LOUISIANA

Bureau of Engraving and Printing Currency Production Facility RFI Response

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EXECUTIVE SUMMARY

FEDERAL PARTNERSHIP

LOUISIANA IS COMMITTED TO LONG-TERM FEDERAL PARTNERSHIP.

Louisiana is ready to partner with the Bureau of Engraving and Printing (BEP) in establishing a next-generation currency production facility that will serve the nation for decades.

The state understands the importance of maintaining a secure, resilient, and technologically advanced domestic currency production capability. Through strong state leadership, coordinated agency support, proven federal partnerships, and a nationally-recognized economic development ecosystem, Louisiana offers the infrastructure, workforce, and long-term commitment needed to support this critical mission.

Louisiana is prepared to help BEP meet its goals for security, operational continuity, workforce readiness, infrastructure reliability, and future expansion. From site selection through operations, the state is committed to being a responsive and collaborative partner.

SPEED TO MARKET

LOUISIANA IS BUILT TO MOVE PROJECTS QUICKLY.

In Louisiana, state agencies, utility providers, local governments, and economic development partners work together to streamline site development, infrastructure planning, permitting, and regulatory review. This coordinated approach reduces risk, shortens development timelines, and helps projects move efficiently from planning to operation.

CONFIDENCE YOU CAN BUILD ON

LOUISIANA'S COMPETITIVE ADVANTAGE BEGINS WITH SITE READINESS.

Through the Certified Sites Program and FastSites initiative, backed by a $150 million fund for site improvements, Louisiana has invested in preparing locations for major industrial and federal projects before opportunities arise. Candidate sites such as this one have already undergone extensive due diligence, including environmental reviews, geotechnical investigations, utility assessments, transportation analyses, zoning evaluations, and permitting reviews. This work helps eliminate uncertainty, accelerate construction schedules, and ensure sites are ready to support long-term operations.

TALENT PIPELINES

LOUISIANA OFFERS AN EFFICIENT AND ACCLAIMED WORKFORCE DEVELOPMENT SYSTEM DESIGNED TO SUPPORT ADVANCED MANUFACTURING AND SECURE OPERATIONS.

LED FastStart, consistently recognized as one of the nation's top state workforce development programs, works alongside universities, community and technical colleges, military installations, and industry partners to deliver customized workforce solutions.

The state's talent pipeline supports manufacturing, engineering, automation, cybersecurity, operational technology, law enforcement, and other specialized occupations that align with BEP's workforce needs.

OPERATIONAL RELIABILITY

SECURITY AND OPERATIONAL EXCELLENCE ARE CORE STRENGTHS OF LOUISIANA'S LEGACY INDUSTRIAL ECONOMY.

Louisiana supports some of the nation's most important energy, aerospace, defense, maritime, and manufacturing assets. This experience has created a strong culture of security, emergency preparedness, cybersecurity collaboration, regulatory compliance, and coordinated law enforcement response. These capabilities provide the foundation necessary to support a mission-critical federal facility where reliability, protection, and continuity of operations are essential.

THE LOUISIANA CURRENCY PRODUCTION FACILITY

SHREVEPORT AIRPORT AEROPARK SITE SHREVEPORT, LOUISIANA.

The Shreveport Airport AeroPark Site offers a unique combination of security, accessibility, and development readiness. Located within the secured perimeter of Shreveport Regional Airport, the site includes up to 152.2 contiguous developable acres within a larger 231-acre industrial property.

The site provides direct airport access, is located less than two miles from Interstate 20 and less than three miles from Interstate 49, and offers connectivity to Union Pacific rail service, inland waterways, and the Port of Shreveport-Bossier. Existing utility infrastructure, industrial zoning, and extensive completed due diligence—including environmental, geotechnical, cultural, wetlands, and survey studies—help reduce development risk and accelerate project delivery timelines.

Together, these assets position the AeroPark Site as a secure, scalable, and operationally resilient location capable of supporting the Bureau of Engraving and Printing's long-term mission requirements.

LOUISIANA DELIVERS

LOUISIANA BRINGS THE ASSETS, EXPERIENCE, AND A PARTNERSHIP MINDSET NEEDED TO SUPPORT THE BUREAU OF ENGRAVING AND PRINTING'S LONG-TERM MISSION.

With development-ready sites, a skilled workforce, strong infrastructure, and a proven ability to execute complex projects, Louisiana is prepared to help build and sustain the next generation of America's currency production capabilities.

SITE AND
INFRASTRUCTURE PLAN

PROPOSED SITE: SHREVEPORT AIRPORT AEROPARK SITE

The Shreveport Airport AeroPark Site is a development-ready industrial site located within the secured environment of Shreveport Regional Airport.

Key attributes of the site include:

- Up to 152.2 contiguous developable acres within a larger 231-acre industrial property.
- Direct adjacency to Shreveport Regional Airport.
- Less than two miles from Interstate 20.
- Less than three miles from Interstate 49.
- Access to Union Pacific rail service.
- Proximity to the Port of Shreveport-Bossier and inland waterway transportation.
- Existing utility infrastructure and industrial zoning.
- Prior completion of environmental, geotechnical, cultural, wetlands, and survey due diligence.

SITE IDENTIFICATION

SITE NAME

Shreveport Airport AeroPark Site

LOCATION

7099 Challenger Drive
Shreveport, Louisiana 71109
Caddo Parish

COORDINATES

Latitude: 32.448092
Longitude: -93.820817

OWNERSHIP

Owner: Shreveport Airport Authority

Primary Contact:

Larry Blackwell, *Director of Airports*
318.673.5370
larry.blackwell@shreveportla.gov

LAND AND SITE READINESS

MINIMUM THRESHOLD COMPLIANCE

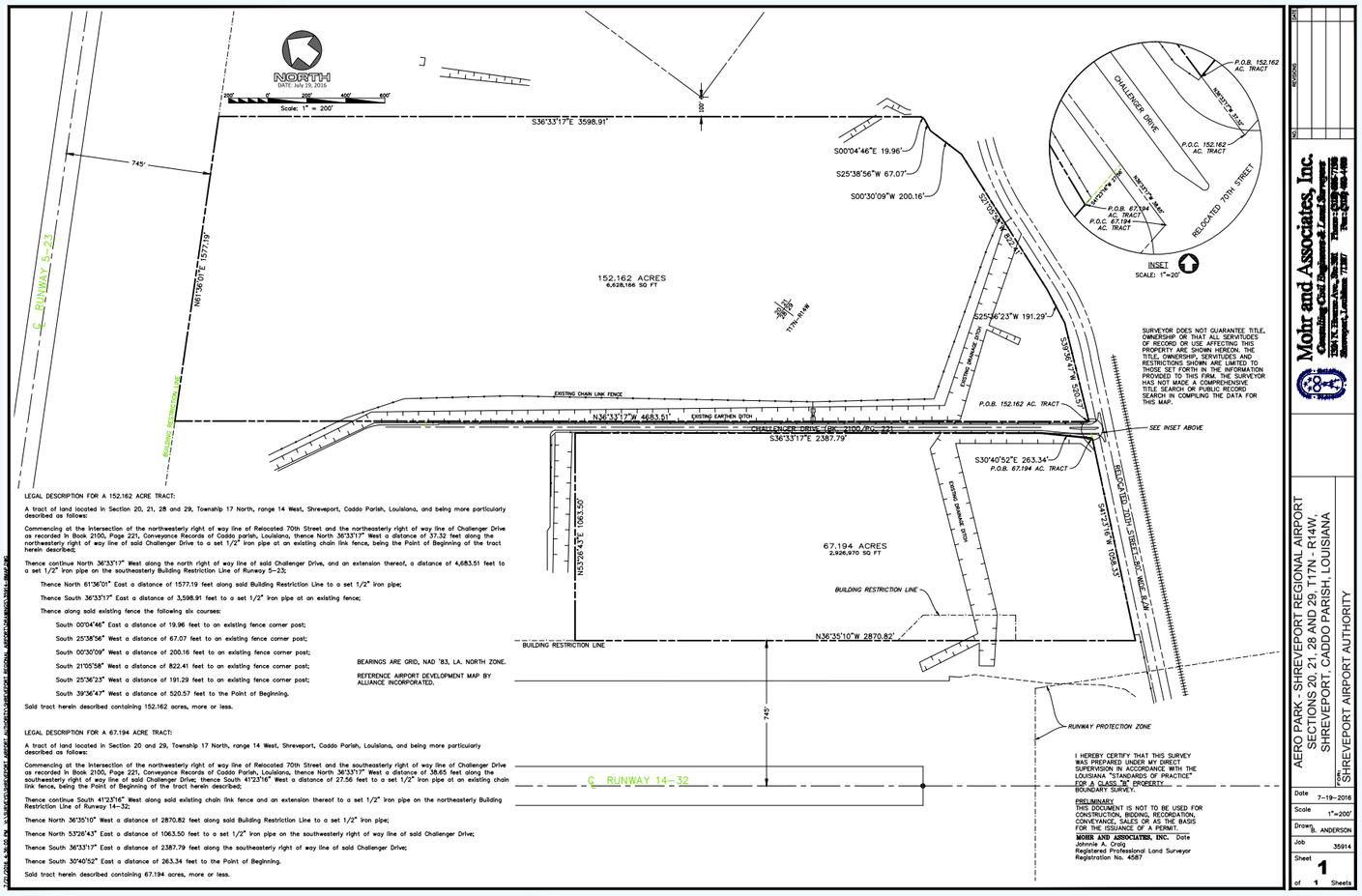
REQUIREMENT	STATUS
125-150 contiguous acres	Meets requirement (152.2 acres available)
Site controllable within 180 days	Confirmed with Airport Authority
No known fatal environmental barriers	Meets requirement

SITE CHARACTERISTICS

- Cleared and development-ready.
- Vacant industrial acreage.
- Light Industrial (I-1) zoning.
- Previously evaluated under Louisiana Certified Sites Program.
- Significant due diligence completed.

COMPLETED DUE DILIGENCE

- Phase I Environmental Site Assessment *(See Appendix pg. 165)*
- Geotechnical Investigation *(See Appendix pg. 298)*
- Cultural Resources Survey *(See Appendix pg. 68)*
- Wetlands Delineation *(See Appendix pg. 324)*
- Class B Boundary Survey *(See pg. 19)*



LEGAL DESCRIPTION FOR A 152.162 ACRE TRACT:

A tract of land located in Section 20, 21, 28 and 29, Township 17 North, range 14 West, Shreveport, Caddo Parish, Louisiana, and being more particularly described as follows:

Commencing at the intersection of the northwesterly right of way line of Relocated 70th Street and the northeasterly right of way line of Challenger Drive as recorded in Book 2100, Page 221, Conveyance Records of Caddo parish, Louisiana, thence North 36°33'17" West a distance of 37.32 feet along the northeasterly right of way line of said Challenger Drive to a set 1/2" iron pipe at an existing chain link fence, being the Point of Beginning of the tract herein described;

Thence continue North 36°33'17" West along the north right of way line of said Challenger Drive, and an extension thereof, a distance of 4,683.51 feet to a set 1/2" iron pipe on the southeasterly Building Restriction Line of Runway 5-23;

Thence North 61°36'01" East a distance of 1577.19 feet along said Building Restriction Line to a set 1/2" iron pipe;

Thence South 36°33'17" East a distance of 3,598.91 feet to a set 1/2" iron pipe at an existing fence;

Thence along said existing fence the following six courses:

South 00°04'46" East a distance of 19.96 feet to an existing fence corner post;
South 25°38'56" West a distance of 67.07 feet to an existing fence corner post;
South 00°30'09" West a distance of 200.16 feet to an existing fence corner post;
South 21°05'58" West a distance of 822.41 feet to an existing fence corner post;
South 25°36'23" West a distance of 191.29 feet to an existing fence corner post;
South 39°36'47" West a distance of 520.57 feet to the Point of Beginning.

Said tract herein described containing 152.162 acres, more or less.

BEARINGS ARE GRID, NAD '83, LA. NORTH ZONE.

REFERENCE AIRPORT DEVELOPMENT MAP BY ALLIANCE INCORPORATED.

LEGAL DESCRIPTION FOR A 67.194 ACRE TRACT:

A tract of land located in Section 20 and 29, Township 17 North, range 14 West, Shreveport, Caddo Parish, Louisiana, and being more particularly described as follows:

Commencing at the intersection of the northwesterly right of way line of Relocated 70th Street and the southeasterly right of way line of Challenger Drive as recorded in Book 2100, Page 221, Conveyance Records of Caddo Parish, Louisiana, thence North 36°33'17" West a distance of 38.65 feet along the southeasterly right of way line of said Challenger Drive; thence South 47°23'16" West a distance of 27.56 feet to a set 1/2" iron pipe at an existing chain link fence, being the Point of Beginning of the tract herein described;

Thence continue South 41°23'16" West along said existing chain link fence and an extension thereof to a set 1/2" iron pipe on the northeasterly Building Restriction Line of Runway 14-32;

Thence North 36°35'10" West a distance of 2870.82 feet along said Building Restriction Line to a set 1/2" iron pipe;

Thence North 53°26'43" East a distance of 1063.50 feet to a set 1/2" iron pipe on the southeasterly right of way line of said Challenger Drive;

Thence South 36°33'17" East a distance of 2387.79 feet along the southeasterly right of way line of said Challenger Drive;

Thence South 30°40'52" East a distance of 263.34 feet to the Point of Beginning.

Said tract herein described containing 67.194 acres, more or less.

SURVEYOR DOES NOT GUARANTEE TITLE, OWNERSHIP OR THAT ALL SERVITUDES AND RESTRICTIONS AFFECTING THE PROPERTY ARE SHOWN HEREON. THE TITLE, OWNERSHIP, SERVITUDES AND RESTRICTIONS SHOWN ARE LIMITED TO THOSE SET FORTH IN THE INFORMATION PROVIDED TO THIS FIRM. THE SURVEYOR HAS NOT MADE A COMPREHENSIVE TITLE SEARCH OR PUBLIC RECORD SEARCH IN COMPILING THE DATA FOR THIS MAP.

I HEREBY CERTIFY THAT THIS SURVEY WAS PREPARED UNDER MY DIRECT SUPERVISION IN ACCORDANCE WITH THE LOUISIANA "STANDARDS OF PRACTICE" FOR A CLASS "B" PROPERTY BOUNDARY SURVEY.

PRELIMINARY
THIS DOCUMENT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING, RECORDATION, CONVEYANCE, SALE OR AS THE BASIS FOR THE ISSUANCE OF A PERMIT.

MOHR AND ASSOCIATES, INC. Date
Johnnie A. Craig
Registered Professional Land Surveyor
Registration No. 4587

Mohr and Associates, Inc.
Consulting Civil Engineers & Land Surveyors
2324 N. Thomas Ave., Ste. 200 Phone: (318) 868-7396
Shreveport, Louisiana 71107 Fax: (318) 868-7398

AERO PARK - SHREVEPORT REGIONAL AIRPORT
SECTIONS 20, 21, 28 AND 29, T17N - R14W,
SHREVEPORT, CADDO PARISH, LOUISIANA

SHREVEPORT AIRPORT AUTHORITY

Date	7-19-2016
Scale	1"=200'
Drawn	B. ANDERSON
Job	35914
Sheet	1 of 1 Sheets

ENVIRONMENTAL CONDITIONS

Wetlands

- Approximately 365 feet of jurisdictional ephemeral stream.
- Estimated impact area of approximately 0.002 acres.
- Located along eastern boundary.

Floodplain

- Limited floodplain impacts located near southern boundary.
- FEMA flood mapping available.

Shreveport Airport AeroPark Site

UTILITIES AND INFRASTRUCTURE

EXISTING UTILITY PROVIDERS

UTILITY	PROVIDER
Electric	AEP SWEPCO
Water	City of Shreveport
Sewer	City of Shreveport
Natural Gas	Delta Utilities
Telecommunications	AT&T
Fiber Optic	AT&T

INFRASTRUCTURE ADVANTAGES

- Existing industrial utility infrastructure.
- Scalable utility systems supporting industrial development.
- Existing fiber communications availability.
- Opportunity for redundant utility design.

UTILITIES AVAILABLE AT THE PROPOSED SITE

POWER

10.5 MW is currently available. N+1 is not currently in place. The addition of this redundancy can be completed within approximately 12-16 months.

WATER

Current average daily flow in the distribution system is approximately 40 MGD (Million Gallons per Day). The Amiss WTP will be able to serve the additional 200,000 gallons per day requested. The water distribution system has been modeled to determine its capability to serve this water demand and has shown no significant impact to the existing system.

FIBER-OPTIC

Robust telecommunications infrastructure is available in close proximity to the site, with fiber connectivity located approximately one-half mile away. Per AT&T officials, diverse routing options can be implemented to support network redundancy and operational continuity. Virtually any required bandwidth level can be achieved, including secure private networking solutions designed to meet the communications and cybersecurity requirements of sensitive federal operations.

TRANSPORTATION AND ACCESS

HIGHWAY ACCESS

TRANSPORTATION ASSET	DISTANCE
Interstate 20	1.9 miles
Interstate 49	2.7 miles
State Route 511	0.3 miles
Highway 173	0.4 miles
Highway 71	1.2 miles
Highway 3132	1.2 miles

AIRPORT ACCESS

AIRPORT	DISTANCE
Shreveport Regional Airport	Adjacent
Monroe Regional Airport	101 miles

BARKSDALE AIR FORCE BASE

12.2 miles from Shreveport Airport AeroPark Site

barksdale.af.mil

Public Affairs: 318.456.1015 | 2bw.pa@us.af.mil

Base Operator: 318.456.1110

RAIL ACCESS

- Union Pacific Railroad (0.4 miles).
- Kansas City Southern Railway (1.1 miles).

WATERBORNE TRANSPORTATION

- Red River (6.2 miles).
- Cypress Bayou (6.3 miles).
- Port of Shreveport-Bossier (13.9 miles).

SHREVEPORT REGIONAL AIRPORT LEASE OPTIONS

Following discussions with Shreveport Regional Airport leadership, the Airport is open to structuring a graduated ground lease rate as the project progresses toward a fair market value lease arrangement. Given the nature of the proposed development and the anticipated long-term lease term on premium airport property, a new land appraisal would be required to establish current market value. For reference, the Airport's current commercial ground lease rate is $0.328 per square foot.

Historically, the Airport has successfully utilized graduated lease structures that establish rental rates in defined increments over the life of the agreement, such as Years 0–5, Years 5–10, Years 11–15, and subsequent periods. This approach provides a predictable framework for both parties while allowing lease rates to adjust appropriately over time in alignment with market conditions and project maturity.

Should our proposal be selected to advance in the process, we would welcome the opportunity to further discuss and negotiate an appropriate graduated lease structure. As with all Airport lease agreements, any proposed lease terms would be subject to approval by the Shreveport Airport Authority Board. Additionally, because the contemplated lease term would exceed 50 years, approval from the Federal Aviation Administration (FAA) would also be required.

For additional information regarding lease terms, airport property requirements, or the approval process, please contact:

Stacy C. Kuba, A.A.E., *Deputy Director of Airports, Shreveport Airport Authority*

Office: 318.673.5370
Mobile: 318.771.8058

WORKFORCE DEVELOPMENT PLAN

EXISTING WORKFORCE RESOURCES

STATE WORKFORCE RESOURCES

LED FastStart is a multi-pronged discretionary incentive that is provided at no financial cost for any of their services.

Service Areas Covered: Talent Attraction, Training & Development, and Workforce Initiatives.

TALENT ATTRACTION

SUPPORT OVERVIEW

LED FastStart Recruiting provides fully customized talent attraction strategies designed to help employers raise awareness, engage qualified candidates, and drive applications aligned with specific project hiring goals and timelines. Through a comprehensive recruitment assessment process, the recruitment team develops solution-focused recruitment plans tailored to each employer's workforce needs, company culture, operational demands, and long-term talent objectives. Recruitment strategies are designed to support accelerated project startup timelines while building sustainable workforce pipelines that support continued growth and retention.

LED FastStart Recruiting utilizes modern, technology-enabled recruitment services and targeted outreach strategies to connect employers with top talent at the local, statewide, and national levels. Talent attraction support may include strategic sourcing, employment-focused company landing pages, AI-powered recruitment tools, social media advertising campaigns, digital content creation, industry and hiring events, workforce-marketing initiatives, and targeted candidate engagement campaigns. These customized recruitment strategies combine workforce expertise, economic development alignment, and innovative talent attraction methods to deliver scalable workforce solutions that support each project's unique hiring needs.

LED SUCCESS STORIES

To demonstrate Louisiana Economic Development's ability to support the workforce needs contemplated for the New Currency Production Facility Development Initiative, we have included examples of prior projects in which LED provided customized workforce solutions to assist employers with recruitment, talent attraction, screening, training coordination, and workforce pipeline development. While the specific workforce strategies and services associated with the New Currency Production Facility Development Initiative would be tailored to its unique hiring requirements, operational timelines, and workforce demands, these examples illustrate our experience designing and implementing comprehensive talent solutions in support of major economic development projects.

The enclosed workforce case studies serve as representative examples of how LED can support large-scale employer recruitment and workforce development initiatives through strategic partnerships, targeted outreach, workforce training programs, candidate sourcing, and talent pipeline cultivation. They are provided solely to demonstrate our capacity to deliver customized workforce solutions and should not be interpreted as proposed workforce plans, commitments, or guaranteed outcomes for the New Currency Production Facility Development Initiative.

TALENT ATTRACTION SUCCESS STORIES

FIRST SOLAR

CHALLENGE: LED FastStart Recruiting was engaged to build a talent pipeline for more than 700 positions at First Solar's new 2.5 million sq. ft. manufacturing facility in New Iberia, LA. Recruitment efforts had to launch across three hiring phases while establishing awareness for a new employer and new industry with no existing Louisiana footprint.

First Solar expressed concerns about sourcing qualified local talent for highly specialized manufacturing, maintenance, engineering, and leadership roles—particularly for the "Pioneer Team", which had proven difficult to recruit at another facility. Additional barriers included candidate salary expectations and community skepticism that the facility was actually being built.

PROCESS: Developed a phased recruitment marketing strategy aligned to construction and hiring timelines, leveraging social media campaigns, landing pages, email outreach, lead generation forms, job-targeted videos, school and community partnerships, event activation, signage, and localized awareness campaigns to drive candidate engagement.

Used AI-powered CRM sourcing tools, competitor watchlists, proactive SMS/email outreach, and transferable skills mapping to identify passive candidates, "boomerang" talent, and experienced manufacturing professionals across Louisiana, and the U.S.

Improved candidate conversion through strategic tactics including job title optimization for hard-to-fill mechanical engineering tech roles, online pre-assessments to qualify candidates before interviews, open interview scheduling, and recruitment content showcasing career progression and "day in the life" production roles.

RESULTS: LED FastStart Recruiting successfully front-loaded hiring efforts, enabling First Solar to achieve its 2027 hiring goal of 715 direct hires two years ahead of schedule.

Recruitment performance exceeded client expectations to such an extent that First Solar expanded its workforce target to more than 850 hires by the end of 2026.

The recruitment campaign maintained staffing levels ahead of project timelines throughout all hiring phases and achieved these results without hosting a job fair. First Solar staff also shared verbally that its "Louisiana cost per hire was basically $0."

BIENVILLE LUMBER

CHALLENGE: Announced in 2021, the project was expected to create 387 direct jobs over a 10-year period in Gibsland, LA, with a planned opening date of Q1 2024.

Recruiting efforts needed to generate awareness and build an early talent pipeline in a small, rural market while attracting qualified leadership, maintenance, and production talent ahead of operations launch.

PROCESS: Executed pre-opening recruitment campaigns and hosted job fairs in Gibsland, LA and Bossier City to drive candidate engagement and expand local awareness of career opportunities.

Produced targeted recruitment videos featuring the Plant Manager outlining available positions, workplace expectations, and career opportunities to support candidate attraction and education.

Recruitment outreach generated more than 200 attendees across hiring events prior to the facility opening.

RESULTS: Prior to opening, the mill secured 130 employees, including all leadership positions and maintenance technicians, successfully establishing critical operational talent ahead of launch.

Recruitment efforts positioned the facility to reach an anticipated total headcount of 186 employees within the first 6 months of operations.

PROLEC GE (SHREVEPORT, LA)

CHALLENGE: The project goal was to add 153 jobs by 2026 while building awareness and generating a qualified talent pipeline in advance of hiring demand.

Recruitment efforts required a high-volume outreach strategy capable of attracting and converting candidates quickly enough to accelerate hiring timelines.

PROCESS: In July 2023, LED FastStart hosted a targeted recruitment job fair that attracted more than 600 attendees.

Recruitment support included promotional materials, social media marketing campaigns, radio advertising scripts, and a recruitment video designed to welcome job fair participants and introduce them to ProlecGE opportunities.

Coordinated recruitment outreach and event execution to maximize candidate engagement and drive immediate applicant flow.

RESULTS: All 153 positions were filled through the event, three years ahead of schedule, while also creating an additional pipeline of qualified candidates that eliminated the need for future job fairs or recruitment support.

The success of the recruitment campaign exceeded expectations to the extent that ProlecGE leadership canceled all subsequently planned job fairs.

SLB (SHREVEPORT, LA)

CHALLENGE: In 2024, SLB set a goal to add 596 jobs by the end of 2028, including 126 hires by the end of 2024, requiring an accelerated recruitment strategy to support rapid workforce expansion.

Recruitment efforts needed to efficiently manage high-volume applicant flow while supporting large-scale hiring events under aggressive hiring timelines.

PROCESS: LED FastStart implemented a job pull integration with SLB's applicant tracking system to automatically sync job postings and redirect applicants directly into the hiring workflow.

Provided comprehensive job fair support including recruitment staffing, promotional collateral, event marketing, and candidate outreach to drive applicant engagement and streamline hiring operations.

RESULTS: As of October 2024, SLB hired 616 employees, exceeding the projected new hire count for the entire 5-year project ahead of schedule.

Due to the success of recruitment efforts, SLB announced plans to hire an additional 600 employees as part of an expansion initiative.

SLB leadership credited LED FastStart Recruiting's coordination and support of large-scale hiring events as critical to meeting aggressive hiring demands under compressed timelines.

TRAINING & DEVELOPMENT

SUPPORT OVERVIEW

LED FastStart Project includes support for training by LED FastStart. This training will be developed and delivered by LED FastStart. The training services are designed to assist a project achieving an accelerated start-up with personnel who are well trained and knowledgeable about a project's processes and job-specific tasks.

Training prescriptions are written to address the needs of each position being trained by LED FastStart. Prescriptions are written in proposed sequential order, but it is recognized that the sequencing of training may vary based on project's staffing and/or operational circumstances.

LED FastStart will provide pre & post-hire training for a project's new employees that address the following critical areas under the condition project has confirmed the employee already has the credentials, certifications, or degrees achieved through K-12, 2- and 4-year colleges.

PRE-HIRE TRAINING

LED FastStart's Pre-Hire Training serves as a custom tool for a company's interview process to confirm candidates' skills and competencies alignment with the position being considered.

POST-HIRE TRAINING

The Post-Hire Training starts with the Onboarding & Orientation process where we focus on integrating the new employee into the project's organization; ensuring that they understand their role in the company, as well as learning a project's organizational culture.

Talent Management training is designed to identify, develop, and provide new leaders with the foundational knowledge and basic skills that will allow them to develop to their fullest potential. Also, under the Talent Management umbrella includes customized training focused on the skill sets new employees need to work together effectively as a team and produce products and services which surpass customer requirements.

**LED FastStart identifies the most effective path to training success by conducting targeted discovery assessments that pinpoint the right topics and—most critically—the ideal training modality to perfectly match your project's unique needs.*

TRAINING & DEVELOPMENT SUCCESS STORIES

SCHOOLMINT—TALENT MANAGEMENT TRAINING

CHALLENGE: Leaders and team members lacked sufficient training and development opportunities.

PROCESS: Conducted a training needs assessment of SchoolMint's existing leadership development program and identified upskilling opportunities between current capabilities and desired outcomes. Recommended targeted leadership training courses for SchoolMint's review and approval.

RESULTS: LED FastStart's Talent Management team delivered nine training courses designed to upskill leaders and team members. SchoolMint informed the team that the training successfully helped support a shift in their leadership culture.

FIRST SOLAR—PRE-HIRE ASSESSMENT

CHALLENGE: First Solar faced an aggressive greenfield solar panel manufacturing facility startup. As the company's fifth plant expansion nationwide, workforce quality was a major concern. Previous support efforts at another southern greenfield site had been viewed as unsuccessful, creating hesitation from the client.

PROCESS: Conducted a manufacturing assessment focused on identifying pre-hire workforce skill requirements. Developed recommendations to support effective applicant skill evaluations.

RESULTS: FastStart partnered with the local community college to develop and deliver a hands-on pre-employment training and assessment program aligned with First Solar's technical manufacturing skill requirements. The program was delivered five months ahead of schedule, exceeded client expectations, and contributed to a record-setting facility startup.

SLB—ONBOARDING TRAINING

CHALLENGE: SLB entered a new industry by converting an existing one-million-square-foot brownfield facility. Rapid growth created the need to hire and train 600 employees within a condensed timeline.

PROCESS: Conducted a manufacturing assessment focused on high-volume hiring, workforce onboarding, and accelerated employee upskilling. FastStart developed recommendations to quickly establish manufacturing competencies and workforce culture.

RESULTS: LED FastStart's Subject Matter Experts developed an onboarding training suite for the client. More than 7,000 training hours were delivered within a 90-day startup window. Expansion support continues as the facility grows to three million square feet and 1,200 employees. SLB credits FastStart's support as a key contributor to both startup and expansion success.

WORKFORCE INITIATIVES

SUPPORT OVERVIEW

For LED FastStart's workforce pipeline support, the team collaborates with K-12, higher education, economic development, and other workforce partners to align your workforce pipeline from day one of your project. Some of our statewide partners include Louisiana Department of Education/regional K-12 schools; Louisiana Community & Technical College System's two-year schools; 4-year colleges and universities (LSU, Southern University, University of Louisiana Systems); Louisiana Works (the state's workforce commission); Louisiana Board of Regents; and regional and local economic development organizations.

The LED FastStart Workforce Initiatives team:

- Works to identify opportunities with partners to fill gaps in LED FastStart project's workforce pipeline.
- Collaborates with educational partners to align programs with LED FastStart project needs.
- Facilitates engagements between students, educators, and projects as part of our Manufacturing 365 initiative. Manufacturing 365 empowers manufacturers to build excitement about manufacturing careers, helps communities and future generations to thrive, and exposes students, parents, and educators to high-paying careers in manufacturing.

WORKFORCE INITIATIVES' NORTHWEST LOUISIANA PARTNERS AND CONTACTS

4-YEAR UNIVERSITIES

NORTHWESTERN STATE UNIVERSITY

Rachel Cunningham, *Assistant Director of Career Services*
cunninghamr@nsula.edu
318.357.4050

LOUISIANA STATE UNIVERSITY–SHREVEPORT

Jessica Hemingway, *Director, Center for Northwest Louisiana Regional Impact*
Jessica.Hemingway@lsus.edu
318.795.5947

Jennie Flynn-McKevitt, *Director of Career Services*
Jennifer.Flynn-McKevitt@lsus.edu
318.797.5062

2-YEAR COMMUNITY COLLEGES

BOSSIER PARISH COMMUNITY COLLEGE (BPCC)

Holly French-Hart, *Provost/Vice Chancellor for Academic Affairs and Institutional Affairs and Institutional Effectiveness*
hfrench@bpcc.edu
318.678.6132

Joseph Brownlee, *Dean of Academic Affairs, Division of Science, Technology, Engineering, and Mathematics*
jbrownlee@bpcc.edu
318.678.6152

NORTHWEST LOUISIANA TECHNICAL COMMUNITY COLLEGE (NLTCC)

Renee Sears, *Vice Chancellor of Academics, Student Affairs and Workforce*
reneesears@nltcc.edu
318.371.3035

SOUTHERN UNIVERSITY AT SHREVEPORT (SUSLA)

John Galiotos, *Dean of Community and Workforce Development*
jgaliotos@susla.edu
318.670.9571

K-12/HIGH SCHOOLS

CADDO PARISH SCHOOL BOARD

Victor Maniero, *Executive Director*
vmainiero@caddoschool.org
318.603.6545

BOOKER T. WASHINGTON HS

Crystal T. Barnes, *Principal*
ctbarnes@caddoschools.org
318.222.2186

CE BYRD HS

Jerry Badgley, *Principal*
gbadgley@caddoschools.org
318.869.2567

CADDO CAREER AND TECHNICAL CENTER

Harold Berg
hkberg@caddoschools.org
318.364.1950

CADDO MAGNET HS

R.J. Middleton, *Principal*
rmiddleton@caddoschools.org
318.221.2501

WORKFORCE INITIATIVES SUCCESS STORIES

AMAZON/REGIONAL FULFILLMENT CENTER

CHALLENGE: Amazon's Shreveport, LA location (SHV1) had a need to fill over 1,000 open positions that required workers with hands-on experience operating new and emerging technologies, and current talent pipelines were not producing job-ready candidates at the scale or speed needed.

SOLUTION: LED FastStart coordinated engagements with regional workforce organizations and technical education providers. LED FastStart connected Amazon with technical school students and alumni, creating experience-driven pathways that deliver the applied skills required to rapidly fill these high-demand roles.

RESULTS: Amazon collaborated with Bossier Parish Community College (BPCC) and designed a 16-week program to rapidly upskill current Amazon associates into Mechatronics and Robotics (MRT) Technician roles. Amazon will roll out this program to other regional Amazon sites as an upskilling resource to expand opportunities for Amazon associates across their network.

HAAS AUTOMATION/STATEWIDE ADVANCED CNC TRAINING

CHALLENGE: Through ongoing discussions with industry, LED FastStart identified a shortage of highly-skilled manufacturing workers to meet the demand for increasingly complex skillsets–specifically advanced CNC training.

SOLUTION: LED FastStart partnered with Haas Automation and the Gene Haas Foundation to develop CNC machining skills training resources for the Louisiana Community & Technical Community College System. LED FastStart funded the acquisition costs of machining centers, training to upskill current manufacturing instructors, and the stand-up of the advanced manufacturing, statewide training programs.

RESULTS: The initiative established a statewide advanced manufacturing training network across Louisiana by deploying 12 HAAS 5-axis CNC machining centers at LCTCS campuses, expanding credit and non-credit programs, and integrating industry-recognized curriculum and certifications. Colleges grew enrollment, enhanced instructor capacity, and strengthened Louisiana's pipeline of workforce-ready talent aligned to industry demand.

MARITIME WORKFORCE EXPANSION

CHALLENGE(S): **(1)** Louisiana's maritime and shipbuilding industries continue to see a demand for skilled, entry-level workers with industry-recognized training and technical skills. **(2)** Students are often unaware of the career opportunities available within the maritime industry and the pathways that can connect them to those careers.

SOLUTION(S): **(1)** South Louisiana Community College provides students with hands-on training in maritime fitting, safety, blueprint reading, and other foundational skills through the NCCER Maritime Fitter program. **(2)** LED FastStart supports South Louisiana Community College and regional workforce partners by helping connect K-12, postsecondary education, and industry to ensure training programs align with workforce demand and industry needs. **(3)** The partnership helps expand awareness of maritime career pathways while increasing access to industry-based credentials and workforce opportunities for participants across the region.

RESULTS: **(1)** Students earn nationally recognized NCCER credentials while still in high school, increasing workforce readiness and opportunities for employment or continued technical education. **(2)** The initiative continues to support the long-term workforce needs of Louisiana's maritime and shipbuilding industries by building a stronger pipeline of skilled talent.

REGIONAL WORKFORCE RESOURCES

EMPWR LA

EMPWR LA is a 6-week "Employment Preparedness & Workforce Readiness" boot camp-style training program producing quality entry-level candidates in industrial skilled trades, advanced manufacturing, and distribution industries. The training models a 40-hour workweek with an accountability structure that mirrors employers' expectations for attendance, punctuality, safety, dress code, and cell phone use. The program combines hands-on training, classroom instruction, direct employer engagement, and opportunities to earn multiple Industry-Based Credentials (Forklift, OSHA 10, NCCER Core, CPT). All program completers are guaranteed interviews with partner companies. EMPWR has a 100% placement rate for graduates.

FEDERATION FOR ADVANCED MANUFACTURING EDUCATION (FAME)

FAME is an Advanced Manufacturing Technician (AMT) Program. FAME has a chapter in Shreveport-Bossier MSA. This two-year work-study program serves as a recruitment vehicle for companies in the region to identify and train multi-skilled maintenance technicians. Students become certified AMTs through paid on-the-job training at their sponsor company and classroom/lab work at Bossier Parish Community College, with the aim of being hired full-time by their sponsor company. FAME has a 100% placement rate for graduates.

CONTRACTOR SUPPORT WORKFORCE

Existing contractor workforce includes:

FUNCTION	PERSONNEL
Building Operations/Maintenance	67
Janitorial & Grounds Maintenance	32
Environmental Support	13
Safety/Health/Workers Compensation	13
Wastewater Operations	12
Information Technology Support	23
Security Contractors	49
Total Contract Support Workforce	209 Personnel

WORKFORCE DEVELOPMENT STRATEGY SUMMARY

Louisiana proposes utilizing:

- LED FastStart.
- Louisiana Community and Technical College System.
- Regional universities.
- Military transition programs.
- Industry workforce partnerships.

SOC	Description	2025 Jobs	2026 Jobs	2025 Employment Concentration	2025 Resident Workers	Pct. 75 Hourly Earnings	BPCC Completers	LSU-Shrv Completers	NLTCC Completers	NSU Completers	SUSLA Completers	2025 Profiles	Median Hourly Earnings	Avg. Hourly Earnings	Pct. 25 Hourly Earnings	Median Hourly Earnings	Avg. Hourly Earnings	Pct. 75 Hourly Earnings	BPCC Completers	LSU-Shrv Completers	NLTCC Completers	NSU Completers	SUSLA Completers	2025 Profiles
							Last 5 yrs	Last 5 yrs	Last 5 yrs	Last 5 yrs	Last 5 yrs								Last 5 yrs	Last 5 yrs	Last 5 yrs	Last 5 yrs	Last 5 yrs	
11-1021	General and Operations Managers	3,976	3,995	0.98	3,767	$31.44	$48.32	$58.22	$70.31	3,353	12,572	142	2,283	468	10,201	$49.17	$62.34	$75.36	0	0	0	0	0	930
11-3013	Facilities Managers	194	194	1.21	165	$34.63	$49.13	$57.20	$75.49	422	149	142	0	49	542	$24.18	$23.99	$29.52	0	0	0	0	0	526
11-3021	Computer and Information Systems Managers	174	176	0.24	178	$39.93	$48.42	$55.24	$61.87	11	122	54	0	51	257	$28.51	$30.03	$38.72	0	44	0	176	0	23
11-3031	Financial Managers	637	646	0.66	584	$38.68	$55.69	$60.47	$75.05	2,931	12,646	2,283	0	419	1,898	$21.39	$30.86	$32.30	17	1,136	0	79	5	378
11-3061	Purchasing Managers	54	55	0.58	48	$40.10	$49.01	$54.07	$62.65	0	52	0	0	0	211	$27.39	$11.62	$19.44	48	46	0	24	0	32
11-3071	Transportation, Storage, and Distribution Managers	173	177	0.70	168	$30.38	$43.26	$46.00	$56.38	422	97	142	0	49	1,086	$14.55	$22.23	$26.45	0	83	0	48	0	287
11-3121	Human Resources Managers	112	114	0.45	112	$39.93	$48.97	$53.59	$60.67	419	14,732	0	976	0	989	$28.08	$28.25	$33.37	159	132	28	57	65	172
11-9161	Emergency Management Directors	54	54	3.35	48	$29.85	$37.18	$39.00	$45.45	625	78	0	248	0	13	$16.93	$21.39	$36.74	0	83	0	48	0	287
11-3061	Purchasing Managers	54	55	0.58	48	$40.10	$49.01	$54.07	$62.65	0	52	0	2,283	419	211	$24.05	$27.38	$35.16	0	44	0	129	0	69
11-3071	Transportation, Storage, and Distribution Managers	173	177	0.70	168	$30.38	$43.26	$46.00	$56.38	422	97	142	0	49	1,086	$11.16	$13.28	$14.76	0	0	0	0	0	544
11-3121	Human Resources Managers	112	114	0.45	112	$39.93	$48.97	$53.59	$60.67	419	14,732	0	976	0	989	$29.13	$28.51	$32.19	361	0	0	107	0	449
11-9161	Emergency Management Directors	54	54	3.35	48	$29.85	$37.18	$39.00	$45.45	625	78	0	248	0	13	$16.60	$18.00	$21.30	105	0	32	0	0	464
13-1028	Buyers and Purchasing Agents	269	273	0.48	261	$25.00	$29.88	$34.05	$39.78	1	0	0	0	0	822	$11.16	$13.28	$14.76	0	0	0	0	0	544
13-1031	Claims Adjusters, Examiners, and Investigators	159	158	0.44	151	$21.86	$28.94	$31.60	$38.44	0	171	0	0	0	319	$29.50	$35.20	$41.61	2,931	12,475	0	2,323	419	2,488
13-1041	Compliance Officers	268	267	0.59	258	$23.22	$32.88	$38.34	$49.75	550	2,433	0	248	0	497	$21.36	$23.72	$26.53	44	86	0	214	30	986
13-1071	Human Resources Specialists	545	551	0.50	538	$22.68	$29.02	$32.43	$38.55	2,931	12,674	0	2,780	419	1,030	$20.05	$21.39	$22.92	0	0	0	0	0	50
13-1075	Labor Relations Specialists	39	39	0.54	34	$28.10	$32.92	$32.30	$35.52	0	24	0	0	0	7	$21.61	$22.92	$25.93	0	199	0	497	0	298
13-1081	Logisticians	241	244	0.81	216	$31.15	$39.23	$43.50	$54.66	0	0	0	27	0	445	$22.64	$22.85	$26.22	0	0	0	0	0	0
13-1111	Management Analysts	692	700	0.57	613	$34.71	$49.48	$56.25	$62.06	841	12,275	142	479	49	1,283	$17.89	$18.48	$21.80	2,628	297	90	1,844	448	6,250
13-199	Business Operations Specialists, All Other	1,145	1,148	0.86	1,086	$22.59	$33.22	$35.02	$43.94	3,481	12,553	0	2,531	419	130	$15.00	$15.97	$18.73	25	0	0	0	0	142
13-2011	Accountants and Auditors	1,423	1,430	0.82	1,304	$24.50	$32.30	$38.20	$39.80	463	12,264	0	693	30	1,166	$38.34	$36.86	$40.88	421	0	2,017	0	0	2
13-2031	Budget Analysts	61	61	1.07	49	$31.53	$37.26	$40.19	$46.09	0	257	0	214	0	37	$23.96	$25.96	$29.72	58	0	226	0	0	258
13-2051	Financial and Investment Analysts	122	124	0.31	114	$23.38	$28.77	$35.55	$35.16	0	171	0	10	0	547	$20.91	$22.52	$26.76	443	0	894	0	0	666
15-1211	Computer Systems Analysts	175	177	0.31	172	$31.93	$40.00	$46.33	$48.85	11	122	54	0	51	248	$22.88	$25.84	$32.43	0	0	0	0	0	0
15-2031	Operations Research Analysts	61	62	0.48	55	$26.04	$28.82	$32.51	$32.22	0	0	0	10	0	214	$22.64	$22.85	$26.22	0	0	0	0	0	0
17-1011	Architects, Except Landscape and Naval	95	96	0.62	93	$24.73	$35.77	$46.38	$50.72	0	0	0	0	0	62	$18.75	$22.89	$26.97	0	0	0	0	0	0
17-1012	Landscape Architects	<10	<10	0.29	<10	Insf. Data	Insf. Data	$31.60	$38.44	0	171	0	0	0	319	$18.91	$23.73	$27.24	0	0	0	0	0	0
17-2051	Civil Engineers	208	212	0.49	213	$36.63	$47.72	$50.13	$60.78	52	0	0	0	0	17	$27.59	$13.58	$16.97	0	0	0	0	0	0
17-2071	Electrical Engineers	71	74	0.34	69	$42.79	$48.34	$54.03	$63.20	52	0	0	0	1	217	$4.52	$13.58	$16.97	0	0	0	0	0	0
17-2112	Industrial Engineers	167	173	0.44	160	$41.50	$50.25	$56.13	$61.93	98	0	35	0	1	278	$16.97	$22.84	$27.24	0	0	0	0	0	0
17-2141	Mechanical Engineers	90	95	0.28	99	$37.51	$40.39	$48.46	$55.54	98	0	35	0	1	234	$18.95	$13.43	$18.95	0	0	0	0	0	0
17-2199	Engineers, All Other	321	323	1.71	325	$34.76	$45.23	$49.46	$59.27	0	30	0	0	0	41	$18.75	$22.89	$27.08	0	0	0	0	0	0
17-3029	Engineering Technologists and Technicians, Except Drafters, All Other	84	84	1.07	95	$22.52	$31.87	$32.94	$42.71	45	0	1,967	0	0	60	$17.08	$17.88	$22.84	0	0	0	0	0	0
19-1032	Foresters	<10	<10	0.63	<10	Insf. Data	Insf. Data	$32.94	$42.71	45	0	1,967	0	0	60	$10.80	$14.44	$17.08	0	0	0	0	0	0
19-2031	Chemists	38	38	0.41	36	$32.86	$39.32	$45.43	$46.63	0	30	0	0	0	145	$13.46	$13.17	$14.44	0	0	0	0	0	0
19-2041	Environmental Scientists and Specialists, Including Health	47	47	0.48	50	$24.00	$37.90	$37.89	$47.51	0	82	0	20	0	86	$15.36	$16.16	$17.84	0	0	0	0	0	0
19-2099	Physical Scientists, All Other	27	27	0.77	24	$32.01	$36.37	$47.19	$51.39	210	0	0	0	0	639	$15.36	$16.16	$17.84	0	0	0	0	0	0
19-3093	Historians	<10	<10	0.28	<10	Insf. Data	Insf. Data	$49.46	$59.27	0	68	0	73	0	16	$13.35	$16.68	$17.08	0	0	0	0	0	0

SOC	Description	2025 Jobs	2026 Jobs	2025 Employment Concentration	2025 Resident Workers	Pct. 75 Hourly Earnings	BPCC Completers	LSU-Shrv Completers	NLTCC Completers	NSU Completers	SUSLA Completers	2025 Profiles	Median Hourly Earnings	Avg. Hourly Earnings	Pct. 25 Hourly Earnings	Median Hourly Earnings	Avg. Hourly Earnings	Pct. 75 Hourly Earnings	BPCC Completers	LSU-Shrv Completers	NLTCC Completers	NSU Completers	SUSLA Completers	2025 Profiles
							Last 5 yrs	Last 5 yrs	Last 5 yrs	Last 5 yrs	Last 5 yrs								Last 5 yrs	Last 5 yrs	Last 5 yrs	Last 5 yrs	Last 5 yrs	
23-1011	Lawyers	636	635	0.63	641	$33.65	$49.17	$62.34	$75.36	0	0	0	0	0	930	$25.96	$29.72	$32.86	0	0	0	0	0	258
23-2011	Paralegals and Legal Assistants	309	303	0.74	299	$17.41	$24.18	$23.99	$29.52	0	0	0	0	0	526	$22.52	$26.76	$32.86	0	0	0	0	0	0
25-4012	Curators	32	32	1.95	28	$18.91	$28.51	$30.03	$38.72	0	44	0	0	0	23	$25.71	$32.94	$39.52	0	0	0	0	0	0
25-9031	Instructional Coordinators	233	232	0.93	214	$27.59	$30.86	$32.30	$36.80	17	1,136	0	79	5	378	$22.64	$22.85	$26.22	0	0	0	0	0	0
27-1019	Artists and Related Workers, All Other	34	36	0.82	31	$4.52	$11.62	$19.44	$26.40	48	46	0	24	0	32	$22.64	$22.85	$26.22	0	0	0	0	0	0
27-1024	Graphic Designers	172	172	0.57	157	$16.97	$22.23	$26.45	$29.83	0	83	0	48	0	287	$22.64	$22.85	$26.22	0	0	0	0	0	0
27-3031	Public Relations Specialists	114	116	0.34	114	$22.84	$28.25	$33.37	$40.77	159	132	28	57	65	172	$22.64	$22.85	$26.22	0	0	0	0	0	0
27-4021	Photographers	85	85	0.49	83	$13.43	$21.39	$36.74	$38.62	0	83	0	48	0	287	$22.64	$22.85	$26.22	0	0	0	0	0	0
33-3021	Detectives and Criminal Investigators	106	105	0.80	100	$22.89	$27.38	$35.16	$43.30	339	144	0	129	0	69	$22.64	$22.85	$26.22	0	0	0	0	0	0
33-3051	Police and Sheriff's Patrol Officers	1,576	1,567	1.97	1,362	$23.73	$29.13	$28.51	$32.19	361	0	0	0	107	0	449	$22.64	$22.85	$26.22	0	0	0	0	0
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	1,412	1,418	1.08	1,382	$13.58	$16.60	$18.00	$21.30	105	0	32	0	0	464	$22.64	$22.85	$26.22	0	0	0	0	0	0
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	3,489	3,459	1.26	3,193	$9.05	$11.16	$13.28	$14.76	0	0	0	0	0	544	$22.64	$22.85	$26.22	0	0	0	0	0	0
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	1,845	1,849	1.29	1,656	$21.49	$29.50	$35.20	$41.61	2,931	12,475	0	2,323	419	2,488	$22.64	$22.85	$26.22	0	0	0	0	0	0
43-3031	Bookkeeping, Accounting, and Auditing Clerks	2,180	2,167	1.26	1,985	$17.24	$21.36	$23.72	$26.53	44	86	0	214	30	986	$22.64	$22.85	$26.22	0	0	0	0	0	0
43-3061	Procurement Clerks	34	33	0.54	31	$17.49	$20.05	$21.39	$22.90	0	0	0	0	0	50	$22.64	$22.85	$26.22	0	0	0	0	0	0
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	79	78	0.76	72	$18.95	$21.61	$22.92	$25.93	0	199	0	497	0	298	$22.64	$22.85	$26.22	0	0	0	0	0	0
43-4199	Information and Record Clerks, All Other	218	218	1.26	194	$18.75	$22.64	$22.85	$26.22	0	0	0	0	0	0	$22.64	$22.85	$26.22	0	0	0	0	0	0
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	2,605	2,597	1.20	2,457	$14.63	$17.89	$18.48	$21.80	2,628	297	90	1,844	448	6,250	$22.64	$22.85	$26.22	0	0	0	0	0	0
43-9061	Office Clerks, General	3,483	3,454	1.17	3,229	$11.66	$15.00	$15.97	$18.73	25	0	0	0	0	142	$22.64	$22.85	$26.22	0	0	0	0	0	0
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	112	113	1.50	106	$33.43	$38.34	$36.86	$40.88	421	0	2,017	0	0	2	$22.64	$22.85	$26.22	0	0	0	0	0	0
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	509	516	1.02	474	$19.31	$23.96	$25.96	$29.72	58	0	226	0	0	258	$22.64	$22.85	$26.22	0	0	0	0	0	0
49-9071	Maintenance and Repair Workers, General	2,329	2,334	1.27	2,153	$16.68	$20.91	$22.52	$26.76	443	0	894	0	0	666	$22.64	$22.85	$26.22	0	0	0	0	0	0
49-9099	Installation, Maintenance, and Repair Workers, All Other	463	463	1.91	460	$17.08	$22.84	$25.71	$32.86	0	0	0	0	0	0	$22.64	$22.85	$26.22	0	0	0	0	0	0
51-6011	Laundry and Dry-Cleaning Workers	376	377	1.66	339	$10.80	$13.46	$13.17	$14.44	0	0	0	0	0	31	$22.64	$22.85	$26.22	0	0	0	0	0	0
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	4,233	4,264	1.29	3,820	$13.35	$15.36	$16.16	$17.84	0	0	0	0	0	1,069	$22.64	$22.85	$26.22	0	0	0	0	0	0

SECURITY AND RISK MITIGATION PLAN

EXISTING SECURITY ENVIRONMENT

The site is located within the operational environment of Shreveport Regional Airport and benefits from existing airport security infrastructure and controlled access.

Airport leadership has indicated willingness to support enhanced project-specific security requirements and federal protective measures.

Larry Blackwell, *Director, Shreveport Regional Airport*
larry.blackwell@shreveportla.gov
318.673.5370

SECURITY FRAMEWORK ALIGNMENT

The site can support:

- Controlled federal security perimeters.
- Federal facility design standards.
- Secure logistics corridors.
- Controlled site access.
- Enhanced law enforcement coordination.

SECURITY ADVANTAGES

- Airport-controlled environment.
- Existing aviation security infrastructure.
- Established emergency response capabilities.
- Existing law enforcement workforce.
- Access control opportunities.
- Transportation redundancy.

SEVERE WEATHER PREPAREDNESS

Louisiana is well-prepared to support mission-critical operations in the face of severe weather and other emergency events. Through the Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP), the state maintains a comprehensive emergency management framework focused on protecting lives, maintaining critical infrastructure, and ensuring operational continuity. Louisiana's coordinated approach to preparedness, response, recovery, mitigation, and prevention helps provide the resilience and reliability required for long-term federal operations. Additional information regarding the state's emergency preparedness and resilience capabilities is available at **gohsep.la.gov.**

GOVERNOR'S OFFICE OF HOMELAND SECURITY AND EMERGENCY PREPAREDNESS

7667 Independence Boulevard, Baton Rouge, LA 70806

225.925.7500

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INCENTIVE PACKAGE AND **LEGAL AUTHORITIES**

Jeff Landry
Governor

LOUISIANA ECONOMIC DEVELOPMENT

Susan Bonnett Bourgeois
Secretary

June 16, 2026

DELIVERED VIA RFI RESPONSE
Michael Brown
Director, Bureau of Engraving and Printing
Senior Advisor, Office of the Treasurer
United States Department of the Treasury
301 14th Street South West
Washington, DC 20250

RE: Louisiana Letter of Intent for United States Department of the Treasury

Dear Mr. Brown:

Louisiana Economic Development (LED) is providing this nonbinding letter of intent to the United States Department of the Treasury ("Company") for its proposed New Currency Production Facility Development Initiative in Caddo Parish ("Project"). We thank you for the opportunity to learn about the country's strategic plan and future growth potential in Louisiana.

To help explain why we believe Caddo Parish is the right choice for you, we have divided this document into two pertinent sections. We first highlight the incentive package that we have customized for your Project. Second, we share additional benefits of investing in Caddo Parish, Louisiana.

The estimated values provided hereinafter are based upon Company fulfillment of the following site selection, capital investment, and employment, as established in your correspondence with LED, and subject to incentive program eligibility of the Company.

a. Selection of Louisiana as the state of choice for the New Currency Production Facility Development Initiative by the Company at Caddo Parish, Louisiana.

b. Total capital investment by the Company at Caddo Parish, Louisiana of at least $3.0 Billion by December 31, 2033.

c. New jobs (in Louisiana for Company and its affiliates, excluding contract labor) and new annual payroll from those new jobs (excluding benefits and contract labor) at the Caddo Parish facility at the following levels:

Year	Average Number of New Jobs	New Actual Payroll ($millions)
2033	592	53.0
2034	592	54.2
2035	592	55.4
2036	592	56.7
2037	592	58.0

Given this scenario, LED envisions the following programs may be available to the Company pending fulfillment of its goals and its adherence to contractual terms.

	Potential Value ($Millions)
1. Performance-Based Grant to be used for reimbursement of Company expenditures to improve public infrastructure. This will be administered pursuant to a cooperative endeavor agreement and requires Company compliance with and adherence to the site selection, capital investment, and employment and payroll commitments provided in a, b, and c. LED estimates the grant, based upon the needs of the facility as well as investment, employment and payroll projections, could be for up to 15% of total investment by Company or up to $50.0 million, payable at $10.0 million per year for 5 years.	**$50.0**
2. LED FastStart® offers substantial LED investment in customized employment recruitment and training during the Company's period of employment ramp-up. Based upon employment data provided by the Company above, LED estimates FastStart may provide a benefit to the Company of up to $1.0 million. See Attachment A for more information on LED FastStart.	**$1.0**
Total Potential Value	**$51.0 million**

As indicated, each of the opportunities is subject to review and approval provided by law and adherence to the terms of operation for each of those contracts. They may require separate contracts consistent with the individual programs identified above. The Company is also responsible for following applicable rules and regulations in order to receive benefits for each statutory program.

LED may at its discretion and a time of its choosing require participation by the Company in a public news release and announcement of the Project, including disclosure of the Project capital investment; the number of new direct jobs to be created, along with an average annual salary, exclusive of benefits, associated with those new direct jobs; the number of indirect jobs to be supported by the project, as determined by LED economic impact models; and other relevant project information. Until such time of announcement, LED will consider all communications with the Company to be confidential and any disclosure by the Company to others of these terms before mutual announcement may result in a withdrawal of the LED proposal.

This outline of available program incentives, if utilized, combined with Louisiana's business-friendly tax structure and low-cost environment, allows the Company the opportunity to minimize its ongoing costs and to operate efficiently and profitably.

ADDITIONAL BENEFITS OF INVESTING IN LOUISIANA

Louisiana Momentum – Louisiana continues to experience economic success indicative of the state's positive business climate. Area Development's 2025 rankings showcase Louisiana as the No. 9 state for doing business and the No. 7 most favorable regulatory framework in the U.S. Demonstrating Louisiana's pro-growth environment in action, Site Selection highlights Louisiana as the No. 10 state nationally for projects per capita.

Ease of Doing Business – Louisiana gives companies every advantage to operate, expand, and deliver results. Ranked No. 2 for lowest industrial electricity rates and No. 4 for lowest natural gas rates, the state also boasts 5 of the nation's 15 highest-producing ports, including the Port of South

Louisiana — the No. 2 port by tonnage in the Western Hemisphere. LED is the only state agency in the U.S. accredited by the International Economic Development Council, reflecting a commitment to excellence and accountability.

Ensuring Speed to Market – Louisiana is redefining what companies can expect from a state partner through Louisiana Lightning Speed, a whole-of-government model that removes barriers, accelerates timelines, and gives businesses direct engagement with state decision-makers. The initiative brings together liaisons across 16 state entities into a single, coordinated team led by LED, ensuring faster, more predictable outcomes by cutting red tape, resolving challenges early, and engaging every agency from day one. With LED serving as your single point of contact — aligning permitting, workforce, infrastructure, incentives, and executive-level support — companies gain a streamlined path from concept to groundbreaking. For every project, this means one thing: you never navigate the process alone; you have a statewide team aligned and accountable to deliver results at the speed of business. See Attachment B for more information on Louisiana's speed to market.

High-Quality, Available and Affordable Workforce – Louisiana's workforce is one of its greatest strengths — skilled, dependable, and driven to succeed. Our people bring deep experience, strong work ethic, and a commitment to staying and growing at home. Through LED FastStart® — one of the nation's top workforce programs for over 15 years — companies gain customized recruiting, training, and onboarding solutions that deliver qualified workers on day one. As a Right-to-Work state for more than 30 years, Louisiana also offers one of the nation's lowest unionization rates, ensuring flexibility and reliability for employers across every industry.

Louisiana's workforce is one of the most productive among all states according to the Annual Survey of Manufacturers from the US Census. For every hour a Louisiana manufacturing employee worked, each person created $405.09 in added value, considerably higher than the national average by 124 percent. Additionally, for every dollar paid to manufacturing workers, $12.29 was generated in added value, which was 85 percent higher than the national average.

Louisiana Works – After 3 years of operation in Louisiana, the company is eligible for additional support through the **Incumbent Worker Training Program**, administered by Louisiana Works. This program provides grants for customized, employer-driven training designed to enhance employee skills, boost productivity, and improve overall business performance. It's another way Louisiana helps companies grow stronger — investing in talent, efficiency, and long-term success.

Highly Competitive, Low-Cost Business Environment – Louisiana offers one of the most favorable corporate tax climates in the nation, ranking 10th overall for competitiveness. Beyond its tax advantages, Louisiana is recognized as the most competitive state for energy costs, featuring the 2nd lowest industrial electricity rate and the 4th lowest industrial natural gas rate in the country. Additionally, real estate costs in Louisiana rank among the lowest in the nation.

We look forward to continuing our discussions and hope we can accommodate the project's needs. Please respond to LED within 180 days from the date of this letter so that we may finalize arrangements. LED is committed to supporting the long-term success of the Federal Bureau of Engraving and Printing and to ensuring that Louisiana represents a compelling platform for the future growth of the United States of America.

Sincerely,

Susan Bonnett Bourgeois
Susan Bonnett Bourgeois (Jun 16, 2026 09:19:12 CDT)

Susan Bonnett Bourgeois
Secretary

LED FastStart

OVERVIEW OF SERVICES

Eligibility

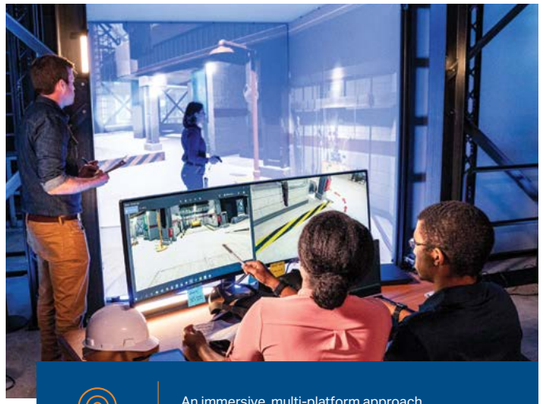
LED FastStart®'s innovative, customized programs are available to companies that meet eligibility requirements and are aligned with Louisiana's economic development targets, including:

- Advanced and Traditional Manufacturing
- Digital Media
- Headquarters and Business Operations
- Research and Development
- Warehousing and Distribution

To qualify, a company must first commit to creating a net of at least 15 new, permanent jobs for manufacturing or distribution centers or a net of at least 50 new, permanent jobs for digital media, headquarters, R&D or inbound call center operations. Each request is evaluated prior to project commencement to ensure all eligibility requirements are met.

How It Works

FastStart provides customized employee recruitment, screening, training development and training delivery for eligible new or expanding companies—all at no cost.



Recruit
An immersive, multi-platform approach to engaging modern job-seekers and creating deep and diverse talent pools.

Train
Company-specific, custom-built combinations of new technology and proven techniques across a range of industries.

Sustain
Innovative partnerships keep Louisiana's talent pipelines filled with diverse, qualified candidates.

01 Analyze

Every aspect of a company's proposed operation is analyzed.

LED FastStart® pairs its world-class team with a company's subject matter experts at any location in the world mirroring the new operations. If the company has a unique process, FastStart will work with the R&D and engineering departments to gather necessary critical data.

02 Attract

FastStart sets forth to find the best potential talent.

After a complete analysis of the company, FastStart determines the competencies and behaviors that match the cultural and technical abilities that will help define the most successful employee.

03 Evaluate

Pre-hire evaluations mean the best candidates are selected.

Critical data is collected for each applicant through behavioral interviews, job observations, situational role-playing, pre-employment training and hands-on simulations.

04 Train

Customized and comprehensive training delivers a strong workforce.

Technical, team-based and soft-skills training programs are custom designed, sequenced and delivered to engage new employees. Learning curves are greatly improved and a company's productivity increases, resulting in a faster start and a better bottom line.

LOUISIANA LIGHTNING SPEED

Louisiana's Whole-of-Government Advantage for Business

Louisiana is redefining what companies should expect from a state partner. Through Louisiana Lightning Speed, Governor Landry formalized a whole-of-government model that removes barriers, accelerates timelines and gives businesses direct access to the state's top decision-makers.

This first-of-its-kind initiative brings together designated liaisons across 16 state entities into a single, coordinated team led by LED. By cutting red tape, resolving challenges early, and engaging every agency from day one, the initiative mitigates time, risk, and money while delivering faster, more predictable outcomes that strengthen business confidence.

Backed by the Governor's Executive Order, this unified, accountability-driven approach is already moving projects at the speed of business and positioning Louisiana to compete—and win—on the world stage.

The Support System Behind Your Success

LED serves as your single point of contact—coordinating all required agencies and aligning resources around your project.

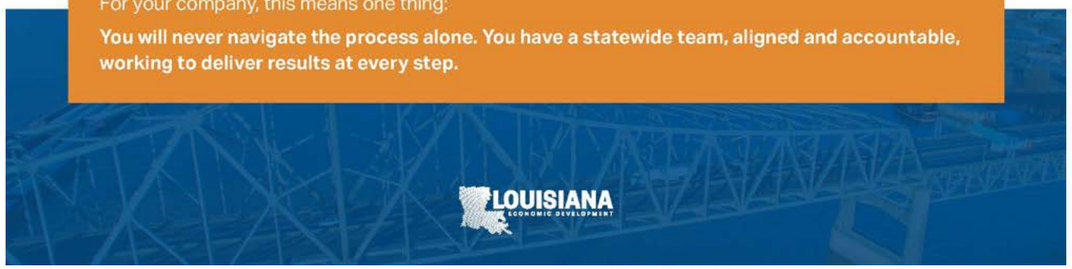
Through Louisiana Lightning Speed, LED brings:

- **Proactive permitting and regulatory coordination**
- **Statewide workforce alignment with Louisiana Works, higher education and training partners**
- **Infrastructure planning with DOTD, utilities and local providers**
- **Coordinated review of policy, incentives, compliance and site development**
- **Ongoing executive-level engagement from state decision makers**

Whether you are selecting a site, expanding operations, or launching a complex, multi-agency project, LED ensures you are supported by the full weight of state government.

For your company, this means one thing:

You will never navigate the process alone. You have a statewide team, aligned and accountable, working to deliver results at every step.



COST MODEL
(30-YEAR LIFECYCLE)

COST FRAMEWORK SUMMARY

This section presents the 30-year Total Cost of Occupancy (TCO) model for the proposed Shreveport Aeropark site, organized to Treasury's specified cost categories: land, site preparation, construction and infrastructure contributions, utility costs, labor cost projections, and incentive offsets. All costs are presented in net present value terms at 3% and 7% discount rates per the RFI's specified sensitivity analysis.

The 30-year occupancy period reflects operations from Q2 2033 (BEP's target start of operations per Q4 2026 FID) through Q2 2063. Capital costs incurred prior to 2033 are treated as Year 0 outlays. Operating costs run from Year 1 through Year 30 and escalate at 2.5% annually.

HEADLINE TCO

TRANSPORTATION ASSET	NPV AT 3%	NPV AT 7%
Capital—Land (ground lease, see Section 2)	Not in headline*	Not in headline*
Capital—Site preparation and construction (gross)	$146,246,000	$146,246,000
Less: SWEPCO-absorbed electric infrastructure	($11,039,000)	($11,039,000)
Less: Louisiana incentive offset (public infrastructure)	($50,000,000)	($50,000,000)
Capital—Net to BEP	**$85,207,000**	**$85,207,000**
Utilities (30-year NPV)	$373,133,000	$221,122,000
Labor (30-year NPV)	$1,880,252,000	$1,114,258,000
Total 30-Year TCO (net of offsets)	**$2,338,592,000**	**$1,420,587,000**

***Land.** The Shreveport Airport Authority is open to a graduated ground lease structured toward fair market value over the life of the agreement. Because a current appraisal has not yet been completed, the lease is not priced into the headline TCO; an illustrative range is provided in Section 2 for transparency.

Two cost offsets reduce BEP's capital outlay: SWEPCO absorbs $11.0 million of electric infrastructure through standard cost recovery, and Louisiana contributes $50 million to public infrastructure (including the $7.4 million Contribution in Aid of Construction for the redundant electric feed). This contribution directly reduces BEP's site preparation outlay and accelerates the path to occupancy. No portion of Louisiana's contribution is contingent on tax abatement or revenue-based offsets, which are inapplicable to a federal counterparty.

LAND

The Aeropark site at 7099 Challenger Drive is controlled by the Shreveport Airport Authority. Following discussions with Airport leadership, the Airport is open to structuring a graduated ground lease that progresses toward a fair market value arrangement over the life of the agreement. This structure satisfies Treasury's requirement for long-term site control (99–150 years), and because the contemplated lease term exceeds 50 years, it will also require Federal Aviation Administration approval—a process the Airport Authority and Louisiana Economic Development are prepared to support.

Lease structure. The Airport has historically used graduated lease structures that establish rental rates in defined increments over the life of the agreement (for example, Years 0–5, 6–10, 11–15, and subsequent periods), providing a predictable framework for both parties while allowing rates to adjust with market conditions and project maturity. A new land appraisal would be required to establish current market value before terms are finalized, and all lease terms are subject to approval by the Shreveport Airport Authority Board.

Illustrative cost (subject to appraisal and negotiation). The Airport's current commercial ground lease rate is $0.328 per square foot. Applied to the 152.2-acre site, a fully-graduated lease reaching this rate would represent an illustrative cost on the order of $1.1 million per year in early periods, rising toward approximately $2.2 million per year at full rate—roughly $34 million on a 30-year NPV basis at 3% (approximately $20 million at 7%). *These figures are illustrative only. The actual lease rate is subject to a current appraisal, graduated-structure negotiation, Airport Board approval, and FAA review, and is therefore presented separately from the headline TCO rather than embedded within it.*

Louisiana and the Airport Authority are committed to structuring lease terms that deliver the long-term control and cost certainty BEP requires while reflecting the premium nature of the airport-adjacent location. The State welcomes the opportunity to negotiate a structure that meets Treasury's objectives should the proposal advance.

SITE PREPARATION AND CONSTRUCTION

Site preparation and construction costs are based on the CSRS ROM Planning Estimate, Revision 1 (June 23, 2026), which incorporates the SWEPCO Preliminary Electric Service Review. The estimate covers site infrastructure (clearing, grading, utilities-in, access, security perimeter) and a 600,000 SF industrial building shell sized to BEP's stated facility program.

CATEGORY	LOW	HIGH	MIDPOINT (USED IN TCO)
Site infrastructure (CSRS ROM REV1)	$52,671,000	$72,422,000	$62,546,000
Building shell and core (CSRS ROM REV1)	$72,600,000	$94,800,000	$83,700,000
Gross capital cost	$125,271,000	$167,222,000	$146,246,000
Less: SWEPCO-absorbed electric infrastructure			($11,039,000)
Less: Louisiana incentive offset (public infrastructure)			($50,000,000)
Net capital cost to BEP			**$85,207,000**

Electrical infrastructure—SWEPCO Desktop Review confirms favorable cost structure. Per SWEPCO's Preliminary Electric Service Review (June 2026), confirmed in CSRS REV1, the primary feed from Powell Street Station (138 kV transmission-served) is delivered through a new 12.47 kV circuit at $1,000,000, **absorbed entirely by SWEPCO under standard 5-year service agreement at no capital outlay to BEP.** The redundant 69 kV feed required for N+1 reliability is delivered through a new ring bus substation at total infrastructure cost of $17,440,000, of which SWEPCO absorbs $10,038,858 through rate base recovery, with a Customer CIAC of $7,401,142—**fully absorbed within Louisiana's $50 million state contribution to public infrastructure.** The full $18,440,000 electrical infrastructure cost therefore reaches BEP at no net capital outlay.

Application of Louisiana incentive offset. Louisiana's $50 million contribution is delivered as a direct credit against BEP's site preparation outlay, allocated to public infrastructure including the $7.4M SWEPCO CIAC for redundant electric feed, site clearing and grading, primary and emergency access roads, the security perimeter, and supporting water, sewer, and gas extensions.

UTILITY COSTS

Utility cost projections are based on documented rates and tariffs from the four utility providers serving the Aeropark site, scaled to BEP's stated demand. All rates reflect 2026 schedules; the 30-year model escalates rates at 2.5% annually.

UTILITY	PROVIDER	DOCUMENTED RATE	YEAR 1 COST (2033)
Electricity	SWEPCO (AEP)	$0.075/kWh + $10.51/kW demand	$3,531,000
Natural gas	Delta Utilities (LCT-1)	$6.5411/MMBtu (first 1,000) / $4.7611/MMBtu (over)	$624,000
Water	City of Shreveport	$6.04/1,000 gal (Tier 4 industrial)	$4,409,000
Sewer	City of Shreveport	$7.87/1,000 gal	$5,171,000
Total utilities, Year 1			**$13,735,000**

Demand basis. Electricity: 5.4 MW with 38,000 MWh annual consumption per Treasury Q&A. Natural gas: 350 MCF/day base demand, 525 MCF/day winter peak. Water: full ramp-up to 2.0 MGD by Q4 2030, reflected in Year 1 (2033) as steady-state. Sewer: 1.8 MGD ramp-up by Q4 2030, reflected in Year 1 as steady-state.

Structural cost advantages confirmed by utility partners. The Shreveport-Bossier service territory delivers electricity at $0.075/kWh, materially below the U.S. industrial average of approximately $0.083/kWh, providing a structural cost advantage over the 30-year horizon. SWEPCO's Preliminary Electric Service Review (June 2026) confirms that the **primary feed from Powell Street Station is delivered at no capital outlay to BEP**, with infrastructure cost fully absorbed through SWEPCO's standard 5-year service agreement. Delta Utilities (LCT-1/GIT-1 tariff) further indicates that **more favorable gas rates may be available** once anticipated natural gas volumes and load characteristics are confirmed in final design—a benefit not reflected in the Year 1 projection shown below.

UTILITY COST SUMMARY	NPV AT 3%	NPV AT 7%	NOMINAL 30-YEAR
30-Year Utility Cost (NPV)	$373,133,000	$221,122,000	$603,016,000

LABOR COST PROJECTIONS

Labor projections cover 612 federal full-time equivalents and 209 contracted support personnel, totaling 821 positions at steady-state operations per the Treasury Q&A of April 14, 2026. Federal staffing levels mirror the Western Currency Facility in Fort Worth and span 37 federal occupational classification series.

Wage basis. Labor costs are projected using the Shreveport-Bossier MSA weighted average hourly wage of $29.81 (Lightcast Q1 2026, weighted across the BEP-relevant SOC universe), annualized at 2,080 hours for a base wage of $62,005 per FTE. Federal positions apply a 38% benefits and overhead load factor reflecting FERS, FEHB, FICA, and standard federal compensation structure. Contractor positions apply a 30% benefits and overhead load factor reflecting typical private-sector total compensation.

WORKFORCE CATEGORY	HEADCOUNT	TOTAL COMP PER FTE	YEAR 1 COST
Federal FTEs (GS/FWS, Shreveport locality)	612	$85,567	$52,367,000
Contractors (facilities, security, IT)	209	$80,606	$16,847,000
Total labor, Year 1	**821**		**$69,213,000**

The Shreveport-Bossier MSA wage basis produces a structural labor cost advantage versus comparable BEP siting options in higher-cost metropolitan areas. *Average hourly earnings in the BEP-relevant occupational mix are $29.81 in Shreveport-Bossier, compared to $34.07 in New Orleans-Metairie, $33.52 in Baton Rouge, and the national average of approximately $32–34 for comparable federal manufacturing workforce composition. Over the 30-year horizon at 2.5% wage escalation, this differential compounds materially.*

LABOR COST SUMMARY	NPV AT 3%	NPV AT 7%	NOMINAL 30-YEAR
30-Year Labor Cost (NPV)	$1,880,252,000	$1,114,258,000	$3,038,659,000

INCENTIVE OFFSETS

Louisiana's incentive package is structured around the principle that any contribution to a federal counterparty must deliver tangible capital value rather than tax-based abatements that are inapplicable to BEP. The state and its utility partners have therefore committed contributions entirely to public infrastructure and direct cost absorption that reduce BEP's site preparation, construction, and operating outlay.

INCENTIVE COMPONENT	VALUE	FORM	CERTAINTY
State of Louisiana—public infrastructure (includes $7.4M SWEPCO CIAC for redundant feed)	$50,000,000	Capital outlay for site work, redundant electric feed CIAC, water and sewer extensions, access roads, security perimeter	State appropriation
Land—Shreveport Airport Authority	Graduated lease (see Section 2)	Graduated ground lease toward fair market value; long-term term to satisfy 99–150 year control, subject to appraisal, Board approval, and FAA review	Airport Board commitment to negotiate
SWEPCO—primary electric feed (Powell Street Station)	$1,000,000 absorbed cost	Full infrastructure cost recovered through standard 5-year service agreement; no BEP capital outlay	Confirmed by SWEPCO Desktop Review (June 2026)
SWEPCO—alternate feed rate base contribution	$10,038,858 absorbed cost	Portion of $17.44M 69 kV station infra-structure absorbed by SWEPCO rate base	Confirmed by SWEPCO Desktop Review (June 2026)
LED FastStart—workforce training services	In-kind	Recruiting, screening, and customized training program delivery at no cost to BEP	Guaranteed (statutory program)

Statutory and guaranteed character. Each incentive listed above is either statutory (LED FastStart), supported by direct state appropriation (the $50M public infrastructure commitment), or absorbed by the regulated utility through standard cost recovery mechanisms (SWEPCO). No element of Louisiana's package is dependent on future legislative action. Long-term durability analysis is not required because all contributions are delivered as upfront capital investment or absorbed infrastructure cost, not as long-tail tax or revenue offsets.

CONSOLIDATED 30-YEAR TCO

The table below consolidates all cost categories into a single 30-year TCO view at both required discount rates.

COST CATEGORY	NPV AT 3%	NPV AT 7%
Land (ground lease—see Section 2)	Shown separately*	Shown separately*
Site preparation and construction (gross)	$146,246,000	$146,246,000
Utilities—30 years	$373,133,000	$221,122,000
Labor—30 years	$1,880,252,000	$1,114,258,000
Gross 30-Year TCO (before offsets)	$2,399,631,000	$1,481,626,000
Less: SWEPCO-absorbed electric infrastructure	($11,039,000)	($11,039,000)
Less: Louisiana incentive offset	($50,000,000)	($50,000,000)
Net 30-Year TCO to BEP	**$2,338,592,000**	**$1,420,587,000**

***Land.** *The potential graduated ground lease (illustrative ~$34M NPV at 3%, ~$20M at 7%, subject to appraisal and negotiation) is presented in Section 2 and excluded from the consolidated figure above pending a current appraisal and finalized lease structure.*

Sensitivity. The TCO is dominated by labor cost (approximately 78% of NPV at both discount rates), reflecting the personnel-intensive operating profile of a federal manufacturing facility. The differential between Shreveport-Bossier wages and higher-cost metropolitan options compounds across the 30-year horizon and is the single largest driver of long-term cost competitiveness for this site. Utility cost as a share of total TCO is approximately 15% at the 3% discount rate; capital cost is approximately 6%.

KEY ASSUMPTIONS

- 30-year occupancy period: Q2 2033 through Q2 2063 (Year 1 through Year 30 of operations).
- Capital costs are treated as Year 0 outlays, incurred during the 2027–2032 construction period.
- Discount rates: 3% and 7% per OMB Circular A-94 and Treasury RFI specification.
- Wage and utility escalation: 2.5% per year, applied to all operating cost categories.
- Electricity demand: 5.4 MW with 38,000 MWh annual consumption (Treasury Q&A).
- Natural gas demand: 350 MCF/day base, 525 MCF/day winter peak (Treasury Q&A).
- Water and wastewater demand: 2.0 MGD water, 1.8 MGD wastewater at full ramp-up (RFI site information form). Day 1 demand of 200,000 GPD water/55,000 GPD wastewater is achieved within the existing distribution and treatment system without modification, per City of Shreveport confirmation. Capital investments required to scale capacity from Day 1 levels to full ramp-up are addressed in the Site and Infrastructure Plan (Section 2 of this proposal) and are not duplicated here.
- Labor: 612 federal FTEs and 209 contractors at Shreveport-Bossier MSA weighted average hourly wage of $29.81 (Lightcast Q1 2026).
- Capital cost basis: CSRS ROM Planning Estimate REV1 (June 23, 2026), midpoint of low–high range, incorporating the SWEPCO Preliminary Electric Service Review and revised security perimeter fencing.

- Utility rates: SWEPCO ($0.075/kWh, $10.51/kW demand); Delta Utilities (LCT-1/GIT-1 tariff, $6.5411/MMBtu first 1,000 / $4.7611/MMBtu over); City of Shreveport water ($6.04/1,000 gal industrial Tier 4) and sewer ($7.87/1,000 gal).
- Year-by-year cashflow detail, NPV calculation tables, and supporting utility rate documentation are provided in the next section: Cost Model Supporting Detail.

COST MODEL SUPPORTING DETAIL

YEAR-BY-YEAR CASHFLOW SUMMARY (SELECTED YEARS)

Full year-by-year cashflow is maintained in supporting workbook.
Selected milestone years shown below.

YEAR	CALENDAR YEAR	UTILITY (NOMINAL)	LABOR (NOMINAL)	TOTAL OPEX
1	2033	$13,735,000	$69,213,000	$82,948,000
5	2037	$15,159,000	$76,409,000	$91,568,000
10	2042	$17,153,000	$86,453,000	$103,606,000
15	2047	$19,409,000	$97,816,000	$117,225,000
20	2052	$21,962,000	$110,675,000	$132,637,000
25	2057	$24,851,000	$125,225,000	$150,076,000
30	2062	$28,121,000	$141,687,000	$169,808,000

Escalation applied at 2.5% per year compounded for both utility and labor cost categories.

CAPITAL COST DETAIL (CSRS ROM)

COMPONENT	LOW	HIGH	MIDPOINT
Land/legal/FAA coordination	Excluded	Excluded	
Clearing and earthwork	$16,607,000	$23,484,000	$20,046,000
Electrical—Powell St primary feed (S-10)	$1,000,000	$1,000,000	$1,000,000
Electrical—new 69 kV station/alt feed (S-11)	$17,440,000	$17,440,000	$17,440,000
Electrical—on-site distribution & backup gen (S-12/S-13)	TBD	TBD	
Water infrastructure	$690,000	$1,195,000	$943,000
Wastewater infrastructure	$384,000	$519,000	$451,000
Natural gas infrastructure	$1,025,000	$1,900,000	$1,463,000
Telecom/fiber	TBD	TBD	
Access and transportation	$14,411,000	$24,376,000	$19,394,000
Security perimeter (fencing revised per CG input)	$1,114,000	$2,508,000	$1,811,000
Subtotal—site infrastructure	**$52,671,000**	**$72,422,000**	**$62,546,000**
Building shell and core	$40,500,000	$53,400,000	$46,950,000
Building interiors	$2,400,000	$4,200,000	$3,300,000
Building equipment	$1,800,000	$2,400,000	$2,100,000
Building systems (MEP, fire)	$20,700,000	$22,800,000	$21,750,000
Building GC/general conditions	$7,200,000	$12,000,000	$9,600,000
Building risk/hardening premium	TBD	TBD	
Subtotal—building	**$72,600,000**	**$94,800,000**	**$83,700,000**
Combined capital subtotal	**$125,271,000**	**$167,222,000**	**$146,246,000**

Electrical infrastructure detail. *Electrical line items reflect the SWEPCO Preliminary Electric Service Review, incorporated into CSRS REV1. Primary feed from Powell Street Station via new 12.47 kV circuit (1.58 miles reconductoring) at $1,000,000, fully absorbed by SWEPCO through standard 5-year service agreement; alternate feed via new 69 kV three-breaker ring bus station at $17,440,000, of which $10,038,858 is absorbed by SWEPCO through rate base recovery and $7,401,142 is a Contribution in Aid of Construction absorbed within Louisiana's $50M contribution. SWEPCO projects monthly non-fuel revenue of $183,981 and five-year non-fuel revenue of $11,038,858. On-site primary distribution and backup generation (S-12, S-13) remain TBD pending final facility design.*

Security perimeter detail. *The perimeter fencing line (S-41) was revised in CSRS REV1 to reflect documented site-specific fencing pricing of approximately $223,500 for the selected 2.5-mile site perimeter, reducing the security perimeter subtotal from the prior estimate. Fencing scope assumes standard industrial perimeter; federal anti-climb/anti-cut systems, crash-rated barriers, and intrusion detection are excluded pending final security standard definition.*

UTILITY COST DETAIL (YEAR 1, 2033)

UTILITY	DEMAND BASIS	RATE	YEAR 1 COST
Electricity—energy charge	38,000 MWh	$0.075/kWh	$2,850,000
Electricity—demand charge	5.4 MW × 12 mo	$10.51/kW/mo	$681,000
Natural gas—commodity	350 MCF/day × 365	Tiered LCT-1	$621,000
Natural gas—service & admin	12 months	$266/mo	$3,000
Water (industrial Tier 4)	2.0 MGD × 365	$6.04/1,000 gal	$4,409,000
Sewer	1.8 MGD × 365	$7.87/1,000 gal	$5,171,000
Total utility, Year 1			**$13,735,000**

LABOR COST DETAIL (YEAR 1, 2033)

WORKFORCE CATEGORY	HEADCOUNT	BASE WAGE	TOTAL COMP LOAD	YEAR 1 COST
Federal FTEs	612	$62,005	1.38× (FERS, FEHB, FICA)	$52,367,000
Contractors	209	$62,005	1.30× (private sector)	$16,847,000
Total labor	**821**			**$69,213,000**

Base wage of $62,005 derived from Shreveport-Bossier MSA weighted average hourly earnings of $29.81 across the BEP-relevant SOC universe (Lightcast Q1 2026), annualized at 2,080 hours.

NPV SENSITIVITY AT BOTH DISCOUNT RATES

COMPONENT	NOMINAL 30-YEAR	NPV AT 3%	NPV AT 7%
Capital—gross	$146,246,000	$146,246,000	$146,246,000
Less: SWEPCO-absorbed	($11,039,000)	($11,039,000)	($11,039,000)
Less: Louisiana offset	($50,000,000)	($50,000,000)	($50,000,000)
Capital—net to BEP	**$85,207,000**	**$85,207,000**	**$85,207,000**
Utilities (30 years)	$603,016,000	$373,133,000	$221,122,000
Labor (30 years)	$3,038,659,000	$1,880,252,000	$1,114,258,000
Total—net to BEP (excl. land lease)	**$3,726,882,000**	**$2,338,592,000**	**$1,420,587,000**
Memo: potential ground lease (illustrative)	~$55,600,000	~$34,400,000	~$20,200,000

The potential ground lease is shown as a memo item, not included in the net TCO total, pending appraisal and lease negotiation. If a finalized lease were included at the illustrative full-graduation level, total net TCO would rise to approximately $2.37 billion at 3% and $1.44 billion at 7%.

DATA SOURCES

- Facility demand: U.S. Department of the Treasury, Project Treasure Island Q&A Response (April 14, 2026), Questions Q1–Q7.
- Workforce composition: Treasury Q&A Response—DCF-Based Employees providing BEP-wide support and Facilities Contract Head Count tables; 612 federal FTEs across 37 occupational series and 209 contractors.
- Site information and existing utility infrastructure: Project Treasure Island RFI Site Information Form—Shreveport Aeropark, completed by Louisiana Economic Development and the Shreveport Airport Authority.
- Ground lease structure and rate: Shreveport Regional Airport Lease Options memorandum (Stacy C. Kuba, Deputy Director of Airports), current commercial ground lease rate $0.328/sq ft, graduated structure subject to appraisal, Airport Board approval, and FAA review.
- Capital cost basis: CSRS, Project Treasure Island ROM Planning Estimate REV1 (June 23, 2026), Site Infrastructure and Building Estimate detail tabs.
- Electrical infrastructure scope, costs, and timeline: SWEPCO Economic and Business Development, Preliminary Electric Service Review—Desktop Analysis (June 2026). Service options include Powell Street Station primary feed via 138 kV transmission ($1.0M, SWEPCO-absorbed under standard 5-year service agreement) and alternate 69 kV station feed ($17.44M total infrastructure, with $10.04M absorbed by SWEPCO rate base and $7.40M as Customer CIAC absorbed within Louisiana state contribution).
- Electricity rate: SWEPCO standard Lighting and Power service at 12.47 kV, 80% load factor—$0.075/kWh energy + $10.51/kW demand charge (RFI Site Information Form, confirmed by Eric Basinger, SWEPCO Economic and Business Development Manager).
- Natural gas rate: Delta Utilities current LCT-1 Transportation Services tariff—$6.5411/MMBtu (first 1,000 MMBtu) / $4.7611/MMBtu (over 1,000 MMBtu), plus $16 monthly service charge and $250 monthly transportation admin fee (RFI Site Information Form, confirmed by Jackie Richmond, Delta Utilities Key Accounts Manager).
- Water and sewer rates: City of Shreveport Water and Sewerage Department published schedule—$6.04/1,000 gal industrial Tier 4 water rate inside city; $7.87/1,000 gal sewer rate inside city.
- Labor wage basis: Lightcast Q1 2026 Data Set, Shreveport-Bossier City MSA (43340), weighted average hourly earnings of $29.81 across the BEP-relevant SOC universe.
- Discount rates: 3% and 7% per Section 11 (Cost Framework) of the Treasury RFI, consistent with OMB Circular A-94.

NOTES ON CONSERVATISM AND SENSITIVITY

The TCO projection presented in this section reflects standard assumptions on wage and utility escalation (2.5% per year) and operates from documented Year 1 rates. Several elements of the model are inherently conservative from BEP's standpoint:

- Delta Utilities indicates that more favorable gas tariff rates may be available once anticipated natural gas volumes and load characteristics are confirmed—this potential benefit is not reflected in the projection.
- SWEPCO's published Economic Development Rider may be applicable to the customer-owned 69 kV substation and large industrial load profile, providing additional rate benefit beyond the primary feed absorption confirmed in the desktop review. This is not reflected in the projection.
- The SWEPCO Desktop Review timeline of 4–6 months for the Powell Street primary feed and 18–24 months from contract execution for the 69 kV alternate feed both align well within Treasury's 6.5-year FID-to-operations window, with substantial schedule margin for engineering refinement, procurement, and commissioning.
- The Louisiana incentive offset of $50 million is treated as a Year 0 capital credit; if structured as in-kind delivery of completed public infrastructure, the value to BEP is potentially greater due to avoided procurement and construction management overhead.
- Wage escalation at 2.5% per year is consistent with long-term federal pay scale trajectories; faster wage growth in higher-cost competitor markets would widen Shreveport-Bossier's labor cost advantage over the 30-year horizon.

PROJECT SCHEDULE AND MILESTONES

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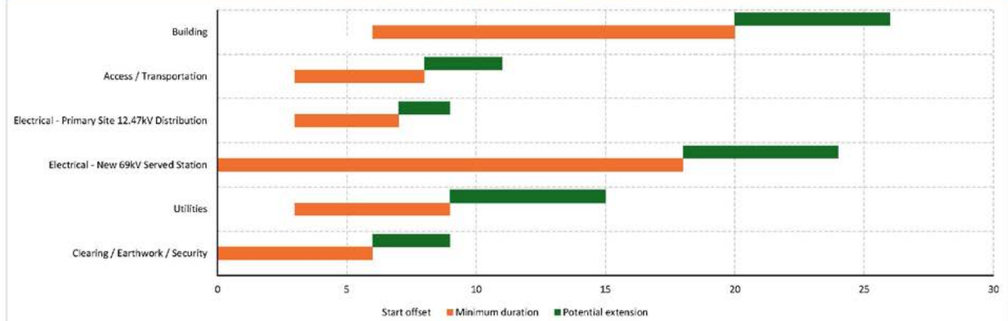
Project Treasure Island - Construction Schedule Summary

Construction-only schedule range by major workstream; actual durations remain subject to scope definition and construction delivery strategy.

Workstream	Included Construction Scope	Low Duration	High Duration	Primary Schedule Drivers
Clearing, Earthwork, and Security Perimeter	Clearing/grubbing, mass grading, pad stabilization, select fill, dewatering allowance, erosion controls, construction access, laydown areas, fencing, gates/guardhouse infrastructure, perimeter lighting conduit, and barrier prep where defined.	**6 months**	**9 months**	Geotechnical conditions, pad stabilization requirements, weather, and final security standard.
Electrical Infrastructure	Primary Site 12.47kV Distribution (4-6 months) and New 69kV Served Station (18-24 months), including related site service construction, station construction, and interconnection work.	**4 / 18 months**	**6 / 24 months**	Utility-provider agreement execution, routing, interconnection requirements, station equipment lead times, outage coordination, and energization criteria.
Utilities (water, sewer, natural gas, telecom)	Water lateral, meter vault, fire loop, wastewater lift station and force main, jack-and-bore crossings, tie-in, gas main extension, and industrial gas meter/regulator station. Telecom/fiber remains TBD unless later defined.	**6 months**	**12 months**	Utility-provider responsibilities, routing, major equipment lead times, and final demand criteria.
Access / Transportation	Primary secure access road, secondary/emergency access road, intersection improvements, perimeter security road, and Challenger Drive vacation/realignment/internalization if later defined.	**5 months**	**8 months**	Utility corridor coordination, drainage requirements, pavement section, and intersection scope.
Building	600,000 SF industrial shell/core, concrete/foundations/slab, structural steel, roof/envelope, openings, limited interiors, dock equipment, fire suppression, MEP systems, and building general conditions. Hardening/security premium remains TBD unless later defined.	**14 months**	**20 months**	Pad readiness, foundations/slab, steel/enclosure, MEP/fire protection, utility energization, and commissioning.

Preliminary Construction Schedule



Note: The chart illustrates potential overlap only. The start offset is used solely to place each workstream along the construction timeline and is not presented as a separate data table.

Foot Notes

1. Construction-only planning schedule; excludes permitting, ROW, engineering/design, financing, procurement approvals, owner soft costs, and other non-construction activities.
2. Schedule ranges are planning-level estimates intended to show probable construction duration and overlap; they are not a CPM baseline schedule.
3. TBD items remain excluded unless later defined, including telecom/fiber, stormwater detention/retention, industrial pretreatment, and building hardening/security premiums.
4. Geotechnical findings may materially affect duration through unsuitable soils, surcharge, wick drains, dewatering, lime/cement stabilization, or deep foundation requirements.
5. Utility durations may change based on provider responsibilities, off-site upgrades, interconnect studies, agreements, procurement schedule, and energization requirements.
6. Roadway durations may change based on pavement section, drainage structures, traffic control, intersection scope, airport operational constraints, and Challenger Drive treatment.
7. Building duration may change based on structural criteria, fire-protection classification, MEP loads, utilities, dock count, interior/lab/admin buildout, and security/hardening criteria.
8. Weather, contractor phasing, procurement, long-lead electrical gear, and owner-furnished equipment coordination could compress or extend the overall construction window.
9. Overall construction duration is expected to be approximately 18 to 24 months from construction mobilization to substantial completion if workstreams overlap as shown.
9. Electrical infrastructure durations strictly derived from SWEPCO provided information.

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Project Treasure Island - ROM Planning Estimate Summary

SITE INFRASTRUCTURE	Low	High	Detail References
Land / Legal / FAA	Excluded	Excluded	Site Infrastructure S-01
Clearing / Earthwork	$16,607,000	$23,484,000	Site Infrastructure S-02-S-09
Electrical Infrastructure	$18,440,000	$18,440,000	Site Infrastructure S-10-S-14
Water Infrastructure	$690,000	$1,195,000	Site Infrastructure S-15-S-19
Wastewater Infrastructure	$384,000	$518,500	Site Infrastructure S-20-S-25
Natural Gas Infrastructure	$1,025,000	$1,900,000	Site Infrastructure S-26-S-30
Telecom / Fiber	Excluded	Excluded	Site Infrastructure S-31-S-34
Access / Transportation	$14,411,000	$24,376,000	Site Infrastructure S-35-S-39
Security Perimeter	$1,114,000	$2,508,000	Site Infrastructure S-41 and S-43-S-45
Total Site Infrastructure	**$52,671,000**	**$72,421,500**	**Refer to Site Infrastructure detail tab for unit costs, assumptions, inclusions, exclusions, and TBD placeholders.**

BUILDING ESTIMATE	Low	High	Detail References
Building Shell/Core	$40,500,000	$53,400,000	Building Estimate B-01-B-04
Building Interiors	$2,400,000	$4,200,000	Building Estimate B-05
Building Equipment	$1,800,000	$2,400,000	Building Estimate B-06
Building Systems	$20,700,000	$22,800,000	Building Estimate B-07-B-08
Building GC / General Conditions	$7,200,000	$12,000,000	Building Estimate B-09
Building Risk / Hardening	Excluded	Excluded	Building Estimate B-10; excluded/TBD risk placeholder.
Total Building Estimate	**$72,600,000**	**$94,800,000**	**Refer to Building Estimate detail tab for unit costs, assumptions, inclusions, exclusions, and TBD placeholders.**
Combined Subtotal:	**$125,271,000**	**$167,221,500**	**Combined range references Site Infrastructure and Building Estimate detail tabs. Review line-item notes before use.**

GENERAL ESTIMATE NOTES

1. ROM estimate is for preliminary planning only; it is not a bid, GMP, or final engineer's opinion of probable cost.
2. CSRS assumed design basis is based solely on limited Project Treasure Island information provided by LED.
3. Existing utility information was derived from historical LED site certification documents and is subject to current provider confirmation.
4. Quantities, alignments, capacities, and unit prices remain subject to survey, geotechnical findings, utility studies, permitting, agency review, and final engineering.
5. Utility scope assumes third-party utility participation and approvals; off-site upgrades, deposits, impact fees, and betterments are excluded unless listed.
6. Building estimate assumes a large industrial shell/core basis; final costs will vary with program, structural criteria, MEP loads, fire protection classification, security requirements, and delivery method.
7. Excludes land acquisition/value, airport lease economics, financing, taxes, FF&E, process equipment, owner soft costs, and undefined security/hardening premiums unless listed.
8. Allowances and contingencies are planning placeholders only and should be refined as design, vendor, provider, and contractor information is received.
9. TBD line items are retained for scope awareness where costs can vary widely; they are excluded from numeric subtotal ranges until defined.
10. Line-item notes govern individual scope interpretation and should be reviewed with the applicable detail tabs before using totals.

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ID	Category	Line Item	Project Basis	Low Qty	High Qty	Unit	Low Rate / LS	High Rate / LS	Low Direct Cost	High Direct Cost	Assumptions, Limitations, and Qualifications	Inclusions	Exclusions
											Land / Legal / FAA		
S-01	Land / Legal / FAA	FAA coordination and legal scheduling	1	1	1	LS	TBD	TBD	TBD	TBD	Highly variable due to FAA coordination, lease/conveyance structure, legal responsibilities, and airport authority requirements can materially affect cost.	Not Applicable	Not Applicable
	Subtotal - Land / Legal / FAA								**$0**	**$0**			
											Clearing / Earthwork		
S-02	Clearing / Earthwork	Clearing and grubbing	231 (project provided data)	231	231	AC	$8,000	$12,000	$1,848,000	$2,772,000	Based on supplied acreage and subject to survey, clearing limits, and permitting. Unit pricing informed by comparable industrial benchmark scope and normalized to the stated quantity basis.	Generally includes clearing undeveloped acreage, vegetation removal, grubbing, and associated site clearing/haul activities.	Excludes mass grading, erosion control, wetland/tree mitigation, hazardous material remediation, and off-site disposal of contaminated materials.
S-03	Clearing / Earthwork	Rough grading and earthwork / mass grading	231 (project provided data)	231	231	AC	$35,000	$45,000	$8,085,000	$10,395,000	ROM earthwork quantity basis only. Final cost subject to grading plan and geotech. Unit pricing informed by comparable industrial benchmark scope and normalized to the stated quantity basis.	Mass grading / cut-fill activities across sitework area, including roead rough grading, cut/fill balancing, and earthwork operations comparable to typical industrial mass grading scope.	Excludes unsuitable soil treatment, limiteement stabilization; imported select fill, deep foundations, fine grading, erosion controls, construction testing, and final pavement/base construction unless separately included.
S-04	Clearing / Earthwork	Excavation/fill and lime treatment/soil cement at pad areas	50 (project provided data)	50	50	AC	$65,000	$90,000	$3,250,000	$4,500,000	Subject to geotech and building pad design. Unit pricing informed by comparable industrial benchmark scope and normalized to the stated quantity basis.	Excavation/fill activities and subgrade stabilization comparable to lime treatment and soil cement for building pad or disturbed pad areas.	Excludes full-depth remediation, hazardous remediation, contaminated soil disposal, final design, foundations/piles, construction testing, and foundation.
S-05	Clearing / Earthwork	Density-controlled select fill import	80000 (project provided data)	80000	80000	CY	$25	$40	$2,000,000	$3,200,000	Assumes off-site borrow. Final rate depends on source, haul distance, and selected fill. Planning allowance only; subject to project-specific design information.	Generally includes off-site borrow/select fill material, placement in controlled lifts, moisture conditioning as required, and compaction to specified density.	Excludes excavation of unsuitable material, haul-off/disposal of contaminated material, limiteement stabilization; imported select fill, deep foundations, fine grading, erosion controls, construction testing, and final pavement/base construction unless separately included.
S-06	Clearing / Earthwork	Dewatering / wick drains / pad-area ground improvement allowance	50 (project provided data)	50	50	AC	$10,000	$20,000	$500,000	$1,000,000	Pad-area allowance. Subject to change based on groundwater, project schedule, and geotech recommendations. Unit pricing informed by comparable industrial benchmark scope and normalized to the stated quantity basis.	Dewatering and wick-drain type ground improvement for pad-area comparable to comparable industrial dewatering and wick drain scope.	Excludes final fine grading, imported select fill, stabilization, foundations, construction testing, drainage systems, and material remediation.
S-07	Clearing / Earthwork	Erosion controls, construction entrances, laydown yards and access roads	231 (project provided data)	231	231	AC	$4,000	$7,000	$924,000	$1,617,000	Subject to SWPPP, phasing, and contractor means/methods. Unit pricing informed by comparable industrial benchmark scope and normalized to the stated quantity basis.	Construction-phase erosion controls and maintenance, construction entrances, laydown yards, and temporary/access road components comparable to comparable industrial erosion control/maintenance scope.	Excludes permanent stormwater detention/retention basins, permanent drainage structures, long-term maintenance, wetland mitigation, and stormwater quality treatment unless separately included.
S-08	Clearing / Earthwork	Supplemental geotechnical investigation	1	1	1	LS	TBD	TBD	TBD	TBD	Highly variable due to boring death,count, testing, pavement core, groundwater, access, traffic control, and geotech recording vary with final site layout and building criteria.	Not Applicable	Not Applicable
S-09	Clearing / Earthwork	Geotechnical risk allowance for stabilization/deep foundation alternatives	1	1	1	LS	TBD	TBD	TBD	TBD	Highly variable based on range from shallow stabilization to surcharge, wick drains, undercut/replacement, deep foundations, or other ground-improvement systems.	Not Applicable	Not Applicable
	Subtotal - Clearing / Earthwork								**$16,607,000**	**$23,484,000**			
											Electrical Infrastructure		
S-10	Electrical Infrastructure	Powell Street Station Feed / Primary 12.47 kV Circuit	1	1	1	LS	$1,000,000	$1,000,000	$1,000,000	$1,000,000	Information strictly derived from SWEPCO desktop review estimate. SWEPCO scope includes constructing a new 12.47 kV circuit from Powell Street Station and reconductoring approximately 1.58 miles to the Treasure Island site at AeroPark. SWEPCO indicates the Powell Street Station feed is anticipated to be fully recoverable within projected revenues.	Provides primary electric service feed from Powell Street Station to support the projected 6.4 MW load. Includes new 12.47 kV circuit and approximately 1.58 miles of reconductoring to the AeroPark site based on SWEPCO desktop-level service review.	Desktop-level estimate only. Final cost, scope timing, and feasibility require distribution engineering, field validation, ROW review, procurement, detailed project development, and final SWEPCO service agreement. Does not include customer-side building electrical systems, backup generation, battery storage, utility distribution, or costs outside SWEPCO-defined service scope.

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ID	Category	Line Item	Project Basis	Low Qty	High Qty	Unit	Low Rate / LS	High Rate / LS	Low Direct Cost	High Direct Cost	Assumptions, Limitations, and Qualifications	Inclusions	Exclusions
S-11	Electrical Infrastructure	New 69 kV Served Station and Alternate Feed	1	1	1	LS	$17,440,000	$17,440,000	$17,440,000	$17,440,000	Highly variable based on project site design, distribution to building pad and fuel storage capacities, backup generator pad and fuel storage capacities, utility coordination / interconnection agreement support.	Provides alternate long-term electric service configuration through new 69 kV servo station and associated 12.47 kV distribution circuit to approximately 5.4 MW and provide more resilient service configuration than relying only on existing underground circuit capacity.	Desktop-level estimate only. Final cost, scope timing, and feasibility require planning studies, engineering, field validation, ROW acquisition review, real estate/land procurement, permitting/approvals, procurement, material lead-time review, construction sequencing, and final design. Excludes on-site backup generation, internal facility distribution, or non-SWEPCO infrastructure.
S-12	Electrical Infrastructure	On-site primary distribution to building pad	1	1	1	LS	TBD	TBD	TBD	TBD	Highly variable based on project site design, equipment locations, onsite substation location, and fuel requirements.	Not Applicable	Not Applicable
S-13	Electrical Infrastructure	Backup generator pad and fuel storage	1	1	1	LS	TBD	TBD	TBD	TBD	Highly variable based on backup power strategy.	Not Applicable	Not Applicable
S-14	Electrical Infrastructure	Utility coordination / interconnection agreement support	1	1	1	LS	TBD	TBD	TBD	TBD	Highly variable based on undefined scope and interconnection agreement duty due to undefined scope and SWEPCO's desktop review projects monthly non-fuel revenue of $193,590.97 and five-year non-fuel revenue of $11,038,956, capital costs exceeding this five-year revenue threshold may be recovered through a Contribution in Aid of Construction (CIAC), currently projected at $7,401,142, with the Powell Street Station feed anticipated to be fully recoverable economic evaluation.	Generally includes utility coordination, application/interconnection support, engineering meetings, studies, and agreement support.	Excludes major capital upgrades, tariffed utility charges, network deferred, utility-owned assets, and legal disputes.
	Subtotal - Electrical Infrastructure								$18,440,000	$18,440,000			
	Water Infrastructure												
S-15	Water Infrastructure	Water main extension / on-site lateral	1500 (project provided data)	1500	1500	LF	$40	$80	$60,000	$120,000	Assumes conceptual extension length. Final size, route, and easements require utility review. Unit pricing informed by available planning-level benchmark data and applied to project basis.	Generally includes trenching, bedding, pipe/fittings, valves, backfill, testing, and restoration for an on-site water lateral.	Excludes off-site water main upsizing, water storage tank, booster pump, fire loop, impact fees, and utility-provider capital charges.
S-16	Water Infrastructure	Meter vault and connection fees	1	1	1	LS	$30,000	$75,000	$30,000	$75,000	Final fees and meter configuration subject to utility authority requirements. Unit pricing informed by available planning-level benchmark data and applied to the stated quantity basis.	Not Applicable	Not Applicable
S-17	Water Infrastructure	On-site fire suppression loop / fire line	1	1	1	LS	$600,000	$1,600,000	$600,000	$1,600,000	Highly variable based on required fire flow, process demand, fire-flow criteria, looping requirements, and pressure criteria. Unit pricing informed by comparable industrial benchmark scope and normalized to the stated quantity basis.	Generally includes exterior distribution, valves, hydrants/FDCs, and connection to building fire protection service.	Excludes interior building sprinkler systems, ESFR systems, booster pumps, fire tank, fire alarm/detection, in-rack sprinklers, special hazard systems, etc.
S-18	Water Infrastructure	Redundant water connection / second feed	1	1	1	LS	TBD	TBD	TBD	TBD	Highly variable based on storage need and cost drivers on required fire flow, process demand, pressure criteria, tank size/type, etc.	Not Applicable	Not Applicable
S-19	Water Infrastructure	Water storage / elevated tank allowance	1	1	1	LS	TBD	TBD	TBD	TBD		Not Applicable	Not Applicable
	Subtotal - Water Infrastructure								$690,000	$1,195,000			
	Wastewater Infrastructure												
S-20	Wastewater Infrastructure	Proposed domestic on-site lift station (50,000 GPD)	1	1	EA	$180,000	$350,000	$180,000	$250,000	Assumes domestic wastewater basis. Final design subject to flow, discharge, and permit requirements. Unit pricing informed by available planning-level benchmark data and applied to the stated quantity basis.	Provides one domestic on-site lift station conceptually sized around 50,000 GPD, including the lift station structure/equipment package as represented in the prior sewer estimate.	Excludes industrial pretreatment, process-specific equipment, off-site upgrades, and final civil/mechanical/electrical design.

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ID	Category	Line Item	Project Basis	Low Qty	High Qty	Unit	Low Rate / LS	High Rate / LS	Low Direct Cost	High Direct Cost	Assumptions, Limitations, and Qualifications	Inclusions	Exclusions
S-21	Wastewater Infrastructure	Proposed force main extension (50,000 GPD)	1500 (project provided data)	1500	1500	LF	$60	$80	$90,000	$120,000	Final length and size require survey and hydraulic design. Unit pricing informed by available planning-level benchmark data and applied to the stated quantity basis.	Generally includes approximately 1,500 LF of 8-inch force main extension associated with a 50,000 GPD sanitary sewer conveyance system.	Excludes lift station, jack-and-bore, tie-in to existing main, pretreatment, utility conflicts, contaminated soils, and final design changes.
S-22	Wastewater Infrastructure	Jack & bore crossings for force main	3 (assumed)	3	3	EA	$35,000	$45,500	$105,000	$136,500	Final crossing count, casing size, and method subject to route survey. Unit pricing informed by available planning-level benchmark data and applied to the stated quantity basis.	Generally includes three jack-and-bore crossings associated with the proposed force-main extension, including casing/boring work as represented in the prior sewer estimate.	Excludes unusually long bores, railroad/agency permit fees, contaminated soils, major utility conflicts, dewatering, and traffic control beyond ordinary crossing assumptions.
S-23	Wastewater Infrastructure	Tie-in to existing 8-inch force main	1	1	1	EA	$9,000	$12,000	$9,000	$12,000	Assumes tie-in is feasible. Subject to utility approval and existing system capacity. Unit pricing informed by available planning-level benchmark data.	Generally includes one proposed tie-in to an existing 8-inch force main, including localized connection work as represented in the prior sewer estimate.	Excludes municipal capacity/impact fees, major system upgrades, bypass pumping beyond ordinary tie-in requirements, and utility-owner fees
S-24	Wastewater Infrastructure	Industrial pretreatment system	1	1	1	LS	TBD	TBD	TBD	TBD	Highly variable based on wastewater characterization, discharge limits, flow, sampling requirements, authority approval, and process equipment.	Not Applicable	Not Applicable
S-25	Wastewater Infrastructure	Stormwater detention / retention	1	1	1	LS	TBD	TBD	TBD	TBD	Highly variable based on impervious area, detention volume, outfall conditions, pumping needs, convenience routing, and drainage criteria.	Not Applicable	Not Applicable
	Subtotal - Wastewater Infrastructure								$384,000	$518,500			
	Natural Gas Infrastructure												
S-26	Natural Gas Infrastructure	8-inch natural gas main extension / upgrade	4000 (project provided data)	4000	4000	LF	$150	$300	$600,000	$1,200,000	Assumes conceptual gas extension/upgrade. Final scope subject to CenterPoint capacity review. Planning range based on current project direction and stated quantity basis.	Generally includes approximately 4,000 LF of 8-inch natural gas main extension or upgrade, including pipe, trenching, bedding/backfill, fittings, valves, testing, and limited restoration.	Excludes utility-owned contributions, meter/regulator station, on-site distribution, internal piping, easements, boxes, and CenterPoint charges.
S-27	Natural Gas Infrastructure	Industrial gas meter / regulated station	1	1	1	LS	$400,000	$600,000	$400,000	$600,000	Allowance basis. Final configuration subject to pressure, demand, and utility metering standards. Unit pricing informed by available planning-level benchmark data and applied to the stated quantity basis.	Generally includes one high-volume industrial gas meter/regulator station, including pressure regulation, metering, odorization, limited piping, valves, and utility coordination interface.	Excludes capital improvement charges, tariffed utility charges, easements, legal fees, permit fees, customer-owned improvements, and final design costs
S-28	Natural Gas Infrastructure	CenterPoint utility coordination	1	1	1	LS	$25,000	$100,000	$25,000	$100,000	Preliminary coordination effort only. Excludes utility reimbursement or system betterment charges. Unit pricing informed by available planning-level benchmark data and applied to the stated quantity basis.	Generally includes meetings, applications, engineering coordination, load confirmation, and service agreement support.	Excludes capital improvement charges, tariffed utility charges, easements, legal fees, permit fees, customer-owned improvements, and final design costs
S-29	Natural Gas Infrastructure	On-site gas distribution	1	1	1	LS	TBD	TBD	TBD	TBD	Highly variable based on load profile, pressure class, routing, pipe diameter/material, trench conditions, regulator locations, utility ownership limits, and building/process tie-in points.	Not Applicable	Not Applicable
S-30	Natural Gas Infrastructure	Internal building gas piping	1	1	1	LS	TBD	TBD	TBD	TBD	Highly variable based on final process equipment, loads, pressure, equipment locations, code classification, metering, ventilation, etc.	Not Applicable	Not Applicable
	Subtotal - Natural Gas Infrastructure								$1,025,000	$1,900,000			
	Telecom / Fiber												
S-31	Telecom / Fiber	Primary fiber connection from eastern boundary	1	1	1	LS	TBD	TBD	TBD	TBD	Primary fiber cost depends on provider service availability, route length, trenching/boring requirements, handhole/vault needs, and carrier construction responsibilities	Not Applicable	Not Applicable
S-32	Telecom / Fiber	Second physically diverse fiber path	1	1	1	LS	TBD	TBD	TBD	TBD	Retained as TBD because a physically diverse path can vary widely based on carrier availability, separation criteria, alternate route length, off-site crossings, easement needs, and resiliency requirements.	Not Applicable	Not Applicable
S-33	Telecom / Fiber	On-site conduit infrastructure	1	1	1	LS	TBD	TBD	TBD	TBD	On-site infrastructure details depends on final building placement, telecom room locations, duct bank routing, and security separation criteria	Not Applicable	Not Applicable

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ID	Category	Line Item	Project Qty Basis	CSRS High Qty	Unit	Low Rate / LS	High Rate / LS	Low Direct Cost	High Direct Cost	Assumptions, Limitations, and Qualifications	Inclusions	Exclusions
TOTAL SITE INFRASTRUCTURE RANGE								**$1,114,000**	**$2,608,000**			
		Subtotal - Security Perimeter						**$1,114,000**	**$2,608,000**			
S-44	Security Perimeter	Perimeter lighting conduit and pole bases	1	1	LS	$500,000	$1,300,000	$530,000	$1,300,000	Final lighting levels require photometric design. Unit pricing informed by comparable industrial benchmark scope	Generally includes conduit, pole bases, pull boxes, and related civil/electrical trenching work for perimeter/security lighting	Not Applicable
S-45	Security Perimeter	Vehicle barrier foundations / anti-ram prep	1	1	LS	TBD	TBD	TBD	TBD	Highly variable based on threat criteria, crash rating, and selected system. Includes foundation design, controls, power, and integration with security operations	Not Applicable	Not Applicable
		Subtotal - Security Perimeter						**$1,114,000**	**$2,608,000**			
		Subtotal - Access / Transportation						**$14,411,000**	**$24,376,000**			
		Security Perimeter										
S-41	Security Perimeter	Perimeter fencing / fence-ready improvements	13,200 LF (project provided data)	13200	LF	$20	$85	$264,000	$858,000	Assumes fence-ready improvements. Final system depends on owner security standard. Planning range based on current project direction and stated quantity basis.	Standard industrial perimeter fencing and gate-related site improvements comparable to large industrial/logistics facilities. Planning range assumes higher-end allowance for more robust perimeter/security requirements.	Excludes fencing, gates, and barriers specific to airport operations, airfield separation, wildlife exclusion, or classified/secure facilities.
S-43	Security Perimeter	Security gate foundations and guardhouse / guard booth infrastructure	2 entry points (assumed)	2	EA	$175,000	$225,000	$350,000	$450,000	Allowance for gate/guardhouse infrastructure. Final scope subject to security operators plan. Unit pricing informed by comparable industrial benchmark scope and normalized to the stated quantity basis.	Two security gate / guardhouse points with prefabricated guardhouse provisions, basic foundation support, basic electrical/HVAC. Cost should not be interpreted as full federal hardened system.	Excludes ballistic-rated or blast-resistant guardhouse construction, vehicle barriers, anti-ram systems, CCTV, access control, card readers, intrusion detection, federal hardening and utility extensions.
S-42	Security Perimeter	Secondary / emergency access road	1,000 LF (project provided data)	1000	LF	$700	$1,200	$700,000	$1,200,000	Emergency access allowance. Final scope subject to fire marshal and airport/security requirements. Planning range based on current project direction and stated quantity basis.	Includes emergency access roadway including clearing, grading, embankment, base, treated subgrade, asphalt pavement, striping, mobilization, layout, and testing.	Excludes major off-site roadway widening, ROW/easement acquisition, utility relocations, gates/security electronics, and special signage/striping not explicitly included.
S-37	Access / Transportation	Challenger Drive relocation / realignment / internalization	1	1	LS	TBD	TBD	TBD	TBD	Cost range reflects relocation / realignment of Challenger Drive, including roadway section, drainage, utility conflicts, phasing, and agency approvals.	Not Applicable	Not Applicable
S-38	Access / Transportation	Intersection improvements	1 intersection improvement package	1	LS	$775,000	$1,000,000	$775,000	$1,000,000	Allowance only. Final improvements subject to traffic impact analysis and agency requirements. Planning range based on current project direction and stated quantity basis.	Includes widening existing roadway for right-turn deceleration lane and left-turn lane, including excavation, embankment, soil-cement base, subgrade, pavement, storm drain pipe, catch basins, concrete paving, curb, striping, construction layout, temporary traffic control and mobilization	Excludes utility relocations, ROW acquisition, traffic signals unless separately scoped, major interchange work, bridge structures, environmental mitigation, and extraordinary DOT/permitting requirements.
S-39	Access / Transportation	Perimeter security road	2.5 miles (project provided data)	13200	LF	$700	$1,200	$9,240,000	$15,840,000	Conceptual perimeter road allowance. Final alignment subject to security plan and drainage design. Planning range based on current project direction and stated quantity basis.	Paved perimeter security/patrol road using fire apparatus access roadway basis, including roadway excavation, subgrade, asphalt pavement, striping, mobilization, layout, testing, and contingency-level items.	Scoped to change if final road is gravel, aggregate, or lighter-duty patrol road. Excludes fencing, lighting, security systems, and major drainage structures.
		Subtotal - Access / Transportation						**$14,411,000**	**$24,376,000**			
		Access / Transportation										
S-35	Access / Transportation	Primary secure access road	1 mile (project provided data)	5280	LF	$700	$1,200	$3,696,000	$6,336,000	Conceptual alignment allowance. Final cost subject to roadway design, drainage, and geotechnical conditions. Planning range based on current project direction and stated quantity basis.	Includes paved access roadway, clearing, grubbing, excavation, embankment, 12-inch Class II base course, treated subgrade, asphalt, hydroseeding, striping, construction layout, mobilization, and construction testing.	Excludes major off-site roadway widening, bridges/culverts beyond ordinary drainage, ROW/easement acquisition, utility relocations, traffic signals, and federal/security-specific hardening unless separately included.
S-36	Access / Transportation	Secondary / emergency access road	1,000 LF (project provided data)	1000	LF	$700	$1,200	$700,000	$1,200,000	Emergency access allowance. Final scope subject to fire marshal and airport/security requirements. Planning range based on current project direction and stated quantity basis.	Includes emergency access roadway including clearing, grading, embankment, base, treated subgrade, asphalt pavement, striping, mobilization, layout, and testing.	Excludes major off-site roadway widening, ROW/easement acquisition, utility relocations, gates/security electronics, and special signage/striping not explicitly included.
		Subtotal - Telecom / Fiber						**TBD**	**TBD**			
S-34	Telecom / Fiber	High-security communications duct bank	1	1	LS	TBD	TBD	TBD	TBD	High-security communications duct bank requirements widely depend on owner security criteria and classified/federal communication standards.	Not Applicable	Not Applicable

CSRS
a Westwood company

ID	Category	Line Item	Project Qty Basis	CSRS High Qty	Unit	Low Rate / LS	High Rate / LS	Low Direct Cost	High Direct Cost	Assumptions, Limitations, and Qualifications	Inclusions	Exclusions
TOTAL BUILDING ESTIMATE RANGE								**$72,600,000**	**$94,800,000**			
		Subtotal - Building Risk / Hardening						**$0**	**$0**			
B-10	Building Risk / Hardening	Enhanced security / hardening / unclefined industrial process building premium	600000 (per project provided data)	600000	SF	TBD	TBD	TBD	TBD	Retained as TBD risk placeholder because building hardening cost depends on owner/federal security criteria, blast/ballistic requirements, controlled-access areas, redundancy requirements, process hazards, envelope criteria, and MEP redundancy.	Not Applicable	Not Applicable
		Building Risk / Hardening										
		Subtotal - Building GC / General Conditions						**$12,600,000**	**$12,600,000**			
B-09	Building GC / General Conditions	Building-related GC general conditions, fee, insurance/contingency allowance	600000 (per project provided data)	600000	SF	$ 21.00	$ 21.00	$12,600,000	$12,600,000	Percentage/benchmark allowance. Final GC, fee, insurance, and contingency subject to delivery strategy. Unit pricing informed by comparable industrial benchmark scope and normalized to the stated quantity basis.	Generally includes contractor general conditions, project management/supervision, overhead/fee, insurance, and contingency components appropriate for a large industrial building. ROM allowance.	Excludes owner soft costs, design fees, escalation beyond current estimate assumptions, FF&E, process equipment, financing, and unusual hazardous/secure contracting requirements.
		Subtotal - Building GC / General Conditions						**$22,800,000**	**$22,800,000**			
B-08	Building Systems	Building MEP, plumbing, HVAC, electrical, fire alarm/detection, safety	600000 (per project provided data)	600000	SF	$ 30.00	$ 33.00	$18,000,000	$18,800,000	MEP allowance based on benchmark industrial scope. Final loads and systems require owner criteria. Unit pricing informed by comparable industrial benchmark scope and normalized to the stated quantity basis.	Includes warehouse/office plumbing, HVAC, main service/switchgear, warehouse electrical/lighting, fire alarm, and electronic safety systems comparable to a large industrial facility.	Excludes Treasure Island-specific process equipment, 5+1 MW N+1 service infrastructure outside building, industrial process utilities, classified/security systems, and specialized environmental controls.
B-07	Building Systems	Building fire suppression	600000 (per project provided data)	600000	SF	$ 4.50	$ 5.00	$2,700,000	$3,000,000	Assumes conventional sprinkler fire protection basis. Final design subject to commodity classification and code. Unit pricing informed by comparable industrial benchmark scope and normalized to the stated quantity basis.	Includes building fire suppression systems comparable to large industrial/logistics buildings, including ESFR/ood sprinkler, fire pump/tank components where applicable, standpipes, and associated RSP components where applicable.	Excludes final hazard-classification changes, in-rack sprinklers, process fire suppression, foam/special suppression, additional fire water storage beyond included scope, and security/federal hardening requirements.
		Subtotal - Building Equipment						**$1,800,000**	**$2,400,000**			
B-06	Building Equipment	Dock equipment allowance	600000 (per project provided data)	600000	SF	$ 3.00	$ 4.00	$1,800,000	$2,400,000	Allowance basis. Final dock count, levelers, shelters, and controls require operating equipment, and similar loading dock equipment scope.	Generally includes dock levelers, truck restraints, dock seals/shelters, bollards, basic material handling, security screening, rail equipment, and dock equipment.	Excludes dock count changes, specialized loading systems, automated material handling, security screening, rail equipment, and dock equipment.
		Subtotal - Building Interiors						**$2,400,000**	**$4,200,000**			
B-05	Building Interiors	Interior framing, drywall, ceilings, flooring, paint/coatings, toilet accessories/specialties	600000 (per project provided data)	600000	SF	$ 4.00	$ 7.00	$2,400,000	$4,200,000	Limited interior allowance. Final office, lab, and admin buildout scope remains undefined. Unit pricing informed by comparable industrial benchmark scope and normalized to the stated quantity basis.	Includes limited office/admin buildout, classrooms, controlled environment, process rooms, SCIF/federal secure space, and high-end finishes.	Excludes large office/lab/admin buildout, classrooms, controlled environment, process rooms, SCIF/federal secure space, and high-end finishes.
		Subtotal - Building Shell/Core						**$40,500,000**	**$53,400,000**			
B-04	Building Shell/Core	Openings, exterior doors, hardware	600000 (per project provided data)	600000	SF	$ 1.50	$ 3.00	$900,000	$1,800,000	Opening allowance based on benchmark industrial scope. Final openings require design conformance with owner criteria.	Generally includes exterior glazing, dock doors, roll-up doors, personnel doors, hardware.	Excludes ballistic/forced entry glazing, high security doors, specialized access control, enhanced federal security hardware, and unknown dock/door count changes.
B-03	Building Shell/Core	Roofing, thermal/moisture protection, caulking and sealants	600000 (per project provided data)	600000	SF	$ 6.00	$ 8.00	$3,600,000	$4,800,000	Assumes standard industrial roof/envelope. Final roofing and envelope criteria. Unit pricing informed by comparable industrial benchmark scope and normalized to the stated quantity basis.	Generally includes roofing membrane/insulation where applicable, limited sheet metal, waterproofing, flashing/caulking, and related assistant	Excludes specialized hardened roof assemblies, blast/ballistic envelope requirements, abnormal roof equipment loads, and classified/security envelope detailing.
B-02	Building Shell/Core	Structural steel, joists, roof deck, miscellaneous steel, erection	600000 (per project provided data)	600000	SF	$ 35.00	$ 50.00	$21,000,000	$30,000,000	Assumes standard industrial roof/envelope. Final roofing and envelope criteria. Unit pricing informed by comparable industrial benchmark scope and normalized to the stated quantity basis.	Generally includes structural steel, joists, roof deck, miscellaneous steel, erection, limited sheet metal, waterproofing, flashing/caulking, and related assistant	Excludes specialized hardened roof assemblies, blast/ballistic envelope requirements, abnormal roof equipment loads, and classified/security envelope detailing.
B-01	Building Shell/Core	Building concrete, foundations, slabs, dock pits, wall panels	600000 (per project provided data)	600000	SF	$ 25.00	$ 28.00	$15,000,000	$16,800,000	Assumes 600,000 SF industrial shell basis. Final system subject to geotechnical and structural design. Unit pricing informed by comparable industrial benchmark scope and normalized to the stated quantity basis.	Includes building concrete scope such as slab-on-grade, dock pits, mezzanine/RSP concrete where applicable, wall panels, pad/ring/grading allowances, and related concrete scope comparable to a large industrial shell.	Excludes final Treasure Island deep foundation system if required, process foundations, hardened/security-specific structural upgrades, and unknown specialty slabs.
		Building Shell/Core										
		Building Systems										
		Building Interiors										
		Building Equipment										
		Access / Transportation										
		Security Perimeter										
		Building GC / General Conditions										
		Building Risk / Hardening										

Includes quantified line items shown above and category subtotal formulas.

Excludes TBD, excluded, owner soft cost, escalation, financing, and undefined third-party/owner costs.

Subtotal range excludes TBD placeholders until scope, quantity, and cost basis are defined.

Subtotal range excludes TBD placeholders until scope, quantity, and cost basis are defined.

INFORMATION IS STRICTLY FOR PRELIMINARY PLANNING PURPOSES. COST AND SCHEDULE ARE SUBJECT TO CHANGE BASED ON FINAL PROJECT CRITERIA.

CONFIDENTIAL: Not for external distribution.

CONFIDENTIAL: Not for external distribution.

GOVERNANCE AND **DELIVERY STRUCTURE**

GOVERNANCE AND DELIVERY STRUCTURE

To demonstrate Louisiana Economic Development's ability to establish and administer the types of partnership structures contemplated for the New Currency Production Facility Development Initiative, we have included an example Cooperative Endeavor Agreement (CEA) executed for a prior project. While the specific terms, parties, and obligations associated with the New Currency Production Facility Development Initiative would be tailored to its unique scope and requirements, this example illustrates our experience developing formal agreements that clearly define partner roles, responsibilities, and expectations.

The enclosed CEA serves as a representative framework for how the New Currency Production Facility Development Initiative could be structured, including provisions related to governance, risk allocation, cost-sharing, performance requirements, remedies for non-performance, and long-term operational commitments. It is provided solely as an example of our capacity to negotiate and document complex public-private partnerships and should not be interpreted as a proposed agreement for New Currency Production Facility Development Initiative.

See Appendix pg. 5 for an example Cooperative Endeavor Agreement (CEA)

TOUR THE SITE

Scan the QR code to watch the proposed site video and download LED's Bureau of Engraving and Printing Currency Production Facility RFI Response.

APPENDIX

Bureau of Engraving and Printing
Currency Production Facility
RFI Response

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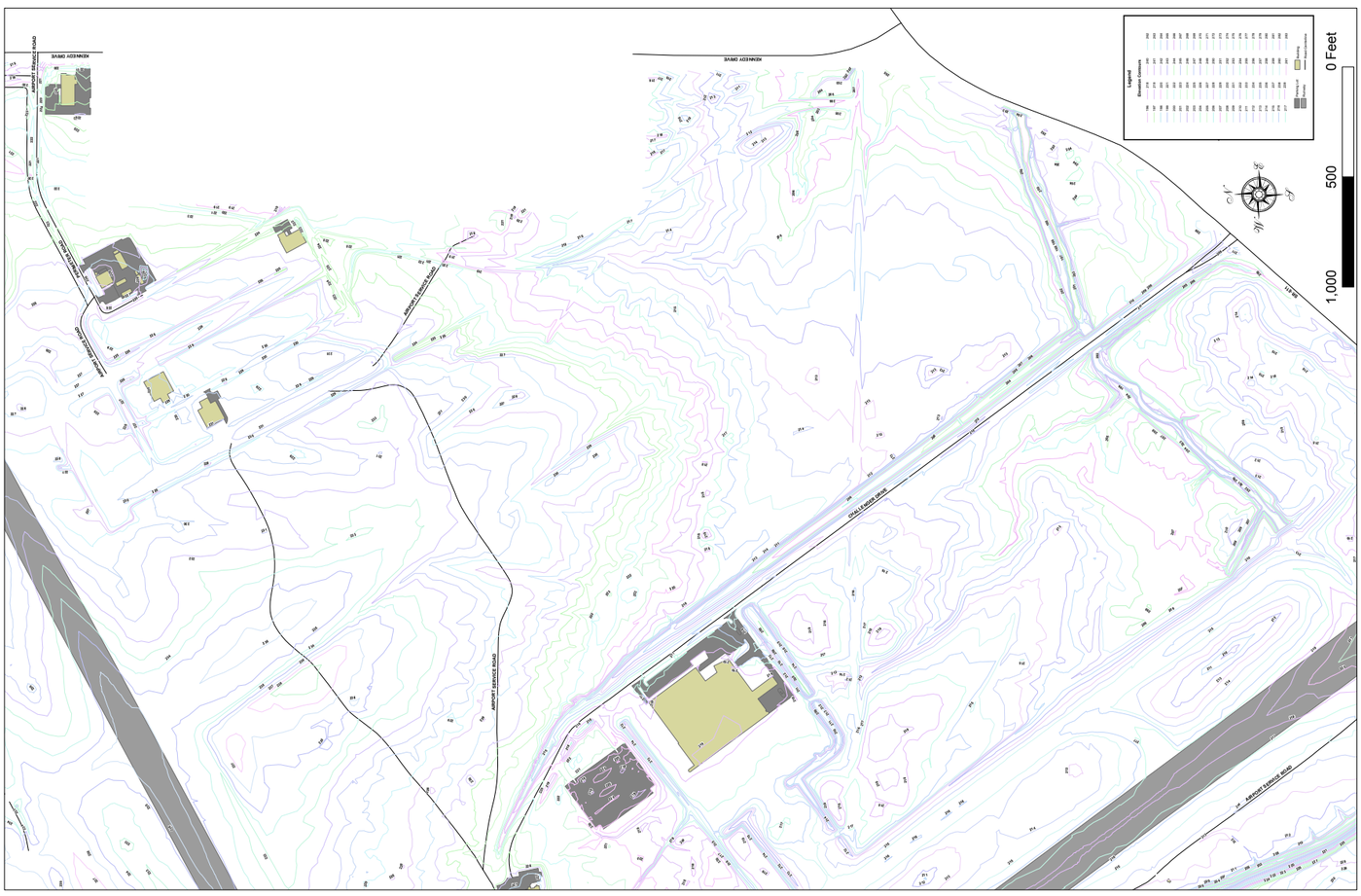
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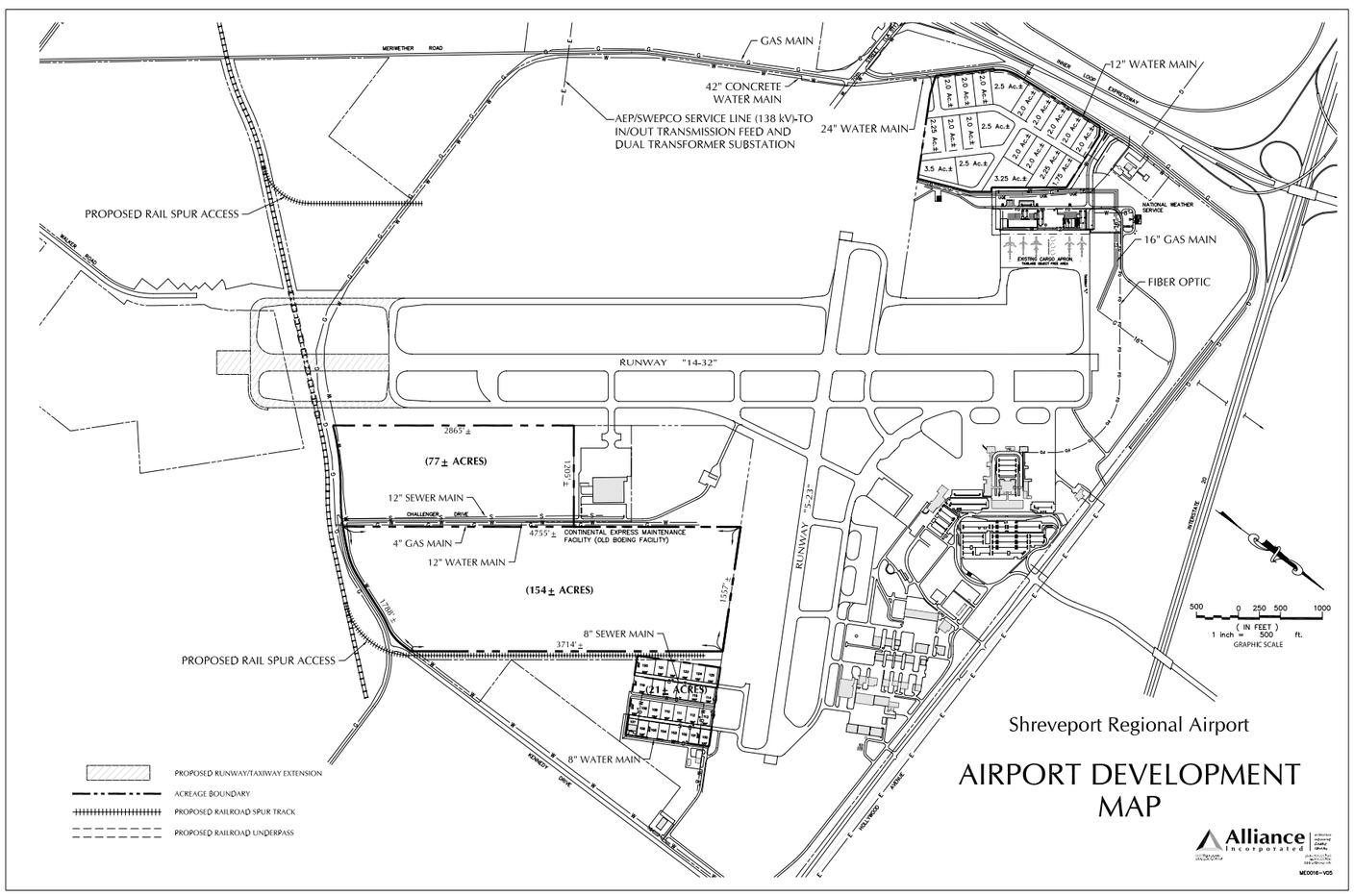
KENNEDY OASIS
AIRPORT SERVICE ROAD
CHALLENGER DRIVE


MERRIMETER ROAD
GAS MAIN
42" CONCRETE WATER MAIN
AEP/SWEPCO SERVICE LINE (138 kV)-TO IN/OUT TRANSMISSION FEED AND DUAL TRANSFORMER SUBSTATION
24" WATER MAIN
12" WATER MAIN
PROPOSED RAIL SPUR ACCESS
NATIONAL WEATHER SERVICE
16" GAS MAIN
FIBER OPTIC
RUNWAY "14-32"
(77 ± ACRES)
12" SEWER MAIN
CHALLENGER DRIVE
4" GAS MAIN
12" WATER MAIN
CONTINENTAL EXPRESS MAINTENANCE FACILITY (OLD BOEING FACILITY)
(154 ± ACRES)
8" SEWER MAIN
PROPOSED RAIL SPUR ACCESS
(21 ± ACRES)
8" WATER MAIN
RUNWAY "5-23"
PROPOSED RUNWAY/TAXIWAY EXTENSION
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AIRPORT DEVELOPMENT MAP
Alliance Incorporated

COOPERATIVE ENDEAVOR AGREEMENT

by and among

THE STATE OF LOUISIANA ("STATE")
AND
LOUISIANA ECONOMIC DEVELOPMENT,
AN AGENCY OF THE STATE OF LOUISIANA ("LED"),

and

HYUNDAI STEEL COMPANY
("COMPANY")

Dated as of May 9, 2025

STATE OF LOUISIANA
COOPERATIVE ENDEAVOR AGREEMENT

THIS COOPERATIVE ENDEAVOR AGREEMENT (as amended, modified and/or supplemented from time to time, the "Agreement") made and entered into as of May 9, 2025 ("Effective Date") by and among:

THE STATE OF LOUISIANA (the "State") herein represented by the undersigned Commissioner of Administration, Division of Administration for the State of Louisiana ("Commissioner");

LOUISIANA ECONOMIC DEVELOPMENT ("LED"), herein represented by the undersigned Secretary of LED; and

HYUNDAI STEEL COMPANY, a corporation duly incorporated under the laws of the Republic of Korea (the "Company"), which intends to register to be authorized to do business in the State of Louisiana, herein represented the undersigned authorized representative, on behalf of the Company and each of its Project Affiliates (as defined herein),

(each a "Party" and collectively, the "Parties").

RECITALS:

WHEREAS, LED is an agency of the State of Louisiana statutorily created pursuant to Louisiana Revised Statutes Title 36, Section 101 through 110, which is responsible for fostering the growth of industry and other commercial enterprises in Louisiana that will contribute to the overall improvement of the economy of Louisiana by promoting the advantages of the State to out-of-state business and industry, facilitating the expansion of existing enterprises, and coordinating with other state agencies and units of local government plans and programs aimed at expanding industrial and commercial enterprises in the State.

WHEREAS, the Company and Project Affiliates are in the process of developing plans to construct, equip and operate a large-scale industrial steel manufacturing facility in the United States of America (the "Project").

WHEREAS, in developing plans for the Project, the Company has investigated multiple potential locations for the Project throughout the United States, including a location within the State of Louisiana in Ascension Parish that is generally depicted on Exhibit A attached hereto.

WHEREAS, the planned development, construction and operation of the Project by the Company is of such a scale that it is projected, over time, to result in substantial growth in employment, tax revenues, as well as other industrial and commercial activity and significant economic benefits wherever the Project is located.

WHEREAS, the Company has requested that the State and LED provide certain incentives for the Project in exchange for the Company locating the Project in Louisiana at the Site (as defined herein).

WHEREAS, the State and LED desire that the Company locate the Project in Louisiana at the Site because it brings the potential for a material expansion of an industrial and commercial enterprise in Louisiana and is projected to substantially contribute to the overall growth and improvement throughout the State of Louisiana and for the local economy of Ascension Parish.

WHEREAS, Article VII, Section 14(c) of the Constitution of the State of Louisiana (the **"**Constitutional Authority") states that "for a public purpose", the State and its political subdivisions may engage in cooperative endeavors with each other and public or private associations, corporations and individuals.

WHEREAS, in addition to the Constitutional Authority, Louisiana Revised Statutes Title 33, Section 9029.2, *et seq*., further authorizes the State to enter into cooperative endeavor agreements that contemplate the purchase and lease of property in order to enhance the growth of economic development in the State.

WHEREAS, the State and LED expect that (i) the location of the Project and operation of the Business (as defined herein) within Louisiana, (ii) the Company's and/or Project Affiliates' creation of the Required Jobs (as defined herein), expenditure of the Required Annual Payroll and Capital Investment (as each are defined herein) within Louisiana, and (iii) the expectation that new Non-Affiliate Suppliers (as defined herein) may locate to Louisiana to service and support the Project and Business are factors that are likely to directly and/or indirectly result in sustaining growth of capital investment, new jobs, commerce, new tax revenues and other economic benefits within Louisiana, and will enhance and maintain the economic well-being of the State of Louisiana and Ascension Parish (collectively, the "Economic Benefits").

WHEREAS, given the expectation of the Economic Benefits to be derived from the location of the Project and operation of the Business within Louisiana, the State and LED wish to undertake the obligations and incentives provided for in this Agreement in accordance with its terms in order to induce the Company and Project Affiliates to locate the Project and operate the Business within Louisiana at the Site.

WHEREAS, the State and LED understand that site selection for the Project is a highly competitive process, and the obligations and incentives provided for in this Agreement are justified and necessary to encourage the Company and Project Affiliates to locate the Project and operate the Business within the State (the "Public Purpose").

WHEREAS, the State and LED each have determined that incentivizing the Company and Project Affiliates to locate the Project at the Site by entering into this Agreement serves the Public Purpose by attracting an industrial and commercial enterprise to Louisiana which is expected to result in the Economic Benefits; therefore, each is authorized to execute and deliver this Agreement and thereafter perform their respective obligations in accordance with the terms of this

Agreement, which each expects will be exceeded by the Economic Benefits projected to be generated by locating the Project and operating the Business within Louisiana.

WHEREAS, the Company has publicly announced, or intends to do so contemporaneously with the full execution and delivery by the Parties of this Agreement, its decision to locate the Project in the State of Louisiana at the Site, subject to the terms of this Agreement.

NOW THEREFORE, in consideration of the mutual covenants herein contained and other good and valuable consideration, including, without limitation, the undertaking of the Project by the Company and Project Affiliates within Louisiana at the Site, the receipt and sufficiency of which is hereby acknowledged and of the mutual benefits, covenants and agreements herein expressed, the Parties agree as follows:

ARTICLE I
PREAMBLE AND RECITALS; DEFINITIONS

1.01 Preamble and Recitals Incorporated. The Preamble and the foregoing Recital clauses are integral to the terms herein and are hereby incorporated as a part of this Agreement.

1.02 Definitions. In addition to the other capitalized terms defined throughout this Agreement, the following terms shall have the meanings assigned to them in this Article I whenever they are used in this Agreement:

"Acquisition Conditions" shall have the meaning assigned thereto in Section 3.02(b) herein.

"Affiliate" means, as to any Person, any other Person that directly or indirectly, through one or more intermediaries, Controls, is Controlled by, or is under common Control with, such Person.

"Ancillary Parcels" shall have the meaning assigned thereto in Section 3.02(f) herein.

"Applicable Law(s)" means any and all federal, state, or local laws, statutes, codes, acts, ordinances, resolutions, orders, judgments, case precedents, decrees, writs, injunctions, rules, regulations, restrictions, permits, plans, authorizations, concessions, investigations, reports, guidelines and requirements or accreditation standards of any Governmental Authority, including all applicable Environmental Laws, the Americans with Disabilities Act of 1990 and the Occupational Safety and Health Standards of the State and the United States, each as amended from time to time; provided, however, that this definition shall not be interpreted as waiving protections granted to any Party against future laws impairing the obligations of contracts between the Parties and/or third parties.

"Business" means the operations of a large-scale industrial steel manufacturing facility at the Site by the Company and/or Project Affiliates upon Project Completion.

"Capital Investment" shall have the meaning assigned thereto in Section 4.02(a) herein.

"Capital Investment Report" shall have the meaning assigned thereto in Section 7.02(e) herein.

"Casualty" means the occurrence of any fortuitous event, loss, damage, destruction or other similar total or partial loss with respect to real property, improvements, or personal property located on the Site that materially impairs the use of such real property, improvements, or personal property located on the Site for its intended use.

"Certificate of Occupancy" means a certificate of occupancy issued to the Company by the appropriate local Governmental Authority, permitting the Project to be occupied and/or leased for its intended purposes of operating the Business, it being agreed that a temporary certificate of occupancy shall be acceptable if the same does not contain any conditions which prohibit or materially interfere with the Business and if any conditions for obtaining a permanent certificate of occupancy are readily achievable.

"Cessation of Operations" means, other than with respect to a Force Majeure event that affects any material portion of the Project, the Site, or the Business, (i) the failure of the Company and all Project Affiliates to collectively meet any of the following requirements: (A) maintain at least twenty percent (20%) of Required Jobs, (B) expend at least twenty percent (20%) of Required Annual Payroll for the Project, or (C) from and after receipt of all required Certificate(s) of Occupancy, Continuously Operate the Business during any period of more than six (6) consecutive months (prorating annual requirements with respect to items (A) and (B)) or (ii) the delivery by the Company (or any Project Affiliate) of any Cessation Notice. Any "Cessation of Operations" shall be effective as of the date that (W) the Company (together with all Project Affiliates) fails to maintain twenty percent (20%) of Required Jobs, as reported to the Contract Monitor on the Annual Certification following the end of a Project Year, (X) the Company (together with all Project Affiliates) fails to expend twenty percent (20%) of Required Annual Payroll, as reported to the Contract Monitor on the Annual Certification following the end of a Project Year, (Y) the Company and/or Project Affiliates fail to Continuously Operate the business during any period of (1) six (6) consecutive months or more or (2) one hundred eighty (180) days or more during any twelve (12) month period, or (Z) the Company delivers a Cessation Notice, as applicable.

"Cessation Notice" means any written communication delivered by, or on behalf of, the Company (or any Project Affiliate) informing all or a portion of its Full Time Employees, the State, or LED of (i) any anticipated closure or curtailment of the Project or Business to less than twenty percent (20%) of Required Jobs or twenty percent (20%) of Required Annual Payroll or (ii) any actual or planned closure of the Business of more than six (6) consecutive months, other than with respect to a Force Majeure event that affects any material portion of the Project or Site.

"Change of Law" the enactment, adoption, amendment, modification, suspension, or repeal of any Applicable Law, or any ruling, directive (including official guidance published by a Governmental Authority or an executive order of the President of the United States or

the Governor of the State), or policy change by any Governmental Authority, that occurs after the Effective Date and that materially affects the rights, obligations, costs, or feasibility of performance by the Company and/or Project Affiliates under this Agreement, including, but not limited, relating to the design, engineering, development and construction of the Project, the authority of the Company under Applicable Law to transact business within the United States of America or the State, or the Continuous Operation of the Business.

"Commissioner" shall have the meaning assigned thereto in the Preamble herein.

"Company Commitments" shall have the meaning assigned thereto in Article IV herein.

"Company Indemnified Parties" shall have the meaning assigned thereto in Section 9.02(b) herein.

"Condemnation" means the taking of all or any part of the Project or the Site, or the right of possession thereof, for any public or quasi-public purpose by any lawful governmental power or authority, by exercise of the right of eminent domain, condemnation, inverse condemnation, or appropriation. Condemnation may occur pursuant to the recording of a final order of condemnation, or by a voluntary sale of all or any part of the Project or the Site to any Person having the power of eminent domain (or to a designee of any such Person); provided that the Project or the Site or such part thereof is then under the threat of condemnation or such sale occurs by way of settlement of a condemnation action.

"Conditions Precedent" shall have the meaning assigned thereto in Article V herein.

"Confidential Information" shall have the meaning assigned thereto in Section 7.04(a) herein.

"Continuously Operate" means continuous operation of the Business in the Company's and/or Project Affiliates' ordinary course of business, allowing for routine maintenance, repair, replacement, and testing of machinery and equipment, temporary shutdowns for economic supply chain interruptions or stoppages, or labor-related issues, or other necessary circumstances; provided that the Company and/or Project Affiliates make commercially reasonable efforts to resume operations as soon as reasonably practicable; "Continuous Operation" shall have correlative a meaning.

"Control" means (i) the ownership (directly or indirectly) in the aggregate by one Person of more than fifty percent (50%) of the profits or capital of another Person or (ii) the possession by a Person (directly or indirectly) of the power to direct, or cause the direction of, the management or policies of another Person, whether through the ownership of voting securities, by contract, or otherwise; "Controlled" and "Controlling" shall have correlative meanings.

"Constitutional Authority" shall have the meaning assigned thereto in the Recitals herein.

"Default" shall have the meaning assigned thereto in Section 8.01 herein.

"Designated GMZ Parcels" shall have the meaning assigned thereto in Section 3.02(c) herein.

"Designated Ancillary Parcels" shall have the meaning assigned thereto in Section 3.02(f) herein.

"Economic Benefits" shall have the meaning assigned thereto in the Recitals herein, *and shall further include* for purposes of the remainder of this Agreement, with respect to location of the Project and operation of the Business at the Site in Ascension Parish, Louisiana, the expectation of diversification of the Ascension Parish and regional economy, the increase in immediate direct revenue in the form of PILOT Payments (as defined herein) for the benefit of the Local Governments, and the expected creation of new and expansion of existing enterprises and other expected economic benefits to Ascension Parish and its surrounding parishes.

"Employee Benefits" means group health plan coverage for basic hospital care, physician care, and medical care, effective for eligible employees no later than the first day of the month ninety (90) days after hiring, which is the same coverage as is offered to executive, administrative and professional employees who are exempt from the minimum wage and maximum hour requirements of the Fair Labor Standards Act (29 U.S.C. §201, *et seq.*) and which has a value of at least $1.25 USD per hour regularly worked (based upon the cost to the Company and/or Project Affiliates) of providing such coverage or the cost of equivalent coverage or, alternatively, a group health plan coverage that is "affordable" and provides "minimum value" as those terms are defined under the federal Patient Protection and Affordable Care Act of 2010, including regulations adopted thereunder and any amendment thereof.

"Environmental Delay" means any of the following matters that, by their nature, require a delay or work stoppage for investigation, remediation, or related activities: (i) the failure of the Company and Project Affiliates, despite using commercially reasonable efforts, to obtain required Regulatory Approvals to commence or complete construction of the Project or thereafter Continuously Operate the Business; (ii) any Governmental Authority (including the State or Parish IDB in its capacity as a lessor of the Site or the Plant, as applicable) is required under any Applicable Law to conduct additional environmental review or prepare additional environmental documents with respect to the Site or the Project; (iii) any third party files a legal action challenging the certification or sufficiency of any environmental review required by any Applicable Law that (A) temporarily or permanently legally enjoins or bars the Company and/or Project Affiliates from continuing with the construction of the Project or the operation of the Business or (B) poses a credible threat to materially and adversely impair the construction of the Project or the Continuous Operation of the Business, as reasonably determined by the Company; (iv) the unanticipated need pursuant to Applicable Law or based upon generally-accepted industry standards, to investigate, remediate, or otherwise correct previously unknown environmental or geotechnical conditions on or affecting any portion of the Site or the

Project, but only if the conditions were not reasonably foreseeable in light of the Company's and/or Project Affiliates' due diligence before the Effective Date; and (v) the unanticipated need to comply with Applicable Law with respect to any mitigation measures adopted for the Project for conditions on or affecting any portion of the Site, but only if the conditions were not reasonably discoverable before the Effective Date, as long as the Party claiming delay is proceeding in a diligent manner to resolve the unforeseen issues.

"Environmental Laws" means any present or future federal, state or local Applicable Laws or policies relating to Hazardous Material (including the handling, release, or remediation) or to human health and safety, industrial hygiene or environmental conditions in the environment, including structures, soil, air, air quality, water, water quality and groundwater conditions, and any environmental mitigation measure adopted under Environmental Laws. For purposes of clarification and without limitation, the term shall include each of the following federal statutes and their state and local counterparts and implementing regulations: the Comprehensive Environmental Response, Compensation, and Liability Act, the Resource Conservation and Recovery Act, the Toxic Substances Control Act, the National Environmental Policy Act, the Clean Water Act, the Clean Air Act, the Occupational Safety and Health Act, the Federal Insecticide, Rodenticide, and Fungicide Act, and the Coastal Zone Management Act.

"Force Majeure" means any event or circumstance that is not caused by, and is beyond the reasonable control of, a Party that (i) in the case of the Company, affects the Company's and/or Project Affiliates' ability to fulfill the Company Commitments in any material respect, or (ii) in the case of the State and LED, affects the State's or LED's ability to fulfill the State Commitments in any material respect, including: (A) domestic or international events disrupting civil activities, such as a war, labor strike, labor lockout, riot, acts of a foreign adversary, terrorism, and crime; (B) unusually severe weather, flooding, hurricanes, earthquakes, sea level rise, drought, erosion, soil compaction, chemical degradation, organic matter depletion, changes in soil structure, sediment buildup, and other acts of God; (C) epidemics, pandemics, or other public health crises affecting workforce, including by actions such as quarantine restrictions; (D) inability to secure necessary labor, materials, or tools (but only if the Party claiming delay has taken all reasonable action to obtain the same on a timely basis) due to any of the above events, freight embargoes, lack of available transportation means, or failure or delay in delivery of utilities serving the Project; (E) material restraint of government of its citizens; (F) any Change of Law; (G) any Casualty affecting the Project; or (H) any Condemnation affecting the Project or the Site.

"Full-Time Employee" means an employee of the Company or any Project Affiliate who is: (i) working at least thirty (30) hours per week on average, subject to any such employee taking paid time off, leaves of absence for physical or mental disability or incapacity, or other reasonable leave of absence, in each case as is consistent with, and subject to, the generally applicable employment policies adopted by the Company or any Project Affiliate, (ii) eligible for Employee Benefits, and (iii) physically domiciled and working within the State, subject to reasonable out-of-state travel, to the extent required for activities that are within the scope of any such employee's employment.

"Governmental Authority" means any and all jurisdictions, entities, courts, boards, agencies, commissions, offices, divisions, subdivisions, departments, bodies or authorities of any nature whatsoever of any governmental unit (federal, state, parish, district, municipality, city or otherwise) whether now or hereafter in existence, with jurisdiction over LED, the Company, or the Project.

"Governmental Delay" means any delay caused by, or resulting from: (i) any Governmental Authority (including any Local Government) failing to act on the Company's or any Project Affiliate's reasonable request or application for Regulatory Approval within the time specified under Applicable Law, or, if no such time is specified, within a commercially reasonable time under its standard practices for the type of Regulatory Approval requested; (ii) an appeal body or court determining that a Governmental Authority's act or failure to act on an application was improper following a challenge by the Company or any Project Affiliate; (iii) an Environmental Delay; or (iv) with respect to the obligations of the Company and any Project Affiliate, (A) the State failing to complete any portion of the State Road Infrastructure Improvements in accordance with the project schedule agreed upon by the Company and the State in accordance with Section 5.08 that results in a delay in completing construction of the Rail Extension (or portions thereof) in accordance with the Rail Extension Milestones, (B) the rail provider or contractor referenced in Section 3.01(b) failing to complete the Rail Extension (or portions thereof) in accordance with the Rail Extension Milestones, or (C) Ascension Parish or the State, as applicable, failing to finally complete the Local Infrastructure Improvements in accordance with the project schedule agreed upon by the Company and Ascension Parish pursuant to the Parish Cooperative Endeavor Agreement; provided that, with respect to clauses (i) and (ii) above, "Governmental Delay" shall exclude any delay caused by the Company's or any Project Affiliate's failure to meet any specified deadline or to submit timely all required and requested information supporting either a request or application for a Regulatory Approval, or necessary for the State and/or LED to satisfy a milestone date set forth in Section 5.08 herein.

"GMZ Parcels" shall have the meaning assigned thereto in Section 3.02(a) herein.

"Ground Lease" shall have the meaning assigned thereto in Section. 3.03(a) herein.

"Hazardous Materials" means any naturally occurring, organic, inorganic, synthetic, or artificial material that is regulated by or, because of its quantity, concentration or physical or chemical characteristics, is deemed by any federal, state or local governmental authority to pose a present or potential hazard to human health or safety or to the environment. Hazardous Materials include any chemical, material, or substance defined as a "hazardous substance," "toxic substance," "hazardous waste," "pollutant" or "contaminant" under Environmental Laws ; any asbestos and asbestos containing materials; radon; polychlorinated biphenyls; petroleum, including crude oil or any fraction thereof; natural gas or natural gas liquids; lead and lead-based paint; and per- and polyfluoroalkyl substances.

"IDB Lease" shall have the meaning assigned thereto in Section 5.04(a) herein.

"Interchange Loop" shall have the meaning assigned thereto in Section 3.01(b) herein.

"Land Acquisition Incentive" shall have the meaning assigned thereto in Section 3.02(h) herein.

"LCTCS" shall have the meaning assigned thereto in Section. 3.06 herein.

"LDR" shall have the meaning assigned thereto in Section 5.05 herein.

"LED" shall have the meaning assigned thereto in the Preamble hereto.

"Local Governments" means the Ascension Parish taxing authorities.

"Local Infrastructure Improvements" shall have the meaning assigned thereto in Section 5.04(b).

"Losses" shall have the meaning assigned thereto in Section 9.02(a) herein.

"Louisiana Entities" shall have the meaning assigned thereto in Section 4.10 herein.

"Louisiana Quality Jobs Program" means the State's Quality Jobs incentive which, as of the Effective Date, is codified pursuant to §2451 through §2462 of Title 51 of the Louisiana Revised Statutes of 1950, as amended.

"Maximum Land Acquisition Commitment" shall have the meaning assigned thereto in Section 3.02(e) herein.

"Non-affiliate Suppliers" shall have the meaning assigned thereto in Section 3.09 herein.

"Non-affiliate Supplier Incentives" shall have the meaning assigned thereto in Section 3.09 herein.

"Non-appropriation Shortfall" shall have the meaning assigned thereto in Section 6.04 herein.

"Operating Lead Rail Extension" shall have the meaning assigned thereto in Section 3.01(b) herein.

"Options" shall have the meaning assigned thereto in Section 3.02(a) herein.

"Options Extension Fees" shall have the meaning assigned thereto in Section 3.02(b) herein.

"Parish Cooperative Endeavor Agreement" shall have the meaning assigned thereto in Section 5.04 herein.

"Parish IDB" means the Industrial Development Board of the Parish of Ascension, Louisiana, Inc., a Louisiana nonprofit corporation and political subdivision created by the Ascension Parish government.

"Performance-Based Grant" shall have the meaning assigned thereto in Section 3.05(a) herein.

"Permitted Exceptions" means (i) all Applicable Laws affecting the Site or any portion thereof; (ii) the rights of a tenant under a lease, excluding any right to purchase the Site or any portion thereof, or any right of first offer or first refusal with respect to any sale of all, or any part of, the Site or any portion thereof, that in either case is not irrevocably terminated effective upon closing; (iii) the lien of real estate taxes and assessments not yet due and payable; (iv) any encroachments, overlaps, conflicts in boundary lines, shortages in area, or other matters which would be disclosed by an accurate survey and inspection of the Site; (iv) all matters shown on the ALTA Commitment for Title Insurance for the GMZ Parcels that are approved by the Company, in its sole and absolute discretion, and are reasonably approved by the State and LED; and (v) all matters that are otherwise expressly permitted or expressly approved by the Company or a Project Affiliate in writing; provided, however, that the State and LED shall not disapprove any title exception, except to the extent that such title exception would reasonably be expected to (1) impose any material additional liability on the State in its capacity as the fee title owner of any of the GMZ Parcels, or (2) materially restrict, impair, or interfere with any fee title owner's surface rights of any of the GMZ Parcels or any sub-surface or foundation work related to exercising such surface rights; provided, further, that the State and LED shall also have the right to approve any new title matter that would impose any material liability obligation upon the State or LED in its capacity as the fee owner of the Site pursuant to the Ground Lease.

"Person" means any individual, partnership, corporation (including a business trust), limited liability company, joint stock corporation, trust, unincorporated association, joint venture, Governmental Authority or any other entity or association.

"Phase I Road" and "Phase I Road Extension" shall have the respective meanings assigned such terms in Section 3.01(a) herein.

"Phase II Road" shall have the meaning assigned thereto in Section 5.04(b) herein.

"Phase 2 Project" shall have the meaning assigned thereto in Section 3.05(c) herein.

"PILOT Payments" shall have the meaning assigned thereto in Section. 5.04(a) herein.

"Plant" shall have the meaning assigned thereto in Section 5.04(a) herein.

"Project" shall have the meaning assigned thereto in the Recitals herein.

"Project Affiliate" means each Affiliate of the Company that is, directly or indirectly, involved with the Company with respect to either the Project or Business.

"Project Completion" means the completion of construction of the Project and the receipt of the required Certificate(s) of Occupancy.

"Project Year" means each calendar year, or portion thereof, during the term of this Agreement.

"Public Purpose" shall have the meaning assigned thereto in the Recitals herein.

"QJ Contract" shall have the meaning assigned thereto in Section. 3.04(a) herein.

"QJ Incentive" shall have the meaning assigned thereto in Section. 3.04(a) herein.

"QJ Incentive Shortfall" shall have the meaning assigned thereto in Section 3.04(c) herein.

"Rail Extension" shall have the meaning assigned thereto in Section 3.01(b) herein.

"Rail Extension Milestones" mean the key milestone dates agreed upon by the Parties and the rail provider in accordance with Section 5.08 that are set forth in the construction project schedule for the Rail Extension.

"Regulatory Approval" means any motion, resolution, ordinance, permit, approval, license, registration, permit, utility services agreement, subdivision map, or other action, agreement, or entitlement required or issued by any Governmental Authority with jurisdiction over any portion of the Site, as finally approved.

"Representative" shall have the meaning assigned thereto in Section 9.01 herein.

"Required Annual Payroll" shall have the meaning assigned thereto in Section 4.03(b) herein.

"Required Jobs" shall have the meaning assigned thereto in Section 4.03(a) herein.

"RiverPlex MegaPark" shall have the meaning assigned thereto in Section 3.01(a) herein.

"Significant Price Escalation" means an average increase of ten percent (10%) or more in the cost of construction materials required for the initial construction of the Project, as measured over any continuous two (2) year period during the term of this Agreement, due to severe supply shortages, new tariffs, trade restrictions, or government actions. Price increases shall be measured using recognized industry indices, including supplier price lists, purchase orders, Company (or Project Affiliate) records, or other verifiable market data.

"Site" means, collectively, the Designated GMZ Parcels and the Designated Ancillary Parcels.

"State" means the State of Louisiana.

"State Commitments" shall have the meaning assigned thereto in Article III herein.

"State Incentive Agreements" means, collectively, all of the following separate written contracts, agreements and instruments that are required by Applicable Law or the policies and procedures of the State or LED in order for the State or LED to commit to the State Commitments in favor of the Company and/or its Project Affiliates that are referenced in Article III herein: the Ground Lease, the QJ Contracts, the Training Center CEA, and the written scope of services (or similar written proposal) from LED's FastStart division that is accepted in writing by the Company.

"State Indemnified Parties" shall have the meaning assigned thereto in Section 9.02(a) herein.

"State Investment" means the aggregate costs to the State and LED associated with providing the State Commitments to the Project and the Company and/or its Project Affiliates as set forth in this Agreement.

"State Road Infrastructure Improvements" shall have the meaning assigned thereto in Section 3.01(a) herein.

"Training Center" shall have the meaning assigned thereto in Section 3.06 herein.

"Training Center CEA" shall have the meaning assigned thereto in Section 3.06 herein.

"Workforce Shortage" means (i) the inability of the State or LCTCS to meet the requirements set forth in the Training Center CEA, and/or (ii) the inability of LED's FastStart division to meet requirements set forth in the written scope of services, that, in either case, results in a failure to provide the minimum number of skilled and trained employees for the Project and the Business, including due to the State, LED, and/or LCTCS failing to timely complete construction of the Training Center in accordance with Section 3.06 and the Training Center CEA, but only for the duration of such delay.

1.03 Rules of Construction. Unless the context clearly indicates to the contrary, the following rules shall apply to the construction of this Agreement:

(a) Words importing the singular number shall include the plural number and vice versa.

(b) All references herein to particular articles or sections are references to articles or sections of this Agreement.

(c) The headings and the table of contents herein are solely for convenience of reference and shall not constitute a part of this Agreement nor shall they affect its meaning, construction or effect.

(d) Words of the masculine gender shall be deemed and construed to include correlative words of the feminine and neutral genders and words of the neutral gender shall be deemed and construed to include correlative words of the masculine and feminine genders.

(e) The words "include", "includes" and "including" shall be deemed to be followed by the phrase "without limitation".

ARTICLE II
REPRESENTATIONS AND WARRANTIES

2.01 State and LED Representations. The State and LED, individually, represent and warrant as follows:

(a) The State is a sovereign state of the United States and has the full legal right, power and authority to (i) execute and deliver this Agreement and all ancillary and necessary documents, and (ii) consummate the transactions contemplated hereby and perform its obligations hereunder subject to the terms of this Agreement.

(b) LED is an agency of the State of Louisiana statutorily created pursuant to Louisiana Revised Statutes Title 36, Section 101 through 110, and has the full legal right, power and authority to (i) execute and deliver this Agreement and all ancillary and necessary documents, and (ii) consummate the transactions contemplated hereby and perform its obligations hereunder subject to the terms of this Agreement.

(c) The State and LED have each obtained, or will use reasonable best efforts to obtain, at the proper times all consents, approvals, authorizations and orders, of any Governmental Authority that are required to be obtained by either the State or LED as a condition precedent to the execution and delivery of this Agreement and any of the State Incentive Agreements or other documents to which either is a party and the performance by the State and LED of the State Commitments (as defined herein) hereunder and thereunder.

(d) No Applicable Law prohibits the State or LED from entering into this Agreement or performing its obligations hereunder, including with respect to the Land Acquisition Incentive, the Ground Lease, the QJ Incentive, the State Road Infrastructure Improvements, and the Local Infrastructure Improvements, as applicable.

(e) This Agreement constitutes a legal, valid and binding obligation of the State and LED, enforceable in accordance with its terms.

2.02 Company and Affiliates Representations. The Company, on behalf of itself and each of its Project Affiliates (as applicable), represents and warrants as follow:

(a) The Company is a corporation duly organized under laws of the Republic of Korea, validly existing and in good standing under the laws of the Republic of Korea, and is, or will be, duly registered to do business in the State of Louisiana prior to conducting any business in the State of Louisiana that requires registration therein under Applicable Law. Each of the Project Affiliates, if any, is, or to the extent not yet formed will be, duly organized, validly existing and in good standing under the laws of its state of formation, and is, or will be, duly registered to do business in the State of Louisiana prior to conducting any business in the State of Louisiana that requires registration therein under Applicable Law.

(b) The Company has the full legal right, power and authority to execute and deliver this Agreement and all ancillary and necessary documents. The Company and each of its Project Affiliates has the full legal right, power and authority to consummate the transactions contemplated hereby and perform its obligations hereunder subject to the terms of this Agreement.

(c) The Company and each of its Project Affiliates has obtained, or will use reasonable best efforts to obtain, at the proper times all consents, approvals, authorizations and orders, of any Governmental Authority that are required to be obtained by the Company and each of its Project Affiliates as a condition precedent to the execution and delivery of this Agreement and any other documents to which it is a party and the performance by the Company and/or its Project Affiliates of their respective obligations hereunder and thereunder.

(d) This Agreement constitutes a legal, valid and binding obligation of the Company, enforceable in accordance with its terms.

(e) The execution of this Agreement and any other documents required by this Agreement as well as the performance by the Company and/or its Project Affiliates of their respective obligations hereunder are within the powers of the Company and/or its Project Affiliates, and will not violate any provisions of any law, regulation, decree or governmental authorization applicable to the Company and/or its Project Affiliates or any agreements of either with any of their respective creditors.

ARTICLE III
STATE AND/OR LED COMMITMENTS

Subject to the Company and/or its Project Affiliates not being in Default with respect to the Company's obligations to satisfy the Company Commitments (as defined in Article IV herein) or otherwise under this Agreement, and in consideration of the Company locating the Project at the Site, and in exchange for the projected Economic Benefits to the State and Ascension Parish, the State and/or LED, as appropriate, hereby commit to providing, or making available to the Company, the following (collectively, the "State Commitments"):

3.01 Infrastructure Improvements.

(a) The State shall engineer, design and construct, or cause to be engineered, designed, and constructed, at no cost or expense to the Company and/or any of the Project Affiliates, the

following: (i) an overpass and other modifications to Louisiana Highway 1 near the Site that will facilitate the construction of the Rail Extension (the "Highway 1 Overpass"), (ii) the two-way surface road (one lane in each direction) within the area commonly-known as the RiverPlex MegaPark complex in Ascension Parish (the "RiverPlex MegaPark") to provide access from Louisiana Highway 1 to the southeast boundary of the Site and further connect to the Phase II Road (the "Phase I Road"), and (iii) an extension of the Phase I Road, consisting of a the two-way surface road (one lane in each direction) from the end of the Phase I Road and extending to, and intersecting with, Louisiana Highway 405 within the RiverPlex MegaPark (the "Phase I Road Extension", which together with the Highway 1 Overpass and Phase I Road, shall be collectively the "State Road Infrastructure Improvements"), all of which work to be, or caused to be, performed by the State is more particularly described on Exhibit C attached hereto and is subject to further development by the Parties in accordance with Section 5.08. The State shall deliver the State Road Infrastructure Improvements in accordance with the key milestone dates to be established pursuant to Section 5.08, and any failure to do so shall constitute a Governmental Delay (to the extent provided in the definition of Governmental Delay). The Company and its Project Affiliates acknowledge and agree that the State Road Infrastructure Improvements shall remain the public property of the State and/or Ascension Parish and is intended to benefit the Project and Business but not for the exclusive use by the Company and/or any Project Affiliate, or the Project or Business, and that such public improvements may benefit other industries and businesses located in the general vicinity of the RiverPlex MegaPark and the general public.

(b) The State shall (i) at no cost or expense to the Company and/or any of the Project Affiliates, cause to be engineered, designed, and constructed a rail extension from the Union Pacific rail mainline abutting Louisiana Highway 1 into the RiverPlex MegaPark and traversing to the southeast boundary of the Site such that rail cars being delivered from the Union Pacific mainline abutting Louisiana Highway 1 to the RiverPlex MegaPark will be unobstructed from Louisiana Highway 1 vehicular traffic (the "Operating Lead Rail Extension"), and (ii) coordinate with a rail provider or contractor (to be selected by joint agreement of the State and the Company) for the engineering, design, and construction of a rail interchange loop or other mutually-agreed upon interchange facility that provides for the inclusion of storage tracks to be located outside of the Site (the "Interchange Loop", which together with the Operating Lead Rail Extension shall be referred to as the "Rail Extension"). The Rail Extension shall be delivered in accordance with the key milestone dates to be established pursuant to Section 5.08, and any failure to do so shall constitute a Governmental Delay. Without limiting the foregoing, to the extent commercially feasible, the State shall use its good faith, reasonable best efforts to coordinate with either Union Pacific or the rail provider or contractor, or both, for the construction of a temporary crossing over Louisiana Highway 1 for the Company to use some portion of the Rail Extension to the Site during the ongoing construction of the Highway 1 Overpass and other modifications to Louisiana Highway 1 near the Site to be constructed by the State, and the Parties will work collaboratively to request that the rail provider or contractor secure all necessary permits for such temporary crossing. The Company and its Project Affiliates acknowledge and agree that the Rail Extension shall remain either the public property of the State, Ascension Parish or other public body or committed to public use and is intended to benefit the Project and Business but not for the exclusive use by the Company and/or any Project Affiliate, or the Project or Business, and that such public or other improvements may benefit other industries and businesses located in the general vicinity of the RiverPlex MegaPark and the general public.

(c) The State hereby commits to cooperate with, and use reasonable best efforts to provide assistance to, Ascension Parish and/or the Parish IDB with respect to the development and construction of the Local Infrastructure Improvements (as defined in Section 5.04(b) herein) pursuant to such terms and conditions that are satisfactory to the State and Ascension Parish and/or the Parish IDB.

3.02 Land Acquisition.

(a) The Company has identified all or some portion of the Germania Plantation site, the Mulberry Grove Plantation site, and the Zeringue site (each a "GMZ Parcel" and, collectively, the "GMZ Parcels") within the RiverPlex MegaPark as suitable for the location of the Project. The GMZ Parcels are generally depicted on Exhibit A. The Company and/or any of its Project Affiliates has contractually secured, or will contractually secure, from some or all of the individual landowners of the several GMZ Parcels, written option rights to purchase or acquire full fee-title ownership of all or some portion of the GMZ Parcels designated and approved by the Company (collectively, the "Options"), which Options are, or shall be, fully assignable by the Company and/or its Project Affiliates to the State and/or LED. The Company, on behalf of itself and its Project Affiliates, represents and warrants that the option period applicable to each Option (each an "Option Period") shall be no less than ninety (90) days to allow for sufficient time for the Company, the State and LED to conduct due diligence, necessary to satisfy the Acquisition Conditions prior to the purchase and acquisition of the Designated GMZ Parcels (as hereinafter defined) and prior to expiration of the Option Periods. At the election of the Company, in its sole and absolute discretion, subject to satisfaction of the Acquisition Conditions (defined below) in favor of the State and LED (or their designee), the State and LED irrevocably covenant and agree, collectively or individually, to (i) take assignment from the Company of the Options, (ii) to the extent the Options are assigned to the State, acquire the Designated GMZ Parcels, and (iii) reimburse the Company and Project Affiliates for all documented, out-of-pocket costs actually paid by the Company or Project Affiliates described in subsection (e) below, subject to the Maximum Land Acquisition Commitment.

(b) The Company shall use commercially reasonable efforts to negotiate, enter into, and assign the Options for the GMZ Parcels to the State and/or LED (or request that the State and/or LED to enter into the Options directly) on or before May 31, 2025, but in no event later than August 1, 2025. Each assignment agreement to assign an option agreement to the State and/or LED shall be mutually agreed upon by the Parties. Upon the assignment of each Option to the State and/or LED (or their designee), the State and LED, at its cost to the extent that the Maximum Land Acquisition Commitment is not exceeded, shall complete and/or obtain the following due diligence items for each GMZ Parcel under Option (collectively, the "Acquisition Conditions"): (i) to the extent not provided by a seller of any GMZ Parcel pursuant to the terms of the relevant Option, an ALTA commitment for title insurance, subject only to Permitted Exceptions (with both an ALTA owner's policy of title insurance and an ALTA leasehold policy of title insurance to be issued at closing in favor of the State, as ground lessor, and the Company and/or its Project Affiliate, as ground lessee, as applicable), (ii) a Phase I ESA performed in accordance with ASTM E 1527-21 finding no evidence of any material unresolved and outstanding recognized environmental condition identified on a GMZ Parcel that requires remediation under applicable Environmental Laws (provided that, for clarity, any controlled recognized environmental

condition or historical recognized environmental condition that has previously been remediated in accordance with applicable Environmental Laws shall not be considered unresolved or outstanding), or, alternatively, an ASTM E 1527-21-compliant Phase I ESA that identifies a recognized environmental condition, provided that the Company, in its sole and absolute discretion, shall investigate and, if necessary, remediate (or commit in writing to remediate from and after closing) such condition to the least stringent permitted standards under applicable Environmental Laws, allowing for the use of engineering and/or institutional controls, or terminate this Agreement, (iii) to the extent recommended by a Phase I ESA in connection with any material unresolved and outstanding recognized environmental condition on a GMZ Parcel and determined in any Party's reasonable business judgement to be appropriate, a Phase II ESA, (iv) a survey certified to the Company, the State and LED as meeting the minimum standard detail requirements for ALTA/NSPS land title surveys and including the following Table A items: 1, 2, 3, 4, 8, 13, and 16, (v) an appraisal conducted by an MAI certified appraiser, and (vi) a cultural resources evaluation showing that the applicable GMZ Parcel does not include any burial grounds or other culturally sensitive resources that, in the State's or LED's reasonable discretion, would impose material additional liability on the State in its capacity as the fee title owner of the GMZ Parcel or materially restrict, impair, or interfere with any fee title owner's surface rights of any of the GMZ Parcels, or, in the Company's sole and absolute discretion, materially impair the construction of the Project; provided that to the extent the cultural resources evaluation indicates that any portion of the GMZ Parcels contains burial grounds or other culturally sensitive resources and the Company desires to acquire and develop such portion of the property in connection with the Project, the State shall, in accordance with Applicable Laws, complete mitigation sufficient to alleviate material liability concerns, ensure uninterrupted exercise of all fee title owner's surface rights, and/or enable construction of the Project, subject to the Maximum Land Acquisition Commitment. In satisfying each of the Acquisition Conditions, the State and LED shall obtain, if possible, at least two (2) arms' length, competitively bid proposals from consultants that, in the reasonable determination of the State, are qualified and competent, and shall retain the lowest qualified bidder, unless the State has a reasonable basis to retain the higher bidder, in the State's and LED's reasonable discretion; provided, however, the State and LED shall not be required to obtain competitive bid proposals for any ALTA owner's policy of title insurance and/or an ALTA leasehold policy provided by any seller of any relevant GMZ Parcel. The State and LED shall consider in good faith any consultant recommended by the Company and/or Project Affiliates. The Parties shall reasonably cooperate in good faith and use their respective reasonable best efforts to satisfy the Acquisition Conditions and resolve any due diligence concerns raised by any Party, including the removal of any title exceptions set forth in the ALTA title commitments for the GMZ Parcels. If the Company, the State and/or LED reasonably require additional time to satisfy the Acquisition Conditions with respect to any GMZ Parcel prior to the expiration of the applicable Option Period, the Company and/or Project Affiliates will use reasonable best efforts to negotiate extensions of the Option Periods, which may require compensating the landowners for any extension granted (collectively, the "Options Extension Fees"), which, whether directly paid by the State or LED or reimbursed to the Company, shall be subject to the Maximum Land Acquisition Commitment.

(c) Upon satisfaction of the Acquisition Conditions and satisfactory results thereof, the Company may deliver a written notice to the State and LED approving the acquisition of some or all of the GMZ Parcels by the State and/or LED, in the Company's sole and absolute discretion, and the State and/or LED (or their designee) shall assume the Options (to the extent not previously

assigned) and consummate transactions with the landowners pursuant to the Options to purchase and acquire fee-title ownership to only the GMZ Parcels designated by the Company (the "Designated GMZ Parcels").

(d) Acquisition of fee title ownership of the Designated GMZ Parcels by the State and/or LED shall be (i) at no costs to the Company and/or Project Affiliates, subject to the limitations set forth in subsection 3.02(e) below, and (ii) satisfy the condition precedent set forth in Section 5.03 herein.

(e) Notwithstanding any provision in this Agreement to the contrary, the total costs of all obligations of the State and/or LED pursuant to this Section 3.02, including the costs to (i) reimburse the Company and/or Project Affiliates for the aggregate options price (and/or purchase prices), option deposits or other earnest money actually paid by the Company and/or its Project Affiliates for the Options, (ii) pay landowners of the GMZ Parcels acquired all options prices (and/or purchase prices), Options Extension Fees, if any, deposits, or earnest money required by such landowners and not paid by the Company and/or Project Affiliates, (iii) pay to the individual landowners of the Designated GMZ Parcels acquired the respective purchase price to purchase and acquire fee-title ownership to the Designated GMZ Parcels, (iv) pay any escrow fees, recording fees, transfer taxes or stamp taxes, real estate broker commissions, and other closing costs, to the extent required to be paid by the optionee pursuant to the Option Agreements, (v) pay all title insurance costs to obtain extended coverage ALTA title insurance policies (with endorsements designated by the Company and/or the State and LED) naming the Company as the insured with respect to its ground leasehold estate in the Designated GMZ Parcels acquired and the State or LED, as applicable, as the insured with respect to its fee simple interest in the Designated GMZ Parcels acquired, to the extent required to be paid by the optionee pursuant to the Option Agreement, (vi) pay directly, or reimburse the Company and Project Affiliates for, all reasonable, documented, out-of-pocket costs and expenses incurred in connection with satisfying the Acquisition Conditions, conducting any other due diligence investigations or inspections related to the Project, acquiring permits related to the Project, and/or undertaking any other task or activity necessary for the Project as determined in the Company's sole discretion, and (vii) satisfy all obligations agreed to in Section 3.02(f) below, if any, shall not exceed One Hundred Million Dollars shall not exceed One Hundred Million Dollars ($100,000,000 USD) in the aggregate (the "Maximum Land Acquisition Commitment"). The State and/or LED shall pay all of the foregoing costs up to the Maximum Land Acquisition Commitment subject to the other terms of this Agreement. Separate from the Maximum Land Acquisition Commitment, the State and LED shall be solely responsible for paying the costs of all necessary due diligence, environmental site assessments, and title examination that the State and/or LED deem necessary or require that relates to the acquisition of the Site in addition to the Acquisition Conditions. Each Party, on behalf of itself and its Project Affiliates, shall (A) provide the other Party with copies of all reports, surveys, and studies relating to the physical condition and title of the GMZ Parcels that are commissioned by such Party and/or its Affiliates in connection with its due diligence activities and (B) request that the Party's consultants (1) certify such reports, surveys, and studies to all Parties and (2) provide certificates or letters in forms reasonably satisfactory to all Parties that acknowledge and agree that all Parties may fully rely on the results, findings and opinions expressed in such reports, surveys, and studies to the same extent as any other Party.

(f) The Company additionally desires that certain smaller parcels located adjacent to the GMZ Parcels be acquired to facilitate the development of the Project, which parcels are located outside of the proposed boundaries of the GMZ Parcels (collectively, the "Ancillary Parcels"). The Ancillary Parcels are generally depicted on Exhibit A. The State and/or LED agrees to take assignment from the Company and/or Project Affiliates and assume of any option agreements or purchase agreements entered into with respect to the Ancillary Parcels pursuant to a mutually agreed upon assignment agreement (or enter into the such agreements directly), to the extent such option agreements or purchase agreements: (i) are freely assignable by the Company to the State and/or LED without the prior consent or approval of the any seller thereof (or such approval is otherwise obtained in writing), (ii) provide for not less than ninety (90) days to satisfy the Acquisition Conditions (or any lesser standard of due diligence mutually acceptable to the Parties) (provided that the parties acknowledge that such period may be subject to extension(s) as contemplated in Section 3.02(b) if necessary to conduct required curative work to satisfy the Acquisition Conditions), (iii) do not require the buyer to consummate the transactions to acquire such Ancillary Parcels prior to acquisition of the Designated GMZ Parcels, and (iv) the aggregate purchase price for such Ancillary Parcels and related due diligence work to satisfy the Acquisitions Conditions, when added to the total costs to acquire the Designated GMZ Parcels (including costs to satisfy Acquisition Conditions), shall not exceed the Maximum Land Acquisition Commitment (unless such excess is paid by the Company). To the extent the options or purchase agreements with respect to the Ancillary Parcels satisfy the requirements set forth in the preceding sentence and are assigned to the State and/or LED, the State and/or LED agree to (Y) undertake due diligence of the Ancillary Parcels sufficient to satisfy the Acquisition Conditions (or any lesser standard of due diligence acceptable to the Parties considering the proposed use or nonuse of the Ancillary Parcels), and (Z) pay directly, or reimburse the Company and Project Affiliates at the closing of any acquired Ancillary Parcels for any and all costs described in subsection (e) above, as applied to the Ancillary Parcels, as opposed to the GMZ Parcels, subject to the Maximum Land Acquisition Commitment. Upon the State and/or LED receiving satisfactory results from the aforementioned due diligence investigations and satisfaction of the applicable Acquisition Conditions with respect to any Ancillary Parcels designated by the Company to be acquired (collectively, the "Designated Ancillary Parcels"), the State and/or LED agree to acquire at a closing such Designated Ancillary Parcels and pay directly to the owners of such Designated Ancillary Parcels the respective purchase price and reimburse to the company or Project Affiliates the costs described in the preceding sentence, subject to the Maximum Land Acquisition Commitment. To the extent the amounts payable by the State and/or LED pursuant to this subsection (f) would cause the Maximum Land Acquisition Commitment to be exceeded, subject to the Company and/or Project Affiliates making the Capital Investment in accordance with Section 4.02, the Company may request that the State and/or LED fund such excess by reducing the first installment of the Performance-Based Grant by an amount equal to amount the Maximum Land Acquisition Commitment is exceeded due to the acquisition of the Designated GMZ Parcels and Designated Ancillary Parcels pursuant to this Section 3.02, beginning with first installment of the Performance-Based Grant.

(g) To the extent that the State acquiring an entity (e.g., through a stock sale) may result in a materially lower purchase price for a Designated GMZ Parcel or a Designated Ancillary Parcel, the State and LED shall collaborate with the Company and endeavor to pursue an entity acquisition, to the extent feasible under Applicable Laws and without compromising the property

tax benefits of the Ground Lease or causing the State or LED to incur material additional liability, in the State's and/or LED's reasonable discretion.

(h) The matters described in sub-Sections 3.02(a) – (g) are referred to as the "Land Acquisition Incentive").

3.03 Ground Lease.

(a) Upon the acquisition of the Site by the State and/or LED upon satisfaction of the Acquisition Conditions, as applicable, the State and/or LED shall lease the Site exclusively to the Company and/or Project Affiliates for a term not to exceed ninety-nine (99) years at a rental rate of One Dollar ($1 USD) annually plus other good and valuable consideration pursuant to a written ground lease agreement (the "Ground Lease"). The Ground Lease shall provide for the exclusive use of the Site by the Company and/or Project Affiliates in accordance with Applicable Law, permit the Company and/or Project Affiliates to construct the Project and operate the Business and any ancillary industrial and commercial enterprises directly related to the Business, upon written notice to the State not less than thirty (30)-days prior to the effective date of such sublease, but without the prior consent of the State or LED, permit the Company to sublease any portion of the Site to an Affiliate or an unrelated third party for uses related to, or for the benefit of, the Project or the Business and shall further contain such other terms mutually acceptable to the parties thereto.

(b) The Ground Lease shall provide the Company, or its designee, the exclusive option to purchase not less than the entirety of the Site from the State and/or LED on or after (i) the 32nd year from the commencement date of the Ground Lease for a purchase price of Ninety-Nine Dollars ($99 USD) or (ii) the earlier termination of this Agreement. If this Agreement terminates prior to the 32nd year from the commencement date of the Ground Lease, the Ground Lease will provide that the Company will have the option to either (i) acquire not less than the entirety of the Site from the State for a purchase price equal to the State's out-of-pocket acquisition cost, less a proportionate credit against the purchase price for each Project Year that the Company complies with the terms of this Agreement from Project Completion, or (ii) continue to lease not less than the entirety of the Site for a fair market rental value, to be determined by an appraisal process, all as to be set forth more particularly in the Ground Lease.

3.04 Quality Jobs Program.

(a) Subject to meeting the eligibility requirements, timely filing of the necessary advance notifications and applications, and obtaining the approvals required under Applicable Law, LED will negotiate in good faith one or more written contracts between the State and the Company and/or its Project Affiliates (each a "QJ Contract"), which will govern the participation of the Company and/or its Affiliates in the Louisiana Quality Jobs Program with respect to new quality jobs created by operation of the Business on the Site (the "QJ Incentive"). Each QJ Contract shall include the following economic benefits to the Company and Project Affiliates: (i) a four percent (4%) or six percent (6%) payroll rebate on the gross annual payroll for qualifying new jobs and a five (5) year initial term, which may be renewed for an additional five (5) years; and (ii) a one and five tenths percent (1.5%) project facility expense rebate on capital expenditures (excluding land, existing buildings, tax-exempt machinery and equipment, and interest).

(b) Notwithstanding any provision in this Agreement to the contrary, the Company and Project Affiliates hereby acknowledge that participation in the Louisiana Quality Jobs Program requires the Company and its Project Affiliates to file the necessary advance notifications and make application for the QJ Incentive, and that approval by the Louisiana Board of Commerce and Industry and Governor as provided for under the Louisiana Quality Jobs Program is a condition to the State and LED entering into each QJ Contract.

(c) If the Company and its Project Affiliates timely file the necessary advance notifications and make application for the QJ Incentive, and such application is not approved by the Louisiana Board of Commerce and Industry and/or Governor, for reasons other than untimely application or administrative error by the Company, and substitute program funding by the State or LED is not available for the benefit of the Company and/or Project Affiliates at the time the QJ Incentive would have been provided at the same level as the expected QJ Incentive, the Parish Cooperative Endeavor Agreement shall provide that the Company and/or Project Affiliates shall have the right, in the Company's sole and absolute discretion, to proportionately reduce and offset the amount of any PILOT Payments due and payable to the Parish IDB under the Parish Cooperative Endeavor Agreement in the total monetary amount that the Company would otherwise have been entitled to receive as a QJ Incentive pursuant to the Louisiana Quality Jobs Program had the Company's application been accepted by the Louisiana Board of Commerce and Industry and/or Governor (a "QJ Incentive Shortfall"); provided, however, notwithstanding the foregoing, (1) the total amount of all such reductions and offsets from any PILOT Payments shall not exceed One Hundred Twenty Five Million Dollars ($125,000,000 USD) in the aggregate; (2) such reductions and offsets shall be taken proportionately during the term the QJ Incentive would have been provided (*i.e.*, the Company shall only be entitled to offset PILOT Payments as and when the QJ Incentive benefits would otherwise have been received by the Company and/or its Project Affiliates); and (3) after any reduction or offset of any PILOT Payments, if any portion of the QJ Incentive is approved and/or restored or any substitute program funding by the State or LED is available for the benefit of the Company and/or Project Affiliates, the Company shall restore the amount of any reduced or offset PILOT Payments simultaneously with the restoration and payment of the QJ Incentive or substitute program funding. For clarity, if the Company and/or Project Affiliates offsets PILOT Payment due and payable in any given Project Year pursuant to this Section 3.04(c), and the amount of PILOT Payments for such Project Year is less than the total QJ Incentive Shortfall, the Company and/or Project Affiliates shall continue to offset PILOT Payments due in subsequent Project Years until the Company and Project Affiliates have offset the entire QJ Incentive Shortfall.

3.05 Performance-Based Grant.

(a) Conditions of Performance-Based Grant.

(i) Subject to (1) the Company and/or Project Affiliates achieving the target Capital Investment pursuant to Section 4.02 and Exhibit B during the Project Years through Project Completion, and (2) the Company not being in Default (that remains uncured) under this Agreement, LED shall pay to the Company and/or Project Affiliates performance-based grants, in amounts not exceeding Twenty Million Dollars ($20,000,000 USD) annually for a period of up to five (5) consecutive years beginning in January 2026 to reimburse a portion of the expenses specified in the following sentence incurred by the

Company and/or Project Affiliates in developing and constructing the Project (the "Performance-Based Grant"). The Performance-Based Grant is to be used solely for reimbursing any and all hard and soft costs (including any amounts paid to Affiliates under competitive market rate agreements) expended by the Company or any Project Affiliate for the design, entitlement, engineering, development and construction of infrastructure work, access roads, Site improvements, dredging, the Plant (other than movable equipment, machinery and furniture), utilities and water upgrades, or the acquisition of the Ancillary Parcels pursuant to Section 3.02, at the Company's election. Notwithstanding any provision in this Agreement to the contrary, the maximum Performance-Based Grant payable to the Company and/or Project Affiliates with respect to the Project pursuant to this Section 3.05 shall not exceed One Hundred Million Dollars ($100,000,000 USD) in the aggregate.

(ii) If the Company and/or its Project Affiliates shall invest more than the target minimum Capital Investment amount for any Project Year set forth in Part (I) on Exhibit B attached hereto, then, (1) for avoidance of doubt, such additional amount shall count towards the total Capital Investment required under this Agreement, (2) the Company shall receive a credit in the amount by which its investment for such Project Year exceeds the minimum Capital Investment target designated for that Project Year, and (3) the Company may allocate such credit to reduce the minimum Capital Investment targets for subsequent Project Years. Additionally, subject to appropriation by the Legislature of sufficient funds therefor and the availability of funds following appropriation by the Legislature, the State and LED shall accelerate the payment of the Performance-Based Grant for future Project Years to the extent that the Company and/or its Project Affiliates invest more than the minimum Capital Investment amount for the then-current Project Year (and all preceding Project Years). By way of example, if the Company invests $2,424,801,750 USD in the aggregate through Project Year 2 (i.e., the entire $1,186,964,500 USD cumulative target set forth in Part (I) on Exhibit B for Project Year 2, *plus* 50% of the $2,475,674,500 USD annual target for Project Year 3), then (assuming that the State and LED previously disbursed $20,000,000 USD of the Performance-Based Grant following Project Year 1) the State and LED shall disburse $20,000,000 USD of the Performance-Based Grant to the Company promptly upon LED's receipt and reasonable approval of the Capital Investment Report submitted by the Company for Project Year 2, and, subject to appropriation by the Legislature, the State and/or LED shall disburse the remaining additional $10,000,000 USD of the Performance-Based Grant in July of Project Year 3.

(iii) If the Company and/or Project Affiliates fail to achieve the target Capital Investment during any particular Project Year, the State and LED may reduce the Performance-Based Grant to be disbursed by the State and LED to the Company for such Project Year on a pro rata basis by *multiplying* $20,000,000 USD (i.e., the maximum annual disbursement of the Performance-Based Grant) *by* the quotient resulting from *dividing* the total Capital Investment made by the Company and/or Project Affiliates during the Project Year *by* the *sum of* the target minimum Capital Investment amount for such Project Year set forth in Part (I) on Exhibit B *and* any shortfall amount remaining from prior Project Years. If the Company and/or Project Affiliates increase the Capital Investment in subsequent Project Years and exceed the target minimum Capital Investment amount for any subsequent Project Year set forth in Part (I) on Exhibit B attached hereto, then, subject

to appropriation by the Legislature of sufficient funds therefor and the availability of funds following appropriation by the Legislature, State and LED shall proportionately disburse the Performance-Based Grant to thereafter include the amount previously withheld from distribution, promptly upon LED's receipt and reasonable approval of the Capital Investment Report submitted by the Company for such Project Year. By way of example, if the Company invests only $586,497,750 USD in Project Year 2 (i.e., 50% of the target amount set forth in Part (I) on Exhibit B for Project Year 2), the State and LED shall disburse only $10,000,000 USD to the Company (i.e., 50% of the Performance-Based Grant for Project Year 2). If the Company then invests an aggregate of $3,662,639,000 USD through Project Year 3 (i.e., the remaining 50% of the outstanding amount for Project Year 2, *plus* 100% of the target amount set forth in Part (I) on Exhibit B for Project Year 3), the State and LED will disburse an additional $30,000,000 USD to the Company (i.e., the remaining portion of the Performance-Based Grant withheld during Project Year 2, *plus* the entire amount of the Performance-Based Grant for Project Year 3).

(iv) During the term of this Agreement, the Performance-Based Grant shall remain subject to adjustment, reduction and/or reimbursement following a Default by the Company as provide above and under Article VIII (after the expiration of any applicable cure period set forth in Section 8.02).

(b) Requests for Performance-Based Grant Payments. The Company and/or Project Affiliates shall submit payment requests for annual disbursements of the Performance-Based Grant to the Contract Monitor as provided in Article VII, herein.

(c) Additional Capital Investment. If the Company increases the Capital Investment beyond Five Billion Eight Hundred Million Dollars ($5,800,000,000 USD), then the Company shall receive a dollar-for-dollar capital investment credit ("Excess Capital Investment Credit") for each additional dollar of qualified capital expenditure in excess of Five Billion Eight Hundred Million Dollars ($5,800,000,000 USD) invested in the Project as of Project Completion. Subject to the State and LED obtaining any necessary approval, consent or authorization from the Louisiana Governor, Louisiana Board of Commerce and Industry or any other Governmental Authority, if the State, LED, and the Company (and/or any Affiliate of the Company) negotiate one or more future cooperative endeavor agreements (or other incentive agreements) for (i) an expansion of, or other upgrade to, the Project or (ii) a new project to be designed, engineered, developed and constructed by the Company (or any Affiliate thereof) within the Site (each a "Phase 2 Project"), each of which are commenced and completed prior to the fifth (5^{th}) anniversary of Project Completion, the Excess Capital Investment Credit shall be taken into account and credited to the Company or its Affiliate in determining the qualified capital investment incentives for which the Company or its Affiliate may be eligible in connection with each Phase 2 Project, which might include additional performance-based grants. For clarity, "an expansion of, or other upgrade to, the Project" may include the installation of new equipment or machinery to enhance the capacity of the Plant or the quality of the Company's products produced at the Plant, even if such installation occurs concurrently with the initial construction of the Project, but shall not include any expenditures made by the Company and/or any Project Affiliate after Project Completion in connection with the routine maintenance, repair, or replacement of equipment or machinery. Any Excess Capital Investment Credit shall have no other monetary value between the Parties except as described in this Section 3.05(c).

3.06 Workforce Training Center. The State and LED agree to develop and construct a workforce training center, at no cost or expense to the Company and/or any of the Project Affiliates, that is located in Donaldsonville, Louisiana and dedicated to educating and training employees and prospective employees primarily to support the Project and the Business that has the capacity to train the minimum number of skilled and qualified prospective employees of the Company and/or its Project Affiliates per year, as agreed upon in the Training Center CEA (defined below) (the "Training Center"). The State shall complete construction of the Training Center not later than April 30, 2027, and shall cause LCTCS to begin enrolling its first cohort of employees and prospective employees on or before January 1, 2027. The Training Center incentive provided by this Section 3.06 shall be governed by the terms of a separate cooperative endeavor agreement (the "Training Center CEA") between the Company and/or Project Affiliates and the Louisiana Community and Technical College System ("LCTCS") pursuant to which LCTCS shall operate the Training Center at its sole cost and expense, but the State and LED commit that such separate agreement with LCTCS shall include that the Training Center will focus on providing assessment and job-specific training for the Business' prospective and existing employees. During the Project's ramp-up period to full employment, the Training Center will be primarily for the training and administrative use to support the Project. The Training Center will be outfitted with modern learning spaces and hands-on skills trainers with input from the Company taken into consideration by LCTCS in designing the Training Center. LED further commits that its FastStart division will conduct thorough task, process, and training needs analyses to determine the necessary design and equipment needs of the Training Center in collaboration with the Company and/or Project Affiliates and, if requested by the Company and/or Project Affiliates, an agreement to install the Company-specific equipment for training at the cost of LCTCS. For the avoidance of doubt, an individual's completion of Training Center programs shall not obligate the Company to hire and/or thereafter maintain employment of such person.

3.07 FastStart Services. LED shall commit the services of its FastStart division to assist the Company and/or Project Affiliates with customized employee recruitment and training prior to and during the Business start-up period and continuing thereafter. The incentive provided in this Section 3.07 shall be subject to a "scope of services" that FastStart will issue and negotiate in good faith with the Company and/or Project Affiliates.

3.08 Best Efforts. The Company acknowledges and agrees that the State Incentive Agreements have not been fully negotiated and are subject to the Company (and/or its Project Affiliates) and the applicable Governmental Authority agreeing upon binding, definitive State Incentive Agreements to implement certain material terms of the State Commitments set forth in this Article III. With respect to the State Incentive Agreements, LED and the State make no assurances and do not warrant that any State Incentive Agreements will be agreed upon between the respective parties to said agreements; provided, however, that notwithstanding the foregoing sentence, (i) each State Incentive Agreement shall incorporate the terms of the State Commitments agreed upon in this Agreement and shall not reduce, limit, or modify such terms in any material respect; and (ii) the further negotiation of the State Incentive Agreements shall not in any way otherwise reduce, limit, or modify State and LED's other obligations under this Article III that are independent of, and not conditioned upon, entering into any additional State Incentive Agreement. However, the State and LED hereby commit to negotiating the terms of such further agreements in good faith and support the approval of such agreements by the Louisiana Board of Commerce

and Industry and Governor of Louisiana, with the goal of entering into all State Incentive Agreements and to ensure State funding for all incentives.

3.09 Non-affiliate Suppliers. The State and LED recognize that the Company and/or its Project Affiliates may enter into agreements with suppliers which are not Affiliates of the Company ("Non-affiliate Suppliers") to locate within Louisiana and/or near the Site in order to provide parts, products, and services to support the Company and/or its Project Affiliates, the Project and/or the Business. Any Non-affiliate Suppliers that locate within the Site and enter into subleases with the Company and/or Project Affiliates shall be exempt from real property taxes assessed against the land pursuant to the Ground Lease. Subject to Non-affiliate Suppliers meeting statutory and regulatory eligibility requirements, the State and LED will provide Non-affiliate Suppliers with all non-discretionary statutory incentives that are available to similarly situated businesses, and State and LED will further negotiate in good faith with the Non-affiliate Suppliers who choose to locate in Louisiana for the same types of competitive incentives provided to the Company and Project Affiliates, taking into consideration the relative capital investment and employment levels of such Non-affiliate Suppliers, which may include: (a) performance-based grants for minimum level of capital investments and job creation; (b) property tax abatements for manufacturers through the Industrial Tax Exemption Program; (c) property tax abatements for manufacturers and non-manufacturers through a payment-in-lieu-of-tax structure with the cooperation of Local Governments; and (d) receive from the State (i) recruitment and job training services as described herein, and (ii) other start-up training services as then-offered by the State (collectively, "Non-affiliate Supplier Incentives"). Such available Non-affiliate Supplier Incentives will be memorialized in separate incentive agreements with the State and/or incentive agreements with Local Governments with such Non-affiliate Suppliers. It is expressly understood that (x) the benefits to the Non-affiliate Suppliers as set forth herein are separate and distinct from the inducements otherwise made available to the Company and Project Affiliates that relate to the Project and the Business; and (y) no such benefits granted to or made available to any such Non-affiliate Suppliers shall in any manner preclude, reduce, diminish or adversely impact in any manner upon the inducements and the value thereof made available or otherwise available to the Company and Project Affiliates related to the Business. For the avoidance of doubt, Project Affiliates located on the Site and that are considered part of the Project and that are engaged in the operation of the Business shall not be entitled to any additional incentives as outlined in this Section 3.09 with respect to the investments in the Project on the Site, and shall only be entitled to the incentives expressly set forth in this Agreement; provided, however, that notwithstanding the foregoing sentence, the State and LED acknowledge and agree that certain other Affiliates of the Company, such as Hyundai Motor Company, may, but shall not be obligated to, consider locating a portion of their unrelated business to the Site, locations adjacent to the Site, or elsewhere in the State and constructing subsequent projects in connection therewith, and the State and LED will negotiate in good faith with such Affiliates who may choose, in their sole and absolute discretion, to locate in Louisiana for the same or similar types of competitive incentives provided to the Non-affiliate Suppliers.

3.10 State Economic and Regulatory Support. The State, through LED, shall use its best efforts to reasonably support the Company and/or Project Affiliates in navigating economic and regulatory challenges, including those related to federal regulations and trade and import rules, and identifying potential opportunities for growth and development, including opportunities made available through federal programs. Such support may include providing informational resources,

facilitating connections with relevant stakeholders, and offering guidance on programs and strategies. Additionally, upon evaluation of specific application processes or other initiatives pursued by the Company and/or Project Affiliates, including those related to federal regulations, rules, and programs, LED may, at its discretion, provide letters of support or similar. Nothing in this Section 3.10 shall be construed to create any legal obligation or liability on the part of LED or the State of Louisiana to ensure any particular outcome for the Company or Project Affiliates or require LED or the State to provide direct financial assistance, guarantees, or commit of state funds, except as expressly set forth in this Agreement, the State Incentives Agreements, and/or other formal incentive agreements.

3.11 Support for Hydrogen Incentives. The State, through LED, supports the efforts of the Company and/or Project Affiliates to expand its Louisiana operations to include hydrogen production, hydrogen mobility, and related projects. The State and LED recognize the strategic importance of hydrogen in advancing economic development, energy diversification, and sustainability goals. In support of these efforts, LED will work in good faith to facilitate access to relevant state and federal programs, provide guidance on regulatory and permitting processes, and assist in identifying potential partnerships and infrastructure opportunities. Additionally, the State and LED will, subject to then-Applicable Laws, negotiate in good faith potential additional incentives to encourage such investments in Louisiana. The support described in this Section 3.11 does not require LED or the State to provide direct financial assistance, guarantees, or commitments of state funds, unless expressly provided through formal incentive agreement.

3.12 Emergency Response Support. The Parties acknowledge that emergency response and environmental risk management within the RiverPlex Megapark are overseen by existing state and local agencies, including the Louisiana Department of Environmental Quality (LDEQ), the Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP), the Louisiana State Police, and the Ascension Parish Office of Homeland Security and Emergency Preparedness. These agencies maintain comprehensive monitoring and emergency response systems that serve industrial facilities throughout the state, including those within the RiverPlex Megapark. The State, through LED, supports efforts to ensure coordination and preparedness among local emergency management authorities, industrial operators, and other stakeholders.

ARTICLE IV
COMPANY COMMITMENTS

The Company and/or Project Affiliates each acknowledge and agree that the State Commitments provided in Article III herein are conditioned on the continuous material compliance of the Company and/or Project Affiliates with the following commitments of the Company (collectively, the "Company Commitments"):

4.01 Establishment of Project and Business. The Company and/or Project Affiliates will (a) design, acquire, and locate the Project in Ascension Parish on the Site and reach Project Completion not later than March 31, 2030, and (b) promptly after Project Completion, commence operations of the Business on the Site without any Cessation in Operations for a period that is not less than the latter of (i) the term of this Agreement or (ii) the longest term under any State Incentive Agreement.

4.02 Capital Investment.

(a) The Company and Project Affiliates shall use good faith, reasonable best efforts to (i) invest an amount not less than minimum Capital Investment amounts for each Project Year set forth in Part (I) on Exhibit B attached hereto, as certified by the Company to LED for each applicable Project Year and upon Project Completion, and (ii) cause the aggregate amount of such Capital Investment by the Company and/or Project Affiliates to be an amount not less than Five Billion Eight Hundred Million Dollars ($5,800,000,000 USD) upon reaching Project Completion (the "Capital Investment"). In any event, the Company, on behalf of itself and Project Affiliates, covenants and agrees to invest a minimum amount of not less than eighty percent (80%) of the total Capital Investment by Project Completion, in which case the Performance-Based Grant shall be proportionately reduced as provided in Section 3.05(a). The Capital Investment shall be determined based on the total capital cost of acquiring, constructing, installing and equipping the Project on the Site that is, or would be with a proper election, eligible to be capitalized for United States federal income tax purposes (without regard to whether such expenditures are so capitalized).

(b) Notwithstanding the best efforts obligation of the Company and/or Project Affiliates as provided in Section 4.02(a), above, the failure by the Company and/or Project Affiliates to invest at least eighty percent (80%) of the minimum Capital Investment in the Project as of Project Completion in accordance with this Section 4.02 shall constitute a Default pursuant to Section 8.01(b) following the expiration of any applicable cure period set forth in Section 8.02(a)(i).

4.03 Required Jobs and Required Annual Payroll.

(a) The Company and/or Project Affiliates shall use good faith, reasonable best efforts to employ and maintain the minimum number of Full-Time Employees opposite each Project Year set forth in Part (II) on Exhibit B attached hereto (the "Required Jobs").

(b) The Company and/or Project Affiliates shall maintain and actually expend not less than eighty percent (80%) of the annual aggregate payroll amounts set forth opposite each Project Year set forth in Part (II) on Exhibit B (the "Required Annual Payroll"), and use good faith, reasonable best efforts to achieve the total Required Annual Payroll for each Project Year set forth in Part (II) on Exhibit B attached hereto. The Required Annual Payroll shall be determined based on the Full-Time Employees employed by the Company and/or Project Affiliates during each Project Year; provided that no more than Two Hundred Fifty Thousand Dollars ($250,000 USD) of each Full-Time Employee's annual salary (as increased by a stipulated inflation factor of two percent (2%) per annum for each Project Year set forth on Part (II) on Exhibit B) may be included in determining the Required Annual Payroll. The Required Annual Payroll reported by the Company to the State and LED may include the aggregate of all salary, wages, compensation, bonuses, earnings and any and all discretionary and nondiscretionary payments, benefits, reimbursements or expenses or the like made, allocated or contributed to, or on behalf of, all Full-Time Employees, to the extent such amounts constitute federal or State taxable income for the applicable Project Year; provided, however, that all payments made, or benefits provided, by the Company and/or Project Affiliates on behalf of Full-Time Employees not considered federal or

State taxable income to any Full-Time Employee for the applicable Project Year shall be entirely excluded from such calculation (such amounts may currently include employer retirement contributions, health insurance premiums, disability income, life insurance premiums, long-term medical care costs, health savings account payments, and unemployment benefits).

(c) If the Company and/or Project Affiliates shall exceed one hundred percent (100%) of the Required Annual Payroll during any Project Year, the Company shall receive a dollar-for-dollar credit in the amount by which the Company and/or Project Affiliates exceed the Required Annual Payroll for that Project Year, and the Company may allocate such credit to reduce the Required Annual Payroll in subsequent Project Years, as determined in the Company's sole and absolute discretion. If the Company and/or Project Affiliates do not achieve the Required Annual Payroll, the ground lease rent payable by the Company, as ground lessee, to the State, as ground lessor, shall be adjusted to provide that, upon the earlier to occur of (i) the termination of the Ground Lease or (ii) expiration of the thirty-second (32nd) lease year, the Company will make a one-time, lump sum additional rent payment to the State in amount to be determined by *multiplying* (1) the difference between (A) the aggregate Required Annual Payroll set forth in column (c) of Part (II) on Exhibit B through the last full Project Year in which the Ground Lease terminates (not to exceed $3,366,700,000 USD (i.e., the aggregate of all payroll amounts set forth in column (c) of Part (II) on Exhibit B)) *and* (B) all qualifying payroll payments made by the Company and/or Project Affiliates through the end of the last full Project Year in which the Ground Lease terminates *by* (2) six and fourteen hundredths percent (6.14%). By way of example, if the Ground Lease terminates at the beginning of 2041 (and there are no delays as provided in Sections 8.03 and 8.04), and the Company and/or Project Affiliates have expended $1,300,000,000 USD in payroll, as opposed to $1,517,300,000 USD (i.e., the aggregate Required Annual Payroll set forth in column (c) of Part (II) on Exhibit B through Project Year 2040), resulting in a shortfall of $217,000,000 USD, then the Ground Lease final rent payment shall be $13,323,800 USD (i.e., $217,000,000 USD * 0.0614).

(d) If upon the expiration of the final Project Year set forth on Part (II) on Exhibit B (as the same may be extended pursuant to Sections 8.03 and 8.04) the Company and/or Project Affiliates have failed to achieve the aggregate Required Annual Payroll of Three Billion Three Hundred Sixty-Six Million Seven Hundred Thousand Dollars ($3,366,700,000 USD), the Company may, in its sole and absolute discretion, continue to submit to the Contract Monitor Quarterly Reports pursuant to Section 7.02(c), Annual Certifications of Compliance pursuant to Section 7.02(d), and any other documentation required pursuant to Section 7.02(f) to the Contract Monitor. All qualified payroll expended by the Company and/or Project Affiliates and reported to the Contract Monitor during each subsequent calendar year that occurs until the earlier to occur of (i) the termination of the Ground Lease or (ii) expiration of the thirty-second (32nd) lease year shall reduce the amount of the additional rent payment payable to the State pursuant to the Ground Lease.

(e) The failure by the Company and/or Project Affiliates to meet eighty percent (80%) of the Required Annual Payroll in accordance with this Section 4.03 for five (5) Project Years during any ten-(10)-Project-Year period shall result in a Default pursuant to Article VIII following the expiration of any applicable cure period set forth in Section 8.02.

4.04 Non-Affiliate Suppliers. In consideration of the commitments of the State and LED pursuant to Section 3.09 with respect to Non-affiliate Suppliers, the Company and/or Project Affiliates shall, if commercially feasible for the Project, as reasonably determined by the Company, encourage such Non-affiliate Suppliers to consider locating in the State of Louisiana to better serve the Project and Business, in accordance with Applicable Law.

4.05 [Intentionally Omitted].

4.06 Reporting Requirements. The Company shall timely satisfy all reporting, certification and audit requirements provided for in this Agreement and each of the State Incentive Agreements.

4.07 Cooperation with Contract Monitor. The Company and/or Project Affiliates shall reasonably cooperate with the Contract Monitor in all matters related to the duties and responsibilities of such Contract Monitor as set forth in this Agreement.

4.08 Good Standing. During the term of this Agreement or the applicable term of each of the State Incentive Agreements, the Company and/or Project Affiliates operating the Business shall remain validly existing and in good standing under the laws or the jurisdiction where such entities are organized and shall remain duly registered to do business in the State of Louisiana.

4.09 Operation of the Business. During the term of this Agreement or the applicable term of each of the State Incentive Agreements, the Company and/or Project Affiliates operating the Business shall operate the Business without any Cessation in Operations .

4.10 Construction Preferences. To the extent practicable and permissible under Applicable Law, the Company and/or Project Affiliates shall, if commercially feasible for the Project, as reasonably determined by the Company, use commercially reasonable efforts during the construction of the Plant to (i) request that manufacturers and suppliers deliver construction materials for the Project to the Site or within Louisiana, as opposed to another state, and (ii) give preference to Louisiana manufacturers, suppliers, vendors, contractors and subcontractors in connection with the original construction of the Project ("Louisiana Entities"), provided such Louisiana Entities are competitive in price, quality and delivery.

ARTICLE V
CONDITIONS PRECEDENT

The State Commitments described in Article III and Company Commitments described in Article IV, respectively, are subject to satisfaction and fulfillment of the following conditions precedent (the "Conditions Precedent"), any one or more of which may be waived in whole or in part by mutual written agreement of the Parties. If any Condition Precedent is not satisfied by the applicable date set forth below, then either Party may terminate this Agreement upon written notice to the other Party prior to the satisfaction of such Condition Precedent.

5.01 Governmental Approvals. On or before July 31, 2025, the State and LED shall obtain all approvals, consents or authorizations required by all Governmental Authorities as a

condition precedent to the execution and delivery of certain of the State Incentive Agreements or other documents to which either the State or LED is a party and the performance by the State and LED of the State Commitments herein; provided, however, with the foregoing approval deadline shall not apply to any QJ Incentive for which all advance notifications for such benefit has not been filed or released by the Company in sufficient time to be processed by LED for consideration by such Governmental Authorities prior to June 30, 2025. The Company shall reasonably cooperate with the State and LED to consider and negotiate any extensions that are required to obtain all final governmental approvals, including in connection with the land acquisition by the State, to the extent that such extensions may be reasonable necessary in spite of the State's and LED's good faith, reasonable best efforts to secure all approvals by the date set forth above in this Section 5.01.

5.02 State Incentive Agreements. On or before May 31, 2025, the Parties fully negotiated the forms of each State Incentive Agreement, subject to such terms that are mutually satisfactory to the parties thereto. On or before June 30, 2025, the Company shall complete and file one or more advance notifications in accordance with the regulatory requirements of the Louisiana Quality Jobs Program. On or before August 31, 2025, the Parties shall execute and deliver to each other the State Incentive Agreements, other than the QJ Contracts.

5.03 Site Acquisition. Provided that (a) the Company enters into the Options for the Designated GMZ Parcels that the Company deems necessary to construct the Project providing the Parties not less than ninety (90) days to conduct due diligence and has assigned such Options to the State and/or LED (provided that the parties acknowledge that such period may be subject to extension(s) as contemplated in Section 3.02(b) if necessary to conduct required curative work to satisfy the Acquisition Conditions), and (b) the Acquisition Conditions with respect to such Designated GMZ Parcels have been satisfied in accordance with Section 3.02, then on or before December 31, 2025, the State and/or LED shall consummate the transactions necessary to purchase and acquire fee-title ownership of the Site in its entirety. The Parties mutually agree that this condition precedent shall be deemed satisfied upon the State's and/or LED's acquisition of the Designated GMZ Parcels.

5.04 Agreements with Parish IDB and Ascension Parish. On or before July 31, 2025, the Company and/or Project Affiliates shall negotiate and enter into a cooperative endeavor agreement and such related agreements with Ascension Parish and/or the Parish IDB subject to such terms that are satisfactory to all parties thereto, but which shall at a minimum provide for the following (the "Parish Cooperative Endeavor Agreement"):

(a) As part of the Parish Cooperative Endeavor Agreement, the Company and/or Project Affiliates will agree to transfer and convey by separate instruments, fee-title ownership to the structures, building and other improvements contemplated by the Project (the "Plant") to be located on the Site to the Parish IDB as the Plant is being constructed and as completed, and the Parish IDB will agree to lease by a separate lease agreement, the Plant to the Company for a period of 32 years (the "IDB Lease") in exchange for the anticipated Economic Benefits resulting from the Project and the annual lease payments payable by the Company and/or Project Affiliates that consists of payments-in-lieu-of-tax totaling Five Hundred Fifty-Three Million Dollars ($553,000,000 USD) in the aggregate during the term of the IDB Lease, in accordance with such

annual installment schedule that is satisfactory to the parties to the IDB Lease (the "PILOT Payments").

(b) The Parish Cooperative Endeavor Agreement shall provide that Ascension Parish and/or the Parish IDB will (i) engineer, design, and construct a the two-way surface road (one lane in each direction) roadway (to be more particularly described therein) intersecting with the Phase I Road near the southeast corner of the Site and extending to, and intersecting with, Louisiana Highway 405 within the RiverPlex MegaPark (the "Phase II Road"), to serve the Project, the Company and/or Project Affiliates and other tenants within the RiverPlex MegaPark complex and (ii) provide up to 156,000 GPD capacity of potable water and expand related infrastructure needed to service the Project and Business, at no cost to the Company or Project Affiliates (collectively with the Phase II Road, the "Local Infrastructure Improvements") prior to a date to be determined pursuant to Section 5.08 all as more particularly set forth in the Parish Cooperative Endeavor Agreement. The Local Infrastructure Improvements will be undertaken in accordance with the schedule necessary for the Project's construction timeline and to timely reach Project Completion. The roadways anticipated as part of the Local Infrastructure Project are generally depicted on Exhibit C attached hereto, but the precise location, alignment and specifications of thereof remains subject to changes mutually approved by the Parties.

(c) The Company and/or Project Affiliates acknowledge and agree that once completed, the Phase II Road shall remain the public property of Ascension Parish and is intended to benefit the Project and Business but not for the exclusive use by the Company and/or Project Affiliate, or the Project or Business, and that such public improvements may benefit other industries and businesses located in the general vicinity of the RiverPlex MegaPark and the general public.

(d) The IDB Lease shall provide that the completed Plant shall be conveyed by the Parish IDB to the Company, or its designee, not later than thirty-two (32) years from the commencement date of the IDB Lease.

(e) The Parties mutually agree that this condition precedent shall be deemed satisfied upon the full execution, delivery and release of the Parish Cooperative Endeavor Agreement.

5.05 State Tax Compliance. On or before December 31, 2025, in accordance with La. R.S. 39:1624(A)(10), the Louisiana Department of Revenue ("LDR") must determine that the Company (or its domestic Project Affiliate successor in interest), as a prospective contractor, is current in the filing of all applicable tax returns and reports and in payment of all taxes, interest, penalties, and fees owed to the State and collected by LDR. The Company, as a prospective contractor, hereby attests, on behalf of itself or its domestic Project Affiliate successor in interest, as applicable, to its current and/or prospective compliance and agrees to provide its seven-digit LDR Account Number to LED so that the Company's tax payment compliance status may be verified. The Company, as a prospective contractor, further acknowledges understanding that issuance of a tax clearance certificate by LDR is a necessary precondition to the approval and effectiveness of this Agreement. LED reserves the right to withdraw its consent to this Agreement without penalty and proceed with alternate arrangements should the Company fail to resolve any identified apparent outstanding tax compliance discrepancies with the LDR within ten (10) business days of such notification.

5.06 Entergy Louisiana. On or before May 31, 2025, the Company and/or Project Affiliates shall negotiate and enter into either a binding memorandum of understanding or a precedent agreement with Entergy Louisiana, which shall form the basis for a future energy services agreement for the Project and shall include such terms reasonable that results in such parties entering into such binding memorandum of understanding or a precedent agreement. The Company shall provide written notice to the State and LED within ten (10) business days of this condition has been satisfied to the Company's satisfaction and, if such condition has not been satisfied, whether the Company elects to waive and release such condition precedent, in the Company's sole and absolute discretion.

5.07 Deepwater Port. On or before July 31, 2025, the Company and/or Project Affiliates shall negotiate and enter into a cooperative endeavor agreement (or other agreement, which may include a dock build-to-suit lease, management agreement) with one or more Louisiana deepwater port(s) on such terms that results in such parties entering into such agreements. The Company shall provide written notice to the State and LED within ten (10) business days of this condition has been satisfied to the Company's satisfaction and, if such condition has not been satisfied, whether the Company elects to waive and release such condition precedent, in the Company's sole and absolute discretion.

5.08 Establishment of Infrastructure Construction Project Schedule.

(a) By July 31, 2025, the State will provide a thirty percent (30%) schematic design of the State Road Infrastructure Improvements.

(b) The State and LED shall use best efforts to cause Ascension Parish to provide a thirty percent (30%) schematic design of the Local Infrastructure Projects by July 31, 2025.

(c) The State and LED shall use best efforts to cause Union Pacific, WATCO, Rail Logix, and/or another rail provider will provide a thirty percent (30%) schematic design of the Rail Extension (incorporating the Company's prior written feedback) within thirty (30) days of the Company's written notice to the State and LED of the Company choice as to a preferred rail provider.

(d) The Parties will work in good faith to finalize each of the foregoing thirty percent (30%) schematic designs and, after finalization of each preliminary design, to establish the individual project schedules and key milestone dates related to each such project within ten (10) business days of finalization of each preliminary design. Thereafter, any failure of the State or LED to adhere to the project schedules and key milestone dates shall constitute a Governmental Delay.

(e) The Company shall provide separate written notices to the State, LED and the other appropriate parties referenced above (i.e., Asension Parish or the rail provider, as applicable) within ten (10) business days of this condition having been satisfied, in whole or in part, as applicable, to the Company's satisfaction and, if such condition has not been satisfied, whether the Company elects to waive and release such condition precedent, in the Company's sole and absolute discretion.

ARTICLE VI
NON-APPROPRIATION

6.01 Non-Appropriation. Certain portions of the State Investment under this Agreement are subject to appropriation by the Legislature of sufficient funds therefor and the availability of funds following appropriation by the Legislature and subject to termination or reduction due to unavailability of funding. LED agrees to request that the executive budget include the funds necessary for such portions of the State Investment and to use its reasonable best efforts to bring about the necessary appropriation by the Legislature, but makes no representations, warranties, covenants, or guarantees, express or implied, that the Legislature will make such appropriations.

6.02 Suspension During Non-Appropriation. A failure by the Legislature to timely appropriate sufficient funds for any portion of the State Investment, a veto of appropriated funding, or a reduction of such an appropriation required by law, shall not constitute a Default under this Agreement, and this Agreement shall continue in full force and effect as if the appropriation had been made. However, to the extent such failure or reduction results in an inability to make the State Investment when due, the Company Commitments and the Company's obligations under each QJ Contract (except any obligation to reimburse the State attributable to a time period during which the State met its funding obligations) shall be suspended until the State is current on its payments, at which time all the Company obligations hereunder shall be effective as if no suspension had occurred (except no interest shall be assessed on any reimbursement attributable to the suspension period). Notwithstanding anything contained herein to the contrary, if the State fails or is unable to make a State Investment in accordance with this Agreement as the result of the lack of appropriation thereof, the State shall make any and all State Investment for any prior period that the Company otherwise complied with its obligations under this Agreement promptly upon appropriation thereof.

6.03 Termination for Non-Appropriation. Should the State fail to become current on any of its State Investment due to non-appropriation within a one-year period, the Company at its option may elect to terminate this Agreement. Upon such termination, the Parties shall have no further obligations under this Agreement, however, nothing herein shall be interpreted to terminate obligations it has under any other State Incentive Agreements.

6.04 Reduction of PILOT Payment. The State and LED acknowledge and agree that, considering the significant economic investment of the Company and Project Affiliates into the State, following commencement of construction of the Project, the termination remedy set forth in Section 6.03 shall be insufficient to adequately compensate the Company and/or Project Affiliates for any failure by the Legislature to timely appropriate sufficient funds to pay any portion of the State Investment. Therefore, in addition to the remedy set forth in Section 6.03, the Parish Cooperative Endeavor Agreement shall provide that the Company and/or Project Affiliates shall have the right, in the Company's sole and absolute discretion, to proportionately reduce and offset the amount of any PILOT Payments due and payable to the Parish IDB under the Parish Cooperative Endeavor Agreement in the total amount by which any State Investment is not timely paid due to a lack of appropriations by the Legislature (a "Non-appropriation Shortfall"); provided that, notwithstanding the foregoing, (1) the total amount of all such reductions and offsets from

any PILOT Payments shall not exceed Two Hundred Fifty Million Dollars ($250,000,000 USD) in the aggregate; (2) such reductions and offsets shall be taken proportionately during the time period such State Incentive payment would have been earned by the Company and/or Project Affiliate (*i.e.*, the Company shall only be entitled to offset PILOT Payments as and when the State Incentive benefit(s) would otherwise have been received by the Company and/or its Project Affiliates); and (3) if the Legislature subsequently appropriates sufficient funding to pay the State Investment, and the State thereafter pays all delinquent and unpaid portions of the State Investment required under this Agreement and the State Incentive Agreements, the Company shall thereafter pay the outstanding portion of the unpaid PILOT Payments to the Parish IDB within sixty (60) days of the State and LED fully satisfying all outstanding obligations with respect to the State Commitments. For clarity, if the Company and/or Project Affiliates offsets PILOT Payment due and payable in any given Project Year pursuant to this Section 6.04, and the amount of PILOT Payments for such Project Year is less than the total Non-appropriation Shortfall, the Company and/or Project Affiliates shall continue to offset PILOT Payments due in subsequent Project Years until the Company and Project Affiliates have offset the aggregate amount of the Non-appropriation Shortfall.

ARTICLE VII
REPORTING AND COMPLIANCE

7.01 Contract Monitoring.

(a) The Secretary of LED or her/his designee will designate, and may change from time to time, one or more persons on LED's staff to serve as "Contract Monitor" for the Project, to act as LED's and the State's representative and liaison between LED, the State and the Company, and to monitor the achievement of the Public Purpose.

(b) The Parties agree to LED's monitoring through the Contract Monitor of the following:

(i) expenditure by the Company and/or Project Affiliates of the Capital Investment;

(ii) creation of Required Jobs and Required Annual Payroll; and

(iii) all other compliance with the Company's obligations under this Agreement.

Such monitoring may include additional review of documents related to the Capital Investment, reasonable Project inspections during normal business hours (including to document creation of the Required Jobs), and such additional review and inspection may be documented in writing.

(c) To the extent that the Company is required to provide to the State information or access to information listed above in Section 7.01(b) under one or more of the State Incentive Agreements, then the provision of such information by the Company to LED or access to such information by LED pursuant to any State Incentive Agreement shall satisfy the reporting requirements of provision without the need for duplicate submissions.

(d) Any approval by the Contract Monitor required by this Agreement may be provided by the Secretary or her/his designee. The Company shall be entitled to rely on any written approval by the Secretary, the Contract Monitor or any other designee of the Secretary.

7.02 Reports. In addition to any reports required pursuant to the State Incentive Agreements, but not in duplication thereof, the Company shall provide the following reports to the Contract Monitor:

(a) Project Budget. A summary of the Project Budget is attached hereto as Exhibit D. If the estimated costs or the schedule of expenditure should materially increase or decrease at any time, the Company shall promptly submit a revised Project Budget to the Contract Monitor showing such changes. The State Investment shall not be increased, nor payment thereof accelerated by any increased revision except as otherwise provided for in the State Incentive Agreements; provided, however, a reduction of the Capital Investment by the Company and/or Project Affiliates in violation of Section 4.02 or Exhibit B may result in a Default as provided in Article VIII.

(b) Progress Reports. As a means of substantiating attainment of the Public Purpose of this Agreement, the Company shall submit Progress Reports for the Project to the Contract Monitor, in the general form of Exhibit E attached hereto, on a calendar semiannual basis from the Effective Date through Project Completion.

(c) Quarterly Payroll Reports. Upon filing its Quarterly Report of Wages Paid with the Louisiana Workforce Commission, the Company shall contemporaneously deliver a copy thereof to the Contract Monitor.

(d) Annual Certification of Compliance. Within sixty (60) days following the end of each Project Year, the Company shall deliver to the Contract Monitor a Certification of Compliance, duly executed by an executive officer of the Company, in the general form of Exhibit F attached hereto. Additionally, upon request of the Contract Monitor, the Company shall provide supporting documentation, as reasonably necessary and appropriate to verify the extent of compliance through the end of the previous Project Year with Article IV, including the specific number of Required Jobs, and other matters subject to the Contract Monitoring set forth in Section 7.01 above. Copies of all documentation supporting each Certification of Compliance shall be maintained by the Company for a period of five (5) years from submission of the applicable Certification of Compliance.

(e) Capital Investment Cost Reports. The Company and/or Project Affiliates shall request payments of the Performance-Based Grant by submitting to the Contract Monitor a report detailing the expenditure by the Company and/or Project Affiliates of the Capital Investment for the Project required under this Agreement, reasonably documenting its expenditures, including reasonable supporting documentation as may be requested by the Contract Monitor (such as invoices, checks and other appropriate records reflecting costs incurred, and a spreadsheet showing cost categories, invoice dates, invoicing companies, invoice amount, and a brief description of the items or services purchased) (each a "Capital Investment Report" – Exhibit G). Each Capital Investment Report shall be reviewed and approved by the chief financial officer of the Company or other appropriate representative of the Company and/or Project Affiliates, and shall be

submitted annually within sixty (60) days of end of each Project Year specified in Part (I) on Exhibit B and within ninety (90) days of Project Completion. The Contract Monitor shall approve, and have paid, or upon good cause, deny payments of the Performance-Based Grant within ninety (90) days of receipt of the Capital Investment Report. If the Contract Monitor reasonably requires additional supporting documentation, the Contract Monitor shall promptly notify the Company in writing, and the Company shall promptly provide such further documentation, to the extent that the same exists and is in the Company's possession or subject to the Company's or its Project Affiliate's control. If certain reasonable supporting documentation requested by the Contract Monitor is missing or is incomplete, the Contract Monitor shall approve, and have paid, the Performance-Based Grant with respect to all portions of the submission that are complete and shall withhold a portion of the Performance-Based Grant applicable to the incomplete materials. Copies of all documentation supporting the Capital Investment Reports shall be maintained by the Company and/or Project Affiliates for a period of five (5) years from the date that the LED disburses the applicable Performance-Based Grant payment and shall be subject to audit as hereinafter provided.

(f) Other Documentation. During the term of this Agreement, the Company shall provide to the Contract Monitor any other reasonably requested documentation which may be reasonably required to monitor and confirm compliance with the Company's obligations under this Agreement.

(g) No Duplication of Submissions. To the extent that the Company is required to provide to the State information or access to information listed above in this Section 7.02 under one or more of the State Incentive Agreements, then the provision of such to the State by the Company or access to such information by the State pursuant to any State Incentive Agreement shall satisfy the requirements of this Section.

7.03 Audit; Inspection. At the sole cost of LED or the Louisiana Legislative Auditor, as applicable, the Company shall make all of its books and records (and those of Affiliates, if applicable) reasonably necessary to document compliance with the Company's obligations under this Agreement available to LED for review, inspection, and audit upon written request, and to the Louisiana Legislative Auditor as may be required by Applicable Law, provided that neither LED nor the Louisiana Legislative Auditor shall perform such a review, inspection, or audit more than once annually. LED and/or the State shall review such books and records at its sole costs and expense; provided, however, to the extent such examination or audit reveals a discrepancy that conclusively demonstrates in the immediately preceding Project Year either (i) the amount of the Capital Investment expended on the Project or (ii) the Require Annual Payroll expended by the Company has been overrepresented by fifteen percent (15%) or more, then the Company and/or Project Affiliates shall reimburse all actual, documented, out-of-pocket costs reasonably incurred by LED in conducting such review, inspection, or audit. To the extent permitted by Applicable Law, all information provided shall be treated as Confidential Information (defined below) pursuant to Sections 7.04 and 7.05.

7.04 Confidential, Proprietary, or Trade Secret Information.

(a) All nonpublic records, documents, studies, reports, legal documents, financial information, computer output and other materials and information, analyses, compilations,

forecasts, projections and other documents prepared based upon such materials and information, whether the same are in electronic, pictorial, written or other form, including any of the foregoing containing proprietary, economic development, or trade secret information ("Confidential Information") that the Company intends to be maintained by LED as confidential pursuant to La. R.S. 44:3.2 shall be submitted with a cover sheet or communicated pursuant to a letter or cover email that provides in bold type **"ENCLOSED DOCUMENTS CONTAIN CONFIDENTIAL, PROPRIETARY OR TRADE SECRET INFORMATION"**. The State and LED shall hold all Confidential Information in confidence and shall not disclose or permit the disclosure of the Confidential Information to any Person without the Company's prior written consent in each instance, except as otherwise permitted under Section 7.05. The State and LED further agree that the Confidential Information shall be used solely for purposes of evaluating the Company's (and its Project Affiliate's) compliance with their obligations under this Agreement. Except as otherwise provided in Section 7.05, the State and LED shall disclose the Confidential Information only to its employees, officers, directors, attorneys, agents and representatives who (i) have a need to review the Confidential Information for the purpose of advising the State and LED with respect to their rights, duties, and obligations under this Agreement, and (ii) have been informed in writing of the confidential nature of such information. The State and LED shall use commercially reasonable efforts to keep the Confidential Information generally confidential in accordance with the terms of this Agreement. In any event, the State and LED shall be responsible for any breach of this Agreement by any Person to whom the State or LED discloses the Confidential Information. However, with respect to submissions leading to payment of invoices, the Company shall endeavor to avoid the use of any such Confidential Information designation unless in the opinion of the Company:

(i) the Confidential Information is the proprietary property of the Company and is strictly confidential and privileged pursuant to Applicable Law;

(ii) the release of the Confidential Information provided could cause harm to the Company's competitive position;

(iii) the Confidential Information is potentially personal and private; and

(iv) the Confidential Information is exempt from disclosure under pursuant to La. R.S. 44:3.2.

7.05 Required Disclosure. In the event that the State and/or LED is required, in the opinion of legal counsel to the State and/or LED, to disclose any of the Confidential Information by Applicable Law or pursuant to a subpoena, court order, or other legal proceeding, or stock exchange rule, the State and/or LED will, to the extent practicable and permitted by Applicable Law, notify the Company promptly, and at least seventy-two (72) hours prior to disclosure, so that it may seek a protective order or other appropriate remedy or, in the Company's sole discretion, waive compliance with the terms of this Agreement. In the absence of a protective order or waiver of compliance by the Company, the State and/or LED shall (a) disclose only that portion of the Confidential Information that it is advised by counsel that it is legally required to disclose, (b) exercise reasonable efforts to provide the Company with a copy of the information to be disclosed before the same is given to any third party, (c) cooperate fully with the Company to obtain such protective order, and (d) exercise all reasonable efforts to obtain reliable assurance that

confidential treatment will be accorded any Confidential Information that is ultimately required to be disclosed to the extent provided under Applicable Law. The State and LED acknowledge that the Confidential Information is of a special, unique, unusual, extraordinary and intellectual character and that the Company's (or any Project Affiliate's) interest in the Confidential Information may be irreparably injured by disclosure of such Confidential Information in violation of this Agreement. The State and LED further acknowledge and agree that monetary damages would not be a sufficient remedy for any breach of Section 7.04 and this Section 7.05 by the State and LED and that, in addition to all other remedies available at law or in equity, the Company and any Project Affiliate shall be entitled to specific performance or injunctive or other equitable relief as a remedy for any breach or potential breach by the State or LED of Section 7.04 and this Section 7.05. The provisions of Section 7.04 and this Section 7.05 shall survive any termination of this Agreement.

ARTICLE VIII
DEFAULT; TERMINATION

8.01 Events of Default. Subject to the right to cure as provided in Section 8.02 and Force Majeure as provided in Section 8.03, the occurrence of any of the following actions during the term of this Agreement shall constitute a "Default":

(a) failure of the Project to reach Project Completion by March 31, 2030 (subject to the Company's extension rights as provided in Section 8.04);

(b) failure of the Company to observe or timely perform with respect to any of the Company Commitments, or any other covenant, commitment, condition or agreement in this Agreement of the Company that remains uncured as provided in Section 8.02 (subject to the Company's extension rights as provided in Section 8.04, as applicable);

(c) material failure by the Company to comply with monitoring, reporting or audit obligations as required by Article VII;

(d) commencement of a bankruptcy (whether liquidation or reorganization) or dissolution proceeding by or against the Company; or

(e) failure by the State and/or LED to observe or timely perform with respect to any of the State Commitments or any other covenant, commitment, condition or agreement in this Agreement of the State and/or LED that remains uncured as provided in Section 8.02; provided, however, if the State and/or LED's failure to timely perform with respect to any of the State Commitments is due to a failure by the Legislature to timely appropriate sufficient funds for any portion of the State Investment, a veto of appropriated funding, or a reduction of such an appropriation required by Applicable Law as provided under Sections 6.01 and 6.02, such failure shall not be deemed a Default and the Company's sole remedy shall be to terminate this Agreement in accordance with Section 6.03 or proportionately offset PILOT Payments in accordance with Section 6.04.

8.02 Default Remedies.

(a) Remedies of the State and LED. Upon the occurrence of a Default by the Company and/or Project Affiliates pursuant to Section 8.01(a) - (d):

(i) the State or LED shall provide the Company with written notice specifying the Default, and the Company and/or Project Affiliates shall have a period of sixty (60) days from the date of such notice or demand to cure the Default; provided that if the nature of such Default is such that the same cannot reasonably be cured within a sixty (60) day period, the Company or Project Affiliate shall not be deemed to be in Default if it diligently commences such cure within such period and thereafter diligently proceeds to rectify and cure such Default, but in no event exceeding a period of time in excess of one hundred twenty (120) days after written notice thereof from the State or LED to the Company; and

(ii) if the Company fails to cure the Default within the period provided in subsection (i), then (1) the State and LED shall no longer have an obligation to satisfy any of its outstanding State Commitments provided in this Agreement until such Default is cured by the Company and/or Project Affiliate and (2) the State and LED shall have the option to terminate this Agreement at any time prior to such Default being cured by the Company and/or Project Affiliate, in which event the Company and/or Project Affiliates shall reimburse a portion of the Performance-Based Grant in the amount set forth on Exhibit H attached hereto based upon the Project Year in which this Agreement terminates.

(b) Additional Remedies of the State and LED. Without limiting subsection (a) above, (i) if at the time that this Agreement is terminated the Company and/or Project Affiliates have failed to pay the aggregate Required Annual Payroll for all full Project Years through the termination date, the Company shall make a one-time, lump sum additional rent payment to the State on account of such shortfall, in amount to be determined under the Ground Lease and in accordance with Section 4.03(c), and (ii) to the extent the Default of the Company and/or Project Affiliates is a result of its or their breach or violation of any of the State Incentive Agreements, the State and LED shall have the option to exercise the remedies provided therein.

(c) Remedies of the Company and Project Affiliates. Upon the occurrence of a Default by the State or LED pursuant to Section 8.01(e):

(i) the Company shall provide the State and LED with written notice specifying the Default, and the State and LED shall have a period of sixty (60) days from the date of such notice or demand to cure the Default to the Company's reasonable satisfaction; provided that if the nature of such Default is such that the same cannot reasonably be cured within a sixty (60) day period, the State and LED shall not be deemed to be in Default if either diligently commences such cure within such period and thereafter diligently proceeds to rectify and cure such Default, but in no event exceeding a period of time in excess of one hundred twenty (120) days after written notice thereof from the Company to the State and LED;

(ii) if the State and LED fail to cure the Default within the period provided in subsection (i), then (1) the Company shall no longer have an obligation to timely satisfy any of its outstanding the Company Commitments provided in this Agreement until such Default is cured by the State or LED, and (2) the Company shall have the option to terminate all or any portion of this Agreement at any time prior to the State or LED curing such Default.

(iii) to the extent the State's or LED's Default is a result of its or their breach or violation of any of the State Incentive Agreements, the Company shall have the option to exercise the remedies provided therein.

(d) The reimbursements and adjustments described above are not intended by the Parties to be a forfeiture or penalty clause, but instead constitute liquidated damages and are negotiated by the Parties to protect the State and LED and the expected Economic Benefits for the State Investment. The Parties acknowledge that the damages to the State and LED in the event of a Default by the Company would be difficult or impossible to determine, that the amounts set forth in Section 8.02(a) and (b) (and the Ground Lease) are the Parties' best and most accurate estimate of the damages that would be suffered by the State and LED if this Agreement should terminate due to a Default by the Company, and that such estimate is reasonable under the circumstances existing as of the Effective Date and under the circumstances that the Parties reasonably anticipate would exist at the time of such Default. The Parties, having diligently endeavored to ascertain the actual compensatory damages which the State and LED would suffer in the event of the Company's Default, agree that the amounts set forth in Section 8.02(a) and (b) (and the Ground Lease) are a reasonable estimate of said damages. Except as otherwise provided in the State Incentive Agreements, the sole and exclusive remedies of the Parties under this Agreement and the State Incentive Agreements shall be as set forth in this Section 8.02.

(e) In no circumstance shall the amount of the reimbursement payable exceed the amount of the Performance-Based Grant received by Company pursuant to Section 3.05 herein.

(f) None of the Parties shall have the right to recover any consequential, punitive, special, indirect, lost profits, loss of use, business and reputational harm, or other damages as a result a Default by the other Party.

(g) No delay or omission in any of the Parties' exercise of any right or remedy accruing to such Party arising from a Default of this Agreement shall impair such Party's rights or remedies provided herein. The waiver of any condition or breach of any term, covenant or condition herein shall be deemed a waiver of any other condition or any subsequent breach of the same or any other term, covenant or condition herein.

8.03 Force Majeure.

(a) Upon occurrence of an event of Force Majeure, either Party shall have the right, but not the obligation, to declare a Force Majeure period to the extent such event materially affects such Party's ability to perform under this Agreement or any of the State Incentive Agreements by giving written notice of such event and declaration to the other Party.

(b) The Force Majeure period shall continue from the date of such written notice until the effects of such Force Majeure are removed, remedied, repaired or otherwise no longer prevent performance of the Party's obligations hereunder. During the Force Majeure period, the obligations of Parties under this Agreement shall be suspended, except any obligation of the Company to pay reimbursement, arising prior to the event of Force Majeure.

(c) The Parties shall use commercially reasonable efforts to mitigate the effects of a Force Majeure.

8.04 Extensions; Acceleration.

(a) Company Extension Right. Notwithstanding anything to the contrary contained in this Agreement, upon written notice to the State and LED, the Company shall have the right to extend the deadlines for Project Completion, as well as the resulting Project Year commitments for Capital Investment, Required Jobs and Required Annual Payroll, all as specified in Exhibit B, for a period not to exceed twenty-four (24) months.

(b) Extension For Delay. Without limiting the right of the Company and/or Project Affiliates set forth in subsection (a) above, upon the occurrence of any Significant Price Escalation, Environmental Delay, or other Governmental Delay from and after the Effective Date, the Company shall have the right, upon written notice to the State and LED to extend the deadlines for Project Completion as well as the resulting Project Year commitments for Capital Investment, Required Jobs and Required Annual Payroll, all as specified in Exhibit B, for the duration of the specified and documented Significant Price Escalation, Environmental Delay, or other Governmental Delay. Upon the occurrence of any Workforce Shortage occurring from and after Project Completion, the Company shall have the right, upon written notice to the State and LED to extend the deadlines for compliance with the Capital Investment, Required Jobs and Required Annual Payroll for the duration of the Workforce Shortage.

(c) Company Acceleration Right. Notwithstanding anything to the contrary contained in this Agreement, to the extent that the Company achieves Project Completion prior to March 31, 2030, upon written notice to the State and LED, the Company shall have the right, in its sole and absolute discretion, to accelerate (i) the Project Year commitments for Capital Investment and/or (ii) the Project Year commitments for Required Jobs and Required Annual Payroll, all as specified in Exhibit B. By way of example, if the Company achieves Project Completion in March 2029, the Company may elect to accelerate the Project Year commitments for Required Jobs and Required Annual Payroll to commence in Project Year 6 (2030), as opposed to commencing in Project Year 7 (2031).

8.05 Termination. Upon any of the following events, the Company shall have the right to terminate this Agreement in its entirety, without penalty or liability to the State or LED: (a) any failure obtain required Regulatory Approvals due to Governmental Delay or denial of a substantially complete application by the Company and/or Project Affiliates that accurately reflects the scope of the Project; (b) any Change of Law extends beyond twenty-four (24) months; (c) any Force Majeure event extends beyond twenty-four (24) months; and (d) any Condemnation shall occur with respect to all or any material part of the Site or the Project, or any adjacent property or street shall be taken by power of eminent domain or condemned by any Governmental Authority for any public or quasi-public use or purpose, or reconfigured or vacated by any Governmental Authority, that in either case shall result in the Company and Project Affiliates no longer being able to conduct the Business in any material respect (and the award or payment in connection with any Condemnation shall be allocated appropriately between, on the one hand, to the State and/or LED for the value attributable to the land, and on the other hand, to company for the value of the Plant).

ARTICLE IX
MISCELLANEOUS

9.01 No Personal Liability. No covenant or agreement contained in this Agreement shall be deemed to be the covenant or agreement of any official, officer, director, agent or employee of any Party hereto (hereafter, "Representative") in his/her individual capacity. No Representative, including any person executing this Agreement, shall be personally liable with respect to this Agreement or by reason of execution and delivery of this Agreement.

9.02 Indemnification.

(a) The Company shall protect, defend, indemnify, save, and hold harmless the State and LED, and all State departments, agencies, boards and commissions, its officers, employees, contractors, and agents, including volunteers (collectively, "State Indemnified Parties"), from and against any and all claims, demands, losses, liabilities (including direct or vicarious liabilities), damages, liens, obligations, interest, injuries, penalties, fines, lawsuits and other proceedings, judgments and awards and costs and expenses, (including reasonable Attorneys' Fees and Costs and consultants' fees and costs) of whatever kind or nature, known or unknown, contingent or otherwise (collectively, "Losses") imposed upon, incurred by, or asserted against any such State Indemnified Party arising out of any negligent act or omission (to the extent there is a duty to act) of the Company or an Affiliate, or any of their respective officers, directors, members, employees, contractors, agents, or invitees relating to this Agreement; provided, however, the foregoing indemnity obligation shall not apply to any Loss arising out of the negligent or wrongful acts of any of the State Indemnified Parties; further, provided, however, the term "Losses" shall not include or double-count the amount of any remedy or recovery provided under any of the State Incentive Agreement, which such remedies under such State Incentive Agreements shall be the sole and exclusive remedies of any of the Parties with respect to the matters therein.

(b) The State and LED, jointly and severally, shall protect, defend, indemnify, save, and hold harmless the Company each Project Affiliates and their respective direct and indirect owners, and their respective agents, officers, directors, trustees, advisors, managers, members,

agents, owners, employees and counsel (collectively, "Company Indemnified Parties"), from and against any and all Losses imposed upon, incurred by, or asserted against any such Company Indemnified Party arising out of any negligent act or omission (to the extent there is a duty to act) of any State Indemnified Party relating to this Agreement; provided, however, the foregoing indemnity obligation shall not apply to any Loss arising out of the negligent or wrongful acts of any of the Company Indemnified Parties.

(c) The provisions of this Section 9.02 shall survive the expiration or earlier termination of this Agreement for a period of one (1) year.

9.03 Tax Liability. The Company hereby agrees that the responsibility for the payment of any taxes which may be due from any State Incentives received under or in connection with this Agreement shall be the Company's obligation, identified under the Company's (or its domestic Project Affiliate successor in interest's), Federal Tax Identification Number, which has been, or will be, provided to LED.

9.04 Choice of Law. This Agreement shall be construed in accordance with and governed by the laws of the State of Louisiana.

9.05 Jurisdiction and Venue. The 19th Judicial District Court in the Parish of East Baton Rouge, State of Louisiana, shall be deemed to be the exclusive court of jurisdiction and venue for any litigation, special proceeding, or other proceeding between the Parties that may be brought, or arise out of, in connection with, or by reason of this Agreement; and the Parties submit themselves to the jurisdiction of said court in the event of any legal proceedings in connection with this Agreement.

9.06 Entire Agreement. This Agreement, together with any exhibits and/or attachments specifically incorporated herein by reference, the State Incentive Agreements, the Parish Cooperative Endeavor Agreement, and any other agreements or instruments expressly contemplated by this Agreement to be entered into by the Parties, constitute the entire understanding and agreement between the Parties with respect to the subject matter of this Agreement, and there are no representations, warranties, covenants or undertakings other than those expressly set forth herein. Any prior Letter of Intent or other term sheets or any documents, conversations or circumstances that may be claimed to be or otherwise deemed to be agreements between the Parties relating to the Project are superseded by this Agreement and shall cease to be in effect upon the Effective Date. Notwithstanding anything herein to the contrary, to the extent that any of the State Incentive Agreements provided for in Article III hereof, conflict with the provisions of this Agreement, the State Incentive Agreements shall control.

9.07 Notices. Any notice required or permitted to be given under or in connection with this Agreement shall be in writing and shall be delivered by one of the following means:

(a) hand-delivered by courier, with signed receipt;

(b) mailed through the United States Postal Service, postage prepaid, first-class, with return receipt requested;

(c) delivered by private, commercial carrier, such as Federal Express, with signature for delivery; or

(d) sent by attachment to electronic mail or other similar form of rapid transmission confirmed by written notice sent (by one of the first three methods described above) at substantially the same time as such transmission.

All such communications shall be delivered to the designated representative (or his or her successor) at the address set forth below, or to such other person and address as may be subsequently designated by such Party in written notice to the other Parties in accordance with this Agreement. Further, notwithstanding anything to the contrary, email notice delivered to the Company will be treated as given on receipt, as verified by written receipt.

To the State:

Taylor F. Barras, Commissioner of Administration
Division of Administration
P.O. Box 94095, Baton Rouge, LA 70804-9095 (USPS mail)
Claiborne Building, 7th Floor, 1201 North 3rd Street; Baton Rouge, LA 70802 (Delivery)
Telephone: (225) 342-7000

To LED:

Anne G. Villa, Deputy Secretary
Louisiana Economic Development
P. O. Box 94185; Baton Rouge, LA 70804-9185 (USPS mail)
LaSalle Building, Room 1150; 617 North 3rd Street; Baton Rouge, LA 70802 (Delivery)
Telephone: (225) 342-3000
Email: Anne.Villa@LA.GOV

To the Company:

Hyundai Steel Company
117, Bundangnaegok-ro, Bundang-gu, Seongnam-si
Gyeonggi-do, South Korea 13529
Attn: Hyo Joon Park, Senior Manager, Green Steel Planning Team
Telephone: +82-31-510-2313
Email: hyojoon14@hyundai-steel.com

And to:

Hyundai Steel Company
117, Bundangnaegok-ro, Bundang-gu, Seongnam-si
Gyeonggi-do, South Korea 13529
Attn: Seokho Lee, Legal Team, Senior Counsel
Telephone: +82-31-510-3037
Email: shl@hyundai-steel.com

With a copy to:

Pillsbury Winthrop Shaw Pittman LLP
1200 Seventeenth Street NW
Washington, DC 20036
Attn: Sungbum Lee
Telephone: (202) 663-9228
Email: sungbum.lee@pillsburylaw.com

and to:

Pillsbury Winthrop Shaw Pittman LLP
1200 Seventeenth Street NW
Washington, DC 20036
Attn: Aimee P. Ghosh
Telephone: (202) 663-8091
Email: aimee.ghosh@pillsburylaw.com

9.08 Non-assignability. The Company shall not assign any interest in this Agreement by assignment, transfer, or novation, without prior written consent of the State. This provision shall not be construed to prohibit the Company from assigning its bank, trust company, or other financial institution any money due or to become due from approved contracts without such prior written consent. Notwithstanding the foregoing prohibition on assignment, the Company shall have the right to assign this Agreement, in whole or in part, to a Project Affiliate without consent of the State or LED but upon prior written notice to the State and LED; the State and LED acknowledge that the Company intends to form one or more corporate entities in the United States and assign this Agreement to an Affiliate subsidiary, to be determined and formed by the Company. Notice of any such assignment or transfer shall be furnished forthwith to the State and the Office of Contractual Review.

9.09 [Intentionally Omitted].

9.10 Term of Agreement. This Agreement shall begin on the Effective Date and shall terminate on the earlier of either: (a) the date on which all of the Parties' reporting, monitoring, examination and audit requirement set forth herein with respect to the 2050 Project Year expires, (b) the date this Agreement is terminated early pursuant in accordance with its terms, or (c) the date this Agreement is otherwise terminated by written agreement of all Parties.

9.11 Discrimination Clause. The Company agrees to abide by the requirements of the following as applicable: Title VI and VII of the Civil Rights Act of 1964, as amended by the Equal Opportunity Act of 1972, Federal Executive Order 11246, the Federal Rehabilitation Act of 1973, as amended, the Vietnam Era Veteran's Readjustment Assistance Act of 1974, Title IX of the Education Amendments of 1972, the Age Act of 1975, and contractor agrees to abide by the requirements of the Americans with Disabilities Act of 1990. The Company agrees not to discriminate in its employment practices and will render services under this contract without regard

to race, color, religion, sex, national origin, veteran status, political affiliation, disabilities. Upon the entry of any final, non-appealable judgement determining that the Company and/or any Project Affiliate engaged in systemic and widespread discrimination (as opposed to one or more isolated instances pertaining to an employment dispute) in violation of the foregoing statutes, the State or LED may terminate this Agreement.

9.12 Captions. The captions or headings in this Agreement are for convenience only and do not define or limit the scope or extent of this Agreement.

9.13 Severability. To the fullest extent possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but if any provisions of this Agreement shall be prohibited or invalid under such law, such provision shall be ineffective to the extent of such prohibition or invalidity without invalidating the remainder of such provision or any remaining provisions of this Agreement; and to this end the terms and conditions of this Agreement are declared severable.

9.14 Ambiguous Terms. Any rule of construction of contracts that provides that ambiguous terms are construed against the drafter of the agreement are not applicable to this Agreement or any amendment to this Agreement.

9.15 Counterpart. This Agreement may be executed in several counterparts, each of which shall be deemed an original, and all of which when taken together shall be deemed one and the same Agreement.

9.16 Prohibition of Discriminatory Boycotts of Israel. In accordance with La. R.S. 39:1602.1, for any contract for $100,000 USD or more and for any contractor with five or more employees, the Company, or any subcontractor, shall certify it is not engaging in a boycott of Israel, and shall, for the duration of this Agreement, refrain from a boycott of Israel.

9.17 Prohibition of Companies that Discriminate Against Firearm and Ammunition Industries. In accordance with La. R.S. 38:2216.1, the following applies to any competitive sealed bids, competitive sealed proposals, or contract(s) with a value of $100,000 USD or more involving a for-profit company with at least fifty full-time employees:

(a) Unless otherwise exempted by law, by submitting a response to this solicitation or entering into this contract, the Bidder, Proposer or Contractor certifies the following:

(i) The company does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association based solely on the entity's or association's status as a firearm entity or firearm trade association; and

(ii) The company will not discriminate against a firearm entity or firearm trade association during the term of the contract based solely on the entity's or association's status as a firearm entity or firearm trade association.

9.18 Approval and Amendment. This Agreement is not effective until approved by the Commissioner, and the Commissioner's signature to this Agreement below shall constitute his irrevocable approval hereof. This Agreement may be amended only upon the written consent and approval of all Parties, and the approval of the Commissioner.

9.19 Electronic Transaction; Electronic Signatures. In accordance with La. R.S. 9:2605 B(1) and (2), the Parties each agree that this transaction, as well as any amendments to this Agreement, may be conducted by electronic means; and electronic signatures of the Parties to this Agreement and any amendments hereto shall be acceptable and satisfactory for all legal purposes; as authorized by the **"Louisiana Uniform Electronic Transactions Act"**, La. R.S. 9:2601 through 9:2621.

9.20 Public Announcements. Subject to all Applicable Laws, the Parties shall coordinate to ensure that any public announcement, press release or similar publicity with respect to the State Commitments or the Company Commitments described herein will be issued, if at all, at such time and in such manner as the Parties shall mutually determine in their respective reasonable discretion.

9.21 Legal Representation of the Parties. This Agreement was negotiated by the Parties with the benefit of legal representation, and any rule of construction or interpretation otherwise requiring this Agreement to be construed or interpreted against any signatory hereto shall not apply to any construction or interpretation hereof.

[The remainder of this page intentionally left blank; signatures pages to follow]

THIS AGREEMENT has been signed by the undersigned duly authorized representative of the Company, for the uses, purposes, benefits and considerations herein expressed, on the date shown below, but to be effective as of the Effective Date, after a due reading of the whole document.

HYUNDAI STEEL COMPANY

By:_____

Gang Hyun Seo
Print Name

President & CEO
Title

May 9, 2025
Date

[Signature page to Cooperative Endeavor Agreement]

THIS AGREEMENT has been signed by the undersigned duly authorized representative of the Louisiana Economic Development, for the uses, purposes, benefits and considerations herein expressed, on the date shown below, but to be effective as of the Effective Date, after a due reading of the whole document.

LOUISIANA ECONOMIC DEVELOPMENT

By: _____
Susan B. Bourgeois
Secretary

May 9, 2025
Date

By: _____
Anne G. Villa
Deputy Secretary

May 9, 2025
Date

ACKNOWLEDGED BY:
LED CONTRACT MONITOR:

By: _____

Jacob A. Ellis
Print Name

Director of Business Development
Title

May 9, 2025
Date

[Signature page to Cooperative Endeavor Agreement]

4922-9765-7885.v20

THIS AGREEMENT has been signed by the undersigned duly authorized representative of the State of Louisiana, for the uses, purposes, benefits and considerations herein expressed, on the date shown below, but to be effective as of the Effective Date, after a due reading of the whole document.

STATE OF LOUISIANA

BY: _____
Taylor F. Barras
Commissioner of Administration

DATE: 5/9/25

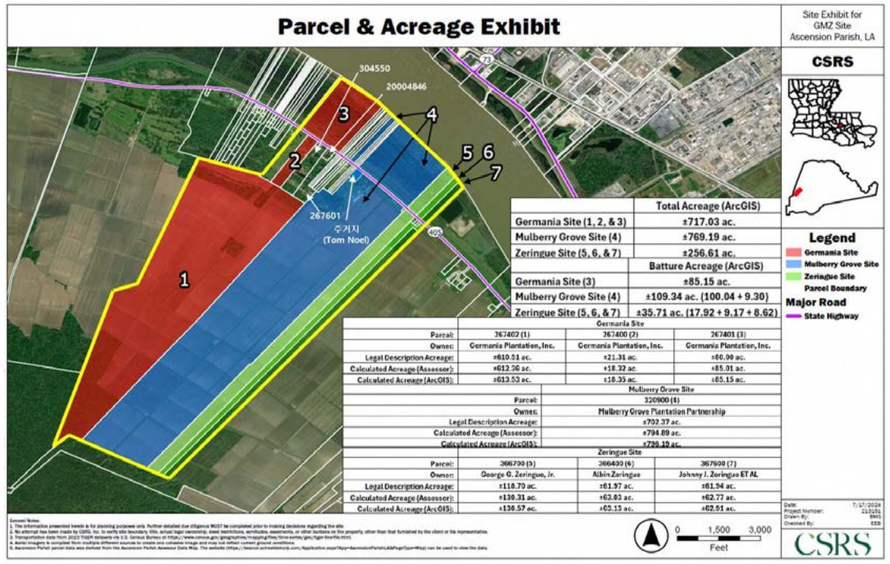
[Signature page to Cooperative Endeavor Agreement]

4922-9765-7885.v20

EXHIBIT A

DEPICTION OF GMZ PARCELS

Project Site: Yellow Boundary



List of GMZ and Additional Parcels

Site	Owner	Parcel #	Acreage (Calculated Acreage, Assessor)
Germania	Germania Plantation Inc.	267402	612.36
	Germania Plantation Inc.	267400	18.32
	Germania Plantation Inc.	267401	85.01
	Hayward, William C III	304550	20.34
	Hayward, William C III	20004846	2.28
	Hayward, William C III	267601	14.98
	Hayward, William C III	267500	18.5
	Total		**771.79**
Mulberry	Mulberry Grove Plantation Partnership	320900	794.89
	Noel, Allen T	20014013	2.32
	Total		**797.21**
Zeringue	Zeringue, George G JR	366700	130.31
	Millet Antoinette Z	312800	0.25
	Zeringue, Johnny J (12.5%) ET AL	367600	62.77
	Zeringue, Albin	366400	63.03
	Morris Faye Z	320700	0.35
	Morris William H (50%), Jeffrey Zeringue (50%)	366800	0.38
	Zeringue Jeffrey J	366770	0.61
	Total		**257.7**
GMZ Total			**1,827**
Site	**Owner**	**Parcel #**	**Acre** (Calculated Acreage, Assessor)
Additional Parcels	Bajon, Charlton A JR (72%) **ET AL**	256000	1.09
	Brooks, John	259304	4.04
	Skinner, Daniel L	20004896	0.43
	Skinner, Estelle	285100	5.35
	Skinner, Estelle	277703	3.46
	Skinner, Estelle	20000002	7.6
	Landry, Gene J	296000	6.25
	Landry, Gene J (50%), Landry, Kate O (50%)	295200	6.6
	Troxclair Paul V JR	292000	0.37
	Too Tall LLC	20019708	4.85
	Ayo, Karen M	305200	4.78
	Jackson Varnel	275600	4.53
	Jackson Bessie D (50%) **ET AL**	273600	4.03
	Total		**53.38**
Total (GMZ + Additional Parcels)			**1,880**

EXHIBIT B

PERFORMANCE-BASED GRANT REQUIREMENTS

(I) Capital Investment Requirements

(a) Date by which Minimum Capital Investment shall be made	(b) Minimum Capital Investment Amount Target (USD)	(c) Cumulative Capital Investment Amount Target (USD)
Year 1 (through December 31, 2025)	$13,969,000	$13,969,000
Year 2 (through December 31, 2026)	$1,172,995,500	$1,186,964,500
Year 3 (through December 31, 2027)	$2,475,674,500	$3,662,639,000
Year 4 (through December 31, 2028)	$1,877,451,500	$5,540,090,500
First Quarter, Year 6 (through March 31, 2030)	$284,216,000	$5,824,306,500

Note: The Minimum Capital Investment Amount Target and the Cumulative Capital Investment Amount Target for Project Years 2025 through 2030 are subject to Section 4.02 of this Agreement.

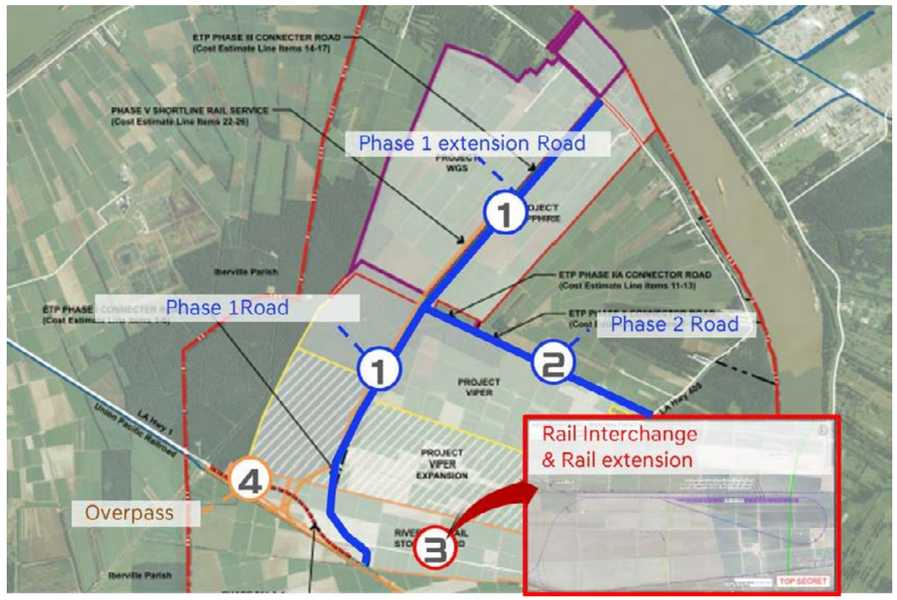
(II) Minimum Jobs Requirements and Payroll Requirements

The minimum Required Jobs and Payroll Requirements of the Company and/or Project Affiliates shall be measured and calculated for the period January 1 through December 31 of each "Project Year" set forth below:

(a) Project Year	(b) Minimum Required Jobs Target (Full-Time Employees)	(c) Minimum Required Annual Payroll (USD in millions)
Year 7 (2031)	1,452	$138.6
Year 8 (2032)	1,452	$141.3
Year 9 (2033)	1,452	$144.2
Year 10 (2034)	1,452	$147.0
Year 11 (2035)	1,452	$150.0
Year 12 (2036)	1,452	$153.0
Year 13 (2037)	1,452	$156.0
Year 14 (2038)	1,452	$159.2
Year 15 (2039)	1,452	$162.4
Year 16 (2040)	1,452	$165.6
Year 17 (2041)	1,452	$168.9
Year 18 (2042)	1,452	$172.3
Year 19 (2043)	1,452	$175.7
Year 20 (2044)	1,452	$179.2
Year 21 (2045)	1,452	$182.8
Year 22 (2046)	1,452	$186.5
Year 23 (2047)	1,452	$190.2
Year 24 (2048)	1,452	$194.0
Year 25 (2049)	1,452	$197.9
Year 26 (2050)	1,452	$201.9

EXHIBIT C

DEPICTION OF RAIL EXTENSION, STATE ROAD INFRASTRUCTURE IMPROVEMENTS, AND LOCAL INFRASTRUCTURE IMPROVEMENTS



Rail Extension (further detail):

① Road (Phase 1)+ (Phase 1 Extension)	Connected Road: 1) Phase 1 road: providing access from LA 1 to the boundary of the Site 2) Phase I road extension: to Louisiana Highway 405
② Road (Phase 2)	Connected Road between LA 405 Road and Phase 1 Road
③ Rail	Requirement Rail Track: Includes rail track installation and all associated work such as surveying, engineering, and related activities. 1) Rail lead track from main line to UP WYE 2) Operating Lead Rail Extension track from UP WYE to border of WGS Site 3) Interchange Loop track for loop style and lead track from UP WYE to rail interchange 4) Rail track for rail yard inner rail interchange
④ Overpass	Constructing the overpass needed to connect the railway to the RiverPlex railway
⑤ Portable Water	Location: Mulberry Site Water Quality: As per OSHA code Water Quantity: Serve 94,000-156,000 gallon/day (for construction)

EXHIBIT D

PROJECT BUDGET SUMMARY

Activity	Amount and Source of Funds (in $$mm)				
	Company	Performance-Based Grant	Land Acquisition Commitment	Other Sources	Total by Activity
Land Acquisition	-	-	100	-	100
Building Construction	2,867	40	-	-	2,827
Capital Equipment	2,649	-	-	-	2,649
Other Buildings	-	-	-	-	-
Land/Site Improvements	162	40	-	-	122
Infrastructure, access roads, site improvements, utilities, water upgrades, etc. –	146	20	-	-	126
	5,824	100	100	-	Total: 5,824

Note: This Project Budget is a high-level estimate of anticipated costs associated with the design, engineering, development, and construction of the Project through Project Completion. The estimates are based on information available as of the Effective Date and are subject to change due to market conditions, evolving project requirements, and other relevant factors. This Project Budget does not constitute a firm commitment by the Company or any Project Affiliate to make any particular expenditure or to complete any particular Project Activity at any specific cost.

EXHIBIT E

PROGRESS REPORT FORM

PROGRESS REPORT

[Company]

Cooperative Endeavor Agreement:

SRM#_____;

Effective Date [date of execution]

Progress Report for: _____ (applicable time period)

On behalf of the above named company, the undersigned authorized representative certifies that to the best of his knowledge, after making reasonable inquiry, the following information is true and correct:

1. What progress has been made on the Facility during this period? _____.

2. Percentage of the Facility completed to date: _____

3. Is the Facility on schedule for completion? _____. If not, provide explanation. _____.

4. Estimated Facility completion date: March 31, 2030.

5. Allowable Expenditures for the Facility as of _____: _____

6. Please provide any other related information (any concerns, problems, milestones or additional achievements):

_____
_____
_____

[Company]

By: _____

(Signature)

_____

(Printed Name)

Title: _____

Date: _____

EXHIBIT F

CERTIFICATION OF COMPLIANCE FORM

CERTIFICATION OF COMPLIANCE
Project Year _____
(1/1/__ – 12/31/__)

[Company]

Cooperative Endeavor Agreement:
SRM#_____;
Effective Date [date of execution]

On behalf of the above named company, for the purpose of verifying compliance with the requirements of the above referenced Cooperative Endeavor Agreement, the undersigned representative certifies that to the best of his knowledge, after making reasonable inquiry, the following information is true and correct for the above referenced Project Year:

1. Operation of the Facility: ☐ has not commenced;
   ☐ commenced *(date)* and continues to date.

2. Required Jobs: _____ *(attach report)*

3. Required Annual Payroll: _____ *(attach report)*.

4. Capital Investment by the company as of: Current Project Year: _____.
   Life of Project (cumulative): .

[Company]

By: _____
(Signature)

_____
(Printed Name)

Title: _____

Date: _____

EXHIBIT G

CAPITAL INVESTMENT COST REPORT

[Company]

Cooperative Endeavor Agreement:
SRM#_____;
Effective Date [to be filled in]

Cost Report for: _____ (applicable time period)

On behalf of the above named company, the undersigned authorized representative certifies that to the best of his knowledge, after making reasonable inquiry, the costs shown below are true and correct, have been incurred, and reimbursement is now due, in accordance with the terms of the above referenced Cooperative Endeavor Agreement and applicable law:

Cost Category	Grant Amount	Reimbursement to Date	Requested Reimbursement	Remaining Balance
Totals:				

[Company]

By: _____
(Signature)

_____
(Printed Name)

Title: _____

Date: _____

Attached supporting documentation:

- *invoices, checks or other appropriate records reflecting expenses incurred;*
- *architect's certification of project milestones;*
- *spreadsheet showing invoice date, vendor/contractor name, dollar amount, and a brief description of items or services purchased.*

EXHIBIT H

PERFORMANCE-BASED GRANT REIMBURSEMENT SCHEDULE

(a) **Project Year**	**(b)** **Reimbursement Amount ($)**
2031	(20,000,000)
2032	(31,666,667)
2033	(30,000,000)
2034	(28,333,333)
2035	(26,666,667)
2036	(25,000,000)
2037	(23,333,333)
2038	(21,666,667)
2039	(20,000,000)
2040	(18,333,333)
2041	(16,666,667)
2042	(15,000,000)
2043	(13,333,333)
2044	(11,666,667)
2045	(10,000,000)
2046	(8,333,333)
2047	(6,666,667)
2048	(5,000,000)
2049	(3,333,333)
2050	(1,666,667)

Contract Publication Series 15-443

A NEGATIVE FINDINGS CULTURAL RESOURCE SURVEY OF A 93 ACRE TRACT AT THE SHREVEPORT REGIONAL AIRPORT IN CADDO PARISH, LOUISIANA

by
Jason A. Kennedy, MA, RPA

Prepared for

Shreveport Airport Authority

Prepared by

cra
cultural resource analysts, inc

Kentucky | West Virginia | Ohio
Wyoming | Illinois | Indiana | Louisiana | Tennessee
Utah | Virginia | Colorado

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By

Jason A. Kennedy, MA, RPA

Prepared for:

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CRA Project No.: L15C003

Paul D. Bundy
Principal Investigator

November 18, 2015

ABSTRACT

Cultural Resource Analysts, Inc., personnel completed a records review and cultural resource survey of a 37.6 ha (93.0 acre) parcel at Shreveport Regional Airport in Caddo Parish, Louisiana. This work was conducted at the request of the City of Shreveport to comply with the National Historic Preservation Act and obtain cultural resource clearance for state site certification of the project area. The records review for the project was conducted on November 6, 2015, and the fieldwork was conducted on November 9 and 10, 2015. The project parcel is located on the east side of Shreveport Regional Airport, approximately 10.7 km (6.7 mi) southwest of downtown Shreveport, Louisiana, and 14.8 km (9.2 mi) east of the town of Greenwood, Louisiana.

The purpose of this work was to locate, describe, and evaluate any archaeological materials or historic structures in the project area and provide recommendations for future management of cultural resources. This report includes a summary of all previous archaeological work conducted in the project area and includes a summary of archaeological and historic information that has been documented for each cultural resource.

The records review consisted of a search of online files maintained by the Louisiana Office of Cultural Development, Division of Archaeology, an examination of historic maps, and a review of historic structures listed in the Louisiana Historic Resources Inventory to identify any cultural resources or cultural resource investigations previously documented in the area. The records review indicated that six previous cultural resource investigations and two archaeological sites (16CD88–16CD89) had been documented within a 1.6 km (1.0 mi) radius of the project area. No standing structures were recorded within or directly adjacent to the project area. One of the previous surveys included the current project area, but that work was not conducted in accordance with the current Louisiana Office of Cultural Development, Division of Archaeology guidelines and as a result the area was re-surveyed.

The field investigation consisted of an intensive pedestrian survey supplemented with screened shovel tests excavated in areas where excavation was physically possible. Shovel tests were dug at 50 m (164 ft) intervals. The entire project area was also visually inspected for cultural material during the shovel test survey. A total of 157 shovel tests were excavated on 12 transects. All shovel tests were negative for cultural material. No structures, structural remains, or other features older than 50 years were encountered within the project area during fieldwork.

Based on the findings of the records review and cultural resource survey, no archaeological sites or historic properties listed in, or recommended eligible for listing in, the National Register of Historic Places will be affected by construction activities. The area is considered cleared from a cultural resources perspective, and no additional management action is recommended.

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I. INTRODUCTION

During the period extending from November 6 to 10, 2015, Cultural Resources Analysts, Inc. (CRA), personnel completed a cultural resource file search and phase I archaeological survey of a property at Shreveport Regional Airport in Caddo Parish, Louisiana (Figure 1). The project area consisted of a single tract measuring approximately 37.6 ha (93.0 acres) in area and was located on the west side of Shreveport Regional Airport to the southwest of downtown Shreveport, Louisiana (Figure 2). This survey was conducted at the request of the City of Shreveport. The cultural resource file search, utilizing online files maintained by the Louisiana Office of Cultural Development Division of Archaeology/State Historic Preservation Office (SHPO), was conducted on November 6, 2015, and the fieldwork for the project was conducted on November 9 and 10, 2015.

Purpose of Study

The purpose of this cultural resource survey was to locate, describe, evaluate, and to make appropriate recommendations for the future treatment of any historic or prehistoric archaeological properties that may be affected by the development of the project area. All associated field notes, records, and site photographs will be curated at the Louisiana Office of Cultural Development, Division of Archaeology.

Figure 1. Map showing the location of Caddo Parish in the state of Louisiana.

All work associated with this investigation was conducted pursuant to standards set forth by the Louisiana Office of Cultural Development, Division of Archaeology (SHPO), to comply with the National Historic Preservation Act (NHPA) of 1966, as amended (36 CFR 800). *Louisiana's Comprehensive Archaeological Plan* (LCAP) was referred to for guidance during this investigation (Smith et al. 1983).

Project Description

The project area is located on the east side of Shreveport Regional Airport, southwest of downtown Shreveport and east of the town of Greenwood, in central Caddo Parish, Louisiana (Figure 2). The parcel is bound on the northeast by an aircraft taxi strip and an arbitrary boundary; on the northwest by an arbitrary boundary; on the southwest by an arbitrary boundary adjacent to Challenger Drive; and on the southeast by an arbitrary boundary. Measuring roughly 37.6 ha (93.0 acres) in area, the project area occupies portions of Sections 20 and 21 of Township 17N, Range 14W. The survey parcel was suitable for shovel testing and is covered with grasses and isolated trees.

Summary of Findings

A records review using data available from the SHPO was conducted to identify any cultural resources or cultural resource investigations previously documented in the area. The review consisted of a search of online files maintained by the Louisiana Office of Cultural Development, Division of Archaeology, an examination of historic maps, and a review of historic structures listed in the Louisiana Historic Resources Inventory. The records review indicated that six previous cultural resource investigations and two previously recorded archaeological sites (16CD88–16CD89) had been documented within a 1.6 km (1.0 mi) radius of the project area. One of the previous surveys included the current project area, but that work was not conducted in accordance with the current SHPO guidelines and as a result the area was re-surveyed. In addition, the review of historic maps indicated that no structures had previously been depicted within the project area on historic United States Geological Survey (USGS) topographic quadrangles.

The field investigation consisted of a pedestrian survey of the entire project area along with the excavation of shovel tests. Shovel tests were dug on a 50 m (164 ft) grid (Figure 3). Over the course of the project, 157 shovel tests were excavated on 12 transects. All of the shovel tests were negative for cultural material. No historic structures, structural remains, or other features older than 50 years were encountered within the project area during fieldwork.

Based on the findings of the records review and cultural resource survey, no archaeological sites or historic properties listed in, or recommended eligible for listing in, the NRHP will be affected by development activities in the project area. The area is considered cleared from a cultural resources perspective, and no additional management action is recommended.

Report Organization

This report is organized into six numbered Sections. Section I provides an overview of the project and summarizes the results of the archaeological investigation. Section II is an overview of the environmental setting of the project area. The results of the records review are detailed in Section III. Section IV contains the methodological approach of the archaeological investigation. The results of the cultural resource survey are presented in Section V, and CRA's conclusions and recommendations regarding future work in the project area are presented in Section VI.

Project Personnel

Jason Kennedy served as the field director for the project and oversaw daily operations. Field crew members included Gilson Killhour. Paul Bundy served as Principal Investigator, and the report preparation was carried out by Jason Kennedy. The final report production was completed by the CRA CAD and publications departments. All documentation produced during fieldwork will be curated at the CRA office in Shreveport, Louisiana.

II. ENVIRONMENTAL SETTING

This section of the report provides a description of the modern environment and considers those aspects of the physical environment that may have influenced the location and methods for finding archaeological sites. The discussion of the modern environment specifically provides information regarding the physiography, soils, vegetation, and climate.

Physiography

The project area is located in central Caddo Parish in northwest Louisiana. Caddo Parish covers an area of 244,236 ha (603,520 acres), of which 11,422 ha (28,224 acres) are occupied by reservoirs, lakes, streams, and other waterways (Edwards et al. 1980). The project area's elevation is 72–81 m (236–265 ft) above mean sea level (AMSL), generally sloping downward from northeast to southwest.

The survey area is situated within the Tertiary Uplands of the South Central Plains "ecoregion", a term used by Daigle et al. (2006) to refer to geographic areas similar in environmental characteristics, vegetation, soils, and biotic and abiotic resources. The South Central Plains occupy portions of Louisiana, Oklahoma, east Texas, and Arkansas. The topography of the South Central Plains is typified by rolling plains interspersed with sandy low hills, bottomlands, and flat fluvial terraces. The Tertiary Uplands within this ecoregion are dissected by multiple small intermittent streams and are primarily composed of silts, sands, and clays of Eocene age, with some deposits of Paleocene sediments being found in the western portions of the unit (Daigle et al. 2006).

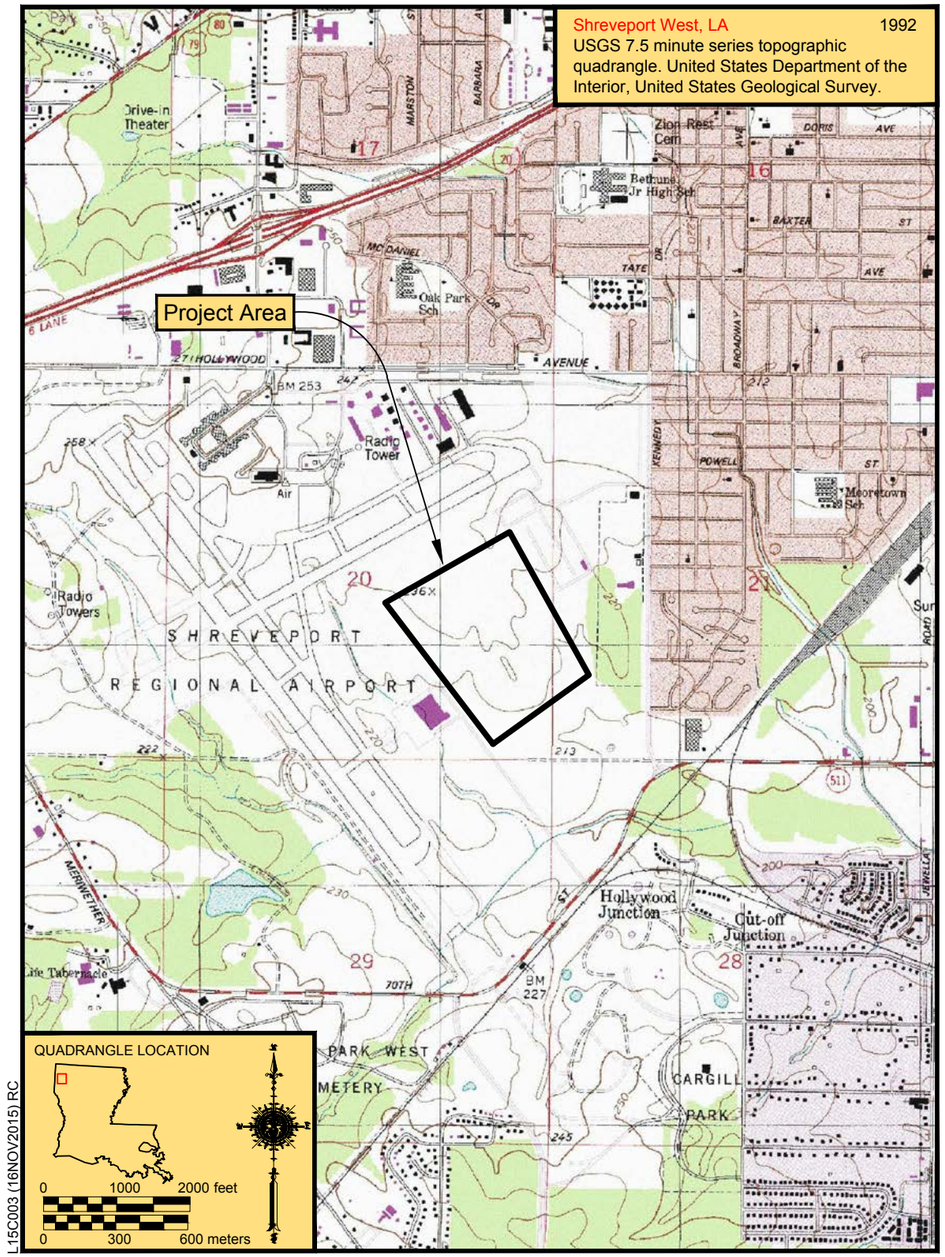

Figure 2. Topographic map showing the location of the project area.

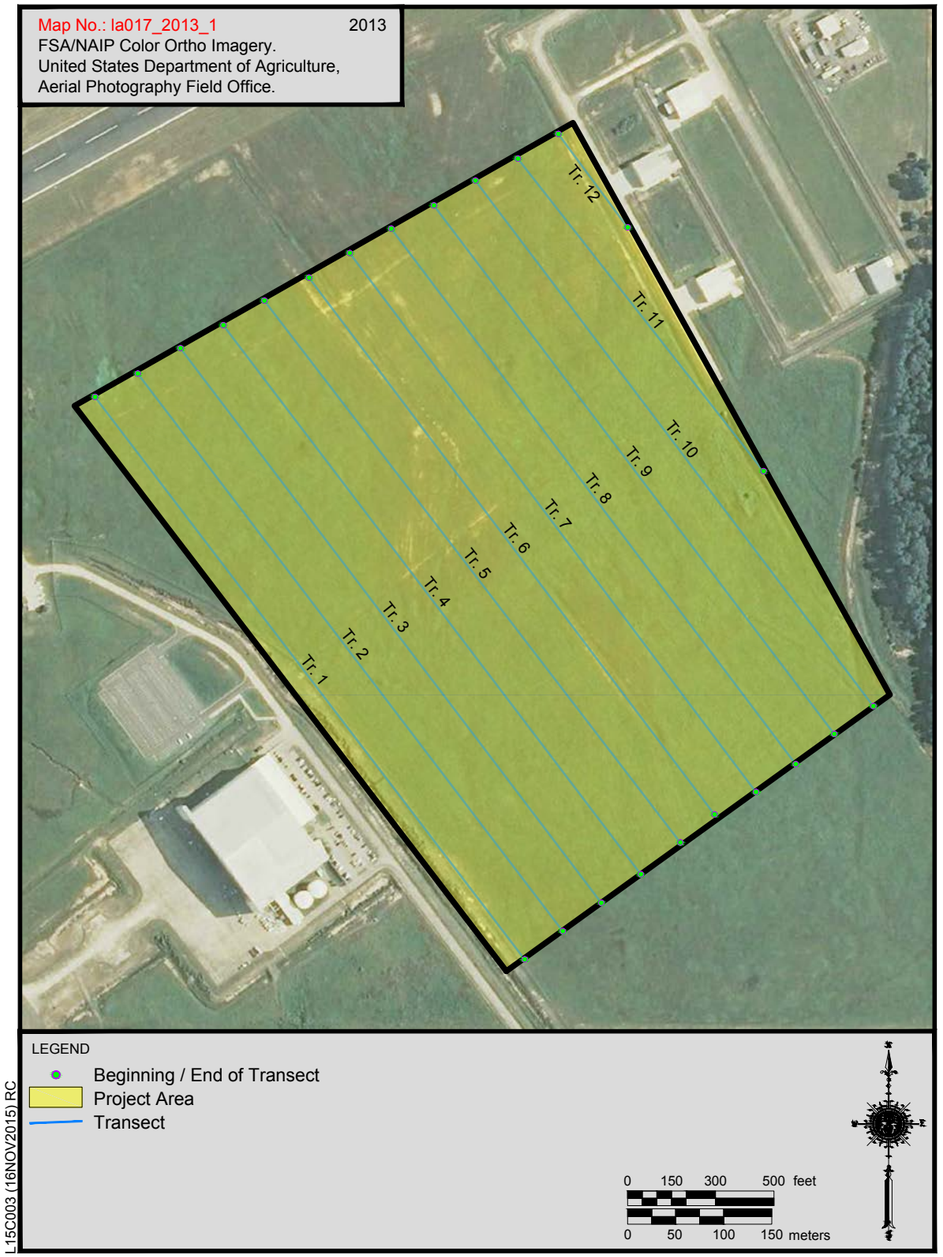

Figure 3. Aerial view showing the location of the project area, transects, Shreveport Regional Airport infrastructure, and local vegetation conditions.

Soils

According to the Soil Survey of Caddo Parish, Louisiana, and the online Web Soil Survey maintained by the United States Department of Agriculture (USDA), the project area is mapped as containing soils from two different series. The vast majority of the north and center portion of the project area contain Keithville very fine sandy loams, while a smaller portion of the survey area's southern boundary is mapped as containing a Metcalf-Timpson soil complex, which is typical of low-lying areas (Edwards et al. 1980; USDA 2015).

Keithville very fine sandy loams are the dominant soils found in the project area, present in much of the area's eastern half and a portion of its northwest quadrant. This soil is gently sloping, moderately well drained, and experiences medium surface runoff. Keithville soils typically form on ridgetops or drainage divides found in uplands. A typical Keithville pedon consists of an A1 horizon of brown (10YR 4/3) very fine sandy loam from 0 to 8 cm (0 to 3 in) below ground surface (bgs); an A2 horizon of yellowish brown (10YR 5/4) very fine sandy loam from 8 to 23 cm (3 to 9 in) bgs; and a B21t horizon of yellowish red (5YR 5/8) loam subsoil from 23 to 41 cm (9 to 16 in) bgs (Edwards et al. 1980; USDA 2015).

Metcalf silt loams are present in a complex interspersed with Timpson soils in the low-lying lands in the project area's west half. This soil is gently sloping, somewhat poorly drained, and experiences slow runoff. Metcalf soils commonly form on broad level or nearly level marine or stream terraces. A typical Metcalf pedon consists of an A1 horizon of dark grayish brown (10YR 4/2) silt loam from 0 to 8 cm (0 to 3 in) bgs; an E horizon of light yellowish brown (10YR 6/4) silt loam from 8 to 20 cm (3 to 8 in) bgs; and a Bt1 horizon of yellowish brown (10YR 5/6) loam subsoil from 20 to 41 cm (8 to 16 in) bgs (Edwards et al. 1980; USDA 2015).

Timpson silt loams are mapped as part of the same Metcalf-Timpson soil complex in the low-lying portions of the west half of the project area. This soil is nearly level, moderately well drained, and experiences slow to medium runoff. Timpson soils form in alluvial sediments on Pleistocene-age terraces. A typical Timpson pedon consists of an A horizon of dark grayish brown (10YR 4/2) silt loam from 0 to 18 cm (0 to 7 in) bgs; an E horizon of yellowish brown (10YR 5/4) very fine sandy loam from 18 to 36 cm (7 to 14 in) bgs; a BE horizon of strong brown (7.5YR 5/6) very fine sandy loam from 36 to 53 cm (14 to 21 in) bgs; and a Bt1 horizon of strong brown (7.5YR 5/8) loam subsoil from 53 to 71 cm (21 to 28 in) bgs (Edwards et al. 1980; USDA 2015).

Shovel tests excavated in the majority of the project area displayed intact profiles that generally corresponded with the soil series mapped in their respective locations. The observed disturbance in sections of the northeastern portion of the project area is likely the result of construction activities associated with Shreveport Regional Airport infrastructure.

Vegetation

The Tertiary Uplands were historically vegetated with shortleaf pine and hardwood forest. Much of the native woodland has since been lost, and undeveloped areas of the Tertiary Uplands are presently typically vegetated with commercial pine plantations or pastureland. The land is primarily utilized for timber production, with poultry production, livestock grazing, and oil and gas activities representing secondary land uses. Within Caddo Parish, typical agricultural crops in these areas include cotton and soybeans (Daigle et al. 2006; Edwards et al. 1980).

At the time of the survey, the majority of the project area was covered by open fields vegetated with tall grass. Isolated deciduous trees were present on the northeast edge of the project area (see Figure 3). Several large areas within the project area contained shallow standing water especially south of a shallow slope in the middle of the project area.

Modern Climate

Caddo Parish has a humid, subtropical climate heavily influenced by a fluctuating frontal boundary that is alternately dominated by warm and moist tropical air from the Gulf of Mexico and colder continental air from the north. Incursions of the cold continental air occur frequently during winter and spring, while the warm Gulf of Mexico air dominates during summer and autumn.

Daytime high temperatures average 34 degrees C (93 degrees F) in the summer months and 15 degrees C (59 degrees F) in the winter months. Daily low temperatures average 22 degrees C (72 degrees F) in the summer months and 4 degrees C (39 degrees F) in the winter months. Temperatures occasionally exceed 38 degrees C (100 degrees F) from June to September, and the warm summer pattern typically persists from April through October. Between October and March temperatures have been known to drop below freezing, but these periods are typically brief. Though snowfall is generally rare, snowfalls of short duration occasionally take place. The annual mean rainfall in the parish totals 114 cm (45 in), of which 56 cm (22 in) typically falls from April through September and 58 cm (23 in) falls from October through March (Edwards et al. 1980).

Description of the Project Area

The project area is a rectangular polygon on the east side of Shreveport Regional Airport, approximately 10.7 km (6.7 mi) southwest of downtown Shreveport, Louisiana, and 14.8 km (9.2 mi) east of the town of Greenwood, Louisiana. The parcel is bound on the northeast by an aircraft taxi strip and an arbitrary boundary; on the northwest by an arbitrary boundary; on the southwest by an arbitrary boundary adjacent to Challenger Drive; and on the southeast by an arbitrary boundary (see Figures 2 and 3). The polygon encompassing the project area measures approximately 740 m (2,428 ft) from north to south and 595 m (1,952 ft) from east to west at its greatest extent, and covers 37.6 ha (93.0 acres).

Located in Section 20 and 21 of Township 17N, Range 14W, the project area is depicted on the Shreveport West, Louisiana, 7.5-minute USGS topographic quadrangle (USGS 1992). Elevations in the project area vary by roughly 9 m (29 ft), from approximately 65 m (212 ft) AMSL near the southern boundary to 72 m (236 ft) AMSL at the northern boundary. The topography of the project area slopes generally downward from northeast to southwest.

At the time of the survey, the project area was covered by open fields and was suitable for shovel testing. As discussed above, vegetation in the vast majority of the project area consisted of tall grasses, with isolated deciduous trees being present on the southeast boundary. The gentle slope to the south was the most visibly prominent topographic feature within the project area. These elevated areas appeared to represent the natural contours of the land, (Figure 5). A chain-link fence separated the undeveloped portions of the project area from the surrounding areas.

Surface visibility was generally minimal throughout the shovel tested portions of the project area due to grass coverage. However, many of the elevated areas in the north had moderate to good surface visibility, though subsoil was generally present at or near the surface in these locations. With the exception of the truncated or absent upper soil horizons observed in shovel tests excavated in the northeastern portion of the project area, shovel tests excavated in the majority of the project area displayed intact profiles that generally corresponded with the soil series mapped in their respective locations. The weather during the survey was mostly sunny and provided excellent field conditions.

Figure 4. Project Area Facing North from Southern Edge. Airport facilities observed are outside project area.

Figure 5. Project Area Facing North from Transect 10 STP 9, showing two large Shreveport Regional Airport hangers just outside of the project area.

III. PREVIOUS RESEARCH AND CULTURAL OVERVIEW

On November 6, 2015, a search of online files maintained by the Louisiana Office of Cultural Development Division of Archaeology (SHPO) was conducted to: 1) determine if the project area had been previously surveyed for archaeological resources; 2) identify any previously recorded archaeological sites that were situated within the project area; 3) provide information concerning what archaeological resources could be expected within the project area; and 4) provide a context for interpreting any cultural resources identified within the project area. The examination of SHPO data consisted of a review of professional survey reports and records of archaeological sites for an area encompassing a 1.6 km (1.0 mi) radius of the project area. The review of professional survey reports and archaeological site data in the area can provide basic information on the types of archaeological resources that are likely to occur within a project area and the landforms that are most likely to contain these resources. In addition to the examination of site data, a review of available historic maps and the Louisiana Historic Resources Inventory was conducted to identify any mapped historic structures in the vicinity of the project area and aid in locating potential historic sites. The results of the records review are discussed below.

Previously Documented Cultural Resource Surveys and Archaeological Sites

The SHPO maintains an online database containing professional survey reports and archaeological site data for the entire state of Louisiana. Examination of this data indicated that six prior archaeological surveys and two archaeological sites (16CD88–16CD89) were documented within a 1.6 km (1.0 mi) radius of the project area. One of the previously recorded surveys overlapped the entire area of the current project (Figure 6). These prior archaeological surveys and sites as well as information about standing structures recorded on historic maps are described below.

Survey of Airport Park (Report #22-0008): SHPO Report 22-0008 documents the results of an archaeological survey of approximately 12 ha (30 acres) encompassing a proposed park adjacent to the Shreveport Regional Airport. The survey was conducted in 1976 by Clarence H. Webb. The project consisted of a pedestrian survey supplemented with periodic examination of exposed soils. No cultural resources were identified during this survey (Webb 1976)

Shreveport Regional Airport Survey (Report #22-0353): SHPO Report 22-0353 documents the results of an archaeological survey of approximately 688 ha (1,700 acres) encompassing Shreveport Regional Airport. The survey was conducted in November and December of 1977 by Jon L. Gibson, Steven J. Brazda, and Rain Barnes for the Shreveport Airport Authority and HTB of Louisiana, Inc. The 1977 project consisted of a pedestrian survey supplemented with periodic shovel tests. The survey tract defining the 1977 work encompassed the entire current project area, but the methodology of the fieldwork did not conform to the current SHPO standards. A total of five cultural loci were recorded during the 1977 project, three of which received trinomials and were officially designated as archaeological sites (16CD88–16CD90) Only two of these sites are within the 1.6 km (1.0 mi) radius of the project area (Gibson 1977).

Site 16CD88 consisted of two prehistoric lithic flakes found roughly 12 m (40 ft) apart. Neither of these artifacts was diagnostic, and the site was recommended not eligible for listing in the NRHP. Site 16CD89 consisted in 1977 of one partial Bassett projectile point and one lithic flake found on the surface of a ridge roughly 6 m (20 ft) apart. No subsurface artifacts were found, and the site was recommended not eligible for listing in the NRHP (Gibson 1977). Both Site 16CD88 and

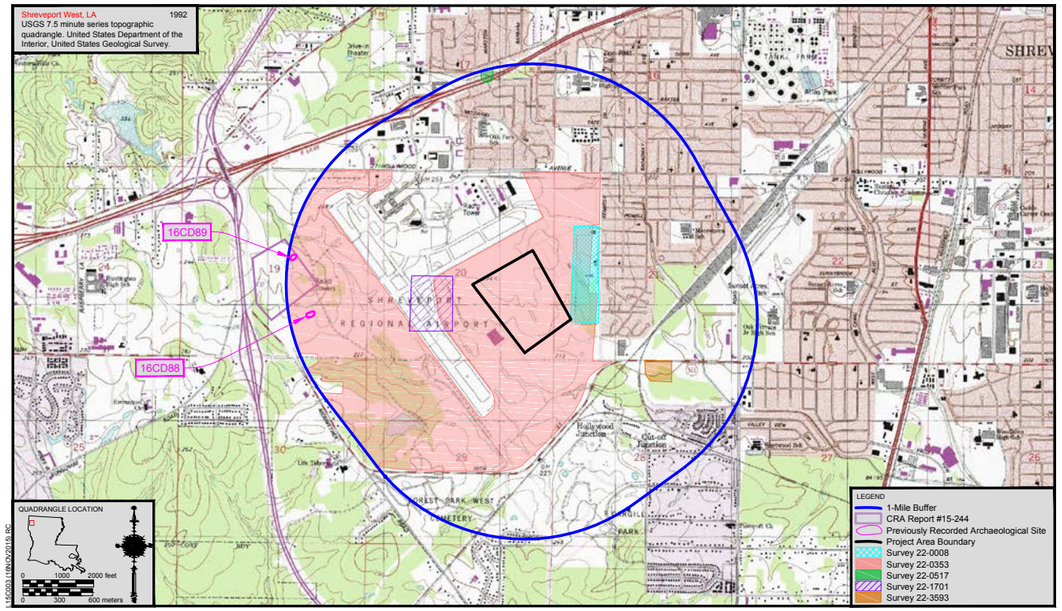

Figure 6. Topographic map showing the locations of previously recorded archaeological sites and surveys within a 1.6 km (1.0 mi) radius of the project area.

Site 16CD89 are located well outside the current survey area and will not be impacted by any development activities in the project area.

I-220 Corridor Survey (Report #22-0517): This report describes the results of a pedestrian and shovel test survey of a proposed alignment of Interstate 220 in the vicinity of Cross Lake in west Shreveport. This investigation was performed in the summer of 1977 for Howard, Needles, Tammen and Bergendoff by the Research Institute, College of Pure and Applied Sciences of Northeast Louisiana University. The 1977 project corridor measured approximately 122 m (400 ft) in width and 24 km (15 mi) in length. No cultural resources were identified during this survey, and the surveyed areas passed no closer than roughly 730 m (2,395 ft) northwest of the current project area (Price and Heartfield 1977).

Northwestern State University Regional Archaeology Program Management Unit 1 Survey (Report #22-1701): SHPO Report 22-1701 documents the results of archaeological surveys conducted by Northwestern State University during the 1991–1992 grant year under the auspices of the Regional Archaeology Program. These investigations involved the survey of multiple areas covering a combined total of approximately 162 ha (400 acres) in Management Unit 1, which encompassed 14 parishes in northwest Louisiana. A total of 42 new archaeological sites were recorded during these investigations and 6 previously recorded sites were revisited (Girard 1992). None of the surveyed areas examined during this project were located closer than approximately 630 m (2,067 ft) from the current project area, and none of the examined sites will be impacted by any development activities in the current project area.

Impact Assessment of the ETC Tiger Pipeline Expansion (Report #22-3593): SHPO Report 22-3593 documents the results of archaeological surveys conducted by TRC in 2009 for ETC Tiger Pipeline, LLC. These investigations involved the survey of multiple areas, including 33.0 km (20.5 mi) of pipeline, three existing compressor stations and seven contractor yards, in northwest Louisiana. Only one contractor yard mentioned above is within 1.6 km (1.0 mi) of the current project area. Field methods consisted of pedestrian survey supplemented by shovel testing. No structures, structural remains, or other features older than 50 years were encountered within the project area during fieldwork (Stanyard 2015).

Survey of 55 Acre Tract at Shreveport Regional Airport (Report # not yet listed): This report (CRA Report # 15-244) documents the results of an archaeological survey conducted by Cultural Resources Analysts, Inc., of a 22.3 ha (55.0 acres) parcel at Shreveport Regional Airport in Caddo Parish, Louisiana. The fieldwork was conducted on June 19 and 20, 2015. The project parcel is located on the west side of Shreveport Regional Airport. The field investigation consisted of an intensive pedestrian survey supplemented with screened shovel tests excavated in areas where excavation was physically possible. Shovel tests were dug at 30 m (98 ft) or 50 m (164 ft) intervals, depending on project conditions. No structures, structural remains, or other features older than 50 years were encountered within the project area during fieldwork (Bilgri 2015).

Historic Map and Louisiana Historic Resources Inventory Data

Following the file search, a review of available historic maps and the Louisiana Historic Resources Inventory was conducted to help identify any historic structures that may be located within the project area. The Louisiana Historic Resources Inventory is an online database maintained by the SHPO containing information on historic standing structures listed in the NRHP in the state of Louisiana. The historic maps provide information on the dynamics of the cultural landscape in response to political and social changes, as well as technological innovations associated with agricultural industries. The review of the Louisiana Historic Resources Inventory indicated that no historic standing structures listed in the NRHP were present within a 1.6

km (1.0 mi) radius of the current project area.

The following USGS maps were reviewed:

1945 Greenwood, Louisiana, 15-minute series topographic quadrangle map (USGS 1945);

1955 Greenwood, Louisiana, 15-minute series topographic quadrangle map (USGS 1955a);

1955 Shreveport West, Louisiana, 7.5-minute series topographic quadrangle map (USGS 1955b);

1959 Shreveport West, Louisiana, 7.5-minute series topographic quadrangle map (USGS 1959);

1969 Greenwood, Louisiana, 15-minute series topographic quadrangle map (USGS 1969a);

1969 Shreveport West, Louisiana, 7.5-minute series topographic quadrangle map (USGS 1969b);

1975 Shreveport West, Louisiana, 7.5-minute series orthophotoquad (USGS 1975);

1980 Shreveport West, Louisiana, 7.5-minute series topographic quadrangle map (USGS 1980); and

1992 Shreveport West, Louisiana, 7.5-minute series topographic quadrangle map (USGS 1992).

All mapped structures on these quadrangles are well outside the project area and if associated structural elements should exist, they will not be impacted by any proposed construction activities.

Survey Predictions

In recent decades, many scholars have labored to develop predictive models to aid in the management and protection of cultural resources (e.g., Anderson et al. 1988, 1999; Anderson and Smith 2003; Campbell and Weed 1986; Hillman 1980; Johnson 1984a, 1984b; Johnson et al. 1986; Phillips and Willingham 1990; Servello 1983; Thomas et al. 1982; and Willingham and Phillips 1987). The factors that tend to be most commonly associated with prehistoric settlement are a close proximity to water and level ground. Historical draws to regions would have been the same as prehistoric, although through time there would have been increasing concern for suitability of land to certain prevailing industries, such as timber production or agriculture. Considering the soils data, information gleaned from historic maps, and the previously recorded archaeological sites surrounding the project area, certain predictions are possible regarding the presence of cultural resources within the project area.

The majority of the project area is covered with gentle southwest-facing slopes, with a few relatively flat areas also being present on ridgetops and in shallow bottoms. Despite the presence of a small intermittent stream traversing the south of the project area, the survey area does not incorporate any permanent water sources, with the nearest natural perennial water source being an unnamed tributary of Brush Bayou, roughly 2.1 km (1.3 mi) southeast. Most of the project area was therefore considered to have a low probability of containing cultural material. Accordingly, the project area was shovel tested at a low probability interval of 50 m (164 ft).

IV. METHODS

Field investigation consisted of an intensive pedestrian survey supplemented with screened shovel tests. The project area was considered to have a low probability of containing cultural materials due to its distance from perennial water sources and from previously recorded archaeological sites. Therefore, the project area was shovel tested at an interval of 50 m (164 ft) (see Figure 3).

Transects were each assigned a consecutive numerical designation, and the shovel tests were numbered consecutively along each transect. Transect beginning locations were marked with flagging tape that specified the unique transect. All shovel tests measured 30-x-30 cm (12-x-12 in) and were excavated to 50 cm (20 in) bgs or until sterile subsoil was encountered. In practice, sterile subsoil or fill soil was typically encountered between 10 and 40 cm (4 and 16 in) bgs. Fill removed from the tests was screened through .64 cm (.25 in) mesh hardware cloth or was trowel-sorted in instances where the soil was extremely clayey. The sidewalls and bottoms of shovel tests were examined for cultural material and features. Along each transect the ground surface was visually inspected for artifacts. The locations of the individual transects are presented in Figure 3.

Soil profiles exposed in each excavated shovel test were recorded using standardized recording forms. Shovel test form entries included the unique designation for each transect shovel test along with shovel test status (positive or negative) and the depth, soil texture, and predominant color of each stratigraphic zone encountered (including disturbances).

Universal Transverse Mercator (UTM) coordinates were recorded with a GeoExplorer 3000 Series GeoXT handheld global positioning system (GPS) unit manufactured by Trimble to verify locations within the project area. Beginning of transect (BOT) locations were flagged and numbered for crew members. After transects were completed, the locations of each BOT and end of transect (EOT) were recorded as UTM positions using the GPS unit. The quality parameters of the GPS unit were adjusted to only collect data that would satisfy a 3 m (10 ft) level of accuracy. For all points collected, 20 incoming GPS positions were averaged. The GeoXT GPS units are capable of sub-meter accuracy after post-processing. Photographs were taken of general conditions within the project area. All photographs taken during the project were recorded on standardized photographic log sheets.

V. RESULTS

The fieldwork portion of this project consisted of a combination of pedestrian survey and shovel testing. The project area was vegetated with tall grasses at the time of the survey, with isolated deciduous trees being present on the northeast boundary. Surface visibility was generally minimal throughout the shovel tested portions of the project area due to grass coverage. However, along the northeastern portion of the project area, moderate to good surface visibility though subsoil was generally present at or near the surface in these locations.

All 157 shovel tests excavated on 12 transects in the project area were negative for cultural materials, and no surface artifacts were observed. No aboveground or subsurface features were encountered, and no soil strata that resembled cultural midden were revealed. No historic structures, structural remains, or other features older than 50 years were encountered within the project area during fieldwork.

Shovel tests excavated in the project area displayed intact profiles that generally corresponded with the soil series mapped in their respective locations. However, several tests excavated in the northeastern portion of the project area displayed significant disturbance. In general, disturbance in these areas consisted of truncated or absent upper soil horizons, often displaying subsoil at the surface. At the extreme southern edge of the project area, standing water and a high water table were evident. The observed disturbance in portions of the eastern half of the project area is likely the result of construction activities associated with Shreveport Regional Airport infrastructure.

VI. CONCLUSIONS AND RECOMMENDATIONS

Cultural Resource Analysts, Inc., personnel completed a file search on November 6, 2015, and fieldwork on November 9 and 10, 2015, for a 37.6 ha (93.0 acre) parcel at Shreveport Regional Airport in Caddo Parish, Louisiana. This work was conducted at the request of the City of Shreveport to comply with Section 106 of the NHPA, and to obtain cultural resource clearance for state site certification of the project area.

The records review consisted of a search of online professional survey reports and records of archaeological sites maintained by the SHPO, an examination of historic maps, and a review of historic structures listed in the Louisiana Historic Resources Inventory for an

area encompassing a 1.6 km (1.0 mi) radius of the project area. The records review indicated that six previous cultural resource investigations and two archaeological sites (16CD88–16CD89) had been documented within this radius. One of the previous surveys included all of the current project area, but was not conducted in accordance with the current SHPO guidelines and as a result the area was re-surveyed. No standing structures were recorded within or directly adjacent to the project area.

Pedestrian survey supplemented with 157 screened shovel tests excavated at 50 m (164 ft) intervals on 12 transects resulted in negative findings. All shovel tests were negative for cultural material. No structures, structural remains, or other features older than 50 years were encountered within the project area during fieldwork.

Based on the findings of the records review and the cultural resource survey, no archaeological sites or historic properties listed in, or recommended eligible for listing in, the NRHP will be affected by construction activities within the project area. The area is considered cleared from a cultural resources perspective, and no additional management action is recommended.

If any previously unrecorded archaeological materials are encountered during activities in the project area, the SHPO should be notified immediately. If human skeletal material is discovered, the construction activities should cease, local law enforcement and the SHPO should be notified immediately, and SHPO guidelines should be followed.

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DEPARTMENT OF THE ARMY
VICKSBURG DISTRICT, CORPS OF ENGINEERS
4155 CLAY STREET
VICKSBURG, MISSISSIPPI 39183-3435

REPLY TO
ATTENTION OF:

November 17, 2015

Operations Division

SUBJECT: Determination of Permit Requirements – Shreveport Airport Authority, Development Tracts, (55.0 and 93.0 Acres) Shreveport, Louisiana; MVK-2015-677

Ms. Jessica R. Keasler
Terracon Consultants, Incorporated
2822-B O'Neal Lane
Baton Rouge, Louisiana 70816

Dear Ms. Keasler:

I refer to your letter requesting a determination of Department of the Army permit requirements on the subject project sites. The property is located in sections 19 and 20, T17N-R14W, Caddo Parish, Louisiana, as depicted on the enclosed map (enclosure 1).

Based upon the information provided, including a preliminary delineation submitted by Terracon Consultants, Incorporated, it appears there are jurisdictional areas within the proposed project area subject to regulation pursuant to Section 404 of the Clean Water Act. The approximate extent of jurisdictional waters of the United States is depicted on the enclosed preliminary map (enclosure 2). Any work involving the discharge of dredged or fill material (land clearing, ditching, filling, leveeing, etc.) within the limits of the jurisdictional areas identified will require a Department of the Army Section 404 permit prior to beginning work. Please note that this jurisdictional determination is preliminary and should be used for planning purposes only. A final determination of permit requirements will be made upon submission of a completed application, including final project plans. I have enclosed a copy of an appeals form (enclosure 3).

For your convenience, I am enclosing a Department of the Army permit application (enclosure 4). Your application for any proposed work in wetlands or other waters of the United States should be submitted at least 120 days in advance of the proposed starting date. To expedite the evaluation process, please refer to identification no. MVK-2015-677 when submitting the application or requesting project updates.

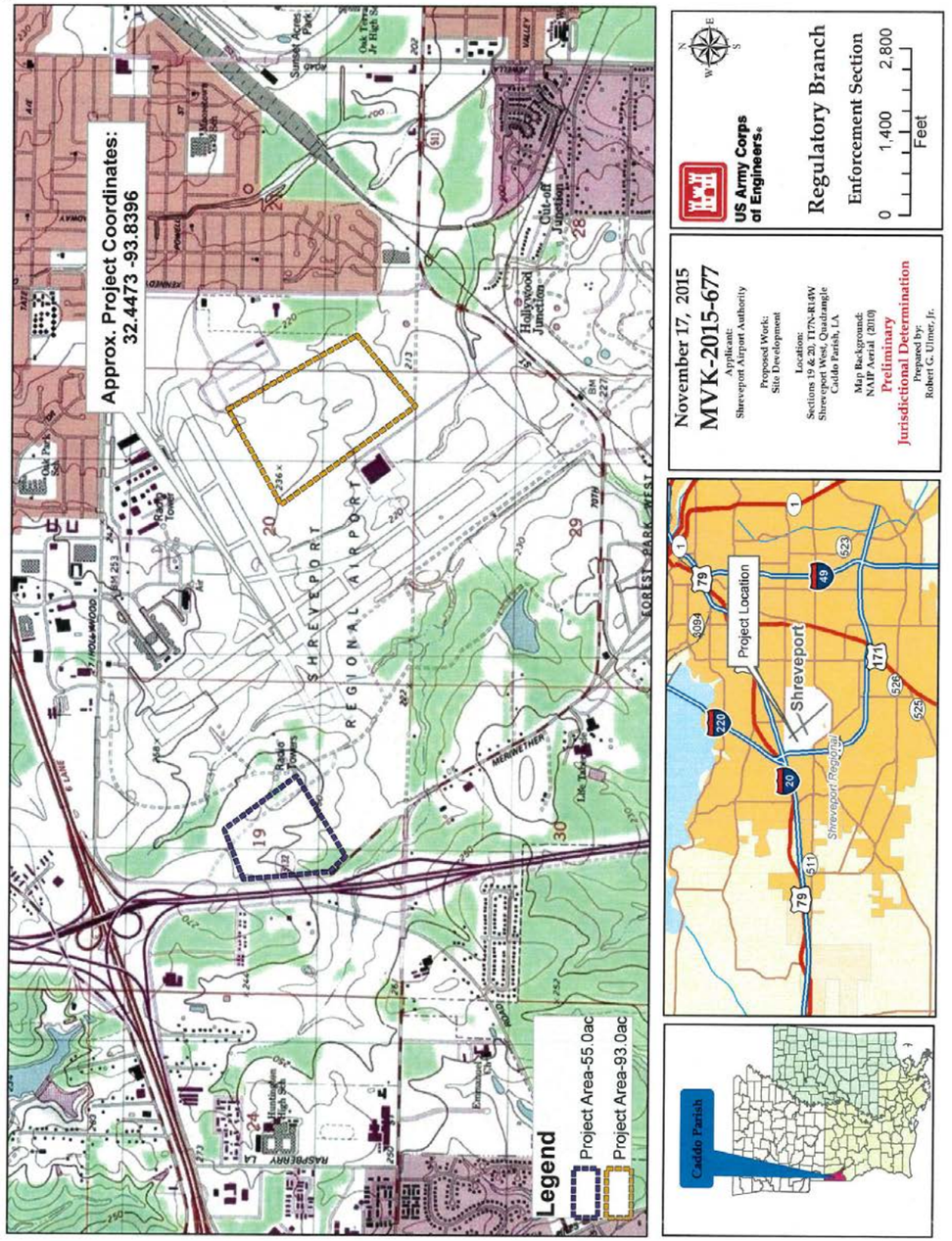
If we may be of any further assistance in this matter, please contact Mr. Robert Ulmer of this office, telephone (601) 631-5637, fax (601) 631-5459 or e-mail address: robert.g.ulmer@usace.army.mil.

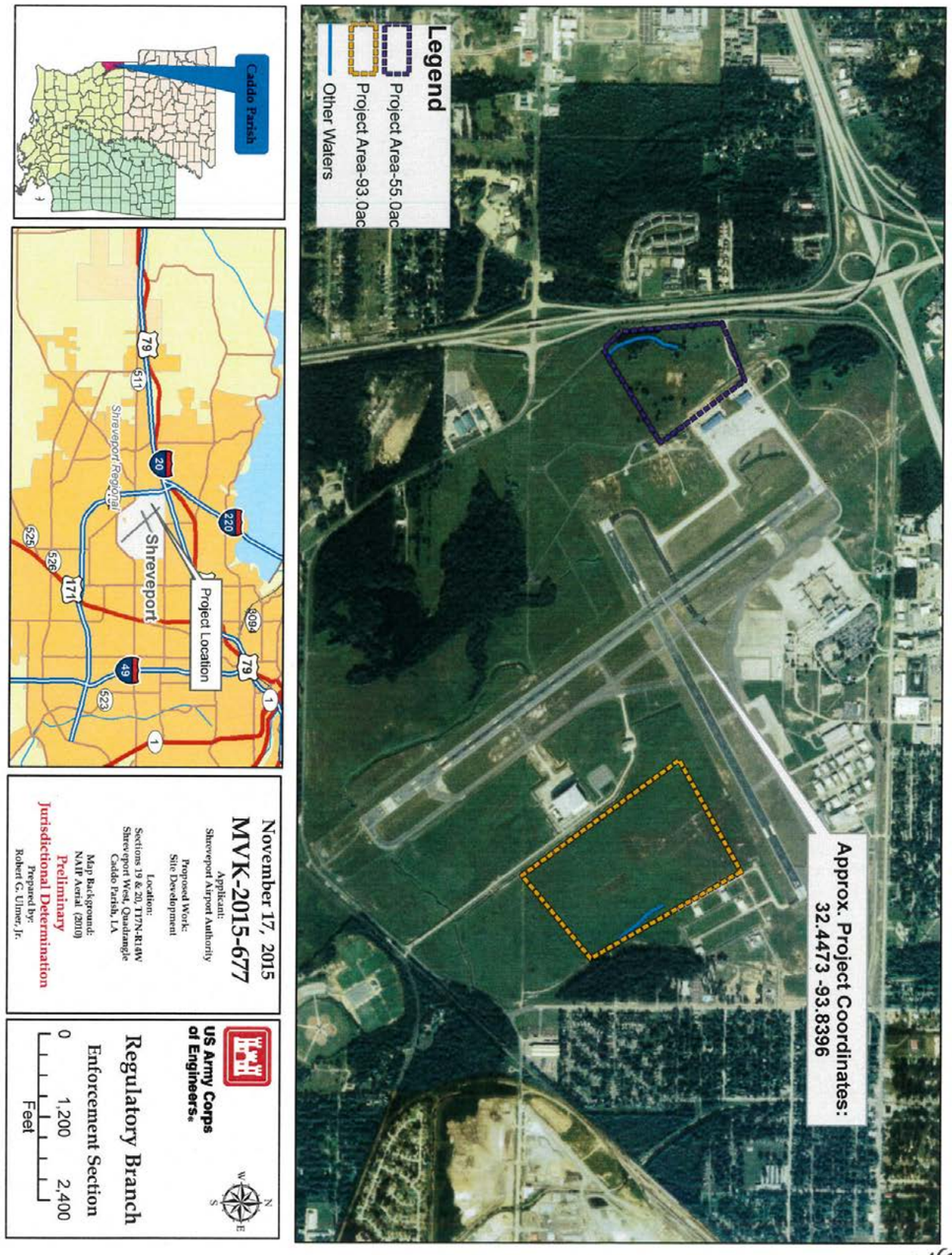
Sincerely,

Charles R. Allred, Jr.
Chief, Enforcement Section
Regulatory Branch

Enclosures

(1) page





encl(2)

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL			
Applicant: Shreveport Airport Authority		File Number: MVK-2015-677	Date: November 17, 2015
Attached is:			See Section Below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of Permission)		A
	PROFFERED PERMIT (Standard Permit or Letter of Permission)		B
	PERMIT DENIAL		C
	APPROVED JURISDICTIONAL DETERMINATION		D
X	PRELIMINARY JURISDICTIONAL DETERMINATION		E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://usace.army.mil/inet/functions/cw/cecwo/reg or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

• ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations (JD) associated with the permit.

• OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit.

• ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

• APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

• ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.

• APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

encl(3)

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:	If you only have questions regarding the appeal process you may also contact:
Robert Ulmer U.S. Army Corps of Engineers Regulatory Branch 4155 Clay Street Vicksburg, MS 39183-3435 (601) 631-5637	Attn: Appeals Review Officer Mississippi Valley Division Post Office Box 80 Vicksburg, MS 39181-0080 (601)634-5820

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

	Date:	Telephone number:
Signature of appellant or agent.		

U.S. ARMY CORPS OF ENGINEERS
APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT
33 CFR 325. The proponent agency is CECW-CO-R.

Form Approved - OMB No. 0710-0003 Expires: 31-AUGUST-2013

Public reporting for this collection of information is estimated to average 11 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of the collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters, Executive Services and Communications Directorate, Information Management Division and to the Office of Management and Budget, Paperwork Reduction Project (0710-0003). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please DO NOT RETURN your form to either of those addresses. Completed applications must be submitted to the District Engineer having jurisdiction over the location of the proposed activity.

PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and/or instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETE

(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME	8. AUTHORIZED AGENT'S NAME AND TITLE (agent is not required)
First - Middle - Last -	First - Middle - Last -
Company -	Company -
E-mail Address -	E-mail Address -
6. APPLICANT'S ADDRESS:	9. AGENT'S ADDRESS:
Address-	Address-
City - State - Zip - Country -	City - State - Zip - Country -
7. APPLICANT'S PHONE NOs. w/AREA CODE	10. AGENTS PHONE NOs. w/AREA CODE
a. Residence b. Business c. Fax	a. Residence b. Business c. Fax

STATEMENT OF AUTHORIZATION

11. I hereby authorize, _____ to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

_____ SIGNATURE OF APPLICANT _____ DATE

NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME OR TITLE (see instructions)

13. NAME OF WATERBODY, IF KNOWN (if applicable)	14. PROJECT STREET ADDRESS (if applicable) Address
15. LOCATION OF PROJECT Latitude: °N Longitude: °W	City - State- Zip-

16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (see instructions)
State Tax Parcel ID Municipality
Section - Township - Range -

ENG FORM 4345, JUL 2013 PREVIOUS EDITIONS ARE OBSOLETE. Page 1 of 3

encl (4)

17. DIRECTIONS TO THE SITE

18. Nature of Activity (Description of project, include all features)

19. Project Purpose (Describe the reason or purpose of the project, see instructions)

USE BLOCKS 20-23 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards:

Type Amount in Cubic Yards	Type Amount in Cubic Yards	Type Amount in Cubic Yards

22. Surface Area in Acres of Wetlands or Other Waters Filled (see instructions)

Acres

or

Linear Feet

23. Description of Avoidance, Minimization, and Compensation (see instructions)

24. Is Any Portion of the Work Already Complete? ☐ Yes ☐ No IF YES, DESCRIBE THE COMPLETED WORK

25. Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property Adjoins the Waterbody (if more than can be entered here, please attach a supplemental list).

a. Address-

City - State - Zip -

b. Address-

City - State - Zip -

c. Address-

City - State - Zip -

d. Address-

City - State - Zip -

e. Address-

City - State - Zip -

26. List of Other Certificates or Approvals/Denials received from other Federal, State, or Local Agencies for Work Described in This Application.

AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED

* Would include but is not restricted to zoning, building, and flood plain permits

27. Application is hereby made for permit or permits to authorize the work described in this application. I certify that this information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

SIGNATURE OF APPLICANT DATE SIGNATURE OF AGENT DATE

The Application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than $10,000 or imprisoned not more than five years or both.

BOBBY JINDAL
GOVERNOR

State of Louisiana
DEPARTMENT OF WILDLIFE AND FISHERIES
OFFICE OF WILDLIFE

ROBERT J. BARHAM
SECRETARY
JIMMY L. ANTHONY
ASSISTANT SECRETARY

Date February 6, 2014

Name Stephen Price
Company Shreveport Airport Authority
Street Address 5103 Hollywood Ave, Ste 300
City, State, Zip Shrevport, La 71109

Project Areopark Development
Project ID 222014
Invoice Number 14020609

Personnel of the Habitat Section of the Coastal & Nongame Resources Division have reviewed the preliminary data for the captioned project. After careful review of our database, no impacts to rare, threatened, or endangered species or critical habitats are anticipated for the proposed project. No state or federal parks, wildlife refuges, scenic streams, or wildlife management areas are known at the specified site within Louisiana's boundaries.

The Louisiana Natural Heritage Program (LNHP) has compiled data on rare, endangered, or otherwise significant plant and animal species, plant communities, and other natural features throughout the state of Louisiana. Heritage reports summarize the existing information known at the time of the request regarding the location in question. The quantity and quality of data collected by the LNHP are dependent on the research and observations of many individuals. In most cases, this information is not the result of comprehensive or site-specific field surveys; many natural areas in Louisiana have not been surveyed. This report does not address the occurrence of wetlands at the site in question. Heritage reports should not be considered final statements on the biological elements or areas being considered, nor should they be substituted for on-site surveys required for environmental assessments. LNHP requires that this office be acknowledged in all reports as the source of all data provided here. If at any time Heritage tracked species are encountered within the project area, please contact the LNHP Data Manager at 225-765-2643. If you have any questions, or need additional information, please call 225-765-2357.

Sincerely,

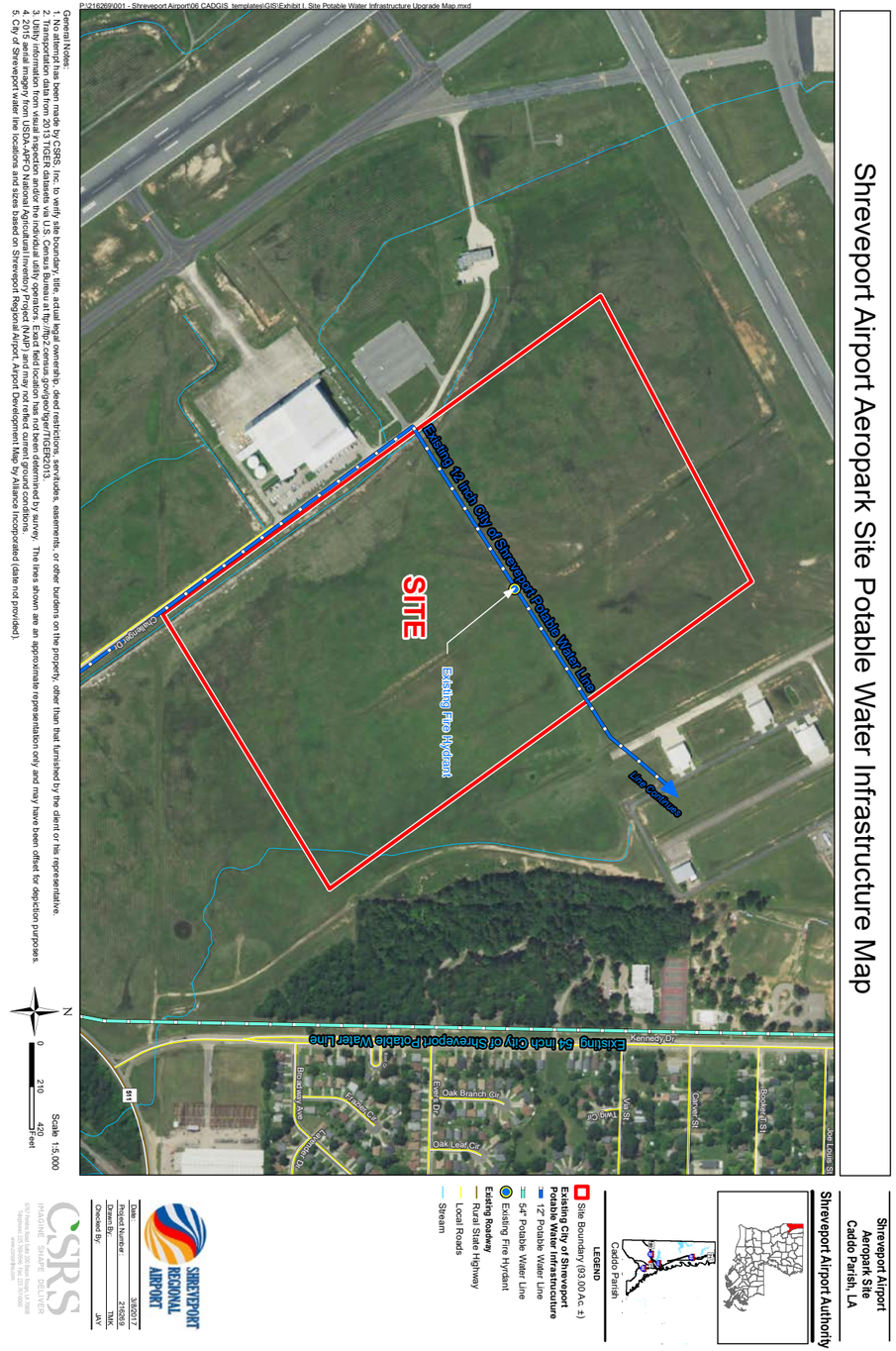
for Amity Bass, Coordinator
Natural Heritage Program

P.O. BOX 98000 • BATON ROUGE, LOUISIANA 70898-9000 • PHONE (225) 765-2800
AN EQUAL OPPORTUNITY EMPLOYER

Exhibit J. Shreveport Airport Aeropark Site
Potable Water Infrastructure Map

SHREVEPORT REGIONAL AIRPORT

CSRS
IMAGINE SHAPE DELIVER



CITY OF SHREVEPORT

P.O. BOX 31109 SHREVEPORT, LA 71130 ● 505 TRAVIS STREET SHREVEPORT, LA 71101
Website: www.shreveportla.gov

Mr. Stephen Price
Shreveport Airport Authority
5103 Hollywood Avenue
Suite 300
Shreveport, LA 71109

Re: Excess Capacity of Water and Sewerage System, City of Shreveport

Mr. Price:

The City of Shreveport Water and Sewerage System currently has the following excess treatment capacity available:

Water Treatment Facility – 5 Million Gallons Per Day
Wastewater Treatment Facility – 5 Million Gallons Per Day

Please let me know if you should need any additional information.

Sincerely,

Barbara Featherston, P.E.
Director
Department of Water and Sewerage

Cc Autumn Permenter, P.E. – Assistant City Engineer

Department of Water & Sewerage **Office of the Director** **505 Travis Street, Suite 580, Shreveport, LA 71101**
Phone 318-673-7660 **Fax: 318-673-7663** **e-mail: Barbara.Featherston@shreveportla.gov**

Exhibit S. Shreveport Airport Aeropark Site Railroad Infrastructure Upgrade Letter & Map

SHREVEPORT REGIONAL AIRPORT

CSRS
IMAGINE SHAPE DELIVER

CSRS, INC.
6767 Perkins Road, Suite 200
Baton Rouge, Louisiana 70808
Phone: (225) 769-0546
Fax: (225) 767-0060

March 17, 2017

Stephen Price
Shreveport Airport Authority
5103 Hollywood Avenue
Shreveport, LA 71109

Re. Shreveport Airport Aeropark Site Railroad Spur Construction Estimate
CSRS Job No. 216269

Dear Mr. Price:

A proposed cost estimate is outlined below for the construction of a railroad spur to access the Shreveport Airport Aeropark Site in Caddo Parish, Louisiana. CSRS contacted a representative of Union Pacific Railroad Company, Inc. and determined that a rail spur is feasible for this site from an operational standpoint. Further investigation, engineering studies, and detailed design will need to be conducted to determine the options for exact rail spur location.

The proposed rail spur will connect directly to an existing Union Pacific Rail Line. The proposed extension will require an at-grade crossing of LA Highway 511. It should be noted that LADOTD policy has restrictions on creating new at-grade crossings, which means that other at-grade crossings in the state may need to be consolidated or closed. In addition, a railroad grade crossing may be constructed only after a permit has been obtained from LADOTD. The construction cost of a railroad spur, which includes labor, materials (switches, frogs, ballast, and track), excavation and embankment is estimated to be $2,164,000.

Please note this estimate does not include engineering, required rights of way, environmental impacts, or operation and maintenance costs. This cost estimate was prepared with the best information available at the time of certification. The actual costs can vary based on the availability of material, site conditions and labor availability. This plan can be executed within a reasonable timetable of 24 months or less based on preliminary engineering judgment and Union Pacific Railroad Company construction guidelines.

Thank you for the opportunity to assist you in this project. Should you have any questions or require additional information, feel free to contact me.

Sincerely,

CSRS, Inc.

Taylor M. Gravois, PE, PLS

STATE OF LOUISIANA
TAYLOR M. GRAVOIS
REG. No. 33928
REGISTERED
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

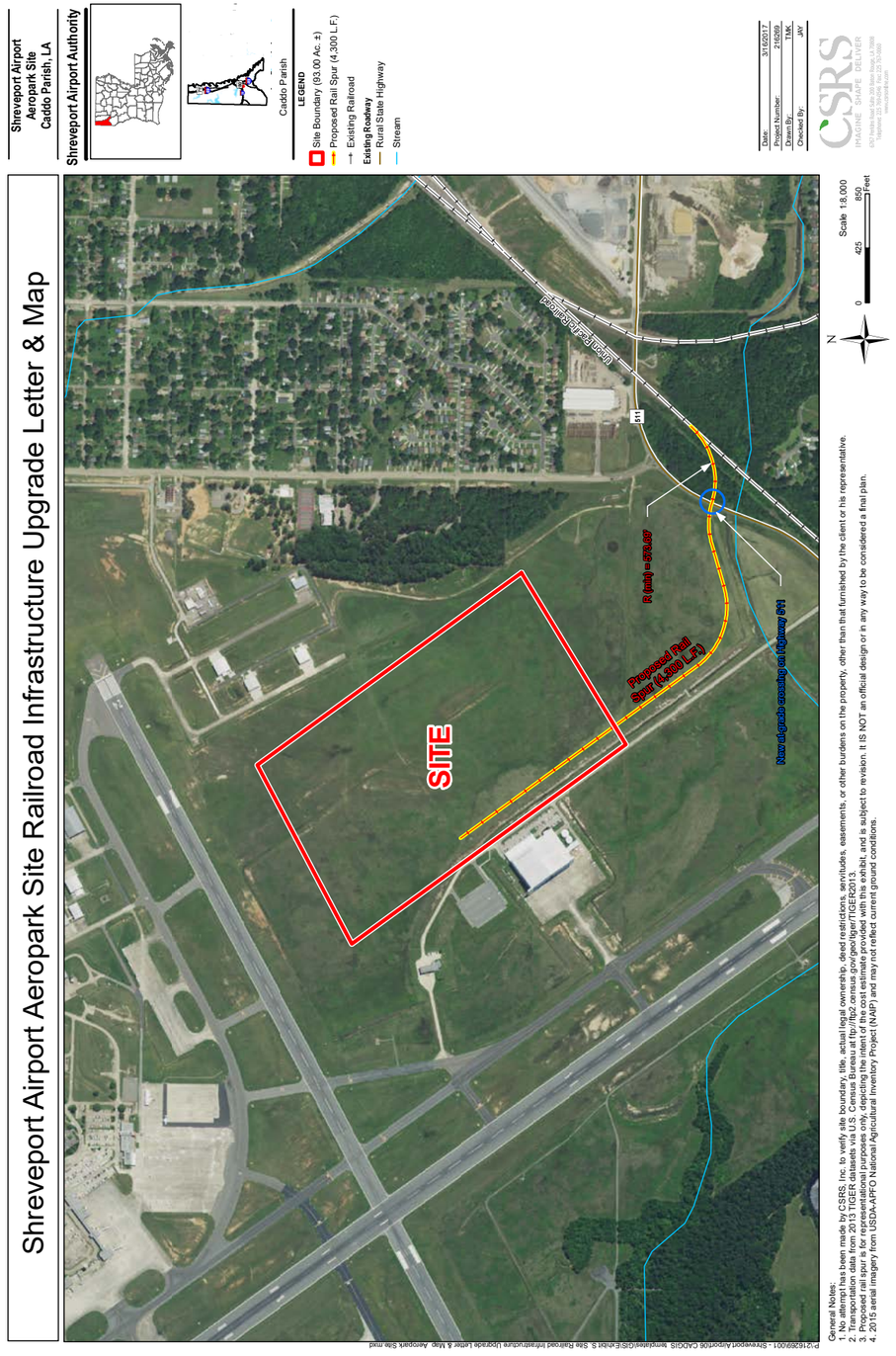
Shreveport Airport Aeropark Site
Rail Cost Estimate
Job No. 216269

Rough Order of Magnitude Cost Estimate						
Item No.	**Description**	**Unit**	**Est. Quantity**	**Unit Price**		**Extension**
1	New Single Track on New Rail Bed	L.F.	4,300	$ 300.00	$	1,290,000.00
2	New at-grade crossing on LA Highway 511 with Four Quadrant Gates w/ Warning System	Each	1	$ 353,000.00	$	353,000.00
3	Clearing and Grubbing 100' R/W	Acre	1	$ 5,000.00	$	5,000.00
4	Turnout - Concrete Ties	Each	1	$ 155,000.00	$	155,000.00
				Subtotal:	***$***	***1,803,000.00***
				20% Contingency [1]:		***x 1.20***
				Rough Order of Magnitude (ROM):	**$**	**2,164,000.00**

Footnotes:

1.) Does not include costs for engineering, permitting, or general project management.
2.) This cost estimate was prepared with the best information available at the time of certification.
3.) Actual costs can vary based on availability of material, site conditions, and labor.

P:\216269 3/17/2017



LOUISIANA ECONOMIC DEVELOPMENT

John Bel Edwards
Governor

Don Pierson
Secretary

Date	April 21, 2017

Louisiana Certified Sites Program Application

Site name	Shreveport Airport Aeropark Site	
Street address or other physical location (Please include accurate latitude/ longitude in decimal form (not Deg/Min/Sec))	7099 Challenger Drive Latitude (32.448092), Longitude (-93.820817)	
City/town(nearest), State, and Zip code	Shreveport, Louisiana 71109	
Parish	Caddo Parish	
Contact person and title (Owner, Director, etc.)	Stephen Price, Management Assistant	
Organization	Shreveport Airport Authority	
Street address	5103 Hollywood Avenue	
City/State/Zip	Shreveport, Louisiana 71109	
Telephone	Office (318) 673-5370	Cell (318) 771-0799
E-mail	stephen.price@shreveportla.gov	

Statement of Affirmation

I have examined this application and all accompanying materials, and to the best of my knowledge, the information provided herein is correct and complete. I will notify Louisiana Economic Department in writing of any subsequently discovered errors in the information provided and will clarify, amend or supplement any information as requested by the department.

In submitting this application, I do freely participate in the Louisiana Certified Sites Program. Certification of the site by Louisiana Economic Development is made at its sole discretion and its decision is not appealable.

I therefore request certification pursuant to this application.

Signature	Title	Date
Stephen Price	Management Assistant	4/19/17

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Foreword

As you prepare to undertake the LED certification process, please understand that you are preparing, in effect, a *proposal to a prospective buyer*. Do not think of this document as "busy work," necessary to get your site certified by LED. *That could be a big mistake.*

A minimum quality submittal will get minimal interest from buyers. The exhibits being required herein will go, in their entirety, to prospective buyers from across the US and, potentially, across the globe. Do your best effort to have high-quality exhibits that will represent you and your site well with all prospective buyers. Do not short-change your site with hastily prepared exhibits and always use original, 1st generation prints. Take your time and show your site in its best light.

Prospective buyers that contact LED are often considering multiple states. Your site submittals will likely be compared to a dozen sites under consideration from other states. Do what you can, via enhanced submittals, to make sure your site makes it to the second round and you get a site visit from the buyer.

Note: Do NOT fill out this application if you have not received LED's review and approval of the pre-application form.

Instructions

Save yourself time, effort, and rework. *Please read these instructions carefully.*

Also, to eliminate the need to complete this document a second time, please download the latest version of this application from LED's website. Do not bother submitting an out-of-date version.

This is a "protected form." Please enter all data into the white spaces provided. Do not enter data into the gray spaces, which are reserved for LED use only.

Pressing the TAB key will automatically take the user from blank to blank.

> Note: We apologize that Microsoft's Spellchecker does not work on "protected forms", like this one, for some reason. Because of this shortcoming, many applicants are submitting applications with many spelling errors. So, please check the spelling yourself or have someone else review your responses to the questionnaire word-for-word. Do not let small typos detract buyers' attention from an otherwise quality document.

Requirement – Binders
Applicants must plan to submit a minimum of two rounds of binders: a Draft set for LED's initial review/comment and a Final set for LED's files after incorporation of LED's comments. Both sets must be complete binders representing *your best and final effort* and must contain:

1. The application (this document),
2. All required exhibits (see list of required documents),
3. Tab pages separating the Application and every major exhibit,
4. A CD-rom, and
5. Any other appurtenances discussed herein.

Submission of loose leaf documents, not in a binder, is not acceptable. Use of binder clips is not permitted.

LED does not require extravagant binding but all documents must be bound. Three-ring binders are perfectly acceptable for LED purposes.

All exhibits within a binder must be separated *by a tabbed page with tabs that extend past the edge of the exhibit pages* (standard tabs extend ½ inch) so as to allow LED personnel and/or prospective buyers, to locate a particular exhibit quickly. Office supply stores like Office Depot sell ready-made tab sets that go from A – Z and 1 – 50. Choose one of these. Alternatively, office supply stores sell tab sets that can feed into your office printer where the actual title of the exhibit can be printed on the tab. This is preferred but is not required. That said, having printed tab pages does add to the overall quality of the submission.

Two complete binders must be submitted with each round (2 complete binders for the Draft round and 2 complete binders for the Final round.) The tabs separating the individual exhibits should be clearly visible when looking at the edge of the binder.

Each binder in both rounds must be accompanied by a CD-rom/flashdrive containing a full and complete copy of all exhibits. Each exhibit must be a separate file on the CD-rom. Do not put more than one exhibit in a file.

> Note: Later in these instructions, we explain that the entire Phase 1 Environmental Site Assessment report does not need to be included in the binder. For our purposes, we only need the summary report pages, typically the first 10-30 pages that discuss the "Recognized Environmental Conditions (RECs)," if any. However, the entire Phase 1 report must always be included on the CD-rom/flashdrive. Similarly, if the applicant chooses to include abbreviated sections of any other reports in the binder, the full report must still be included on the CD-rom/flashdrive.

Requirement - Upper/Lower Case
All responses MUST BE in upper/lower case. Scientific studies have shown that upper/lower case responses are easier and faster to read. Responses in all UPPER CASE are the hardest to read and will be rejected. Using upper/lower case will make it easier for your buyer to read.

Requirement - Descriptive Titles on All Exhibits
LED plans to build hyper-linked copies of all Certified Site applications so prospective buyers can quickly access every section, title and exhibit with just one click. In order to prepare all submissions for inclusion in a hyperlinked submission to prospective buyers, LED requires that all exhibits be given very descriptive titles. Please give an exhibit a title as long as is necessary to properly describe the contents of the exhibit.

> ***Submissions with brief, non-descriptive titles will be rejected.*** For example, the titles "Exhibit B – SHPO" and "Exhibit C – Wetlands" will both be rejected since they do not properly convey the contents of the exhibit. But, the titles "Exhibit B – SHPO Letter of Site Clearance" and "Exhibit C – Wetlands Delineation Report" are both acceptable since they do communicate the contents sufficiently to avoid unnecessary clicks by prospective buyers.

Requirement - Large, Clear Labeling of All Exhibits
All attachments submitted with the questionnaire should be CLEARLY labeled as exhibits: Exhibit A, Exhibit B, etc. All exhibits should also have a single page showing the exhibit title preceding the exhibit title like: "Exhibit A – Property Boundary Survey". So, each exhibit should consist of the following:

1. A tabbed page that has the Exhibit name or number on the tab,
2. A blank sheet with the title of the exhibit in bold 16-point font (as a minimum size) near the upper middle of the page, and
3. The exhibit itself.

The exhibit itself may be 1-page or 500 pages but it should be preceded by a Tab and a Title page.

Requirement – Consistent Exhibit Naming
LED does not have any special requirement regarding exhibit numbering/naming except that all exhibits must have the same general format. If you use letters (a, b, c, etc.) to name your exhibits ("Exhibit A – XXXX"), then use letter designators on all exhibits. When you get to Exhibit Z, start over with Exhibit AA, AB, AC, until done. If you choose to use numbers to identify exhibits, then start at Exhibit "1" and increase the exhibit numbers by "1" until you are complete.

Exhibit names can have special characters like dashes in them (Example: "Exhibit A – Wetlands Delineation.") but do not use commas to separate portions of the Exhibit Name (Example: "Exhibit A, Wetlands Delineation").

When completing the Application, never add text AFTER an exhibit name unless the entire exhibit name is enclosed in quotes. Example: See "Exhibit C – Wetlands Delineation" completed on December 10.

Requirement – All Exhibits Referenced at Least Once
All exhibits should be referenced in the application at least once. If you have a useful exhibit you believe would be of interest to prospective buyers, be sure to find a logical place to include the exhibit title within this application/questionnaire.

Requirement – Titles of Filenames Must Exactly Match Exhibit Names
It is the intent of the department to send an electronic copy of the entire binder to prospective purchasers. For that reason, LED is asking that all documents be submitted in both hardcopy (3-ring binder with tabs separating all sections/exhibits) and electronic form (flashdrive, CD-rom, or equivalent). In addition to 16-point exhibit names preceding each exhibit (discussed above), all files submitted electronically should have a matching filename. That is, the "Exhibit A – Property Boundary Survey", when submitted electronically, should have a matching filename: "Exhibit A – Property Boundary Survey."

> Note: It is critical that the documents in electronic form be clearly labeled: the titles ("filenames") of the electronic files must contain 1) exhibit numbers and 2) document contents AND the document, when opened, should have the 1) Exhibit number and 2) Exhibit Title prominently (16-point or larger as mentioned above) presented on page 1. The first page of each exhibit, as discussed earlier, should be a blank page except for the Exhibit Title in 16-point font or larger placed in the upper middle portion of the page.

Requirement – Map Specifications and Quality
The site must be clearly outlined on all maps, aerial photos, etc. using a wide line in a color that contrasts sharply with the surrounding colors on the map/photo. Maps without the site outlined in a bold, contrasting color will be rejected. For example, using a yellow line to represent a pipeline on a white background does not allow the prospective buyer to spot a pipeline quickly.

Maps showing utilities (pipelines, electrical, sewer, etc.) should clearly delineate the utility by using wide lines drawn in contrasting colors.

All maps should be first generation copies; prospective buyers will have a difficult time reading 2nd and 3rd generation maps.

Requirement – Roadway Maps
At least one map should be included to show the roadways in the general area of the site. The map should be from a high enough elevation to show the major highways in the area. A map that is zoomed in too close will often not accomplish this goal. Typically, a good local transportation map will cover an area 1-2 miles wide but may be smaller or larger, depending on the site and the major highways accessing the site.

At least one roadway map should highlight the nearest Interstate highway; prospective buyers are always interested in interstate access. If the nearest interstate is too far from the site to show local highways in sufficient detail, a second roadway map zoomed in closer to the site should be included.

Requirement – Legible Exhibits
LED plans to send a high-quality set of the exhibits to all prospective buyers and interested parties. To accomplish that, all exhibits must be very legible. A 2nd or 3rd generation copy is not acceptable.

LED understands that some exhibits, especially those from courthouses, are only available via microfiche and the microfiche copies from a courthouse are not always the best. Original courthouse copies are

acceptable even if of poor quality. Third and 4th generation copies of a poor-quality courthouse document are not acceptable.

If the only copy of a document you have, such a parish ordinance or deed, is of poor quality, it will be necessary to contact the appropriate authorities to get a clear copy.

Copies of color maps and aerial photographs should be original print copies; not copies of copies. Colors and lines blend together with each successive photocopy of a document and prospective buyers will not be able to distinguish key features.

Refrain from using scans of color documents/maps. Scanners are very poor at copying the minute details embedded within maps. Scanners are also very poor at reproducing colors accurately. Always produce original prints for maps, not scanned prints.

Requirement – Site Outlined in Bold Contrasting Color

Every map that depicts the site must show the site property boundary outlined in a wide line of contrasting color. There are no exceptions to the requirement. Prospective buyers will be unfamiliar with your site and when you give them a map that does not have the site clearly outlined, they will be quickly frustrated.

> **IMPORTANT NOTE:** Some of the required maps, such as the National Resource Conservation Soils map, the FEMA flood plain map, the National Wetlands Inventory map, etc., must be submitted with the site clearly outlined. But, the on-line Federal mapping program only gives the user a PDF of the map. The federal automated mapping program does not give the user an opportunity to outline the site. Even then, the user should NOT print a hardcopy of the PDF map, manually outline the site, and then scan the outlined map into the computer. Too many important details, colors and other pertinent data are lost via the scanning process. This process results in a map of poor quality that will frustrate prospective buyers. Instead, while it might take a bit longer and may require the brief, one-time use of an IT person, the user must edit the PDF directly (without resorting to hardcopy edits) to place the site outline in a bright contrasting color with a wide line so the site is clearly delineated. There are numerous software tools available from Adobe and others to accomplish this task.

Minimum Criteria for Entry into the Louisiana Certified Sites Program

Note: A site does not have to be certified to have its profile published on Louisiana Economic Development's interactive sites and building website.

Note#2: All sites will undergo a recertification process every five years to verify the original site is still available as described in the submitted certification documents.

- **Size:** At least 25 contiguous, buildable acres, free of impediments to development such as existing structures not appropriate for future commerce, soil contaminants, wetlands, flood plain, protected species and/or cultural resources.

- **Price per Acre:** A fixed purchase price or a fixed leasing price per acre for a specified time period is required to certify and publish a site. Sites without an offering price will be rejected. Applications indicating "Price is negotiable" will be rejected.

- **Property Control/Ownership:** Control of the site through option, purchase or other legally binding agreement must be obtained and maintained as a condition of certification. It is required that the property can be obtained free and clear of encumbrances.

- **Zoning**: The site must be zoned or otherwise approved for industrial applications. If zoned, a zoning district description and map are required. Many rural parishes do not have zoning; nevertheless, the site needs to be otherwise acceptable to parish authorities for placement of a heavy industry.

  Only sites suitable for industrial use will be considered. Sites adjacent to significant residential development or other land uses incompatible with industrial activities will not be considered. The 24-hr noise, lights, and truck traffic typical of a major industrial development are inherently incompatible with residential communities.

- **Flood:** At least 25 contiguous, buildable acres must be above the 100-year flood plain. Alternatively, the applicant may provide a formal cost estimate, construction plan and funding source by which construction footprints can be elevated above the flood plain and meet FEMA standards.

  Note: The flood plain map that is used to make the above determination must be the latest FEMA map, even if the latest map is still preliminary and even if the local government is protesting or appealing the map.

- **Water Supply:** Delivery prior to any potential project startup, either by line or by well, a minimum of 250,000 gallons of potable or process water per day. If an existing source of water supply is not available, certification will require submission of 1) an order-of-magnitude cost estimate, 2) a conceptual design and 3) funding source to meet the minimum level of service within a reasonable timetable.

  Typically, a 4" water distribution line is the minimum size that can deliver the required dynamic pressure required at larger industrial sites.

- **Sanitary Sewer:** Provide a minimum of 250,000 gallons per day of available sanitary sewer capacity in a reasonable time period upon notification. If existing sewer capacity is not available to the property boundary, certification will require submission of 1) an order-of-magnitude cost estimate, 2) a conceptual design, and 3) a funding source to meet the minimum level of service within a reasonable timetable.

- **General Road Access:** The roads accessing the site must be able to support vehicles with a maximum gross weight of 83,400 pounds, such as semi-trucks and trailers. If an access road is not immediately adjacent to the site, certification will require submission of 1) an order-of-magnitude cost estimate, 2) a conceptual design and 2) a funding source to meet the required access within a reasonable timetable.

- **Electricity:** Identify service provider or providers that can deliver reliable 3-Phase power service to the site prior to any potential project startup. If existing capacity is not available at the site, certification will require submission of 1) an order-of-magnitude cost estimate, 2) a conceptual design and 3) a funding source to meet the minimum level of service within a reasonable timetable.

- **Natural Gas:** Natural gas must be available to the property boundary or available prior to any potential project startup. Typically, a minimum of a 4" distribution line is required with an 8" line preferred.

  If natural gas is not available, certification will require submission of 1) an order-of-magnitude cost estimate, 2) a conceptual design and 3) a funding source to meet the minimum level of service within a reasonable timetable.

- **Listing:** The property owner must agree to have the site published by the Louisiana Economic Development on its interactive sites and building website.

- **Phase I Environmental Site Assessment:** The site must have undergone a Phase I Environmental Site Assessment as a prerequisite for being considered for participation in the certification process. The Phase I Environmental Site Assessment must be less than 5 years old from the date of submission.

- **Remediated/Contaminated/Brownfield Sites:** If there are unresolved environmental issues, as discussed in the Phase 1 Environmental Site Assessment, the site cannot be certified until a *No Further Action* letter or its equivalent from the Louisiana Department of Environmental Quality (DEQ) is provided.

- **Due Diligence:** The following due diligence action items must be completed for certification.

  - **Phase I Environmental Site Assessment:** The site must have undergone a Phase I Environmental Site Assessment as a prerequisite for being considered for participation in the certification process. The Phase I Environmental Site Assessment must be less than 5 years old from the date of submission.

  - **Wetland and "Waters of the US" Delineation:** Applicants must have a wetland and stream field survey conducted to delineate all wetlands and "waters of the U.S." on the site.

    If the results of the wetlands delineation indicate that wetlands or water of the U.S. will likely be impacted by planned development of the site (i.e., wetlands are in the middle of the site or in areas likely to undergo construction), the applicant must also submit the wetlands delineation to the U.S. Army Corps of Engineers for a formal Jurisdictional Determination (JD). This formalizes the wetlands delineation and provides some assurance from the Corps that wetlands are no more extensive than the delineation purports.

    Notes: A wetlands permit application (which is the process required to mitigate on-site wetlands) does not have to be submitted to the Corps and wetlands *mitigation* is NOT required of an applicant. That said, applicants with wetlands in the prime areas of their site are encouraged to mitigate those wetlands.

  - **Topographic Survey and 100 year Flood Plain Designation:** Obtain a USGS "Quad" map of the site. The map should be zoomed in close enough to the site so the prospective buyer can read the topographical data (elevations). As with all maps, the site must be outlined on the map using a wide, bold line in a contrasting color.

    Note: Quad maps are available electronically on the web. The electronic map can be zoomed in close to the site with no loss of fidelity. Photocopying a hardcopy of a quad map results in a serious loss of fidelity in the map quality and may be rejected.

    Obtain the latest FEMA DFIRM map, whether preliminary or final. Demonstrate that the site is either above the 100 year flood plain or a site manufacturing pad can be cost effectively constructed to raise the site above the flood plain. (Be sure to outline the site on the map in a wide, bold line of contrasting color.)

  - **Preliminary Geotechnical Investigation:** Obtain a preliminary geotechnical investigation of the site generally characterizing the site's soil, rock and *groundwater conditions*. Substantiate that unfavorable geotechnical conditions do not exist at the site. The geotechnical investigation required for certification should involve no less than 2 and no more than 5 borings spread evenly across the site. More than 5 borings is generally not required, regardless of the size of the site

since the goal here is to establish general soil bearing pressures/characteristics. The narrative in the geotechnical report should clearly state the approximate load bearing capacity of a 14" concrete or pipe pile or other similar, commonly used geotechnical support structures used in a major petrochemical plant. It should also estimate the approximate size of spread footings for 2-3 types of industrial structures (tanks, pipe racks, etc.).

Here is LED's guidance for the required number of borings and depth of borings.

25-50 acres, 2 borings with one to 50'.

50 – 250 acres, 3 borings with one to 100'

250+ acres, 5 borings with at least one to 100'.

As stated above, more than 5 borings for a preliminary geotechnical investigation is generally not advised.

Note: If the applicant has recent geotechnical data from a project in the immediate vicinity of the site, that data may be deemed acceptable to LED.

- **Cultural Resources Investigation:** All certified sites must be cleared for development by the State Historic Preservation Office (SHPO) to verify there are no historic or prehistoric archeological sites that will be destroyed by an industrial development. The process to clear a site typically requires two steps:

1) Check the SHPO's Database: Hire a qualified third-party archeologist to check the SHPO's electronic database to see if the site has been surveyed for cultural resources in the past. This will typically take under an hour to complete.

   If the site has already been surveyed in the past, then get a letter or email from the SHPO indicating the site is cleared for development. Put this letter/email in the binder, as an Exhibit, and you are done.

2) If the site has not been surveyed in the past, the SHPO will likely require that a Phase 1 Cultural Resources Assessment be conducted. Again, you will need to hire a qualified archeological team to conduct the field work and write a report acceptable to the SHPO. Once the study is done, the SHPO will review the report and issue a site clearance, assuming nothing of significance is found during the survey.

Below is a copy of the SHPO stamp that they typically use when clearing a site. A letter from SHPO stating the same thing is acceptable.

Note: The SHPO's site clearance must CLEARLY state that the site "is cleared for development" or "we have no further concerns about development of this site." If the letter/email just says "we have received the report and agree with its findings", that is insufficient. Please request a letter or email that states the site is cleared for development.

No known historic properties will be affected by this undertaking. This effect determination could change should new information come to our attention.

Pam Breaux 4-25-11

Pam Breaux — Date

State Historic Preservation Officer

- **Endangered Species Investigation:** Secure a letter from the Louisiana Department of Wildlife and Fisheries (LDWF) indicating that development on the site will not impact any protected or endangered species on or near the site. It is very rare but the LDWF will occasionally ask for a "habitat survey" to determine if certain species have habitat on the site. If so, this study must be conducted in order for the site to be certified.

An Endangered Species Study is not required or desired. There is no reason to pay money send a scientist to the site to look for endangered species. A letter from the LDWF is all that is needed.

- **Railroad Accessibility:** If the site can be served by railroad, please provide a brief narrative describing how rail access will be provided. Be sure to indicate in the narrative if roads, highways, streams, bayous or other water bodies must be crossed. Please include a map as an additional exhibit if the suggested route for access crosses any of the previously mentioned obstacles.

- **Utility, Oil/Gas Well, Drainage, and Pipeline Easements and Rights-of-Way:** Identify any and all existing easements, utility rights-of-way, well heads, pipelines, etc. on the site that may be potential impediments to fully utilizing the site.

Minimum Criteria Check List

Criteria	Minimum Requirement	Yes/No
Acres above 100-yr flood plain using *latest* DFIRM maps	25 acres or greater	Yes
Price per acre	Clearly stated numerical Price/Lease Amount quoted in writing	Yes
Control of property	Ownership/Option/Other clearly stated.	Yes
Use classification (zoning)	If the site is in an area with zoning, the site must be zoned for industrial use (or capable of being rezoned for industrial use within a reasonable timetable) and, if zoned, a zoning map and zoning regulations attached. If the site is not in an area with zoning, the site must be appropriate for medium to heavy industrial use with 24-hr noise, lights and truck traffic with no significant residential areas nearby.	Yes
Potable water supply	250,000 gal/day or greater is available on site within a reasonable timetable. If the water source is not available to the property boundary, a construction plan, schedule, and cost estimate is attached.	Yes
Wastewater service	250,000 gal/day or greater is available at the site within a reasonable time frame. If existing capacity is not available at the property boundary, a construction plan, schedule, and cost estimate is attached.	Yes
Electrical supply	Reliable 3-phase on site or a construction plan, schedule, and cost estimate is attached.	Yes
Natural gas availability	$" minimum sized distribution line must be available at the property boundary or a construction estimate, schedule, and plan for bringing natural gas to the site attached.	Yes
Environmental clearance	Phase I Environmental Site Assessment (less than 5 years old). Phase 2 may be required if Phase 1 indicates issues exist on the property.	Yes
Cultural resources	SHPO has cleared the site for development. A Phase I Cultural Resources study may be requested by the SHPO to get the site cleared.	Yes
Endangered species clearance	A clearance letter from the Louisiana Department of Wildlife and Fisheries (LDWF) indicating that development on the site will not impact threatened/endangered species.	Yes
Wetlands delineation	A Wetlands Delineation has been completed and the report is included in the application.	Yes

Geotechnical testing	A geotechnical firm was hired and the required minimum number of geotechnical borings to appropriate depths (see previous guidance) were made on the site and the report is included in the application.	Yes
Highway accessibility	All highways required to access the site from the nearest Interstate highway are capable of supporting 83,400 pounds gross weight.	Yes
Bound and tabbed copies of application and all exhibits	Two copies of the application and all exhibits (in 1st generation copies) are submitted in a 3-ring or similar binder with tabs separating each exhibit. Submittal includes a flashdrive or CD-rom of all documents with each exhibit being a separate file. The site is outlined in a wide, bold contrasting color on EVERY map. All exhibit names match the filenames *exactly.*	Yes
Maps and attachments	All REQUIRED Maps and attachments, as a minimum, been included with this submittal. (See list of REQUIRED Exhibits near the end of the application.)	Yes

I. Verification of Site Availability

A. Site Identification			
1.	Site name	Shreveport Airport Aeropark Site	
	If a brochure, pictures of the site, or other special exhibits are available, please list them here (one exhibit name per line) As a minimum, please cite the Exhibit# and title for both the aerial photo and the boundary survey here.	Exhibit G. Shreveport Airport Aeropark Site Property Boundary Aerial Exhibit Exhibit Z. Shreveport Airport Aeropark Site Color Aerial Photo Map Exhibit AA. Shreveport Airport Aeropark Site Oblique Aerial Photo Map Exhibit BB. Shreveport Airport Aeropark Site All Utilities Infrastructure Site Map	
2.	Address or physical location (include accurate latitude/ longitude in decimal notation (not Deg/Min/Sec))	7099 Challenger Drive Latitude (32.448092), Longitude (-93.820817)	
3.	City/town (nearest), State/Zip code	Shreveport, Louisiana 71109	
4.	Parish	Caddo Parish	
5.	Contact person and title	Stephen Price, Management Assistant	
6.	Street address	5103 Hollywood Avenue	
7.	City/State/Zip	Shreveport, Louisiana 71109	
8.	Telephone	Office (318) 673-5370	Cell (318) 771-0799
9.	E-mail for key contact(s)	stephen.price@shreveportla.gov	

10.	Total acres for lease/sale? (acres)	93.00 (acres)
	Total contiguous developable acreage **above the 100-year flood plain** (when assessed using the latest flood plain maps, even if the maps are preliminary and are being protested by local authorities.)	91.68 (acres)
11.	Number of parcels making up acreage	One
12.	Number of owners of the separate parcels	One
13.	Total selling price for all acres ($) Note: Include a total price, not a unit price per acre or per sq. foot. You may include both total and unit costs but a total cost is required.	For lease only
14.	Total acreage annual lease ($)	$324,086.40

15.	Is there a lease-purchase option? (YES/NO)	No
	If yes, description/comment on lease-purchase option:	
	Not applicable	
16.	Is there a right-of-first-refusal feature? (YES/NO)	No
	If yes, description/comment on right-of-first refusal option:	
	Not applicable	
17.	Has a title abstract been submitted with this application? (YES/NO) Note: A title abstract is REQUIRED for sites designated as future LED mega-sites.	Yes
	If YES, Exhibit# and title of document?	Exhibit A. Shreveport Airport Aeropark Site Partial Title Abstract
18.	Is the acreage sub-divisible? If yes, complete box 18a. (YES/NO)	No

18 a.	Parcel description	Acres	Lease or selling price per acre ($)	Total Lease or selling price ($)
	Geog. Number: 171420-000-0009-00	93.00 (acres)	$3,484.80 (per acre/year) $0.08 (per sq ft/year)	$324,086.40 (per year)
	Not applicable	Not applicable	Not applicable	Not applicable
	Not applicable	Not applicable	Not applicable	Not applicable
	Not applicable	Not applicable	Not applicable	Not applicable

A. Site Identification (continued) – Owner#1 information			
1.	Site name	Shreveport Airport Aeropark Site	
2.	Owner name	Shreveport Airport Authority	
3.	Contact person	Stephen Price	
4.	Street address	5103 Hollywood Avenue	
5.	City/State/Zip	Shreveport, Louisiana 71109	
6.	Telephone	Office (318) 673-5370	Cell (318) 771-0799
7.	E-mail(s)	stephen.price@shreveportla.gov	
8.	Total acres within the site owned by this owner (acres)		93.00 (acres)
9.	Total selling price of this acreage ($)		For Lease Only
10.	Total annual lease price of this acreage ($)		$324,086.40
11.	Has an “intent to sell” letter from this owner regarding this acreage been included with this application? (YES/NO) If YES, please include Exhibit# and title of document.	Yes Exhibit B. Shreveport Airport Aeropark Site Letter of Intent	
12.	Comments regarding the immediate availability of this parcel:		
	Parcel is immediately available for lease.		

A. Site Identification (continued) – Owner #2 information			
1.	Site name	Shreveport Airport Aeropark Site	
2.	Owner name	Not applicable	
3.	Contact person	Not applicable	
4.	Street address	Not applicable	
5.	City/State/Zip	Not applicable	
6.	Telephone	Office Not applicable	Cell Not applicable
7.	E-mail (s)	Not applicable	
8.	Total acres within the site owned by this owner (acres)		Not applicable
9.	Total selling price of this acreage ($)		Not applicable
10.	Total annual lease price of this acreage ($)		Not applicable
11.	Has an “intent to sell” letter from this owner regarding this acreage been included with this application? (YES/NO) If YES, include Exhibit# and title of document.	Not applicable	
12.	Comments regarding the immediate availability of this parcel:		
	Not applicable		

A. Site Identification (continued) – Owner #3 information			
1.	Site name	Shreveport Airport Aeropark Site	
2.	Owner name	Not applicable	
3.	Contact person	Not applicable	
4.	Street address	Not applicable	
5.	City/State/Zip	Not applicable	
6.	Telephone	Office Not applicable	Cell Not applicable
7.	E-mail (s)	Not applicable	
8.	Total acres within the site owned by this owner (acres)		Not applicable
9.	Total selling price of this acreage ($)		Not applicable
10.	Total annual lease price of this acreage ($)		Not applicable
11.	Has an “intent to sell” letter from this owner regarding this acreage been included with this application? (YES/NO) If YES, include Exhibit# and title of document.	Not applicable	
12.	Comments regarding the immediate availability of this parcel:		
	Not applicable		

A. Site Identification (continued) – Owner #4 information			
1.	Site name	Shreveport Airport Aeropark Site	
2.	Owner name	Not applicable	
3.	Contact person	Not applicable	
4.	Street address	Not applicable	
5.	City/State/Zip	Not applicable	
6.	Telephone	Office Not applicable	Cell Not applicable
7.	E-mail (s)	Not applicable	
8.	Total acres within the site owned by this owner (acres)		Not applicable
9.	Total selling price of this acreage ($)		Not applicable
10.	Total annual lease price of this acreage ($)		Not applicable
11.	Has an “intent to sell” letter from this owner regarding this acreage been included with this application? (YES/NO) If YES, include Exhibit# and title of document.	Not applicable	
12.	Comments regarding the immediate availability of this parcel:		
	Not applicable		

B. Option to Purchase Site *(if applicable)*			
1.	Option holder	Not applicable	
2.	Contact person and organization (as appropriate)	Not applicable	
3.	Street address	Not applicable	
4.	City/State/Zip	Not applicable	
5.	Telephone	Office Not applicable	Cell Not applicable
6.	E-mail (s)	Not applicable	
7.	Total number of acres under option to purchase (acres)		Not applicable
8.	Option expiration date (MM/DD/YYYY)		Not applicable
9.	Is the option assignable? (YES/NO)		Not applicable
10.	Is there a mechanism to renew the option upon expiration? (YES/NO)		Not applicable
11.	Has a copy of the option to purchase been included with this application? (YES/NO) If YES, include Exhibit# and title of document.	Not applicable	
12.	Special comments, if any, relative to option to purchase:		
	Not applicable		

C. Site Zoning, Tax Assessment, and Special Economic Development Districts			
1.	Is site within incorporated municipal limits? (YES/NO)		Yes
	If YES, what municipality?	The City of Shreveport	
	If the site is NOT within an incorporated municipality, what is the distance to the boundary line of the nearest incorporated area (miles)? What is the name of the incorporated municipality/city/town?	Not applicable	
2.	Is the site within a zoning district? (YES/NO)		Yes
	If YES, contact name, agency name, address and phone number of zoning authority.	Shreveport Caddo Parish Metropolitan Planning Commission	
	If the site is zoned, briefly describe the property's current zoning classification.	Light Industrial (existing zoning) Light Industrial & Open Space (proposed zoning)	
	If the site is zoned, a copy of the zoning map (with the site clearly outlined in a bold, contrasting color) and zoning regulation for that zoning classification must be included. If the site is zoned, include Exhibit# and title of document.	According to correspondence with the City of Shreveport, a proposed zoning map is expected to be adopted on May 15, 2017. Both the existing and proposed zoning map and documents are provided in Exhibit C. Shreveport Airport Aeropark Site Zoning Map & Documents.	
3.	Are there any zoning restrictions or other ordinances that limit noise levels? (YES/NO)		No
	If YES, please describe:	Airports do not have noise restrictions, however the ordinances state that the Caddo Parish Noise Control Officer shall consult with the airport proprietor to recommend changes in airport operations to minimize any noise disturbance which the airport owner may have authority to control in its capacity as proprietor.	
4.	Are there any height restrictions due to zoning regulations, aviation restrictions, etc.? (YES/NO)		Yes
	If YES, please describe:	Building heights are subject to Federal Aviation Administration review and approval. Height limitations are outlined in Section 18-202 of the Shreveport Code of Ordinances which is included in "Exhibit C. Shreveport Airport Aeropark Site Zoning Map & Documents".	
5.	Describe any other land use restrictions (e.g., hours of operation; lighting ordinances, etc.)	Land use is subject to Federal Aviation Administration review and approval.	

6.	If the site must be rezoned to attain an Industrial classification, how long will it take for required re-zoning permits or other required permits to be issued? (months)	Not applicable
7.	Are adjacent properties zoned the same as the site? (YES/NO)	No
	If NO, what zoning applies to adjacent properties? If NO, a zoning map of the area zoomed in to within a mile of the site must be included with the submittal. Please include Exhibit# and Title.	R-1D: Urban, One Family Residence (existing zoning) R-1-5 & R-1-7: Single Family Residential (proposed zoning)

8.	Please describe previous and current uses of the adjacent sites and planned projects. Please note any nearby schools, churches, daycare, or residential developments. Be sure to specifically reference any schools, hospitals, or other major government or residential developments by name. Also, please note, by name, any highways, railroads, or other transportation arteries adjacent to the site in your response.	
	North: The site is bounded to the north by vacant land. Approximately 650 feet north of the site is an airline runway. Multiple private hangars, a residential area, and I-20 exist north of the site as well.	
	East: The site is bounded to the east by vacant land and airline service facilities. The Airport Park Recreational Center and residential areas exist east of the site.	
	South: The site is bounded to the south by a vacant field, Cargill Park, a Union Pacific rail line, and LA Highway 511.	
	West: The site is bounded to the west by Challenger Drive and the ExpressJet facility. Approximately 1,700 feet west of the site is an airline runway. Inner Loop Expressway (Highway 3132) exists west of the site.	
9.	What is the current property tax millage applied to the site? Include units (per acre, etc.) (mills)	The site is tax exempt.
10.	What is the current assessed valuation of the site? ($)	$10,157.59
11.	Has a copy of the latest assessment been provided with this application? (YES/NO)	Yes
	If YES, include Exhibit# and title of document.	Exhibit D. Shreveport Airport Aeropark Site 2016 Parcel Detail
12.	Is the site located within a Foreign Trade Zone? (YES/NO)	No
13.	Is the site located within a Renewal Community? (YES/NO)	No
14.	Is the site located within a Louisiana Enterprise Zone? (YES/NO)	No

D. Existing Structures on-site

1.	Buildings	Size (sq ft)	Year Built	Latest use	Included in sale (YES/NO)
	None	N/A	N/A	Not applicable	N/A
	None	N/A	N/A	Not applicable	N/A
	None	N/A	N/A	Not applicable	N/A
	None	N/A	N/A	Not applicable	N/A
	None	N/A	N/A	Not applicable	N/A
2.	Paved surfaces				
	None	N/A	N/A		
	Not applicable	N/A	N/A		
	Not applicable	N/A	N/A		
3.	Fences				
	Chain link fence	1,847 feet	Not known		
	Not applicable	N/A	N/A		
	Not applicable	N/A	N/A		
	Not applicable	N/A	N/A		
4.	Are there any cemeteries located on the site? (YES/NO)				No
	If YES, please describe.	Not applicable			
5.	Can any structures not included in the sale be removed within a reasonable timetable such as 180 days or less? (YES/NO)				N/A
	If current and existing structures will be removed, does a work plan exist to remove structures? (YES/NO) If YES, include Exhibit# and title of document.	No structures exist on site.			

E. Land Transferability and Encumbrances

1.	Has a copy of the deed been included with this application? (YES/NO) NOTE: Deeds that have no deed restrictions are not required documents; deeds with any form of easements, right-of-ways, limitations of use, or other encumbrances MUST BE attached as an exhibit.	Yes
	If YES, include Exhibit# and title of document.	Exhibit E. Shreveport Airport Aeropark Site Property Deed Report
2.	Has the required boundary/property survey been included with this application? (YES/NO) Note: The boundary survey *must be* on a white background. A boundary survey using an aerial photo for the background is also appreciated, as a second survey exhibit, if available.	Yes
	If YES, include Exhibit# and title of document.	Exhibit F. Shreveport Airport Aeropark Site Property Boundary Exhibit Exhibit G. Shreveport Airport Aeropark Site Property Aerial Exhibit
3.	List and describe rights-of-way (include property survey indicating rights-of-way). Feel free to attach as a separate Exhibit, if lengthy. Note: Each encumbrance of any type must be listed here. List each one on a separate line. List the acres encumbered for each separate encumbrance. If there is a utility right-of-way, a drainage right-of-way, wetlands, cultural resource sites, etc., list each of them on a separate line. Include Exhibit# and title of document if attached as a separate document.	
	Exhibit H. Shreveport Airport Aeropark Site Property Rights Exhibit 1. Apparent Drainage Servitude (Area affected: 4.66 Ac. ±) 2. Apparent 15' Water Line Servitude (Area affected: 0.50 Ac. ±)	
4.	List and describe other easements (include property survey indicating easements.) Each easement must be listed on a separate line. Include approximate acreage for each easement. Include Exhibit# and title of document if attached as a separate document.	
	None known at this time.	
5.	List and describe any liens against the property. Include Exhibit# and title of document if attached as a separate document.	
	None known at this time	
6.	List and describe any judgments impacting development of the site. Include Exhibit# and title of document if attached as a separate document.	

	None known at this time

7.	List and describe any restrictive covenants associated with the site, each on a separate line. Include Exhibit# and title of document if attached as a separate document.
	None known at this time.
8.	List and describe other encumbrances, each on a separate line. If wetlands, waters of the US, or cultural resources remain on the site and have not been listed in the previous questions about encumbrances, list them here on separate lines. Include the number of encumbered acres. Include Exhibit# and title of document if attached as a separate document.
	Exhibit I. Shreveport Airport Aeropark Site Wetlands & Cultural Encumbrances None known at this time.

F. Fire Protection Rating and Proximity to Emergency Medical Care			
1.	Is the site within the coverage area of a fire department? (YES/NO)		Yes
2.	Name, address and phone of agency or other provider of fire protection services to the site.	City of Shreveport Fire Department 263 N. Common Street Shreveport, Louisiana 71101	
3.	Rating of fire service provider (ISO PPC rating)		1
4.	Distance to fire station from the site (miles)		3.2 (miles)
	Name, address and phone of Fire Station providing services to the site.	Fire Station No. 16 5105 Hollywood Avenue Shreveport, Louisiana 71109 Both fire station no. 16 and fire station no. 21 will respond to emergency calls. However, station 21, located along Challenger Drive, is primarily for plane related emergencies. Fire station no. 16 will be the primary station to service this site.	
5.	Distance to local emergency medical care facility (miles)		4.3 (miles)
	Name, address, phone and brief description of nearest emergency medical care facility. If the facility is a hospital, be sure to include, as a minimum, the number of beds and the types of services rendered.	Willis-Knighton South 2510 W Bert Kouns Industrial Loop Shreveport, Louisiana 71118 (318) 212-5000 Willis-Knighton South opened in southwest Shreveport in 1982 as South Park Hospital, the first satellite hospital in the state. It provides critical, emergency and general medical care with a focus on women's services at the adjacent Center of Women's Health, which features the health system's neonatal intensive care unit. Also at the Center of Women's Health is the Pediatric Intensive Care Unit under the direction of an experienced board-certified pediatric critical care specialist. Willis-Knighton South offers patients and their parents a convenient suburban location with a full array of services for children. Also on campus are the Institute for Behavioral Medicine, WK South Wellness Center, WK Quick Care, WK Work Kare and numerous physician office buildings. The campus includes WK Canterbury Square which houses outpatient services like the WK Hyperbaric and Wound Care Center.	

II. Utilities and infrastructure

A. Water Supply Infrastructure			
1.	Has a site map, with the site clearly outlined, indicating the location of all existing water utilities been provided with this application? (YES/NO) If YES, please include Exhibit# and title of document.	Yes Exhibit J. Shreveport Airport Aeropark Site Potable Water Infrastructure Map	
2.	Company/agency name, address and phone of provider of potable or process water to the site	City of Shreveport Water and Sewerage Department 505 Travis Street, Room 580 Shreveport, LA 71101 (318) 673-7660	
3.	Distance to the closest potable/process water line to service the site (feet) (Note: The line must be available at the property boundary or a construction plan, schedule, and cost estimate must be attached to this application.) If a construction plan is attached, include Exhibit# and title of document	On Site	
4.	Size of potable/process water line closest to the site (inches in diameter)	12 (inches in diameter)	
5.	Static and residual pressures of the potable/process water line closest to the site	Static 62 (psi)	Residual 20-60 (psi)
6.	Source of potable or process water (lake, well, other source)	Cross Lake	
7.	Total potable/process water system capacity (millions of gallons per day)	78 (MGD)	
8.	Current average daily use of the water system (millions of gallons per day)	40 (MGD)	
9.	Peak demand (millions of gallons per day)	55 (MGD)	
10.	Excess capacity of the existing water system (millions of gallons per day)	5 (MGD)	
11.	Has a letter from the provider, confirming the excess capacity, been provided with this application? (YES/NO) If YES, include Exhibit# and title of document.	Yes Exhibit J. Shreveport Airport Aeropark Site Potable Water Infrastructure Map	
12.	Distance to closest elevated potable water storage tank (miles)	Site is serviced by potable water plant. 4.0 (miles)	
13.	Capacity of closest elevated potable water storage tank (gallons)	Not Applicable	

14.	Distance to the appropriate booster station (miles)	None
15.	Is or will there be adequate pressure and flow at site to combat fires? (YES/NO)	Yes
16.	Has a plan to improve or upgrade the existing water system (including construction budget and schedule) been provided with this application? (YES/NO) If YES, include Exhibit# and title of document.	No
	If YES, can this plan be executed within a reasonable timetable such as 180 days or less? (YES/NO)	N/A
	If the plan can be implemented within a reasonable time frame, what is the basis for this assertion? Discussions with water company? Engineering schedule? Contractor discussions?	
	The existing potable water infrastructure is adequ ate without the need for additional offsite improvements.	

B. Wastewater Infrastructure		
1.	Has a site map, with the site clearly outlined, indicating the location of all existing wastewater utilities been provided with this application? (YES/NO) If YES, please include Exhibit# and title of document.	Yes Exhibit K. Shreveport Airport Aeropark Site Wastewater Infrastructure Map
2.	Provider of sewer service (company name, municipal name, etc.). Include name, address, phone and contact name, as appropriate.	City of Shreveport Water and Sewerage Department 505 Travis Street, Room 580 Shreveport, Louisiana 71101 (318) 673-6000 Robert Westerman, City Engineer
3.	Distance to the closest wastewater collection line to service the site (feet) (Note: Line must be available at the site boundary or a construction plan and cost estimate must be attached.)	Adjacent to the site
4.	Size of wastewater collection line closest to the site (inches diameter)	8 (inches)
5.	Is there a force main at or near the site? (YES/NO)	No
6.	Capacity of nearest lift station (gallons/day)	18,000,000 (GPD) (Cedar Grove Lift Station)
7.	NPDES permit number of sewer provider	LAQQ41394
8.	Total capacity of wastewater system (gallons/day)	30,000,000 (gallons/day)
9.	Current average daily use of wastewater system (gallons/day)	21,000,000 (gallons/day)
10.	Peak load on wastewater system (gallons/day)	25,000,000 (gallons/day)
11.	Excess capacity of wastewater system (gallons/day)	5,000,000 (gallons/day)
12.	Has a letter from the provider confirming the excess capacity been provided with this application? (YES/NO)	Yes
	If not, what is the basis for the excess capacity assertion?	Not applicable
13.	If the site's industrial wastewater will be discharged to a local municipal sewer system, what are the pre-treatment requirements to discharge industrial wastewater to the municipal wastewater system? If lengthy, please include the pretreatment requirements as a separate attachment. If included as a separate document, please include Exhibit# and title of document here.	

	Pre-treatment requirements found in Sec. 94 of the City of Shreveport Code of Ordinances. See Exhibit K. Shreveport Airport Aeropark Site Wastewater Infrastructure Map	

14.	Has a plan to improve or upgrade the existing wastewater system (including construction budget and schedule) been provided with this application? (YES/NO) If YES, please include Exhibit# and title of document.	No
	If YES, can this plan be executed within a reasonable time frame such as 180 days or less? (YES/NO)	Not applicable
15.	Has a plan to establish an on-site wastewater treatment facility been provided with this application? (YES/NO) If YES, please include the Exhibit# and title of document.	No. Existing infrastructure is adequate. Additional on-site treatment to be determined based on user.

C. Electricity Infrastructure

1.	Has a site map, with the site clearly outlined, indicating the location of all existing electrical lines been provided with this application? (YES/NO) If YES, please include Exhibit# and title of document.	Yes Exhibit L. Shreveport Airport Aeropark Site Electrical Distribution Infrastructure Map Exhibit M. Shreveport Airport Aeropark Site Electrical Transmission Infrastructure Map
2.	Local provider of electrical power (company name, address, phone and contact person, as appropriate)	AEP Southwestern Electric Power Company 428 Travis Street Shreveport, Louisiana 71101 (318) 673-3170 Eric Basinger, Economic and Business Development Manager
3.	Distance to provider's nearest distribution line (feet)	50 (feet) (located along Challenger dr.) 2,500 (feet) (located along Hwy 511)
4.	Size of provider's nearest distribution line (kV)	12.5 kV (located along Challenger dr.) *This line is limited to 1.5 MVA of available capacity. 34.5 kV (located along Hwy 511)
5.	Distance to nearest transmission line equal to or greater than 69 kV (miles)	0.60 (miles)
6.	Is reliable 3-phase service available at the site today? (YES/NO) (Note: If existing 3-phase service is not available at the site, certification will require submission of a formal cost estimate, schedule, construction plan and funding source to meet the minimum level of service within a reasonable timetable.)	Yes
	If 3-Phase is NOT available at the site, include Exhibit# and title of document containing the plan to install 3-phase.	Not applicable. 3-phase service is available.
	What additional services are to be included with this upgrade?	Not applicable. 3-phase service is available.
	Can these upgrade plans be executed within a reasonable timetable such as 180 days or less? (YES/NO)	Not applicable. 3-phase service is available.
7.	Is dual feed available? That is, can the site be supplied power from two substations such that if one substation has an outage, the site still has power? (YES/NO)	No
8.	Peak load capacity available at site (MW)?	6.0 (MW)

9.	Distance to nearest substation to serve the site (miles)	1.2 (miles)
10.	Distance to the next closest substation to serve the site (miles)	8.0 (miles)

D. Natural Gas Infrastructure		
1.	Has a map, with the site clearly outlined, indicating the location of all existing natural gas distribution and transmission lines near/adjacent to the site been provided with this application? (YES/NO) If YES, please include Exhibit# and title of document.	Yes Exhibit N. Shreveport Airport Aeropark Site Natural Gas Infrastructure Map
2.	Local distribution/supplier of natural gas (Company/agency name, address, phone and contact name, as appropriate)	Christopher Davis Centerpoint Energy 525 Milam Street Shreveport, LA 71104 Christopher.davis@centerpointenergy.com (318) 429-2530
3.	Distance to nearest distribution service line (NOT transmission line) (feet)	Adjacent to site
4.	Size of distribution service line (inches)	4 (inches)
5.	Pressure of distribution service line (psi)	10-60 (psi)
6.	If the distribution line is not on or immediately adjacent to the site, has a plan to extend the line (including construction budget and schedule) been provided with this application? (YES/NO) If YES, please include Exhibit# and title of document.	Not applicable. A distribution line is available to service the site.
	If the line needs to be extended to the site, can this plan be executed within a reasonable timetable such as 180 days or less? (YES/NO)	N/A
	What is your basis for asserting that the plan can be completed in a reasonable timetable? Engineering/construction estimate? Letter from natural gas supplier? etc.	
	Not applicable	
7.	Transmission provider (Company/ agency name, address, phone and	Enable Midstream Partners 211 N. Robinson Ave., Suite 150 Oklahoma City, OK 73102

	contact name, as appropriate) of natural gas	(405) 525-7788 Jon Terrell, District Manager
8.	Distance to nearest transmission line (NOT distribution line) (miles)	0.6 (miles)
9.	Size and pressure of transmission line (inches and PSI)	16 (inches) 205 (psi)
10.	Are any known transmission or distribution upgrades or infrastructure improvements planned that will impact service to the site? (YES/NO)	No

11.	List and describe services to be upgraded or improved.	
	Not applicable	
	Can these plans be executed within a reasonable timetable such as 180 days or less? (YES/NO) If so, what is the basis for this assertion?	
	Not applicable	

E. Local Product Pipeline Crossings

1.	Do any pipelines of any type (natural gas, water, crude oil, sewer, brine, etc.) cross the site? (YES/NO) If YES, has a map, with the site clearly outlined, depicting the location of any existing or proposed underground (or above-ground) product pipelines been provided with this application? (YES/NO) If YES, please include Exhibit# and title of document.	No Exhibit O. Shreveport Airport Aeropark Site Local Product Pipelines Map

2.	Pipeline owner	Not applicable
	Primary contents of pipeline	Not applicable
3.	Pipeline owner	Not applicable
	Primary contents of pipeline	Not applicable
4.	Pipeline owner	Not applicable
	Primary contents of pipeline	Not applicable
5.	Pipeline owner	Not applicable
	Primary contents of pipeline	Not applicable
6.	Pipeline owner	Not applicable
	Primary contents of pipeline	Not applicable

F. Telecommunications Infrastructure

1.	Has a map, with the site clearly outlined, indicating the location of all existing telecommunications lines been provided with this application? (YES/NO) If YES, please include Exhibit# and title of document.	Yes Exhibit P. Shreveport Airport Aeropark Site Telecommunications Infrastructure Map
2.	Local provider of telecommunications services (Company, name, address, phone and contact name, as appropriate)	AT&T 3115 Dee Street, Room 300 Shreveport, Louisiana 71105 (318) 670-1024 Jason Ewert
3.	Distance to provider's nearest telecommunications line (feet)	Adjacent to site
4.	Distance to nearest central office (CO) serving the site (miles)	11 (miles)
5.	Is digital switching available at the site? (YES/NO)	Yes
6.	Is fiber optic cable currently available at the site? (YES/NO)	Yes
7.	Are T-1 lines available at the site? (YES/NO)	Yes
8.	Are T-3 lines available at the site? (YES/NO)	Yes
9.	Is cellular or PCS wireless service available at the site? (YES/NO)	Yes
10.	Is satellite of commercial grade with an unobstructed view of the sky available at the site? (YES/NO)	No
11.	If a plan is underway to improve telecommunications at/near the site, has a copy of the plan to improve the existing telecom lines or systems (including construction budget and schedule) been provided with this application? (YES/NO) If YES, please include Exhibit# and title of document.	No
	If a plan has been developed, which services are to be included:	
	Not applicable	
	Can these plans be executed within a reasonable timetable such as 180 days or less? (YES/NO) If YES, what is the basis for this assertion?	
	Not applicable	

G. Roadway Transportation Infrastructure

1.	Has the required map, with the site clearly outlined, indicating the location of all existing roadways in the vicinity of the site been provided with this application? (YES/NO) Note: See guidance on transportation map requirements in the Instructions. If YES, please include Exhibit# and title of document.	Yes Exhibit Q. Shreveport Airport Aeropark Site Roadway Transportation Infrastructure & Drive Time Map Exhibit R. Shreveport Airport Aeropark Site Roadway Transportation Infrastructure Wide Map

	Nearest roadway	Roadway number	Distance from site (road miles)	Number of lanes	Width of lanes
2.	Parish road	Challenger Drive	Adjacent to site	2 (lanes)	14
	State highway	LA 511 (W 70th Street) LA 3132 (Inner Loop Expressway)	0.40 (miles) 2.5 (miles)	2 (lanes) 4 - 6 (lanes)	12
	U.S. highway	US 79 (Greenwood Road)	5.11 (miles)	2 (lanes)	12
	North-south Interstate highway	I-49 I-220	3.80 (miles) 3.50 (miles)		
	East-west Interstate highway	I-20	3.50 (miles)		

3.	Can parish road sustain HS20 capacities (3-4 axle vehicles, such as semi-trucks and trailers)? (YES/NO)	Yes
4.	What is the weight limit of the parish road in pounds (lbs)?	83,400 (lbs)
5.	Can state highway sustain HS20 capacities (3-4 axle vehicles, such as semi-trucks and trailers)? (YES/NO)	Yes
6.	What is the weight limit of the state highway in pounds (lbs)?	83,400 (lbs)
7.	Is access to site controlled by a traffic light? (YES/NO)	No
8.	Are there any known improvements planned for local roadways? (YES/NO). If YES, please complete the blocks below.	No

Local roadway to be improved	Description of improvement, Including controlling or funding authority	Schedule
Interstate I-49	The I-49 North project is a 36-mile project that will construct a four-lane interstate with a 4-foot inside shoulder and a 10-foot outside shoulder from I-220 in Shreveport to the Arkansas state line.	Estimated Completion: 2017-2018
Not applicable	Not applicable	Not applicable

	Not applicable	Not applicable	Not applicable
9.	Are there any known road improvements planned that will impact access to the Interstate highway? (YES/NO)		An extension is planned for I-49. This will not impact site access. However, it will enhance the accessibility of the site to North/South interstate systems.
	If YES, how long will access to the interstate be impacted?	Not applicable	
10.	Are any roadway improvements required to access the site? (YES/NO)		No
	If YES, please describe required improvements.	Off-site infrastructure to access the site is currently in place.	
	If YES, is there a state or local commitment to making these improvements? (YES/NO)		N/A
11.	Do any rights-of-way need to be obtained to provide roadway access the site? (YES/NO)		No
	If YES, please describe Right-of-Way needs.	Not applicable	
	If YES, what is the time schedule for obtaining these rights-of-way?		Not applicable

H. Air Transportation Infrastructure

1.	Name and address of ***nearest commercial airport*** with scheduled passenger service	Shreveport Regional Airport 5103 Hollywood Avenue, Suite 300 Shreveport, Louisiana 71109
2.	Distance in road miles to the nearest commercial airport (road miles)	On site
3.	Average travel time to nearest commercial airport (min)	On site
4.	Number of air carriers serving nearest commercial airport	5
5.	Is direct international passenger service available at this airport? (YES/NO)	No
6.	Is international passenger service available within a two-hour flight? (YES/NO)	Yes
7.	Is international cargo service available? (YES/NO)	Yes

Optional – Enter a second commercial airport that might be near your facility if your site can be accessed fairly easily from two airports.

8.	Name and address of second closest commercial airport with scheduled passenger service	DFW International Airport 2400 Aviation Drive Dallas, TX 75261
9.	Distance in road miles to the second closest commercial airport (road miles)	202 (miles)
10.	Average travel time to second closest commercial airport (min)	173 (min)
11.	Number of air carriers serving second closest commercial airport	12 (carriers)
12.	Is direct international passenger service available at this airport? (YES/NO)	Yes
13.	Is international passenger service available within a two-hour flight at this airport? (YES/NO)	Yes
14.	Is international cargo service available at this airport? (YES/NO)	Yes

I. Rail Infrastructure			
1.	Is there a rail spur already on-site or is a rail line adjacent to the site? (YES/NO)	No	
2.	Name of carrier of nearest freight railroad line?	Union Pacific	
3.	Distance to the nearest carrier's freight railroad line (miles)		0.40 (miles)
4.	If the site is accessible by rail, please provide a brief narrative describing the route the rail will take to access the site. If the route will cross any roads/highways or waterbodies (bayous, canals, rivers, etc.) be sure to mention these crossings in the narrative. Include a map of the proposed route if any right-of-way must be acquired in order to bring rail to the site. If a map is included, please include Exhibit# and title of document.	There is currently no rail on site. However, a Union Pacific Rail line exits within close proximity. See Exhibit S. Shreveport Airport Aeropark Site Railroad Infrastructure Upgrade Letter & Map for more details.	
5.	Second carrier's closest freight railroad line, if a second carrier is available.	Kansas City Southern Railway	
6.	Distance to the second closest carrier's freight railroad line (miles)		6.50 (miles)
7.	Location of nearest intermodal rail yard (rail miles)	Hollywood Rail Yard	
8.	Distance to nearest intermodal rail yard (rail miles)		3.4 (miles)
9.	If rail is not already on or adjacent to the site, has a plan to provide service (including construction budget, construction plan, and source of funding) been attached? (YES/NO) If YES, please include Exhibit# and title of document.	Yes Exhibit S. Shreveport Airport Aeropark Site Railroad Infrastructure Upgrade Letter & Map	
	In what time frame (number of months) can rail service to the site be provided?		Not applicable
	What is the basis for this assertion? Engineering estimate? Letter from rail company? etc.		
	Preliminary engineering judgment.		
10.	If rail is not currently on or adjacent to the site, do rights-of-way (ROW) exist for extension of rail line to site? (YES/NO)		No
	Do these rights-of-way cross federal, state, or parish roadways? (YES/NO)		No
11.	What party is responsible for ongoing maintenance of line extended to the site?	User	

J. Water Transportation Infrastructure			
1.	Name, address, phone and contact name (as appropriate) of ***nearest shallow draft port*** Note: If a deep water port is the closest port to the site and can handle shallow water/barge traffic, enter it here and in the spaces designated for a deep water port.	The Port of Caddo-Bossier 6000 Doug Attaway Boulevard Shreveport, LA 71115 (318) 550-0439 Brenda Levinson, Deputy Port Director/Business Development	
2.	Name of waterway at shallow draft port	Red River	
3.	What water depth is maintained at the shallow water port? (feet)		9 (feet)
4.	Distance in road miles to nearest shallow draft port		16.3 (miles)
5.	Does the shallow water port site currently have barge docking facilities? (YES/NO)		Yes
6.	Name, address, phone and contact name (as appropriate) of ***nearest deepwater port*** (Note the name of the shallow water port and deepwater port may be the same. Most deep water ports can also service shallow water vessels, like barges.)	Port of Lake Charles 150 Marine Street Lake Charles, Louisiana 70601 (337) 493-3513 William Rase III, Executive Director	
7.	Name of body of water at deepwater port	Calcasieu River	
9.	Distance in road miles to nearest deepwater port		189 (miles)
10.	Does the deepwater port currently have deepwater vessel docking facilities? (YES/NO)		Yes
11.	How much draft can this deepwater port accommodate?		40 (feet)

K. Geography and Geological Assessment

1.	Has the required U.S. Geological Survey quad map, with the site clearly outlined, been provided with this application? (YES/NO) Note: The map must be zoomed in to the site close enough to where the topographical data (elevations) is clearly legible. LED does not need the whole USGS quad map but would appreciate it if both exhibits are attached. Note: See cautionary statement about using hardcopy quad maps in the Instructions. Please include Exhibit# and title of document.	Yes Exhibit T. Shreveport Airport Aeropark Site U.S. Geological Survey Quad Map
2.	Has the required Soils Conservation Service (SCS) map, with the site clearly outlined, been provided with this application? (YES/NO) Please include Exhibit# and title of document.	Yes Exhibit U. Shreveport Airport Aeropark Site Soils Conservation Service Map Exhibit V. Shreveport Airport Aeropark Site Soils Map Report
3.	Has the required National Wetlands Inventory (NWI) map, with the site clearly outlined, been provided with this application? (YES/NO) Please include Exhibit# and title of document.	Yes Exhibit W. Shreveport Airport Aeropark Site National Wetlands Inventory Map
4.	Has the required FEMA 100-year flood plain map, with the site clearly outlined, been provided with this application? (YES/NO) Note: Applicants must use the latest FEMA DFIRM map, even if the map is preliminary and the map is being contested by local authorities. Please include Exhibit# and title of document.	Yes Exhibit X. Shreveport Airport Aeropark Site FEMA 100 Year Flood Plain Fill Letter & Map
5.	Minimum topographical elevation (ft, MSL)	210 (ft, MSL)
6.	Maximum topographical elevation (ft, MSL)	235 (ft, MSL)
7.	Topographical variation (maximum elevation minus minimum elevation) (ft)	25 (ft)
8.	Indicate the general grade or percentage slope of the site.	< 1%
9.	Describe the general terrain of the site (e.g., flat, gently rolling, greatly sloping, etc.).	Flat
10.	Describe the general type of vegetation on the site.	Grass

11.	Identify any bodies of water or wetlands on or abutting the site.	Identify authority with jurisdiction over these water bodies.
	Not applicable	Not applicable
	Not applicable	Not applicable
	Not applicable	Not applicable
12.	Has a copy of the required geotechnical study been provided with this application? (YES/NO) Note: By “geotechnical study,” we mean the study must have included soil borings by a licensed geotechnical contractor at the site or a nearby adjacent site. A GeoCheck report is not deemed sufficient to satisfy this criteria. Please include Exhibit# and title of document.	Yes Exhibit Y. Shreveport Airport Aeropark Site Preliminary Geotechnical Engineering Report
	If YES, does the geotechnical study indicate that the site is compatible with industrial development? (YES/NO)	Yes
	If YES, does the study indicate the soils are suitable for building foundations and/or construction of on-site roadways?	Yes
	If YES, is soil augmentation required for construction of a “typical” 100,000 sq ft industrial manufacturing building? (YES/NO)	No
13.	Depth to groundwater (ft)	12.5 (ft) to 22 (ft)
14.	Has the required color aerial photo (from the past 24 months, with the site clearly outlined, been provided with this application? (YES/NO) Please include Exhibit# and title of document.	Yes Exhibit Z. Shreveport Airport Aeropark Site Color Aerial Photo Map Exhibit AA. Shreveport Airport Aeropark Site Oblique Aerial Photo Map

L. Environmental Site Assessment			
1.	Has the required copy of the Phase I Environmental Site Assessment that is less than 5-years old been included with this application? (YES/NO) Note: Only the basic report should be included in the binder with the complete report included on the CD-rom/flashdrive. Please include Exhibit# and title of document.	Yes Exhibit CC. Shreveport Airport Aeropark Site Phase I Environmental Site Assessment	
2.	Was the recommendation from the Phase I "No Further Action"? (YES/NO) If NO, list the "Recognized Environmental Conditions (RECs)" that were identified (line-by-line) and what additional recommendations were made in the report.	Yes	
3.	Do the findings of Phase I suggest/require a Phase II? (YES/NO)		No
	If YES, has a Phase II environmental assessment been completed? (YES/NO)		N/A
	If a Phase II has been completed, a copy must be included as an exhibit. Has a copy of the Phase II assessment executive summary been provided with this application? (YES/NO) If YES, please include Exhibit# and title of document.	N/A	
	Was the recommendation from Phase II "No Further Action"? (YES/NO)		N/A
4.	Has the required letter from the LA Dept. of Wildlife and Fisheries (LDWF) indicating that development will not impact any endangered species and that the site is cleared for development been included with the application? (YES/NO) Note: No field study is required. Just the letter. Please include Exhibit# and title of document.	Yes Exhibit DD. Shreveport Airport Aeropark Site LA Dept. of Wildlife & Fisheries Letter	
5.	Has the required wetlands delineation (less than 5 years old) been conducted for this site? (YES/NO)		Yes
	A copy of the entire wetland delineation report must be provided with this application. Please include Exhibit# and title of document.	Exhibit EE. Shreveport Airport Aeropark Site Wetlands Delineation Report & Transmittal Letter	

	If a wetlands delineation has been conducted, did it indicate the presence of wetlands and/or other "waters of the U.S." on site? (YES/NO)	No
	If wetlands were identified on site, has a Jurisdictional Determination (JD) been requested from the Corps of Engineers? (YES/NO) Note: Sites designated as future megasites must request a Jurisdictional Determination from the Corps.	Yes
	If a JD was requested, the JD application must be attached here. Please include Exhibit# and title of document.	Exhibit EE. Shreveport Airport Aeropark Site Wetlands Delineation Report & Transmittal Letter
	If wetlands were present, was a Corps of Engineers Sec 404 Permit Application submitted to mitigate the wetlands? (YES/NO) Note: LED does not require any sites to seek a Sec 404 permit and mitigate the wetlands on site. If YES, please include Exhibit# and title of document.	No
	If a Sec 404 wetlands permit application was submitted, has a Corps of Engineers Sec 404 Permit been received? (YES/NO) If YES, please include Exhibit# and title of document.	Not applicable
	If a wetlands permit (404 permit) was received from the Corps, have all wetlands on the site been mitigated? (YES/NO) If YES, please include Exhibit# and title of document showing signed agreement with wetlands bank or other substantiation.	Not applicable
	Any other comments related to the possible presence of wetlands on site?	No
6.	Has the required Phase 1 Cultural Resources study been completed (now or any time in the past)? (YES/NO) Note: The "SHPO" in Louisiana is the Louisiana Office of Culture, Recreation and Tourism (CRT), Division of Historic Preservation. They have a database of the entire state of Louisiana and know which areas have already had a Phase 1 study. If a site has already been studied, it is not necessary to re-do the Phase 1 study for certification. If a Phase 1 Cultural Resources study was completed as part of the site certification process, please include Exhibit# and title of document.	Yes Exhibit FF. Shreveport Airport Aeropark Site LA SHPO Letter of Site Recommendation

		Exhibit GG. Shreveport Airport Aeropark Site Phase I Cultural Resources Assessment Report
	If a Phase 1 Cultural Resources study was completed as part of the site certification process, was the report submitted to the SHPO for their concurrence with the archeologist's recommendations? (YES/NO)	Yes
	In the letter issued by the SHPO, did the SHPO mention any historical or prehistoric areas on the site that must be avoided during development? (YES/NO)	No
	Has the SHPO cleared the *entire* site for development? (YES/NO)	No (Approximately 9.30 acres of the site have not been cleared.)
	If the SHPO has NOT cleared the entire site for development, is a Phase 2 or 3 Cultural Resources study planned? (YES/NO) If YES, please include an explanation and, if needed, cite an Exhibit# and title of document.	No

Required Documents/Exhibits List

- ☐ **1.** U.S. Geological Survey quad map **with the site outlined**
- ☐ **2.** Color aerial photo from the past 24 months **with the site outlined**
- ☐ 3. Boundary survey (including all rights-of-way and easements)
- ☐ 4. Copy of the deed or other documents, including parish, state or federal ordinances that would restrict construction or operations at the site of any type. (Required for future mega-sites.)
- ☐ 5. Topographical map **with the site outlined** (The USGS Quad map will satisfy this requirement if the topo/elevation data is clearly visible on the portion of the Quad map included as an exhibit.)
- ☐ 6. Roster of all owners
- ☐ 7. Site map, **with the site outlined**, indicating the location of all existing roadways abutting and/or crossing the site
- ☐ 8. Site map, **with the site outlined**, indicating location of existing water, wastewater, electrical, natural gas, telecommunications and other utility lines. These exhibits are best if shown on separate maps. A consolidated map is useful, as well.
- ☐ **9.** USDA Natural Resources Conservation Service Web Soil Survey map **with the site outlined**
- ☐ **10.** National Wetlands Inventory (NWI) map **with the site outlined**
- ☐ 11. A wetlands delineation must accompany submission. (It must be completed by a Professional Wetlands Scientist (PWS) or, as a minimum, someone who has been through the Army Corps' Wetland Delineation course.)

  The submitted wetlands delineation does not have to be a "jurisdictional wetlands determination," that is, a delineation officially approved by the Corps of Engineers is not required unless the site is slated to be a mega-site. Mega-sites must seek a Jurisdictional Determination.
- ☐ 12. If a Jurisdictional Determination was submitted to the Corps, a copy of the Corps' Jurisdictional Determination must be included as an exhibit.
- ☐ 13. LED does not require that wetlands be mitigated but if a Section 404 Wetlands Permit Application was submitted to the Corps (in order to start the process of mitigating on-site wetlands), a copy of the application must be included as an attachment.
- ☐ 14. If the Corps has issued a Sec 404 Permit, allowing the on-site wetlands to be mitigated/destroyed, a copy of the Corps permit must be attached.
- ☐ 15. FEMA flood plain map **with the site outlined.** Applicants must use the latest flood plain map, even if it is preliminary and is being protested by local agencies.
- ☐ 16. Phase I environmental site assessment (must be within the last 5 years.). Include the base report in the binder; include the entire report on the CD-rom/flashdrive.
- ☐ 17. If a Phase II environmental site assessment has been completed, a copy of a Phase II assessment report in its entirety. Include the base report in the binder; include the entire report on the CD-rom/flashdrive.

☐ 18. LA Dept. of Wildlife and Fisheries (LDWF) clearance letter – A clearance letter from LDWF indicating that development will not impact any endangered species. (No field work is expected or required, unless required in the clearance letter from LDWF. This is rare.)

☐ 19. State Historical Preservation Officer (SHPO) letter or rubber stamp on a letter/email regarding the presence of historical or cultural artifacts on the site. The letter or stamp from SHPO will indicate that the site is cleared or may indicate that further evaluation, like a Phase 1 Cultural Resources Assessment, is required.

Note: An email or letter from the SHPO saying "the Cultural Resources report has been reviewed and we have no further comments" is insufficient. We must have something that indicates the site is cleared for development. See the Instructions for further information.

☐ 20. Phase I cultural resources report, unless the site was previously cleared by the SHPO and no further work was required.

☐ 21. Copy of a geotechnical study for the site.

Desired Documents List

☐ 22. Copy of the deed, if not required above. Required for future mega-sites.

☐ 23. Copy of title abstract. Required for future mega-sites.

☐ 24. Copy of the latest property assessment from the parish assessor

☐ 25. If applicable, a plan to improve or upgrade the existing potable water system to meet 250 thousand gal/day certification threshold (including construction budget & schedule)

☐ 26. Letter from the local water provider confirming excess water capacity.

☐ 27. If applicable, a plan to improve or upgrade the existing wastewater system to meet 250 thousand gal/day certification threshold (including construction budget & schedule)

☐ 28. If applicable, a plan to extend existing electrical lines, or upgrade current system, to meet 3-phase certification threshold (including construction budget & schedule)

☐ 29. If applicable, a plan to extend the natural gas line (including construction budget & schedule)

☐ 30. If applicable, a plan to extend and/or improve the existing telecom lines or systems to meet certification threshold (including construction budget & schedule)

☐ 31. If applicable, a plan to provide rail service to the site (including construction budget and schedule)

(Last revision: Feb 2016)

Occupation Table

Treasure Island SOCs in Selected Louisiana MSAs

Lightcast Q1 2026 Data Set

April 2026

Louisiana Economic Development

1051 North Third Street
Baton Rouge, Louisiana 70802
225.342.1135

Parameters

Regions

Code	Description
29180	Lafayette, LA
43340	Shreveport-Bossier City, LA
35380 and 43640	New Orleans-Metairie, LA; Slidell-Mandeville-Covington, LA
33740	Monroe, LA
29340	Lake Charles, LA
12940	Baton Rouge, LA

Timeframe

2024 - 2026

Datarun

2026.1 – QCEW Employees, Non-QCEW Employees, and Self-Employed

SOC	Description	2025 Jobs	2026 Jobs	2025 Employment Concentration	2025 Resident Workers	Pct. 25 Hourly Earnings	Median Hourly Earnings	Avg. Hourly Earnings	Pct. 75 Hourly Earnings
11-1021	General and Operations Managers	4,684	4,727	1.07	4,352	$30.39	$47.99	$57.82	$70.32
11-3013	Facilities Managers	73	74	0.43	91	$28.37	$42.46	$44.45	$51.90
11-3021	Computer and Information Systems Managers	184	193	0.24	209	$46.94	$62.66	$64.90	$75.62
11-3031	Financial Managers	672	685	0.65	668	$38.31	$50.89	$58.26	$75.45
11-3061	Purchasing Managers	38	40	0.39	41	$39.40	$48.31	$53.37	$62.01
11-3071	Transportation, Storage, and Distribution Managers	158	163	0.59	179	$26.66	$41.69	$42.78	$53.77
11-3121	Human Resources Managers	103	105	0.38	118	$43.90	$49.99	$57.56	$61.95
11-9161	Emergency Management Directors	<10	<10	0.17	<10	Insf. Data	Insf. Data	Insf. Data	Insf. Data
13-1028	Buyers and Purchasing Agents	249	254	0.42	272	$23.60	$29.47	$33.05	$35.32
13-1031	Claims Adjusters, Examiners, and Investigators	143	145	0.37	167	$21.40	$31.26	$33.84	$44.06
13-1041	Compliance Officers	239	243	0.50	268	$21.72	$31.74	$36.14	$45.23
13-1071	Human Resources Specialists	514	525	0.44	557	$21.53	$26.90	$29.18	$35.18
13-1075	Labor Relations Specialists	<10	<10	0.03	<10	Insf. Data	Insf. Data	Insf. Data	Insf. Data
13-1081	Logisticians	189	192	0.60	192	$30.28	$34.14	$37.22	$42.41
13-1111	Management Analysts	468	477	0.36	494	$30.96	$43.57	$59.85	$61.71
13-1199	Business Operations Specialists, All Other	1,597	1,609	1.12	1,521	$22.06	$29.14	$33.25	$40.98
13-2011	Accountants and Auditors	1,355	1,374	0.73	1,380	$27.14	$32.49	$38.60	$42.92
13-2031	Budget Analysts	14	14	0.22	15	$28.72	$35.87	$37.51	$44.43
13-2051	Financial and Investment Analysts	130	132	0.31	139	$21.57	$28.37	$34.55	$39.04
15-1211	Computer Systems Analysts	234	240	0.39	245	$37.54	$45.66	$50.67	$59.09
15-2031	Operations Research Analysts	51	53	0.38	59	$26.65	$29.48	$33.66	$32.68
17-1011	Architects, Except Landscape and Naval	180	177	1.10	176	$24.18	$36.02	$45.42	$50.55
17-1012	Landscape Architects	12	12	0.37	12	$17.40	$31.62	$49.06	$55.41
17-2051	Civil Engineers	281	284	0.62	293	$34.92	$47.38	$50.38	$61.64
17-2071	Electrical Engineers	59	60	0.26	73	$34.63	$46.65	$50.84	$60.31
17-2112	Industrial Engineers	118	129	0.29	153	$40.18	$55.50	$64.02	$75.41
17-2141	Mechanical Engineers	142	145	0.41	156	$34.52	$38.70	$47.89	$51.27
17-2199	Engineers, All Other	608	606	3.02	620	$31.56	$36.70	$43.02	$50.52
17-3029	Engineering Technologists and Technicians, Except Drafters, All Other	149	151	1.78	169	$22.05	$30.19	$31.81	$39.19
19-1032	Foresters	<10	<10	0.25	<10	Insf. Data	Insf. Data	Insf. Data	Insf. Data
19-2031	Chemists	32	35	0.32	41	$28.13	$41.16	$44.09	$49.84
19-2041	Environmental Scientists and Specialists, Including Health	70	70	0.67	87	$26.65	$33.47	$38.07	$44.83
19-2099	Physical Scientists, All Other	46	47	1.21	42	$31.74	$62.98	$59.78	$107.92
19-3093	Historians	12	12	1.94	12	$24.88	$34.64	$36.16	$44.33
23-1011	Lawyers	1,132	1,135	1.05	1,088	$36.92	$55.41	$68.59	$83.38
23-2011	Paralegals and Legal Assistants	433	432	0.97	415	$18.01	$24.34	$25.31	$31.81
25-4012	Curators	45	47	2.58	38	$18.64	$22.93	$25.23	$31.69
25-9031	Instructional Coordinators	155	158	0.58	166	$26.02	$31.24	$33.25	$38.15
27-1019	Artists and Related Workers, All Other	34	35	0.76	33	$3.56	$8.50	$16.08	$17.59
27-1024	Graphic Designers	165	168	0.51	156	$16.04	$20.52	$25.84	$27.48
27-3031	Public Relations Specialists	139	142	0.38	143	$24.29	$30.51	$35.40	$40.45
27-4021	Photographers	155	160	0.83	154	$12.16	$21.99	$36.54	$39.01
33-3021	Detectives and Criminal Investigators	117	118	0.83	128	$24.12	$28.69	$32.16	$33.95
33-3051	Police and Sheriff's Patrol Officers	1,278	1,282	1.49	1,291	$21.35	$25.77	$26.92	$31.38
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	1,689	1,713	1.20	1,589	$13.55	$16.87	$18.31	$21.40
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	2,572	2,640	0.87	2,529	$10.50	$12.78	$14.19	$15.70
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	2,426	2,423	1.58	2,227	$22.64	$30.34	$35.14	$44.30
43-3031	Bookkeeping, Accounting, and Auditing Clerks	2,395	2,391	1.29	2,212	$16.42	$20.23	$21.67	$24.25
43-3061	Procurement Clerks	25	25	0.37	31	$19.15	$19.36	$21.80	$24.21
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	44	44	0.39	48	$17.12	$19.89	$21.10	$24.06
43-4199	Information and Record Clerks, All Other	192	192	1.04	188	$15.95	$22.30	$24.26	$30.97
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	2,881	2,895	1.24	2,855	$14.86	$18.73	$19.80	$23.17
43-9061	Office Clerks, General	4,968	4,961	1.57	4,263	$12.15	$15.18	$15.21	$16.92
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	45	47	0.56	64	$21.08	$26.56	$28.90	$35.90
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	582	597	1.09	515	$18.84	$23.17	$25.62	$29.49
49-9071	Maintenance and Repair Workers, General	2,358	2,380	1.20	2,249	$14.01	$18.33	$19.61	$22.91
49-9099	Installation, Maintenance, and Repair Workers, All Other	543	545	2.09	592	$19.01	$24.38	$26.22	$31.87
51-6011	Laundry and Dry-Cleaning Workers	345	351	1.43	297	$10.55	$11.35	$12.47	$13.86
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	4,231	4,271	1.21	3,951	$13.40	$14.25	$15.62	$17.34
		41,759	42,133		40,033			$30.03	

SOC	Description	2025 Jobs	2026 Jobs	2025 Employment Concentration	2025 Resident Workers	Pct. 25 Hourly Earnings	Median Hourly Earnings	Avg. Hourly Earnings	Pct. 75 Hourly Earnings
11-1021	General and Operations Managers	13,618	13,673	1.01	12,581	$32.33	$49.86	$62.48	$73.74
11-3013	Facilities Managers	277	282	0.52	284	$33.70	$45.16	$48.99	$58.99
11-3021	Computer and Information Systems Managers	911	927	0.38	925	$49.49	$64.24	$70.89	$82.22
11-3031	Financial Managers	2,589	2,615	0.82	2,409	$45.05	$60.64	$67.33	$80.81
11-3061	Purchasing Managers	121	120	0.40	130	$45.60	$55.08	$58.06	$69.93
11-3071	Transportation, Storage, and Distribution Managers	675	680	0.82	620	$35.34	$47.16	$50.32	$60.27
11-3121	Human Resources Managers	512	517	0.62	500	$45.81	$54.19	$59.49	$65.10
11-9161	Emergency Management Directors	61	61	1.15	56	$37.63	$47.89	$50.93	$58.38
13-1028	Buyers and Purchasing Agents	864	874	0.47	842	$26.20	$33.27	$37.06	$44.35
13-1031	Claims Adjusters, Examiners, and Investigators	1,201	1,188	1.00	1,120	$27.51	$35.20	$36.03	$43.11
13-1041	Compliance Officers	1,384	1,386	0.93	1,289	$25.25	$34.77	$37.34	$45.70
13-1071	Human Resources Specialists	2,313	2,328	0.65	2,239	$24.28	$31.53	$34.08	$40.30
13-1075	Labor Relations Specialists	54	52	0.23	50	$30.58	$37.08	$36.38	$41.36
13-1081	Logisticians	710	720	0.73	662	$28.70	$36.49	$39.80	$48.11
13-1111	Management Analysts	2,064	2,077	0.52	2,021	$34.84	$46.91	$58.57	$63.44
13-1199	Business Operations Specialists, All Other	5,362	5,366	1.22	5,200	$23.39	$34.73	$38.16	$47.36
13-2011	Accountants and Auditors	4,993	5,010	0.87	4,701	$28.56	$36.14	$41.41	$47.85
13-2031	Budget Analysts	97	97	0.52	98	$30.76	$38.29	$40.89	$47.39
13-2051	Financial and Investment Analysts	541	541	0.41	524	$24.75	$33.04	$41.27	$49.49
15-1211	Computer Systems Analysts	739	747	0.40	773	$33.63	$45.98	$48.96	$57.65
15-2031	Operations Research Analysts	305	307	0.73	297	$28.54	$33.47	$34.66	$33.47
17-1011	Architects, Except Landscape and Naval	590	586	1.17	581	$27.25	$37.69	$44.27	$50.40
17-1012	Landscape Architects	31	31	0.31	30	$17.77	$32.37	$48.38	$54.20
17-2051	Civil Engineers	1,356	1,354	0.97	1,280	$37.58	$48.08	$53.20	$61.73
17-2071	Electrical Engineers	308	309	0.44	297	$39.44	$50.40	$55.32	$69.46
17-2112	Industrial Engineers	839	852	0.67	708	$49.95	$65.89	$65.40	$80.60
17-2141	Mechanical Engineers	676	685	0.64	613	$44.39	$56.56	$57.67	$67.83
17-2199	Engineers, All Other	1,871	1,862	3.02	1,825	$39.93	$52.78	$57.77	$67.72
17-3029	Engineering Technologists and Technicians, Except Drafters, All Other	496	496	1.93	499	$24.75	$32.28	$36.73	$43.86
19-1032	Foresters	<10	<10	0.18	<10	Insf. Data	Insf. Data	Insf. Data	Insf. Data
19-2031	Chemists	159	162	0.52	149	$40.60	$55.04	$57.32	$65.89
19-2041	Environmental Scientists and Specialists, Including Health	356	356	1.11	355	$28.42	$37.81	$43.13	$54.87
19-2099	Physical Scientists, All Other	137	138	1.17	142	$35.98	$45.69	$51.64	$66.48
19-3093	Historians	26	26	1.39	23	$26.89	$32.88	$35.77	$38.82
23-1011	Lawyers	5,289	5,284	1.60	4,957	$36.86	$58.88	$67.22	$81.95
23-2011	Paralegals and Legal Assistants	2,882	2,880	2.09	2,570	$19.43	$23.10	$26.30	$31.13
25-4012	Curators	79	80	1.45	87	$24.54	$29.13	$37.02	$47.09
25-9031	Instructional Coordinators	476	479	0.58	564	$28.14	$32.63	$35.82	$39.58
27-1019	Artists and Related Workers, All Other	130	135	0.95	126	$4.12	$10.19	$18.50	$23.09
27-1024	Graphic Designers	624	625	0.63	600	$16.93	$22.76	$26.75	$30.46
27-3031	Public Relations Specialists	659	665	0.59	641	$24.76	$31.38	$36.54	$41.43
27-4021	Photographers	508	512	0.89	500	$14.41	$25.65	$36.21	$38.92
33-3021	Detectives and Criminal Investigators	535	533	1.23	539	$26.41	$31.66	$42.29	$59.05
33-3051	Police and Sheriff's Patrol Officers	4,108	4,112	1.56	3,765	$22.72	$25.41	$26.95	$29.38
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	5,597	5,646	1.30	5,456	$14.72	$18.27	$20.73	$24.20
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	8,565	8,531	0.94	8,129	$11.43	$13.95	$15.12	$17.03
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	5,711	5,682	1.21	5,016	$21.77	$30.79	$36.12	$45.23
43-3031	Bookkeeping, Accounting, and Auditing Clerks	6,283	6,250	1.10	5,899	$17.46	$21.60	$22.78	$26.01
43-3061	Procurement Clerks	188	185	0.91	187	$19.91	$22.61	$24.04	$27.61
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	252	251	0.73	244	$17.74	$21.98	$23.47	$26.82
43-4199	Information and Record Clerks, All Other	938	936	1.64	908	$18.36	$21.85	$22.80	$25.79
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	8,874	8,865	1.24	8,423	$15.62	$18.95	$19.93	$23.11
43-9061	Office Clerks, General	9,870	9,821	1.01	9,319	$11.41	$15.31	$16.13	$18.48
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	128	127	0.52	135	$29.20	$33.96	$36.86	$45.08
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	1,612	1,633	0.98	1,549	$20.09	$26.49	$27.23	$31.74
49-9071	Maintenance and Repair Workers, General	6,877	6,923	1.14	6,391	$16.79	$20.45	$22.32	$25.28
49-9099	Installation, Maintenance, and Repair Workers, All Other	2,784	2,761	3.49	2,421	$17.42	$25.35	$27.65	$36.30
51-6011	Laundry and Dry-Cleaning Workers	1,146	1,148	1.54	1,051	$12.08	$13.86	$14.45	$16.17
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	10,992	11,018	1.02	10,267	$13.82	$16.68	$17.06	$18.85
		131,354	131,516		123,570			$34.07	

SOC	Description	2025 Jobs	2026 Jobs	2025 Employment Concentration	2025 Resident Workers	Pct. 25 Hourly Earnings	Median Hourly Earnings	Avg. Hourly Earnings	Pct. 75 Hourly Earnings
11-1021	General and Operations Managers	1,906	1,916	0.89	1,974	$29.17	$43.60	$54.34	$63.71
11-3013	Facilities Managers	78	78	0.92	74	$33.77	$47.43	$44.13	$54.70
11-3021	Computer and Information Systems Managers	94	97	0.25	105	$47.27	$64.12	$64.21	$75.05
11-3031	Financial Managers	282	285	0.56	309	$38.74	$55.21	$57.64	$67.28
11-3061	Purchasing Managers	34	34	0.70	30	$36.52	$48.97	$50.41	$55.55
11-3071	Transportation, Storage, and Distribution Managers	65	65	0.49	73	$33.90	$46.10	$47.11	$58.86
11-3121	Human Resources Managers	48	48	0.37	55	$37.58	$46.03	$50.89	$58.18
11-9161	Emergency Management Directors	<10	<10	0.22	<10	Insf. Data	Insf. Data	Insf. Data	Insf. Data
13-1028	Buyers and Purchasing Agents	110	112	0.38	126	$18.73	$26.53	$29.85	$35.16
13-1031	Claims Adjusters, Examiners, and Investigators	67	64	0.35	79	$22.98	$34.87	$34.37	$44.59
13-1041	Compliance Officers	122	122	0.51	136	$22.16	$29.07	$30.48	$36.97
13-1071	Human Resources Specialists	237	240	0.42	273	$20.54	$23.96	$27.34	$30.95
13-1075	Labor Relations Specialists	17	17	0.46	13	$27.75	$32.57	$31.63	$34.88
13-1081	Logisticians	81	83	0.52	85	$39.03	$48.55	$52.96	$62.62
13-1111	Management Analysts	261	265	0.41	255	$29.53	$37.51	$49.92	$49.89
13-1199	Business Operations Specialists, All Other	588	589	0.84	619	$21.42	$25.66	$30.45	$37.01
13-2011	Accountants and Auditors	563	568	0.61	588	$25.25	$32.37	$38.85	$44.84
13-2031	Budget Analysts	13	13	0.45	13	$42.35	$53.21	$55.51	$65.47
13-2051	Financial and Investment Analysts	52	53	0.25	60	$23.15	$28.25	$36.13	$44.19
15-1211	Computer Systems Analysts	75	76	0.25	87	$35.33	$39.83	$48.21	$57.34
15-2031	Operations Research Analysts	25	25	0.38	26	$26.04	$42.98	$45.44	$65.75
17-1011	Architects, Except Landscape and Naval	51	53	0.64	47	$23.99	$35.27	$46.24	$47.12
17-1012	Landscape Architects	<10	<10	0.39	<10	Insf. Data	Insf. Data	Insf. Data	Insf. Data
17-2051	Civil Engineers	133	135	0.59	134	$35.96	$47.90	$50.35	$54.57
17-2071	Electrical Engineers	52	53	0.47	50	$36.11	$47.12	$50.52	$58.19
17-2112	Industrial Engineers	65	68	0.33	81	$43.93	$55.21	$55.92	$65.48
17-2141	Mechanical Engineers	57	58	0.34	62	$34.93	$43.42	$46.98	$58.76
17-2199	Engineers, All Other	207	206	2.09	218	$27.21	$36.62	$39.79	$45.71
17-3029	Engineering Technologists and Technicians, Except Drafters, All Other	35	35	0.85	47	$22.02	$27.95	$28.09	$34.18
19-1032	Foresters	<10	<10	0.21	<10	Insf. Data	Insf. Data	Insf. Data	Insf. Data
19-2031	Chemists	10	11	0.21	17	$34.86	$47.39	$50.62	$62.18
19-2041	Environmental Scientists and Specialists, Including Health	59	58	1.15	56	$24.44	$33.61	$36.81	$45.02
19-2099	Physical Scientists, All Other	<10	<10	0.27	<10	Insf. Data	Insf. Data	Insf. Data	Insf. Data
19-3093	Historians	<10	<10	0.24	<10	Insf. Data	Insf. Data	Insf. Data	Insf. Data
23-1011	Lawyers	351	349	0.66	332	$30.96	$44.76	$55.19	$63.40
23-2011	Paralegals and Legal Assistants	149	147	0.68	133	$17.04	$21.46	$22.84	$29.83
25-4012	Curators	<10	<10	0.10	<10	Insf. Data	Insf. Data	Insf. Data	Insf. Data
25-9031	Instructional Coordinators	118	119	0.90	119	$28.75	$30.31	$35.93	$40.32
27-1019	Artists and Related Workers, All Other	29	29	1.32	26	$11.02	$35.97	$34.99	$58.78
27-1024	Graphic Designers	75	76	0.47	75	$17.15	$21.81	$26.19	$27.76
27-3031	Public Relations Specialists	69	70	0.39	72	$21.26	$26.92	$29.94	$35.09
27-4021	Photographers	49	49	0.53	47	$15.55	$22.17	$35.50	$35.35
33-3021	Detectives and Criminal Investigators	98	96	1.40	90	$22.62	$30.96	$28.38	$33.06
33-3051	Police and Sheriff's Patrol Officers	645	635	1.53	634	$18.48	$25.64	$24.58	$30.40
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	793	795	1.15	754	$13.05	$14.95	$17.27	$20.33
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	2,151	2,161	1.48	1,996	$10.01	$11.93	$13.17	$14.68
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	756	754	1.00	772	$20.94	$29.18	$32.70	$39.15
43-3031	Bookkeeping, Accounting, and Auditing Clerks	1,018	1,013	1.11	1,029	$16.84	$20.18	$22.32	$24.08
43-3061	Procurement Clerks	<10	<10	0.18	<10	Insf. Data	Insf. Data	Insf. Data	Insf. Data
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	32	32	0.58	34	$18.02	$22.05	$22.75	$25.48
43-4199	Information and Record Clerks, All Other	108	109	1.19	105	$14.69	$17.44	$18.12	$20.94
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	1,441	1,442	1.26	1,481	$14.02	$17.38	$17.91	$20.73
43-9061	Office Clerks, General	2,295	2,282	1.47	2,222	$10.50	$13.62	$14.54	$16.69
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	22	22	0.55	26	$26.20	$29.10	$32.11	$37.74
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	273	280	1.04	292	$18.11	$21.80	$24.51	$28.82
49-9071	Maintenance and Repair Workers, General	1,168	1,175	1.21	1,163	$15.13	$20.00	$21.13	$25.47
49-9099	Installation, Maintenance, and Repair Workers, All Other	241	241	1.89	261	$16.15	$22.43	$25.81	$34.16
51-6011	Laundry and Dry-Cleaning Workers	147	148	1.24	138	$10.42	$12.30	$12.62	$13.83
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	2,945	2,950	1.71	2,594	$12.51	$14.59	$15.78	$18.74
		20,384	20,422		20,114			$26.40	

SOC	Description	2025 Jobs	2026 Jobs	2025 Employment Concentration	2025 Resident Workers	Pct. 25 Hourly Earnings	Median Hourly Earnings	Avg. Hourly Earnings	Pct. 75 Hourly Earnings
11-1021	General and Operations Managers	8,414	8,529	0.85	7,875	$35.95	$50.93	$65.70	$77.92
11-3013	Facilities Managers	154	157	0.40	161	$31.78	$41.36	$46.22	$52.04
11-3021	Computer and Information Systems Managers	972	993	0.55	825	$46.97	$58.68	$65.20	$78.23
11-3031	Financial Managers	1,916	1,959	0.82	1,720	$43.39	$56.47	$63.80	$76.21
11-3061	Purchasing Managers	168	169	0.75	137	$42.46	$51.63	$58.63	$71.95
11-3071	Transportation, Storage, and Distribution Managers	477	489	0.79	431	$35.92	$46.50	$50.11	$61.05
11-3121	Human Resources Managers	503	510	0.83	425	$41.65	$49.15	$56.22	$62.87
11-9161	Emergency Management Directors	49	49	1.25	43	$39.43	$46.82	$50.70	$57.55
13-1028	Buyers and Purchasing Agents	753	765	0.56	666	$26.06	$32.62	$35.16	$40.61
13-1031	Claims Adjusters, Examiners, and Investigators	917	953	1.04	800	$23.83	$30.71	$32.98	$39.22
13-1041	Compliance Officers	954	964	0.87	862	$19.99	$25.79	$31.83	$38.30
13-1071	Human Resources Specialists	2,067	2,097	0.79	1,801	$22.83	$29.73	$31.43	$38.35
13-1075	Labor Relations Specialists	71	72	0.41	59	$32.96	$37.68	$38.98	$38.31
13-1081	Logisticians	390	402	0.54	370	$29.40	$38.60	$42.47	$49.75
13-1111	Management Analysts	1,667	1,703	0.57	1,512	$37.11	$51.12	$61.07	$69.43
13-1199	Business Operations Specialists, All Other	5,401	5,458	1.67	4,622	$22.60	$28.06	$32.48	$37.92
13-2011	Accountants and Auditors	3,678	3,725	0.87	3,332	$27.85	$32.80	$39.34	$43.89
13-2031	Budget Analysts	125	126	0.91	108	$27.12	$35.34	$35.88	$41.45
13-2051	Financial and Investment Analysts	470	474	0.49	421	$25.54	$30.56	$36.51	$41.52
15-1211	Computer Systems Analysts	1,065	1,082	0.78	892	$31.72	$41.00	$45.15	$49.93
15-2031	Operations Research Analysts	392	403	1.28	326	$26.78	$30.12	$31.71	$33.92
17-1011	Architects, Except Landscape and Naval	499	499	1.35	438	$34.23	$47.19	$54.07	$76.11
17-1012	Landscape Architects	67	67	0.90	52	$28.03	$36.78	$40.70	$41.84
17-2051	Civil Engineers	943	956	0.91	842	$44.21	$53.28	$56.31	$64.71
17-2071	Electrical Engineers	277	284	0.54	251	$42.30	$60.64	$60.49	$73.35
17-2112	Industrial Engineers	449	464	0.48	447	$47.70	$61.20	$61.92	$76.70
17-2141	Mechanical Engineers	494	506	0.64	428	$47.56	$63.67	$64.71	$78.56
17-2199	Engineers, All Other	1,886	1,908	4.14	1,630	$32.91	$48.08	$50.69	$63.57
17-3029	Engineering Technologists and Technicians, Except Drafters, All Other	425	436	2.24	393	$24.64	$36.09	$38.85	$50.14
19-1032	Foresters	46	46	1.36	38	$30.65	$37.84	$38.03	$44.74
19-2031	Chemists	216	221	0.96	198	$40.62	$62.06	$59.06	$77.61
19-2041	Environmental Scientists and Specialists, Including Health	737	744	3.12	618	$26.11	$31.20	$36.77	$41.92
19-2099	Physical Scientists, All Other	97	98	1.12	96	$31.25	$38.29	$43.87	$46.92
19-3093	Historians	<10	<10	0.47	<10	Insf. Data	Insf. Data	Insf. Data	Insf. Data
23-1011	Lawyers	2,668	2,686	1.10	2,502	$34.37	$49.55	$62.15	$75.41
23-2011	Paralegals and Legal Assistants	851	855	0.84	864	$18.67	$24.03	$26.48	$32.21
25-4012	Curators	43	43	1.07	40	$12.11	$24.25	$27.96	$34.23
25-9031	Instructional Coordinators	856	868	1.41	732	$23.53	$28.89	$30.70	$36.39
27-1019	Artists and Related Workers, All Other	88	91	0.88	81	$4.78	$12.48	$17.52	$22.84
27-1024	Graphic Designers	421	428	0.58	388	$17.83	$24.07	$27.67	$31.29
27-3031	Public Relations Specialists	471	481	0.57	430	$23.25	$28.40	$31.78	$33.84
27-4021	Photographers	291	293	0.69	275	$14.03	$24.10	$34.91	$34.56
33-3021	Detectives and Criminal Investigators	468	468	1.46	414	$24.21	$28.97	$33.78	$39.86
33-3051	Police and Sheriff's Patrol Officers	2,195	2,201	1.13	2,090	$20.65	$24.65	$25.20	$29.14
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	3,198	3,231	1.01	2,965	$14.64	$18.14	$19.69	$22.37
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	5,773	5,820	0.86	5,508	$10.73	$13.54	$14.69	$16.74
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	3,702	3,738	1.07	3,381	$23.43	$33.17	$37.64	$46.36
43-3031	Bookkeeping, Accounting, and Auditing Clerks	4,414	4,427	1.05	4,068	$17.79	$21.94	$23.17	$26.36
43-3061	Procurement Clerks	228	227	1.50	186	$20.37	$23.22	$24.37	$27.27
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	199	200	0.78	173	$18.26	$22.21	$22.52	$25.20
43-4199	Information and Record Clerks, All Other	397	402	0.95	389	$16.44	$20.41	$21.65	$25.13
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	6,797	6,845	1.29	6,219	$15.45	$18.87	$19.71	$22.99
43-9061	Office Clerks, General	6,724	6,753	0.93	6,372	$10.90	$14.37	$15.24	$17.76
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	233	235	1.29	188	$26.65	$30.05	$32.62	$32.52
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	1,322	1,335	1.09	1,147	$21.10	$28.53	$28.14	$31.94
49-9071	Maintenance and Repair Workers, General	4,562	4,614	1.03	4,244	$16.73	$21.66	$23.60	$28.41
49-9099	Installation, Maintenance, and Repair Workers, All Other	1,179	1,194	2.01	1,161	$18.89	$25.41	$28.66	$37.79
51-6011	Laundry and Dry-Cleaning Workers	436	431	0.80	461	$11.04	$13.22	$13.43	$15.27
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	8,889	9,031	1.12	7,916	$13.81	$17.01	$17.31	$19.88
		93,147	94,214		85,018			$33.52	

SOC	Description	2025 Jobs	2026 Jobs	2025 Employment Concentration	2025 Resident Workers	Pct. 25 Hourly Earnings	Median Hourly Earnings	Avg. Hourly Earnings	Pct. 75 Hourly Earnings
11-1021	General and Operations Managers	2,063	2,068	0.85	2,056	$31.17	$48.29	$58.42	$72.15
11-3013	Facilities Managers	74	74	0.78	67	$25.22	$29.82	$41.56	$62.24
11-3021	Computer and Information Systems Managers	83	83	0.19	95	$47.27	$53.76	$61.19	$72.13
11-3031	Financial Managers	261	265	0.46	274	$44.46	$61.10	$66.86	$82.03
11-3061	Purchasing Managers	26	26	0.48	23	$41.57	$55.67	$61.00	$64.56
11-3071	Transportation, Storage, and Distribution Managers	88	91	0.59	92	$28.57	$45.95	$50.57	$71.08
11-3121	Human Resources Managers	58	57	0.39	62	$43.09	$52.49	$59.03	$70.57
11-9161	Emergency Management Directors	<10	<10	0.08	0	Insf. Data	Insf. Data	Insf. Data	Insf. Data
13-1028	Buyers and Purchasing Agents	138	140	0.42	140	$25.62	$33.18	$35.75	$45.16
13-1031	Claims Adjusters, Examiners, and Investigators	48	49	0.22	59	$31.28	$40.23	$39.34	$49.08
13-1041	Compliance Officers	140	141	0.52	148	$22.30	$31.16	$35.61	$48.43
13-1071	Human Resources Specialists	284	284	0.44	303	$24.92	$29.87	$31.29	$32.77
13-1075	Labor Relations Specialists	16	15	0.37	13	$28.39	$33.31	$32.35	$35.68
13-1081	Logisticians	129	131	0.74	119	$36.45	$49.98	$51.71	$64.59
13-1111	Management Analysts	201	203	0.28	215	$32.59	$48.49	$57.89	$68.68
13-1199	Business Operations Specialists, All Other	700	700	0.88	693	$19.53	$27.84	$34.70	$43.99
13-2011	Accountants and Auditors	681	682	0.66	664	$26.98	$32.63	$38.21	$42.85
13-2031	Budget Analysts	<10	<10	0.20	<10	Insf. Data	Insf. Data	Insf. Data	Insf. Data
13-2051	Financial and Investment Analysts	58	58	0.25	58	$22.89	$28.63	$33.87	$35.00
15-1211	Computer Systems Analysts	66	69	0.20	81	$34.47	$45.51	$47.88	$54.79
15-2031	Operations Research Analysts	15	16	0.21	18	$26.13	$28.98	$33.17	$32.29
17-1011	Architects, Except Landscape and Naval	84	85	0.93	77	$40.71	$47.38	$54.69	$68.82
17-1012	Landscape Architects	<10	<10	0.27	<10	Insf. Data	Insf. Data	Insf. Data	Insf. Data
17-2051	Civil Engineers	122	125	0.48	143	$38.75	$51.20	$55.00	$63.52
17-2071	Electrical Engineers	45	47	0.36	47	$46.34	$60.02	$58.76	$67.92
17-2112	Industrial Engineers	276	286	1.22	211	$46.35	$60.81	$61.42	$75.90
17-2141	Mechanical Engineers	71	72	0.37	75	$39.71	$51.09	$58.29	$64.78
17-2199	Engineers, All Other	1,359	1,368	12.21	983	$41.00	$44.38	$49.77	$51.79
17-3029	Engineering Technologists and Technicians, Except Drafters, All Other	158	159	3.41	132	$22.37	$31.36	$33.02	$40.10
19-1032	Foresters	<10	<10	0.13	<10	Insf. Data	Insf. Data	Insf. Data	Insf. Data
19-2031	Chemists	157	158	2.84	113	$46.81	$62.89	$59.53	$77.30
19-2041	Environmental Scientists and Specialists, Including Health	39	39	0.67	43	$27.64	$35.74	$42.82	$54.21
19-2099	Physical Scientists, All Other	<10	<10	0.24	<10	Insf. Data	Insf. Data	Insf. Data	Insf. Data
19-3093	Historians	<10	<10	0.21	<10	Insf. Data	Insf. Data	Insf. Data	Insf. Data
23-1011	Lawyers	407	407	0.69	422	$35.20	$47.52	$59.17	$66.79
23-2011	Paralegals and Legal Assistants	143	142	0.58	154	$19.06	$23.63	$24.83	$29.65
25-4012	Curators	<10	<10	0.07	0	Insf. Data	Insf. Data	Insf. Data	Insf. Data
25-9031	Instructional Coordinators	115	115	0.77	113	$28.89	$30.05	$32.03	$38.58
27-1019	Artists and Related Workers, All Other	15	15	0.59	14	$3.56	$8.49	$16.06	$17.56
27-1024	Graphic Designers	54	54	0.30	55	$15.99	$18.92	$24.30	$25.34
27-3031	Public Relations Specialists	61	61	0.31	66	$24.89	$29.78	$33.96	$40.17
27-4021	Photographers	50	50	0.49	46	$13.82	$18.61	$33.80	$33.89
33-3021	Detectives and Criminal Investigators	93	93	1.18	93	$21.40	$29.17	$33.10	$37.30
33-3051	Police and Sheriff's Patrol Officers	2,408	2,416	5.08	2,088	$23.10	$27.41	$28.73	$35.95
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	947	953	1.22	1,029	$13.51	$16.11	$17.71	$19.28
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	1,485	1,506	0.91	1,482	$10.79	$13.19	$14.48	$16.07
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	1,007	1,010	1.19	881	$19.96	$27.88	$33.04	$37.40
43-3031	Bookkeeping, Accounting, and Auditing Clerks	948	938	0.92	949	$16.60	$20.13	$22.31	$25.75
43-3061	Procurement Clerks	48	50	1.31	39	$17.50	$22.14	$22.65	$24.71
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	43	43	0.70	40	$14.36	$17.46	$18.41	$20.96
43-4199	Information and Record Clerks, All Other	80	81	0.78	89	$17.48	$21.72	$24.58	$31.40
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	1,531	1,520	1.19	1,479	$14.90	$18.62	$19.35	$22.72
43-9061	Office Clerks, General	1,838	1,818	1.05	1,771	$11.11	$14.29	$15.05	$17.14
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	46	46	1.03	48	$24.76	$29.00	$32.78	$37.74
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	276	281	0.93	299	$19.54	$22.05	$25.67	$29.71
49-9071	Maintenance and Repair Workers, General	1,539	1,551	1.42	1,397	$17.41	$24.76	$28.45	$35.70
49-9099	Installation, Maintenance, and Repair Workers, All Other	290	291	2.02	286	$14.66	$25.42	$26.45	$34.60
51-6011	Laundry and Dry-Cleaning Workers	155	156	1.16	148	$10.54	$11.98	$12.91	$14.76
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	1,942	1,946	1.00	1,841	$13.69	$16.79	$16.95	$19.93
		22,980	23,052		21,853			$31.64	

SOC	Description	2025 Jobs	2026 Jobs	2025 Employment Concentration	2025 Resident Workers	Pct. 25 Hourly Earnings	Median Hourly Earnings	Avg. Hourly Earnings	Pct. 75 Hourly Earnings	BPCC Completers	LSU-Shrv Completers	NLTCC Completers	NSU Completers	SUSLA Completers	2025 Profiles
										Last 5 yrs	Last 5 yrs	Last 5 yrs	Last 5 yrs	Last 5 yrs	
11-1021	General and Operations Managers	3,976	3,995	0.98	3,767	$31.44	$48.32	$58.22	$70.31	3,353	12,572	142	2,283	468	10,201
11-3013	Facilities Managers	194	194	1.21	165	$34.63	$49.13	$57.20	$75.49	422	149	142	0	49	542
11-3021	Computer and Information Systems Managers	174	176	0.24	178	$39.93	$48.42	$55.24	$61.87	11	122	54	0	51	257
11-3031	Financial Managers	637	646	0.66	584	$38.68	$55.69	$60.47	$75.05	2,931	12,646	0	2,283	419	1,898
11-3061	Purchasing Managers	54	55	0.58	48	$40.10	$49.01	$54.07	$62.65	0	52	0	0	0	211
11-3071	Transportation, Storage, and Distribution Managers	173	177	0.70	168	$30.38	$43.26	$46.00	$56.38	422	97	142	0	49	1,086
11-3121	Human Resources Managers	112	114	0.45	112	$39.93	$48.97	$53.59	$60.67	419	14,732	0	976	0	989
11-9161	Emergency Management Directors	54	54	3.35	48	$29.85	$37.18	$39.00	$45.45	625	78	0	248	0	13
13-1028	Buyers and Purchasing Agents	269	273	0.48	261	$25.00	$29.88	$34.05	$39.78	1	0	0	0	0	822
13-1031	Claims Adjusters, Examiners, and Investigators	159	158	0.44	151	$21.86	$28.94	$31.60	$38.44	0	171	0	0	0	319
13-1041	Compliance Officers	268	267	0.59	258	$23.22	$32.88	$38.34	$49.75	550	2,433	0	248	0	497
13-1071	Human Resources Specialists	545	551	0.50	538	$22.68	$29.02	$32.43	$38.55	2,931	12,674	0	2,780	419	1,030
13-1075	Labor Relations Specialists	39	39	0.54	34	$28.10	$32.92	$32.30	$35.52	0	24	0	0	0	7
13-1081	Logisticians	241	244	0.81	216	$31.15	$39.23	$43.50	$54.66	0	0	0	27	0	445
13-1111	Management Analysts	692	700	0.57	613	$34.71	$49.48	$56.25	$62.06	841	12,275	142	479	49	1,283
13-1199	Business Operations Specialists, All Other	1,145	1,148	0.86	1,086	$22.59	$33.22	$35.02	$43.84	3,481	12,553	0	2,531	419	130
13-2011	Accountants and Auditors	1,423	1,430	0.82	1,304	$24.50	$32.30	$38.20	$39.80	463	12,264	0	693	30	1,166
13-2031	Budget Analysts	61	61	1.07	49	$31.53	$37.26	$40.19	$46.09	0	257	0	214	0	37
13-2051	Financial and Investment Analysts	122	124	0.31	114	$23.38	$28.77	$35.55	$35.16	0	171	0	10	0	547
15-1211	Computer Systems Analysts	175	177	0.31	172	$31.93	$40.00	$46.33	$48.85	11	122	54	0	51	248
15-2031	Operations Research Analysts	61	62	0.48	55	$26.04	$28.82	$32.51	$32.22	0	0	0	10	0	214
17-1011	Architects, Except Landscape and Naval	95	96	0.62	93	$24.73	$35.77	$46.38	$50.72	0	0	0	0	0	62
17-1012	Landscape Architects	<10	<10	0.29	<10	Insf. Data	Insf. Data	Insf. Data	Insf. Data	0	0	0	0	0	17
17-2051	Civil Engineers	208	212	0.49	213	$36.63	$47.72	$50.13	$60.78	52	0	0	0	1	311
17-2071	Electrical Engineers	71	74	0.34	69	$42.79	$48.34	$54.03	$63.20	52	0	0	0	1	217
17-2112	Industrial Engineers	167	173	0.44	160	$41.50	$50.25	$56.13	$61.93	98	0	35	0	1	278
17-2141	Mechanical Engineers	90	95	0.28	99	$37.51	$40.39	$48.46	$55.54	98	0	35	0	1	234
17-2199	Engineers, All Other	321	323	1.71	325	$34.76	$45.23	$49.46	$59.27	0	30	0	0	0	41
17-3029	Engineering Technologists and Technicians, Except Drafters, All Other	84	84	1.07	95	$22.52	$31.87	$32.94	$42.71	45	0	1,967	0	0	60
19-1032	Foresters	<10	<10	0.63	<10	Insf. Data	Insf. Data	Insf. Data	Insf. Data	0	0	0	0	0	61
19-2031	Chemists	38	38	0.41	36	$32.86	$39.32	$45.43	$46.63	0	30	0	0	0	145
19-2041	Environmental Scientists and Specialists, Including Health	47	47	0.48	50	$24.00	$37.90	$37.89	$47.51	0	82	0	20	0	86
19-2099	Physical Scientists, All Other	27	27	0.77	24	$32.01	$36.37	$47.19	$51.39	210	0	0	0	0	639
19-3093	Historians	<10	<10	0.28	<10	Insf. Data	Insf. Data	Insf. Data	Insf. Data	0	68	0	73	0	16
23-1011	Lawyers	636	635	0.63	641	$33.65	$49.17	$62.34	$75.36	0	0	0	0	0	930
23-2011	Paralegals and Legal Assistants	309	303	0.74	299	$17.41	$24.18	$23.99	$29.52	0	0	0	0	0	526
25-4012	Curators	32	32	1.95	28	$18.91	$28.51	$30.03	$38.72	0	44	0	176	0	23
25-9031	Instructional Coordinators	233	232	0.93	214	$27.59	$30.86	$32.30	$36.80	17	1,136	0	79	5	378
27-1019	Artists and Related Workers, All Other	34	36	0.82	31	$4.52	$11.62	$19.44	$26.40	48	46	0	24	0	32
27-1024	Graphic Designers	172	172	0.57	157	$16.97	$22.23	$26.45	$29.83	0	83	0	48	0	287
27-3031	Public Relations Specialists	114	116	0.34	114	$22.84	$28.25	$33.37	$40.77	159	132	28	57	65	172
27-4021	Photographers	85	85	0.49	83	$13.43	$21.39	$26.74	$38.62	0	83	0	48	0	287
33-3021	Detectives and Criminal Investigators	106	105	0.80	100	$22.89	$27.38	$35.16	$43.30	339	144	0	129	0	69
33-3051	Police and Sheriff's Patrol Officers	1,576	1,567	1.97	1,362	$23.73	$29.13	$28.51	$32.19	361	0	0	107	0	449
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	1,412	1,418	1.08	1,382	$13.58	$16.60	$18.00	$21.30	105	0	32	0	0	464
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	3,489	3,459	1.26	3,193	$9.05	$11.16	$13.28	$14.76	0	0	0	0	0	544
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	1,845	1,849	1.29	1,656	$21.49	$29.50	$35.20	$41.61	2,931	12,475	0	2,323	419	2,488
43-3031	Bookkeeping, Accounting, and Auditing Clerks	2,180	2,167	1.26	1,985	$17.24	$21.36	$23.72	$26.53	44	86	0	214	30	986
43-3061	Procurement Clerks	34	33	0.54	31	$17.49	$20.05	$21.39	$22.90	0	0	0	0	0	50
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	79	78	0.76	72	$18.95	$21.61	$22.92	$25.93	0	199	0	497	0	298
43-4199	Information and Record Clerks, All Other	218	218	1.26	194	$18.75	$22.64	$22.85	$26.22	0	0	0	0	0	0
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	2,605	2,597	1.20	2,457	$14.63	$17.89	$18.48	$21.80	2,628	297	90	1,844	448	6,250
43-9061	Office Clerks, General	3,483	3,454	1.17	3,229	$11.66	$15.00	$15.97	$18.73	25	0	0	0	0	142
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	112	113	1.50	106	$33.43	$38.34	$36.86	$40.88	421	0	2,017	0	0	2
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	509	516	1.02	474	$19.31	$23.96	$25.96	$29.72	58	0	226	0	0	258
49-9071	Maintenance and Repair Workers, General	2,329	2,334	1.27	2,153	$16.68	$20.91	$22.52	$26.76	443	0	894	0	0	666
49-9099	Installation, Maintenance, and Repair Workers, All Other	463	463	1.91	460	$17.08	$22.84	$25.71	$32.86	0	0	0	0	0	0
51-6011	Laundry and Dry-Cleaning Workers	376	377	1.66	339	$10.80	$13.46	$13.17	$14.44	0	0	0	0	0	31
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	4,233	4,264	1.29	3,820	$13.35	$15.36	$16.16	$17.84	0	0	0	0	0	1,069
		38,405	38,458		35,679			$29.81							

Appendix A - Data Sources and Calculations

State Data Sources

This report uses state data from the following agencies: Louisiana Workforce Commission

SHREVEPORT REGIONAL AIRPORT

PHASE I

ENVIRONMENTAL SITE ASSESSMENT

Shreveport, Louisiana

Prepared by:

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February, 2014

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PROFESSIONAL CERTIFICATION

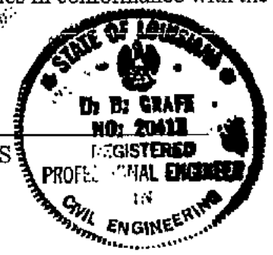
This Phase 1 Environmental Site Assessment (ESA) was conducted consistent with generally accepted environmental consulting practices within the limitations included as Appendix A. The site visits and records reviews were performed by D. B. Graff, P.E., PLS, consistent with the proposal submitted to the Shreveport Airport Authority. The information contained in this ESA was obtained from personal inspection, from various government agencies and from sources deemed to be reliable.

PHASE I
ENVIRONMENTAL SITE
ASSESSMENT

Aero Park Sites
Shreveport Regional Airport
Shreveport, LA

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental professional as defined in Section 312 10 of 40 CFR 312.

I have the specific qualifications based on education, training and experience to assess a property of the nature, history, and setting of the Subject Property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.



D. B. Graff, P.E., PLS

1 SUMMARY

This ESA was performed on the two sites of the proposed Aero Park at Shreveport Regional Airport in Shreveport, Louisiana.

After inspecting the Subject Property; reviewing its past uses; observing surrounding properties; searching through the Federal Environmental Protection Agency, State of Louisiana, Caddo Parish and City of Shreveport records, it can be concluded that there is no evidence of 'recognized environmental conditions', as defined by the ASTM, in connection with the Subject Property. No further action is required at this time.

2 INTRODUCTION

2.1 Purpose

The purpose of this ESA is to identify 'recognized environmental conditions' in connection with the Subject Property. The ASTM Standard Practice for Environmental Site Assessments E 1527-05 defines "recognized environmental condition" as "the presence or likely presence of any hazardous substance or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of an hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water on the property."

2.2 Scope of Work

As agreed to between CGS and the SAA, the scope of work for this ESA included the following:

- Site Inspection
- Surrounding Property Observation
- Interviews With Individuals Having Knowledge of the Operations on the Subject Property
- Inspection of Owner/Operator's Books and Records
- Inspection of City Building Permits
- Inspection of City Fire Department Records
- State and Federal Regulatory Agency Database Search for Posted Properties Within An ASTM Designated Radius of the Subject Property
- Search for Records of Permits for Underground or Aboveground Storage Tanks
- Inspection of Historical Aerial Photographs
- Research of Archive City Directories for Subject Property and Adjoining Properties
- Preparation and Presentation of Two Reports

2.3 Limitations and Exceptions of Assessments

This ESA is based upon the information available from a variety of sources and on the inspection of the Subject Property. The ESA was performed in accordance with industry standards and using appropriate methods. It is intended to allow a party to make an informed decision regarding the Subject Property.

CGS is not responsible or liable for the accuracy of the information provided by others. This ESA is not a guaranty that there is no subsurface contamination, nor can it be warranted that those areas of environmental concern herein noted are the only areas of potential contamination at the Subject Property.

There was no sampling or testing for the possible presence or absence of, nor is any definitive statement made in this ESA regarding the possible presence or absence of, any of the following:

1. Asbestos Containing Materials
2. Radon
3. Lead Based Paints
4. Lead in the Drinking Water

2.4 Limiting Conditions

There were no limiting conditions with regard to the ability of CGS to conduct the property inspection portion of this ESA. Access was made available to all parts of the Subject Property.

2.5 Previous Environmental Site Assessments/Investigations

Neither the Client nor CGS Engineering were aware of any previous environmental Assessments or investigations.

2.6 Data Gaps

There were no data gaps reported in the records research conducted by Environmental Data Resource, Inc.

3 SUBJECT PROPERTY DESCRIPTION AND USE HISTORY

3.1 Site and Improvement Description

The Subject Property consists of two rectangularly shaped parcels, approximately 190 acres and 70 acres. The larger parcel (East Parcel) is located east of Challenger Drive, north of West 70th Street, west of Airport Park and south of Runway 6-24.

The smaller parcel (West Parcel) is located west of Challenger Drive, north of West 70th Street, east of Runway 14-32 and south of the Express Jet Airline Maintenance facility.

The topography of the subject property is slightly sloping. The north ends of both tracts are the highest and generally slope to the southeast, from about 230' msl to 210' msl. The underlying soils in the area are of the Metcalf-Timpson complex, (a silt loam) and the Keithville (a sandy loam). Both of these soil groups are somewhat permeable to depths of about 6' to 8'. The primary groundwater aquifer in the area is the Wilcox Formation, which according to USGS publications, is at a depth of approximately 200 feet.

Structure There are no structures on the Subject Property.

Parking and Landscaping There are no paved areas on the Subject Property.

Utilities The utility service to the Subject Property is provided by a variety of vendors. Gas is provided by Centerpoint Energy, Inc.; electricity by AEP Swepco; trash removal by City of Shreveport; water by City of Shreveport; and sewer treatment by City of Shreveport.

3.2 Subject Property – Use History

Both parcels are currently undercharged grassed areas.

3.2.1 Subject Property – Past Uses

Past uses for the Subject Property were determined by reviewing aerial photographs dating back to 1945 up to the present.

3.3 Adjoining Properties – Use History

A number of properties adjoin the Subject Property. The current uses are as follows:

East To the east of the Subject Property, it a public park.

South To the south is a roadway, railroad and public park complex.

West To the west is additional airport property.

North To the north is additional airport property and the Express Jet facility.

Nothing was observed on any of these properties that would be of environmental concern to the Subject Property, except that the Express Jet facility has chemical storage tanks and conducts industrial activities

3.3.1 Adjoining Properties – Past Uses

Prior uses for the properties discussed above were determined by reviewing aerial photographs back to 1945. The photo and map are discussed in Section 3.4

3.4 Historical Aerial Photograph and USGS Map Analysis

Historical aerial photographs for the Subject Property dating back to 1945 were examined. These photo revealed the following:

The 1945 aerial photo showed the Subject Property to be undeveloped and mostly in trees with two residential/agricultural structures. West 70th Street runs due east and west across the property prior to construction of the airport.

The 1956 photo shows the subject parcels to be part of the airport property, now cleared and West 70th has been relocated to its present location.

Aerial photos from 1956 up to 1992 showed no significant changes to the property or its use.

The 1992 photo shows that Challenger Drive has been constructed, as has the now Express Jet facility.

4 RECORDS SEARCH

4.1 Regulatory Agencies Database Search

The following Federal, State of Louisiana and local government agency databases and sources were searched for postings within designated radii of the Subject Property:

FEDERAL SOURCES

- National Priority List (NPL)
- National Priority Delisted (NPDL)

- Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS)
- RCRA Corrective Action (CORRACTS)
- RCRA Treatment Storage and Disposal Facilities (TSD)
- RCRA Hazardous Waste Generator (RCRANLR)
- Federal EPA Institutional Controls/Engineering Controls (Fed IC/EC)
- Emergency Response Notification System for Spills (ERNS)
- Tribal Lands

STATE OF LOUISIANA AND LOCAL GOVERNMENT SOURCES

- Louisiana/Tribal EPA (Cal Sites)
- Louisiana Spills (Spills)
- Louisiana/Tribal Solid Waste Landfills (SWL)
- Louisiana/Tribal Leaking Underground Storage Tanks (LUST)
- Louisiana/Tribal Hazardous Substance Storage Containers (UST/AST)
- Louisiana/Tribal EPA Institutional Controls
- Louisiana/Tribal EPA Engineering Controls
- Louisiana/Tribal EPA Voluntary Cleanup Program
- Louisiana/Tribal EPA Brownfields (Brownfields)
- Toxic Release Inventory System (TRIS)
- Louisiana Permits (Permits)
- Louisiana Other (Other)

All searches were drawn for a ¼ mile radius.

A compilation of the Federal, State of Louisiana and Tribal databases is included in the data search report.

SUBJECT PROPERTY POSTINGS The Subject Property is not posted on any of the databases.

ADJOINING PROPERTY POSTINGS The Express Jet facility is posted on the RCRA-SQG Finds database. That Posting indicates that Express Jet generated more than 100 and less than 1,000 kg of hazardous wasted during any calendar month and accumulates less that 6,000 kg of hazardous waste at any time, or generates less than 100 kg or less of hazardous waste during any calendar month and accumulates more than 1000 kg of hazardous waste at any time. The violations cited for this facility has been for record/reporting infractions. There were no spills reported.

NEARBY PROPERTY POSTINGS Two sites within ¼ of a mile are posted onto databases. Both of these sites are posted onto the UST list only. Both postings are for underground storage tanks at the SPAR Sports facility south of the Subject Property. One posting is for a tank removal and the other was for a tightness test for the same tank. The report states that no leakage had occurred and the surrounding soil was excavated. A new tank was installed.

There are several unmapped postings in the report, but a review of the same has determined that none are in close proximity to the Subject Property. There is no indication that any of the posted sites have affected the environmental condition of the Subject Property. There is a known regional groundwater impact in the area.

4.2 Municipal Sources

4.2.1 City of Shreveport

Due to there being no structures located on the Subject Property a review of the building permit records was not deemed necessary.

5 SUBJECT PROPERTY INSPECTION

The Subject Property was visited on November 10th by D. B. Graff, P.E., PLS. The purpose of the site visit was to seek out and to report on visible environmental concerns, or to note use and storage of hazardous materials which could affect the environment condition of the Subject Property.

5.1 Use and Storage of Hazardous Materials at the Subject Property

Both the East and West parcels are undeveloped grasslands which are not being used for any specific purpose at present. The East Parcel has a fairly large improved earthen ditch which runs from north to south along the west boundary, and then heads east along the southern boundary. There is also a smaller ditch running diagonally from about midways of the west line southeasterly to the southeast corner of the parcel.

There is also an earthen ditch traversing the southern position of the West Parcel, and there are a couple of natural drainage swales visible. None appeared to be receiving any contaminated runoff. This ditch receives flows from a ditch west of Challenger which receives runoff from the Express Jet ramp.

It should be noted that both parcels are a significant distance away from the active ramp areas of the airport where fueling, fuel storage, and de-icing operations are conducted. These are some of the most common contamination sources for airports.

5.2 Indications of PCBs

There is no indication that polychlorinated biphenyls (PCBs) were used or stored at the Subject Property. No transformers were noted on the property.

5.3 Indications of Solid Waste Disposal

There are no solid wastes being generated on the property.

5.4 Indications of Hazardous Waste Disposal

There are no hazardous wastes being generated on the property.

5.5 Indications of Asbestos Containing Materials (ACMs)

There are no structures on the property which could contain asbestos.

6 INTERVIEW

An important part of any Phase 1 is interviews with individuals having knowledge of the facilities and the operations at the property being assessed. For this ESA, an informal interview was conducted with Mr. Stephen Price, Marking and Public Relations Director for the SAA. Mr. Price provided access to all parts of the Subject Property.

Mr. Price advised us of the following:

1. His conversations with SAA personnel indicates that this property has never been used for any specific purposes.

2. His conversations with SAA personnel indicates that the crews who maintain the property have never encountered any unusual conditions on the property, such as barren areas or chemical odors, which might suggest the presence of contamination.

3. His conversations with SAA personnel indicate that there has never been an aircraft crash on the property which could result in contamination.

7 FINDINGS, OPINIONS AND CONCLUSIONS

Prior to arriving at these conclusions, the following tasks were completed:

- The Subject Property was inspected.
- The surrounding properties were observed.
- Historic aerial photographs were examined
- Information was requested from various governmental and regulatory agencies for environmental information pertaining to the Subject Property.
- The databases from state and federal regulatory agencies were examined

Findings included the following:

- Prior to 1945 the property was in trees and does not appear to being used for any purpose that would pose a risk for contamination.
- Since 1956 the property has been an unused grassed area of the airport.
- There are no data base postings for the Subject Property.
- There are postings for the Express Jet facility to the north of the West Parcel and to the west of the East Parcel. These postings are for record/reporting infractions of their hazardous waste generation permit.
- There are two postings from underground storage tank issues at the city-owned Cargill Park south of the Subject Property. These postings were for a failed tightness test and for removal and replacement of the tank.
- There were no visual indications of contamination during the inspection.

The Environmental Site Assessment on the Aero Park Parcels at Shreveport Regional Airport was performed in conformance with the scope and limitations of ASTM Standard Practice. In the opinion of CGS Engineering, this assessment has revealed no evidence of “recognized environmental conditions”, as defined by the ASTM, in connection with the Subject Property. Therefore, it can be concluded that no further action is required.

APPENDIX A

LIMITATIONS

LIMITATIONS

The services described in this report were performed consistent with generally accepted consulting principles and practices. No other warranty, expressed or implied, is made. These services were performed consistent with our agreement with the Client. This report is solely for the use and information of the Client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the Client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to the performance of services. We do not warranty the accuracy of information supplied by others.

The purpose of an environmental assessment is to reasonably evaluate the potential for or actual impact of past and current practices on the Subject Property. In performing an environmental assessment, it is understood that a balance must be struck between a reasonable inquiry into the environmental issues and an exhaustive analysis of each conceivable issue of potential concern. The following paragraph discusses the assumptions and parameters under which such an opinion is rendered.

No investigation is thorough enough to exclude the presence of hazardous materials at a given site. If hazardous conditions have not been identified during the assessment, such a finding should not therefore be construed as a guarantee of the absence of such materials on the site, but rather as the services performed within the scope, limitations, and cost of the work performed. Environmental conditions may exist on the Subject Property that cannot be identified by visual observation.

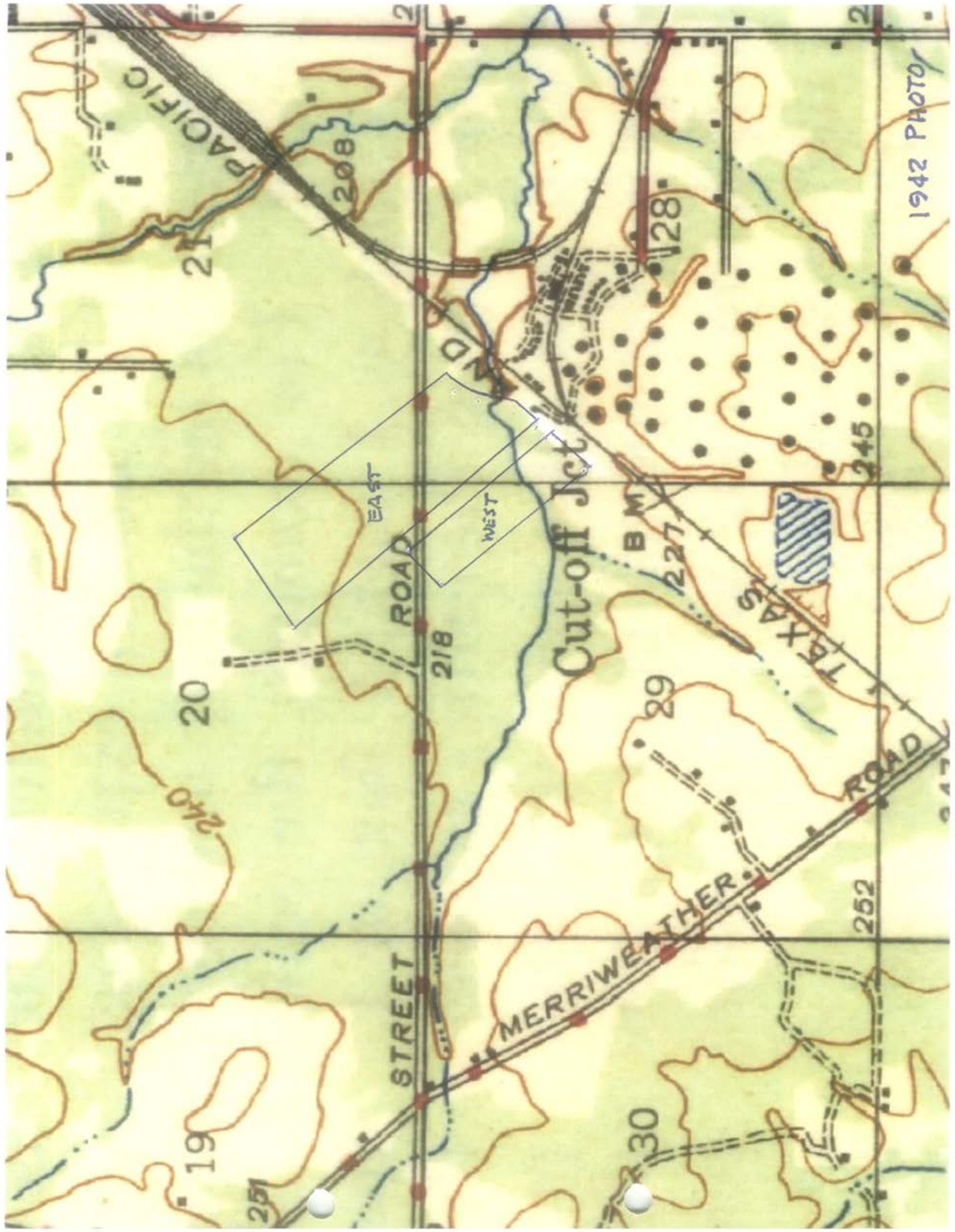
APPENDIX B

USGA MAP / PLAT MAP

APPENDIX C

SUBJECT PROPERTY PHOTOGRAPHS

1942, 1956, 2002, 2013



1952 PHOTO
GREATER SHREVEPO
AIRPORT
Beacons
Moore Cem
Cut-off Junction
TEXAS
TANK FARM
MURRY
Mooretown Sch
AND
TEXAS
WEST
EAST
213
222
245
227
200
19
20
29
28
30

2002 PHOTO
Google earth
EAST
WEST
1
3
miles
km
Google earth

APPENDIX D

REGULATORY DATABASE LISTS

Shreveport Regional Airport
7048-6961 CHALLENGER DR
Shreveport, LA 71109

Inquiry Number: 3779678.1s
November 07, 2013

The EDR Radius Map™ Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
Toll Free: 800.352.0050
www.edrnet.com

FORM-NULL-GXH

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Map Findings	7
Orphan Summary	14
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

GeoCheck - Not Requested

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

7048-6961 CHALLENGER DR
SHREVEPORT, LA 71109

COORDINATES

Latitude (North):	32.4425000 - 32° 26' 33.36"
Longitude (West):	93.8148000 - 93° 48' 53.28"
Universal Tranverse Mercator:	Zone 15
UTM X (Meters):	423407.0
UTM Y (Meters):	3589599.2
Elevation:	214 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	32093-D7 SHREVEPORT WEST, LA
Most Recent Revision:	1992

AERIAL PHOTOGRAPHY IN THIS REPORT

Photo Year:	2010
Source:	USDA

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 7 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
EXPRESSJET AIRLINES MAINTENANCE 6990 CHALLENGER DR SHREVEPORT, LA	RCRA-SQG FINDS	LAD982285512

EXECUTIVE SUMMARY

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL..... National Priority List
Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

CERCLIS..... Comprehensive Environmental Response, Compensation, and Liability Information System
FEDERAL FACILITY..... Federal Facility Site Information listing

Federal CERCLIS NFRAP site List

CERC-NFRAP..... CERCLIS No Further Remedial Action Planned

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG..... RCRA - Large Quantity Generators
RCRA-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROL..... Sites with Institutional Controls
LUCIS..... Land Use Control Information System

Federal ERNS list

ERNS..... Emergency Response Notification System

State- and tribal - equivalent CERCLIS

SHWS..... Potential and Confirmed Sites List

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Landfill List
DEBRIS..... LDEQ Approved Debris Sites
HIST DEBRIS..... LDEQ Approved Debris Sites

State and tribal leaking storage tank lists

LUST..... Leaking Underground Storage Tanks
INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

INDIAN UST..... Underground Storage Tanks on Indian Land
FEMA UST..... Underground Storage Tank Listing

State and tribal institutional control / engineering control registries

AUL..... Conveyance Notice Listing

State and tribal voluntary cleanup sites

VCP..... Voluntary Remediation Program Sites
INDIAN VCP..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS..... Brownfields Inventory

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations
ODI..... Open Dump Inventory
SWRCY..... Recycling Directory
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL..... Clandestine Drug Labs
DEL SHWS..... Deleted Potential & Confirmed Sites
CDL..... Clandestine Drug Lab
US HIST CDL..... National Clandestine Laboratory Register

Local Land Records

LIENS 2..... CERCLA Lien Information
LIENS..... Environmental Liens

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System
SPILLS..... Emergency Response Section Incidents
SPILLS 90..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR..... RCRA - Non Generators
DOT OPS..... Incident and Accident Data
DOD..... Department of Defense Sites
FUDS..... Formerly Used Defense Sites
CONSENT..... Superfund (CERCLA) Consent Decrees
ROD..... Records Of Decision
UMTRA..... Uranium Mill Tailings Sites
US MINES..... Mines Master Index File
TRIS..... Toxic Chemical Release Inventory System
TSCA..... Toxic Substances Control Act
FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing
SSTS..... Section 7 Tracking Systems
ICIS..... Integrated Compliance Information System
PADS..... PCB Activity Database System
MLTS..... Material Licensing Tracking System
RADINFO..... Radiation Information Database
RAATS..... RCRA Administrative Action Tracking System
RMP..... Risk Management Plans
UIC..... Underground Injection Wells Listing
DRYCLEANERS..... Drycleaner Facility Listing
NPDES..... LPDES Permits Database
AIRS..... Air Permit List
INDIAN RESERV..... Indian Reservations
SCRD DRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing
REM..... Division of Remediation Services Database
US AIRS..... Aerometric Information Retrieval System Facility Subsystem
PRP..... Potentially Responsible Parties
2020 COR ACTION..... 2020 Corrective Action Program List
LEAD SMELTERS..... Lead Smelter Sites
EPA WATCH LIST..... EPA WATCH LIST
US FIN ASSUR..... Financial Assurance Information
PCB TRANSFORMER..... PCB Transformer Registration Database
COAL ASH DOE..... Steam-Electric Plant Operation Data
COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List
COAL ASH..... Coal Ash Disposal Sites
ASBESTOS..... Asbestos Projects List
Financial Assurance..... Financial Assurance Information

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP..... EDR Proprietary Manufactured Gas Plants

EDR US Hist Auto Stat_____ EDR Exclusive Historic Gas Stations
EDR US Hist Cleaners_____ EDR Exclusive Historic Dry Cleaners

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

State and tribal leaking storage tank lists

HIST LUST: Department of Environmental Quality's Underground Storage Tank Case History Incidents database.

A review of the HIST LUST list, as provided by EDR, and dated 11/01/1999 has revealed that there is 1 HIST LUST site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CITY OF S'PORT-PARKS & REC	3100 STANDARD OIL RD	SE 1/8 - 1/4 (0.249 mi.)	A3	11

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Environmental Quality's Louisiana Underground Storage Tank Database.

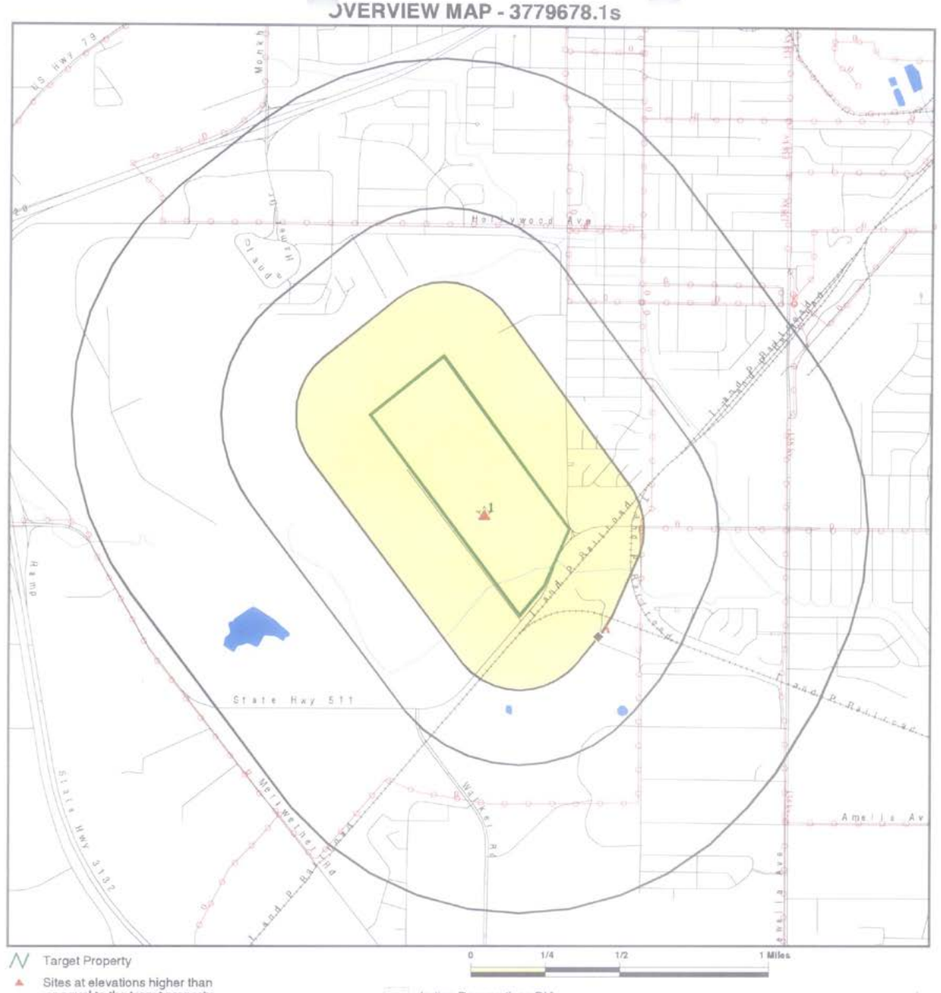
A review of the UST list, as provided by EDR, and dated 07/19/2013 has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SHREVEPORT CITY OF - PARKS & R	3100 STANDARD OIL RD	SE 1/8 - 1/4 (0.249 mi.)	A2	10

Due to poor or inadequate address information, the following sites were not mapped. Count: 20 records.

Site Name	Database(s)
LEONARD RD SPILL	VCP, REM
CHEMTRADE REFINERY SERVICES INC -	SPILLS 90
ADESA ARK-LA-TEX LLC	RCRA-CESQG, FINDS, US AIRS
LA HWY. 3132 AT HWY. 526 IN SHREVE	SPILLS
OFF HWY 1 SOUTH SHREVEPORT AT RED	SPILLS
SEWERAGE LIFT STATION LOCATED OFF	SPILLS
SITE LOCATED ALONG SHREVEPORT-BLAN	SPILLS
SHREVEPORT I-20 ACCIDENT	CERCLIS
BRASHER'S GROCERY	UST
PIE NATIONWIDE PARKWAY	UST
SOUTH SHREVEPORT ANIMAL HOSPITAL	RCRA-CESQG, FINDS
SHREVEPORT I-20 ACCIDENT	FINDS
SHREVEPORT ASPHALT +ACY-	FINDS
SHREVEPORT RIVERVIEW PROJ	FINDS
CROSS BAYOU SITE	US BROWNFIELDS, FINDS
CITY OF SHREVEPORT	FINDS
RED RIVER ENTERTAINMENT OF SHREVEP	FINDS
SHREVEPORT CITY OF - NORTH REG	FINDS
SHREVEPORT FACILITY	FINDS
1739 KINGS HIGHWAY	US BROWNFIELDS

OVERVIEW MAP - 3779678.1s



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Shreveport Regional Airport	CLIENT: Cothren, Graff, Smoak Engineering, Inc
ADDRESS: 7048-6961 CHALLENGER DR Shreveport LA 71109	CONTACT: Robert W. Beard, Jr.
LAT/LONG: 32.4426 / 93.8148	INQUIRY #: 3779678.1s DATE: November 07, 2013 2:35 pm

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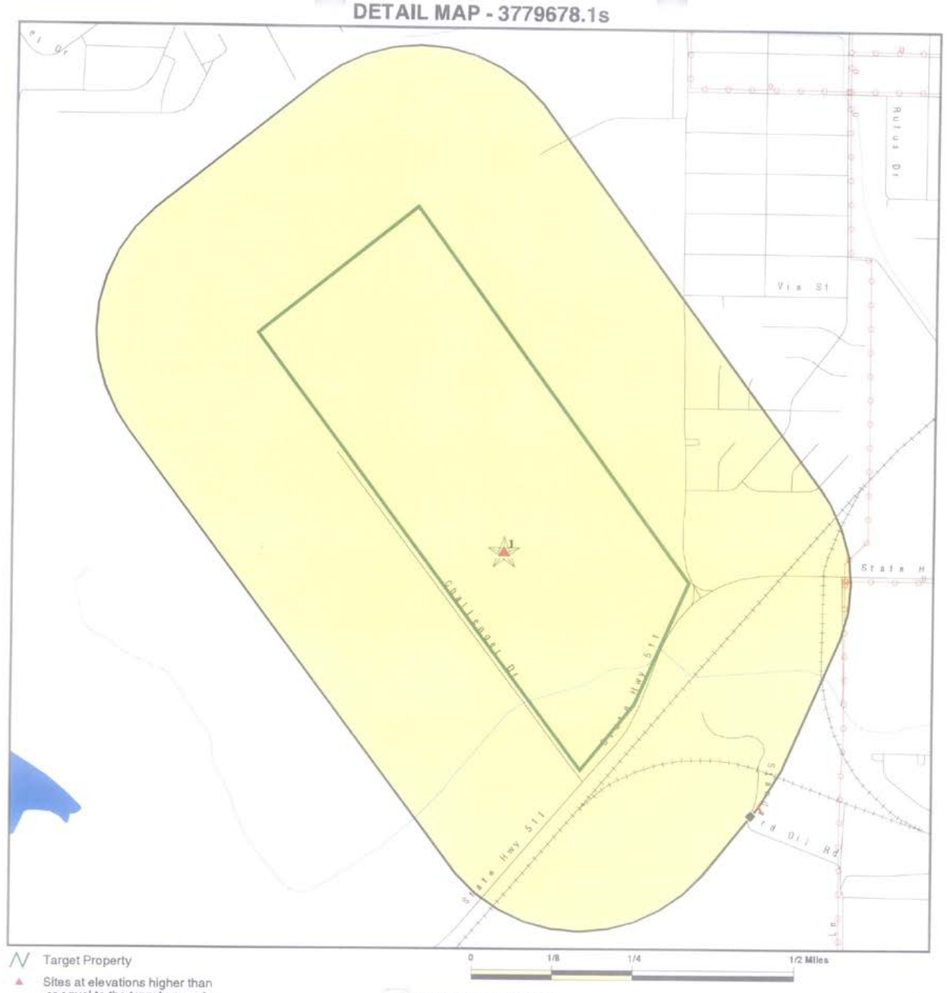
DETAIL MAP - 3779678.1s



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SITE NAME: Shreveport Regional Airport	CLIENT: Cothren, Graff, Smoak Engineering, Inc
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LAT/LONG: 32.4426 / 93.8148	INQUIRY #: 3779678.1s DATE: November 07, 2013 2:38 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250	1	0	0	NR	NR	NR	1
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		0	0	0	0	NR	0
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
DEBRIS	0.500		0	0	0	NR	NR	0
HIST DEBRIS	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	0	0	NR	NR	0
HIST LUST	0.500		0	1	0	NR	NR	1

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		0	1	NR	NR	NR	1
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
AUL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
DEL SHWS	1.000		0	0	0	0	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
LIENS	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP	1	NR	NR	NR	NR	NR	1
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
REM	0.500		0	0	0	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
COAL ASH	0.500		0	0	0	NR	NR	0
ASBESTOS	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		0	0	NR	NR	NR	0
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
1 Target Property	EXPRESSJET AIRLINES MAINTENANCE 6990 CHALLENGER DR SHREVEPORT, LA	RCRA-SQG FINDS	1000273199 LAD982285512

Actual: 214 ft.

RCRA-SQG:

Date form received by agency:	12/04/2001
Facility name:	EXPRESSJET AIRLINES MAINTENANCE
Facility address:	6990 CHALLENGER DR SHREVEPORT, LA 71109
EPA ID:	LAD982285512
Mailing address:	CHALLENGER DR SHREVEPORT, LA 71109
Contact:	DAVE REPP
Contact address:	6990 CHALLENGER DR SHREVEPORT, LA 71109
Contact country:	US
Contact telephone:	(318) 636-4740
Contact email:	Not reported
EPA Region:	06
Land type:	Municipal
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	EXPRESSJET AIRLINES
Owner/operator address:	6990 CHALLENGER DR SHREVEPORT, LA 71109
Owner/operator country:	Not reported
Owner/operator telephone:	(318) 636-4740
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	01/01/0001
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	11/09/2001
Facility name:	EXPRESSJET AIRLINES MAINTENANCE

EXPRESSJET AIRLINES MAINTENANCE (Continued) **1000273199**

Classification: Small Quantity Generator

Date form received by agency: 03/19/1991
Facility name: EXPRESSJET AIRLINES MAINTENANCE
Classification: Small Quantity Generator

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: F002
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Facility Has Received Notices of Violations:
Regulation violated: SR - LAC33V1109.E.7.d.ii(a)
Area of violation: Generators - General
Date violation determined: 04/09/2003
Date achieved compliance: 04/09/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/25/2003

EXPRESSJET AIRLINES MAINTENANCE (Continued) **1000273199**

Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - LAC33V2109.A
Area of violation: Generators - General
Date violation determined: 04/09/2003
Date achieved compliance: 04/09/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/25/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - LAC33V1105B
Area of violation: Generators - Records/Reporting
Date violation determined: 05/11/1992
Date achieved compliance: 06/17/1992
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/05/1992
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 08/16/1990
Date achieved compliance: 02/18/1991
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 01/24/1991
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 04/09/2003
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 04/09/2003
Evaluation lead agency: State

Evaluation date: 04/22/1997

EXPRESSJET AIRLINES MAINTENANCE (Continued) 1000273199

Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/17/1997
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 08/17/1992
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Generators - Records/Reporting
Date achieved compliance: 08/17/1992
Evaluation lead agency: State

Evaluation date: 05/11/1992
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Records/Reporting
Date achieved compliance: 08/17/1992
Evaluation lead agency: State

Evaluation date: 02/18/1991
Evaluation: COMPLIANCE SCHEDULE EVALUATION
Area of violation: Generators - General
Date achieved compliance: 02/18/1991
Evaluation lead agency: State

Evaluation date: 08/16/1990
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 02/18/1991
Evaluation lead agency: State

FINDS:

Registry ID: 110003306930

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

A2 **SHREVEPORT CITY OF - PARKS & RECREATION** UST U003923737
SE **3100 STANDARD OIL RD** N/A
1/8-1/4 **SHREVEPORT, LA 71108**
0.249 mi.
1315 ft. **Site 1 of 2 in cluster A**

Relative: UST:
Lower
Facility ID: 09011640
Master Agency Id: 69915
Actual: Subject Category Code: Individual UST
211 ft.

SHREVEPORT CITY OF - PARKS & RECREATION (Continued) U003923737

Subject Item ID: 1

UST Tank Num: 31042
Tank Status: Removed
Install Date: 08-May-1983
Total Capacity: 1000
Number Of Compartments: 1
Gasoline Flag: Not reported
Diesel Flag: Yes
Gasohol Flag: Not reported
Kerosene Flag: Not reported
Heating Oil Flag: Not reported
New Used Oil Flag: Not reported
MS Aviation Fuel JP: Not reported
MS Additive: Not reported
MS Antifreeze: Not reported
MS Naptha: Not reported
MS Varsol: Not reported
Unknown: Not reported
Other Sub: Not reported
Steel Tank Covered With Asphalt: Not reported
Cathodically Protected: Not reported
Epoxy Coated Tank: Not reported
A Composite Of Different Materials: Not reported
Fiberglass Or Plastic: Not reported
Interior Line With Some Material: Not reported
Double Wall As Opposed To Single Wall: Not reported
Outside Lined w/ Polyethylen Jacket: Not reported
Made Of Concrete: Not reported
Liner Covering Excavation Hole: Not reported
Other Material: Not reported
Pipe Method Description: Not reported

A3 **CITY OF S'PORT-PARKS & REC** HIST LUST S106034040
SE **3100 STANDARD OIL RD** N/A
1/8-1/4 **SHREVEPORT, LA 71108**
0.249 mi.
1315 ft. **Site 2 of 2 in cluster A**

Relative: HIST LUST:
Lower
Facility ID: 09-011640
Facility Parish: CADDO
Actual: Substance Name: GASOLINE
211 ft.
Substance Name 2: Not reported
Quantity: UNKNOWN
Quantity 2: Not reported
Date Confirmed: 01/29/1991
Date Confirmed 2: Not reported
Incident Number: 91-7-0029
Incident Date: 01/29/1991
Type of Incident: TANK TIGHT FAIL
Type of Incident No2: Not reported
Reported By: PUMP MASTERS
Reported By 2: Not reported
Owner ID: 00374400
Owner Name: CITY OF SHREVEPORT-SPAR
Owner Address: 400 CLYDE FANT PKWY
Owner City,St,Zip: SHREVEPORT, LA 71101

CITY OF S'PORT-PARKS & REC (Continued) S106034040

Assessment Pending Info:	Yes
Assessment Request Date:	Not reported
Assessment Plan Due Date:	Not reported
Assessment Plan Received Date:	Not reported
Assessment Approved Date:	Not reported
Assessment Contractor:	PUMP MASTERS INC.
Assess Date Add Info Due:	Not reported
Assess Date Add Info Recd:	Not reported
Assess Date Add Info Due2:	Not reported
Assess Date Add Info Recd:	Not reported
Assess Date Add Info Due3:	Not reported
Corrective Plan Due Date:	Not reported
Corrective Plan Received Date:	Not reported
Corrective Plan Approved Date:	05/11/1993
Corr Act Date Add Info Due:	Not reported
Corr Act Date Add Info Recd:	Not reported
Corr Act Date Add Info Due2:	Not reported
Corr Act Date Add Info Recd2:	Not reported
Corr Act Date Add Info Due3:	Not reported
Remediation Method:	Not reported
Remediation Date:	Not reported
Remediation Terminated Date:	Not reported

LA HIST LUST INCIDENT:
Comments: Not reported

LA HIST LUST ASSESMENT:
Comments: UST WAS REPORTEDLY TAKING ON WATER AND FAILDED TIGHTNESS TEST.GASOLINE WAS NOTED COMING OUT OF THE GROUND AROUND THE UST. SOIL TOBE EXCAVATED.

LA HIST LUST CORRECTIVE ACTION:
Comments: OLD TANK REMOVED AND NEW TANK INSTALLED. AMENDED REGISTRATIONFORM IS DATED 2/24/93.

Facility ID:	09-011640	
Facility Parish:	CADDO	
Substance Name:	Not reported	
Substance Name 2:	Not reported	
Quantity:	Not reported	
Quantity 2:	Not reported	
Date Confirmed:	Not reported	
Date Confirmed 2:	Not reported	
Incident Number:	91-7-0029	
Incident Date:	01/29/1991	
Type of Incident:		Not reported
Type of Incident No2:		Not reported
Reported By:	Not reported	
Reported By 2:	Not reported	
Owner ID:	00374400	
Owner Name:	CITY OF SHREVEPORT-SPAR	
Owner Address:	400 CLYDE FANT PKWY	
Owner City,St,Zip:	SHREVEPORT, LA 71101	
Assessment Pending Info:		Yes
Assessment Request Date:		Not reported
Assessment Plan Due Date:		Not reported
Assessment Plan Received Date:		Not reported
Assessment Approved Date:		Not reported
Assessment Contractor:		PUMP MASTERS INC.
Assess Date Add Info Due:		Not reported

CITY OF S'PORT-PARKS & REC (Continued) S106034040

Assess Date Add Info Recd:	Not reported
Assess Date Add Info Due2:	Not reported
Assess Date Add Info Recd:	Not reported
Assess Date Add Info Due3:	Not reported
Corrective Plan Due Date:	Not reported
Corrective Plan Received Date:	Not reported
Corrective Plan Approved Date:	05/11/1993
Corr Act Date Add Info Due:	Not reported
Corr Act Date Add Info Recd:	Not reported
Corr Act Date Add Info Due2:	Not reported
Corr Act Date Add Info Recd2:	Not reported
Corr Act Date Add Info Due3:	Not reported
Remediation Method:	Not reported
Remediation Date:	Not reported
Remediation Terminated Date:	Not reported

LA HIST LUST INCIDENT:
Comments: Not reported

LA HIST LUST ASSESMENT:
Comments: UST WAS REPORTEDLY TAKING ON WATER AND FAILDED TIGHTNESS TEST.GASOLINE WAS NOTED COMING OUT OF THE GROUND AROUND THE UST. SOIL TOBE EXCAVATED.

LA HIST LUST CORRECTIVE ACTION:
Comments: OLD TANK REMOVED AND NEW TANK INSTALLED. AMENDED REGISTRATIONFORM IS DATED 2/24/93.

Count: 20 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
BENSON	U004052003	BRASHER'S GROCERY	18778 LA HWY 171	71109	UST
SHREVEPORT	S112334391	CHEMTRADE REFINERY SERVICES INC -	10889 HWY 1 SOUTH/SHREVEPORT		SPILLS 90
SHREVEPORT	1007122775	SHREVEPORT I-20 ACCIDENT	INTERSTATE 20 NEAR PINE RD.		FINDS
SHREVEPORT	1007117452	SHREVEPORT I-20 ACCIDENT	INTERSTATE 20 NEAR PINE RD.		CERCLIS
SHREVEPORT	U003923606	PIE NATIONWIDE PARKWAY	7652 HWY 80	71109	UST
SHREVEPORT	1004710839	ADESA ARK-LA-TEX LLC	7666 HWY 80 W		RCRA-CESQG, FINDS, US AIRS
SHREVEPORT	1007639243	SHREVEPORT ASPHALT +ACY-	AGGREGATE SALES		FINDS
SHREVEPORT	1004709975	SOUTH SHREVEPORT ANIMAL HOSPITAL	1122 E BERT KOUNS		RCRA-CESQG, FINDS
SHREVEPORT	1007147538	SHREVEPORT RIVERVIEW PROJ	700 BLK OF CLYDE PKWY		FINDS
SHREVEPORT	1007057616	CROSS BAYOU SITE	LA HIGHWAY 3036		US BROWNFIELDS, FINDS
SHREVEPORT	S108515463	LA HWY. 3132 AT HWY. 526 IN SHREVE	LA HWY. 3132 AT HWY. 526		SPILLS
SHREVEPORT	1014946384	1739 KINGS HIGHWAY	1739 KINGS HIGHWAY AKA	00000	US BROWNFIELDS
SHREVEPORT	S112659528	LEONARD RD SPILL	LEONARD RD & HWY 1S		VCP, REM
SHREVEPORT	1006879158	CITY OF SHREVEPORT	LUCAS TREATMENT PLANT		FINDS
SHREVEPORT	S108628195	OFF HWY 1 SOUTH SHREVEPORT AT RED	OFF HWY 1 SOUTH SHREVEPORT AT		SPILLS
SHREVEPORT	1006263740	RED RIVER ENTERTAINMENT OF SHREVEP	SEC. 30, T 16N, R 13W		FINDS
SHREVEPORT	S105518822	SEWERAGE LIFT STATION LOCATED OFF	SEWERAGE LIFT STATION LOCATED		SPILLS
SHREVEPORT	S108620933	SITE LOCATED ALONG SHREVEPORT-BLAN	SITE LOCATED ALONG SHREVEPORT-		SPILLS
SHREVEPORT	1007449972	SHREVEPORT CITY OF - NORTH REG	UNKNOWN		FINDS
SHREVEPORT	1005592057	SHREVEPORT FACILITY	580 E ZION RD		FINDS

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List
National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/09/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 62

Source: EPA
Telephone: N/A
Last EDR Contact: 10/11/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 5
Telephone 312-886-6686

EPA Region 10
Telephone 206-553-8665

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6774

EPA Region 9
Telephone: 415-947-4246

Proposed NPL: Proposed National Priority List Sites
A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/09/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 62

Source: EPA
Telephone: N/A
Last EDR Contact: 10/11/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens
Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

DELISTED NPL: National Priority List Deletions
The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/09/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 62
Source: EPA
Telephone: N/A
Last EDR Contact: 10/11/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System
CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/29/2013
Date Made Active in Reports: 08/09/2013
Number of Days to Update: 72
Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Quarterly

FEDERAL FACILITY: Federal Facility Site Information listing
A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 10/09/2012
Date Made Active in Reports: 12/20/2012
Number of Days to Update: 72
Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 10/11/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Varies

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned
Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/29/2013
Date Made Active in Reports: 08/09/2013
Number of Days to Update: 72
Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report
CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36
Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36
Source: Environmental Protection Agency
Telephone: 214-665-6444
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36
Source: Environmental Protection Agency
Telephone: 214-665-6444
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36
Source: Environmental Protection Agency
Telephone: 214-665-6444
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36
Source: Environmental Protection Agency
Telephone: 214-665-6444
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

US ENG CONTROLS: Engineering Controls Sites List
A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 06/17/2013
Date Data Arrived at EDR: 06/21/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 104

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls
A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 06/17/2013
Date Data Arrived at EDR: 06/21/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 104

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

LUCIS: Land Use Control Information System
LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 08/20/2013
Date Data Arrived at EDR: 08/23/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 70

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 08/15/2013
Next Scheduled EDR Contact: 09/02/2013
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System
Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/17/2013
Date Made Active in Reports: 02/15/2013
Number of Days to Update: 29

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 10/01/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Annually

State- and tribal - equivalent CERCLIS

SHWS: Potential and Confirmed Sites List
Confirmed status denotes that assessments have been performed and a determination made that (1) hazardous waste(s) or substance(s) are present at the site and (2) these sites are under the jurisdiction of the LDEQ/RSD. Potential status is an indicator that sites are either waiting to be assessed or the assessment is in progress.

Date of Government Version: 07/19/2013
Date Data Arrived at EDR: 07/22/2013
Date Made Active in Reports: 09/03/2013
Number of Days to Update: 43

Source: Department of Environmental Quality
Telephone: 225-219-3181
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Landfill List
Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 09/16/2013
Date Data Arrived at EDR: 09/17/2013
Date Made Active in Reports: 10/16/2013
Number of Days to Update: 29

Source: Department of Environmental Quality
Telephone: 225-219-3181
Last EDR Contact: 09/16/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Annually

DEBRIS: LDEQ Approved Debris Sites
A listing of LDEQ Approved Debris Sites where hurricane debris is dumped.

Date of Government Version: 09/03/2013
Date Data Arrived at EDR: 09/04/2013
Date Made Active in Reports: 10/17/2013
Number of Days to Update: 43

Source: Department of Environmental Quality
Telephone: 225-219-3953
Last EDR Contact: 09/04/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: Varies

HIST DEBRIS: LDEQ Approved Debris Sites
A listing of LDEQ Approved Debris Sites where hurricane debris is dumped.

Date of Government Version: 02/07/2007
Date Data Arrived at EDR: 11/14/2008
Date Made Active in Reports: 11/21/2008
Number of Days to Update: 7

Source: Department of Environmental Quality
Telephone: 225-219-3070
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tanks
Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 07/19/2013
Date Data Arrived at EDR: 07/22/2013
Date Made Active in Reports: 09/03/2013
Number of Days to Update: 43

Source: Department of Environmental Quality
Telephone: 225-219-3181
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Varies

HIST LUST: Underground Storage Tank Case History Incidents
This listing includes detailed information for Leaking Underground Storage Tanks reported through November 1999. It is no longer updated. Current LUST incidents, without detail, can be found in the Leaking Underground Storage Tank Database

Date of Government Version: 11/01/1999
Date Data Arrived at EDR: 02/16/2000
Date Made Active in Reports: 05/01/2000
Number of Days to Update: 75

Source: Department of Environmental Quality
Telephone: N/A
Last EDR Contact: 12/04/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 08/20/2013
Date Data Arrived at EDR: 08/23/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 70

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 03/01/2013
Date Data Arrived at EDR: 03/01/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 42

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 08/27/2012
Date Data Arrived at EDR: 08/28/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 49

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 08/27/2013
Date Data Arrived at EDR: 08/27/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 66

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 09/12/2011
Date Data Arrived at EDR: 09/13/2011
Date Made Active in Reports: 11/11/2011
Number of Days to Update: 59

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 08/02/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 91

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Semi-Annually

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 02/01/2013
Date Data Arrived at EDR: 05/01/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 184

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 11/01/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 07/29/2013
Date Data Arrived at EDR: 07/30/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 94

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

State and tribal registered storage tank lists

UST: Louisiana Underground Storage Tank Database
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 07/19/2013
Date Data Arrived at EDR: 07/22/2013
Date Made Active in Reports: 09/03/2013
Number of Days to Update: 43

Source: Department of Environmental Quality
Telephone: 225-219-3181
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Quarterly

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 07/29/2013
Date Data Arrived at EDR: 08/01/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 92

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 02/28/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 43

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 09/28/2012
Date Data Arrived at EDR: 11/07/2012
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 156

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 11/01/2014
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 08/02/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 91

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 08/20/2013
Date Data Arrived at EDR: 08/23/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 70

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 02/05/2013
Date Data Arrived at EDR: 02/06/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 65

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/10/2011
Date Data Arrived at EDR: 05/11/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 34

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Semi-Annually

INDIAN UST R9: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 02/21/2013
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 45

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 10/17/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

AUL: Listing of Institutional and/or Enginnering Controls
A notice of contamination (nature and levels of contaminants) and restriction of property to non-residential use are placed in the conveyance records for the property.

Date of Government Version: 10/18/2010
Date Data Arrived at EDR: 11/04/2010
Date Made Active in Reports: 11/12/2010
Number of Days to Update: 8

Source: Department of Environmental Quality
Telephone: 225-219-3168
Last EDR Contact: 10/10/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Quarterly

State and tribal voluntary cleanup sites

VCP: Voluntary Remediation Program Sites
Sites that have entered the Department of Environmental Quality's Voluntary Remediation Program

Date of Government Version: 07/18/2013
Date Data Arrived at EDR: 07/22/2013
Date Made Active in Reports: 09/04/2013
Number of Days to Update: 44

Source: Department of Environmental Quality
Telephone: 225-219-3181
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/28/2012
Date Data Arrived at EDR: 10/02/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 14

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 10/01/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Brownfields Inventory
Brownfields are abandoned, idled, or underused industrial or commercial real property, the expansion, redevelopment or reuse of which may be complicated by the presence of or potential presence of a hazardous substance, pollutant, or contaminant.

Date of Government Version: 01/21/2013
Date Data Arrived at EDR: 01/22/2013
Date Made Active in Reports: 03/08/2013
Number of Days to Update: 45

Source: New Orleans Office of Environmental Affairs
Telephone: 504-658-4070
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/24/2013
Date Data Arrived at EDR: 06/25/2013
Date Made Active in Reports: 08/09/2013
Number of Days to Update: 45

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 09/24/2013
Next Scheduled EDR Contact: 01/06/2014
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39
Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137
Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: No Update Planned

SWRCY: Recycling Directory
A listing of recycling facilities.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 09/21/2010
Date Made Active in Reports: 10/12/2010
Number of Days to Update: 21
Source: Department of Environmental Quality
Telephone: 225-219-3181
Last EDR Contact: 09/16/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Semi-Annually

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52
Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 11/04/2013
Next Scheduled EDR Contact: 02/17/2014
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US CDL: Clandestine Drug Labs
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 08/06/2013
Date Data Arrived at EDR: 09/11/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 22
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 09/04/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: Quarterly

DEL SHWS: Deleted Potential & Confirmed Sites
A listing of sites removed from the Potential and Confirmed Listing.

Date of Government Version: 07/19/2013
Date Data Arrived at EDR: 07/22/2013
Date Made Active in Reports: 08/30/2013
Number of Days to Update: 39
Source: Department of Environmental Quality
Telephone: 225-219-3168
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Varies

CDL: Clandestine Drug Lab
A list of residential real properties that have been reported as potentially contaminated.

Date of Government Version: 08/20/2013
Date Data Arrived at EDR: 09/04/2013
Date Made Active in Reports: 10/16/2013
Number of Days to Update: 42
Source: Department of Environmental Quality
Telephone: 225-219-5337
Last EDR Contact: 09/04/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: Semi-Annually

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007
Date Data Arrived at EDR: 11/19/2008
Date Made Active in Reports: 03/30/2009
Number of Days to Update: 131
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

Local Land Records

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/06/2013
Date Data Arrived at EDR: 04/25/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 15
Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 11/01/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

LIENS: Environmental Liens
An Environmental Lien is a charge, security, or encumbrance upon title to a property to secure the payment of a cost, damage, debt, obligation, or duty arising out of response actions, cleanup, or other remediation of hazardous substances or petroleum products upon a property, including (but not limited to) liens imposed pursuant to CERCLA 42 USC ? 9607(1) and similar state or local laws. In other words: a lien placed upon a property's title due to an environmental condition.

Date of Government Version: 04/10/2013
Date Data Arrived at EDR: 07/22/2013
Date Made Active in Reports: 09/03/2013
Number of Days to Update: 43
Source: Department of Environmental Quality
Telephone: N/A
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Varies

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 55
Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 10/01/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Annually

SPILLS: Emergency Response Section Incidents
Spills and/or releases, to land, reported to the Emergency Response Section.

Date of Government Version: 08/20/2013
Date Data Arrived at EDR: 08/23/2013
Date Made Active in Reports: 10/17/2013
Number of Days to Update: 55
Source: Department of Environmental Quality
Telephone: 225-219-3620
Last EDR Contact: 08/15/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Varies

SPILLS 90: SPILLS90 data from FirstSearch
Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 10/30/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 03/07/2013
Number of Days to Update: 63
Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36
Source: Environmental Protection Agency
Telephone: 214-665-6444
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

DOT OPS: Incident and Accident Data
Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42
Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 11/06/2013
Next Scheduled EDR Contact: 02/17/2014
Data Release Frequency: Varies

DOD: Department of Defense Sites
This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62
Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites
The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 03/13/2013
Number of Days to Update: 15
Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2013
Date Data Arrived at EDR: 08/07/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 57
Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 09/30/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

ROD: Records Of Decision
Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 06/11/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 143
Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 09/13/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites
Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146
Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/28/2013
Next Scheduled EDR Contact: 09/09/2013
Data Release Frequency: Varies

US MINES: Mines Master Index File
Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 09/05/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 28
Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 09/05/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System
Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/31/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 44
Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 08/30/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Annually

TSCA: Toxic Substances Control Act
Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2006
Date Data Arrived at EDR: 09/28/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 64
Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/24/2013
Next Scheduled EDR Contact: 01/06/2014
Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems
Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 07/20/2011
Date Data Arrived at EDR: 11/10/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 10/09/2014
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 06/01/2013
Date Data Arrived at EDR: 07/17/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 107

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Annually

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 07/22/2013
Date Data Arrived at EDR: 08/02/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 91

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Quarterly

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 09/30/2013
Date Data Arrived at EDR: 10/09/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 23

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 10/09/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System
Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 03/08/2013
Date Data Arrived at EDR: 03/21/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 111

Source: EPA
Telephone: (214) 665-2200
Last EDR Contact: 05/11/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System
RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 05/08/2012
Date Data Arrived at EDR: 05/25/2012
Date Made Active in Reports: 07/10/2012
Number of Days to Update: 46

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 04/19/2013
Number of Days to Update: 52

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 08/26/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Biennially

UIC: Underground Injection Wells Listing

A listing of underground injection well locations.

Date of Government Version: 04/16/2013
Date Data Arrived at EDR: 04/16/2013
Date Made Active in Reports: 04/30/2013
Number of Days to Update: 14

Source: Department of Natural Resources
Telephone: 225-342-5515
Last EDR Contact: 09/30/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

DRYCLEANERS: Drycleaner Facility Listing

A listing of drycleaner facilities.

Date of Government Version: 07/25/2013
Date Data Arrived at EDR: 07/26/2013
Date Made Active in Reports: 09/03/2013
Number of Days to Update: 39

Source: Department of Environmental Quality
Telephone: 225-219-3168
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Varies

NPDES: LPDES Permits Database

A listing of sites with a Louisiana Pollutant Discharge Elimination System (LPDES) program issued permit.

Date of Government Version: 07/29/2013
Date Data Arrived at EDR: 07/30/2013
Date Made Active in Reports: 09/04/2013
Number of Days to Update: 36

Source: Department of Environmental Quality
Telephone: 225-219-3181
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

AIRS: Air Permit List

A listing of facilities with air permits issued by the Air Permits Division

Date of Government Version: 09/04/2013
Date Data Arrived at EDR: 09/25/2013
Date Made Active in Reports: 10/16/2013
Number of Days to Update: 21

Source: Department of Environmental Quality
Telephone: 225-219-3417
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Varies

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Semi-Annually

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Varies

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 01/23/2013
Date Data Arrived at EDR: 01/30/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 09/30/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Annually

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 04/15/2013
Date Data Arrived at EDR: 07/03/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 72

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 10/04/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: N/A

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 01/23/2013
Date Data Arrived at EDR: 01/30/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 09/30/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Annually

REM: Division of Remediation Services Database
Facilities or sites come to the Underground Storage Tank and Remediation Divison either through self notification or referral. These sites are designated for remediation via the following regulatory paths: Solid Waste (SW), Hazardous Waste (Haz Waste), Groundwater (Grwater), Inactive & Abandoned Sites (Confirmed or Potential), or Underground Storage Tanks (UST).

Date of Government Version: 07/19/2013
Date Data Arrived at EDR: 07/22/2013
Date Made Active in Reports: 09/04/2013
Number of Days to Update: 44

Source: Department of Environmental Quality
Telephone: 225-219-3168
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List
The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 11/11/2011
Date Data Arrived at EDR: 05/18/2012
Date Made Active in Reports: 05/25/2012
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 08/16/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites
A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

LEAD SMELTER 1: Lead Smelter Sites
A listing of former lead smelter site locations.

Date of Government Version: 01/29/2013
Date Data Arrived at EDR: 02/14/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 09/24/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Varies

EPA WATCH LIST: EPA WATCH LIST
EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 06/30/2013
Date Data Arrived at EDR: 08/13/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 08/07/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Quarterly

US FIN ASSUR: Financial Assurance Information
All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/04/2013
Date Data Arrived at EDR: 03/15/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 56

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 09/27/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Quarterly

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 11/01/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

COAL ASH DOE: Steam-Electric Plan Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 10/15/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 08/17/2010
Date Data Arrived at EDR: 01/03/2011
Date Made Active in Reports: 03/21/2011
Number of Days to Update: 77

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 09/13/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

COAL ASH: Coal Ash Disposal Sites
A listing of coal ash impoundments.

Date of Government Version: 07/25/2013
Date Data Arrived at EDR: 07/26/2013
Date Made Active in Reports: 09/03/2013
Number of Days to Update: 39

Source: Department of Environmental Quality
Telephone: 225-219-3168
Last EDR Contact: 10/10/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Varies

ASBESTOS: Asbestos Projects List
Asbestos demolition and renovation notification projects locations in the state.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 04/25/2013
Date Made Active in Reports: 06/27/2013
Number of Days to Update: 63

Source: Department of Environmental Quality
Telephone: 225-219-3181
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Annually

Financial Assurance 1: Financial Assurance Information
Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay

Date of Government Version: 08/14/2013
Date Data Arrived at EDR: 08/27/2013
Date Made Active in Reports: 10/11/2013
Number of Days to Update: 45

Source: Department of Environmental Quality
Telephone: 225-219-3168
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing
Information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay

Date of Government Version: 08/14/2013
Date Data Arrived at EDR: 08/27/2013
Date Made Active in Reports: 10/11/2013
Number of Days to Update: 45

Source: Department of Environmental Quality
Telephone: 225-219-3168
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR US Hist Auto Stat: EDR Exclusive Historic Gas Stations
EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Exclusive Historic Dry Cleaners
EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Proprietary Historic Dry Cleaners - Cole

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: N/A
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Auto Stat: EDR Proprietary Historic Gas Stations - Cole

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: N/A
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 08/19/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 08/07/2013
Date Made Active in Reports: 09/10/2013
Number of Days to Update: 34

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 11/07/2013
Next Scheduled EDR Contact: 02/17/2014
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 07/24/2013
Date Made Active in Reports: 08/19/2013
Number of Days to Update: 26

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 08/09/2013
Date Made Active in Reports: 09/27/2013
Number of Days to Update: 49

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 09/16/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data
Source: Rextag Strategies Corp.
Telephone: (281) 769-2247
U.S. Electric Transmission and Power Plants Systems Digital GIS Data

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

STREET AND ADDRESS INFORMATION

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Shreveport Regional Airport Option 2
6900-6959 CHALLENGER DR
Shreveport, LA 71109

Inquiry Number: 3786904.1s
November 15, 2013

The EDR Radius Map™ Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
Toll Free: 800.352.0050
www.edrnet.com

FORM-NULL-GXH

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GEOCHECK ADDENDUM

GeoCheck - Not Requested

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

6900-6959 CHALLENGER DR
SHREVEPORT, LA 71109

COORDINATES

Latitude (North):	32.4390000 - 32° 26' 20.40"
Longitude (West):	93.8164000 - 93° 48' 59.04"
Universal Tranverse Mercator:	Zone 15
UTM X (Meters):	423253.6
UTM Y (Meters):	3589201.2
Elevation:	208 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	32093-D7 SHREVEPORT WEST, LA
Most Recent Revision:	1992

AERIAL PHOTOGRAPHY IN THIS REPORT

Photo Year:	2010
Source:	USDA

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL..... National Priority List

Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

CERCLIS..... Comprehensive Environmental Response, Compensation, and Liability Information System
FEDERAL FACILITY..... Federal Facility Site Information listing

Federal CERCLIS NFRAP site List

CERC-NFRAP..... CERCLIS No Further Remedial Action Planned

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG..... RCRA - Large Quantity Generators
RCRA-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator

Federal Institutional controls / engineering controls registries

US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROL..... Sites with Institutional Controls
LUCIS..... Land Use Control Information System

Federal ERNS list

ERNS..... Emergency Response Notification System

State- and tribal - equivalent CERCLIS

SHWS..... Potential and Confirmed Sites List

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Landfill List
DEBRIS..... LDEQ Approved Debris Sites
HIST DEBRIS..... LDEQ Approved Debris Sites

State and tribal leaking storage tank lists

LUST..... Leaking Underground Storage Tanks
INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

UST..... Louisiana Underground Storage Tank Database

INDIAN UST..... Underground Storage Tanks on Indian Land
FEMA UST..... Underground Storage Tank Listing

State and tribal institutional control / engineering control registries

AUL..... Conveyance Notice Listing

State and tribal voluntary cleanup sites

VCP..... Voluntary Remediation Program Sites
INDIAN VCP..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS..... Brownfields Inventory

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations
ODI..... Open Dump Inventory
SWRCY..... Recycling Directory
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL..... Clandestine Drug Labs
DEL SHWS..... Deleted Potential & Confirmed Sites
CDL..... Clandestine Drug Lab
US HIST CDL..... National Clandestine Laboratory Register

Local Land Records

LIENS 2..... CERCLA Lien Information
LIENS..... Environmental Liens

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System
SPILLS..... Emergency Response Section Incidents
SPILLS 90..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR..... RCRA - Non Generators
DOT OPS..... Incident and Accident Data
DOD..... Department of Defense Sites
FUDS..... Formerly Used Defense Sites
CONSENT..... Superfund (CERCLA) Consent Decrees

ROD..... Records Of Decision
UMTRA..... Uranium Mill Tailings Sites
US MINES..... Mines Master Index File
TRIS..... Toxic Chemical Release Inventory System
TSCA..... Toxic Substances Control Act
FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing
SSTS..... Section 7 Tracking Systems
ICIS..... Integrated Compliance Information System
PADS..... PCB Activity Database System
MLTS..... Material Licensing Tracking System
RADINFO..... Radiation Information Database
FINDS..... Facility Index System/Facility Registry System
RAATS..... RCRA Administrative Action Tracking System
RMP..... Risk Management Plans
UIC..... Underground Injection Wells Listing
DRYCLEANERS..... Drycleaner Facility Listing
NPDES..... LPDES Permits Database
AIRS..... Air Permit List
INDIAN RESERV..... Indian Reservations
SCRD DRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing
REM..... Division of Remediation Services Database
US AIRS..... Aerometric Information Retrieval System Facility Subsystem
PRP..... Potentially Responsible Parties
2020 COR ACTION..... 2020 Corrective Action Program List
LEAD SMELTERS..... Lead Smelter Sites
EPA WATCH LIST..... EPA WATCH LIST
US FIN ASSUR..... Financial Assurance Information
PCB TRANSFORMER..... PCB Transformer Registration Database
COAL ASH DOE..... Steam-Electric Plant Operation Data
COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List
COAL ASH..... Coal Ash Disposal Sites
ASBESTOS..... Asbestos Projects List
Financial Assurance..... Financial Assurance Information

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP..... EDR Proprietary Manufactured Gas Plants
EDR US Hist Auto Stat..... EDR Exclusive Historic Gas Stations
EDR US Hist Cleaners..... EDR Exclusive Historic Dry Cleaners

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 07/11/2013 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EXPRESSJET AIRLINES MAINTENANC	*6990 CHALLENGER DR*	*N 0 - 1/8 (0.006 mi.)*	*1*	*7*

State and tribal leaking storage tank lists

HIST LUST: Department of Environmental Quality's Underground Storage Tank Case History Incidents database.

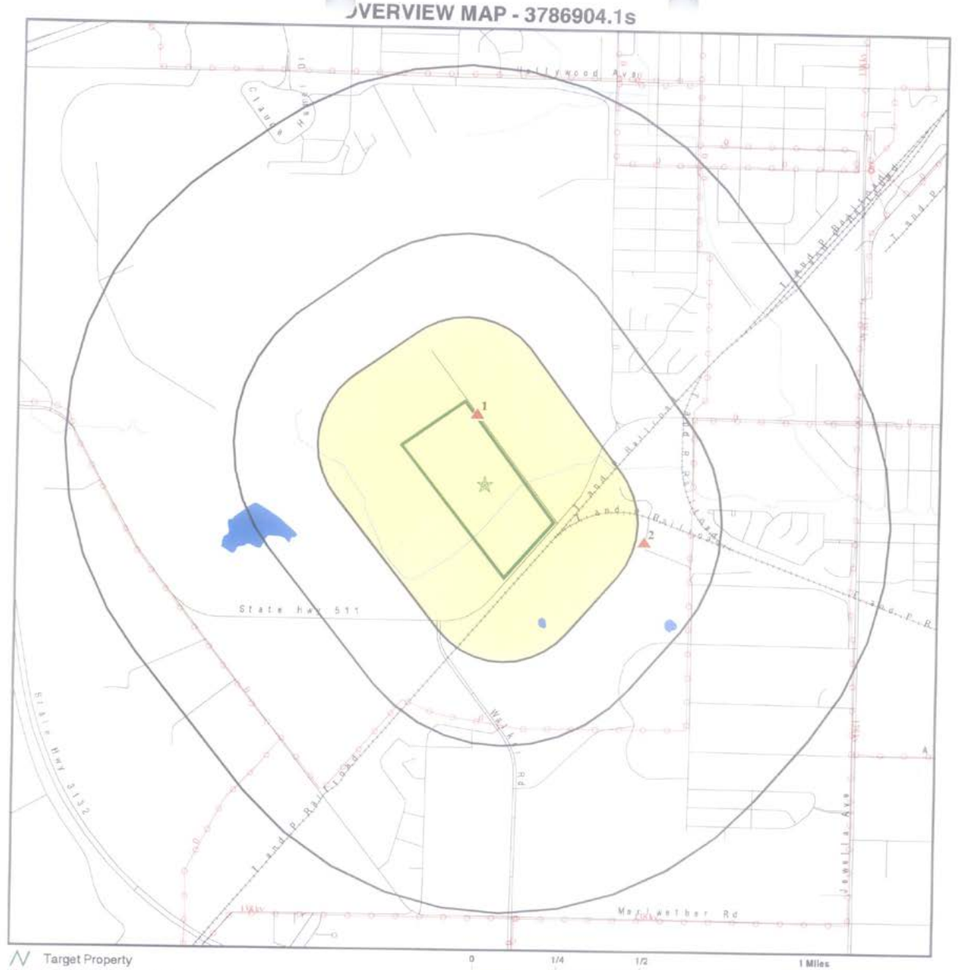
A review of the HIST LUST list, as provided by EDR, and dated 11/01/1999 has revealed that there is 1 HIST LUST site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CITY OF S'PORT-PARKS & REC	3100 STANDARD OIL RD	ESE 1/4 - 1/2 (0.276 mi.)	2	11

Due to poor or inadequate address information, the following sites were not mapped. Count: 20 records.

Site Name	Database(s)
LEONARD RD SPILL	VCP, REM
CHEMTRADE REFINERY SERVICES INC -	SPILLS 90
ADESA ARK-LA-TEX LLC	RCRA-CESQG, FINDS, US AIRS
SEC. 22 ROAD (PARISH ROAD 113) 1/1	SPILLS
LA HWY. 3132 AT HWY. 525 IN SHREVE	SPILLS
OFF HWY 1 SOUTH SHREVEPORT AT RED	SPILLS
SEWERAGE LIFT STATION LOCATED OFF	SPILLS
SITE LOCATED ALONG SHREVEPORT-BLAN	SPILLS
SHREVEPORT I-20 ACCIDENT	CERCLIS
BRASHER'S GROCERY	UST
PIE NATIONWIDE PARKWAY	UST
SOUTH SHREVEPORT ANIMAL HOSPITAL	RCRA-CESQG, FINDS
SHREVEPORT I-20 ACCIDENT	FINDS
SHREVEPORT RIVERVIEW PROJ	FINDS
CROSS BAYOU SITE	US BROWNFIELDS, FINDS
CITY OF SHREVEPORT	FINDS
RED RIVER ENTERTAINMENT OF SHREVEP	FINDS
GRIGSBY PETROLEUM, INC. - GWHLSU;	FINDS
SHREVEPORT FACILITY	FINDS
1739 KINGS HIGHWAY	US BROWNFIELDS

OVERVIEW MAP - 3786904.1s



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Shreveport Regional Airport Option 2	CLIENT:	Cothren, Graff, Smoak Engineering, Inc
ADDRESS:	6900-6959 CHALLENGER DR Shreveport LA 71109	CONTACT:	Robert W. Beard
		INQUIRY #:	3786904.1s
LAT/LONG:	32.439 / 93.8164	DATE:	November 15, 2013 10:42 am

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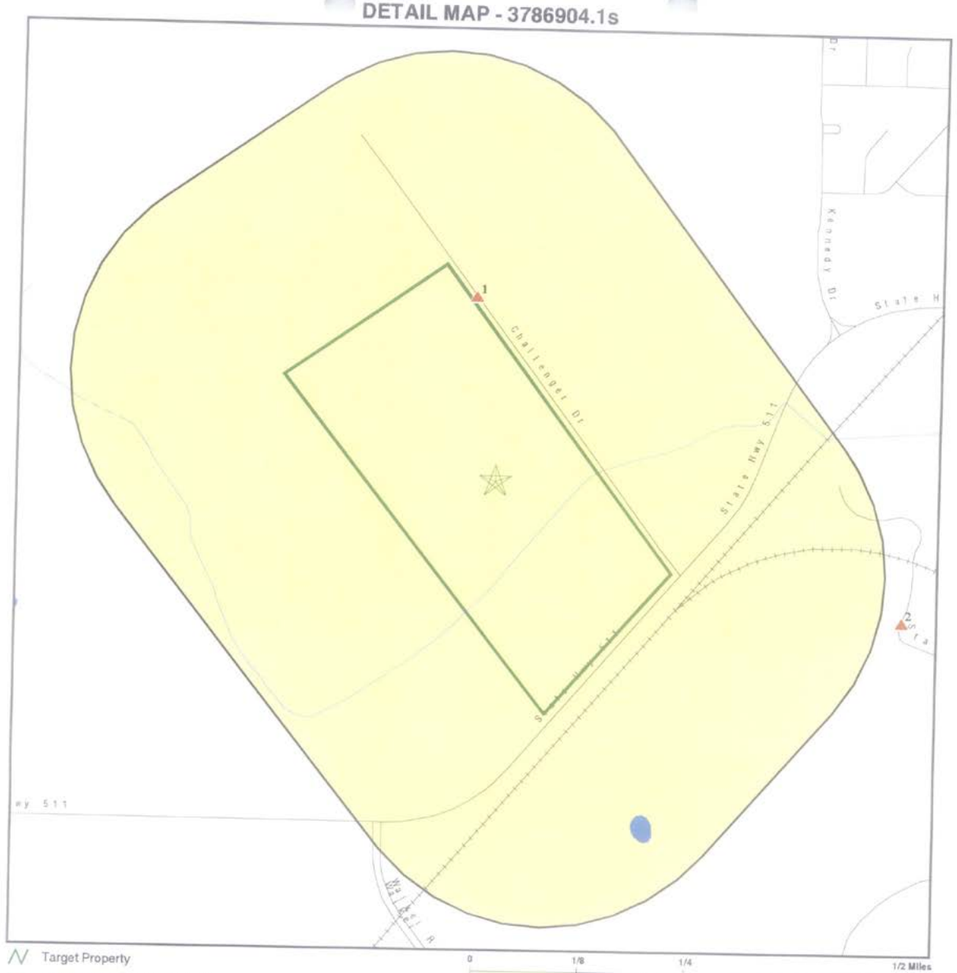
DETAIL MAP - 3786904.1s



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Shreveport Regional Airport Option 2	CLIENT:	Cothren, Graff, Smoak Engineering, Inc
ADDRESS:	6900-6959 CHALLENGER DR Shreveport LA 71109	CONTACT:	Robert W. Beard
		INQUIRY #:	3786904.1s
LAT/LONG:	32.439 / 93.8164	DATE:	November 15, 2013 10:42 am

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		1	0	NR	NR	NR	1
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		0	0	0	0	NR	0
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
DEBRIS	0.500		0	0	0	NR	NR	0
HIST DEBRIS	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	0	0	NR	NR	0
HIST LUST	0.500		0	0	1	NR	NR	1

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
AUL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
DEL SHWS	1.000		0	0	0	0	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
LIENS	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Properly	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
REM	0.500		0	0	0	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
COAL ASH	0.500		0	0	0	NR	NR	0
ASBESTOS	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	1.000	0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250	0	0	NR	NR	NR	0
EDR US Hist Cleaners	0.250	0	0	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID / Direction / Distance / Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

1
North
< 1/8
0.006 mi.
34 ft.

EXPRESSJET AIRLINES MAINTENANCE
6990 CHALLENGER DR
SHREVEPORT, LA

Database(s): RCRA-SQG, FINDS
EDR ID Number: 1000273199
EPA ID Number: LAD982285512

Relative:
Higher

Actual:
213 ft.

RCRA-SQG:
Date form received by agency: 12/04/2001
Facility name: EXPRESSJET AIRLINES MAINTENANCE
Facility address: 6990 CHALLENGER DR
SHREVEPORT, LA 71109
EPA ID: LAD982285512
Mailing address: CHALLENGER DR
SHREVEPORT, LA 71109
Contact: DAVE REPP
Contact address: 6990 CHALLENGER DR
SHREVEPORT, LA 71109
Contact country: US
Contact telephone: (318) 636-4740
Contact email: Not reported
EPA Region: 06
Land type: Municipal
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: EXPRESSJET AIRLINES
Owner/operator address: 6990 CHALLENGER DR
SHREVEPORT, LA 71109
Owner/operator country: Not reported
Owner/operator telephone: (318) 636-4740
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/0001
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. Importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

EXPRESSJET AIRLINES MAINTENANCE (Continued) **1000273199**

Historical Generators:
Date form received by agency: 11/09/2001
Facility name: EXPRESSJET AIRLINES MAINTENANCE
Classification: Small Quantity Generator

Date form received by agency: 03/19/1991
Facility name: EXPRESSJET AIRLINES MAINTENANCE
Classification: Small Quantity Generator

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: F002
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Facility Has Received Notices of Violations:
Regulation violated: SR - LAC33V1109.E.7.d.ii(a)
Area of violation: Generators - General
Date violation determined: 04/09/2003
Date achieved compliance: 04/09/2003

EXPRESSJET AIRLINES MAINTENANCE (Continued) **1000273199**

Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/25/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - LAC33V2109.A
Area of violation: Generators - General
Date violation determined: 04/09/2003
Date achieved compliance: 04/09/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/25/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - LAC33V1105B
Area of violation: Generators - Records/Reporting
Date violation determined: 05/11/1992
Date achieved compliance: 08/17/1992
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/05/1992
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 08/16/1990
Date achieved compliance: 02/18/1991
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 01/24/1991
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 04/09/2003
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 04/09/2003

EXPRESSJET AIRLINES MAINTENANCE (Continued) 1000273199

Evaluation lead agency: State

Evaluation date: 04/22/1997
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/17/1997
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 08/17/1992
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Generators - Records/Reporting
Date achieved compliance: 08/17/1992
Evaluation lead agency: State

Evaluation date: 05/11/1992
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Records/Reporting
Date achieved compliance: 08/17/1992
Evaluation lead agency: State

Evaluation date: 02/18/1991
Evaluation: COMPLIANCE SCHEDULE EVALUATION
Area of violation: Generators - General
Date achieved compliance: 02/18/1991
Evaluation lead agency: State

Evaluation date: 08/16/1990
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 02/18/1991
Evaluation lead agency: State

FINDS:

Registry ID: 110003306930

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

2 CITY OF S'PORT-PARKS & REC HIST LUST S106034040
ESE 3100 STANDARD OIL RD N/A
1/4-1/2 SHREVEPORT, LA 71106
0.276 mi.
1455 ft.

Relative:
Higher

Actual:
211 ft.

HIST LUST:
Facility ID: 09-011640
Facility Parish: CADDO
Substance Name: GASOLINE
Substance Name 2: Not reported
Quantity: UNKNOWN
Quantity 2: Not reported
Date Confirmed: 01/29/1991
Date Confirmed 2: Not reported
Incident Number: 91-7-0029
Incident Date: 01/29/1991
Type of Incident: TANK TIGHT FAIL
Type of Incident No2: Not reported
Reported By: PUMP MASTERS
Reported By 2: Not reported
Owner ID: 00374400
Owner Name: CITY OF SHREVEPORT-SPAR
Owner Address: 400 CLYDE FANT PKWY
Owner City,St,Zip: SHREVEPORT, LA 71101
Assessment Pending Info: Yes
Assessment Request Date: Not reported
Assessment Plan Due Date: Not reported
Assessment Plan Received Date: Not reported
Assessment Approved Date: Not reported
Assessment Contractor: PUMP MASTERS INC.
Assess Date Add Info Due: Not reported
Assess Date Add Info Recd: Not reported
Assess Date Add Info Due2: Not reported
Assess Date Add Info Recd2: Not reported
Assess Date Add Info Due3: Not reported
Corrective Plan Due Date: Not reported
Corrective Plan Received Date: Not reported
Corrective Plan Approved Date: 05/11/1993
Corr Act Date Add Info Due: Not reported
Corr Act Date Add Info Recd: Not reported
Corr Act Date Add Info Due2: Not reported
Corr Act Date Add Info Recd2: Not reported
Corr Act Date Add Info Due3: Not reported
Remediation Method: Not reported
Remediation Date: Not reported
Remediation Terminated Date: Not reported

LA HIST LUST INCIDENT:
Comments: Not reported

LA HIST LUST ASSESMENT:
Comments: UST WAS REPORTEDLY TAKING ON WATER AND FAILDED TIGHTNESS TEST.GASOLINE WAS NOTED COMING OUT OF THE GROUND AROUND THE UST. SOIL TOBE EXCAVATED.

LA HIST LUST CORRECTIVE ACTION:
Comments: OLD TANK REMOVED AND NEW TANK INSTALLED. AMENDED REGISTRATIONFORM IS DATED 2/24/93.

Facility ID: 09-011640
Facility Parish: CADDO

CITY OF S'PORT-PARKS & REC (Continued) **S106034040**

Substance Name:	Not reported	
Substance Name 2:	Not reported	
Quantity:	Not reported	
Quantity 2:	Not reported	
Date Confirmed:	Not reported	
Date Confirmed 2:	Not reported	
Incident Number:	91-7-0029	
Incident Date:	01/29/1991	
Type of Incident:		Not reported
Type of Incident No2:		Not reported
Reported By:	Not reported	
Reported By 2:	Not reported	
Owner ID:	00374400	
Owner Name:	CITY OF SHREVEPORT-SPAR	
Owner Address:	400 CLYDE FANT PKWY	
Owner City,St,Zip:	SHREVEPORT, LA 71101	
Assessment Pending Info:		Yes
Assessment Request Date:		Not reported
Assessment Plan Due Date:		Not reported
Assessment Plan Received Date:		Not reported
Assessment Approved Date:		Not reported
Assessment Contractor:		PUMP MASTERS INC.
Assess Date Add Info Due:		Not reported
Assess Date Add Info Recd:		Not reported
Assess Date Add Info Due2:		Not reported
Assess Date Add Info Recd:		Not reported
Assess Date Add Info Due3:		Not reported
Corrective Plan Due Date:		Not reported
Corrective Plan Received Date:		Not reported
Corrective Plan Approved Date:		05/11/1993
Corr Act Date Add Info Due:		Not reported
Corr Act Date Add Info Recd:		Not reported
Corr Act Date Add Info Due2:		Not reported
Corr Act Date Add Info Recd2:		Not reported
Corr Act Date Add Info Due3:		Not reported
Remediation Method:		Not reported
Remediation Date:		Not reported
Remediation Terminated Date:		Not reported

LA HIST LUST INCIDENT:
Comments: Not reported

LA HIST LUST ASSESMENT:
Comments: UST WAS REPORTEDLY TAKING ON WATER AND FAILDED TIGHTNESS TEST.GASOLINE WAS NOTED COMING OUT OF THE GROUND AROUND THE UST. SOIL TOBE EXCAVATED.

LA HIST LUST CORRECTIVE ACTION:
Comments: OLD TANK REMOVED AND NEW TANK INSTALLED. AMENDED REGISTRATIONFORM IS DATED 2/24/93.

ORPHAN SUMMARY

Count: 20 records.

City	EDR ID	Site Name	Site Address	Zip	Database(s)
BENSON	U004052003	BRASHER'S GROCERY	18778 LA HWY 171	71109	UST
CADDO COUNTY	S109154234	SEC. 22 ROAD (PARISH ROAD 113) 1/1	SEC. 22 ROAD (PARISH ROAD 113)		SPILLS
SHREVEPORT	S112324391	CHEMTRADE REFINERY SERVICES INC -	10869 HWY 1 SOUTHSHREVEPORT		SPILLS 90
SHREVEPORT	1007122775	SHREVEPORT I-20 ACCIDENT	INTERSTATE 20 NEAR PINE RD.		FINDS
SHREVEPORT	1007117452	SHREVEPORT I-20 ACCIDENT	INTERSTATE 20 NEAR PINE RD.		CERCLIS
SHREVEPORT	U003923606	PYE NATIONWIDE PARKWAY	7652 HWY 80	71109	UST
SHREVEPORT	1004710839	ADESA ARK-LA-TEX LLC	7666 HWY 80 W		RCRA-CESQG, FINDS, US AIRS
SHREVEPORT	1004709675	SOUTH SHREVEPORT ANIMAL HOSPITAL	1122 E BERT KOUNS		RCRA-CESQG, FINDS
SHREVEPORT	1007147638	SHREVEPORT RIVERVIEW PROJ	700 BLK OF CLYDE PKWY		FINDS
SHREVEPORT	1007057618	CROSS BAYOU SITE	LA HIGHWAY 3036		US BROWNFIELDS, FINDS
SHREVEPORT	S106515463	LA HWY. 3132 AT HWY. 526 IN SH	LA HWY. 3132 AT HWY. 526 IN SH		SPILLS
SHREVEPORT	1014948384	1739 KINGS HIGHWAY	1739 KINGS HIGHWAY AKA 1731 KI	00000	US BROWNFIELDS
SHREVEPORT	S112658528	LEONARD RD SPILL	LEONARD RD & HWY 1S		VCP, RCRA
SHREVEPORT	1006878158	CITY OF SHREVEPORT	LUCAS TREATMENT PLANT		FINDS
SHREVEPORT	S108528195	OFF HWY 1 SOUTH SHREVEPORT AT RED	OFF HWY 1 SOUTH SHREVEPORT AT		SPILLS
SHREVEPORT	1006263740	RED RIVER ENTERTAINMENT OF SHREVEP	SEC. 30, T 18N, R 13W		FINDS
SHREVEPORT	1006799849	GRIGSBY PETROLEUM, INC. - GWHLSU;	SECTION 30-T18N-R13W		FINDS
SHREVEPORT	S108618622	SEWERAGE LIFT STATION LOCATED OFF	SEWERAGE LIFT STATION LOCATED		SPILLS
SHREVEPORT	S108620933	SITE LOCATED ALONG SHREVEPORT-BLAN	SITE LOCATED ALONG SHREVEPORT-		SPILLS
SHREVEPORT	1005592057	SHREVEPORT FACILITY	500 E ZION RD		FINDS

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List
National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/09/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 62

Source: EPA
Telephone: N/A
Last EDR Contact: 11/11/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 5
Telephone 312-886-6686

EPA Region 10
Telephone 206-553-8665

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6774

EPA Region 9
Telephone: 415-947-4246

Proposed NPL: Proposed National Priority List Sites
A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/09/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 62

Source: EPA
Telephone: N/A
Last EDR Contact: 11/11/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens
Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

DELISTED NPL: National Priority List Deletions
The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/09/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 62

Source: EPA
Telephone: N/A
Last EDR Contact: 11/11/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System
CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/29/2013
Date Made Active in Reports: 08/09/2013
Number of Days to Update: 72

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 11/11/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Quarterly

FEDERAL FACILITY: Federal Facility Site Information listing
A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 10/09/2012
Date Made Active in Reports: 12/20/2012
Number of Days to Update: 72

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 10/11/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Varies

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned
Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/29/2013
Date Made Active in Reports: 08/09/2013
Number of Days to Update: 72

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 11/11/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report
CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: 214-665-6444
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: 214-665-6444
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: 214-665-6444
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: 214-665-6444
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 06/17/2013
Date Data Arrived at EDR: 06/21/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 104

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 06/17/2013
Date Data Arrived at EDR: 06/21/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 104

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 08/20/2013
Date Data Arrived at EDR: 08/23/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 70

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 08/15/2013
Next Scheduled EDR Contact: 09/02/2013
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/17/2013
Date Made Active in Reports: 02/15/2013
Number of Days to Update: 29

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 10/01/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Annually

State- and tribal - equivalent CERCLIS

SHWS: Potential and Confirmed Sites List

Confirmed status denotes that assessments have been performed and a determination made that (1) hazardous waste(s) or substance(s) are present at the site and (2) these sites are under the jurisdiction of the LDEQ/RSD. Potential status is an indicator that sites are either waiting to be assessed or the assessment is in progress.

Date of Government Version: 07/19/2013
Date Data Arrived at EDR: 07/22/2013
Date Made Active in Reports: 09/03/2013
Number of Days to Update: 43

Source: Department of Environmental Quality
Telephone: 225-219-3181
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Landfill List
Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 09/16/2013
Date Data Arrived at EDR: 09/17/2013
Date Made Active in Reports: 10/16/2013
Number of Days to Update: 29

Source: Department of Environmental Quality
Telephone: 225-219-3181
Last EDR Contact: 09/16/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Annually

DEBRIS: LDEQ Approved Debris Sites
A listing of LDEQ Approved Debris Sites where hurricane debris is dumped.

Date of Government Version: 09/03/2013
Date Data Arrived at EDR: 09/04/2013
Date Made Active in Reports: 10/17/2013
Number of Days to Update: 43

Source: Department of Environmental Quality
Telephone: 225-219-3953
Last EDR Contact: 09/04/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: Varies

HIST DEBRIS: LDEQ Approved Debris Sites
A listing of LDEQ Approved Debris Sites where hurricane debris is dumped.

Date of Government Version: 02/07/2007
Date Data Arrived at EDR: 11/14/2008
Date Made Active in Reports: 11/21/2008
Number of Days to Update: 7

Source: Department of Environmental Quality
Telephone: 225-219-3070
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tanks
Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 07/19/2013
Date Data Arrived at EDR: 07/22/2013
Date Made Active in Reports: 09/03/2013
Number of Days to Update: 43

Source: Department of Environmental Quality
Telephone: 225-219-3181
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Varies

HIST LUST: Underground Storage Tank Case History Incidents
This listing includes detailed information for Leaking Underground Storage Tanks reported through November 1999. It is no longer updated. Current LUST incidents, without detail, can be found in the Leaking Underground Storage Tank Database

Date of Government Version: 11/01/1999
Date Data Arrived at EDR: 02/15/2000
Date Made Active in Reports: 05/01/2000
Number of Days to Update: 75

Source: Department of Environmental Quality
Telephone: N/A
Last EDR Contact: 12/04/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 08/20/2013
Date Data Arrived at EDR: 08/23/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 70

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 03/01/2013
Date Data Arrived at EDR: 03/01/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 42

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 08/27/2012
Date Data Arrived at EDR: 08/28/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 49

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 08/27/2013
Date Data Arrived at EDR: 08/27/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 66

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 09/12/2011
Date Data Arrived at EDR: 09/13/2011
Date Made Active in Reports: 11/11/2011
Number of Days to Update: 59

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 08/02/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 91

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Semi-Annually

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 02/01/2013
Date Data Arrived at EDR: 05/01/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 184

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 11/01/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 07/29/2013
Date Data Arrived at EDR: 07/30/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 94

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

State and tribal registered storage tank lists

UST: Louisiana Underground Storage Tank Database
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 07/19/2013
Date Data Arrived at EDR: 07/22/2013
Date Made Active in Reports: 09/03/2013
Number of Days to Update: 43

Source: Department of Environmental Quality
Telephone: 225-219-3181
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Quarterly

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 07/29/2013
Date Data Arrived at EDR: 08/01/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 92

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 02/28/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 43

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 09/28/2012
Date Data Arrived at EDR: 11/07/2012
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 156

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 11/01/2014
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 08/02/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 91

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 08/20/2013
Date Data Arrived at EDR: 08/23/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 70

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 02/05/2013
Date Data Arrived at EDR: 02/06/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 65

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/10/2011
Date Data Arrived at EDR: 05/11/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 34

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Semi-Annually

INDIAN UST R9: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 02/21/2013
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 45

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 10/17/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

AUL: Listing of Institutional and/or Engineering Controls
A notice of contamination (nature and levels of contaminants) and restriction of property to non-residential use are placed in the conveyance records for the property.

Date of Government Version: 10/18/2010
Date Data Arrived at EDR: 11/04/2010
Date Made Active in Reports: 11/12/2010
Number of Days to Update: 8

Source: Department of Environmental Quality
Telephone: 225-219-3168
Last EDR Contact: 10/10/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Quarterly

State and tribal voluntary cleanup sites

VCP: Voluntary Remediation Program Sites
Sites that have entered the Department of Environmental Quality's Voluntary Remediation Program

Date of Government Version: 07/16/2013
Date Data Arrived at EDR: 07/22/2013
Date Made Active in Reports: 09/04/2013
Number of Days to Update: 44

Source: Department of Environmental Quality
Telephone: 225-219-3181
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/26/2012
Date Data Arrived at EDR: 10/02/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 14

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 10/01/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Brownfields Inventory
Brownfields are abandoned, idled, or underused industrial or commercial real property, the expansion, redevelopment or reuse of which may be complicated by the presence of or potential presence of a hazardous substance, pollutant, or contaminant.

Date of Government Version: 01/21/2013
Date Data Arrived at EDR: 01/22/2013
Date Made Active in Reports: 03/08/2013
Number of Days to Update: 45

Source: New Orleans Office of Environmental Affairs
Telephone: 504-658-4070
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups In My Community. Cleanups In My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/24/2013
Date Data Arrived at EDR: 06/25/2013
Date Made Active in Reports: 08/09/2013
Number of Days to Update: 45

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 09/24/2013
Next Scheduled EDR Contact: 01/08/2014
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 05/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: No Update Planned

SWRCY: Recycling Directory
A listing of recycling facilities.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 09/21/2010
Date Made Active in Reports: 10/12/2010
Number of Days to Update: 21

Source: Department of Environmental Quality
Telephone: 225-219-3181
Last EDR Contact: 09/16/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Semi-Annually

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 11/04/2013
Next Scheduled EDR Contact: 02/17/2014
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US CDL: Clandestine Drug Labs
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 08/06/2013
Date Data Arrived at EDR: 09/11/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 22

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 09/04/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: Quarterly

DEL SHWS: Deleted Potential & Confirmed Sites
A listing of sites removed from the Potential and Confirmed Listing.

Date of Government Version: 07/19/2013
Date Data Arrived at EDR: 07/22/2013
Date Made Active in Reports: 08/30/2013
Number of Days to Update: 39

Source: Department of Environmental Quality
Telephone: 225-219-3168
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Varies

CDL: Clandestine Drug Lab
A list of residential real properties that have been reported as potentially contaminated.

Date of Government Version: 08/20/2013
Date Data Arrived at EDR: 09/04/2013
Date Made Active in Reports: 10/16/2013
Number of Days to Update: 42

Source: Department of Environmental Quality
Telephone: 225-219-5337
Last EDR Contact: 09/04/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: Semi-Annually

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007
Date Data Arrived at EDR: 11/19/2008
Date Made Active in Reports: 03/30/2009
Number of Days to Update: 131

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

Local Land Records

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/06/2013
Date Data Arrived at EDR: 04/25/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: 202-564-5023
Last EDR Contact: 11/13/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

LIENS: Environmental Liens
An Environmental Lien is a charge, security, or encumbrance upon title to a property to secure the payment of a cost, damage, debt, obligation, or duly arising out of response actions, cleanup, or other remediation of hazardous substances or petroleum products upon a property, including (but not limited to) liens imposed pursuant to CERCLA 42 USC ? 9607(1) and similar state or local laws. In other words: a lien placed upon a property's title due to an environmental condition.

Date of Government Version: 04/10/2013
Date Data Arrived at EDR: 07/22/2013
Date Made Active in Reports: 09/03/2013
Number of Days to Update: 43

Source: Department of Environmental Quality
Telephone: N/A
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Varies

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 55

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 10/01/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Annually

SPILLS: Emergency Response Section Incidents
Spills and/or releases, to land, reported to the Emergency Response Section.

Date of Government Version: 08/20/2013
Date Data Arrived at EDR: 08/23/2013
Date Made Active in Reports: 10/17/2013
Number of Days to Update: 55

Source: Department of Environmental Quality
Telephone: 225-219-3620
Last EDR Contact: 08/15/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Varies

SPILLS 90: SPILLS90 data from FirstSearch
Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 10/30/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 03/07/2013
Number of Days to Update: 63

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: 214-665-6444
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

DOT OPS: Incident and Accident Data
Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 11/06/2013
Next Scheduled EDR Contact: 02/17/2014
Data Release Frequency: Varies

DOD: Department of Defense Sites
This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 10/16/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites
The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 03/13/2013
Number of Days to Update: 15

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2013
Date Data Arrived at EDR: 08/07/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 57
Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 09/30/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

ROD: Records Of Decision
Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 06/11/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 143
Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 09/13/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites
Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146
Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/28/2013
Next Scheduled EDR Contact: 09/09/2013
Data Release Frequency: Varies

US MINES: Mines Master Index File
Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 09/05/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 28
Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 09/05/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System
Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/31/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 44
Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 08/30/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Annually

TSCA: Toxic Substances Control Act
Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2006
Date Data Arrived at EDR: 09/29/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 64
Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/24/2013
Next Scheduled EDR Contact: 01/06/2014
Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems
Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77
Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 07/20/2011
Date Data Arrived at EDR: 11/10/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 10/09/2014
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 06/01/2013
Date Data Arrived at EDR: 07/17/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 107

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 10/16/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Annually

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 07/22/2013
Date Data Arrived at EDR: 08/02/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 91

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Quarterly

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 09/30/2013
Date Data Arrived at EDR: 10/09/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 23

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 10/09/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System
Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 03/08/2013
Date Data Arrived at EDR: 03/21/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 111

Source: EPA
Telephone: (214) 665-2200
Last EDR Contact: 09/11/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System
RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

RMP: Risk Management Plans
When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 05/08/2012
Date Data Arrived at EDR: 05/25/2012
Date Made Active in Reports: 07/10/2012
Number of Days to Update: 46

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

BRS: Biennial Reporting System
The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 04/19/2013
Number of Days to Update: 52

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 08/26/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Biennially

UIC: Underground Injection Wells Listing
A listing of underground injection well locations.

Date of Government Version: 04/15/2013
Date Data Arrived at EDR: 04/16/2013
Date Made Active in Reports: 04/30/2013
Number of Days to Update: 14

Source: Department of fNatural Resources
Telephone: 225-342-5515
Last EDR Contact: 09/30/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

DRYCLEANERS: Drycleaner Facility Listing
A listing of drycleaner facilities.

Date of Government Version: 07/25/2013
Date Data Arrived at EDR: 07/26/2013
Date Made Active in Reports: 09/03/2013
Number of Days to Update: 39

Source: Department of Environmental Quality
Telephone: 225-219-3168
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Varies

NPDES: LPDES Permits Database
A listing of sites with a Louisiana Pollutant Discharge Elimination System (LPDES) program issued permit.

Date of Government Version: 07/29/2013
Date Data Arrived at EDR: 07/30/2013
Date Made Active in Reports: 09/04/2013
Number of Days to Update: 36

Source: Department of Environmental Quality
Telephone: 225-219-3181
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

AIRS: Air Permit List
A listing of facilities with air permits issued by the Air Permits Division

Date of Government Version: 09/04/2013
Date Data Arrived at EDR: 09/25/2013
Date Made Active in Reports: 10/16/2013
Number of Days to Update: 21

Source: Department of Environmental Quality
Telephone: 225-219-3417
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Varies

INDIAN RESERV: Indian Reservations
This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Semi-Annually

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing
The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Varies

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)
The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 01/23/2013
Date Data Arrived at EDR: 01/30/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 09/30/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Annually

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 04/15/2013
Date Data Arrived at EDR: 07/03/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 72

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 10/04/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

FEDLAND: Federal and Indian Lands
Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: N/A

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 01/23/2013
Date Data Arrived at EDR: 01/30/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 09/30/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Annually

REM: Division of Remediation Services Database
Facilities or sites come to the Underground Storage Tank and Remediation Divison either through self notification or referral. These sites are designated for remediation via the following regulatory paths: Solid Waste (SW), Hazardous Waste (Haz Waste), Groundwater (Grwater), Inactive & Abandoned Sites (Confirmed or Potential), or Underground Storage Tanks (UST).

Date of Government Version: 07/19/2013
Date Data Arrived at EDR: 07/22/2013
Date Made Active in Reports: 09/04/2013
Number of Days to Update: 44

Source: Department of Environmental Quality
Telephone: 225-219-3168
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List
The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 11/11/2011
Date Data Arrived at EDR: 05/18/2012
Date Made Active in Reports: 05/25/2012
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 11/15/2013
Next Scheduled EDR Contact: 02/24/2014
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites
A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 38

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

LEAD SMELTER 1: Lead Smelter Sites
A listing of former lead smelter site locations.

Date of Government Version: 01/29/2013
Date Data Arrived at EDR: 02/14/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 09/24/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Varies

EPA WATCH LIST: EPA WATCH LIST
EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 06/30/2013
Date Data Arrived at EDR: 08/13/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 31
Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 11/15/2013
Next Scheduled EDR Contact: 02/24/2014
Data Release Frequency: Quarterly

US FIN ASSUR: Financial Assurance Information
All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/04/2013
Date Data Arrived at EDR: 03/15/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 56
Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 09/27/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Quarterly

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 11/01/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

COAL ASH DOE: Steam-Electric Plan Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 10/15/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 08/17/2010
Date Data Arrived at EDR: 01/03/2011
Date Made Active in Reports: 03/21/2011
Number of Days to Update: 77
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 09/13/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

COAL ASH: Coal Ash Disposal Sites
A listing of coal ash impoundments.

Date of Government Version: 07/25/2013
Date Data Arrived at EDR: 07/26/2013
Date Made Active in Reports: 09/03/2013
Number of Days to Update: 39
Source: Department of Environmental Quality
Telephone: 225-219-3168
Last EDR Contact: 10/10/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Varies

ASBESTOS: Asbestos Projects List
Asbestos demolition and renovation notification projects locations in the state.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 04/25/2013
Date Made Active in Reports: 06/27/2013
Number of Days to Update: 63
Source: Department of Environmental Quality
Telephone: 225-219-3181
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Annually

Financial Assurance 1: Financial Assurance Information
Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay

Date of Government Version: 08/14/2013
Date Data Arrived at EDR: 08/27/2013
Date Made Active in Reports: 10/11/2013
Number of Days to Update: 45
Source: Department of Environmental Quality
Telephone: 225-219-3168
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing
Information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay

Date of Government Version: 08/14/2013
Date Data Arrived at EDR: 08/27/2013
Date Made Active in Reports: 10/11/2013
Number of Days to Update: 45
Source: Department of Environmental Quality
Telephone: 225-219-3168
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A
Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR US Hist Auto Stat: EDR Exclusive Historic Gas Stations
EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Proprietary Historic Dry Cleaners - Cole

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: N/A
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Auto Stat: EDR Proprietary Historic Gas Stations - Cole

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: N/A
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 08/19/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 08/07/2013
Date Made Active in Reports: 09/10/2013
Number of Days to Update: 34

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 11/07/2013
Next Scheduled EDR Contact: 02/17/2014
Data Release Frequency: Annually

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 07/24/2013
Date Made Active in Reports: 08/19/2013
Number of Days to Update: 26

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 08/09/2013
Date Made Active in Reports: 09/27/2013
Number of Days to Update: 49

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 09/16/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data
Source: Rextag Strategies Corp.
Telephone: (281) 769-2247
U.S. Electric Transmission and Power Plants Systems Digital GIS Data

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

STREET AND ADDRESS INFORMATION

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APPENDIX E

SOILS SURVEY

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.

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

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
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: Caddo Parish, Louisiana
Survey Area Data: Version 6, Dec 26, 2013

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

Date(s) aerial images were photographed: Sep 25, 2013—Nov 1, 2013

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

Caddo Parish, Louisiana (LA017)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
EaC	Eastwood fine sandy loam, 1 to 5 percent slopes	7.1	0.3%
EaG	Eastwood fine sandy loam, 5 to 15 percent slopes	172.1	7.8%
GYA	Guyton-lulus complex, 0 to 1 percent slopes , frequently flooded	133.5	6.1%
KeC	Keithville very fine sandy loam, 1 to 5 percent slopes	510.9	23.2%
MEA	Metcalf-Timpson complex, 0 to 2 percent slopes	640.5	29.1%
UB	Urbanland	384.0	17.5%
UKC	Urbanland-Keithville complex, 1 to 5 percent slopes	66.4	3.0%
UMB	Urbanland-Metcalf complex, 0 to 2 percent slopes	269.7	12.3%
W	Water	14.3	0.6%
Totals for Area of Interest		2,197.6	100.0%

Physical Soil Properties

This table shows estimates of some physical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Particle size is the effective diameter of a soil particle as measured by sedimentation, sieving, or micrometric methods. Particle sizes are expressed as classes with specific effective diameter class limits. The broad classes are sand, silt, and clay, ranging from the larger to the smaller.

Sand as a soil separate consists of mineral soil particles that are 0.05 millimeter to 2 millimeters in diameter. In this table, the estimated sand content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Silt as a soil separate consists of mineral soil particles that are 0.002 to 0.05 millimeter in diameter. In this table, the estimated silt content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. In this table, the estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of sand, silt, and clay affects the physical behavior of a soil. Particle size is important for engineering and agronomic interpretations, for determination of soil hydrologic qualities, and for soil classification.

The amount and kind of clay affect the fertility and physical condition of the soil and the ability of the soil to adsorb cations and to retain moisture. They influence shrink-swell potential, saturated hydraulic conductivity (Ksat), plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

Moist bulk density is the weight of soil (ovendry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at 1/3- or 1/10-bar (33kPa or 10kPa) moisture tension. Weight is determined after the soil is dried at 105 degrees C. In the table, the estimated moist bulk density of each soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute linear extensibility, shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

Saturated hydraulic conductivity (Ksat) refers to the ease with which pores in a saturated soil transmit water. The estimates in the table are expressed in terms of micrometers per second. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Saturated hydraulic conductivity (Ksat) is considered in the design of soil drainage systems and septic tank absorption fields.

Available water capacity refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at 1/3- or 1/10-bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. The amount and type of clay minerals in the soil influence volume change.

Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

Organic matter is the plant and animal residue in the soil at various stages of decomposition. In this table, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter. The content of organic matter in a soil can be maintained by returning crop residue to the soil.

Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms.

Erosion factors are shown in the table as the K factor (Kw and Kf) and the T factor. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and Ksat. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

Erosion factor Kw indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Erosion factor Kf indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

Erosion factor T is an estimate of the maximum average annual rate of soil erosion by wind and/or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Wind erodibility groups are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. The groups are described in the "National Soil Survey Handbook."

Wind erodibility index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

Reference:
United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. (http://soils.usda.gov)

Physical Soil Properties—Caddo Parish, Louisiana

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
GYA—Guyton-lulus complex, 0 to 1 percent slopes, frequently flooded														
Guyton	0-28	-18-	-60-	7-22- 25	1.20-1.55	4.23-14.11	0.20-0.23	0.0-2.9	0.5-4.0	.43	.43	5	6	48
	28-64	-14-	-58-	20-28- 35	1.35-1.70	0.42-1.41	0.15-0.22	0.0-2.9	0.5-1.0	.37	.37			
	64-80	-14-	-59-	20-27- 35	1.35-1.70	0.42-1.41	0.15-0.22	0.0-2.9	0.5-1.0	.37	.37			
lulus	0-6	45-51- 70	20-30- 35	6-20- 26	1.35-1.65	4.00-14.00	0.11-0.18	0.0-2.9	0.5-2.0	.37	.37	5	5	56
	6-27	46-71- 75	10-17- 35	6-13- 20	1.40-1.70	4.00-14.00	0.11-0.18	0.0-2.9	0.1-1.0	.32	.32			
	27-80	45-67- 70	10-14- 35	10-19- 26	1.40-1.70	4.00-14.00	0.11-0.18	0.0-2.9	0.1-1.0	.32	.32			
KaC—Keithville very fine sandy loam, 1 to 5 percent slopes														
Keithville	0-3	45-62- 75	10-23- 40	8-15- 20	1.44-1.53	1.41-14.11	0.15-0.20	0.0-2.9	0.5-2.0	.37	.37	5	3	86
	3-11	45-62- 75	10-23- 40	8-15- 20	1.53-1.63	1.41-14.11	0.15-0.20	0.0-2.9	0.3-1.0	.43				
	11-22	10-28- 40	35-42- 65	18-30- 35	1.53-1.54	1.41-4.23	0.15-0.20	0.0-2.9	0.0-0.5	.49				
	22-28	10-28- 40	35-42- 65	18-30- 35	1.42-1.54	1.41-4.23	0.15-0.20	0.0-2.9	0.0-0.5	.49				
	28-51	5-10- 30	35-45- 60	35-45- 60	1.41-1.59	0.11-0.42	0.15-0.18	6.0-8.9	0.0-0.5	.32				
	51-81	5-10- 30	35-45- 60	35-45- 60	1.41-1.61	0.11-0.42	0.15-0.18	6.0-8.9	0.0-0.5	.32				

Report—Physical Soil Properties

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
EaC—Eastwood fine sandy loam, 1 to 5 percent slopes														
Eastwood	0-9	-71-	-17-	5-13- 20	1.30-1.55	4.23-14.11	0.11-0.15	0.0-2.9	1.0-2.0	.43	.43	4	3	86
	9-22	-32-	-27-	40-41- 60	1.25-1.40	0.11-0.42	0.12-0.17	6.0-8.9	0.5-1.0	.32	.32			
	22-64	-40-	-29-	30-31- 60	1.25-1.50	0.42-1.41	0.12-0.17	6.0-8.9	0.0-0.5	.32	.32			
	64-80	-25-	-26-	40-49- 60	1.25-1.40	0.11-0.42	0.12-0.17	6.0-8.9	0.5-1.0	.32	.32			
EaG—Eastwood fine sandy loam, 5 to 15 percent slopes														
Eastwood	0-11	-55-	15-35- 35	3-11- 18	1.20-1.60	4.00-14.00	0.13-0.20	0.0-2.9	1.0-2.0	.49	.49	4	3	86
	11-41	-37-	15-15- 60	40-48- 65	1.20-1.45	0.01-0.42	0.12-0.18	6.0-8.9	0.5-1.0	.32	.32			
	41-65	-47-	15-19- 60	25-34- 40	1.20-1.50	0.42-1.40	0.12-0.20	6.0-8.9	0.5-1.0	.32	.32			
	65-80	-52-	15-18- 60	15-30- 35	1.35-1.65	0.42-1.40	0.10-0.15	3.0-5.9	0.5-1.0	.37	.37			

Physical Soil Properties—Caddo Parish, Louisiana

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct	Kw	Kf	T		
UMB—Urbanland-Metcalf complex, 0 to 2 percent slopes														
Urbanland	—	—	—	—	—	—	—	—	—					
Metcalf	0-10	10-14-30	65-71-75	7-15-22	1.35-1.65	4.00-14.00	0.12-0.18	0.0-2.9	0.5-2.0	.49	.49	5	5	56
	10-46	10-10-30	60-	10-30-40	1.35-1.65	1.40-4.00	0.15-0.20	0.0-2.9	0.0-0.5	.37	.37			
	46-80	5-30-30	39-	25-31-60	1.20-1.60	0.01-0.42	0.15-0.18	6.0-8.9	0.0-0.5	.32	.32			
W—Water														
Water	—	—	—	—	—	—	—	—	—					

Data Source Information

Soil Survey Area: Caddo Parish, Louisiana
Survey Area Data: Version 6, Dec 26, 2013

USDA Natural Resources Conservation Service

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct	Kw	Kf	T		
MEA—Metcalf-Timpson complex, 0 to 2 percent slopes														
Metcalf	0-10	10-14-30	65-71-75	7-15-22	1.35-1.65	4.00-14.00	0.12-0.18	0.0-2.9	0.5-2.0	.49	.49	5	5	56
	10-46	10-10-30	60-	10-30-40	1.35-1.65	1.40-4.00	0.15-0.20	0.0-2.9	0.0-0.5	.37	.37			
	46-80	5-30-30	39-	25-31-60	1.20-1.60	0.01-0.42	0.15-0.18	6.0-8.9	0.0-0.5	.32	.32			
Timpson	0-21	55-	38-	7-6-12	1.20-1.50	14.00-42.00	0.15-0.22	0.0-2.9	0.5-3.0	.43	.43	5	3	86
	21-56	45-	38-	10-17-25	1.30-1.70	14.00-42.00	0.15-0.22	0.0-2.9	0.5-1.0	.43	.43			
	56-80	47-	26-	20-27-40	1.30-1.65	1.40-4.00	0.15-0.20	3.0-5.8	0.5-1.0	.37	.37			
UB—Urbanland														
Urbanland	—	—	—	—	—	—	—	—	—					
UKC—Urbanland-Keithville complex, 1 to 5 percent slopes														
Urbanland	—	—	—	—	—	—	—	—	—					
Keithville	0-11	82-	23-	8-15-22	1.35-1.65	1.41-14.11	0.15-0.20	0.0-2.9	0.5-2.0	.37	.37	5	3	86
	11-28	28-	42-	16-30-35	1.35-1.70	1.41-14.23	0.15-0.20	0.0-2.9	0.0-0.5	.49	.49			
	28-51	10-	45-	35-45-60	1.20-1.60	0.13-0.42	0.15-0.18	6.0-8.9	0.0-0.5	.32	.32			
	51-61	10-	45-	33-45-60	1.20-1.60	0.01-0.42	0.15-0.18	6.0-8.9	0.0-0.5	.32	.32			

USDA Natural Resources Conservation Service

Engineering Properties

This table gives the engineering classifications and the range of engineering properties for the layers of each soil in the survey area.

Hydrologic group is a group of soils having similar runoff potential under similar storm and cover conditions. Soil properties that influence runoff potential are those that influence the minimum rate of infiltration for a bare soil after prolonged wetting and when not frozen. These properties are depth to a seasonal high water table, saturated hydraulic conductivity after prolonged wetting, and depth to a layer with a very slow water transmission rate. Changes in soil properties caused by land management or climate changes also cause the hydrologic soil group to change. The influence of ground cover is treated independently. There are four hydrologic soil groups, A, B, C, and D, and three dual groups, A/D, B/D, and C/D. In the dual groups, the first letter is for drained areas and the second letter is for undrained areas.

The four hydrologic soil groups are described in the following paragraphs:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

Depth to the upper and lower boundaries of each layer is indicated.

Texture is given in the standard terms used by the U.S. Department of Agriculture. These terms are defined according to percentages of sand, silt, and clay in the fraction of the soil that is less than 2 millimeters in diameter. "Loam," for example, is soil that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand. If the content of particles coarser than sand is 15 percent or more, an appropriate modifier is added, for example, "gravelly."

Classification of the soils is determined according to the Unified soil classification system (ASTM, 2005) and the system adopted by the American Association of State Highway and Transportation Officials (AASHTO, 2004).

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to particle-size distribution of the fraction less than 3 inches in diameter and according to plasticity index, liquid limit, and organic matter content. Sandy and gravelly soils are identified as GW, GP, GM, GC, SW, SP, SM, and SC; silty and clayey soils as ML, CL, OL, MH, CH, and OH; and highly organic soils as PT. Soils exhibiting engineering properties of two groups can have a dual classification, for example, CL-ML.

The AASHTO system classifies soils according to those properties that affect roadway construction and maintenance. In this system, the fraction of a mineral soil that is less than 3 inches in diameter is classified in one of seven groups from A-1 through A-7 on the basis of particle-size distribution, liquid limit, and plasticity index. Soils in group A-1 are coarse grained and low in content of fines (silt and clay). At the other extreme, soils in group A-7 are fine grained. Highly organic soils are classified in group A-8 on the basis of visual inspection.

If laboratory data are available, the A-1, A-2, and A-7 groups are further classified as A-1-a, A-1-b, A-2-4, A-2-5, A-2-6, A-2-7, A-7-5, or A-7-6. As an additional refinement, the suitability of a soil as subgrade material can be indicated by a group index number. Group index numbers range from 0 for the best subgrade material to 20 or higher for the poorest.

Rock fragments larger than 10 inches in diameter and 3 to 10 inches in diameter are indicated as a percentage of the total soil on a dry-weight basis. The percentages are estimates determined mainly by converting volume percentage in the field to weight percentage.

Percentage (of soil particles) passing designated sieves is the percentage of the soil fraction less than 3 inches in diameter based on an ovendry weight. The sieves, numbers 4, 10, 40, and 200 (USA Standard Series), have openings of 4.76, 2.00, 0.420, and 0.074 millimeters, respectively. Estimates are based on laboratory tests of soils sampled in the survey area and in nearby areas and on estimates made in the field.

Liquid limit and *plasticity index* (Atterberg limits) indicate the plasticity characteristics of a soil. The estimates are based on test data from the survey area or from nearby areas and on field examination.

References:

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Engineering Properties—Caddo Parish, Louisiana														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—			Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				Pct	Pct					Pct	
EaC—Eastwood fine sandy loam, 1 to 5 percent slopes														
Eastwood	75	D	0-9	Fine sandy loam	CL-ML, CL, SM	A-6, A-4	0	0	100	100	95-100	65-90	19-40	3-17
			9-22	Clay, silty clay	CH	A-7-6	0	0	95-100	90-100	75-100	40-75	18-35	2-13
			22-64	Clay loam, sandy clay loam, clay	CH, CL	A-7-6	0	0	100	90-100	80-100	60-98	50-70	29-44
			64-80	Clay, silty clay	CH	A-7-6	0	0	100	90-100	80-100	60-98	50-70	29-44
EaD—Eastwood fine sandy loam, 5 to 15 percent slopes														
Eastwood	75	D	0-11	Fine sandy loam, very fine sandy loam	SM, CL, CL-ML	A-6, A-4	0	0	98-100	96-100	77-95	43-60	0-31	NP-12
			11-41	Silty clay, clay	CH	A-7-6	0	0	100	94-100	75-100	56-85	50-74	29-48
			41-65	Sandy clay loam, loam, silty clay loam, clay loam	CL, CH, SC	A-7-6, A-6	0	0	100	94-100	74-94	46-64	38-53	18-29
			65-80	Sandy clay loam, stratified fine sandy loam to silty clay loam	CL, SC	A-7-6, A-6, A-4	0	0	95-100	90-100	64-92	35-58	27-47	10-25
GYA—Guyton-Iulus complex, 0 to 1 percent slopes, frequently flooded														
Guyton	45	C/D	0-28	Silt loam	CL-ML, ML, SM	A-4	0	0	94-100	85-100	76-100	42-68	16-25	NP-6
			28-64	Clay loam, silty clay loam, silt loam	CL-ML, ML, CL	A-6, A-4	0	0	95-100	79-100	68-100	27-54	16-25	NP-8
			64-80	Sandy clay loam, silty clay loam, silt loam	CL-ML, ML, CL	A-6, A-4	0	0	100	100	95-100	50-85	22-40	NP-18
Iulus	35	C	0-8	Loam, very fine sandy loam, fine sandy loam	CL-ML, ML, SM	A-4	0	0	94-100	85-100	76-100	42-68	16-25	NP-6
			8-27	Loam, fine sandy loam	CL-ML, SC, ML, SM	A-4, A-2-4	0	0	95-100	79-100	68-100	27-54	16-25	NP-8
			27-60	Sandy clay loam, loam, fine sandy loam	SC, SM, CL	A-2-4, A-6, A-4	0	0	95-100	84-100	75-100	32-69	16-32	9-15

Report—Engineering Properties

Absence of an entry indicates that the data were not estimated. The asterisk "*" denotes the representative texture; other possible textures follow the dash.

Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				Pct	Pct					Pct	
KaC—Kalthville very fine sandy loam, 1 to 5 percent slopes														
Kalthville	85	C	0-3	Very fine sandy loam	CL-ML, CL	A-4, A-6	0	0	100	100	95-100	85-100	19-36	3-15
			3-11	Very fine sandy loam	CL-ML, CL	A-4, A-6	0	0	100	100	90-100	75-100	27-38	12-19
			11-22	Clay loam, silty clay loam, loam, silt loam	CL	A-6, A-7-6	0	0	100	100	95-100	90-100	49-69	28-44
			22-28	Clay loam, silty clay loam, loam, silt loam	CL	A-6, A-7-6	0	0	100	100	85-95	50-95	45-69	25-44
			28-51	Clay loam, sandy clay, clay, silty clay	CH, CL	A-7-6	0	0	100	100	85-95	50-95	45-69	25-44
			51-81	Clay loam, sandy clay, clay, silty clay	CH, CL	A-7-6	0	0	100	100	85-95	50-95	45-69	25-44

Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				Pct	Pct					Pct	
MEA—Metcalf-Timpson complex, 0 to 2 percent slopes														
Metcalf	55	C	0-10	Silt loam	CL-ML, ML	A-4, A-6	0	0	100	100	95-100	85-100	19-36	3-15
			10-46	Silty clay loam, clay loam, loam, silt loam	CL	A-6	0	0	100	100	90-100	75-100	27-38	12-19
			46-80	Clay loam, clay, silty clay	CH, CL	A-7-6	0	0	100	100	95-100	90-100	49-69	28-44
Timpson	35	B	0-21	Silt loam	ML, CL-ML	A-4	0	0	97-100	95-100	80-95	50-82	0-30	NP-7
			21-56	Silt loam, loam	CL, SC-SM	A-4, A-6	0	0	97-100	95-100	85-99	48-66	21-31	6-12
			56-80	Sandy clay loam, silty clay loam, clay loam	CL, SC, CH	A-6, A-7-6	0	0	97-100	95-100	85-99	47-92	32-51	13-29
UKC—Urbanland-Keithville complex, 1 to 5 percent slopes														
Keithville	30	C	0-11	Very fine sandy loam	CL-ML, CL	A-4, A-6	0	0	100	100	85-100	50-90	20-36	4-15
			11-28	Silt loam, loam, silty clay loam, clay loam	CL	A-6, A-7-6	0	0	100	100	90-100	85-95	27-44	12-25
			28-51	Silty clay, clay, sandy clay, clay loam	CH, CL	A-7-6	0	0	100	100	85-95	50-95	45-69	25-44
			51-81	Silty clay, clay, sandy clay, sandy clay loam, clay loam, loam	CH, CL	A-7-6	0	0	100	100	85-95	50-95	45-69	25-44

Preliminary Electric Service Review

Treasure Island Project at Shreveport AeroPark

Prepared by SWEPCO Economic and Business Development

Purpose of Review

Objective

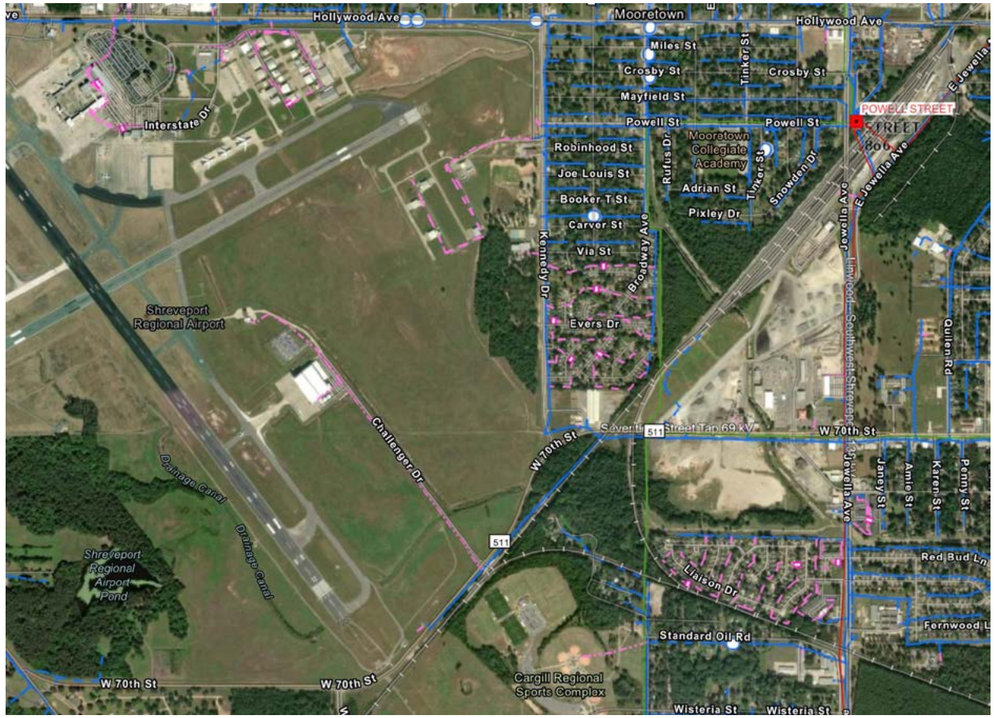
- Evaluate potential electric service options to support Treasure Island's 5.4 MW projected load at the AeroPark site
- Identify preliminary infrastructure needs based on a desktop analysis. Desktop analysis utilizes recent studies in the
- Provide early capital cost estimates for business planning purposes
- Outline additional engineering studies required to refine scope, cost, and schedule

SWEPCO has completed a preliminary desktop review and identified potential service solutions to support Treasure Island's projected electric load. Additional distribution and transmission planning studies are needed to confirm final scope, cost, timing, and feasibility.

Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Engineering Properties—Caddo Parish, Louisiana								
					Classification		Fragments		Percentage passing sieve number—			Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200	
			In				Pct	Pct					
UnfB—Urbanland-Metcalf complex, 0 to 2 percent slopes													
Metcalf	45	C	0-10	Silt loam	CL-ML, ML, CL	A-4, A-6	0	0	100	100	95-100	65-100	19-36	3-15
			10-46	Silt loam, loam, clay loam, silty clay loam	CL	A-6	0	0	100	100	90-100	75-100	27-38	12-19
			46-80	Silty clay, clay, clay loam	CH, CL	A-7-6	0	0	100	100	95-100	90-100	49-69	29-44

Data Source Information

Soil Survey Area: Caddo Parish, Louisiana
Survey Area Data: Version 6, Dec 26, 2013



Map description: The green line to the east of the AeroPark Site is the 69 kV transmission circuit we would use for the Point of Interconnection to build the substation for the alternate feed. The Powell Street substation at the northeast of the image will serve the primary feed.

Existing Circuit Assessment

Distribution Engineering Review

- Further analysis by Distribution Engineering indicates the existing underground circuit will not support Treasure Island's projected load
- Upgrades would be required to enable the existing circuit to serve the project and are expected to take 4-6 months to complete.

Planning Conclusion

The existing underground circuit does not provide sufficient capacity for the projected load. Upgraded infrastructure will be required to reliably serve the site. The new circuit will be designed to support the increased load from Project Treasure Island.

Preliminary Service Option 1

Powell Street Station Feed

Scope

- Construct a new 12.47 kV circuit from Powell Street Station
- Reconductor approximately 1.58 miles to the Treasure Island site at AeroPark

Estimated Cost

- Powell Street Station feed: $1,000,000

Preliminary Service Option 2 (Alternate Feed)

New 69 kV Served Station

Scope

- Cut into the nearby 69 kV line located adjacent to the site
- Construct a new 69 kV served station on or near the customer property
- Build a new 12.47 kV distribution circuit from the new station to the site
- Establish a robust, long term service configuration

Estimated Cost

- New 69 kV station and feed: $17,440,000

Proposed Scope of Work

New 69 kV Served Station

Station

- Construct a new three breaker 69 kV ring bus station on the customer property
- Utilize standard breaker and equipment ratings
- Install two capacitor banks at the new station

Right of Way

- Acquire required right of way
- Secure additional easements as needed

Real Estate

- Procure sufficient land to support construction of the 69 kV station

Metering

- Install high side metering at the 69 kV station

Telecommunications

- Install necessary fiber and communication infrastructure to support system integration and customer service configuration

Load and Schedule Assumptions

Projected Load

- Final load: approximately 5.4 MW

69k V Timeline

- Full load anticipated within 18-24 months from contract execution

Planning Considerations

- Engineering study timelines
- Equipment procurement and material lead times
- Construction sequencing
- Required approvals and permitting

Preliminary Cost Summary

Estimated Infrastructure Costs

- New 69 kV station and feed: $17,440,000
- Powell Street Station feed: $1,000,000

Total Identified Infrastructure

- $18,440,000

Important Note

These are desktop level estimates only. Final costs and timelines may increase or decrease following engineering analysis, field validation, right of way review, and detailed project development.

Revenue and Cost Recovery Considerations

Estimated Non-Fuel Revenue

- Monthly: $183,980.97
- Five-year total: $11,038,858

SWEPCO Cost Recovery Approach

- Capital costs are evaluated against projected non-fuel revenues. Customers will pay a Contribution in Aid of Construction (CIAC) for the amount of capital that's greater than the 5-year non-fuel revenues. **This project's CIAC amount is projected to be $7,401,142.**
- Based on the desktop review, the Powell Street Station feed is anticipated to be fully recoverable within projected revenues
- The 69 kV station option will require additional evaluation to determine overall project economics and any potential customer contribution

PRELIMINARY
SUBSURFACE EXPLORATION AND
GEOTECHNICAL ENGINEERING EVALUATION
AERO PARK SITE
SHREVEPORT REGIONAL AIRPORT
SHREVEPORT, LOUISIANA
P.O. NO. 2015-00004850

PREPARED
FOR:
SHREVEPORT AIRPORT AUTHORITY
5103 HOLLYWOOD AVENUE
SUITE 300
SHREVEPORT, LOUISIANA 71109

PREPARED
BY:
ARDAMAN & ASSOCIATES, INC.
7222 GREENWOOD ROAD
SHREVEPORT, LOUISIANA 71119

ARDAMAN PROJECT NO.: 113-15-94-8609
SHREVEPORT FILE NO.: 15.94.062
AUGUST 17, 2015

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Ardaman & Associates, Inc.

Geotechnical, Environmental and Materials Consultants

August 17, 2015

Shreveport Airport Authority
5103 Hollywood Avenue
Suite 300
Shreveport, Louisiana 71109

Attention: Mr. Steven Price

Reference: Preliminary Geotechnical Investigation
Aero Park Site
Shreveport Regional Airport
Shreveport, Louisiana
Ardaman Project No.: 113-15-94-8609
Shreveport File No.: 15.94.062
P.O. NO. 2015-00004850

Gentlemen:

Attached is Ardaman & Associates, Inc. (AAI) Preliminary Geotechnical Investigation Report for the above referenced site. AAI would be pleased to assist you further by furnishing any subsequent site or client specific geotechnical studies that may be needed on the property in the future. It has been a pleasure to perform this work for you. If we can be of any further assistance, please do not hesitate to call on us.

Very truly yours,

ARDAMAN & ASSOCIATES, INC.

James M. Belt, P.E.
Branch Manager
Shreveport Area Operations

STATE OF LOUISIANA
JAMES M. BELT
REG. No. 27126
REGISTERED PROFESSIONAL ENGINEER
6-17-15
IN
CIVIL ENGINEERING

cc: Mr. Dennis Dean, P.E.
Aillet, Fenner, Jolly, & McClelland, Inc.

Location: 7222 Greenwood Road, Shreveport, Louisiana 71119 Phone (318) 636-3673 Fax (318) 636-3723
Mailing Address: PO Box 19220, Shreveport, Louisiana 71149-0220
Louisiana: Alexandria, Baton Rouge, Monroe, New Orleans, Shreveport
Florida: Bartow, Cocoa, Fort Myers, Miami, Orlando, Port St. Lucie, Sarasota, Tallahassee, Tampa, West Palm Beach

PHELIMINARY
SUBSURFACE EXPLORATION AND
GEOTECHNICAL ENGINEERING EVALUATION
AERO PARK SITE
SHREVEPORT REGIONAL AIRPORT
SHREVEPORT, LOUISIANA
P.O. NO. 2015-00004850

GENERAL

AAI's proposal P15.26.062, dated May 21, 2015 was verbally approved on behalf of the Shreveport Airport Authority (SAA) by Steven Price and subsequently confirmed by receipt of the City of Shreveport's Purchase Order Number 2015-00004850. The purposes of the study were to (1) explore the subsurface conditions present at this site, (2) determine the pertinent engineering properties of the materials encountered, (3) characterize site soil and groundwater conditions, and (4) determine if unfavorable soil conditions exist at the site. Item 4 is general in nature and each boring has brief analysis and conditions presented.

PROJECT DESCRIPTION

The SAA's Site Certification Master Plan map provided to AAI indicates the Warehouse district property consists of about 93 acres. The property is located on the east side of the Regional Airport's property near the city of Shreveport's Airport Park property. The SAA is seeking to have this property certified for the Louisiana Economic Development (LED) "Certified Site" program. This report is, in part, a requirement of the program.

FIELD OPERATIONS

The geotechnical investigation consisted of a total of 3 test borings, more or less randomly located on the property. All test borings were advanced to a depth of approximately 25 feet below the existing ground surface. This investigation was conducted on July 16, 2015. Boring locations were pre-selected by the geotechnical engineer, but not staked in the field. Our drill crew estimated boring placement using the maps provided, referencing identifiable landmarks, and visually estimating positions on the property. Minor adjustments to the pre-selected map locations may have been made where site access was difficult or obstructions may have existed. A copy of the client provided site map along with a *Google™earth* aerial map indicating the approximate location of the test borings are included in appendix A of this report.

The test borings were advanced utilizing continuous-flight, solid stem augers and samples were obtained for laboratory evaluation in general accordance with provisions of *ASTM D1586* and *ASTM D1587*. Standard, thin-walled, seamless Shelby tube samplers were used to obtain specimens of cohesive materials. These specimens obtained at intervals of 5 feet as the borings were advanced.

Soils which contained enough cohesionless material or were sufficiently dense to prevent recovery of undisturbed specimens with Shelby Tube samplers were evaluated by means of the Standard Penetration test. This test consists of determining the number of blows required by a 140 pound hammer dropped 30 inches to achieve one foot penetration of the soil. This number is then related to "in situ" density of the material.

All samples obtained were logged, sealed and packaged in the field to protect them from disturbance and maintain their in situ moisture content during transportation to our laboratory. The results of our boring program (Logs of Boring) are included as Appendix "A" of this report.

LABORATORY TESTING

Upon return to our laboratory selected samples were subjected to standard laboratory tests under the supervision of a soils engineer. The Atterberg Limits, in situ unit weights, percent of material passing a #200 sieve, and moisture contents of the different subsurface soils were determined. These soil properties were used to classify the soils and evaluate their potential for volumetric change. Standard Penetration testing performed in the field or unconfined compression tests performed in laboratory was used to evaluate the shear strength of the different subsurface materials. The results of our testing program are included on the Logs of Boring in Appendix "A" of this report.

SOIL CONDITIONS

Soil conditions described in this section are of a generalized nature and intended to emphasize key features and characteristics. For a more detailed description of the subsurface materials encountered refer to the soil profile on each Log of Boring in Appendix "A". Strata contacts indicated on our Logs are approximate. Actual transitions may be gradual in nature. The soils described are at the specific boring locations within the depths explored. Soils at other locations or depths may be different than those encountered during this exploration. Considering the substantial distances between the boring locations, soil conditions are summarized for each individual test boring location.

Test Boring B-1.

Geotechnical laboratory testing performed on selected samples collected from this location indicates generally sandy soils with medium to high plasticity. The surface soils are sandy clays that classify *sandy fat clay* per *ASTM D2487, Standard Practice for Classification of Soils for Engineering Purposes (Unified Soils Classification System)*. Strength consistency of this surficial stratum is stiff. Between the depths of 3 and 15 feet, low to medium plastic sands were encountered. These sand strata classify *clayey sand (SC), clayey silty sand (SC-SM), and* silty *sand (SM)*. Relative density varies between medium dense and dense. Below the 15 foot depth, *fat clays (CH)* and *clayey sand (SC)* were again encountered. The boring was terminated in *clayey sand (SC)* at a depth of 25 feet below the existing ground surface (BGS).

Test Boring B-2.

Geotechnical laboratory testing performed on selected samples collected from this location indicates sandy soils with highly variable plasticity. The surface soils are slightly plastic sands that classify *clayey silty sand (SC-SM)* per *ASTM D2487, Standard Practice for Classification of Soils for Engineering Purposes (Unified Soils Classification System)*. Relative density of this surficial stratum is medium dense. Between the depths of 3 and 10 feet, high to medium plastic clays were encountered. These clay strata classify *sandy fat clay (CH) and sandy lean clay (CL)*. Strength consistency of the clays are medium stiff to stiff. Below the 10 foot depth, *clayey sand (SC)* was encountered. The boring was terminated in *clayey sand (SC)* at a depth of 25 feet BGS.

Test Boring B-3.

Geotechnical laboratory testing performed on selected samples collected from this location indicates sandy soils with highly variable plasticity. The surface soils are non-plastic silt that classifies *sandy silt (ML)* per *ASTM D2487, Standard Practice for Classification of Soils for Engineering Purposes (Unified Soils Classification System)*. Relative density of this surficial stratum is medium dense. Between the depths of 3 and 15 feet, high to medium plastic clays were encountered. These clay strata classify *sandy fat clay (CH) and sandy lean clay (CL)*. Strength consistency of the clays vary from very soft to very stiff. Below the 15 foot depth, very dense *clayey sand (SC)* and hard *silty clay (CL-ML)* were encountered. The boring was terminated in *silty clay (CL-ML) stratum* at a depth of 25 feet BGS.

GROUNDWATER

Shallow groundwater was encountered in all of the test boring locations during the drilling operations. Our water level observations, in feet BGS, are summarized in Table 1. These levels represent our estimation of initial encounter depth and should not be construed as static or equilibrium levels. Static levels may in fact be higher (or lower) than our initial observations. It must be understood shallow groundwater levels will fluctuate with site elevation, climatic conditions/seasons of the year, and the levels of any nearby streams and ponds. Based on the stratigraphy encountered at these sites, shallow groundwater will not likely adversely impact surface construction activities. However excavation operations below a depth of about 10 feet may encounter water seepage and construction activities would be impacted.

TABLE 1.
GROUNDWATER OBSERVATIONS

Test Boring Location	Groundwater Depth (feet BGS)
B-1	22
B-2	13.5
B-3	12.5

GENERAL SUBGRADE PREPARATION

Although none are expected, prior to subsequent construction activity any existing foundations, buried structures, or pavements in the proposed construction area should be demolished and removed. Any utilities with in the proposed construction area that are to be abandoned should be completely removed or plugged in-place. Top soil stripping in grassed areas should be expected. The contractor should anticipate stripping and de-grassing will require removal of the upper 4 to 6 inches of surface material. The contractor should provide drainage of the exposed subgrade by sloping grades and ditching away from the construction site.

After any required demolition and rough site grading are complete, the exposed surface of areas where fill or paving are to be placed should be proof rolled to identify any weak areas. Proofrolling can be accomplished with a loaded dump truck or similarly weighted equipment under the observation of the geotechnical engineer or his designated representative. Weak areas should be investigated, removed, and/or repaired under the supervision of the geotechnical engineer prior to subsequent construction activity. After verification of a stable subgrade layer, the exposed

subgrade should be scarified to a minimum of 8 inches, the moisture content adjusted to within one 1 percent below to 3 percent above optimum and recompacted to 90 percent of the laboratory maximum as determined by *ASTM D1557, Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft^3)* prior to placement of any fill or base materials.

It is imperative the contractor understand the importance of establishing and maintaining proper site drainage to maintain the prepared subgrade's suitability for subsequent construction activity. Failure to follow good site water control practices may result in construction delays and additional costs for reconditioning or replacing saturated materials. Earthwork performed during wet periods of the climatic cycle may warrant special considerations. The use of hydrated lime, fly ash or Portland cement stabilization should be considered to provide a working platform if work is expected to occur during these periods. The need for such techniques is dependent upon earthwork scheduling with respect to weather patterns and good site management of drainage during the construction phase. The suitability of any area left exposed to the elements should be verified by proofroll prior to subsequent construction activity.

GENERAL FILL RECOMMENDATIONS

Where fill materials may be required to achieve the desired finished grade elevations of any future projects, the material should be placed in controlled lifts. Lifts should be placed in thin horizontal layers not exceeding 8 inches *compacted* thickness. In sloped areas, horizontal lifts should be benched or stair stepped into the slope as the wedge of fill is constructed. Each lift of select fill should be moisture conditioned to 2 percentage points of optimum moisture and compacted to a minimum of 95 percent of the laboratory maximum as determined by ASTM D1557.

All imported fill material should be *"select"*. Select materials classify *clayey sand (SC) or sandy lean clay (CL)* in accordance with ASTM D2487. Select fill materials placed below grade should be sandy lean clay with liquid limits no greater than 35, plasticity indices (PI) between 8 and 18, and have no more than 60 percent passing the U.S. Standard No. 200 Sieve.

Onsite soils classifying CL, SC, SC-SM, SM, or SP-SM, free of organic materials or construction debris, are suitable for use as fill with adequate processing and moisture conditioning. Soils classifying ML, CH or those otherwise of suitable classification, but containing organics,

construction debris or excessive moisture are not recommended for reuse as fill under structures or pavements. Typical specifications for compaction of sandy clay and clayey sand type soils are included in Appendix "B" or this report.

GENERAL FOUNDATION RECOMMENDATIONS

The soils discovered at the test boring locations on this site are of fair bearing quality but generally have slight to moderate potential for shrink and swell. Some of the near surface soils are considered active or *expansive*. Some clay soils that would be considered expansive were encountered near the existing ground surface in the locations of test borings B-1 and B-2. These soils exist within 5 feet of the existing ground surface. A soft layer was encountered in the location of test boring B-3 below the 3 foot depth. These soils will likely fail the required proofroll and require removal and replacement with density controlled select or suitable on site soils.

As such, with attention to the fore mentioned expansive clays and soft soils, or with certain site modifications, light to moderately loaded future developments could be supported on shallow foundation systems. Our preliminary estimate of allowable bearing capacities for continuous and spread footings placed in the native undisturbed soils or density controlled select fill, at depths between 2 and 4 feet BGS, are summarized in Table 2 for each of the test boring locations. Capacities include a minimum factor of 3 against shear failure of the bearing stratum. Where the sites are properly prepared and maintained, and allowable bearing capacities are not exceeded, total settlement from consolidation should be limited to an inch or less for typical spread footings with widths less than 5 feet and continuous footings with widths less than 3 feet.

To utilize a conventionally reinforced shallow foundation system, AAI recommends a minimum 4 feet of density controlled select fill or inactive native soil beneath the bottom of all footings and/or grade beams and any underlying active or expansive clay soil. A minimum of 6 feet is recommended beneath any *non-load bearing* floor slab sections. To meet these criteria, the proposed finished floor elevation can be raised, any existing expansive soils can be removed, or a combination of both procedures can be used to achieve an acceptable finished floor elevation with the required thickness of inactive fill beneath it.

For the soil profiles at B-1 and B-2, it appears the criteria could be met with a minimal amount of site modifications. AAI strongly recommends that our office review the preliminary grading plans so that we can finalize our recommendations regarding treatment of the fat clay soils with in the proposed building area. The Geotechnical Engineer should retained to inspect the exposed subgrade and verify the assumptions of this report before proceeding with fill material placement.

For heavy loading, where consolidation settlements may be critical, a deep foundation system would be more suitable. Probably the most economical deep foundation system to support heavily loaded structures is with an auger-cast-in-place (ACIP) pile system. The test boring sites are ideal for utilizing ACIP piles to support heavier loads or to minimize settlement. All areas explored can support heavily loaded structures on an ACIP pile foundation. Although generally less economical, driven timber piles, concrete piles, or steel piles can also be used. For moderate loads, straight sided drilled and cast-in-place concrete caissons (drilled shafts) or helical screw anchor type piers can also be utilized.

A seismic site classification of Class D, as defined in the International Building Code Section 1613, should be assumed for this site due to the lack of specific soil data to a depth of one hundred (100) feet.

TABLE 2.

ALLOWABLE BEARING CAPACITIES FOR SHALLOW FOUNDATIONS[1]

Test Boring Location	Allowable Net Bearing for Continuous Footings (psf)	Allowable Net Bearing for Spread Footings (psf)
B-1	3000	3500
B-2	3000	3500
B-3	3000	3500

The recommendations contained in this section are our opinion based on the limited amount of information available and are intended for preliminary planning purposes only. Prior to any final design, a thorough site/project specific geotechnical study should be made to finalized design parameters for specific areas of the Technology Park property.

[1] Table values assume site modifications including undercutting unsuitable soils and replacement with density controlled fill will be required at all test boring locations.

GENERAL PAVEMENT INFORMATION

The pavement section recommendations for this site are based upon subsurface conditions implied by the test borings and the assumption use will be limited to commercial or light industrial use. No specific pavement analyses was performed as there is no known specific usage at this time. Recommendations outlined here in are in our opinion, "typical" for the assumed site use and intended for preliminary planning purposes only.

The existing sandy clay and clayey sand subgrade soils, prepared and maintained as recommended in the Subgrade Preparation Section of this report should have a laboratory soaked California Bearing Ratio (CBR) values in the order of 5 to 10 or Modulus of Subgrade Reaction (k_s) in the order of 100 to 150 PCI.

Generalized specifications for recommended crushed aggregate base materials and geotechnical fabrics are included in Appendix "B" of this report. Aggregate base course layers in excess of four (4) inches in thickness should be compacted to not less than 98% of the laboratory maximum as determined by *ASTM D1557, Method C.* Layers of 4 inches or less can be compacted by establishing a rolling pattern under the direction of the geotechnical engineer that produces the maximum density.

Where a soil-cement sub-base is considered, the type soils recommended for use as *select* fill or the prepared subgrade can be readily stabilized with Type I Portland cement. The cement stabilized soil or "soil-cement" sub-base layer should achieve a minimum unconfined compressive strength of 300 PSI at 7 days of age. Eight percent by volume cement can be used for cost estimation for cement stabilization of select soils. The actual quantity required should be verified by the geotechnical engineer during the construction phase of the project in accordance with Louisiana Department of Transportation and Development Test Method TR 432.

Construction of the soil-cement subgrade layer should be in accordance with the provisions outlined in Section 303 of the *Louisiana Standard Specifications for Roads and Bridge, 2006 Edition.* Compaction of the finished subbase layer should not be less than 95% of the maximum laboratory density as determined by LDOTD TR 418. Heavy construction traffic should not utilize cement stabilized areas until the materials have cured sufficiently to obtain minimum specified strength.

Rigid Pavement - AAI recommends rigid pavement be considered for all heavy duty pavement applications. However we understand the need to make cost effective decisions for the facility. At a minimum turnout aprons, trash collection areas, and any parking aprons adjacent to the truck docks be constructed of rigid pavement.

Minimum flexural strength of the concrete should be 650 pounds per square inch (PSI) at twenty-eight (28) days of age or have compressive strength value of 4,000 PSI. AAI recommends the use of air entrainment chemicals that improve workability of the concrete mix and improve durability of the pavement surface. Control joint spacing should not exceed 15 feet for un-reinforced pavement of the thicknesses outlined below. All concrete paving should include provisions to mechanically control temperature induced shrinkage cracking and provide for load transfer across construction joints. Rigid pavement sections suggested for this site are summarized in Table 3.

TABLE 3.
RIGID PAVEMENT SECTIONS

Pavement Layer	Light Duty Auto Parking	Medium Duty Channelized Auto Drives	Heavy Duty Truck Access Drive, Dumpster Pads, & Turnout Aprons
Portland Cement Concrete	5.0"	6.0"	8.0"
Base Course Layer	4" crushed stone base material	4" crushed stone base material	8" crushed stone base material
Subbase Course Layer	Density controlled fill per Fill Section of this report	Density controlled fill per Fill Section of this report	Density controlled fill per Fill Section of this report
Subgrade Layer	Density controlled subgrade prepared per the Subgrade Section of this report	Density controlled subgrade prepared per the Subgrade Section of this report	Density controlled subgrade prepared per the Subgrade Section of this report

Flexible Pavement – Flexible paving structurally similar to the above rigid sections are provided for your cost comparison. Hot mixed asphaltic concrete (HMAC) mixtures should meet applicable requirements for materials, production, placement and acceptance as outlined in the *Louisiana Standard Specifications for Roads and Bridges, 2000 Edition*, Section 501 for Marshall mixtures or *LSSRB, 2006,* Section 502 for level 1 Superpave mixtures. For parking lot and light duty drive

applications we recommend utilizing the ½ inch Nominal HMAC mix of either type. This mix produces a more aesthetic surface finish and generally holds up well under automobile parking lot use. Flexible pavement sections suggested for this site are summarized in Table 4.

TABLE 4.

FLEXIBLE PAVEMENT SECTIONS

Pavement Layer	Light Duty Auto Parking	Medium Duty Auto Drives	Heavy Duty Parking
Hot Mixed Asphaltic Concrete Wearing and Binder Course	2.0" WC	1.5" WC 1.5" BC	1.5" WC 3.0" BC
Base Course	8" crushed stone base material or 8" soil-cement base materials	8" crushed stone base material or 8" soil-cement base materials	12" crushed stone base material or 12" soil-cement base materials
Geotechnical Fabric Layer Requirement	Required under aggregate base material	Required under aggregate base material	Required under aggregate base material
Subbase Course	Density controlled fill per Fill Section of this report	Density controlled fill per Fill Section of this report	Density controlled fill per Fill Section of this report
Subgrade Layer	Density controlled subgrade prepared per the Subgrade Section of this report	Density controlled subgrade prepared per the Subgrade Section of this report	Density controlled subgrade prepared per the Subgrade Section of this report

If a soil-cement base layer is to be considered, be aware soil-cement materials develop tension cracks during the curing process and these cracks "reflect" through the overlying HMAC paving over time. A general rule of thumb for crack propagation is about one (1) vertical inch per year (takes about 2 years to show up through a 2 inch overlay). Although not initially structurally detrimental to the pavement system, the cracks must be periodically sealed to minimize moisture infiltration into the base system. Failure to preform regular maintenance of the cracks can lead to saturated subgrade soils and premature base failures in the pavement.

Reflective cracking cannot be prevented; however a separation layer can be used to minimize the propagation of reflective cracking. There are commercially available engineered fabrics (underlayment) that claim to reduce crack propagation and a thin layer of crushed aggregate base layer can also be used between the base layer and binder course layers to reduce reflective cracking. Both approaches have pros and cons and the benefit of either must be weighed against installation costs.

CONSTRUCTION CONCERNS

The upper soils at the site are fine-grained materials composed of significant silt and clay fractions. Silty and/or clayey soils are subject to changes in shear strength with varying moisture conditions. If construction is initiated during wetter seasons of the year, it may be difficult to move equipment about the site. Once these type soils become saturated, compaction operations can be hampered by a tendency of the silt to "pump" and the clay to "shear".

Consequently it is recommended, adequate site drainage be established prior to, during, and following construction operations to prevent water ponding on or adjacent to construction areas. Compaction operations may be expedited by using light compaction equipment and thin lifts of soil. Rolling only as necessary to obtain compaction is advisable because further repetitive loading may cause the subgrade to "pump" or fail. Once soils begin to pump, it is usually necessary to either start the moisture conditioning process over or remove and replace the saturated material. AAI can provide experience soils technicians to monitor the contractor's compaction operations and assist in expediting the site work.

Compaction operations and installation of the foundations should be supervised by a qualified soils technician under the supervision of the Geotechnical Engineer. All foundation excavations should be inspected to verify cleanliness and adequate bearing. Concrete should be placed in foundation excavations as soon as practical after forming and final clean-up have been approved, to avoid prolonged exposure of the bearing stratum and possible disturbance due to standing water, desiccation or other construction operations.

LIMITATIONS

This study has been prepared in accordance with generally accepted preliminary geotechnical engineering principles and practices in this area at this time. We make no other warranty either express or implied.

The conclusions and recommendations submitted in this report are based upon the data obtained from the preliminary exploratory borings drilled at the location(s) indicated in Appendix A, the different possible type of construction, and our experience in the area. Our findings include interpolation and extrapolation of the subsurface conditions identified at the exploratory boring(s) and variations in the subsurface conditions may not become evident until excavations are performed.

This study has been prepared for the exclusive use by our client for preliminary purposes only. We are not responsible for technical interpretations by others of our exploratory information, which has not been described or documented in this report. As the site is eventually developed additional borings should be taken. Significant design changes could be required or modifications of the recommendations presented herein. We recommend on-site observation of excavations and foundation bearing strata by a representative of the geotechnical engineer.

APPENDIX A

SITE MAP
AND
LOGS OF BORING

TEST BORING LOCATIONS

AERO PARK SITE
SHREVEPORT REGIONAL AIRPORT
SHREVEPORT, LOUISIANA

Ardaman & Associates, Inc.

AAI Project 113-15-94-8510
Warehouse District Site
Shreveport File No.: 15.94.063

15

LOG OF BORING NO. B-1

PROJECT: Shreveport Aero Park — **SHEET** 1 of 1

CLIENT: City of Shreveport Engineering Dept. — **LOCATION:** See Remarks

DATE: 7/16/15 — **SURFACE ELEV:** 231' +/-

DRILLING METHOD(S): Auger

GROUNDWATER INFORMATION: Water encountered at twenty-three (23) feet after 20 minutes stayed at twenty-two (22) feet

DEPTH (FT)	SAMPLE TYPE	N: SPT, BLOWS/FT T: THD, BLOWS/FT P: HAND PEN, TSF	MOISTURE CONTENT, %	DRY DENSITY POUNDS/CU.FT	LIQUID LIMIT, %	PLASTIC LIMIT, %	PLASTICITY INDEX, %	MINUS NO. 200 SIEVE, %	COMPRESSIVE STRENGTH, KSF	FAILURE STRAIN (%)	CONFINING PRESSURE PSI	DESCRIPTION OF STRATUM
		N=18	17		51	21	30	61				Stiff red and tan sandy fat clay (CH)
												3.0
5		N=19	14		25	20	5	40				Medium dense clayey silty sand (SC-SM)
												8.5
		N=31	18		38	18	20	42				Dense red and tan clayey sand (SC)
10												11.5
		N=18	27									Medium dense tan sandy silt (ML)
15												16.5
		N=17	31		60	27	33	90				Stiff gray fat clay (CH) with fine sand partings
20												21.5
		N=46	27									Dense tan clayey sand (SC)
25												25.0
												Bottom of boring at 25 feet
30												

TUBE SAMPLE | AUGER SAMPLE | SPLIT-SPOON | ROCK CORE | THD CONE PEN. | NO RECOVERY

REMARKS: N 32 degrees 26 58.43 W 93 degrees 49 03.71

15.94.062 — ARDAMAN & ASSOCIATES, INC.

LOG OF BORING NO. B-2

PROJECT: Shreveport Aero Park — **SHEET** 1 of 1

CLIENT: City of Shreveport Engineering Dept. — **LOCATION:** See Remarks

DATE: 7/16/15 — **SURFACE ELEV:** 230' +/-

DRILLING METHOD(S): Auger

GROUNDWATER INFORMATION: Water encountered at fifteen (15) feet after 20 minutes stayed at thirteen and one-half (13.5) feet

DEPTH (FT)	SAMPLE TYPE	N: SPT, BLOWS/FT T: THD, BLOWS/FT P: HAND PEN, TSF	MOISTURE CONTENT, %	DRY DENSITY POUNDS/CU.FT	LIQUID LIMIT, %	PLASTIC LIMIT, %	PLASTICITY INDEX, %	MINUS NO. 200 SIEVE, %	COMPRESSIVE STRENGTH, KSF	FAILURE STRAIN (%)	CONFINING PRESSURE PSI	DESCRIPTION OF STRATUM
		N=10	11		20	16	4	52				Medium dense red and tan clayey silty sand (SC-SM)
												3.0
5		N=9	23		64	24	40	67				Medium stiff red and tan sandy fat clay (CH)
												8.5
		N=16	26		45	19	26	71				Stiff gray sandy lean clay (CL)
10												11.5
		N=6	32		34	20	14					Loose tan and gray clayey sand (SC)
15												
		N=12	34									--Medium dense
20												
		N=18	32					21				
25												25.0
												Bottom of boring at 25 feet
30												

TUBE SAMPLE | AUGER SAMPLE | SPLIT-SPOON | ROCK CORE | THD CONE PEN. | NO RECOVERY

REMARKS: N 32 degrees 26 47.37 W 93 degrees 49 07.45

15.94.062 — ARDAMAN & ASSOCIATES, INC.

LOG OF BORING NO. B-3

PROJECT: Shreveport Aero Park — **SHEET** 1 of 1

CLIENT: City of Shreveport Engineering Dept. — **LOCATION:** See Remarks

DATE: 7/16/15 — **SURFACE ELEV:** 227' +/-

DRILLING METHOD(S): Auger

GROUNDWATER INFORMATION: Water encountered at twelve and one-half (12.5) feet depth

DEPTH (FT)	SAMPLE TYPE	N: SPT, BLOWS/FT T: THD, BLOWS/FT P: HAND PEN, TSF	MOISTURE CONTENT, %	DRY DENSITY POUNDS/CU.FT	LIQUID LIMIT, %	PLASTIC LIMIT, %	PLASTICITY INDEX, %	MINUS NO. 200 SIEVE, %	COMPRESSIVE STRENGTH, KSF	FAILURE STRAIN (%)	CONFINING PRESSURE PSI	DESCRIPTION OF STRATUM
		N=13	10		18	16	2	57				Medium dense tan sandy silt (ML)
												3.0
5		N=3	29		49	22	27	66				Very soft red and gray sandy lean clay (CL)
												6.5
		N=15	36		89	33	56	81				Medium stiff gray fat clay (CH) with sand
10												11.5
		N=27	31									Very stiff tan and gray sandy lean clay (CL)
15												16.5
		N=44	29									Dense gray clayey sand (SC)
20												21.5
		N=54	26		27	23	4	87				Hard gray silty clay (CL-ML) with sand
25												25.0
												Bottom of boring at 25 feet
30												

TUBE SAMPLE | AUGER SAMPLE | SPLIT-SPOON | ROCK CORE | THD CONE PEN. | NO RECOVERY

REMARKS: N 32 degrees 26 49.28
W 93 degrees 48 54.90

15.94.062

ARDAMAN & ASSOCIATES,INC.

KEY TO SOIL CLASSIFICATION TERMS AND SYMBOLS

SOIL OR ROCK TYPES

SAND, SILT, CLAY, FILL, SANDY, SILTY, CLAYEY, ORGANIC, SHALE, SANDSTONE, LIMESTONE, GRAVEL

SAMPLER TYPES

SHELBY TUBE, DISTURBED (AUGER), SPLIT SPOON, NO RECOVERY, DENISON, PISTON, PITCHER, ROCK CORE

CONSISTENCY OF COHESIVE SOILS (MAJOR PORTION PASSING NO. 200 SIEVE)

DESCRIPTIVE TERM	UNDRAINED SHEAR STRENGTH, KIPS/SQ FT
VERY SOFT	LESS THAN 0.25
SOFT	0.25 TO 0.5
FIRM	0.5 TO 1.0
STIFF	1.0 TO 2.0
VERY STIFF	2.0 TO 4.0
HARD	GREATER THAN 4.0

RELATIVE DENSITY OF GRANULAR SOILS (MAJOR PORTION RETAINED ON NO. 200 SIEVE)

DESCRIPTIVE TERM	RELATIVE DENSITY,%
VERY LOOSE	LESS THAN 15
LOOSE	15 TO 35
MEDIUM DENSE	35 TO 65
DENSE	65 TO 85
VERY DENSE	GREATER THAN 85

WATER LEVELS

- DEPTH GROUNDWATER FIRST ENCOUNTERED DURING DRILLING

- GROUNDWATER LEVEL AFTER 24 HOURS (UNLESS OTHERWISE NOTED)

TERMS DESCRIBING SOIL STRUCTURE

Parting: paper thin in thickness

Seam: 1/8" - 3" in thickness

Layer: greater than 3" in thickness

Calcareous: containing appreciable quanties of calcium carbonate

Ferrous: containing appreciable quantities of iron

Well-graded: having wide range in grain size & similar proportions of all intermediate sizes

Poorly graded: predominately one grain size or having a range of sizes with few or no particles of some intermediate sizes

Fissured: containing shrinkage cracks, frequently filled with fine sand or silt, usually more or less vertical

Interbedded: composed of alternate layers of different soil types

Laminated: composed of thin layers of varying color and texture

Slickensided: having inclined planes of weakness that are slick & glossy in appearance

NOTE: Clays possessing slickensided or fissured structure may exhibit lower measured shear strength than indicated by the described consistency. The consistency of such soil is interpreted using the measured shear strength along with pocket penetrometer results.

APPENDIX B

MATERIAL PROCEDURES AND SPECIFICATIONS

B.1 GENERALIZED SPECIFICATIONS FOR COMPACTION

Sandy Clay and Clayey Sand Soils

The thickness of lifts used should be no more than the height of the teeth on sheepsfoot rollers. Generally, for a forty-eight (48) inch diameter or smaller drum roller, the maximum compacted lift thickness acceptable is six (6) inches. For rollers with drums of sixty (60) inches in diameter and larger with teeth about nine (9) inches long, a nine (9) inch final compacted lift thickness will be acceptable. The sole determination of the thickness of a lift will be the capability of the contractor's equipment to obtain the required compaction.

When obtaining the average density of a lift to determine its conformance to specifications, the lift should be immediately rejected if any density is more than 2% below the required average.

Generally, sheepsfoot rollers are most suitable for compaction of sandy clay and clayey sand soils, the contractor may use spiketooth rollers, rubber tired rollers, or any fill compaction equipment that has sufficient mass to compact the soil. Generally, the drums of sheepsfoot rollers should be filled with water or for additional weight with both water and sand. Tractors or other vehicles used primarily for hauling WILL NOT be allowed as fill compaction equipment. The contractor should also have smooth wheel rollers to seal the working area at the end of the day's operations so overnight rains will not saturate the soil and delay his work. These rollers should also be used to seal the surface whenever rainfall is imminent.

The soil engineer or his representative will perform density tests and will accept or reject a lift within two (2) hours after being tested. No material will be placed on any lift that has not been accepted by the engineer.

B.2 GENERALIZED COARSE AGGREGATE SPECIFICATIONS

Crushed Stone Crushed Concrete

Crushed stone base course shall be composed of crusher-run broken stone. The material shall be crushed and consist of durable particles of stone mixed with approved soil binder material.

Gradation

The base material shall meet the following requirements:

Pass #1-1/2"	100%
Pass #1"	90-100%
Pass #3/4"	70-100%
Pass #4	35-65%
Pass #40	12-32%
Pass #200	5-12%

Soil Binder

Material passing the No. 40 sieve shall be known as "soil binder" and shall meet the following requirements:

Plasticity Index < 15

Compaction

Compaction shall be obtained by a minimum of 12 passes of a 5,000 pound sheepsfoot roller 3 to 4 feet wide. Surface shall be finished rolled by sufficient passes of a steel wheel roller to provide a smooth surface for application of the surface course.

Note

Extra binder material may be added with the approval of the geotechnical or design engineer.

Soundness and Los Angeles abrasion tests should meet Louisiana Department of Transportation Specifications.

B.3 GENERIZED GEOTEXTILE FABRIC SPECIFICATIONS

The following proven woven Geotextile Fabrics are approved:

1. Amoco Pro Pex 2006
2. Beltech Style 980
3. ConTech C300
4. Mirafi 600X
5. Hanes (Terra Tex) HD

If alternate geotextile fabric from above is requested, the following qualifications should be met:

SPECIFICATIONS

Property	Test Method	Minimum Requirements
Fabric Structure	-	Woven
Polymer Composition	-	Polypropylene
Fabric Width	-	12½', 15', 17½'
Weight	ASTM D-3776C	5 oz. /yd.
Grab Strength	ASTM D-4632	300 x 300 lbs.
Elongation	ASTM D-4632	20%
Trap Tear Strength	ASTM D-4533	115 lbs. x 115 lbs.
Burst Strength	ASTM D-3786	575 psi.
Puncture	ASTM D-4833	120 lbs.
UV Resistance	ASTM D-4355	> 70%
A.O.S.	ASTM D-4751	35

NOTE:

1. Requires Mill Certification from manufacturer.
2. Minimum requirements are not minimum average values. Minimum average values per roll are not an acceptable specification.

Preliminary WOUS Delineation

Shreveport Airport Tracts

Hollywood Avenue

Shreveport, Caddo Parish, Louisiana

August 13, 2015

Terracon Project No. EH157076

Prepared for:
Shreveport Airport Authority
Shreveport, LA

Prepared by:
Terracon Consultants, Inc.
Baton Rouge, Louisiana

August 13, 2015

Terracon

Mr. Stephen Price
Shreveport Airport Authority
5103 Hollywood Avenue, Suite 300
Shreveport, LA 71109

C/O: Dennis Dean, P.E.

Re: Preliminary WOUS Delineation
Shreveport Airport Tracts
Hollywood Drive
Shreveport, Caddo Parish, Louisiana
Terracon Project No. EH157076

Dear Mr. Price:

Terracon Consultants, Inc. (Terracon) is pleased to submit the enclosed Preliminary Waters of the United States (WOUS) Delineation report for the above-referenced site. On July 20, 2015, Terracon sent qualified wetland scientists to perform a delineation of the site to determine the presence/absence of jurisdictional WOUS.

Based on site conditions at the time of reconnaissance, it is Terracon's opinion that 1,783 linear feet of jurisdictional WOUS are present within the site; however, the U.S. Army Corps of Engineers (USACE) is the official agency to make the final determination of the location, type, and extent of jurisdictional WOUS. Should work be proposed within the jurisdictional area, coordination with the USACE to obtain coverage under a Section 10 or 404 permit may be required.

We appreciate the opportunity to be of service to you on this project. Our professionals provide a variety of environmental, geotechnical, construction materials, and facilities services locally, regionally and nationally. For more detailed information on all of Terracon's services please visit our website at www.terracon.com. If there are any questions regarding this report or if we may be of further assistance, please do not hesitate to contact Jessica Keasler at 225-239-2628 or by e-mail at Jessica.keasler@terracon.com.

Sincerely,
Terracon Consultants, Inc.

For Jessica R. Keasler, MS
Environmental Scientist

For Ginger C. Horn, PWS
Approved Project Reviewer

Attachments

Terracon Consultants, Inc. 2822-B O'Neal Lane Baton Rouge, LA 70816
P [225] 344-6052 F [225] 344-6346 terracon.com

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APPENDICES

APPENDIX A EXHIBITS

Exhibit 1: Topographic Vicinity Map
Exhibit 2: Site Diagram
Exhibit 3: Detail Site Diagram – 55-Acre Tract
Exhibit 4: Detail Site Diagram – 93-Acre Tract
Exhibit 5: National Wetland Inventory Map
Exhibit 6: Soils Map
Exhibit 7: Flood Insurance Rate Map

APPENDIX B PHOTO LOG

APPENDIX C DATA FORMS

APPENDIX D COMMON ACRONYMS

EXECUTIVE SUMMARY

Terracon Consultants, Inc. (Terracon) conducted a delineation of waters of the United States (WOUS) for two tracts within the Shreveport Airport property, a 55-acre tract and a 93-acre tract (the site).

Terracon's qualified wetland scientists, Ms. Jessica Keasler and Mr. Lem Dial conducted a site visit on July 20, 2015 in order to determine the presence of potentially jurisdictional WOUS within the site.

The site was reviewed for potential WOUS using the routine determination methodology published in the 1987 Corps of Engineers Wetland Delineation Manual (Technical Report Y-87-1, online edition) as amended by the Atlantic and Gulf Coastal Plain Regional Supplement manual. The site was also reviewed for potential WOUS, including wetlands, following the June 5, 2007 guidance form the U.S. Environmental Protection Agency and the USACE as presented in the USACE Jurisdictional Determination Form Instructional Guidebook.

Opinion

Terracon's opinion is that there is a total of 1,783 linear feet of jurisdictional WOUS within the site, of which, all was classified as ephemeral stream and none as wetland habitat. Additionally, no non-jurisdictional WOUS were identified. However, the U.S. Army Corps of Engineers (USACE) is the official agency to make the final determination of the location, type, and extent of jurisdictional WOUS. According to the guidelines, non-wetland jurisdictional WOUS are identified according to their flow regime as Traditional Navigable Waters (TNW), Relatively Permanent Waters (RPW), and Non Relatively Permanent Waters (NRPW).

Terracon's opinion of jurisdictional and non-jurisdictional waters is summarized as follows:

- A total of 1,783 linear feet jurisdictional non-wetland WOUS were identified on site for a total of 0.0056 square feet (Table 1).
- No jurisdictional wetlands were identified on site.
- No non-jurisdictional waters were identified on site.

This opinion is part of an executive summary and incomplete without the remainder of the Preliminary WOUS Delineation report.

1.0 INTRODUCTION

Terracon Consultants, Inc. (Terracon) conducted a preliminary delineation of waters of the United States (WOUS) for two tracts within the Shreveport Airport property, a 55-acre tract and a 93-acre tract (the site), as shown on Exhibits 1 & 2 in Appendix A. Terracon conducted the preliminary WOUS delineation in order to determine the jurisdiction of WOUS on the site. The following Exhibits are included in Appendix A:

- USGS Topographic Vicinity Map (Exhibit 1)
- Site Diagram (Exhibit 2)
- Detail Site Diagram – 55-Acre Tract (Exhibit 3)
- Detail Site Diagram – 93-Acre Tract (Exhibit 4)
- National Wetland Inventory Map (Exhibit 5)
- Soils Map (Exhibit 6)
- Flood Insurance Rate Map (Exhibit 7)

Terracon's qualified wetland scientists, Ms. Jessica Keasler and Mr. Lem Dial conducted a site visit on July 20, 2015 in order to determine the presence of potentially jurisdictional WOUS within the site.

The site was reviewed for potential WOUS using the routine determination methodology published in the 1987 Corps of Engineers Wetland Delineation Manual (Technical Report Y-87-1, online edition) as amended by the Atlantic Gulf Coast Regional Supplement manual. The site was also reviewed for potential WOUS, including wetlands, following the June 5, 2007 guidance form the U.S. Environmental Protection Agency and the USACE as presented in the USACE Jurisdictional Determination Form Instructional Guidebook.

The observations and opinions contained in this report are based on guidance, regulations, and data available at the time of preparation as well as site conditions encountered at the time of the site reconnaissance. Guidance, regulations, data furnished by others, and site conditions are dynamic and subject to changes beyond the control of Terracon. A future evaluation may yield differing results.

This Preliminary WOUS Delineation report is prepared for the exclusive use and reliance of **Shreveport Airport Authority**. Use or reliance by any other party except a governmental entity having jurisdiction over the site is prohibited without the written authorization of **Shreveport Airport Authority** and Terracon.

Reliance on the Preliminary WOUS Delineation by the client and all authorized parties will be subject to the terms, conditions and limitations stated in the proposal, Preliminary WOUS Delineation report, and Terracon's Agreement for Services. The limitation of liability defined in

the Agreement for Services is the aggregate limit of Terracon's liability to the client and all relying parties.

2.0 PRELIMINARY DATA GATHERING AND ANALYSIS

Prior to performing the site visit, several map and aerial photograph resources were reviewed to assist with identifying suspect WOUS, including wetlands, at the project site. Each source of data is described below.

2.1 Topographic Map

The United States Department of the Interior Geologic Survey (USGS) 7.5-Minute Topographic Map of the project site was reviewed to identify drainages or suspect WOUS within the project site. A portion of the Shreveport West, LA quadrangle can be seen on Exhibit 1 in Appendix A. The USGS map shows both tracts to be undeveloped. The USGS map shows a roadway extending through the 55-acre tract, which is not currently present; additionally for this tract the map shows two areas of vegetation/woods. The USGS map does not show other apparent drainages or suspect WOUS occurring on the project site.

2.2 National Wetlands Inventory Map

The National Wetlands Inventory (NWI) Map of the project site was reviewed to identify suspect wetland areas. The map for the project site was published by the U.S. Department of the Interior's Fish and Wildlife Service (USFWS) and depicts suspect wetland areas based on stereoscopic analysis of high altitude aerial photographs. A NWI map is included as Exhibit 5 in Appendix A. The review of the NWI map does not indicate the presence of suspect wetland areas occurring on the project site.

2.3 Soil Survey

Data from the soil survey of Caddo Parish, Louisiana, the U.S. Department of Agriculture (USDA) soil data mart, and the Natural Resources Conservation Service (NRCS) web soil survey was reviewed to identify soil types, including hydric soils. Hydric soil is one of the three essential characteristics of a wetland according to the USACE. Data for the soil survey was compiled by the USDA Soil Conservation Service, now known as the NRCS, in 2014. A soil survey map is included as *Exhibit 6* in *Appendix A*.

The following soil types were identified within the project area on the soil survey map:

- Keithville very fine sandy loam The Keithville series consists of deep, moderately well drained, very slowly permeable soils that formed in loamy over clayey sediment of Tertiary age. These soils are on broad nearly level or gently sloping uplands of the coastal plains.

Keithville soils are saturated above the clayey layers to a depth of 2 to 3 feet below the surface for intermittent periods totaling 2 to 6 weeks during the winter and early spring.

- Metcalf-Timpson complex The Metcalf series consists of deep, somewhat poorly drained, very slowly permeable soils that formed in Pliestocene age loamy marine or alluvial sediments over Tertiary age clayey deposits. These soils are on broad level, nearly level marine or stream terraces on the Coastal Plain. The Timpson series consists of very deep, moderately drained soils. These nearly level soils formed in loamy and clayey alluvial sediments on Pleistocene age marine or fluvatile terraces overlying the Wilcox Formation.
- Meth fine sandy loam The Meth series consists of very deep, well drained, moderately slowly permeable soils that formed in thick loamy and clayey sediments on Tertiary age uplands. These soils are on broad sloping coastal plains. Water runs off the surface at a medium rate.

The 2014 Hyrdric Soils list for Caddo Parish did not include any of the listed soil series.

2.4 FEMA Flood Insurance Rate Map

Terracon downloaded and reviewed Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Panel Numbers 22017X0454H and 22017C0458H. According to the FIRM panels, the site is located outside of the 100-year and 500-year floodplains. A FEMA Map is included as Exhibit 7 in Appendix A.

2.5 Aerial Photographs

Terracon reviewed aerial photographs to review suspect WOUS, including wetland areas that may be present on the project site. Aerial photographs were available for 1998, 2004, 2007, 2012 and 2013 from the Louisiana Department of Natural Resources (LDNR) Strategic Online Natural Resources Information System (SONRIS). In all of the photographs reviewed, the site and surrounding area had characteristics similar to the current conditions. No evidence of suspect wetlands was observed in the aerial photographs.

3.0 FIELD METHODS

Terracon wetland scientists conducted a reconnaissance of the site to characterize existing conditions and identify the presence/absence of potentially jurisdictional WOUS. Geographic Information System (GIS) software was used to analyze collected features, calculate areas, and generate figures provided in Appendix A.

The site was reviewed for potentially jurisdictional WOUS (including wetlands) using the routine determination methodology published in the 1987 Corps of Engineers Wetland Delineation Manual (Technical Report Y-87-1, online edition) as amended by the Atlantic and Gulf Coastal Plain Regional Supplement manual. The site was also reviewed for potential WOUS, including

wetlands, following the June 5, 2007 guidance form the U.S. Environmental Protection Agency and the USACE as presented in the USACE Jurisdictional Determination Form Instructional Guidebook. Following the June 5, 2007 guidance, if present, the boundaries of potential wetlands would have been placed at the point where one or more of the field indicators of wetlands were no longer observed. If present, the boundaries of streams and other open water bodies were determined using the OHWM as described in the June 5, 2007 guidance.

3.1 Wetland Field Methods

Wetlands generally have three essential characteristics: hydrophytic (water-loving) vegetation, hydric soils, and wetland hydrology. During the site reconnaissance, Terracon personnel traversed the site and recorded observations with attention paid to suspect areas if they were identified on NWI maps and aerial photographs prior to the site visit. Vegetation and hydrology observations were performed randomly throughout the site where access was permitted and soils were evaluated to determine if wetland characteristics were present. Data regarding the three essential characteristics was gathered within observed suspect wetland areas to further delineate boundaries.

3.1.1 Vegetative Community

Suspect areas were visually observed to determine the species, when possible, and absolute percentage of ground cover for five strata of plant community types. Herbs were generally observed within a five-foot radius, shrubs/saplings within a fifteen-foot radius, and trees and vines within a thirty-foot radius of the observation location. Areas representing different vegetative communities were identified throughout the project site and a plant community assessment was performed in each vegetative community.

For each species of vegetation observed, wetland indicator status was evaluated. The indicator status was determined using the USACE National Wetlands Plant List (NWPL) version 3.2. The NWPL can be found at http://wetland_plants.usace.army.mil. Indicator categories for vegetation are listed below:

- Obligate Wetland (OBL) – occur almost always (estimated probability greater than 99%) under natural conditions in wetlands.
- Facultative Wetland (FACW) – usually occur in wetlands (estimated probability 67-99%) but occasionally found in non-wetlands.
- Facultative (FAC) – equally likely to occur in wetlands or non-wetlands (estimated probability 34-66%).
- Obligate Upland (UPL) – rarely occur in wetlands, but occur almost always (estimated probability greater than 99%) under natural conditions in non-wetlands.

The percent cover of each stratum was determined and dominance was evaluated. Dominant species were the most abundant species that accounted for more than 20 percent of the absolute percent coverage of the stratum. The number of dominant species with an indicator status of OBL, FACW, and/or FAC was compared to the total number of dominant species across all strata. Typically, when more than 50 percent of the dominant species had an indicator status of OBL, FACW, and/or FAC, hydrophytic vegetation was present.

If the percentage of dominant species with an indicator status of OBL, FACW, and/or FAC was less than 50 percent, prevalence index and morphological adaptations may have been evaluated to confirm if hydrophytic vegetation was present or absent.

3.1.2 Hydric Soils

After Terracon evaluated wetland vegetation, subsurface soil samples were collected. The samples were collected to a depth of approximately 16 inches below ground surface (or until rock was encountered) and were visually compared to Munsell Soil Color Charts which aided in the evaluation of hydric soil characteristics. The soil samples were further examined for hydric soil indicators including, but not limited to, histosol, thick dark surface, sandy gleyed matrix, sandy redox, loamy gleyed matrix, redox dark surface, and/or redox depressions. If these or other hydric soil indicators were observed in the subsurface soil sample, the observation location was considered to have hydric soil.

3.1.3 Wetland Hydrology

Visual indicators of wetland hydrology were evaluated. Examples of primary wetland hydrology indicators include, but are not limited to surface water, high water table, soil saturation, water marks, sediment deposits, drift deposits, iron deposits, inundation visible on aerial imagery, sparsely vegetated concave surface, and water-stained leaves. If at least one primary or two secondary indicators were observed, the observation location was considered to have wetland hydrology.

3.2 Non-Wetland WOUS Field Methods

Terracon recorded observations of non-wetland site features that may be considered a jurisdictional WOUS. If a potential jurisdictional WOUS was identified, observations regarding its characteristics were recorded. Potentially jurisdictional non-wetland WOUS were generally evaluated based on the following characteristics:

- Flow regime
  - Perennial – flowing water year-round during a typical year
  - Intermittent – flowing water during certain times of the year (groundwater supports streamflow)
  - Ephemeral – flowing water for a short duration during and after a precipitation event (groundwater is not a source for streamflow)

- OHWM – The limit line established by fluctuation of a water surface
- Bank shape
  - Undercut – banks overhang the channel
  - Steep – bank slope greater than 30 degrees
  - Gradual – bank slope equal to or less than 30 degrees
- Aquatic Habitat
  - Pool – deep portion of stream where water flows slower
  - Riffle – shallow portion of stream with swift flow over rock or coarse substrate producing turbulence on the surface
  - Run -- section of stream with little or no turbulence on the surface

4.0 FIELD OBSERVATIONS

A total of 9 sampling points documenting existing soil and vegetation conditions were established during the field investigation (Exhibits 3 and 4, Appendix A). Each sampling point reflects representative vegetative communities occurring on the site at the time of the investigation. A shovel/auger test was used as the primary tool to sample the soils to a minimum depth of 16 inches. A Munsell color chart was utilized to evaluate the soil at each station, and the results are documented in Appendix C.

The majority of the site for both tracts was of an herbaceous community that is periodically mowed. Neither tract appeared to have been mowed recently. Within the 55-acre tract, a wooded area was observed in the vicinity of a stream, and a few trees were observed within the tract outside of this area.

5.0 PRINCIPAL FINDINGS OF THE INVESTIGATION

Terracon's opinion is that there is a total of 1,783 linear feet of jurisdictional WOUS within the site, of which, all was classified as ephemeral stream and none as wetland habitat. Additionally, no non-jurisdictional WOUS were identified. However, the U.S. Army Corps of Engineers (USACE) is the official agency to make the final determination of the location, type, and extent of jurisdictional WOUS. According to the guidelines, non-wetland jurisdictional WOUS are identified according to their flow regime as Traditional Navigable Waters (TNW), Relatively Permanent Waters (RPW), and Non Relatively Permanent Waters (NRPW).

Terracon's opinion of jurisdictional and non-jurisdictional waters is summarized as follows:

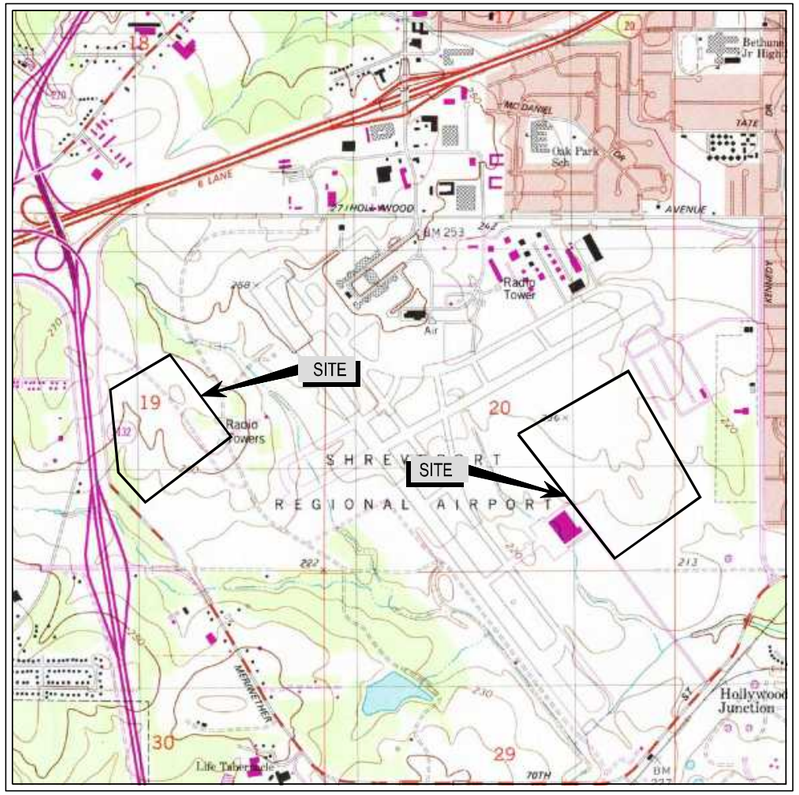
- A total of 1,783 linear feet jurisdictional non-wetland WOUS were identified on site for a total of 0.0056 acre (Table 1).
- No jurisdictional wetlands were identified on site.
- No non-jurisdictional waters were identified on site.

Table 1. Opinion of Jurisdictional Wetlands on the Site

Name	USACE Classification	Flow Regime	Length (feet)	Average Width (feet)	Area (acres)
55-Acre Ephemeral Stream	jurisdictional	Ephemeral	1,148	2	0.0036
93-Acre Ephemeral Stream	jurisdictional	Ephemeral	365	2	0.002
Total	-	-	*1,783*	-	*0.0056*

APPENDIX A
EXHIBITS

UNITED STATES – DEPARTMENT OF THE INTERIOR – GEOLOGICAL SURVEY



SCALE 1:24 000

1 .5 0 KILOMETERS 1 2
1000 0 METERS 1000 2000
1 .5 0 1
MILES
1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10 000
FEET

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

N

QUADRANGLE
SHREVEPORT WEST, LA
1980 PR1982
7.5 MINUTE SERIES (TOPOGRAPHIC)

*INDICATES WHICH MAP SITE IS LOCATED ON

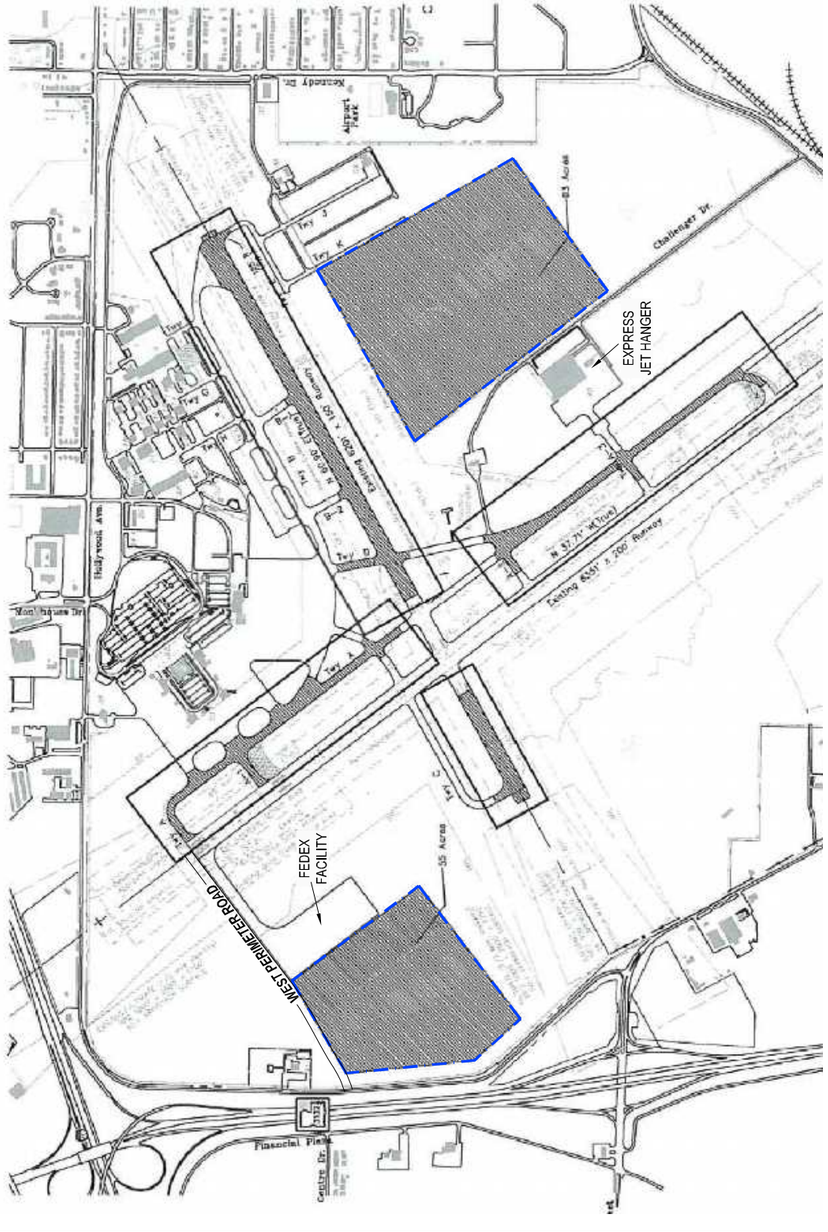
Project Mngr:	JRK
Drawn By:	RLW
Checked By:	JRK/MRF
Approved By:	JRK
Project No.	EH157076
Scale:	AS SHOWN
File No.	ESAEH157076-1
Date:	JULY 2015

Terracon
Consulting Engineers and Scientists
2822-B O'Neal Lane, Building B Baton Rouge, LA 70816
(225) 344-6052 (225) 344-6346

TOPOGRAPHIC VICINITY MAP	EXHIBIT
SHREVEPORT REGIONAL AIRPORT SHREVEPORT REGIONAL AIRPORT SHREVEPORT, LA	1

N

NOT TO SCALE



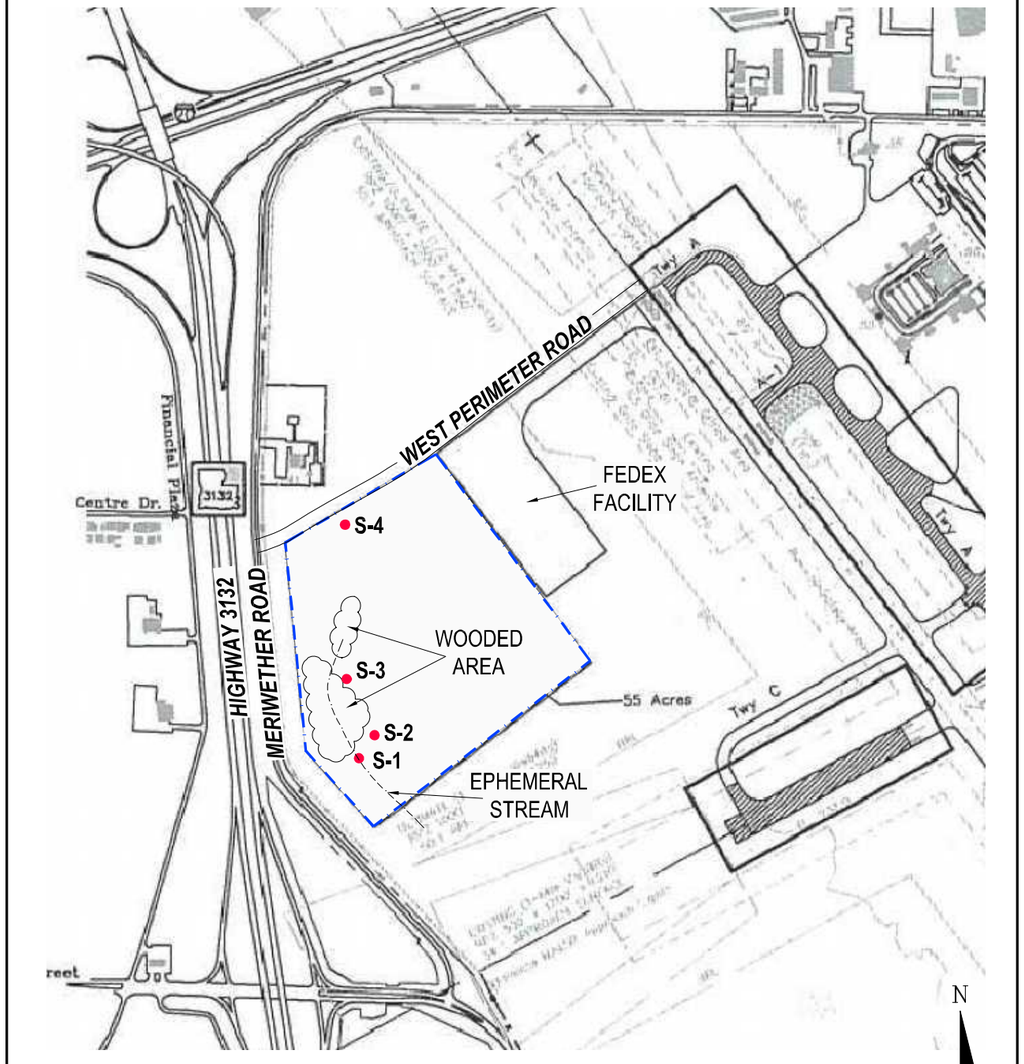
Project Mngr:	JRK
Drawn By:	RLW
Checked By:	JRK/MRF
Approved By:	JRK
Project No.	EH157076
Scale:	AS SHOWN
File No.	ESAEH157076-2
Date:	AUG. 2015

Terracon
Consulting Engineers and Scientists
2822-B O'Neal Lane, Building B Baton Rouge, LA 70816
(225) 344-6052 (225) 344-6346

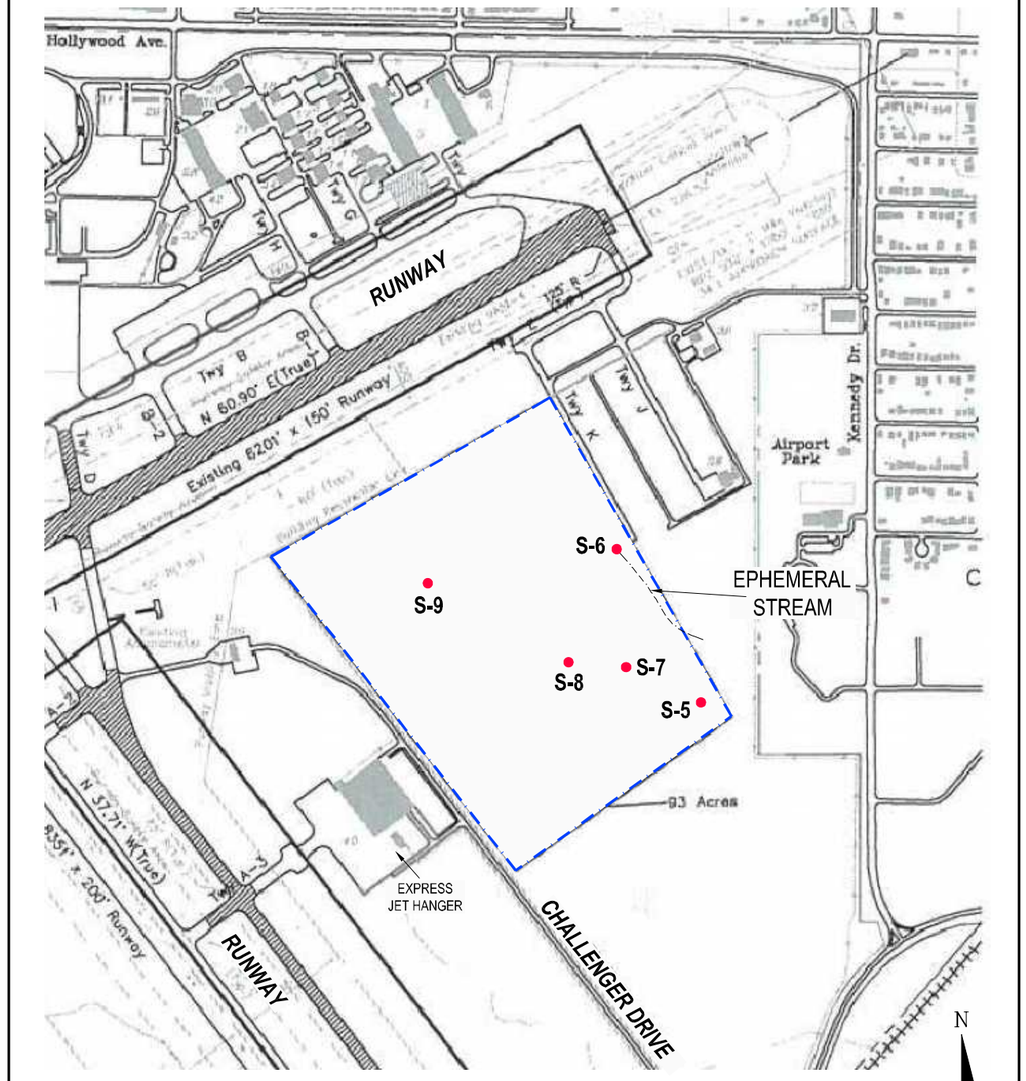
SITE DIAGRAM	EXHIBIT
SHREVEPORT REGIONAL AIRPORT SHREVEPORT REGIONAL AIRPORT SHREVEPORT, LA	2

LEGEND
SITE

THIS DIAGRAM IS FOR GENERAL LOCATION ONLY AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

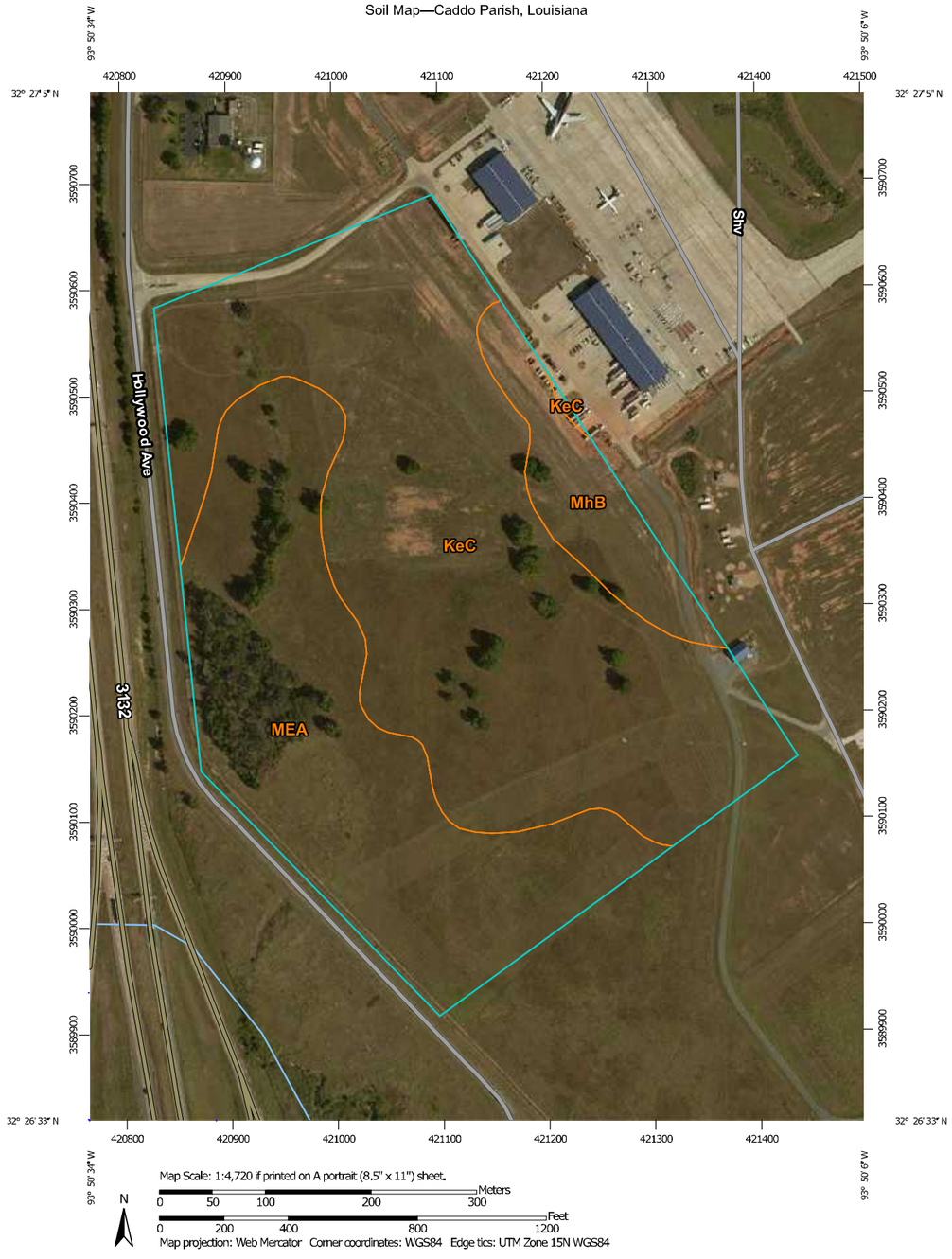


Project Mngr: JRK Drawn By: RLW Checked By: JRK/MRF Approved By: JRK	Project No. EH157076 Scale: AS SHOWN File No. ESAEH157076-3 Date: AUG. 2015	Terracon Consulting Engineers and Scientists 2822 O'Neal Lane, Building B Baton Rouge, LA 70816 (225) 344-6052 (225) 344-6346	DETAIL SITE DIAGRAM SHREVEPORT REGIONAL AIRPORT SHREVEPORT REGIONAL AIRPORT SHREVEPORT, LA	EXHIBIT 3



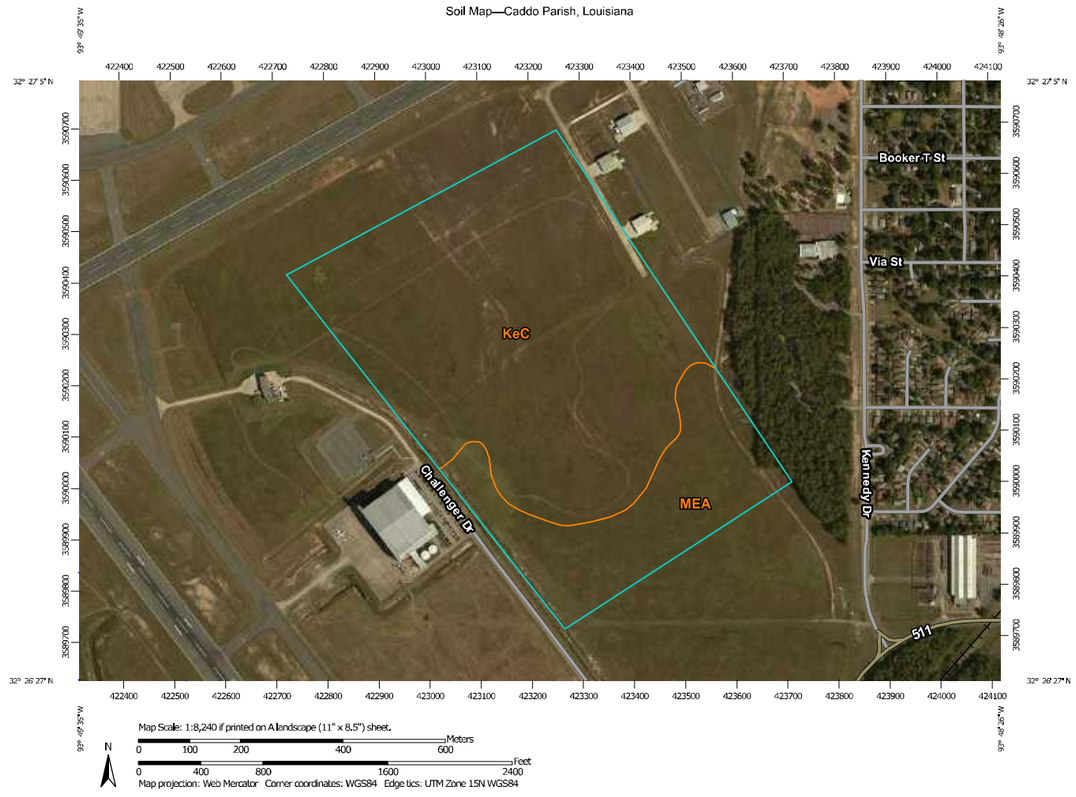
Project Mngr: JRK Drawn By: RLW Checked By: JRK/MRF Approved By: JRK	Project No. EH157076 Scale: AS SHOWN File No. ESAEH157076-4 Date: AUG. 2015	Terracon Consulting Engineers and Scientists 2822 O'Neal Lane, Building B Baton Rouge, LA 70816 (225) 344-6052 (225) 344-6346	DETAIL SITE DIAGRAM SHREVEPORT REGIONAL AIRPORT SHREVEPORT REGIONAL AIRPORT SHREVEPORT, LA	EXHIBIT 4

User Remarks:



Map Unit Legend

Caddo Parish, Louisiana (LA017)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
KeC	Keithville very fine sandy loam, 1 to 5 percent slopes	38.9	56.5%
MEA	Metcalf-Timpson complex, 0 to 2 percent slopes	24.7	35.9%
MhB	Meth fine sandy loam, 1 to 3 percent slopes	5.2	7.6%
Totals for Area of Interest		**68.8**	**100.0%**



Map Unit Legend

Caddo Parish, Louisiana (LA017)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
KeC	Keithville very fine sandy loam, 1 to 5 percent slopes	88.7	75.0%
MEA	Metcalf-Timpson complex, 0 to 2 percent slopes	29.5	25.0%
Totals for Area of Interest		**118.3**	**100.0%**

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: http://websoilsurvey.nrcs.usda.gov
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.

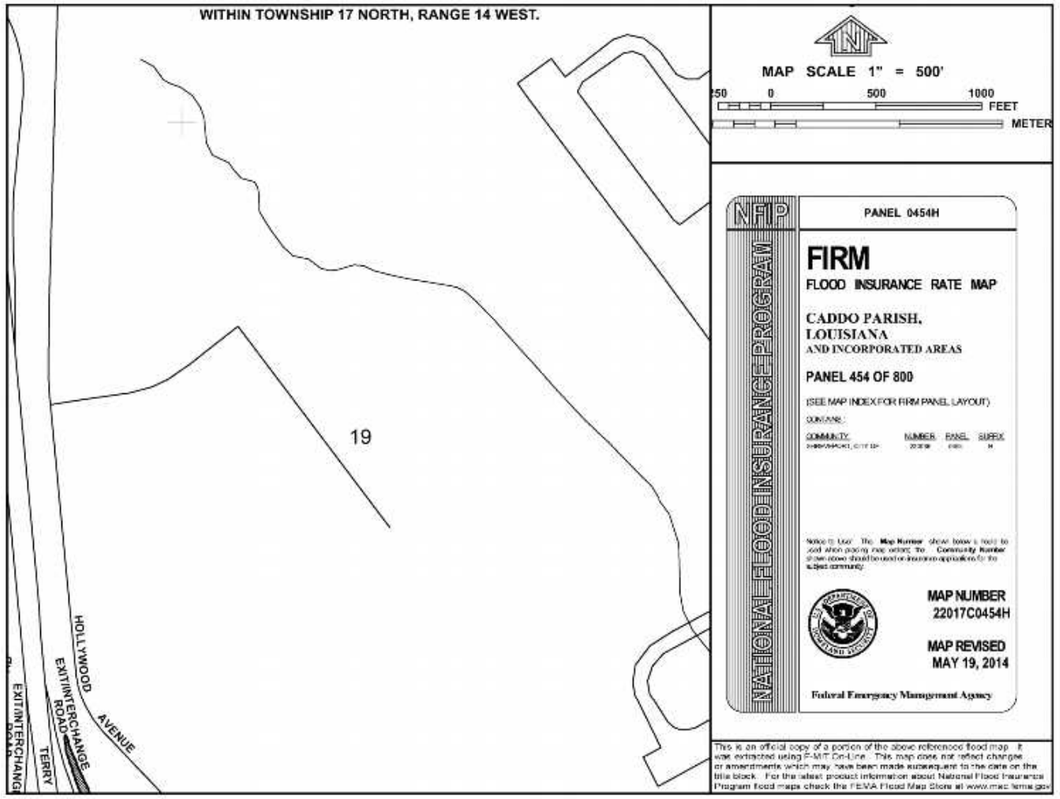
This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

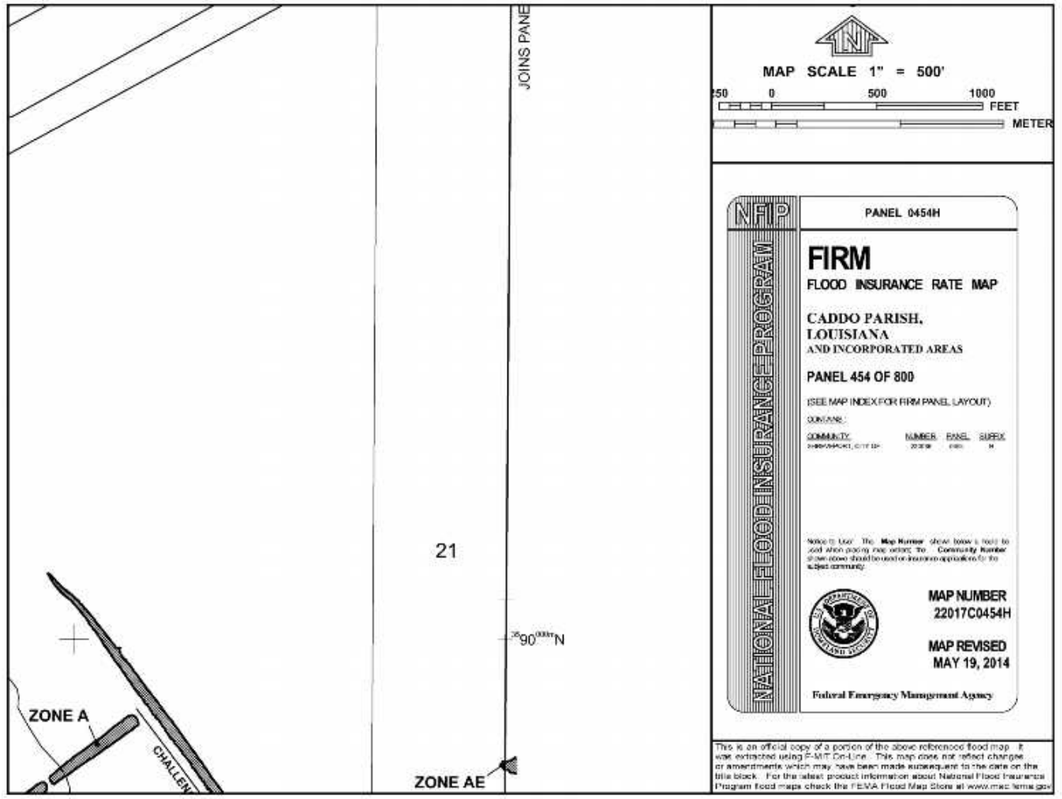
Soil Survey Area: Caddo Parish, Louisiana
Survey Area Data: Version 7, Sep 26, 2014

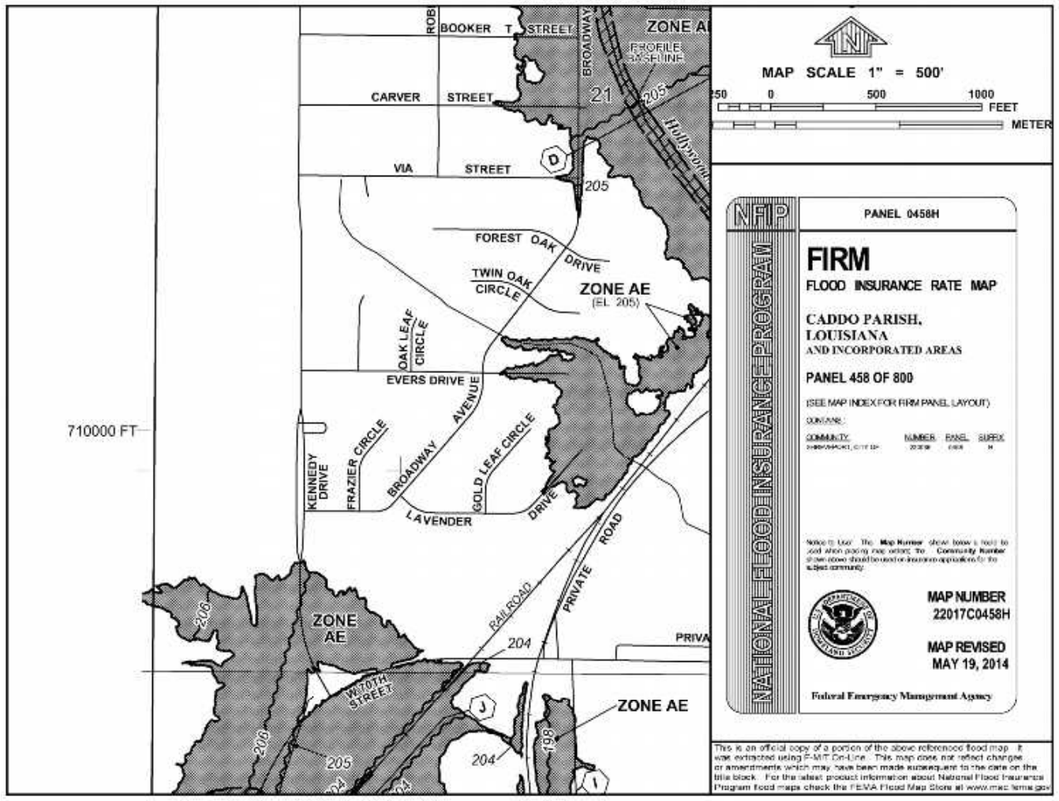
Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 25, 2013—Nov 1, 2013

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.


WITHIN TOWNSHIP 17 NORTH, RANGE 14 WEST.
19
HOLLYWOOD AVENUE
EXIT/INTERCHANGE ROAD
TERRY
EXIT/INTERCHANG
MAP SCALE 1" = 500'
250 0 500 1000
FEET
METER
NFIP
PANEL 0454H
FIRM
FLOOD INSURANCE RATE MAP
CADDO PARISH, LOUISIANA
AND INCORPORATED AREAS
PANEL 454 OF 800
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)
CONTAINS:
COMMUNITY
NUMBER
PANEL
SUFFIX
MAP NUMBER
22017C0454H
MAP REVISED
MAY 19, 2014
Federal Emergency Management Agency
NATIONAL FLOOD INSURANCE PROGRAM
This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov


JOINS PANE
21
90°00'00"N
ZONE A
CHALLEN
ZONE AE
MAP SCALE 1" = 500'
250 0 500 1000
FEET
METER
NFIP
PANEL 0454H
FIRM
FLOOD INSURANCE RATE MAP
CADDO PARISH, LOUISIANA
AND INCORPORATED AREAS
PANEL 454 OF 800
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)
CONTAINS:
COMMUNITY
NUMBER
PANEL
SUFFIX
MAP NUMBER
22017C0454H
MAP REVISED
MAY 19, 2014
Federal Emergency Management Agency
NATIONAL FLOOD INSURANCE PROGRAM
This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



APPENDIX B
PHOTO LOG

Photo 1 View east across 55-acre site.

Photo 2 View of soil profile at S-1.

Photo 3 View of southern end of wooded area on 55-acre site.

Photo 4 View of soil profile at S-2.

Photo 5 View of stream channel within wooded area in 55-acre site.

Photo 6 View of soil profile at S-3.

Photo 7 View of soil profile at S-4.

Photo 8 Typical view of 93-acre site facing north.

Photo 9 View of soil profile at S-5.

Photo 10 View of willow trees at head of ephemeral stream on 93-acre site.

Photo 11 View of soil profile at S-6.

Photo 12 View of soil profile at S-7.

Photo 13 View of soil profile at S-8.

Photo 14 View of soil profile at S-9.

APPENDIX C
DATA FORMS

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: 55-Acre / EH157076 City/County: Shreveport / Caddo Parish Sampling Date: 7/20/15

Applicant/Owner: Shreveport Airport State: LA Sampling Point: S-1

Investigator(s): Jessica Keasler & Lem Dial Section, Township, Range: 19 T17N R14W

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): Concave Slope (%): <1

Subregion (LRR or MLRA): LRRP 133B Lat: 32.44548 Long: -93.84118 Datum: 84

Soil Map Unit Name: Metcalf-timpson complex NWI classification: none

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X 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 X

Hydric Soil Present? Yes _____ No X

Wetland Hydrology Present? Yes X No _____

Is the Sampled Area within a Wetland? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) **(LRR U)**
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☑ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☑ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): _____

Wetland Hydrology Present? Yes X No _____

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: S-1

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. Loblolly Pine (Pinus taeda)	10	Y	FAC
2. southern red oak (Quercus falcata)	15	Y	FACU
3.			
4.			
5.			
6.			
7.			
8.			
	25	= Total Cover	

50% of total cover: 12.5 20% of total cover: 5

Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
		= Total Cover	

50% of total cover: _____ 20% of total cover: _____

Herb Stratum (Plot size: _____)			
1. globe flatsedge (Cyperus echinatus)	5	N	FAC
2. ricefield flat sedge (Cyperus iria)	5	N	FACW
3. liverseed grass (Urochloa ramosa)	35	Y	FACU
4. broom sedge (Andropogon virginicus)	25	Y	FAC
5. goose grass (Eleusine indica)	5	N	FACU
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	75	= Total Cover	

50% of total cover: 37.5 20% of total cover: 15

Woody Vine Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

50% of total cover: _____ 20% of total cover: _____

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	
FACW species	5	x 2 =	10
FAC species	40	x 3 =	120
FACU species	55	x 4 =	220
UPL species	0	x 5 =	
Column Totals:	100 (A)		350 (B)

Prevalence Index = B/A = 3.5

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: S-1

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-14	10YR 5/3	80	10YR 3/2	15			Sand	
			5YR 3/4	2			Sand	
			10YR 6/8	3			Sand	
14-19	10YR 6/1	70	2.5YR 4/8	30			Clay	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**
- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: 55-Acre / EH157076 City/County: Shreveport / Caddo Parish Sampling Date: 7/20/15

Applicant/Owner: Shreveport Airport State: LA Sampling Point: 2

Investigator(s): Jessica Keasler & Lem Dial Section, Township, Range: 19 T17N R14W

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): <1

Subregion (LRR or MLRA): LRRP 133B Lat: 32.44555 Long: -93.841067 Datum: 84

Soil Map Unit Name: Metcalf-timpson complex NWI classification: none

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X 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 X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes X	No _____	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) **(LRR U)**
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☑ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☑ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): _____

Wetland Hydrology Present? Yes X No _____

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: 2

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	= Total Cover		
50% of total cover: _____	20% of total cover: _____		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	= Total Cover		
50% of total cover: _____	20% of total cover: _____		
Herb Stratum (Plot size: _____)			
1. yellow partridge pea (Chamaecrista fasciculata)	10		FACU
2. sticky-willy (Gallum aparine)	35		FACU
3. sunflower (Helianthus strumosus)	3		UPL
4. snakeroot (Ageratina altissima)	15		FACU
5. globe flatsedge (Cypercus echinatus)	3		FAC
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	66 = Total Cover		
50% of total cover: 33	20% of total cover: 13.2		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
50% of total cover: _____	20% of 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 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: 2

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 6/4						Silty Sand	
	10YR 6/6	80	10YR 6/3	5			Silty Sand	
			10YR 7/1	15			Silty Sand	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**
- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: 55-Acre / EH157076 City/County: Shreveport / Caddo Parish Sampling Date: 7/20/15

Applicant/Owner: Shreveport Airport State: LA Sampling Point: S-3

Investigator(s): Jessica Keasler & Lem Dial Section, Township, Range: 19 T17N R14W

Landform (hillslope, terrace, etc.): adjacent to stream bed Local relief (concave, convex, none): None Slope (%): <1

Subregion (LRR or MLRA): LRRP 133B Lat: 32.44688 Long: -93.84138 Datum: 84

Soil Map Unit Name: Metcalf-timpson complex NWI classification: none

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X 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 X No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes _____ No X	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) **(LRR U)**
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☑ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: S-3

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. winged elm (Ulmus alata)	15	Y	FACU
2. oak (Quercus nigra)	10	Y	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	25 = Total Cover		
50% of total cover: 12.5	20% of total cover: 5		
Sapling/Shrub Stratum (Plot size: _____)			
1. privet (Ligustrum sinense)	20	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	_____ = Total Cover		
50% of total cover: _____	20% of total cover: _____		
Herb Stratum (Plot size: _____)			
1. saw greenbrier (Smilax bona-nox)	15	Y	FAC
2. beauty berry (Callicarpa americana)	5	N	FACU
3. wood oats (chasmanthium sessiliflorum)	5	N	FAC
4. poison ivy (Toxicodendron radicans)	5	N	FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	30 = Total Cover		
50% of total cover: 15	20% of total cover: 6		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
50% of total cover: _____	20% of total cover: _____		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = 3.5

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes X No _____

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: S-3

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-4	10YR 6/3	100					Silty Sand	
4-18	10YR 5/4	92	5YR 4/6	8			Silty Sand	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**
- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: 55-Acre / EH157076 City/County: Shreveport / Caddo Parish Sampling Date: 7/20/15

Applicant/Owner: Shreveport Airport State: LA Sampling Point: S-4

Investigator(s): Jessica Keasler & Lem Dial Section, Township, Range: 19 T17N R14W

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): none

Subregion (LRR or MLRA): LRRP 133B Lat: 32.44943 Long: -93.8412 Datum: 84

Soil Map Unit Name: Keithville very fine NWI classification: none

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X 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 X	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) **(LRR U)**
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: S-4

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	_____ = Total Cover		
50% of total cover: _____	20% of total cover: _____		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	_____ = Total Cover		
50% of total cover: _____	20% of total cover: _____		
Herb Stratum (Plot size: _____)			
1. sawtooth blackberry (Rubus argutus)	20	Y	FAC
2. black elder (Sambucus nigra)	50	Y	FAC
3. sunflower (Helianthus strumosus)	5	N	UPL
4. blackeyed susan (Rudbeckia hirta)	20	Y	FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	95 = Total Cover		
50% of total cover: 47.5	20% of total cover: 19		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
50% of total cover: _____	20% of total cover: _____		

Dominance Test worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 66 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes X No _____

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: S-4

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-6	10YR 5/4	100					Sandy loam	
6-19	10YR 6/6	100					Sandy loam	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**
- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: 93-Acre / EH157076 City/County: Shreveport / Caddo Parish Sampling Date: 7/20/15

Applicant/Owner: Shreveport Airport State: LA Sampling Point: S-5

Investigator(s): Jessica Keasler & Lem Dial Section, Township, Range: 21 T17N R14W

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): None

Subregion (LRR or MLRA): LRRP 133B Lat: 32.4447 Long: -93.8132 Datum: 84

Soil Map Unit Name: Metcalf-timpson complex NWI classification: none

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X 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 X

Hydric Soil Present? Yes _____ No X

Wetland Hydrology Present? Yes _____ No X

Is the Sampled Area within a Wetland? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) **(LRR U)**
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: S-5

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	_____ = Total Cover		
50% of total cover: _____	20% of total cover: _____		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	_____ = Total Cover		
50% of total cover: _____	20% of total cover: _____		
Herb Stratum (Plot size: _____)			
1. meadow beauty (Rhexia mariana)	20	Y	FACW
2. globe flatsedge (Cyperus echinatus)	15	Y	FAC
3. yarrow (Achillea millefolium)	15	Y	FACU
4. blackeyed susan (Rudbeckia hirta)	20	Y	FACU
5. poverty rush (Juncus tenius)	10	N	FAC
6. peppervine (Ampelopsis arborea)	2	N	FAC
7.			
8.			
9.			
10.			
11.			
12.			
	82 = Total Cover		
50% of total cover: 41	20% of total cover: 16.4		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
50% of total cover: _____	20% of total cover: _____		

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	27	x 3 =	81
FACU species	35	x 4 =	140
UPL species	0	x 5 =	0
Column Totals:	82 (A)		261 (B)

Prevalence Index = B/A = 3.18

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: S-5

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 6/3	100					Sandy loam	
4-12	10YR 6/3	93	10YR 3/6	7			Sand	
12-20	10YR 5/6	85	10YR 3/6	15			Sand	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**
- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: 93-Acre / EH157076 City/County: Shreveport / Caddo Parish Sampling Date: 7/20/15

Applicant/Owner: Shreveport Airport State: LA Sampling Point: S-6

Investigator(s): Jessica Keasler & Lem Dial Section, Township, Range: 21 T17N R14W

Landform (hillslope, terrace, etc.): adjacent to stream bed Local relief (concave, convex, none): None Slope (%): None

Subregion (LRR or MLRA): LRRP 133B Lat: 32.4478 Long: -93.8145 Datum: 84

Soil Map Unit Name: Keithville NWI classification: none

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X 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 X

Hydric Soil Present? Yes _____ No X

Wetland Hydrology Present? Yes _____ No X

Is the Sampled Area within a Wetland? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) **(LRR U)**
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: S-6

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	_____ = Total Cover		
50% of total cover: _____	20% of total cover: _____		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	_____ = Total Cover		
50% of total cover: _____	20% of total cover: _____		
Herb Stratum (Plot size: _____)			
1. goose grass (Eleusine indica)	10	N	FACU
2. little barley (Hordeum pusillum)	20	Y	FACU
3. yarrow (Achillea millefolium)	8	N	FACU
4. gama grass (Tripsacum dactyloides)	5	N	FAC
5. horseweed (Erigeron canadensis)	15	Y	FACU
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	58 = Total Cover		
50% of total cover: 29	20% of total cover: 11.6		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
50% of total cover: _____	20% of 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 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: S-6

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
	5YR 4/6	75	7.5YR 5/1	25			clay	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**
- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: 93-Acre / EH157076 City/County: Shreveport / Caddo Parish Sampling Date: 7/20/15

Applicant/Owner: Shreveport Airport State: LA Sampling Point: S-7

Investigator(s): Jessica Keasler & Lem Dial Section, Township, Range: 21 T17N R14W

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): None

Subregion (LRR or MLRA): LRRP 133B Lat: 32.44555 Long: -93.81522 Datum: 84

Soil Map Unit Name: Keithville NWI classification: none

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X 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 X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes _____ No X	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) **(LRR U)**
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☑ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☑ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes _____ No X	Depth (inches): _____
Water Table Present?	Yes _____ No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____ No X	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: S-7

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	_____ = Total Cover		
50% of total cover: _____	20% of total cover: _____		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	_____ = Total Cover		
50% of total cover: _____	20% of total cover: _____		
Herb Stratum (Plot size: _____)			
1. dropseed (Sporobolus indicus)	60	Y	FACU
2. orange milkwort (Polygala lutea)	5	N	FACW
3. blackeyed susan (Rudbeckia hirta)	10	N	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	75 = Total Cover		
50% of total cover: 37.5	20% of total cover: 15		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
50% of total cover: _____	20% of 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 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks: (If observed, list morphological adaptations below).

SOIL Sampling Point: S-7

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/6	100					sa loam	
6-10	7.5YR 4/6	100					cl sa	
10-18	2.5YR 4/8	80	7.5YR 7/1	20			sa cl	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**
- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: 93-Acre / EH157076 City/County: Shreveport / Caddo Parish Sampling Date: 7/20/15

Applicant/Owner: Shreveport Airport State: LA Sampling Point: S-8

Investigator(s): Jessica Keasler & Lem Dial Section, Township, Range: 21 T17N R14W

Landform (hillslope, terrace, etc.): toe of hill Local relief (concave, convex, none): None Slope (%): None

Subregion (LRR or MLRA): LRRP 133B Lat: 32.4455 Long: -93.8158 Datum: 84

Soil Map Unit Name: Keithville NWI classification: none

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X 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 X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) **(LRR U)**
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: S-8

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	_____ = Total Cover		
50% of total cover: _____	20% of total cover: _____		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	_____ = Total Cover		
50% of total cover: _____	20% of total cover: _____		
Herb Stratum (Plot size: _____)			
1. dropseed (Sporobolus indicus)	40	Y	FACU
2. yaupon (Ilex vomitoria)	10	N	FAC
3. curly dock (Rumex crispus)	10	N	FAC
4. bladdersedge (Carex inturnescens)	10	N	FACW
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	70 = Total Cover		
50% of total cover: 35	20% of total cover: 14		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
50% of total cover: _____	20% of 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 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	20	x 3 =	60
FACU species	40	x 4 =	160
UPL species	0	x 5 =	0
Column Totals:	70 (A)		240 (B)

Prevalence Index = B/A = 3.4

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: S-8

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-4	5YR 4/6	100					sa loam	
4-14	5YR 5/6	80	5YR 6/1	20			sa silt	
14-18	10YR 66	10					sa silt	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**
- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: 93-Acre / EH157076 City/County: Shreveport / Caddo Parish Sampling Date: 7/20/15

Applicant/Owner: Shreveport Airport State: LA Sampling Point: S-9

Investigator(s): Jessica Keasler & Lem Dial Section, Township, Range: 21 T17N R14W

Landform (hillslope, terrace, etc.): flat Local relief (concave, convex, none): None Slope (%): None

Subregion (LRR or MLRA): LRRP 133B Lat: 32.4484 Long: -93.8185 Datum: 84

Soil Map Unit Name: Keithville NWI classification: none

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X 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 X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) **(LRR U)**
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☑ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: S-9

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	_____ = Total Cover		
50% of total cover: _____	20% of total cover: _____		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	_____ = Total Cover		
50% of total cover: _____	20% of total cover: _____		
Herb Stratum (Plot size: _____)			
1. dropseed (Sporobolus indicus)	60	Y	FACU
2. bagpod (Sesbania vesicaria)	20	Y	FAC
3. goose grass (Eleusine indica)	5	N	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	85 = Total Cover		
50% of total cover: 42.5	20% of total cover: 17		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
50% of total cover: _____	20% of total cover: _____		

Dominance Test worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	20	x 3 =	60
FACU species	65	x 4 =	260
UPL species	0	x 5 =	0
Column Totals:	85 (A)		320 (B)

Prevalence Index = B/A = 3.05

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks: (If observed, list morphological adaptations below).

SOIL Sampling Point: S-9

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	2.5YR 4/6	90	5YR 7/1	10			clay	

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

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

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**
- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

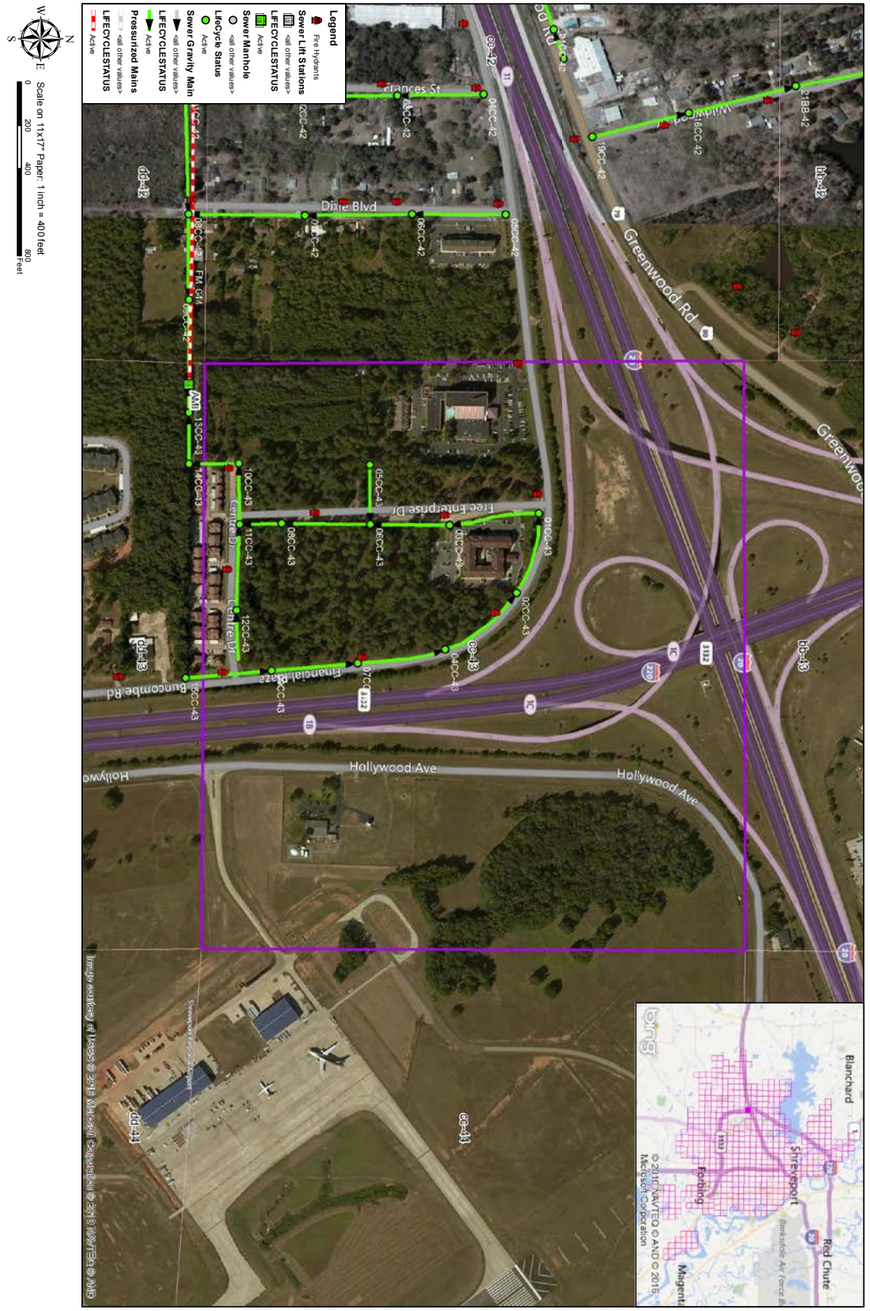
Hydric Soil Present? **Yes** _____ **No** X

Remarks:

APPENDIX D
COMMON ACRONYMS

COMMON ACRONYMS

CLOMR	Conditional Letter of Map Revision
CWA	Clean Water Act
DFIRM	Digital Flood Insurance Rate Map
FEMA	Federal Emergency Management Administration
FIRM	Flood Insurance Rate Map
GIS	Geographic Information System
GPS	Global Positioning System
IH	Interstate Highway
NRCS	Natural Resources Conservation Service
NRPW	Non-Relatively Permanent Water
OHWM	Ordinary High Water Mark
PJD	Preliminary Jurisdictional Determination
RHA	Rivers and Harbors Act
RPW	Relatively Permanent Water
TNRIS	Texas Natural Resource Information System
TNW	Traditionally Navigable Water
U.S.	United States
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geologic Survey
WOUS	Waters of the U.S.



Map Showing
Quarter Section cc-43
Sanitary Sewer Assessment (SSA)
City of Shreveport, Louisiana

BKI No. SH.10.005
22 January, 2016

PRIVILEGED AND CONFIDENTIAL COMMUNICATION/ATTORNEY WORK PROJECT

Map Showing
Quarter Section cc-47
Sanitary Sewer Assessment (SSA)
City of Shreveport, Louisiana

BKI BURK-KLEINPETER, INC.

BKI No. SH.10.005
22 January, 2016

PRIVILEGED AND CONFIDENTIAL COMMUNICATION/ATTORNEY WORK PROJECT

Map Showing
Quarter Section cc-45
Sanitary Sewer Assessment (SSA)
City of Shreveport, Louisiana

BKI BURK-KLEINPETER, INC.

BKI No. SH.10.005
22 January, 2016

PRIVILEGED AND CONFIDENTIAL COMMUNICATION/ATTORNEY WORK PROJECT

Map Showing
Quarter Section dd-43
Sanitary Sewer Assessment (SSA)
City of Shreveport, Louisiana

BURK-KLEINPETER, INC.

BKI No. SH.10.005
22 January, 2016

PRIVILEGED AND CONFIDENTIAL COMMUNICATION/ATTORNEY WORK PROJECT

Map Showing
Quarter Section dd-46
Sanitary Sewer Assessment (SSA)
City of Shreveport, Louisiana

BURK-KLEINPETER, INC.

BKI No. SH.10.005
22 January, 2016

PRIVILEGED AND CONFIDENTIAL COMMUNICATION/ATTORNEY WORK PROJECT

Map Showing
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Sanitary Sewer Assessment (SSA)
City of Shreveport, Louisiana

BURK-KLEINPETER, INC.

BKI No. SH.10.005
22 January, 2016

From: Stephen Price
To: DCRT Section 106
Cc: William Cooksey
Subject: [SPAM] SHPO letter for grant
Date: Friday, October 28, 2016 10:47:46 AM
Attachments: SHPO letter for grant.doc
Importance: Low

Mr. Boggan,

Please read the attached letter in regard to information needed to help the Shreveport Airport Authority complete a grant application for EDA.

Thanks.

Stephen Price
Marketing/Public Relations
Shreveport Airport Authority

5103 Hollywood Ave. Ste 300
Shreveport, LA 71109
Phone: 318.673.5370
Fax: 318.673.5377
E-mail stephen.price@shreveportla.gov
Web: www.flyshreveport.com
Facebook.com/flyshreveport

Shreveport Airport Authority

5103 Hollywood Ave., Suite 300 | Shreveport, LA 71109
Phone (318) 673-5370 | Fax (318) 673-5377
Shreveport Regional Airport | Shreveport Downtown Municipal Airport

October 28, 2016

Mr. Phil Boggan
SHPO
Capitol Annex Building
1051 North Third Street
Baton Rouge, Louisiana 70802

Dear Mr. Boggan:

The Shreveport Airport Authority is in the process of leasing a building to Southern University-Shreveport campus at our Downtown Airport to help them expand their Aerospace program, which trains aviation mechanics.

To help with the process, we are applying for an EDA grant with the U.S. Department of Commerce, to help make renovations to the building, which was once an Army Reserve building that was donated to the Airport. Renovations will include work being done to the building and the parking lot. Attached to this e-mail is a Google Earth photo, showing the parking lot.

The grant application requires we receive clearance from our SHPO office.

Please provide us and our EDA office with comments and clearance information for this matter. Our EDA contact is Vicki Hendershot, and contact is (225) 964-6858 and e-mail vhendershot@eda.gov .

Should you have any questions, please do not hesitate to contact me, Stephen Price, or Deputy Director Bill Cooksey at (318) 673-5370.

Sincerely,

Stephen Price, Management Assistant

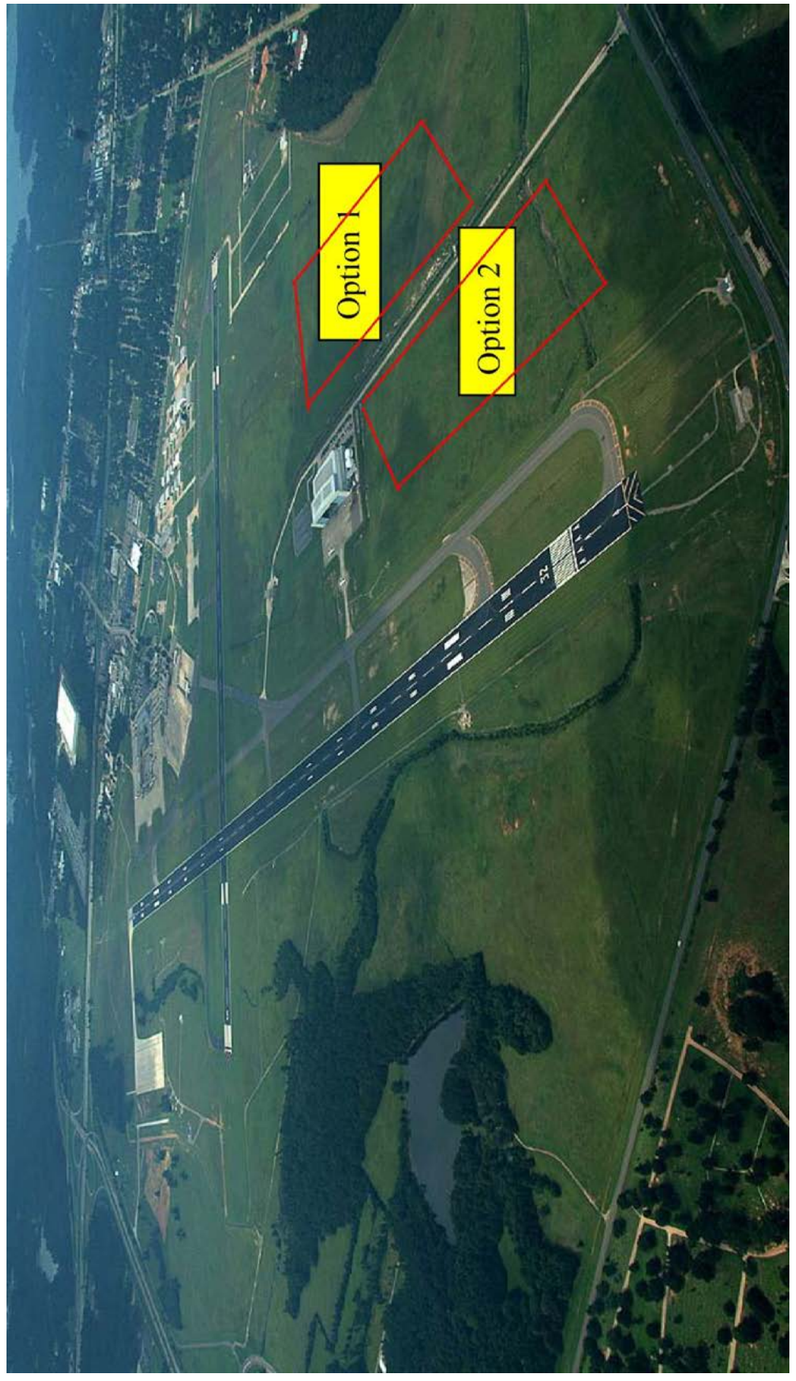
Shreveport Airport Authority

No known historic properties will be affected by this undertaking. Therefore, our office has no objection to the implementation of this project. This effect determination could change should new information come to our attention.

Phil Boggan
State Historic Preservation Officer

Date

11/10/2016



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