

STAFF REPORT: 2/8/2023 MEETING

PREPARED BY: J. ROSS

APPLICATION NUMBER: #23-8212

ADDRESS: 450 AMSTERDAM

HISTORIC DISTRICT: NEW AMSTERDAM

APPLICANT: ROSS HOEKSTRA/ARCHITECT (MCINTOSH PORIS ASSOCIATES)

OWNER: SARAH PAVELKO/GREATWATER OPPORTUNITY CAPITAL

DATE OF PROVISIONALLY COMPLETE APPLICATION: 1/16/2023

DATE OF STAFF VISIT: 1/30/2022

SCOPE OF WORK: DEMOLISH ADDITION AND REHABILITATE BUILDING

EXISTING CONDITIONS

The building located at 450 Amsterdam Avenue was erected in 1904-1906 and designed by George Mason and the Trussed Concrete Steel Company, engineers. Per the Detroit Historic Designation Advisory Board:

This building was the main assembly plant for the Cadillac Motor Car Company, which was founded by Henry Leland in 1902. The original Cadillac plant (located on the same site) had been destroyed by fire just prior to the construction of this building. George D. Mason, who designed this building, was a prominent Detroit architect whose commissions included the Detroit Masonic Temple and the Grand Hotel on Mackinac Island, both of which are listed on the National Register of Historic Places. Mason's use of reinforced concrete provided protection from fire, provided more floor and window space, and protected against damage from vibration. It should be noted that the Palms Apartments of 1901 was Detroit's first building to use reinforced concrete, and was designed by the brief partnership of Mason and Kahn; in this case, Kahn's Trussed Steel firm was involved. The Cadillac Motor Car Company was completed in sixty-seven days, in the same year that Albert Kahn completed the first reinforced concrete industrial structure in Detroit- the Packard Motor Car Company Building Number 10. Both structures were pioneers in the use of reinforced concrete for industrial buildings. Cadillac occupied the building until 1920, when a new facility was built in another area of the city. The building was then purchased by Louis Rose of Rose Realty Company in 1954. Westcott Paper Products was a tenant in the building. In 1965, Westcott purchased the building, which still served as Westcott's headquarters at the turn of the century.

The building is three stories in height (with one-story wings at the east and north elevations) and was constructed with reinforced concrete and brick. The rear, one-story addition was erected with concrete masonry units. The building features a six-bay wide, four-bay deep main mass which faces south on Amsterdam Avenue. To the north of the main mass, the building steps in two bays at the east elevation and one bay at the west elevation forming the building's T-plan. The roof is flat. Exterior walls are primarily brick, although concrete is present at the rear one-story addition's north and west elevations, at the first story at the west elevation, and at stories two and three of the west elevation's stair tower. Many of the fenestration openings retain historic-age steel windows. Some window openings have been infilled with glassblock (mainly at the west elevation, first story). Still other window openings include non-historic vinyl sliding windows with masonry infill/surrounds. The primary entrance, which is located at the south elevation is a non-historic aluminum storefront door with aluminum and glassblock sidelites. A non-historic awning shelters this entrance. Other entrances are non-historic steel overhead doors and non-historic hinged single doors. A loading dock which includes a masonry dock and a steel-frame canopy is located at the building's northeastern corner.



450 Amsterdam, current appearance (staff photos, 1/30/2023)



450 Amsterdam, current appearance (staff photos, 1/30/2023)



450 Amsterdam, current appearance (staff photos, 1/30/2023)



Google aerial facing south showing rear one-story addition, 2022



Google Streetview, facing southwest showing east elevation, one-story addition



Google Streetview, facing northwest showing east elevation, one-story addition and loading dock canopy



Google Streetview, facing southwest showing east elevation, one-story addition, loading dock canopy, and rear one-story addition

PROPOSAL

With the current submission, the applicant is seeking to undertake a substantial renovation of this former industrial building so that it might house 92 loft apartment units. Work items associated with this project include the following per the submitted application materials:

East Elevation

- Demolish the one-story, masonry wing
- Demolish metal canopy which is located at the loading dock
- At southernmost bay, first story, install a new aluminum canopy with rigid tiebacks over a new entry door

North Elevation

- At rear, one-story addition/block, rebuild wall with new brick per elevation drawings (sample of new brick not provided)

Roof

- Remove one existing stair enclosure
- Replace existing roofing with new EPDM membrane roof system and insulation over existing slab

Doors and Windows (Throughout)

- Per submission, replace all existing historic steel windows, masonry infill with vinyl slider windows, and glassblock windows with new aluminum fenestration. **Please see the submitted demolition drawings to note that most window openings at the side and rear elevations will be enlarged to allow for the replacement of deteriorated lintels and/or the installation of new windows which are slightly larger or wider than the current/historic openings.** Only the window openings at the north/primary elevation will retain their original dimensions.

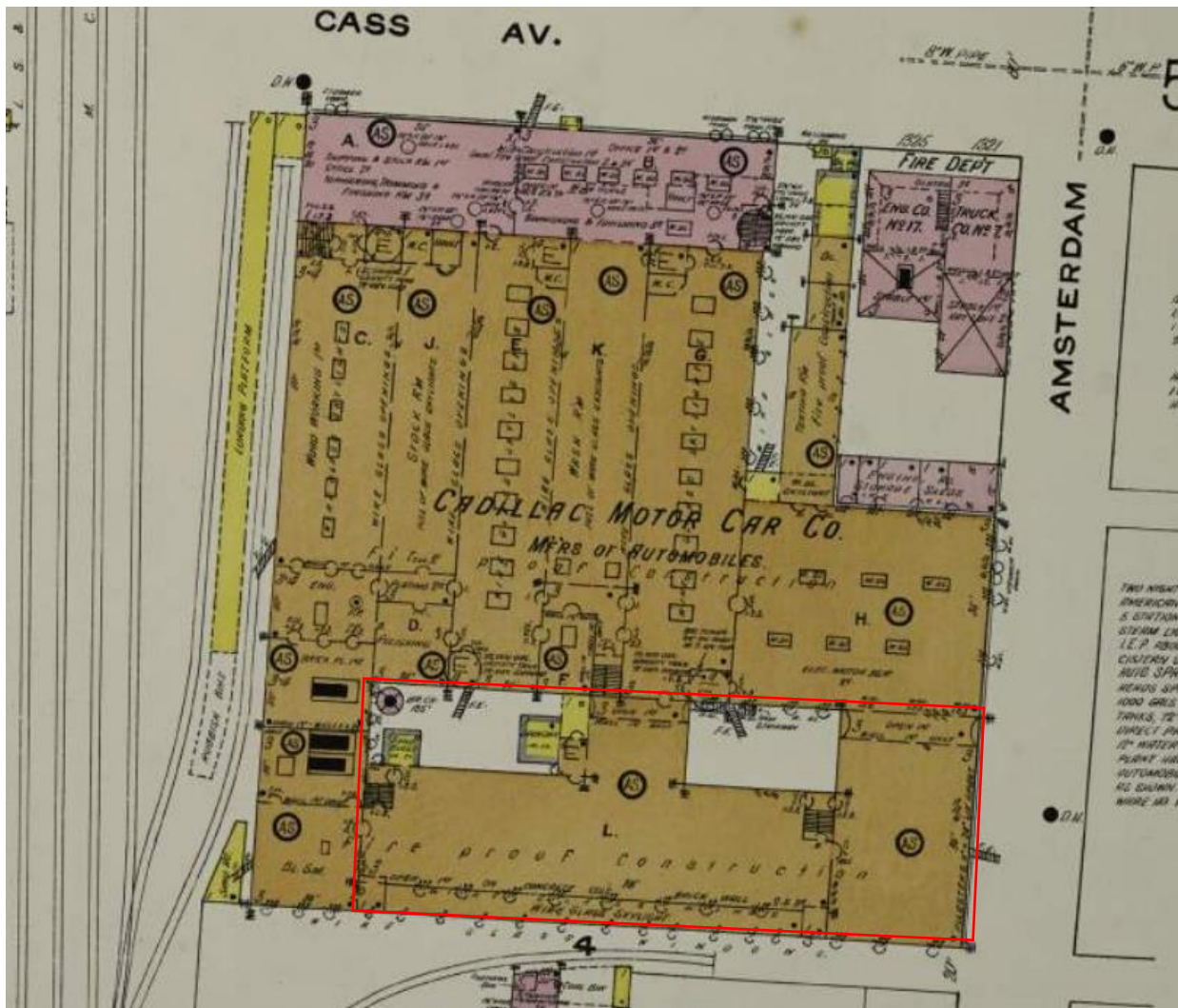
- Replace all exterior doors with new fenestration per submission
- Add new openings and add new aluminum fenestration per submission
- Replace all concrete window sills with new concrete sills

Tuckpoint throughout/where necessary

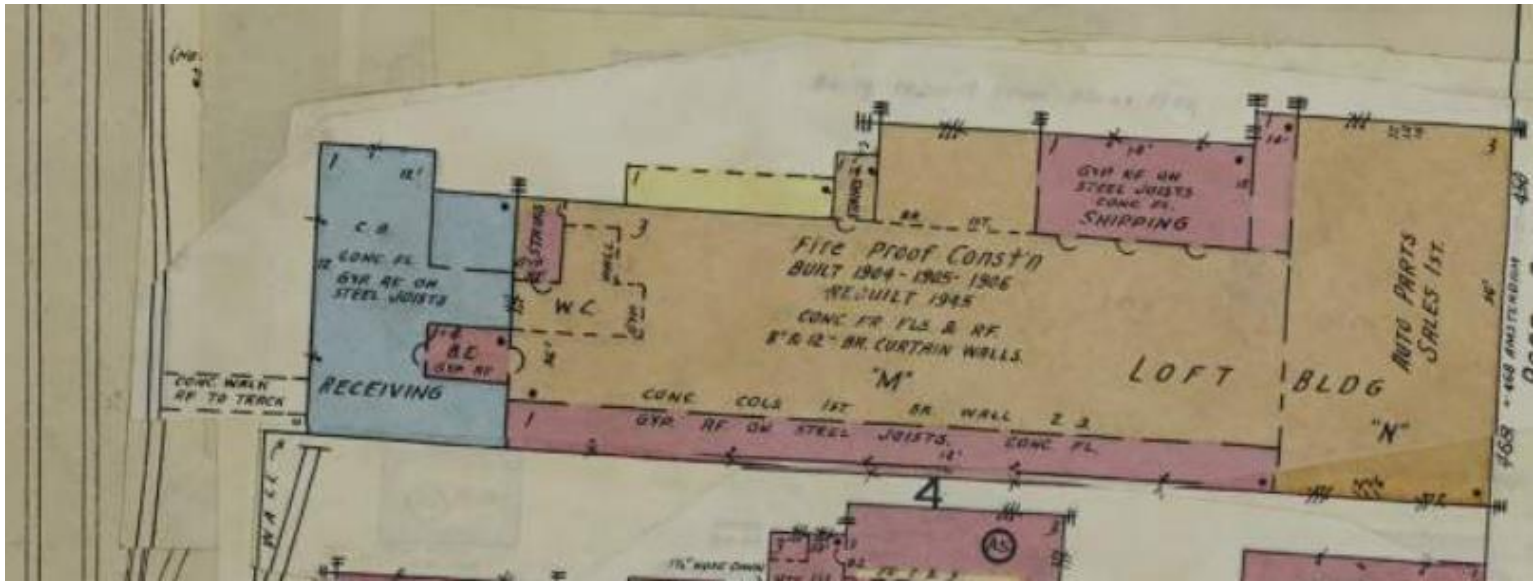
Please note that the current application does not include any site improvements. The applicant has indicated that they will submit a future proposal for any such work.

STAFF OBSERVATIONS AND RESEARCH

- As noted above, the building was originally erected in 1905 to serve as the Cadillac Motor Car Company Assembly Plant. See the below 1910 Sanborn Fire Insurance map which depicts the footprint of the original complex. In 1945, per the below Sanborn Fire Insurance map, much of the original plant had been demolished and the east elevation one-story addition and loading dock and the north elevation, one-story addition had been added. It also appears that the first story at the west elevation had been modified during the 1945 rehabilitation.



Sanborn Fire insurance Map, 1910 showing original footprint with existing portion outlined in red



Sanborn Fire Insurance Map, 1951 showing current footprint

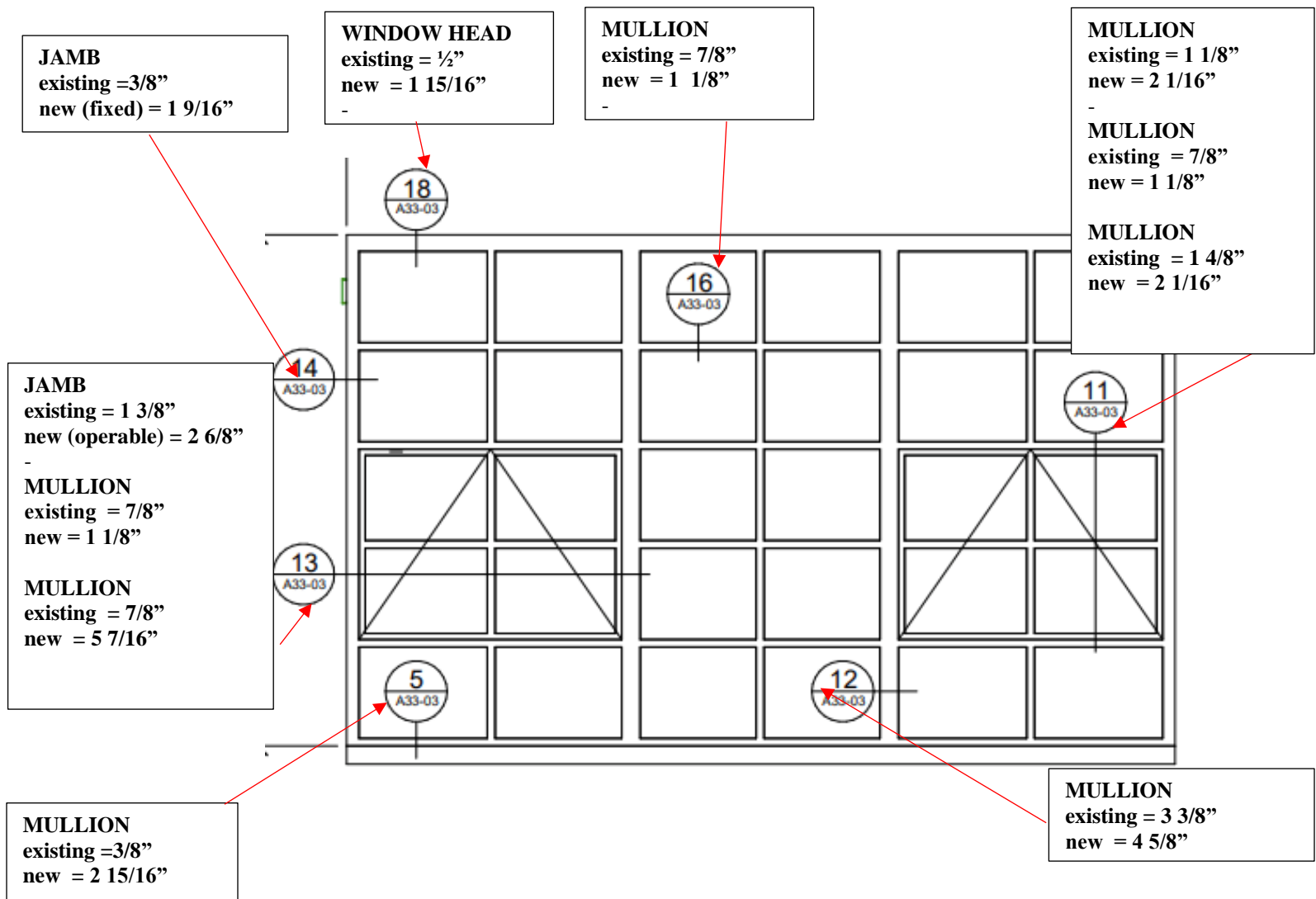
- It is staff's opinion that this building's primary architectural significance is associated with the fact that it remains as one of the city's earliest erected reinforced concrete buildings although the east elevation one-story addition and loading dock canopy are historic-age, they are not associated with the building's original construction or its historic significance and are therefore not distinctive character-defining features of the building. Rather, these elements detract from the expression of the reinforced concrete structure at the building's east elevation. Staff supports the removal of these elements.
- While the application provides product specs for the proposed new storefront doors and the private doors/window assemblies, the current submission does not include product specs for any of the proposed new single hinged public doors.
- The application proposes to rebuild the rear wall of the north elevation, one-story rear wing. However, the submission has not included a photo of the type/style/finish color, etc of the new masonry. As this wall at the rear elevation of a non-original addition and faces towards existing railroad tracks/outside of the district, staff has no issue with rebuilding the wall as long as the treatment is compatible with the building's historic character.

ISSUES

- As previously stated, the building has three types of windows: historic-age steel sash, non-historic glassblock, and non-historic vinyl with masonry surrounds/infill. **Photos of each window proposed for replacement (300 + photos in total) can be found at the following link:**
https://www.dropbox.com/s/owu3vuk50vg8mrx/230131_450%20Amsterdam%20Window%20Assessment.zip?dl=0
- Historic masonry sills remain throughout and the historic-age window openings are discernable when non-historic fenestration (vinyl and concrete and glassblock) is present.
- The application proposes to replace all windows with new aluminum sash units. All window sills will be replaced as well. A review of the demolition drawings also indicates that several courses of brick above most windows at the side and rear elevations will be removed to accommodate

the installation of new lintels (to replace the current corroded/failing steel lintels) and new taller windows. Also, window openings at the west elevation, first story, which currently include glassblock, will be widened from their original dimensions.

- The applicant has noted that they wish to replace the remaining historic steel windows due to the units' high level of deterioration. They have further noted that it will be difficult to repair these windows because of the manner in which they were installed. Specifically, according to the application, "the original installation sequence was to place the windows and mullions in the masonry opening and pour a concrete sill to hold the window assembly in place." Corrosion/rust of the windows have contributed to sill failure throughout the building.
- When reviewing the appropriateness of the proposed treatment of the building's windows, staff has posed the following questions with staff opinions/analysis in red:
 - Is the window type a distinctive character-defining feature of the building which must be repaired if feasible or replicated if deteriorated beyond repair?
 - The non-historic glassblock windows and the vinyl slider windows with masonry surrounds/infill are not distinctive character-defining features. However, the remaining steel windows are distinctive character-defining features of the building.
 - Has the application adequately demonstrated that the distinctive character-defining steel windows are deteriorated to an extent that their repair is infeasible?
 - The applicant has provided a good amount of photos of the steel windows which are proposed for replacement, and it does appear that they all display deterioration/corrosion to varying degrees. The windows likely can be repaired, but such work could not be undertaken in situ/would require their removal. Although no quote for repair has been provided in the current application, staff does acknowledge that the cost to repair the remaining steel sash will likely not be feasible due to the large number of units, their level of deterioration, the necessity to replace the existing sills and lintels, and the historic windows' method of installation.
 - If a window type is a significant character-defining feature of the building but repair is not feasible, is the proposed new window product an adequate replica of the significant window type?
 - Please see the below graphic which provides a comparison of the typical details of the existing historic steel windows versus the proposed new aluminum windows. Note that at every detail of the new windows presents wider/thicker dimension and profile due to the properties of the material from which the units are made and the double-pane glazing/thickness of the glass panes. However, staff does note that new steel sash is not a readily available and economically feasible product for a rehab project of the current scale. Also, the proposed new window product has been successfully employed as a reasonable replacement for steel sash in similar projects which involve the adaptive reuse of former industrial buildings



- If a window type is not a significant character-defining feature of the building, and therefore need not be retained or replicated, is the new window product **compatible with** the building's historic character?
 - Yes, the new style, type, material, operation, and light configuration of the fenestration proposed for replacement of non-historic age glassblock and vinyl windows are compatible with the building's historic/industrial character
- What aspects of the historic window openings themselves are distinctive character-defining features of the building which must be retained?
 - In this case, the large size of window openings, which is associated with the building's original industrial use, should be maintained as well as the placement of the window sills. Also, the size of the openings should be regular/consistent at the building's elevations which are readily visible from the public right-of-way. A review of the project's submitted drawings indicated that most window openings at the side elevations will be enlarged. However, the window openings at the front elevation will not be similarly enlarged.

RECOMMENDATION

Section 21-2-78, Determination of Historic District Commission

It is staff's opinion that the project generally conforms to the Elements of Design for the New Amsterdam Historic District and meets the Secretary of the Interior's Standards for Rehabilitation. Staff therefore recommends that the Commission issue a Certificate of Appropriateness for the work with the following conditions:

- The size of the window openings shall be consistent/regular at the building elevations that are visible from the public right-of-way (front and side elevations)
- HDC staff shall be afforded the opportunity to review and approve the final detail drawings and brick sample for the proposed rear/north elevation reconstruction. Should staff determine that the work item does not meet the SOI Standards, the item will be submitted to the Commission for review at a future meeting
- The applicant shall provide staff with the outstanding product cut sheets for the new single hinged doors which are proposed for installation at the side elevations