MP 694

NPS Form 10-900 OMB No. 1024-0018

United States Department of the Interior
National Park Service
National Register of Historic Places Registration Form

REC
JAN 13 2017
Natl. Reg. of Historic Places
National Park Service

1. Name of Property

Historic Name: Leon Street Bridge at the Leon River
Other name/site number: Leon Street Bridge
Name of related multiple property listing: *Historic Road Infrastructure of Texas MPS*

2. Location

Street & number: Leon Street at Leon River
City or town: Gatesville State: Texas County: Coryell
Not for publication: ☐ Vicinity: ☐

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this ☑ nomination ☐ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property ☑ meets ☐ does not meet the National Register criteria.

I recommend that this property be considered significant at the following levels of significance:
☐ national ☑ statewide ☑ local

Applicable National Register Criteria: ☑ A ☐ B ☑ C ☐ D

Mark Wolfe State Historic Preservation Officer 1/5/17
Signature of certifying official / Title **Date**

Texas Historical Commission
State or Federal agency / bureau or Tribal Government

In my opinion, the property ☐ meets ☐ does not meet the National Register criteria.

Signature of commenting or other official **Date**

State or Federal agency / bureau or Tribal Government

4. National Park Service Certification

I hereby certify that the property is:

✓ entered in the National Register
___ determined eligible for the National Register
___ determined not eligible for the National Register.
___ removed from the National Register
___ other, explain: _____

for Edson K. Beall 2.28.17
Signature of the Keeper **Date of Action**

5. Classification

Ownership of Property

	Private
X	Public - Local
	Public - State
	Public - Federal

Category of Property

	building(s)
	district
	site
X	structure
	object

Number of Resources within Property

Contributing	Noncontributing	
0	0	buildings
0	0	sites
1	0	structures
0	0	objects
1	0	total

Number of contributing resources previously listed in the National Register: N/A

6. Function or Use

Historic Functions: Transportation: Road-related = bridge

Current Functions: Transportation: Road-related = bridge

7. Description

Architectural Classification: OTHER: Pratt through-truss bridge

Principal Exterior Materials: METAL/steel

Narrative Description (see continuation sheets 6-7)

8. Statement of Significance

Applicable National Register Criteria

X	**A**	Property is associated with events that have made a significant contribution to the broad patterns of our history.
	B	Property is associated with the lives of persons significant in our past.
X	**C**	Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
	D	Property has yielded, or is likely to yield information important in prehistory or history.

Criteria Considerations: N/A

Areas of Significance: Engineering, Transportation

Period of Significance: 1904-1938

Significant Dates: 1904, 1938

Significant Person (only if criterion b is marked): N/A

Cultural Affiliation (only if criterion d is marked): N/A

Architect/Builder: George E. King Bridge Company of Des Moines, Iowa

Narrative Statement of Significance (see continuation sheets 8-12)

9. Major Bibliographic References

Bibliography (see continuation sheet 13-14)

Previous documentation on file (NPS):
- _ preliminary determination of individual listing (36 CFR 67) has been requested.
- _ previously listed in the National Register
- _ previously determined eligible by the National Register
- _ designated a National Historic Landmark
- _ recorded by Historic American Buildings Survey #
- _ recorded by Historic American Engineering Record #

Primary location of additional data:
- **x** State historic preservation office (*Texas Historical Commission*, Austin)
- _ Other state agency
- _ Federal agency
- _ Local government
- _ University
- _ Other -- Specify Repository:

Historic Resources Survey Number (if assigned): NA

10. Geographical Data

Acreage of Property: Less than one acre

Coordinates

Latitude/Longitude Coordinates

Datum if other than WGS84: NA

1. Latitude: 31.432835° Longitude: -97.761614°

Verbal Boundary Description: The nominated parcel includes the entire bridge structure at Leon Street and the Leon River in Gatesville, Texas. The bridge is approximately 17' 9" wide and 141 feet long.

Boundary Justification: The boundary includes all components historically associated with the structure.

11. Form Prepared By

Name/title: Roger Miller, with THC Historian Stephen F. Austin
Organization: N/A
Street & number: 302 E Leon Street
City or Town: Gatesville State: TX Zip Code: 76258
Email: fajumper@aol.com, stephen.austin@thc.state.tx.us
Telephone: 254-630-9794, (512) 463-6046
Date: May 23, 2016

Additional Documentation

Maps (see continuation sheets 15)

Additional items (see continuation sheets 16-23)

Photographs (see continuation sheets 5, 24-35)

Photograph Log
Leon River Bridge
Gatesville, Coryell County, Texas
Photographed by Linda Henderson (THC) and Rebekah Dobrasko (TxDOT), April 2016

Photo 1
Steel truss utility bridge with two large pipes atop concrete piers.
Camera facing southwest.

Photo 2
Deck and Pratt truss from east portal.
Camera facing west.

Photo 3
Latticed side railings.
Camera facing northeast.

Photo 4
Pin connection.
Camera facing west.

Photo 5
Deck and trusses from west portal.
Camera facing east.

Photo 6
Inclined end post on south side.
Camera facing east.

Photo 7
Stone masonry abutment.
Camera facing east.

Photo 8
Stone masonry walls at east portal.
Camera facing south.

Photo 9
Floor beams and lateral bracing.
Camera facing west.

Photo 10
Pin connection.
Camera facing north.

Photo 11
Utility pipe.
Camera facing northeast.

Photo 12
Deck, trusses, and latticed bracing from west portal.
Camera facing east.

Narrative Description

The Leon Street Bridge is a pin-connected Pratt through truss located on the Leon River approximately a half-mile from downtown Gatesville, Texas and approximately 995 ft. southeast of U.S. Highway 84. Erected in 1904, the 141-foot-long bridge consists of a single truss span with seven panels and a 5-foot timber approach span at the east end of the structure.[1] The one-lane deck is comprised of transverse timber beams spanning seventeen feet wide with a 15-foot-wide roadway, atop six floor beams with lateral bracing, five stringers, and the bottom chord. The approach span is abutted by two rock masonry retaining walls. Two monumental stone masonry abutments support and anchor the structure to the east and west banks of the Leon River. The bridge retains its original truss configuration and steel superstructure components including its parallel upper and lower chords and vertical and diagonal posts. In 1985, the bridge was annexed by the City of Gatesville and promptly closed to traffic. It was restored and reopened in 1993. The bridge is an excellent example of a pin-connected Pratt through truss in Texas, a once common type that is now increasingly rare. The structure has received very few alterations and retains a high degree of integrity.

General Characteristics

The Leon Street Bridge is sited in the Central Texas county of Coryell, within the city limits of the county seat. The bridge is located within the existing floodplain of the Leon River, with a minimal single-family neighborhood to its northwest, sparsely populated single-family homes to its southwest and flat agricultural lands to the southeast. The bridge is stationed over a north-south stretch of the Leon River, one of two major drainages of Coryell County, and serves as the only connection between West and East Leon Street. The bridge has accommodated significant traffic over its lifespan due to its location on the former Old Georgetown Road where it functioned as the de facto gateway between Gatesville and other regional communities. In 1917, the bridge became part of the newly designated State Highway 7 (SH 7), one of the original twenty-six state highways established by the Texas Highway Commission.[2] By 1938, U.S. Highway 84 supplanted SH 7 as the primary link between the Central Texas cities of Waco and Goldthwaite.[3] However, it continued to be utilized as the primary link between rural populations and the City of Gatesville.

Engineering

The single 137-foot-long truss of the Leon Street Bridge consists of seven panels: five full panels and two inclined end posts. All seven panels are 19’4” in height and width, with the inclined end post extending diagonally at its hip vertical. The bridge has deck width of 17’ 6” and road width of 14’9”. The intersection of diagonals and counter bracing creates a web configuration in the center panel of both spans. The bridge retains its original lower and upper chords, inclined end posts, vertical and diagonal members, top lateral bracing, and four struts, two portal struts, sway bracing, latticed non-standard steel side railings, and latticed portal bracing on its east and west ends. Masonry abutments support either end of the Pratt through truss. Such massive abutments may indicate the crossing's importance or be a precaution against flood damage.[4]

The bridge’s horizontal top chords are parallel and connected by four portal struts, eight sway braces, and five pairs of lateral bracing. The span is pin-connected throughout the structure, most notably at each joint on the top and bottom

[1] State of Texas, L.E. Howell, Jr., “Bridge Inventory Report.” Register Professional Engineer, District 09, County 50, Cont. Sec C001-75, Structure 001, Route # GAT Leon Street, June 20, 1994.
[2] Barbra Stocklin, “1904 Leon River Bridge in Coryell County,” *TXDOT,* August 26, 1996.
[3] Barbra Stocklin, “1904 Leon River Bridge in Coryell County: Additional Information for THC RTHL Application,” *TXDOT,* August 26, 1996.
[4] Barbra Stocklin, “1904 Leon River Bridge in Coryell County,” *TXDOT,* August 26, 1996.

chords. Each vertical member is comprised of two individual steel members connected by lacing and pins at the top chord. Steel plates were added during restoration work in 1993 to the end posts and inside of the upper chord joints; they do not impact the bridge's integrity. The top chord is composed of a steel I-beam with horizontal lacing along its underside. The deck is comprised entirely of transverse 3x7 ft. wooden timber beams topped by two 2 ft. longitudinal timber runners attached to the bottom chord. A steel bottom chord, floor beams, bottom lateral bracing, and five stringers run the length of the structure. The steel bottom chord is attached atop two massive rock masonry abutments, one at each end of the bridge. The bridge's metal components were likely shop-riveted at the George E. King Bridge Company in of Des Moines, Iowa, shipped by railroad to the site.[5] The bridge's pin-connections were likely joined during field assembly, a method which typifies pre-1915 truss bridges as later designed relied primarily on rivet and bolt connections.

All visible elements of the bridge's sub and superstructure are significantly rusted. The City of Gatesville attached water, gas, and sewage piping to both sides of the bottom chord in the late 1950s or early 1960s. A standalone steel truss utility bridge containing two large pipes atop concrete piers runs parallel to the Leon Street Bridge approximately 20 feet to its north. After it was decommissioned in the mid-1980s, the Coryell County Historical Commission began efforts to restore and reopen the Leon Street Bridge. The structure's existing deck and longitudinal stringers were replaced in 1993 and steel girders were installed under the deck for added strength. Its ornamental metal side rails and wooden approach were restored. Aside from general maintenance, there have been no major structural changes to the bridge since its construction. The bridge was designated a Recorded Texas Historic Landmark in 1997, and a Texas Historical Marker placed nearby. The Leon Street Bridge maintains all aspects of integrity to a high degree.

[5] Barbra Stocklin, "1904 Leon River Bridge in Coryell County," *TXDOT,* August 26, 1996.

Statement of Significance

The Leon Street Bridge at the Leon River is a pin-connected Pratt through truss that has served as a major arterial connection in Central Texas since its completion in 1904. The structure was built at the site of a river crossing used since 1854 as part of the Old Georgetown Road. Several conveyances predate the current bridge, including a ferry (ca.1854) and a Bowstring truss bridge (1882) that was damaged in successive flood events in 1899 and 1900. The Pratt truss was authorized and funded by the Coryell County Commissioners' Court and has remained under county ownership since its construction. Built by George E. King Bridge Company of Des Moines, Iowa, the bridge represents early patterns of state and county infrastructure development which relied heavily on local funding, planning, labor, and transportation of materials via railroad. The Leon Street Bridge is nominated under Criterion A in the area of Transportation at the local level for association with locally-funded transportation networks and county controlled infrastructure development prior to the creation of Texas Highway Department. The bridge later carried traffic over State Highway 7, until the road was bypassed in 1938. The bridge is also nominated under Criterion C, at the state level, in the area of Engineering as an excellent example of a pin-connected Pratt through truss in Texas. The period of significance is 1904-1938.

Texas Road and Bridge Development[6]

By the 1850s, the desire for professionally designed bridges was growing in many Texas communities, particularly those with major crossings where ferries and fording were impractical. Given the prohibitive cost of many metal bridges and the lack of available local funding, many counties relied on privately constructed and owned bridges to span important crossings. Business and community leaders often created private corporations responsible for bridge construction in an effort to promote and increase regional commerce. Texas Legislators granted charters to over 100 toll-bridge corporations between 1850 and 1870. After the Civil War, advancement of roads and bridges in Texas was spurred by the increased primacy of railroad commerce to local economies. Metal truss bridge technology was revolutionized as the demand for strong, reliable bridges drove innovation. For Texas counties, the easiest way to reduce costs of bridge construction was to purchase a metal truss bridge from Eastern manufacturing companies and have it transported by rail as close to the required location as possible. The 1876 Texas Constitution placed responsibility for the development and improvement of all road and bridges on local governments.[7] Several amendments allowed cash strapped counties to levy road taxes and issue limited bonds for construction of transportation infrastructure.[8] Despite this, metal truss bridges remained rare features on Texas roads until the last two decades of the nineteenth century.

By the late 1880s, establishment of a robust railroad network across Texas helped counties to afford the formerly prohibitive cost of purchasing a metal truss bridge. In addition, the state's population swelled, with demand for transportation access and public services coming from cities, rural communities, and farmers alike. The bridge-bonding acts of 1884 and 1887 facilitated the acquisition of the first metal truss span in many counties. Local governments often utilized the bonds to span important crossings first, usually on stagecoach and postal routes, and on important roads linking farms with county seats and other regional centers. Steel replaced wrought iron as the universal material for truss construction by the turn of the century. But steel truss bridges and I-beams were slow to catch-on in

[6] Partially adapted from Bruce Jensen, *Historic Road Infrastructure of Texas, 1866-1965,* National Register of Historic Place Registration Form, Multiple Property Documentation Form*,* 2015,5-58.; Lila Knight, "A Guide to Research and Documentation of Local Texas Bridges," *Texas Department of Transportation, Environmental Affairs Division, Historical Studies Branch,* Historical Studies, Report No. 2004-01, January 2004, 3.

[7] Ericson, Joe E., and Ernest Wallace, "Constitution of 1876," *Handbook of Texas Online*, June 12, 2010, modified September 16, 2015, accessed April 14, 2016.

[8] Lila Knight, "A Guide to Research and Documentation of Local Texas Bridges," *Texas Department of Transportation, Environmental Affairs Division, Historical Studies Branch,* Historical Studies Report No. 2004-01, January 2004, 3.

Texas as cost of shipping from Eastern and Midwestern producers continued to prohibit many counties from commissioning bridges. It was not until the 1910s that fabricators began operating in the state, resulting in extensive use of steel I-beams in Texas bridge construction.

By the early 1900s, even as the automobile was growing in popularity, state law makers were reluctant to centralize road authorities at the state level. The state road and bridge-bonding system heavily favored counties with high populations and property values, leaving a disproportionate number of Texas counties without infrastructure advancements. In 1904, a constitutional amendment allowed "any county or political subdivisions of the county" (e.g. municipalities, commissioners' precinct) to vote on road bonds to further expand road and bridge construction. Still, rural areas lagged behind urban centers in road improvements, as the state legislature opted to broaden local funding mechanisms for road and bridge projects.

The Federal Aid Road Act of 1916 allocated $25 million to improve rural post roads, with federal apportionment not exceeding fifty percent.[9] However, only states that had a central highway agency, or state control of road building, were eligible to receive monetary assistance.[10] The prospect of matching federal funding prompted lawmakers to create the Texas Highway Department (THD) in 1917. The primary function of the new agency was to allocate financial aid to counties for highway projects. The legislation was amended in 1921 to a system of matching funds with state money to provide for road construction. By the mid-1920s, the THD accepted all responsibility for upkeep and construction of the state's highway system and signed on to a national system of uniform highway routes.

Bridges and Roads of Coryell County[11]

Created from Bell and McLennan counties in 1854, Coryell County was primarily settled by immigrants from the southern United States, the majority of whom raised livestock or were subsistence farmers. County residents elected Gatesville to be the county seat. The town was established on land donated by Richard G. Grant, a local entrepreneur and land developer. The town was relatively isolated during its early years, which necessitated shipping supplies via wagon some 200 miles from Houston. Shortly following the Civil War, Coryell County was hit hard by economic depression with livestock values dropping by nearly fifty percent. By the 1870s, the county saw a proliferation of immigration as settlers moved to the area, with some 434 people settling in Gatesville, helping the town become an important frontier supply station. The economy continued to recover with agricultural goods increasing in value and new transportation routes becoming available. In 1882, citizen of Gatesville gave $30,000 and donated land to the Texas and St. Louis Railway to extend service from Waco to Gatesville, making the town a major shipping and supply center. As the town grew into a major hub in the Central Texas region, older transportation routes became increasingly important and trafficked.

The location of the Leon Street Bridge was initially more significant than the bridge itself, with the crossing in use by 1854 as part of the Old Georgetown Road (OGR). Although records are sparse, written accounts and modern maps indicate the original alignment began at the public square in downtown Gatesville and extended southeast, connecting with Georgetown and Austin. One character-defining feature of the route was the crossing at the Leon River east of Gatesville. Written accounts detail several conveyances erected at the crossing. Beginning in 1854, Richard Grant built

[9] Richard F. Weingroff, "Federal Aid Road Act of 1916: Building the Foundation," *Federal Highways Administration: Research and Technology*, Last revised June 15, 2015. http://www.fhwa.dot.gov/publications/publicroads/96summer/p96su2.cfm.
[10] John D. Huddleston, "Texas Department of Transportation," *Handbook of Texas Online*, June 15, 2010. Accessed April 14, 2016, http://www.tshaonline.org/handbook/online/articles/mctgn.
[11] Partially adapted from Lalla Rookh Ward, "History of the 1904 Leon River Bridge West Leon Street Gatvesville, Coryell County, Texas." November 8, 1994.; Barbra Stocklin, "1904 Leon River Bridge in Coryell County," *TXDOT,* August 26, 1996.; Vivian Elizabeth Smyrl, "Gatesville, TX," *Handbook of Texas Online*, June 15, 2010. Accessed April 18, 2016, http://www.tshaonline.org/handbook/online/articles/hfg02.

a ferry at the location of the present Leon Street Bridge, presumably functioning until the early 1880s. The first metal truss bridge in the Coryell County was a "wrought iron tubular arch," also known as a Bowstring truss bridge, erected in 1882 near the present location of the Leon Street Bridge. Coryell County commissioners' contracted the King Iron Bridge Company to "build, paint and make complete, ready for use, by October 1, 1882…the substructure and superstructure for a wrought iron tubular arch [Bowstring truss] bridge of the King's latest improved patent over the Leon River…on the West side of Gatesville."[12]

The Bowstring design was popular in 1880s Texas and was often the first metal truss span in most counties as it was easy to assemble, strong, and relatively lightweight. However, early structures like the Bowstring truss were prone to washouts and substructure failures.[13] Although popular, an iron truss bridge was still rare in most Texas counties during the late-nineteenth century. It is likely that Gatesville's importance as a shipping depot was the major reason for the purchase of such a bridge so early. Additionally, its presence signifies the importance of this crossing to the county and region. The bridge stood for roughly twenty-two years before successive flood events in 1899 and 1900 damaged the Bowstring truss, promoting county commissioners to authorize the construction of the present Pratt through truss in 1904. Construction was contracted to the George E. Bridge Company of Des Moines, Iowa, at a total cost of $10,165.00 with specifications and field supervision furnished by Gatesville's Post Master and "local bridge expert" Harry Harris.[14]

In 1917, the Texas Highway Department set about planning the state's first highway system. Twenty-six numbered routes were proposed, many along already existing roads, including the named route known as the "Central Texas Highway**."** Similar to its contemporaries,[15] the Central Texas Highway originated through a named highway association whose purpose was to promote development of particular routes.[16] New roadways were often based on existing trails or closely followed railroad lines. While the origins of other contemporary highways are well documented, records remain scant regarding the founding of the Central Texas Highway. It is likely that its routing through Gatesville was deliberate, based on its importance as a railroad shipping point and as a county seat. The Leon Street Bridge was pivotal to the development and functionality of the route, as it was a major connection between the western and eastern segments of the highway. Immediately west of the bridge, the Old Georgetown Road provided an important connection between Gatesville and points south.

The route was designated State Highway 7 (SH 7) in 1917. The proposed routing was to begin from the New Mexico State Line at Farwell, running east through Brownwood, then southeast to Goldthwaite, where it continued to Gatesville, connecting with State Highway 43 (U.S. 79) east of Waco near the Trinity River.[17] Historic state highway maps indicate the alignment of SH 7 changed little from its original 1917 routing. By 1938, the segment of the highway containing the Leon Street Bridge was bypassed in favor of a new 8.7-mile roadway running between Gatesville and the town of Arnett to the west. The new route, designated U.S. Highway 84, passed through Gatesville on East Main St., one block north of East Leon Street, which was the original routing of SH 7. Additionally, the improved U.S. 84 included a modern cantilevered concrete steel I-beam bridge located approximately one-fourth mile

[12] Bruce Jensen, *Historic Road Infrastructure of Texas, 1866-1965,* National Register of Historic Places Registration Form, Multiple Property Documentation Form*,* 2015, 92.
[13] Ibid, 17.
[14] Partially adapted from Lalla Rookh Ward, "History of the 1904 Leon River Bridge West Leon Street Gatvesville, Coryell County, Texas." November 8, 1994.; Roger Miller, email correspondence with Stephen Austin, June 9, 2016.
[15] For more information on named highways in Texas see: Texas Historical Commission, "Bankhead Highway," http://www.thc.state.tx.us/preserve/projects-and-programs/historic-texas-highways/bankhead-highway.
[16] David W. Moore et al., "The Development of Highways in Texas: A Historic Context of the Bankhead Highway and Other Historic Named Highways" Vol. 1, Section I. June 20, 2014.
[17] Anne Cooke, "Highway Number Designations," *compiled from Gibb Gilchrist, 'Texas Highway Department 1927-1937,'* Pp. 35, 1937.

upstream from the original Leon Street Bridge. The current alignment and configuration of the U.S 84 has not changed since the improvement project was completed in 1938.

George E. King Bridge Company[18]

The George E. King Bridge Company of Des Moines, Iowa, built many bridges throughout Texas in the late-nineteenth and early-twentieth centuries. The company was founded by George Elias King, nephew of iron bridge construction pioneer, Zenas King, of the King Bridge Company stationed in Cleveland, Ohio. A native of Vermont, George studied law before joining his uncle as an agent for the company in 1869. King worked with the company for twenty years, first as an erector in Kansas, then a contracting agent in Iowa, eventually establishing a marketing operation for the company in the state.[19] In 1889, he broke from his uncle's company to found the George E. King Bridge Company, which operated throughout the western and southern United States until 1927. It is believed that George and his uncle's company maintained a working relationship as George never built his own fabrication plant, and likely subcontracted to the King Bridge Company for such work. King later merged with other Midwestern bridge companies which were absorbed into the Chicago Bridge & Iron Company for a period in the 1890s.[20] A primary characteristic of early bridge companies was the fluidity in which agents and engineers moved between companies. Many formed their own bridge companies with or without manufacturing facilities in order to secure contracts, then subcontracted with companies that had fabricating capabilities.[21] The movement of company agents was also a feature in Texas. One of the state's most prolific bridge companies, the Austin Bridge Company, was founded by a former agent of the George E. King Bridge Company. George L. Austin was employed by the firm, he moved to Dallas in 1889, later establishing the only major bridge fabrication plant in Texas prior to 1917. [22]

Engineering: Pratt Truss[23]

The Pratt truss form was created by Massachusetts engineer Thomas Pratt ca. 1842; he and his father Caleb patented the design in 1844 for use by the railroads who sought a solution to expensive stone and temporary wood bridges. The design was prototyped using wood and iron rods, eventually leading to the construction of a completely iron bridge.[24] The Pratt became popular among railroad companies and county governments as it was a strong design and relatively cheap to erect. By the 1880s, the Pratt truss design had largely replaced the Bowstring truss and quickly became the bridge of choice for short to intermediate spans lengths of 30 to 150 feet. Material efficiency was a vital component to success of the Pratt as it reduced weight and costs. Based on geometric principles, compression members must use significantly more metal per linear foot to resist buckling than required by tension members to resist tensile forces. With the Pratt, shorter members functioned in compression with longer members in tension, making for increased

[18] Partly adapted from Johnson Brigham, *Des Moines: The Pioneer of Municipal Progress and Reform of the Middle West: Together with the History of Polk County, Iowa, the Largest, Most Populous and Most Prosperous County in the State of Iowa,* Volume 2, Part 1, Chicago, S.J. Clarke Publishing Company, 1911, 250-253.; Karen Van Etten, *King Bridge Over Troubled Waters: Preservation versus Destruction of the Historic Zenas King Iron Bowstring Bridge in Newfield, New York,* May 6, 2013, 53, 58.

[19] Allen King Sloan, "All in the Family of Zenas King," *King Iron Bridge & Manufacturing Co., Cleveland, Ohio, 1858 to 1922.* September 2005, accessed April 21, 2016. http://www.kingbridgecompany.com/all-in-the-family/

[20] Ibid.

[21] Allen King Sloan, "All in the Family of Zenas King," *King Iron Bridge & Manufacturing Co., Cleveland, Ohio, 1858 to 1922.* September 2005, accessed April 21, 2016. http://www.kingbridgecompany.com/all-in-the-family/.

[22] "Austin Brothers Bridge Company," *Texas Historical Commission*, accessed December 7, 2016, http://www.thc.state.tx.us/explore/historic-bridges-texas/metal-truss-bridges/austin-brothers-bridge-company.

[23] Bruce Jensen, *Historic Road Infrastructure of Texas, 1866-1965,* National Register of historic Place Registration Form, Multiple Property Documentation Form*,* 2015, 89, 228.

[24] F. Robby, "The Pratt Through-Truss: Patuxent Branch Trail," *The Historical Marker Database, Columbia in Howard County, Maryland,* July 3, 2009, accessed April 19, 2016. http://www.hmdb.org/Marker.asp?Marker=20498.

strength and prolonged durability while achieving a reduction in materials. Additionally, pinned connections simplified certain aspects of the engineering calculations and facilitated erection. Riveted connection eventually superseded the pin giving the Warren truss an advantage over the Pratt design.

The Pratt truss became the most popular type of bridge structure in Texas between 1895 and 1910, as it was versatile in length, highly durable, and easy to erect with semi-skilled labor. All of the Pratt's components were manufactured in a shop and easily shipped for assembly in the field. The design became so popular that it quickly became the standard American truss design for intermediate spans and gave rise to several other designs based on its configuration including the Whipple, Truss Leg Bedstead, and Parker. According to the *Historic Road Infrastructure of Texas, 1866-1965* multiple property documentation form:

> Surviving examples of pin-connected wrought iron Pratt trusses in Texas are particularly significant for their association with the rise of the Post Bellum American Standard truss. That most Pratt trusses will be significant under several areas (uncommon type, pin-connections, early date, and use of wrought iron) is a reflection of the subtype's overall importance in Texas and American bridge history.[25]

The Pratt truss is an iconic and important design in the history of engineering and particularly important to transportation infrastructure development in Texas. With the advent of bridge-bonding and other funding mechanisms, many counties gravitate to the design. Early examples of the Pratt truss in the state can be found in Central and North Texas, including the 1884 Hickory Creek Bridge near Denton (NRHP 1988) and the 1885 Fort Griffin Iron Truss in Shackelford County (NRHP 1979).

Few examples of Pratt through truss bridges remain in Texas. While some presently are, or were formerly, on-system bridges known to the Texas Department of Transportation (TXDOT), others may be off-system, or county owned. For this reason, it is difficult to generate an accurate count of Pratt through-truss bridges still extant in the state.

The Leon Street Bridge functioned as part of an important highway between Gatesville and points west until 1938, and continued to serve local traffic until 1985 it was closed by the City of Gatesville closed the bridge due to economic and liability concerns.[26] Community response prompted the Coryell County Historical Commission to work toward preservation of the structure, leading to its eventual reopening. County and city officials approved cost-sharing agreement to restore the bridge, and in December 1993, the bridge was reopened to traffic, with a rededication ceremony held four months later. The bridge was designated a Recorded Texas Historic Landmark in 1997.

[25] Bruce Jensen, *Historic Road Infrastructure of Texas, 1866-1965,* National Register of historic Place Registration Form, Multiple Property Documentation Form*,* 2015, 228.

[26] Lalla Rookh Ward, "History of the 1904 Leon River Bridge West Leon Street Gatvesville, Coryell County, Texas." November 8, 1994.; Barbra Stocklin, "1904 Leon River Bridge in Coryell County," *TXDOT,* August 26, 1996.

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Maps:

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Map Number 6254, 1917
Map Number 6183, 1919
Map Number 4364, 1920-1940
Map Number 6184, 1922
Map Number 1988, 1923
Map Number 6185, 1926
Map Number 6148, 1930
Map Number 6553, 1936
Map Number 4831, 1940

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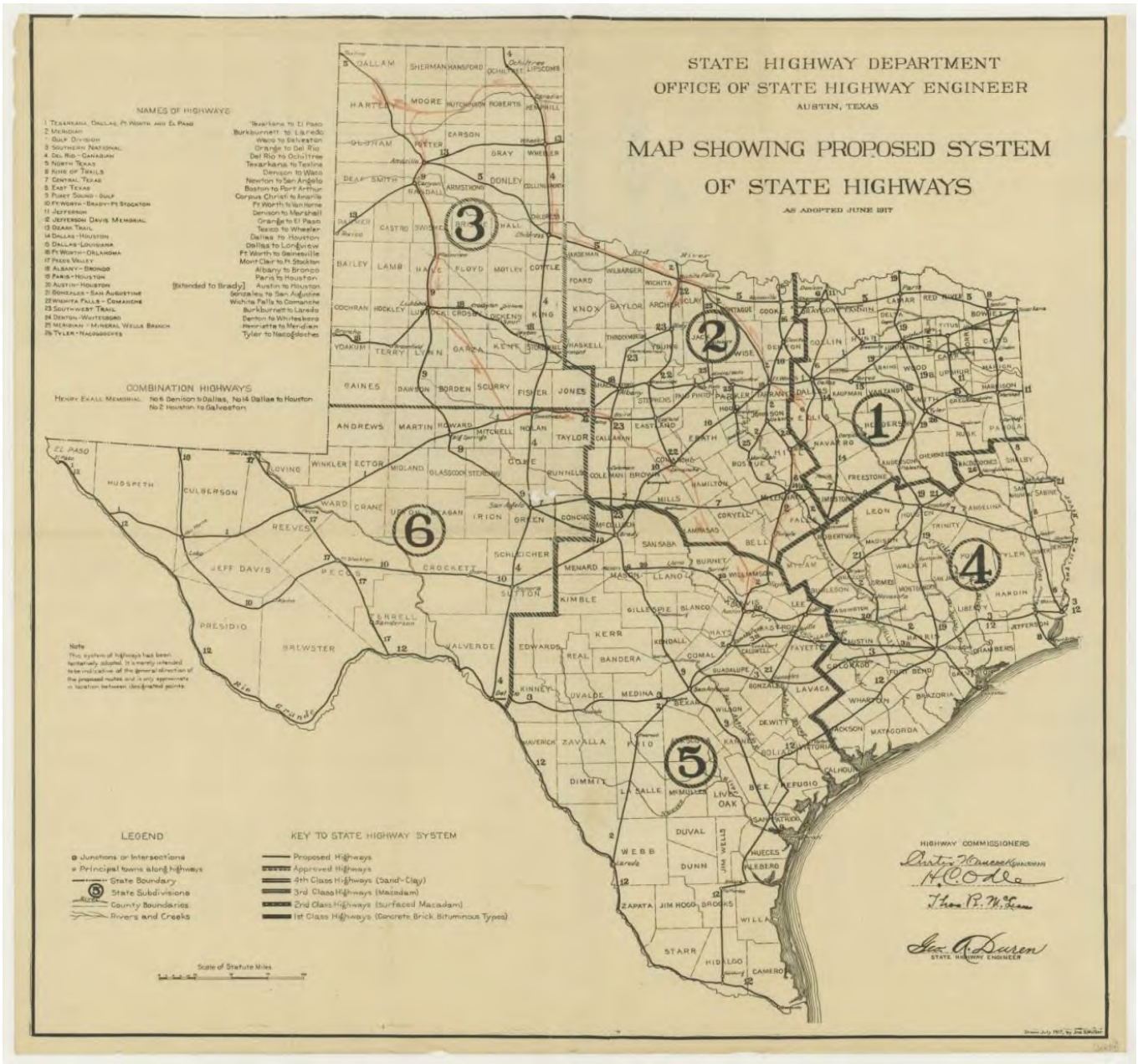
Coryell County, Texas

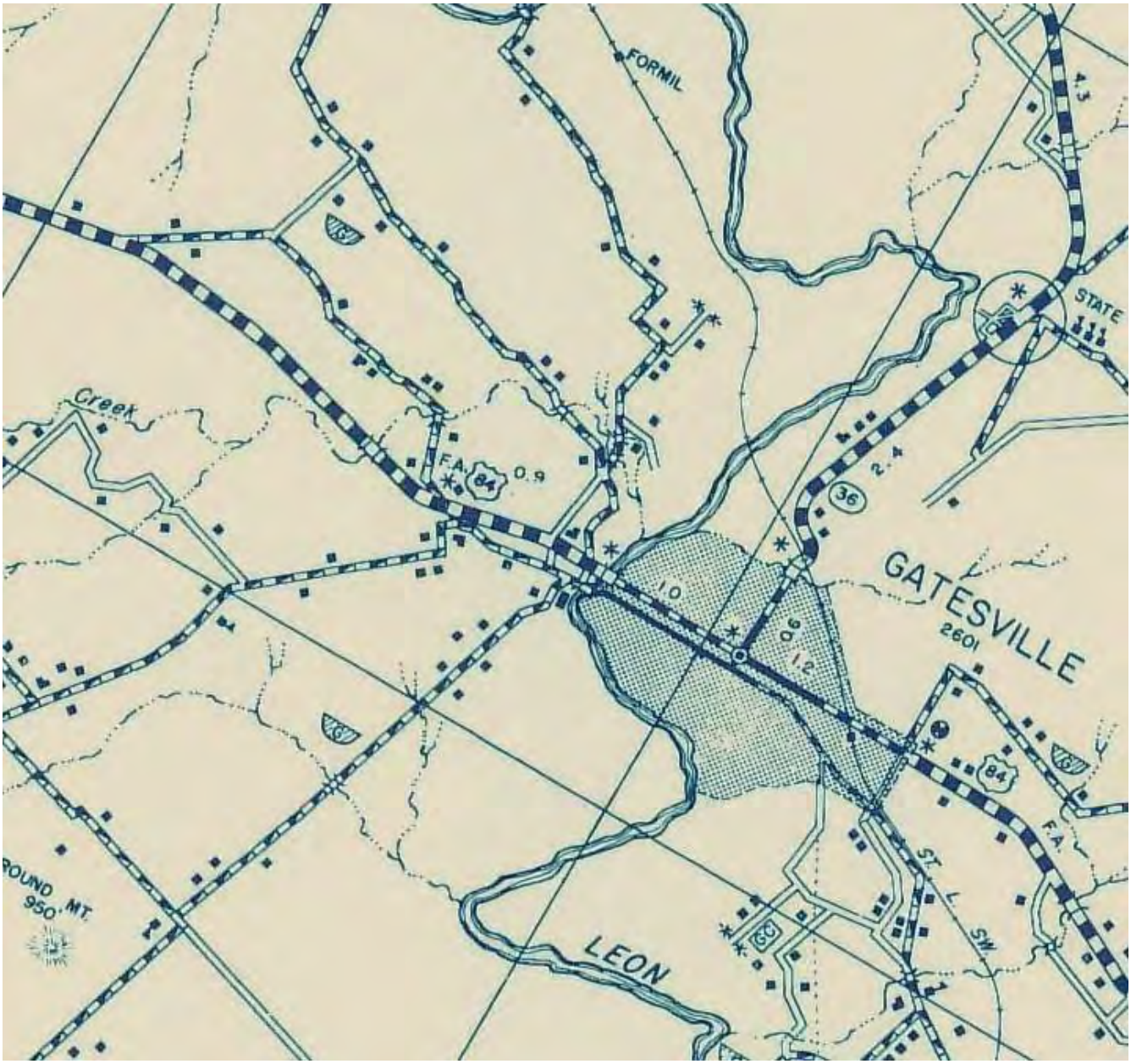
Leon Street Bridge
Gatesville, Coryell County, Texas
Lat: 31.432835°
Lon: -97.761614°

Proposed System of State Highways, 1917.



Texas State Highway Map, 1919.
State Highway 7 / Central Texas Highway (detail)

U.S. Hwy 84, Coryell County, with Leon Street running paralell to the south.
General Highway Map of Coryell County (detail), Texas Department of Transportation
No scale



N

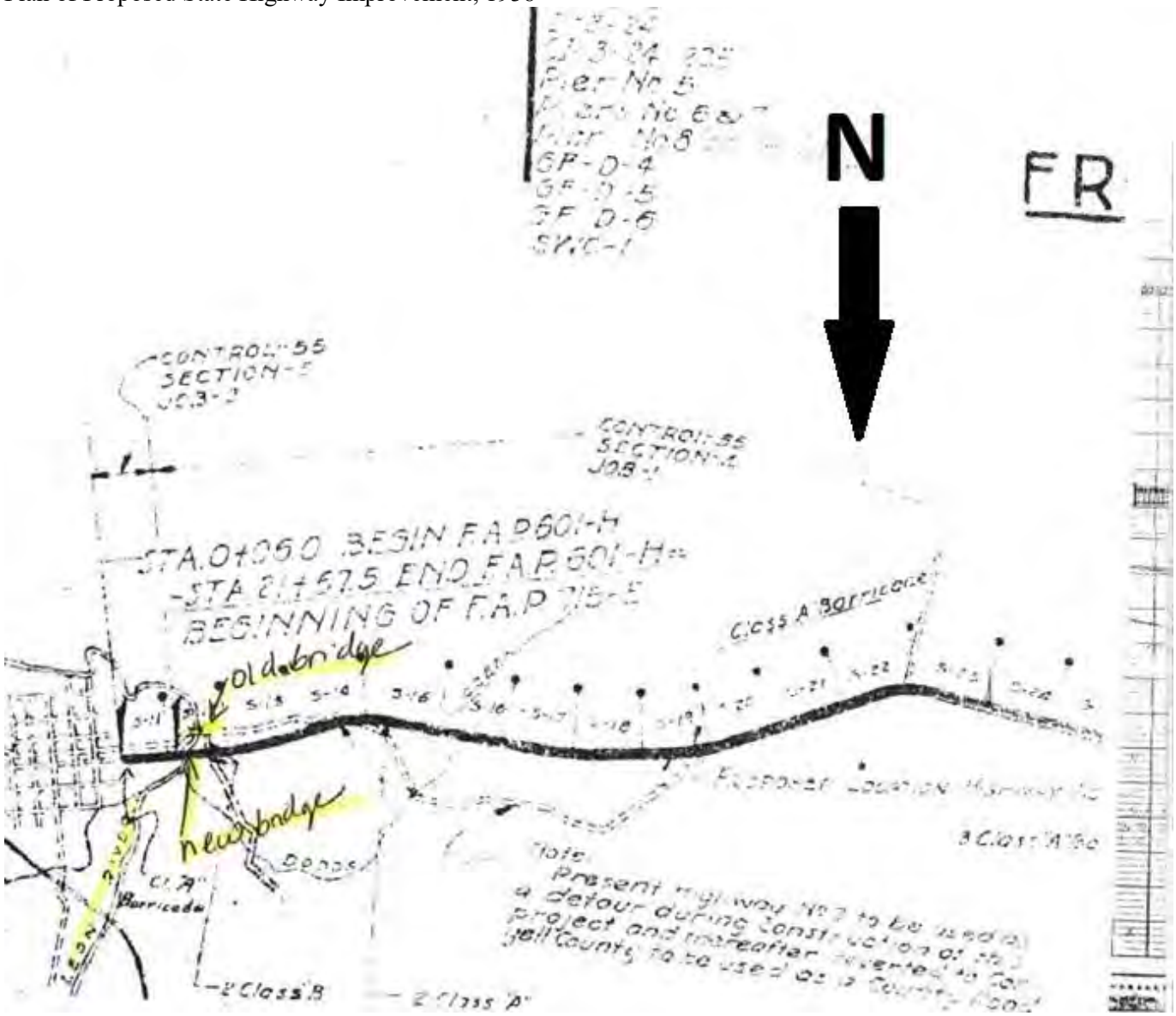
Leon Street Bridge, unknown date
Recorded Texas Histroic Landmark file, Texas Historical Commission

Postcard, Leon Street Bridge (no date).
Collection of Texas Department of Transportation

Pratt through trusses in Texas, June, 2016
Via: Warran Gannis, Texas Department of Transportation

Bridge ID	Facility Carried	Feature Crossed	Year Built
230250AA0114002	CR 114	TURKEY CREEK	1936
230420AA0294001	CR 220	COLORADO RIVER	1900
230420AA0498001	CR 139	PECAN BAYOU	1922
090500C00175001	LEON ST	LEON RI #1 GAT	1904
020730AA0270001	CR 270 - PCT 1	GREEN CREEK	1906
130760AA0189001	PIANO BRIDGE RD	EAST NAVIDAD RIVER	1900
130760AA0398005	WILLOW SPRINGS RD	CUMMINS CREEK	1910
130900AA0232002	CO RD 232	SAN MARCOS RIVER	1915
130900AA0353003	CO RD 353	PEACH CREEK	1910
010920AA0474001	ABANDONED KO&G RR	RED RIVER	1910
090980AA0296001	CR 103	WARREN CREEK # 205	1900
131430AA0102004	CR 183	SMOTHERS CREEK	1930
171660AA0355001	CR 428	SAN GABRIEL RIVER	1911
171980AA0120002	WILDCAT BRIDGE RD	LITTLE BRAZOS RIVER	1920
171980AA0125001	PROVIDENCE RD	LITTLE BRAZOS RIVER	1940
232060AA0262001	CR 204	SAN SABA RIVER	1910
082090010703012	FM 601	HUBBARD CREEK	1930
082090AA0188001	CO RD 188	CLEAR FORK BRAZOS RIVER	1900
142460AA0351003	CR 434	BRUSHY CREEK	1930

Proposed Bridge on U.S. 84 and 1904 Leon Street Bridge
Plan of Proposed State Highway Improvement, 1938

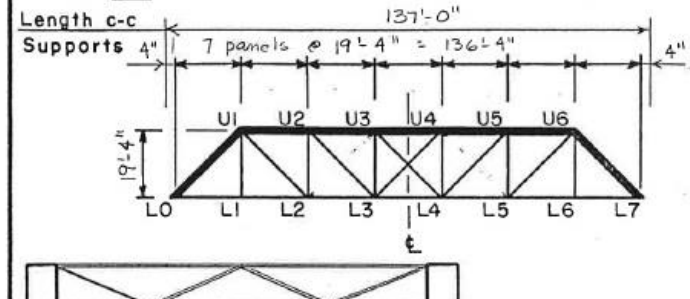


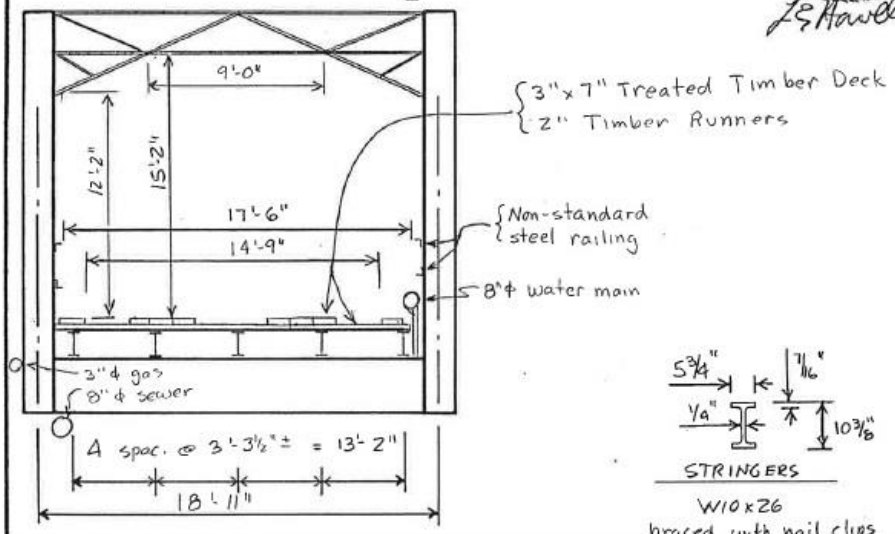
Leon River Bridge, Bridge Inventory Report, 1994

#1 GAT

District 09 County 050 Cont.-Sec. C001-75 Structure 001 Route LEON ST

SPAN 1 PRATT TRUSS (TYPE E) 7 PANELS





STRINGERS
W10x26
braced with nail clips

MEMBER	NAME	DESIGNATION	d	b_f	t_w	t_f	SKETCH	CONNECTION
BOTTOM CHORD	L3-L4	2 PL 1" x 3½						P 2¾" ( )
	L2-L3/L0-L2	2 PL 1" x 3" / 2 PL ⅞" x 2"						( )
TOP CHORD	U1-U6	2 C 8x 11.5	8"	2¼"	¼"	-		B = Bolt R = Rivet P = Pin
		PL ¼ x 12"						
END POST	L0-U1	2 C 8x 11.5	8"	2¼"	¼"	-		( ) = # of holes at critical x-section
		PL ¼ x 12"						
DIAGONALS	U1-L2	2 PL ⅞ x 2"						( )
	U2-L3	2 PL ⅝ x 2"						( )
	U3-L4	2 - ⅞" ϕ						( )
VERTICALS	U1-L1	2 PL ½ x 1¾						( )
	U2-L2/U3-L3	2 C 5x 6.7 / 2 C 4x 5.4	5¼"	1⅜" / 1⅛"	3/16"	—		( )
FLOOR BEAMS		S15x 42.9	15	5½"	7/16"	—		PE 7

© 1987 HOWELL ENGINEER & CO Sheet No. 2 of 3 Sheets

Photo 1: Standalone steel truss utility bridge with two large pipes atop concrete piers. Camera facing southwest. Photo by Rebekah Dobrasko, Texas Department of Transportation

Photo 2: Deck and Pratt truss from east portal. Camera facing west.
Photo by Rebekah Dobrasko, Texas Department of Transportation

Photo 3: Latticed side railings. Camera facing northeast.
Photo by Rebekah Dobrasko, Texas Department of Transportation

Photo 4: Pin connection. Camera facing west.
Photo by Linda Henderson, Texas Historical Commission.

Photo 5: Deck and trusses from west portal. Camera facing east.
Photo by Linda Henderson, Texas Historical Commission

Photo 6: Inclined end post on south side. Camera facing east.
Photo by Linda Henderson, Texas Historical Commission

Photo 7: Stone masonry abutment. Camera facing east.
Photo by Linda Henderson, Texas Historical Commission

Photo 8: Stone masonry walls at east portal. Camera facing south.
Photo by Linda Henderson, Texas Historical Commission

Photo 9: Floor beams and lateral bracing. Camera facing west.
Photo by Linda Henderson, Texas Historical Commission

Photo 10: Pin connection. Camera facing north.
Photo by Linda Henderson, Texas Historical Commission

Photo 11: Utility pipe. Camera facing northwest.
Photo by Linda Henderson, Texas Historical Commission

Photo 12: Deck, trusses, and latticed bracing from west portal. Camera facing east.
Photo by Linda Henderson, Texas Historical Commission

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
EVALUATION/RETURN SHEET

Requested Action:	Nomination
Property Name:	Leon Street Bridge at the Leon River
Multiple Name:	Road Infrastructure of Texas, 1866-1965 MPS
State & County:	TEXAS, Coryell

Date Received:	Date of Pending List:	Date of 16th Day:	Date of 45th Day:	Date of Weekly List:
1/13/2017			2/28/2017	3/9/2017

Reference number:	MP100000694
Nominator:	State

Reason For Review:

X Accept _____ Return _____ Reject **2/28/2017** Date

Abstract/Summary Comments:	Meets Registration Requirements
Recommendation/ Criteria	

Reviewer Edson Beall Discipline Historian

Telephone _____ Date _____

DOCUMENTATION: see attached comments : No see attached SLR : No

If a nomination is returned to the nomination authority, the nomination is no longer under consideration by the National Park Service.

TEXAS HISTORICAL COMMISSION
real places telling real stories

TO: Edson Beall
National Register of Historic Places
National Park Service
1201 Eye Street, NW (2280)
Washington, DC 20005

From: Mark Wolfe, SHPO
Texas Historical Commission

RE: Leon Street Bridge, Gatesville, Coryell County, Texas

DATE: December 28, 2016

The following materials are submitted:

X	Original National Register of Historic Places form on disk. The enclosed disk contains the true and correct copy of the National Register of Historic Places nomination for the Leon Street Bridge, Gatesville, Coryell County, Texas
	Resubmitted nomination.
X	Original NRHP signature page signed by the Texas SHPO.
	Multiple Property Documentation form on disk.
	Resubmitted form.
	Original MPDF signature page signed by the Texas SHPO.
X	CD with TIFF photograph files, KMZ files, and nomination PDF
	Correspondence

COMMENTS:

___ SHPO requests substantive review (cover letter from SHPO attached)

___ The enclosed owner objections (do__) (do not__) constitute a majority of property owners

___ Other: