

### RIO VISTA MUSEUM NEWSLETTER

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#### The Rio Vista Bridge - Part II

by Phil Pezzaglia

Editor's Note: Rio Vistans have been reminded over the past few months just how critical the Rio Vista Bridge is to both vehicular and ship traffic. In our last issue (October 2018), we recounted the early history of the bridges spanning the Sacramento by Rio Vista. We are pleased to continue the story here.

During the fifteen years from 1928 to 1943 the State of California spent \$185,000 on the Rio Vista Bridge. Unfortunately, even with all the repairs done, it still managed to end up at the top of the list of bridges that needed to be replaced. It was finally decided, in the early 1940s, that Rio Vista needed to have a new bridge constructed. Even though the existing one was less than a quarter of a century old, it needed to be replaced.

The year 1943 marked the beginning of construction on the "new" Rio Vista Bridge, a bridge that would not be formally dedicated until seventeen years later, on April 1, 1960. The company of Lord & Bishop was secured to construct the substructure of the new two-lane bridge just west of the existing Rio Vista bridge structure.

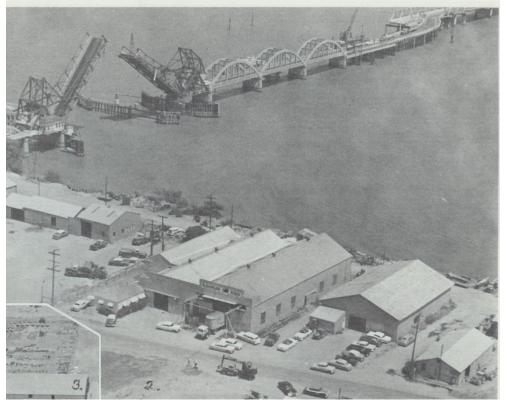
The east portion of the bridge was completed in 1945. It consisted of 1,300 feet of steel trusses, at a cost of \$960,500. From the *California Highways and Public Works* May-June 1960 edition, we find the following reference to the crossover: "In 1945, the old timber A-frame spans then in poor condition were replaced by a series of 180-foot steel truss spans on a new alignment located 60 feet upstream from and parallel to the old bridge. A crossover for traffic was constructed between the truss spans and the westerly portion of the old structure, so that from 1945 to 1960 a combination of new and old structures was used."

This plan would change when the Sacramento Deep Water Channel was being formulated in 1947.

This new and old combination of bridges was considered finished and opened to the public on January 12, 1946. From 1946 to 1960 a combination of

the old and new bridges stood side by side and were used in combination. The use of the "crossover" took advantage of using the old bridge's movable span and the new bridge's completed sections. During this time of construction, it was necessary to continue to provide a working bridge for both vehicular as well as water navigating crafts.

When the initial plans were drawn for the 1,300-foot structure in 1943-44, the location of the piers and the length of the structure were based on the existing navigational channel. This plan would change when the Sacramento Deep Water Channel was being formulated in 1947. At that time the Corps of Engineers made the request to make the centerline of the new navigational channel to be 575



Old and new bridge construction, 1958

feet to the east of the existing one. Due to this change, the crossover, which had been in use since 1946, had to be reconstructed and changes had to be made towards handling traffic issues.

The following description of the two crossovers appeared in the *California Highways and Public Works* of May/June 1960:

On crossover No. 1, one side of the existing truss span was supported on timber pile bents, and the top chord and lateral bracing supported by a strong back placed over the top chord. Five panels of the truss, along with about 180 feet of sidewalk were removed to provide adequate roadway clearance for entry to the truss roadway.

After completion of the new lift span and timber fenders, crossover No. 2 was constructed. This involved entry through the side of an existing concrete tied-arch span. Several hangers between the arch and roadway were removed, and pile bents and steel needle beams placed to support the roadway.

Upon completion of crossover No. 2, traffic was routed over it and crossover No. 1 was removed. This allowed for removal of the easterly portion of the old structure, routing of water traffic through the new lift span, and completion of the new truss over the old navigable channel.

Due to the shortage of steel because of the war effort, as well as funding issues, work on the bridge came to a halt, with this portion of the bridge completed at a cost of \$730,000.

The U.S. Corps of Engineers gave approval for the construction of the final portion of the bridge on February 2, 1950. However, money for this phase was not made available and it would be more than a decade before work was resumed on the "new" Rio Vista Bridge.

In 1957, Judson Pacific-Murphy, of Yuba Consolidated Industries, Inc., was awarded the contract to construct the remaining section of the Rio Vista Bridge. The contract was for the reinforced concrete and construction of the structural steel bridge. A bid of \$2,146,870, with a completion date of June 1960 (550 working days) was accepted.

This new portion was approximately 1,150 feet long and extended westerly from the section of truss spans constructed in 1945. Two separate contracts were issued for the construction of the westerly section of the bridge, one for the substructure and one for the superstructure.

Included in the superstructure contract was the construction of an approach structure located immediately west of the west abutment consisting of 441 feet of continuous slab.

The cost of the substructure totaled \$960,000, while the superstructure, which included the slab approach on the west end amounted to \$2,410,000. Work on the substructure commenced on April 2, 1957, and this phase was completed on October 30, 1958. This new construction featured a 26-foot roadway with a four-foot sidewalk on each side. The vertical clearance for vehicles, in the truss spans, was 15 feet.

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The superstructure consisted of 1,150 feet of steel truss spans, designed to look like those used in 1945, however utilizing the latest features and methods wherever possible.

Work officially started on the superstructure on April 24, 1958, when the order was place for the structural steel. On December 4, 1958 work was started on the erecting of the east tower, with the west following shortly thereafter. To erect the steel structure, a steam-operated floating tower derrick crane was brought into service. This crane had the ability to lift 100-ton loads up to a height of 205 feet above water elevation.

Most of the tower sections and truss units were assembled at the contractor's yard in Richmond, California, and then shipped to Rio Vista, by barge, in pre-assembled sections. These sections were then put in place using the crane and a lot of manpower.

Long hours and many days passed during the construction of the remaining half of the bridge, but the people of Rio Vista were more than willing to wait, knowing that the long-awaited outcome would be an attraction that would be synonymous with Rio Vista.

The completed bridge was a true testament to keeping a dream alive. It may have taken nearly twenty years to be completed, but as the majority would say, it was well worth the wait. In fact, the Rio Vista Bridge was given the

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Rio Vista Bridge today. Photo courtesy of Gregory Mitchell/Rubridgeman

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Steel Institute's Award for the "Most Beautiful Movable Steel Bridge" completed in 1959.

The "new" Rio Vista Bridge was officially opened to traffic on April 1, 1960. The Rio Vista Chamber of Commerce sponsored the opening ceremonies, which featured Lieutenant Governor Glenn M. Anderson, Senator Luther E. Gibson of Solano County, and T. F. Bagshaw, Assistant Director of Public Works.

In 1998, the Rio Vista Bridge was officially designated the Helen Madere Memorial Bridge after Helen Madere, a former vice-mayor of Rio Vista who served as that city's representative to the Solano Transportation Authority.

Editor's note: when you visit the museum, be sure to see the piece of the bridge that was hit by the freighter Ilice in the fog in 1967.

#### 10<sup>th</sup> Annual Old Tyme Christmas Faire Continues a Fine Tradition

Thank you to ALL who made this year's Christmas Faire so successful. So much goes into this type of event: decorating the museum for the season, soliciting the many talented vendor craftspeople, finding ways to fit those vendor tables into our crowded, wonderful museum space, getting the word out in local papers and with posters in businesses, running our popular bake sale, selling raffle tickets, and, or course, cleaning up afterwards. This year, the Craft Faire was expanded to include Friday evening, and the response was enthusiastic.

Thank you Nora Crane for organizing this delightful event and to all who helped. A special thanks to our vendors who donated items for the raffle, to all who baked items, and to all who bought them.

## Bob Benedetti to Speak at Annual Membership Meeting Monday, January 28, 2019 6:30 p.m.

Come to the museum to enjoy a program of historical interest and to elect the 2019 officers and board members.

This year we are pleased to welcome Bob Benedetti, research associate at the Center for California Studies, CSU Sacramento and University of the Pacific Emeritus. The title of Bob's presentation is Ethnic Enclaves in the Sacramento Delta 1850–1950. He draws on his work as co-director of the Delta Narratives project which generated the foundations for a history of the Delta region. It was sponsored by the Delta Protection Commission and the report is on their website. Bob is currently working on an anthology of Delta writings from the 18<sup>th</sup> through the 21<sup>st</sup> centuries.

#### 2019 Museum Dues

Please return your dues in the enclosed envelope or bring it with you to the Annual Meeting. Remember, the museum depends on these funds.

# More Film Screenings Planned

When Rio Vista's Third Thursday activities resume this spring, look for more films to be screened at the museum, complete with popcorn. After successful showings of "The Volga Boatman" and the popular film "The McCullochs," we are looking for more films with a Rio Vista connection for the viewing pleasure of our museum visitors. If you have suggestions, please let us know. "Howard the Duck," anyone?



Museum visitors enjoying "The McCullochs" during October's Third Thursday