NPS Form 10-900-b
(Jan. 1987)

OMB No. 1024-0018

United States Department of the Interior
National Park Service

National Register of Historic Places
Multiple Property Documentation Form

A. Name of Multiple Property Listing

St. Louis, Missouri, Public Schools of William B. Ittner

B. Associated Historic Contexts

The Early Public School Buildings of William B. Ittner, St. Louis, 1897-1901.

C. Geographical Data

The city limits of the City of St. Louis, Missouri.

N/A See continuation sheet

D. Certification

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this documentation form meets the National Register documentation standards and sets forth requirements for the listing of related properties consistent with the National Register criteria. This submission meets the procedural and professional requirements set forth in 36 CFR Part 60 and the Secretary of the Interior's Standards for Planning and Evaluation.

Vain L. Blackwell for 16 July 1992
Signature of certifying official G. Tracy Mehan III, Director Date

Department of Natural Resources and State Historic Preservation Officer
State or Federal agency and bureau

I, hereby, certify that this multiple property documentation form has been approved by the National Register as a basis for evaluating related properties for listing in the National Register.

Beth Boland 9/2/92
Signature of the Keeper of the National Register Date

E. Statement of Historic Contexts

Discuss each historic context listed in Section B.

_X_ See continuation sheet

F. Associated Property Types

_X_ See continuation sheet

G. Summary of Identification and Evaluation Methods

Discuss the methods used in developing the multiple property listing.

_X_ See continuation sheet

H. Major Bibliographical References

_X_ See continuation sheet

Primary location of additional documentation:

____State historic preservation office
____Other State agency
____Federal agency
____Local government
____University
_X_Other

Specify Repository: Landmarks Association of St. Louis, Inc.

I. Form Prepared By

name/title: Cynthia H. Longwisch/Research Associate
organization: Landmarks Association of St. Louis, Inc. Date: 4/19/90
street & number: 912 Locust, 7th Floor Telephone: 314/421-6474
city or town: St.Louis state: Missouri zip code: 63101

E. Statement of Historic Contexts

Introduction:

The public schools designed by William Ittner in St. Louis generally fall into one of three contexts:[1]

The Early Public School Buildings of William B. Ittner, St. Louis, 1897-1901
The Refining of the "Open Plan" in St. Louis Public Schools, 1902-1910
St. Louis Public Schools, 1911-1914: William B. Ittner's Designs as Consulting Architect for the Board of Education

For purposes of this submission, only the first context, "The Early Public School Buildings of William B. Ittner, St. Louis, 1897-1901," will be discussed. Referring to Ittner's early, somewhat tentative design attempts, this context chronologically explores the architect's first school designs. Although his early efforts with the public school system of St. Louis laid the groundwork for much of his later design work, Ittner's most substantial contributions to school design were achieved later and his work was represented in most of the states.[2] Therefore, given the limited scope of this initial context, the significance of his earliest schools in St. Louis has only been assessed locally; the development of subsequent contexts may require a reassessment of this level of significance.

William Butts Ittner was born in St. Louis on September 4, 1864, and as a child attended the city's public schools. The son of builder and brick-maker Anthony Ittner, he graduated from Washington University's Manual Training School in 1884. He continued his studies at the Cornell University School of Architecture, from which he graduated in 1887. Ittner supplemented his schooling and preparation for his work by independently traveling and studying in Europe. Upon his return to St. Louis, he opened a general practice in which he designed a variety of buildings. In 1888, he married Lettie Crane Allen. In 1891, he was elected Fellow, American Institute of Architects and, in 1892, served as president of the St. Louis Chapter. Ittner became known as a prominent St. Louisan and was involved in many civic duties, receiving numerous honors throughout his life[3]; however, his life's work was not inaugurated until he decided to accept an offer from the St. Louis Board of Education in 1897 to become the first Commissioner of School Buildings.

The old Board of Education's 28 members, each representing a ward, had been engaged in infighting during much of the latter half of the nineteenth century. They fought over literally every aspect of their responsibilities, as Board records of the 1880s and 1890s clearly show. So much arguing took

place among this partisan group over the location of each new school, in fact, that construction was usually delayed (sometimes indefinitely), leaving the city in great need of school facilities. As a result, many classes were held in rented rooms of dwellings and other buildings wholly unsuited for school use. Moreover, repeated balloting was required each time candidates were up for appointment as School Board Architect (the 1883 election went to eleven votes); evidently Board members "campaigned" for favorite choices between votes.

Considerable spans of time sometimes passed with no staff architect, and in 1889 the Board abolished the position altogether in favor of hiring on a job-by-job basis. Any continuity previously achieved was totally lost. The office was reinstated in 1893, although by that time changes were afoot, and during the 1896-97 school year, the Missouri State Legislature voted to remove the city's old Board of Education and re-establish it with a new charter. A new twelve-member Board comprised of leading citizens set about the task of bringing St. Louis school facilities up to par.

The Early Public School Buildings of William B. Ittner, 1897-1901

On June 22, 1897, a newly reorganized St. Louis Board of Education made a fortuitous decision in its appointment of William B. Ittner to the new post of Commissioner of School Buildings, a position he would hold until 1910. Not surprisingly, he found the Building Department in great disarray. The Department had no sense of direction, no real guidance, and no master plan. That the old regime had been less than scrupulous was suggested by Board President Paul Coste in 1898:

> The Commissioner of School Buildings . . . found it necessary to provide an efficient office force of draughtsmen, etc. and maintain a rigid inspection of all work. That this plan has been successful is shown not only by a considerable reduction in the cost of maintaining the old buildings, but also by a corresponding reduction in the cost of our new buildings.[4]

Ittner had immediately begun to apply his considerable organizational skills to the enormous task at hand. To his great credit, he realized at the outset that schools of the type he had attended (and which were still being built) were unsuitable for their intended use. They had dimly-lit corridors; too-wide classrooms that received light from only one source, resulting in difficult working conditions; no indoor plumbing, with unsanitary facilities behind the school and children drinking from a community schoolyard dipper; unsafe stairways and too few exits; dingy basement classrooms; and generally

inadequate and inconvenient facilities necessary to provide a quality education. In addition, most older St. Louis schools were boxy red hulks of almost forbidding aspect and little imagination, more suited to inspire dread rather than genius. These were almost invariably located right on the sidewalk line, unrelieved by vegetation or lawn of any kind.

Once the new Commissioner had identified these shortcomings and established a staff, Ittner traveled to several Midwestern cities to meet with other architects and to see what the state of the art was in 1897. His first foray was to Chicago, Minneapolis, Milwaukee, Detroit and Springfield, Illinois. At the Detroit convention of the AIA, he met with a contingent of school architects to discuss their common goals and problems. His report of this trip revealed his dismay at the high cost per student of St. Louis schools in comparison to those of the cities he visited. Ittner found the schools he inspected "much better constructed than our most recent schools. I am at a loss to understand the excessive cost of our own buildings. . ."[5] Ittner also traveled to Boston to view new schools supposedly in the vanguard of modern school design, only to find essentially unchanged interiors with some exterior innovations. He decided to investigate school design in Europe, but first he put his own inchoate ideas on paper; St. Louis was in pressing need of classroom space and he did not have the luxury of more travel time. In 1898, his first full year as commissioner and a record year for school construction in St. Louis, Ittner obtained building permits for six of his designs--Eliot, Sherman, Jackson, Rock Spring, and Monroe schools and Simmons Colored School.

Building permits for the first two schools--Eliot School and Sherman School[6] --were issued in March of 1898, the first schools Ittner ever attempted. He immediately chose a plan different from standard school plans, aware from the start that to improve on school design meant a departure from the norm. Beginning cautiously, he produced spare designs that were not radically different from older schools in exterior aspect, but which greatly improved upon internal systems. These were the first schools in St. Louis to have indoor plumbing and adequate heating and ventilation mechanisms; they were the most fireproof to date, and the best-lighted.[7] Ittner gave serious thought to every material, dimension, arrangement, furnishing, and intended use within each school, often becoming personally involved in the selection of the grade of coal to be used in the boilers he specified or the type of marble to be used for trim. His reports to the Board were from the outset detailed, organized, highly informed and to the point, leaving no doubt as to how money was being spent, at what stage each project was, or what Ittner's opinions might be on a given school-related subject.

It was clear that the architect believed he should avail himself of the expertise that could be offered by practicing school architects in Europe, particularly Germany, Austria and Prussia, where public education had been given priority for well over a century. Once Ittner's first St. Louis schools were approved and under way, he traveled to England and Europe to gather information. The trip was evidently personally financed because no mention of this tour appears in Board records, unlike his previous excursions to study schools. Retrospectives of Ittner's career in both the Post-Dispatch and the Daily Globe-Democrat cite his European travels, the former saying that Ittner took "two or three trips to Europe at this time."[8] Although it seems unlikely that he went more than once during this busy period, it is certain that he went to western Germany, France, Italy, Spain and England to observe and sketch schools, gathering ideas for ornamental detailing, general historical styles, construction techniques and, most importantly, innovation in interior plans.

According to M. W. Childs of the Post-Dispatch, he spent time in England studying at length the brickwork at the public schools Eton and Harrow. In Berlin, he spent a month with City Architect Ludwig Hoffman, who was at that time becoming known for his modern municipal buildings.[9] Emily Grant Hutchings of the Globe-Democrat, who wrote an article with Ittner in 1928, reported that he found the basics of the "open plan" for which he later became known in the U.S. in "one of the smaller cities in Western Germany where a more daring innovation [more daring than his own first designs] had been tried. This was a building with class rooms only on one side of the corridor."[10] The one-sided corridor plan was used in Europe at least as early as 1891, when the Johannes School was built in Stockholm using an H-shaped configuration with a long center block.[11] A similar plan was used for the Gemeindeschule Number 204 in Berlin, which was completed shortly after Ittner's visit;[12] it is possible that he was able to view the school's plans while there. It is certain that Ittner immediately began to develop his version of the one-sided corridor plan, calling it the "open plan." Upon his return to St. Louis, the first school he designed--the Eugene Field School--incorporated a tentative version of this innovation using a U shape. This was a transitional design between his older, H-shaped plans and the crystallization of the E-shaped "open plan" that became his design trademark afterward.

Wheelwright's 1901 treatise, School Architecture, provided a broad survey of school buildings at this critical moment in school design history. The plans illustrated in the book run the gamut from the older, square plans to the new designs using the one-sided corridor; schools from all over Europe and the United States are depicted. While the aforementioned European schools and a

few others are shown using the one-sided corridor innovation, few American schools are shown using the idea. Ittner's new, U-shaped school appears, along with two of his older H-shaped designs.

Only two other illustrated American schools reveal an awareness of the new innovation; these were Mayhew and Paul Revere Schools in Boston. Mayhew, by architect John Lyman Faxon, features classrooms curved around a courtyard, a corridor wrapping around the outside elevation. Poor use was made of the design, however, because there are only three windows per wing in the corridor's outer walls; the text mentions that the rooms are lit from the courtyard, indicating a lack of appreciation of the possibilities inherent in the plan. The other school stretches a one-sided corridor along a center block but then obstructs it by mounting a stairwell on the corridor's center outer wall. This plan leaves just two windows to directly light the corridor.[13] Clearly Ittner was an early, if not the first, proponent of this feature in this country; it is also clear that he did not totally invent the "open plan," as has been suggested by a number of sources. What he did successfully accomplish was the synthesis and development of a seminal concept to suit the needs of modern American cities.

By the close of 1900, a building permit had been issued for a school that was unique in St. Louis in many ways. With the Edward Wyman School, Ittner had, for the first time, designed a school using the E plan, one-sided corridors, the Jacobethan style, and a landscape specifically designed to enhance the school. Thereafter, a large percentage of Ittner's schools featured all these characteristics; the E was sometimes modified, but the basic concept is seen over and over, whether or not the external arrangement is exactly the same. The Tudor Revival style known as Jacobethan henceforth became Ittner's favored idiom, although he occasionally designed a school in another style, usually going back to the Classical Revival or mixed revival styles. The Jacobethan style adapted well to educational architecture, its range of detailing serving to individualize the schools - turrets, curvilinear parapets, ornate brickwork with stone trim and imposing entrances all enabled the architect to suitably embellish the basic E plan. Of American Jacobethan architecture, Whiffen mentions the exuberant educational designs by Cope & Stewardson, then says, "More typical, and at least as worthy of critical consideration, is the series of schools at St. Louis, Missouri, for which William B. Ittner is the architect."[14]

In his first four years as Commissioner of School Buildings, William Ittner literally transformed standards of school building in St. Louis, bringing it wide attention as a progressive city. Having three "open plan" schools built or under construction by the end of 1901, he was ready to take the next

logical step: to build the high schools St. Louis desperately needed, beginning the second phase of his school-designing career.

ENDNOTES

[1]See "Final Report--Ittner Schools Survey: Reconnaissance Level," August 4, 1987 (copy in Missouri Cultural Resource Inventory, Missouri Department of Natural Resources, Jefferson City, Missouri).

[2]"Ittner, William Butts," Who Was Who in America, vol. 1: 1897-1942 (Chicago: A.N. Marquis Company, 1943), p. 621.

[3]In addition, Ittner's achievements and positions included:
Corresponding Secretary, Civic Improvement League, 1902;
President, Architectural League of America, 1903;
Awarded Silver Medal by International Jury of Awards in connection with World's Fair, 1904;
President, Public Question Club, 1907;
Gold Medal for exhibit in connection with Jamestown Tercentennial, 1907;
U.S. delegate to International Congress of Architects, Madrid, Spain, 1908;
Medal for marked meritorious achievement in the design and construction of school buildings presented by the St. Louis Chapter of the AIA, 1914;
Treasurer, AIA, 1924-26;
Elected to Life Membership in AIA, 1927;
Member of National Education Association Committee on Administration of Secondary Education and wrote the chapter on school architecture for their Bulletin 23, 1922;
Lecturer on School/Home planning, New York University, 1922;
Invited to White House by President Hoover to conference on building, 1926;
Vice-President, St. Louis Plaza Commission, 1926;
Elected to Life Membership, Missouri Historical Society, 1927;
Elected to Life Membership, National Education Association, 1931;
Honorary LL.D. conferred by the University of Missouri, 1931.

[4]St. Louis Board of Education, Annual Report (1898), p. 21.

[5]St. Louis Board of Education, Proceedings (12 October 1897), p. 256.

[6]Sherman School was included as part of the Shaw Neighborhood District, a St. Louis City District, in 1985.

[7]Ittner's appointment coincided with new laws regarding fireproof construction in the City. His policy was to exceed the code requirements wherever feasible, a vast improvement over the partially flammable construction of many older school buildings.

[8]St. Louis Post-Dispatch Sunday Magazine, 27 July 1930.

[9]Ibid.

[10]Daily Globe-Democrat, 9 February, 1936.

[11]Edmund March Wheelwright, School Architecture (Boston: Rogers & Manson, 1901), p. 56.

[12]Ibid., p. 22-23.

[13]Ibid. pp. 22-23.

[14]Marcus Whiffen, American Architecture Since 1780 (Cambridge, Massachusetts: the M.I.T. Press, 1981), pp. 181-82.

F. Associated Property Types

I. Name of Property Type: St. Louis Public Schools of William B. Ittner

During the course of his career, William B. Ittner designed forty-nine public school buildings in St. Louis; nation-wide, he was responsible for approximately 500 buildings. Forty-seven of the schools designed by Ittner in St. Louis are extant.[1] Forty-two of these remain in the public school system and in use by the system; all but one are still used as classrooms.[2]

William Ittner's St. Louis schools were designed in several categories or subtypes, beginning with the H-plan elementary schools and continuing with the cruciform, U-plan and finally the E-plan elementary schools. These were followed by high schools and colleges, in which he continued his basic tenets of design while significantly expanding the scale. While the first two plans were early concepts for Ittner and little used afterward, the U- and E-plans were employed extensively throughout the rest of his career. These subtypes were modified as Ittner refined his concepts and according to need, becoming more sophisticated in conception as he evolved as a designer.

Subtype: H-Plan Elementary Schools

II. Description

When faced with the new task of public school design in his first year as the Commissioner of School Buildings for the St. Louis Board of Education, William Ittner had the choice of using traditional urban American school design or attempting to create facilities more suitable to modern needs. Having attended public school in St. Louis, the architect was aware of some of the shortcomings prevalent in the older buildings and resolved to improve upon them where possible. Hired by the City in June 1897, Ittner managed to galvanize the inefficient Building Department, effecting a complete reorganization, and design a new type of school building that was ready for construction by March 1898. City schools had customarily been basically square, with a center stairwell. Ittner's first plan was in the shape of an H with a one-story kindergarten projecting from the center rear. (See floor plans for Eliot and Jackson Schools for examples of the H-Plan.)

Ittner's plan was a three-story block paralleling the front of the property. On either side, perpendicular wings provide the "legs" of an H shape. By using this design, he created more exterior wall surface and therefore more access to light and air in a greater percentage of classrooms. Two smaller stairwells (lit by large, round-headed window bays) terminate the corridor,

replacing the single, large center stairway; this change was made for reasons of light and safety. Basements, recognized as a major source of school fires, are raised to provide bigger windows and constructed so they can be sealed off into a tight, fireproof unit. Built of pressed brick and stone, all of Ittner's schools are of fireproof construction.

On each floor, two classrooms in the center block face the front of the building; on the opposite side of the corridor, the kindergarten room is centered on the first floor, flanked by wardrobe and storage rooms. On the second and third floors, these small flanking rooms were designated for use as recitation rooms, storage rooms, wardrobes, and principals' and nurses' offices. Each wing is divided in two by the stairwells, with one classroom on either side (front and rear elevations). A total of eighteen regular-sized classrooms for grades 1 - 5 is gained in this way. Basements accommodate playrooms, restrooms, boiler rooms and storage space (originally for coal). The primary entrance is centered in the front elevation, with secondary entrances located in the centers of the side elevations; smaller doors exit onto the rear playground on either side of the kindergarten.

III. Significance

The H-plan Ittner schools are significant under Criterion C in the area of ARCHITECTURE and are of local significance. They represent the first attempt at modernization of a systematic type seen in the City of St. Louis in the late nineteenth century. The first of Ittner's nearly fifty public schools in the City, the H-plan buildings are the beginning of his widely-known philosophies of school design. It is possible to follow Ittner's development as a school architect through his schools, tracing his personal growth chronologically. These are his first tentative efforts at making a departure from older design. Older plans had been virtually unquestioned in St. Louis before Ittner came onto the scene, making any kind of change seem fairly dramatic to the public.

These first schools were a qualified success in Ittner's mind. He was led to try other innovations and plans to improve upon his first efforts, but he actually returned to the H plan one last time after attempting the cruciform plan.

Ittner's first plans were almost immediately recognized by educational architects in other cities, and his work appeared in various publications within a short time. St. Louis became known as a city of educational innovation at the turn of the century, largely because of William B. Ittner.

Subtype: Cruciform-Plan Elementary Schools

II. Description

Ittner was aware that his first design, the H-shaped plan, was not perfect. His intent was to keep evolving ideas for plans until something better could be worked out. His second plan was designed in a cruciform shape. (See the floor plan for Rock Spring School for an example of the cruciform design.)

This second design, three stories in height, was essentially a long center block paralleling the front of the property with a short center wing and a longer rear wing, also centered. This plan was an attempt to provide more light and air to a greater number of classrooms; rooms have windows on three sides. They are "stacked," one on top of the other, in each of the four arms of the school. A center corridor receives natural light only through rooms and via north-facing windows in the two stairwells, the primary design flaw in the cross-shaped plan; the hallway is quite dim, although it does receive more light than those of the older, pre-Ittner schools. As with Ittner's earlier schools, the cruciform plan was of fireproof construction with a somewhat raised basement that could be sealed off to form a fireproof unit. Pressed brick with stone foundation and trim and slate roof are exterior materials.

The plan could potentially house twelve classrooms; on the first floor, the east wing is divided into administrative offices. The basement is outfitted for playrooms, boiler room, storage and restrooms. Two entrances flank the front wing and there is one rear entrance in the rear wing; this is the smallest number of entrances of any of Ittner's plans, necessitated by the fact that there are rooms in the ends of the wings rather than stairwells.

III. Significance

The Cruciform-Plan Elementary School is significant under Criterion C in the area of ARCHITECTURE and is of local significance. This plan represents Ittner's second step in school design, a link in the evolution of his philosophy. Following the logical course of Ittner's development as a school architect, this plan is more significant for its part in the whole process than for its individual merits.

Indeed, the plan of this school was less than satisfactory when put into use. It was almost certainly difficult to heat, the stairway locations were not ideal, and the corridors were much too dim. However, Ittner evidently learned from the results, first returning to the H plan one last time and then moving

on to other forms. Perhaps the experience with the cruciform plan led him to travel to Europe to gather more information, which he did a few months later.

Subtype: U-Plan Elementary Schools

II. Description

Upon his return from his first European reconnaissance trip, Ittner designed a school with a different plan than had been seen in St. Louis before: U-shaped, the school had a one-story kindergarten attached to the rear elevation. A center block parallels the front of the property, as in his earlier schools; with this plan, the flanking wings are pulled forward to form a squared U shape. (See the floor plan for Field School for an example of the U-Plan School.)

The three-story school has two classrooms per floor per wing, separated by a stairway, in much the same design as the H-shaped plan; the wings of this school, however, also house smaller rooms to be used for storage as well as a short corridor. The biggest difference of this school from those preceding was its use, across the front of the center block, of a corridor with exterior windows. On the other side of the corridor, across the rear elevation, two classrooms and a kindergarten are located on the first floor; three classrooms cross the rear side on the second and third floors. The two stairways are located in the inside front corners formed by the U shape, instead of at the ends of the corridors; the necessity of placing the stair/lightwells at the ends of the corridors to provide light is obviated in this design with the implementation of the one-sided corridor.

Like Ittner's other schools, the U plan is fireproof, with a somewhat raised basement that can be sealed into a fireproof unit if necessary. Built of pressed brick, stone and terra cotta, the school has a red clay tile roof hipped at a very shallow pitch.

The plan houses twenty regular classrooms and a kindergarten room in addition to basement playrooms, boiler room, storage room, restrooms and wardrobe rooms and offices in the upper floors.

III. Significance

The U-Plan Elementary Schools are significant under Criterion C in the area of ARCHITECTURE and are of local significance. The plan represents the first

time that the European concept of a one-sided corridor was developed in a St. Louis school, and almost certainly the first of its kind in the State as well. The old plan of lining a corridor with rooms on both sides produced a dimly-lit hallway and rooms that were primarily illuminated naturally from one side only, a major drawback during half the day in an east- or west-facing school. With light coming directly into the hallways, classrooms benefited by a more even wash of daylight, making working conditions easier. The U plan is a transitional one in Ittner's career; he was on the verge of designing the "open plan" that marked the majority of his later designs, yet he had not quite gotten away from the older plans he had originally devised. In this case, when he went on to design a different type of layout, it was not because his last had failed; rather, it was the next logical step in a series of improvements.

The relative success of the U plan was evidently encouraging to Ittner, who went on immediately to develop the concept into the E, or "open plan," for which he became widely known. The critical step of the U plan provided the impetus of seeing a successful design virtually within his grasp.

E ("Open")-Plan Elementary Schools

II. Description

The E-plan school, also referred to as the "open plan," followed the U-shaped school design within nine months. The design became Ittner's preferred mode for the rest of his career, and was virtually always the plan shape cited by others as innovative. (See the floor plan for Wyman School for an example of the E-Plan School.)

The E plan is a versatile one that can be modified to suit needs, size, lot dimensions, etc. The basic idea is a long center block paralleling the street; three wings project from the body of the school. These are typically located one at either end and one in the middle. Variations can include insetting the end wings a few feet; extending the wings to the rear rather than to the front; "bumping" out the ends of the center block beyond the edges of the wings; adding extra angles to wings to create extra space inside; adding a small rear projection in addition to the front-facing wings; reducing or omitting the center wing; and making two or three "mini-wings" between the two standard outer wings, rather than a single standard wing in the middle.

Two or three classrooms are typically located in each wing per floor; the center wing is often reduced in size and accommodates a kindergarten or

entrance stairway. A one-sided corridor runs the length of the center block, usually having stairwells at either end in the corners formed by the wings. Classrooms are located across the opposite side, also running the length of the block, usually four in number.

The E-plan schools are usually two stories high, of fireproof construction, with raised basement. Entrances vary, the front elevation usually having either one rather monumental, embellished entrance in the center or two smaller entrances flanking the center wing. Secondary entrances are located at the sides and rear of the schools. Each of the E-plan schools has differing interior layouts in details like wardrobes, restrooms, storage rooms, etc. but each retains the basic design described above. Basements are outfitted with playrooms, restrooms, boiler rooms and storage space.

III. Significance

The E ("Open")-Plan Elementary Schools are significant under Criterion C in the area of ARCHITECTURE and are of local significance. They represent the culmination of three years of study and work to devise the best possible elementary school plan for St. Louis. Ittner's development as a school architect led up to the first E-shaped plan that was built, marking a watershed moment in his career. For the first time, his ideas had jelled and produced what was in his mind an unqualified success. The "open plan" became the standard by which other schools in St. Louis were judged; eventually, the plan became known in education circles across the country and was adopted by many architects. Most of the recognition and accolades Ittner received as a result of his architecture was due to the E or "open" plan.

The E-shaped plan was the first used by William Ittner to realize fully the potential of the one-sided corridor technique of design. Classrooms were all lit both directly by their own windows and indirectly by hallway light, providing a more comfortable work environment. The air circulation provided by the design was also a desirable result. The E plan provides a "livable" educational environment, equally suitable for teaching and being taught. The plan also proved to be adaptable to various needs, sites and exterior treatments.

Ittner spent most of the rest of his career designing school buildings. Nearly all of the remaining elementary schools he planned were done in the E plan or variations of it. His successes with this design were unqualified, both in St. Louis and, when he began later to take outside commissions, all over the country.

IV. Registration Requirements

To be eligible for listing in the National Register, all Ittner-designed school buildings must first retain their physical integrity, exhibiting original materials (with the possible exception of roof material). The schools must retain characteristically-shaped plans, scale, roof shape and fenestration in order to convey a clear sense of historic character. The schools must be in their original locations, landscaped approximately in their original fashion. The physical condition of the buildings should be reasonably good.

Original materials in Ittner's schools include pressed-brick exterior walls, stone foundations and slate roofs in the case of hipped designs. Replacement brick of a different color or pattern from the original is unacceptable; tuckpointing must be of the same color as the original mortar and of a mix approximating the content of the original mortar (e.g., cement is not appropriate to tuckpoint or repair brick masonry). Replacement sash ideally would be of painted wood matching the original dimensions, although repair is preferable to replacement.

The shape of the plan should be retained. Any additions should not obstruct the adjoining elevation and should be attached to the original building in a minimal and unobtrusive manner. Additions should be limited to one story in height; their location ideally would be at the rear of the school, although a non-obstructing addition on a side (preferably the least-visible side) elevation is permissible.

The scale of the building should not be altered by any means, including changes in the facade, roof height, or architectural detailing; the original height of three stories should be retained.

Subtype: H-Plan Elementary Schools

The H-shaped schools should retain their original rooflines, whether flat or hipped. Any changes to this, such as the addition of a mansard roof to gain space, are unacceptable. The pitch of hipped roofs should not have been altered from the original.

Fenestration should remain as built; modern windows should not be punched in. The common practice of bricking in or boarding selected windows, especially those in the basement, is unfortunate but reversible. Upper-story windows, those on the primary elevations, or large banks of windows should not be infilled. Original sash of six-over-six, nine-over-nine, etc. should be

replaced in kind if necessary. Modern windows of one or two panes are unacceptable. Replacement mullions are ideally of wood; other materials may be acceptable if they duplicate original pane configuration.

The physical condition of the buildings should be reasonably good, and the structural integrity should be present; vacant schools should retain a roof, for example. The schools should not be adapted for reuse in such a manner as to obliterate the buildings' original use or design.

Original landscapes such as specific trees, shrubs, etc. will not be expected to endure indefinitely, but the original character (determined as much as possible from written and photographic indications in Board of Education or other contemporary publications) should be represented. Any major departure from the original landscape intent is unacceptable; these would include paving large sections of lawn, clearing of lawn of all or most trees, using the lawn for other purposes that alter its character, and inappropriate plantings (e.g., to plant a row of evergreens across the front shoulder-to-shoulder, thereby eventually obstructing the view of the school and changing the intent of a randomly-planted grounds).

Subtype: Cruciform-Plan Elementary Schools

The hipped roofline should be retained. Any changes to this, such as the addition of a mansard roof to gain space or an alteration in the pitch of the roof, are unacceptable.

The cruciform plan did not feature original landscaping, so paved spaces around the building are not inappropriate.

Subtype: U-Plan Elementary Schools

The original, shallow-hipped roofline should be retained. Original sketches of the school show a tile roof, a material ideally retained; however, other materials are allowable in this type because the nearly flat roof makes it very difficult to view the sheathing from the ground.

The U-shaped plan did not feature original landscaping, so surrounding paved surfaces are not inappropriate.

Subtype: E ("Open")-Plan Elementary Schools

The E-plan schools should retain their original roofline, whether flat, hipped or gabled. The pitch of the hipped and gabled roofs should not be altered from the original.

The schools should be landscaped approximately in their original fashion, noting that a few of the first E-plan schools had none.

ENDNOTES

[1]The two schools which have been destroyed were Special School #1, 10th and Carroll, constructed in 1913; and Taussig Open-Air School, 1540 South Grand, constructed in 1915. "Final Report--Ittner Schools Survey: Reconnaissance Level," August 4, 1987, pp. 1-4 (copy in Missouri Cultural Resource Inventory, Missouri Department of Natural Resources, Jefferson City, Missouri).

[2]The Normal School, 1517 South Theresa, is used as an audio-visual center. Ibid.

The Ittner schools were identified in a 1987 survey conducted by Landmarks Association of St. Louis. The survey methodology was to obtain a list of the buildings constructed during the tenure of William B. Ittner as Commissioner of School Buildings and, later, Consulting Architect for the St. Louis Board of Education. The buildings were site-inspected to determine demolition, condition, alterations, additions, etc.

Additional research was conducted in the Public School Archives at Harris-Stowe State College in St. Louis. Annual Reports and Proceedings, both serial Board publications, were scanned for information regarding Ittner and his schools. Other sources, such as educational periodicals, construction periodicals and local architectural files were consulted to obtain additional information.

Forty-seven extant schools designed by Ittner were identified in St. Louis. These were photographed and individually documented. Through the research process, it became evident that Ittner and his schools were important both to the City and to educational architecture and as such were possibly eligible for the National Register and merited additional research.

Major Bibliographic References

Barnard, Henry. School Architecture; or Contributions to the Improvement of School-Houses in the United States. New York: A.S. Barnes, 1849.

Bruce, William, comp. School Architecture. Milwaukee: Johnson Service Company, 1910.

Bruce, William C., comp. Grade School Buildings. Milwaukee: Bruce, 1914.

Childs, M.W. "Interesting St. Louisans: William B. Ittner," St. Louis Post-Dispatch Sunday Magazine, 27 July 1930.

"The Edward Wyman School Building," The Inland Architect and News Record, vol. 46 (Dec. 1905). n.p.

"Facts Concerning One Hundred Years of Progress in the Public Schools of St. Louis," Public School Messenger, vol. 35, no. 5 (3 Jan. 1938). St. Louis: St. Louis Board of Education, 1938.

Hamlin, A.D.F., et al. Modern School Houses. New York: Swetland, 1910.

Hutchings, Emily Grant. "Art and Artists," St. Louis Globe-Democrat, 9 February 1936.

Ittner, Marie Anderson. Footprints. St. Louis: John S. Swift, 1955.

Ittner, Marie Anderson. "William B. Ittner: His Service to American School Architecture," American School Board Journal,(January 1941).

Ittner, William B. "School Problems in Design and Construction," The Realty Record and Builder, vol. 18, no. 3 (June 1911).

Mills, Wilbur T. American School Building Standards. Columbus, Ohio: Franklin Educational Publishing Co., 1915.

"Model Grounds for School Buildings," The Inland Architect and News Record, vol. 49 (May 1907), pp. 61-63.

Powell, Mary. "Public Art in St. Louis," St. Louis Public Library Monthly Bulletin, (July-August 1925).

St. Louis Board of Education. Annual Report. Printed yearly from

1896-97 to 1930-31.

St. Louis Board of Education. Printed Record. (also called Official Proceedings) Printed biannually and annually from 1897 to 1916.

Strayer, George D.; and Engelhardt, N.L. School Building Problems. New York: Columbia University, 1927.

"Tells of Ittner's Work For Schools," Globe-Democrat, 13 January 1941.

"W. B. Ittner, Noted Architect and Designer of Schools Dies," St. Louis Post-Dispatch, 27 January 1936.

"W. B. Ittner, Noted School Architect and Designer, Dies," St. Louis Globe-Democrat, 27 January 1936.

Wheelwright, Edmund March. School Architecture: A General Treatise for the Use of Architects and Others. Boston: Rogers & Manson, 1901.

Whiffen, Marcus. American Architecture Since 1790. Cambridge, Mass.: the M.I.T. Press, 1981.

Who Was Who in America. Chicago: A.N. Marquis Company, 1943. vol. 1: 1897-1942.

2. Steven E. Mitchell
National Register Coordinator
Missouri Department of Natural Resources
Division of Parks, Recreation and Historic Preservation
Historic Preservation Program
P.O. Box 176
Jefferson City, Missouri 65102

Editor and revisions, items E and F

NPS Form 10-900-b
(March 1992)

OMB No. 1024-0018

RECEIVED
OCT 23 2000
NATIONAL REGISTER, HISTORY & EDUCATION
NATIONAL PARK SERVICE

Cover AD

United States Department of the Interior
National Park Service

National Register of Historic Places Multiple Property Documentation Form

This form is used for documenting multiple property groups relating to one or several historic contexts. See instructions in How to Complete the Multiple Property Documentation Form (National Register Bulletin 16B). Complete each item by entering the requested information. For additional space, use continuation sheets (Form 10-900-a). Use a typewriter, word processor, or computer to complete all items.

____New Submission __X__Amended Submission

A. Name of Multiple Property Listing

St. Louis, Missouri, Public Schools of William B. Ittner

B. Associated Historic Contexts

The Refining of the "Open Plan" in St. Louis Public Schools, 1902 - 1910

C. Form Prepared by

name/title Lynn Josse, Associate Research Director, Landmarks Association of St. Louis, Inc.

street & number 917 Locust Street, 7th Floor telephone (314) 421-6474

city or town St. Louis state MO zip code 63101

D. Certification

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this documentation form meets the National Register documentation standards and sets forth requirements for the listing of related properties consistent with the National Register criteria. This submission meets the procedural and professional requirements set forth in 36 CFR Part 60 and the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation. (___ See continuation sheet for additional comments.)

Claire F. Blackwell 16 October 2000

Signature and title of certifying official (Claire F. Blackwell/ Deputy SHPO) Date

Missouri Department of Natural Resources
State or Federal agency and bureau

I hereby certify that this multiple property documentation form has been approved by the National Register as a basis for evaluating related properties for listing in the National Register.

Edson W. Beall 12/13/00

Signature of the Keeper Date

for

The Refining of the "Open Plan" in St. Louis Public Schools, 1902 - 1910

At the end of 1903-1904 fiscal year, William B. Ittner wrote a report for the Board of Education summarizing the chief planning considerations which resulted in the physical layout of his school designs. The open plan, which he also referred to as an E-shaped plan, satisfied his requirements for classroom size, corridor lighting, window placement, sanitation, and ventilation. During his tenure as the Board of Education's Commissioner of School Buildings, Ittner used the open plan with remarkable consistency. Twenty-nine of the schools Ittner designed between 1902-1910 were extant at the time of the 1987 St. Louis Public Schools survey, providing a timeline of the refinements which Ittner made to his successful design.

One of Ittner's top priorities on his return from his European trip was the development of two new high schools. The Superintendent of Schools wrote in the 1899-1900 annual report that the city's high school enrollment was smaller than that of any other large city, a fact he attributed to "the abnormal fact that we only have one High School for white pupils in the city." Noting that students were discouraged from attending school by the enormous distance they had to travel to get there, he concluded that "there could be no greater benefit to the public schools than the building of additional High Schools in the northern and southern parts of the city."[1]

In 1902, Ittner designed McKinley High School for the city's south side and Yeatman High School for the north side. Both were envisioned as full-service schools which would incorporate a manual training program as well as a science and humanities curriculum. Ittner's exposure to the high school planning process gave him his first experience manipulating elements such as auditoriums, purpose-built gymnasiums, and upper story restrooms for students. All of these features would be introduced into the elementary schools of St. Louis in the decade following Ittner's first high school designs.

Despite the large size of these facilities, with up to twice as many classrooms as the elementary schools and a wide variety of specialty spaces for manual and domestic training programs, Ittner remained faithful to the ideal of the open plan. At McKinley, for example, additional floor space was gained by placing skylit shops in the basement level

---

[1]Board of Education of the City of St. Louis, *46th Annual Report of the Board of Education of the City of St. Louis, Missouri for the year ending June 30, 1900.* St. Louis: Burton & Skinker Stationary Co., 1901. 86-87. Central High School was centrally located (as the name suggests). Sumner High School, founded in 1875, would remain the city's only high school for African-American students until well after Ittner's tenure.

and creating a figure-eight shaped plan around them on the floor above. The second and third floors resemble the typical E-plan.

As the first decade of the 20th century progressed, Ittner took the lessons of the high schools back to the elementary schools and made additional adjustments to the basic plan. In 1905 (reporting on the 1903-04 fiscal year), he wrote that classroom size should be approximately 32 feet by 24 or 25 feet. Just a few years later, he had developed a standard of 24 feet by 32 feet six inches for all classrooms. The kindergartens were designed to be about twice the size of a regular classroom.

Depending on the size and cost of the school, Ittner's earliest elementary school plans usually showed two or four basement "play rooms," segregated by sex. After Ittner designed McKinley and Yeatman, his elementary schools would often (but not always) incorporate gymnasiums instead of two of the playrooms. While elementary school gymnasiums were always in the basement, creative planning resulted in gymnasium placement on the third floor of Ittner's Sumner High School (1909; NR 1988).

In schools designed before about 1907, all student toilets were located in the basement adjacent to play rooms. Later designs always incorporated toilets on upper floors. (Some publications refer to such small lavatories as emergency toilets, which would evolve into full-sized student restrooms in the next few decades.)

Another innovation which occurred toward the end of Ittner's tenure was the development of the elementary school auditorium. While such an assembly space was a standard feature of high schools, Ittner did not experiment with its use in a lower school until 1908's Humboldt School. These never became standard features during Ittner's tenure.

In the 1905 report cited above, Ittner also described his philosophy on exterior design of his school buildings. He describes the use of hard red brick "mixed as to color and laid up with a large bed joint in garden wall or flemish bond." "Stone is used sparingly," he writes, "and no attempt is made to accent any part of the building except the main entrance, which is generally dignified by fitting architectural treatment." (In fact, even before this article was written, the stair towers on Ittner's schools were also often the subject of architectural embellishment - frequently taking the form of projecting Tudor towers.) Each building was invested with an individual character, he wrote, "in the belief that this, together with simplicity of design and material, will more nearly express the

tendency of the times, and that buildings so expressed will more nearly fulfill their purpose as part of our great system of education."[2]

It was during this second period of Ittner's work for the St. Louis schools that he fully developed the range of "Jacobethan" motifs for which he became so well known. His first Jacobethan school design was the Wyman School in 1900. Beginning in 1901, Jacobethan became his preferred mode of design. Fully two thirds of the Ittner schools contracted between 1901-1910 use some variation of this eclectic mix of Tudor and English Renaissance elements. For the remaining third, a wide range of styles are employed (Classical and Renaissance Revival, Craftsman, a version of Gothic or Venetian revival, and some eclectic mixes of various historical elements).

Ittner resigned from his position as Commissioner of School Buildings in 1910, leaving a legacy of well over 30 new schools and countless improvements and upgrades to existing facilities. After this point, he would continue to contract with the board as a consulting architect.

---

[2]Ibid, 220.

Major Bibliographical References

In addition to the works cited in the original bibliography, this amended submission consulted or referred to the following works:

Landmarks Association of St. Louis. "St. Louis Public Schools Survey" Phase I (the schools of William B. Ittner. 1987.

Teachers College of Columbia University Institute of Educational Research, Division of Field Studies. *A Report of a Survey of The Public Schools of St. Louis, Missouri.* (New York?: n.p., 1939).