PRIMARY RECORD

Primary #
HRI # 5476-0255-0000
Trinomial:
NRHP Status Code: 5S1
Resource Name or #: Watmaugh Road Bridge

Other Listings:
Review Code: **Reviewer:** **Date:**

P1. Other Identifier: Bridge 20C-0017

P2. Location: **a. County:** Sonoma
b. USGS 7.5' Quad: Sonoma **Date:** 1951 (photorevised 1980)
T 5 **N/R** 6 **W; 1/4 of 1/4 of Sec.** ; **MDBM** On boundary between the Petaluma Rancho and Pueblo Lands of Sonoma
c. Address: **City:** **Zip:**
d. UTM: Zone: 10 546700 **mE** 4235260 **mN**
e. Other Locational Information: In southeastern Sonoma County, about two miles south of the city of Sonoma. This bridge carries Watmaugh Road over Sonoma Creek.

P3a. Description:

Watmaugh Road Bridge is a three-span structure carrying Watmaugh Road over Sonoma Creek. The bridge is 170 feet long and 24 feet wide. Its main span is a 102-foot long, rigid connection Warren pony truss structure with a polygonal top chord. The approach spans are made of reinforced concrete and have cast concrete rails. Concrete abutments and piers support the superstructure and the asphalt-over-concrete deck. This bridge was designed by Sonoma County Surveyor, E.A. Peugh in 1929. The contractor was W.L. Proctor. The bridge is in its original location and has good integrity of setting. The bridge is relatively unaltered from its original design. Its original lattice guardrails have been replaced by steel beam rails.

P3b. Resource Attributes: HP19 (Bridge) **P4. Resources Present:** Structure

P5. Photograph or Drawing: **P5b. Description of Photo:** View of south elevation, facing northeast

P6. Date Constructed/Age and Sources:
1929 (county records)

P7. Owner and Address:
County of Sonoma
2550 Ventura Ave.
Santa Rosa, CA 95403

P8. Recorded by:
Tom Origer & Associates
P.O. Box 1531
Rohnert Park, CA 94927

P9. Date Recorded:
February 1999

P10. Type of Survey:
Reconnaissance

P11. Report Citation: Beard, V. 2001 Historic Property Survey Report for the Watmaugh Road at Sonoma Creek Bridge Seismic Retrofit Project, Sonoma County, California.

P12. Attachments: Building, Structure, and Object Record; Continuation Sheets (2); Location Map.

BUILDING, STRUCTURE, AND OBJECT RECORD

Primary #
HRI # 5476-0255-0000
NRHP Status Code: 5S1
Resource Name or #: Watmaugh Road Bridge

B1. Historic Name: Hopke Bridge

B2. Common Name: Watmaugh Road Bridge

B3. Original Use: Highway bridge

B4. Present Use: Highway bridge

B5. Architectural Style: Warren pony truss with polygonal top chord

B6. Construction History: Steel beam guardrails added prior to 1981 replacing steel lattice rails.

B7. Moved? No **Date:** N/A **Original Location:** N/A

B8. Related Features: None

B9a. Architect: E. A. Peugh, Sonoma County Surveyor **B9b. Builder:** W.L. Proctor

B10. Significance: **Theme:** Sonoma County's 1919 Highway Modernization Plan **Area:** Sonoma County
Period of Significance: 1919 to 1933
Property Type: Bridge
Applicable Criteria:

The Watmaugh Road Bridge is one of nineteen extant metal truss bridges in Sonoma County, and one of two remaining Warren pony truss bridges in the county. The existing truss bridges were constructed from circa 1880 to 1949 and include former railroad bridges and bridges built exclusively for wagon/automobile transportation. In 1919, a bond measure was passed by the Sonoma County Board of Supervisors, and subsequently by popular vote, funding modernization of the county road system. The proposed roads would link Sonoma, Petaluma, Valley Ford, Bodega Bay, and north to the Mendocino County Line; Santa Rosa, Sebastopol, Freestone, and Valley Ford; Healdsburg, Forestville, Guerneville, and Jenner; Healdsburg to the Napa County Line; Cotati, Sebastopol, and Forestville; and Graton and Occidental. The improvements plan included construction of several new bridges and replacement of others. Six of the existing truss bridges in Sonoma County were built under this plan. The majority of these six were completed during the nine-year period preceding 1930. Only two of the remaining truss bridges were built under the County plan during the early 1930s.

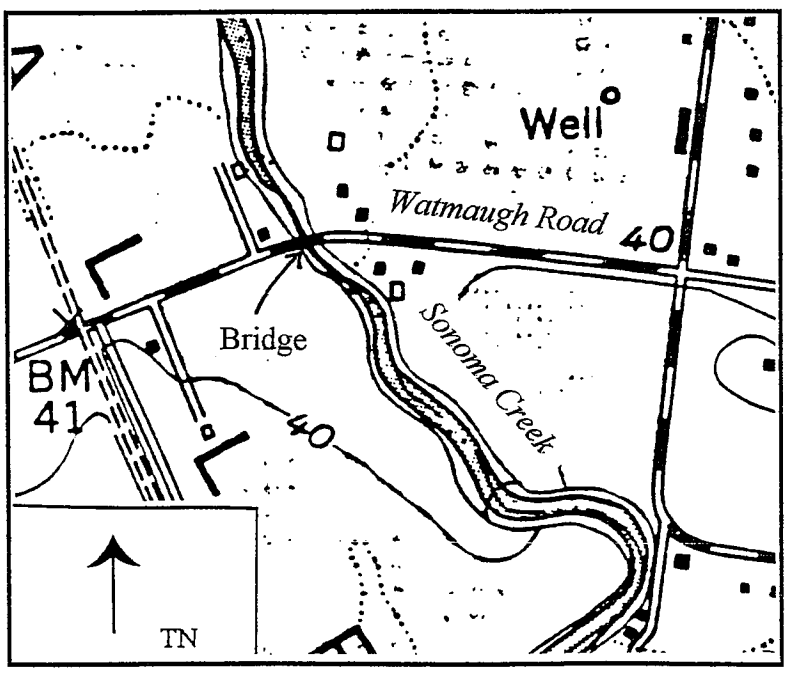
(See Continuation Sheet page 3)

B11. Additional Resource Attributes: None

B12. References:
(See Continuation Sheet page 4)

B13. Remarks:

B14. Evaluator: Vicki Beard
Date of Evaluation: January 2001



North ⇑

B10. Significance: (Continued from page 2)

During the first years of the Great Depression, the County stuck to its road projects but as the decade progressed, the County's ability to complete its projects was severely hindered. In 1933, the State took control of much of the County's road system, including portions of present-day State Highways 1, 12, 116, and 128. Nine of the extant truss bridges were constructed after that date.

The creek crossing at Watmaugh Road was a ford until the 1890s when, at the behest of local residents, the County financed construction of a wooden bridge (Sonoma County Board of Supervisors [SCBS] 1891a). The Watmaugh Road crossing provided a more direct link to the south end of Sonoma and the lower Broadway area. The contract for construction of the bridge was awarded to the King Iron Bridge Manufacturing Company in 1891 for $2,730.00 (SCBS 1891b). The County opted to replace the original bridge under the 1919 Highway Modernization Plan. New plans were drawn for a steel truss bridge by County Surveyor, E.A. Peugh in 1927, and the construction contract went to W.L. Proctor for $14,783.00 (SCBS 1929).

Events occurring in late-1970 and early-1980 demonstrate the importance of this bridge to local residents. When the County considered replacing the bridge, citizens formed the Committee for the Preservation of Watmaugh Road Bridge to prevent the replacement project arguing that "the bridge has considerable character, which can not be said of the two bridges recently constructed on Highway 121 and on Leveroni Road" (Niles 1981). Other citizens groups and the Sonoma League for Historic Preservation joined this committee in its efforts. Subsequently, the bridge was granted county landmark status in 1981 and received historic district (HD) zoning.

The Watmaugh Road Bridge was evaluated within the context of Sonoma County's Highway Modernization Plan of 1919. To be eligible for inclusion on the National Register, a property must possess integrity of location, design, setting, materials, workmanship, feeling, and association (National Park Service [NPS] 1995). If it is found to possess integrity, then one of the following criteria must be met:

A. That are associated with events that have made a significant contribution to the broad patterns of our history; or

B. That are associated with the lives of persons significant in our past; or

C. That embody the distinct characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. That have yielded or may be likely to yield, information important in prehistory or history.

Watmaugh Bridge retains a high degree of integrity in all aspects. The location, setting, and feeling are relatively unchanged, and physical alterations are limited to replacement of lattice rails with the existing metal beam rails. Therefore, its eligibility for inclusion on the National Register was considered in terms of Criterion A and Criterion C.

The Watmaugh Road Bridge is a locally important historic property associated with Sonoma County's efforts to create a modern road system during the early twentieth century; however, it was not found to be a particularly important element of the modernization plan as required under Criterion A. Moreover, this bridge is not an especially good example of a Warren truss bridge and does not meet Criterion C. The Watmaugh Road Bridge does not meet criteria for inclusion on the National Register.

B12. References: (Continued from page 2)

Archer, P. and S. Lamp
1978 Historic Resources Inventory form for Watmaugh Bridge. On file at the Northwest Information Center, Rohnert Park.

California Department of Transportation (Caltrans)
1984 Truss Bridge Rating Sheet. On file with the California Department of Transportation, District 4, Oakland.

1985 *Historic Truss Bridges in California: Request for Determination of Eligibility.* California Department of Transportation, Sacramento.

1987 *Caltrans Local Bridge Survey.* Structures Maintenance System. HSLALL, Historical Significance, Local Bridge.

1990 *Historic Highway Bridges of California.* California Department of Transportation, Sacramento.

Harris, D.
1993 Historic Resources Inventory Form for the Sonoma County Bridges Thematic District. On file with the Sonoma County Landmarks Commission, Santa Rosa.

National Park Service
1995 *How to Apply the National Register Criteria for Evaluation.* National Register Bulletin 15. U.S. Department of the Interior, Washington, D.C.

Niles, K.
1981 Letter from Kenneth Niles to Donald B. Head, Director, County of Sonoma Public Works. On file with the Sonoma County Landmarks Commission.

Peugh, E.
1929 Bridge over Sonoma Creek at Hopke Ranch. On file at Sonoma County Public Works Map Room (File No. 004038).

Reynolds W. and T. Proctor
1898 *Illustrated Atlas of Sonoma County, California.* Reynolds and Proctor, Santa Rosa.

Sonoma County Board of Supervisors
1891a Petition to the Board of Supervisors for a bridge over Sonoma Creek. Road book 4; pages 375-377.

1891b Award of contract for construction of bridge over Sonoma Creek. Petition to the Board of Supervisors for a bridge over Sonoma Creek. Road book 4; pages 382-384.

1929 Award of contract to W.L. Proctor for construction of a truss bridge on Sonoma Creek. General Minutes of the Board of Supervisors book 28; page 61.

1939 General Index to Minutes of the Board of Supervisors: 1883-1939. On file at the Sonoma County Board of Supervisors Chambers, Santa Rosa.

1998 Ordinance No. 5985. Summary ordinance to change zoning districts of property.

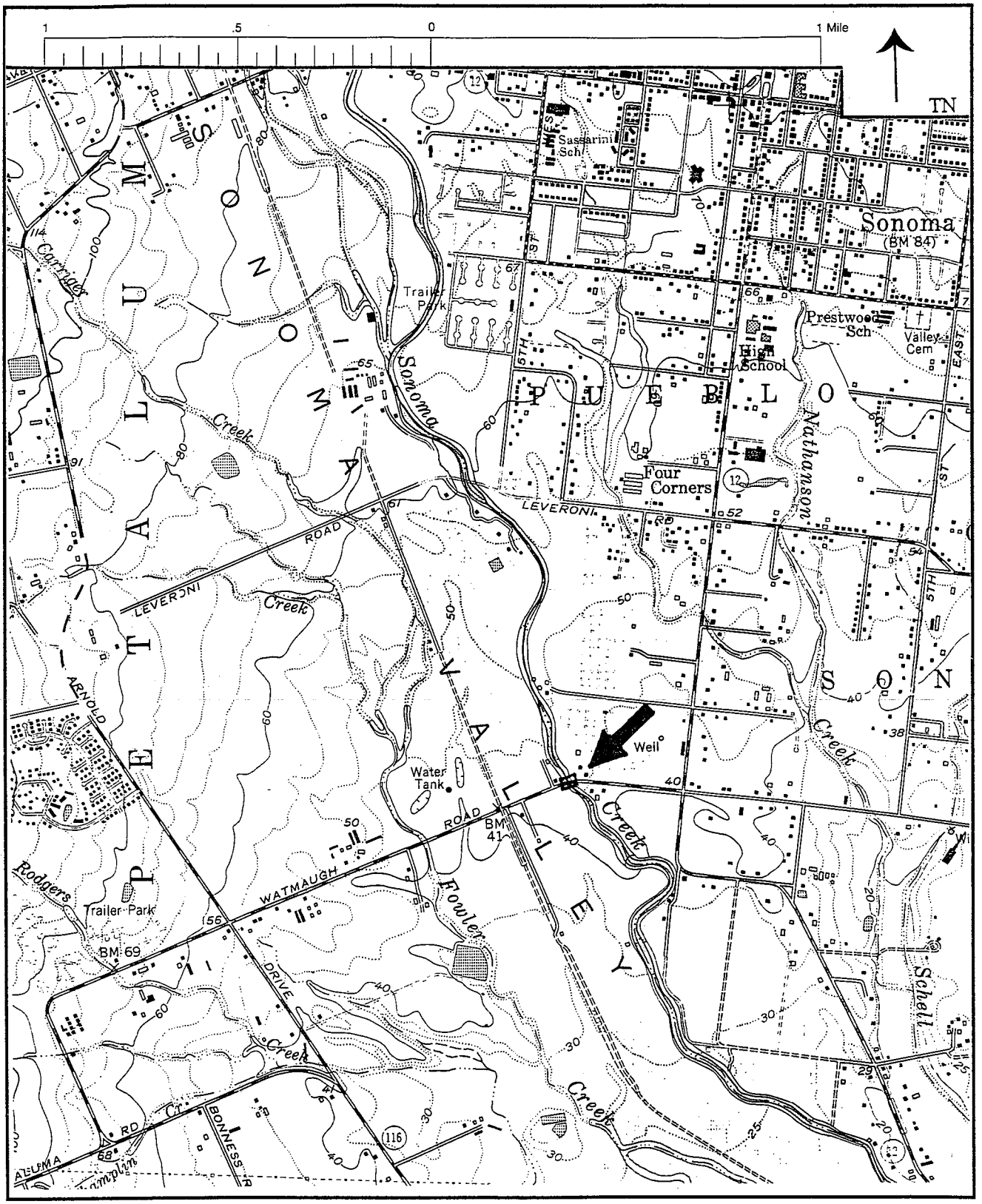
Sonoma League for Historic Preservation
1979 *Valley of the Moon, Sonoma County, California: Historic Resources Survey.* On file at the Northwest Information Center, Rohnert Park.

Thompson, T.H. & Co.
1877 Historial Atlas Map of Sonoma County, California. T.H. Thompson & Co., Oakland.

LOCATION MAP

Primary #
HRI # 5476-0255-0000
Trinomial:
Resource Name or #: Watmaugh Road Bridge
Date of Map: 1951 (Photorevised 1980)

Page 5 **of** 5
Map Name: Sonoma **Scale:** 7.5'



PRIMARY RECORD

Primary # P-49-0002867 (SUPPLEMENT)
HRI # 5476-0255-0000
Trinomial:
Other Listings:
NRHP Status Code: 3CS
Review Code: **Reviewer:** **Date:** **Resource Name or #:** Watmaugh Road Bridge

P1. **Other Identifier**: Bridge 20C-0017

P2. **Location:** Unrestricted **a. County:** Sonoma
b. USGS 7.5' Quad: Sonoma **Date:**
T N/R W; **1/4 of 1/4 of Sec.** ; **MDBM**1980
c. Address: **City:** **Zip:**
d. UTM: Zone: 10 546700 **mE** 4235260 **mN**
e. Other Locational Information:

P3a. **Description:** The Watmaugh Road Bridge is a three-span, pony truss bridge measuring 170 feet long and 24 feet wide. The main span is 102 feet long and is a steel, pony truss with a concrete deck. The superstructure is comprised of a Warren polygonal truss. Presently, the main span has steel beam guardrails, and it is flanked by reinforced concrete approach spans with cast concrete rails. The approaches measure 38 feet on the west and 29 feet on the east. The bridge is supported by concrete abutments and two concrete piers. There is no walkway or lighting.

The Watmaugh Road Bridge was designed by Sonoma County Surveyor, E.A. Peugh in 1929, and the contractor was W.L. Proctor. The bridge is situated in its original location and the surrounding area remains rural agricultural land much as it was in 1929 when the bridge was built. Its design is unaltered except for the replacement of its original steel lattice guardrails with steel beam rails. Sonoma County recognizes the importance of the bridge as a contributor to a County Historical Bridge District (Harris 1993).

P3b. **Resource Attributes:** HP19 (Bridge)

P4. **Resources Present:** Structure

P5. **Photograph or Drawing:**

P5b. **Description of Photo:** Southern truss of the Watmaugh Road Bridge.

P6. **Date Constructed/Age and Sources:**
1929 (county records)

P7. **Owner and Address:**
County of Sonoma
2550 Ventura Ave.
Santa Rosa, CA 95403

P8. **Recorded by:**
V. Beard
Tom Origer & Associates
P.O. Box 1531
Rohnert Park, CA 94927

P9. **Date Recorded:**
May 2012

P10. **Type of Survey:**
Property specific

P11. **Report Citation:** Beard, V. 2012 Letter report of findings regarding the Watmaugh Road Bridge over Sonoma Creek, Sonoma County, California.

P12. **Attachments:** Building, Structure, and Object Record; Continuation Sheets; Location Map

P3a. Description: (continued from page 1)

Figure 1. View across the bridge, facing west.

Figure 2. Cast concrete rails used on the approach.

B1. Historic Name: Hopke Bridge

B2. Common Name: Watmaugh Road Bridge

B3. Original Use: Highway bridge

B4. Present Use: Highway bridge

B5. Architectural Style: Warren pony truss with polygonal top chord

B6. Construction History: The original steel lattice rails were replaced by steel beam guardrails prior to 1981.

B7. Moved? No **Date:** NA **Original Location:** NA

B8. Related Features:

B9a. Architect: E.A. Peugh, Sonoma County Surveyor

B9b. Builder: W.L. Proctor

B10. Significance: **Theme:** Sonoma County Truss Bridges **Area:** Sonoma County
Period of Significance: 1880 to 1950
Property Type: Truss Bridge
Applicable Criteria: 1 and 3

Context Statement

In 1999, an evaluation was completed for the Watmaugh Road Bridge assessing its eligibility for inclusion on the National Register of Historic Places (Beard 1999). The bridge was considered not eligible for the National Register. That determination was guided primarily by the Caltrans bridge survey of 1987, and was based on highway bridges statewide rather than the importance of such resources at the local level. Caltrans prepared an updated bridge survey in 2004, and the Watmaugh Road Bridge continues to be listed as not eligible for the National Register (Hope 2004).

This evaluation addresses the bridge's importance *vis-a-vis* the California Register of Historical Resources eligibility criteria, and focuses on the Watmaugh Road Bridge as a locally important resource. Therefore, the historic context is expanded to the address the status of metal truss bridges in Sonoma County, not just those built under the previous context of Sonoma County's 1919 Highway Modernization Plan, and a longer period of significance is defined to capture all metal truss highway bridges in the county. (See Continuation Sheet page 4)

B11. Additional Resource Attributes:

B12. References:
See Continuation Sheet page 10

B13. Remarks:

B14. Evaluator: V. Beard
Date of Evaluation: May 2012

North ⇑

Context Statement

Sonoma County Truss Bridges

Sonoma County bridges take many forms and represent a variety of construction techniques and materials. By far the largest subset is comprised of reinforced concrete bridge, while metal truss bridges are poorly represented in the county, numbering 17 in all. There are three additional bridges in Sonoma County that technically fall into the truss category. These bridges, commonly known as "Bailey bridges," are constructed of interchangeable truss panels, and generally are considered temporary structures. The three Bailey bridges and a temporary summer crossing truss constructed in 1993 are not included in the discussion of truss bridges that follows.

Sonoma County's steel truss bridges reflect various phases of the County's development and the development of its transportation network. They also reflect technological developments affecting transportation both state and nationwide during the early twentieth century. The following table summarizes extant highway truss bridges in Sonoma County.

Time Frame	Era	Bridge	Type
Pre-1900	Railroad	Haupt Creek	Pratt through
		Big Sulphur Creek	Pratt through
1900 to 1919	Railroad	Clarks Crossing	Parker through
	Early Roads	Hacienda Bridge	Parker through
		Lambert Bridge	Parker through
1919 to 1933	County Plan	Healdsburg Bridge	PA Petit through
		Wohler Road	Parker through
		Guerneville Bridge*	Parker through
		Austin Creek/Duncans Grade	Pratt through
		Watmaugh Road	Warren pony
		Arnold Drive	Parker through
1933 to 1950	State Support	D Street Bridge (bascule)**	Warren variation
		Monte Rio Bridge	Pratt pony
		Westside Road	Pratt pony
		Crocker Road	Warren pony
		Austin Creek/Old Duncan's Grade	Pratt through
		Jimtown Bridge	Cantilever pony

* State Highway Bridge
** Funded by the City of Petaluma

On a regional scale, Caltrans (1985) prepared a context for evaluating metal truss bridges in California, and locally, historian Dennis Harris (1993) identified issues regarding metal truss bridges in Sonoma County. These documents were used as guides during this evaluation. Primary research conducted during this study adds to the body of knowledge concerning Sonoma County truss bridges, and updates information regarding these bridges.

The earliest existing metal truss bridges in Sonoma County date to the late nineteenth century and were constructed as railroad bridges. The Haupt Creek Bridge and the Big Sulphur Creek Bridge both originated as parts of a Northwest Pacific Railroad (NPR) bridge over the Russian River near Northwood. The NPR bridge had three Pratt through truss spans, each measuring 130 feet long. The Phoenix Bridge Company built the bridge using their patented Phoenix column in its construction. Caltrans' survey of state bridges found four extant Phoenix bridges, three of which are the reused spans of the Russian River NPR bridge: the fourth crosses Burger Creek in Mendocino County.

Early twentieth-century railroad bridges are also represented in Sonoma County's remaining truss bridges. The current Hacienda Bridge over the Russian River was built in 1914 (Harris 1993b), replacing a Pratt combination truss, itself having replaced a deteriorated, wooden Howe through truss structure in 1891 (Burgin 1891 reprinted in Kneiss 1956:147-151). The bridge over the Wheatfield Fork of the Gualala River at Clarks Crossing might also be a relocated railroad bridge. No records have been located regarding its construction. Caltrans estimated a construction date of 1909.

There remains one metal truss bridge in Sonoma County dating to the early phase of county road development, and it crosses Dry Creek northwest of Healdsburg. Lambert Bridge was built by the American Bridge Company and was constructed at its present location in 1915. This Parker through truss structure is the earliest truss bridge still standing in Sonoma County that was built as a roadway rather than a railway bridge

In 1919, a bond measure was passed by the Sonoma County Board of Supervisors, and subsequently by popular vote, funding modernization of the county road system. The proposed roads would link Sonoma, Petaluma, Valley Ford, Bodega Bay, and north to the Mendocino County Line; Santa Rosa, Sebastopol, Freestone, and Valley Ford; Healdsburg, Forestville, Guerneville, and Jenner; Healdsburg to the Napa County Line; Cotati, Sebastopol, and Forestville; and Graton and Occidental. The improvements plan included construction of several new bridges and replacement of others. Six of the eighteen existing truss bridges in Sonoma County were built under this plan. The majority of these six was completed during the nine-year period preceding 1930. Only two of the remaining truss bridges were built under the County plan during the early 1930s. The "D" Street Bridge in Petaluma was constructed in 1933 and it is unique in two respects. It was funded by the City of Petaluma "in conjunction with a Corps of Engineers river improvement project" (Peterson 1978:20), and it is a single-leaf bascule bridge, the only moveable truss bridge in Sonoma County.

During the first years of the Great Depression, the County stuck to its road projects but the County's ability to complete its projects was severely hindered as the decade progressed. In 1933, the State took control of much of the County's road system, including portions of present-day State Highways 1, 12, 116, and 128. Four of the extant truss bridges were constructed after that date.

Through-truss bridges of the Parker style are the best represented of the extant truss bridges in Sonoma County. Pratt-style through-truss bridges are the second most frequent type, followed by Pratt pony trusses. In 1985, when the Caltrans bridge survey was completed, Sonoma County had four Warren truss bridges, in addition to the Warren variation bascule bridge in Petaluma. Two were through trusses, which have since been demolished. The two pony truss bridges have survived. Below is a summary of the types of highway truss bridges remaining in Sonoma County.

Design	**Roadway**	**Number**
Parker	Through	6
Pratt	Through	4
Pratt	Pony	3
Warren polygonal	Pony	2
Warren variation (bascule)	Pony	1
Pennsylvania Petit	Through	1
Cantilever	Pony	1

The Truss Bridge

In the United States, truss bridges of wood date to the late 18th and early 19th centuries. In 1840, William Howe patented a bridge that incorporated both wood and iron in its design, quickly leading to trusses made exclusively of metal. Significant use of metal truss bridges in the United States began after the Civil War with the expansion of the railroad industry and the need for bridges to span ever increasing distances and carry heavier loads. Metal truss bridges were adopted for roadways during the 1870s as nation's road system grew.

A metal truss bridge is a bridge whose supporting structure consists of a network of beams in a series of triangular sections. The manner in which the triangles are formed and interact is the basis of distinction for the many types of truss bridges. Figure 3 depicts a variety of truss styles.

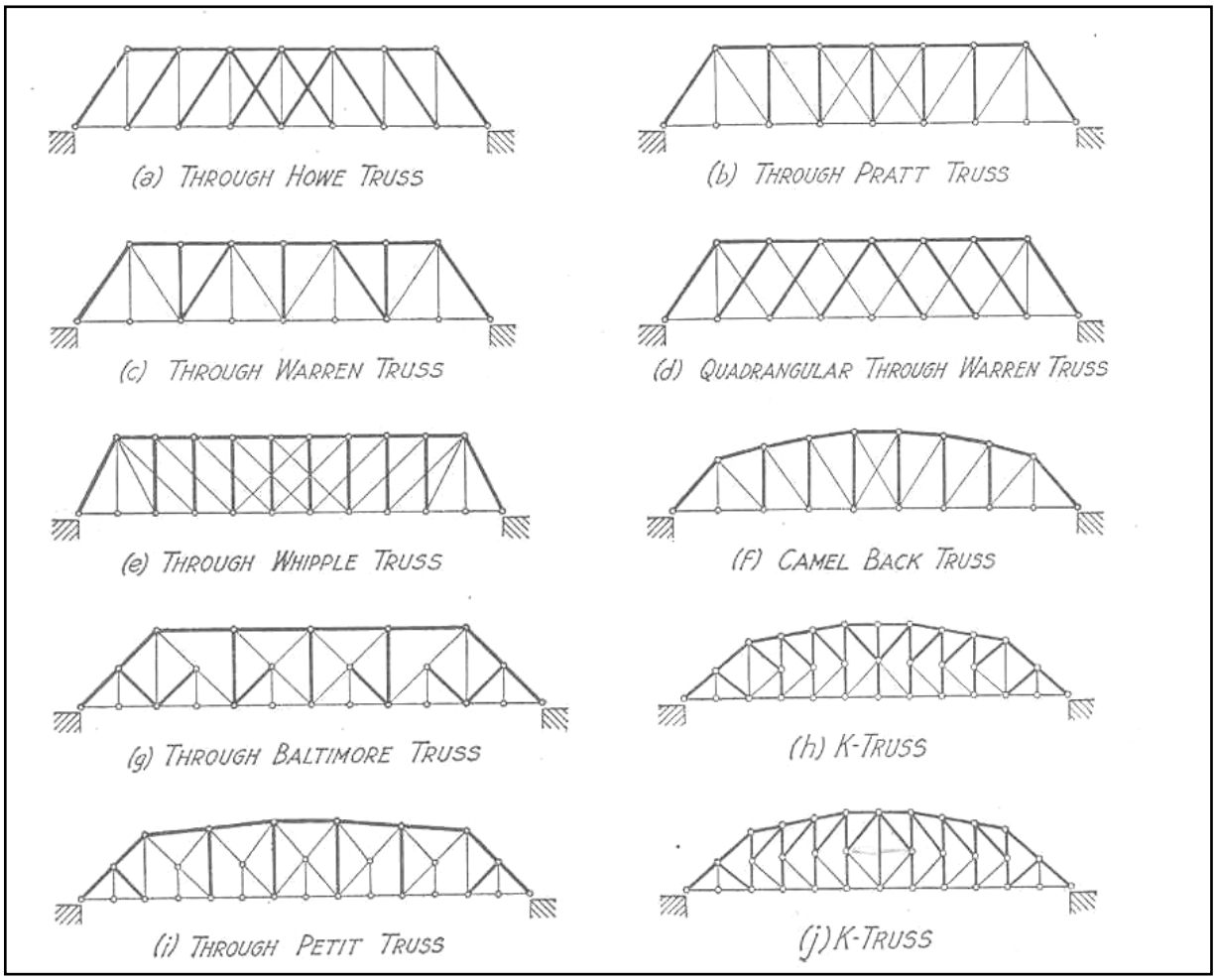


Figure 3. Common variations of truss bridges.

> The principle upon which all trusses rely is that the triangle is the strongest and most rigid geometric figure. By arranging the framework of triangles in patterns that varied from designer to designer, the structure acquired different appearances and served different purposes depending on the needs of bridge builders. The pony truss, the smallest type and ordinarily confined to lengths under 140 feet, with most under 100 feet, is distinguished by its low profile and absence of bracing above the roadway. The through truss by comparison is greater in length and height and consists of a tunnel-like structure that carries traffic through a system of overhead bracing which ties together the upper chords of the bridge [King 1993].

In 1848, James Warren and Willoughby Monzani patented a bridge design configured as repeating equilateral triangles (Figure 3c). This British-patented bridge was common in England, and pre-fabricated versions were used in British colonies (Guiss 2006). The Warren truss was a relatively light truss due to its configuration of longitudinal members joined by angled cross-members that form alternating, inverted, equilateral triangles over the length of the truss. This configuration ensures that no individual strut, beam, or tie is subject to bending or straining forces, but only to tension or compression. Loads on the diagonals alternate between compression and tension (approaching the center), with no vertical elements, while elements near the center must support both tension and compression in response to live loads. This configuration combines strength with economy of materials and can therefore be relatively light.

Truss bridges would eventually give way to the reinforced concrete bridge, the first of which was constructed in San Francisco in 1889. By the turn of the twentieth century, the concrete bridge was a dominant bridge-form nationwide. Historically, concrete bridges were most often used for smaller spans that lacked the engineering challenges presented by larger ones. Ease of design and construction made the concrete bridge especially attractive to local governments. They were usually designed by county surveyors and state engineers, and are cited by Caltrans (1990:78) as "probably the most common bridge type built on California highways."

The Watmaugh Road Bridge

The creek crossing at Watmaugh Road was a ford until the 1890s when, at the behest of local residents, the County financed construction of a wooden bridge (Sonoma County Board of Supervisors [SCBS] 1891a). The Watmaugh Road crossing provided a more direct link to the south end of Sonoma and the lower Broadway area. The contract for construction of the bridge was awarded to the King Iron Bridge Manufacturing Company in 1891 for $2,730.00 (SCBS 1891b). Under the 1919 Highway Modernization Plan, the County opted to replace the original bridge over Sonoma Creek. New plans were drawn for a steel truss bridge by County Surveyor, E.A. Peugh in 1927, and the construction contract went to W.L. Proctor for $14,783.00 (SCBS 1929).

The bridge designer, E.A. Peugh, grew up in West Sonoma County and worked on the family farm as a teenager (United States Bureau of Census [USBC] 1900). During the early 1900s, Peugh married Georgia Guerne of the Russian River lumbering family. He and Georgia stayed in West County for a while, and Edward worked as a grocery clerk in the Guerneville area (USBC 1910). By 1918, the Peugh's had moved to Santa Rosa, where Edward worked for the County as a surveyor (Ancestry.com 2005).

In 1922, Edward A. Peugh ran unopposed for the position of County Surveyor, replacing R. Press Smith, who had held the position for three years. Peugh's was the last election held for county surveyor; thereafter, it was an appointed rather than an elected position. Peugh served as County Surveyor from 1922 until his death in 1937.

Contractor, W.L. Proctor was born in Wisconsin and, like Peugh, worked on the family farm as a young man. A review of voter registration shows that, upon his arrival in California (c.1890), Proctor worked as a telegrapher operator in Bodega in 1892, and was a merchant in Marin County and San Francisco in 1896 and 1898, respectively (Ancestry.com 2011). He seems to have settled in Sonoma County at the beginning of the 1900s as census reports for 1910 through 1930 enumerate him and his family in Bodega and Santa Rosa during that time frame (USBC 1910, 1920, 1930). Proctor's name is found in association with several construction projects as early as 1917 (American Association for Highway Improvements 1917; *Domestic Engineering* 1919:42; *Municipal Engineering* 1917:222, 322).

The Watmaugh Road Bridge is a three-span, pony truss bridge measuring 170 feet long and 24 feet wide (Figure 4). The main span is 102 feet long and is a steel, pony truss with a concrete deck. The superstructure is comprised of a Warren polygonal truss. Presently, the main span has steel beam guardrails, and it is flanked by reinforced concrete approach spans with cast concrete rails. The approaches measure 38 feet on the west and 29 feet on the east. The bridge is supported by concrete abutments and two concrete piers. There is no walkway or lighting.

Statewide, Caltrans found Warren truss bridges to be numerous (Caltrans 1990); however, in Sonoma County the Watmaugh Road Bridge is one of only two remaining fixed Warren trusses. Moreover, it was one of the last bridges constructed under the County's road improvement plan of 1919. The other extant Warren truss, the Crocker Road Bridge in Cloverdale, was built in 1938. Writing in their request for a determination of eligibility for historic truss bridges, Caltrans personnel note that 1920s truss bridges are underrepresented in the nomination as it was "a slow period in the construction of truss bridges in California" (Caltrans 1985:12).

Sonoma Valley citizens consider the Watmaugh Road Bridge an important local landmarks, a fact demonstrated in the late 1970s and early 80s when a replacement bridge was under consideration. A citizens group fought to preserve the bridge, considered to have "...considerable character, which cannot be said of the two bridges recently constructed on Highway 121 and on Leveroni Road" (Niles 1981). The Committee for the Preservation of Watmaugh Road Bridge was joined in its efforts by the Sonoma League for Historic Preservation and other citizens groups, and subsequently the bridge was granted county landmark status in 1981.

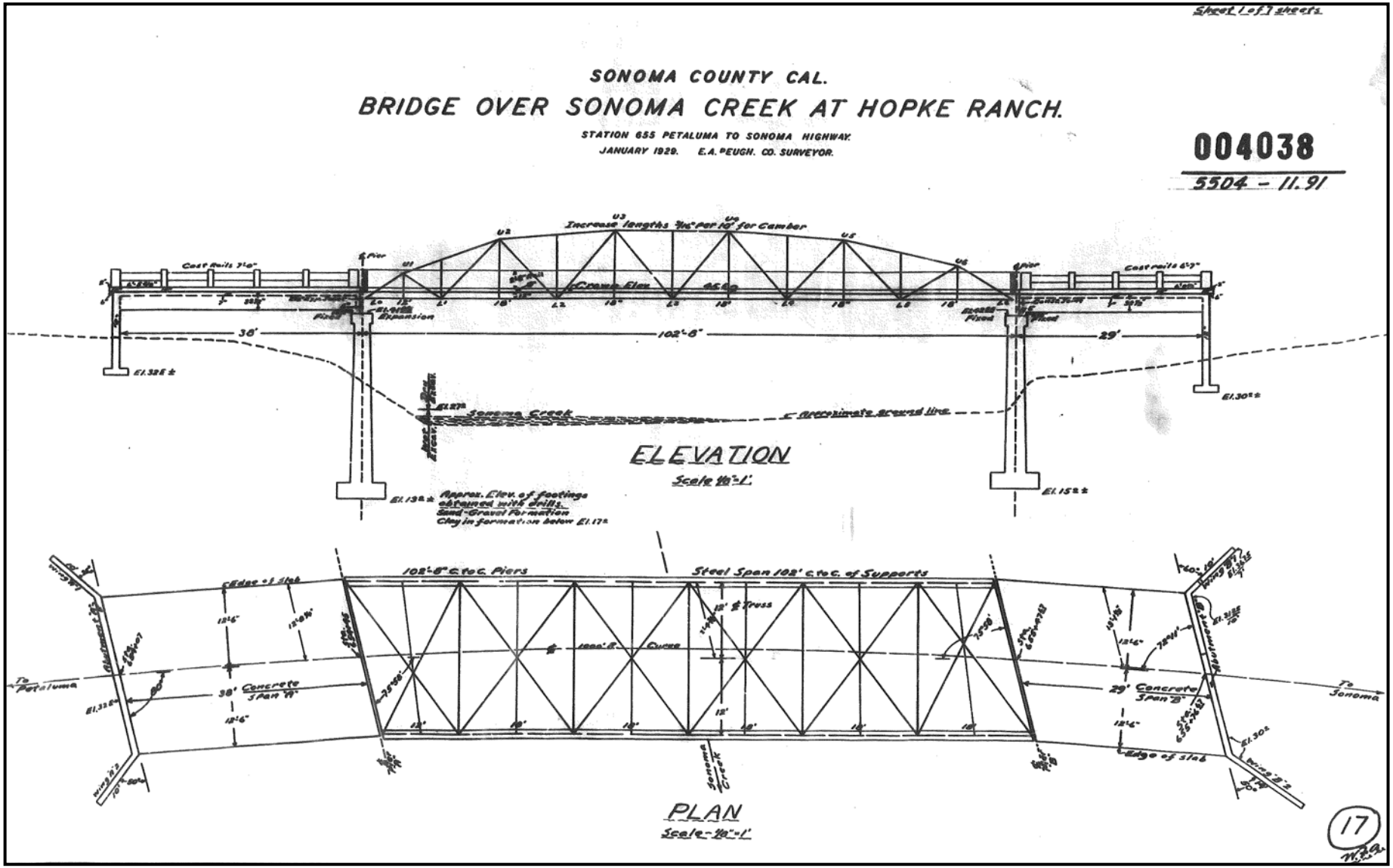


Figure 4. Original plans drawn by Edward A. Peugh.

B10. Significance: (Continued)

The following decade, Sonoma County began efforts to establish a thematic district of historic bridges. Harris (1993) summarized information from the Caltrans bridge survey and developed a context specific to Sonoma County bridges. In 1998, the Sonoma County Board of Supervisors voted to establish the district. Ten contributing bridges were rezoned as HD (historic district) properties at that time. Watmaugh Road Bridge and Calabazas Creek Bridge were previously rezoned HD properties and they are considered contributors to the district.

Statement of Significance
This building was evaluated for inclusion on the California Register of Historical Resources (California Register). Briefly, a resource eligible for the California Register is one that meets one of the following criteria.

1. Is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.

2. Is associated with the lives of persons important to local, California, or national history.

3. Embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of a master, or possesses high artistic values.

4. Has yielded, or may be likely to yield, information important to the prehistory or history of the local area, California, or the nation.

In addition to meeting one or more of the above criteria, eligibility to the California Register requires that a resource retain sufficient integrity to convey a sense of its significance or importance. As defined by the State, "Integrity is the authenticity of an historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance" (California Office of Historic Preservation 2001:11). Seven elements are considered key in considering a property's integrity: location, design, setting, materials, workmanship, feeling, and association.

The following conclusions were reached regarding the property's eligibility for the California Register as an individual resource:

Criterion 1. The Watmaugh Road Bridge is representative of a period in California's history when construction of truss bridges was in decline, and it is illustrative of a vanishing bridge form in Sonoma County. The bridge was part of a countywide highway plan approved by the county supervisors and voters in 1919 and designed to modernize the county transportation system. The bridge represents an important aspect of the area's growth and development and, in particular, the County's initial efforts to modernize its transportation system. This structure meets Criterion 1.

Criterion 2. The two individuals directly associated with the bridge were E.A. Peugh and T.L. Proctor. As the County Surveyor, Peugh was the lead designer for most of the County's infrastructure projects between 1922 and 1937. This was a common function of county surveyors/engineers during the early 20th century. Neither he nor his body of work is particularly notable. Proctor was granted many local contracts during the early to mid-part of the 20th century, many of which were in support of city and county projects, including roads, bridges, and asphalt plants. Other than his involvement in local construction projects, Proctor was not historically important and his buildings and structures are not considered notable. Because no especially important people are associated with the Watmaugh Road Bridge, Criterion 2 is not met.

Criterion 3. The Watmaugh Road Bridge is a Warren pony truss, of which there were many constructed in the United States during the late 19th and early 20th centuries. This structure is not a distinctive example of the style, but it is one of only two left in Sonoma County. Rarity of the style lends this bridge importance under Criterion 3, as it is does embody the characteristic of a type and period of construction. It is not the work of a master bridge builder. Neither Peugh nor Proctor was noted for their design or construction of bridges. This bridge was built for function rather for artist merit. This structure meets Criterion 3.

Criterion 4. This property does not meet Criterion 4. Criterion 4 generally applies to archaeological resources that could yield important analytical data relating to prehistory or history.

Integrity Issues
The Watmaugh Road Bridge retains a high degree of integrity in all aspects. The location, setting, and feeling are relatively unchanged, and physical alterations are limited to replacement of lattice rails with the existing metal beam rails.

Conclusion
The Watmaugh Road Bridge is a locally important historic property associated with Sonoma County's efforts to create a modern road system during the early twentieth century. In addition, in terms of Sonoma County's bridge inventory it is a rare type of metal truss bridge. Based on the above discussion and the retention of integrity, it appears that the Watmaugh Road Bridge is eligible for inclusion on the California Register under Criteria 1 and 3.

B12. References:

American Association for Highway Improvements
1917 *Good Roads Yearbook, 1917.* American Association for Highway Improvements, Washington, D.C.

Ancestry.com.
2005 *World War I Draft Registration Cards, 1917-1918.* <http://search.ancestry.com/iexec?htx=View&r=an&dbid=6482&iid=CA-1544406-3709&fn=Edward+Allen&ln=Peugh&st=r&ssrc=&pid=29375470>

2011 *California, Voter Registers, 1866-1898* <http://search.ancestry.com/iexec?htx=View&r=an&dbid=2221&iid=32421_237313-00117&fn=Walter+Lewis&ln=Proctor&st=r&ssrc=&pid=1904912

Archer, P. and S. Lamp
1978 Historic Resources Inventory form for Watmaugh Bridge. On file at the Northwest Information Center, Rohnert Park.

Beard, V.
1999 Primary Record for the Watmaugh Bridge. Document on file at the Northwest Information Center, Rohnert Park.

California Department of Transportation (Caltrans)
1984 Truss Bridge Rating Sheet. On file with the California Department of Transportation, District 4, Oakland.

1985 Historic Truss Bridges in California: Request for Determination of Eligibility. California Department of Transportation, Sacramento.

1987 Caltrans Local Bridge Survey. Structures Maintenance System. HSLALL, Historical Significance, Local Bridge. Historic Highway Bridges of California. California Department of Transportation, Sacramento.

Domestic Engineering
1919 *Domestic Engineering*, Vol. 89, No 1:42. Np, Chicago.

Guiss, D.
2006 The Evolution of the Warren, or Triangular, Truss. IA, The Journal of the Society for Industrial Archeology 32(2):23-40.

2009 Abstracts & Chronology of American Truss Bridge Patents, 1817-1900. Occasional Electronic Publication No. 1-2009. Society for Industrial Archeology.

Harris, D.
1993 Historic Resources Inventory Form for the Sonoma County Bridges Thematic District. On file with the Sonoma County Landmarks Commission, Santa Rosa.

Hope, A.
2004 Caltrans Statewide Historic Bridge Inventory Update: Survey and Evaluation of Common Bridge Types. California Department of Transportation, Division of Environmental Analysis, Sacramento.

King, J.
1993 Spans of Time. Planning Division, Oklahoma State Department of Transportation. <http://www.okladot.state.ok.us/hqdiv/p-r-div/spansoftime/steeltruss.htm>

Koester, F.
1913 Bridges and Bridge Approaches. The American City 8(5):467-472.

Municipal Engineering
1917a*Municipal Engineering*, Vol. 53, No. 5:54. Engineering Publishing Company, Indianapolis.

1917b*Municipal Engineering*, Vol. 53, No. 6:52. Engineering Publishing Company, Indianapolis.

National Park Service
1995 How to Apply the National Register Criteria for Evaluation. National Register Bulletin 15. U.S. Department of the Interior, Washington, D.C.

Niles, K.
1981 Letter from Kenneth Niles to Donald B. Head, Director, County of Sonoma Public Works. On file with the Sonoma County Landmarks Commission.

Peugh, E.
1929 Bridge over Sonoma Creek at Hopke Ranch. On file at Sonoma County Public Works Map Room (File No. 004038).

Reynolds W. and T. Proctor
1898 Illustrated Atlas of Sonoma County, California. Reynolds and Proctor, Santa Rosa.

Sonoma County Board of Supervisors
1891a Petition to the Board of Supervisors for a bridge over Sonoma Creek. Road book 4; pages 375-377.

1891b Award of contract for construction of bridge over Sonoma Creek. Petition to the Board of Supervisors for a bridge over Sonoma Creek. Road book 4; pages 382-384.

1929 Award of contract to W.L. Proctor for construction of a truss bridge on Sonoma Creek. General Minutes of the Board of Supervisors book 28; page 61.

1939 General Index to Minutes of the Board of Supervisors: 1883-1939. On file at the Sonoma County Board of Supervisors Chambers, Santa Rosa.

1998 Ordinance No. 5985. Summary ordinance to change zoning districts of property.

Sonoma League for Historic Preservation
1979 *Valley of the Moon, Sonoma County, California: Historic Resources Survey.* On file at the Northwest Information Center, Rohnert Park.

Thompson, T.H. & Co.
1877 Historical Atlas Map of Sonoma County, California. T.H. Thompson & Co., Oakland.

Untied States Bureau of Census
1900 Sonoma County, California. Manuscript census, population schedule.

1910 Sonoma County, California. Manuscript census, population schedule.

1920 Sonoma County, California. Manuscript census, population schedule.

1930 Sonoma County, California. Manuscript census, population schedule.

LOCATION MAP

Primary # P-49-0002867 (SUPPLEMENT)
HRI # 5476-0255-0000
Trinomial:
Resource Name or #: Watmaugh Road Bridge
Date of Map: 1980

Map Name: Sonoma **Scale:** 7.5'