

United States Department of the Interior  
National Park Service

SENT TO D.C.  
6-29-01

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 an 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 Sixth, Seventh and Tenth Street Stone Arch Bridges

other names/site number \_\_\_\_\_

2. Location

street & number 700 Blocks of Sixth, Seventh and Tenth Streets  not for publication

city or town Charleston  vicinity

state Illinois code IL county Coles code 029 zip code 61920

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this  nomination  request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property  meets  does not meet the National Register criteria. I recommend that this property be considered significant  nationally  statewide  locally. ( See continuation sheet for additional comments.)

William L. Wheeler / SHP 6-22-01  
Signature of certifying official/Title Date

State of 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 commenting official/Title Date

State or Federal agency and bureau \_\_\_\_\_

4. National Park Service Certification

I hereby certify that the property is:

<input type="checkbox"/> entered in the National Register. <input type="checkbox"/> See continuation sheet.	Signature of the Keeper _____	Date of Action _____
<input type="checkbox"/> determined eligible for the National Register. <input type="checkbox"/> See continuation sheet.	_____	_____
<input type="checkbox"/> determined not eligible for the National Register.	_____	_____
<input type="checkbox"/> removed from the National Register.	_____	_____
<input type="checkbox"/> other, (explain:)	_____	_____

Sixth, Seventh & Tenth Street Stone Arch Bridges  
Name of Property

Coles / Illinois  
County and State

**5. Classification**

**Ownership of Property**  
(Check as many boxes as apply)

- private
- public-local
- public-State
- public-Federal

**Category of Property**  
(Check only one box)

- building(s)
- district
- site
- structure
- object

**Number of Resources within Property**  
(Do not include previously listed resources in the count.)

Contributing	Noncontributing	
0	0	buildings
0	0	sites
3	0	structures
0	0	objects
3	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**

N/A

**6. Function or Use**

**Historic Functions**  
(Enter categories from instructions)

Transportation/Road-related

**Current Functions**  
(Enter categories from instructions)

Transportation/Road-related

**7. Description**

**Architectural Classification**  
(Enter categories from instructions)

Other: Stone Arch Bridge

**Materials**  
(Enter categories from instructions)

foundation Limestone

walls Limestone

Concrete

roof

other

**Narrative Description**

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

Sixth, Seventh & Tenth Street Stone Arch Bridges

Coles / Illinois

Name of Property

County and State

8. Statement of Significance

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.
X C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
D Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations

(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.

Areas of Significance

(Enter categories from instructions)

Engineering

Period of Significance

1895

Significant Dates

N/A

Significant Person

(Complete if Criterion B is marked above)

N/A

Cultural Affiliation

N/A

Architect/Builder

Briggs, Alexander

Narrative Statement of Significance

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

9. Major Bibliographical References

Bibliography

(Cite the books, articles, and other sources used in preparing this form on one or more 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 #

Primary location of additional data:

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

Name of repository:

Sixth, Seventh & Tenth Street Stone Arch Bridges

Coles / Illinois

Name of Property

County and State

10. Geographical Data

Acreage of Property Less than one

UTM References

(Place additional UTM references on a continuation sheet.)

1 16 398930 4371890
Zone Easting Northing
2 16 399030 4371870

3 16 399270 4371960
Zone Easting Northing
4

See continuation sheet

Verbal Boundary Description

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

Boundary Justification

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

11. Form Prepared By

name/title Jacquelin L. Wilen (See continuation sheet.)
organization Coles County Regional Planning & Development Commission date September, 2000
street & number 651 Jackson, Room 309 telephone (217) 348-0521
city or town Charleston state IL zip code 61920

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps

- A USGS map (7.5 or 15 minute series) indicating the property's location.
A Sketch map for historic districts and properties having large acreage or numerous resources.

Photographs

Representative black and white photographs of the property.

Additional items

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

Property Owner

(Complete this item at the request of SHPO or FPO.)

name City of Charleston
street & number 520 Jackson Avenue telephone (217) 345-2484
city or town Charleston state IL zip code 61920

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Projects (1024-0018), Washington, DC 20503.

United States Department of the Interior  
National Park Service

## National Register of Historic Places Continuation Sheet

Section number 7 Page 1

SIXTH, SEVENTH AND TENTH STREET STONE ARCH BRIDGES

### 7. NARRATIVE DESCRIPTION

Charleston's three stone single arch bridges, built circa 1895 and crossing the Town Branch of Cassell Creek, are located on Sixth, Seventh, and Tenth Streets within a quarter mile (1320 feet) length of the Town Branch. They are found just south of the Charleston's central historic downtown area or Courthouse Square. All three bridges are constructed primarily of local limestone from the Livingstone member of a 300 million year old Bond Formation located in the quarries adjacent to the Embarras River east of Charleston (Tarble, 2000). The stones have been squared and most visible surfaces exhibit a rock face. These single arch bridges are partially obscured from view to the motorist or pedestrian and one must walk toward the creek bed in order to observe the attractive construction of their stone arches. A local stonemason, Alexander Briggs (1855-1924), was responsible for their construction. Each bridge arch crosses the creek at a ninety-degree angle in a north-south direction. The Town Branch of Cassell Creek is an intermittent stream exhibiting many relatively dry periods.

#### The Neighborhood

The Town Branch runs generally in an east-west direction about two city blocks south of the Courthouse Square. The creek marks the south edge of the Courthouse Square and its adjacent blocks which were the commercial and social center of Charleston for about one hundred and thirty years and is still a business center and the seat of Coles County Government. The residential neighborhoods located directly to the south of the creek and the three stone arch bridges were platted and developed during a twelve year period prior to 1895. The streets around the square were paved in brick in 1894, as were Sixth, Seventh and Tenth Streets in subsequent years. The two stone arch bridges on Sixth and Seventh Streets are located on the south edge of the Original Town which was platted in 1831. The Tenth Street Stone Arch Bridge is located between J. H. Bails's 2<sup>nd</sup> Addition (1914) and Anderson's 1<sup>st</sup> Addition (1852). The homes in this quarter mile creek area are mostly of a moderate size and were constructed fifty to seventy-five years ago.

#### Sixth Street Stone Arch Bridge

Charleston's Sixth Street Stone Arch Bridge is constructed of large (20x20x24-36 inches) squared stone, stabilized by mortar. The west concrete parapet and some patching are the only exceptions to the original stone construction. The arch rings, barrel arch, spandrels, wings, parapet and deck are mostly in good condition and scouring has

United States Department of the Interior  
National Park Service

**National Register of Historic Places  
Continuation Sheet**

Section number 7 Page 2

SIXTH, SEVENTH AND TENTH STREET STONE ARCH BRIDGES

not affected the structure. Each semicircular arch ring is constructed of about 16 voussoirs, has a span of 20 feet and a rise of about 9 feet. The large squared stones can be observed in the 60 foot barrel arch or tunnel, which is uninterrupted except for four large tile storm sewer drains, two on each end.

The creek bed to the west of the Sixth Street Bridge is confined by a perpendicular 7 to 8 foot concrete wall on the south side and then 20 feet to the north across the creek another perpendicular 8 to 9 foot stone wall. These walls adjoin the west spandrel at the edge of the arch's 20 foot span reducing the visible expanse of the spandrel.

Two major stone courses of eleven and twelve inches in width and a six inch wide minor stone course are positioned above the keystone. These elements are then topped by a twelve inch concrete parapet making the total spandrel distance above the keystone 3.4 feet. The west spandrel top advances 41 feet across the top of the arch but is mostly hidden from view by the creek walls and shrubbery. A ten foot expanse of concrete patching is found adjacent to a small wing wall that advances to the southwest eight feet from the south end of the parapet. Other small brick and concrete patches are located in the top part of the west spandrel wall.

A municipal sewer line runs partially submerged in the creek and a raised (3 to 4 feet) sewer manhole is located within the west end of the barrel arch. There is a 4x4x4 foot square brick structure located against the southeastern barrel arch wall below the drain pipe.

The Sixth Street Bridge is 60.5 feet in width from east to west. The bridge deck consists of a 30 foot wide asphalt street with a sidewalk and a grass parkway on each side. The concrete west parapet is 41.6 feet long, 1.5 feet wide, and 6.5 inches above the adjacent concrete sidewalk. Both parapet and sidewalk have been added as an improvement since the original construction. \* Five iron pipes of the 3.5 foot high double, horizontal railing are embedded in this concrete parapet top. The grade level east parapet is 25 feet long and is capped with three stones that are 1.6 feet wide and one foot deep. The top north, south and west edges of these stones are beveled, leaving a sharper edge on the parapet

\*Glenn Bennett who worked for the Charleston Street Department from 1960-1975 believes that the sidewalks on the three Stone Arch Bridge decks were improved during his tenure with the city (Bennett, 2001).

United States Department of the Interior  
National Park Service

## National Register of Historic Places Continuation Sheet

Section number 7 Page 3

SIXTH, SEVENTH AND TENTH STREET STONE ARCH BRIDGES

---

capstone to the stream side of the parapet. They also exhibit marks on the top that indicate a railing was previously embedded in the stone. A 3.75 foot high "2X6" wooden railing is positioned between the sidewalk and this east parapet. The street surface may have been dirt when this bridge was first built. It was soon paved in brick that still lies beneath the present asphalt along with the original street subsurface, all providing contemporary traffic with a firm and durable street that is one of Charleston's main one-way arteries going south.

A large area of rip-rap is located just to the east of the Sixth Street Bridge on the north side of the creek. The rip-rap advances down the embankment from the street level just north of the wing wall and progresses eastward about 75 feet. As this "creek side" continues easterly for a block toward the Seventh Street Bridge, it is slightly curved, moderately sloped and covered with grass vegetation. The south side of the creek to the east of the Sixth Street Bridge is characterized by a steep wall which runs east for 30 feet and is constructed without mortar of broken concrete chunks. As the creek side continues to the Seventh Street Bridge, it is held in place by rip rap.

The wing walls on the east side form 120 degree angles with the east spandrel at junctures coinciding with the springers at the base of the arch. The north wing wall advances in a northeasterly direction about 10.3 feet, is stepped to street level, and contains 9 stone courses above the creek bed which gives it a height of 12.75 feet. The south wing wall advances southeasterly from its juncture with the spandrel for about 3 or 4 feet and then is joined by the broken concrete chunk wall previously mentioned.

Two major stone courses of 11 and 16 inches in width are positioned above the east keystone which measures approximately 20x20x36 inches. The topmost course contains two 7.5x14 inch openings which could have been used to drain the bridge deck in the past. These stone courses are then topped by the parapet previously described making a total distance of about 3.5 feet above the keystone.

### Seventh Street Stone Arch Bridge

The Charleston Seventh Street Stone Arch Bridge's structure is very similar in type, materials, and construction process to the Sixth Street Bridge. The spandrels, and wing

United States Department of the Interior  
National Park Service

National Register of Historic Places  
Continuation Sheet

Section number 7 Page 4

SIXTH, SEVENTH AND TENTH STREET STONE ARCH BRIDGES

walls are built of similar stones, cut in a similar fashion and are from the same quarry. The 55.8 foot tunnel, however, is built of smaller cut stones stabilized by a considerable amount of mortar and the voussoirs are smaller in size than those in the Sixth Street Bridge. All four wing walls meet their spandrel wall at a 120 degree angle in junctures similar to the ones on the east side of the Sixth Street bridge as described above. The structure is in fair condition, as some stone shifting, patching and loss of joint mortar is evident. Each segmental arch ring is constructed of about 20 voussoirs and has a span of 19 feet. The west arch has a rise of 7.25 feet.

The west, or ebb flow, side of the Seventh Street Bridge has gradually sloping stream banks eliminating the necessity for retaining walls. The two stepped wing walls are clearly evident in their entirety and have not been altered or covered by further construction to control stream bank erosion.

Five major stone courses, each with an average width of about 18 inches and one minor stone course, less than one foot in width, are positioned above the west keystone. The spandrel is topped by a parapet that is 21.75 feet in length north to south. There are three capstones on the parapet that are 1.6 feet wide and 1 foot deep and the largest is 10 feet long. The top north, south and east edges of these stones are beveled, leaving a sharp edge on the parapet capstone to the stream side of the parapet. The stream side surface of the capstones exhibit a rock face, as do the facing surfaces of the spandrels, voussoirs, and wing walls on all three bridges. The southernmost capstone appears to have been slightly moved from its original position and is missing a portion of its north end. Some of the parapet base is also missing at its north end as if the structure had been hit by a moving vehicle and never fully repaired. The parapet varies in height from 1 to 2 feet on the street side and can be clearly observed from the street or sidewalk on the bridge deck.

The north wing wall contains about 12 stone courses made of squared stones approximately 18x20x36-48 inches in size and is stepped on the top in its advance away from the spandrel. The bottommost courses are located underground. This wing wall extends about 12.66 feet out from the spandrel in a northwesterly direction. It is 14.83 feet high at its juncture with the spandrel. The south wing wall is constructed of about 11 stone courses with the lowermost ones located below ground, is stepped in the same manner and advances in a southwesterly direction for 12.83 feet. It is 15.58 feet high at its juncture with the spandrel. Some of the stones in this wing wall show evidence of shifting and there is a large drain pipe positioned at the top middle of the wall.



United States Department of the Interior  
National Park Service

## National Register of Historic Places Continuation Sheet

Section number 7 Page 5

SIXTH, SEVENTH AND TENTH STREET STONE ARCH BRIDGES

The Seventh Street Bridge is 56.33 feet in width from east to west. The bridge deck consists of a 30.75 foot wide asphalt street with a sidewalk and a grass parkway on the east side and a grass parkway only on the west side. The street surface may have been dirt when this bridge was constructed. It was soon paved in brick as was Sixth Street, providing an excellent street substructure for this main one-way artery going north.

The Town Branch's creek sides are steep to the east of the Seventh Street Bridge, necessitating additional masonry walls of containment. The north wing wall on the east side contains about 12 visible stone courses, is about 16 feet high at its juncture with the spandrel and advances in a northeasterly direction for about 7 feet. Its top four courses are stepped, leaving an 8 foot high vertical end which is joined by an equally high stone and concrete wall advancing in a northwesterly direction for about 12 feet. Only four of the south wing wall's stone courses are visible above the ground. Their stepped end surfaces are met by a rubble stone and concrete "top wall." The combined walls advance about 8 feet in a southeasterly direction and abut against a large tree trunk. Only 6.2 feet of this wing wall is visible above the steep incline of the creek side. An additional rubble stone and concrete wing wall is located to the north front of the wing wall described above. This rubble wall displays a tipped manner and serves to direct the creek water into the tunnel and reduce erosion.

The east spandrel is similar to the west one in size and number of stone courses. The east parapet is 22.8 feet in length and has four capstones that are 1.6 feet wide, one foot high, and display the beveled edges and surfaces described previously. The viewer can clearly observe the parapets on both sides of the Seventh Street Bridge as they rise one to two feet above the deck.

### Tenth Street Stone Arch Bridge

The Stone Arch Bridge in the 700 block of Tenth Street is not visible to those who are passing over it. Its stones and manner of construction are similar to the other bridges. The use of smaller stones mixed with large ones occurs in the Tenth and Seventh Street Bridges. Each segmental arch ring has a span of 20 feet and consists of about 22 voussoirs that have a 12-16 inch width, a 17 inch height, and an 18-36 inch length. The west arch ring has a rise of 7 feet. It appears that the wing walls on this bridge meet their spandrel wall at an angle slightly larger than 120 degrees. The structure is in good-to-fair condition, with a minimal amount of mortar missing from a few joints.

**United States Department of the Interior  
National Park Service**

**National Register of Historic Places  
Continuation Sheet**

Section number 7 Page 6

SIXTH, SEVENTH AND TENTH STREET STONE ARCH BRIDGES

The creek to the west of the Tenth Street Bridge has a steep north bank and a gradually sloping south bank which is grass covered. The south wing wall on the west side of the bridge has eleven stone courses, each about 12 inches in width, advances in a southwesterly direction for 13 feet, and is stepped. The single stone on the top of this wing wall is 1.9 feet wide, 1 foot high, and 4.83 feet long. The wall is 10.9 feet high at its juncture with the west spandrel. A metal drain pipe from the street protrudes over the stepped portion of the south wing wall. The north wing wall also has eleven stone courses, advances in a northwesterly direction for seven feet abutting into the dirt bank. It is 10.6 feet high at its juncture with the spandrel. There is one step at the top end of this wall.

Three stone courses, each with an average width of about 13 inches, are positioned above the keystone. This west spandrel has a total of 10 visible courses with their respective width in inches from the ground up as follows: 9, 13, 13, 10, 6, 8, 6, 15, 12 and 12. The west spandrel is topped by a parapet that is 25.25 feet in length north to south and is made up of five capstones that overhang the spandrel about six inches. A concrete sidewalk rises 1.25 feet above and 1.66 feet to the east of the west parapet on the bridge deck. A metal pipe railing similar to the one on the west side of the Sixth Street Bridge is set in its west edge. It appears that the sidewalk has been added as an improvement since the original construction.

The Tenth Street Bridge is the smallest of the three bridges, with a total width of about 44 feet. The deck consists of a 24.8 foot asphalt street with a sidewalk and small grass strip on the west and a grass strip on the east side. The tenth street deck has been raised a little over a foot from the time of its original construction. Tenth Street was also first paved in brick and these bricks still remain below the asphalt in areas where the street has been undisturbed by sewer or water system construction. It is a one way street going south.

The Town Branch's creek sides are steep to the east of the Tenth Street Bridge, again necessitating additional masonry walls of containment. The north wing wall is constructed of about 11 visible stone courses and it advances northeasterly an estimated 5 feet. Its top two courses are stepped and the remaining courses are met by a stepped concrete block wall which runs for an additional estimated 12 feet along the creek side. The south wing wall advances southeasterly for an estimated 5 feet, is stepped and is met by a concrete chunk wall.

There are three major stone courses and one minor one above the keystone on the east spandrel which contains a total of 9 visible stone courses. The 25 foot long parapet has

United States Department of the Interior  
National Park Service

## National Register of Historic Places Continuation Sheet

Section number 7, 8 Page 7

SIXTH, SEVENTH AND TENTH STREET STONE ARCH BRIDGES

seven capstones and some end remains of a pipe railing can be seen protruding a few inches up from them. About a 1.25 foot layer of dirt and sod is located on top of this parapet. The dirt/sod layer sets about 6 to 8 inches to the west of the east lip or edge of the parapet. A "2x6" wood railing similar to those described previously is set in the grass about 4 feet east of the curb.

The Tenth Street Bridge tunnel is constructed of large, medium and small sized stones. There are two concrete 2x3x4.5 foot structures against the north tunnel wall and a 4x4 foot concrete mound in the creek bed at the east end of the tunnel. The creek bed is littered with considerable refuse on the east side of the Tenth Street Bridge.

### 8. NARRATIVE STATEMENT OF SIGNIFICANCE

The Sixth, Seventh and Tenth Street Stone Arch Bridges are locally significant. They qualify under Criterion C for engineering. The builder's request for payment for the construction of the Sixth Street Bridge is noted in the October 17, 1895 Charleston City Council Minutes indicating that these three similar bridges were constructed during the last few years of the nineteenth century. The bridges are a little over 100 years old and are in good to fair condition. They all retain the majority of the integrity of materials, design, workmanship, location, feeling, association and setting as they did when they were built. They were built with local Coles County stone by a local stonemason who constructed other large stone structures in Charleston. They were erected during a time when the City was growing by "leaps and bounds." New subdivisions were appearing, electric lights and phones installed, a new courthouse was constructed, streets were paved in brick, and a new teacher training institution developed in Charleston. The three stone arch bridges are located on through streets that still carry considerable traffic. They are an integral part of Charleston's infrastructure which includes thirteen bridges crossing the Town Branch, the creek draining the northern two-thirds of the City. Stone arch bridges are not a common structure in east central Illinois and these are the only ones in Charleston.

#### History of Stone Arch Bridge Construction

The construction of the stone arch as an engineering component of tombs was first practiced in Egypt and Mesopotamia at least 2000 years before the birth of Christ (Brown, 1993: 18-19). The Romans perfected the use of the stone arch in bridge and aqueduct

United States Department of the Interior  
National Park Service

## National Register of Historic Places Continuation Sheet

Section number 8 Page 8

SIXTH, SEVENTH AND TENTH STREET STONE ARCH BRIDGES

construction and built many large structures during the height of their civilization. Vitruvius, a first century AD military engineer and architect recorded Roman architectural practices of the period including the use of wedge shaped stones or voussoirs that form the curved parts of the arch (Hopkins, 1970:17). Roads and bridges were of strategic importance as the Roman Empire advanced through Europe, an importance that continued in the minds of Renaissance officials (Hayden, 1976:43). Roman bridges and aqueducts, some constructed without mortar remain today in Europe, and a few are still in use such as the Puente de Alcantara, c. AD 100 crossing 164 feet above the Tagus River in Spain and built with six arches for a total length of 600 feet. The use of the cofferdam was a necessary construction component for such an immense bridge. Large stone arch construction projects with numerous arches took years to complete and their enduring quality has kept them standing for centuries. On occasion they were ravaged by war or flood, reconstructed or their construction changed in some way by officialdom. Early bridges were built by the church and small chapels and prayer stations were incorporated into their construction. Further masonry arch development occurred throughout the medieval and Renaissance periods and culminated in the Industrial Revolution with John Rennie's design of the Waterloo Bridge (1811-1817) (Hayden, 1976:58). Numerous single and multiple stone arch bridges built in the medieval and Renaissance periods are still in use today in England and Europe.

Old London Bridge across the Thames carries a rich history from its medieval beginnings in 1176 to its removal in about 1970 and subsequent reconstruction in western United States. The construction of the 20 stone arches slowly advanced across the 900 foot river for the next 33 years. The church was instrumental in its construction which included a chapel and two defensive towers. By 1500 the bridge was covered with houses and shops on both sides making it similar to the other medieval streets of London. A great stone gateway was located at the Southwalk end, a second gateway tower guarded a drawbridge about 200 feet further on, and the river could be observed at an open area in the center. The bridge witnessed an intense on site battle in 1450 and suffered through reoccurring fires and much political strife that effected its upkeep. The buildings were removed in the eighteenth century and the roadway improved. In 1831, the original medieval structure was replaced by John Rennie's New London Bridge constructed with five semi-elliptical stone arches at a site 180 feet upstream. This graceful structure was replaced in 1973 with the present London Bridge constructed of pre-pressed concrete (Hayden, 1976:35-39).

In the latter part of the eighteenth Century, Jean Rodolphe Perronet, a French engineer, perfected the segmented arch in bridge construction (Hayden, 1976:49). The 220 foot, single spanned, Cabin John Aqueduct built of Seneca sandstone in 1864 near Washington,

United States Department of the Interior  
National Park Service

## National Register of Historic Places Continuation Sheet

Section number 8 Page 9

SIXTH, SEVENTH AND TENTH STREET STONE ARCH BRIDGES

D.C. is a good example of a segmented arch located in this country. For 39 years it was the longest masonry arch in the world (DeLony, 1992:20). The monumental, 8 spanned, 612 foot, Thomas Viaduct built in 1835 by the B&O Railroad at Relay, Maryland was the nations first multi-span masonry arch railroad bridge. It was built "for the unprecedented stresses of ever larger railroads (Sculle, 1990:14)." The wider historic picture indicates that Americans preferred timber to stone bridge construction as wood was plentiful and carpenters were many making stone bridge construction less frequent. The durability of stone was of prime consideration when in c.1900, the Pennsylvania Railroad replaced some metal bridges with stone ones on their line between Jersey City and Pittsburgh.

Nineteenth Century single arch bridges were built in this country by local people who used local materials. Such is the case in Monroe County, Illinois where numerous members of the original 166 single span stone arch bridges still stand (Sculle, 1990:113-114). The county had a ready supply of stone, local stone masons and a preference for stone bridge construction as seasonal flooding along the Mississippi River floodplain would soon destroy a wooden bridge.

Charleston was fortunate to have among its citizenry a European trained stone mason by the name of Alexander Briggs and the town was also fortunate to be situated a little over three miles west of limestone quarry sites located along the Embarras River. These factors resulted in the construction of the Sixth, Seventh and Tenth Street Stone Arch Bridges of limestone similar to that located in the local quarries (Tarble, 2000). The Charleston City Minutes of October 17, 1895 mention a claim of Alex Briggs for \$547, "for building stone culvert arch near old cemetery (Charleston City Hall, 1895)."

### Construction of Charleston's Three Stone Arch Bridges

Abutments at the sides of the river and piers in the river were the first parts of a stone bridge to be put in place. Charleston's three stone arch bridges are all single span arches with an abutment on each end. The stone loading forces for such an arch push downward and outward on the abutment, which must be of massive construction (Brown, 1993:15). These massive stones (20x24x42-96 inches) can best be observed at the base of the Sixth Street barrel tunnel. A temporary framework of wood construction called centering supports the arch elements as they are assembled. Centering is built out from and is braced to the abutments and piers (Brown, 1993: 21). A gravel/dirt/rock fill is packed into the area above the arch to form the flat bridge deck.

United States Department of the Interior  
National Park Service

**National Register of Historic Places  
Continuation Sheet**

Section number 8 Page 10

SIXTH, SEVENTH AND TENTH STREET STONE ARCH BRIDGES

Alexander Briggs

“Born in Springfield, Massachusetts in 1855, Alexander Briggs settled in Charleston with his family in 1863. After attending public schools, Briggs learned the stonemasonry trade from his father. From 1874-1876 Briggs studied his trade in Europe and on his return started a marble and monument business in Charleston.

In 1898, Briggs advertised his primary occupation as “contractor” and in 1903 he sold his marble and monument business to the Charleston Monument Company, in which he owned the controlling stock. Briggs continued to do contracting for several years. Some of the structures he built include the jail in Charleston, demolished ca. 1976; several stone churches, the First Christian Church was demolished in 1979; several residences, including his own; the Briggs Block, a commercial structure since demolished; and “Old Main” on the Eastern Illinois University campus, a building completed by Briggs’ construction company. Around 1905 Briggs gave up contracting in order to manage the Charleston Monument Company.

Briggs served as President of the Colombian Building and Loan and of the Charleston Trust and Savings Bank. He was a member of various fraternal organizations including: Masons, Odd Fellows, and Modern Woodmen. Briggs’ investments included properties in Charleston, a farm in Coles County, and land in Louisiana and Oklahoma.

Briggs eventually turned the Charleston Monument Company over to his sons, who operated the company at the time of his death in 1924 (Dunne, 1979).”

History of Charleston

The 1820 land act lead to the beginning of settlement of central Illinois. Benjamin Parker purchased the first parcel of land in Coles County near the Illinois Route 130 Embarras River crossing in 1824. Settlers were attracted to this area on the edge of the prairie where there was an abundant water supply and ample woodlands. Charleston developed as a trading center for the surrounding agricultural community, with grist mills and saw mills appearing first.

**United States Department of the Interior  
National Park Service**

**National Register of Historic Places  
Continuation Sheet**

Section number 8 Page 11

SIXTH, SEVENTH AND TENTH STREET STONE ARCH BRIDGES

Coles County was established on December 25, 1830 and the small village of Charleston became the county seat when the original town plat for lots, streets and a public square was recorded on June 4, 1831. Benjamin Parker, the first settler of Charleston, and Charles Morton gave the County Board the land for the original town plat. The lots in this area between 5<sup>th</sup> Street to 9<sup>th</sup> Street and Railroad Avenue to Harrison Avenue were then sold and the funds were used to finance the county government. The first log courthouse was constructed in 1831 on the square.

Charleston grew from a cluster of a few families in 1830 then called Coles Courthouse, to 25 families in 1834 and a population of around 200 in 1837. Charles Morton was the town's first postmaster, first store owner and the man for whom Charleston was named. The town evolved as a crossroads of emigration, primarily of people from the upper south because of its proximity to the Wabash River and local trails such as the State Road, Archer Road, York Trail and Embarras Trail.

Incorporation as a village came in 1835 and in the same year a brick two-story courthouse with a pyramid roof and a central tower was constructed for \$5000 on the site of the original courthouse. On March 2, 1839 the village incorporated as a town with a president and trustees. In 1850, the population stood at 849 and continued to increase, allowing for an incorporated city on February 9, 1865.

Charleston's earliest industries included the Bain Manufacturing Company, a foundry started in 1857, the Weiss Woolen company opening in 1863 and the Record Tile and Brick works operating from 1877 to 1916. A strong community effort was put forth in 1919 to bring the Brown Shoe Company to Charleston. Shoe manufacturing employed the largest number of Charleston residents for many years and continued its presence in town until about 1985.

The presence of Oliver sandstone adjacent to the Embarras River about four miles east of Charleston was a boon for our local contractors. The stone was awarded "first premium" at the Louisiana Purchase Exposition in St. Louis in 1904 and can be seen today in our courthouse (1898) and in historical residences throughout town. Limestone quarries are also located along the Embarras River. Local limestone can be seen today around town in basements, curbs, sidewalks, and the three stone arch bridges.

Broom corn became an important agricultural commodity at the turn of the century, as Coles County produced almost half of the Illinois crop by 1908. Broom corn factories and

United States Department of the Interior  
National Park Service

## National Register of Historic Places Continuation Sheet

Section number 8 Page 13

SIXTH, SEVENTH AND TENTH STREET STONE ARCH BRIDGES

employees resided in the small homes located in the subdivisions near the tracks and repair yard on the north side of town.

The east/west line, owned by the Terre Haute and Alton Railroad, was completed in 1855. For many years it was called the "Big Four" for the Cleveland, Cincinnati, Chicago and St. Louis Railroad, then it became the New York Central, Penn Central, Conrail, and has recently been developed into a recreation trail. A line affectionately called the "Clover Leaf Route" was completed in 1883 and produced the greatest economic impact, as Charleston was chosen as the location of its repair yard. This railroad had many names through the years, most recently the Nickel Plate and Norfolk and Western. Today it is a short line which connects with the Illinois Central Railroad at Neoga and is called the Eastern Illinois Railroad.

The Central Illinois Traction Company began operating its first electric trolley in Charleston on June 5, 1904. It came from Mattoon and entered the City on Monroe Avenue, traveling to Seventh Street on the square. The car then used a turning "Y" to reverse its direction. A City Line was started in 1911. It began its route at the Normal School and traveled north on Sixth Street to Railroad Avenue past the Clover Leaf and Big Four Depots, to the brown Shoe Company and the Coles County Fairgrounds on the east side. Central Illinois Public Service Company acquired both lines in 1912 and they operated until sometime in the 1920's when automobiles became more affordable for everyone.

### 6<sup>th</sup> and 7<sup>th</sup> Street Neighborhood

The coming of the railroad in 1855 to Charleston had a marked effect on the City's progress and prosperity. City population grew from 849 in 1850 to 2849 in 1870, 4135 in 1890, and 5884 in 1910. Subdivisions began to appear on the edges of the original town and the large showy homes mixed with moderate sized ones were built on Sixth and Seventh Streets south of the stone arch bridges in the following subdivisions:

- Compton's Addition – 1889
- Connolly's 1<sup>st</sup> Addition – 1883
- County Clerk's Survey of Lot 13 – 1892
- McGurty's Subdivision – 1890
- Rickett and Wood's Addition – 1883 (see enclosed map)



United States Department of the Interior  
National Park Service

# National Register of Historic Places Continuation Sheet

Section number 8,9 Page 14

SIXTH, SEVENTH AND TENTH STREET STONE ARCH BRIDGES

Similar neighborhood development also occurred at this time in the subdivisions to the east and west of the square. Increased traffic due to growth and development appears to have led to a desire for the construction of three durable stone arch bridges near a bustling downtown area.

## 9. BIBLIOGRAPHY

Bennett, Glenn, Born March 10, 1911; Oral Interview, February 22, 2001.

Brown, David J. Bridges. New York: Macmillan Publishing Co. 1993.

Charleston and Mattoon Bicentennial Commission. History of Coles County, 1876-1976. Dallas, Texas: Taylor Publishing Company, 1976.

Charleston City Hall, City Clerk's Office, Charleston City Minutes; October 17, 1895.

Coles County Courthouse, Clerk's Office; Subdivision Files, 1830-1914.

Delaware Historic Bridge Survey and Evaluation. Delaware Department of Transportation Project 87-070-02, Historic Architecture and Engineering Series No. 89, 1991.

DeLong, Eric. Landmark American Bridges. Boston: Little, Brown and Company, 1992.

Dunne, Shaela C., James Riddle and Linda Riddle. "Alexander Briggs House, National Register Nomination." U.S. Department of the Interior, National Park Service, 1970.

Easter-Shick, Nancy. 'Round The Square, Life in Downtown Charleston, Illinois 1830-1998. Easter-Shick Publishing, 1999.

Easter-Shick, Nancy and Douglas K. Meyer. Pictorial Landscape History of Charleston, Illinois. Charleston, Illinois: Rardin Graphics, 1985

Gutowski, Vincent P., Born C.1945. Oral Interview March, 2000, Mattoon, Illinois.

Hayden, Martin. The Book of Bridges. New York: Galahad Books, 1976.

United States Department of the Interior  
National Park Service

**National Register of Historic Places  
Continuation Sheet**

Section number 9, 10 Page 15

SIXTH, SEVENTH AND TENTH STREET STONE ARCH BRIDGES

Hopkins, H.J. A Span of Bridges. New York: Praeger Publishers, 1970.

“Hunterdon County’s Stone-Arch Bridges: History, Technology, and Preservation”  
APT Bulletin, The Journal of Preservation Technology. Vol. XXX, No. 2-3, 1999.

Sculle, Keith A. “Lessons from the Landscape: The Stone Arch Bridges of Monroe County.” Illinois Historical Journal, Vol. 83, No. 2, pp 112-126, Summer 1990.

Tarble, Jay. Born c. 1974. Charleston Stone Co., Oral interview July, 2000, Charleston, IL.

Wilen, Jacquelin. “Charleston Sixth and Seventh Street Historic District, Coles County Register Nomination.” Coles County Regional Planning and Development Commission, 1998.

Wilson, Charles Edward. History of Coles County Illinois, 1905. Historical Encyclopedia of Illinois and History of Coles County, Newton Bateman and Paul Selby, Editors, Chicago: Munsell Publishing Co., 1905.

**10. GEOGRAPHICAL DATA**

Verbal Boundary Description  
Sixth Street Bridge

Beginning at the point where the north ROW of Harrison Street crosses the east ROW of Sixth Street, thence easterly 10 feet along the north ROW of Harrison Street, thence northerly 177 feet along a line parallel to the east ROW of Sixth Street to the point of beginning at the southeast corner of the property parcel rectangle, thence northerly 46 feet, thence westerly 76 feet, thence southerly 46 feet, thence easterly 76 feet to the point of beginning, all located in the Southwest Quarter of the Southwest Quarter of Section 11, Township 12, Range 9, East of the Third Principal Meridian, Charleston, Illinois.

Seventh Street Bridge

Beginning at the point where the north ROW of Harrison Street crosses the east ROW of Seventh Street, thence easterly 6 feet along the north ROW of Harrison Street,

United States Department of the Interior  
National Park Service

**National Register of Historic Places  
Continuation Sheet**

Section number 10, 11 Page 16

SIXTH, SEVENTH AND TENTH STREET STONE ARCH BRIDGES

---

thence northerly 228 feet along a line parallel to the east ROW of Seventh Street to the point of beginning at the southeast corner of the property parcel rectangle, thence northerly 36 feet, thence westerly 76 feet, thence southerly 36 feet, and thence easterly 76 feet to the point of beginning, all located in the Southwest Quarter of the Southwest Quarter of Section 11, Township 12, Range 9, East of the Third Principal Meridian, Charleston, Illinois.

Tenth Street Bridge

Beginning at the point where the south ROW of Van Buren Street crosses the west ROW of Tenth Street, thence westerly 12 feet along the south ROW of Van Buren Street, thence southerly 264 feet along a line parallel to the west ROW of Tenth Street to the point of beginning at the northwest corner of the property parcel rectangle, thence southerly 36 feet, thence easterly 60 feet, thence northerly 36 feet, and thence westerly 60 feet to the point of beginning, all located in the Southeast Quarter of the Southwest Quarter of Section 11, Township 12, Range 9, East of the Third Principal Meridian, Charleston, Illinois.

Boundary Justification

The boundaries for these three stone arch bridges in Charleston were chosen because they encompass the total area covered by the stone structure of each bridge.

**11. FORM PREPARED BY:**

Jackie Wilen, Charleston, IL

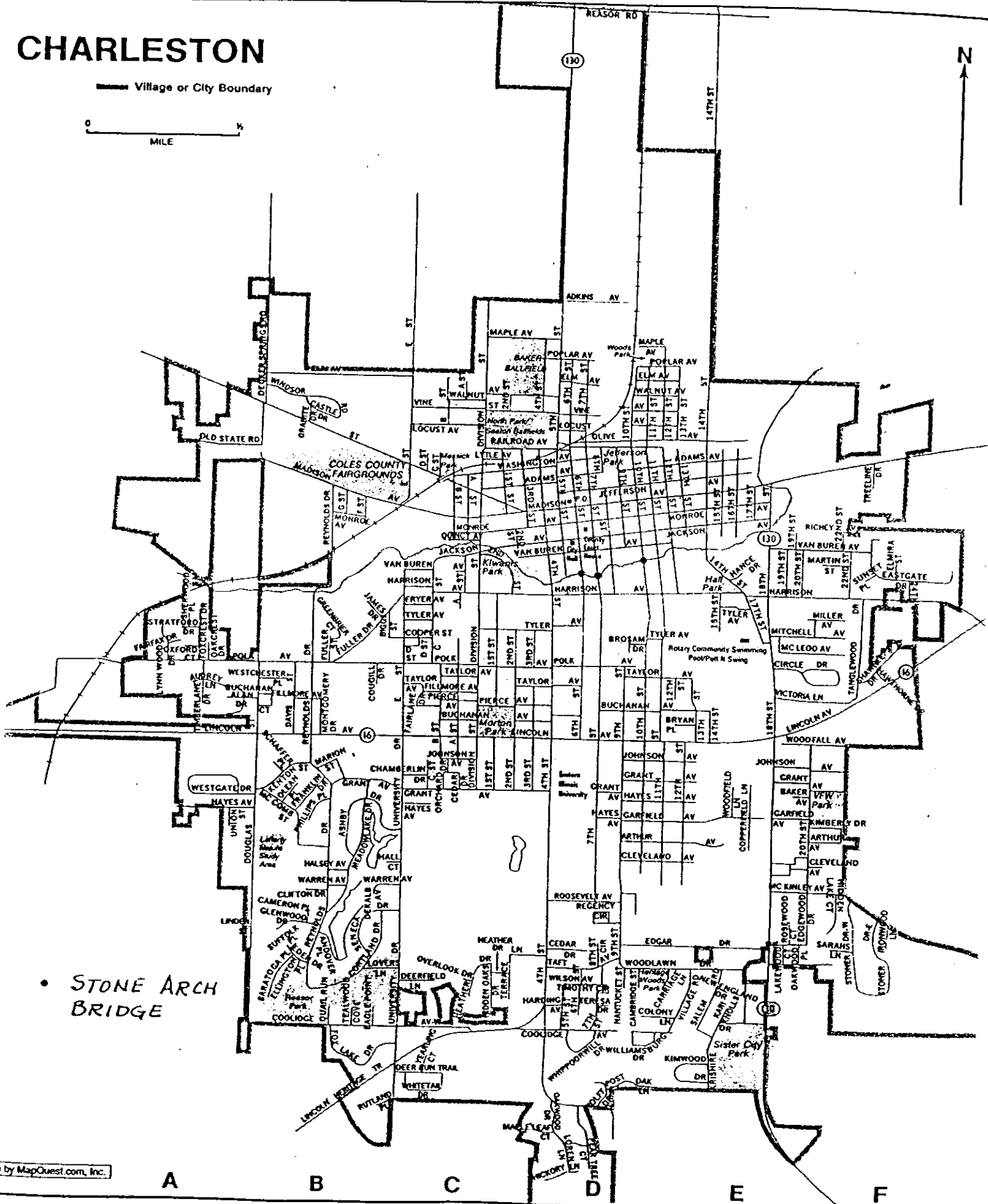
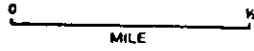
**RESEARCHERS:**

Joyce St.Micheal, Mattoon, IL

Chris Jerrells, Benton, IL

# CHARLESTON

— Village or City Boundary



• **STONE ARCH BRIDGE**

A

B

C

D

E

F