arrow, spoke strongly in support of the mosque, sharing her long-standing personal experience with the Muslim community. She described Muslims as kind, generous, and charitable friends who have become like family to her, despite her being openly Christian. She expressed concern that some Muslims were afraid to attend the meeting due to hostility and bigotry. She emphasized that the issue before the commission is about constitutional rights, not Islam versus Christianity. Ms. Martinez argued that freedom of religion applies to all faiths, reminded the body that many sacrificed for that freedom, and urged commissioners to see Muslims as neighbors and fellow Broken Arrow residents who deserve the same right to worship near their homes.

Doc Sublett spoke from an economic development perspective rather than a religious one, expressing concern that a prominent mosque across from the city's taxpayer-funded 90-acre innovation district could negatively impact efforts to attract high-paying jobs, major investors, and high-end businesses. As a longtime business owner and Broken Arrow taxpayer, he argued that visual context matters when recruiting companies to locate, and he worried that the presence of a large religious facility could make it harder to "sell" the area to potential investors. He urged decision-makers to prioritize protecting and maximizing the city's significant public investment and to ensure the innovation district has every advantage in competing for economic development.

Angie Stephens said she recently moved to Broken Arrow and raised concerns after learning about the proposal. She questioned the project's financial readiness, noting that only about half of the mosque's funding has been secured, and expressed concern that construction could stall, leaving an unfinished or blighted site. Drawing on her background as a kindergarten teacher, she also raised concerns about Friday afternoon traffic around 1:00, asking how long services last and how increased congestion could affect school buses, parents, and children, especially as nearby neighborhoods grow. She raised concerns about potential noise and emphasized the need for long-term planning, stating that, given these issues, she opposes the project.

Linda Russell spoke in opposition, focusing on zoning, infrastructure, and regulatory concerns rather than religion. She questioned whether a mosque meets the intent of a Level Six Comprehensive Plan designation, which emphasizes employment and commercial intensity. She argued the proposed use does not align with those standards. She raised concerns about development intensity, septic-based wastewater limitations versus municipal sewer, emergency access and ingress/egress constraints, lack of secondary access, increased traffic and fire response demands, proximity to floodplain and the Creek Turnpike, and compliance with city engineering standards and the International Fire Code. She also cited Oklahoma Administrative Code requirements governing onsite sewage systems and lagoons, arguing these constraints further undermine feasibility. Based on these planning, engineering, and regulatory issues, she opposed both the rezoning and the conditional use permit.

Karen Hardin opposed the rezoning on planning, infrastructure, environmental, and public safety grounds, arguing it would effectively override the city's comprehensive plan. She stated that existing infrastructure cannot support the proposal due to traffic ingress and egress limitations, lack of municipal sewer, septic system constraints, floodplain issues, and DEQ wastewater regulations, asserting that septic limitations should be a decisive barrier given the

scale and occupancy of the proposed development. She contended that the request constitutes preferential treatment and spot zoning, driven by a specific site plan rather than a comprehensive reevaluation of the area, and that it sets a harmful precedent that could erode greenway and floodplain protections along the corridor. She warned that approving rezoning before adequate roads, utilities, and access exist undermines long-term infrastructure planning and environmental stewardship, and she questioned why cumulative impacts and precedent were being ignored. She also referenced safety concerns related to the land's ownership history, asserting these factors warranted denial of the rezoning.

Patricia Highland opposed the rezoning on planning and infrastructure grounds, emphasizing that her objection was not religious. She argued that the property lacks adequate ingress and egress on all sides, including the north and south sides and the floodplain area, making it currently inaccessible and unsuitable for development. She warned that approval would eventually require taxpayer-funded road and infrastructure improvements, which she strongly opposed. She stated the proposal fails to meet legal standards, floodplain and greenway constraints, zoning ordinance requirements, emergency access needs, and basic parking capacity, asserting the site cannot even accommodate small gatherings. She described the property as unsustainable due to runoff, groundwater, and utility limitations, suggested the buyer was misled about its viability, and urged decision-makers to visit the site in person, concluding that the rezoning should be denied on these practical and legal grounds.

Billy Wiland opposed the zoning request by recounting a personal experience during a trip to Jerusalem in which he said young children attacked him in a Muslim area because he was Jewish, an incident he described as learned hatred instilled by adults rather than the children themselves. He framed the story as a moral and spiritual warning about the responsibility of parents and leaders in shaping beliefs and values, emphasizing that his response is rooted in prayer rather than hatred. He concluded by urging the board to deny the zoning request, expressing concern about what he views as the cultural and ideological implications rather than the children or individuals themselves.

Randy Prevatt opposed the zoning request based on his personal experience living in the Middle East for 5 years as a civilian contractor. He said repeated calls to prayer broadcast over loudspeakers were disruptive and asserted that he does not want similar noise in Broken Arrow. His primary concern was noise, particularly early morning amplification, which he believes would negatively affect nearby residents and property values and could cause people to move away. He also expressed skepticism that noise ordinances could effectively prevent such broadcasts. In addition, he raised concerns about stormwater runoff from a large parking area, questioning how water from hundreds of vehicles would be managed, to which staff responded that onsite detention would be required during the engineering and design phase.

James Gillis spoke in opposition to the proposal, arguing that the council demonstrated bias by not challenging or redirecting comments made in support of the project while, in his view, dismissing or minimizing opposing concerns as irrelevant or social-media-based. He stated that opponents had researched Islamic texts and history and claimed that Islam seeks to impose Sharia law through gradual cultural influence. Mr. Gillis cited examples from Michigan that he believes illustrate political and cultural changes following increased Muslim representation, expressed fears about erosion of constitutional values and women's rights, and warned that the project represents a broader ideological threat rather than a simple zoning matter.

Alan Jackson spoke in opposition to the proposed zoning change for the Islamic Center, framing his comments as a formal notice to the Planning Commission. He argued that Oklahoma is a common-law state rooted in Christian principles and cited portions of the Oklahoma Constitution, the Northwest Ordinance, and legal maxims to support his view that government authority derives from God and exists to protect what he described as divinely grounded rights and liberties. Mr. Jackson contended that zoning approval for the Islamic Center would conflict with these principles and urged commissioners, as trustees and agents of the people, to vote no to protect the general welfare, the constitutional foundations, and the public's rights.

Karla Morris spoke in opposition to the proposal, citing concerns about infrastructure strain, such as sewage capacity and noise, and expressing a preference for keeping the land agricultural and rural. She argued that rural areas should remain quiet, low-density, and free from what she views as incompatible development, stating that residents moved there for privacy and open space. Ms. Morris also raised objections to foreign land ownership. She expressed broader fears about Islam and mosques in the United States, asserting that community opposition should be decisive and urging the commission to reject the proposal to preserve the area's rural character and perceived safety.

Caleb Mitchell spoke in support of the proposal, addressing concerns about noise and infrastructure by noting that similar issues already exist with other nearby developments and would apply to any project in the area. He compared potential noise to familiar sounds, such as

church bells, and emphasized that ingress and egress challenges are not unique to the mosque. Mr. Mitchell shared that he lives nearby, welcomed the mosque as a neighbor, and expressed support for religious freedom for all faiths, noting that the group's willingness to build in Broken Arrow reflects a desire to be part of the community.

Ralph McClendon, a longtime Broken Arrow resident, opposed the proposal by arguing that while he has known Muslims who were good people, he believes Islam itself promotes violence against nonbelievers and poses a long-term threat to the community. He cited alleged incidents elsewhere involving weapons and militant agendas, expressed fears of future coercion or force, and urged officials to stop the project at the zoning or permitting stage to avoid what he sees as serious future consequences.

Mark Smith, a 40-year Broken Arrow resident, argued that the proposal conflicts with the city's secular BA Next comprehensive plan by introducing what he described as a religious "way of life" that governs social, political, and economic behavior. He expressed concern that a mosque with a future retail component could impose restrictive leasing practices, create noise and traffic impacts from daily calls to prayer, and reduce property values and economic attractiveness in the Forge Innovation District and surrounding neighborhoods. He questioned how the city would enforce ordinances, raised concerns about cultural conflict and alleged organizational associations, and urged the commission to reject both the zoning and related requests.

Chris Jacobson, a 31-year Broken Arrow resident and petroleum engineer, opposed the proposal primarily on infrastructure grounds, warning that a large septic or anaerobic system would likely create serious drainage and groundwater problems for properties downhill to the south, based on his firsthand experience with nearby developments. He argued the site's soil conditions and planned parking areas make effective percolation unlikely, increasing runoff risks. He also cited past problems with nearby casino and event center projects as reasons for community sensitivity. He said existing traffic congestion on Olive Avenue shows the area is not ready for such intensive use. He concluded the development is premature and that the land would be better reserved for future commercial use once infrastructure can support it.

Bo Stall, a longtime resident, disabled veteran, and parent, opposed the proposal by urging the commission to view it strictly as a zoning and code issue informed by her extensive personal experience living in Saudi Arabia and working in dozens of Muslim-majority countries. He said he has firsthand knowledge of religious persecution, violence, abuse of women and children, and the cultural impacts that can follow small initial developments, warning that promises made early often change over time, including calls to prayer. He argued that zoning codes exist to prevent long-term harm to communities, that Broken Arrow is a place his family chose for safety and freedom, and that approving the project risks undermining those values. He closed by urging the commission to protect constitutional liberties and community standards, emphasizing that freedom must be actively defended.

Linda M., an ordained Christian minister, said she opposed the proposal based on concerns she described as rooted in national security and law enforcement intelligence rather than personal animus. She urged commissioners, city leaders, and police to seek additional training, citing FBI documents from 2014 and 2019 that she said discuss long-term strategic goals of the Muslim Brotherhood in North America and its alleged ties to Islamic organizations. She argued that not all Muslims are radicalized but claimed that adherence to Sharia law leads to radicalization over time, asserted that some mosques are part of a broader ideological movement, and warned that communities must educate themselves to respond appropriately. She emphasized that her position was framed as a call for awareness and preparedness rather than hatred, and encouraged officials to seek outside training resources.

John McCabe, a longtime Broken Arrow resident, raised concerns about floodplain risk, wastewater runoff standards, and the adequacy of septic systems, given Oklahoma's frequent flooding. He also warned that recent changes to the city's noise ordinance could allow amplified sound for up to ten minutes. He urged the commission to impose permanent restrictions on any exterior speakers or minarets to prevent future calls to prayer.

Tammy Keefer, a retired military veteran, opposed the proposal based on national security and cultural concerns, citing her military experience in Muslim-majority countries and affiliations she believes exist between the North American Islamic Trust and other Islamic organizations. She expressed fears about Sharia law influencing local life, potential trauma for veterans associated with calls to prayer, questioned organizational ties and funding, and argued that the development should not be approved.

Kamran Karimi, a longtime Tulsa-area resident who said he emigrated from Iran decades ago and now serves as a Christian pastor, spoke in opposition to the proposal, citing personal history and ideological concerns. She argued that the mosque represents a political or cultural statement rather than a place of worship and said it could generate fear within the community.

While stating that she has Muslim friends and does not accuse the local applicants personally, she warned that Islam as a system seeks influence and control once it gains numerical strength. She urged the commission to scrutinize funding sources, explicitly citing the North American Islamic Trust, and encouraged officials to "follow the money," asserting that financial backing could signal broader intentions beyond local religious use.

Jamye Bittell spoke in opposition to the proposal, arguing that the mosque does not align with the city's comprehensive plan and expressing concern for the long-term future of her children. She framed her opposition around cultural and ideological issues, citing historical examples from the Middle East and asserting that Islamic law is incompatible with Western freedoms and assimilation. She claimed that Islam ultimately seeks dominance rather than coexistence, referenced violence against Christians in places like Nigeria, and urged commissioners to consider global precedents rather than assurances given locally. She concluded by recounting a recent personal interaction she perceived as aggressive, reinforcing her concerns about community impact and safety.

John Huffines urged the commission to keep the roughly 15-acre property zoned agricultural, arguing that open land has intrinsic value beyond development potential. He emphasized that agricultural zoning supports long-range planning by maintaining spatial balance, preventing overconcentration of development, and preserving flexibility for the future. He also highlighted the environmental benefits of undeveloped land, including stormwater absorption, natural drainage, and groundwater recharge, noting that these functions are permanently diminished once land is rezoned and developed. He concluded that preserving the land in its open state better serves the community than immediate development.

Robert Easton stated that after 26 years serving the Broken Arrow and Tulsa communities as a paramedic and instructor, and after volunteering in Israel during the recent conflict, he believes Islam poses a serious threat to communities. He described witnessing what he characterized as deception and violence toward non-Muslims, both abroad and locally, claiming that influence and pressure from the Islamic community affected his professional work. He expressed concern about psychological and cultural impacts, including the call to prayer, alleged misinformation, and what he views as a historical pattern of expansion and coercion, warning that similar outcomes seen in the Middle East and parts of Europe could occur locally if the project proceeds.

Mary Ann Colston thanked the commissioners for the opportunity to speak and emphasized her long-standing involvement in Broken Arrow civic efforts, particularly in drainage and flooding issues. She focused her comments on environmental and infrastructure concerns, expressing serious reservations about flooding, stormwater, and sewage impacts associated with the site. She noted that the proposed sewage area appears very close to White Church Creek, a tributary of Hakey Creek, and questioned whether DEQ would approve such proximity. She stressed that the property lies within the Hakey Creek watershed and designated greenway, which imposes fundamental limits on development intensity, emergency access, and long-term maintenance. She warned that rezoning to commercial general would increase impervious surfaces, alter runoff patterns, reduce flood storage capacity, and create downstream risks, arguing these impacts are predictable consequences of intensifying development in environmentally constrained floodplain areas.

Michelle DeBoer argued that the commission should prioritize the will of the people over zoning plans, stating that public opposition expressed at the meeting should outweigh technical considerations. She contended that both U.S. and Oklahoma law prohibit foreign ownership of land and claimed this would invalidate the zoning and conditional use requests. She also asserted that houses of worship operating under 501(c)(3) status cannot legally rent or manage commercial property. She warned that approving the proposal could expose the city and commissioners to legal liability. She raised concerns about common-law drainage obligations, arguing that downstream property owners could be harmed, and concluded by alleging that the project could indirectly support terrorism, urging the commission to deny the request on grounds of legal compliance rather than planning discretion.

Nathan Dahm thanked the commissioners for their service and patience, then argued that supporters of the proposal offered emotional appeals rather than factual justifications. He contended that Islam is incompatible with Western civilization. He emphasized that the proposal fails on practical planning grounds, asserting that the site cannot physically accommodate the proposed building size, 750 parking spaces, septic systems, drainage, and commercial components when compared to nearby churches with far fewer parking spaces and larger road access. He highlighted traffic concerns, noting the surrounding two-lane roads and the proximity to school dismissal times, and argued that similar, but smaller, facilities already cause congestion. He concluded that the commissioners had been given many concrete reasons to vote no and no substantive reasons to vote yes, and urged denial of the request.

Theresa Powell emphasized their love for Broken Arrow and concern for preserving its character, noting that nearby roads are already near capacity and not designed to handle large surges of traffic associated with a major facility. They warned that increased vehicles, noise, parking overflow, and crowding would negatively impact neighborhood quality of life, and raised concerns about limited infrastructure, including water, septic, and drainage capacity. While acknowledging others had raised similar points, they urged the council to proceed cautiously and ensure any decision prioritizes public safety, neighborhood peace, and the long-term well-being of the community.

Brenda Long, a lifelong Broken Arrow resident, argued that broadcasting an Islamic call to prayer over loudspeakers would resemble psychological warfare, comparing it to historical uses of loudspeaker propaganda intended to intimidate, confuse, and disrupt daily life. She expressed concern that repetitive, loud, foreign-language broadcasts from early morning to night could cause sleep deprivation, fear, confusion, and trigger PTSD, particularly for veterans. While stating that she does not oppose the mosque as a building, she urged that any approval must permanently prohibit the use of external loudspeakers, emphasizing that freedom of religion should not infringe on residents' right to peace.

Clint Fulton, a Broken Arrow resident, spoke in opposition to rezoning land south of the Creek Turnpike, arguing it would create safety risks and long-term negative consequences for the community. He expressed distrust of the proposed mosque, asserting it is funded by foreign actors and claiming that Muslims would exploit zoning rules while concealing harmful intentions. He distinguished the nearby Christian church as nonthreatening, warned that the impacts might not be felt immediately but would affect future generations, and said he felt compelled to speak out to protect his children and the community, even if his concerns were viewed as repetitive or unpopular.

Derek Mills, an immigrant from England, said most of his concerns had already been covered, but added two points. He argued that the public notice signs for the rezoning were poorly placed and effectively invisible to drivers traveling at speed, limiting public awareness. Drawing on his experience in England, he warned that large-scale immigration there began quietly but became increasingly disruptive over time, leading to political bloc voting and the election of Muslim leadership in significant cities. He stated that while he does not oppose Muslims as individuals, he is concerned about long-term cultural and political impacts based on what he has witnessed abroad.

Catherine Davis, a Broken Arrow resident of six years, said she does not oppose immigrants but strongly opposes Islam, which she believes is incompatible with American law and culture. She expressed fear for her daughters and argued that Islam seeks conquest and deception rather than coexistence. Speaking from her Christian faith, she affirmed her belief in Yahweh and Jesus Christ as the foundation of truth and salvation, rejected Muhammad's claims as a prophet, and stated she will not accept or submit to any religion other than Christianity, regardless of consequence.

Therese Lawless opposed both the rezoning from agricultural to commercial and the requested conditional use permit, arguing that many residents learned of the proposal only very recently and did not have adequate time to review or respond. She said approving the proposal before broader community awareness and input was inappropriate and that concerns about traffic, drainage, and infrastructure alone should be sufficient to deny it. She expressed distrust of the applicant's intentions, framing the rezoning as a gateway to long-term impacts she believes would negatively affect Broken Arrow and Oklahoma. She urged decision-makers to study outcomes in other cities before acting and to consider the long-term consequences of their decisions rather than treating them as routine zoning matters.

George Schaffer opposed the proposal by arguing that Islam is not merely a religion but a geopolitical ideology, citing his personal experiences in Africa and the violence he witnessed against Christians and Jews. He said he believes Muslims are trained to deceive, referenced historical and global conflicts, and expressed deep concern about long-term risks to future generations. He urged commissioners to carefully consider the consequences of permitting the project, framing the decision as one that could endanger children and grandchildren rather than a routine zoning matter.

Derek Massengill opposed moving forward at this stage, arguing, based on his experience as a general contractor, that the site's traffic and infrastructure cannot support the proposed scale of development. He said a septic system could not handle a facility with roughly 700 parking spaces and that city sewer would be required. He emphasized that the applicant lacks confirmed funding and has not completed engineering or feasibility studies, calling the proposal premature and a "pipe dream." He urged the commission to require the applicant to return only after securing funding, completing proper studies, and presenting a fully developed plan, warning that approving a phased project without resources risks leaving the city with an unfinished eyesore similar to past failed developments.

Gary Thomas opposed the proposal by citing the East Plano Islamic Center project in Texas as a cautionary example, arguing that a development initially presented as legally compliant later became the subject of investigations and lawsuits by the Texas governor, attorney general, and other agencies over alleged zoning, environmental, financial, and consumer protection violations. He warned that similar issues could arise in Broken Arrow, particularly related to environmental permitting, septic systems near floodplains, funding transparency, and long-term public safety. He urged the commission to consider these risks and avoid exposing the city to what he described as a potential future legal and infrastructure "train wreck."

Mary Bishop Baldwin urged the commission to base its decision strictly on zoning law and constitutional principles, not on opposition to the applicant's religion. She emphasized that the First Amendment, the Oklahoma Constitution, the Oklahoma Religious Freedom Act of 2023, and recent directives from Governor Stitt all prohibit government bodies from discriminating against religious entities or denying public benefits, such as zoning changes or conditional use permits, on the basis of spiritual identity. She argued that rejecting the request based on the applicant being Muslim would violate state and federal law, noting that religious freedom must apply equally to all, not selectively.

Derek Davis argued that, beyond infrastructure concerns like drainage, Islam as an ideology is fundamentally incompatible with Western civilization. He asserted that Islam does not support core Western values such as freedom of speech, freedom of expression, or freedom of religion, claiming that questioning religious authority is forbidden and that deception is permitted if it advances Islamic goals. He contrasted this with Christianity and American principles, which he described as grounded in truth and individual liberty. He concluded that Islam seeks power and domination rather than coexistence, making it unsuitable for Broken Arrow or Oklahoma.

Mark Smentowski raised concerns about infrastructure and traffic, noting that 129th Street already experiences significant congestion during peak hours and that this congestion would likely worsen with additional development. He also cited research about the landowner, North American Islamic Trust, alleging past associations with extremist activity, including being named an unindicted co-conspirator in a 2007 federal case, reports of terrorist attendance at NAIT-controlled mosques, and claims that NAIT has taken control of mosques nationwide by replacing moderate leadership with more hardline clergy. He concluded that these factors raise serious concerns about approving the project.

Grady Thompson said that while drainage is an issue, his primary concern is safety and traffic. He argued that, in his view, the proportion of Muslims involved in terrorist attacks is higher than that of Christians, proposing a public safety concern. He also emphasized that adding a facility with roughly 700 parking spaces onto an already congested two-lane road would not work and would worsen traffic. Finally, he questioned why the project should be approved at all if the applicants do not currently have the funding to build it.

Barry Piles opposed both the zoning change and the permit, arguing that the proposal is primarily for a mosque and therefore should not be approved as a commercial zoning request, even with a secondary commercial component. He stated that the site plan appears to be only conceptual and lacks the detailed engineering review usually required, including confirmation of approval by the engineering department. He also raised concerns about the feasibility of sanitary sewer systems, noting that ODEQ setback requirements from streams could prohibit a leach field if a blue stream is present. Based on these issues, he urged the board to disapprove the request due to improper zoning classification and insufficient technical detail.

Lane Brown opposed the proposal, arguing that approving it would endanger public safety by inviting future violence into the community. He cited recent attacks involving U.S. service members and claimed that allowing the project would create long-term risks for families, schools, and future generations. He asserted that approving one such development would lead to more attempts elsewhere and urged the commission to reject the request to avoid what he described as serious safety consequences.

Darrell Startwell, a third-generation Broken Arrow resident, opposed the proposal, arguing that the information presented understated its real impacts. He said the architect minimized traffic concerns by suggesting congestion would be limited, while representatives of the mosque acknowledged attending prayers multiple times daily, indicating more frequent traffic. He raised environmental concerns, stating that an extensive septic system near a freshwater supply would risk contamination and noting he has personally been denied permits for similar proximity issues. He also contended that the development would negatively affect nearby property values and potentially drive residents away. He concluded by questioning what long-term planning the commission is pursuing if such impacts are overlooked.

Wade Miller, a 35-year Broken Arrow resident and father of three, spoke in opposition to the rezoning request. He said he values Broken Arrow as a place to raise a family and believes the decision would affect generations. Framing his comments as a public safety concern, he stated

that while many Muslims are peaceable, he considers some forms of fundamental or orthodox Islam involve conquest and subjugation. He questioned what assurances the commission could provide that such ideology would not develop over time in Broken Arrow, arguing they could not give an adequate answer beyond hope. He also cited his personal experience working in the Middle East and described the call to prayer as loud and frequent, saying he would not want that near nearby residents or the neighboring church. He closed by urging commissioners to have courage, weigh long-term effects, and view their responsibility as protecting citizens.

Eddie Grant suggested that instead of rezoning the property outright from agricultural to commercial general, the commission consider a dual zoning or retaining agricultural zoning to preserve future options, especially given the funding uncertainties and unresolved concerns. He questioned why a commercial rezoning would move forward without clearer information on flooding and downstream drainage impacts, noting that paving roughly seven acres would significantly affect stormwater. He raised doubts about whether retention ponds or septic systems could legally or effectively be placed in the floodplain. He warned that relocating those elements could reduce parking and conflict with sound engineering practices. He concluded that, regardless of the proposed use, a shift to commercial zoning would have substantial impacts on traffic and flooding, and that these impacts should be more fully evaluated before approval.

Michael Pescia, a resident of the Stonehorse neighborhood who drives the affected road daily, said existing traffic congestion is already a problem during rush hour and that adding commercial development would significantly worsen it. He expressed concern that road widening would likely be required and that residents would not support using their tax dollars to expand infrastructure for a project many oppose. He argued that bringing large numbers of people from outside the area into a quiet residential corridor would raise safety concerns, negatively affect property values, and undermine the peaceful character that drew families to the neighborhood. He concluded that the land should remain agricultural, warning that rezoning could force residents to move due to declining property values, reduced child safety, and the loss of the area's quiet nature.

Christi Gillespie thanked the Planning Commission for their volunteer service and urged a no vote based on the comprehensive plan and economic development concerns rather than religion. Drawing on her experience as a former Broken Arrow city councilor and current state senator, she emphasized that South Broken Arrow's revitalization and future growth depend heavily on sales tax–tax-generating development. She argued that the proposed project would create a third place of assembly within proximity, generating little to no sales tax and undermining municipal funding for infrastructure and public services. She said the small retail component would not offset the economic loss, noted the lack of a city sewer plan, and described the project as a self-contained use inconsistent with Broken Arrow's development patterns. She further stated the proposal conflicts with the comprehensive plan by blocking a planned frontage road along the Creek Turnpike between Aspen and Olive, limiting future connectivity and commercial visibility at a key city gateway. For these reasons, she concluded the project does not comply with the comprehensive plan or sound economic development principles and should be denied.

The applicant's rebuttal focused on logistics and enforceable conditions: no basement is planned; Friday services currently run twice at the Tulsa mosque because of crowd size, but would be a single, roughly 30-minute service at each location once Broken Arrow has its own site, while weekday prayer attendance is described as small, and heavier traffic is mainly on Friday and Ramadan. They said they already hire police for onsite traffic control in Tulsa and would do the same here, and reiterated that existing Tulsa-area mosques do not broadcast calls to prayer. Commissioners and staff confirmed that a conditional use permit could prohibit the use of loudspeakers and that the city could also enforce its noise ordinance. Regarding drainage and septic, the applicant stressed that engineering has not yet been done, claimed there is usable acreage outside the floodplain for leach fields and stormwater design, and acknowledged the plan might need to be reduced once studies are completed. Frontage-road questions drew a response that no one had approached them yet, but they would dedicate the needed right-of-way during platting. After closing the hearing, commissioners debated land-use and tax impacts versus comprehensive-plan consistency, emphasized that they must base decisions on adopted plans and law rather than public emotion, and agreed that the rezoning and conditional-use permit should be voted on as separate items.

MOTION: A motion was made by Jason Coan, seconded by Jonathan Townsend
Move to Approve Item 25-1766 BAZ-002469-2025 (Rezoning) and SP-002526-2025 (Conditional Use Permit), Islamic Center of Tulsa, 15.06 acres, AG (Agricultural) and FD (Floodplain) to CG (Commercial General) and FD (Floodplain), located approximately ½ mile north of Tucson Street (121st Street) and just east of Olive Avenue (129th E. Avenue)

The motion carried by the following vote:
Aye: 4 - Jonathan Townsend, Jaylee Klempa, Jason Coan, Robert Goranson
Nay: 1 - Mindy Payne

MOTION: A motion was made by Jason Coan, seconded by Jonathan Townsend
Move to Approve Item 25-1766 BAZ-002469-2025 (Rezoning) and SP-002526-2025 (Conditional Use Permit), Islamic Center of Tulsa, 15.06 acres, AG (Agricultural) and FD (Floodplain) to CG (Commercial General) and FD (Floodplain), located approximately ½ mile north of Tucson Street (121st Street) and just east of Olive Avenue (129th E. Avenue) with Conditional use permit with no broadcast outside

The motion carried by the following vote:
Aye: 3 - Jonathan Townsend, Jason Coan, Robert Goranson
Nay: 2 - Mindy Payne, Jaylee Klempa

7. Appeals - NONE

8. General Commission Business – NONE

9. Remarks, Inquiries, and Comments by Planning Commission and Staff (No Action)

Rocky Henkel, Director of Community Development, reported that interviews for the Downtown Master Plan Study were completed this week, and staff will bring a recommendation for a consultant to the City Council on either January 6 or January 20.

10. Adjournment

The meeting was adjourned at 10:30 p.m.

MOTION: A motion was made by Mindy Payne, seconded by Jaylee Klempa
Move to Adjourn

The motion carried by the following vote:
Aye: 5 - Mindy Payne, Jonathan Townsend, Jaylee Klempa, Jason Coan, Robert Goranson



City of Broken Arrow

Request for Action

File #: 26-135, **Version:** 1

**Broken Arrow Planning Commission
01-08-2026**

To: Chairman and Commission Members
From: Community Development Department
Title:

Approval of PT-002580-2025|PR-000809-2025, Preliminary Plat, Harvest Church BA, approximately 4.56 acres, 1 Lot, AG (Agricultural) to CG (Commercial General) via BAZ-002238-2025, and SP-002459-2025, located at the northwest corner of New Orleans Street (101st Street) and 9th Street (177th E. Avenue/Lynn Lane Road)

Background:

Applicant: Danyell Blankenship, Route 66 Engineering
Owner: Richard Manganaro, Harvest Church Broken Arrow
Developer: Harvest Church Broken Arrow
Engineer: Billy Cox, Route 66 Engineering
Location: Northwest corner of New Orleans Street (101st Street) and 9th Street (177th East Avenue/Lynn Lane Road)
Size of Tract 4.56 acres
Number of Lots: 1
Zoning: AG (Agricultural) to CG (Commercial General) via BAZ-002238-2025, SP-002459-2025
Comp Plan: Level 4 - Commercial/Employment Nodes

PT-002580-2025, the preliminary plat for Harvest Church BA, proposes to have 1 lot on 4.56 acres. This property is located at the northwest corner of New Orleans Street and Lynn Lane Avenue. On July 14, 2025 City Council approved a rezoning for this property from AG (Agricultural) to CG (Commercial General). A conditional use permit, SP-002459-2025, was approved for this property on December 2, 2025 to allow for place of assembly use.

This lot is proposed to house both a place of assembly and a commercial development. Proposed access is available from New Orleans Street and Lynn Lane Road.

According to FEMA maps, none of this property is located in 100-year floodplain. Water is available from the City of Broken Arrow, and sanitary sewer will be available with a planned sewer line extension. This preliminary plat was reviewed by the Technical Advisory Committee on December 30, 2025.

Attachments: Preliminary Plat; Checklist

Recommendation:

Staff recommends that PT-002580-2025|PR-000809-2025, Preliminary Plat, Harvest Church BA, be approved subject to the attached comments.

Reviewed by: Jane Wyrick

Approved by: Rocky Henkel

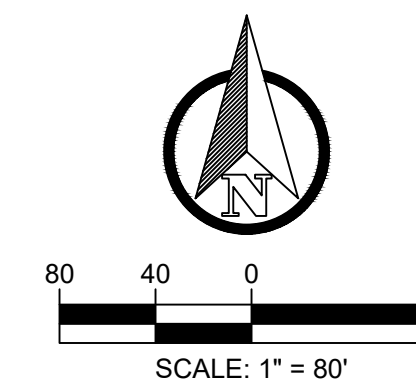
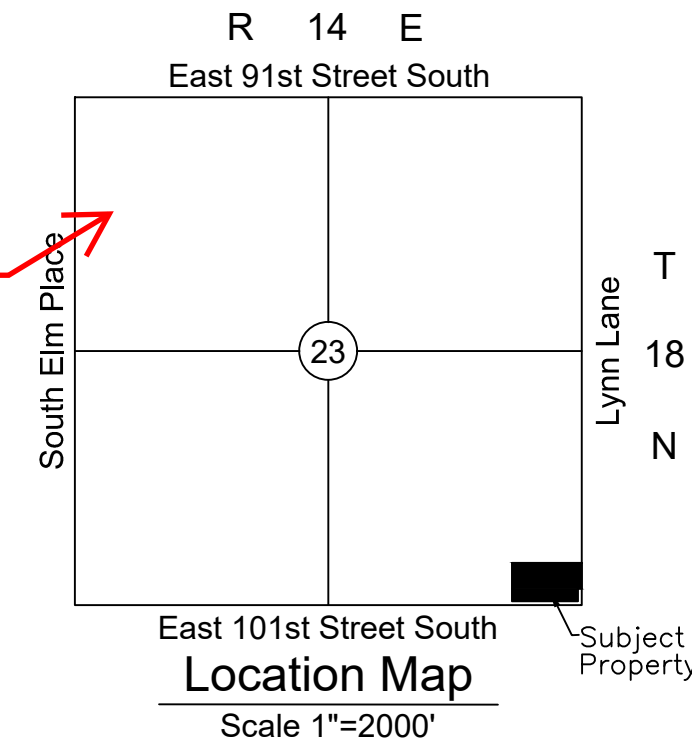
MEH

PLAT NO.

PRELIMINARY FINAL PLAT

HARVEST CHURCH BA

A SUBDIVISION IN THE CITY OF BROKEN ARROW, TULSA COUNTY, OKLAHOMA, BEING A PART OF THE SE/4 OF THE SW/4 OF SECTION TWENTY THREE (6), TOWNSHIP 18 NORTH, RANGE 14 EAST OF THE INDIAN BASE AND MERIDIAN.



OWNER / DEVELOPER
HARVEST CHURCH BROKEN ARROW, INC
1814 SOUTH MAIN STREET
BROKEN ARROW, OK 74012
PH (918) 259-8037
manganaro@harvestchurchba.com

SURVEYOR
WALLACE DESIGN COLLECTIVE
123 NORTH MARTIN
LUTHER KING JR. BLVD.
TULSA, OKLAHOMA 74103
PH (918) 584-5858
E-mail: cliff.bennett@wallace.design
CA No. 1460 Renewal: June 30, 2026

ENGINEER
ROUTE 66 ENGINEERING, LLC
5 S MAIN STREET
SAPULPA, OK 74066
PH (918) 248-1129
E-mail: bcox@66eng.com
CA No. 8853 Renewal: June 30, 2027

SURVEY DATE:
MAY 05, 2025

PLAT DATE:
DECEMBER 08, 2025

E01
List the BA project number
PR-000809-2025
on all plat submittals and
sheets

HARVEST CHURCH BA
PRELIMINARY PLAT - DECEMBER 08, 2025
Sheet 1 of 2

E10
An ODE from the facility to the creek may be needed if the discharge from the facility is not returned to an overland flow condition. This easement will need to be filed separately and the document number with the easement will need to be shown on the plat.

E04
Add a physical description of the location of each benchmark, these need to be able to be located without using GPS equipment.

E03
Benchmark symbols don't match what is shown on the plan

E09
Show a 20' easement along the North boundary as part of the sanitary sewer extension from the City of BA for this area.
The detention facility will need to be adjusted to locate the top of the bank with the location of the manhole.

E13
Add a legend for the linetypes used

E06
Unless detention will be developed in the NE corner the easement needs to be changed to an overland drainage easement

E07
Add an address and finish floor elevation placeholder

E12
Add Distances and bearings to the proposed R/W

E11
Label the POC and the POB and include the bearing and distance between them

E05
All text on the plat needs to be a minimum height of 0.10

E08
Add a section for the FIRM panel number, the effective date, and the zone that the parcel is in.

BENCHMARK

Benchmark 1
MAGNETIC NAIL
ELEV= 692.87
N=377853.85
E=2624423.404

Benchmark 2
MAGNETIC NAIL
ELEV= 703.18
N=377826.182
E=2624691.912

Benchmark 3
CHISELED "X"
ELEV= 708.54
N=377904.432
E=2624967.492

ADDRESSES

ADDRESSES SHOWN ON THIS PLAT ARE ACCURATE AT THE TIME THE PLAT WAS FILED. ADDRESSES ARE SUBJECT TO CHANGE AND SHOULD NEVER BE RELIED ON IN PLACE OF THE LEGAL DESCRIPTION.

ACC. = LIMITS OF ACCESS
LNA = LIMITS OF NO ACCESS
RW/E = RESTRICTED WATERLINE
EASEMENT
U/E = UTILITY EASEMENT
B/L = BUILDING SETBACK LINE
R/W = RIGHT-OF-WAY
SF = SQUARE FEET

SUBDIVISION CONTAINS 1 LOT IN 1 BLOCK

SUBDIVISION CONTAINS 4.56 TOTAL ACRES

THIS PLAT MEETS THE OKLAHOMA MINIMUM STANDARDS FOR THE PRACTICE OF LAND SURVEYING AS ADOPTED BY THE OKLAHOMA STATE BOARD OF LICENSURE FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS.

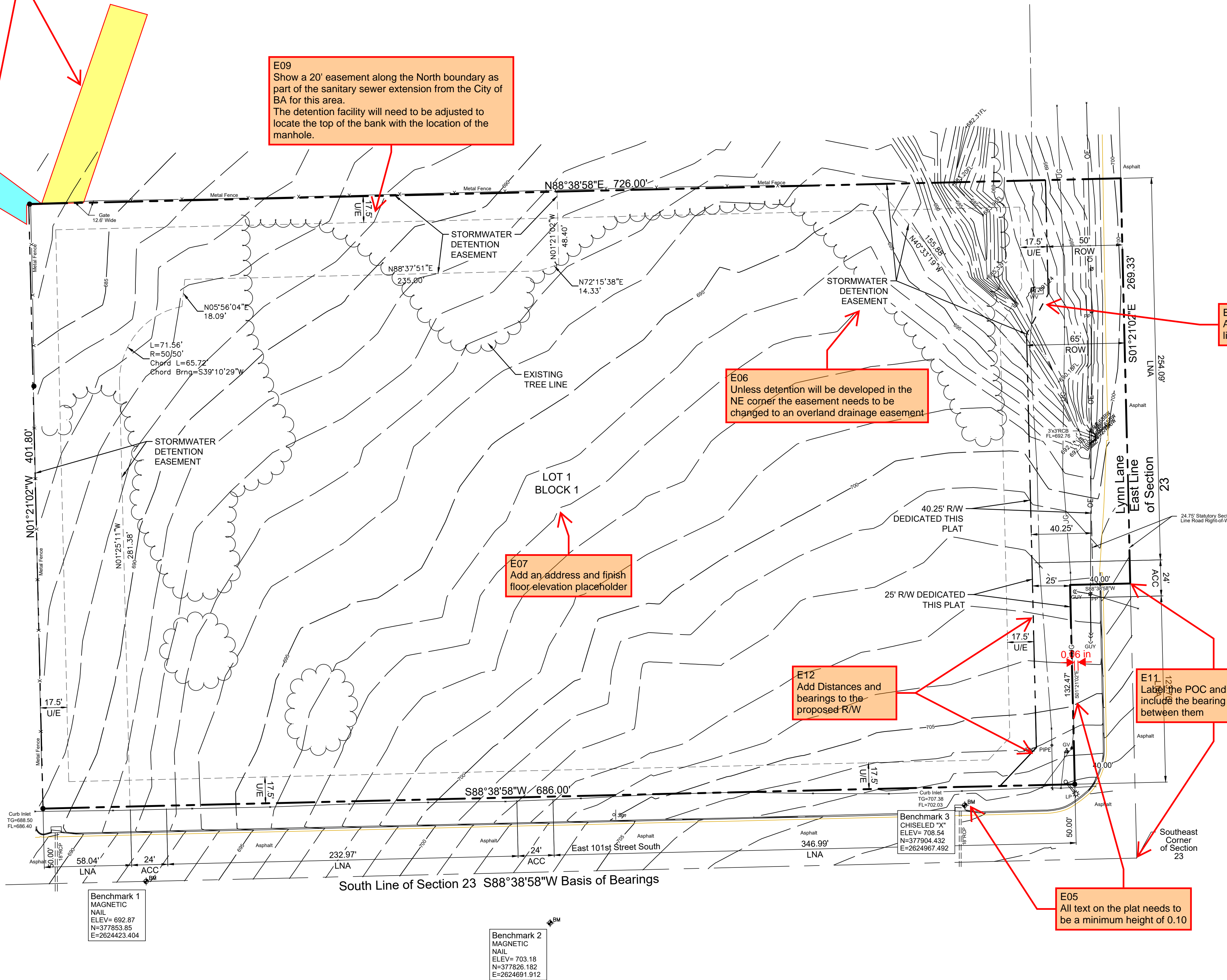
LEGAL DESCRIPTION

A TRACT OF LAND LYING IN THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER (SE/4, SE/4) OF SECTION TWENTY-THREE (23), TOWNSHIP EIGHTEEN (18) NORTH, RANGE FOURTEEN (14) EAST OF THE INDIAN BASE AND MERIDIAN, CITY OF BROKEN ARROW, TULSA COUNTY, ACCORDING TO THE U.S. GOVERNMENT SURVEY THEREOF; AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS TO-WIT:

COMMENCING AT THE SOUTHEAST CORNER OF THE SOUTHEAST QUARTER OF SAID SECTION TWENTY-THREE (23); THENCE N01°21'02"W AND ALONG THE EAST LINE OF SAID SE/4 FOR A DISTANCE OF 182.47 FEET TO THE **POINT OF BEGINNING**; THENCE S88°38'58"W FOR A DISTANCE OF 40.00 FEET; THENCE S01°21'02"E FOR A DISTANCE OF 132.47 FEET; THENCE S88°38'58"W FOR A DISTANCE OF 686.00 FEET; THENCE N01°21'02"W FOR A DISTANCE OF 401.80 FEET; THENCE N88°38'58"E FOR A DISTANCE OF 726.00 FEET TO A POINT ON THE EAST LINE OF SAID SE/4; THENCE S01°21'02"E AND ALONG THE EAST LINE OF SAID SE/4 FOR A DISTANCE OF 269.33 FEET TO THE **POINT OF BEGINNING** (P.O.B.). SAID TRACT CONTAINING 286,408.00 SQUARE FEET OR 6.48 ACRES, MORE OR LESS.

BASIS OF BEARING

HORIZONTAL DATUM BASED UPON NAD 83 (1993) OKLAHOMA STATE PLANE COORDINATE SYSTEM NORTH ZONE 3501. VERTICAL DATUM BASED UPON NAVD 88 USING S88°38'58"W AS THE SOUTH LINE OF SECTION 23, TOWNSHIP 18 NORTH, RANGE 14 EAST OF THE INDIAN BASE AND MERIDIAN WAS USED AS THE BEARING FOR THIS SURVEY.



PRELIMINARY FINAL PLAT

HARVEST CHURCH BA

DEED OF DEDICATION AND DECLARATION OF RESTRICTIVE COVENANTS

KNOW ALL MEN BY THESE PRESENTS:

HARVEST CHURCH BA, HEREINAFTER REFERRED TO AS THE "OWNER/DEVELOPER", IS THE OWNER OF THE FOLLOWING DESCRIBED LAND IN THE CITY OF BROKEN ARROW, TULSA COUNTY, STATE OF OKLAHOMA, TO-WIT:

A TRACT OF LAND LYING IN THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER (SE/4, SE/4) OF SECTION TWENTY-THREE (23), TOWNSHIP EIGHTEEN (18) NORTH, RANGE FOURTEEN (14) EAST OF THE INDIAN BASE AND MERIDIAN, CITY OF BROKEN ARROW, TULSA COUNTY, ACCORDING TO THE U.S. GOVERNMENT SURVEY THEREOF, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS TO-WIT:

COMMENCING AT THE SOUTHEAST CORNER OF THE SOUTHEAST QUARTER OF SAID SECTION TWENTY-THREE (23); THENCE N01°21'02"W AND ALONG THE EAST LINE OF SAID SE/4 FOR A DISTANCE OF 182.47 FEET TO THE **POINT OF BEGINNING**; THENCE S88°38'58"W FOR A DISTANCE OF 40.00 FEET; THENCE S01°21'02"E FOR A DISTANCE OF 132.47 FEET; THENCE S88°38'58"W FOR A DISTANCE OF 686.00 FEET; THENCE N01°21'02"W FOR A DISTANCE OF 401.80 FEET; THENCE N88°38'58"E FOR A DISTANCE OF 726.00 FEET TO A POINT ON THE EAST LINE OF SAID SE/4; THENCE S01°21'02"E AND ALONG THE EAST LINE OF SAID SE/4 FOR A DISTANCE OF 269.33 FEET TO THE **POINT OF BEGINNING** (P.O.B.); SAID TRACT CONTAINING 286,408.00 SQUARE FEET OR 6.48 ACRES, MORE OR LESS.

AND HAS CAUSED THE ABOVE DESCRIBED TRACT OF LAND TO BE SURVEYED, STAKED, PLATTED, AND SUBDIVIDED INTO 1 LOT, 1 BLOCK IN CONFORMITY WITH THE ACCOMPANYING PLAT AND SURVEY(HEREINAFTER THE "PLAT"), HAS ENTITLED AND DESIGNATED THE SUBDIVISION AS "HARVEST CHURCH BA", A SUBDIVISION IN THE CITY OF BROKEN ARROW, TULSA COUNTY, STATE OF OKLAHOMA (HEREINAFTER "SUBDIVISION" OR "HARVEST CHURCH BA")

SECTION I. STREETS, EASEMENTS AND UTILITIES

1. PUBLIC STREETS AND UTILITY EASEMENTS

- 1.1. THE OWNER HEREBY DEDICATES TO THE PUBLIC THE UTILITY EASEMENTS DESIGNATED AS " U/OF R " UTILIT"EASEMENT" FOR THE SEVERAL PURPOSES OF CONSTRUCTING, MAINTAINING, OPERATING, REPAIRING, REPLACING, AND/OR REMOVING ANY AND ALL PUBLIC UTILITIES, INCLUDING STORM SEWERS, SANITARY SEWERS, TELEPHONE AND COMMUNICATION LINES, ELECTRIC POWER LINES AND TRANSFORMERS, GAS LINES, WATER LINES AND CABLE TELEVISION LINES, TOGETHER WITH ALL FITTINGS, INCLUDING THE POLES, WIRES, CONDUITS, PIPES, VALVES, METERS, MANHOLES AND EQUIPMENT FOR EACH OF SUCH FACILITIES AND ANY OTHER APPURTENANCES THERETO, WITH THE RIGHTS OF INGRESS AND EGRESS TO AND UPON THE UTILITY EASEMENTS FOR THE USES AND PURPOSES STATED, PROVIDED THE OWNER RESERVES THE RIGHT TO CONSTRUCT, MAINTAIN, OPERATE, LAY AND REPAIR OR REPLACE WATER LINES AND SEWER LINES, TOGETHER WITH THE RIGHT OF INGRESS AND EGRESS FOR SUCH CONSTRUCTION, MAINTENANCE, OPERATION, LAYING, REPAIRING AND RE-LAYING OVER, ACROSS AND ALONG ALL OF THE UTILITY EASEMENTS DEPICTED ON THE PLAT, FOR THE PURPOSE OF FURNISHING WATER AND/OR SEWER SERVICES TO AREAS DEPICTED ON THE PLAT. THE OWNER HEREIN IMPOSES A RESTRICTIVE COVENANT, WHICH COVENANT SHALL BE BINDING ON EACH LOT OWNER AND SHALL BE ENFORCEABLE BY THE CITY OF TULSA, OKLAHOMA, AND BY THE SUPPLIER OF ANY AFFECTED UTILITY SERVICE, THAT WITHIN THE UTILITY EASEMENTS DEPICTED ON THE ACCOMPANYING PLAT NO BUILDING, STRUCTURE OR OTHER ABOVE OR BELOW GROUND OBSTRUCTION THAT INTERFERES WITH STATED USES AND PURPOSES OF THE UTILITY EASEMENTS SHALL BE PLACED, ERECTED, INSTALLED OR MAINTAINED, PROVIDED NOTHING HEREIN SHALL BE DEEMED TO PROHIBIT DRIVES, PARKING AREAS, CURBING, LANDSCAPING AND CUSTOMARY SCREENING FENCES THAT DO NOT CONSTITUTE AN OBSTRUCTION.

2. STORMWATER DETENTION EASEMENTS

- 2.1. THE OWNER DOES HEREBY DEDICATE TO THE PUBLIC PERPETUAL EASEMENTS ON, OVER, AND ACROSS THE PROPERTY DESIGNATED AND SHOWN ON THE ACCOMPANYING PLAT AS "STORMWATER DETENTION EASEMENT" FOR THE PURPOSES OF PERMITTING THE FLOW, CONVEYANCE, RETENTION, DETENTION AND DISCHARGE OF STORMWATER RUNOFF FROM THE SUBDIVISION.
- 2.2. DETENTION, RETENTION AND OTHER DRAINAGE FACILITIES LOCATED WITHIN THE STORMWATER DETENTION EASEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARDS AND SPECIFICATIONS APPROVED BY THE CITY OF , BROKEN ARROW OKLAHOMA.
- 2.3. NO FENCE, WALL, BUILDING, OR OTHER OBSTRUCTION MAY BE PLACED OR MAINTAINED IN STORMWATER DETENTION EASEMENTS NOR SHALL THERE BE ANY ALTERATION OF GRADE IN SAID EASEMENTS UNLESS APPROVED BY THE CITY OF BROKEN ARROW, OKLAHOMA.
- 2.4. DETENTION, RETENTION, AND OTHER DRAINAGE FACILITIES SHALL BE MAINTAINED BY THE OWNER, TO THE EXTENT NECESSARY TO ACHIEVE THE INTENDED DRAINAGE, RETENTION, AND DETENTION FUNCTIONS INCLUDING REPAIR OF APPURTENANCES AND REMOVAL OF OBSTRUCTIONS AND SILTATION. DETENTION FACILITIES SHALL BE MAINTAINED BY THE OWNER IN ACCORDANCE WITH THE FOLLOWING MINIMUM STANDARDS:
 - 2.4.1. GRASS AREAS SHALL BE MOWED (IN SEASON) AT REGULAR INTERVALS OF FOUR WEEKS, OR LESS.
 - 2.4.2. CONCRETE APPURTENANCES SHALL BE MAINTAINED IN GOOD CONDITION AND REPLACED IF DAMAGED.
 - 2.4.3. THE DETENTION EASEMENT SHALL BE KEPT FREE OF DEBRIS.
 - 2.4.4. CLEANING OF SILTATION AND VEGETATION FROM CONCRETE CHANNELS SHALL BE PERFORMED TWICE YEARLY.
- 2.5. LANDSCAPING, APPROVED BY THE CITY OF BROKEN ARROW, OKLAHOMA, SHALL BE ALLOWED WITHIN THE DETENTION EASEMENTS.
- 2.6. IN THE EVENT THE OWNER SHOULD FAIL TO PROPERLY MAINTAIN THE DETENTION, RETENTION, AND OTHER DRAINAGE FACILITIES OR, IN THE EVENT OF THE PLACEMENT OF AN OBSTRUCTION, OR THE ALTERATION OF GRADE WITHIN A DETENTION EASEMENT, THE CITY OF BROKEN ARROW, OKLAHOMA, OR ITS DESIGNATED CONTRACTOR MAY ENTER AND PERFORM MAINTENANCE NECESSARY TO ACHIEVE THE INTENDED DRAINAGE AND DETENTION FUNCTIONS AND MAY REMOVE ANY OBSTRUCTION OR CORRECT ANY ALTERATION OF GRADE, AND THE COSTS THEREOF SHALL BE PAID BY THE OWNER. IN THE EVENT THE OWNER FAILS TO PAY THE COST OF MAINTENANCE AFTER COMPLETION OF THE MAINTENANCE AND RECEIPT OF A STATEMENT OF COSTS, THE CITY OF BROKEN ARROW, OKLAHOMA, MAY FILE OF RECORD A COPY OF THE STATEMENT OF COSTS IN THE LAND RECORDS OF THE TULSA COUNTY CLERK, AND THEREAFTER THE COSTS SHALL BE A LIEN AGAINST THE PROPERTY IN THE SUBDIVISION. A LIEN ESTABLISHED AS ABOVE PROVIDED MAY BE FORECLOSED BY THE CITY OF BROKEN ARROW, OKLAHOMA.

3. UTILITY SERVICE

- 3.1. OVERHEAD LINES FOR THE SUPPLY OF ELECTRIC, TELEPHONE AND CABLE TELEVISION SERVICES MAY BE LOCATED WITHIN THE PERIMETER EASEMENTS OF THE SUBDIVISION. STREET LIGHT POLES OR STANDARDS MAY BE SERVED BY OVERHEAD LINE OR UNDERGROUND CABLE, AND ELSEWHERE THROUGHOUT THE SUBDIVISION, ALL SUPPLY LINES INCLUDING ELECTRIC, TELEPHONE, CABLE TELEVISION AND GAS LINES SHALL BE LOCATED UNDERGROUND IN EASEMENTS DEDICATED FOR GENERAL UTILITY SERVICES AND IN THE RIGHTS-OF-WAY OF THE PUBLIC STREETS AS DEPICTED ON THE ACCOMPANYING PLAT. SERVICE PEDESTALS AND TRANSFORMERS, AS SOURCES OF SUPPLY AT SECONDARY VOLTAGES, MAY ALSO BE LOCATED IN GENERAL UTILITY EASEMENTS.
- 3.2. UNDERGROUND SERVICE CABLES AND GAS SERVICE LINES TO ALL STRUCTURES WITHIN THE SUBDIVISION MAY BE EXTENDED FROM THE NEAREST GAS MAIN, SERVICE PEDESTAL OR TRANSFORMER TO THE POINT OF USAGE DETERMINED BY THE LOCATION AND CONSTRUCTION OF SUCH STRUCTURE UPON THE LOT, PROVIDED UPON INSTALLATION OF A SERVICE CABLE OR GAS SERVICE LINE TO A PARTICULAR STRUCTURE, THE SUPPLIER OF SERVICE SHALL THEREAFTER BE DEEMED TO HAVE A DEFINITIVE, PERMANENT, EFFECTIVE AND NON-EXCLUSIVE EASEMENT ON THE LOT, COVERING A 5 FOOT STRIP EXTENDING 2.5 FEET ON EACH SIDE OF THE SERVICE CABLE OR LINE EXTENDING FROM THE GAS MAIN, SERVICE PEDESTAL OR TRANSFORMER TO THE SERVICE ENTRANCE ON THE STRUCTURE.
- 3.3. THE SUPPLIER OF ELECTRIC, TELEPHONE, CABLE TELEVISION AND GAS SERVICE, THROUGH ITS AGENTS AND EMPLOYEES, SHALL AT ALL TIMES HAVE THE RIGHT OF ACCESS TO ALL UTILITY EASEMENTS SHOWN ON THE PLAT OR OTHERWISE PROVIDED FOR IN THIS DEED OF DEDICATION FOR THE PURPOSE OF INSTALLING, MAINTAINING, REMOVING OR REPLACING ANY PORTION OF THE UNDERGROUND ELECTRIC, TELEPHONE, CABLE TELEVISION OR GAS FACILITIES,INSTALLED BY THE SUPPLIER OF THE UTILITY SERVICE.
- 3.4. THE OWNER OF ANY LOT SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE UNDERGROUND SERVICE FACILITIES LOCATED ON THE OWNERS LOT AND SHALL PREVENT THE ALTERATION OF GRADE OR ANY CONSTRUCTION ACTIVITY WHICH WOULD INTERFERE WITH THE ELECTRIC, TELEPHONE, CABLE TELEVISION OR GAS FACILITIES. EACH SUPPLIER OF THESE SERVICES SHALL BE RESPONSIBLE FOR ORDINARY MAINTENANCE OF UNDERGROUND FACILITIES, BUT THE LOT OWNER SHALL PAY FOR DAMAGE OR RELOCATION OF SUCH FACILITIES CAUSED OR NECESSITATED BY ACTS OF THE LOT OWNER OR THE LOT OWNER'S AGENTS OR CONTRACTORS.
- 3.5. THE COVENANTS SET FORTH IN THIS SUBSECTION SHALL BE ENFORCEABLE BY EACH SUPPLIER OF THE ELECTRIC, TELEPHONE, CABLE TELEVISION OR GAS SERVICE AND THE OWNER OF ANY LOT AGREES TO BE BOUND BY THESE COVENANTS.

4. WATER, SANITARY SEWER AND STORM SEWER SERVICES

- 4.1. THE OWNER OF ANY LOT SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE PUBLIC WATER MAINS, SANITARY SEWER MAINS, AND STORM SEWERS LOCATED ON THE OWNER'S LOT.
- 4.2. WITHIN UTILITY EASEMENTS, RESTRICTED WATERLINE, SANITARY SEWER, STORM SEWER AND DRAINAGE EASEMENTS DEPICTED ON THE ACCOMPANYING PLAT, THE ALTERATION OF GRADE FROM THE CONTOURS EXISTING UPON THE COMPLETION OF THE INSTALLATION OF A PUBLIC WATER MAIN, SANITARY SEWER MAIN, OR STORM SEWER OR ANY CONSTRUCTION ACTIVITY WHICH, IN THE JUDGMENT OF THE CITY OF BROKEN ARROW, WOULD INTERFERE WITH PUBLIC WATER MAINS, SANITARY SEWER MAINS, OR STORM SEWERS SHALL BE PROHIBITED.
- 4.3. THE CITY OF BROKEN ARROW, OKLAHOMA, OR ITS SUCCESSORS, SHALL BE RESPONSIBLE FOR ORDINARY MAINTENANCE OF PUBLIC WATER SYSTEMS, SANITARY SEWER MAINS, AND STORM SEWERS BUT THE LOT OWNER SHALL PAY FOR DAMAGE OR RELOCATION OF SUCH FACILITIES CAUSED OR NECESSITATED BY ACTS OF THE LOT OWNER, OR THE LOT OWNER'S AGENTS AND/OR CONTRACTORS.
- 4.4. THE CITY OF BROKEN ARROW, OKLAHOMA, OR ITS SUCCESSORS, SHALL AT ALL TIMES HAVE RIGHT OF ACCESS TO ALL UTILITY EASEMENTS, RESTRICTED WATERLINE, SANITARY SEWER, STORM SEWER AND DRAINAGE EASEMENTS DEPICTED ON THE ACCOMPANYING PLAT, OR OTHERWISE PROVIDED FOR IN THIS DEED OF DEDICATION, FOR THE PURPOSE OF INSTALLING, MAINTAINING, REMOVING OR REPLACING ANY PORTION OF UNDERGROUND WATER, SANITARY SEWER, OR STORM SEWER FACILITIES.
- 4.5. THE COVENANTS SET FORTH IN THIS SUBSECTION SHALL BE ENFORCEABLE BY THE CITY OF BROKEN ARROW, OKLAHOMA, OR ITS SUCCESSORS, AND THE OWNER OF EACH LOT AGREES TO BE BOUND BY THESE COVENANTS.

5. GAS SERVICE

- 5.1. THE SUPPLIER OF GAS SERVICE THROUGH ITS AGENTS AND EMPLOYEES SHALL AT ALL TIMES HAVE THE RIGHT OF ACCESS TO ALL UTILITY EASEMENTS SHOWN ON THE PLAT OR AS OTHERWISE PROVIDED FOR IN THIS DEED OF DEDICATION FOR THE PURPOSE OF INSTALLING, REMOVING, REPAIRING, OR REPLACING ANY PORTION OF THE FACILITIES INSTALLED BY THE SUPPLIER OF GAS SERVICE.
- 5.2. THE OWNER OF ANY LOT SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE UNDERGROUND GAS FACILITIES LOCATED WITHIN THE LOT AND SHALL PREVENT THE ALTERATION OF GRADE OR ANY OTHER CONSTRUCTION ACTIVITY WHICH WOULD INTERFERE WITH GAS SERVICE. THE SUPPLIER OF GAS SERVICE SHALL BE RESPONSIBLE FOR THE ORDINARY MAINTENANCE OF ITS FACILITIES, BUT THE LOT OWNER SHALL PAY FOR DAMAGE OR RELOCATION OF FACILITIES CAUSED OR NECESSITATED BY ACTS OF THE LOT OWNER, OR THE LOT OWNER'S AGENTS OR CONTRACTORS.
- 5.3. THE COVENANTS SET FORTH IN THIS SUBSECTION SHALL BE ENFORCEABLE BY THE SUPPLIER OF THE GAS SERVICE AND THE OWNER OF THE LOT AGREES TO BE BOUND BY THESE COVENANTS.

6. PAVING AND LANDSCAPING WITHIN EASEMENTS

- 6.1. THE OWNER OF ANY LOT DEPICTED ON THE ACCOMPANYING PLAT SHALL BE RESPONSIBLE FOR THE REPAIR OF DAMAGE TO LANDSCAPING AND PAVING OCCASIONED BY INSTALLATION OR NECESSARY MAINTENANCE OF UNDERGROUND WATER, SANITARY SEWER, STORM SEWER, NATURAL GAS, COMMUNICATION, CABLE TELEVISION OR ELECTRIC FACILITIES WITHIN THE EASEMENT AREAS DEPICTED UPON THE ACCOMPANYING PLAT, PROVIDED THE CITY OF BROKEN ARROW, OKLAHOMA, OR ITS SUCCESSORS, OR THE SUPPLIER OF THE UTILITY SERVICE SHALL USE REASONABLE CARE IN THE PERFORMANCE OF SUCH ACTIVITIES.

7. SIDEWALKS

- 7.1. SIDEWALKS TO BE CONSTRUCTED ALONG SOUTH 101st STREET SOUTH AND SOUTH LYNN LANE ROAD. SIDEWALKS SHALL BE CONSTRUCTED AND MAINTAINED IN CONFORMANCE WITH THE CITY OF BROKEN ARROW ENGINEERING DESIGN STANDARDS.

SECTION II. ENFORCEMENT, DURATION, AMENDMENT AND SEVERABILITY

1. ENFORCEMENT

THE RESTRICTIONS HEREIN SET FORTH ARE COVENANTS TO RUN WITH THE LAND AND SHALL BE BINDING UPON THE OWNER/DEVELOPER, ITS SUCCESSORS AND ASSIGNS. WITHIN THE PROVISIONS OF SECTION I. STREETS, EASEMENTS AND UTILITIES ARE SET FORTH CERTAIN COVENANTS AND THE ENFORCEMENT RIGHTS PERTAINING THERETO, AND ADDITIONALLY THE COVENANTS WITHIN SECTION I, WHETHER OR NOT SPECIFICALLY THEREIN SO STATED, SHALL INURE TO THE BENEFIT OF AND SHALL BE ENFORCEABLE BY THE CITY OF BROKEN ARROW, OKLAHOMA. IN ANY JUDICIAL ACTION BROUGHT TO ENFORCE THE COVENANTS ESTABLISHED WITHIN THIS DEED OF DEDICATION, THE DEFENSE THAT THE PARTY INITIATING THE EQUITABLE PROCEEDING HAS AN ADEQUATE REMEDY AT LAW IS HEREBY WAIVED

2. DURATION

THESE RESTRICTIONS AND COVENANTS, TO THE EXTENT PERMITTED BY APPLICABLE LAW, SHALL BE PERPETUAL BUT IN ANY EVENT SHALL BE IN FORCE AND EFFECT FOR A TERM OF NOT LESS THAN THIRTY (30) YEARS FROM THE DATE OF THE RECORDING OF THIS DEED OF DEDICATION UNLESS TERMINATED OR AMENDED AS HEREINAFTER PROVIDED.

3. AMENDMENT

THE COVENANTS CONTAINED WITHIN SECTION I. STREETS, EASEMENTS AND UTILITIES MAY BE AMENDED OR TERMINATED AT ANY TIME BY A WRITTEN INSTRUMENT SIGNED AND ACKNOWLEDGED BY THE BROKEN ARROW PLANNING COMMISSION, OR ITS SUCCESSORS WITH THE APPROVAL OF THE CITY OF BROKEN ARROW, OKLAHOMA. THE COVENANTS CONTAINED WITHIN SECTION II. PLANNED UNIT DEVELOPMENT STANDARDS MAY BE AMENDED OR TERMINATED AT ANY TIME BY A WRITTEN INSTRUMENT SIGNED AND ACKNOWLEDGED BY THE OWNERS OF A MAJORITY OF THE LAND WITHIN THE SUBDIVISION AND WITH THE CONCURRENCE OF THE CITY OF BROKEN ARROW.

4. SEVERABILITY

INVALIDATION OF ANY RESTRICTION SET FORTH HEREIN OR ANY PART THEREOF, BY AN ORDER, JUDGMENT, OR DECREE OF ANY COURT, OR OTHERWISE, SHALL NOT INVALIDATE OR AFFECT ANY OF THE OTHER RESTRICTIONS OR ANY PART THEREOF AS SET FORTH HEREIN, WHICH SHALL REMAIN IN FULL FORCE AND EFFECT.

CERTIFICATE OF OWNERSHIP
IN WITNESS WHEREOF, HARVEST CHURCH BA, BEING THE OWNER OF THE SUBDIVISION, HEREBY APPROVES THE FOREGOING DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS ON THIS

_____ DAY OF _____, 2025.

BY: _____
RICH MANGANARO, PASTOR

STATE OF OKLAHOMA _____)
COUNTY OF _____)

BEFORE ME, THE UNDERSIGNED, NOTARY OF PUBLIC IS AND FOR SAID COUNTY AND AND STATE, ON THIS _____ DAY OF _____, 2023 PERSONALLY APPEARED TO ME RICH MANGANARO, MANAGING OF HARVEST CHURCH BA, KNOWN TO BE THE IDENTICAL PERSON WHO SUBSCRIBED THEIR NAME AS THE MAKER OF THE FOREGOING INSTRUMENT, AS ITS OWNER AND ACKNOWLEDGED TO ME THAT EXECUTED THE SAME AS HIS FREE AND VOLUNTARY ACT AND DEED AND AS THE FREE AND VOLUNTARY ACT AND DEED OF SUCH COMPANY FOR THE USES AND PURPOSES THEREIN SET FORTH.

GIVEN UNDER MY HAND AND SEAL OF OFFICE THE DAY AND YEAR LAST ABOVE WRITTEN.

MY COMMISSION EXPIRES: _____ NOTARY PUBLIC

CERTIFICATE OF SURVEY

I, AARON BURNS, A REGISTERED LAND SURVEYOR IN THE STATE OF OKLAHOMA, HEREBY CERTIFY THAT I HAVE CAREFULLY AND ACCURATELY SURVEYED, SUBDIVIDED AND PLATTED THE TRACT OF LAND DESCRIBED ABOVE, AND THAT SAID PLAT DESIGNATED HEREIN AS THE FINAL PLAT OF "HARVEST CHURCH BA", A SUBDIVISION IN THE CITY OF BROKEN ARROW, TULSA COUNTY, STATE OF OKLAHOMA, IS A TRUE AND CORRECT REPRESENTATION OF SAID SURVEY.

WITNESS MY HAND AND SEAL THIS _____ DAY OF _____, 2025.

AARON BURNS
REGISTERED PROFESSIONAL LAND SURVEYOR
OKLAHOMA NO. 1923

STATE OF OKLAHOMA _____)
COUNTY OF _____)

BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, ON THIS _____ DAY OF _____, 2025., PERSONALLY APPEARED AARON BURNS TO ME KNOWN TO BE THE IDENTICAL PERSON WHO EXECUTED THE WITHIN AND FOREGOING INSTRUMENT.

GIVEN UNDER MY HAND AND SEAL THE DAY AND YEAR LAST ABOVE WRITTEN.

MY COMMISSION EXPIRES: _____ NOTARY PUBLIC

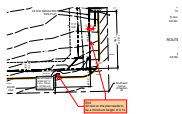
251208 Preliminary Plat-Harvest Church_v1.pdf Markup Summary

Group (2)



Subject: Group
Page Label: [1] PLAT
Author: jdickeson
Date: 12/16/2025 4:46:32 PM
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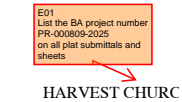
E10
An ODE from the facility to the creek may be needed if the discharge from the facility is not returned to an overland flow condition. This easement will need to be filed separately and the document number with the easement will need to be shown on the plat.



Subject: Group
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Author: jdickeson
Date: 12/16/2025 4:48:55 PM
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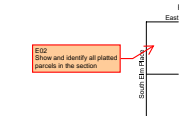
E05
All text on the plat needs to be a minimum height of 0.10

Jason Comments (12)



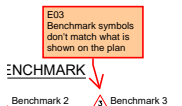
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Page Label: [1] PLAT
Author: jdickeson
Date: 12/16/2025 4:46:32 PM
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E01
List the BA project number PR-000809-2025 on all plat submittals and sheets



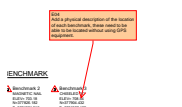
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Author: jdickeson
Date: 12/16/2025 4:46:32 PM
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E02
Show and identify all platted parcels in the section



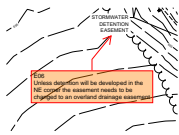
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Page Label: [1] PLAT
Author: jdickeson
Date: 12/16/2025 4:46:32 PM
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E03
Benchmark symbols don't match what is shown on the plan



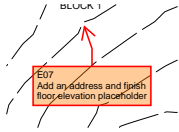
Subject: Jason Comments
Page Label: [1] PLAT
Author: jdickeson
Date: 12/16/2025 4:46:32 PM
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E04
Add a physical description of the location of each benchmark, these need to be able to be located without using GPS equipment.



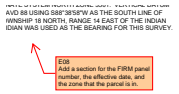
Subject: Jason Comments
Page Label: [1] PLAT
Author: jdickeson
Date: 12/16/2025 4:46:32 PM
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E06
Unless detention will be developed in the NE corner the easement needs to be changed to an overland drainage easement



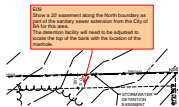
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E07
Add an address and finish floor elevation placeholder



Subject: Jason Comments
Page Label: [1] PLAT
Author: jdickeson
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E08
Add a section for the FIRM panel number, the effective date, and the zone that the parcel is in.



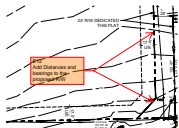
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E09
Show a 20' easement along the North boundary as part of the sanitary sewer extension from the City of BA for this area.
The detention facility will need to be adjusted to locate the top of the bank with the location of the manhole.



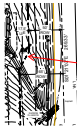
Subject: Jason Comments
Page Label: [1] PLAT
Author: jdickeson
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E11
Label the POC and the POB and include the bearing and distance between them



Subject: Jason Comments
Page Label: [1] PLAT
Author: jdickeson
Date: 12/16/2025 4:50:28 PM
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E12
Add Distances and bearings to the proposed R/W

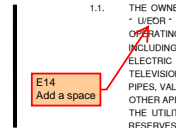


E13
Add a legend for the linetypes used

OWNERS
HARVEST CITY

Subject: Jason Comments
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Author: jdickeson
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E13
Add a legend for the linetypes used



1.1. THE OWNER
* UICOR *
OPERATING
INCLUDING
ELECTRIC
TELEVISION
PIPES, VAL
OTHER API
THE UTILIT
RESERVES

Subject: Jason Comments
Page Label: [1] COVENANTS
Author: jdickeson
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E14
Add a space



City of Broken Arrow

Request for Action

File #: 26-133, **Version:** 1

Broken Arrow Planning Commission
01-08-2026

To: Chairman and Commission Members
From: Community Development Department
Title:

Public hearing, consideration, and possible action regarding BAZ-002565-2025 (Rezoning), Oneta 71, LLC, approximately 16.875 acres, AG (Agricultural) to CG (Commercial General) located approximately one-tenth mile north of the northwest corner of E. Kenosha Street (71st Street) and Oneta Road (241st E. Avenue).

Background:

Applicant: Nathalie Cornett, Eller & Detrich

Owner: Oneta 71, LLC

Developer: [Click here to enter text.](#)

Location: One-tenth mile north of the northwest corner of E. Kenosha Street (71st Street) and Oneta Road (241st E. Avenue)

Size of Tract Approximately 16.875 acres

Number of Lots: 4 lots

Present Zoning: AG (Agriculture)

Comp Plan: Level 4 (Commercial/Employment Nodes)

A rezoning request, BAZ-002565-2025, is proposing to change the zoning on this property from AG (Agricultural) to CG (Commercial General) for a proposed commercial development. During the December 18, 2025 meeting two opposition forms were received and a surrounding property owner voiced concerns regarding increased traffic, pedestrian safety, noise & light pollution, depreciating property values, nearby competition of other stores, increased litter, and a decreased quality of life. The applicant stated that the development would adhere to all city development standards, codes, and ordinances, that a Traffic Impact Analysis (TIA) had been performed for the site, and that sidewalks would be installed along both Kenosha Street & Oneta Road for pedestrian safety. Planning Commission recommended approval (5-0) of COMP-002532-2025, a Comprehensive Plan Amendment, for 8.8 of the total 16.875 acres to go from Level 1 to Level 4 that aligns with the already designated Level 4 in the Comprehensive Plan for the rest of the project site. The comprehensive plan amendment is scheduled for City Council on January 20, 2026. This rezoning application follows that item, with the understanding that the comprehensive plan amendment will need to be approved by City Council prior to the rezoning application going to City Council which is slated for the February 3, 2026 meeting. These back-to-back applications support the project timeline of the development.

The proposed development has had a 94-page Traffic Impact Analysis (TIA) completed which reflects no change in Level of Service during peak hours with the addition of this development. A copy of the full analysis is available for review in the Community Development Department. Right-in, right-out turn lanes are requested for the Kenosha Street driveway to promote left-hand turns at the stoplight. The Zoning Ordinance addresses exterior lighting standards in Section 4-4-2, litter or property maintenance issues can be addressed by the Code Enforcement Division if they arise, sidewalks along Kenosha & Oneta will be required addressing pedestrian safety, although gas stations and a discount variety store are in close proximity, the nearest grocery store is over two miles away.

SURROUNDING LAND USES/ZONING/COMPREHENSIVE PLAN

The surrounding properties contain the following zoning designations, land uses, and Comprehensive Plan future development guide levels:

Direction	Comprehensive Plan	Zoning	Land Use
North	Level 1 & FP	AG (Agricultural)	Residential Estate
East	Level 4	AG (Agricultural)	Residential
South	Level 4	CG (Commercial General)	Agricultural
West	Level 1 & FP	AG (Agricultural)	Power Substation

Attachments: Case Map
Aerial Map
Legal Description

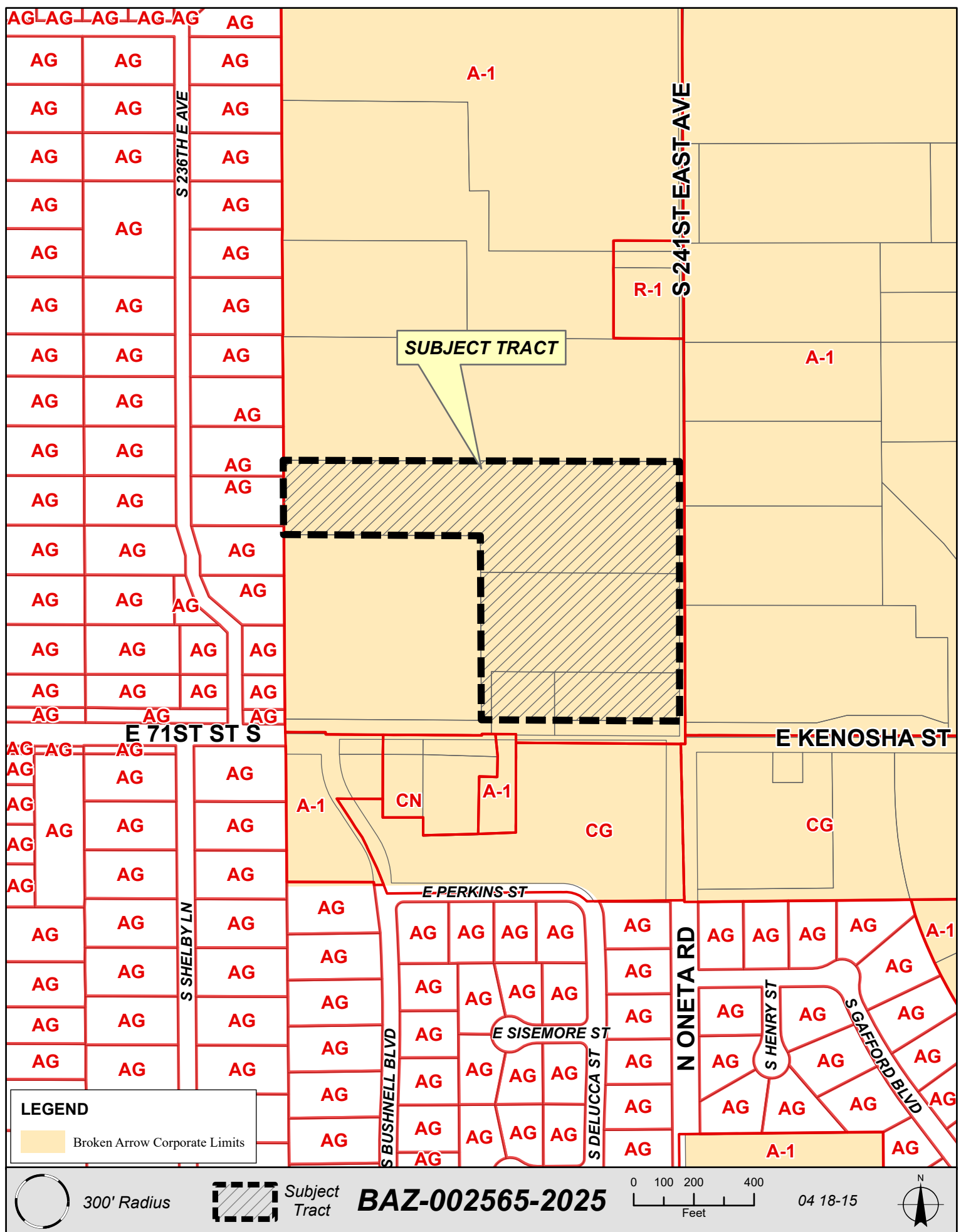
Recommendation:

Based upon the Comprehensive Plan, the location of the property, and the surrounding land uses, Staff recommends that BAZ-002565-2025 be approved subject to the property being platted.

Reviewed By: Jane Wyrick

Approved By: Rocky Henkel

RLB





Note: Graphic overlays may
not precisely align with physical
features on the ground.
Aerial Photo Date: 2025



Subject
Tract

BAZ-002565-2025

0 100 200 400
Feet

04 18-15



SURVEYED PROPERTY DESCRIPTION

BEING a tract of land situated in the SE1/4 of the SE 1/4 of Section 4, Township 18 North, Range 15 East of the Indian Meridian, City of Broken Arrow, Wagoner County, Oklahoma, and being all of those tracts of land described in a General Warranty Deed to Oneta71 LLC, recorded in Book 2913, Page 309 and all of that tract of land described in a General Warranty Deed to Oneta71 LLC, recorded in Book 2913, Page 323, both of the Official Public Records of Wagoner County, Oklahoma, and being more particularly described as follows:

COMMENCING at an ODOT brass disk found for the southeast corner of Section 4, Township 18 North, Range 15 East, and being the centerline intersection of E. 71st Street (E. Kenosha Street) and S. 241st East Avenue;

THENCE North 01°34'19" West, along the east line of said section 4, a distance of 50.0 feet to a MAG nail with a washer, stamped "KHA PLS1767" set for the **POINT OF BEGINNING** of the herein described tract, same being the southeast corner of the Oneta71 LLC tract as recorded in said Book 2913, Page 309;

THENCE South 89°06'27" West, departing the east line of said Section 4 and said S. 241st East Avenue, along the south line of the Oneta71 LLC tract as recorded in said Book 2913, Page 309 and along the north right of way line of said E. 71st Street (E. Kenosha Street), a distance of 662.27 feet to a concrete monument found for the southwest corner of said Oneta71 LLC, same being on the east line of a tract of land described in a deed to Public Service Company of Oklahoma, recorded in Book 526, Page 92 of the Official Public Records of Wagoner County, Oklahoma;

THENCE North 01°26'58" West, departing the north right of way line of said E. 71st Street (E. Kenosha Street), along the west line of the Oneta71 LLC tract as recorded in said Book 2913, Page 309, a west line of Oneta71 LLC tract as recorded in said Book 2913, Page 323 and the east line of said Public Service Company of Oklahoma tract, a distance of 611.72 feet to a 1/2-inch iron rod found for the northeast corner of said for corner of said Public Service Company of Oklahoma tract;

THENCE South 89°03'28" West, along a south line of the Oneta71 LLC tract as recorded in said Book 2913, Page 323 and the north line of said Public Service Company of Oklahoma tract, a distance of 661.50 feet to a 5/8-inch iron rod with an illegible plastic cap found for the westerly, southwest corner of the Oneta71 LLC tract as recorded in said Book 2913, Page 323 and the northwest corner of said Public Service Company of Oklahoma tract, same being on the east line of Meadowood Estates III, an addition to the City of Broken Arrow, according to the Map or Plat, recorded in Book 5, Page 7 of the Plat Records of Wagoner County, Oklahoma;

THENCE North 01°22'03" West, along the west line of the Oneta71 LLC tract as recorded in said Book 2913, Page 323 and the east line of said Meadow Estate III, a distance of 249.47 feet to a 5/8-inch iron rod with an illegible plastic cap found at the northwest corner of Oneta71 LLC tract

as recorded in said Book 2913, Page 323, same being the southwest corner of tract of land, described in a deed to Celia M. Zuccala, et al, recorded in Book 2965, Page 614 of the Official Public Records of Wagoner County, Oklahoma;

THENCE North 89°01'55" East, along the north line of the Oneta71 LLC tract as recorded in said Book 2913, Page 323 and the south line of said Zuccala, et al tract, a distance of 1,321.56 feet to a MAG nail with a washer, stamped "KHA PLS1767" set in S. 241st East Avenue, on the east line of said Section 4, for the northeast corner of the Oneta71 LLC tract as recorded in said Book 2913, Page 323 and the southeast corner of said Zuccala, et al tract;

THENCE South 01°34'19" East, along the east line of said Section 4, a distance of 862.39 feet to the **POINT OF BEGINNING** and containing 16.875 acres (735,084 square feet) of land, more or less.



City of Broken Arrow

Request for Action

File #: 26-145, Version: 1

**Broken Arrow Planning Commission
01-08-2026**

To: Chair and Commission Members
From: Community Development Department
Title:

Public hearing, consideration, and possible action regarding PUD-002514-2025 (Planned Unit Development) and BAZ-002575-2025 (Rezoning), Pediatrics Plus, 14.55 acres, RS (Residential Single-Family) and RM (Residential Multi-Family) to AG (Agricultural) and CG (Commercial General), located just south of Washington St (91st Street) and just east of Aspen Ave (145th E Avenue)

Background:

Applicant: David Tapp, Pediatrics Plus

Owner: David Tapp, Pediatrics Pus

Developer: NA

Engineer: NA

Location: South of Washington St (91st Street) and east of Aspen Ave (145th E Avenue)

Size of Tract 14.55 acres

Present Zoning: RS (Residential Single-Family) and RM (Residential Multi-Family)

Proposed Zoning: AG (Agricultural) and CG (Commercial General)

Comp Plan: Level 3 - Transition Area, Level 4 - Commercial/Employment Nodes, Greenway

PUD-002514-2025 proposed to create a Planned Unit Development for a proposed “therapeutic farm”. The property is located south of Washington St (91st Street) and east of Aspen Ave (145th E Avenue).

PUD-002514-2025 and BAZ-002575-2025 proposed to change the zoning designation on 14.55 acres of land from RS and RM to CG and AG. More specifically 7.98 acres will be rezoned to CG while 6.57 acres will be rezoned to AG. This split zoning will allow for the rear portion of the property to be used for the “farm” aspect of the development. The PUD request also includes a request that buffer yard landscaping requirements be waived for zoning boundaries within the development.

SURROUNDING LAND USES/ZONING/COMPREHENSIVE PLAN

The surrounding properties contain the following uses, along with the following development guide and zoning designations:

Location	Comprehensive Plan	Zoning	Land Use
North	Level 2 - Urban Residential	RS - Residential Single-Family	Residential Single-Family
East	Levels 6 and 3	RM - Residential Multi-Family	Vacant/Agricultural
South	Level 3 - Transition Area Level 4 - Commercial/Employment Nodes	RS - Residential Single-Family	Vacant/Agricultural
West	Level 3 - Transition Area Level 4 - Commercial/Employment Nodes	RS - Residential Single-Family	Vacant/Agricultural

According to FEMA maps, a portion of the property is located in the 100-year floodplain. Water and sanitary sewer are available from the City of Broken Arrow.

Attachments: Case Map

Aerial Photo

Development Outline

Pediatrics Plus
Applicant Statement

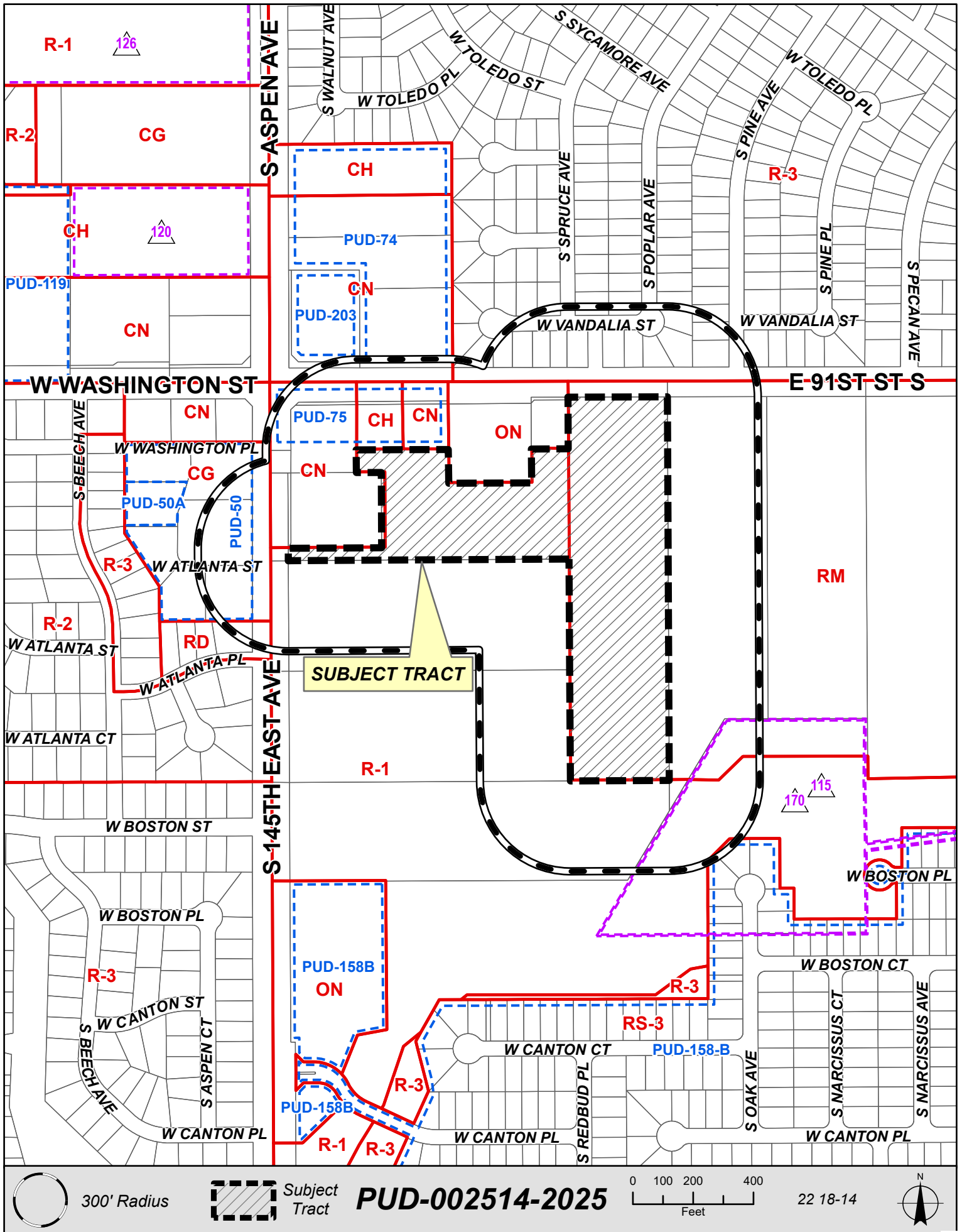
Recommendation:

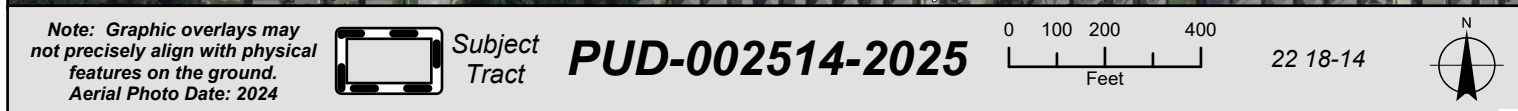
Based upon the location of the property, and the surrounding land uses, Staff recommends that PUD-002514-2025 be approved and BAZ-002575-2025 be approved subject to platting.

Reviewed by: Jane Wyrick

Approved by: Rocky Henkel

JAJ





Proposed Split Zoning PUD

**W Washington St.
Broken Arrow, OK 74012**

Tulsa County Parcel ID: 98422-84-22-03980

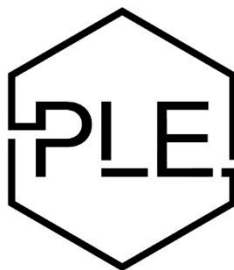
December 08, 2025

**Submitted to:
The City of Broken Arrow**

On Behalf of:



Prepared by:



PHILLIP LEWIS ENGINEERING

Structural + Civil Consultants

23620 Interstate 30 | Bryant, AR
PH: 501-350-9840

I. Current Site Details

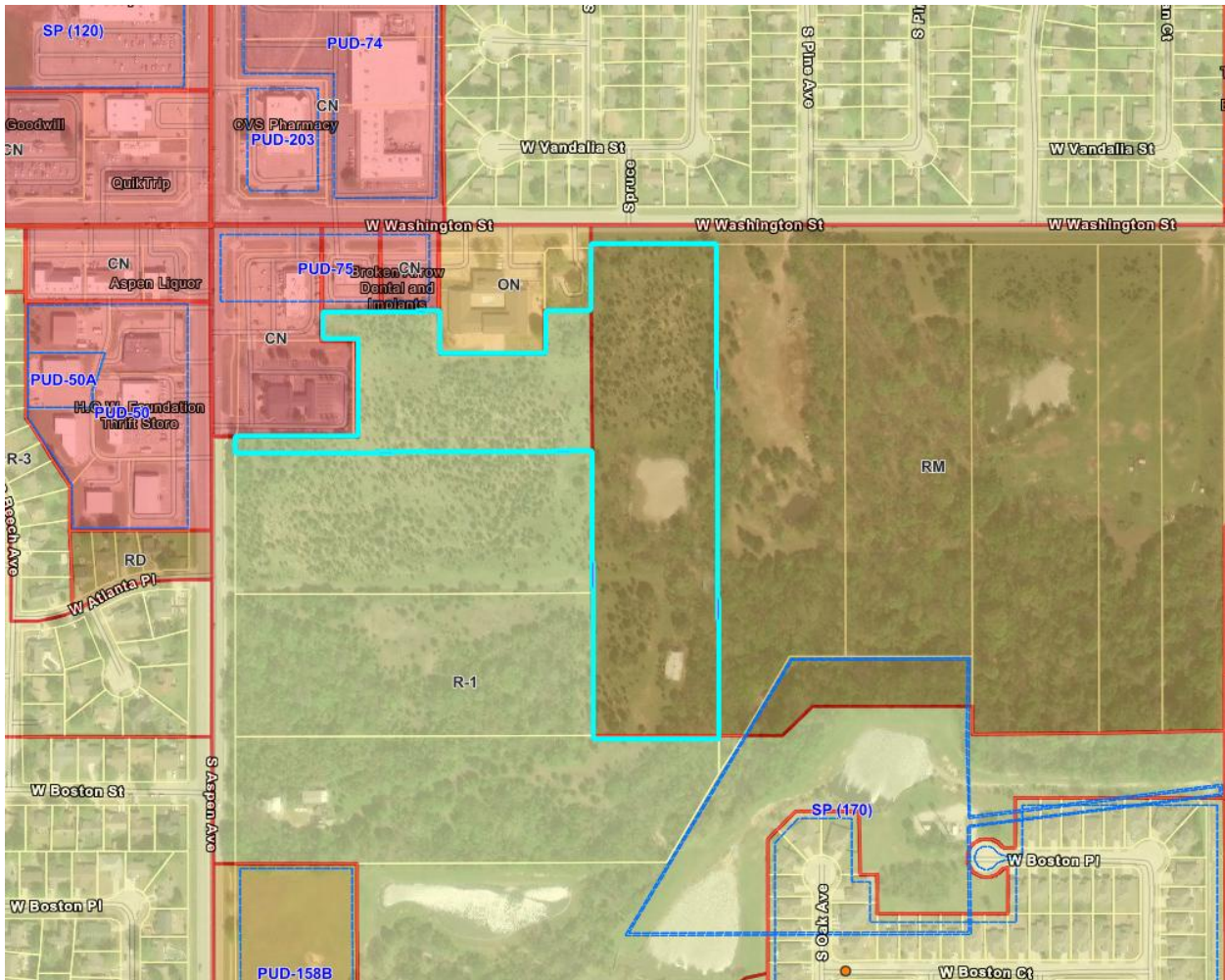
Tulsa County Parcel ID: 98422-84-22-03980

Legal Description: EG 545S & 60E NWC NW TH E310 N250 W75 N75 E369 S114 E276 N114 E120 N170 E330 S1270 W330 N733 W930 N TO POB SEC 22 18 14 14.55ACS

Section: 22 Township: 18 Range: 14

Total Acreage: Approximately 14.55 acres

The current zoning of the development is split residential (R1 & RM). The zoning surrounding the site consists of commercial, residential, as well as an existing PUD bordering the site to the North (see map below).



II. Development Concept and Character

Pediatrics Plus is a proposed development for a pediatric healthcare provider specializing in occupational, speech, and physical therapy as well as applied behavioral analysis. The proposed development is being submitted as a Planned Unit Development (PUD) pursuant to the provisions of the Broken Arrow Zoning Code.

The core of what Pediatrics Plus does is offer multi-disciplined therapy services through various delivery models to overcome any obstacles that might hinder a child from accessing or benefiting from the services they need. Pediatrics Plus accomplishes this by offering their services in three unique settings to provide the best outcomes for the child: an outpatient clinic, a farm, and a developmental preschool.

The Farm by Pediatrics Plus is a unique, cutting-edge way to implement a service model and ideals for children and families. A collaborative approach has been and will always be the foundation of their therapeutic interventions. The Farm by Pediatrics Plus's comprehensive approach includes ABA, OT, PT, and ST services and maintains a holistic perspective that is vital to the development of children.

With the setting of a farm and intentional layout of therapeutic areas, The Farm by Pediatrics Plus provides a natural environment for the development and progression of skills in all areas. It allows for functional therapy through exploration, play, and activities of daily living. The dream is empowering children to conquer their world through real-life experiences in gardening, cooking, outdoor play, and socializing; all while remaining within the culture of Pediatrics Plus.

The proposed site will consist of a (+/-) 5,000 sq. ft. main office building (The Farmhouse), a (+/-) 1,000 sq. ft. gym, a (+/-) 5,000 sq. ft. gym, a garden, and a few small barns. The main farmhouse will be used for therapy. The outdoor areas and agricultural zoning will be used for walking trails, pond, gardens, and farm animal enclosures. All of these areas will be used in a multitude of different ways to provide therapy for children.

Normal hours of operation are Monday-Friday from 7:00 am to 5:00 pm. There is a potential for a once-a-month Farmers Market on Saturday from 8:00 am to 12:00 pm. This would allow the children to sell the vegetables from the garden to the local community.

III. Need for Split Zoning PUD

The settings in which Pediatrics Plus offers their services require multiple zoning classifications. To accommodate the proposed development, particularly the outpatient clinic and developmental preschool, the zoning will need to be changed to commercial. The proposed commercial zoning would encompass the front 7.98 acres of the site. Additionally, the farming therapy setting requires zoning that allows agricultural activities. The proposed agricultural zoning would encompass the rear 6.57 acres of the site.

IV. Zoning Ordinance Variances

Per city zoning ordinance 4-3-7, “district bufferyards are required between zoning districts that are not separated by a public street.” We are requesting that this requirement be waived for varying zones located within the same parcel.

V. Exterior Building Materials

The materials for the new Farm for Pediatrics Plus will be cement fiber board and batten siding, with vinyl framed windows, and a composition shingle roof. There will be stained wood accents at the porch columns and porch soffit.

VI. Facility Example Rendering & Photographs

The plans, photographs, and rendering below are not of the current proposed project, but are of past projects and intended to represent to the anticipated product.

The last page is the current preliminary site plan for this location.

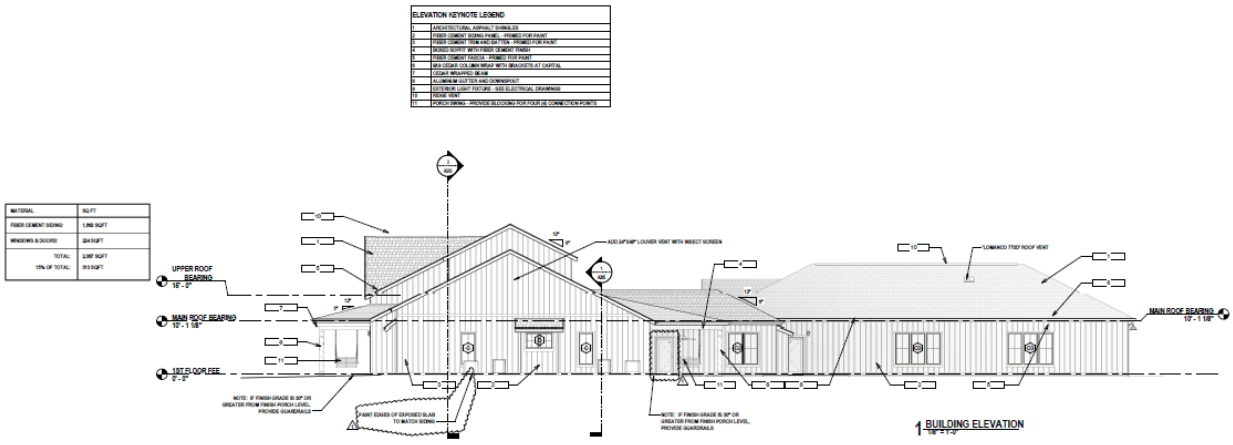
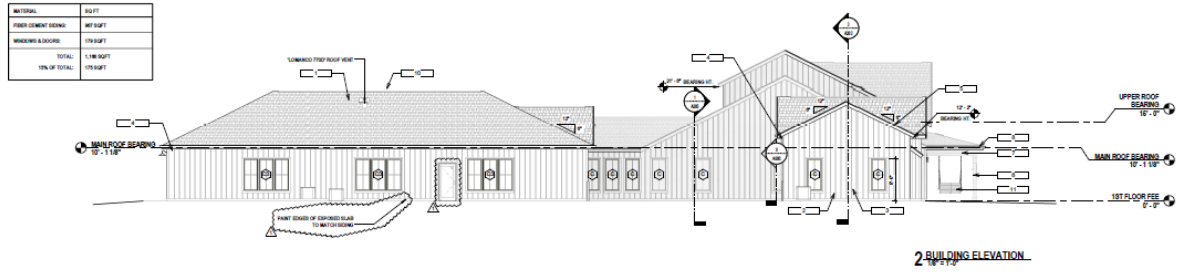
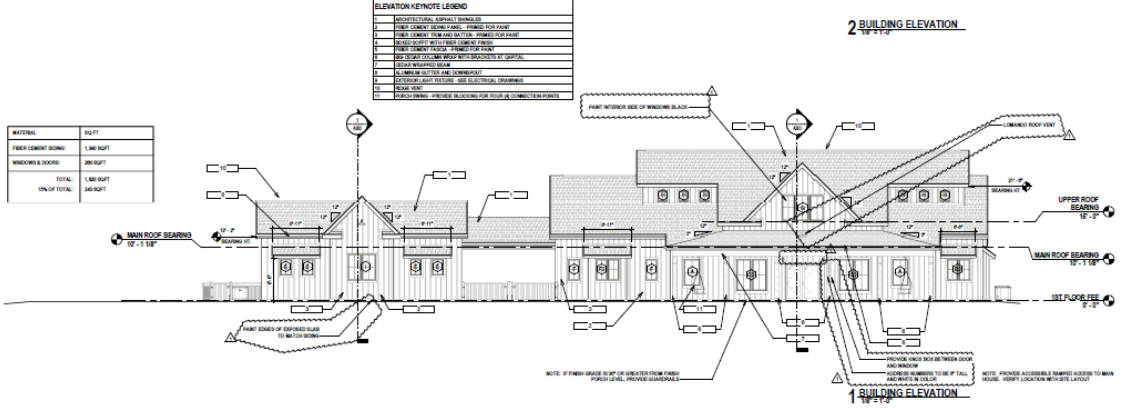
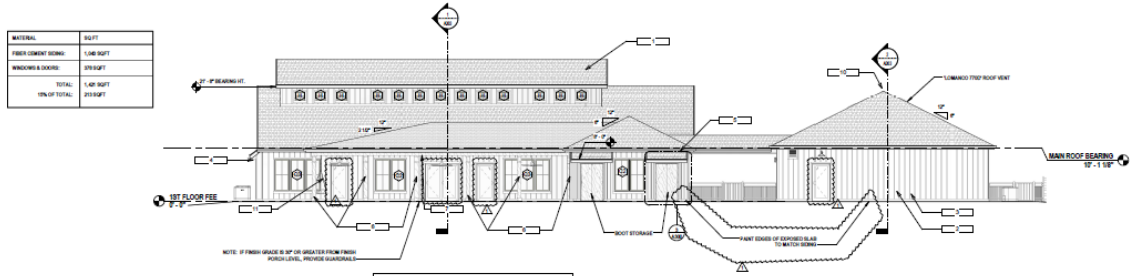




1 INTERIORS FLOOR PLAN - FLOOR 1
11-214

Not to Scale

Intended for representative purposes only



Not to Scale

Intended for representative purposes only



WILLIAMS & DEAN
ARCHITECTURE | INTERIOR DESIGN

December 5, 2025

The Farm by Pediatrics Plus
W Washington St
Broken Arrow, OK

To Whom It May Concern:

The exterior materials for the new Farm for Pediatrics Plus will be cement fiber board and batten siding, with vinyl framed windows, and composition shingle roof. There will be stained wood accents at the porch columns and porch soffit.

The accessory structures will be of similar exterior materials.

If you have any questions, feel to call.

Sincerely,

John Johnson, AIA
President
OK No. 6315



City of Broken Arrow

Request for Action

File #: 26-150, Version: 1

**Broken Arrow Planning Commission
01-08-2026**

To: Chair and Commission Members
From: Community Development Department
Title:

Public hearing, consideration, and possible action regarding PUD-002550-2025 (Planned Unit Development) and BAZ-002374-2025 (Rezoning), D&B Processing, 9.15 acres, AG (Agricultural) to IL (Industrial Light)/PUD-002550-2025, abrogation of PUD-193, located one-half mile south of Washington Street (91st Street), one-half mile east of the Creek Turnpike

Background:

Applicant: Rob Coday, Rob Coday Architect LLC
Owner: Doug Burgess, D&B Processing
Developer: D&B Processing
Engineer: Daryl Worley, Worley Consulting
Location: One-half mile south of Washington Street (91st Street), one-half mile east of the Creek Turnpike
Size of Tract: 9.15 acres
Present Zoning: AG (Agricultural)
Proposed Zoning: IL (Industrial Light)/PUD-002550-2025
Comp Plan: Level 6 (Regional Commercial/Employment)

Planned Unit Development (PUD)-002550-2025, D&B Processing, is a proposed development consisting of 9.15 acres generally located one-half mile south of Washington Street (91st Street), one-half mile east of the Creek Turnpike. BAZ-002374-2025 is a concurrent request to change the underlying zoning on the property from AG (Agricultural) to IL (Industrial Light). The property is currently one unplatted lot.

This development is a proposed storage yard to serve the existing D&B Processing facility across East Gary Street to the south. This property, along with the property to the east, was approved as part of PUD-193 and BAZ-1818 on November 8, 2008 for Coach Port storage facility. The property to the east developed per PUD-193, with the subject property currently under consideration initially planned as a second phase of development. The second phase never developed and was not platted along with the Coach Port subdivision. PUD-193 restricts the uses on this parcel to indoor RV storage, and the current developer would like to abrogate PUD-193 in order to develop under a different concept.

SUMMARY OF DEVIATION FROM THE BROKEN ARROW ZONING ORDINANCE

PUD-002550-2025 consists of one development area with two potential phases of development. The site will be used as a storage yard where raw materials will be stored for use at the existing D&B Processing manufacturing facility located in the industrial development to the south across Gary Street. No structures are proposed on this site.

IL (Industrial Light) is a possible use in Level 6 of the Comprehensive Plan, provided certain criteria are met, including the requirement of a PUD and abutting existing industrial areas. Storage yards are allowed in the IL zoning designation.

Item	Zoning Ordinance Requirement	PUD-002550-2025 Request
Permitted Uses:	Uses permitted by right in IL district.	<ul style="list-style-type: none"> • Office, Business or Professional • Research Laboratory • General Industrial Services • Assembly, Light • Manufacturing, Light • Office Warehouse • Storage Yard • Warehouse • Wholesale Establishment
Parking Requirements:	1 space per 2,000 square feet of storage area.	No onsite parking required, offsite parking provided at existing D&B Processing facility.
Screening Fence:	Outdoor storage areas shall be screened with an opaque fence 6'-8' in height	<ul style="list-style-type: none"> • South: 8' opaque metal fence with gate • East: No fence required abutting the same zoning designation • North: Existing wire fence will be preserved as screening between this development and the railroad right-of-way • West: Existing wire fence will be preserved in order to limit damage to existing vegetation. Onsite and offsite vegetation will act as a natural buffer between this development and Rosewood Elementary School to the west.
Landscaping Requirements:	<ul style="list-style-type: none"> • 10' wide landscape edge required along street frontage • 1 tree per 35 linear feet of frontage required • At least 50% of trees shall be medium to large • Irrigation required for all landscaped areas 	Landscape edge provided along Gary Street per Zoning Ordinance. 8' buffer provided around existing wetland, which will be preserved in its natural state.

SURROUNDING LAND USES/ZONING/COMPREHENSIVE PLAN

The surrounding properties contain the following uses, along with the following development guide and zoning designations:

Location	Development Guide	Zoning	Land Use
North	N/A	AG	Railroad
East	Level 6	IL/PUD-193	RV & Mini Storage
South	Level 6	IL	Industrial

West	Public/Semi-Public	AG	Public School
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Access to this site will be available from East Gary Street to the south.

According to FEMA maps, none of the property is located in the 100-year floodplain. Water and sanitary sewer are available from the City of Broken Arrow.

Attachments: Case map
Aerial photo
Comprehensive Plan
PUD-002550-2025 Design Statement

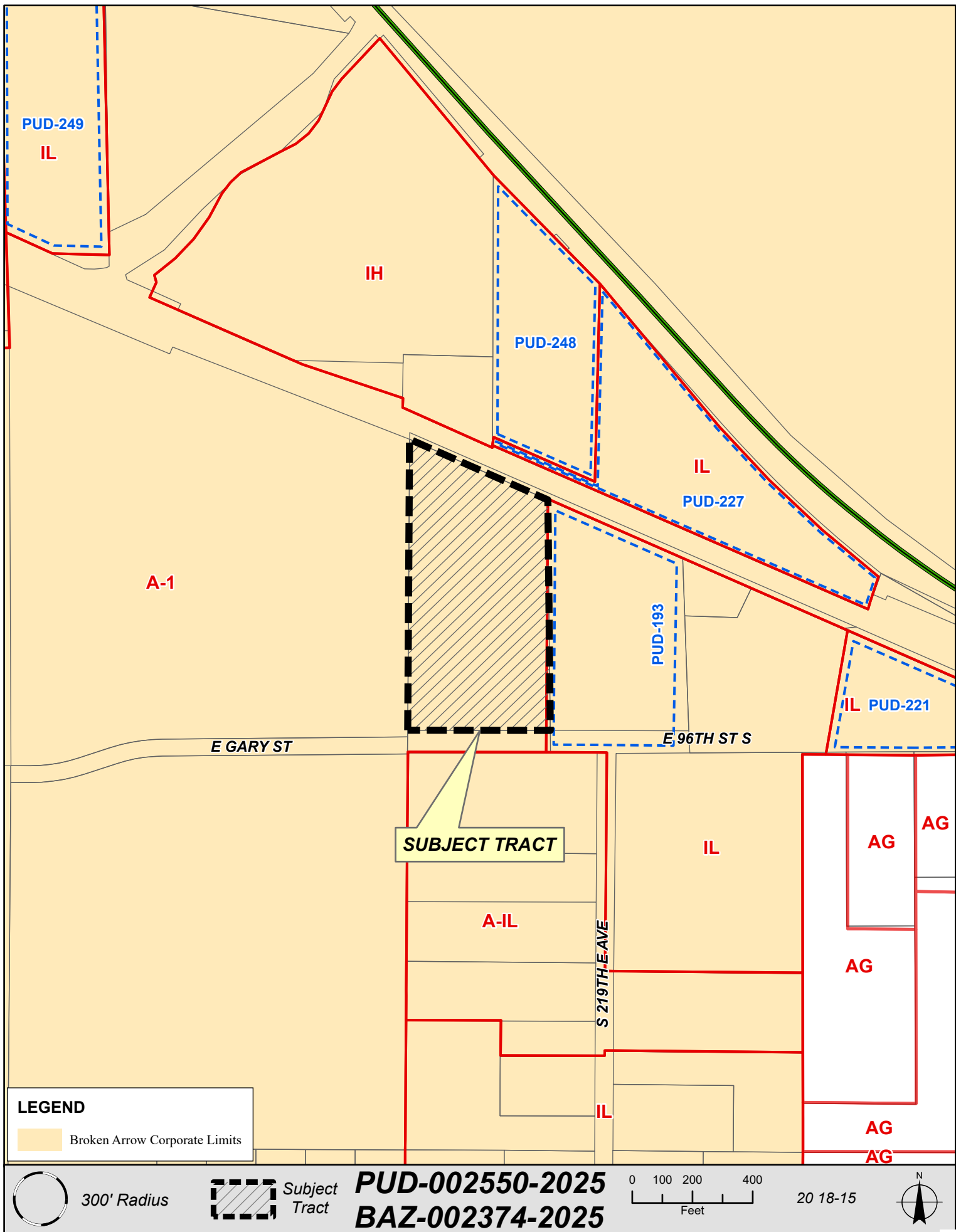
Recommendation:

Based upon the Comprehensive Plan, the location of the property, and the surrounding land uses, Staff recommends that PUD-002550-2025 and BAZ-002374-2025 be approved and that PUD-193 on this property be abrogated.

Reviewed by: Jane Wyrick

Approved by: Rocky Henkel

MEH



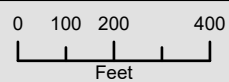


Note: Graphic overlays may not precisely align with physical features on the ground.
Aerial Photo Date: 2025



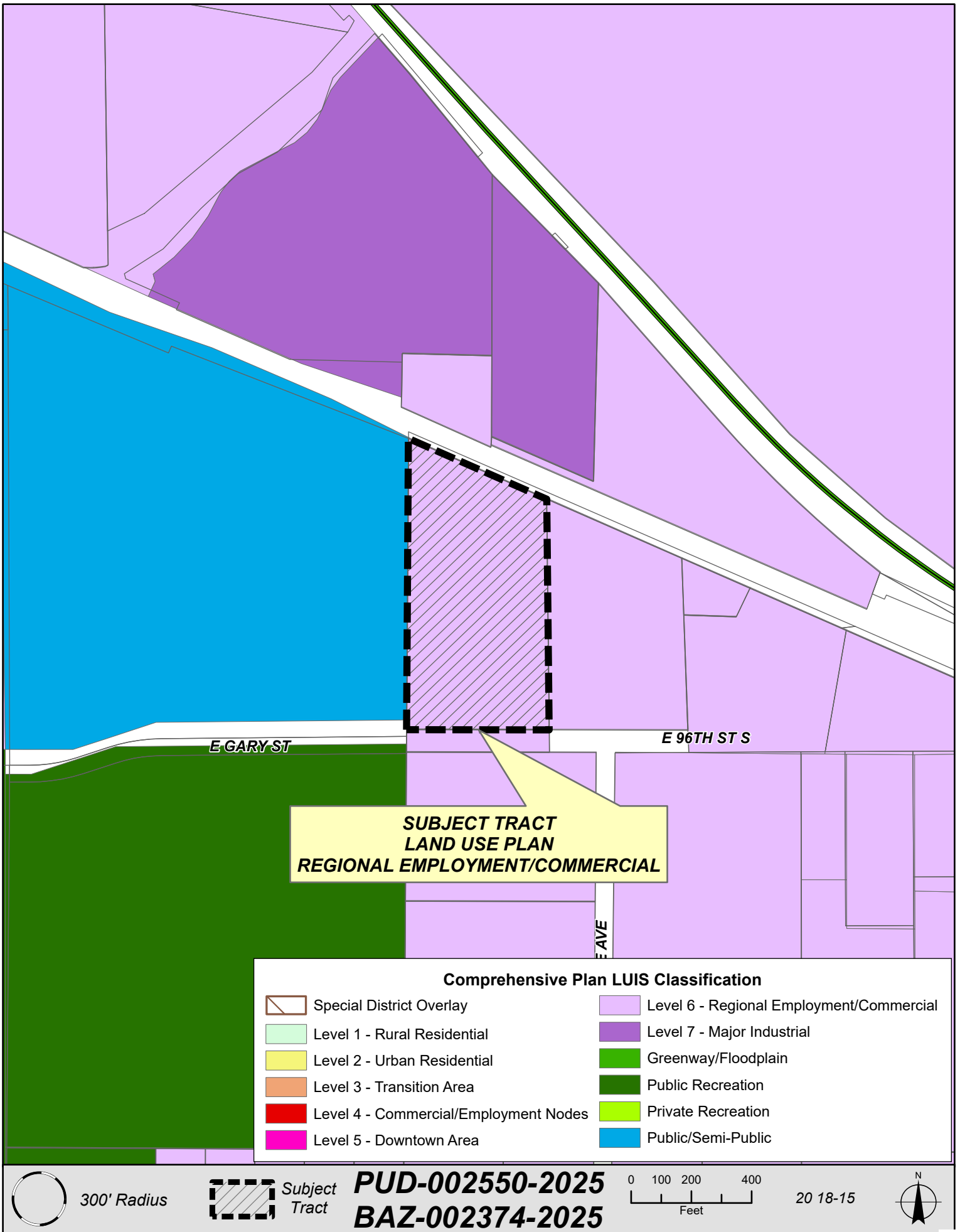
Subject
Tract

PUD-002550-2025
BAZ-002374-2025



20 18-15





LAY-DOWN YARD

for

D & B PROCESSING, LLC

BROKEN ARROW, OKLAHOMA

Case number:

Owner: D & B Processing, LLC.
9750 South 219th E Avenue
Broken Arrow, Oklahoma

Architect: rob coday architect, llc, aia
13721 w 168th pl s
sapulpa, ok 74066

Civil Engineer: Daryl Worley, P.E.
Worley Consulting

LAY-DOWN YARD
INDEX

PAGE	TITLE
1	SHEET INDEX
2	DEVELOPMENT STANDARDS
3	DEVELOPMENT CRITERIA
4	SITE PLAN
5	VICINITY ZONING PLAN
EXHIBIT "A"	WETLAND AQUATIC DELINEATION REPORT
EXHIBIT "B"	PRELIMINARY CIVIL ENGINEERING
EXHIBIT "C"	SURVEY
EXHIBIT "D"	COACHPORT PUD 193 (REFERENCE ONLY)

DEVELOPMENT STANDARDS:

ZONING: I-L, LIGHT INDUSTRIAL DISTRICT

BUILDING SETBACK REQUIREMENTS:

NORTH SETBACK:	30 FT
EAST SETBACK:	0 FT
SOUTH SETBACK:	30 FT
WEST SETBACK:	30 FT

PERMITTED USES:

OFFICE, OFFICE BUSINESS AND PROFESSIONAL, RESEARCH LABORATORY, GENERAL INDUSTRIAL SERVICE, ASSEMBLY, LIGHT MANUFACTURING, LIGHT OFFICE/WAREHOUSE, **[STORAGE YARD]**, WAREHOUSE AND WHOLESALE ESTABLISHMENT BY RIGHT.

MINIMUM LOT FRONTAGE:

MINIMUM FRONTAGE:	150 FT
PROVIDED:	460 FT, COMPLIES

MAXIMUM BLDG HEIGHT: DOES NOT APPLY, NO BUILDINGS

OFF-STREET PARKING: NO EMPLOYEES THIS SITE, OFF-STREET PARKING PROVIDED ACROSS STREET AT MAIN PLANT.

LANDSCAPING:

LANDSCAPING CONFORMING TO CITY OF BROKEN ARROW ZONING CODE WILL BE PROVIDED AT PROPERTY LINE ALONG EAST GARY STREET. REGULATED WETLAND AREA WILL BE PROTECTED WITH AN EIGHT- FOOT- WIDE BUFFER. WETLAND WILL NOT BE SPRINKLERED AS IT WILL REMAIN IN ITS NATURAL STATE.

SCREEN FENCES:

SOUTH:	AN EIGHT- FOOT-HIGH METAL PANEL FENCE WITH GATE WILL BE PROVIDED AT THE SOUTH SIDE OF THE PROPERTY, ELEVEN FOOT INSIDE THE PROPERTY.
EAST:	NO FENCE WILL BE PROVIDED AT THE EAST PROPERTY LINE, IL IS ADJACENT.
NORTH:	AN EXISTING WIRE FENCE WILL REMAIN AT THE NORTH PROPERTY LINE ALONG THE UNION PACIFIC RAILROAD RIGHT-OF-WAY.
WEST:	IT IS PROPOSED THAT THE POOR CONDITION WIRE FENCE REMAIN IN PLACE AT THE WEST PROPERTY LINE. THIS WILL MINIMIZE DAMAGE TO THE VEGETATION WHICH IS CURRENTLY GROWING IN THAT LOW AREA. THE LAND WEST OF THE SUBJECT SITE, WHICH LIES BETWEEN THE WEST PROPERTY LINE AND THE SCHOOL IS VERY HEAVILY COVERED WITH BRUSH AND TREES. THIS NATURAL BUFFER IS DIFFICULT TO PENETRATE AND IS MORE ATTRACTIVE THAN A SCREEN FENCE WOULD BE.

EXTERIOR LIGHTING: NO EXTERIOR LIGHTING IS TO BE PROVIDED.

SIGNS: NO SIGNS EXCEPT THE REQUIRED ADDRESS SIGN WILL BE PROVIDED.

WETLAND; BUILDING FACADES AND DESIGN: NO BUILDING(S) WILL BE CONSTRUCTED.

REFER EXHIBIT "A", WETLAND WILL BE PROTECTED PER AQUATIC RESOURCES DELINEATION REPORT PREPARED BY APEX COMPANIES, LLC. APPROPRIATE FEDERAL PERMITS AND APPROVALS ALONG WITH STATE OF OKLAHOMA AND CITY OF BROKEN ARROW RULES AND REGULATIONS WILL BE OBSERVED. THE WETLAND WILL NOT BE DESIGNED WITH THE STORMWATER SYSTEM AS IT WILL BE PROTECTED IN ITS "NATURAL" STATE.

STORMWATER CONTROL:

THE SITE IS SUBJECT TO RECEIVING OFF-SITE STORMWATER AS WELL AS HAVING A DETENTION AREA FROM THE PROPERTY TO THE EAST. THE REQUIREMENTS WILL BE STUDIED BY A REGISTERED OKLAHOMA CIVIL ENGINEER AND, IF ANY REWORK OF THE STORMWATER DRAINAGE IS REQUIRED, THAT DESIGN WILL BE SUBMITTED FOR REVIEW AND APPROVAL OF THE CITY OF BROKEN ARROW.

MATERIAL STORAGE:

MATERIAL IS UNLOADED FROM TRUCKS BY FORKLIFTS AND PLACED UPON RAILROAD TIES. THE HEIGHT OF THE RAILROAD TIES ALLOWS STORMWATER TO FLOW UNIMPEDED BELOW THE STEEL. THE YARD IS KEPT CLEAN AS IT IS CONSTANTLY HAVING MATERIAL MOVED THUS THERE IS NEVER AN AREA OF THE YARD WHICH WILL IMPEDE THE FLOW OF THE WATER (EXCEPT THE AREA WHICH IS DESIGNED TO BE A DETENTION AREA).

DEVELOPMENT CRITERIA

The PUD’s occupancy will be as a “lay-down” yard, a staging area for metal sheets which are used by the D & B manufacturing facilities across East Gary Street (E 96th St S). Yard will be screened from the street by an 8’ high metal fence.

No structures are to be built on the site. No employees will be placed there except temporarily to accept shipments and to pick up materials to transfer to the manufacturing buildings.

A wetlands area is located on the site. The wetlands regulatory area has been studied and an assessment report prepared by Apex Companies, LLC. The Owner will protect the defined wetlands are during construction and of occupancy of Phase ONE and will secure, prior to commencing construction, the proper permits for the construction of Phase TWO.

A portion of the site is utilized as a detention and stormwater flow path for stormwater from the east and north. The use of this site for the lay-down staging works well as the steel is placed on railroad ties which enables stormwater to freely flow throughout the site as well as enable protection and free flow of the wetlands area.

EXISTING CONDITIONS:

- 1E Parcel is zoned IL.
- 2E Parcel is m/l
- 3E Existing parcel surface has existing gravel, detention easements, drainage easements, sanitary sewer easement and a regulated wetland easement.
- 4E Area north of the wetlands currently has limited accessibility.
- 5E Existing area tabulations:
Total area: 398,703.86 SQ FT
+/- 9.15 ACRES

DEVELOPMENT PLANS:

1D PUD will consist of two phases:
Phase ONE, 89,622.27 SF (2.057 ACRES) = will consist of the south portion of the site, between Gary and the wetlands. Work this phase will consist of moving an existing metal screen fence north in order to provide a 10 foot street landscape buffer, gravel gravel yard to stage pre-production metal. The wetlands will be protected during the construction and occupancy of Phase I.

Phase TWO 253,627.58 SF (5.83 ACRES, including wetlands with buffer) will consist of the north portion of the site, between the south edge of the 8’ wide wetlands “buffer” and the RR. Work will consist of design and securing required permits for implementation of protection of the wetlands, constructing the 8’ wide “buffer” strip, grading and gravel placement.

Not included in the above cited area tabulations are the various easements.

AREA TABULATIONS

TOTAL AREA OF PARCEL:	398,703.86 SQ FT	9.15 ACRES (+/-)
PHASE ONE:	89,622.27 SQ FT	2.06 ACRES (+/-)
PHASE TWO:	253,627.58 SQ FT	5.82 ACRES (+/-)
PHASE TWO WITHOUT WETLANDS:	204,940.14 SQ FT	4.71 ACRES (+/-)
DETENTION EASEMENT:	120,647.07 SQ FT	2.77 ACRES (+/-)
20’ DRAINAGE EASEMENT:	2,529.90 SQ FT	.06 ACRES (+/-)
30’ SAN. SEWER EASEMENT:	20,416.50 SQ FT	0.47 ACRES (+/-)
TEMPORARY ACCESS EASEMENT:	3,360.34 SQ FT	0.07 ACRES (+/-)
EXISTING DETENTION BUFFER:	39,443.72 SQ FT	0.91 ACRES (+/-)
WETLAND AREA:	33,837.30 SQ FT	0.78 ACRES (+/-)
WETLAND WITH BUFFER:	46,687.44 SQ FT	1.07 ACRES (+/-)

LEGAL DESCRIPTION:

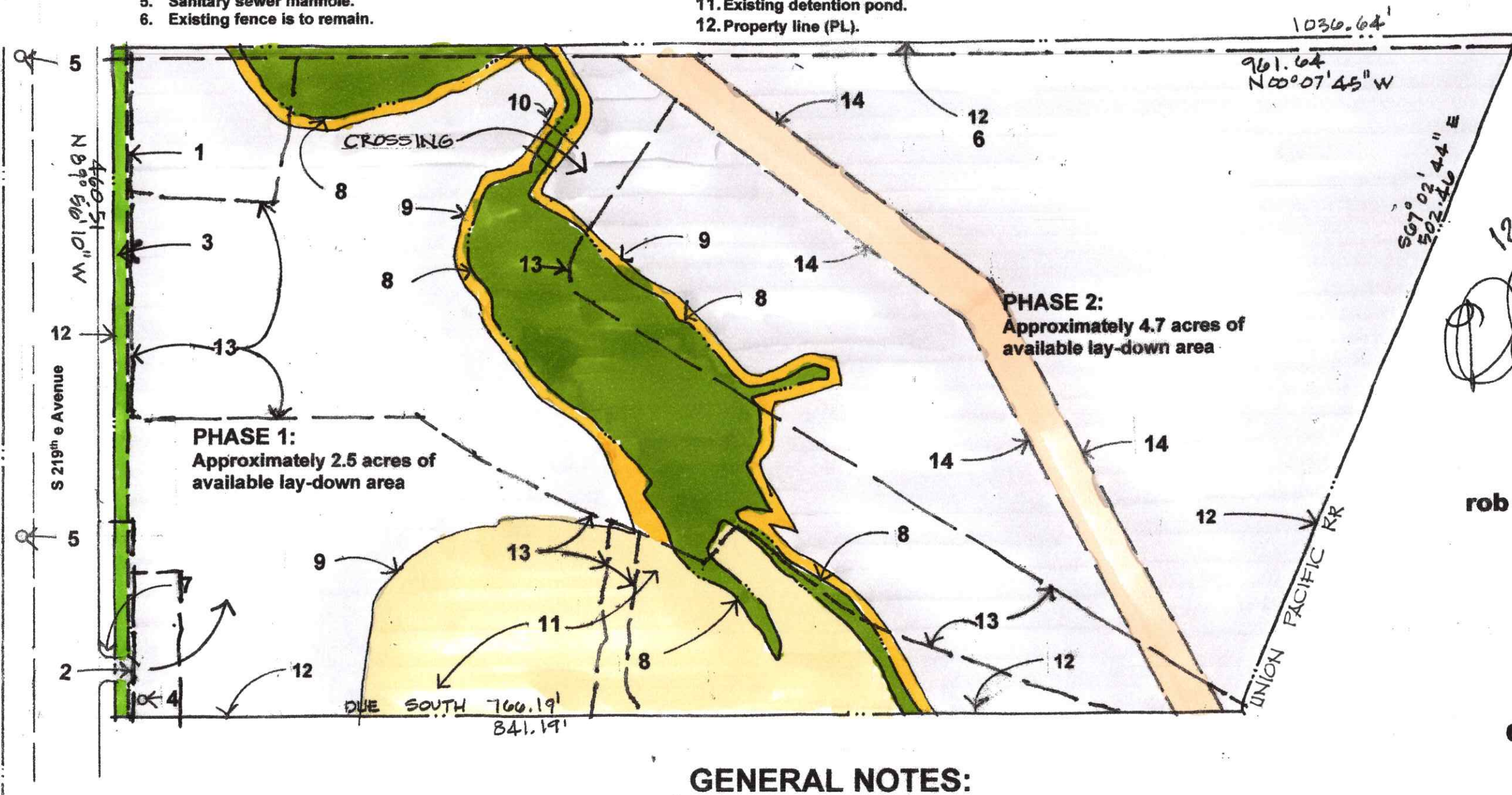
A tract of land in the Southwest Quarter of the Northeast Quarter (SW/4 NE/4) of Section Twenty (20), Township Eighteen (18) North, Range Fifteen (15) East of the Indian Base and Meridian, Wagoner County, State of Oklahoma, according to the U.S. Government Survey thereof, more particularly described as follows: Beginning at the Southwest corner of said NE/4, thence N 00°07'45" W along the Westerly line thereof a distance of 1036.64 feet to a point on the Southerly Right-of-Way line of the MK&T Railroad; thence S 67°02'44" E along said line a distance of 502.46 feet to the Northwest corner of Coach Port, an Addition in Wagoner County, State of Oklahoma, according to the recorded Plat thereof; thence due South and along the West line of said Coach Port, a distance of 841.19 feet to the South line of said NE/4; thence N 89°56'10" W along the Southerly line of said SW/4 NE/4 a distance of 460.34 feet to the Point of Beginning; LESS AND EXCEPT the South 75.00 feet thereof.

KEY NOTES:

1. 6-foot-high metal screening fence.
2. Metal access gate w/ Knox box.
3. 10-foot-wide landscaping strip complete with sprinkler system.
4. Water service with meter. Water service to supply sprinkler system with backflow prevention.
5. Sanitary sewer manhole.
6. Existing fence is to remain.

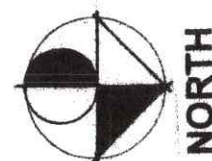
7. Existing 16" diameter plastic pipe culvert.
8. Boundary of regulated wetland.
9. 8 foot wide "buffer" between regulated wetland and new gravel for laydown yard.
10. Wetland crossing structure.
11. Existing detention pond.
12. Property line (PL).

13. Existing Drainage easement which directs offsite stormwater. Possible to be amended (per Civil Engineer's design) with final stormwater design. Line: _____
14. Sanitary Sewer Easement. Line: _____



SITE PLAN

1"=80'



GENERAL NOTES:

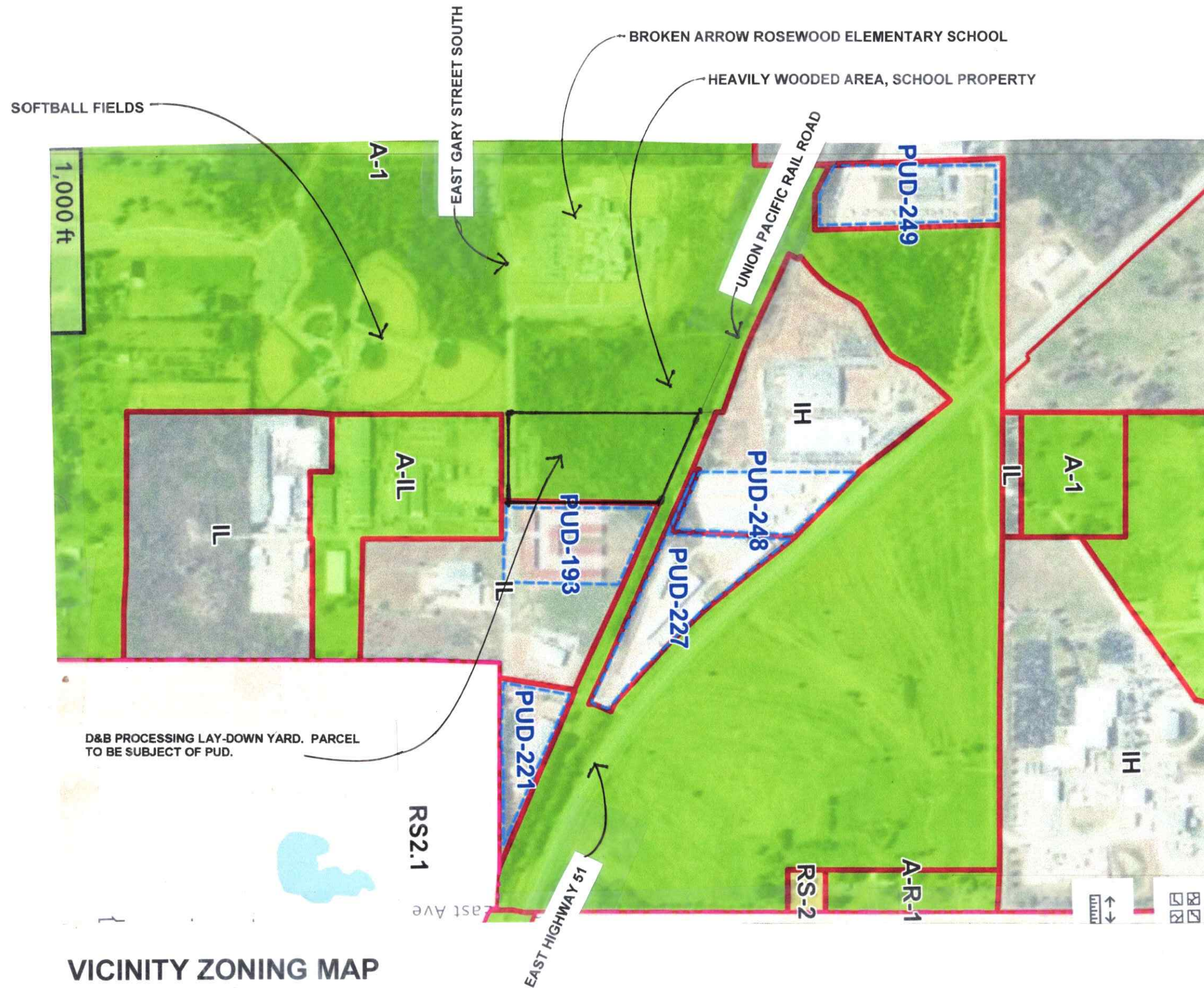
1. Information provided is preliminary in nature and can change during actual design and project's permit review process.
2. Wetlands boundary is based upon consultant's review.
3. Future Platting: Property's internal stormwater easements may be amended based upon engineer's stormwater design; however, no change to off-site stormwater which affects this site will be reduced without engineer's study.
4. Lay-down area has a gravel surface with defined edge at the wetland edge. Refer Civil Engineer's drawings.



rob coday architect LLC

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918 636 0574
rcodayarch@yahoo.com

**zoning change
for
d & b processing
laydown yard**



VICINITY ZONING MAP
SCALE: REFER BAR GRAPH

EXHIBIT A



AQUATIC RESOURCES DELINEATION REPORT

**Laydown Yard
4600 E Gary St
Broken Arrow, OK 74014
Wagoner County**

Prepared for:

D&B Processing
9750 South 219th East Avenue
Broken Arrow, 74014

May 2025

Prepared by:

Apex Companies, LLC
6666 South Sheridan Road, Suite 250
Tulsa, OK 74133

Apex Project No. DBP001-0312045-25007888

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Table 3: Delineated Aquatic Features - Wetlands

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Appendix B – Wetland Determination Data Sheets

Appendix C – Antecedent Precipitation Tool Results

Appendix D – Photographic Log

1.0 INTRODUCTION

Apex Companies, LLC (Apex) completed an aquatic resources delineation for the approximately 9.2-acre property located at 4600 East Gary Street in Broken Arrow, OK, in Wagoner County (Project). The Project is mostly undeveloped except for a laydown yard in the southeast portion. The Project location is provided in **Figure 1**.

The purpose of the assessment was to identify water features within the Project and determine the locations and extent of potentially jurisdictional WOTUS subject to the Clean Water Act (CWA). Under Section 404 of the CWA, the United States Army Corps of Engineers (USACE) has the authority to permit the discharge of dredged or fill material into WOTUS.

2.0 REGULATORY OVERVIEW

WOTUS are regulated under Section 404 of the CWA and a subset of those waters are subject to Section 10 of the Rivers and Harbors Act. The Environmental Protection Agency (EPA) is responsible for administering the laws and regulations of the CWA; however, the USACE has the primary regulatory authority for enforcing Section 404/10 requirements for WOTUS, including wetlands.

The definition of WOTUS has been in transition. EPA promulgated the “Revised Definition of ‘Waters of the United States’” rule on March 20, 2023, to effectively replace the National Waters Protection Rule which was already remanded by a US Supreme Court decision. On August 29, 2023, EPA issued a final rule, the “Revised Definition of ‘Waters of the United States’; Conforming” rule, to align key aspects of the regulatory text to the US Supreme Court’s May 25, 2023, decision in the case of *Sackett v. EPA*. However, considering preliminary injunctions, the agencies are interpreting WOTUS consistent with the pre-2015 regulatory regime, plus the *Sackett* decision, in 26 states, including Oklahoma, until further notice.

Section 10 of the Rivers and Harbors Act applies to all navigable WOTUS, and those waters that are subject to the ebb and flow of tides, including any wetlands located below the mean high water line of tidal waters. Section 404 of the CWA applies to all waters, including wetlands, which have a continuous surface connection to other WOTUS. Wetlands have been defined by the USACE as 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.

3.0 METHODOLOGY

3.1 Background Review

Prior to conducting field work, the following resources were evaluated to identify water features and areas that are prone to wetland formation within the Project. Referenced sources can be found in **Appendix A** including:

- National Oceanic and Atmospheric Administration (NOAA) National Weather Service data
- US Geological Survey (USGS) topographic map (**Figure 2**)
- US Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) database (**Figure 2**)

- US Department of Agriculture (USDA) National Resources Conservation Service (NRCS) digital soil database (**Figure 3**)
- Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM; **Figure 4**)
- Aerial Photography, Google Earth 1995-2025

The antecedent precipitation conditions at the Project were evaluated prior to conducting the fieldwork on May 14 and 16, 2025, using the USACE Antecedent Precipitation Tool (APT) version v.2.0.0. The generated result of APT evaluation is included in **Appendix B**. Based on this evaluation; the survey occurred during the wet season and the antecedent precipitation was wetter than normal during fieldwork in May 2025.

According to NOAA, 0.71 inches of precipitation was recorded on May 7-8, 2025, prior to the May 2025 survey at the Broken Arrow 1.5 WSW weather station in Broken Arrow, OK.

3.2 Project Area Description

Ecoregion and Land Use

The Project lies entirely within the Osage Cuestas EPA Level IV Ecoregion within the Central Irregular Plains EPA Level III Ecoregion. The Osage Cuestas ecoregion is an irregular to undulating plain that is underlain by interbedded, westward-dipping sandstone, shale, and limestone. Natural vegetation is mostly tall grass prairie, but a mix of tall grass prairie and oak-hickory forest is native to eastern areas. Today rangeland, cropland, riparian forests, and on rocky hills, oak woodland or oak forest occur. Rivers and streams typically have low gradients, slowly moving water, muddy banks, and meander in wide valleys. Stream substrates and habitats vary from a high quality, variable mix of conditions to silt- and mud-choked channels. (Woods et al. 2005).

The Project includes approximately 9.2 acres of mostly undeveloped land which includes an approximately 0.8-acre laydown yard for metal sheets on the southeast portion. A municipal wastewater utility right-of-way (ROW) transects the Project in the central portion as evidenced by active construction during the May 2025 survey. The Project consisted of mixed grassland on the southeastern portion which transitions to forested communities dominated by deciduous trees, such as green ash (*Fraxinus pennsylvanica*), common hackberry (*Celtis occidentalis*), American elm (*Ulmus americanus*), black willow (*Salix nigra*), and eastern cottonwood (*Populus deltoides*). Per USGS topographic maps, an unnamed riverine feature transects the Project from the northeast corner to the southeast corner.

3.3 Field Survey

The approximately 9.2-acre Project was assessed by project scientist, Gianna Spear, MS, on May 14 and 16, 2025. The assessment was conducted following the guidance of *USACE Wetlands Delineation Manual* (1987) and *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region* (Version 2.0, 2010). At the time of the May 2025 survey, there was active construction along the municipal wastewater utility ROW in response to a municipal wastewater pipeline break. Sewage had entered the environment; however, the volume and impact had not yet been determined at the time of the May 2025 survey. Due to safety concerns, the area of active construction and potential areas of

impact were avoided. Visual assessment of the areas was made from a safe distance. Lack of access to these portions of the Project is discussed in Section 4.3.

The field survey consisted of a visual presence/absence assessment of aquatic features within the Project. All aquatic features were digitally georeferenced/mapped using an Apple iPad tethered via Bluetooth connection with an iSxBlue II+ GNSS with sub-meter accuracy. ArcGIS's Field Maps application was used to store, host, and process collected Project data.

For waterways and waterbodies, the presence of an Ordinary High-Water Mark (OHWM) as defined in the *USACE National Ordinary High Water Mark Field Delineation Manual for Rivers and Streams*, dated January 2025 was used. The manual defines OHWM as "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as [a] 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 presence of a wetland was determined by the existence of all three (3) of the following criteria: wetland hydrology, hydrophytic vegetation, and hydric soils. Areas meeting all three (3) wetland criteria as described below contain two (2) data points one (1) within the boundary of the wetland and one (1) demarcating the upland extent outside of the wetland). Historical aerial photography and current Project conditions were evaluated to determine connectivity with hydrologic features outside of the Project.

Hydrology

Wetland hydrology indicators include the presence of surface water, high water tables, saturation, water marks, sediment deposits, drift deposits, algal mats or crusts, iron deposits, and inundation visible on aerial imagery. In addition, water-stained leaves, aquatic fauna, hydrogen sulfide odor, oxidized rhizospheres along living roots, the presence of iron reduction in tilled soils, thin muck surfaces, gauge or well data, drainage patterns, surface soil cracks, crayfish burrows, and shallow aquitards are considered indicators of wetland hydrology.

Hydrophytic Vegetation

The USACE 2022 *National Wetland Plant Lists* for the Midwest Region were used to identify the appropriate wetland indicator status for each plant species identified. Hydrophytic vegetation is considered prevalent where more than 50 percent of the dominant species in a plant community have an indicator status of OBL, FACW, or FAC as defined below.

Individual plant species are classified as follows:

- OBL – obligate wetland species
- FACW – facultative trending wet and usually found in wetlands
- FAC – facultative found in wetlands and uplands
- FACU – facultative but usually found in uplands
- UPL – upland species
- NI – plants with no indicator; usually considered upland species

Hydric Soil

Hydric soils are defined as soils that are saturated, flooded, or ponded during the growing season for a period sufficient to develop anaerobic conditions in the upper horizons. These conditions are created by repeated or prolonged saturation or flooding resulting in changes in soil color and chemistry which are used to differentiate hydric from non-hydric soils.

3.4 Anticipated Determination of Jurisdictional Status

The anticipated jurisdictional status of each aquatic feature was determined based on our experience and guidance produced by the EPA and USACE for the pre-2015 regulatory regime and the *Sackett v. EPA* US Supreme Court decision.

4.0 RESULTS

4.1 Delineated Aquatic Features

A total of eight (8) aquatic features were delineated within the Project through the methodologies described above which include: four (4) waterways, one (1) waterbody, and three (3) wetlands. Additionally, a retention pond is present in the southeastern corner of the Project. The results of the assessment are summarized in **Tables 1-3**. Delineated aquatic features are depicted in **Figure 5**, clearly representing which features and boundaries have been field verified. Representative photographs from the May 2025 survey events are provided in **Appendix C**.

A total of nine (9) data points (DP; **Figure 5**) were sampled in May 2025 within the Project that were suspected of having wetland conditions or to delineate the extent of wetlands. Four (4) of the nine (9) data points met all three criteria (hydrology, hydric soils, and hydric vegetation) to be deemed a wetland. Wetland determination data sheets are provided in **Appendix B**.

Table 1: Delineated Aquatic Features - Waterways

ID	Resource Type ¹	Surface Area ² (acres) within Project	Average OHWM Width (ft) ³	Potentially Jurisdictional?	NWI ⁴
WW01	Intermittent	0.120	3	Yes	PFO1A
WW02	Intermittent	0.048	3	Yes	PFO1A
WW03	Intermittent	0.024	4	Yes	PFO1A
WW04	Ephemeral	0.011	2	No	PFO1A

¹Resource types defined as follows:

Ephemeral: A waterway that flows only in direct response to a precipitation event.

Intermittent: A waterway that flows more than in direct response to a precipitation event, and generally seasonally.

Perennial: A waterway that flows continuously throughout the year.

²All calculations were based on the Project using the NAD 1983 StatePlane Oklahoma North FIPS 3501 Feet coordinate system as depicted in **Figure 5**.

³Average OHWM rounded to the nearest foot.

⁴National Wetlands Inventory classification defined as follows:

PFO: Palustrine forested; 1: Broad-leaved deciduous; A: Temporary Flooded

Table 2: Delineated Aquatic Features – Waterbodies

ID	Resource Type ¹	Surface Area (acres) ² within Project	Potentially Jurisdictional?	NWI ³
WB01	Impoundment	0.15	Yes	PFO1A

¹Impoundment is defined as a waterbody with a continuous and indistinguishable surface connection with a waterway.

²All calculations were based on the Project using the NAD 1983 StatePlane Oklahoma North FIPS 3501 Feet coordinate system as depicted in **Figure 5**.

³National Wetlands Inventory classification defined as follows:

PFO: Palustrine forested; 1: Broad-leaved deciduous; A: Temporary Flooded

Table 3: Delineated Aquatic Features – Wetlands

ID	Resource Type ¹	Area (acres) ²	Potentially Jurisdictional?	NWI ³
WET01-PEM	Palustrine Emergent	0.140	No	-
WET02-PEM	Palustrine Emergent	0.163	Yes	PFO1A
WET03-PFO	Palustrine Forested	0.386	Yes	PFO1A

¹Resource type is defined as follows:

PEM – Palustrine Emergent Wetland

PFO – Forested Wetland

²All calculations were based on the Project using the NAD 1983 StatePlane Oklahoma North FIPS 3501 Feet coordinate system as depicted in **Figure 5**.

³National Wetlands Inventory classification defined as follows:

PFO: Palustrine forested; 1: Broad-leaved deciduous; A: Temporary Flooded

4.2 Aquatic Features Descriptions

Waterways

WW01, WW02, and WW03

WW01, WW02, and WW03 are intermittent streams (**Figure 5**). WW01 extends from the east central portion of the project to the southwest before joining WW02 and flowing off the Project. WW03 is a continuation of WW01. WW01 and WW03 are bound by herbaceous upland, forested upland, and herbaceous wetland vegetation communities. Herbaceous upland species includes common ragweed (*Ambrosia artemisiifolia*), black willow, poison ivy (*Toxicodendron radicans*), Japanese honeysuckle (*Lonicera japonica*), coralberry (*Symphoricarpos orbiculatus*), and Chinese privet (*Ligustrum sinense*). Within the forested upland, additional species include mulberry (*Morus rubra*), common hackberry, and snailseed (*Nephroia carolina*). Evidence of an OHWM consists of minor scouring, exposed tree roots, changes in character of soil, and drift deposits. The OHWM ranges from approximately two (2) to five (5) feet. The stream bed consists of silty clay sediment and surface water was turbid at the time of the survey. WW02 has similar vegetation community, bed, and hydrological characteristics. WW02 may have had a continuous upstream surface connection with WB01 and WET03-PFO which is further discussed in the Wetlands section. Evidence of vehicle traffic through WW01 and WW02 is evident in the west central portion of Project, likely impacting turbidity and altering rate and path of flow. Additionally, evidence of earthwork activities was observed adjacent to WW01 and WW02 which likely have contributed sediment deposition into the streams.

WW04

WW04 is an ephemeral stream that drains excess flow during heavy precipitation events from WET02-PEM into WW02. The vegetation community is consistent with WW03. A faint OHWM is present intermittently and is evident by destruction of vegetation and minor scouring. WW04 is impacted by vehicle traffic, altering rate and path of flow.

Waterbodies

WB01

WB01 is an isolated impoundment northeast of WW02 and adjacent to the municipal wastewater utility pipeline right of way. Evidence of earthwork activities and additional pooling were observed within the immediate proximity of WB01. WB01 did not have a continuous surface connection with WET03-PFO or WW02 at the time of the May 2025 survey, however there likely was a historical continuous surface connection based on aerial imagery and local topography.

Wetlands

WET01-PEM

WET01-PEM is a palustrine emergent wetland that is present within a historical retention pond. The dominant vegetation observed within the retention pond is the Rufous bulrush (*Scirpus pendulus*). Additional species are broomsedge bluestem (*Andropogon virginicus*) and common spike-rush (*Eleocharis palustris*). The retention pond receives upland flow from the east adjacent property and drains through a concrete outlet as sheet flow into WET02-PEM.

WET02-PEM

WET02-PEM is a palustrine emergent wetland adjacent to WW01 with which it exhibits a continuous surface connection. Dominant vegetation consists of swamp dock (*Rumex verticillatus*), bearded beggarticks (*Bidens aristosa*), summer grape (*Vitis aestivalis*), tall goldenrod (*Solidago altissima*), poison ivy, black willow, climbing rose (*Rosa setigera*), foxtail sedge (*Carex vulpinoidea*), and fleabane (*Erigeron annuus*). Intermittent standing water and drainage patterns were observed. Debris from tree removal is present within the wetland. The eastern portion of WET02-PEM likely receives subsurface flow from the retention pond.

WET03-PFO

WET03-PFO is a forested wetland within the northern portion of the Project. Dominant vegetation consists of black willow, common spike-rush, and poison ivy. Other vegetation consists of American elm, American sycamore (*Platanus occidentalis*), late boneset (*Eupatorium serotinum*), and Japanese honeysuckle. Standing water and saturation were observed and confirmed from aerial imagery were observed. The southwestern portion of WET03-PFO has been impacted by the ongoing wastewater utility construction and sewage spill. During the May 2025 survey, the ROW between WET03-PFO and WB01 was graded, potentially filled, and installed with construction matting. These observations

combined with aerial imagery and local topography, it is likely that WET03-PFO had a historical surface connection with WB01 and WW02. However, at the time of the survey, there was no surface connection.

4.3 Normal Circumstances, Problematic Areas, and Atypical Situations

The *USACE Wetland Delineation Manual* (1987), *Regional Supplement* (2010), and *Regulatory Guidance Letters* (RGL 82-02 and 86-09) define the terms Normal Circumstances, Problematic Areas, and Atypical Situations. Apex looked for these conditions during the field events. Atypical Situations are a result of human activities or natural events that modify vegetation, hydrology, or soil. This could include placement of fill, construction of dams/levees, land use conversion, channelization of drainages, fire, drought, or flooding.

At the time of the May 2025 survey, there was construction on the municipal wastewater utility right of way that transects the Project. The right of way was graded, cleared of all vegetation, and construction matting was placed over areas between WET03-PFO and WB01. Earthwork activities were evident in areas adjacent to the right of way, altering the soils, vegetation community, and hydrology. Pooling was observed in areas and is shown in the photolog (**Appendix D**) and in **Figure 5**. The construction foreman indicated that the wastewater pipeline failed, resulting in a sewage release to the immediate area. The amount and extent of sewage release had not been determined at the time of the May 2025 survey. The approximate extent of sewage release footprint shown on **Figure 5** was determined by odor and presence of algae in areas of pooling, but the footprint has not been confirmed. Given accessibility was restricted due to avoid untreated sewage and active construction, the extent of WET03-PFO within the potential sewage release footprint was visually estimated from a safe distance and further refined with aerial imagery. These conditions classify WET03-PFO as an Atypical Situation. The presence of wetland hydrology and hydrophytic vegetation were confirmed, but soil samples were not feasible to define the entire extent of WET03-PFO.

In addition, the May 2024 survey occurred during the wet season, and according to the USACE APT, conditions were wetter than normal. Higher than normal water levels were considered during evaluation.

5.0 REGULATORY CONSIDERATIONS

5.1 USACE and EPA Jurisdictional Determination

The USACE and EPA have not delegated the authority to make jurisdictional determinations; however, the jurisdictional determination opinions of Apex, expressed herein, are based on the records review, site observations, experience, joint USACE and EPA guidance, and the federal definition of WOTUS. The USACE asserts jurisdiction on a case-by-case basis. USACE and EPA concurrence can be sought through the Approved Jurisdictional Determination process.

There were four (4) aquatic features, WW01, WW02, WW03, and WET02-PEM, on the Project that were considered potential WOTUS based on field conditions during the May 2025 survey. The WET03-PFO jurisdictional status is dependent on post-construction conditions within the wastewater utility right of way. If pre-construction conditions are restored, and the connection between WET03-PFO is restored, then WET03-PFO is likely jurisdictional. If the connection is permanently severed, it is likely that WET03-PFO is not jurisdictional. Per the Supreme Court of the United States decision in *EPA v. Sackett*, wetlands

must have a “continuous surface connection” with another WOTUS so that there is “no clear demarcation between waters and wetlands.” Based on the May 2025 survey, WET02-PEM directly abuts WW01 and WW02 discharges into WW01. WW001 is an intermittent stream that eventually discharges into Broken Arrow Creek which discharges into the Arkansas River, a Section 10 River, and Harbors Act water according to the USACE Tulsa District (**Figure 6**). Additionally, tributaries may be considered WOTUS if they are “relatively permanent, standing or continuously flowing bodies” which excludes ephemeral streams (WW04) due to short durations of flow. Tables 1-3 summarize the type, NWI classification, and acreage of the features.

6.0 SUMMARY AND CONCLUSIONS

Apex completed a WOTUS assessment on an approximately 9.2-acre survey area for the D&B Processing property. The purpose of the investigation was to identify and delineate potentially jurisdictional WOTUS that are subject to regulations under Section 404 of the CWA. Jurisdictional WOTUS are regulated under the CWA by the USACE.

The investigation was completed through the review of background resources, field identification of water features, and determination of potential jurisdictional WOTUS. Apex identified eight (8) aquatic features at the Project. These features were identified based on the presence of an OHWM, hydrology indicators, hydrophytic vegetation, and/or hydric soils.


It is our opinion that four (4) aquatic features, WW01, WW02, WW03, and WET02-PEM, on the Project are likely jurisdictional WOTUS regulated by USACE under Section 404 of the CWA following the pre-2015 Rule and *Sackett* decision. WET03-PFO is also potentially jurisdictional if a surface connection is restored with WB01 and WW02 after the wastewater utility right of way construction is completed and been restored.

These services and this report were performed and prepared in accordance with generally accepted and customary practices of the environmental profession. No warranties, express or implied, are intended or made. The limitations of this assessment should be recognized as the relying party formulates conclusions on the environmental risks associated with construction of the proposed Project. Furthermore, the services herein shall in no way be construed, designed, or intended to be relied upon as legal interpretation or advice.

If you have any questions or require additional information, please contact Amy Smith at amy.smith@apexcos.com.

Sincerely,
Apex Companies, LLC


Gianna Spear, MS
Environmental Scientist II


Amy Smith, PhD, CSE
Senior Program Manager

REFERENCES

Federal Emergency Management Agency Flood Insurance Rate Map, Map Panel 40145C0115J eff. 9/30/2016.

Google Earth historical imagery that is a mix of private collections and photographs provided by the USGS and USDA Farm Service Agency with coverage of the Site between 1995 and 2025.

US Army Corps of Engineers (USACE). National Ordinary High Water Mark Field Delineation Manual for Rivers and Streams, Wetlands Regulatory Assistance Program. January 2025.

US Army Corps of Engineers (USACE). Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0). April 2010.

US Army Corps of Engineers (USACE). Wetlands Delineation Manual, Technical Report Y-87-1, US Army Engineer Waterways Experiment Station, Vicksburg, MS. January 1987.

US Department of Agriculture National Resource Conservation Service (NRCS) Wetland Search (<https://plants.usda.gov/home/wetlandSearch>)

US Department of Agriculture National Resource Conservation Service (NRCS) Web Soil Survey (<https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>)

US Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) (<https://www.fws.gov/wetlands/Data/Mapper.html>).

US Geological Survey (USGS) 7.5 Minute Topographic Quadrangle Map hosted by Esri

US Geological Survey (USGS) National Hydrography Dataset (NHD) <https://www.usgs.gov/national-hydrography/national-hydrography-dataset>

Woods, A.J., Omernik, J.M., Butler, D.R., Ford, J.G., Henley, J.E., Hoagland, B.W., Arndt, D.S., and Moran, B.C. (2005). Ecoregions of Oklahoma. Reston, US Geological Survey. https://dmap-prod-oms-edc.s3.us-east-1.amazonaws.com/ORD/Ecoregions/ok/ok_front.pdf


APPENDIX A

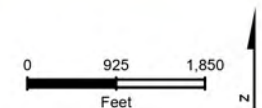
FIGURES

Figure 1
Site Location Map

**Aquatic Resources Delineation
D&B Processing
4600 E Gary St
Broken Arrow, OK 74014**

Legend

 Project Boundary



Feature symbols are not shown to scale



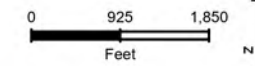
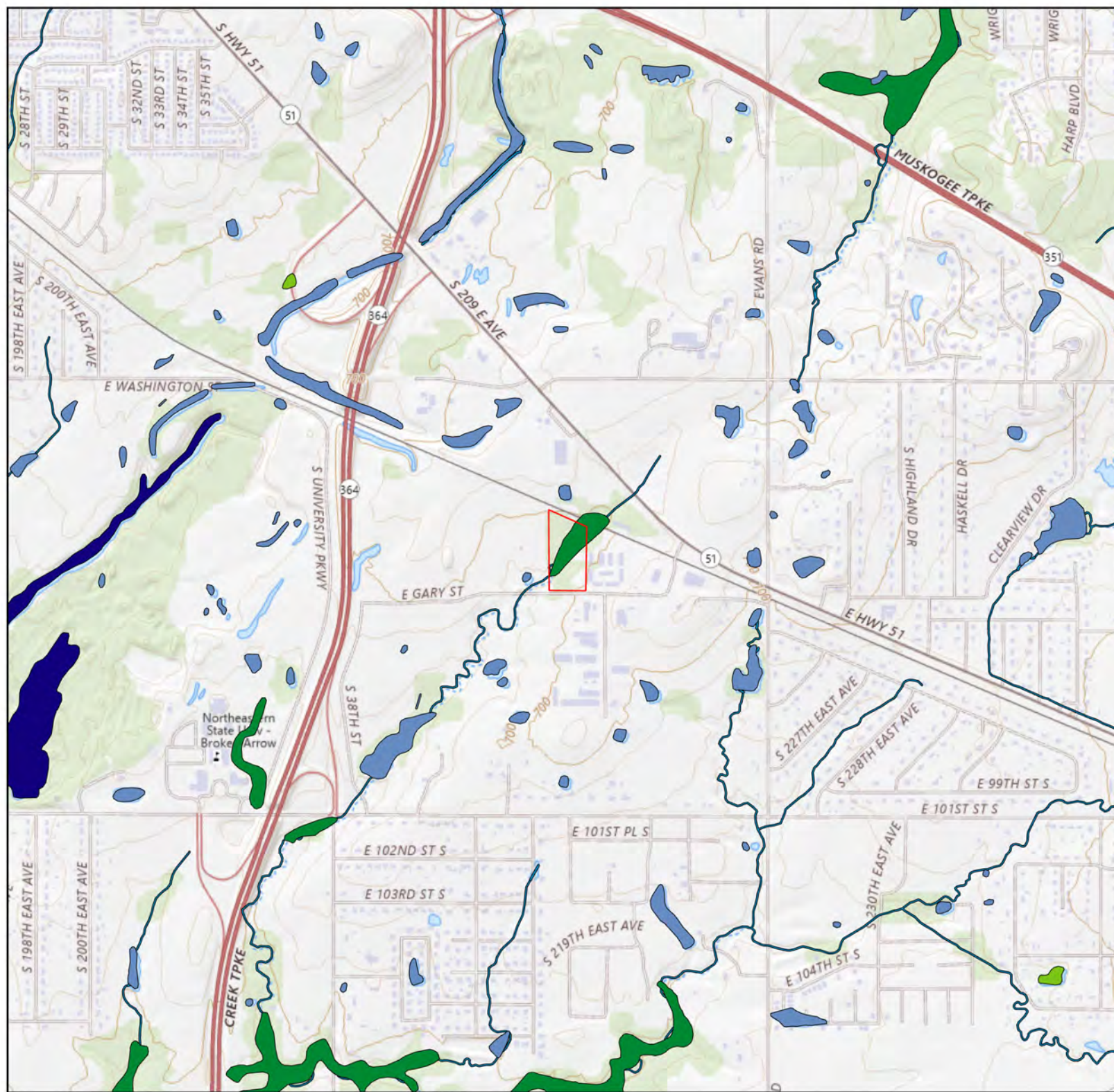
Apex Companies, LLC
6666 S Sheridan Rd, Ste 250
Tulsa, OK 74136
(918) 610-3543
www.apexcos.com

Figure 2 **National Wetlands** **Inventory and USGS** **Topographic Map**

Aquatic Resources Delineation
D&B Processing
4600 E Gary St
Broken Arrow, OK 74014

Legend

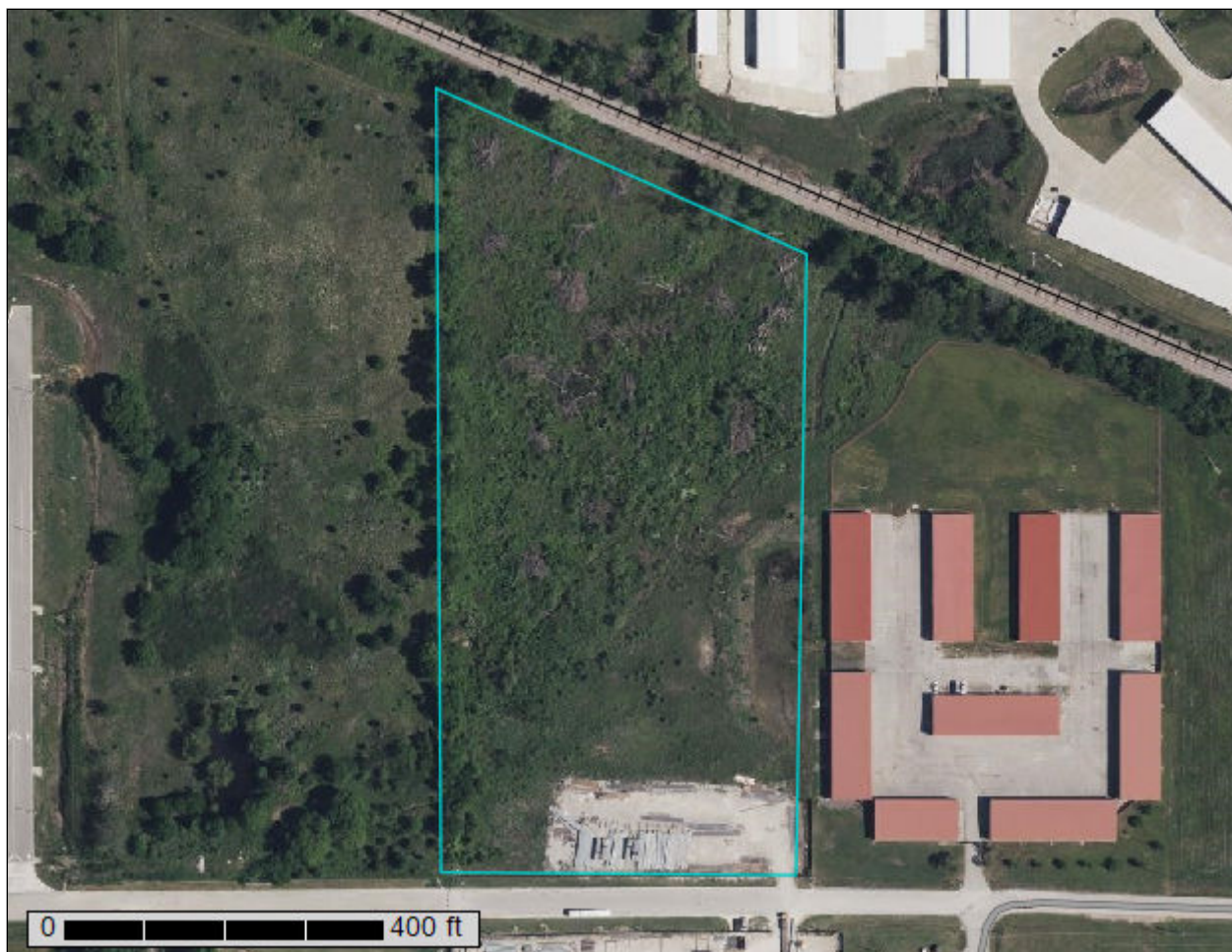
- Project Boundary
- Wetlands**
 - Estuarine and Marine Deepwater
 - Estuarine and Marine Wetland
 - Freshwater Emergent Wetland
 - Freshwater Forested/Shrub Wetland
 - Freshwater Pond
 - Lake
 - Other
 - Riverine



Feature symbols are not shown to scale

Custom Soil Resource Report for **Wagoner County, Oklahoma**

Figure 3



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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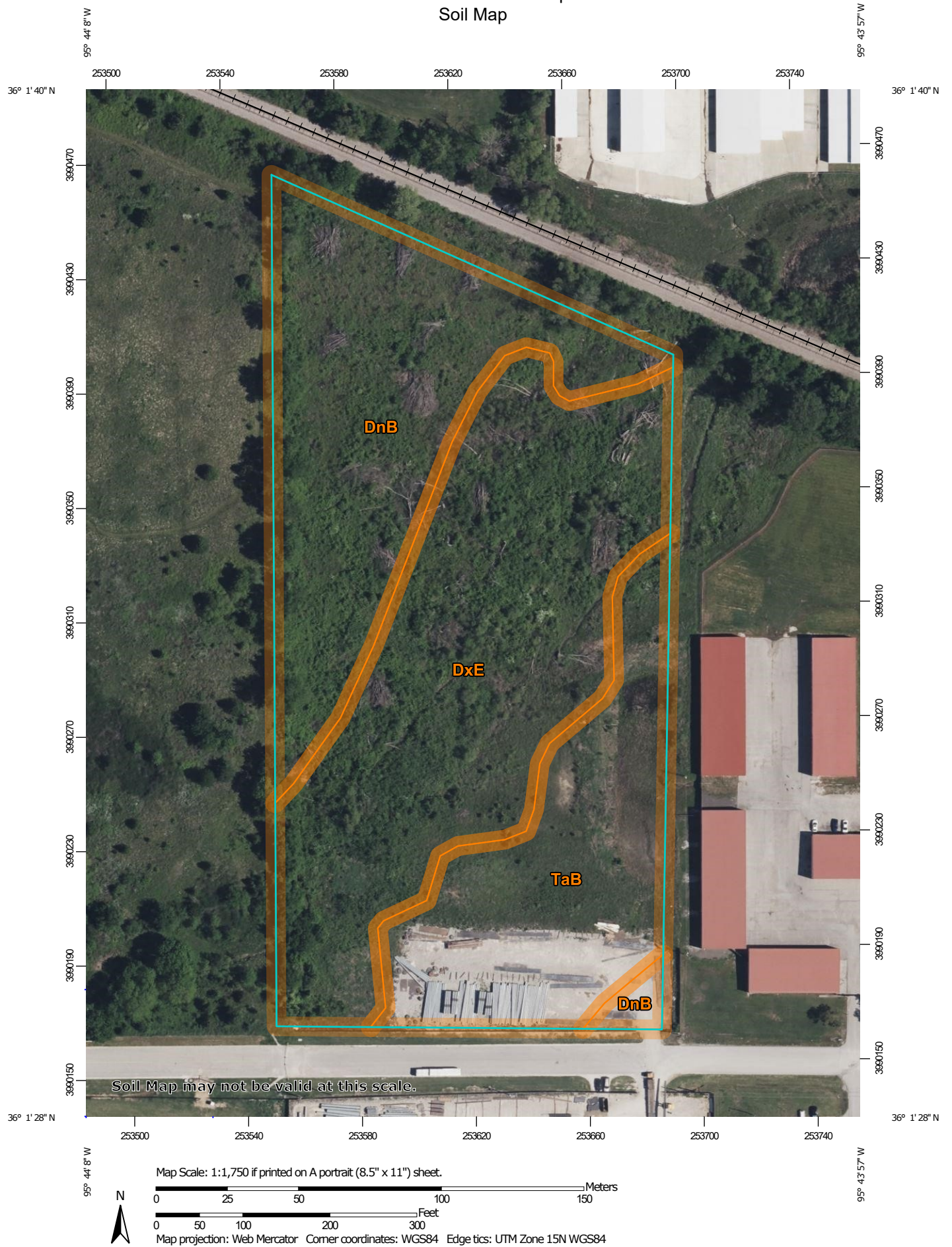
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Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

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

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

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

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

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

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

Soil Survey Area: Wagoner County, Oklahoma
Survey Area Data: Version 20, Sep 11, 2024

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

Date(s) aerial images were photographed: May 11, 2022—May 14, 2022

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
DnB	Dennis silt loam, 1 to 3 percent slopes	3.0	32.6%
DxE	Dennis-Radley complex, 0 to 15 percent slopes	4.0	43.9%
TaB	Taloka silt loam, 1 to 3 percent slopes	2.2	23.5%
Totals for Area of Interest		9.2	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or

landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Wagoner County, Oklahoma

DnB—Dennis silt loam, 1 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2tgsq
Elevation: 460 to 1,260 feet
Mean annual precipitation: 37 to 45 inches
Mean annual air temperature: 55 to 61 degrees F
Frost-free period: 150 to 255 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Dennis and similar soils: 82 percent
Minor components: 18 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dennis

Setting

Landform: Interfluves
Landform position (two-dimensional): Summit, footslope
Landform position (three-dimensional): Interfluve, base slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Silty and clayey residuum weathered from shale

Typical profile

A - 0 to 11 inches: silt loam
BA - 11 to 17 inches: silty clay loam
Bt1 - 17 to 22 inches: silty clay
Bt2 - 22 to 68 inches: silty clay
C - 68 to 79 inches: silty clay loam

Properties and qualities

Slope: 1 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 12 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C/D
Ecological site: R112XY103KS - Loamy Upland
Hydric soil rating: No

Minor Components

Parsons

Percent of map unit: 5 percent
Landform: Divides
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: R112XY101KS - Claypan Upland
Hydric soil rating: No

Bates

Percent of map unit: 5 percent
Landform: Interfluves
Landform position (two-dimensional): Summit, shoulder
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: R112XY103KS - Loamy Upland
Hydric soil rating: No

Eram

Percent of map unit: 5 percent
Landform: Interfluves
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: R112XY102KS - Clayey Upland
Hydric soil rating: No

Kenoma

Percent of map unit: 2 percent
Landform: Interfluves
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: R112XY102KS - Clayey Upland
Hydric soil rating: No

Pharoah

Percent of map unit: 1 percent
Landform: Paleoterraces
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Linear
Ecological site: R112XY102KS - Clayey Upland
Hydric soil rating: No

DxE—Dennis-Radley complex, 0 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2wqf9

Elevation: 480 to 790 feet

Mean annual precipitation: 41 to 45 inches

Mean annual air temperature: 59 to 63 degrees F

Frost-free period: 190 to 220 days

Farmland classification: Not prime farmland

Map Unit Composition

Dennis and similar soils: 50 percent

Radley and similar soils: 30 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dennis

Setting

Landform: Hillslopes

Landform position (two-dimensional): Shoulder, backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Silty and clayey residuum weathered from shale

Typical profile

A - 0 to 11 inches: silt loam

BA - 11 to 17 inches: silty clay loam

Bt1 - 17 to 22 inches: silty clay

Bt2 - 22 to 68 inches: silty clay

C - 68 to 79 inches: silty clay loam

Properties and qualities

Slope: 3 to 15 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 12 to 24 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water supply, 0 to 60 inches: High (about 10.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: C/D

Ecological site: R112XY103KS - Loamy Upland

Hydric soil rating: No

Description of Radley

Setting

Landform: Drainageways

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Silty alluvium

Typical profile

Ap - 0 to 16 inches: silt loam

Bw - 16 to 41 inches: silty clay loam

C - 41 to 79 inches: silty clay loam

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.20 to 1.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: Frequent

Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water supply, 0 to 60 inches: High (about 12.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 5w

Hydrologic Soil Group: B

Ecological site: R112XY120MO - Loamy Upland Drainageway

Hydric soil rating: No

Minor Components

Taloka

Percent of map unit: 10 percent

Landform: Paleoterraces

Landform position (three-dimensional): Tread

Down-slope shape: Convex

Across-slope shape: Linear

Ecological site: R112XY101KS - Claypan Upland

Hydric soil rating: No

Coweta

Percent of map unit: 5 percent

Landform: Hillslopes

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Ecological site: R112XY105OK - Shallow Sandstone Upland

Hydric soil rating: No

Parsons

Percent of map unit: 3 percent

Custom Soil Resource Report

Landform: Divides
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: R112XY101KS - Claypan Upland
Hydric soil rating: No

Okemah

Percent of map unit: 2 percent
Landform: Paleoterraces
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: R112XY103KS - Loamy Upland
Hydric soil rating: No

TaB—Taloka silt loam, 1 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2thf4
Elevation: 500 to 1,200 feet
Mean annual precipitation: 37 to 45 inches
Mean annual air temperature: 54 to 63 degrees F
Frost-free period: 185 to 255 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Taloka and similar soils: 94 percent
Minor components: 6 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Taloka

Setting

Landform: Paleoterraces
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Loamy and clayey alluvium and/or loamy and clayey colluvium over residuum weathered from sandstone and shale

Typical profile

Ap - 0 to 8 inches: silt loam
E - 8 to 20 inches: silt loam
2Btg1 - 20 to 24 inches: silty clay
2Btg2 - 24 to 39 inches: silty clay
2BC - 39 to 59 inches: silty clay loam
2C - 59 to 79 inches: silty clay loam

Properties and qualities

Slope: 1 to 3 percent

Depth to restrictive feature: 9 to 24 inches to abrupt textural change

Drainage class: Somewhat poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)

Depth to water table: About 6 to 18 inches

Frequency of flooding: None

Frequency of ponding: None

Gypsum, maximum content: 6 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water supply, 0 to 60 inches: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3s

Hydrologic Soil Group: D

Ecological site: R112XY101KS - Claypan Upland

Hydric soil rating: No

Minor Components

Dennis

Percent of map unit: 6 percent

Landform: Interfluves

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Base slope

Down-slope shape: Convex

Across-slope shape: Convex

Ecological site: R112XY103KS - Loamy Upland

Hydric soil rating: No

Soil Information for All Uses

Suitabilities and Limitations for Use

The Suitabilities and Limitations for Use section includes various soil interpretations displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each interpretation.

Land Classifications

Land Classifications are specified land use and management groupings that are assigned to soil areas because combinations of soil have similar behavior for specified practices. Most are based on soil properties and other factors that directly influence the specific use of the soil. Example classifications include ecological site classification, farmland classification, irrigated and nonirrigated land capability classification, and hydric rating.

Hydric Rating by Map Unit

This rating indicates the percentage of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is rated based on its respective components and the percentage of each component within the map unit.

The thematic map is color coded based on the composition of hydric components. The five color classes are separated as 100 percent hydric components, 66 to 99 percent hydric components, 33 to 65 percent hydric components, 1 to 32 percent hydric components, and less than one percent hydric components.

In Web Soil Survey, the Summary by Map Unit table that is displayed below the map pane contains a column named 'Rating'. In this column the percentage of each map unit that is classified as hydric is displayed.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.


Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

Custom Soil Resource Report Map—Hydric Rating by Map Unit









MAP LEGEND

Area of Interest (AOI)







 Area of Interest (AOI)

Soils







Soil Rating Polygons

 Hydric (100%)
 Hydric (66 to 99%)
 Hydric (33 to 65%)
 Hydric (1 to 32%)
 Not Hydric (0%)
 Not rated or not available


Soil Rating Lines

 Hydric (100%)
 Hydric (66 to 99%)
 Hydric (33 to 65%)
 Hydric (1 to 32%)
 Not Hydric (0%)
 Not rated or not available






Soil Rating Points

 Hydric (100%)
 Hydric (66 to 99%)
 Hydric (33 to 65%)
 Hydric (1 to 32%)
 Not Hydric (0%)
 Not rated or not available


Water Features

 Streams and Canals

Transportation

 Rails
 Interstate Highways
 US Routes
 Major Roads
 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

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

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

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

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

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

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

Soil Survey Area: Wagoner County, Oklahoma
 Survey Area Data: Version 20, Sep 11, 2024

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

Date(s) aerial images were photographed: May 11, 2022—May 14, 2022

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

Table—Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
DnB	Dennis silt loam, 1 to 3 percent slopes	0	3.0	32.6%
DxE	Dennis-Radley complex, 0 to 15 percent slopes	0	4.0	43.9%
TaB	Taloka silt loam, 1 to 3 percent slopes	0	2.2	23.5%
Totals for Area of Interest			9.2	100.0%

Rating Options—Hydric Rating by Map Unit

Aggregation Method: Percent Present

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

National Flood Hazard Layer FIRMMette



95°44'22"W 36°1'49"N



1:6,000

95°43'44"W 36°1'19"N

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
MAP PANELS		Unmapped
		The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.



This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **5/22/2025 at 11:03 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Figure 5
Delineated
Features Map

Aquatic Resources Delineation
D&B Processing
4600 E Gary St
Broken Arrow, OK 74014

Legend

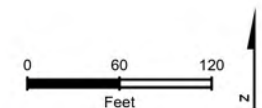
- Project Boundary
- 3-ft Contour
- Approximate Active Construction Area
- Potential Sewage Release Footprint

Delineated Features

- Waterway - Ephemeral Stream
- Waterway - Intermittent Stream
- Wetland - Emergent
- Wetland - Forested
- Pond
- Retention Pond
- Low Wet Area

Data Points

- Upland
- Wetland



Feature symbols are not shown to scale

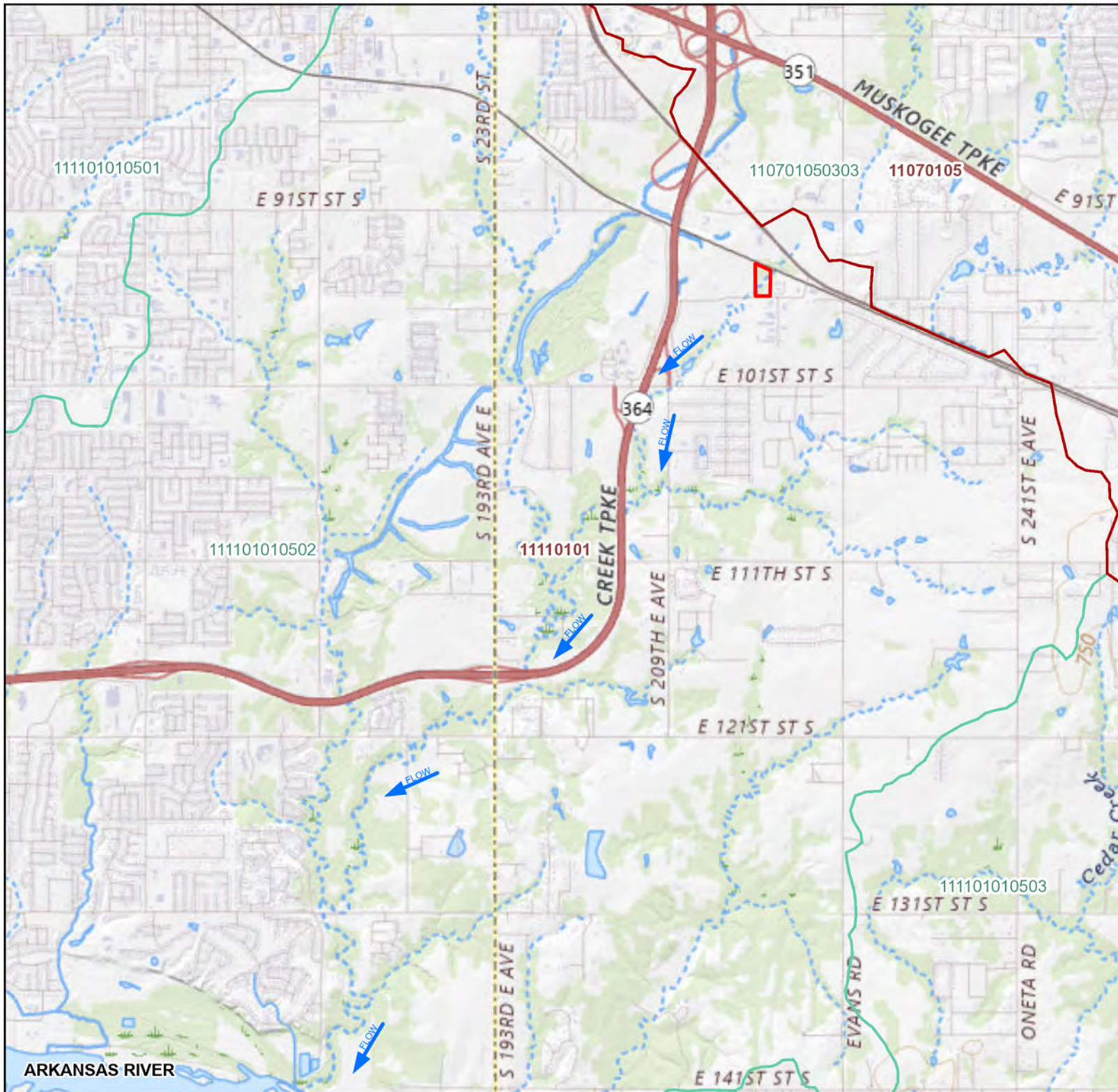


Figure 6
Watershed Map

**Aquatic Resources Delineation
D&B Processing
4600 E Gary St
Broken Arrow, OK 74014**

Legend

- Project Boundary
- 8-Digit HUC
- 12-Digit HUC



0 2,000 4,000
Feet



Feature symbols are not shown to scale



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APPENDIX B
FIELD DATA FORMS

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Midwest Region See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	OMB Control #: 0710-0024, Exp: 9/30/2027 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
--	---

Project/Site: Laydown Yard City/County: Broken Arrow, Wagoner County Sampling Date: 5/14/25
Applicant/Owner: D&B Processing State: OK Sampling Point: DP01
Investigator(s): Gianna Spear Section, Township, Range: Section 20 Township 18 N Range 15 E
Landform (hillside, terrace, etc.): retention pond Local relief (concave, convex, none): concave
Slope (%): 0-1 Lat: 36.025560 Long: -95.733575 Datum: WGS 1984
Soil Map Unit Name: Taloka silt loam, 1 to 3 percent slopes NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No X (If no, explain in Remarks.)
Are Vegetation , Soil X, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes No X
Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present? Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	

Remarks:
According to the USACE APT, survey occurred during the wet season and conditions are wetter than normal. Since DP001 is within a retention pond, the soil and hydrology have been artificially impacted.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> =Total Cover				Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>80</u> x 1 = <u>80</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>10</u> x 4 = <u>40</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>90</u> (A) <u>120</u> (B) Prevalence Index = B/A = <u>1.33</u>
Sapling/Shrub Stratum (Plot size: <u>15</u>)				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> =Total Cover				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: <u>5</u>)				
1. <u>Scirpus pendulus</u>	<u>80</u>	<u>Yes</u>	<u>OBL</u>	
2. <u>Andropogon virginicus</u>	<u>10</u>	<u>No</u>	<u>FACU</u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>90</u> =Total Cover				
Woody Vine Stratum (Plot size: <u>30</u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> =Total Cover				

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 2/2	100					Loamy/Clayey	
4-6	10YR 2/2	90	10YR 5/4	10	C	M	Loamy/Clayey	Distinct redox concentrations
6-14	10YR 2/2	80	10YR 5/4	20	C	M	Loamy/Clayey	Distinct redox concentrations

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stratified Layers (A5)	
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Iron Monosulfide (A18)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:
DP001 meets hydric soil indicator F8 due to being situated in a depression

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input checked="" type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input checked="" type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

Field Observations:				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Surface Water Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Depth (inches): _____		
Water Table Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Depth (inches): _____		
Saturation Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Depth (inches): _____		
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 9/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Laydown Yard City/County: Broken Arrow, Wagoner County Sampling Date: 5/14/25
Applicant/Owner: D&B Processing State: OK Sampling Point: DP02
Investigator(s): Gianna Spear Section, Township, Range: Section 20 Township 18 N Range 15 E
Landform (hillside, terrace, etc.): hillslope Local relief (concave, convex, none): convex
Slope (%): 0-1 Lat: 36.025645 Long: -95.733752 Datum: WGS 1984
Soil Map Unit Name: Taloka silt loam, 1 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☐ No ☒ (If no, explain in Remarks.)
Are Vegetation ☐, Soil ☒, or Hydrology ☒ significantly disturbed? Are "Normal Circumstances" present? Yes ☐ No ☒
Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☐ No ☒
Hydric Soil Present? Yes ☒ No ☐
Wetland Hydrology Present? Yes ☐ No ☒

Is the Sampled Area within a Wetland? Yes ☐ No ☒

Remarks:

According to the USACE APT, survey occurred during the wet season and conditions are wetter than normal. DP02 is within a retention pond berm, the soil and hydrology have been artificially impacted.

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				
		=Total Cover		
Sapling/Shrub Stratum	(Plot size: <u>15</u>)			
1.				
2.				
3.				
4.				
5.				
		=Total Cover		
Herb Stratum	(Plot size: <u>5</u>)			
1.	<u>Bromus arvensis</u>	<u>30</u>	<u>No</u>	<u>FACU</u>
2.	<u>Apocynum cannabinum</u>	<u>15</u>	<u>No</u>	<u>FAC</u>
3.	<u>Sorghum halepense</u>	<u>40</u>	<u>Yes</u>	<u>FACU</u>
4.	<u>Rubus allegheniensis</u>	<u>10</u>	<u>No</u>	<u>FACU</u>
5.	<u>Galium aparine</u>	<u>50</u>	<u>Yes</u>	<u>FACU</u>
6.	<u>Solidago altissima</u>	<u>15</u>	<u>No</u>	<u>FACU</u>
7.	<u>Teucrium canadense</u>	<u>10</u>	<u>No</u>	<u>FACW</u>
8.				
9.				
10.				
		<u>170</u>	=Total Cover	
Woody Vine Stratum	(Plot size: <u>30</u>)			
1.				
2.				
			=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>10</u>	x 2 = <u>20</u>
FAC species <u>15</u>	x 3 = <u>45</u>
FACU species <u>145</u>	x 4 = <u>580</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>170</u> (A)	<u>645</u> (B)
Prevalence Index = B/A = <u>3.79</u>	

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☐ No ☒

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP02

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-5	10YR 2/2	100					Loamy/Clayey	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Iron Monosulfide (A18) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Dark Surface (S7) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input checked="" type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Iron-Manganese Masses (F12) <input type="checkbox"/> Red Parent Material (F21) <input type="checkbox"/> Very Shallow Dark Surface (F22) <input type="checkbox"/> Other (Explain in Remarks)
--	---

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

Restrictive Layer (if observed): Type: _____ compaction Depth (inches): _____ 5	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
--	---

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Midwest Region See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	OMB Control #: 0710-0024, Exp: 9/30/2027 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: Laydown Yard City/County: Broken Arrow, Wagoner County Sampling Date: 5/16/25
Applicant/Owner: D&B Processing State: OK Sampling Point: DP03
Investigator(s): Gianna Spear Section, Township, Range: Section 20 Township 18 N Range 15 E
Landform (hillside, terrace, etc.): floodplain Local relief (concave, convex, none): concave
Slope (%): 0-1 Lat: 36.025747 Long: -95.734110 Datum: WGS 1984
Soil Map Unit Name: Dennis-Radley complex, 0 to 15 percent slopes NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No X (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No X
Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present? Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	

Remarks:
According to the USACE APT, survey occurred during the wet season and conditions are wetter than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> =Total Cover				Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>5</u> x 1 = <u>5</u> FACW species <u>110</u> x 2 = <u>220</u> FAC species <u>10</u> x 3 = <u>30</u> FACU species <u>20</u> x 4 = <u>80</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>145</u> (A) <u>335</u> (B) Prevalence Index = B/A = <u>2.31</u>
Sapling/Shrub Stratum (Plot size: <u>15</u>)				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> =Total Cover				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: <u>5</u>)				
1. <u>Carex vulpinoidea</u>	<u>80</u>	<u>Yes</u>	<u>FACW</u>	
2. <u>Scirpus pendulus</u>	<u>5</u>	<u>No</u>	<u>OBL</u>	
3. <u>Lonicera japonica</u>	<u>15</u>	<u>No</u>	<u>FACU</u>	
4. <u>Rubus allegheniensis</u>	<u>5</u>	<u>No</u>	<u>FACU</u>	
5. <u>Bidens aristosa</u>	<u>30</u>	<u>Yes</u>	<u>FACW</u>	
6. <u>Toxicodendron radicans</u>	<u>10</u>	<u>No</u>	<u>FAC</u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>145</u> =Total Cover				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
Woody Vine Stratum (Plot size: <u>30</u>)				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> =Total Cover				

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP03

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-15	10YR 2/1	100					Loamy/Clayey	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:						Indicators for Problematic Hydric Soils³:		
<input type="checkbox"/> Histosol (A1)					<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Iron-Manganese Masses (F12)		
<input type="checkbox"/> Histic Epipedon (A2)					<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Red Parent Material (F21)		
<input type="checkbox"/> Black Histic (A3)					<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Very Shallow Dark Surface (F22)		
<input type="checkbox"/> Hydrogen Sulfide (A4)					<input type="checkbox"/> Dark Surface (S7)	<input type="checkbox"/> Other (Explain in Remarks)		
<input type="checkbox"/> Stratified Layers (A5)					<input type="checkbox"/> Loamy Mucky Mineral (F1)			
<input type="checkbox"/> 2 cm Muck (A10)					<input type="checkbox"/> Loamy Gleyed Matrix (F2)			
<input type="checkbox"/> Depleted Below Dark Surface (A11)					<input type="checkbox"/> Depleted Matrix (F3)			
<input type="checkbox"/> Thick Dark Surface (A12)					<input type="checkbox"/> Redox Dark Surface (F6)			
<input type="checkbox"/> Iron Monosulfide (A18)					<input type="checkbox"/> Depleted Dark Surface (F7)			
<input type="checkbox"/> Sandy Mucky Mineral (S1)					<input type="checkbox"/> Redox Depressions (F8)			
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)								

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric Soil Present?
Yes ____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		
Field Observations:			
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	
Water Table Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	16
Saturation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	15
(includes capillary fringe)		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Midwest Region See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	OMB Control #: 0710-0024, Exp: 9/30/2027 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: <u>Laydown Yard</u>	City/County: <u>Broken Arrow, Wagoner County</u>	Sampling Date: <u>5/16/25</u>
Applicant/Owner: <u>D&B Processing</u>	State: <u>OK</u>	Sampling Point: <u>DP04</u>
Investigator(s): <u>Gianna Spear</u>	Section, Township, Range: <u>Section 20 Township 18 N Range 15 E</u>	
Landform (hillside, terrace, etc.): <u>riparian edge</u>	Local relief (concave, convex, none): <u>concave</u>	
Slope (%): <u>1-2</u>	Lat: <u>36.025883</u>	Long: <u>-95.734110</u> Datum: <u>WGS 1984</u>
Soil Map Unit Name: <u>Dennis-Radley complex, 0 to 15 percent slopes</u>		NWI classification: <u>PFO1A</u>
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (If no, explain in Remarks.)		
Are Vegetation <input checked="" type="checkbox"/> , Soil <input checked="" type="checkbox"/> , or Hydrology <input checked="" type="checkbox"/> significantly disturbed? Are "Normal Circumstances" present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> naturally problematic? (If needed, explain any answers in Remarks.)		

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: According to the USACE APT, survey occurred during the wet season and conditions are wetter than normal. Significant earthwork activities and local sewage release have impacted soil, vegetation, and hydrology. Data point taken outside of disturbance area, but full extent of wetland was estimated.	

VEGETATION – Use scientific names of plants.

<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Tree Stratum</th> <th style="text-align: center;">(Plot size: <u>30</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td colspan="3" style="text-align: right;">=Total Cover</td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Sapling/Shrub Stratum</th> <th style="text-align: center;">(Plot size: <u>15</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u>Salix nigra</u></td><td></td><td style="text-align: center;">10</td><td style="text-align: center;">Yes</td><td style="text-align: center;">OBL</td></tr> <tr><td>2. <u>Populus deltoides</u></td><td></td><td style="text-align: center;">7</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FAC</td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td colspan="3" style="text-align: right;">17 =Total Cover</td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Herb Stratum</th> <th style="text-align: center;">(Plot size: <u>5</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u>Rumex verticillatus</u></td><td></td><td style="text-align: center;">25</td><td style="text-align: center;">Yes</td><td style="text-align: center;">OBL</td></tr> <tr><td>2. <u>Bidens aristosa</u></td><td></td><td style="text-align: center;">30</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>3. <u>Vitis aestivalis</u></td><td></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>4. <u>Solidago altissima</u></td><td></td><td style="text-align: center;">15</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACU</td></tr> <tr><td>5. <u>Toxicodendron radicans</u></td><td></td><td style="text-align: center;">10</td><td style="text-align: center;">No</td><td style="text-align: center;">FAC</td></tr> <tr><td>6. <u>Salix nigra</u></td><td></td><td style="text-align: center;">10</td><td style="text-align: center;">No</td><td style="text-align: center;">OBL</td></tr> <tr><td>7. <u>Erigeron annuus</u></td><td></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>8. <u>Rosa setigera</u></td><td></td><td style="text-align: center;">7</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>9. <u>Carex vulpinoidea</u></td><td></td><td style="text-align: center;">15</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>10.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td colspan="3" style="text-align: right;">122 =Total Cover</td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Woody Vine Stratum</th> <th style="text-align: center;">(Plot size: <u>30</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td colspan="3" style="text-align: right;">=Total Cover</td> </tr> </table>	Tree Stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status	1.					2.					3.					4.					5.							=Total Cover			Sapling/Shrub Stratum	(Plot size: <u>15</u>)	Absolute % Cover	Dominant Species?	Indicator Status	1. <u>Salix nigra</u>		10	Yes	OBL	2. <u>Populus deltoides</u>		7	Yes	FAC	3.					4.					5.							17 =Total Cover			Herb Stratum	(Plot size: <u>5</u>)	Absolute % Cover	Dominant Species?	Indicator Status	1. <u>Rumex verticillatus</u>		25	Yes	OBL	2. <u>Bidens aristosa</u>		30	Yes	FACW	3. <u>Vitis aestivalis</u>		5	No	FACU	4. <u>Solidago altissima</u>		15	Yes	FACU	5. <u>Toxicodendron radicans</u>		10	No	FAC	6. <u>Salix nigra</u>		10	No	OBL	7. <u>Erigeron annuus</u>		5	No	FACU	8. <u>Rosa setigera</u>		7	No	FACU	9. <u>Carex vulpinoidea</u>		15	Yes	FACW	10.							122 =Total Cover			Woody Vine Stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status	1.					2.							=Total Cover			<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>83.3%</u> (A/B) </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>45</u></td> <td>x 1 = <u>45</u></td> </tr> <tr> <td>FACW species <u>45</u></td> <td>x 2 = <u>90</u></td> </tr> <tr> <td>FAC species <u>17</u></td> <td>x 3 = <u>51</u></td> </tr> <tr> <td>FACU species <u>32</u></td> <td>x 4 = <u>128</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>139</u> (A)</td> <td><u>314</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.26</u></td> </tr> </table> </div> <div style="border: 1px solid black; padding: 5px;"> Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> <u>2</u> - Dominance Test is >50% <input checked="" type="checkbox"/> <u>3</u> - Prevalence Index is ≤3.0¹ <u>4</u> - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. </div> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> </div>	Total % Cover of:	Multiply by:	OBL species <u>45</u>	x 1 = <u>45</u>	FACW species <u>45</u>	x 2 = <u>90</u>	FAC species <u>17</u>	x 3 = <u>51</u>	FACU species <u>32</u>	x 4 = <u>128</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>139</u> (A)	<u>314</u> (B)	Prevalence Index = B/A = <u>2.26</u>	
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SOIL

Sampling Point: DP04

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 2/1	100					Loamy/Clayey	
4-14	10YR 2/1	95	10YR 3/3	5	C	M	Loamy/Clayey	Distinct redox concentrations

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stratified Layers (A5)	
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Iron Monosulfide (A18)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

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

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>1</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>15</u> Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>13</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 9/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Laydown Yard City/County: Broken Arrow, Wagoner County Sampling Date: 5/16/25
Applicant/Owner: D&B Processing State: OK Sampling Point: DP05
Investigator(s): Gianna Spear Section, Township, Range: Section 20 Township 18 N Range 15 E
Landform (hillside, terrace, etc.): riparian edge Local relief (concave, convex, none): convex
Slope (%): 1-2 Lat: 36.025948 Long: -95.734228 Datum: WGS 1984
Soil Map Unit Name: Dennis-Radley complex, 0 to 15 percent slopes NWI classification: PFO1A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☐ No ☒ (If no, explain in Remarks.)
Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☐ No ☒
Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒
Wetland Hydrology Present? Yes ☐ No ☒

Is the Sampled Area
within a Wetland? Yes ☐ No ☒

Remarks:

According to the USACE APT, survey occurred during the wet season and conditions are wetter than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				
		=Total Cover		
Sapling/Shrub Stratum	(Plot size: <u>15</u>)			
1.				
2.				
3.				
4.				
5.				
		=Total Cover		
Herb Stratum	(Plot size: <u>5</u>)			
1.	<u><i>Symphoricarpos orbiculatus</i></u>	<u>90</u>	<u>Yes</u>	<u>FACU</u>
2.	<u><i>Toxicodendron radicans</i></u>	<u>15</u>	<u>No</u>	<u>FAC</u>
3.	<u><i>Ambrosia artemisiifolia</i></u>	<u>5</u>	<u>No</u>	<u>FACU</u>
4.	<u><i>Rubus allegheniensis</i></u>	<u>20</u>	<u>No</u>	<u>FACU</u>
5.	<u><i>Vitis aestivalis</i></u>	<u>5</u>	<u>No</u>	<u>FACU</u>
6.	<u><i>Rosa setigera</i></u>	<u>7</u>	<u>No</u>	<u>FACU</u>
7.				
8.				
9.				
10.				
		<u>142</u> =Total Cover		
Woody Vine Stratum	(Plot size: <u>30</u>)			
1.				
2.				
		=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That
Are OBL, FACW, or FAC: 0 (A)

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

Percent of Dominant Species That
Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>15</u>	x 3 = <u>45</u>
FACU species <u>127</u>	x 4 = <u>508</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>142</u> (A)	<u>553</u> (B)
Prevalence Index = B/A = <u>3.89</u>	

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation
2 - Dominance Test is >50%
3 - Prevalence Index is ≤3.0¹
4 - Morphological Adaptations¹ (Provide supporting
data in Remarks or on a separate sheet)
Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must
be present, unless disturbed or problematic.

**Hydrophytic
Vegetation
Present?** Yes ☐ No ☒

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP05

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-11	10YR 2/1	100					Loamy/Clayey	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.
²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Iron Monosulfide (A18) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)			<input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Dark Surface (S7) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8)			Indicators for Problematic Hydric Soils³: <input type="checkbox"/> Iron-Manganese Masses (F12) <input type="checkbox"/> Red Parent Material (F21) <input type="checkbox"/> Very Shallow Dark Surface (F22) <input type="checkbox"/> Other (Explain in Remarks)		
--	--	--	--	--	--	--	--	--

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

Restrictive Layer (if observed): Type: _____ roots Depth (inches): _____ 11	Hydric Soil Present? <div style="display: flex; justify-content: space-between;"> Yes _____ No <u>X</u> _____ </div>
Remarks: _____	

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		
Field Observations:			
Surface Water Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<input type="text"/>
Water Table Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<input type="text"/>
Saturation Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<input type="text"/>
(includes capillary fringe)		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Midwest Region See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	OMB Control #: 0710-0024, Exp: 9/30/2027 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: Laydown Yard City/County: Broken Arrow, Wagoner County Sampling Date: 5/16/25
Applicant/Owner: D&B Processing State: OK Sampling Point: DP06
Investigator(s): Gianna Spear Section, Township, Range: Section 20 Township 18 N Range 15 E
Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave
Slope (%): 1-2 Lat: 36.027007 Long: -95.733802 Datum: WGS 1984
Soil Map Unit Name: Dennis silt loam, 1 to 3 percent slopes NWI classification: PFO1A
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No X (If no, explain in Remarks.)
Are Vegetation , Soil X, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No X
Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present? Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	

Remarks:
According to the USACE APT, survey occurred during the wet season and conditions are wetter than normal. DP06 located on historic earthen crossing over forested wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
1. <u>Salix nigra</u>	<u>10</u>	<u>Yes</u>	<u>OBL</u>	
2. <u>Ulmus americana</u>	<u>5</u>	<u>Yes</u>	<u>FACW</u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>15</u> =Total Cover				Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>140</u> x 1 = <u>140</u> FACW species <u>15</u> x 2 = <u>30</u> FAC species <u>52</u> x 3 = <u>156</u> FACU species <u>5</u> x 4 = <u>20</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>212</u> (A) <u>346</u> (B) Prevalence Index = B/A = <u>1.63</u>
Sapling/Shrub Stratum (Plot size: <u>15</u>)				
1. <u>Salix nigra</u>	<u>50</u>	<u>Yes</u>	<u>OBL</u>	
2. <u>Platanus occidentalis</u>	<u>5</u>	<u>No</u>	<u>FACW</u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>55</u> =Total Cover				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: <u>5</u>)				
1. <u>Eleocharis palustris</u>	<u>80</u>	<u>Yes</u>	<u>OBL</u>	
2. <u>Eupatorium serotinum</u>	<u>15</u>	<u>No</u>	<u>FAC</u>	
3. <u>Toxicodendron radicans</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>	
4. <u>Sorghum halepense</u>	<u>5</u>	<u>No</u>	<u>FACU</u>	
5. <u>Penstemon digitalis</u>	<u>7</u>	<u>No</u>	<u>FAC</u>	
6. <u>Platanus occidentalis</u>	<u>5</u>	<u>No</u>	<u>FACW</u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>142</u> =Total Cover				
Woody Vine Stratum (Plot size: <u>30</u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> =Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: DP06

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-7	10YR 4/2	70	10YR 6/4	30	C	M	Loamy/Clayey	Distinct redox concentrations

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stratified Layers (A5)	
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Iron Monosulfide (A18)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	

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

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>6</u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks: Datapoint was taken on earthen crossing, surface water was present on either side up to 6 inches. Saturation visible on 2018 aerial imagery. Wetland is obscured by tree cover in more recent aerial imagery.	

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Midwest Region See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	OMB Control #: 0710-0024, Exp: 9/30/2027 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: <u>Laydown Yard</u>	City/County: <u>Broken Arrow, Wagoner County</u>	Sampling Date: <u>5/16/25</u>
Applicant/Owner: <u>D&B Processing</u>	State: <u>OK</u>	Sampling Point: <u>DP07</u>
Investigator(s): <u>Gianna Spear</u>	Section, Township, Range: <u>Section 20 Township 18 N Range 15 E</u>	
Landform (hillside, terrace, etc.): <u>hillslope</u>	Local relief (concave, convex, none): <u>convex</u>	
Slope (%): <u>3-5</u>	Lat: <u>36.027023</u>	Long: <u>-95.734076</u> Datum: <u>WGS 1984</u>
Soil Map Unit Name: <u>Dennis silt loam, 1 to 3 percent slopes</u>		NWI classification: <u>None</u>
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (If no, explain in Remarks.)		
Are Vegetation <input type="checkbox"/> , Soil <input checked="" type="checkbox"/> , or Hydrology <input type="checkbox"/> significantly disturbed? Are "Normal Circumstances" present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> naturally problematic? (If needed, explain any answers in Remarks.)		

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: According to the USACE APT, survey occurred during the wet season and conditions are wetter than normal. DP06 located on historic earthen crossing over forested wetland.	

VEGETATION – Use scientific names of plants.

<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Tree Stratum</th> <th style="text-align: center;">(Plot size: <u>30</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u>Fraxinus pennsylvanica</u></td><td></td><td style="text-align: center;">20</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>2. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>3. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>4. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>5. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="2"></td><td style="text-align: center;">20</td><td colspan="2" style="text-align: center;">=Total Cover</td></tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Sapling/Shrub Stratum</th> <th style="text-align: center;">(Plot size: <u>15</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u>Ligustrum sinense</u></td><td></td><td style="text-align: center;">20</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACU</td></tr> <tr><td>2. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>3. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>4. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>5. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="2"></td><td style="text-align: center;">20</td><td colspan="2" style="text-align: center;">=Total Cover</td></tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Herb Stratum</th> <th style="text-align: center;">(Plot size: <u>5</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u>Symphoricarpos orbiculatus</u></td><td></td><td style="text-align: center;">30</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACU</td></tr> <tr><td>2. <u>Rubus allegheniensis</u></td><td></td><td style="text-align: center;">40</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACU</td></tr> <tr><td>3. <u>Sorghum halepense</u></td><td></td><td style="text-align: center;">10</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>4. <u>Rosa setigera</u></td><td></td><td style="text-align: center;">30</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACU</td></tr> <tr><td>5. <u>Solidago altissima</u></td><td></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>6. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>7. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>8. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>9. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>10. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="2"></td><td style="text-align: center;">115</td><td colspan="2" style="text-align: center;">=Total Cover</td></tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Woody Vine Stratum</th> <th style="text-align: center;">(Plot size: <u>30</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>2. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="2"></td><td></td><td colspan="2" style="text-align: center;">=Total Cover</td></tr> </table>	Tree Stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status	1. <u>Fraxinus pennsylvanica</u>		20	Yes	FACW	2. _____					3. _____					4. _____					5. _____							20	=Total Cover		Sapling/Shrub Stratum	(Plot size: <u>15</u>)	Absolute % Cover	Dominant Species?	Indicator Status	1. <u>Ligustrum sinense</u>		20	Yes	FACU	2. _____					3. _____					4. _____					5. _____							20	=Total Cover		Herb Stratum	(Plot size: <u>5</u>)	Absolute % Cover	Dominant Species?	Indicator Status	1. <u>Symphoricarpos orbiculatus</u>		30	Yes	FACU	2. <u>Rubus allegheniensis</u>		40	Yes	FACU	3. <u>Sorghum halepense</u>		10	No	FACU	4. <u>Rosa setigera</u>		30	Yes	FACU	5. <u>Solidago altissima</u>		5	No	FACU	6. _____					7. _____					8. _____					9. _____					10. _____							115	=Total Cover		Woody Vine Stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status	1. _____					2. _____								=Total Cover		<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>20.0%</u> (A/B) </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: center;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>20</u></td> <td>x 2 = <u>40</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>135</u></td> <td>x 4 = <u>540</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>155</u> (A)</td> <td><u>580</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.74</u></td> </tr> </table> </div> <div style="border: 1px solid black; padding: 5px;"> Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0¹ <u>4</u> - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. </div> <div style="border: 1px solid black; padding: 5px;"> Hydrophytic Vegetation Present? 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SOIL

Sampling Point: DP07

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-8	10YR 2/1	100					Loamy/Clayey	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stratified Layers (A5)	
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Iron Monosulfide (A18)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

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

Restrictive Layer (if observed): Type: _____ compaction Depth (inches): _____ 8	Hydric Soil Present? Yes _____ No <u>X</u>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input checked="" type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Midwest Region See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	OMB Control #: 0710-0024, Exp: 9/30/2027 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: Laydown Yard City/County: Broken Arrow, Wagoner County Sampling Date: 5/16/25
Applicant/Owner: D&B Processing State: OK Sampling Point: DP08
Investigator(s): Gianna Spear Section, Township, Range: Section 20 Township 18 N Range 15 E
Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave
Slope (%): 3-5 Lat: 36.026045 Long: -95.733736 Datum: WGS 1984
Soil Map Unit Name: Dennis-Radley complex, 0 to 15 percent slopes NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No X (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No X
Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present? Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	

Remarks:
According to the USACE APT, survey occurred during the wet season and conditions are wetter than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> =Total Cover				Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>30</u> x 1 = <u>30</u> FACW species <u>110</u> x 2 = <u>220</u> FAC species <u>10</u> x 3 = <u>30</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>150</u> (A) <u>280</u> (B) Prevalence Index = B/A = <u>1.87</u>
Sapling/Shrub Stratum (Plot size: <u>15</u>)				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> =Total Cover				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: <u>5</u>)				
1. <u>Carex vulpinoidea</u>	<u>30</u>	<u>Yes</u>	<u>FACW</u>	
2. <u>Typha latifolia</u>	<u>15</u>	<u>No</u>	<u>OBL</u>	
3. <u>Rumex verticillatus</u>	<u>15</u>	<u>No</u>	<u>OBL</u>	
4. <u>Eupatorium serotinum</u>	<u>10</u>	<u>No</u>	<u>FAC</u>	
5. <u>Juncus spp.</u>	<u>75</u>	<u>Yes</u>	<u>FACW</u>	
6. <u>Teucrium canadense</u>	<u>5</u>	<u>No</u>	<u>FACW</u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>150</u> =Total Cover				
Woody Vine Stratum (Plot size: <u>30</u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> =Total Cover				

Remarks: (Include photo numbers here or on a separate sheet.)
No inflorescence observed on the rush (Juncus spp.). Given presence in depression with only species that are designated either FACW or OBL, the rush species is likely FACW.

SOIL

Sampling Point: DP08

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3	10YR 2/2	100					Loamy/Clayey	
3-13	10YR 2/2	95	10YR 3/6	5	C	M	Loamy/Clayey	Prominent redox concentrations

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stratified Layers (A5)	
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Iron Monosulfide (A18)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
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<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

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

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 11 Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 9 (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 9/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Laydown Yard City/County: Broken Arrow, Wagoner County Sampling Date: 5/16/25
Applicant/Owner: D&B Processing State: OK Sampling Point: DP09
Investigator(s): Gianna Spear Section, Township, Range: Section 20 Township 18 N Range 15 E
Landform (hillside, terrace, etc.): hillslope Local relief (concave, convex, none): convex
Slope (%): 3-5 Lat: 36.026180 Long: -95.733450 Datum: WGS 1984
Soil Map Unit Name: Taloka silt loam, 1 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☐ No ☒ (If no, explain in Remarks.)
Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☐ No ☒
Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒
Wetland Hydrology Present? Yes ☐ No ☒

Is the Sampled Area
within a Wetland? Yes ☐ No ☒

Remarks:

According to the USACE APT, survey occurred during the wet season and conditions are wetter than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				
		=Total Cover		
Sapling/Shrub Stratum	(Plot size: <u>15</u>)			
1.				
2.				
3.				
4.				
5.				
		=Total Cover		
Herb Stratum	(Plot size: <u>5</u>)			
1.	<u>Rhus copallinum</u>	<u>50</u>	<u>Yes</u>	<u>UPL</u>
2.	<u>Rubus allegheniensis</u>	<u>15</u>	<u>No</u>	<u>FACU</u>
3.	<u>Solidago altissima</u>	<u>60</u>	<u>Yes</u>	<u>FACU</u>
4.	<u>Lonicera japonica</u>	<u>60</u>	<u>Yes</u>	<u>FACU</u>
5.	<u>Carex bushii</u>	<u>10</u>	<u>No</u>	<u>FAC</u>
6.				
7.				
8.				
9.				
10.				
		<u>195</u> =Total Cover		
Woody Vine Stratum	(Plot size: <u>30</u>)			
1.				
2.				
		=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>10</u>	x 3 = <u>30</u>
FACU species <u>135</u>	x 4 = <u>540</u>
UPL species <u>50</u>	x 5 = <u>250</u>
Column Totals: <u>195</u> (A)	<u>820</u> (B)
Prevalence Index = B/A = <u>4.21</u>	

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☐ 2 - Dominance Test is >50%

☐ 3 - Prevalence Index is ≤3.0¹

☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☐ No ☒

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP09

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-8	10YR 2/2	100					Loamy/Clayey	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stratified Layers (A5)	
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Iron Monosulfide (A18)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	

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

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <u>X</u>
Remarks:	

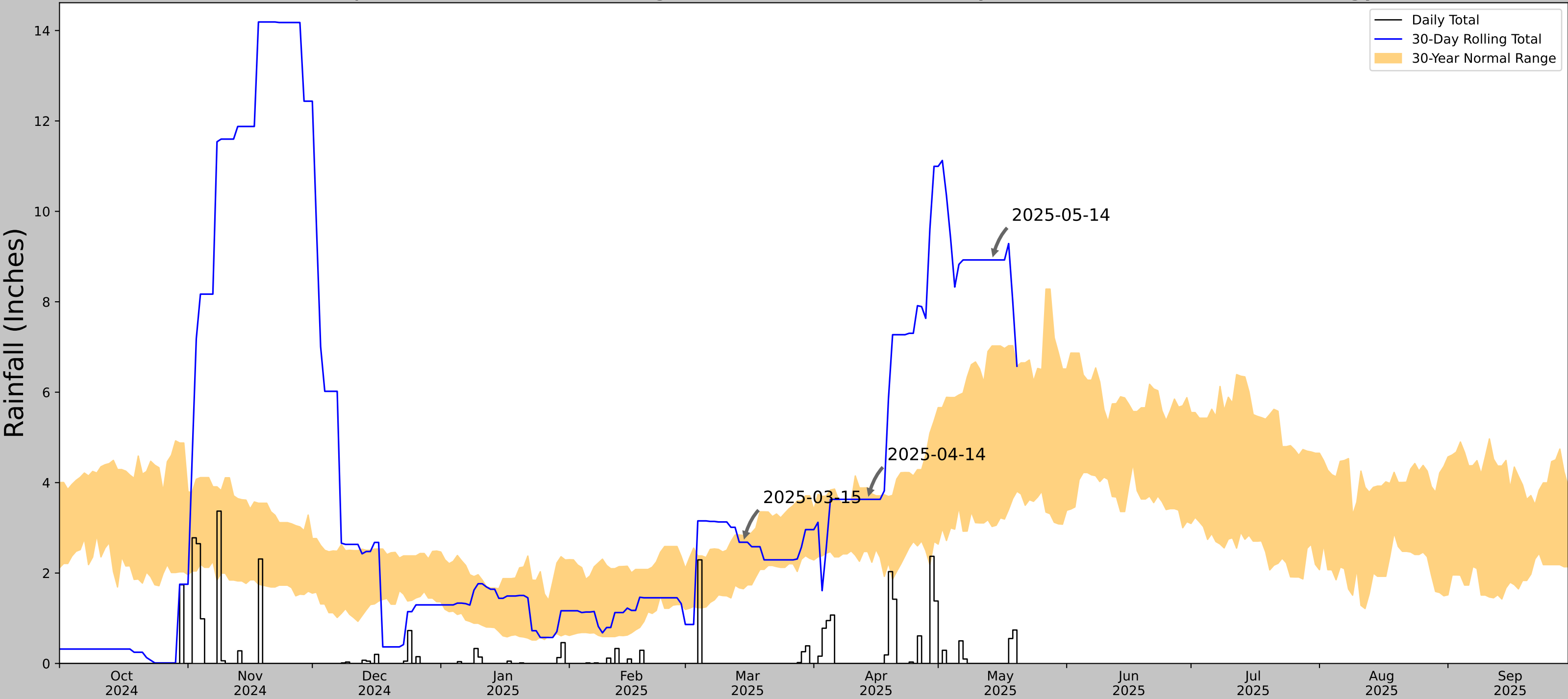
HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	


APPENDIX C
ANTECEDENT PRECIPITATION TOOL

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	36.025779, -95.734195
Observation Date	2025-05-14
Elevation (ft)	691.554
Drought Index (PDSI)	Mild wetness (2025-04)
WebWIMP H ₂ O Balance	Wet Season


30 Days Ending	30 th %ile (in)	70 th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-05-14	3.029134	7.023622	8.925197	Wet	3	3	9
2025-04-14	2.475197	3.886614	3.629921	Normal	2	2	4
2025-03-15	1.651969	2.830709	2.681102	Normal	2	1	2
Result							Wetter than Normal - 15



**US Army Corps
of Engineers®**

Figures and tables made by the
Antecedent Precipitation Tool
Version 2.0

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and
Development Center



ERDC
ENGINEER RESEARCH & DEVELOPMENT CENTER

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
TULSA INTL AP	36.1986, -95.8783	639.108	14.397	52.446	7.234	11352	90
TULSA RICHARD L JONES JR AP	36.0425, -95.9903	620.079	12.466	19.029	5.847	1	113

APPENDIX D
PHOTOGRAPHIC LOG

Photograph 1

LOCATION: SW Corner of Project

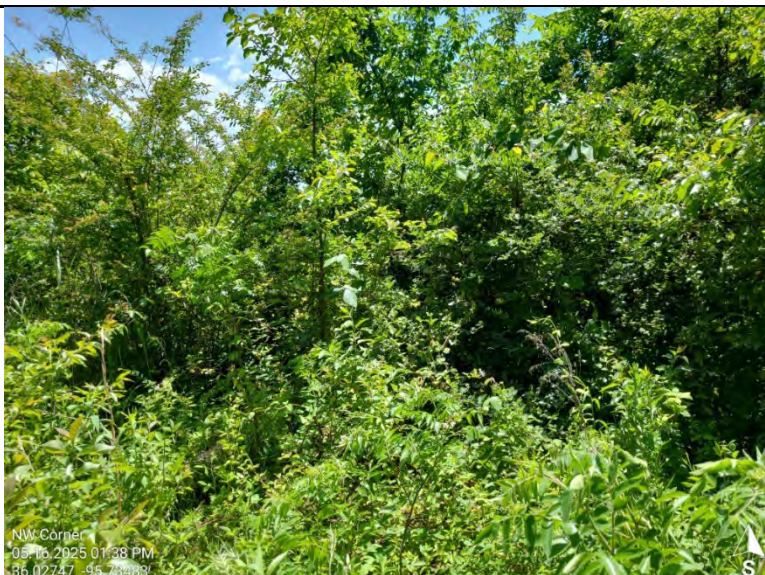
Notes: Example of herbaceous upland vegetation community.



Photograph 2

LOCATION: NW Corner of Project

Notes: Example of forested upland vegetation community.



Photograph 3

LOCATION: WW01 (Waterway 01)

Notes: Intermittent stream with sediment bed. Facing upstream.



Photograph 4

LOCATION: WW01

Notes: Example of earthwork activities potentially altering turbidity, flow rate, and flow path by sediment deposition.



Photograph 5

LOCATION: WW02

Notes: Intermittent stream with sediment bed. Facing upstream.



Photograph 6

LOCATION: WW02

Notes: Example of vehicle traffic impact potentially altering turbidity, flow rate, and flow path. Facing downstream.



Photograph 7

LOCATION: WW03

Notes: Intermittent stream with sediment bed. Facing downstream.



Photograph 8

LOCATION: WW04

Notes: Ephemeral stream with intermittent OHWM. Facing upstream.



Photograph 9

LOCATION: WET01-PEM (Palustrine Emergent Wetland 01) and DP01

Notes: DP01 (Data Point 01) met all three wetland criteria. WET01-PEM is within retention pond.



Photograph 10

LOCATION: DP01

Notes: Soil sample. Evidence of hydric soil observed.



Photograph 11

LOCATION: DP02

Notes: DP02 is upland reference data point for WET01-PEM, located on retention pond berm.



Photograph 12

LOCATION: DP02

Notes: Soil sample. No evidence of hydric soil observed.



Photograph 13

LOCATION: DP03

Notes: DP03 is upland reference data point for WET02-PEM.



Photograph 14

LOCATION: DP03

Notes: Soil sample. No evidence of hydric soil observed.



Photograph 15

LOCATION: WET02-PEM and DP04

Notes: DP04 met all three wetland criteria. WET02-PEM directly abuts WW01.



Photograph 16

LOCATION: DP04

Notes: Soil sample. Evidence of hydric soil observed.



Photograph 17

LOCATION: DP05

Notes: DP05 is upland data point to confirm extent of WET02-PEM.



Photograph 18

LOCATION: DP05

Notes: Soil sample. No evidence of hydric soil observed.



Photograph 19

LOCATION: WET03-PFO and DP06

Notes: DP06 met all three wetland criteria. WET03-PFO is adjacent to active construction and impacted sewage release on its southeastern extent. Photo taken from northern extent.



Photograph 20

LOCATION: DP06

Notes: Soil sample. Evidence of hydric soil observed.



Photograph 21

LOCATION: DP07

Notes: DP07 is upland reference data point for WET03-PFO.



Photograph 22

LOCATION: DP07

Notes: Soil sample. No evidence of hydric soil observed.



Photograph 23

LOCATION: WET02-PEM and DP08

Notes: DP08 is wetland reference data point to confirm extent of WET02-PEM.



Photograph 24

LOCATION: DP08

Notes: Soil sample. Evidence of hydric soil observed.



Photograph 25

LOCATION: DP09

Notes: DP09 is upland reference data point for WET02-PEM.



Photograph 26

LOCATION: DP09

Notes: Soil sample. No evidence of hydric soil observed.



Photograph 27

LOCATION: Central portion of Project and WET03-PFO

Notes: Sewer line right-of-way (ROW) active construction and portion of WET03-PFO.



Photograph 28

LOCATION: Adjacent to sewer line ROW

Notes: Evidence of earthwork activities and pooling.



Photograph 29

LOCATION: WB01 (Waterbody 01)

Notes: Pond located near earthwork activities.



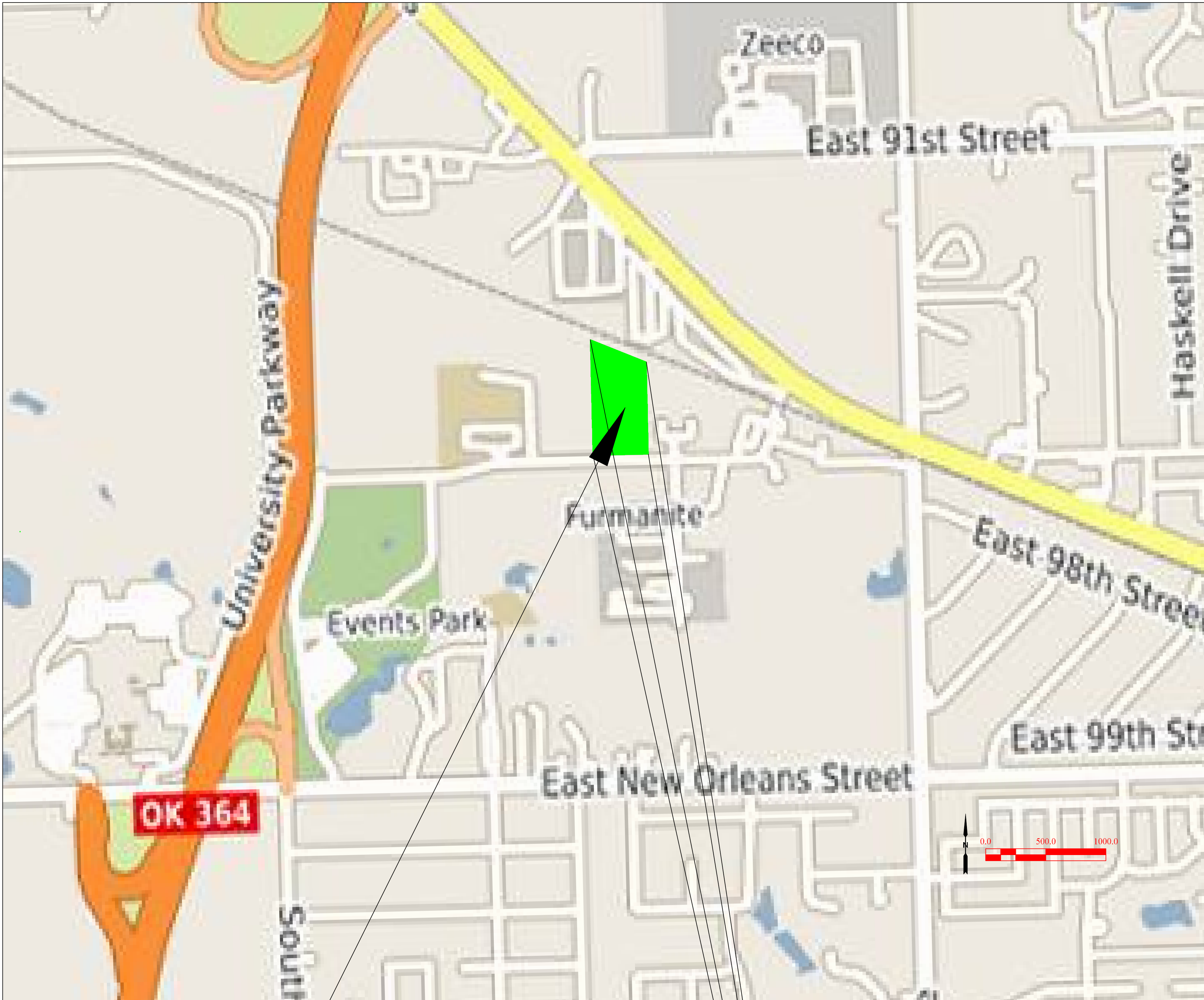
EXHIBIT B

Daryl Leland Worley
11-18-6-2025

9750 S 219TH DB PROCESSING LAYDOWN YARD SKETCH PLAN

BROKEN ARROW

WAGONER COUNTY,OKLAHOMA



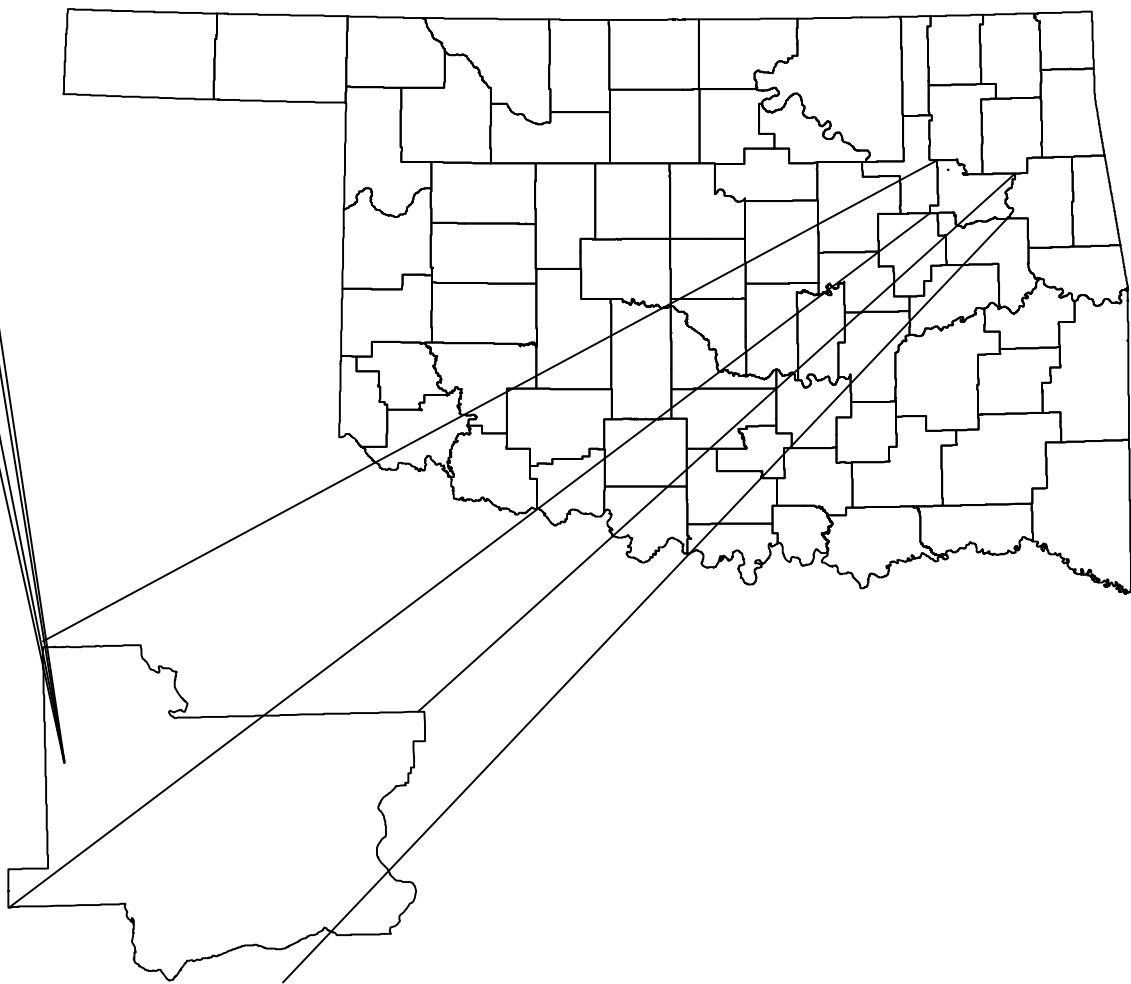
PROJECT LOCATION
36° 04' 33.28" N LATITUDE
95° 44' 02.95" W LONGITUDE
APPROXIMATE CENTER
OF PROJECT
PER GOOGLE EARTH
BROKEN ARROW,
WAGONER COUNTY, OK

BEFORE YOU DIG CALL



INDEX	
Title	Number
Project Cover	C101
Project Notes	C102
Site	C103

PROJECT NAME:
DB PROCESSING STEEL LAYDOWN YARD
PROJECT LOCATION:
9750 S 219TH, BROKEN ARROW, OKLAHOMA
PROJECT OWNER:GOUG BURGESS
918-619-6452



GENERAL CONSTRUCTION NOTES

C-1 PROJECT WILL BE CONSTRUCTED UNDER THE 2009 ODOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION. PROJECT SHALL BE CONSTRUCTED WITHOUT CLOSING THE ROAD TO LOCAL AND THROUGH TRAFFIC. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PLACEMENT OF TEMPORARY PAVEMENT MARKINGS.

C-2 THE CONTRACTOR SHALL UTILIZE THE CALL-OKIE SYSTEM (1-800-522-6543 OR 811) 48 HOURS IN ADVANCE OF EXCAVATION.

C-3 NOT USED CONTRACTOR IS RESPONSIBLE FOR MAINTAINING WATER AND SEWER SERVICE CONNECTIONS TO THE BUSINESS IN WORKING ORDER AT ALL TIMES EXCEPT FOR BRIEF INTERRUPTIONS IN SERVICE FOR SERVICES TO BE RE-INSTATED. IN NO CASE SHALL SERVICES BE ALLOWED TO REMAIN OUT OF SERVICE OVERNIGHT.

C-4 THE CONTRACTOR SHALL MAKE THE NECESSARY PROVISIONS FOR THE SUPPORT AND PROTECTION OF ALL UTILITY POLES, GAS MAINS, TELEPHONE CABLES, SANITARY SEWER LINES, ELECTRIC CABLES, DRAINAGE PIPES, UTILITY SERVICES, AND ALL OTHER STRUCTURES BOTH ABOVE AND BELOW GROUND DURING CONSTRUCTION. THE CONTRACTOR IS LIABLE FOR ALL DAMAGES DONE TO SUCH EXISTING FACILITIES AS A RESULT OF THE CONTRACTORS OPERATIONS.

C-5 THE CONTRACTOR SHALL SUBMIT WRITTEN REQUEST TO THE OWNER FOR APPROVAL OF ALL AREAS TO BE USED FOR STAGING, MOBILIZATION, EQUIPMENT AND MATERIAL STORAGE AND GENERAL PROJECT CONSTRUCTION MANAGEMENT. REQUEST SHALL BE SUBMITTED TO THE OWNER WITHIN 5 DAYS OF THE NOTICE TO PROCEED.

C-6 CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING GENERAL SAFETY AT AND ADJACENT TO THE PROJECT AREA, INCLUDING THE PERSONAL SAFETY OF THE CONSTRUCTION CREW AND THE GENERAL PUBLIC AND THE SAFETY OF PUBLIC AND PRIVATE PROPERTY.

C-7 CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING STREETS AND SIDEWALKS ADJACENT TO PROJECT FREE OF MUD AND DEBRIS CAUSED BY CONSTRUCTION ACTIVITIES.

C-8 NO EQUIPMENT OR MATERIAL SHALL BE DEPOSITED ON PRIVATE PROPERTY WITHOUT WRITTEN PERMISSION. THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGES RESULTING FROM SUCH ACTS AND SHALL REMOVE THE MATERIAL AND RESTORE THE PROPERTY AT THE EXPENSE OF THE CONTRACTOR.

C-9 THE LOCATIONS OF DRIVEWAYS, STEPS, AND RETAINING WALL, TC AND ALL WATER, SANITARY, STORM SEWER, TELEPHONE, GAS, ELECTRIC, AND CABLE TELEVISION UTILITIES SHOWN ON THE PLAN ARE APPROXIMATE. ACCURATE LOCATIONS SHALL BE VERIFIED AT THE TIME OF CONSTRUCTION AFTER CONSULTATION WITH THE PROPERTY OWNERS AND THE RESPECTIVE COMPANIES.

C-10 THE CONTRACTOR PERSONNEL SHALL WEAR IDENTIFYING CLOTHING OR HATS AT ALL TIMES.

C-11 CONSTRUCTION ACTIVITIES SHALL BE LIMITED TO THE HOURS OF 7:00 AM TO 7:00 PM UNLESS APPROVED OR DIRECTED BY THE OWNER.

C-12 CONSTRUCTION DEBRIS SUCH AS BROKEN CONCRETE, EXCESS FILL, ETC SHALL BECOME THE PROPERTY OF THE CONTRACTOR. MATERIAL SHALL BE COMPLETELY REMOVED FROM THE SITE PRIOR TO ACCEPTANCE OF THE PROJECT. ALL MATERIAL SHALL BE DISPOSED IN A MANNER THAT IS IN COMPLIANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.

C-13 OPERATION OF ALL WATER VALVES SHALL BE PERFORMED BY THE OWNER OF THE UTILITY. THIS WORK SHALL BE DISCUSSED WITH THE UTILITY 72 HOURS IN ADVANCE OF THE NEED TO COMMENCE SUCH WORK.

C-14 ALL HAIL TRUCKS USED IN THE HAULING OF MATERIAL SHALL COVER THEIR BEDS WITH A HEAVY COTTON, CANVAS OR VINYL TARP.

QUANTITY NOTES

ALL QUANTITIES GIVEN ARE FOR INFORMATIONAL PURPOSES. THE ACTUAL QUANTITY INSTALLED MAY VARY.

GEO-TECHNICAL NOTES

NO GEO-TECHNICAL INVESTIGATION HAS BEEN MADE. CONTRACTOR MUST SATISFY THEMSELVES AS TO THE PRESENCE OF ROCK OR OTHER CONSTRUCTION HINDRANCES

CLEARING NOTES

CONTRACTOR IS RESPONSIBLE FOR THE CLEARING


PROJECT INFO
THERE IS AN 8 FT WIDE BUFFER
OUTSIDE THE REGULATED WETLAND.

THE FINAL AND EXITING GRADES ALONG THE BUFFER LINE
ARE THE SAME ELEVATION

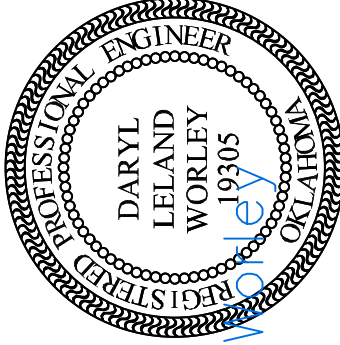
THE FINAL SURFACE WILL BE GRAVEL SO
NO IMPERVIOUS SURFACE WILL BE ADDED.

DARYL WORLEY, P.E.

2655 SE Evergreen Drive
Bartlesville, OK 74005
918-440-3186
daryl-worley@sbcijobaj.net



THE SON SHINES!



Daryl Leland Worley
8-6-2025

9750 S 219TH DB
PROCESSING
LAY DOWN
YARD
BROKEN ARROW, OK

DRAWINGS ISSUED FOR

SKETCH
PLAN FOR
DISCUSSION

REVISIONS

REVISIONS
NUMBER

DATE

DESIGN BY: DLW

DRAWN BY: DLW

CHECKED BY: RC

PROJECT NUMBER

2025001

DATE:

DRAWING TITLE

PROJECT NOTES

SHEET

C102

EXHIBIT C

EXHIBIT D

DAD RIGHT-OF-WAY DEED
FOR RECORD IN WAGONER
TY SEPTEMBER 8, 1919.
MENT NO. 20923 & 20924,
135, PAGE 298 & 299.

Addition has 1 Lot in 1 Block
and contains 7.18 acres, more or less.

A BACKFLOW PREVENTER VALVE IS REQUIRED FOR THIS PROJECT

Mike Lester
Mayor
Mary E. Blazer
Attest: City Clerk 4-7-10 68



Location Map

SCALE: 1"=4000'

OWNER

Coach Port, LLC
8321 East 61st Street
Suite 207
Tulsa, OK 74133
(918) 359-6006

SURVEYOR

White Surveying Company

9936 E. 55th Place
Tulsa, Oklahoma 74146
(918) 663-6924
Certificate of Authorization No. CA1098
Expires June 30, 2011

ENGINEER

Khoury Engineering, Inc.
1435 East 41st Street
Tulsa, Oklahoma 74105
(918) 712-8768
Certificate of Authorization No. 375
Expires June 30, 2011

BASIS OF BEARING

THE BEARINGS SHOWN HEREON ARE BASED ON
THE WEST LINE OF THE RECORDED PLAT OF
VENTURE 777 BEING ASSUMED N 00°07'45" W.

MONUMENTATION

ALL CORNERS WERE MONUMENTED BY WHITE SURVEYING COMPANY AS NOTED ON PLAT. USING A NO. 3 REBAR WITH PLASTIC CAP #CA 109B UNLESS OTHERWISE NOTED.

LEGEND

B/L = BUILDING LINE
D/E = DRAINAGE EASEMENT
R.O.W. ESMT. = RIGHT-OF-WAY EASEMENT
U/E = UTILITY EASEMENT
W.E = EXCLUSIVE WATER LINE EASEMENT

ADDRESSES

ADDRESSES SHOWN ON THIS PLAT ARE ACCURATE AT THE TIME THE PLAT WAS FILED. ADDRESSES ARE SUBJECT TO CHANGE AND SHOULD NEVER BE RELIED ON IN PLACE OF THE LEGAL DESCRIPTION.

STORMWATER DISPOSITION NOTE:

STORMWATER DETENTION ACCOMMODATIONS FOR THIS SITE ARE PROVIDED IN ACCORDANCE WITH DETENTION DETERMINATION #DD-121108-60.

COACH PORT

Case No. PT08-122, Development No. 08-169
March 22, 2010
SHEET 1 OF 2

132