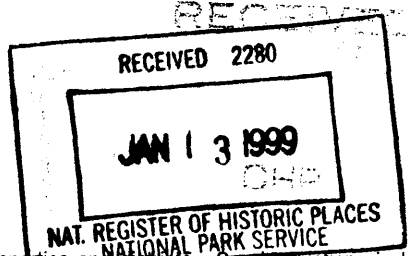


United States Department of the Interior  
National Park Service



# National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in How to Complete the National Register of Historic Places Registration Form (National Register Bulletin 16A). Complete each item by marking "X" in the appropriate box or by entering the information requested. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

## 1. Name of Property

historic name Reinforced Concrete Bridge to Carry Georgia Street over University Avenue and Concrete Walls and Rails for University Avenue

other names/site number Georgia Street Bridge/Caltrans Bridge I.D. # 57C-418 (preferred)

## 2. Location

street & number Georgia Street and University Avenue/between Florida Street and Park Boulevard

city or town San Diego

N/A not for publication  
N/A vicinity

state California code CA county San Diego code 073 zip code 92103

## 3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1986, as amended, I hereby certify that this X 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 X meets \_\_\_ does not meet the National Register Criteria. I recommend that this property be considered significant \_\_\_ nationally \_\_\_ statewide X locally. ( \_\_\_ See continuation sheet for additional comments.)

David Ahoyta  
Signature and title of certifying official/title

December 28, 1998  
Date

State Historic Preservation Officer

State or Federal agency and bureau

In my opinion, the property \_\_\_ meets \_\_\_ does not meet the National Register criteria. ( \_\_\_ See continuation sheet for additional comments.)

Signature of certifying official/title

Date

State or Federal agency and bureau

## 4. National Park Certification

I hereby certify that the property is:

- entered in the National Register.  
\_\_\_ See continuation sheet.
- determined eligible for the National Register.  
\_\_\_ See continuation sheet.
- determined not eligible for the National Register.
- removed from the National Register.
- other, (explain): \_\_\_\_\_

[Signature]  
Signature of the Keeper  
Jason H. Beall

Date of Action

2.12.99

Georgia Street Bridge and University Avenue Grade Cut Separation Retaining Walls  
San Diego, CA

**5. Classification**

Ownership of Property (Check as many boxes as apply)

- private  
 public-local  
 public-State  
 public-Federal

Category of Property (Check one box)

- building(s)  
 district  
 structure  
 object

Number of Resources within Property

Contributing	Noncontributing
_____	_____ buildings
_____	_____ sites
1	_____ structures
_____	_____ objects
1	0 Total

Name of related multiple property listing  
(Enter "N/A" if property is not part of a multiple  
property listing.)

N / A

Number of contributing resources previously  
listed in the National Register 0

**6. Function or Use**

Historic Functions (Enter categories from instructions)

Cat: Transportation

Sub: Road-Related : vehicular bridge and paved grade separation

Rail-Related: electric streetcar line grade separation

Pedestrian-Related: sidewalks along bridge and grade separation

Public Works: municipal vehicular bridge and grade separation

constructed for public use

Government

Current Functions (Enter Categories from instructions)

Cat: Transportation

Sub: Road-Related: vehicular bridge and paved grade separation

Pedestrian-Related: sidewalks along bridge and grade separation

**7. Description**

Architectural Classification (Enter categories from instructions)

Cat: Other

Sub: Three-hinged Reinforced Concrete Open Spandrel Arch Bridge

Reinforced Concrete Blind Arcade Retaining Wall and Railings

Asphalt-Covered Poured Concrete Grade Separation Roadway

Materials:

Bridge: Concrete  
Asphalt

Walls: Concrete  
Gunitite

Roadway: Asphalt  
Concrete

Sidewalks: Concrete

**Narrative Description**

(Describe the historic and current condition of the property on one or more continuation sheets.)

❖ See attached Continuation Sheets

Georgia Street Bridge and University Avenue Grade Cut Separation Retaining Walls  
San Diego, CA

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**8. Statement of Significance**

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**Applicable National Register Criteria**

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- 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.
- 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**

(Mark "x" in all the boxes that apply.)

Property is:

- A** owned by a religious institution or used for religious purposes.
- B** removed from its original location.
- C** a birthplace or grave.
- D** a cemetery.
- E** a reconstructed building, object, or structure.
- F** a commemorative property.
- G** less than 50 years of age or achieved significance within the past 50 years.

**Narrative Statement of Significance**

(Explain the significance of the property on one or more continuation sheets.)

❖ See attached Continuation Sheets

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**9. Major Bibliographical References**

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**Bibliography**

(Cite the books, articles, and other sources used on one or more continuation sheets.)

❖ See attached Continuation Sheets

**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  
# \_\_\_\_\_

**Areas of Significance**

Engineering

Transportation

Architecture

**Period of Significance**

1914-1949

**Significant Dates**

1914

**Significant Persons**

N/A

**Builder**

Edward T. Hale

**Architect (Designer)**

James R. Comly, C.E.

**Cultural Affiliation**

N/A

**Primary location of additional data:**

- State Historic Preservation Office
- Other State Agency
- Federal Agency
- Local government
- University
- Other

**Name of repository:**

City of San Diego  
Dept. of Long-Range Planning  
202 C Street  
San Diego, CA 92101

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Georgia Street Bridge and University Avenue Grade Separation Cut Retaining Walls  
San Diego, CA

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**10. Geographical Data**

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Acreeage of Property Less than 1 acre

**UTM References**

(Place additional UTM references on a continuation sheet.)

1 11 486460 3623225  
Zone Easting Northing

2 \_\_\_\_\_  
Zone Easting Northing

3 \_\_\_\_\_  
Zone Easting Northing

4 \_\_\_\_\_  
Zone Easting Northing

**Verbal Boundary Description**

(Describe the boundaries of the property on a continuation sheet.)

❖ See Attached Continuation Sheets.

**Boundary Justification**

(Explain why the boundaries were selected on a continuation sheet.)

❖ See Attached Continuation Sheets.

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**11. Form Prepared By**

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name/title Alexander D. Bevil

organization University Heights Historical Society date June 5, 1998

street and number 4752 Mt. Longs Drive telephone 619-569-1486

city or town San Diego state CA zip code 92117

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**Additional Documentation**

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(Submit the following items with the completed form.)

**Continuation Sheets**

❖ See attached Continuation Sheets

**Maps**

A USGS map (7.5 or 15 minute series) indicating the property's location.

A sketch map showing the boundaries of the property, footprints and locations of all counted resources, and an indication of important landscape resources. Please make sure to provide a scale and north arrow.

**Photographs**

Two sets of black and white photographs representative of the property.

❖ See attached Continuation Sheets

Additional items (Check with the SHPO or FPO for any additional items.)

Two copies of the completed National Register form.

One to five color slides picturing the major elevation(s) and significant features of the property.

Names and complete mailing addresses of all fee simple owners of the property.

❖ See attached Continuation Sheets

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Georgia Street Bridge and University Avenue Grade Separation Cut Retaining Walls  
San Diego County, CA

NARRATIVE DESCRIPTION

Located between the San Diego communities of Uptown and Greater North Park, the Georgia Street Bridge is situated in a moderately dense commercial/residential district. Completed in 1914, the bridge and its flanking retaining walls represent a unique design solution to a difficult engineering problem. Besides supporting the concrete roadway carrying Georgia Street across the University Avenue Grade Separation Cut, the bridge's thick reinforced concrete ribbed arches have the Herculean task of preventing the cut's reinforced concrete walls from collapsing upon the roadway below. Rising some 50 feet above University Avenue, the open-spandrel arch bridge serves a monumental and artistic gateway between the communities east and west of the historic University Avenue Grade Separation Cut. During the bridge's period of historic significance, 1914-1948, the east and westbound tracks of the San Diego Electric Railway's East San Diego Line traveled under the bridge along University Avenue. With the line's discontinuance in 1949, the City merely covered over the tracks with a layer of concrete and asphalt. During this time the bridge also featured an open balustrade along the upper deck railing and those of the twin retaining walls. However, these were filled in sometime after 1947, perhaps due to safety reasons. Other alterations include the application of a gunite-like coating over the bridge and retaining walls' entire surfaces. This was done to cover up areas of splayed concrete and exposed steel reinforcing rods (a problem that continues today). Also missing are two pairs of Arts and Crafts-style concrete lampposts that used to be mounted on either end of the upper deck's railing. "Ghost" marks in the concrete reveal their former location. Despite these alterations, the bridge and retaining walls still retain all seven aspects of their original historic aspects of location, setting, design, materials, workmanship, feeling, and association.

Structurally, the Georgia Street Bridge comprises three interrelated structures. The first is an open-spandrel single-span reinforced concrete ribbed arch bridge. Its primary purpose is to support the asphalt-covered reinforced concrete deck carrying Georgia Street across the University Avenue Grade Separation Cut. The second and third structures are a pair of flanking twin reinforced concrete retaining walls. These keep the cut from collapsing upon the roadway between Park Boulevard and Florida Street. The bridge's 69-foot long by 30-foot wide deck permits two lanes of automobile traffic to cross the cut.<sup>1</sup> Cantilevered sidewalks extending some 5 feet laterally beyond the roadway allow pedestrians to use the bridge to travel between two moderately built-up residential districts along Georgia Street. Solid reinforced concrete closed panel railings protect those walking along the sidewalks from falling into the roadway below. Historic blueprints and photographs indicate that the railings once featured an open arch balustrade, with separate balusters lined up between modified-Doric-style piers similar to those found on other contemporary monumental style bridges built throughout the nation. However, sometime after the late 1940s, perhaps for safety reasons, they were filled in with concrete.<sup>2</sup>

The bridge's most distinguishing design feature is a set of three parabolic reinforced concrete ribbed arches beneath the roadway deck. Hinged at either end and at mid-span, the thick concrete arches support a series of columns that are joined at the top by smaller semi-circular spandrel arches. The ribs and arches support the roadway's concrete deck above. Rising at a point some 8 feet above a concrete sidewalk on either side of University Avenue, the base of the ribs travel upward in a symmetrical parabolic curve to a point some 30 feet above the roadway at mid-span.<sup>3</sup> Viewed from a distance, the bridge's thick ribbed arches, open-spandrel arched arcade, as well as the roadway's closed rail deck above, combine to give it its monumental appearance.

The Georgia Street Bridge also appears to be the only thing keeping the twin reinforced concrete retaining walls flanking either side of the University Avenue Grade Separation Cut from crashing down upon the roadway below. Each wall runs approximately

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Georgia Street Bridge and University Avenue Grade Separation Cut Retaining Walls  
San Diego County, CA

### Narrative Description (Continued)

680 feet between Park Boulevard and Florida Street along the respective north and south perimeters of University Avenue's 80-foot wide asphalt-covered roadway. The truncated parabolic walls range in height from approximately 1 foot at either end to 34 feet where it reaches the Georgia Street Bridge.<sup>4</sup> Adding stability and strength to the wall's surface are a series of engaged pilasters running at 10-foot intervals along the wall's surface. Except for three sections on either end, semi-circular arches connect the pilasters' crowns, forming a blind arcade. The pattern of the blind arcade's semi-circular arches mimics those of the bridge. Also, like the bridge, the retaining walls feature a closed panel railing along its upper edges. Again, like the bridge, these once featured an open balustrade.

Three small but interesting features also adorn the reinforced concrete wall's surface. The first are two pairs of metal eyebolts. Once used to anchor electric trolley wires suspended above the roadway, each eyebolt is affixed near the top of the wall approximately 8 feet west of the wall/bridge junction, and an equal distance east of the same junction.<sup>5</sup> During the bridge's period of historic significance, the trolley wires provided electricity to streetcars traveling through the University Avenue Grade Separation Cut. The streetcars were an important factor in the growth of a number of "streetcar suburbs" that developed east of the cut along University Avenue between 1914 and 1948. With the discontinuance of streetcar service throughout San Diego in 1949, city crews merely covered over the tracks with a layer of concrete and asphalt.<sup>6</sup>

The second feature is a small bronze plaque beneath the southeast corner parabolic rib/wall junction at eye-level above the sidewalk. Dating from the time of the bridge's completion in 1914, the plaque commemorates the work of its designing engineer, James R. Comly and builder, Edward T. Hale. Directly below the plaque is the third and final feature: a brass U. S. Geodetic Survey Benchmark installed in 1927.

In addition to the filling in of the railings, alterations include the coating of the bridge and retaining walls with a spray coating of *gunite*. A dry mix of sand and cement mixed and shot by compressed air through a "cement gun," as it hit the concrete surface, the *gunite* impinged with considerable force, ejecting any surplus water. As a result, a dense mortar was produced much stronger than hand-placed mortar of similar composition. Introduced as early as 1914, this technique was used to line tunnels, for the encasement of structural steel, and, in the case of the Georgia Street Bridge and University Avenue Grade Separation Cut, for building repair.<sup>7</sup> Although the *Gunite* obscures the original surface texture, it is still a concrete-like material, and, with considerable cost and effort, can still be removed.

Other alterations to the bridge include the removal of four 4'6"-tall elephantine columned globe light fixtures from the rail ends at the north and south approaches. Photographic evidence indicates that the lampposts survived well into the late-1940s.<sup>8</sup> Rusted "ghost" marks of the steel bolts that held them in place still reveal their former location. Armed with this information, there is enough additional photographic and archival documentation available to facilitate their replication.

Despite these alterations, the bridge and retaining walls still retain their historic integrity. They still reflect their original location, setting, and association with the historic gateway to San Diego's early streetcar suburbs. The bridge's design, original construction materials, and workmanship contribute to the feeling of a particular period in San Diego's development as it sought to provide a monumental gateway to a burgeoning early 20th century suburban district.

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Georgia Street Bridge and University Avenue Grade Separation Cut Retaining Walls  
San Diego County, CA

### Narrative Description (Continued)

### Endnotes

<sup>1</sup> California Department of Transportation, Arch Bridge Rating Sheet for Bridge No. 57C-418 [Georgia Street/University Avenue Separation], Sacramento, 8 May 1986, n.p.

<sup>2</sup> "Street Overpass Being Repaired," San Diego Union, 13 May 1947, B1.

<sup>3</sup> City of San Diego, Engineering Department, "Reinforced Concrete Bridge to Carry Georgia Street over University Avenue," document no. D5220 [microfilm], December 1912.

<sup>4</sup> City of San Diego, Engineering Department, "Concrete Walls & Rails for University Avenue," document no. D5220-1 [microfilm], December 1912.

<sup>5</sup> Harre W. Demoro, Interurbans Special 100: California's Electric Railways (Glendale, California: Interurban Press, 1986), 192.

<sup>6</sup> Dodge, Richard V., Rails of the Silvergate: the Spreckels San Diego Empire (San Marino: Golden West Books, 1960), 114 and 131.

<sup>7</sup> Alan W. Pense and Roger G. Slutter, Engineering Materials, vol. 9, Colliers Encyclopedia CD-ROM, 02-28-1996. Obtained from Electronic Library, <http://3.elibrary.com>.

<sup>8</sup> "Reinforced Bridge to Carry Georgia Street over University Avenue;" "Street Overpass Being Repaired," San Diego Union, 13 May 1947, 1; and "Concrete Walls & Rails for University Avenue," 1912.

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Georgia Street Bridge and University Avenue Grade Separation Cut Retaining Walls  
San Diego County, CA

### NARRATIVE STATEMENT of SIGNIFICANCE (continued)

#### NARRATIVE STATEMENT OF SIGNIFICANCE

##### Statement of Significance

The historic gateway between Uptown San Diego and the Greater North Park area, the Georgia Street Bridge and its adjoining retaining walls is one of the finest surviving early 20th century examples of reinforced concrete bridge construction unique to the state of California. It is historically significant under Criterion A as part of a cooperative public works effort between the local municipal government and a private street railway company to providing improved electric streetcar and automobile transportation through the University Avenue Grade Separation Cut. From the time of its completion in 1914 until the cessation of streetcar service in 1949, the bridge, and especially the widened roadway below, was directly responsible for the continued growth and development of several of San Diego's burgeoning "streetcar suburbs." Designed by city engineer James R. Comly, the open-spandrel arched bridge, with its flanking blind-arcade reinforced concrete retaining walls, is also significant under Criterion C as the work of a master designer that embodies the distinctive characteristics of a type, period and method of construction. In the best spirit of the City Beautiful Movement, the monolithic bridge appears to hold open the University Avenue Grade Separation Cut, thereby providing an axial alignment between the communities of Uptown San Diego and Greater North Park. The bridge's reinforced concrete construction, with its graceful three-hinged ribbed arches anchored deep in the opposing embankments, also possesses historical significance for its design and engineering. Its reinforced concrete construction reflects the growing national trend among municipalities toward the material's use for its strength, durability, and monumentally aesthetic design possibilities. However, it is characteristic of the majority of California's early "home-grown," reinforced concrete bridges. Designed and built by technically innovative California civil engineers, they used local materials to collectively develop a comprehensive bridge design aesthetically unique to the state. Although the electric streetcars no longer pass under it, the Georgia Street Bridge still serves as a monumental and artistic gateway between the modern communities of Uptown San Diego and the Greater North Park area.

##### Historical Background

Donald C. Jackson, writing in his book, Great American Bridges and Dams, describes bridges as helping to define the built landscape by literally and symbolically bridging the past to the present.<sup>1</sup> Likewise, the Georgia Street Bridge does more than just carry traffic over the University Avenue Grade Separation Cut. Designed by noted San Diego city engineer James R. Comly in 1914, the bridge's unique, reinforced-concrete parabolic arches combine to form an historical as well as a symbolic gateway to some of San Diego's earliest 20th century streetcar suburbs.

The present Georgia Street Bridge is not the first to carry Georgia Street over University Avenue. In 1907 the City of San Diego initiated the construction of a smaller wooden bridge to allow street and pedestrian traffic to cross over the newly dug University Avenue Grade Separation Cut. Cut between Park Boulevard and Florida Street, the grade separation cut passed through a steep escarpment overlooking Florida Canyon to the east. Because of the cut's narrow width, there wasn't the threat of the sloping earthen walls to collapse, so they were left bare. The cut and the bridge above were a cooperative affair between the city and the privately owned *San Diego Electric Railway Company* [SDERY]. Once completed, they allowed SDERY's electric streetcars, and automobile traffic, to proceed eastward beyond San Diego's city limits toward the unincorporated area known as City Heights.<sup>2</sup>



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Georgia Street Bridge and University Avenue Grade Separation Cut Retaining Walls  
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NARRATIVE STATEMENT of SIGNIFICANCE (continued)

The extension of the streetcar line eastward from Park Boulevard to City Heights represented the citywide expansion of SDERY's streetcar service during this time. Between 1906 and 1910, the traction company, whose underlying philosophy was to "develop . . . a street railway system which would reach out to even the outlying section of the city," initiated the construction or expansion of at least 10 new electric streetcar lines. Radiating out from downtown San Diego, these lines helped to found or improve numerous outlying "streetcar suburbs," including City Heights.<sup>3</sup>

Laid out in 1888, City Heights had originally been serviced by its own steam-powered rail line. However, poor local economic conditions forced the line's abandonment the following year. From that time until the opening of the University Avenue Grade Separation Cut in 1907, the town site stagnated as a sparsely populated semi-rural community.<sup>4</sup> With the opening of the grade separation cut, SDERY was able to extend its streetcar service eastward to City Heights. Within the year, the company offered connecting single-track shuttle service along University Avenue between the communities of University Heights and City Heights.<sup>5</sup>

Within a few years, the shuttle service proved another adage promoted by SDERY's director John D. Spreckels that "transportation determines the flow of population." By 1911, City Heights' population had increased dramatically from 400 to over 4,000 residents. As a result, on November 7, 1911, it incorporated into the City of East San Diego, and remained so until its eventual annexation by the City of San Diego in 1926.<sup>6</sup> In addition to East San Diego's phenomenal growth, between 1906 and 1912, no fewer than nine residential additions sprang up along the University Avenue shuttle line. Among these was the present community of North Park. Laid out on April 8, 1912, the former site of a lemon orchard developed into a major suburban commercial center around a trolley transfer point at the intersection of 30th Street and University Avenue.<sup>7</sup>

The resulting increase in population along University Avenue east of Park Boulevard caused a converse demand for improved streetcar service. So much so that in 1912 SDERY negotiated with the City of San Diego to widen and pave the grade separation cut between Park Boulevard and Florida Street. This would facilitate the eventual laying down of an additional set of tracks along University Avenue between Park Boulevard and the 30th Street intersection in North Park.<sup>8</sup> The widening and paving of University Avenue was also due in part to the growing popularity of automobiles in San Diego. Privately owned cars were now starting to compete with the streetcars for space along University Avenue.<sup>9</sup>

The proposed design of the widened grade separation cut posed a particular problem from an engineering viewpoint. Thirty-one feet deep at mid-center, the new cut would actually be an artificial canyon. Left bare, the deep perpendicular earthen sides of the approximately 680-foot long cut would collapse onto the roadbed without proper vertical support. The solution, developed by city engineer James R. Comly in 1912, would be an exercise of engineering ability and ingenuity. To prevent the walls of the grade separation cut from collapsing, Comly designed two reinforced concrete retaining walls. Done in conjunction with the paving of University Avenue, the approximately two-foot thick truncated parabolic arch-shaped walls ran along the entire length of the grade separation cut, from Park Boulevard to Florida Street. A series of T-shaped reinforced-concrete strutted anchors, set into the earthen walls along the top of the embankment, held their crowns securely in place.<sup>10</sup>

Assigned to the project by City Engineer William R. Runsey, Comly had only been with the City of San Diego for about two years. However, he had seven years prior experience as a civil engineer. Born in Helena, Montana, in 1885, Comly moved with

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Georgia Street Bridge and University Avenue Grade Separation Cut Retaining Walls  
San Diego County, CA

NARRATIVE STATEMENT of SIGNIFICANCE (continued)

his family to San Diego where he enrolled at San Diego High School. After graduating in 1903, he was hired by the United States Reclamation Service and took part in the design and construction of the Yuma and Pitt river projects in the Arizona Territory. Between 1905 and 1906, he held a number of civil engineering jobs in San Diego. Among these were with the *Bay Shore & Pacific Railroad*, and the *Southern California Mountain Water Company*. In 1906 Comly went north to work as a member of the engineering staff of the Mare Island Naval Yard. Six years later, he returned to San Diego where he found a position in the City's Engineering Department as a designing engineer under Rumsey.<sup>11</sup>

Based on his experience and engineering skill, Comly was assigned to design and supervise construction of three important bridge projects. All three were designed in response to the expansion of San Diego's urban infrastructure into outlying areas. From 1910 to the outbreak of World War I, San Diego experienced a tremendous amount of growth due to several factors. One was the announcement of the building of the Panama Canal. It was speculated that San Diego, with its large natural harbor, would become a major seaport. Second, local capitalist John D. Spreckels announced that he would finance the building of a short line railroad from the harbor to a connection with a transcontinental railroad line near Yuma, Arizona Territory. The guarantee of a direct link to eastern markets brought a wave of speculative growth along San Diego's waterfront including new harbor facilities, warehouses, railroad switching and freight yards. This invariably brought about an increase in local banking, insurance, commercial, building and supply businesses. Accompanying this growth was another wave of growth and investment as entrepreneurs, managers and middle-class workers brought about a demand for real estate development in San Diego's suburban communities. Soon, electric streetcar and automobile traffic led inexorably into the semi-rural suburban areas to the north and east of downtown San Diego's commercial, warehouse, and financial districts.<sup>12</sup>

During this time of suburban growth, the City of San Diego saw the need to provide access to its suburban areas through various public works projects. The most visible of these were a number of new reinforced concrete bridges. As mentioned previously, the Georgia Street Bridge was designed to allow expanded electric streetcar and automobile traffic eastward into City Heights. In conjunction with the Georgia Street Bridge, the City commissioned Comly to design two additional bridges allowing improved access to developing suburban areas in Southeast San Diego. One was a reinforced concrete bridge to carry an extension of H Street eastward over 24th Street. The other was a similar constructed bridge to carry an eastward extension of Woolman Avenue over Chollas Creek. Like the Georgia Street Bridge, both featured reinforced concrete retaining walls to hold back earthen embankments. Also, like the former, the H Street Bridge was rail-related. However, unlike the Georgia Street Bridge, it carried electric streetcars over 24th Street.<sup>13</sup>

The bridges' unique design and construction highlighted Comly's expertise as a master civil engineer. For example, the H Street Bridge was an approximately 80-foot long reinforced concrete girder type roadway bridge across 28th Street. An important outlet from the Brooklyn Heights section south to San Diego Bay, 28th Street ran through a deep canyon. Its 20-foot depth would ordinarily have called for a high embankment on either side of the bridge's abutments and the approaches to the bridge. Like the University Avenue Grade Separation Cut, Comly solved the problem by designing high reinforced concrete retaining walls under the bridge, with curved wing-walls extending out along the bottom of the roadway from the abutments. A series of narrow piers, extending 5 feet from the abutment's inner walls, supported the span over 28th Street. Concrete sidewalks between the piers and the abutments, and along the bridge's 40-foot wide roadway, allowed for pedestrian traffic.<sup>14</sup>

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Georgia Street Bridge and University Avenue Grade Separation Cut Retaining Walls  
San Diego County, CA

NARRATIVE STATEMENT of SIGNIFICANCE (continued)

Crossing a broad dry wash, which turned into torrential flood waters during the rainy season, the Wollman Avenue Bridge's 50-foot closed-spandrel span affording safe passage over Chollas Creek. Like the H Street Bridge, Comly designed spreading wing walls to keep the embankments on either side of the abutments from washing out. Also, like the H Street and Georgia Street Bridges, the bridge featured an ornamental open-baluster paneled concrete rail. Viewed from below, the general architectural effect given by the bridges was that of massiveness and strength, set off by the ornamental balustrade along the railing.<sup>15</sup>

After the completion of all three bridge projects, Comly had to quit his position as Designing Engineer at the City of San Diego Engineering Department. In 1915, a lack of funds forced the City to vacate his position. Comly then became assistant engineer for the *Sweetwater Water Company* of San Diego. Two years later, he worked as a civil engineer for the *San Diego & Arizona Railway Company*. This was cut short by America's entry into World War I, when Comly immediately volunteered for duty in the U. S. Army's Corps of Engineers. Commissioned a first lieutenant, he reached the rank of Captain and was responsible for organizing two companies and commanded three. While stationed at Fort Myer, Virginia, Captain Comly organized Company C of the 76th Engineer Battalion. Scheduled to go overseas to France, it never reached its destination due to the signing of the Armistice in 1918. Mustered out of the service, Comly returned to San Diego where he resumed his position with the railroad. Two years later, he returned to the City Engineering Department. Employed as a draftsman, senior draftsman, and later as an investigator for the City Planning Department, Comly was unable to reach the status of his former position as Designing Engineer. In 1925 he left the City for the last time and entered the private sector as a Civil Engineer.<sup>16</sup>

During his tenure as both a municipal and private civil engineer, Comly was involved in a number of important engineering and city planning projects. Among these was the design of a bridge on 6th Avenue over another deep canyon north of Ivy Lane [demolished]. An active member of "The San Diegans," a hospitality and recreation committee of the San Diego Chamber of Commerce, he drafted a plan for the conversion of parts of Balboa Park into recreational centers. Comly also made a comprehensive city plan that, with modifications, was later adopted by the City of San Diego. Sometime before his untimely death on October 6, 1931, Comly proposed a design for a reinforced concrete bridge that would replace a wooden viaduct known as the "Thirtieth Street Bridge" spanning Switzer Canyon in North Park. Although never built, the design of the four-span open-spandrel arched bridge was similar to his 1912 design for the Georgia Street Bridge.<sup>17</sup>

Reviewing Comly's short, yet productive career, has established his position as an innovative designer of reinforced concrete bridges in San Diego. It also places his work within the larger picture of contemporary reinforced bridge building in California and throughout the rest of the United States. By the time of Comly's 1912 design for the Georgia Street Bridge, reinforced concrete, except for extremely long spans, had superseded steel in bridge construction. While the initial cost of the former was greater, it was more than offset by reinforced concrete's longer life span and lower maintenance costs. According to local newspaper reports, the City of San Diego regarded the introduction of reinforced concrete bridges as representative of a modern and progressive city. Concrete also lent itself well to artistic treatment of a bridge and retaining wall's surface. This was an important factor of growing concern in American cities at this time. Tired of "ugly" utilitarian steel girder bridges, city planners now considered beauty and harmony as essential features of modern bridge design. This was best summarized by engineering professor J. A. L. Waddell, who, in the March 1918 issue of *American City*, stated that "a structure must be in harmony with its environment and not appear as an intrusion thereon. Waddell and others noted that the "main portion of the improvement in architectural effect in American bridge engineering which has taken place in the last decade has come through the extensive

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building of reinforced concrete structures.” During the first two decades of the 20th century, many believed that bridges, as well as other public buildings and structures, should serve as monumental focal points in the urban landscape.<sup>18</sup>

Reinforced-concrete bridges and retaining walls were the product of technological and engineering innovations made during the late 19th century. Building engineers had first used reinforced concrete as a building material in Europe during the 1840s. Consisting of steel rods, embedded and bonded in poured and formed concrete, reinforced-concrete produced structures high in tensile as well as in compression strength. Introduced into the United States in the mid-1870s, reinforced concrete was first used in the construction of large residences, warehouses and sidewalks.<sup>19</sup> The first use of reinforced concrete in bridge design and construction also originated in Europe. Two styles developed during the mid-1880s—the “Melan System,” concrete reinforced by steel I-beams or the “Monier System” of concrete poured over wire mesh. The first use of reinforced concrete in American bridge building was in the 1889 construction of the closed-arch Lake Alford bridge in San Francisco’s Golden Gate Park. Instead of either the Melan or the Monier systems, the bridge featured twisted reinforcement bars imbedded in the concrete. Developed by San Francisco engineer, Ernest L. Ransome, his innovative design pioneered the use of expansion joints, and concrete mixers for pouring concrete into pre-formed molds.<sup>20</sup> California bridge historian Stephen D. Mikesell acknowledges that, within the larger historical context of reinforced concrete bridges built in America, California’s would become both typical and atypical. According to Mikesell, by 1900, most American bridge designers who came to work in California had completely diverged from following original European designs. The latter were wont to design thin and elegant bridges after the work of Robert Mailart, Eugene Freyssinet, and others. In America, however, reinforced concrete bridge design began to reflect the work of civil engineer George S. Morison, whose designs featured bulkier arches decorated with details borrowed from Neoclassical architecture.<sup>21</sup>

Morison’s use of Neoclassical details was directly associated with design esthetics derived from the late 1890s/early 1900s Beaux-Arts Classicism of the American City Beautiful Movement. Introduced to this country at the 1893 Chicago World’s Columbian Exhibition by a new generation of American architects trained at Paris’ école Des Beaux-Arts, it exemplified the school’s Neo-Baroque-like fascination with Roman Imperial, as well as Italian Renaissance architecture. In this country, the movement would merge with the concurrent Neoclassical and Renaissance Revival architectural movements. As an architectural and city planning style, the Beaux-Arts/City Beautiful Movement attempted to adorn American cities with monumental buildings, structures, and boulevards ending in broad vistas. In addition, the Beaux Arts/City Beautiful Movement stressed that their form should fit into and enhance the fabric of a community. In a 1913 article in *The Architect and Engineer of California*, H. G. Tyrell argued that, like post offices or city halls, bridges should be treated and decorated as public monuments.<sup>22</sup> In the best spirit of the City Beautiful Movement, the monolithic Georgia Street Bridge appears to hold open the University Avenue Grade Separation Cut, thereby providing an axial alignment between the communities to the west and east. In addition, the bridges graceful arches form a monumental gateway between University Heights and the burgeoning suburban communities of North Park and East San Diego.

The concept of the “City Beautiful bridge” had been promoted four years earlier by Charles Mulford Robinson. In his 1909 report, *The City Beautiful*, presented to the Los Angeles Municipal Art Commission, he criticized that city for erecting iron or steel truss bridges at every major river crossing. According to Robinson, these bridges were “. . . about as ugly as they can be.”

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He called for their eventual replacement with ". . . handsome structures . . .," which, according to Robinson, meant concrete bridges.<sup>23</sup>

While a few were designed by a number of well-known out of state engineers, the majority of California's reinforced concrete bridges were "home-grown," designed and built by Californians using local materials. Because of the high cost of steel on the west coast, and the ready availability of concrete from local sources, reinforced concrete construction was more feasible cost-wise than that of steel. Therefore, because of these and other factors, reinforced-concrete structures appear to be more numerous in California than in any other state. By the early 1900s, California's reinforced concrete bridges began to have a distinctively regional imprint on the landscape. Most were designed by civil engineers, like James R. Comly, were employed by state or local governments. Technically innovative, these bridge engineers would go on to collectively develop a comprehensive design aesthetic unique to the state.<sup>24</sup>

Comly's design solution for the Georgia Street Bridge was the use of a three-hinge, open-spandrel reinforced concrete arch.<sup>25</sup> Developed by Los Angeles bridge designer William Thomas, the "Thomas Three-Hinge Arch" of the "Thomas System" featured an arch with steel hinges at the crown and each abutment. Although the three-hinge system originated in Europe, Thomas innovated the use of arch rings precast in molds formed on the ground. The precursor of modern-day pre-cast structural members, the arches were then hoisted into place and fixed onto the hinges. Thomas designed dozens of such structures, chiefly in Southern California. While there are no available historical photographs of the Georgia Street Bridge under construction, it can be assumed that this is how it was done. While dozens of these types of bridges were constructed in California between 1911 and 1917, few have survived into modern times.<sup>26</sup>

The Georgia Street Bridge is what is generally referred to as a "deck arch" bridge, its roadway lying on top of its arch. First introduced in America by Fritz Von Emperger and Edwin Thacher in the 1890s, deck arches became extremely popular by the early 1900s. What makes Comly's design of the Georgia Street Bridge unique, is that its roadbed lies on an open spandrel arch. Typically, most reinforced concrete bridges less than 100 feet were of the closed-spandrel arch type. Introduced to California by Ransome in his design of the Lake Alvord bridge, a closed-spandrel arch bridge consisted of a roadway resting on a solid barrel form arch, with vertical side, or "spandrel" walls, filled in with material found on-site.<sup>27</sup> Open-spandrel arch bridges, on the other hand, differed radically in both appearance and in the way in which they carried their deck over. In order to reduce the weight of the span, the area between the deck and the main arch was opened up by a series of struts or supports. The "open-spandrel" design allowed for a considerable saving in the amount of concrete placed between the arch proper and the deck above. In addition to the open spandrel area, the design of the main arch itself resulted in a substantial weight loss. Instead of having a solid barrel arch, the bridge's arch consisted of a series of parallel arch rings, or "ribs," that functioned as separate arches. Horizontal struts placed in-between the ribs added lateral stability.<sup>28</sup>

Considered the most aesthetically pleasing of all reinforced concrete bridges, the open-spandrel arch bridge was first introduced in California in 1910 with the completion of the Buena Vista Viaduct in Los Angeles. One of its most daring designs was in the construction of the City of Pasadena's Colorado Street Bridge. Completed in 1913, the curvature of its 153-foot-long span, in order to take advantage of a more solid footing, resembles the Roman aqueduct at Segovia, Spain.<sup>29</sup> Constructed one year after the Colorado Street Bridge, the Georgia Street Bridge is one of a large number of such bridges built in California before World

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War I. Although supplanted by precast concrete bridge construction after the war, several notable open-spandrel-arch bridges were still built. These include the 1918 Arroyo Hondo bridge near Gaviota, several over the Los Angeles River built between 1926 and 1931, and the 1926 Bonsall Bridge in north San Diego County. The type reached its highest technological and aesthetic expression in the 1936 design of the Bixby Creek Arch in Monterey County's Big Sur region.<sup>30</sup>

The overall design of the Georgia Street Bridge follows closely the principles of the Beaux Arts/American City Beautiful Movement. Its graceful, yet massive arch acts as a monumental gateway straddling the University Avenue Grade Separation Cut. The view from either of the bridge's cantilevered balustrades offers sweeping vistas in the best tradition of Renaissance Revival and Neo-Baroque city planning. For example, an approximately 4-foot tall open-arched concrete railing ran along the bridge's cantilevered sidewalks and along the twin retaining walls entire upper length. In addition, the retaining walls' dull concrete surfaces was broken up by blind arcades composed of semi-circular arches, modeled after the bridge's open-spandrel arches, set between tall engaged pilasters resembling stretched modified Doric capitals.<sup>31</sup>

Structurally, the Georgia Street Bridge and the adjacent retaining walls represented innovative civil engineering techniques common to early 20th century reinforced concrete bridge construction. In order to secure the ends of the bridge's three 66-foot long arch rings, Comly's design called for their attachment to six triangular-shaped reinforced-concrete anchor abutments. Each abutment was countersunk and back-filled into the earthen embankment on either side of the bridge. Steel hinges connecting the foot of the arch rings to the abutments allowed movement due to the concrete's normal expansion and contraction during the day. Comly secured the bridge's upper deck firmly to the flanking ridges along the grade separation cut by four T-shaped reinforced-concrete strutted anchor rods and six rectangular abutments. Rising some 20 feet above the roadway at their crowns, the extrados of each arch ring supported ten vertical rectangular columns. These in turn, linked by curving spandrel arches, supported the bridge's 69-foot long, reinforced concrete deck. Above the deck was laid an approximately 22-inch thick by 26-foot wide roadway. Similar to the Colorado Street Bridge, on either side of the two-lane roadway were 5-foot wide cantilevered pedestrian sidewalks, protected by 4-foot tall modified baluster bridge railings. Divided into 11 sections, each section was divided by a modified Doric-capped concrete post.<sup>32</sup>

The completion of the Georgia Street Bridge/University Avenue Grade Separation Cut in 1914 allowed for a much greater flow of both automobile and electric streetcar traffic along University Avenue. This was represented by a program of intensive laying of new tracks and the realignment of old streetcar lines at the intersection of University Avenue and Park Boulevard. In 1916, the SDERy laid double tracks along University Avenue from Normal Avenue to Park Boulevard, and north from University Avenue along Park Boulevard to El Cajon Boulevard, where they connected to an already existing line to Adams Avenue. The following year, the company extended a new set of double tracks from the eastern terminus of Laurel Street in Balboa Park north to University Avenue. Northbound streetcars could now turn eastward through the University Avenue Grade Separation Cut and under the Georgia Street Bridge to 30th Street in North Park. Steel eyebolts set near the concrete retaining walls' parapets close to the bridge, and from subsequent telephone poles near Florida Street and Park Boulevard, respectively, held up two new sets of overhead wires. These provided electric power for each separate track heading east and westbound along University Avenue.<sup>33</sup>

With the addition of the new track, the shuttle service between University Heights and East San Diego was discontinued. Riders could now travel directly to downtown San Diego, through the University Avenue Grade Separation Cut, to downtown San Diego

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without having to transfer streetcars. They could also catch connecting trolleys to other nearby streetcar communities to the west and northeast.<sup>34</sup>

As a result of the high amount of trolley service passing through the area, by the 1920's the intersection of Park Boulevard and University Avenue became an important and busy trolley transfer point. Taking advantage of the situation were a number of real estate developers and entrepreneurs who transformed the area around the intersection into a viable commercial hub. Between 1922 and 1930, at least 10 mixed-use commercial and residential buildings were built within a two-block area along Park Boulevard, between University and Robinson avenues.<sup>35</sup>

It wasn't trolley traffic alone that influenced the area's growth. The buildings also represent the development of the area as a major automobile thoroughfare. Park Boulevard (originally named "Midland Drive") had been installed through Balboa Park north from downtown San Diego prior to the opening of the 1915 California-Panama Exposition. The new road helped to facilitate access to the Exposition's attractions from the eastern terminus of today's Laurel Street. By 1920, the road extended northward to University Avenue. Here it continued north on either side of the trolley tracks to El Cajon Boulevard. Besides providing access to Mission Valley and the inland highway to San Bernardino, El Cajon Boulevard played an important role in the development of San Diego's interstate highway system.<sup>36</sup>

The early 1920s had seen the transference of mass production techniques learned during World War I into the production of cheap, mass-produced consumer goods. Among these were vast numbers of relatively inexpensive automobiles, which became available to the general public. A healthy post-war economy also contributed to raising the standards of living of the American middle class, which now found itself with more leisure time. Capitalizing on this, articles written by the Automobile Club of Southern California and the Los Angeles and San Diego Chambers of Commerce extolled the Southern California's balmy Mediterranean climate, beaches, and historic attractions.<sup>37</sup>

Between 1923 and 1926, the final link of a transcontinental highway between Savannah, Georgia and San Diego was completed. Joined by two other major highway routes from New York and St. Augustine, respectively, the *Lee Highway* provided an all-weather southern route to San Diego and the rest of Southern California. This, and the paving of the Coast Highway from Los Angeles to San Diego, plus the development of Tijuana as a tourist Mecca in Prohibition-era California, accelerated San Diego's role as an automobile-oriented recreation center in the 1920s. Motorists travelling the final link of Highway 80 (as it was named in 1926) along El Cajon Boulevard, could choose between continuing west along Washington Street down the grade to Pacific Highway or south along Park Boulevard. Thus, Park Boulevard became a major junction in the southern route of the first all-weather transcontinental highway to San Diego, offering direct access to downtown San Diego through the heart of Balboa Park. Likewise, the roadway along the University Avenue Grade Separation Cut became an important gateway for automobile traffic traveling east and west along University Avenue.<sup>38</sup>

The roadway along the University Avenue Grade Separation Cut remained an important electric streetcar and automobile thoroughfare for the next 23 years. It lost its importance as a streetcar thoroughfare on April 24, 1949. On that day the SDERY ceased operations in San Diego. Many of the former streetcar routes, like those along Park Boulevard and University Avenue, were taken over by bus lines of the new *San Diego Transit System*.<sup>39</sup> However, even though Highway 80 no longer travels along

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El Cajon Boulevard [supplanted by a new interstate freeway through Mission Valley during the 1950s], University Avenue still serves as an important automobile corridor linking the communities of Uptown, Greater North Park and East San Diego.<sup>40</sup>

With the lessening of its importance as a major transportation corridor after World War II, the Georgia Street Bridge fell into a state of disrepair. Two years prior to the abandonment of the streetcar line, the City of San Diego had done some cosmetic repairs to the bridge and the retaining walls' timeworn exterior surfaces. Corroded exposed steel rebars were replaced along with the filling in of chipped cement abutments. The whole structure was then re-surfaced in concrete. Sometime between 1947 and 1955, city work crews filled in the bridge and retaining walls' open-arch railings.<sup>41</sup> Subsequent coatings of gunite merely serve to camouflage serious repair problems. Discussions are currently underway by state and local officials that will decide the 84-year-old landmark's future [the bridge was declared a local historic landmark by the San Diego Historical Site Board in 1994]. While the bridge and walls along the grade separation cut are reportedly not in any imminent danger of collapse, their present rate of deterioration necessitates a plan for their replacement or retrofitting to meet current seismic standards.<sup>42</sup> Regardless, the Georgia Street Bridge and the University Avenue Grade Separation Cut Retaining Walls still retain a large part of their historical integrity and still serves as a monumental and artistic gateway to the communities east and west of the historic University Avenue Grade Separation Cut.

**Evaluation Of The Bridge's Historical Integrity**

Despite the filling in of the railings, the coatings of gunite, and the definite need to replace rusted steel rebars and spalling concrete, the Georgia Street Bridge and the University Avenue Grade Separation Cut Retaining Walls have kept all seven aspects of their historical integrity. They convey this by their location, setting and feeling, giving an understanding of why they were designed and built in the first place 84 years ago. The bridge and the retaining walls' reinforced concrete construction also convey the historic materials that went into their construction and the workmanship of San Diego's early concrete masons. Finally, the bridge's ribbed arch design, as well as the blind arcade along the flanking retaining walls, combine to create a form, plan, and unique structure reflecting a local example of early 20th century American reinforced concrete bridge design and construction.



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<sup>1</sup> Donald C. Jackson, Great American Bridges and Dams (Washington, D. C.: National Trust for Historic Preservation, 1988), 11.

<sup>2</sup> Dodge, Richard V., Rails of the Silvergate: the Spreckels San Diego Empire (San Marino: Golden West Books, 1960), 43; and "San Diego County History," This Week in San Diego (September 25-October 3, 1958): n.p. On file at San Diego Public Library—California Room, vertical file: University Heights—San Diego (City).

<sup>3</sup> Dodge, 42-43.

<sup>4</sup> *Ibid.*, 20-21.

<sup>5</sup> *Ibid.*, 43.

<sup>6</sup> *Ibid.*; and "San Diego County History," n.p.

<sup>7</sup> Clarence McGrew, The City of San Diego and San Diego County: the Birthplace of California, vol. 1 of 2 (Chicago: The American Historical Society, 1922), 396; Richard F. Pourade, The Rising Tide: Southern California in the Twenties and Thirties (San Diego: The Union-Tribune Publishing Company, 1967), 66; and Union Title Insurance and Trust Company, Catalog of Recorded Plats in San Diego County (Author: San Diego, 1948), 7, 9, 12, 42 and 45.

<sup>8</sup> Dodge, 131 and 143. By 1912, the tracks along University Avenue between 30th Street in North Park and Fairmont Avenue had already been doubled.

<sup>9</sup> I. E. Quastler, "Transportation in San Diego County," in San Diego: An Introduction to the Region, Philip R. Pryde, ed. (Dubuque: Kendall/Hunt Publishing Company, 1984), 180.

<sup>10</sup> "Plans Prepared for City Bridges: Topography is Feature of Beauty," San Diego Union, 4 January 1914, 8; and City of San Diego, Engineering Department, "Concrete Walls & Rails for University Avenue," document no. D5220-1 [microfilm], December 1912.

<sup>11</sup> "James R. Comly Dies Suddenly at Rowing Club," San Diego Union, 7 October 1931, III; and "Plans Prepared for City Bridges . . . , 8.

<sup>12</sup> Raymond Starr, San Diego, a Pictorial History (Norfolk, Virginia: The Donning Company, 1986), 115-118.

<sup>13</sup> "Plans Prepared for City Bridges . . . , 8; and Dodge, 141.

<sup>14</sup> *Ibid.*

<sup>15</sup> *Ibid.*

<sup>16</sup> "James R. Comly Dies Suddenly at Rowing Club," III.

<sup>17</sup> SDHS photograph collection: photograph #6969, "Suggested Design of the 30th St. Bridge by J. R. Comly, Civil Engineer," ca. 1931.

<sup>18</sup> "Plans Prepared for City Bridges . . . , 8; Stephen D. Mikesell, Historic Highway Bridges of California (California Department of Transportation: Sacramento, 1990), 86; and J. A. L. Waddell, "Esthetics in Bridge Design," American City [Town & Country Edition] 18 (March 1918), 209.

<sup>19</sup> Mikesell, 71; and Jackson, 35.

<sup>20</sup> Mikesell, 71 and 72.

<sup>21</sup> *Ibid.*, 71.

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<sup>22</sup> Ibid., 71 and 86; David Gebhard and Robert Winter, A Guide to Architecture in Los Angeles and Southern California (Santa Barbara: Peregrine Smith, Inc., 1977), 694; and same authors, Architecture in Los Angeles: a Compleat [sic] Guide (Layton, Utah: Gibbs M. Smith, Inc. Peregrine Smith Books, 1985), 478.

<sup>23</sup> Mikesell, 76.

<sup>24</sup> Ibid.

<sup>25</sup> City of San Diego, Engineering Department, "Reinforced Concrete Bridge to Carry Georgia Street over University Avenue," document no. D5220 [microfilm], December 1912.

<sup>26</sup> Mikesell, 72 and 79; and California Department of Transportation, Arch Bridge Rating Sheet for Bridge No. 57C-418 [Georgia Street/University Avenue Separation], Sacramento, 8 May 1986, n.p.; and Mikesell, 104.

<sup>27</sup> Jackson, 36; and Mikesell, 76-78.

<sup>28</sup> Jackson, 36-37; and Mikesell, 78

<sup>29</sup> Jackson, 274-275; Mikesell, 86; Gebhard and Winter, Architecture in Los Angeles & Southern California, 322; and "Pasadena's Beautiful Bridge," Scientific American 109 (December 6, 1913): 423.

<sup>30</sup> Jackson, 264; Mikesell, 71, 92 and 98; and Bob White and Art Halloran, North County People and Places (Fallbrook, California: Aero Publishers, 1996), 26.

<sup>31</sup> "Concrete Walls & Rails for University Avenue." December 1912; Arch Bridge Rating Sheet for Bridge No. 57C-418, n.p.; SDHS photograph collection: Photograph #1651, "University Avenue from Georgia Street Bridge," 1928; Photograph #6852-2, "University Avenue and Park Boulevard—Looking Northeast," ca. 1927; Photograph #20254-113, "University Avenue East From Georgia Street, 1923; Photograph #6852, "North Park, University Avenue, Looking East under Georgia Street Bridge," 1929; Photograph #20254-127A, "Looking East from Viaduct Crossing University Avenue at Georgia Street," ca. 1927; and Photograph #Sensor 8-133, "Looking Northwest on University at Park Boulevard [from Georgia Street Bridge]," ca. 1930.

<sup>32</sup> "Pasadena's Beautiful Bridge," 423; Arch Bridge Rating Sheet for Bridge No. 57C-418, n.p.; "Reinforced Concrete Bridge to Carry Georgia Street over University Avenue;" and California Department of Transportation, Bridge Report of Bridge No. 57C-418 [Georgia Street/ University Avenue Separation], revised (Sacramento, 27 June 1990), 76.

<sup>33</sup> Photograph #6852; and Harre W. Demoro, Interurbans Special 100: California's Electric Railways (Glendale, California: Interurban Press, 1986), 192.

<sup>34</sup> Dodge, 65, 133, and 141.

<sup>35</sup> Alexander D. Bevil, Historic Survey of the Bush Egyptian Theatre (11 May 1998): 10. Report on file at the Environmental Analysis Section of the City of San Diego's Office of Development Services.

<sup>36</sup> Ibid.

<sup>37</sup> Ibid., 12.

<sup>38</sup> Ibid.

<sup>39</sup> Dodge, 111 and 133.

<sup>40</sup> Quastler, 182.

<sup>41</sup> "Street Overpass Being Repaired," San Diego Union, 13 May 1947, 1; and San Diego Historical Society—Photograph Collection, Photograph #S-2298, "University Avenue—Georgia Street Bridge," 1955.

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<sup>42</sup> City of San Diego, Office of the City Clerk, Resolution No. R-9409281. Designation of Georgia Street Bridge as San Diego Historic Landmark No. 325, 28 September 1994; and Ed Jahn, "Landmark Span's Backers Rally," San Diego Union, 30 May 1998, B1.

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"San Diego County History." This Week in San Diego (September 25-October 3, 1958): n.p. On File at San Diego Public Library—California Room, Vertical File: University Heights—San Diego (City).

San Diego Historical Society—Photograph Collection

Photograph #6852. "North Park, University Avenue, Looking East under Georgia Street Bridge," 1929.

Photograph #6852-2. "University Avenue and Park Boulevard-- Looking Northeast," ca. 1927.

Photograph #6969. "Suggested Design of the 30th St. Bridge by J. R. Comly, Civil Engineer," ca. 1931.

Photograph #20254-113. "University Avenue East From Georgia Street, 1923.

Photograph #20254-127A. "Looking East from Viaduct Crossing University Avenue at Georgia Street," ca. 1927.

Photograph #Sensor 8-133. "Looking Northwest on University at Park Boulevard [from Georgia Street Bridge]," ca. 1930.

Photograph #Sensor 2298. "University Avenue—Georgia Street Bridge," 1955.

Union Title Insurance and Trust Company, Catalog of Recorded Plats in San Diego County. Author: San Diego, 1948.

United States Department of the Interior  
National Park Service

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Section number 10 Page 1

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**Georgia Street Bridge and University Avenue Grade Separation Cut Retaining Walls**  
San Diego County, CA

### **BOUNDARY DESCRIPTION**

The nominated property's northern boundary follows the reinforced concrete retaining wall beginning at a point near the northeast corner of Park Boulevard and University Avenue and traveling eastward some 680 feet along the north side of University Avenue to a point terminating near the northwest corner of University Avenue and Florida Street. The nominated property's southern boundary follows the opposite reinforced concrete retaining wall beginning at a point near the southeast corner of Park Boulevard and University Avenue and traveling eastward some 680 feet along the south side of University Avenue to a point terminating near the southwest corner of University Avenue and Florida Street. Included in the north and south boundaries are the north and south openings of the Georgia Street Bridge's north/south-oriented span. The nominated property's western boundary runs approximately 80 feet due south from the northwestern most terminus of the north retaining wall to the southwestern most terminus of the south retaining wall near the intersection of University Avenue and Park Boulevard. The nominated property's eastern boundary runs approximately 80 feet due south from the northeastern most terminus of the north retaining wall to the southeastern most terminus of the south retaining wall near the intersection of University Avenue and Florida Street.

### **BOUNDARY JUSTIFICATION**

The nominated property's boundary is limited to the length of the retaining walls facing the north and south sides of the University Avenue Grade Separation Cut [including the north and south openings of the Georgia Street Bridge's north/south-oriented span] and its respective eastern and western termini at Florida Street and Park Boulevard.

### **NAMES AND MAILING ADDRESS OF THE FEE SIMPLE OWNER OF THE PROPERTY**

City of San Diego  
Office of the City Clerk  
202 C Street  
San Diego, CA 92117

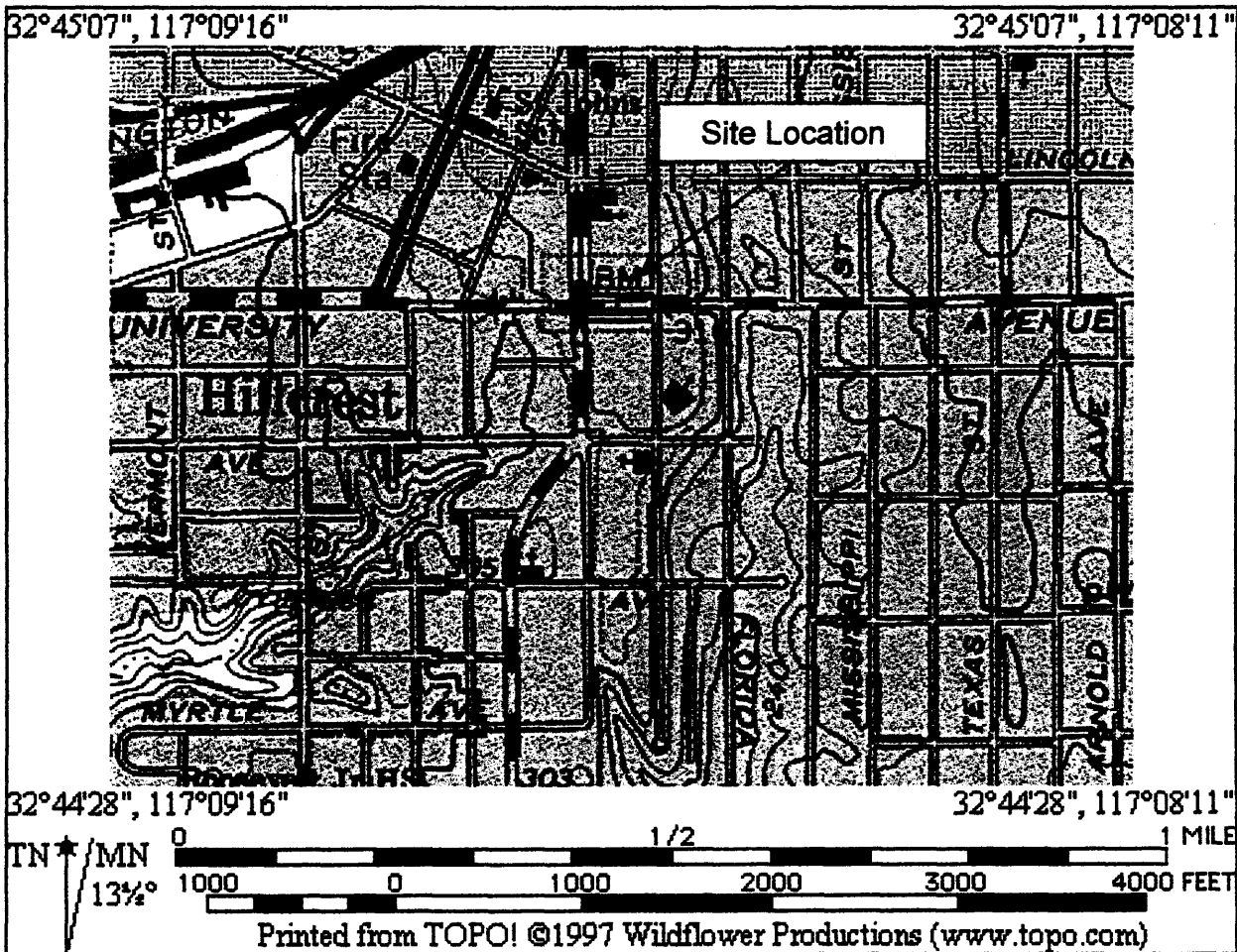
United States Department of the Interior  
National Park Service

National Register of Historic Places  
Continuation Sheet

Section number Additional Documentation Page 1

Georgia Street Bridge and University Avenue Grade Separation Cut Retaining Walls  
San Diego County, CA

SKETCH MAP 1



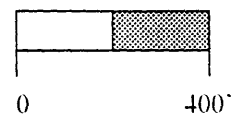
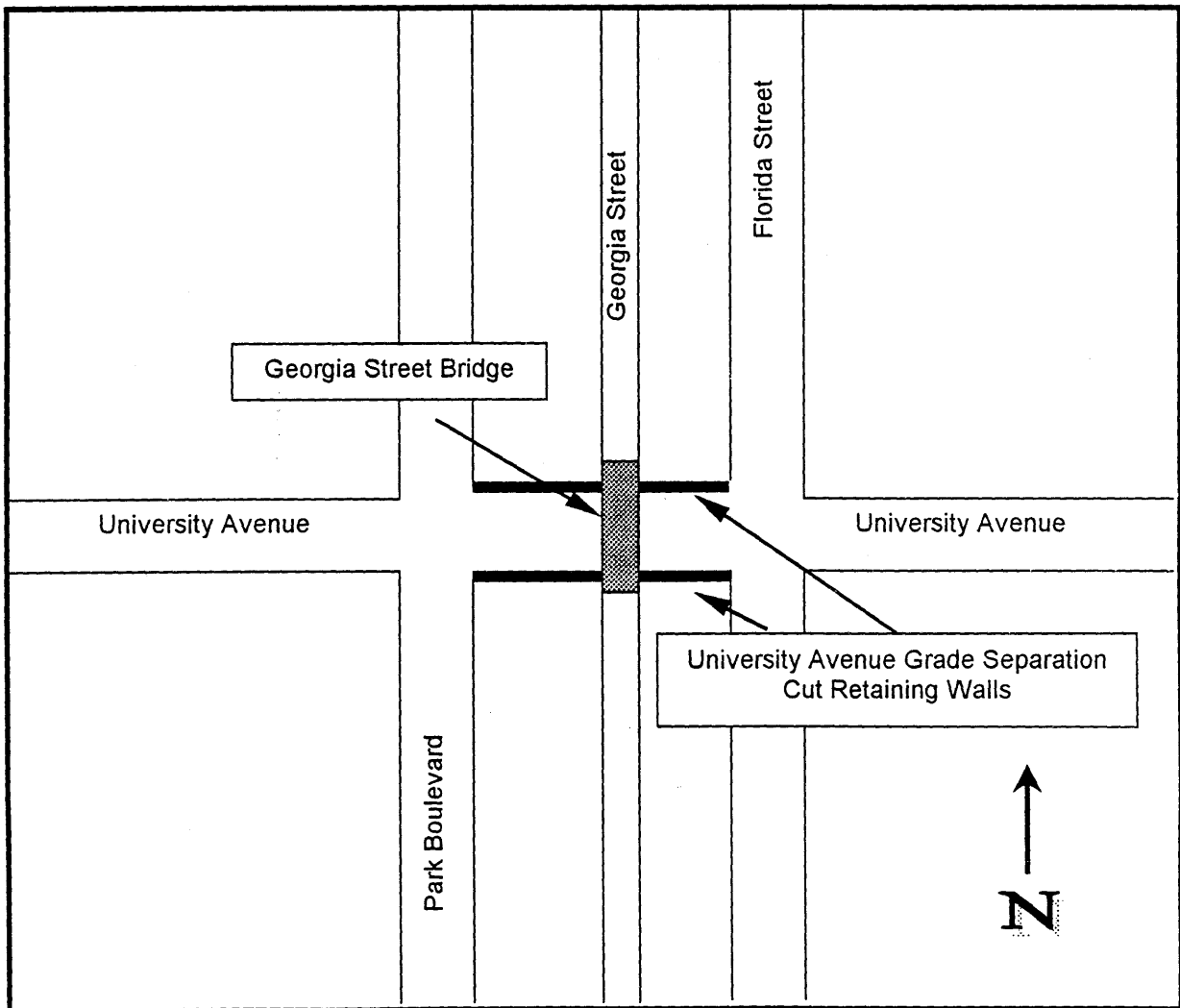
United States Department of the Interior  
National Park Service

# National Register of Historic Places Continuation Sheet

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Georgia Street Bridge and University Avenue Grade Separation Cut Retaining Walls  
San Diego County, CA

## SKETCH MAP 2





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National Park Service

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Georgia Street Bridge and University Avenue Grade Separation Cut Retaining Walls  
San Diego County, CA



Georgia Street Bridge and University Avenue Grade Separation Cut Retaining Walls  
San Diego County, CA  
San Diego Historical Society—Photograph Collection  
Photograph #6852  
Title: "North Park—University Avenue Under Georgia Street Bridge," 1924  
View Looking East Toward North Park From Park Boulevard

United States Department of the Interior  
National Park Service

## National Register of Historic Places Continuation Sheet

Photograph Reproductions      Page      2

Georgia Street Bridge and University Avenue Grade Separation Cut Retaining Walls  
San Diego County, CA



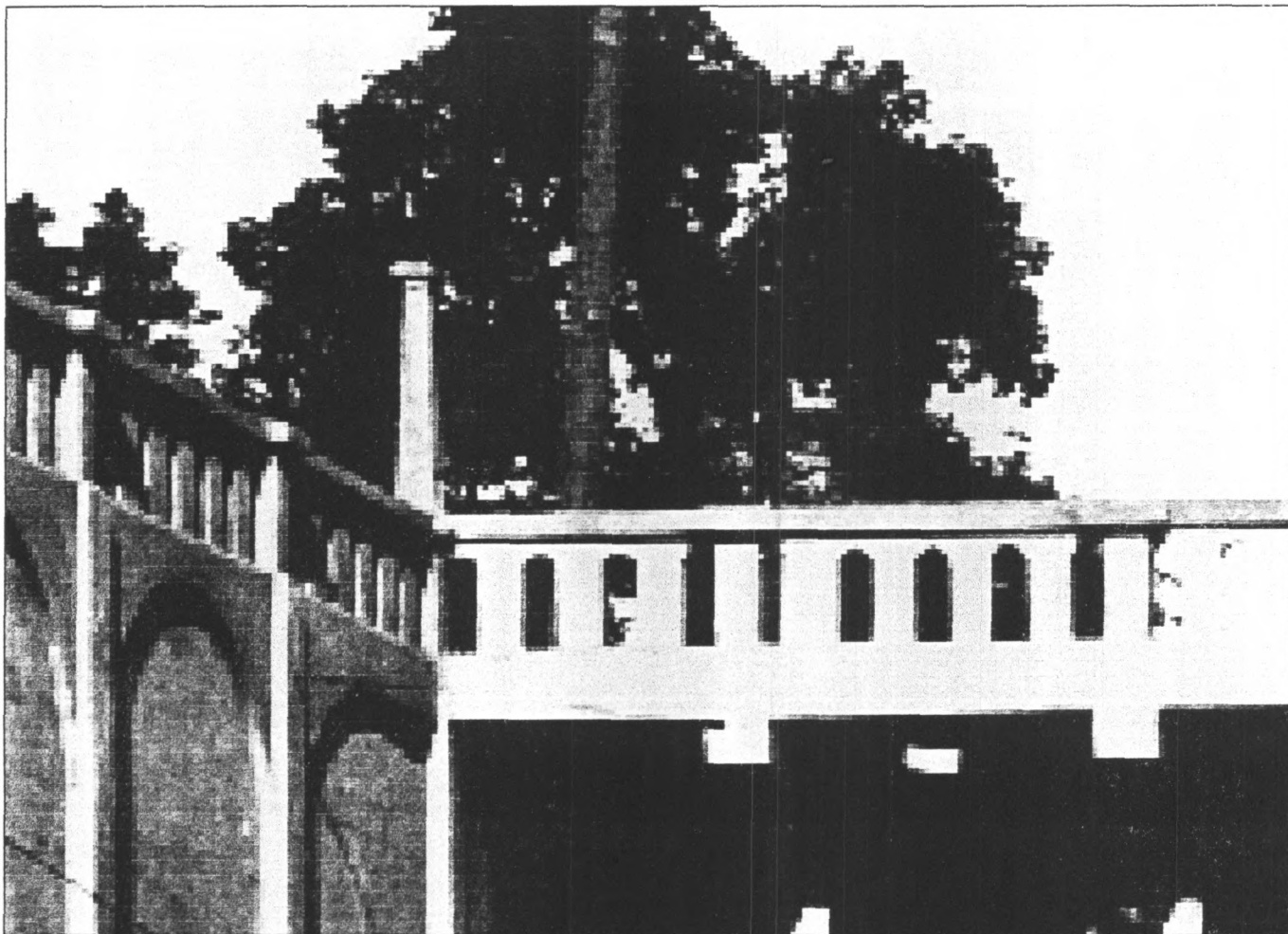
Georgia Street Bridge and University Avenue Grade Separation Cut Retaining Walls  
San Diego County, CA  
San Diego Historical Society—Photograph Collection  
Close-up of Photograph #6852 Showing Bridge Detail and Approaching Electric Streetcar Under  
Arches

United States Department of the Interior  
National Park Service

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Photograph Reproductions      Page      3

Georgia Street Bridge and University Avenue Grade Separation Cut Retaining Walls  
San Diego County, CA



Georgia Street Bridge and University Avenue Grade Separation Cut Retaining Walls  
San Diego County, CA  
San Diego Historical Society—Photograph Collection  
Close-up of Photograph #6852 Showing Balustrade Details, Elephantine Lamppost, and U-bolt Wire  
Anchor In Wall Pilaster Under Parapet

United States Department of the Interior  
National Park Service

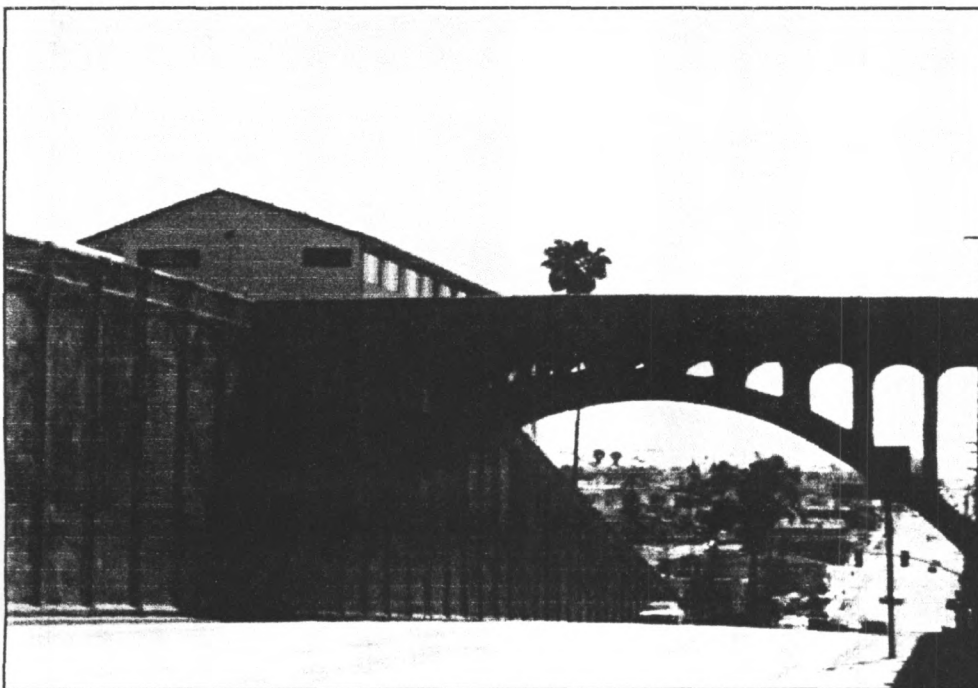
## National Register of Historic Places Continuation Sheet

Photograph Reproductions      Page      4

Georgia Street Bridge and University Avenue Grade Separation Cut Retaining Walls  
San Diego County, CA



**Photograph #1**  
Georgia Street  
Bridge/University Avenue  
Grade Separation Cut  
Retaining Walls  
San Diego County, CA  
Photograph Taken by Alex  
D. Bevil  
May 1998  
Original Negative in  
Possession of  
Photographer  
View of Western Approach  
to Grade Separation Cut,  
Looking East along  
University Avenue from  
Intersection of University  
Avenue and Park Boulevard



**Photograph #2**  
Georgia Street  
Bridge/University Avenue  
Grade Separation Cut  
Retaining Walls  
San Diego County, CA  
Photograph Taken by Alex D.  
Bevil  
May 1998  
Original Negative in  
Possession of Photographer  
Close-up View of Western  
Approach to Bridge, Looking  
East along University Avenue  
toward North Park and East  
San Diego



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National Park Service

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Photograph Reproductions Page 5

Georgia Street Bridge and University Avenue Grade Separation Cut Retaining Walls  
San Diego County, CA



**Photograph #3**  
Georgia Street  
Bridge/University Avenue  
Grade Separation Cut  
Retaining Walls  
San Diego County, CA  
Photograph Taken by Alex D.  
Bevil  
May 1998  
Original Negative in  
Possession of Photographer  
View of Southern Approach to  
Bridge Deck, Looking North  
along Georgia Street toward  
University Heights



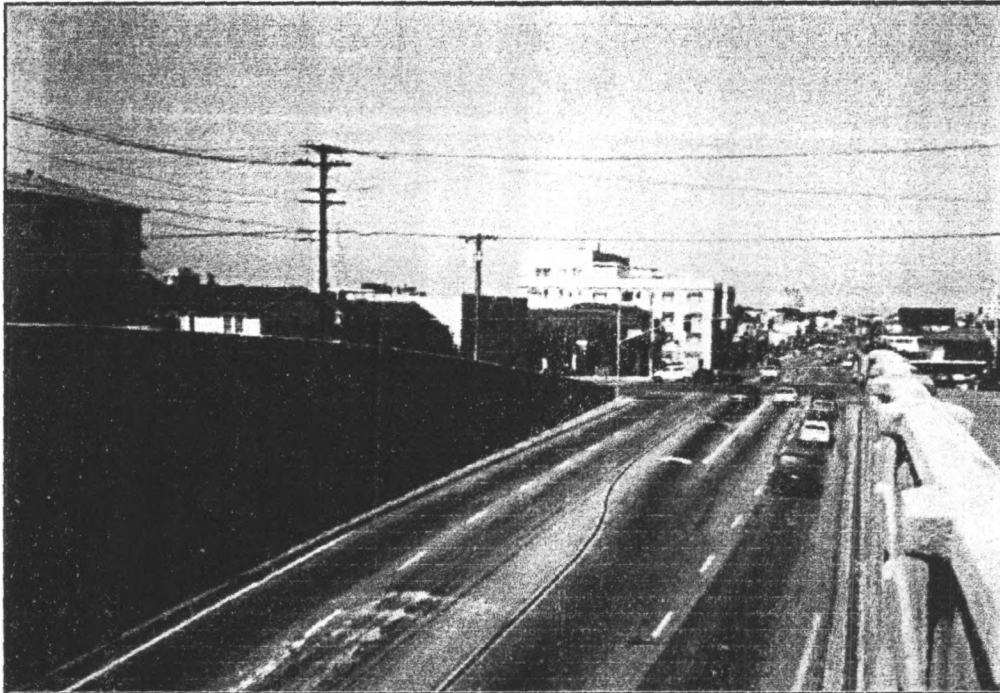
**Photograph #3a**  
Georgia Street Bridge/  
University Avenue Grade  
Separation Cut Retaining  
Walls  
San Diego County, CA  
Photograph Taken by Alex  
D. Bevil  
May 1998  
Original Negative in  
Possession of Photographer  
View of Southern Approach  
to Bridge Deck, Looking  
North along Georgia Street  
toward University Heights  
Close-up Detail of Sidewalk  
along Roadbed

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Photograph Reproductions Page 6

Georgia Street Bridge and University Avenue Grade Separation Cut Retaining Walls  
San Diego County, CA



**Photograph #4**  
Georgia Street  
Bridge/University Avenue Grade  
Separation Cut Retaining Walls  
San Diego County, CA  
Photograph Taken by Alex D.  
Bevil  
May 1998  
Original Negative in Possession  
of Photographer  
View of Western Approach to  
Bridge, Looking West from the  
Bridge's Deck toward  
Intersection of Park Boulevard  
and University Avenue



**Photograph #5**  
Georgia Street  
Bridge/University Avenue Grade  
Separation Cut Retaining Walls  
San Diego County, CA  
Photograph Taken by Alex D.  
Bevil  
May 1998  
Original Negative in Possession  
of Photographer  
View of Eastern Approach to  
Bridge, Looking East from the  
Bridge's Deck toward the  
Intersection of University  
Avenue and Florida Street

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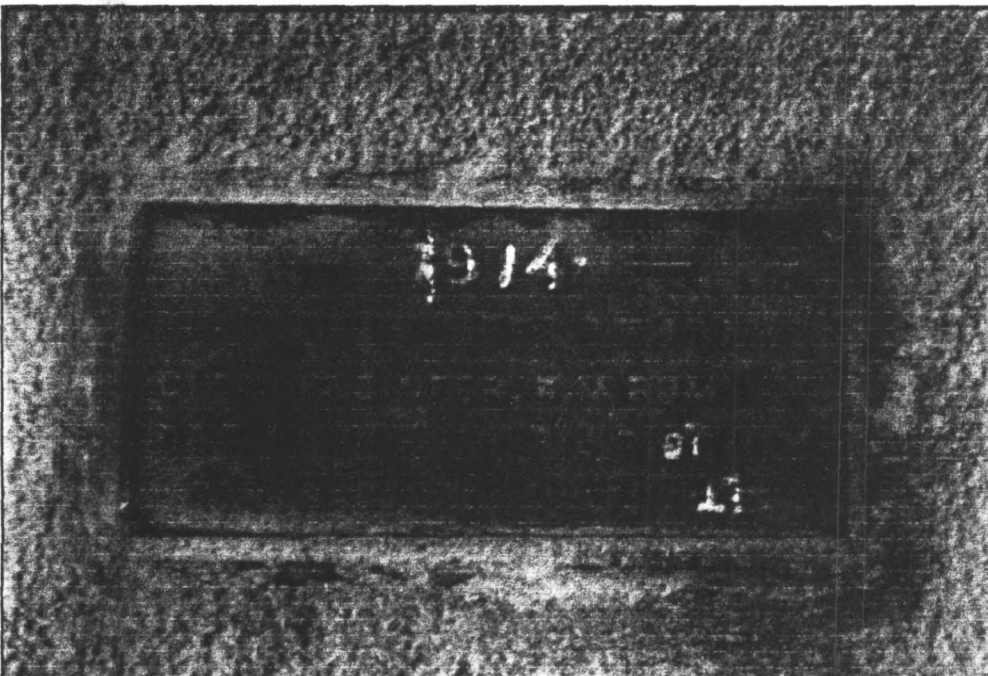
National Register of Historic Places  
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Photograph Reproductions Page 7

Georgia Street Bridge and University Avenue Grade Separation Cut Retaining Walls  
San Diego County, CA



**Photograph #6**  
Georgia Street  
Bridge/University Avenue  
Grade Separation Cut  
Retaining Walls  
San Diego County, CA  
Photograph Taken by Alex  
D. Bevil  
May 1998  
Original Negative in  
Possession of  
Photographer  
Close-up View of Eastern  
Approach to Bridge,  
Looking West toward the  
Intersection of University  
Avenue and Park  
Boulevard



**Photograph #7**  
Georgia Street  
Bridge/University Avenue  
Grade Separation Cut  
Retaining Walls  
San Diego County, CA  
Photograph Taken by Alex D.  
Bevil  
May 1998  
Original Negative in  
Possession of Photographer  
View of Historic Plaque  
Commemorating Bridge and  
Retaining Wall's Completion  
in 1914, Looking South from  
under Bridge's Southeast  
Arch/Retaining Wall Junction

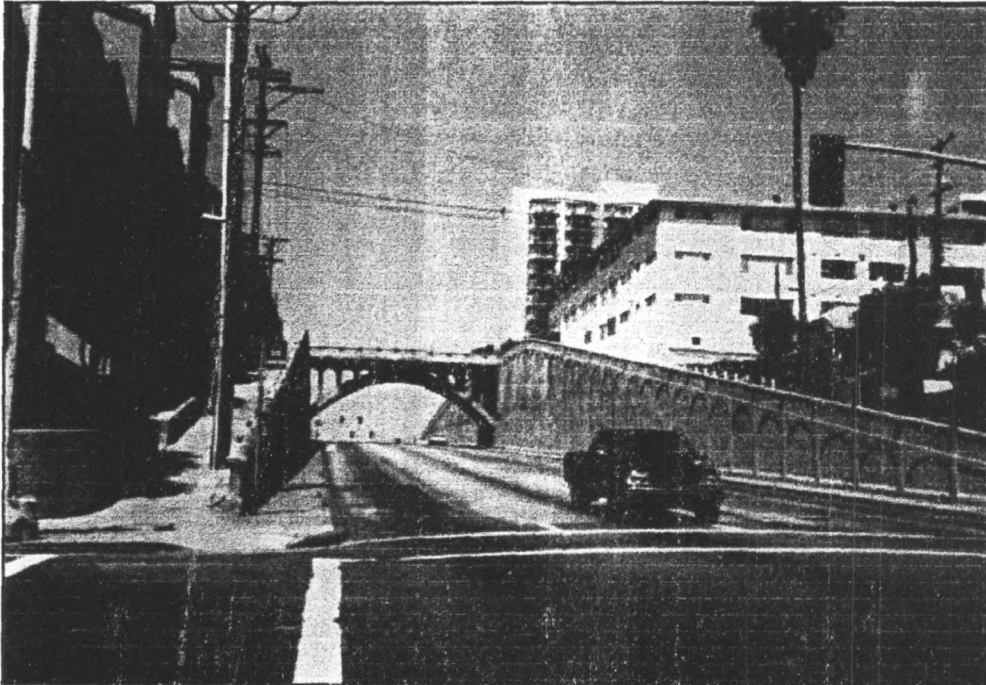


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Continuation Sheet

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Georgia Street Bridge and University Avenue Grade Separation Cut Retaining Walls  
San Diego County, CA



**Photograph #8**  
Georgia Street  
Bridge/University Avenue  
Grade Separation Cut  
Retaining Walls  
San Diego County, CA  
Photograph Taken by Alex  
D. Bevil  
May 1998  
Original Negative Located in  
Possession of Photographer  
View of Eastern Approach to  
Grade Separation Cut,  
Looking West from  
Intersection of University  
Avenue and Florida Street