

## Proposed Ford Piquette Avenue Plant Historic District Final Report



By a resolution dated July 3, 2002, the Detroit City Council charged the Historic Designation Advisory Board, a study committee, with the official study of the proposed Ford Piquette Avenue Plant Historic District in accordance with Chapter 25 of the 1984 Detroit City Code and the Michigan Local Historic Districts Act.

The proposed Ford Piquette Avenue Plant Historic District consists of the single property at 411 Piquette Avenue. It is located approximately five miles north of the Detroit River, three blocks south of E. Grand Blvd. It is located on the northwest corner of Piquette and Beaubien in the third block east of Woodward. The plant stands in a linear industrial area created by railroad access; to the south of the plant and north of the tracks are declining residential areas.

**BOUNDARIES:** The boundaries of the proposed district include the footprint of the single building known as the Ford Piquette Avenue Plant and the vacant land north of the building to the north lot line of the parcel, are shown on the attached map, and are as follows:

On the east, the centerline of Beaubien;

on the south, the centerline of Piquette;

on the west, a line drawn 56' west of and parallel to the east line of Lot II, Out Lot 4 of Emily Campau's Sub of Fractional Part of Section 31 (Liber 3, Page 64), and

on the north, the south line of Trombly St. (vacated).

The plant is the sole contributing resource in the proposed district.

### **History:**

The Ford Piquette Avenue Plant is historically significant because it is: 1) the birthplace of the Model T, the most important car in history, 2) the site where the application of the moving assembly line to the manufacture of automobiles was conceived, 3) the site where the world's record for car production was achieved, thereby establishing American dominance and expertise in automobile manufacturing, 4) the site where the Ford Motor Company became the largest American manufacturer of cars, and 5) the first building built and owned by the Ford Motor Company, one of the largest corporations in the world.

Detroit played an enormously important role in the nation's early development and manufacture of the automobile and, conversely, the automobile drove the City of Detroit's growth and development. Henry Ford, a farmer from Dearborn and mechanic turned engineer, combined innovative product development, engineering and team management to introduce the technology of mass production to an automobile industry still in its infancy. Henry Ford's vision became a reality as the very first Model T was shipped from the Ford Piquette Avenue Plant on October 1<sup>st</sup>, 1908. With top speeds up to 45 mph and the backbone to handle the rugged roads of the day, the Model T became the universal car that sent millions from the farm to the city. Well before the Model T faded into history in May of 1927, the Ford nameplate was on half the cars in the world.

Detroit was already well established as a major production center in the second half of the 19<sup>th</sup> century. Railroad rolling stock, including bodies, frames, wheels, and axles, were manufactured here. Raw materials were abundant; chemicals and salt were readily available for the manufacture of glass and paint, and lumber to make carriage bodies was available. Because of the existence of the petroleum industry around Ohio, Pennsylvania and Indiana, internal combustion technology was known locally. Detroit's shipbuilding industry thrived in the second half of the nineteenth century, and iron casting was important in stove manufacture, a leading local industry. The skilled labor force provided by these industries easily adapted to the production of automobiles. Fortunes made by men exploiting the region's natural resources and the developing railroad industry provided ample capital to invest in auto-making ventures.

Henry Ford was one of many young entrepreneurs entering the automobile business at the turn of the century. He was formerly employed as chief engineer by the Edison Illuminating Company. Henry Ford built his first automobile, a two-cylinder gas driven motor car, in 1896. In 1900, he formed the Detroit Automobile Company. After its failure, he and various partners formed the Henry Ford Company in 1901. However, after a short time he left the company and, in 1902, joined up with Alexander Malcomson to form Ford and Malcomson Ltd. Ford Motor Company, with Malcomson's backing, was officially incorporated on June 16, 1903. It leased a frame carpenter shop located on the Belt Line Railway and Mack Avenue from April, 1903 until the fall of 1904. The company initially assembled the Model A in this building, known as the Mack Avenue plant, from parts manufactured by the Dodge Brothers and other firms.

At a special meeting on April 1, 1904, the Stockholders of the Ford Motor Company met and ratified the approval of the Board of Directors for the purchase of the new plant site on Piquette Avenue for \$23,000 and the construction of a building at a maximum cost of \$76,500. The Piquette site was 430' by 308', and was connected to the tracks of the Michigan Central, Lake Shore, Grand Trunk and other railroads at Milwaukee Junction. This brick building on the corner of Piquette and Beaubien was the first new plant built by Ford; it was 402' long by 56' wide, in three stories. No foundry was provided and few machine tools were involved, as at the time little manufacturing of parts was done on site. All vehicle production, however, was done under one roof.

The firm of Field, Hinchman and Smith designed the Ford Piquette Avenue Plant (building permit #558, May 21, 1904); Nutt and Clark were its builders. Field and Hinchman had an engineering consulting partnership and both held degrees from the University of Michigan, College

of Engineering. They joined with the successful architectural firm of Fred Smith in 1903. Among the early commissions of the new firm was the building of the new Olds Motor Works in Lansing, Michigan after a disastrous fire destroyed the Olds plant in Detroit. Consequently, the Ford Motor Company's new factory building was designed to prevent such a calamity. Still built of *slow-burning construction* with nineteenth century building technology, the factory was divided into four sections by three fire walls. External fire escapes were placed on the east side, and an automatic sprinkler system fed by a 25,000 gallon water tank and a 70,000 gallon reservoir on the roof protected the entire building.

Work on the new factory began in earnest on May 10, 1904. The Board of Directors took a hands-on approach to overseeing its construction; they approved the following contracts at various meetings throughout that summer:

Malow Brothers, \$23,500 for carpenter work  
Nutt & Clark, \$21,195 for mason and stone work  
James H. Crumley, \$2,035.24 for plumbing  
Helary, Schaefer & Son, \$340 for plastering offices  
Whitehead & Kales, \$3,656 for steel and iron work  
Voight & Texauer, \$1,548 for sheet metal roofing  
Carl Kilwinski, \$2,100 for painting and glazing  
Murphy Iron Works, \$1,550 for stokers for the boilers  
Gardner Elevator Company, \$2,160 for elevators  
General Fire Extinguisher Company, \$5,100 for sprinkler system  
Irving and Waltheberer, \$4,850 for heating plant

Completed at the end of 1904, Ford's Piquette Avenue Plant cost more than originally budgeted but was a tremendous improvement over its Mack Avenue facility. It was hailed in June, 1904 issues of *Motor Age* as *Ford's immense plant*, for it was considered roomy for the time and was ten times larger than the old plant. The Piquette plant provided the entire working force of the company with a welcome sense of space, much better floor arrangements for work, and improved appliances. Large windows allowed abundant natural light.

The main entrance to the plant was centered on the Piquette facade. The first floor front was the domain of James Cousins, the secretary and business manager of the Ford Motor Company. It housed the business office, which included bookkeepers, stenographers, sales, and advertising personnel. The fire-resistant company vault for business records remains in place. The remainder of the floor was devoted to factory use; initial testing was done here, although most of it was done in the street and later in the yard. The machine shop, electrical department and shipping room also occupied the first floor.

Above the business offices, on the second floor, was the assembly area for the four cylinder Model B chassis and the upholstery of its bodies. Later, several experimental rooms were added. At the rear of the second floor were the design and drafting rooms, a second machine shop and additional storage space. The third floor housed painting, trimming and varnishing operations and the general assembly of Ford's smaller vehicles, plus storage space. Later, the drafting room was moved to the third floor and a photomicrographic unit for metal analysis was installed. The Model B, Model C, and Model F, with prices ranging between \$800 and \$2000, were assembled on the third floor of the Piquette Plant from 1904 through 1906. The vehicles, once assembled on the upper floors, were transported by elevator to the ground floor where they were taken outside to the yard to be tested.

Prior to the development of the Model N in 1906, most cars were affordable only to the wealthy. The Model K, an expensive six cylinder car produced at the Piquette Avenue Plant beginning in April of 1906 but later moved to a Ford facility on Bellevue known as the Bellevue Avenue Plant, was a good example. Henry Ford, on the other hand, envisioned the entire middle class population out for a Sunday drive. On May 9<sup>th</sup> and 10<sup>th</sup>, 1905, Detroit's evening and morning newspapers carried the headline, ■Plan Ten Thousand Autos at \$400 Apiece.● Ford was telling reporters he intended to reach the masses. Although he realized it would take some time and he was not sure how he would do it, Ford set out to build a simple car that was easily operated, required a minimum of maintenance, was easy to control, had enough power to be useful, and was priced cheap enough to appeal to the middle classes. The Model N, the predecessor to the Model T, began production in July, 1906. It was sold as a car for the masses at a cost of \$600 apiece. It was highly successful but still hampered by the inefficiencies of operation inherent in early automobile manufacture. Still, because of its popularity, the Ford Motor Company was placed amongst the ranks of the big four in automobile manufacturing, alongside Maxwell-Briscoe, Buick, and R.E.O.

The need to correct flaws in the Model N and the introduction of special alloy steel with vanadium used in automobile production in Europe provided Ford with an opportunity to design a new car - the Model T. Blueprints for the Model T were developed in 1907 in a twelve by fifteen foot room at the north end of the third floor of the Piquette Avenue Plant with Childe Harold Wills, engineer, and Joseph Galamb, engineer and patternmaker, working together with Ford. Ford first supervised the designs for a new transmission from his mother's old rocking chair, which was moved up from his office. While the transmission was being developed, ■the first commercial heat of vanadium alloy steel in the United States was produced in Canton, Ohio under Ford's sponsorship.● (Bogges, Vintage Ford, *The Piquette Avenue Plant*, p. 20).

Meanwhile, back in the ■experimental room● on the third floor, machinist C.J. Smith made up parts according to Galamb's blackboard drawings on a drill press, lathe and milling machine Ford had moved upstairs. The new designs were tested by installing them in Model N chassis to reveal any flaws or weaknesses. Because it was cutting-edge technology, Ford found it necessary to develop special heat treating processes and to construct a specialized heat treatment process building on the west edge of the Piquette building in late 1907. The alloying and heat treatment of vanadium steel was put under the overall supervision Childe Harold Wills. John Wandersee undertook the chemical analysis and testing of steels; August Degener worked on developing the heat treatment methods that would give vanadium steel its greatest strength.

After the initial design and development phases of the Model T, which lasted about ten months, two prototypes were built, tested and refined. During the winter of 1908, Model N, R and S production was closed out and the factory was retooled for the new designs. The first Model T, introduced in the late fall of 1908 and priced at \$850, was the vehicle that really made the automobile available to the middle class population. In 1909, Ford sold approximately 18,000 cars, that number representing one-quarter of all the automobiles produced in Detroit and ten percent of those made nationwide.

Early automobile workers were skilled mechanics, not assembly line factory workers. Cars then were regarded as complex and exotic pieces of machinery with a minimum of standardization. Cars were assembled at a fixed location and workmen brought parts to the assembly site as they were needed. The process was similar to the way houses were built. As early as 1904-05, a shortage of skilled labor developed as demands for production increased. To attract workers, salaries at the Piquette Plant rose from \$2.00 to \$2.50 a day, and the Detroit labor force went ■automobile crazy● as furniture workers, painters, blacksmiths and wood workers joined the automobile labor force.

Approximately twenty-five cars were produced per day at the Piquette Avenue Plant in 1904.

On June 4<sup>th</sup>, 1908, Ford workers set the world's record for car production by assembling one hundred and one cars in ten hours. Subsequently, production exceeded one hundred cars per day, and the Ford Motor Company became America's largest automobile manufacturer. However, demand for cars continued to exceed production capacity, thus stimulating the search for a radically different way to assemble automobiles more quickly.

Ford engineers took the initial steps away from craft production at the Piquette Avenue Plant, assigning assemblers to separate operations and arranging machinery according to the production process rather than the type of production. During the course of Ford's occupation at the Piquette Plant, the organization of the raw materials stored in the courtyard took on a more logical sequence as production demand increased. Parts were brought into the building at times dictated by the increasingly tightly controlled production schedule for the day. The quality of machining was greatly increased so that parts became interchangeable. These procedures set in place the fundamental elements of the beginning of the moving assembly line concept later utilized in Ford's Highland Park manufacturing facility.

The idea of constructing automobiles by a moving assembly line was tested at the Piquette Avenue Plant in 1908. After weeks of preparation, Charles Sorensen, with the help of Charles Lewis, demonstrated a proto-assembly line one Sunday morning to Henry Ford, C.H. Wills and Ed Martin. Sorensen recalls that

We did this simply by putting the frame on skids, hitching a towrope to the front end and pulling the frame along until axles and wheels were put on. Then we rolled the chassis along in notches to prove what could be done. While demonstrating this moving line, we worked on some of the subassemblies, such as completing a radiator with all its hose fittings so that we could place it very quickly on the chassis. We also did this with the dash and mounted the steering gear and the spark coil.

With increasing production demand, the factory on Piquette Avenue soon became inadequate for sequential production. The Packard Plant on East Grand Boulevard and the Olds Lansing Plant were larger, better arranged and equipped. Rapid advances in factory design quickly kept pace with evolving production methods for the new and burgeoning automotive industry. By 1906, Ford realized that his Piquette and Bellevue plants were obsolete, so he purchased a sixty-acre tract in suburban Highland Park where he planned to consolidate his operations. The Highland Park Plant was designed to allow implementation of the moving assembly line for the manufacture of automobiles as initially conceived at Piquette in 1908. Production of the Model T at the Highland Park Plant began in 1910. However, time was required to perfect the moving assembly line. To quote Nevins,

Then in 1912-13 came the dawn of production by the continuously moving assembly line. This was the crowning achievement in the creation of mass production techniques. For the Ford Company, the first great step had been taken at Piquette when the management began bringing the work to the men instead of the men to the work. The second step followed, partly at Piquette and more completely at Highland Park, when men, machines and materials were placed in the sequence of operations.

The Model T went on to become the most successful car in American history and the most important car in the world. In production until 1927, over fifteen million were sold all around the world at prices ranging as low as \$260.00.

Meanwhile, automobile manufacturing companies continued to pop up all over Detroit, many growing out of bicycle and carriage manufacturing businesses. In 1907 alone, thirty-three automobile companies were listed in the Detroit city directory. Some lasted many years until they were merged with other companies; some went out of business after only a few model years. One such short-lived company located across Brush Street from the Ford Piquette Avenue Plant was the Wayne Automobile Company. Wayne merged with Northern Motor Car Company in 1908 to form E-M-F Company (Everitt-Metzger-Flanders). William Metzger, better known as the first retail motor car dealer in Detroit, had formed Northern and stayed on with the new company. He was joined by Walter Flanders, one of the brains behind Ford's early success, and Byron F. Everitt, who was associated with the Detroit automobile industry since 1899 as a body builder.

E-M-F produced its 30 Model from 1908 until 1912 at E-M-F Plant #1 on Piquette near Brush, in the block to the west of the Ford Piquette Avenue Plant. The Studebaker Brothers, carriage and wagon builders from South Bend, Indiana, had an arrangement to distribute all of E-M-F's production, but due to a dispute in 1909, the Studebakers decided to add to their already substantial E-M-F stock holdings. As recorded in the November 2, 1911 minutes of the E-M-F Corporation, the sale of the company to the newly formed Studebaker Corporation was then accomplished. Flanders remained with Studebaker for a short time as vice president and general manager.

The Studebaker Corporation purchased the Ford Piquette Avenue property in January of 1911. The former Ford plant then became known as Studebaker Plant #10 while the old E-M-F Plant became Studebaker Plant #5. The E-M-F name for the cars manufactured by Studebaker was changed to Studebaker in 1913. It was for Studebaker that Albert Kahn, architect, designed the reinforced concrete factory building connecting to the second and third stories of the former Ford Piquette Avenue Plant on the northeast corner of Piquette and Brush in 1920. However, during the 1920s, Studebaker moved the bulk of its automobile manufacturing operations from Detroit to South Bend to enter the market of the post-war economy, although it continued to manufacture vehicles in Detroit on a limited basis. From 1927 to 1930, the Piquette Plant #10 was involved in production of the Erskine, after which it was shut down and used only as a parts depot. In 1931, the plant was reactivated for the production of the Rockne, a car that was produced for only two years.

After production of cars ceased at the Piquette Avenue Plant, the building was converted to a shelter for the homeless during the Great Depression. In 1936, the Studebaker Real Estate Corporation sold the plant to the Minnesota Mining and Manufacturing Company, which became the 3-M Corporation. 3-M owned it until 1968, when it was sold to Norman Shulevitz, owner of Cadillac Overall, supplier of work clothes to the automotive industry. An extensive laundry operation was housed in the facility until 1989, when it was purchased by Heritage Investment Company. The Model T Automotive Complex, Inc. (T-Plex), a non-profit corporation established to save the building, purchased the Ford Piquette Avenue Plant in April 2000. The Henry Ford Heritage Association, through its Piquette Plant Preservation Project, provided the money for the down payment. T-Plex is dedicated to the preservation and restoration of the Ford Piquette Avenue Plant and the interpretation and celebration of Detroit's automotive heritage and the automobile in American culture.

#### **Physical Description:**

The Ford Piquette Avenue Plant is located approximately five miles north of the Detroit River in a section of the City of Detroit just east of Woodward Avenue between the Ford Freeway (I-94) on the south and East Grand Boulevard on the north, known as *Milwaukee Junction*. Residential development had not yet reached this far northward when the Ford Piquette Plant was built in 1904, but the rail lines were already established, making it attractive to the several

automobile and automobile-related companies that located there in the early years of the twentieth century. Several of the industrial buildings situated along this rail line, both east and west of Woodward Avenue (New Amsterdam Historic District, listed on the National Register, 2001), still remain today.

The Ford Piquette Avenue Plant is built on its lot lines at the northwest corner of Piquette and Beaubien. The original three-story building measures 402' by 56' in ground dimensions. Its exterior envelope consists of load bearing brick masonry walls constructed of common brick, punctuated with a regular pattern of window openings on all sides. The south (Piquette Avenue) elevation is the front, and exhibits Late Victorian influences with a tripartite arrangement of bays with a low gable over the center. The minimally sloped roof is hidden by the parapet wall in the front; thus, it is not visible from the street. The yard to the building's west was a major feature of the site's functionality while operated by the Ford Motor Company and has changed over the years through the addition and removal of support buildings for the Piquette Plant. Studebaker Plant #10, built in 1920, changed the yard into a courtyard, as its long end ran the remaining length of the block westward to Brush. The two buildings were then connected at the second and third floor levels. A drive-through between the two buildings at the ground level permitted access into the courtyard. The resulting drive-through between the two buildings at the ground level permitted access into the courtyard. Structurally, the Ford Piquette Avenue Plant is in excellent condition. Its defining features, such as the brick walls, window arrangements, wood columns, and wood floors are all intact. In addition, many original elements such as signage, sprinkler system, fire doors, electrical fuse boxes and rear elevator remain in place.

Although it was built for utility, the Ford Piquette Avenue Plant was designed with some modest architectural pretensions. Its narrow front facade facing Piquette Avenue contains three bays; the center one projects slightly forward. Detailing is in the brick and is concentrated around the parapet level in the form of a stepped corbel table. A stepped brick beltcourse separates the first and second stories; a shallow gable, also outlined in stepped brick, projects from the center of the front facade. The same pattern of stepped brickwork is carried beneath the eaves along the east and north side elevations of the building. A projecting brick water table also continues around the sides at ground level. The west side of the building, facing the yard, is simplified, with the corbeled band omitted. On the east side, Beaubien Street slopes down to the north, thus exposing the foundation wall, which is parged. Walls are capped with a vitreous clay tile coping, except at the south gable, which is capped with an ogee-molded limestone coping. The brick is unpainted, except at the front facade, which is painted white.

On the front (south) facade, a recessed garage door type entrance now occupies the central bay of the first story. Originally, the entrance was composed of a single entrance door with a transom above, flanked by sidelights resting on the water table. Above this, the original fan light opening remains, now filled in, with its oversized keystone centered in its arch. A grouping of three elongated windows occupies the central bay of the second floor. A large arched opening with a tripartite window occupies the central bay on the third story. Articulation of fenestration of the flanking bays is similar to that on the long side elevations of the building.

Window design and arrangement present a unified, horizontally banded visual organization to the building. There are approximately 355 wood double hung windows on the building, typically with divided lights and muntins in the upper and lower sashes. Masonry window openings are stacked in three story high groupings in bays that repeat along the length of the building. There are minor variations at the end bays. Masonry opening heads on the first floor are segmentally arched on the exterior and flat (supported with a steel lintel) on the interior. Each opening contains one window. Windows are paired - two in each bay - each with a separate limestone lintel. Second and

third floor windows are set into four-inch deep, arched, recessed two-story bays. Second floor window openings have horizontal headers with steel lintels. Each opening containing one window, paired two per bay with a masonry pier between them. Both windows in the pair share a limestone sill. The third floor windows are tripartite within a single arched masonry opening spanning the entire bay. Corner bays differ from the typical bays in that they are not recessed on the first and second floors, and the third floor windows are two separate arched windows instead of the typical tripartite arrangement. Windows are primarily of the six-over-six double hung sash variety; the first floor windows have three-light transoms above.

Several original masonry openings have been inappropriately modified to accommodate changing use patterns by the installation of contemporary overhead doors. Almost all the existing windows are part of the original historic fabric of the building as it existed during Ford's ownership. Window conditions vary from fair to poor due to repairs or replacement of divided lights, or modifications to accommodate changes in use patterns. Several windows have been blocked up. The most common form of deterioration is weathering to the wood sash and broken single pane glazing in the divided lights.

As a part of the production process, vehicles were offloaded from the Piquette Avenue Plant at the north end of the building. Rail lines connecting to Milwaukee Junction were at the rear of the building. Railroad cars provided the principal mode of transportation from the plant. Two different rail arrangements existed during the building's early life. Originally, the loading dock was located at the first floor level because the tracks were at grade. Subsequently, the loading operation was moved to the second floor because the tracks were raised for the construction of the rail bridge over Woodward Avenue. A portion of the upper dock remains, but the lower dock has been replaced by an inappropriate addition between the north elevation and the railroad tracks. The water tank on the roof once feeding the sprinkler system had been removed. Ancillary buildings located in the yard, such as the engine testing house, paint shop and heat treatment process building, no longer stand.

Contrasting with the turn-of-the-century design of the Piquette Avenue Plant is the addition to its west, built in 1920. This four-story service and parts building was construction of steel reinforced concrete and brick. The concrete frame was exposed on the exterior and the masonry was installed as a brick infill supporting large expanses of industrial steel window sash. The building is L-shaped and abuts the Ford factory at the southwest corner at the upper two floors. The resulting bridge creates an entrance into the large open yard at the center of the complex. Some changes were made to the Piquette Avenue Plant to accommodate the bridge. Plans are to remove the Studebaker bridge and restore the southwest corner to its original appearance.

The original spatial organization of the interior of the Ford Piquette Avenue Plant was three floors of open linear space to facilitate the manufacturing process. The machine shop was located on the first floor. Car assembly took place primarily on the second and third floors. Parts and supplies were brought by elevators; vehicles were assembled in place within various bays; completed vehicles were moved down the central aisle, taken down by elevator and tested in the courtyard or on adjacent streets. Utilization of space frequently changed with the assembly of different models and the ongoing improvement of the assembly process.

Offices of James Couzens, the clerical staff and bookkeeping were on the first floor near the front entrance. The vault that probably held the company business records is on the first floor. Offices of Mr. Ford, C.H. Wills, Walter Flanders, Peter Martin and others were located at the south end of the second floor. The vault in Mr. Ford's office that probably held blue prints, automobile design papers and patents has been removed, but its imprint on the floor is still clearly evident.

The interior of the building reflects its original use and is utilitarian on all three floors,

providing little more than weatherproof space, light, power, adequate floor loading capacity, basic sanitation amenities and access required to facilitate the early twentieth century manufacturing process. The interior is devoid of any ornamentation or decoration except for painted finishes. It is not, however devoid of character. The heavy timber construction is fully exposed in almost all portions of the building, clearly articulating the relationship between all of its components. The predominance and consistency of the simple yet powerfully elegant structural system throughout the building makes it the primary character-defining feature of the interior.

The utilitarian character is further reflected by the wall treatments which, with a few minor exceptions, is simple painted brick throughout the building. Floors are wood at the second and third floors, and concrete at the first floor. Water leakage and lack of heat over the years has resulted in the buckling of floor boards and the peeling of paint. The building is divided into four compartments for the purposes of fire safety by three brick masonry walls that extend from the first floor through the roof. Large arched openings in the center of these walls occur at each floor and are protected by large tin covered horizontally rolling doors, which are important character defining elements. The south portion of the first floor has been finished for office space by installation of partitions and a drop ceiling; only in this area is the heavy timber construction concealed. Such modest modernization has been gentle, fairly sympathetic, and has done little to diminish the fundamental character of the interior.

An original stair and elevator shaft serving all three floors and the roof at the northwest corner of the building still exists. The stair extends from the first floor to the third floors with guards, which are simply but attractively fashioned of beaded paneling and simple moldings. Although elevator equipment is still in place in the adjacent elevator, its functionality or originality is not known at this time. A non-original stair/elevator combination is located at the west side of the building. It appears to date from 1926.

Other original features of the building are the electrical panels, the fire suppression system on all three floors, including the sprinkler system, fire walls and fire doors. Some original signage remains in place on the third floor, including the ■No Smoking• and ■Exit• signs. The original paint remains on the entire third floor. A portion of the original heating system exists at the south end of the third floor. Portions of the paneling in Mr. Ford's office persist on the second floor, and traces of the locations of original walls exist throughout the building. The two original fire escapes remain in place.

The Model T Automotive Heritage Complex, Inc. sponsored the preparation of a *Historic Structure Report/Master Plan*, completed in November of 1999 in anticipation of restoring the Ford Piquette Avenue Plant for re-use as an automotive interpretive center.

**Criteria:** The proposed historic district meets the first, second, and third criteria contained in section 25-2-2: (1) Sites, buildings, structures, or archeological sites where cultural, social, spiritual, economic, political or architectural history of the community, city, state or nation is particularly reflected or exemplified; (2) Sites, buildings, structures, or archeological sites which are identified with historic personages or with important events in community, city, state or national history; (3) Buildings or

structures which embody the distinguishing characteristics of an architectural specimen, inherently valuable as a representation of a period, style or method of construction.

**Recommendation:** The Historic Designation Advisory Board recommends that City Council adopt an ordinance of designation for the proposed historic district with the design treatment level of ■conservation.● A draft ordinance is attached for City Council's consideration.

## **Ford Piquette Avenue Plant**

### **BIBLIOGRAPHY**

Babson, Steve. Working Detroit. Detroit: Wayne State University Press. 1986.

Boggress, Trent E. ■Birthplace of the Model T: The Piquette Avenue Plant.● The Vintage Ford. Vol. 33, No. 6. November/December 1998, p. 15-27

Burton, Clarence. City of Detroit. Detroit: S. J. Clarke Publishing Company. Vol. 5, p. 826-828.

Cannon, W.A. & Fox, F.K. Studebaker, the Complete Story. 1981.

Conot, Robert. American Odyssey: A Unique History of America Told Through the Life of a Great City. New York: William Morrow & Company. 1974.

Erskine, R.E. History of the Studebaker Corporation. 1924.

Ferry, W. Hawkins. The Buildings of Detroit. Detroit: Wayne State University Press. 1968.

Goldstein, Deborah M. The History of Industrial Architecture of South Bend, Indiana. Ithaca: Masters Thesis, Cornell University, 1980.

Henry Ford Heritage Association and Model T Automotive Heritage Complex, Inc. *Piquette Plant Preservation Project, Detroit, Michigan: Historic Structure Report/Master Plan*. November, 1999.

Holleman, Thomas, & Gallagher, James P. Smith Hinchman & Grylls: 125 Years of Architecture and Engineering, 1853-1978. Detroit: Wayne State University Press. 1978.

Husa, Mark. *The Piquette Plant*, Ford Motor Company newsletter.

Leake, Paul. History of Detroit. Vol. 1, pp. 327-34.

Nevins, Allen. Ford: The Times, the Man, the Company. New York: Charles Scribner's Sons. 1954.

Sorensen, Charles E. My Forty Years With Ford. New York: W.W. Norton & Company. 1956.