

STEPHEN J. BARBRE MIDDLE SCHOOL
1610 Third Street
Kenner
Jefferson Parish
Louisiana

HABS No. LA-1265
1292

HABS
LA
26-KENN,
1-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN BUILDINGS SURVEY
National Park Service
Southeast Region
Department of the Interior
Atlanta, Georgia 30303

HISTORIC AMERICAN BUILDINGS SURVEY

STEPHEN J. BARBRE MIDDLE SCHOOL

HABS
LA
26-KENN,
1-

¹²⁹²
HABS NO. LA-1265

Location: 1610 Third Street (southeast corner of Jefferson Highway and former Duncan Street),
Kenner, Jefferson Parish, Louisiana

Legal description: Square 37, 4th Street, Kenner, Louisiana

USGS 7.5 Minute Luling Quadrangle, Section 42, Township 13S, Range 9E
Universal Transverse Mercator Coordinates: 15.765120.3319000

Present
Owner: Jefferson Parish School Board
501 Manhattan Boulevard
Harvey, Louisiana

Present
Occupant: Vacant

Present Use: Vacant

Significance: The Stephen J. Barbre School, built in 1924 as the first Kenner High School, is an architecturally sophisticated example of the Neo-Classical architectural style applied to an educational building program. The original design of the building illustrates many of the standardized architectural features common to school designs of the period. The plan incorporates separate assembly, instruction, and recreation spaces, while the overall design emphasizes natural light and ventilation.

PART I: HISTORICAL INFORMATION

A. HISTORICAL CONTEXT

1. Architectural Development of School Designs

In the early nineteenth century, school buildings in the United States were erected in the most economical fashion possible; comfort, health, and safety issues were not a priority in the building design. As a result, school buildings frequently were crowded, dirty, and dark structures in unpleasant surroundings. The publication of Dr. William A. Alcott's pioneer *Essay on the Construction of Schoolhouses* (1832) transformed the design of educational facilities.

Alcott's essay addressed the location, size, construction, and internal arrangement of schoolhouses. His recommended school was a rectangular, six-by-four-bay, one-room schoolhouse. The facade of the one- to one-and-one-half-story building was characterized by two entrances, one for each gender, flanked by two windows. The rear elevation also incorporated two doors, as well as two windows. Each side elevation featured four windows. Foundation and cladding materials were not specified, nor was the roof type. One can surmise that Alcott probably preferred wood framing and siding, since he advocated painting the exterior of the school for durability and aesthetics. He also suggested that the schoolhouse, which was raised two to three feet above the ground, be positioned on the highest elevation of a quarter- to half-acre lot. The lot should be enclosed by a fence, contain several mature trees for shade and beauty, and located away from public roads. The schoolhouse should be positioned at a moderate distance from other buildings, although "moderate" is not defined.¹

The two facade doors entered into vestibules, which also served as cloak rooms for the pupils. Beyond the vestibules was a 35-by-30-foot classroom with adequate space for individual desks for 60 students. At the head of the class was the instructor's raised platform. A recitation "room" partitioned by seats and movable blackboards was located to the rear, as was the firewood or charcoal stove. Early schoolhouses utilized a fireplace as the sole source of heat during cold, winter days. This method of heating was not favored by Alcott because the heat generated by the fire did not radiate to the back of the class- room, and it was an unsanitary method of heating due to soot. Alcott reasoned that stoves were more affordable, and that pipes could funnel heated air to a larger area of the classroom.²

Ventilation and lighting were afforded by the numerous windows. Alcott specified that the windows be raised five feet from the base of the wall for better ventilation, and to eliminate direct glare.³ In addition, he suggested using windows in the roof to allow impure air to escape. Two rear elevation doors also provided ventilation, as well as access the playground.

Schools erected after publication of Alcott's treatise incorporated many of the principles presented in his essay. The prevalent schoolhouse built during the middle nineteenth century was a one-story, gable-front structure. The majority were wood frame, although a number of brick schoolhouses also were constructed. Although lacking a definitive style, antebellum school buildings featured classical

¹ William A. Alcott, *Essay on the Construction of Schoolhouses* (Boston: Hilliard, Gray, Little and Wilkens, and Richardson, Lord and Holbrock, 1832), 7-16.

² Alcott, *Essay on the Construction of Schoolhouses*, 15.

³ Alcott, *Essay on the Construction of Schoolhouses*, 13-14.

elements, predominantly drawn from the Greek Revival style. Classical architectural elements, in addition to being attractive, conveyed to the students feelings of respect and intellect.⁴ When it could be afforded, small belfries were constructed on the peak at the gable end.

Alcott's principles for school design were modified through trial and error. Most mid-nineteenth century schools featured windows only on the side elevations and rear elevations. In addition, the side elevations incorporated three window bays in contrast to Alcott's four. Too many windows produced excessive light and glare. The reduction of windows did not significantly effect ventilation. Typically, rear elevation doors were not utilized.

Alcott's principles, though geared toward one-room, rural schools, were applied to schools of all sizes and locations. The large, one-room classroom, the basis of Alcott's principles, is duplicated in these larger schools. For example, one-story schools constructed in populous rural districts or small towns adopted two "one-room" classrooms; construction features and the internal arrangement of each room was the same. School buildings in cities and large villages typically were two- to three-stories, with each story consisting of two to four classrooms.⁵ Ventilation and heating principles similar to a one-room rural schoolhouse were utilized, as well as a preference for classical exterior features, applied at a larger scale.

Gradual changes to the design and construction of school buildings began at the end of the nineteenth century. In general, school buildings were larger, more specialized in the division of interior space, and more ornate. The separate entries and large, one-room classrooms promoted by Alcott were retained; however, smaller rooms for cloak rooms, water closets, fuel storage, and additional classrooms also were incorporated into the plan.⁶ These rooms were located to the front of the building. The exterior, whether wood or masonry, exhibited Victorian period (usually Queen Anne or Italianate) trim at the cornices, gable ends, and lintels. Formal exterior porch entries also were adorned with Victorian period ornament.

School buildings serving rural districts continued to be one-room, but also adopted the secondary rooms mentioned above. Villages and populous rural districts constructed wood or brick structures that were two-stories with the one-room classroom on each floor. This is in contrast to the antebellum village schoolhouses, which adopted a one story, two-room plan. Urban schools were constructed with similar plans as before: two to four classrooms on each floor of the two- to three-story building. In some cases, one floor of the school was not divided into classrooms; the large room marks the introduction of the assembly hall.⁷ The large urban school buildings were constructed of masonry, and almost all displayed elaborate ornamentation.

Ventilation and heating changed during this time period. Windows alone in two- to three-story urban school buildings could not provide adequate ventilation. Ventilation flues ran from floor to floor

⁴ Henry Barnard, *School Architecture, or Contributions to the Improvement of Schoolhouses in the United States*, 2nd edition (New York: A.S. Barnes & Co., 1848) 55.

⁵ Barnes, *School Architecture; or Contributions to the Improvement of Schoolhouses in the United States*.

⁶ Samuel F. Eveleth, *School-House Architecture* (New York: George E. Woodward, ca. 1870) np.

⁷ Eveleth, *School-House Architecture*.

and conveyed air through registers located at the base of the walls.⁸ During the third quarter of the nineteenth century, indirect heating replaced direct stove heating in urban schools. In rural schools, a stove located in one part of the large classroom heated the air and disseminated it to the rooms' other areas via a large pipe. The pipe was exposed to the interior and extended along the ceiling.⁹ This heating method continued to be used into the twentieth century by smaller, rural schools. Two- to three-story schools in cities, towns, and populous rural districts utilized a different type of indirect heating. One or more stoves located in the basement or other distant room in the building conducted heated air to classrooms through ducts in the ceiling and/or floor. The heated air entered the room through registers.¹⁰

By the early twentieth century, sixteen states had enacted legislation or adopted codes for plans, construction, fire protection, sanitation, and furnishings of public school buildings.¹¹ Act 192, adopted by the State of Louisiana in 1898, charged the State Board of Health with developing rules and regulations governing the hygiene of school rooms. The State Board of Health delegated the responsibility for enforcement of the regulations to Parish School Boards and Parish Superintendents. In addition to approval by the Parish Superintendent, plans and specifications for proposed schools were reviewed by the State Superintendent of Education and the Parish Health Officer for adequate ventilation, light, and fire protection.¹² Light and ventilation were particular concerns in the Louisiana regulations:

"Every school house, public or private, or other buildings used for school purposes, shall be ventilated in such manner as to afford eighteen hundred cubic feet of air per house for each adult and a proportionate amount for each child, and shall contain not less than two hundred cubic feet of air space for each child to be taught therein. Windows and transoms shall be constructed that windows may be lowered from the top and transoms opened. Every school house must be lighted in such a manner as to minimize the eye strain. Each room must contain of actual surface of glass in windows not less than one-seventh of the floor space".¹³

Standards for school design were promoted through a variety of publications developed by public agencies and institutions during the first quarter of the twentieth century. The 23 October 1916 issue of the *University of Illinois Bulletin* was devoted to the "Planning and Construction of High-School Buildings" and directed at a readership of school board officials. The publications provided guidance on

⁸ Eveleth, *School-House Architecture*.

⁹ Barnard, *School Architecture; or Contributions to the Improvement of Schoolhouses in the United States*, 63-65.

¹⁰ Eveleth, *School-House Architecture*.

¹¹ Wilbur J. Mills, *American School Building Standards* (Columbus Ohio: Franklin Educational Publishing, 1915) 153.

¹² Mills, *American School Building Standards*, 166.

¹³ Mills, *American School Building Standards*, 167.

plans and building types, heating, ventilation, and electrical systems, as well as the design of such specialized features as auditoriums and laboratories.¹⁴

By the 1920's the Department of the Interior, Bureau of Education also was issuing guidance for planning school buildings. In addition to the topics related design and construction, Fletcher B. Dresslar, writing in the Bureau's 1924 *Bulletin on American School Buildings*, also discussed the role of school boards and teachers in the building design process.¹⁵

The architectural development of public schools in Jefferson Parish, Louisiana reflected many of the concerns for student health and safety expressed on a national scale. From the first one-room schoolhouse opened in 1842, the parish developed a comprehensive public educational system with buildings that complied with the state standards for healthful design, reflected nationally popular architectural styles, and met the needs of the local educational system.

2. Site-Specific History

The Stephen J. Barbre Middle School is located in western Jefferson Parish. Historically, Jefferson Parish was a rural area that specialized in the cultivation of such cash crops as indigo and sugar. Agriculture was an economic staple of the area into the twentieth century. The parish was dominated by agricultural use during the nineteenth century (98%); by 1955, industry was the primary land use (98%).

The area presently known as Kenner was originally a plantation owned by the Kenner family. William Butler Kenner Sr., a New Orleans merchant, emigrated from Virginia in the late eighteenth century. His wife, Mary Minor was the daughter of Major Estaban Minor, commander of Spanish forces at the Natchez post. Mary and William Butler Kenner had four sons, who became prominent in the development of northwestern Jefferson Parish. Mr. Kenner Sr. died in 1855. Shortly after the elder Kenner's death, two of the Kenner heirs combined their lands and developed the town of Kenner.

In the late nineteenth century, Kenner became a streetcar suburb of New Orleans following the development of a rail line that extended from downtown New Orleans to the Jefferson/St. Charles Parish line. This line followed the route of the current Jefferson Highway. The streetcar system was in use until 1930, when buses were introduced.

Kenner experienced tremendous growth. The 1830 census recorded a total of 6,846 residents in Jefferson Parish. In 1915, 2,000 people resided in the town of Kenner. By 1960, the Jefferson Parish population was 207,891; 17,037 resided in the town of Kenner.¹⁶

¹⁴ Horace A. Hollister, "The Planning and construction of High-School Buildings," *University of Illinois Bulletin* 14, no.8 (1916): 11-45.

¹⁵ Fletcher B. Dresslar, "American School Buildings" *Department of the Interior, Bureau of Education Bulletin* 17(1924).

¹⁶ Al Robichaux, *Demographic Study of Jefferson Parish and the Jefferson Parish Public School System* (Jefferson parish, Louisiana: Jefferson Parish School Board: 1994).

The Jefferson Parish School System was organized in 1825.¹⁷ The first free public school in Jefferson Parish was opened in 1842.¹⁸ From 1825 to 1908, the Police Jury was responsible for the school system. In the 1850's, the Jefferson Parish Police Jury developed rules and regulations for the orderly running and maintenance of the schools.¹⁹

A School Board assumed control of the educational system in 1908. The newly formed school board appointed J. C. Ellis as the first Superintendent of Schools for Jefferson Parish in 1908. The school board administered education in the parish through a system of nine wards based upon geographical regions. Kenner is in the 9th ward, a district encompassing the northwestern portion of the parish.²⁰

The school board also enacted innovative educational policies. For example, three types of schools were introduced as early as 1917. These schools correlated to grade level: primary (kindergarten - 6), middle (grades 7-9), and high school (10-12). School attendance was required for all children between the ages of 6 and 16.²¹

Increased population and development in western Jefferson Parish led Superintendent Ellis to recommend the construction of three additional high schools, including one between the communities of Harahan and Kenner, in 1920. A site on Shrewsbury Road, now Jefferson Highway, west of Williams Boulevard was selected. This location afforded access to the streetcar lines, which transported students living in the outskirts of town.

In 1923, the Jefferson Parish School Board retained W. J. Quick to construct three schools in the parish: Kenner High School, Metairie Ridge School, and Suburban Acres School. The total fee for the construction of the three facilities was \$182,000. The heating and plumbing for the new facilities was awarded to the American Heating and Plumbing Company for \$19,487. The architect responsible for the design of the three schools is not recorded in the School Board minutes and has not been identified. Funding for the construction of the three schools was approved through a public referendum for the amount of \$400,000.²²

School enrollment reflected the growth of the town of Kenner. In 1917, 2,269 white and 660 African American students were enrolled in Kenner schools. These numbers were approximately 58% of the total school age population of Jefferson Parish. In 1923, 3,280 white and 921 African American

¹⁷ Lemuel W. Higgins, *The Public Schools of Jefferson Parish Before the Civil War*, Masters thesis submitted to the Faculty of the Graduate School of Tulane University, New Orleans, Louisiana, 1938.

¹⁸ Higgins, *The Public Schools of Jefferson Parish Before the Civil War*, 25.

¹⁹ Lemuel W. Higgins, *The Public Schools of Jefferson Parish Before the Civil War*, Masters thesis submitted to the faculty of the Graduate School of Tulane University, New Orleans, Louisiana, 1938, 34-42.

²⁰ George Cecil Daul, *The Administration of the Public Schools of Jefferson Parish Since the Civil War (1860-1940)*, Masters thesis submitted to the Faculty of the Graduate School of Tulane University, New Orleans, Louisiana, 1941, 35-75.

²¹ Daul, *The Administration of the Public Schools of Jefferson Parish Since the Civil War (1860-1940)*, 47.

²² Minutes of the Jefferson Parish School Board meeting, 8 July 1922.

students were enrolled in the system. By 1925, the Kenner enrollment increased to 3,975 white and 1,102 African American students.²³ The Jefferson Parish School System was integrated in the 1968 - 1969 school year.

The Stephen J. Barbre School originally was named the Kenner High School. The school opened on 8 September 1924 with an initial enrollment of 363 students. Staff included 9 teachers, and a principal. The Kenner High School was accredited by the Louisiana Education Board in October 1924. This designation approved the facility and curriculum.²⁴

The Kenner High School was one of 21 schools operating in Jefferson Parish. No new schools were built in Jefferson Parish between 1929 and 1939.²⁵

Interior modifications were made to the Kenner High School by the architectural firm of Burk Associates in 1950²⁶. The Kenner High School operated until the 1955-56 school year. In that year, an influx of younger students necessitated the operation of an additional middle school. The Kenner High school was converted to the Kenner Middle School. The facility operated as a school until it was closed in 1994.²⁷ The school last served as an Adult Education Center.

During a school board meeting in December of 1973, a motion was presented to rename the Kenner Middle School as the Stephen J. Barbre Middle School in honor of the first principal of Kenner High School. Mr. Barbre served Jefferson Parish as an educator for over 40 years. He served as the principal of the Kenner High School from 1924 to 1955. He then was appointed principal of East Jefferson High School in 1955. Mr. Barbre held that position until his retirement in 1964.²⁸

PART II: DESCRIPTIVE INFORMATION

The Stephen J. Barbre Middle School is a two-story, Neo Classical style building constructed in 1924 at the direction of the Jefferson Parish School Board. The Barbre School is oriented to the south towards Jefferson Highway and the Mississippi River levee. The school is part of a multi-building, school complex developed between 1924 and ca. 1970 on a site bounded by Jefferson Highway, and Maria, Fourth, and Butler Streets. In addition to Stephen J. Barbre Middle school, the site includes contemporary, low-scale classroom buildings, a library, gymnasium, cafeteria, and custodian's cottage. The complex is unified by paved parking and recreational areas. Scattered shade trees and a chain link fence defines the perimeter of the site.

²³ Minute Book of the Jefferson Parish School Board, Vol.II, np.

²⁴ Minute Book of the Jefferson Parish School Board, Vol.II, np.

²⁵ Al Robicheaux, *Demographic Study of Jefferson Parish and the Jefferson Parish Public School System*, Jefferson Parish School Board, Jefferson Parish, Louisiana.

²⁶ Burk and Associates, *Renovations of the Kenner High School*, Elevation Drawings Folder 63, Southern Architectural Archives, Howard-Tilton Memorial Library, Tulane University, New Orleans, Louisiana.

²⁷ Personal interview with clerk, Jefferson Parish School Board, 1 July 1996.

²⁸ Minute Book of the Jefferson Parish School Board, Vol. II, np.

The former Kenner High School is monumental-scale, symmetrical masonry building supported by a concrete foundation and terminating in a flat roof defined by capped parapets. Copper downspouts document roof drains behind the parapets. The exterior of the building is clad in brick veneer enlivened by robust, cast-concrete ornamentation depicting classical motifs. The scale and mass of the structure is mitigated through the addition of a water table and a slightly projecting band that defines the sill level of the first floor windows. First and second story floor levels are further delineated by brick panels laid in a projecting stylized diamond design. The cornice line is marked by modest corbelled band that includes a continuous soldier course.

The building adopts a design hierarchy with the most elaborate architectural treatments found on the front elevation. This elevation is faced in scored, buff-brick incorporating a black aggregate. Side and rear elevations lack elaborate architectural ornamentation and are further delineated as secondary building faces by the use of plain, 2 1/4"x 8" red brick veneer.

The front elevation employs a five-part composition including a projecting three-bay entry pavilion flanked by projecting wings. The entry pavilion is the most elaborate element of the building. The entry is reached by a four-step open stair and is marked by four, cast-concrete fluted pilasters, which are supported by a brick water table and terminate in lotus and acanthus leaf capitals. The pilasters support a full cornice incised with "Kenner High School". The cornice rises to a stylized pediment housing a central projecting medallion with scrolled brackets.

All front elevation windows and doors have been infilled with plywood, as have the majority of the secondary elevation window and door bays. Interior inspection revealed that the original windows throughout the building are nine-light-over-two-light, wood sash units arranged in bands to achieve the high window to wall ratio recommended during the period for adequate school ventilation. The original entry door has been replaced with a contemporary plate glass and aluminum frame unit.

The side elevations of the building incorporate a two-part composition defined by a stepped parapet with a concrete cap. Architectural interest is maintained through the regular fenestration pattern and high window to wall ratio. The rear elevation is similar in materials and overall design to the side elevations.

The Barbre School adopts a modified "E" ground plan similar to those promoted by Horace A. Hollister in the 1916 *University of Illinois Bulletin*, "The Planning and Construction of High-School Buildings". The "E" plan was cited as an ideal school configuration for maximizing natural light and air while retaining an integrated design.²⁹

The original interior plan of Kenner High School incorporated an H configuration of interior corridors with classrooms located along the front and side elevations of the building to maximize natural light and air. Six-light transoms, located above the classroom doors and at the ceiling level of the interior classroom walls, provided light and ventilation to the interior corridor. First and second story floor plans are similar in overall arrangement. The basement level of the building was flooded to the first floor level and was not inspected.

The interior wing of the rear elevation was devoted to a two-story auditorium with stage, balcony, robust dentil cornices and monumental-scale pilasters. The auditorium was flanked by closed stair halls, as was recommended in the design publications of the period as a fire precaution. The original open

²⁹ Hollister, "The Planning and Construction of High-School Buildings", 13.

court between the east elevation of the interior wing and the west elevation of the east wing has been infilled to create a one-story storage area.

The original interior finishes included smooth plaster on lath walls, wide wood window surrounds and woodwork, and narrow board floors. The interior walls of each classroom were banded by blackboards secured in wood frames.

Inspection of the building uncovered evidence of two renovations. The interior walls of the corridors were resurfaced with beaver board trimmed with narrow woodwork ca. 1950. The rooms adjoining the front elevation were converted to offices ca. 1970. Interior finishes added during this conversion included wood grained composition panelling, acoustic tile ceilings, and wall-to-wall carpeting. The auditorium was modified during the same renovation. The stage was partitioned with rough lumber to create offices and free standing storage shelves were installed on the auditorium floor.

PART III. SOURCES OF INFORMATION/ BIBLIOGRAPHY

- Alcott, William A. *Essay on the Construction of Schoolhouses*. Boston: Hilliard, Gray, Little and Wilkens, and Richardson, Lord and Holbrock, 1832.
- Barnard, Henry. *School Architecture; or Contributions to the Improvement of School-Houses in the United States*. Second Edition. New York: A.S. Barnes & Co., 1848.
- Burk and Associates. *Renovations of the Kenner High School*. Elevation Drawings Folder 63. Southeastern Architectural Archives. Howard-Tilton Memorial Library, Tulane University, New Orleans, Louisiana
- Daul, George Cecil. *The Administration of the Public Schools of Jefferson Parish Since the Civil War (1860 - 1940)*. Masters thesis Submitted to the Faculty of the Graduate School of Tulane University, New Orleans, Louisiana. Jefferson Parish Historical Commission, Metairie, Louisiana. 1941.
- Dresslar, Fletcher B. "American School Buildings." *Department of the Interior, Bureau of Education Bulletin* 17 (1924).
- Eveleth, Samuel F. *School-House Architecture*. New York: George E. Woodward, ca. 1870.
- Girard, Edith Graham. *Growth and Change in the Public Schools of Jefferson Parish, 1940 - 1960*. Masters thesis submitted to the Department of Education of the Graduate School of Tulane University, New Orleans, Louisiana. Jefferson Parish Historical Commission, Jefferson Parish, Louisiana. 1961.
- Higgins, Lemuel W. *The Public Schools of Jefferson Parish Before the Civil War*. Masters thesis submitted to the Faculty of the Graduate School of Tulane University, New Orleans, Louisiana. Jefferson Parish Historical Commission, Metairie, Louisiana. 1938.
- Hollister, Horace A. "The Planning and Construction of High-School Buildings." *University of Illinois Bulletin*, 14, no. 8 (1916).
- Jefferson Parish School Board Minute Books, I, II, III, 1908 - 1970. unpublished. Jefferson Parish School Board, Westwego, Jefferson Parish, Louisiana.

Mills, Wilbur J. *American School Building Standards*. Columbus, Ohio: Franklin Educational Publishing Company, 1915.

Robichaux, Al. *Demographic Study of Jefferson Parish and the Jefferson Parish Public School System*. Jefferson Parish School Board, Jefferson Parish, Louisiana. 1994.

Sanborn Map Company. *Insurance Maps*. Sanborn map and Publishing Company, Philadelphia, 1926.

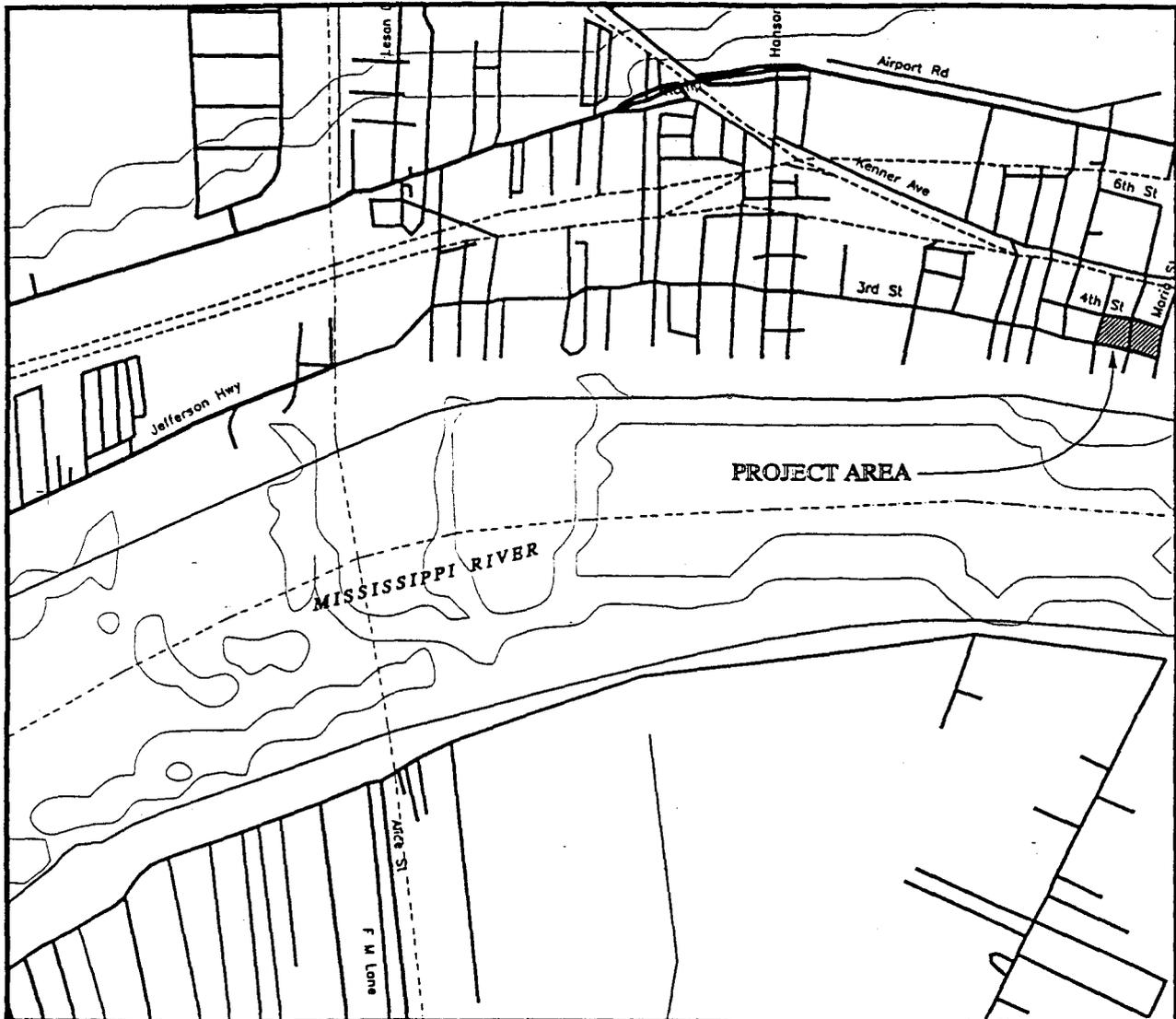
Sanborn Map Company. *Insurance Maps*. Sanborn map and Publishing Company, Philadelphia, 1939.

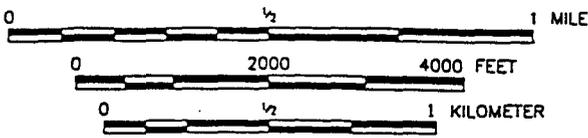
PART IV. PROJECT INFORMATION

The Stephen J. Barbre Middle School is located within the 75 LDN Noise Contour of the New Orleans International Airport in Kenner, Louisiana. The New Orleans Aviation Board has determined that the operation of a school within this contour is an incompatible land use and has negotiated to acquire the school using federal funds secured through the Federal Aviation Administration. The current deteriorated condition of the building makes relocation and rehabilitation of the structure infeasible.

This documentation was completed in fulfillment of a Memorandum of Agreement to mitigate the removal of the school, which was negotiated among the Federal Aviation Administration, the Louisiana State Historic Preservation Office, and the Advisory Council on Historic Preservation, with the City of New Orleans, Louisiana and the Jefferson Parish School Board as concurring parties. R. Christopher Goodwin & Associates, Inc. undertook the recordation on behalf of Halpern, Danner & Faia, LLC.

Prepared by: Kathryn M. Kuranda, Vice President,
and Lori O. Thursby, Architectural Historian
Affiliation: R. Christopher Goodwin & Associates,
Date: June 1997



	<p>SCALE 1" = 2000'</p>  <p>0 1/2 1 MILE 0 2000 4000 FEET 0 1/2 1 KILOMETER</p>	 <p>LOUISIANA QUADRANGLE LOCATION</p>
 <p>R. Christopher Goodwin & Associates, Inc. 337 EAST THIRD STREET, FREDERICK, MD 21701</p>		

