



106GROUP

THE SAINT PAUL FIRE DEPARTMENT ENGINE HOUSES – 1869 TO 1930 HISTORIC CONTEXT – Phase 1

Saint Paul, Ramsey County, Minnesota

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106 Group Project No. 2203

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1.0 INTRODUCTION

In the 2010 *City of Saint Paul Comprehensive Plan*, the Saint Paul Heritage Preservation Commission (HPC) identified the need for additional historic contexts and themes to be developed and explored to “contribute to a more complete understanding of Saint Paul’s historic resources and to guide the preservation planning process.”¹ One of the historic contexts recommended by the HPC was a context study of engine houses in Saint Paul.² The Comprehensive Plan states “this civic property type would benefit from a comparative analysis of the styles and trends of currently used or rehabilitated historical fire houses and fire engine stations to evaluate and prioritize preservation needs.”² In 2016, one of Saint Paul’s oldest extant engine houses was threatened with demolition due to a proposed hotel development. In response to this threat, the HPC prioritized development of a context of fire engine houses in Saint Paul and requested that the 106 Group prepare a historic context for the Saint Paul Fire Department (SPFD) engine houses, from 1869 to 1930, to assist with future survey and evaluation of engine houses in Saint Paul. Several engine houses from the nineteenth century are extant and most likely to be threatened by potential redevelopment. This context begins in 1869, marking the passage of a City Charter amendment to the Minnesota State Legislature to build new engine houses and acquire equipment. This context ends in 1930, when the SPFD moved its department headquarters downtown to the new Public Safety Building due to improvements to the SPFD and expansion of its duties. This context addresses SPFD history between the years above; identifies building typologies and features using field examples of engine houses in Saint Paul; highlights key architects and builders involved with the design and construction of engine houses in Saint Paul; provides guidelines for evaluating SPFD properties of the context era; and makes recommendations for additional research. Appendix A contains a glossary of terms related to engine house construction and SPFD history. Appendix B is a map of known engine houses in Saint Paul constructed between 1869 and 1930. Appendix C provides a chronological list of these engine houses. Appendix D contains representative three-dimensional models and historical and current photographs of all known engine houses in Saint Paul, if available. Finally, Appendix E identifies the project personnel.

PURPOSE OF HISTORIC CONTEXTS

A historic context provides the framework for evaluating resources for potential National Register of Historic Places (NRHP) eligibility. A context is a document “created for planning purposes that groups information about historic properties based on a shared theme, specific time and geographical area.”³ This context describes engine house architecture in Saint Paul and the SPFD’s development over time, to enable evaluation of the City’s extant engine houses, assess their significance, and inform preservation priorities.

Historic contexts are an integral component of the preservation planning process. Contexts serve preservation planning by assuring that the full range of historic properties are identified and subsequently

¹ City of Saint Paul, *City of Saint Paul Comprehensive Plan* (Saint Paul: City of Saint Paul, 2010), 67.

² *Ibid.*, 15, 67.

² *Ibid.*, 67.

³ National Park Service, *How to Complete the National Register Multiple Property Documentation Form*. (Washington D.C.: U.S. Department of the Interior, 2014).

evaluated, registered, and protected. Contexts help to prioritize preservation decision making by comparing similar historic resources, describing their prevalence, and ascertaining their relative significance. Historic contexts help to guide future survey and designation efforts by proactively and objectively identifying geographical areas, resource types, or themes that are likely to be associated with valued historic resources. In local preservation planning, they allow an HPC to pursue designation in a thoughtful, deliberate, and coordinated manner, rather than solely responding to community or development pressures. For an HPC, historic contexts are particularly critical in justifying the identification and designation of historic resources in a regulatory process. Without a historic context to demonstrate the relative significance of a resource, HPC decisions are less able to withstand public scrutiny and legal challenges.⁴

2.0 THE SAINT PAUL FIRE DEPARTMENT ENGINE HOUSES – 1869 TO 1930 HISTORIC CONTEXT

This historic context, *The Saint Paul Fire Department Engine Houses – 1869 to 1930*, begins with the passage of the Saint Paul City Charter amendment by the Minnesota State Legislature approving the sale of bonds to construct SPFD engine houses. The context ends in 1930 when the headquarters of the SPFD, along with the Saint Paul Police Department and the Saint Paul Health Department, moved downtown to the newly constructed Public Safety Building, signaling the centralization of municipal services as part of a major investment in public improvement and civic infrastructure. Historical information pertaining to engine houses in the United States and in Minneapolis is also included to place developments in Saint Paul within a regional and national context. Additionally, this context includes information about the establishment of volunteer fire companies in Saint Paul and the creation of the SPFD, prior to the 1869 amendment, to provide a framework for understanding the early history of the SPFD.

HISTORY OF ENGINE HOUSE DESIGN AND THE DEVELOPMENT OF FIRE DEPARTMENTS

ENGINE HOUSES IN THE UNITED STATES

At the end of the eighteenth century, volunteer companies composed of private citizens took over the responsibility for fire protection in American cities to improve fire protection. This service had previously been the obligation of the entire community, like other civic duties such as night watch, militia duty, or road maintenance. Each citizen was legally obligated to commit a certain amount of time to each of these tasks or pay for a proxy. Initially, firefighting equipment such as hooks and ladders, was housed in wooden sheds, and fire companies held their meetings in taverns, rented halls, or private homes.⁵ More

⁴ William Stark, “Appendix: Historic Preservation, Historic Contexts,” in *Saint Paul Comprehensive Plan*, prepared by Stark Preservation Planning, LLC and the 106 Group, Ltd. for the City of Saint Paul, 2008.

⁵ Rebecca Zurier, *The American Firehouse: An Architectural and Social History* (New York: Abbeville Press, 1982), 17-18, 32.

substantial engine houses began to be constructed in cities in the Eastern United States in the 1820s and 1830s, typically designed in the prevailing Greek Revival architectural style and constructed from granite, brick, or other masonry (Figure 1).⁶



Figure 1. Spring Street Elementary School and Fire Station, Portland, Maine, built 1837⁷

Engine houses had few programmatic requirements aside from the accommodation of firefighting equipment and personnel, and direct access to the street. These requirements typically resulted in buildings with rectangular forms of two to three stories in height, an open space for the fire engine on the ground floor, and meeting rooms in the rear of the engine house or on the second floor. With few requirements, engine houses exhibited great freedom in their design, and these characteristics hold true today.⁸ Engine houses generally followed existing architectural styles, which were adapted to the programmatic needs of a fire company, rather than engine houses pioneering new design methods.⁹ The location of engine houses within a city was also not prescribed, as long as it was conveniently located to provide efficient service.¹⁰ City governments often provided equipment to the volunteer companies, although volunteers would spend their own money to decorate the engines and engine houses with emblems and murals to convey company pride.¹¹

Engine houses in Eastern cities shifted towards employing the Italianate style in the 1840s, following the rise of the style's popularity (Figure 2). Engine houses continued to be constructed from brick or stone,

⁶ Ibid., 32-33.

⁷ Ibid., 34.

⁸ Halsey Wainwright Parker, "Fire Department Buildings," *The Brickbuilder* 19 (May 1910):117.

⁹ Zurier, *The American Firehouse*, 13.

¹⁰ Parker, "Fire Department Buildings," 117.

¹¹ Zurier, *The American Firehouse*, 43.

although warmer tones became favored. Additionally, the Italianate style incorporated more ornate decoration than the Greek Revival style, including carvings, moldings, and cast iron.¹² For example, the tower, which is an element of the Italianate style, emerged in engine house design in the 1850s and conveniently also served a practical function by providing a place to hang up the hose to dry. As towers became more commonly constructed on engine houses, they also served as aesthetic indicators of the building's function.¹³¹⁴



Figure 2. Steamer 5, Richmond, Virginia, built 1849¹⁵

In the 1850s, cities continued to struggle with inadequate fire protection, despite the formation of volunteer companies, and insurance premiums continued to rise for building owners. Additionally, volunteer companies demanded and received more pay for their services, through solicited “donations” from insurance companies and the public, and appropriations from municipal treasuries.¹⁵ At the same time, volunteer fire companies had become more like fraternities, with their engine houses serving as clubhouses. Firefighting also became regarded as a spectator sport where firefighters could display their strength and daring, and competing volunteer fire companies used names and uniforms to assert their identities. Firefighters participated in parades to demonstrate company pride, which caused some rivalries among the various companies.¹⁶ Rowdy behavior and altercations between volunteer companies became common as the focus shifted to socializing more than serving the community.¹⁷ As the decade went on, the public began to lose trust in the volunteer companies because of their poor manners and inability to keep up with the public need for fire protection.¹⁸ However, city leaders were hesitant to curtail the

¹² Ibid., 57.

¹³ Ibid., 65.

¹⁴ Ibid., 53.

¹⁵ Ibid., 75.

¹⁶ Ibid., 40-43.

¹⁷ Ibid., 74.

¹⁸ Ibid., 71.

firemen's behavior, since the independently-managed fire companies could influence citywide elections by swinging votes against sitting city officials.¹⁹ By the late 1850s, cities had begun to replace volunteer companies with part-time, all-paid fire departments. This transition occurred in Saint Louis and Chicago in 1857, in Baltimore in 1858, and in Buffalo in 1859.²⁰ The establishment of paid fire departments brought about increased professionalization through a new hierarchical organization of positions within the department, including captains, lieutenants, and sergeants. New York City established the first fulltime paid fire department in 1865, which influenced other fire departments in large cities across the country to follow suit.²¹

The formal organization of fire departments under municipal management changed engine house construction. New engine houses in the 1860s and 1870s exhibited less ornamentation than their Greek Revival and Italianate style predecessors, following more austere forms and exhibiting greater unity of design in each city (Figure 3). Volunteer companies had previously hired their own architects and used the design of their engine house to set themselves apart from their competitors. However, with municipal governments now in charge of all the companies, engine houses became more likely to look alike.^{22,23}



Figure 3. Fire Company 12, Cincinnati, Ohio, built 1876²⁴

Engine house construction was also impacted by new organizational practices and equipment. As urban populations grew in the second half of the nineteenth century, new engine houses were built at a rapid rate, wherever space was available, due to the urgent need for fire protection in these crowded downtown

¹⁹ Ibid., 75.

²⁰ Ibid., 78.

²¹ Ibid., 80.

²² Ibid., 81.

²³ Ibid., 76.

areas.²⁴ In some cases, an engine house would be used by several fire companies or by a fire company and the department headquarters, necessitating larger accommodations.²⁶ Consolidation of companies into one engine house meant that all necessary companies, such as a ladder company, a hose company, and an engine company, could answer an alarm together instead of separately, resulting in a faster response time.²⁵ Additionally, manufactured red brick became the material of choice for engine houses, as it was less expensive than stone but not considered an inferior material according to late nineteenth century preferences.²⁶ Engine house design was also changed by the advent of the horse-drawn steam engine, in the late 1850s and early 1860s, which replaced the hand-drawn steam engine. Firemen were initially reluctant to share the engine house space with horses and wary of labor-saving measures. However, they gradually conceded and accepted this new type of equipment, and engine houses began to be expanded to accommodate horses in the 1870s and 1880s.²⁷ For example, in the circa 1890 Fire Department and Town Hall in Wyoming, Ohio, among numerous other examples, the horse stalls were located on the first floor in the rear of the engine house with the hay loft located above on the second floor (Figure 4).²⁸

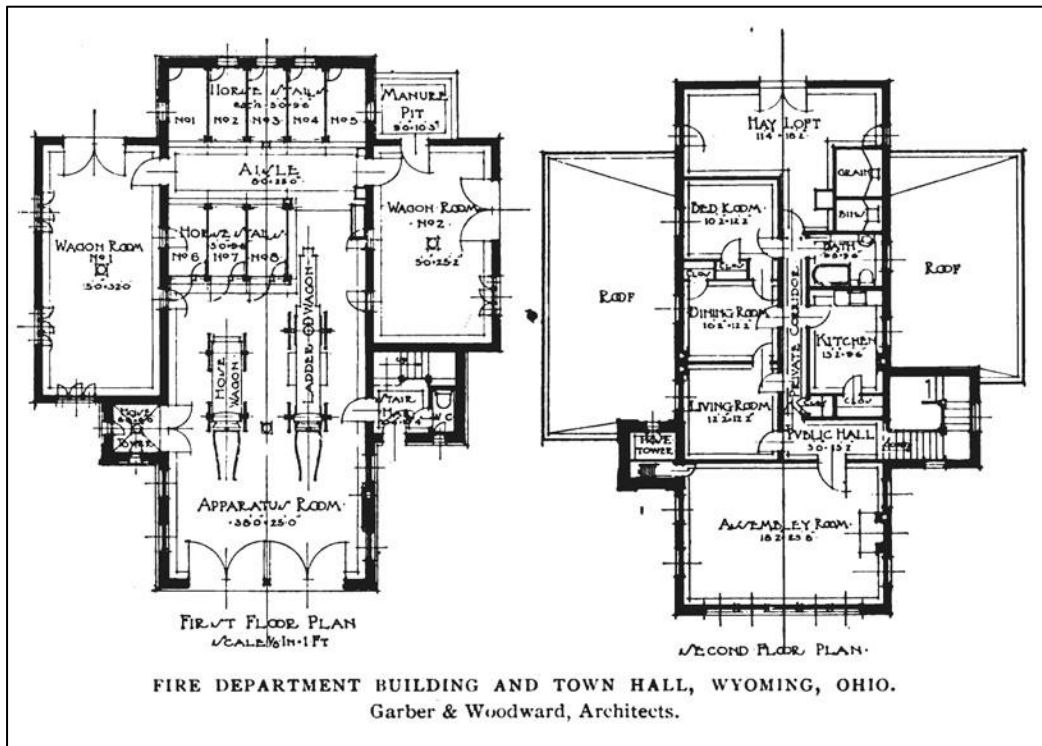


Figure 4. Plan of Engine House in Wyoming, Ohio, c. 1890²⁹

²⁴ Ibid., 89.

²⁶ Ibid.

²⁵ Ibid., 90.

²⁶ Ibid., 111.

²⁷ Ibid., 78, 98.

²⁸ Parker, "Fire Department Buildings," 117-125, and City of Wyoming, "About Wyoming," accessed November 14, 2016, <http://wyomingohio.gov/about-wyoming/>.

²⁹ Parker, "Fire Department Buildings," 117.

An alternate style for engine houses, particularly in urban areas, was the “storefront style,” which emerged in 1832 and prevailed into the twentieth century. “Storefront style” engine houses were typically narrow and two or three stories tall, to fit between other buildings on the same block (Figure 5). A personnel entrance and a window would flank the large engine door on the façade, likening it to the symmetrical arrangement of a store’s entrance and display windows. Exterior ornamentation was often visible on the first story, specifically around the door, and the cornice sometimes extended above the roofline, forming a parapet wall. The engine was stored on the first floor, and meeting rooms and living quarters were located on the second floor.³² Towers, when present, were typically located in the rear of the engine house to make it easier to unload the hose and hang it to dry. Engine houses sometimes had cupolas in the center of the façade, often sheltering a bell used to sound the alarm.



Figure 5. Truck 2, Chicago, Illinois, built 1872³³

Engine house design continued to evolve in the 1880s as styles and the needs of municipal fire departments changed. For example, architects began to showcase the tower by moving it from the rear of the engine house to a front corner of the building. Although this arrangement was less convenient, the tower now served as a more prominent identifying feature of the structure. Engine houses also grew to accommodate additional equipment; greater size reflected growing civic pride for the institution. Also during this time, the Richardsonian Romanesque style began to be used in engine house design, as

³² Zurier, *The American Firehouse*, 87.

³³ *Ibid.*, 71.

this style was gaining popularity throughout the country (Figure 6).³⁰ Some cities began the practice of hiring one architect to design all the engine houses within their respective cities, while other cities established the full-time salaried position of City Architect to design all public building projects.³¹ Both practices in municipal coordination led to greater standardization of engine house design within a city.



Figure 6. Engine 33/Ladder 15, Boston, Massachusetts, built 1888³²

In the 1890s, the red brick engine house gave way to a greater variety of style references, including medieval castles, French chateaux, Italian palaces, and Swiss chalets (Figures 7 and 8).³³ The firemen had regained public favor and citizens were more willing to spend money on the comfort of the firemen and design of the engine house. In general, the 1890s saw an expansion of municipal services, including extensive sewer systems, street lighting, and playgrounds, in addition to increased funding for fire departments.³⁴ Engine houses also began to be constructed of lighter colored brick, signaling a change in material preference.³⁵

³⁰ Ibid., 117.

³¹ Ibid., 82.

³² Ibid., 99.

³³ Ibid., 119.

³⁴ Ibid., 127.

³⁵ Ibid., 128.

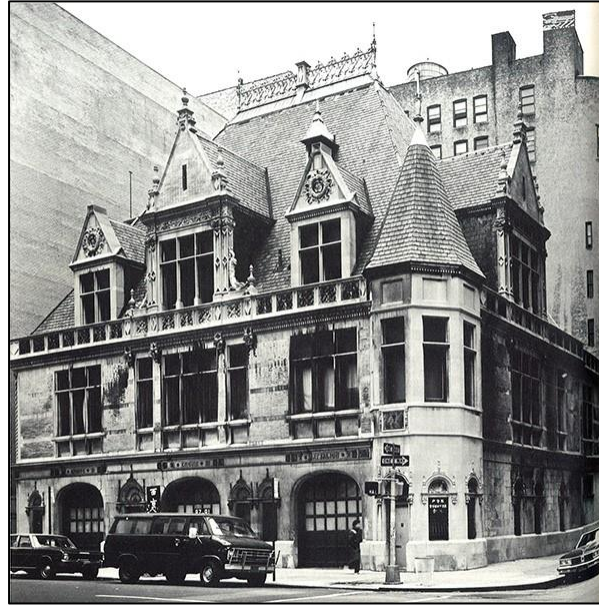


Figure 7. Engine 31, New York City, built 1895³⁶



Figure 8. Engine 26, Buffalo, New York, built 1895³⁷

³⁶ Ibid., 119.

³⁷ Ibid., 125.

The early twentieth century brought significant changes to firefighting equipment and personnel management, which also influenced engine house design. The first gasoline-powered fire engine was introduced in Connecticut in 1903. The trend did not catch on nationwide until 1912, and by 1919 most large American cities used motorized equipment in place of horse-drawn engines. This change impacted engine house design by eliminating the need for haylofts, stables, and feed rooms. It was also considered more sanitary and comfortable for firemen.³⁸ Another change during this time was the introduction of a two-platoon arrangement. Prior to the twentieth century, firemen were on duty 24 hours a day, seven days a week, with minimal time off over the course of a year. Under the two-platoon arrangement, firemen now worked in alternating 12-hour shifts and could not leave the engine house while on duty. This led to the introduction of kitchens in the engine house so firemen could take meals while on duty.³⁹

World War I brought about employment shortages and stalled new engine house construction, but fire departments rebounded in the 1920s and 1930s and could resume construction efforts.⁴⁰

Additionally, during this time engine houses were scaled down, often to the size of a modest home, as the motorized equipment took up much less space than horse-drawn steam engines.⁴¹ Engine houses exhibited a variety of architectural styles during this time. Fire departments also continued to evolve with the modernization and consolidation of facilities, increased governmental oversight, and formalized professional training for firemen.



Figure 9. Fire Station 2, Albuquerque, New Mexico, built 1937⁴⁶

³⁸ Ibid., 159-160.

³⁹ Ibid., 161, 163.

⁴⁰ Ibid., 155.

⁴¹ Ibid., 168.

⁴⁶ Ibid., 198.

ENGINE HOUSES IN THE TWIN CITIES

Minneapolis

Minneapolis and Saint Paul both developed as urban areas in the mid-nineteenth century. As such, the development of their respective fire protection services occurred concurrently and often followed national trends. In 1851, the Village of St. Anthony in Minnesota established a volunteer fire department.⁴² The City of Minneapolis was established in 1855 across the river from St. Anthony and consequently relied on St. Anthony's services, including fire protection, until 1868.⁴³ Minneapolis and St. Anthony merged in 1872, but maintained separate volunteer fire companies until 1879 when the City of Minneapolis organized a part-time fire department. In 1884, Minneapolis transitioned to a full-time paid fire department following the national trend. By 1885, the city had 105 staff members. Minneapolis' population burgeoned in the final decades of the nineteenth century, increasing the need for fire protection. As a result, the Minneapolis Fire Department (MFD) built 14 new engine houses between 1884 and 1895.⁴⁴

The first decade of the twentieth century was a period of great operational change as the MFD determined infrastructure needs, rewrote the fire codes to improve fire protection services, and conducted the first survey to assess the City's fire protection needs.⁴⁵ Following the national trend, the MFD's first motorized engine was introduced in 1910. Motorization reduced call times, allowed water pumps and hoses to be accommodated on one truck, and prompted changes in engine house design, including the elimination of spaces related to livestock such as tack rooms, stalls, and feed rooms.⁴⁶ Four bond issues were passed between 1911 and 1913 to fund the construction of new engine houses and continued motorization of the MFD's equipment.⁴⁷ After the construction of Station 29 in 1916, the MFD was equipped to provide fire protection for the entire City of Minneapolis. After this point, all new engine house construction was directed at replacing old facilities instead of establishing new neighborhood locations.⁴⁸ The last MFD horse was retired in 1923, by which point the MFD employed 528 firemen and operated 28 engine houses.⁴⁹

Engine houses in Minneapolis generally followed prevailing architectural styles. At least four engine houses constructed for the MFD in the 1870s exhibited characteristics of the Italianate style, including

⁴² Carole S. Zellie, "Station 13 Minneapolis Fire Department (MFD) National Register of Historic Places Nomination Form," available at the State Historic Preservation Office and Saint Paul Heritage Preservation Commission, Saint Paul, Minnesota, 2003, Section 8, Page 1.

⁴³ Larry Millett, *AIA Guide to the Twin Cities* (Saint Paul: Minnesota Historical Society Press, 2007), 5, and Zellie, "Station 13," Section 8, Page 1.

⁴⁴ Zellie, "Station 13," Section 8, Page 1.

⁴⁵ Susan Granger and Patricia Murphy, "Station 28 Minneapolis Fire Department National Register of Historic Places Nomination Form," available at the State Historic Preservation Office and Saint Paul Heritage Preservation Commission, Saint Paul, Minnesota, 1993, Section 8, Page 7.

⁴⁶ Zellie, "Station 13," Section 8, Pages 2-3.

⁴⁷ *Ibid.*, Section 8, Page 2.

⁴⁸ Granger and Murphy, "Station 28," Section 8, Page 7.

⁴⁹ *Ibid.*, Section 8, Page 8.

former Station 2 at 13th Avenue Northeast and Main Street (1877; non-extant); former Station E at 43 South 3rd Street (1879; non-extant); former Station 1 at 259 6th (today known as Portland) Avenue South (1879; non-extant; Figure 10); and former Station 11 at 28 2nd Street Southeast (1879; non-extant). Numerous engine houses from the 1880s and 1890s featured Victorian ornamentation and are representative of the “storefront style” façade arrangement that was common in downtown areas. Former Station 12 at 700 Jackson Street Northeast (1886; non-extant; Figure 11) was designed in the Shingle style, and several engine houses from the late 1880s to the early 1900s exhibit traits of the Richardson Romanesque style. Beaux Arts details appeared in Minneapolis engine houses around 1910 and an Arts and Crafts-style bungalow engine house, former Station 13 at 4201 Cedar Avenue (extant), was built in 1923. According to historical photographs, after this point, engine houses in Minneapolis took on more rectangular block forms with less ornament and occasional Art Deco details, revealing a move toward standardization and greater functionality.⁵⁰

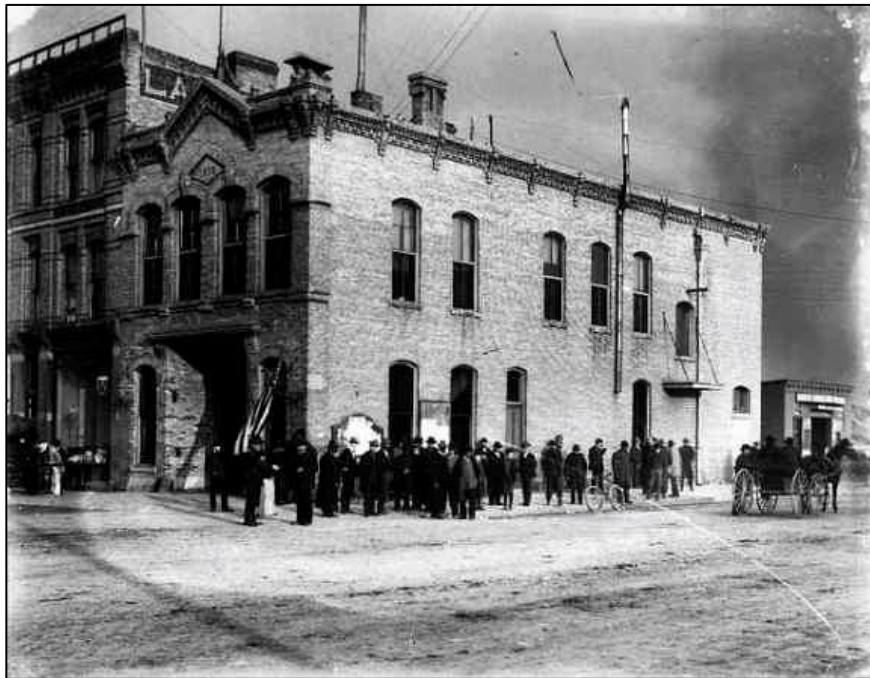


Figure 10. Station 1 at 259 6th Avenue South, c. 1879

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⁵⁰ Extra Alarm Association of the Twin Cities, Inc., “Extra Alarm Association of the Twin Cities, Inc.”, accessed July 29, 2016, <http://www.extraalarm.org/>.

⁵¹ Ibid.



Figure 11. Station 12 at 700 Jackson Street NE, n.d.⁵⁷

Saint Paul

Volunteer Organizations and the Foundation of the SPFD 1850s-1860s

Following the trend of other cities nationwide, fire protection in Saint Paul was initially provided by volunteer hook-and-ladder organizations starting around 1850. In 1855, one such organization called the Pioneer Hook and Ladder Company was recognized by the City of Saint Paul as the official fire protection force for the City and received City funding. This marked the beginning of the SPFD. Initially, the SPFD had only one-horse cart and one ladder truck to serve the entire city, which covered area three miles by one-half mile and had a population of 4,716.⁵² Several large fires in the summer of 1857 prompted the City Council to accept other volunteer hook-and-ladder organizations into the SPFD, including Hope Engine Company No. 1 from the Upper Town community and the Minnehaha Engine Company No. 2 from the Lowertown community.⁵³ Company nicknames (e.g. Hope, Minnehaha, or Pioneer) often exhibited patriotism or made allegorical references to water, and the rest of the company's name (e.g. hook and ladder, or engine) indicated which equipment it would provide in the event of a fire.⁵⁴ In 1859, the City built two permanent brick engine houses on rented sites for the two new volunteer companies: Hope Engine Company No. 1 on 3rd Street at Washington Street and Minnehaha Engine Company No. 2 on Jackson Street between 3rd and 4th Streets.⁵⁵ These buildings are no longer extant and

⁵² Richard L. Heath, *St. Paul Fire: A History, 1856-1994* (Minneapolis: Extra Alarm Association of the Twin Cities, Inc., 1998), 4, and Carole Zellie and Garneth O. Peterson, "Pioneer Houses: 1854-1880," prepared for the Saint Paul Heritage Preservation Commission, 2001, 2.

⁵³ Heath, *St. Paul Fire*, 4-5.

⁵⁴ Zurier, *The American Firehouse*, 40.

⁵⁵ Alix J. Muller and Frank J. Mead, *History of the Police and Fire Departments of the Twin Cities: Their Origin in Early Village Days and Progress to 1900* (Minneapolis: American Land & Title Register Association, 1899), 184.

no information could be found about their dates of demolition.⁵⁶ By 1859, the SPFD was composed of 104 volunteer firefighters and three chiefs.⁶³ The volunteer fire department continued to operate in conjunction with the SPFD during this time.

The SPFD was impacted by the outbreak of the Civil War, as firefighters volunteered for military service and fewer citizens were available for service. However, its ranks rebounded as the end of the war neared. During this time, the SPFD began the practice of paying individuals for their service to the department. In 1864, Charles H. Williams became Fire Chief, with an annual salary of \$200.⁵⁷ In August of 1866, the City purchased a Silsby rotary steamer engine and hired a steam engineer from Cincinnati, Ohio, with an annual salary of \$1,600 to operate the engine.⁵⁸ This new steamer engine was pulled by a team of two horses, whose care became the responsibility of the firemen. The engineer's appointment caused much contention within the volunteer companies, although it is unknown whether it was because an unpaid volunteer firefighter had to drive the engine or because the volunteer companies were not given the power to select the engineer.⁵⁹ Due to the acquisition of a steam engine, the City initiated the development of a city-wide water system in 1867 to increase the effectiveness of the volunteer companies.⁶⁰ Between 1867 and 1869, the City expanded its fire protection services and new volunteer companies formed, including Saint Paul Hose Company No. 1, the Trout Brook Hose Company No. 2, and the Hope Engine Company No. 3.⁶⁸

City Charter Amendment of 1869 and Initial Engine House Construction 1869-1872

In February of 1869, the City promoted a City Charter amendment to the Minnesota State Legislature, which approved the sale of bonds to acquire sites to build new engine houses and purchase additional Silsby rotary steamer engines.⁶¹ This was a critical turning point as the City began to supply the necessary infrastructure for the SPFD to provide fire protection. As the result of this amendment, four engine houses were known to have been constructed between 1869 and 1872. The first engine house built by the City was for the Minnehaha Engine Company No. 2 in 1869, later called Engine House No. 2, and located on 7th and Sibley Streets (non-extant). The City sold this site in 1872, continued to rent it for more than a year after the sale, and then moved the engine house to a new site on Wacouta Street between 6th and 7th Streets.⁶² The second engine house, constructed for the Saint Paul steamer and hose company (later called Engine House No. 1), was built on St. Peter Street near 7th Street (1870; non-extant). The engine house built for Trout Brook Engine Company No. 4 (later called Engine House No. 4) was located at 10th and Broadway Streets (1871; non-extant), and the engine house for Hope Engine Company No. 3 (later called

⁵⁶ Sources consulted include Heath, *St. Paul Fire*, and Extra Alarm Association of the Twin Cities, Inc., "Extra Alarm Association of the Twin Cities, Inc." ⁶³ Heath, *St. Paul Fire*, 3-4.

⁵⁷ William B. Hennessey, *History of the Saint Paul Fire Department* (Saint Paul: Pioneer Press Company, 1909), 38.

⁵⁸ *Ibid.*, 42.

⁵⁹ Heath, *St. Paul Fire*, 4-7, and Hennessey, *History*, 42.

⁶⁰ Susan Granger, "St. Paul's Nineteenth Century Fire and Police Stations National Register of Historic Places Inventory-Nomination Form," available at the State Historic Preservation Office and the Saint Paul Heritage Preservation Commission, Saint Paul, Minnesota, 1984, and Hennessey, *History*, 47. ⁶⁸ Heath, *St. Paul Fire*, 7.

⁶¹ *Ibid.*, 8.

⁶² *Ibid.*, 9.

Engine House No. 3) was built at 1 South Leech Street (1871-1872; RA-SPC-4229; extant; determined NRHP-eligible).⁶³ All four houses were constructed in the Italianate style with very similar features including a two-story brick house with a three-bay façade and cupola; a center bay that is taller than the side bays; arched fenestration with brick crowns and keystones; brick pilasters that divide the bays; an arched center opening on the second story that contains a pair of arched two-over-two, double-hung windows; and two-over-two, double-hung windows in the outside bays on each story (Figure 12).



Figure 12. Engine House No. 3 at 1 South Leech Street, c. 1899⁶⁴

Population Growth, Departmental Management, and the Establishment of an All-Paid Fire Department
During the 1870s, the City's population doubled, increasing the City's density and therefore its risk of fire.⁶⁵ A fire alarm system was installed in 1873 with 15 signal boxes.⁷⁴ These boxes were placed primarily at downtown intersections and helped speed up department responses.⁶⁶ As the population increased, middle-class citizens began to move out of the downtown core, which reduced the number of available volunteers to provide fire protection downtown, especially in company leadership positions. They were replaced by increasing numbers of partially employed or unemployed members of the working class. The City passed ordinances to curb unruly behavior, such as closing the engine houses on Sunday, prohibiting smoking in the stables, and forbidding unauthorized uses of equipment. However, conflicts

⁶³ Ibid., 8-9.

⁶⁴ Muller and Mead, *History of the Police*, 201.

⁶⁵ Department of Fire and Safety Services, *Proud Traditions: A History in Words and Pictures of St. Paul Firefighters 1854-1979* (Saint Paul: Department of Fire and Safety Services, 1979), 73, and *Annual Report of the Bureau of Fire Protection for the Year 1914* (Saint Paul: Department of Public Safety, 1914). ⁷⁴ Hennessey, *History*, 56.

⁶⁶ Heath, *St. Paul Fire*, 9.

continued to arise between salaried employees and the volunteer firefighters, and because many of the paid employees had been appointed by City elected officials thanks to political associations. Throughout the 1870s, volunteer numbers declined and the City continued to confront issues of drunkenness, incompetence, and public brawls among the volunteer firefighters. These challenges led to the termination of the volunteer fire department by the City Council on October 1, 1877, and the establishment of an all paid fire department.⁶⁷ This transition in Saint Paul followed a similar pattern in cities across the country, but was seven years ahead of Minneapolis, which did not establish an all-paid department until 1884. The SPFD initially employed only 42 men, but continued to grow throughout the late nineteenth century.⁶⁸ In 1883, the SPFD transitioned to a full-time, all-paid department.⁷⁸ The SPFD continued to use the engine houses that were built for the volunteer fire companies; no engine houses are known to have been built between 1872 and 1882.

SPFD Expansion and Significant Engine House Construction 1880s

With the establishment of an all-paid fire department in 1877, the City needed to expand services throughout the city, and 15 engine houses are known to have been constructed during the 1880s in various neighborhoods. Fire companies served their immediate neighborhoods but often also traveled throughout the City to fight fires if other companies were unavailable. The first engine house known to have been built in the 1880s was the first Engine House No. 5 (1882; RA-SPC-3248; extant) at 498 Selby Avenue (Figure 13; Appendix B), whose design correlates with a shift in engine house styles.⁶⁹ Whereas the engine houses built between 1869 and 1872 were designed in the Italianate style, beginning in the 1880s, engine houses were designed in more Victorian styles. Firemen were also on duty 24 hours a day, seven days a week, and the shift to an all-paid fire department necessitated the inclusion of sleeping accommodations within the engine house.⁷⁰ In 1881, the City established the Board of Fire Commissioners to oversee the SPFD's operations and plan the construction of a new headquarters for the SPFD, which was built at 8th and Minnesota Streets in 1883. The SPFD continued to expand its workforce and its physical facilities and, in 1885, added 26 new members and invested \$18,000 in engine house construction.⁷¹ The department now numbered 95 men total, including William R. Godette, the first African American fireman to join the force.

Between 1869 and 1930, the time of this context study, there was only one all-African American company in the SPFD. At a meeting of the Board of Fire Commissioners on September 28, 1885, the formation of "a company composed of African citizens" was discussed due to the "large number of colored citizens residing in St. Paul and the deep interest taken by a considerable portion of the colored population in Fire Department matters."⁷² An all-African American company was subsequently established in 1887 and

⁶⁷ Ibid., 11-12.

⁶⁸ Ibid., 15.

⁷⁸ Ibid., 22.

⁶⁹ *Annual Report of the Bureau of Fire Protection for the Year 1914.*

⁷⁰ Zurier, *The American Firehouse*, 13.

⁷¹ Susan Granger, "RA-SPC-3110 Historic Inventory Form," available at the State Historic Preservation Office and Saint Paul Heritage Preservation Commission, Saint Paul, Minnesota, 1981.

⁷² "Proceedings Board Fire Commissioners," *The St. Paul Daily Globe* (Saint Paul, Minnesota), October 2, 1885, 3.

housed at first Chemical House No. 4 at Edmund Avenue and Marion Street (1885; non-extant).⁷³ That same year, the all-African American company moved to a new building at 293 Front Avenue, which became second Chemical House No. 4 (1887; RA-SPC-1400; extant). As a result, the first Chemical House No. 4 at Edmund Avenue and Marion Street (1885; non-extant) became Engine House No. 9, hereafter referred to as first Chemical House No. 4/Engine House No. 9. In 1912, the second Chemical House No. 4 became Engine House No. 22, hereafter referred to as second Chemical House No. 4/Engine House No. 22 (1887; RA-SPC-1400; extant).⁷⁴ The all-African American company was often sent to fight the least desirable fires, often in city dumps or bogs which would burn for multiple days.⁷⁵ The all-African American company remained at second Chemical House No.4/Engine House No. 22 until 1923 when it transferred back to first Chemical House No.4/Engine House No. 9 at Edmund Avenue and Marion Street (1885; non-extant). First Chemical House No.4/Engine House No. 9 closed in 1942 due to a manpower shortage. As a result, the all-African American company was disbanded and the African American firefighters were integrated into other crews at other engine houses in the SPFD. However, within individual engine houses, the African American members of these integrated crews were only allowed to occupy designated beds at their assigned stations.⁷⁶ Moreover, at Chemical House No. 5/Engine House No. 10 at 754 Randolph Avenue (1885; RA-SPC-3110; extant), the African American firefighters had separate kitchens and entrances from the white firefighters.⁷⁷

William R. Godette, the first African American fireman to join the SPFD, served at first Chemical House No. 4/Engine House No. 9 (1885; non-extant) in 1887, second Chemical House No.4/Engine House No.22 (1887; RA-SPC-1400; extant) in 1887-1923, and at first Chemical House No. 4/Engine House No. 9 (1885; non-extant) from 1923-1926 at which point he retired. He was captain for the final 14 years of his career.⁷⁸ In 2010, the SPFD Headquarters and Station 1 at 1000 West Seventh Street was named the William and Alfred Godette Memorial Building, after William and his younger brother Alfred who also worked for the fire department.⁷⁹

⁷³ Heath, *St. Paul Fire*, 33.

⁷⁴ Granger, "St. Paul's Nineteenth Century," and Heath, *St. Paul Fire*, 65.

⁷⁵ Patricia Murphy, "RA-SPC-1400 Historic Inventory Form," available at the State Historic Preservation Office and Saint Paul Heritage Preservation Commission, Saint Paul, Minnesota, 1981.

⁷⁶ Heath, *St. Paul Fire*, 121.

⁷⁷ Mara H. Gottfried, "A well-earned retirement," *St. Paul Pioneer Press*, March 14, 2010.

⁷⁸ David Riehle, email communication with the author, February 9, 2017.

⁷⁹ Charles Hallman, "Station 1 HQ named for Godette brothers," last modified September 30, 2010, <https://www.tcdailyplanet.net/station-1-hq-named-godette-brothers/>.



Figure 13. First Engine House No. 5 at 498 Selby Avenue, c. 1882⁸⁰

In addition to Victorian styles, engine houses began to be constructed in the Richardsonian Romanesque style from the mid-1880s into the 1900s, following national trends. The City of Saint Paul continued to grow and totaled 55 square miles by 1887, which increased the service area of the SPFD.⁸¹ By the end of 1887, the department had nine engine companies, seven chemical companies, and seven hook and ladder companies, together requiring the use of 93 horses. At this point in time, the SPFD was “in splendid condition.”⁸²

Ongoing Department Challenges and Impact of the Economic Depression 1890s-1904

Throughout the 1890s, the administration of the SPFD continued to evolve. Starting in 1890, the SPFD increased its efforts toward professionalization by enacting permanent rules and regulations, as well as a series of selection guidelines. These rules served to codify the process of officer appointments, determine requirements for employment, and establish disciplinary actions. In 1891, the City Charter was revised to cap police and fire department expenditures. This action resulted in the reduction of crews, the inability to purchase new equipment, decreases in salaries, and the inability to control fires throughout the decade.⁸³ Only three engine houses are known to have been built between 1890 and 1901, in large part because of financial difficulties stemming from the 1893 economic depression in the United States, known as the Panic of 1893, and subsequent slowdown of population growth.⁸⁴ These engine houses included Engine House No. 12 at 357 Rosabel Street (1892; non-extant); Engine House No. 13 at Hampden and Raymond

⁸⁰ Department of Fire and Safety Services, *Proud Traditions*, 74.

⁸¹ Heath, *St. Paul Fire*, 30.

⁸² Muller and Mead, *History of the Police*, 219.

⁸³ Heath, *St. Paul Fire*, 41.

⁸⁴ *Annual Report of the Bureau of Fire Protection for the Year 1914*, Heath, *St. Paul Fire*, 43, and Hennessey, *History*, 100.

Avenues (1894; RA-SPC-1708; extant); and Engine House No. 15 at Livingston and Fairfield Avenues (1901; non-extant). Engine House No. 13 was one of the last engine houses in the City to use horse-drawn engines.⁸⁵

The SPFD Reaches a Critical Turning Point 1904-1913

The City had recovered from the 1893 economic depression by the start of the twentieth century, and the population began to rise. However, greater population density again increased fire hazards, creating additional challenges for the SPFD, which was already limited financially by the City. In 1904, voters approved an amendment to the City Charter to raise the expenditure cap by \$30,000, although this was far less than the Fire Department Chief and Board of Fire Commissioners had requested.⁹⁶ The worst fire in Saint Paul history occurred in 1906 at the Ryan Annex-Schutte Block. The following year, the National Board of Underwriters evaluated the SPFD and characterized the department as “fairly efficient, but weak for a city of this size.”⁸⁶ Consequently, voters approved an amendment to the City Charter to remove limits on fire department expenditures and permit the City to sell \$100,000 in bonds to finance new engine houses and equipment.⁸⁷ As a direct result of the bonds, three new engine houses were built between 1908 and 1910, including Engine House No. 18 at 681 University Avenue West (1908; RA-SPC3887; extant; determined NRHP-eligible; Figure 14); Engine House No. 20 at 91 Snelling Avenue North (1909; RA-SPC-3414; extant); and Engine House No. 21 at 643 Ohio Street South (1910; RA-SPC-4767; extant; determined NRHP-eligible). All three engine houses exhibited Beaux Arts style detailing, representing another stylistic shift in engine house design.



Figure 14. Engine House No. 18 at 681 University Avenue West, c. 1909⁸⁸

⁸⁵ L. Scott, “RA-SPC-1708 Historic Inventory Form,” available at the State Historic Preservation Office and Saint Paul Heritage Preservation Commission, Saint Paul, Minnesota, 1981. ⁹⁶ Heath, *St. Paul Fire*, 54.

⁸⁶ *Ibid.*, 57.

⁸⁷ *Ibid.*, 59.

⁸⁸ Hennessey, *History*, 99.

Randall J. Niles was appointed Fire Chief in 1913 and began planning for motorization of the department and construction of three new engine houses to replace older engine houses and consolidate companies.⁸⁹ The first motorized pumper was assigned to Engine House No. 18 in 1913 due to the engine house's large size and centralized location, which allowed the company to quickly respond to calls throughout the city. Additionally, this engine house was built with a concrete floor and without a basement below, which provided better support for the heavier motorized apparatus.⁹⁰ The SPFD continued to replace steam engines with motorized apparatuses as resources became available, and the department was fully motorized by 1924.⁹¹ Despite Niles' plans, engine house construction would not resume until 1918 due to administrative changes in the SPFD, which are outlined below.

Establishment of City Architect and Development of Prototypes 1914-1930

A new City Charter for Saint Paul was adopted in 1914, which transferred management of the SPFD from the Board of Fire Commissioners to an appointed Commissioner. The new City Charter also established the Office of the City Architect, which became responsible for the design of all publicly funded buildings, including engine houses. As a result, architectural styles of engine houses changed again. Charles A. Hausler was the first City Architect. He oversaw the construction of three engine houses and likely designed a fourth engine house before his dismissal as City Architect in 1922.⁹² As City Architect, Hausler developed rectangular block designs for engine houses featuring one, two, or three bays that were used from 1918 to 1930 and exhibited much less ornament than the earlier Victorian, Richardsonian Romanesque, and Beaux Arts engine houses in Saint Paul. These prototypes responded to the function and space requirements of engine houses to modernize and make the SPFD more efficient, and exhibited a variety of architectural styles.¹⁰⁴ The earliest example of Hausler's prototypes is Engine House No. 24 at 1720 East Seventh Street (1918; RA-SPC-540; extant). Hausler also designed Engine House No. 25 at 2179 University Avenue West (1919-1920; RA-SPC-3931; extant; Figure 15); and the new Engine House No. 2 at 412 Wacouta Street North (1922; RA-SPC-5462; extant). The second Engine House No. 23 at 1290 Snelling Avenue North (1922; RA-SPC-3433; extant) was authorized in June 1922 around the time Hausler was dismissed as City Architect; it closely resembles Engine House No. 24, which suggests that it was also designed by Hausler or used his prototypes. Hausler's prototypes also influenced the four engine houses constructed in 1930, which include the second Engine House No. 7 at 1038 Ross Avenue East (1930; RA-SPC-3219; extant); the second Engine House No. 17 at 1226 Payne Avenue North (1930; RA-SPC-5529; extant); the second Engine House No. 5 at 860 Ashland Avenue West (1930; RA-SPC-0186; extant); and the second Engine House No. 19 at 750 Snelling Avenue South (1930; RA-SPC-6169; extant; determined NRHP-eligible). Although Charles Bassford was the City Architect in 1930, three of the four engine houses have been attributed to Clarence W. "Cap" Wigington, the Office of the City Architect's head draftsman at the time. The second Engine House No. 19 (1930;

⁸⁹ Heath, *St. Paul Fire*, 83.

⁹⁰ Sara Nelson, Andrew Schmidt, and Marjorie Pearson, "Fire Station No. 18 National Register of Historic Places Nomination Form," prepared by Summit Envirosolutions, Inc., 2015, Section 8, Page 14.

⁹¹ *Annual Report of the Bureau of Fire Protection for the Year 1924* (Saint Paul: Department of Public Safety, 1924), 2.

⁹² Sara Nelson, Andrew Schmidt, and Marjorie Pearson, "Fire Station No. 20 National Register of Historic Places Nomination Form," 2015, prepared by Summit Envirosolutions, Inc., 2015, Section 8, Page 18. ¹⁰⁴ *Ibid.*, Section 8, Page 18.

RA-SPC-6169; extant; determined NRHP-eligible) features beige brick cladding and red terracotta roof tile, and exhibits the Mediterranean Revival style. The water tower in Highland Park also exhibits these features and was designed by Wigington; therefore, it is likely that he also designed the fourth engine house, the second Engine House No. 19.⁹³



Figure 15. Engine House No. 25 at 2179 University Avenue West, 2016

Following the new City Charter of 1914, new engine house construction did not resume until 1918, likely due to administrative changes and World War I. However, Fire Chief Henry Devlin commented in 1915 that the SPFD's engine houses were gradually being remodeled during this time, particularly with concrete floors replacing wooden floors, and these updates were considered essential to the preservation of good, sanitary conditions.¹⁰⁶

From 1914-1930, personnel management also evolved within the SPFD. Following the national trend, the two-platoon system, in which firemen worked in alternating 12-hour shifts, was implemented in Saint Paul in 1918 and was soon followed by formalized medical and firefighting training for new fireman in the 1920s.⁹⁴ In addition to new engine house construction during the 1920s, the SPFD also retired the last horse-drawn engine in 1924, signaling complete motorization of the SPFD engines.⁹⁵ In the *Annual Report of the Bureau of Fire Protection for the Year 1924*, Fire Chief Owen C. Dunn reported that the SPFD completed 8,376 runs, traveled 18,693.24 miles, and worked 4,349 hours and 12 minutes, demonstrating the great capacity of a fully-motorized department.⁹⁶

⁹³ Summit Envirosolutions, Inc., "RA-SPC-6169 Minnesota Architecture-History Inventory Form," available at the State Historic Preservation Office and Saint Paul Heritage Preservation Commission, Saint Paul, Minnesota, 2014.

¹⁰⁶ *Annual Report of the Bureau of Fire Protection* (Saint Paul: Department of Public Safety, 1915), 4.

⁹⁴ Granger, "St. Paul's Nineteenth Century."

⁹⁵ *Annual Report of the Bureau of Fire Protection for the Year 1924* (Saint Paul: Department of Public Safety, 1924), 2.

⁹⁶ *Annual Report of the Bureau of Fire Protection for the Year 1924*, 12.

SPFD's Move to the Public Safety Building in 1930

In 1927, the United Improvement Council of Saint Paul was formed through the joining of 27 civic, commercial, and neighborhood groups, largely outside the City's political process, in order to focus on civic improvements.⁹⁷ A \$15 million bond program resulted through city and county bonding referenda of 1928 and 1930, providing funding for four new engine houses, a new City Hall, the Ramsey County Courthouse, and the Public Safety Building.⁹⁸ The four new engine houses included the second Engine House No. 7 at 1038 Ross Avenue East (1930; RA-SPC-3219; extant); the second Engine House No. 17 at 1226 Payne Avenue North (1930; RA-SPC-5529; extant); the second Engine House No. 5 at 860 Ashland Avenue West (1930; RA-SPC-0186; extant); and the second Engine House No. 19 at 750 Snelling Avenue South (1930; RA-SPC-6169; extant; determined NRHP-eligible).

In 1930, the Public Safety Building opened to house the headquarters for the SPFD, the Saint Paul Police Department, and the Saint Paul Health Department (RA-SPC-5426; façade partially extant). This new structure allowed for consolidation of administrative offices and centralization of the new fire and police telegraph alarm system. The building also provided modern garaging for new police and fire-fighting vehicles. The construction of new civic buildings also signaled the City's response to the public's demand for major capital improvements.⁹⁹ The Public Safety Building, with its neoclassical building envelope, was the last civic building in Saint Paul to employ the monumental architectural styling popular at the turn of the twentieth century, as the City began to embrace modern architectural styles, particularly Art Deco, for its other new public buildings.¹⁰⁰ For example, the Minnesota Building at 42-48 East 4th Street (1930) features horizontal bands of windows with subtle ornamentation on the façade, and the Saint Paul City Hall and Ramsey County Courthouse at 15 West Kellogg Boulevard (1932) features vertical bands of windows with minimal ornamentation and bas-relief carvings.¹⁰¹ An additional component of the bond program was the implementation of one-way radios to improve communication between stations; the radio control center was initially based in Engine House No. 18 before relocating downtown in 1939.¹⁰² In the *Annual Report of the Bureau of Fire Protection for the Year 1930*, Fire Chief Owen C. Dunn remarked with pride on the construction of four new engine houses and a fifth company housed in the new Public Safety Building, all of which had replaced "antiquated stations which were in need of considerable repairs" and were "a much-needed improvement in our firefighting facilities."¹⁰³ In particular, the new SPFD headquarters now accommodated an assembly room on the third floor, which was well suited for training sessions. That year, the SPFD completed 12,788 runs, traveled 62,006 miles, and worked 9,530 hours and ten minutes.¹⁰⁴

⁹⁷ Heath, *St. Paul Fire*, 99.

⁹⁸ Summit Envirosolutions, Inc., "RA-SPC-6169," 3.

⁹⁹ Heath, *St. Paul Fire*, 98-101.

¹⁰⁰ Paul Clifford Larson, "Historic Site Survey of the St. Paul Public Safety Building," available at the State Historic Preservation Office and Saint Paul Heritage Preservation Commission, Saint Paul, Minnesota, 2005, 14-15.

¹⁰¹ Millett, *AIA Guide*, 324, 339.

¹⁰² Nelson et al., "Fire Station No. 18," Section 8, Page 17.

¹⁰³ *Annual Report of the Bureau of Fire Protection for the Year 1930* (Saint Paul: Department of Public Safety, 1930), 6.

¹⁰⁴ *Ibid.*, 17.

Conclusion

The SPFD experienced substantial growth between 1869 and 1930, both in terms of its physical facilities and its administrative structure. During this time, the City of Saint Paul assumed responsibility to construct engine houses and provide the infrastructure necessary for adequate fire protection, which was made possible through City Charter amendments and bond issues. Generally, engine houses in Saint Paul constructed between 1869 and 1914 followed prevailing architectural styles of the day that were modified for the functions of the fire department. At least 34 known engine houses were constructed during this period, some of which were replacements of older engine houses, which paralleled the expansion of the City to its present-day boundaries and subsequent need for greater fire protection. The 1914 establishment of the Office of the City Architect brought more cohesion to engine house design, which moved away from stylistic trends towards modernization and functionality. The SPFD also evolved as an organization and established the administrative structure it would use throughout the twentieth century.

ENGINE HOUSE LOCATIONS, ARCHITECTURAL STYLES, ARCHITECTS, AND BUILDERS

LOCATIONS

The locations of engine houses in Saint Paul were determined by needs of the neighborhoods and a desire to provide efficient service, as was the case nationally. Chosen locations were then approved by the Board of Fire Commissioners (see Appendix B for a complete list of engine house locations).¹⁰⁵ The first four engine houses in Saint Paul were constructed downtown between 1869-1872. Due to the doubling of the City's population in the 1870s, the City needed to expand its fire protection services. Residents began to move away from the downtown core as well.¹⁰⁶ As a result, 15 engine houses were constructed during the 1880s in various locations throughout the City. In 1885, a "committee on lots" presented potential sites for engine houses for the approval of the Board of Fire Commissioners.¹⁰⁷ Between 1890 and 1930, 15 additional engine houses were constructed in Saint Paul; some introduced fire protection service to new areas, such as second Engine House No. 23 at 1290 North Snelling Avenue (1922; RA-SPC-3433; extant), while others provided new facilities for an already serviced area, such as second Engine House No. 7 built at 1038 Ross Avenue East (1930; RA-SPC-3219; extant) close to first Engine House No. 7 at 1028 Ross Avenue East (1885; non-extant).

Saint Paul residents were also able to influence the location of new engine houses. For example, in 1884 the Dayton's Bluff Citizen's Union was formed to discuss "issues pertaining to the interest of the ward," particularly fire protection.¹⁰⁸ Several neighborhood buildings had been destroyed in a fire in 1883 and residents were concerned because the area only had one chemical wagon, which likely refers to Chemical

¹⁰⁵ Parker, "Fire Department Buildings," 117, and "Fire Board," *The St. Paul Daily Globe* (Saint Paul, Minnesota), April 28, 1885, 2.

¹⁰⁶ Heath, *St. Paul Fire*, 11-12.

¹⁰⁷ "Fire Board," 2.

¹⁰⁸ Steve Trimble, "Dayton's Bluff Memories and Musings," *Dayton's Bluff Forum*, June 2003.

House No. 2 at 3rd and Arcade Streets (1884; non-extant).¹⁰⁹ A subcommittee on fire departments met with the SPFD chief and the Board of Fire Commissioners in 1885 and requested an engine house for Dayton's Bluff. The request was granted and a building for Ladder No. 4 and Supply Hose No. 1 was subsequently built at Maple and Conway Streets; it later became Engine House No. 19 (1885; non-extant).¹¹⁰ Also in 1885, the Minnesota & Dakota Fire Underwriter's Union requested engine houses to be constructed on West 7th Street, in West St. Paul, and near St. Anthony Hill to expand fire protection services.¹¹¹

ARCHITECTURAL STYLES

Since the 1820s when construction of more substantial engine houses began in cities in the Eastern United States, engine houses have typically followed prevailing architectural styles. Engine houses have few programmatic requirements aside from the accommodation of firefighting equipment and personnel, and direct access to the street.¹¹² Therefore, most engine houses are rectangular buildings of two to three stories in height. Some programmatic needs have changed over time, resulting in the addition of horse stalls and hay lofts and their subsequent removal after engines became motorized, and the need for kitchens after the introduction of the "two-platoon system," which required firefighters to remain on duty throughout their 12-hour shifts.¹¹³ However, these programmatic changes have had little impact on the overall form and design of the engine house, thus allowing continued freedom in design. Consequently, any architectural style could accommodate the engine house's function. The character-defining features of an engine house include a façade dominated by one or more vehicular openings at the street level, a vertical component (often a tower or cupola) to signify the building's civic presence, and accommodations for the functional needs of the engine house: sleeping quarters, apparatus and equipment storage and care, and stables prior to the motorized era.¹¹⁴ The styles employed by the SPFD between 1869 and 1914 reflect national architectural trends tailored to the function of the engine house. After 1914, engine house design in SPFD was driven by functionality and the resulting engine houses exhibited a variety of architectural styles.

Italianate Style – 1869-1872

The first four engine houses constructed by the City for the SPFD were designed in the Italianate style with very similar features: a two-story brick house with a three-bay façade and cupola; a center bay that is taller than the side bays; arched fenestration with brick crowns and keystones; brick pilasters that divide the bays; an arched center opening on the second story that contains a pair of arched two-over-two,

¹⁰⁹ No historical photographs were found and a representative three-dimensional model was not created by the Extra Alarm Association of the Twin Cities.

¹¹⁰ Ibid.

¹¹¹ "Fire Board," 2.

¹¹² Parker, "Fire Department Buildings," 117.

¹¹³ Zurier, *The American Firehouse*, 78, 98, 159-161, 163.

¹¹⁴ Betsy H. Bradley, Jennifer L. Bring, and Andrea Vermeer, "Phase II Architectural History Investigation for the Proposed Central Transit Corridor, Hennepin and Ramsey Counties, Minnesota," prepared by the 106 Group Ltd. for the Ramsey County Regional Railroad Authority, 2004, 170.

double-hung windows; and two-over-two, double-hung windows in the outside bays on each story.¹¹⁵ These four engine houses were built for the Minnehaha Engine Company No. 2 at 7th and Sibley Streets, later called Engine House No. 2 (1869; non-extant); the Saint Paul steamer and hose company on St. Peter Street near 7th Street, later called Engine House No. 1 (1870; non-extant); the Trout Brook Engine Company No. 4 at 10th and Broadway Streets, later called Engine House No. 4 (1871; non-extant); and the Hope Engine Company No. 3 at 1 South Leech Street, later called Engine House No. 3 (1871-1872; RASPC-4229; extant). Based on historical photographs, ornamentation was primarily visible on the façades of these engine houses (Figure 16). The arrangement of the façade was also indicative of the “storefront style” with a personnel entrance on one side of the vehicular entrance and a window on the other, which was popular in downtown areas when engine houses were likely to be constructed between two existing buildings.



Figure 16. Engine House No. 4 at 10th and Broadway Streets, c. 1885¹¹⁶

Shift from Italianate to Victorian Styles – 1882

The preferred style for engine houses in Saint Paul shifted from Italianate to Victorian around 1882 and is evident in the construction of the first Engine House No. 5 at 498 Selby Avenue (1882; RA-SPC-3248; extant). According to a historical photograph, the first Engine House No. 5 featured a similar form to its Italianate predecessors (Figure 13). The structure had one vehicular entrance located in the center of the north-facing façade, with a personnel entrance to one side and a window to the other side. The windows were narrow and primarily four-light. Additionally, a gable roof dormer was visible along the west elevation roofline. Despite the similarities with the Italianate engine houses, the details on the first Engine House No. 5 reflected the Second Empire style of the high Victorian era.¹¹⁷ Only some of the fenestration was arched, including the vehicular entrance and the second-story windows on the façade, and the arches were segmental instead of rounded. The cornice line was still prominent but made from a different

¹¹⁵ For more information about the Italianate style, see John J.G. Blumenson, *Identifying American Architecture: A Pictorial Guide to Styles and Terms, 1600-1945* (Nashville, Tennessee: American Association for State and Local History, 1981), 36-37.

¹¹⁶ Extra Alarm Association of the Twin Cities, Inc., “Extra Alarm Association of the Twin Cities, Inc.”

¹¹⁷ For more information about the Second Empire style, see Blumenson, *Identifying American Architecture*, 51-52.

material, and featured overhanging eaves and brackets. A stringcourse separated the first and second stories on the façade. The showpiece of this design was the corner tower, which extended above the roofline. Both tower elevations exhibited brick corbelling and rounded arched windows on the second story of the tower. The tower had a mansard roof with a similar cornice, dormer windows on the north and west elevations, and an open belfry on top. J.A. Clark completed an addition to the engine house in 1886, which added two window bays and a vehicular entrance bay to the east of the original structure, effectively doubling the size of the engine house (Figure 17).¹¹⁸



Figure 17. First Engine House No. 5, with the eastern addition, c. 1886¹¹⁹

Introduction of Richardsonian Romanesque Style - 1883

The Richardsonian Romanesque style emerged as early as 1883 and is evident in the construction of Engine House No. 8 at 8th and Minnesota Streets (1883; non-extant).¹²⁰ Historical photographs reveal rounded arched windows on the third story and detailed stone carvings along the cornice line and around the central personnel entrance on the façade (Figure 18).¹²¹ The second Engine House No. 1 at Fort and 9th Streets (1886; non-extant) more fully expressed the style with its round corner tower and wide rounded arched vehicle entrance. The best extant example appears to be Engine House No. 11 at 676 Bedford Street (1890; RA-SPC-0321; extant).¹²² A representative three-dimensional model of the engine house and historical photographs reveal segmental arched vehicular entrance openings with prominent masonry arch

¹¹⁸ Patricia Murphy, “RA-SPC-3248 Historic Inventory Form,” available at the State Historic Preservation Office and Saint Paul Heritage Preservation Commission, Saint Paul, Minnesota, 1982.

¹¹⁹ Heath, *St. Paul Fire*, 31.

¹²⁰ For more information about the Richardsonian Romanesque style, see Blumenson, *Identifying American Architecture*, 46-47.

¹²¹ Hennessey, *History*, 69.

¹²² Patricia Murphy, “RA-SPC-0321 Historic Inventory Form,” available at the State Historic Preservation Office and Saint Paul Heritage Preservation Commission, Saint Paul, Minnesota, 1981.

surrounds and a highly detailed cornice (Figure 19).¹²³ The stone lintels, sills, and X-shaped patterns below the roofline are still visible today, but only parts of the masonry arch surrounds remain. This basic design is also evident in Engine House No. 12 at 357 Rosabel Street (1892; non-extant) and Engine House No. 15 at Livingston and Fairfield Avenues (1901; non-extant), which was designed by architects Buechner & Orth.¹³⁷



Figure 18. Engine House No. 8, c. 1900¹³⁸

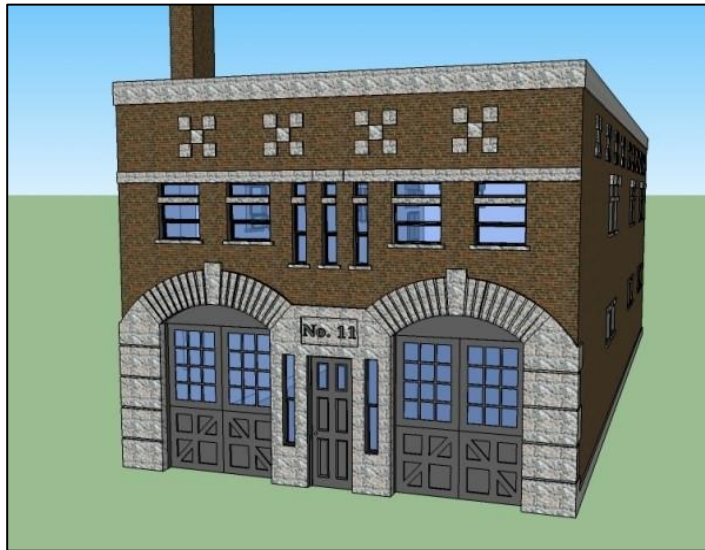


Figure 19. Representative three-dimensional model of Engine House No. 11 at 676 Bedford Street¹³⁹

¹²³ Extra Alarm Association of the Twin Cities, Inc., “Extra Alarm Association of the Twin Cities, Inc.” and Hennessey, *History*, 77. The Extra Alarm Association of the Twin Cities, Inc., is a non-profit corporation that is dedicated to the preservation of the histories of the MFD and SPFD.

¹³⁷ Extra Alarm Association of the Twin Cities, Inc., “Extra Alarm Association of the Twin Cities, Inc.”, and Hennessey, *History*, 91.

¹³⁸ Extra Alarm Association of the Twin Cities, Inc., “Extra Alarm Association of the Twin Cities, Inc.”

¹³⁹ *Ibid.*

Engine House Construction Using Various Styles – 1880s-1900s

Several engine houses constructed in the mid-1880s reveal a restrained, minimally ornamented façade in the “storefront style.”¹²⁴ Representative three-dimensional models suggest that Chemical House No. 3 at 59-61 George Street West (1885; RA-SPC-1468; extant) and Chemical House No. 5 at 754 Randolph Avenue (1885; RA-SPC-3110; extant) were originally built with one vehicular bay and rectangular fenestration, prominent lintels, and flat roofs with slight cornices (Figure 20).¹²⁵ First Chemical House No. 4/Engine House No. 9 at Edmund Avenue and Marion Street (1885; non-extant) was also originally built with one vehicular bay before it was expanded by 1909 to have three vehicular bays in total.¹²⁶ A historical photograph indicates that its detailing also reflected the “storefront style” (Figure 21). This simplification of style may have resulted from the surge of engine house construction compared to available funding.



Figure 20. Representative three-dimensional model of Chemical House No. 3 at 59-61 George Street West¹²⁷

¹²⁴ For more information about the Storefront Style, see Zurier, *The American Firehouse*, 87

¹²⁵ Extra Alarm Association of the Twin Cities, Inc., “Extra Alarm Association of the Twin Cities, Inc.”

¹²⁶ Department of Fire and Safety Services, *Proud Traditions*, 77, and Extra Alarm Association of the Twin Cities, Inc., “Extra Alarm Association of the Twin Cities, Inc.”

¹²⁷ Extra Alarm Association of the Twin Cities, Inc., “Extra Alarm Association of the Twin Cities, Inc.”



Figure 21. first Chemical House No.4/Engine House No. 9 at Edmund Avenue and Marion Street, c. 1909¹²⁸

The same Victorian Gothic design was employed for Engine House No. 14 on Cleveland Avenue near Milwaukee Avenue (1887; non-extant) and for the first Engine House No. 23 on Asbury and Taylor Streets (1887; non-extant; Figure 22).¹²⁹ Each engine house had side-gabled roofs and featured two steep gabled wall dormers on the façade that each contained a vehicular entrance on the first story and a personnel entrance in between the two wall dormers. Prominent stone lintels and sills suggested the simultaneous influence of the Richardsonian Romanesque style.



Figure 22. Engine House No. 14 at Cleveland Avenue near Milwaukee Avenue, c. 1909¹³⁰

¹²⁸ Hennessey, *History*, 73.

¹²⁹ Hennessey, *History*, 89, and Muller and Mead, *History of the Police*, 187. For more information about the Victorian Gothic style, see Blumenson, *Identifying American Architecture*, 32-33.

¹³⁰ Hennessey, *History*, 89.

Shift to Beaux Arts Styles – 1908-1910

In the early 1900s, modifications were made to the fire code and limits were removed on fire department expenditures for the SPFD to provide better fire protection services to the City. During this time, voters also approved an amendment to the City Charter to remove limits on fire department expenditures and permit the City to sell \$100,000 in bonds to finance new engine houses and equipment.¹³¹ As a result, three engine houses were constructed between 1908-1910; all three were designed by architects Buechner & Orth in the Beaux Arts style. The classical detailing of the Beaux Arts was popular during this time in part due to the City Beautiful movement, as it conveyed a strong statement about civic presence and financial stability.¹³² All three Beaux Arts engine houses are extant, and the best example appears to be Engine House No. 18 at 681 West University Avenue (1908; RA-SPC-3887; extant; determined NRHP eligible; Figure 14). This engine house was the first to feature three vehicular entrances on its façade, which were originally round-arched with scroll type keystones and rounded arched fanlights. Other classical details include the large cornice with modillions and dentils; prominent stone foundation, lintels, and sills; corner piers decorated with quoins and topped with stone medallions, garlands, and swags; and two polygonal towers on the east elevation. A marked difference from other Beaux Arts buildings at the time is the use of brown brick in place of white marble. Perhaps this indicated the application of the Beaux Arts for a more utilitarian purpose. Buechner & Orth’s remaining two engine houses, Engine House No. 20 at 91 North Snelling Avenue (1909; RA-SPC-3414; extant) and Engine House No. 21 at 643 South Ohio Street (1910; RA-SPC-4767; extant; determined NRHP-eligible), reveal some of the same features but are far less ornamented (Figure 23).¹⁴⁹



Figure 23. Engine House No. 21 at 643 South Ohio Street, 2016

¹³¹ Heath, *St. Paul Fire*, 59.

¹³² For more information about the Beaux Arts style, see Blumenson, *Identifying American Architecture*, 66-67. ¹⁴⁹ Bradley et al., "Phase II Architectural History," 226.

City Architect Prototypes – 1914-1930

Charles A. Hausler, as City Architect, ushered in a new era starting in 1914 for engine house design with a focus on modernization and efficiency, resulting in a utilitarian aesthetic that would dominate engine house construction up to the present day. After installing the first motorized pumper in 1913 at Engine House No. 18 (1908; RA-SPC-3887; extant; determined NRHP-eligible), the SPFD continued to motorize its equipment and retire the horse-drawn engines. This meant that engine houses no longer needed stables or associated spaces for livestock. Towers had also fallen out of fashion to dry hoses. The engine houses of this new era were typically two stories with the apparatus room on the first floor and crew and dormitory facilities on the second floor. The façades featured prominent vehicular bays, sometimes framed by piers and buttresses, which provided easy access to the street for the fire engines. An emphasis on modernity and efficiency in the design indicated that the SPFD, operating under the new Public Safety Commissioner, was modern and technologically up-to-date.¹³³ Façade detail and architectural style varied across engine houses but the basic forms followed the one-, two-, or three-bay prototypes devised by Hausler.

The earliest example of the two-story, one-bay prototype appears to be Engine House No. 24 at 1720 East Seventh Street (1918; RA-SPC-5401; extant; Figure 24). This is a rectangular building with a partial width projection on the west elevation. The center vehicular opening is flanked by a window bay on each side. All fenestration is rectangular and the windows are slightly recessed, creating the effect that they are framed by brick pilasters. A representative three-dimensional model suggests that the original design was largely unornamented and that there used to be some brick detailing below the roofline that is no longer present today.¹³⁴ Other one-bay engine houses include the second Engine House No. 23 at 1290 North Snelling Avenue (1922; RA-SPC-3433; extant); the second Engine House No. 17 at 1226 North Payne Avenue (1930; RA-SPC-5529; extant); and the second Engine House No. 19 at 750 Snelling Avenue South (1930; RA-SPC-6169; extant; determined NRHP-eligible). Fenestration and details vary across engine houses but they all convey a utilitarian feeling. The second Engine House No. 19 was designed in the Mediterranean Revival style and its building form is slightly different, dictated by its location on a hill (Figure 25).¹⁵²

¹³³ Nelson et al., “Fire Station No. 20,” Section 8, Page 18.

¹³⁴ Extra Alarm Association of the Twin Cities, Inc., “Extra Alarm Association of the Twin Cities, Inc.”

¹⁵² Summit EnviroSolutions, Inc., “RA-SPC-6169,” 1.



Figure 24. Engine House No. 24 at 1720 East Seventh Street, 2016



Figure 25. Engine House No. 19 at 750 Snelling Avenue South, 2016

The earliest example of the two-story, two-bay prototype appears to be Engine House No. 25 at 2179 West University Avenue (1919; RA-SPC-3931; extant; determined NRHP-eligible; Figure 15). The two vehicular openings are surmounted by windows on the second story. The eastern vehicular bay is framed by stepped brick piers; this opening was previously arched. Brick diapering is visible between the two

stories on the façade. Other two-bay engine houses include the second Engine House No. 7 at 1038 Ross Avenue East (1930; RA-SPC-3219; extant) to which one bay was added at a later point, and the second Engine House No. 5, built at 860 West Ashland Avenue (1930; RA-SPC-0186; extant). The second Engine House No. 5 also exhibits Mediterranean Revival stylistic details, including the red terracotta tile roof, and Art Deco details, such as the cut stone surrounds and corner brackets on the truck entrance on the east elevation.¹³⁵ As was seen in the one-bay prototypes, ornamentation is minimal and the façades emphasize the vehicular entrances.

The only three-bay prototype constructed prior to 1930 appears to be Engine House No. 2 at 412 North Wacouta Street (1921; RA-SPC-5463; extant; Figure 26). This engine house exhibits stepped brick piers around each vehicular opening, which are quite like the piers found on Engine House No. 25 at 2179 West University Avenue (1919; RA-SPC-3931; extant; determined NRHP-eligible), an example of Hausler's two-bay prototype. The vehicular openings and personnel entrance on the north end of the façade are segmental arched and surmounted by rectangular windows. The cornice is composed of horizontal corbelled brick courses and a stone projection. This is the most stylistic of the Hausler-era designs, perhaps due to its downtown location.



Figure 26. Engine House No. 2 at 412 North Wacouta Street, 2016

¹³⁵ Patricia Murphy, "RA-SPC-0186 Historic Inventory Form," available at the State Historic Preservation Office and Saint Paul Heritage Preservation Commission, Saint Paul, Minnesota, 1982.

ARCHITECTS

Only a handful of architects have been identified as designers of engine houses built during this time. Not all building permits for the engine houses built in the nineteenth century have yet been found; therefore, it may be possible to identify other architects of these earlier engine houses through future research.¹³⁶

Abraham M. Radcliffe

According to historian Larry Millett, Abraham M. Radcliffe designed the first Engine House No. 5 at 486 Selby Avenue (1882; RA-SPC-3248; extant). His other local work included a circa 1880 enlargement of the Joseph Forepaugh House at 276 South Exchange Street in the Second Empire style, design of the Philip Reilly-Engelbrecht Hobe House at 565 Dayton Avenue (1881) in the Eastlake style, and design of the Judson and Mary Bishop House at 193 North Mackubin Street (1882) in the Second Empire style, which is located one block north of the first Engine House No. 5.¹³⁷ Cass Gilbert worked in Radcliffe's architectural office when he was 18 and was likely influenced by Radcliffe's work.¹³⁸

Edward P. Bassford

Edward P. Bassford designed Chemical House No. 5/Engine House No. 10 (1885; RA-SPC-3110; extant).¹³⁹ Bassford was one of Saint Paul's earliest trained architects, having studied architecture in Boston prior to moving to Saint Paul. His career in Saint Paul spanned from 1866 to 1912.¹⁴⁰ He also designed the original Saint Paul City Hall/Ramsey County Courthouse in 1884-1886, among numerous other commercial and governmental buildings, churches, and residences in Saint Paul, including the NRHP-listed Armstrong-Quinlan House at 225 Eagle Parkway (1886); the NRHP-listed Merchants National Bank (Brooks Building) at 366-68 Jackson Street (1892); and the NRHP-listed Walsh Building at 189-91 East Seventh Street (1888).¹⁴¹ He also designed buildings outside of Saint Paul, including the Holy Rosary Seminary at 1819 Fifth Street South in Minneapolis (1879); the Nicollet County Courthouse in Saint Peter (1880); and the Redwood County Courthouse in Redwood Falls (1891).¹⁴² Bassford also designed an addition to old Engine House No. 2 at 412 North Wacouta Street in 1886 (non-extant).¹⁴³ Historian Susan Granger has suggested that Bassford designed an additional engine house in Saint Paul, but no information was found to attribute any additional engine houses to Bassford.¹⁴⁴ However, based on

¹³⁶ Research was conducted at the Ramsey County Historical Society and using the Historic Sites Survey of Saint Paul and Ramsey County.

¹³⁷ Millett, *AIA Guide*, 433, 472-473.

¹³⁸ Minnesota Historical Society, "Abraham M. Radcliffe," 2010, accessed August 22, 2016, http://www.placeography.org/index.php/Abraham_M._Radcliffe.

¹³⁹ Susan Granger, "RA-SPC-3110," and Millett, *AIA Guide*, 347, 351, 434.

¹⁴⁰ Alan K. Lathrop, *Minnesota Architects* (Minneapolis: University of Minnesota Press, 2010), 14.

¹⁴¹ Granger, "St. Paul's Nineteenth Century."

¹⁴² Lathrop, *Minnesota Architects*, 15, and Millett, *AIA Guide*, 149.

¹⁴³ Susan Granger, "RA-SPC-5463 Historic Inventory Form," available at the State Historic Preservation Office and Saint Paul Heritage Preservation Commission, Saint Paul, Minnesota, 1981.

¹⁴⁴ Granger, "St. Paul's Nineteenth Century." Research was conducted at the Minnesota Historical Society and the following sources were also consulted: Heath, *St. Paul Fire*, and Hennessey, *History*.

representative three-dimensional models, the design of Chemical House No. 3 (1885; RA-SPC-1468; extant) does closely resemble that of Chemical House No. 5/Engine House No. 10.¹⁴⁵

Havelock Hand

Havelock Hand designed Engine House No. 11 (1890; RA-SPC-0321; extant) and at least one other engine house in the City, according to historian Susan Granger. No additional information was found to attribute any additional engine houses to Hand.¹⁴⁶ According to a previous inventory form, this is one of the few designs attributed to Hand.¹⁴⁷ Hand arrived in Saint Paul in 1882 from Buffalo, New York, as part of a surge in the arrival of architects with established portfolios looking to capitalize on rapid expansion in the Midwest.¹⁴⁸ Hand also designed the Frederick Banholzer House at 681 Butternut Avenue in 1889, in the Victorian style.¹⁴⁹

Buechner & Orth

The architectural firm of Buechner & Orth appears to have designed all the engine houses constructed between 1901 and 1910, including Engine House No. 15 (1901; non-extant); Engine House No. 18 (1908; RA-SPC-3887; extant; determined NRHP-eligible); and Engine House No. 20 (1909; RA-SPC-3414; extant). It has also been suggested that the firm designed Engine House No. 21 (1910; RA-SPC-4767; extant; determined NRHP-eligible), due to the similarities in form to Engine House No. 18 (1908; RA-SPC-3887; extant; determined NRHP-eligible) and Engine House No. 20 (1909; RA-SPC-3414; extant); however, no additional information was found to confirm this attribution.¹⁵⁰ Buechner & Orth was founded in 1902 by Charles William Buechner (1859-1924) and Henry W. Orth (1866-1946). This firm was a significant and productive architectural firm in Saint Paul in the early twentieth century, designing numerous prominent institutional and public buildings as well as commercial buildings and residences. Buechner & Orth often designed high-style buildings based on classical precedents, as is evident in its engine house designs in Saint Paul.¹⁵¹ Although each of the three extant Beaux Arts engine houses is distinctive, they all display polygonal towers on the side elevation, projecting beyond the main blocks of the buildings.¹⁵²

Charles A. Hausler

Charles A. Hausler (1889-1971), as City Architect, designed Engine House No. 24 (1918; RA-SPC-5401; extant); Engine House No. 25 (1919-20; RA-SPC-3931; extant; determined NRHP-eligible); and Engine House No. 2 (1922; RA-SPC-5463; extant). The City Architect of Saint Paul designed the second Engine

¹⁴⁵ Extra Alarm Association of the Twin Cities, Inc., “Extra Alarm Association of the Twin Cities, Inc.”

¹⁴⁶ Granger, “St. Paul’s Nineteenth Century.” Research was conducted at the Minnesota Historical Society and the following sources were also consulted: Lathrop, *Minnesota Architects*, and Millett, *AIA Guide*.

¹⁴⁷ Patricia Murphy, “RA-SPC-0321.”

¹⁴⁸ Jeffrey A. Hess and Paul Clifford Larson, *St. Paul’s Architecture* (Minneapolis: University of Minnesota Press, 2008), 56.

¹⁴⁹ Millett, *AIA Guide*, 423.

¹⁵⁰ F. Taraba, “RA-SPC-3887 Historic Inventory Form,” available at the State Historic Preservation Office and Saint Paul Heritage Preservation Commission, Saint Paul, Minnesota, n.d., and Bradley et al., “Phase II Architecture History,” 170.

¹⁵¹ Bradley et al., “Phase II Architecture History,” 224-225.

¹⁵² *Ibid.*, 170.

House No. 23 (1922; RA-SPC-3433; extant), which might have been Hausler since it is like Engine House No. 24; however, he was dismissed from his position that year.¹⁵³ Hausler, a Saint Paul native, worked in the offices of Clarence H. Johnston, Sr., and Harry W. Jones, as well as the Chicago offices of Solon Beman and Louis Sullivan.¹⁵⁴ Hausler introduced a new type of engine house design with a modernized appearance and updated plan to accommodate motorized equipment. Hausler developed one bay, two-bay, and three-bay prototypes, with each vehicular bay opening framed by pilasters.¹⁵⁵

Charles Bassford

Charles Bassford (1879-1945), the son of Edward P. Bassford, was appointed as City Architect in 1930 and was originally attributed as the designer of the second Engine House No. 7 (1930; RA-SPC-3219; extant), according to a previous inventory form. However, this engine house would later be attributed to Clarence W. “Cap” Wigington.¹⁵⁶ Bassford remained as City Architect until his death in 1945 and is particularly well known for designing Roy Wilkins Auditorium (1932); Cleveland Junior High School (1936); and Holman Field Administration Building (1938).¹⁷⁵ Although draftsmen in the Office of the City Architect often designed buildings, numerous designs are instead credited to Bassford since he would have approved them.

Clarence W. “Cap” Wigington

As mentioned above, the second Engine House No. 7 has now been attributed to Clarence W. “Cap” Wigington (1883-1967), who was the head draftsman in the Office of the City Architect and the first African-American municipal architect in the country.¹⁵⁷ He also designed the second Engine House No. 17 (1930; RA-SPC-5529; extant) and the second Engine House No. 5 at 860 West Ashland Avenue (originally Ladder Co. No. 3; 1930; extant). He has been proposed as the architect of the second Engine House No. 19 (1930; RA-SPC-0186; extant; determined NRHP-eligible). Given his position in the Office of the City Architect and his work on other structures in Highland Park, it is likely that Wigington was at least consulted on the design of the second Engine House No. 19, due to its similarity to the Highland Park Water Tower and Pavilion, and the second Engine House No. 5, both constructed in the Mediterranean Revival style and designed by Wigington.¹⁵⁸

BUILDERS/CONTRACTORS

A variety of builders or construction companies have been identified in connection to various engine houses in Saint Paul. Available information about each builder varies. In rare cases, one builder may have worked on more than one engine house. For example, George H. Fletcher built both Chemical House No. 3 (1885; RA-SPC-1468; extant) and Chemical House No. 5/Engine House No. 10 (1885; RA-SPC-3110;

¹⁵³ M. Mingo, “RA-SPC-3433 Historic Inventory Form,” available at the State Historic Preservation Office and Saint Paul Heritage Preservation Commission, Saint Paul, Minnesota, 1981.

¹⁵⁴ Bradley et al., “Phase II Architecture History,” 172.

¹⁵⁵ *Ibid.*, 170.

¹⁵⁶ Lathrop, *Minnesota Architects*, 12-13, and G. Phelps, “RA-SPC-3219 Historic Inventory Form,” available at the State Historic Preservation Office and Saint Paul Heritage Preservation Commission, Saint Paul, Minnesota, 1982.

¹⁷⁵ Lathrop, *Minnesota Architects*, 13-14.

¹⁵⁷ Millett, *AIA Guide*, 334.

¹⁵⁸ Summit EnviroSolutions, Inc., “RA-SPC-6169,” 3.

extant).¹⁵⁹ No additional information could be found about George H. Fletcher.¹⁷⁹ Other builders associated with engine houses in Saint Paul include J.A. Clark, who did an addition to the first Engine House No. 5 at 486 Selby Avenue in 1886 (1882; RA-SPC-3248; extant); A.J. Hoban, who was the builder for Engine House No. 11 (1890; RA-SPC-0321; extant); A.M. Sanberg, who built the second Engine House No. 23 (1922; RA-SPC-3433; extant); L.W. Baumeister and Sons, who was the contractor for the second Engine House No. 7 (1930; RA-SPC-3219; extant); William Selby, who built the second Engine House No. 17 (1930; RA-SPC-5529; extant) and the second Engine House No. 19 (1930; RASPC-6169; extant; determined NRHP-eligible); and John Krumhout, who built the second Engine House No. 5 (1930; RA-SPC-0186; extant).¹⁸⁰ No additional information could be found about these builders.¹⁸¹

Steenberg Brothers

According to its cornerstone, Steenberg Brothers built Engine House No. 18 (1908; RA-SPC-3887; extant; determined NRHP-eligible), and Lieutenant Joseph Devine served as Superintendent of Construction. The Steenberg Construction Company, as it later became known, was established in Saint Paul in 1906 by Paul R. O. Steenberg and Carl Steenberg. This was one of Steenberg Brothers' first buildings.¹⁸² Prior to working on Engine House No. 18, Steenberg Brothers worked on playground shelters and park comfort stations. The company would later build several educational buildings as well as the TriState Telephone Company Building (1935-1936), designed by Clarence H. Johnston; and the First National Bank Building (1930-1931) in Saint Paul.¹⁸³

Ingemann Company

Ingemann Company built Engine House No. 20 (1909; RA-SPC-3414; extant).¹⁸⁴ The company was founded by brothers, Victor and George, in 1884, who worked on hundreds of houses and other buildings across the Twin Cities.¹⁸⁵

¹⁵⁹ A. Katata, "RA-SPC-1468 Historic Inventory Form," available at the State Historic Preservation Office and Saint Paul Heritage Preservation Commission, Saint Paul, Minnesota, 1982, and Granger, "RA-SPC-3110."

¹⁷⁹ Research was conducted at the Minnesota Historical Society.

¹⁸⁰ Patricia Murphy, "RA-SPC-3248," Granger, "RA-SPC-0321 Historic Inventory Form," Mingo, "RA-SPC-3433," Phelps, "RA-SPC-3219," Minnesota Historical Society, "Water Tower N, Highland Parkway, Saint Paul, Minnesota," 2010, accessed August 22, 2016,

http://www.placeography.org/index.php/Water_Tower_N,_Highland_Parkway,_Saint_Paul,_Minnesota, L. Scott, "RA-SPC-5529 Historic Inventory Form," available at the State Historic Preservation Office and Saint Paul Heritage Preservation Commission, Saint Paul, Minnesota, 1981, and Patricia Murphy, "RA-SPC-0186."¹⁸¹

Research was conducted at the Minnesota Historical Society.

¹⁸² Nelson et al., "Fire Station No. 18," Section 8, Page 20, and F. Taraba, "RA-SPC-3887."¹⁸³

Nelson et al., "Fire Station No. 18," Section 8, Page 20.

¹⁸⁴ M. Mingo, "RA-SPC-3414 Historic Inventory Form," available at the State Historic Preservation Office and Saint Paul Heritage Preservation Commission., Saint Paul, Minnesota, 1981.

¹⁸⁵ Millett, *AIA Guide*, 453.

GUIDELINES FOR EVALUATION

NAME OF PROPERTY TYPE: ENGINE HOUSE IN SAINT PAUL

To be eligible for listing in the NRHP, an engine house must retain sufficient integrity to be able to convey its historical significance. The seven aspects of integrity are defined for engine houses as follows:

- Location: the place where the engine house was constructed
- Setting: the physical environment of the engine house
- Design: the combination of elements that create the form, plan, space, structure, and style of the engine house
- Materials: the physical elements that were combined or deposited during a period and in a pattern or configuration to form the engine house

Under NRHP Criterion A, an engine house may be eligible for its association with events that have made a significant contribution to the broad patterns of local history, especially in relation to municipal services or local settlement and development. Additionally, to be eligible under Criterion A, an engine house must have contributed in a meaningful way to the expansion of municipal services, or been significantly integral to the development of the fire protection system in Saint Paul. An engine house needs to retain sufficient integrity of location, setting, feeling, association and other aspects to convey its significance under Criterion A.

This context and research has not identified any individuals who were significant within the development and construction of SPFD engine houses to make an engine house eligible under Criterion B. However, further research may allow for an engine house to be eligible under Criterion B for association with an individual if it can be demonstrated that an engine house illustrates this individual's historic contributions to the SPFD.

Under NRHP Criterion C, an engine house must meet one or more of the following:

- The building must be an excellent example of an architectural style, because engine houses typically followed prevailing styles. Examples of known engine house styles include Italianate, Second Empire; Richardsonian Romanesque; Storefront Style; Victorian Gothic; and Beaux Arts; additional engine house styles may be identified through further research.
- The building must exhibit features of a prototypical design, such as the one-, two-, and three-bay, functional prototypes developed by Charles A. Hausler as City Architect (page 20 & 31). These engine houses may also exhibit characteristics of an architectural style.
- The building must be the best extant example of the work of an architect or builder.

In addition to meeting one or more of the above criteria, an engine house must retain as character-defining features one or more vehicular openings at the street level and two or three stories in height. These elements are critical to conveying the building's historic or ongoing function as an engine house. The building may also retain a vertical component (often a tower or cupola), historically used to dry hose, and may also retain the traditional floor plan consisting of a large open space on the first story where the apparatus would be stored. A vertical component and the large open space are not necessary to achieve eligibility for listing in the NRHP but will enhance the engine house's integrity if retained. An engine

house needs to retain sufficient integrity of design, materials, workmanship, and feeling to convey its significance under Criterion C.

This context and research has not identified any engine house that has the potential to answer important research questions about human history such that an engine house would be eligible under Criterion D. However, further research may allow for an engine house to be eligible under Criterion D if it demonstrates the potential to contribute to our understanding of the development of the SPFD and its engine houses.

Based on this context, engine houses in Saint Paul built between 1869 and 1930 have the potential to be eligible for listing in the NRHP under Criteria A and/or C.

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APPENDIX A: GLOSSARY OF TERMS

GLOSSARY OF TERMS

Board of Fire Commissioners – This entity was established in 1881 by the City to oversee the SPFD's operations and plan the construction of a new headquarters for the SPFD.

City Charter Amendment of 1869 – This amendment approved the sale of bonds to acquire sites to build new engine houses and purchase additional Silsby rotary steamer engines.

City Charter revision of 1891 – This revision placed a cap on police and fire department expenditures.

City Charter Amendment of 1904 – This amendment raised the expenditure cap for the fire department by \$30,000.

City Charter Amendment of 1907 – This amendment removed the limits on fire department expenditures and permitted the City to sell \$100,000 in bonds to finance new engine houses and equipment.

City Charter of 1914 – This charter transferred management of the SPFD from the Board of Fire Commissioners to an appointed Commissioner and established the Office of the City Architect, which was responsible for the design of all publicly funded buildings.

Engine company – This group of firefighters operated the fire engine in the event of a fire.

Hand-drawn steam engine – The first version of a steam engine, pulled by hand. This was used until the horse-drawn steam engine emerged in the late 1850s and early 1860s.

Horse-drawn steam engine – This apparatus replaced the hand-drawn steam engine in the late 1850s and early 1860s. The engine was pulled by horses, which was more efficient.

Hose company – This group of firefighters supplied and operated the hose in the event of a fire.

Ladder company – This group of firefighters supplied and operated the ladder in the event of a fire.

Motorized engine – This engine replaced the horse-drawn steam engine. It emerged in 1903 in Connecticut, but did not become widely used until the 1910s. The SPFD equipment was completely motorized by 1924.

Personnel entrance – This entrance, typically on the façade of the engine house, was used by firefighters to enter the engine house.

Vehicular entrance – This entrance, on the façade of the engine house, was used to bring the engine in and out of the engine house.

Volunteer company – Private citizens who organized themselves into a group to fight fires, initially independent of city funding.

Storefront style – This style of engine house emerged in 1832. Engine houses in this style were typically narrow, two or three stories tall, to fit between other buildings on the same block. A personnel entrance

and window flanked the large engine door on the façade, emulating the symmetrical arrangement of a store's entrance and display windows. Exterior ornament was often visible on the first story, specifically around the door, and the cornice sometimes extended above the roofline, forming a parapet wall.

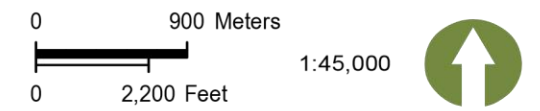
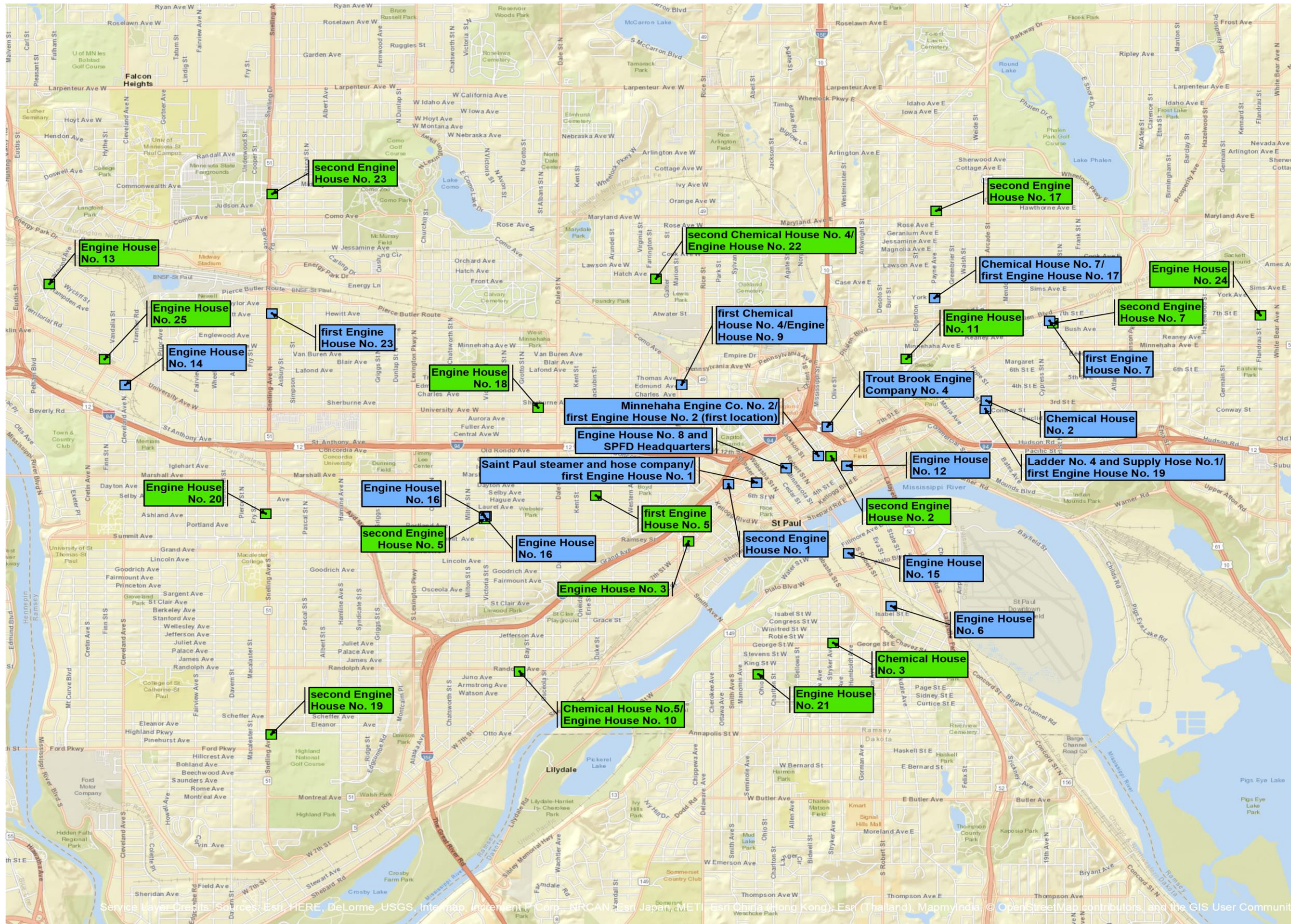
Two-platoon system – This system emerged in the twentieth century to eliminate the 24-hour shifts previously served by firefighters. Instead, firefighters worked in alternating 12-hour shifts and could not leave the engine house while on duty.

Tower – A common element of the Italianate style that emerged in engine houses in the 1850s. It served a practical function of providing a place to hang up the hose to dry and an aesthetic indicator of the building's function.

APPENDIX B: MAP OF KNOWN ENGINE HOUSES IN SAINT PAUL

Saint Paul, Ramsey County, Minnesota

- Extant
- Non-extant



Engine House Locations in Saint Paul from 1869 to 1930

Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (The Land), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

APPENDIX C: TABLE OF KNOWN ENGINE HOUSES IN SAINT PAUL

ENGINE HOUSES IN SAINT PAUL CONSTRUCTED 1869-1930¹⁸⁷

INVENTORY NO.	PROPERTY NAME	ADDRESS	BUILD DATE	ARCHITECT/ BUILDER	STATUS/USE	DESIGNATION STATUS
N/A	Minnehaha Engine Co. No. 2/first Engine House No. 2	7 th and Sibley Streets, moved to Wacouta Street between 6 th and 7 th Streets in 1872	1869	N/A	Non-extant	N/A
N/A	Saint Paul steamer and hose company/first Engine House No. 1	St. Peter Street near 7 th Street	1870	N/A	Non-extant	N/A
N/A	Trout Brook Engine Company No. 4	10 th and Broadway Streets	1871	N/A	Non-extant	N/A
RA-SPC-4229	Engine House No. 3	1 South Leech Street	1871-1872	N/A	Extant; Commercial	Determined NRHP-eligible
RA-SPC-3248	first Engine House No. 5	498 Selby Avenue	1882	Addition in 1886 by J.A. Clark	Extant; Commercial	Designated within local Historic Hill District
N/A	Engine House No. 8 and SPFD Headquarters	8 th and Minnesota Streets	1883	N/A	Non-extant; razed 1931	N/A
N/A	Chemical House No. 2	3 rd and Arcade Streets	1884	N/A	Non-extant	N/A
RA-SPC-1468	Chemical House No. 3	59-61 George Street West	1885	George H. Fletcher	Extant; Domestic	Not evaluated
RA-SPC-3110	Chemical House No.5/Engine House No. 10	754 Randolph Avenue	1885	Edward P. Bassford; George H. Fletcher	Extant; Owned by City of Saint Paul but not an engine house	Not evaluated
N/A	first Chemical House No.4/Engine House No. 9	Edmund Avenue and Marion Street	1885	N/A	Non-extant; razed c. 1952	N/A

¹⁸⁷ Information compiled from the following sources: Bradley et al., “Phase II Architecture History,” Extra Alarm Association of the Twin Cities, Inc., “Extra Alarm Association of the Twin Cities, Inc.,” Granger, “RA-SPC-3110,” Granger, “RA-SPC-5463,” Granger, “St. Paul’s Nineteenth Century,” Heath, *St. Paul Fire*, Hennessey, *History*, Katata, “RA-SPC-1468,” Mingo, “RA-SPC-3414,” Mingo, “RA-SPC-3433,” Muller and Mead, *History of the Police*, Murphy, “RA-SPC-0186,” Murphy, “RA-SPC-0321,” Murphy, “RA-SPC-1400,” Murphy, “RA-SPC-3248,” Nelson et al., “Fire Station No. 18,” Nelson et al., “Fire Station No. 20,” Phelps, “RA-SPC-3219,” Scott, “RA-SPC-1708,” Scott, “RA-SPC-5529,” Summit EnviroSolutions, Inc., “RA-SPC-6169,” and Taraba, “RA-SPC-3887.”

INVENTORY NO.	PROPERTY NAME	ADDRESS	BUILD DATE	ARCHITECT/ BUILDER	STATUS/USE	DESIGNATION STATUS
N/A	first Engine House No. 7	1028 Ross Avenue East	1885	N/A	Non-extant	N/A
N/A	second Engine House No. 1	Fort and 9 th Street	1886	N/A	Non-extant	N/A
N/A	Chemical House No. 7/first Engine House No. 17	Payne and York Avenues	1886	N/A	Non-extant	N/A
N/A	Ladder No. 4 and Supply Hose No.1/first Engine House No. 19	Maple and Conway Streets	1886	N/A	Non-extant	N/A
N/A	Engine House No. 16	Ashland Avenue and Victoria Street	1886	N/A	Non-extant; razed 1928	N/A
N/A	Engine House No. 6	Clinton Avenue and Delos Street	1887	N/A	Non-extant; razed 1965t	N/A
RA-SPC-1400	second Chemical House No. 4/Engine House No. 22	293 Front Avenue	1887	N/A	Extant; Commercial	Not evaluated
N/A	Engine House No. 14	Cleveland Avenue near Milwaukee Avenue	1887	N/A	Non-extant	N/A
N/A	first Engine House No. 23	Asbury and Taylor Streets	1887	N/A	Non-extant	N/A
RA-SPC-0321	Engine House No. 11	676 Bedford Street	1890	Havelock Hand; A.J. Hoban	Extant; Owned by City of Saint Paul but not an engine house	Not evaluated
N/A	Engine House No. 12	357 Rosabel Street	1892	N/A	Non-extant; razed 1944	N/A
RA-SPC-1708	Engine House No. 13	926 Hampden Avenue	1894	N/A	Extant; Domestic	Not evaluated
N/A	Engine House No. 15	Livingston and Fairfield Avenues	1901	Buechner & Orth	Non-extant; razed c. 1970	N/A
RA-SPC-3887	Engine House No. 18	681 University Avenue West	1908	Buechner & Orth; Steenberg Construction Company	Extant; Engine house	Determined NRHP-eligible

INVENTORY NO.	PROPERTY NAME	ADDRESS	BUILD DATE	ARCHITECT/ BUILDER	STATUS/USE	DESIGNATION STATUS
RA-SPC-3414	Engine House No. 20	91 Snelling Avenue North	1909	Buechner & Orth; Ingemann Company	Extant; Commercial	Not evaluated
RA-SPC-4767	Engine House No. 21	643 Ohio Street South	1910	Attributed to Buechner & Orth	Extant; Domestic	Determined NRHP-eligible
RA-SPC-5401	Engine House No. 24	1720 Seventh Street East	1918	Charles A. Hausler	Extant; Engine house	Not evaluated
RA-SPC-3931	Engine House No. 25	2179 University Avenue West	1919	Charles A. Hausler	Extant; Engine house	Determined NRHP-eligible
RA-SPC-5463	second Engine House No. 2	412 Wacouta Street North	1922	Charles A. Hausler	Extant; Domestic	Designated within local and NRHP Lowertown Historic District
RA-SPC-3433	second Engine House No. 23	1290 Snelling Avenue North	1922	Attributed to Charles A. Hausler; A.M. Sandberg	Extant; Domestic	Not evaluated
RA-SPC-5529	second Engine House No. 17	1226 Payne Avenue North	1930	Clarence W. "Cap" Wigington; L.W. Baumeister & Sons	Extant; Commercial	Not evaluated
RA-SPC-3219	second Engine House No. 7	1038 Ross Avenue East	1930	Clarence W. "Cap" Wigington; William Selby	Extant; Commercial	Not evaluated
RA-SPC-0186	second Engine House No. 5	860 Ashland Avenue West	1930	Clarence W. "Cap" Wigington; John Krumhout	Extant; Engine house	Not evaluated
RA-SPC-6169	second Engine House No. 19	750 Snelling Avenue South	1930	Attributed to Clarence W. "Cap" Wigington; William Selby	Extant; Owned by Saint Paul Board of Water Commissioners; not an engine house	Determined NRHP-eligible

APPENDIX D: PHOTOGRAPHS AND REPRESENTATIVE THREEDIMENSIONAL MODELS OF ENGINE HOUSES IN SAINT PAUL

first Engine House No. 2

7th and Sibley Streets (1869)

Wacouta Street between 6th and 7th Streets (1872)

Non-extant



c. 1909, Hennessey, *History*, 20



Extra Alarm Association of Twin Cities, Inc.

first Engine House No. 1

St. Peter Street near 7th Street (1870)

Non-extant



c. 1880, Heath, *St. Paul Fire*, 12



Extra Alarm Association of Twin Cities, Inc.

Engine House No. 4

10th and Broadway Streets (1871)

Non-extant



c. 1900, Extra Alarm Association of Twin Cities, Inc.



Extra Alarm Association of Twin Cities, Inc.

Engine House No. 3

1 South Leech Street (1871-1872)

RA-SPC-4229

Extant



c. 1899, Muller and Mead, *History of the Police*, 201



Extra Alarm Association of Twin Cities, Inc.



Survey 2016

first Engine House No. 5

498 Selby Avenue (1882; addition 1886)
RA-SPC-3248 Extant



c. 1882, Department of Fire and Safety Services, *Proud Traditions*, 74



c. 1886, Heath, *St. Paul Fire*, 12

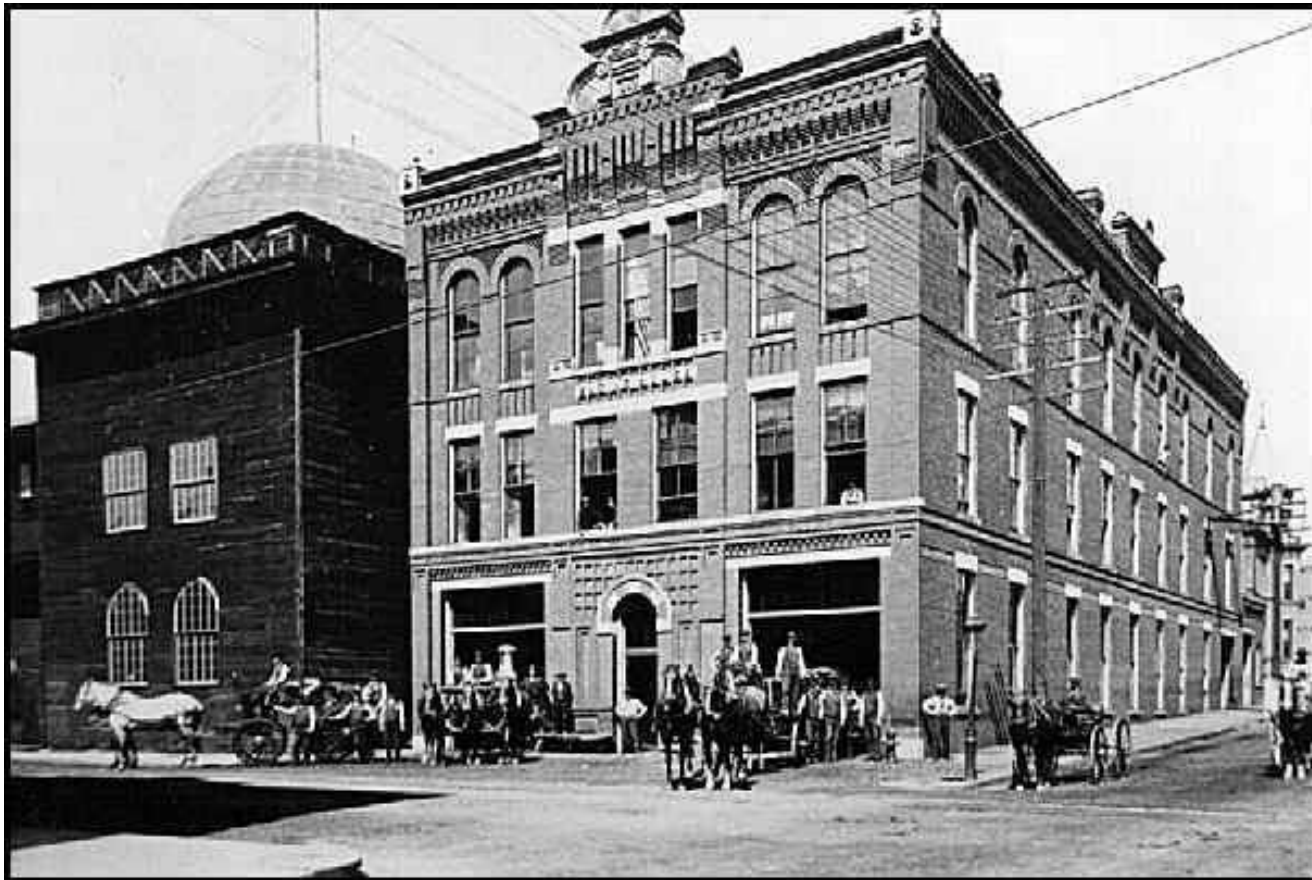


Survey 2016

Engine House No. 8

8th and Minnesota Streets (1883)

Non-extant



c. 1900, Extra Alarm Association of Twin Cities, Inc.



Extra Alarm Association of Twin Cities, Inc.

Chemical House No. 3

59-61 George Street West (1883)

RA-SPC-1468

Extant



Extra Alarm Association of Twin Cities, Inc.



Survey 2016

Chemical House No. 5/Engine House No. 10

754 Randolph Avenue (1885)

RA-SPC-3110

Extant



c. 1885, Department of Fire and Safety Services, *Proud Traditions*, 78



Extra Alarm Association of Twin Cities, Inc.



Survey 2016

first Chemical House No. 4/Engine House No. 9

Edmund Avenue and Marion Street (1885)

Non-extant



c. 1909, Hennessey, *History*, 73

first Engine House No. 7

1028 Ross Avenue East (1885) Non-

extant



Extra Alarm Association of Twin Cities, Inc.

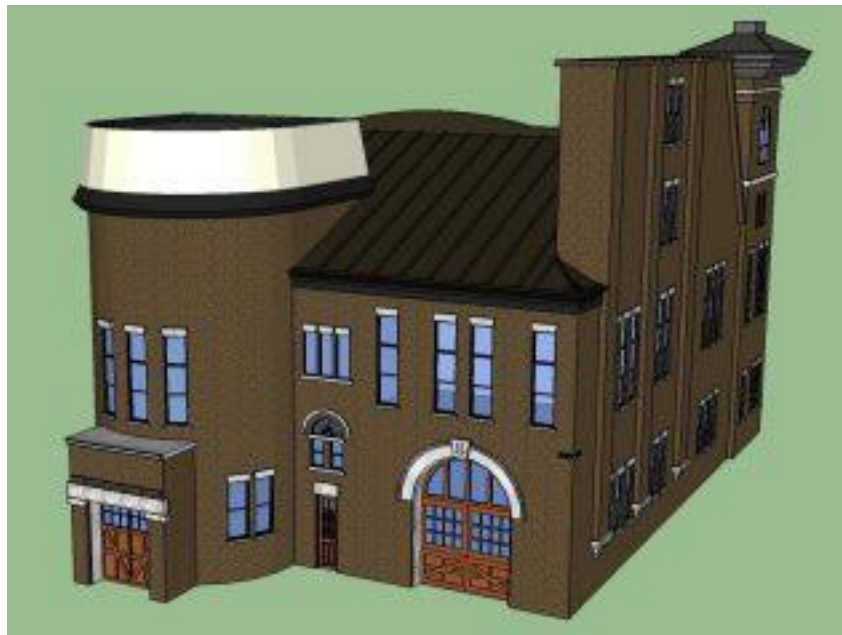
second Engine House No. 1

Fort and 9th Streets (1886)

Non-extant



c. 1909, Hennessey, *History*, 11



Extra Alarm Association of Twin Cities, Inc.

Chemical House No. 7/first Engine House No. 17

Payne and York Avenues (1886)

Non-extant



c. 1909, Hennessey, *History*, 97



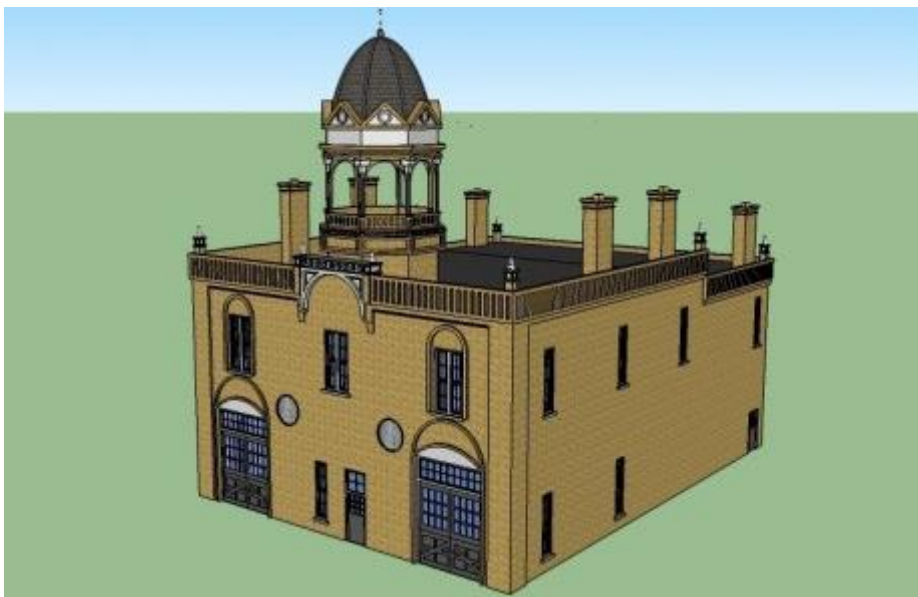
Extra Alarm Association of Twin Cities, Inc.

Ladder No. 4 and Supply Hose No. 1/first Engine House No. 19

Maple and Conway Streets (1886) Non-extant



Extra Alarm Association of Twin Cities, Inc.



Extra Alarm Association of Twin Cities, Inc.

Engine House No. 16

Ashland Avenue and Victoria Street (1886)

Non-extant



c. 1909, Hennessey, *History*, 93

Engine House No. 6

Clinton Avenue and Delos Street (1887)

Non-extant



c. 1909, Hennessey, *History*, 59



Extra Alarm Association of Twin Cities, Inc.

second Chemical House No. 4/Engine House No. 22

293 Front Avenue (1887)

RA-SPC-1400

Extant



c. 1887, Department of Fire and Safety Services, *Proud Traditions*, 85



Survey 2016

Engine House No. 14

Cleveland Avenue near Milwaukee Avenue (1887)

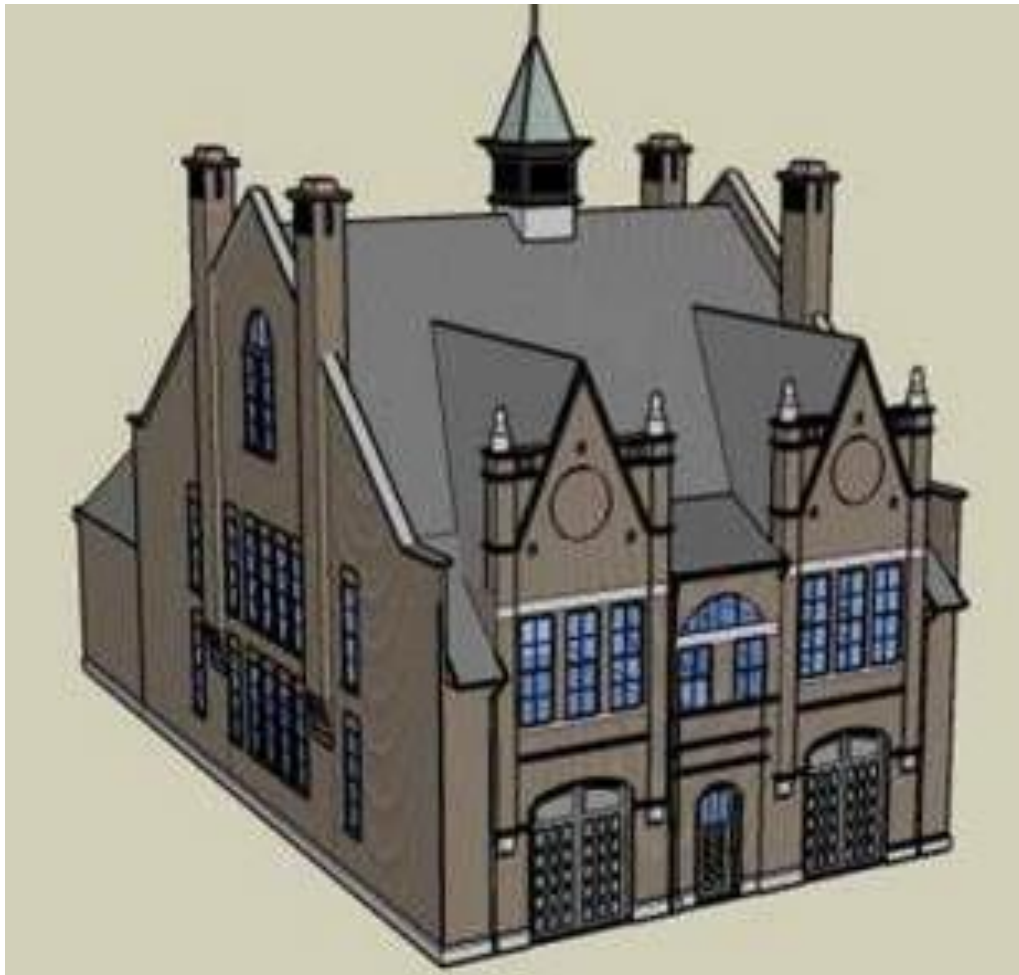
Non-extant



c. 1909, Hennessey, *History*, 89

first Engine House No. 23

Asbury and Taylor Streets (1887) Non-extant



Extra Alarm Association of Twin Cities, Inc.

Engine House No. 11

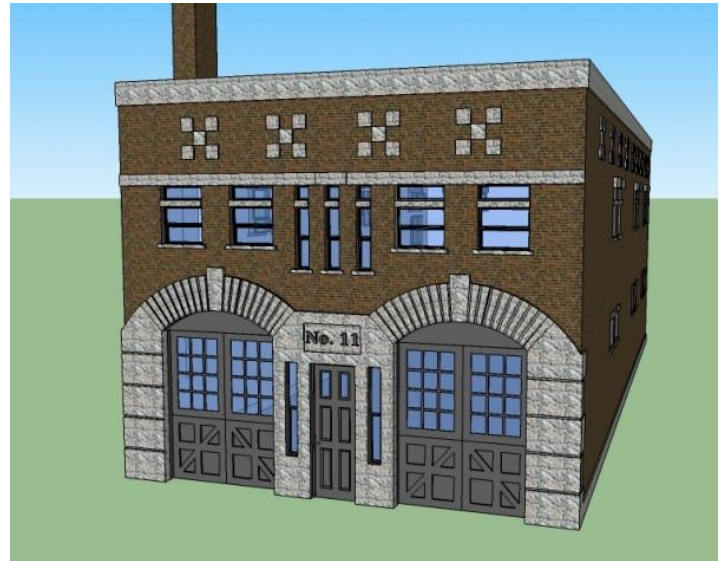
676 Bedford Street (1890)

RA-SPC-0321

Extant



c. 1909, Hennessey, *History*, 77



Extra Alarm Association of Twin Cities, Inc.

Engine House No. 12



Survey 2016

357 Rosabel Street (1892) Non-extant



c. 1909, Hennessey, *History*, 83

Engine House No. 13

926 Hampden Avenue (1894)

RA-SPC-1708

Extant



c. 1899, Muller and Mead, *History of the Police*, 218



Extra Alarm Association of Twin Cities, Inc.

Engine House No. 14



Survey 2016

Engine House No. 15

Livingston and Fairfield Avenues (1901)

Non-extant



c. 1909, Hennessey, *History*, 91

Engine House No. 18

681 University Avenue West (1908)

RA-SPC-3887

Extant



c. 1909, Hennessey, *History*, 99



Extra Alarm Association of Twin Cities, Inc.



Survey 2016

Engine House No. 20

91 Snelling Avenue North (1909)

RA-SPC-3414

Extant



c. 1924, Department of Fire and Safety Services, *Proud Traditions*, 83



Extra Alarm Association of Twin Cities, Inc.



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Engine House No. 21

643 Ohio Street South (1910)

RA-SPC-4767

Extant



Extra Alarm Association of Twin Cities, Inc.



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Engine House No. 24

1720 Seventh Street East (1918)

RA-SPC-5401

Extant



Extra Alarm Association of Twin Cities, Inc.



Survey 2016

Engine House No. 25

2179 University Avenue West (1919)

RA-SPC-3931

Extant



c. 1920, Department of Fire and Safety Services, *Proud Traditions*, 83



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second Engine House No. 2

412 Wacouta Street North (1922)

RA-SPC-5463

Extant



Extra Alarm Association of Twin Cities, Inc.



Survey 2016

second Engine House No. 23

1290 Snelling Avenue North (1922)

RA-SPC-3433

Extant



Survey 2016

second Engine House No. 17

1226 Payne Avenue North (1930)

RA-SPC-5529

Extant



Survey 2016

second Engine House No. 7

1038 Ross Avenue East (1930)

RA-SPC-3219

Extant



Survey 2016

second Engine House No. 5

860 Ashland Avenue West (1930)

RA-SPC-0186

Extant



Survey 2016

second Engine House No. 19

750 Snelling Avenue South (1930)

RA-SPC-6169

Extant



Extra Alarm Association of Twin Cities, Inc.



Survey 2016

APPENDIX E: PROJECT PERSONNEL

LIST OF PERSONNEL

Project Director	Jennifer Bring, B.A.
Project Manager and Principal Investigator	Kelli Andre Kellerhals, M.S.
Field Historian and Report Author	Erin Que, M.A.
GIS	Molly McDonald, MGIS