Form No. 10-300 REV. (9/77)

UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

# NATIONAL REGISTER OF HISTORIC PLACES **INVENTORY -- NOMINATION FORM**

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# AFE INOTRIACTIONS IN LIGHT TO COMPLETE NATIONAL DECISION FOR FORMA

	ТҮРЕ	ALL ENTRIES	COMPLETE APPLICAB	LE SECTIONS	
NAME	A				
HISTORIC	The Col	umbia Canal			
AND/OR COMM	ON				
LOCATI	ON Direc	<del>tly co</del> ntiguou	s to Columbia, Sout	h Carolina, extend	ing along the
STREET & NUME	east ban <sup>BER</sup> & Gas Co	k of the Broa	d and Congaree Rive Dam on the Broad R <del>e River, located ne</del>	rs from South Laro iver to the Southe arnotforpublication	rn <del>Railway</del> × Heyward Stre
CITY, TOWN	Columbi			CONGRESSIONAL DISTR	ICT
STATE	South Carol	ina	соде 045	соимту Richland	CODE 079
	FICATION				
CATEGO	RY OWNI	ERSHIP	STATUS	PRES	ENTUSE
+ BUILDING(S	PUBLIC	-			MUSEUM
		-	—UNOCCUPIED —WORK IN PROGRESS	COMMERCIAL EDUCATIONAL	X_PARK
SITE		IC ACQUISITION		ENTERTAINMENT	RELIGIOUS
OBJECT	IN PROC	ESS	-YES: RESTRICTED	GOVERNMENT	SCIENTIFIC
	BEING C	ONSIDERED	YES: UNRESTRICTED	<b>X</b> _INDUSTRIAL	TRANSPORTATIO
			X_NO	MILITARY	OTHER:
OWNER	OF PROP	ERTY			-
NAME	Multiple ow	nership	( see continua	tion sheet )	
STREET & NUMI	BER				
CITY, TOWN				STATE	
LOCATI	ON OF LE	GAL DESC			
		GIL DLOO			
COURTHOUSE, REGISTRY OF D	EEDS, ETC.	Richland Cou	nty Court House		
STREET & NUMI	BER	1508 Washing	ton Street		
CITY, TOWN		Columbia		state South Ca	rolina

# **6 REPRESENTATION IN EXISTING SURVEYS**

T	i'	т١	E
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Inventory of Historic Places in South Carolina

DATE 1973 (update) \_\_FEDERAL X.STATE \_\_COUNTY \_\_LOCAL DEPOSITORY FOR SURVEY RECORDS South Carolina Department of Archives and History STATE CITY, TOWN

Columbia
COTUNDIA

South Carolina

# 7 DESCRIPTION

CONDITION		CHECK ONE	CHECK ONE
EXCELLENT	X_DETERIORATED	UNALTERED	XORIGINAL SITE
X_GOOD	X RUINS	X_ALTERED	MOVED DATE
XFAIR	UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

The Columbia Canal, located directly adjacent to Columbia, South Carolina, was constructed between 1820 and 1824 as a means to navigate around the rapids of the Broad River where it joins the Saluda River to form the Congaree River. In 1891 the northern section of the Canal was enlarged to extend further down the Broad River in order to serve as a power source for the industrial development of Columbia.

The area of the Columbia Canal nominated to the National Register includes the remains of the 1824 Canal and the complete area of the 1891 Canal which is still intact and in use as an important source of power for the city of Columbia. The nominated area commences at the Southern Railroad Bridge and extends north along the banks of the Congaree River and inland to include the remains of the 1824 Canal. It then runs along the entire length of the 1891 Canal and levee. This 1891 section commences at Gervais Street and runs approximately 2.6 miles to its termination point at the canal bulkhead and diversion dam. The nominated area also encompasses a portion of the Broad and Congaree Rivers, including the rapids which were so instrumental in the decision to construct a canal adjacent to Columbia.

The 1824 Columbia Canal was designed to take advantage of a natural ravine which lay between the city and the Broad and Congaree Rivers. The canal was approximately 3 1/8 miles long and overcame a river fall of 34 feet. The 1824 Canal originated between Lumber and Richland Streets and terminated opposite the Granby landing. The canal had five turning basins with the principle basin located at the end of Senate Street. North of this basin the canal was 12 feet wide with  $2\frac{1}{2}$  feet of water; south of the basin it was 18 feet wide with 4 feet of water. The banks of the canal were earthen, planted with grass, with an 8-foot wide tow path running on either side of the canal. The 1824 Canal had 4 lifting locks and 1 guard lock constructed of brick and granite. In order to allow water to bypass the canal and prevent flooding, the canal had 3 waste weirs and 6 culverts. This canal system also included a diversion dam, completed in 1824, which extended across the Broad River to allow easy access from the nearby Saluda Canal to the Columbia Canal.

With the coming of the railroad, the 1824 Canal was gradually abandoned as a means of transportation. It was allowed to deteriorate and eventually a part of it was incorporated into the 1891 Canal. Nevertheless, substantial evidences of the old canal remain in the area extending from Gervais Street to the Southern Railroad Bridge. In the area south of Gervais Street to Green Street the original 1824 canal bed can be seen in a deteriorated state. From Green Street south to Wheat Street, no traces of the canal are clearly visible. South of Wheat Street to approximately 100 yards north of the Southern Railroad Bridge, the 1824 canal bed remains intact. Major remains in the old canal area include an original waste weir, a major culvert, several small culverts, the remains of the Old River Front Bridge, the remains of an early water pumping station, and approximately  $1\frac{1}{2}$  miles of the 1824 canal bed with tow paths. Further archaelogical investigation should reveal additional evidences of the 1824 Canal.

# 8 SIGNIFICANCE

SPECIFIC DAT	ES 1824, 1891	BUILDER/ARCH	HITECT	
		XINVENTION		
_1900COMMUNICATIONS		XINDUSTRY	POLITICS/GOVERNMENT	OTHER (SPECIFY)
<b>¢</b> 1800-1899	<b>X</b> COMMERCE	EXPLORATION/SETTLEMENT	PHILOSOPHY	<b>X</b> TRANSPORTATION
1700-1799	ART	LENGINEERING	MUSIC	THEATER
_1600-1699	ARCHITECTURE	EDUCATION	MILITARY	SOCIAL/HUMANITARIAN
_1500-1599	AGRICULTURE	ECONOMICS	LITERATURE	SCULPTURE
_1400-1499	_XARCHEOLOGY-HISTORIC	CONSERVATION	LAW	SCIENCE
_PREHISTORIC	ARCHEOLOGY-PREHISTORIC	COMMUNITY PLANNING	LANDSCAPE ARCHITECTURE	RELIGION
PERIOD	AR	EAS OF SIGNIFICANCE CH	ECK AND JUSTIFY BELOW	

#### STATEMENT OF SIGNIFICANCE

The Columbia Canal has played an important role in the commercial and industrial development of Columbia, the capitol of South Carolina. Historically significant for its influence on the city's growth, the Columbia Canal is also a notable example of the engineering expertise of the 19th century.

Completed in 1824, the Columbia Canal was designed to enable the navigation of the Broad and Congaree Rivers at their confluence in Columbia. The canal was part of a state-sponsored system of internal improvements designed to create inexpensive and efficient transportation facilities across South Carolina. The Columbia Canal contributed substantially to the emergence of Columbia as the commercial center of the upper part of the state. Although its importance as a means of transportation significantly decreased after the arrival of the railroad in Columbia in 1842, the canal continued to be used for local commerce and provided water power for small industries. The Columbia Canal was the only canal project in the state which remained in use after the advent of the railroad and steam-propelled craft. During the Civil War a portion of the Columbia Canal was leased to the Confederate government. After the close of hostilities, the canal passed through several owners before reverting to the state. In 1888, as part of the post-Civil War movement to industrialize the South, the State of South Carolina decided to enlarge the canal as a means of providing a power source to aid in the industrial development of Columbia. In 1891 the enlarged Columbia Canal was completed. The canal subsequently served as an impetus to the establishment of mills and factories in Columbia, thereby playing an important role in the growth of the city. In addition, the Columbia Canal was the site of one of the first power houses in the nation to utilize hydroelectric power to drive a large textile mill. Since its completion in 1891 the Columbia Canal has continuously served as a major power source for the city of Columbia.

<u>ARCHEOLOGY-HISTORIC</u>: The Columbia Canal is likely to yield information important to history as follows:

<u>Canal Construction</u>: Archeological techniques could be applied to the relatively intact segments still remaining from the 1824 canal in order to obtain more detailed information about the construction of the canal bed, tow paths, culverts, and other engineering features. Such information would be important to comparative studies with other canals of the period (e.g. Landsford Canal, National Register, 1969) and with the later 1891 Columbia Canal.

# 9 MAJOR BIBLIOGRAPHICAL REFERENCES

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State Printing Company, 1895, Columbia, South Carolina: Columbia City Directory. pp. 10-12.

Columbia, South Carolina. South Carolina Department of Archives and History. Record Book A of the Superintendent of Public Works 1820-1841.

<u>continued</u> **10 GEOGRAPHICAL DATA** ACREAGE OF NOMINATED PROPERTY 648 acres more or less QUADRANGLE NAME Columbia North & Southwest Columbia QUADRANGLE SCALE 1:24000 49.38.0.0 317 615 81010 49,31,4,0 3,7,6,5,7,0,0B 1.7 NORTHING ZONE EASTING NORTHING 4 9 5 1 8 0 317 519 01210 49.65.60 3.7 5.9 8.8.0 D1.7 F H VERBAL BOUNDARY DESCRIPTION Commencing at the point where the Richland County boundary line crosses the Southern continued LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES CODE CODE COUNTY . CODE COUNTY CODE

111 FORM P	REPARED BY		
NAME / TITLE	Julie Burr	John Larson	
	Historic Preservation Divis	ion	
ORGANIZATION		DATE	
	South Carolina Department o	f Archives and History	April 26, 1978
STREET & NUMB		TELEPHON	
	Post Office Box 11,669, Cap	itol Station	(803) 758-5816
CITY OR TOWN		STATE	
	Columbia	South	Carolina
OCTATE I	HISTORIC PRESERVATION		FION
<b>J</b> SIAIE F	IIS I UKIC PRESER VALION	OFFICER CERTIFICA	IIUN
	THE EVALUATED SIGNIFICANCE OF T	HIS PROPERTY WITHIN THE STATE IS	5:
N	ATIONAL STATE	LOCAL	
As the designate	d State Historic Preservation Officer for the Na	tional Historic Preservation Act of 1966	6 (Public Law 89-665), I
hereby nominate	this property for inclusion in the National Re	gister and certify that it has been eval	luated according to the
	dures set forth by the National Park Service.		
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STATE HISTORIC	PRESERVATION OFFICER SIGNATURE	ales. A	
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I HEREBY CER	ITIFY THAT THIS PROPERTY IS INCLUDED IN	NTHE NATIONAL REGISTER	
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### NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM



CONTINUATION SHEET

ITEM NUMBER 4

PAGE 1

South Carolina Electric & Gas Company c/o Mr. Robert L. Castles Director of Land & Public Facilities 328 Main Street Columbia, South Carolina 29202

Mr. David W. Robinson Robinson, McFadden, Moore & Pope Jefferson Square Office Building 1801 Main Street Columbia, South Carolina 29217

Guignard Estates c/o Mr. Broadus Thompson 2119 College Street Columbia, South Carolina 29205

City of Columbia The Honorable John T. Campbell Post Office Box 147 Columbia, South Carolina 29217

Mr. Walter B. Brown Special Representative, Southern Railway Company Room 700, Columbia Building 1200 Main Street Columbia, South Carolina 29201

South Carolina Division of General Services c/o Mr. Paul H. Infinger 300 Gervais Street Columbia, South Carolina 29201

South Carolina Water Resources Commission c/o Mr. William Moser Post Office Box 4515 3830 Forest Drive Columbia, South Carolina 29240

# NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM



**CONTINUATION SHEET** 

ITEM NUMBER 4

page 2

South Carolina Department of Agriculture c/o Mr. Dick Bowman Room 527, Wade Hampton Office Building Columbia, South Carolina 29211

### NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM



CONTINUATION SHEET

ITEM NUMBER 7 PAGE 3

The majority of the area of the 1824 Canal is currently open space and woodlands. A portion of the area extending from Gervais Street to Blossom Street is currently being developed by the City of Columbia as a Bicentennial Park.

In 1888 the Board of Trustees for the Columbia Canal embarked on a program designed to make the Columbia Canal an important power source for the industrial development of the city. This program involved the enlargement of the original canal from Gervais Street to Lumber Street and the addition of 2 7/8 miles to the north end of the canal extending up the Broad River. The enlarged canal was opened on November 21, 1891. It ran approximately  $3\frac{1}{2}$  miles and was 150 feet wide at surface and 10 feet deep. Its notable engineering features included a massive diversion dam, entry lock, bulkhead, and waste weir. The completion of the canal led to the rapid development of its levee as a site for power generation facilities.

The Columbia Canal of 1891 remains virtually intact and is still in use as one of the primary sources of power for the city of Columbia. In addition, the canal levee features both ruins and extant structures which date from the period of the canal's initial development as a power source.

The notable features of the Columbia Canal as it extends north from Gervais Street includes the following:

<u>Columbia Hydro Plant</u>: Built in 1896 by the Columbia Water Power Company, this plant was designed to supplement the Columbia Mills Power House located directly to the north. The Columbia Hydro Plant furnished electricity for all the lights in the city, public and private current for manufacturing, and for the operation of the Street Railway System. The plant is still in use and is a major power source for the city of Columbia. It is the oldest functioning plant of the South Carolina Electric and Gas Company's power system.

This brick structure is set on a random ashlar stone base with arches. Symmetrical in design, it features repetitive paired windows spanned by jack arches, wide eaves supported by simple wood brackets and brick corbels along the roofline.

<u>Columbia Mills Power House Ruins</u>: Completed in 1894 by the Columbia Water Power Company, this plant was built to supply the needs of the Columbia Duck Mill located directly across the canal some 600 feet away from the Power House. This Power House was considered to be the first in the nation to utilize hydroelectric power to drive a large textile mill.

### NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM



CONTINUATION SHEET

ITEM NUMBER 7 PAGE 4

The bulk of this brick structure was demolished approximately 16 years ago. However, visible traces of the plant remain, notably the massive flumes which extended underneath the canal, the water gates, and the bridge abutments for the iron bridge that linked the Power House to the mill.

<u>Columbia Electric Street Railway, Light & Power Company Power House Ruins</u>: Evidence indicates a mill on this site as early 1872. This power house was definitely located on the site by 1893, and was probably constructed by the State Penitentiary prior to 1892 when it was sold to C.E.S.R.L.&P.Co.

The massive ruins of the plant consist of the arched foundation walls and interior archways which were constructed of granite, brick and stone.

<u>Waste Weir</u>: Completed in 1891 as part of the enlarged canal, this waste weir is 200 feet long with 6 waste gates. It is of heavy masonry construction and is surmounted by a wooden bridge. Designed to control the water level of the canal, this weir remains intact and functioning.

<u>Old Water Works Complex</u>: Located directly adjacent to the waste weir is a small complex which served as an early city waterworks system. Evidence indicates that this site was used as a waterworks as early as 1895. Remaining on the site are three intact structures and the foundations of a fourth structure. The intact structures are 1) a Water Pumping Station built prior to 1905 of brick construction featuring outward projecting semi-circular arches over doors and windows; 2) a concrete structure featuring a massive water-tight entrance door surmounted by an arched window; 3) a simple outbuilding with metal siding. At the present time, this complex is not being used.

<u>Site of the Original Diversion Dam</u>: Completed in 1824, this Diversion Dam extended across Broad River and was designed to provide access from the nearby Saluda Canal to the Columbia Canal, thus making the waterway a useful form of transportation beyond the immediate environs of Columbia. This diversion dam was 1500 feet long and rose 6 feet above the surface of the water.

Although no visible traces of this dam remain, a heavy concentration of stone and rubble makes this site a potential area for archeological investigation.

<u>Bull Sluice</u>: Located at the northern end of the 1891 Canal, Bull Sluice was not part of the original Columbia Canal. Instead it was a separate lock designed to

# NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM



CONTINUATION SHEET

ITEM NUMBER 7 PAGE 5

navigate around a small set of rapids in the Broad River. Completed in the early 1820s, Bull Sluice was approximately ½ mile in length. The Sluice had 1 granite lock which overcame a fall of 8 feet. In 1891, the Columbia Canal was extended northward beyond the area of Bull Sluice, thus making the Sluice a secondary section of the river. At the present time, much of Bull Sluice remains intact.

<u>Canal Bulkhead</u>: Completed in 1891, the bulkhead, with its 12 massive archways, is the means by which water is introduced into the canal. It consists of abutments, piers, arches, and parapet walls of granite masonry laid up in hydraulic cement. The flow of the water is controlled by 24 gates. Although an original tin shed covering the bulkhead machinery is gone, the bulkhead itself and its machinery remain intact.

<u>Canal Entry Lock</u>: Completed in 1891, this lift lock provided the only means of entering the canal from the Broad River. Constructed of granite masonry laid in hydraulic cement mortar, the lock is 16 feet wide and 95 feet long. It is located at the west end of the bulkhead and its west wall is connected to the diversion dam by a guard wall of masonry. The entry lock remains relatively intact and functioning.

<u>Diversion Dam</u>: Constructed in 1891, the purpose of this dam was to form a pond in the Broad River from which water could be drawn into the canal. The dam was 1000 feet long as measured at its crest and was constructed of pine cribs and granite. In 1928 a concrete apron was laid on top of the rock crib dam in order to improve its efficiency. Since that time the dam has remained intact and functioning.

The Columbia Canal is traversed by several major highway bridges, notably the Gervais Street Bridge, the Hampton-Meeting Street Expressway, the I-26 Bridge, and the Sunset Drive Bridge. None of these structures significantly affects the canal. In addition, included in the nominated area and directly adjacent to the old Water Works Complex, is a circa 1905 steel truss bridge which leads across the canal to the present waterworks.

The Columbia Canal is a primary power source for the City of Columbia and is consequently a working industrial facility owned and operated by South Carolina Electric & Gas Company, a public utility, under a license issued by the Federal Energy Regulatory Commission (FERC). The canal's lands are presently being used as a major transmission line corridor. At present there are six generators with a generating power of 14,000 kilowatts located on the canal levee. Although there are no present plans to change the power capability of the canal, future energy needs may well necessitate the addition of supplementary towers and poles in the canal area. In addition, as a public utility, the South Carolina Electric & Gas Company is interested in the possible development of newer, more efficient, and better generating facilities for the generation and transCONTINUATION SHEET

#### UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

### NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM



. ITEM NUMBER 7 PAGE 6

mission of power. Because this is a working facility, possible future changes to the existing canal are foreseen.

The City of Columbia Water Works is located adjacent to, but not within, the nominated area. The intake for the Works is in the canal and the pump house is on the bank. There are currently plans to locate another water pump in the canal (within the nominated area) in order to supplement the one already in use by the city Waterworks. The city anticipates that there may be additional installations for the Waterworks from time to time.

The existing transmission towers and poles are not to be considered as an intrusion since they are an integral part of this engineering/industrial area. As the existing 1891 Columbia Canal was constructed totally for power generation and was never intended to be used as a means for transportation, transmission towers and poles located on the canal levee are in keeping with the engineering evolution of the power generation facilities located on the Columbia Canal. South Carolina Electric & Gas Company plans to build additional transmission lines in the area of the Canal and to rebuild and upgrade existing facilities from time to time.

SURROUNDINGS: The Columbia Canal is directly contiguous to the City of Columbia. Bordering the Canal, but not included in the nominated area, are several notable structures, including the original Columbia Duck Mill, the Central Correctional Institute, and the City of Columbia Waterworks. Also bordering the Canal, but not in the district, are an industrial facility of U. S. Steel Company, a strip of Southern Railroad track, and a maintenance facility for a local machinery firm. None of these elements alters the historic integrity of the Canal area.

The nominated area of the Columbia Canal includes the minimal acreage necessary to protect the historic integrity of the Canal. In 1977 the South Carolina State Historic Preservation Office, in conjunction with the City of Columbia, sponsored a study of the historical, cultural, and recreational resources of the Columbia Canal. The boundaries of the nominated area of the Canal closely follow the significant areas delineated by this <u>Columbia Canal Study</u>. The <u>Columbia Canal Study</u>, compiled by Wilbur Smith and Associates, will soon be released in published form.

# NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM



CONTINUATION SHEET

ITEM NUMBER 8 PAGE 7

<u>Canal Use</u>: Excavation in the old 1824 canal bed is likely to produce artifacts that would help interpret the canal's use while it was active. Artifacts might also be found indicating use of the canal bed, such as, perhaps, for trash deposition, after its abandonment.

Use of the 1891 canal is reflected by the various ruined structures that remain along it. Archeological reconstruction could prove particularly useful to the interpretation of the following: Columbia Mills Power House Ruins, Columbia Electric Street Railway, Light & Power Company Power House Ruins, Old Water Works Complex (where there is a foundation for a no longer extant structure), Site of the Original (1824) Diversion Dam, Bull Sluice (especially at the site of its granite lock). In each of the above cases archeological and documentary information would be mutually supportive.

ENGINEERING: The Columbia Canal reflects the development of 19th century canal engineering techniques from the simple designs of the 1820s to the more sophisticated forms of the 1890s. The remains of the 1824 Columbia Canal are indicative of the type of canal design typical of similar canal systems constructed for navigation in South Carolina during the 1820s. In the late 19th century industrialists began to envision the canal as a potential power source, thereby creating aneed for new canal engineering techniques. The 1891 Columbia Canal reflects the advances made in canal engineering in the post-Civil War era. Its massive bulkhead, waste weir, and diversion dam were more ambitious in scale and more sophisticated in design than that of the 1824 canal. It is particularly significant to note that the Columbia Canal of 1891 is intact and is a functioning example of 1890s canal engineering.

TRANSPORTATION/COMMERCE: In 1817 the State of South Carolina embarked on a broad program of internal improvements designed to provide an inexpensive and efficient method of transportation through the creation of a system of canals and navigable rivers. Under the auspices of a Board of Public Works and later a Superintendent of Public Works, some 25 miles of canal were completed across the state. As part of this program the Columbia Canal was constructed between 1820 and 1824 to navigate around the rapids of the Broad and Congaree Rivers. The Columbia Canal subsequently played an invaluable role in the development of Columbia into the state's largest cotton shipping point in the interior and a major commercial center for supplies and credit. With the coming of the railroad, canals became obsolete as an efficient form of transportation. With the exception of the Columbia Canal, all the canal projects across the state were ultimately abandoned. The Columbia Canal remained steadily in use as a transportation facility well past the Civil War, serving cotton boats making local deliveries.

CONTINUATION SHEET

UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

### NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM



ITEM NUMBER 8 PAGE 8

INDUSTRY: Although basically designed for navigation, the 1824 Columbia Canal was also the site of several small industries such as grist mills and saw mills. As the canal became obsolete as an efficient means of transportation, the State of South Carolina began to envision the Columbia Canal as a potential power source which could be used to attract outside capital into the state. In 1888 a Board of Commissioners of the Columbia Canal was established for the purpose of enlarging the canal in order to make it a valuable power source. Expanded under the direction of civil engineer Byron Holley, the enlarged canal was officially opened on November 21, 1891. Subsequently, the canal successfully attracted new industry to Columbia by means of its plentiful and inexpensive water power and its ample frontage for mill sites. It thereby played an invaluable role in the industrial development of Columbia, South Carolina.

INVENTION: In 1894 the Columbia Canal became the site of an important development in the electrification of textile mills. At that time a northern textile manufacturer constructed the Columbia Duck Mills on a site adjacent to the Columbia Canal. (The mill is not included within the nominated property.) A power house for the mill was constructed on the Columbia Canal some 600 feet away from the mill itself. Impatient with the heavy expense of ordinary mechanical power transmission from waterwheels to mill machinery, the owners of the Columbia Duck Mills decided to drive the mill with power generated and electrically transmitted from the Columbia Canal. Sidney B. Paine of General Electric Company completed the contract for electrification of the mill. The resulting power system was significant for 3 basic reasons. First, it was one of the first power systems in the nation to utilize power transmitted at a distance from the point of generation. This development meant that a mill could now be located away from the water source with its threat of floods. Second, it was the first large textile mill to use alternating current polyphase motors in preference to direct current motors. commonly utilized in textile mill power. Finally, it used a new type of drive system which applied power in individual and group motor drive instead of the traditional shaft-belt-pulley system of power transmission.

# NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM



**CONTINUATION SHEET** 

ITEM NUMBER 9 PAGE 9

- Columbia, South Carolina. South Carolina Department of Archives and History. Records of the Superintendent of Public Works. Columbia Canal Lock Book 1832-1840.
- Columbia Railway, Gas and Electric Company. <u>The Columbia Canal</u>. Columbia, South Carolina: The State Co., 1914, pp. 6-44.
- Hennig, Helen Kohn, ed. <u>Columbia: Capital City of South Carolina 1786-1936</u>. Columbia, S.C.: R. L. Bryan Co., 1936, pp. 35, 325, 343, 350-351.
- Holley, Byron. <u>Prospectus of the Enlarged Columbia Canal</u>. Charleston, South Carolina: Walker, Evans & Cogswell Co., 1891, pp. 3-11, map.
- Kelsey and Guild Landscape Architects. <u>The Improvement of Columbia, South Carolina:</u> <u>Report to the Civic League</u>. Harrisburg, Pa.: Mount Pleasant Press, 1905, pp. 54, 55, 58.
- Kohn, August. <u>The Water Powers of South Carolina</u>. Charleston, S.C.: Walker, Evans & Cogswell Co., 1911, pp. 5-6, 64-65.
- Kohn, David. <u>Internal Improvement in South Carolina 1817-1828</u> (compiled Reports of the Superintendent of Public Works). Washington, D.C.: Privately printed, 1938, pp. xi-xiv, 10-12, 19, 19-43, 67, 73, 74, 123-125, 164, 182-187, 303-305, 348, 349, 352, 517, 584, 585.
- McCord, David J., ed. <u>Statutes at Large of South Carolina</u> Vol. 16. Columbia, South Carolina: A. S. Johnston, 1839, pp. 214-219, 267-268, 370-372.
- Mills, Robert. Inland Navigation. Columbia, South Carolina: Telescope Press, 1821.
- Passer, Harold C. <u>The Electric Manufacturers 1875-1900</u>: A Study in Competition, <u>Entrepreneurship, Technical Change, and Economic Growth</u>. Cambridge: Harvard University Press, 1953, pp. 302-305, 340.
- Pogue, Nell. <u>South Carolina Electric and Gas Company 1846-1964</u>. Columbia, South Carolina: The State Printing Co., 1964, pp. 50-65.
- Proclamation with Illustrated Views of Columbia, Capital City of South Carolina. Augusta, Georgia: Wolfe and Lombard Co., n.d., pp. 2-12.
- Smith, Alfred Glaze. Economic Readjustment of an Old Cotton State: South Carolina <u>1820-1860</u>. Columbia, South Carolina: University of South Carolina Press, <u>1958</u>, pp. 154-155.

# NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM



CONTINUATION SHEET

ITEM NUMBER 9 PAGE 10

- Smith, Fenelon DeVere. "The Economic Development of the Textile Industry in the Columbia, South Carolina, Area From 1790 through 1916." Ph.D. dissertation, University of Kentucky, 1952, pp. 72-85.
- State Board of Agriculture of South Carolina. <u>South Carolina: Resources and Population, Institutions and Industries</u>. Charleston, South Carolina: Walker, Evans & Cogswell Printers, 1883; reprint ed., Spartanburg, South Carolina: Reprint Company, 1972, pp. 624-625, 699.

Maps

Drie, C. "Bird's Eye View of the City of Columbia." 1872.

- Columbia, South Carolina. South Carolina Department of Archives and History. Ludlow Engineers. "Plans of the Columbia Canal for Columbia Canal Commission, State of South Carolina." Winston-Salem, North Carolina, 1919.
- Columbia, South Carolina. South Carolina Department of Archives and History. "Map of lands for the projected Columbia Canal sold to the State of South Carolina in Feb. 1820 by James Young, Elisha Daniel, Jonathan Waring and Nicolas Herbemont."
- Columbia, South Carolina. South Carolina Department of Archives and History. "A map of old and enlarged Columbia Canal from Gervais Street to Waste Weir from surveys made Nov. 1878 and April 1888. 1893 Stamped Supreme Court of South Carolina...filed May 11, 1894."
- Columbia, South Carolina. South Carolina Department of Archives and History. "Plan of Columbia Canal, Senate Street to Taylor Street." n.d.
- Columbia, South Carolina. South Carolina Department of Archives and History. James W. Queen and Co.' "Profile of Excavation of the Columbia Canal." Philadelphia, 1867.
- Columbia, South Carolina. South Carolina Department of Archives and History. "Plan of Columbia Canal made Nov. 1893 by George W. Stevens, C.E." Nov. 1893.
- Mills, Robert. <u>Atlas of the State of South Carolina</u>. Baltimore, Md.: F. Lucas, Jr., 1825.
- Niernsee and Lamotte, City Engineers. "Map of Columbia, South Carolina and Suburbs." 1895.

# NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM



CONTINUATION SHEET	ITEM NUMBER	9	PAGE	11	
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Sanborn Insurance Company. "Maps of Columbia, South Carolina." April 1910.

# NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM



CONTINUATION SHEET

ITEM NUMBER 10 PAGE 12

Railroad Bridge located on the Congaree River just below Heyward Street, proceeding north along the east bank of the Congaree River, following along the eastern boundary line of property belonging to David W. Robinson (indicated on Columbia City Tax Maps as lots 385-5-1 and 1-1-5), thence running along a line which lies 175 feet to the west of (and parallel to) the east boundary line of property belonging to the State of South Carolina (indicated on Columbia City Tax Maps as a portion of lot 2-1-3), thence proceeding along the eastern boundary lines of property belonging to Guignard Estates (indicated on Columbia City Tax Maps as lots 2-1-1, 3-1-1, 4-1-5), thence proceeding along the east boundary of property belonging to South Carolina Electric & Gas Company (indicated on Columbia City Tax Maps as lot 4-1-1), thence proceeding along the high water mark of the east bank of the Columbia Canal (this being property belonging to the South Carolina Electric & Gas Company) to the termination of the canal at the canal bulkhead, thence proceeding along the high water mark of the east bank of the Broad River for 20 feet, thence proceeding west across the Broad River along a line running 20 feet to the north of the canal bulkhead, entry lock, and diversion dam to the western bank of the Broad River, thence proceeding south along the western bank of the Broad River until its confluence with the Saluda River. at which point the boundary line extends south across the Saluda River where it joins with and proceeds south along the Richland County boundary line to the Southern Railroad Bridge located on the Congaree River just below Heyward Street, the point of origin.

Because property lines have been followed, the appearance of the boundary lines on the accompanying topographic map is irregular. A more regular boundary line was not considered feasible as such a boundary would be arbitrary without further archeological investigation and would also require a complete appraisal of the property by a surveyor.