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US 281 AT SH 71 INTERCHANGE PROJECT (CSJ 0252-02-058) DESIGN CHANGES

PROJECT OVERVIEW

The Texas Department of Transportation (TxDOT) proposes to reconstruct the existing United States Highway (US) 281 at State Highway (SH) 71 cloverleaf interchange, located within the City of Marble Falls and its extraterritorial jurisdiction (ETJ), into a two-level grade separated turbine configuration. As proposed, the US 281 would consist of a four-lane divided highway with a wide depressed median, auxiliary lanes and full shoulders. Additionally, there would be a two-lane frontage road with shoulders and shared use paths (SUP) for bicycles and pedestrians for each direction. SH 71 would consist of a four-lane undivided highway east of the interchange, a two-lane undivided highway within interchange area, and a four-lane divided highway west of the interchange. SH 71 would have frontage roads and a SUP from Baylor Scott & White Boulevard to 0.5 mi east of the interchange. The proposed improvements would extend approximately 6.4 miles along US 281 and SH 71. The project length is approximately 3.2 miles on US 281 and approximately 3.2 miles on SH 71. The limits along US 281 extend from approximately 1.5 miles North of SH 71 to 2 miles South of SH 71. The limits along SH 71 would extend from approximately 1.6 miles West of US 281 to 1.6 East of US 281 (see attached **Project Location Map**). The proposed project includes 92.67 acres of proposed right-of-way (ROW), 2.92 acres of permanent easements, and 0.07 acres of temporary easements.

A Draft Environmental Assessment (EA), dated April 2025, was approved by TxDOT on April 1, 2025. Following this approval, several schematic design revisions were implemented to reduce displacements. These revisions modified both the proposed design and the ROW acreages originally presented in the approved deliverables and supporting technical reports. The official project limits remain unchanged.

This memo provides information on:

- Modifications made to the schematic design
- Impacts on previous resource assessments and technical reports resulting from these revisions

DESIGN CHANGES

US 281 Design Changes

The following modifications were made to the proposed US 281 design, resulting in reduced proposed ROW and the addition of minimal permanent easements for utilities:

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- South of SH 71: The limits of the proposed US 281 frontage roads were changed from approximately a quarter mile south of Gregg Ranch Blvd to near Foxwood Trail (north of Gregg Ranch Blvd), reducing the frontage road limits by about half a mile. The roadway alignment was adjusted to reflect the reduced frontage road limits.
 - Results:
 - Complete avoidance of impacts to the Hohenberger single-family residential farmstead.
 - Avoidance of displacements to six apartment buildings (264 residential units), a leasing office, and amenities at the Flatz 830 apartment complex.
 - The proposed overpass at the US 281 at Gregg Ranch Blvd intersection was removed and replaced with an at-grade signalized intersection.
 - North of SH 71: The US 281 roadway alignment was shifted slightly east, reducing ROW acquisition for properties to the west.
 - Result:
 - Avoidance of impacts to parking spaces and internal streets at the Prose Thunder Rock apartment complex.
 - Utilities
 - Minimal permanent easements were added parallel to the proposed ROW for utility relocations.

SH 71 Design Changes

The following modifications were made to the proposed SH 71 design, resulting in reduced proposed ROW and the addition of minimal permanent and temporary easements:

- West of US 281
 - The limits of the proposed SH 71 frontage road improvements were changed from west of Little Flatrock Creek Tributary bridge to near Baylor Scott & White Blvd (reduction of approximately half a mile).
 - The design was modified from a divided four-lane SH 71 highway to an undivided two-to-four-lane highway for part of the project limits. The new design removes the depressed median and merges the SH 71 main lanes from near Baylor Scott & White Blvd to the eastern terminus.
 - Results:
 - Reduction in ROW impacts.
 - Removal of the proposed overpass at the intersection of SH 71/(future) West Marble Falls Major Collector; changed to an at-grade signalized intersection.
- East of US 281
 - Limits of the proposed SH 71 frontage road improvements were changed from east of Flatrock Creek bridge to west of Flatrock Creek bridge (reduction of approximately half a mile).
 - The depressed median was removed; SH 71 converted to an undivided four-lane east of US 281.

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- Result:
 - Reduction in ROW impacts.
 - Utilities and Access
 - Minimal permanent easements were added parallel to the proposed ROW for utility relocations.
 - Minimal temporary easements were added at two locations to improve driveway access for the Cude Joe E & Patricia A Cude Testamentary Trust and Harris Max Young Sr, Trustee properties.

Additional Project Changes (No Additional ROW or Easements)

- Modification of access to Ellison Roper Land Corporation property.
- General updates to roadway functional classification, profile, and drainage features.

ACRES OF ROW CHANGES AND DISPLACEMENTS

Under the previous design, the project area included 165 acres of proposed ROW, 0 acres of proposed permanent easements, and 0 acres of proposed temporary easements. Following the recent design changes, proposed ROW has decreased, and minimal acreage of permanent easements and temporary easements were added. The current design now includes 92.67 acres of proposed ROW, 2.92 acres of permanent easements, and 0.07 acres of temporary easements (See attached **Aerial Map** for project footprint details).

The project is still anticipated to displace:

- Residential structure at 200 SH 71, Marble Falls, TX (Schieffer J Emmitt property).
- Utility structure (a cell tower) at 705 SH 71, Marble Falls, TX (Hohenberger Henry Revocable Living Trust property).

CURRENT DESIGN – PROPOSED FACILITY DESCRIPTION

The proposed US 281 at SH 71 interchange would consist of a two-level, grade separated turbine configuration facility. The turbine interchange would provide directional ramps for all right- and left-turn movements in a spiral configuration that generally requires only two levels of bridges. US 281 and SH 71 would both operate as freeways within the project limits.

US 281 would consist of a four-lane divided highway with a wide depressed median, auxiliary lanes, and full shoulders. Additionally, there would be a two-lane frontage road northbound and a two-lane frontage road southbound with shoulders, and SUP for bicycle and pedestrian accommodations. The project would add an overpass at the following cross streets along US 281: Thunder Rock Blvd. There would also be signalized at-grade intersections at the following cross streets: Cora Lee Lp, Gregg Ranch Blvd.

To the west of the intersection, SH 71 would consist of a four-lane divided highway with a wide depressed median, auxiliary lanes, and shoulders. However, as SH 71 approaches intersection with US 281, the outside lanes exit to the turbine ramps connecting to US 281, the median would disappear, and the main lanes would merge to become undivided. To the east of the intersection, SH 71 adds lanes for the turbine ramps connecting to US 281, and then continues as a four-lane undivided highway with pavement markings, auxiliary lanes, and shoulders. Additionally, there would be one-and-two-lane frontage roads eastbound and westbound with shoulders, auxiliary lanes, and SUP. The project would add grade separations at the following cross streets along

SH 71: Flatrock Blvd, and a future road east of US 281. Ramps would be provided to access the future road east of US 281. There would also be a signalized at-grade intersection at (future) West Marble Falls Major Collector.

Frontage roads approaching the interchange on all four approaches will be curved to the right to connect with frontage roads on the intersecting highway. Thus, the eastbound SH 71 frontage road would turn to become the southbound US 281 frontage road. Other frontage roads would follow the same pattern; northbound US 281 to eastbound SH 71, westbound SH 71 to northbound US 281, and southbound US 281 to westbound SH 71. Local traffic would circulate around the interchange using U-turn lanes included with local overpasses provided on all four legs to reach development in other interchange quadrants.

The proposed project would also involve drainage improvements. Drainage improvements would include bridges over Little Flatrock Creek Tributary (west of US 281 on SH 71), and over Flat Rock Creek (east of US 281 on SH 71), several culverts, and a proposed detention pond within the interchange footprint to better manage stormwater flowing into adjacent properties.

The proposed project would involve relocation of utilities. Minimal permanent easements running parallel to proposed ROW were added to the design to incorporate utility relocations.

The proposed project would involve modification to improve driveway access for certain properties. To support the updates, minimal temporary easements were added at two locations to ensure better driveway access.

RESOURCE ASSESSMENT

This section evaluates whether modifications to previously approved assessments and technical reports are necessary as a result of the proposed design changes. Resources evaluated include:

- Species Analysis
- Farmland Protection Policy Act (FPPA)
- Hazardous Materials
- Section 4(f)
- Surface Waters Analysis
- Cultural Resources (ICF)

Separate updates of the Community Impacts Analysis and Traffic Noise Analysis technical reports to account for design changes are being prepared and will be on file in ECOS.

Species Analysis

Updates to the Species Analysis Form and Species Analysis Spreadsheet were approved on March 25, 2025. Section 7 informal consultation with the United States Fish and Wildlife Service (USFWS) is ongoing to address effects to the Golden-cheeked Warbler.

USFWS Information for Planning and Conservation (IPaC) and Texas Parks and Wildlife Department (TPWD) Rare, Threatened, and Endangered Species of Texas (RTEST) county lists were accessed for the project area on November 25, 2025, for review of federally and state-listed threatened, endangered, and candidate species, as well as Species of Greatest Conservation Need (SGCN) within the project area, as part of the Species Re-Analysis for the project. The latest IPaC and RTEST lists are attached. No changes were identified to species

status, suitable habitat, or potential effect/take and/or impacts to listed species; therefore, no new effects to any species previously included in the approved Species Analysis are anticipated.

The reduction in the project footprint proposed as part of the design changes will not result in additional impacts to vegetation or wildlife.

Farmland Protection Policy Act (FPPA)

The FPPA aims to minimize the contribution of federal programs to the unnecessary conversion of prime and important farmlands to non-agricultural uses. The results of the Farmland Conversion Impact Rating corridor assessment previously completed for this project concluded that properties proposed for acquisition do not warrant further consideration for protection or coordination with the Natural Resources Conservation Service (NRCS), and that no additional sites required evaluation.

Based on the reduction of the project footprint, further evaluation of prime farmland soils within the project area is not warranted. No changes are needed from the previously approved FPPA Analysis.

Hazardous Materials

A Hazardous Materials Initial Site Assessment (ISA) was previously approved for the project. The ISA did not identify any unresolved hazardous materials concerns.

Based on the reduction in the project footprint, further review of federal and state regulatory databases for additional potential hazardous materials sites within the project area is not warranted. No changes are needed from the previously approved Hazmat ISA. Any unanticipated hazardous materials encountered during construction will be managed in accordance with applicable federal and TxDOT Standard Specifications.

Section 4(f)

Section 4(f) of the US Department of Transportation Act protects publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, and any land from a historic site of national, state, or local significance. The previously approved Section 4(f) analysis concluded that no Section 4(f) resources are present within the project area. Based on the reduction of the footprint, no additional analysis of potential Section 4(f) lands is necessary. Although the Charley Taylor/Marble Falls Rodeo Arena is located adjacent to the project area (northeast quadrant), Section 4(f) does not apply because it is privately owned. No changes are needed from the previously approved Section 4(f) analysis.

Water Resources

A Surface Water Analysis Form and Section 404/10 Impacts Table were previously approved for the proposed project. Due to the reduction in the project footprint, no additional analysis of water features within the project area is required. No changes are needed from the previously approved Surface Water Analysis. Authorization under Section 404 through a non-reporting Nationwide Permit (NWP) 14 is still anticipated for the proposed project.

Archaeological Resources:

An intensive archeological survey of a portion of the area of potential effects (APE) conducted under Texas Antiquities Permit Number 31729 in May 2024 documented three new archeological sites and one isolated find. The subsequent archeological survey report recommended that the three new archeological sites and one isolated find were not eligible for inclusion in the National Register of Historic Places (NRHP) or formal designation as State Antiquities Landmarks (SALs) and recommended no further work was warranted for the documented resources and for the area surveyed in 2024. In addition, the survey report recommended that 38

acres of proposed new ROW not accessible at the time of the field investigation be surveyed to identify any cultural resources that may be present in those areas and subject to project impacts. The SHPO concurred with the recommendations presented in the survey report in September 2024. TxDOT would complete the recommended survey of the 38 acres once property was acquired post NEPA decision, but prior to any construction-related impacts.

While subsequent design changes have reduced the overall project footprint, future investigations for archeological resources are still anticipated. There is still 14.5 acres of the 38 inaccessible acres recommended for post-NEPA survey. Additionally, there are approximately 1.6 acres of new ROW added in 2025 that were not part of the 2024 project footprint. Appropriate actions for the 1.6 acres of new ROW added in 2025 will be determined through coordination with TxDOT.

Historic Resources:

Based on the previous design and proposed ROW, a historic resources survey of all historic-age (built in or prior to 1984) resources in the 150-foot-wide APE was conducted in July 2024. The September 2024 Historic Resources Survey Report (HRSR) documented the results of this survey, and it included the evaluation of 24 historic-age resources located on five properties (Resource Nos. 1A-5O) in the APE. The HRSR recommended all historic-age resources as not eligible for the NRHP, and TxDOT approved the HRSR. In a September 2024 internal clearance memo, TxDOT determined that all historic-age resources located in the APE are not NRHP eligible.

The reduction in the project footprint proposed as part of the design changes and all proposed ROW are located on parcels that were surveyed in 2024. No changes are needed based on the previously approved HRSR and the September 2024 internal clearance memo.

Conclusion: Based on analysis of the proposed design changes, it is not anticipated there will be any additional impacts for the Species Analysis, FPPA, Hazardous Materials, Section 4(f), Surface Waters, or Historic Resources beyond what was previously assessed and approved in the previous drafts. As noted, separate analyses of Traffic Noise and Community Impacts are being prepared in separate documentation efforts and will be on file in ECOS to document any changes in findings or impacts from previously approved technical studies for those resource areas. Coordination with TxDOT is pending regarding the 1.6 acres of new ROW added as part of the 2025 revised design.

- Attachments:**
1. Project Location Map
 2. Aerial Map
 3. IPaC
 4. RTEST