**Charles J. Quagliana, AIA Preservation Architect** 5641 Willoughby Road Mazomanie, WI 53560

July 8, 2022

Mr. Michael Metzger Director of Development McGrath Property Group, LLC 730 Williamson Street Madison, WI 53703

## Re: Assessment of 615 E Dayton St & 616 E Mifflin St, Madison , WI 53703

Dear Mr. Metzger,

The following is my report on these properties.

#### Purpose

The purpose of the research and observations was to investigate the properties and to provide an opinion on condition, architectural significance, integrity and context of the properties.

## **Background**

The location of these properties is just east of the Capitol Square on the western edge of the Tenney-Lapham Neighborhood. Also, part of "The Old Marketplace Neighborhood."

This is part of the original plat of Madison of 1836 known as block 135. The early history of the block bound by East Mifflin, North Blount, East Dayton and North Blair Streets is characterized by mostly single-family homes.

Research began with a review of Sanborn maps and neighborhood images at the Wisconsin Historical Society archives. I was able to view early aerial views of the neighborhood through Access Dane. I also obtained Intensive Architectural Survey information from the City of Madison files. Additional research for images was conducted on-line with the Wisconsin Historical Society photographic archives and Architecture and History Inventory.

Although the Sanborn maps and aerial photographs yielded little substantive information, they did provide visual information about the early context of the neighborhood. The 615 East Dayton Street lot was vacant at least until the 1908 Sanborn map was produced.

Several aerial photographs in the collection of the Wisconsin Historical Society were located that showed the general area. Image Whi 10328, a 1908 kite photo of the Isthmus area, shows the neighborhood east of the Capitol but the detail of buildings on block 135 are difficult to discern. Image Whi 11432 is a Birds Eye View from 1886. Again, details within the immediate area of this study are heard to determine.

Whi 27140, a street construction image from 1901, does provide a good look at the immediate neighborhood buildings, context and scale.



View down East Mifflin Street looking north near Blair Street. 1901. Wisconsin Historical Society Archives, 27140

#### **Observations**

On June 20<sup>th</sup>, 2022, Kurt Straus (Structural Engineer) and Charles Quagliana (Preservation Architect) conducted on site observations of the two properties. Elements open to view were observed, photographs taken, field notes were recorded.

615 East Dayton Street (609-617 E. Dayton Street) Historic occupant: H.E. Reynolds Warehouse and Garage Recent occupant: Northern Metal & Roofing Present use: Vacant Architectural Style: Commercial Vernacular Architect: Ed Tough. His office was located at 24 East Mifflin Street, second floor.



Image 1985 Wisconsin Historical Society, Wisconsin Architecture and History Inventory, H.E. Reynolds Warehouse and Garage, Madison, Dane, Wisconsin, 95550.

## WHS reference number 95550

Constructed 1929 (city records) with additions 1950 and 1956 There was an adjacent building directly to the east (left in photo above) no longer extant.

Architect Ed Tough was born in Scotland and educated at the technical College of Glasgow. In 1901, he began practicing as an architect. In 1911, Tough came to Madison, serving as the Wisconsin State Architect from 1911 until 1913. In private practice from 1914 until 1946, Tough executed a large number of commissions, predominantly in Madison, in style ranging from the Prairie School to Art Moderne. Although he prepared designs for diverse types of buildings, Tough specialized in schools and churches. *Katherine H. Rankin, "Intensive Study of the Historic Resources of Madison," 19954* 



609-617 East Dayton Street, June 20, 2022

### Context

In the early 20<sup>th</sup> century this block was mostly modest single-family residences. During this time, the City of Madison maintained a city barn at 610 East Dayton Street and established a city water reservoir at 618-620 East Dayton Street. The area remained relatively unchanged for decades.

In the 1950s the six hundred block of East Dayton was characterized by houses to the east and west of the subject property. By 1957 there is a linear building adjacent directly to the east of the 615 building. Sometime before 1968 the land just to east was cleared for a large parking area for trucks.

The existing scale, set back and general feeling of the street scape in the 600 block of East Dayton Street is generally consistent with two- and three-story buildings creating a strong rhythm of solid and voids and repetitive front facing gable roofs. The immediate area is dominated by two story, gable roof apartments (616-632 East Dayton) resembling single family homes, a few single-family homes, a two-story apartment building (627-641 East Dayton) and one three story apartment building with gable roofs (211 North Blair Street). The largest imposing building in the area is the historic six story Das Kronenberg Condominiums at 123 North Blount Street.



Streetscape 616-632 East Dayton Street. June 20, 2022



Rear view, 615 East Dayton Street. June 20, 2022

### Architecture

The architecture of the original building is a commercial vernacular design similar to many such garages existing in Madison during the late 1920s and early 1930s such as Schuster's Garage at 917 North Livingston Street, the Graham-Paige Automobile Sales & Service Garage at 317 West Johnson Street and the Dansin & Endres garage at 207 East Washington Avenue.

The original 1929 building is very utilitarian, designed with a strong focus on function and yet with some attention to exterior aesthetics. The idea was to provide a large economical interior space for servicing vehicles. Therefore, the interior space is tall and free of columns by the use of long span barrel arched trusses for the roof. Office space and shop/storage spaces are provided to support the vehicle service activities. A central skylight illuminates the main garage space. The interior is very industrial with exposed roof structure and brick walls.

The design of the front façade has an effective use of propositions and scale. The central portion, with the doorways, projects slightly in front of the flanking areas with the large industrial windows. The composition is tied together with limestone banding at the parapet line and several decorative limestone panels. It is likely that the two large, hinged doors originally were used as the garage entry.

The roof is in good condition and appears to be fairly new. The roof material is EPDM and this warps behind the parapet walls. Roof insulation is within the wood structure.



Details of front facade with stylized limestone rosette, banding and stylized acanthus leaf panel.

The rectangular plan addition to the west (circa 1950) provided additional service area. The front façade is a sympathetic in design with a central large garage door and flanking industrial steel widnows. The flat roof addition is set back slightly from the main façade and is slightly shorter in height. The side and back walls are painted concrete block with industrial steel windows. The interior ceiling is pressed board attached to the roof structure. The walls are unfinished concrete block.

A second additon is located at the rear directly behind the original building. This "L" shaped addition has concrete block masonry walls with steel industrial windows on the west and south and wood frame walls with wood windows on the west. The wood frame portions are covered with vertical metal siding. The roof is sheaathed with EPDM. The interior of this additon provides small offices with drywall and wood paneling walls, metal doors, broadloom carpet and suspened lay in ceilings.

Masonry walls are in good condition with isolated areas of deterioration primarily along the parapets or where rain and snow melt water flow over the masonry. The front façade masonry requires some repainting and repairs to structural cracks.

Industrial steel windows are in fair condition requiring refinishing and reglazing. Overhead service doors are in good condition but are an inappropriate style for this building. The man doors require rehabilitation and repairs.

The existing electrical and plumbing systems for all portions of the facility are apparently functional and but very dated and not fully code compliant. The heating system consists of some gas fired unit heaters within the garage spaces. An old oil-fired boiler remains but is not functional. The age and state of maintenance of the equipment indicates significant upgrades and replacement are required.

Hazardous materials are likely present. Given the age of the buildings lead paint and asbestos containing materials may be present.

## Structural

The building is a one-story industrial structure constructed circa 1929. The building is a combination of steel and wood frame with brick masonry bearing walls supported by . concrete foundations. A later masonry addition along to the west along East Dayton Street was added circa 1950, consisting of concrete masonry units (CMU) and steel roof structure. A second addition of CMU walls and wood framed walls is found to the south or back of the original building.

The structure of the building was mostly accessible, ceiling tiles were moved to gain access in the back addition.

The building structural systems appear to be mainly intact and in relatively good condition.

### Foundations

The foundations of the building are of poured concrete. There were a number of vertical cracks in the walls, all relatively minor. Some foam expansion material had been added in several cases presumably to keep out weather. Some cracks had been repaired with caulking.

Several trees growing along the foundation walls were noted that may be contributing to foundation movements. Removal of these trees is recommended.

### Floors

The floors in the garage areas are concrete sloped to floor drains. The floor slabs of the building appeared to be in good condition.

## Walls

The brick masonry walls were found to be in good condition. Areas of mortar erosion were noted in the brick masonry, as well as some cracking. CMU wall construction appeared to be in relatively good condition; some repointing is recommended for both brick and CMU wall construction. Lintels were found to be in good condition. A larger crack was noted at the parapet between the original building and the brick addition along East Dayton Street.



Juncture or ofiginal building and west addtion along Dayton Street. Note structural crack and previous repairs.



Mortar erosion along south wall of the original building.



Image showing possible water infiltration from the roof in the form of calcium salt efflorescence.



Image showing an unrepaired crack in the foundation wall separating the original building from the first addition along East Dayton Street



Image showing minor damage below roof pitch pocket drain pan.

### Roofs

The roof of the main structure is framed with four structural steel barrel arched trusses. The trusses were approximately 6 1/2 feet deep, spaced at 16' on center, and spanned the sixty feet across the entire width of the building. The bottom of the structural steel trusses was approximately 12' off of the floor slab. The structural steel trusses consisted of double angle top and bottom chords. Single angles composed the structural webs of the trusses. Steel plates composed several less structural vertical struts.

A number of the steel plate truss web struts were bent. These can be easily straightened. Otherwise, the trusses were in good condition.

Wood 2x10"s at 24" on center spanned between the four structural steel trusses and to the brick front and back bearing walls. Wood decking and plywood span between the 2x10"s. One are of roof water leakage was noted along the western wall of the garage.

The west addition along East Dayton Street is framed with two steel beams with ends supported on the exterior walls and steel posts along the original side wall of the original building. Wood 2x12's span from wall-to-beam-to-beam-to-wall of the addition. The roof is a flat roof. Some water infiltration was noted at the roof drain pitch pots, but little or no damage to the wood framing.

The roof of the rear additions was framed with 2x8's at 16" centers. The framing appeared to be in good condition; no staining was noted on ceiling tiles of the spaces below. A portion of the rear additions is larger than the other longer portion. a segment of the roof was supported with a large structural steel beam lodged in the masonry wall of the original building and supported by a column in the corner of the wall at the two building intersections.

The CMU and metal panel walls of the rear additions appeared to be in good condition.

The floor slabs of the building appeared to be in good condition.

The rear of the original building is lower than the surrounding soils. a short retaining wall was present along the face of the rear additions. This wall appeared to be in good condition and performing well. Some debris was present at the entrance to the original building from a lack of proper drainage.

## Findings

## Architectural Significance

The design of this service garage is typical of similar garages within the neighborhood and the city at the time of construction. This is a utilitarian building focused on function with a front façade more embellished than the typical east side garage of the period. The scale, proportion and setback allow it to serve as a good part of the streetscape. The interior of the building is utilitarian and functional. It is not unique as it is one of many similar remaining arched steel truss garage interiors Madison's east side.



Interior of the original service garage looking north. June 20, 2022

#### Architectural Integrity

Architectural integrity is intact. I would estimate that 90% of the original design features and physical components remain.

## Architectural Context

The context of the adjacent parcels has changed over time but the scale of the original building and the Dayton Street addition fits in well with the rhythm, setback and height of the current streetscape.

#### Condition

Overall, the condition of this property is good to fair. The interior is in good condition for a building of this type and age. Various exterior components require maintenance and rehabilitation. The MEP systems require significant upgrades or replacement. The building appears stable and generally weather tight.

Exterior masonry walls are good to fair. Isolated areas of deterioration are noted and will require repointing with some brick replacement. This includes the parapets, chimney and area on the front façade., The roof appears to be relatively new and in serviceable condition. Skylights are relatively new and in good condition.

#### Historical Significance

Although not part of this study, it should be noted that this building has some relationship to the Reynolds family who have been substantial business and political leaders in Madison and in this neighborhood for nearly 150 years.

Structural

Overall, the condition of the structural systems is good. There are some isolated areas of repairs noted such as at roof leaks, parapet walls and the junction of the original building and west addition at the front façade.



Deterioration of the east parapet. Common bond brick pattern.



View of the EPDM roof on the original building (with new skylights) and south addition. Poor masonry condition at top of chimney.



View of the office are within the original building. Note brick masonry walls and industrial steel windows.



Deterioration of the right-side front door



View of the interior of the west addition.



View of the west side of the west addition. Note the deteriorated steel window glazing and paint finish and the paint finish on the concrete block.



*View of one of the work area/offices in the south addition.* 



View of interior of main garage original building cleanup station.

616 East Mifflin Street Historic Occupant: Edward S. and Tina Reynolds House Recent Occupant: Two apartments Present use: Vacant Architectural Style: Vernacular, Front Gabled Architect: Ferdinand Kronenberg. His office was located at 18 North Carroll Street.



Image March 1974 Wisconsin Historical Society, Wisconsin Architecture and History Inventory, "Edward S. and Tina Reynolds House, Madison, Dane, Wisconsin, 108382

WHS reference number 108382 Constructed 1910 (city records)



616 East Mifflin, June 20, 2022

Ferdinand Kronenberg (1877-1944) whose work spanned nearly five decades in Madison, was born in Germany. At the age of eight, he immigrated with his parents to the United States. Little is known about his formal architectural training, but he is believed to have received his early training and experience in the offices of practicing Madison architects-possibly with either J.O. Gordon or Lew F. Porter. He lived and worked for most of his life at various addresses on and around Williamson Street in Madison's isthmus. In 1902, he entered into practice with John T.W. Jennings to form the Jennings & Kronenberg firm. That partnership lasted until 1907 when Jennings moved to Arkansas and

Kronenberg worked alone. During the 1930s Kronenberg did architectural work for the Madison Parks Department and the Board of Education; during World War II, he was a sectional engineer for the War Department at the Badger Ordnance Works in Sauk County.

Many of the Kronenberg buildings survive today and give Madison its recognizable architectural identity. His residential designs are not as recognizable as his nonresidential work. Many of the residential designs were for frame houses that were often subsequently altered. However, there are some very impressive Kronenberg residential structures that survive, most notably two large Queen Anne style houses at 1306-1308 Jenifer Street and at 416 North Butler Street in Madison. Some consider his best period revival style residential building to be the Schumaker-Bollenbeck house at 104 East Gorham Street

(The description above is adapted from an article by Mary Clark in the Dane County Historical Society Newsletter, Vol. XXVI, 4, Winter 2007.) Dane County Historical Society

"In 1888 the recently widowed Anna Gault Reynolds (1837-1906) founded a livery stable and hauling firm that operated out of a barn located behind her house at 616 E. Mifflin Street (not extant). Her firm began with four rigs and ten horses. Its modest success soon allowed her to build a new house next door at 614 E. Mifflin Street (gone). Her eldest son, Edward S. Reynolds, eventually became the head of the firm and began the specialty of heavy hauling that came to distinguish his company from other trucking concerns.



The Reynolds Dray line in 1900. Wisconsin State Journal 3/3/1961

In 1910 Reynolds and his wife Tina moved the original house at 616 E. Mifflin back on its lot and built the substantial brick house, designed by local architect Ferdinand Kronenberg. Here they raised their six children and Reynolds served for many years as the council member of the district.

When Edward Reynolds died in 1929, his eldest son, Henry Reynolds, took over the management of the firm. Later he was joined by his brother, William. Together, the two grandsons of Anna Reynolds built the firm--Reynolds Transfer and Storage--into one of Wisconsin's largest hauling companies. In 1960 Henry Reynolds was elected mayor of Madison.

Today the firm is operated by his sons, Edward and David Reynolds. The present headquarters of the firm, now the neighborhood's oldest continuously operated business, is located at 725 E. Mifflin Street." Old Market Place Neighborhood walking tour guide. Madison Landmarks Commission and Old Market Place Neighborhood Association, 1991.

Wisconsin Historical Society, Wisconsin Architecture and History Inventory, " Edward S. and Tina Reynolds House, Madison, Dane, Wisconsin, 108382

## Context

In the decade of the 1950s Mifflin Street was dominated by single family homes on the north side of the street and the Kupfer Foundry and Machine Shop at 627-629. The City Market was in the next block east at the corner of North Blount Street.

The scale, set back and general feeling of the existing street scape in the 600 block of East Mifflin Street is generally consistent with two- and three-story buildings creating a strong rhythm of solid and voids and repetitive front facing gable roofs on the north side of the street.



616 East Mifflin and adjacent houses, June 20, 2022

## Architecture

The architectural style of this property is vernacular composition design. This property is typical vernacular small-scale, front gable housing of the early 1900s on Madison's east side. Small in scale, simple rectangular shape, two floors with a basement and an unfinished attic.

Although designed by a well know architect, this is a very modest house as compared to his other residential work fitting in well with the surrounding neighborhood houses. It has minimal distinguishing architectural features including the full width front porch and side facing dormers. The exterior walls are rough faced concrete block with hard red brick walls above. The stone and brick façade is in generally good condition.

Originally a single-family residence it has been converted into two apartments. One on first floor, one on second floor.

Within the house the basement is open and unfinished. The majority of the first floor appears to be original. The kitchen and bath have been remodeled. Original walls are plaster on lath walls. Original two ¼" oak floors, ten" wood base and 4 1/2" wood trim remains. Ceilings on first floor are nine' tall. Many five panel doors with original hardware remain. The original front door and hardware are intact. There are two stairs to second floor. A front formal stair and a utilitarian rear stair. This portion of the house is in good condition. Original window shave been replaced with inappropriate aluminum units.

Many of the original second floor bedrooms remain but the front area of the floor has been remodeled for the apartments kitchen and living room. This floor retains original wood windows and storm windows, and they are in fair condition. Overall, this floor is in good condition with a high degree of remaining original fabric. There is some plater ceiling damage from previous roof leaks.



View of the west façade, note the rusticated concrete block foundation, limestone belt course and running brick masonry with limestone sills. Area of window infill illustrated.



View of the east façade. Note flat brick arches over windows, decorative soffit treatment and original second floor windows. Areas of inappropriate repointing illustrated.



Area of settlement at southwest corner of house at junction with porch. Significant foundation cracking. Rain and snow melt water ponding here.

The wood porches are in good to fair condition overall. The flooring is in poor condition and in need of replacement. The architectural shingles of the main roof are in good condition with many years of serviceable life remaining. The porch roofs are original tin with folded joints. These are in good condition and serviceable.

The upper to feet of the chimney is in poor condition and in need of repointing.

Hazardous materials are likely present. Given the age of the buildings lead paint and asbestos containing materials may be present.



View of southeast corner of front porch. The limestone pier cap has rotated. Evidence of previous repairs of full mortar replacing brick.



Unfinished basement area. Line of heaved floor slab shown.



View of first floor living room from dining room.



View of first floor kitchen. Circa 1970.



Second floor stir landing, front formal stair.



Second floor living room, former bedroom.



Original brass door handset and mortice lock.



Unfinished attic looking toward Mifflin Street.

#### Structural

The building is a two-story residential structure constructed circa 1910. The home is wood framed with wood framed front and back porches. The foundations are a combination of poured concrete and concrete block. The exterior walls of the home are wood studs with brick veneer.

The framing of the home was accessible in the basement and in the attic. All other framing was concealed within finishes. The porch framing was not accessible.

The home appears to be mainly intact with only minor alterations in the structural systems.

#### Foundations:

The foundations are in good condition with several minor exceptions. Cracks were noted in the walls at random intervals. The cracks appear to be older; paint in the basement over these cracks appeared to bridge the cracks for the most part. The color and condition of the paint suggest that it may have been placed in the 50's or 60's.

The slab and interior column footings appear to be supported on heaved soils. The slab along the entire exterior perimeter of the home appears to be 1" to 2" lower than the central areas of the slab and column foundations. We suspect that this is due to the likely presence of relatively poor soils in the neighborhoods along portions of East Washington Ave.

Some settlement was noted on foundations supporting the front and rear porches. settlement on the front porch appeared to be relatively minor; rotation of the eastern most pier was about one-half" of tilt toward the street and approximately 1" of settlement on the western most front pier. Some oddly configured masonry repairs were added to correct some of the earlier movements.

One pier at the back porch of the home was significantly failing and rotated inward to the home.

It was noted that the rear entrance to the basement was not founded on any foundations at all.

## Floors:

The floors are in generally good condition. The first and second floors were two-by-ten at 16" centers spanning side to side on the home. The attic floor was framed with 2x8's at 15" centers. A central wood beam in the basement below first floor supported the middle of the home and bearing walls to the second floor and attic floor. The first and second floors appeared to be relatively firm and adequately stiff; the attic floor was notable bouncier.

A slight general slope was noted from back to front of approximately 1" overall in the length of the home.

It was noted a significant structural defect in the first-floor framing. Nearly half of the floor joists in the basement were found to have been modified near their support at the central beam. Ends of joists had fastened plywood gussets extending the floor joists to the central beam. The plywood appears to have been placed later than the original home construction; plywood technology became more widely used long after the original build date of the home.



Modifications to floor joists and main beam in basement.

It was noted that partitions on the first floor had several cracks. It is believed that joist framing below these walls is deforming or sagging over time allowing the walls to shift. This a relatively minor issue; one that can be addressed with periodic maintenance.



Image of crack in first floor plaster wall of living room.

The porch floors appeared to be relatively spongy. We suspect that the framing is relatively lightly framed with 2x's at 16" centers: possibly 2x8's. Some deteriorated decking was noted suggesting that there may be some damage to the porch framing as well.

## Roofs

The roof appeared to be in good condition. The main roof was framed with 2x4's at 16" centers. The roof was relatively steep, framed with approximately 10:12 to a 12:12 pitch. Collar ties were placed on each set of rafters in the upper 1/third of the rafter height. One gable dormer was present facing eastward. The roof lines appeared to be true, straight, and planer.

Generally, 2x4's at 16" centers would be considered light for the span of this home. There is little doubt that the knee walls load sharing the roof load to the attic floor are contributing to the adequate support of the roof, at the sacrifice of attic floor capacity.

Under the center of each of the rafter spans, knee walls had been added to help the roof 2x's support roof loads. The knee walls bear on the attic floor.

The porch roofs were inaccessible, but appeared to be in good condition with little or no weather infiltration.

# Walls

The building walls appeared to be in good condition. They were wood framed with twoby-four or two-by-six stud walls and brick veneer. It is likely from the age of the building that the framing method was balloon framing for the exterior walls. The framing at the end walls in the attic (2x4's at 16" centers) contained blocking between studs at the attic level; a platform framed system would have floor decking extending out to the exterior walls, not blocking.

Generally, the walls appeared to be in good condition, although issues were found in the masonry veneer, including,

- Cracks in masonry lintel arches
- cracked wall corners
- cracked stone lintels and water tables
- eroded mortar
- inappropriate Portland Cement mortar repairs
- deteriorated
- mortar and brick in the chimney above the roofline.

Cracked walls suggest wall movements. Most of the masonry cracks in the lower half of the homes height appeared to be a result of minor foundation movements.



West masonry wall. Typical area for mortar repointing.



*Typical open joints in flat arch over window.* 



Crack through foundation wall, repaired with hard Portland mortar.



Deteriorate front porch floor and tilting brick column.



Second floor original wood window and storm



Looking down on original tin roof on rear porch. Tin with folded joints.



Step crack in brick masonry at corner of front porch. Inappropriate Portland mortar.

#### Findings

#### Architectural Significance

The architectural significance of the property is moderate. Local significance. It has a strong presence on the streetscape through building form, massing and setback. The house was designed by noted architect Ferdinand Kronenberg and is much more modest than his typical residential work, but the house fits the neighborhood.

#### Architectural Integrity

This is a highly intact example of single-family neighborhood housing at turn of 20<sup>th</sup> century. The overall architectural integrity of the property is highly intact. I estimate that 75% of the character defining features or elements, interior and exterior, remain intact.

### Architectural Context

It is my opinion that the architectural context of all the property is quite good. It relates well to the streetscape in setback, height, scale and proportions.

616 is in generally good condition for a residence of its age. Mostly intact, no obvious maintenance required, little deterioration, retains a high degree of utility and life expectancy

### Condition

616 East Mifflin is in generally good condition for a residence of its age. Mostly intact, no obvious significant maintenance required, little deterioration, retains a high degree of utility and life expectancy.

#### Historical Significance

Although not part of this study, it should be noted that that based upon a review of city directories, the Reynolds family has lived in the Mifflin Street area this since the late 1800s. There is certainly a connection between this house, the Reynold's family and their linkage to the business and political world of Madison.

## Structural

Generally, the house is in good condition and stable with several issues to resolve. Portions of the basement floor slabs will need to be replaced, a new central support beam will be needed for the first floor and multiple isolated areas of masonry repair and repointing are necessary.

Sincerely,

Charles J Quagliana

Charles J. Quagliana, AIA Preservation Architect