



TxDOT ROW

UTILITY WEEK

Partners in Coordination

Collaborative Utility Conflict Resolution - US 87

Day 2 - December 3rd

Track Rm 2, Session 3

3:30PM - 4:15PM

Presenter: William (Billy) O'Dell, PE, ASQ CMQ/OEA



Billy, Vice President of Lamb-Star's Utility Engineering Discipline, oversees project management and operations, prioritizing quality and efficiency. With 17 years of experience in TxDOT utility engineering and transportation design, he has managed projects across 21 TxDOT districts. A licensed engineer and ASQ-certified Manager of Quality, Billy ensures projects meet strict quality and schedule standards while benefiting local communities and aligning with TxDOT's goals.

Presenter: Dakota Smith, PE



Dakota leads Lamb-Star's Texas Utility Engineering operations as a licensed engineer with over a decade of experience in utility management. He has successfully managed utilities for numerous TxDOT roadway projects statewide, specializing in subsurface utility engineering, utility coordination, and utility relocation verification. Dakota also has a background in transportation and utility design, adding a unique perspective that strengthens his approach to utility coordination, conflict identification and resolution, having seen the impacts utilities have on constructability as a designer.

Presenter: Pamela Sherman



Pamela has been with TxDOT for eight years, serving in the Amarillo District. She began her TxDOT career as a design technician, leveraging her background and education in Drafting and CADD design. In 2017, she transitioned to her current role as Utility Coordinator. Before joining TxDOT, Pamela gained valuable experience working for Atmos Energy and the City of Amarillo in the Director of Utilities Department.

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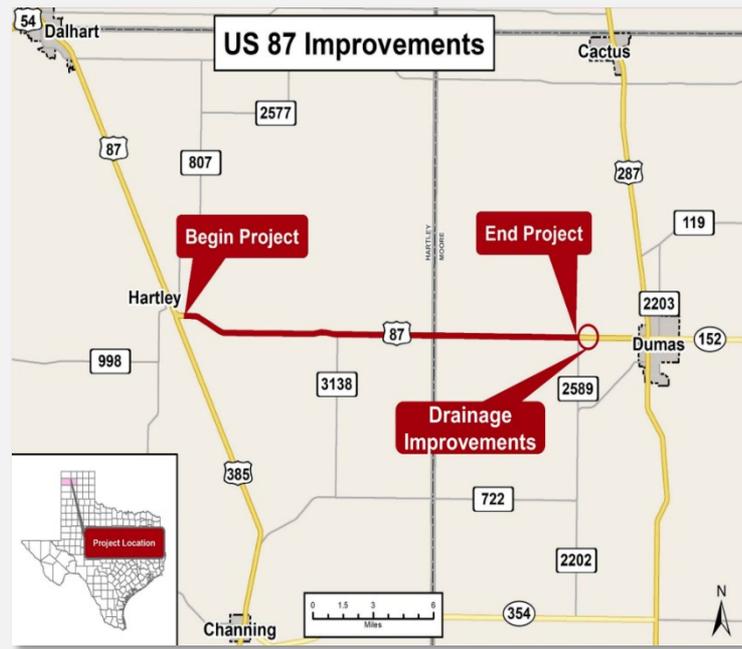
Project Introduction – US 87 (Hartley/Moore County)

➤ Project Overview

- **Location:** US 87 between US 385 & FM 2589
- **Purpose:** Widen and reconstruct the existing 20-mile project corridor from a super 2 to 4-lane divided highway
- **Objectives:** Improve safety and increase capacity
- 100% PS&E was completed in July 2023, with ROW acquired by April 2024
- We currently have three remaining utility companies relocating

➤ Partnership Focus

- **Key constraints:** Project Length, ROW Acquisition, Volume of Utilities
- Coordinated approach was required from scoping to get utilities cleared during the Schematic and PS&E design



Project Scope – Emphasizing Early Utility Coordination

TxDOT Project Scope

Project Scope and Challenges: Spanning 20 miles across two counties with three CSJs, the project required extensive ROW acquisition and posed significant utility and agricultural impacts, regardless of the alignment chosen.

Utility Coordination Efforts: Early engagement with Lamb-Star was crucial due to the substantial utility impacts, including 10 utilities and a small electric co-op with lines running nearly the entire project length.

Support: TxDOT provided Lamb-Star with all available data (previous SUE, UIR permits) to support early utility identification and assist with alignment studies, ensuring proactive coordination with utility owners.

Lamb-Star

➤ **Utility Task Lead**

- Responsible for utility engineering, coordination, and verification throughout the project corridor
- Coordinated with Garver (design team) to identify and resolve utility conflicts.
- Subsurface Utility Engineering (SUE) Conducted Quality Levels A through D
- Investigated and mapped over 240,000 LF of utilities (Gas, Helium, Telephone, Electric, Fiber)
- Developed and executed a work plan for 17 test holes

➤ **Utility Coordination**

- Created a comprehensive Utility Conflict Matrix (UCM) in coordination with utility owners
- Facilitated utility relocation processes to clear conflicts prior to project letting.

➤ **Integrated Team Effort**

- Worked closely with the design team and utility owners to ensure seamless integration of utility data and solutions.

➤ **Collaboration**

- With a shared alignment and goals between Lamb-Star, Design Team, & TxDOT we implemented a plan of attack.
 - **Schematic:** Strategically expedited SUE investigation, Utility Conflict Analysis, and Utility Coordination efforts. Primary focus of identifying critical path items for utility relocations.

Unique Utility Challenges

- **Many unique utility challenges were encountered during the project:**
 - Utility owner Experience
 - Multiple Utility Agreements
 - Unclaimed Utilities
 - Federal government utilities (BLM)
 - Private Utility in Conflict

- **TxDOT and Lamb-Star focused on identifying solutions and resolving challenges collaboratively:**
 - Tailored Resolution Approach
 - Gaps in TxDOT's ROW Utility Manual
 - Early Identification and Collaboration

Challenge – Electric Coop. with no TxDOT Experience

➤ Challenge

- Electric Cooperative with no prior experience with TxDOT Standard Utility Agreements
- 14 miles in conflict, creating logistical and financial challenges

➤ **Lamb-Star Perspective:** recognized a need for additional support due to the complexity and scope of the relocation and proactively took the following steps:

- Established biweekly meetings to guide them through the entire process and answer questions along the way
- Offering in-person meetings and involving ROW specialists and auditors when support was needed
- Assisted with easement documentation to confirm reimbursable status and establish an eligibility ratio early



➤ **TxDOT's approach and priorities in relation to this challenge:**

Collaborative Problem-Solving: TxDOT facilitated in-person meetings, attended board sessions, and worked with Rita Blanca's CEO to directly address concerns about cost recovery, overhead, and acceptable agreement terms.

Support for Resource-Limited Entities: Provided Lamb-Star support with guiding them through the process, offering solutions like joint bids and SIB loans, and ensuring costs were adequately justified.

Flexibility and Persistence: Addressed leadership changes and board hesitations, worked with auditors to itemize costs, and reassured reimbursement concerns, leading to SUA execution

➤ **Solution & Outcome:** By providing early guidance, and education on requirements and processes, LSE and TxDOT established a strong working relationship with RBEC, keeping the project on track

Challenge – Federal Government Utility Conflict

➤ Challenge

- BLM helium pipeline conflicted with UAR regulations on depth of cover and encasement.
- BLM was selling the pipeline to the private sector, adding complexity to coordination and compliance

➤ **Lamb-Star Perspective:** LSE collaborated with BLM, TxDOT, and the Design Team to find an effective solution

- Proposed design adjustments - Increased encasement thickness and concrete-lined ditch grading
- Collaborated with BLM's engineering consultant for necessary analysis and safety compliance required by the BLM



➤ **TxDOT's response and collaboration on solution options:**

Easement Protections and Analysis: TxDOT partnered with Lamb-Star and the BLM's consultant to conduct the protective analysis, in an effort to not delay the process

Proposed Solutions: TxDOT facilitated discussions on creative solutions, including concrete capping or casing extension during roadway construction, aligning with BLM's preferences for full casing replacement and staged traffic management

Joint Bid Resolution: A joint bid approach was initially developed to ensure pipeline replacement met specifications, though plans were disrupted by BLM selling the helium line to a private company.

➤ **Solution & Outcome:** Through collaborative efforts, the team implemented design modifications and alternative payment structures, ensuring compliance and project continuity while respecting BLM's requirements

Challenge – Unidentified Utility Conflict

➤ Challenge

- An unmarked utility line in conflict was discovered during inductive sweeping as part of the SUE investigation

➤ **Lamb-Star Perspective:** Attempt to identify the unknown utility and work to clear the conflict

- Reached out to all identified utility owners for any information they may have or determine if it's associated with their facilities
- Reached out to the ROW acquisition team to discuss with the adjacent property owners
- Coordinated with TxDOT to review historical utility installation permits helping identify the owner who was no longer in business
- Worked with TxDOT Environmental for their assistance to clear the conflict



➤ **TxDOT's response and collaboration on solution options:**

Adapted ROW Process: Collaborated with Lamb-Star to engage landowners and local entities instead of relying solely on citation by publication per the ROW manual

Supportive Coordination: Leveraged TxDOT's statewide remediation contract to support Lamb-Stars' efforts by testing for hazards, determine activity status, and safely cap the line

Resolution Outcome: Identified the line as possibly an abandoned gas line, resolving the issue within six months

➤ **Solution & Outcome:** After confirming the line was actually an abandoned water line, TxDOT's environmental team safely removed it, clearing the conflict. This collaborative approach ensured project safety and maintained schedule integrity.

Takeaways & Closing Remarks

➤ **Expect Unique Challenges**

- Complex utility conflicts are inevitable in projects of this scale
- Proactively addressing these challenges early is essential for keeping the project on track

➤ **Importance of Early Identification & Collaboration**

- Identifying potential issues at the outset and collaborating with all stakeholders—especially utility owners and TxDOT—ensures a smoother path to resolution

➤ **Leverage TxDOT Resources**

- Build strong communication channels with your TxDOT district team from the start
- When necessary, use their expertise and resources for unique guidance and navigating complex utility scenarios

Questions



Thank You!