

About the Report

The Milwaukee Public Museum is moving to a new facility in downtown Milwaukee's Haymarket neighborhood. Milwaukee County, through it's Economic Development Division, and GRAEF, in partnership with Bear Real Estate Group and CG Schmidt has conducted a due diligence investigation of the current Milwaukee Public Museum facility located at 800 West Wells Street, Milwaukee, Wisconsin. The building is planned to be vacated late 2027 or early 2028, after the new museum estimated opening in early 2027. The goal of this project is to gain an understanding of the current state of the facility and its future value, pros and cons of potential development and land use scenarios, with community benefit in mind.

Acknowledgments

Prepared For:



Milwaukee County Economic Development Division

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Introduction



Project Background

This report contains Milwaukee County Economic Development's due diligence efforts to assess the future development potential of the current Milwaukee Public Museum (MPM) located at 800 W Wells Street (tax parcel 3611701115), and the land it is situated on, hereafter referred to as the "Subject Property". This effort underscores the County's commitment to ensuring that the Subject Property's future use aligns with the interests of the community while maximizing its value and long-term benefits.

In August 2024, Milwaukee County's Economic Development Division released a Request for Proposals (RFP) for due diligence services for the analysis of the Subject Property. The team of GRAEF, Bear Real Estate Group, and CG Schmidt was selected by Milwaukee County's Economic Development Division and entered

into a Professional Services Agreement with GRAEF at the end of 2024. Work began in earnest in early 2025.

Project Purpose

The project purpose was to undertake due diligence and preliminary site development analysis activities for the redevelopment or adaptive reuse of the Subject Property. Project deliverables included an ALTA (American Land Title Association) survey, engineering and architectural assessments of the building and land, and other investigation that aid in determining the current state and value of the property. This report includes an overall analysis of various options for use of the land, with recommendations and potential obstacles summarized, to enable the County to make an informed decision for divestment.

Project Site

The project site is described below in terms of the Subject Property itself and the surrounding area (see Appendix A-1). Understanding the site context is particularly important given the dense urban environment. There are also numerous buildings, roads, parking structures and their foundational supports, tunnels, and connections which may influence future usage of the site. Additionally, the City of Milwaukee's policy direction to improve downtown and increase population in the City has implications not only for the Subject Property, but also its role in the greater urban fabric.

Project Site Description

The Subject Property is about 3.7 acres in area and has a challenging elevation slope across it. The site topography slopes generally from a high elevation on the west end to a low elevation on the east end, with a total elevation change of about ±25 feet. The highest elevation located toward the west end of the Subject Property is about 625 feet above sea level, which falls to about 602 feet above sea level at the east property line. The low elevation is at the northeast corner of the Subject Property at about 601 feet above sea level. There is a sudden rise in topography from east to west at about the midpoint of the property, about where N 8th Street once existed.

Provided below and in Appendix A-4 are additional details of the various existing buildings and features on the site and the connections between them.

There are four buildings on the Subject Property including the original Museum Building built in 1962. The MacArthur Square / Wizard Wing, the Discovery World Building, and the Daniel M. Soref Theater (Dome Theater) and Atrium were all constructed as additions to the original building.

In addition to the buildings, the site includes a surface parking lot; a parking, loading, and maintenance drive; and landscaping as follows:

- Surface parking: The surface parking lot is on the southwest corner of the site and has parking for 31 vehicles that access it from W Wells Street. Northern portions of the lot are located within a designated maintenance easement, and the lot is used by County staff.
- Parking, loading, and maintenance drive: The loading area contains parking spaces for approximately 24 vehicles, a dumpster area, fire lane, and loading zone, and can

be accessed from N James Lovell Street. Portions of the north side of this area are within a driveway easement located on the south edge of the property to the north.

Landscaping: The perimeter of the site includes trees along the property's south, west, northwest edges, and an additional tree on the northeast corner. There are native raingarden plants and a subsurface detention area on a southeast portion of the site that are protected via an easement which will end in 2027. There is also a green roof on part of the original building that has no easement, and a time-lapse video of the green roof installation is sometimes featured outside the museum gift shop. Mowed grass is provided along the northwest and north portions of the site.

Project Context Description

The Subject Property is on the northwest corner of W Wells Street and N 7th/N James Lovell Street. It publicly faces south along W Wells Street. In addition to W Wells Street to the south, it is bounded by N 9th Street to the west, MacArthur Square and a parking garage to the north, and N 7th/N James Lovell Street to the east

With the exception of MacArthur Square, development in the vicinity is highly impervious, with a grid network of urban streets, sidewalks, surface lots and garage parking, and buildings. The Subject Property is squarely in Milwaukee's Downtown Neighborhood, the economic and symbolic center of Milwaukee. Given its function as a cultural, financial, educational, and historical neighborhood, the degree of urban imperviousness is neither unique nor unexpected.

Also in the vicinity are underground on-off ramps to 1-43. The ramps transition from the surface

along W Kilbourn Avenue moving westward to underground beginning west of N 6th Street. The more southern of the two - the eastbound off-ramp to Kilbourn Avenue - travels below the Museum Building and is discussed further in the Transportation & Parking section of the Site & Building Analysis chapter in this report.

Previous Site Research

The Subject Property has been the subject of previous research in anticipation of relocating the Milwaukee Public Museum. Previous research that was referenced as part of this study included the following:

ALTA/NSPS Land Title Survey

- Created for the City of Milwaukee in areas specified as Parcel A and Parcel B north of the Subject Property, by raSmith, February 14, 2023.
- This title survey covers City of Milwaukee properties northeast and north of the Subject Property site and south of State Street, with complicated boundaries and numerous easements shown.

Appraisal Report: Milwaukee Public Museum Property

- Created by The Nicholson Group LLC, January 4, 2019 (appraisal date).
- This appraisal report was for the Subject Property plus three independent but connected buildings. The appraisal determined the individual buildings had an aggregate value of \$11,400,000 and an aggregate use value of \$14,300,000. Those values are each the summation of three independent building values and NOT the market values of the overall property.

ALTA/ACSM Land Title Survey

- Survey was for the Junior Achievement in Lots 8, 9, 15 and 16 and part of the vacated East-West alley in Block 179 in the Plat of the East ½ of the Northwest ¼ of Section 29, T7N, R22E, City of Milwaukee, Milwaukee County, State of Wisconsin, by Kapur & Associates, Inc., August 29, 2008.
- This title survey covers the property beginning along a roughly east-west line along the north side of the existing Dome Theater and extending roughly north by 109.67', forming a rectangle adjacent to and west of N James Lovell Street. The property includes the Discovery World Building addition, a four-story concrete building north of the dome theatre.

Structural Evaluation of the Milwaukee County Public Museum (08-4457)

- Created by Graef, Anhalt, Schloemer & Associates, in October 1994.
- This report resulted in the short-term repairs and long-term remediation that included long-term waterproofing of the Wizard Wing and garage and installing insulation and a vapor barrier on inside face of exterior building walls.

Site & Building Analysis

Ownership & Land Use

The property is owned by Milwaukee County and is actively used as a museum. Land uses adjacent to the property, as shown in Appendix A-2, include the following (moving clockwise around the Subject Property starting at the southeast corner perimeter):

- South: Milwaukee Fire Department Administration Building with surface parking and minimal landscaping, and the rear of the Milwaukee Public Library's Central Library building.
- Southwest: Wisconsin Club.
- West: Clas Plaza and the Milwaukee County Courthouse.
- North: MacArthur Square and a Cityowned parking garage.
- East: A Milwaukee County Service Center for the Wisconsin Department of Revenue.
- Southeast: A parking area with landscaped edges for Stella's: A Cocktail Dive and for a multi-story building called Community Advocates Inc.

Transportation & Parking

In Milwaukee, downtown zoning districts do not have off-street parking requirements, and where parking requirements do apply, such requirements vary by use. The Subject Property is bordered by W Wells Street to the south, a two-way street with parallel parking and bike lanes on both sides; N 7th/N James Lovell Street to the east, a two-way street with parallel street parking on the east side only; and N 9th Street to the west, a one-way street heading south with parallel parking on the west side. There is a surface lot on the west portion of the Subject Property with approximately 31 spaces. There is also a maintenance drive with access off N James Lovell Street with about 24 parking spaces, which is partially within a driveway easement.

WisDOT Ramps: Directly adjacent to the north side of the Subject Property are WisDOT ramps that provide underground access to and from northbound I-43. The exit ramp is partially located under the 'Wizard Wing' addition to the existing museum. The ramp tunnels and buildings are structurally interconnected.

MacArthur Square: The City-owned MacArthur Square parking structure is located directly north of the Subject Property. The north side of the existing museum has direct pedestrian access into the parking structure. The primary vehicular entrance/exit into the parking structure is located off N James Lovell Street and a secondary entrance and separate exit can be accessed off N 9th Street. The structure itself provides parking for 1,445 vehicles, and this public structure is shared with the surrounding district.

MacArthur Square's broad greenspace east of the Milwaukee County Historic Courthouse is what remains of a public greenspace plaza aligned with the presumed City Beautiful movement.

This was a movement in planning and urban design and was popular in the late 19th and early 20th centuries. It aimed to beautify cities and foster civic pride in a functional environment. MacArthur Square has a long history of planning dating all the way back to the late 1800's, when it was envisioned as a grand Civic Center offering cultural, recreational, and institutional activities.

Today, MacArthur Square sits atop the noted parking structure and is flanked by civic buildings that tend to isolate it from the surrounding urban fabric. Borders of MacArthur Square are Milwaukee's W State, W Wells, N 4th, and N 9th streets. Elevated MacArthur Square primarily consists of monoculture lawn interspersed with wide paved walkways and plazas. Buildings around it are generally Neoclassical in style and, despite their presence, provide limited activation of the space.

Site Utilities

The Subject Property's existing utilities are primarily located subsurface within road right-of-way (ROW). For instance, large-diameter sanitary and combined sewers exist within the adjacent ROW of W Wells Street and N James Lovell Street. These ROW also contain various communications, electrical, and natural gas utilities. Adjacent to the property are both private utilities and limited public utilities within easements.

The most significant utility is an approximately 10' by 10' steam tunnel carrying a 14" high-pressure line located along N 8th Street extended through the Subject Property. Utilities to consider in future Subject Property reuse scenarios include:

Sanitary & Storm Sewers

Combined sanitary and storm sewers are in the Subject Property's adjacent ROW and are assumed to have sufficient capacity based on size and current land use in the sewershed. Further discussions with the City of Milwaukee and the Milwaukee Metropolitan Sewerage District (MMSD) regarding available sewer capacity credits will be required to reestablish new sanitary and storm sewer connections. In the future, each building on the Subject Property may have individual building service lines that connect to private main sewers located within the area of N 8th Street extended. Ultimately, private main sewers serving the Subject Property will connect to the combined sewers in W Wells Street or in N James Lovell Street.

Domestic Water and Fire Protection

Public water mains are currently located in W Wells, N 8th, and N James Lovell Streets. For any future Subject Property redevelopment, individual buildings will require individual domestic and fire protection water connections. A fire protection loop consisting of an 8" water main and fire hydrants should be planned for the north side of Subject Property in a public easement or elsewhere on site. Connections should be made to mains in adjacent ROW with water meter vaults and backflow protection at each connection point to the public system. Buildings should be individually metered beyond the meter vaults.

Private Utilities: Gas & Flectric

Private utilities are available in the adjacent ROW and will require further evaluation and coordination in conjunction with the utility owners to determine needs and available capacity of existing systems. Private utility capacity expansions will be at the discretion of the private utility owner.

Stormwater Management

Stormwater management at the Subject Property is currently provided via traditional

grey infrastructure inlets and conveyance away from the Subject Property, as well as via green infrastructure that includes a green roof, bioretention/native vegetation infiltration, and a cistern. The surface and subsurface features were cost-shared with MMSD funding and have a conservation easement that expires in 2027. Subsurface features should be investigated and included in site plans to preserve or remove them.

Development and redevelopment will be subject to the requirements of MMSD's Chapter 13 Surface Water and Stormwater rule implemented through the City of Milwaukee's Chapter 120 Storm Water Management Regulations. The following will apply:

- Land disturbance of at least 1 acre or net impervious surface increase of 0.5 acre requires a stormwater management plan, with various nuances outlined in Chapter 120 of the regulations.
- Development/redevelopment is expected to disturb between 3.5 to 5.0 acres, and so the runoff release rate requirement is reduced by 15% for the 2-year, 100-year, and 24-hour storm events.
- The Subject Property is located within the Combined Sewer Service Area (CSSA). As such, stormwater runoff will be conveyed to and treated at the Jones Island Water Reclamation Facility, and will not be subject to on-site total suspended solids removal requirements.
- Green infrastructure must be considered and is anticipated with future development/ redevelopment. It will require a detention volume equal to at least one-half inch multiplied by the total area of redeveloped impervious surface.
- Green roofs, bioretention/rain gardens, and underground storage are all

anticipated best management practices infrastructure that will be considered and shown in future site plans.

Building Features

There are four separate building structures on the Subject Property that comprise the Milwaukee Public Museum complex of buildings. Those include: the original Museum Building, the Wizard Wing subterranean addition that includes a public square at surface level, a connected former Discovery World building, and the Daniel M. Soref Theater (Dome Theater) and Atrium.

Original Museum Building

The primary Milwaukee Public Museum building is a +417,449-square-foot (SF), sevenstory concrete structure and was constructed between 1960 and 1962. The building includes a full basement and mechanical penthouse. The floor-to-floor heights of this building range between approximately 13 feet to 20 feet. The building is nearly 77' tall from the ground floor at the main entry to the roof, and 64' tall from the first floor to the roof. The tower building roof is 125' from the ground floor to the tower building roof, and 112' tall from the first floor to the tower roof. The building was designed for public use and the museum floors are designed for a live load of 150 lbs/SF while the remaining tower floors are designed for 100 lbs/SF, both of which exceed code requirements for most occupancies.

MacArthur Square / Wizard Wing Addition

A cast-in-place concrete parking structure extending to the north of the primary building and connecting to the off-site Milwaukee County Safety Building includes a multi-level pedestrian plaza and green space at the roof.

MacArthur Square parking garage supports three levels of parking and spans partially over the Kilbourn Avenue and expressway tunnels. Tunnel structures were erected as part of this development project and the tunnel framing and foundation elements are integral with the MacArthur Square parking structure.

Also as part of this project, a connector element was erected north of the Subject Property to connect the parking garage to the north face of the original Museum Building. This building (i.e., Wizard Wing) is partially supported by the original museum's pile caps while structural steel angles attached to the original Museum Building foundation walls support cast-in-place concrete slab edges at multiple levels. The roof and elevated slabs within this connector are continuous elements that constitute the floor of publicly accessible spaces (including the originally proposed Planetarium) and the Kilbourn Avenue/I-43 ramp tunnel ceilings. These slabs are integral to one another.

Discovery World Building

The original four-story, 44,440 SF building to house Discovery World was constructed east of the original Museum Building. Discovery World has since vacated and relocated to a new building on the lakefront; and as such, this building has been vacant since about 2005. The building is 58' from the ground level to the roof, and varies in height depending on the point of reference. The building is composite steel construction with steel columns supported on pile caps and deep pile foundations. The building façade is comprised of precast concrete panels.

1996 – Daniel M. Soref Theater (Dome Theater) and Atrium

An 18,080 SF dome theater featuring a six-story projection screen was constructed as part of the museum's modernization efforts. The theater is 63' from the exterior ground level to the top

of the dome, and measured from the inside is 48' from floor to ceiling. The dome theater is constructed of composite steel framing and its steel columns are supported on grade beams, pile caps, and deep pile foundations.

Structural Features

The structural integrity of the four MPM building complex is generally intact, but with signs of deterioration and age as follows:

Original Museum Building

The 2025 structural analysis reported the building's load-bearing systems are currently functioning as intended. However, multiple areas of the Museum Building basement show signs of deterioration consistent with water infiltration in various locations – primarily at the roofs and basement. As noted in section 7 of Appendix D-1, this along with other deferred maintenance items pose significant risks to the structural integrity of the buildings.

MacArthur Square / Wizard Wing Addition

The MacArthur Square parking garage immediately north of the Subject Property supports three levels of parking and spans partially over the Kilbourn Avenue/I-43 ramp tunnels. The tunnel structures, framing, and foundation elements are integral to the MacArthur Square parking structure.

As part of the museum addition, a connector was erected to connect the parking garage with the Museum Building. The Wizard Wing is partially supported by the original museum's pile caps and structural steel angles attached to the original Museum Building. Foundation walls support cast-in-place concrete slab edges at multiple levels. The roof and elevated slabs within this connector are continuous elements

that constitute the floor of publicly accessible spaces and the Kilbourn Avenue/I-43 ramp tunnel ceilings. These slabs are integral to one another, and need to be considered in any demolition scenario.

The 2025 structural analysis reported the Wizard Wing shows signs of movement potentially associated with differential settlement between the MacArthur parking structure and the Museum Building tower. Structural elements that were repaired and reinforced during a 2021 repair project show subsequent signs of movement, with cracking evident in non-structural finishes.

Discovery World Building

The 2025 structural analysis reported that the overall structure is in good condition, showing no visible signs of maintenance or performance issues. The building is currently being used as storage and is not being maintained as it may be if used as intended.

1996 – Daniel M. Soref Theater (Dome Theater) and Atrium

The 2025 structural analysis reported that the building is in apparent good condition, with no signs of significant maintenance issues. This building was inaccessible at the time of GRAEF's on-site review and as such, a visual inspection of the interior was not conducted. An understanding of the condition of this building is based on conversations with MPM staff and a thorough review of the existing documentation.

Regulatory Considerations

Zoning

The City of Milwaukee's zoning code regulates how properties within the City can be utilized

from a land use perspective. The property is zoned C9D(A) (Appendix A-3), which is intended to be a "civic activity district designed and intended to serve as a regional center for office, government, educational, cultural and recreational activities. Retail uses should be limited and should be signed to serve employees in the district, patrons of cultural, recreational, or educational activities, or district residents."

Depending on future use, projects may be able to fall within existing zoning regulations. Alternatively, the City would support necessary zoning actions; including rezoning to another downtown zoning district, to facilitate a denser development than allowed by the current zoning designation.

Easement, Covenants, and Legal Considerations

The scope of work for due diligence efforts included conducting a survey meeting strict standards of the American Land Title Association, or ALTA, and the National Society of Professional Surveyors, or NSPS. Surveys meeting these standards are professionally delineated, include easements, and investigate public rights-of-way and any other documented restrictions on land - both at the land surface and above/below grade. Conducting this survey is crucial to Milwaukee County's examination of the value and possibilities of the Subject Property and is also a necessary and customary step to obtaining comprehensive Title Insurance for buyers and sellers of land.

Historical property activity was reviewed for the Subject Property to thoroughly determine property boundaries and to identify easements and other restrictions on the parcel comprising the address at 800 W Wells Street in the City of Milwaukee (also referred to as 710 W Wells Street), with a legal Tax Key 36-11701115. A memo summarizing that effort is provided in Appendix C-1. In addition to a review of records for the property at 800 W Wells Street, two prior adjacent site ALTA surveys were reviewed. Those included:

- ALTA/NSPS Land Title Survey dated February 14, 2023: This covers the area immediately north of the Subject Property.
- ALTA/ACSM Land Title Survey dated August 13, 2008: This covers the property that hosts the now-vacant Discovery World building addition immediately east of the Subject Property.

The complete memo for this analysis makes recommendations for further follow up by Milwaukee County on issues found within the Subject Property and available adjacent ALTA survey (see Appendix C-1).

Historic/Space Preservation

The Milwaukee County Historic Courthouse (reference Appendix A-2) is listed on both the National and State of Wisconsin Register of Historic Places. Potential newly constructed building heights on the Subject Property and views of the existing Historic Courthouse would be critical components of historic preservation.

The current Milwaukee Public Museum and associated building structures vary in height from 58' at the Discovery World Building, to 125' in height for the Museum tower structure. The Site Use Development Analysis chapter of this report outlines redevelopment examples with different possible building heights, with a proposed heights ranging from 120' to 180'.

The City's Downtown Plan recommends maintaining a policy of no building height limits in most of Downtown.

Other Impacts

WisDOT Ramps

As described previously, structural concrete slabs that are integral to the MacArthur Square parking structure and Kilbourn Avenue/I-43 ramp tunnels are gravity-supported by the north foundation walls of the Museum Building tower. These slabs will require complete demolition back to a suitable self-supported column line or re-support with any new building or structure alternative. This is described in detail in an appendix to the Structure Condition report found in Appendix D-2.

Site Use Development Analysis

This chapter provides a description of the progressive levels of screening undertaken for future development and use of the Subject Property. The process occurred at two levels and includes:

- 1) 1st Level: Initially a high-level screening of five option types or categories, with only the option of full building removal and redevelopment surviving.
- 2) 2nd Level: Founded in the option of full building removal and redevelopment, a closer evaluation of nine land-use-based feasible alternatives through the lens of a developer relative to what the City and County value.

High-Level Screening

This was the first initial, high-level (or fatal flaw) screening where site reuse types were considered. Initially there were five option types the County considered to ultimately provide the preconditions for redevelopment of the Subject Property. Those included: i) direct reuse, ii) adaptive site reuse, iii) partial MPM buildings removal and redevelopment, iv) full MPM buildings removal and redevelopment, and v) no removal/no reuse/abandonment. These five option types are described and briefly screened below in the context of constraints; the Consultant Team determined it could not recommend four of the five option types.

In terms of screening for feasibility, three fatalflaw factors were considered when evaluating the options. These are factors outside the County's ability to change, and they include 1) the lack of a future market for a stated use or purpose, 2) insurmountable issues with the existing site buildings, and 3) strong misalignment with County and City goals.

The five option types are screened below:

Direct Museum Reuse

This option assumes the existing MPM buildings on the Subject Property are reused as another museum. There are extensive conversion expenses associated with this option which is not recommended because of the lack of a market for a large museum tenant in Downtown Milwaukee. The existing Museum Building is over 450,000 square feet of which nearly 50% is support and storage for the collections and curation. The likelihood of finding a museum tenant that is interested in this large of a space that is not designed with current-day museum space needs, is unlikely. In addition, the building does not meet the American Alliance of Museums accreditation standards because of substandard conditions impacting the collections due to deferred building maintenance and structural neglect. Lastly, this option does not align with City of Milwaukee's Downtown Plan.

Costs to reuse the building as a new museum would be higher than the costs to reuse the

buildings as mixed use apartment/office space. Appendix E-1 breaks down the costs into Construction Costs (which include finish upgrades, new plumbing fixtures in the existing locations, reusing existing MEP equipment) and Capitol Improvement Plan funding needs which are deemed necessary for renewal of accreditation according to the 2019 appraisal. Finish upgrades and capitol improvements are approximately \$264 million. Theming for exhibits is not included in the base costs and is expected to cost an average of an additional \$87 million bringing the total museum reuse costs to approximately \$350 million.

Adaptive Reuse

This option assumes the existing MPM buildings on the Subject Property are reused for a nonmuseum purpose. Within reuse, residential and office land uses were considered. This option is not recommended because the unique museum floor layout, tall story heights, and lack of windows/natural light make reconfiguration expensive; unusual dimensions of the Daniel M. Soref Planetarium and Dome Theater render the buildings very difficult and expensive to adapt for another land use; older foundations that may not meet current building codes; and unique on-site building connections to underground museum spaces in off-site easements make some building space accesses and emergency exiting very complicated (if not impossible).

Comparatively, a new construction residential development delivers a lower cost per unit because the existing structure does not support efficient floor plates or modern density requirements. The current museum building layout forces excess dead space, resulting in fewer leasable units per floor and a materially lower unit count across the site. Once you layer in mandatory renovation costs—mechanical replacement, life-safety upgrades, code compliance, elevators, stairs, and accessibility—the cost per apartment in a reuse

scenario exceeds the economics of ground-up construction.

A new build maximizes density, uses modern structural grids, and meets current code without expensive retrofitting. More units + more efficient layouts and systems = lower cost per unit and a better return on investment. In addition, the current footprint cannot support sufficient quantity of on-site parking that the market demands.

The existing MPM reuse cost defined later in this report assumes the roughly 480,000 SF existing building will be divided into 196,000 SF of 170 apartments and 284,000 SF of new office space with zero on-site parking. The cost per apartment unit is approximately \$430,000 and does not include parking. The future use development examples (shown on page 24-31) assumes two new buildings for a total of 757,000 SF and includes 545 apartments with parking. The future use development cost per apartment unit is approximately \$394,000 per unit and does include attached parking, separating out the parking costs, the gap between reuse and new development increases.

In short: the renovation produces fewer units at a higher cost and no parking, while a new build delivers higher density, lower cost per unit, and proper parking capacity.

Partial Building Removal and Redevelopment

This option assumes that particularly hard-to-reuse buildings, like the Planetarium and Dome Theater, are demolished and that the remaining museum is redeveloped for a non-museum use. This option is not recommended for the same reasons as the adaptive site reuse option – the unique museum floor plan and tall story heights, strategic placement of load-bearing walls, and unusual building dimensions make buildings infeasible to adapt for other land uses.

Further, unique on-site building connections to underground museum spaces in off-site easements make the strategic removal of buildings very complicated (if not impossible).

Full Building Removal and Redevelopment

This option assumes that all existing buildings would be demolished and the entire site redeveloped in some configuration yet to be determined. The cost of demolition is estimated at \$12.5M-\$13.5M. Upon completion of demolition, the vacant land value will be approximately \$2M - \$2.4M per acre (\$7.4M - \$9M). This option is consistent with Milwaukee's Downtown Plan, and is the Consultant Team's recommended option. As a result, several suboptions were developed as project examples. It should be noted that deep foundations and the hazards of removing them should be reviewed in the structural report, Appendix D, before fully proceeding with this scenario type.

No Removal/No Reuse

This option assumes that the building is neither removed nor used by any tenant. This would entail the abandonment of MPM buildings, their continued decline once vacated for the new museum site, growing blight and character of abandonment on the Subject Property, and potentially expanding from the site. This option of doing nothing would not serve the City-County relationship or the surrounding downtown area, and is therefore not recommended.

Further supporting the vacant MPM buildings will result in an estimated \$1.9M annual carry cost. This cost includes utilities at \$2/SF, property management (security, cleaning, etc.) at \$1/SF, maintenance (façade/MEP systems) at \$0.61/SF, and insurance at \$0.39/SF. The carry cost does not include additional deferred maintenance costs needed for repairs to buildings and site features for ongoing use.

Land Use-Based Evaluation

The Consultant Team recommends the "Full Building Removal and Redevelopment" option, as the other options contain fatal flaws or other barriers to their implementation. As part of the recommended option, the Consultant Team identified and evaluated nine land-use alternatives, including:

- 1) Residential Multi-family: In Milwaukee, this is defined as structures containing two or more dwelling units intended for residential occupancy. Given the need for housing units in Milwaukee and alignment with The Housing Element goal to boost the City's housing supply, this alternative was further broken down into market rate, affordable, and workforce housing types. Further, senior living could also be included in this mix.
- 2) Student Housing: These typically include dormitories, student apartments, and co-ops intended to provide housing for students.
- **3)** Hospitality: This is a business or businesses that provide lodging, dining, and other related services to travelers and tourists.
- **4) Medical Office Building:** This is a business that provides medical practices, clinics, and related healthcare facilities.
- 5) Civic, Institutional, Education: This may include public and quasi-public facilities that serve community needs, including schools, hospitals, government offices, and places of worship.
- 6) Commercial Office: This is a designation usually occurring within a building that

involves professional, administrative, and/ or clerical services.

- 7) Restaurant / Supportive Retail: These are businesses that provide convenient services to nearby uses to foster economic growth, enhance quality of life, and promote community development. Examples include Fast-Casual, Grab & Go, coffee, QSR plus convenience retail, and personal business establishments.
- 8) Mid-Large Format Retail: These are large, often free-standing and single-story, retail buildings or complexes and often require parking for customers and loading for a large volume of goods.
- 9) Open Space: This is land that often includes natural or mowed vegetation, trees, shrubs, and other plants. Typically, it's publicly accessible and serves not only passive and active use recreation, but also provides visual relief in an urban environment, mental health benefits for those who encounter it, and urban biodiversity for key species adapted to urban life. Its downside is that it does not typically generate revenue. It could also be a short-term use following site clearing.

Evaluation Criteria

The initial screening determined that full site clearance is recommended for the Subject Property. An evaluation of the land use alternatives was conducted using real estate market conditions and objective criteria. The nine use alternatives and real estate criteria were arranged in a decision-support matrix to provide a legible way to compare and contrast alternatives (Appendix F-1).

In this matrix, a number of criteria were established to consider the potential obstacles

and benefits of each land use scenario relative to one another. Some of the criteria are quantitative including future economic value, upfront cost to County, long-term costs, and (overall) costs, while other criteria are qualitative including market potential, within qualified census tract/affordable housing score, community value, entitlements, catalytic potential, and alignment with City of Milwaukee's downtown plan. The criteria are defined below

- 1) Market Potential: This criteria is used to assess a property's overall value and potential revenue generation based on an assessment of market need for future potential land uses. Strong land use market potential is indicative of several factors including positive economic indicators, population growth & demographics, local amenities and infrastructure, housing inventory / trends, government policies, and social preconditions for development/redevelopment.
- 2) Within Qualified Census Tract/Affordable Housing Score: Qualified Census Tracts (QCTs) are comprised of households with at least 50 percent of households with incomes below 60 percent of an area's median gross income. For residential land uses, this designation can unlock powerful financial incentives for building affordable housing units. Even though the Subject Property is outside a QCT, the site's prelim score is high for potentially qualifying for affordable housing tax credits given its location. Worth noting, the QCT boundary line is located directly south of the Subject Property (south side of W Wells St.).
- 3) Future Economic Value: This is a professional opinion of the fair market value of a property. A higher economic value is often preferred by sellers, including units of government.

- 4) Financial Considerations: This criteria examines if the project is likely to be financially feasible. In each example, subsidized funding sources, such as tax incremental financing, Low Income Housing Tax Credits, and consideration of sales price will be needed to make it feasible.
- 5) Community Value: This is a qualitative assessment of the collective benefit/ contribution that a future land use makes to people who will live/work/play at the site. Higher community value characteristics like aesthetics, convenience, and the potential for positive social interaction related to well being are a precondition that governments often support through policy decisions.
- 6) Catalytic Potential: Site redevelopment may spur new development or may intensify existing development adjacent to a site through intentional place-based policies and actions. Governments oftentimes prefer supporting the redevelopment of sites that have relatively high catalytic potential.
- 7) Align with City Downtown Plan: "Connec+ing MKE: Downtown Plan 2040" was approved by the Milwaukee Common Council on July 31, 2023 to set a vision for the future of Downtown Milwaukee's land use, urban design, and catalytic project recommendations. That plan is here: https://city.milwaukee. gov/ImageLibrary/Groups/cityDCD/ planning/plans/downtown1/connecingmke/MilwaukeeDowntownPlan-ExecutiveSummary-FINAL-web.pdf. Milwaukee County prefers to provide the preconditions for the Subject Property in line with this City policy document.

Evaluation Matrix

The matrix in Appendix F-1 with nine landuse-based alternatives as the vertical axis and evaluation criteria as the horizontal axis was created, with four of the nine land use alternatives emerging as highly acceptable. The results of screening are summarized below:

Land Use-Based Alternatives

Several alternatives <u>did</u> pass as recommended primary uses. While these uses are categorized separately, the Subject Property has potential to accommodate a mix of the following preferred uses, as multiple separate development projects may be likely.

Residential Multi-family: Market Rate (including senior housing)

This use alternative includes the following positive qualities:

Market Potential: Moderate, with about 555 units possible and a moderate 12.4% vacancy rate as of Q3, 2025 per CoStar. This attribute is strong for three of the four alternatives.

There have been several large Market Rate apartments delivered in Downtown Milwaukee over the past 18 months which currently have high vacancy rates, as outlined below. Adjusted Vacancy Rate for existing Market Rate apartments in the Downtown Milwaukee submarket, removing the most recent 18 months of deliveries, is 5.15%.

1) 333 N Water St. (Market Rate) has a current vacancy rate of 36.3% (333 total units; Delivered in April 2024).

- 2) 909 E Michigan St. The Couture (Market Rate) has a current vacancy rate of 44.7% (322 total units; Delivered in May 2024)
- 3) 615 E Corcoran Ave. Evoni (Market Rate) has a current vacancy rate of 46.4% (261 total units; Delivered in February 2025)
- 4) 1845 N Water St. ROWE MKE (Market Rate) has a current vacancy rate of 77.5% (222 total units; Delivered in April 2025)
- 5) 1659 N Jackson St. Elevation 1659 (Market Rate) has a current vacancy rate of 50% (76 total units; Delivered in June 2025)
- Future Economic Value: High, at about \$225 million. This attribute is high for three of the four alternatives.
- Financing Considerations:
 - Tax Increment Financing and Land Sale Price Consideration will be required to make this alternative financially feasible. Current City TIF policy may not support market-rate housing.
- Community Value Potential: Average, because the housing type is not in high demand. Additional value would be provided if neighborhood-supporting commercial uses are included as a mixeduse development. This attribute is high for all four alternatives.
- Catalytic Potential: High, because residential land use would bring nondaytime populations to the Subject Property and new building construction can be configured to better connect to surrounding land uses, specifically activation towards MacArthur Square plaza.

• Alignment with City Downtown Plan: Moderate, because this alternative provides high-density housing, but not intentionally mixed income household occupancy.

Residential Multi-family: Affordable (including senior housing)

This use alternative includes the following positive qualities:

- Market Potential: Strong, with about 555 units possible and a low 6.1% vacancy rate in Downtown Milwaukee submarket for affordable housing as of Q3, 2025 per CoStar. Also, while this alternative is outside a qualified census tract, it scored well at 155/204 points. All of the affordable housing units would be set aside for households making less than 80% of the area median income, with most units set aside for those making below the 60% threshold.
- Future Economic Value: High, at about \$110 million.
- Financing Considerations: Tax Increment Financing, Land Sale Price Consideration, WHEDA HTC and Housing Trust Fund Grant will be required to make this alternative financially feasible.
- Community Value Potential: High, because it meets a housing need for Downtown. Additional value would be provided if neighborhood-supporting commercial uses are included as a mixeduse development.
- Catalytic Potential: High, because residential land use would bring nondaytime populations to the Subject Property and new building construction can be configured to better connect to surrounding land uses, specifically activation towards MacArthur Square plaza.

Alignment with City Downtown Plan: High, because high-density housing, and with the potential for mixed income household occupancy.

Residential Multi-family: Workforce (including senior housing)

This use alternative includes the following positive qualities:

- Market Potential: Strong, with about 555 units possible and a low 6.1% vacancy rate in Downtown Milwaukee submarket for workforce housing as of Q3, 2025 per CoStar. All of the workforce housing units would be affordable to households with an AMI less than or equal to 100%.
- Future Economic Value: High, at about \$133 million.

■ Financing Considerations:

Tax Increment Financing and Land Sale Price Consideration will be required to make this alternative financially feasible.

■ Community Value Potential:

- High, because it meets a housing need for Downtown. Additional value would be provided if neighborhood-supporting commercial uses are included as a mixeduse development.
- Catalytic Potential: High, because residential land use would bring nondaytime populations to the Subject Property and new building construction can be configured to better connect to surrounding land uses, specifically activation towards MacArthur Square plaza.
- Alignment with City Downtown Plan: High, because high-density housing, and with the potential for mixed income household occupancy.

Student Housing

- Market Potential: Strong, with about an unknown number of units possible and several nearby institutions of higher learning (e.g. Marquette University, Milwaukee School of Engineering, Milwaukee Technical College and the University of WI – Milwaukee. This attribute is strong for three of the four alternatives.
- Future Economic Value: High, at about \$130 million.

■ Financing Considerations:

Tax Increment Financing and Land Sale Price Consideration will be required to make this alternative financially feasible.

- Community Value Potential: High, because it meets a housing need for Downtown. Additional value would be provided if neighborhood-supporting commercial uses are included as a mixeduse development.
- Catalytic Potential: High, because residential land use would bring nondaytime populations to the Subject Property and new building construction can be configured to better connect to surrounding land uses, specifically activation towards MacArthur Square plaza.
- Alignment with City Downtown Plan: Moderate, because this alternative provides high-density housing, but not intentionally mixed income household occupancy. This attribute is high for two of the four alternatives.

Other alternatives that were evaluated <u>did not</u> pass as recommended primary uses; however, some could be integrated into a residential development project. These are as follows:

Hospitality: The market for hospitality

- establishments near the Baird Center and Deer District is at saturation, and so is screened out until/unless the market changes.
- Medical Office Building: The market for medical office buildings is not strong. Although the community value could be high, the catalytic potential is not, and so is screened out until/unless the market changes.
- Civic, Institutional, Education: In terms of education, the market potential is strong with several nearby institutions of higher education including Marquette University, Milwaukee School of Engineering, Milwaukee Area Technical College, and University of Wisconsin – Milwaukee. However, as a stand-alone primary use, this is not in alignment with Milwaukee's Downtown Plan which presents a vision of high-density mixed-use development. Therefore, it is screened out until/unless guiding policy documents change.
- Commercial Office: There is a weak market for commercial office space in Downtown Milwaukee (currently, the Downtown West Submarket has a 12.2% vacancy rate as of Q3, 2025 per CoStar, and so is screened out until/unless the market changes.
- Restaurant / Supportive Retail: Market experts believe this low-density use may not be the highest and best use for the Subject Property and a stand-alone use. However, this use would be attractive as a mixed-use residential development with non-residential uses located on the ground floor with visibility from major street intersections.
- Mid-Large Format Retail: The market for this use is weak, with cheaper suburban locations preferred for this land use format. In addition, for expanding mid-large

- format retailers, they are currently looking to backfill other 2nd to 3rd generation big boxes in established retail nodes where buildout costs and rent are significantly lower than new build options.
- Green Space: It could be a short-term use following Subject Property clearing, but with adjacent MacArthur Square's green space, low potential for catalyzing additional development, and little to no future revenue generation potential, it is not a recommended long-term use.

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Development Examples

The initial 1st level screening resulted in the Consultant Team recommending full site clearance for the Subject Property. The subsequent 2nd level screening determined that several residential land use types are preferable given real estate market conditions and a desire for consistency with the City of Milwaukee's plans.

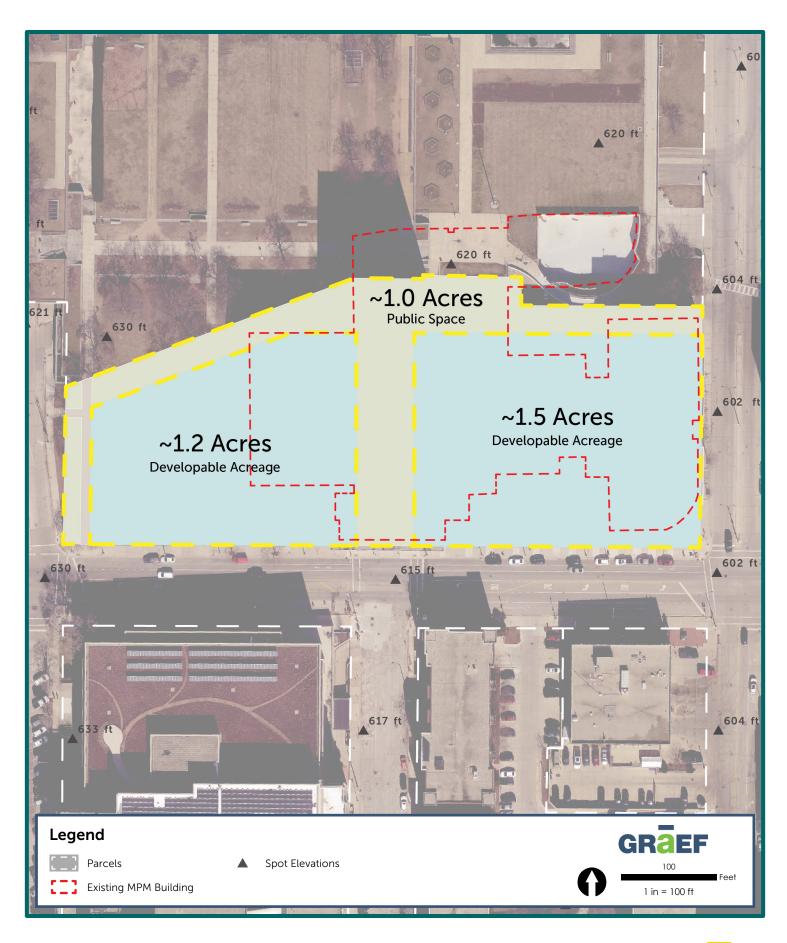
Framework for Development

A development framework was created as part of this report. This framework organizes the overall Subject Property into two independent parcels, integrated through a common infrastructure of public access. Each parcel has multiple options for building configurations which are visualized in the following pages. The two developable areas shown in blue are pulled back approximately 30' from the northern property line to allow a combination of circulation and physical separation from adjacent freeway

tunnels and MacArthur Square parking garage. The central N-S corridor shown in green is a 60' wide space that would accommodate existing/future utility easements serving the area as well as access to and through the Subject Property.

Each development example should accommodate the following:

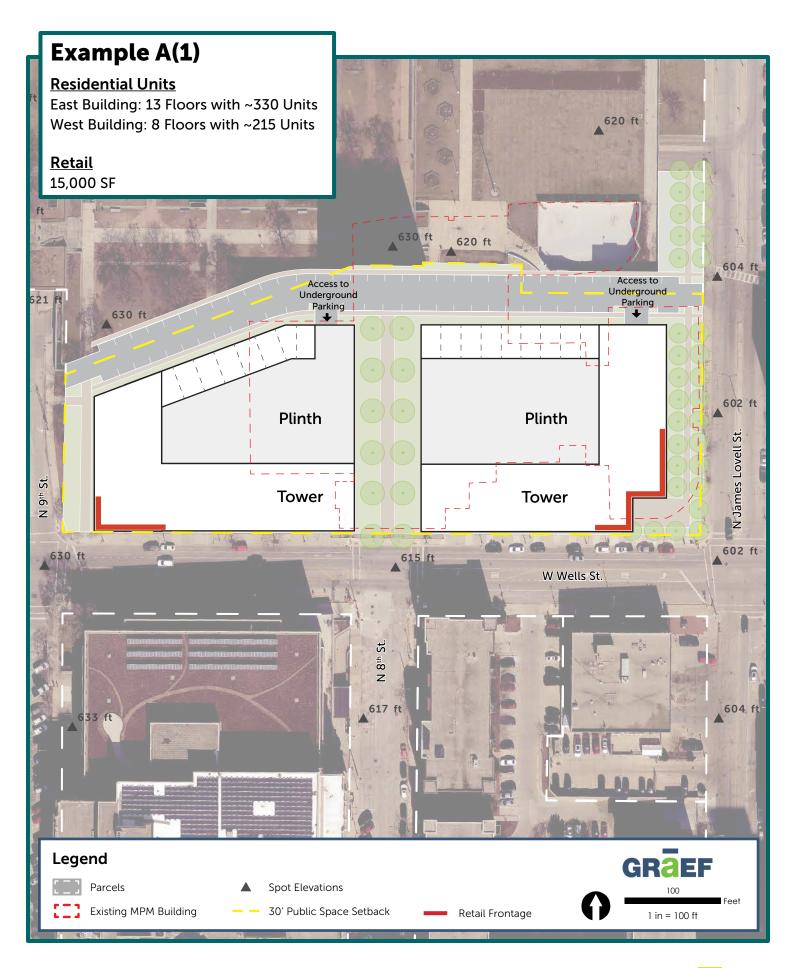
- 1) Supports the preferred primary land uses of market rate housing, affordable housing, workforce housing, and student housing.
- 2) Provides activation opportunities along the street edge.
- 3) Connects visually and physically to MacArthur Square.
- **4)** Does not prevent MacArthur Square redevelopment as envisioned by the City of Milwaukee Downtown Plan.



Example A(1)

The first example features a parking plinth and residential tower configuration, along with ground-level walk-out units facing north towards MacArthur Square. The two buildings are separated by a pedestrian walkway. The building placement identifies a new street connecting N James Lovell St. to N 9th St. Each building includes 2-3 levels of underground parking, with 8-13 residential levels above. The residential towers can each accommodate 23 or 24 standard-sized residential units per floor. There is also opportunity for street-level retail at the corner of James Lovell St. and W Wells St. as well as the corner of W Wells St. and N 9th St.

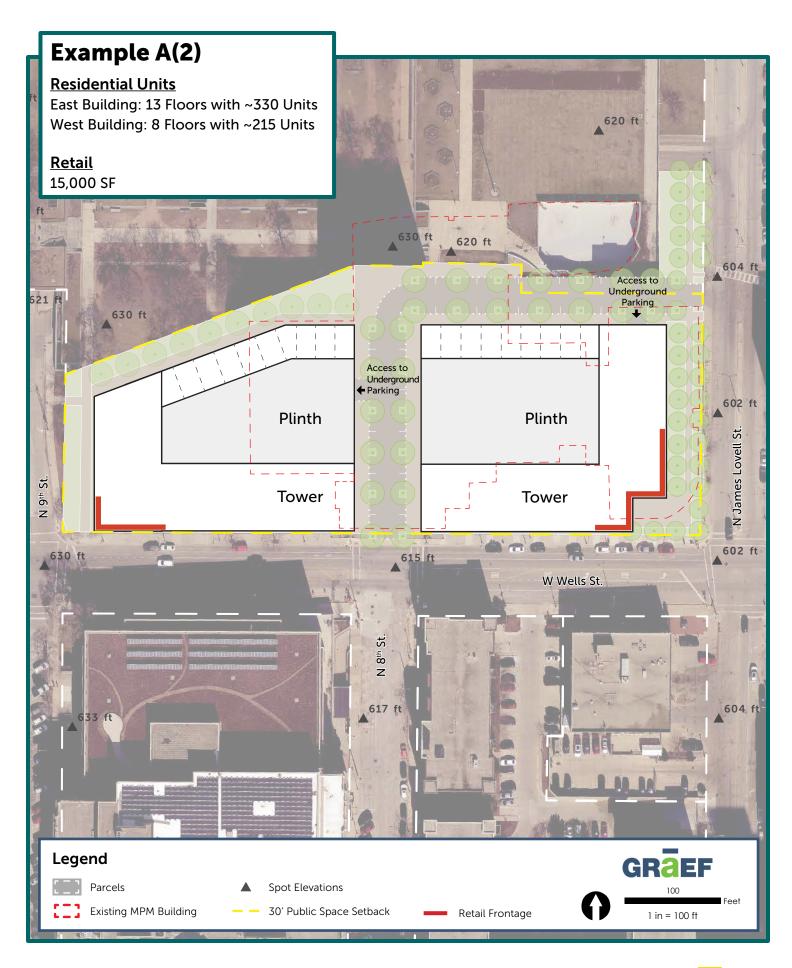




Example A(2):

The second example features the building configuration as Example A(1), but with a street/access drive only wrapping around the eastern building. This shared drive is designed more as a pedestrian plaza with the ability to accommodate vehicular traffic. Each building again proposes 2-3 levels of underground parking, with 8-13 residential levels above. The residential towers can each accommodate 23 or 24 standard-sized residential units per floor. There is also opportunity for street-level retail at the corner of James Lovell St. and W Wells St. as well as the corner of W Wells St. and N 9th St.

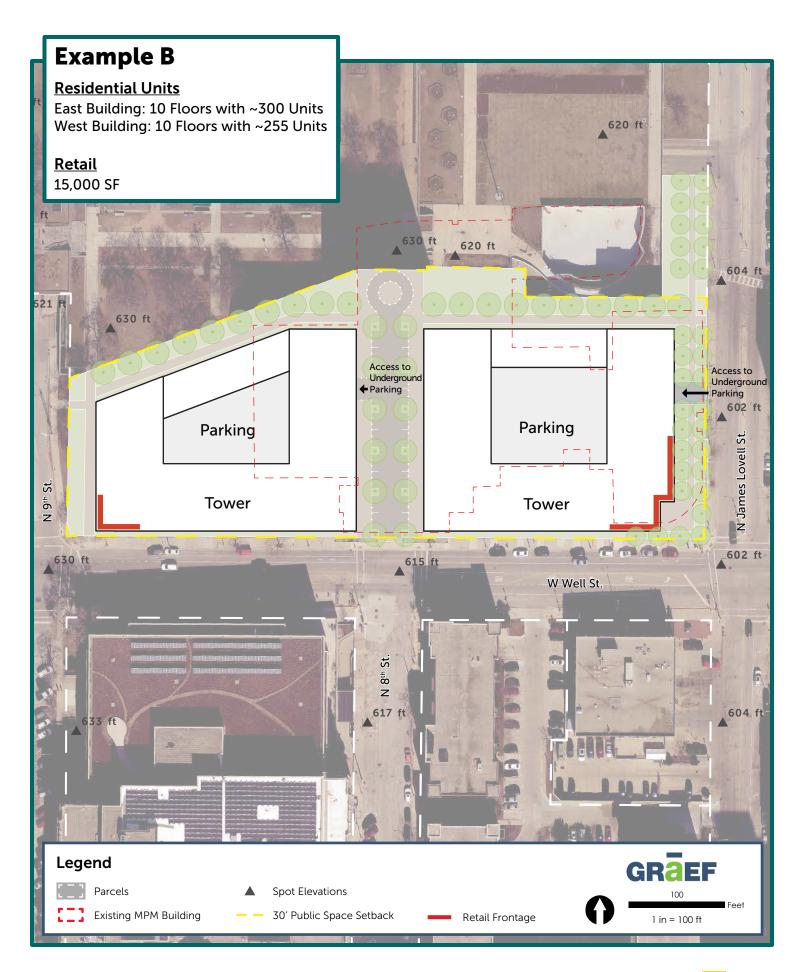




Example B

The third example features a 'texas wrap' configuration, with two 10-story buildings separated by a public access drive as an extension of N 8th Street. The first two levels of each building include a single-loaded corridor with residential units facing outward and the parking structure is internal to the residential units. The remaining upper levels include a double-loaded residential tower configuration. Each building contains approximately 24 units per floor for single-loaded levels and 36 units per floor for double-loaded levels. The northern edge of this concept shows a pedestrian path running parallel to the building edges. There is also opportunity to place commercial along the street edge in lieu of residential units at the southeast and southwest corners of the Subject Property.





Site Costs and Constructibility Analysis

Cost Modeling

Preliminary construction cost models were completed for the future use of the Subject Property. These numbers should be used for planning purposes only with the understanding that additional detailed cost estimates would be required during schematic and design development phases. The proposed cost models are specific only to the Milwaukee Public Museum Future Use Study. See Appendix E-1 for details.

Demolition Options

Demolition Option A - \$12,566,316

- Full demolition of the Milwaukee Public Museum based on Concord's conceptual estimate dated February 25, 2019 escalated through the end of 2027.
- Structurally disconnect the Museum from the Wizard Wing and MacArthur Square Parking Structure.
- Wizard Wing and MacArthur Square Parking Structure to remain.
- At this time, it is unknown if the Wizard Wing is capable of mechanically operating independently. MEP considerations to make the Wizard Wing a fully functional building independent of the Museum building is not included.

- Maintenance and upkeep of the Wizard wing is not included, which includes repairing an existing leak near the offices.
- It is assumed that the Wizard Wing will remain subterranean and exterior finishes are not included where the Museum building is being demolished.
- Existing deep foundation piles to remain, pile caps will be removed.
- Demolition budgets do not include landscaping, it is assumed new building construction will occur immediately after demolition.

Demolition Option B - \$13,584,146

- Full demolition of the Milwaukee Public Museum and Wizard Wing based on Concord's conceptual estimate dated February 25, 2019 escalated through the end of 2027.
- Structurally disconnect the Wizard Wing from MacArthur Square Parking Structure.
- Construct new retaining wall to support MacArthur Square Parking Structure.
- Backfilling the Wizard Wing and Pioneer Courtyard.
- Retaining wall between MacArthur Square and Pioneer Courtyard to remain.

- Minor landscaping allowance for seed at new ground level.
- An allowance is included for structural support and waterproofing of the existing freeway tunnel roof structure.
- Further structural analysis is required to determine the amount of structural reinforcing that will be needed.
- Roofing is not included at the existing freeway tunnel
- Existing deep foundation piles to remain, pile caps will be removed.
- Demolition budgets do not include landscaping (unless specifically noted above), it is assumed new building construction will occur immediately after demolition.

Future Use Options

Future use budgets are based on the three building and site layouts provided in this report. Examples A1 and A2 have identical building layouts, only the site layouts change. Budgets for the new construction are independent of the Museum demolition. There is potential for some existing deep foundation piles and pile caps to be reused, however, for this budget, it was assumed that all new piles would be required. Preliminary costs for the future use options are as follows:

- Example A1 \$216,681,540
- Example A2 \$216,581,540
- Example B \$229,237,598

Potential Reuse Options

The reuse cost is based on converting the existing Museum, Dome Theater and Discovery World buildings into either A) a combination of office space and residential apartments; or B) new museum user. The pricing includes a full gut and remodel of the interior of the buildings. New MEP systems, elevators, and interior finishes are included. Apartment finishes are based on low-income housing standards. Office space is based on primarily open office spaces. Historical restoration is not included. New windows will be cut in to the existing facade along with maintenance to the existing facade. A completely new facade is not included. The existing roof will be replaced with standard roofing materials. The IMAX metal roofing will be replaced with shingles. It is assumed that structural modifications are not required for the new use. Existing areas that are open to below will remain, intermediate floors will not be added. Deferred maintenance items that are above and beyond the base renovation scope which include fresh air tunnel, loading dock, façade repairs and steam tunnel replacement work are included in the building reuse cost. The deferred maintenance costs are based on the previously completed appraisal of the existing buildings and escalated to the end of 2027. Soft costs and design fees are not included.

Costs to reuse the building as a new museum would be higher than the costs to reuse the buildings as mixed use apartment/office space. The below table breaks down the costs into Construction Costs (which include finish upgrades, new plumbing fixtures in the existing locations, reusing existing MEP equipment) and Capitol Improvement Plan funding needs which are deemed necessary for renewal of accreditation according to the 2019 appraisal. Finish upgrades and capitol improvements

are approximately \$264 million. Theming for exhibits is not included in the base costs and is expected to cost an average of an additional \$87 million bringing the total museum reuse costs to approximately \$350 million.

Preliminary cost for the potential building reuse options are as follows:

- Potential Reuse Cost (Mixed Use) -\$208,612,191
- Potential Reuse Cost (Museum) -\$350,857,687

Appendices

Appendix A

Exhibit A-1: Project Site Location

Exhibit A-2: Land Use and Ownership

Exhibit A-3: Zoning

Exhibit A-4: Site Characteristics

Appendix B

Exhibit B-1: ALTA Survey Map

Appendix C

Exhibit C-1: Summary of Title Search Report

Appendix D

Exhibit D-1: Structural Overview and Condition Assessment

Exhibit D-2: Structural Overview Exhibit

Appendix E

Exhibit E-1: Site Costs and Constructibility Considerations

Appendix F

Exhibit F-1: Evaluation Matrix