

DATE: 22 December 2017

TO: The Milwaukee Historic Planning Commission

FROM: Robert Ater and Gregory Baer

Proposed New Construction at 100 West Brown Street in the Brewers Hill Historic Preservation District (File # 170945)

We are requesting a Certificate of Appropriateness for the new construction of a home at 100 West Brown Street at the corner of Brown and First Streets in the Brewers Hill Historic Preservation District of Milwaukee. In its staff report (presented to the Board at their meeting on November 6, 2017), the staff of the Historic Preservation Commission (HPC) praised the design of the home, but recommended that the materials used on the exterior of the home—siding, trim, porch, and windows—should all be wood. In this document we would like to present our case for using alternative materials (as described below) on the exterior of our home.

1 The Milwaukee city ordinances regulating the Historic Preservation Commission discourage new construction that copies historical architecture, while encouraging structures that exhibit sensitivity to the structures around them and to the characteristics of the neighborhood.

Chapter 320 of the City of Milwaukee Code of Ordinances¹ establishing the HPC establishes the HPC's duty to grant Certificates of Appropriateness to those hoping to build new structures "on a parcel within a historic district" (320-21-11) such as the Brewers Hill Historic District. In a subsequent section of the same ordinance (320-21-11-g), the criteria for issuing the Certificates of Appropriateness are established [emphasis added in bold]:

g. Criteria: Certificates to Allow Alteration, Reconstruction, Rehabilitation or New Construction. In determining whether to grant, grant with conditions or deny a certificate of appropriateness to allow alteration, reconstruction, rehabilitation or new construction, the commission shall consider any applicable factors listed in sub. 12 and any of the following:

g-1. Whether the proposed work would destroy or adversely affect any exterior architectural feature of the improvement upon which the work is to be done or **adversely affect the external appearance of other improvements on the site or within the district.**

g-2 Whether, **in the case of construction** of a new improvement on a historic site or within a historic district, and with consideration of design review recommendations issued by the department of city development, the new improvement, other than an accessory structure, an addition thereto or reconstructed features thereof, is all of the following:

g-2-a. **Architecture sensitive to the mass and proportions of existing structures on the site or**

¹ The original text of all City of Milwaukee ordinances can be found in full by navigating to the following web site: <http://city.milwaukee.gov/cityclerk/ordinances/tableofcontents#.Wh9sdbbMygw>

within the district in which the subject property is located.

g-2-b. **Appropriately-scaled architecture that is clearly differentiated from nearby historic structures, while taking cues from them.**

g-2-c. **Not an attempt to re-create a historic structure.**

Ordinance 320-21-11-g then clearly indicates that new construction shall both be differentiated from nearby historic structures and not make an attempt to re-create them. It suggests that attention to mass, proportion, and scale are the means of creating new structures that fit into the historic environment.

The introductory paragraph to Ordinance 320-21-11-g refers to Ordinance 320-21-12, where additional applicable factors related to the granting of Certificates of Appropriateness can be found. Ordinance 320-21-12-c reads as follows:

c. All buildings, structures, and sites shall be recognized as products of their own time. Alterations that have no historical basis and which seek to create an earlier or later appearance shall be discouraged.

Here too, the relevant language of the ordinance indicates that structures attempting to copy or imitate an earlier time should be discouraged, stating explicitly that buildings should be recognizable as "products of their own time" and not as buildings built in an earlier time.

2 Additional criteria published by the HPC for the Brewers Hill Historic District echo the call for distinctions between *new construction* and *historical structures* found in city ordinances.

Milwaukee Ordinance 320-21-11-g (cited above) states that when considering granting a Certificate of Appropriateness the HPC should consider:

g-3. Whether in the case of any property located in a historic district, the proposed alteration, reconstruction, rehabilitation or new construction conforms to the objectives of the historic preservation plan for the district as duly adopted by the common council.

The "plan" mentioned here is the *Historic Designation Study Report* for the Brewers Hill Historic District², which contains city planners' vision for the historic district. The report provides three pages of "preservation guidelines" for the rehabilitation of *existing structures*. The intent was clearly to preserve historic appearances and materials already in existence, whenever possible, and to replace materials on historic structures, when necessary, with historically accurate materials. The document only dedicates one-half page of "preservation guidelines" to *new construction* in the Brewers Hill Historic District. Its stated intent is to ensure that all *new construction* will "be designed so as to *harmonize* with the character of the district [emphasis added]." The guidelines describe how siting, scale, and form (some of the same factors mentioned in the city ordinances discussed above) can be considered to create a new structure that harmonizes with the existing, historical structures. The Brewers Hill *Historic Designation Study Report* then turns its attention to building materials to be considered in *new construction* projects (emphasis added):

² <http://www.city.milwaukee.gov/ImageLibrary/Groups/cityHPC/DesignatedReports/vticnf/HDBrewersHill.pdf>. Page 9.

"The building materials that are visible from the public right-of-way should be consistent with the colors, textures, proportions, and combinations of cladding materials traditionally used in Brewers Hill. **The physical composition of the materials may be different from that of the historic materials, but the same appearance should be maintained.**"³

In encouraging the use of "combinations of cladding materials traditionally used in Brewers Hill," the authors of the document were suggesting that newly built houses in the historic district should make use of materials such as clapboard siding, brick, sidewall shingling, and stone in ways common in the neighborhood in order to provide a consistency of appearance. But they were careful to note explicitly, that these cladding materials may be made of materials other than wood, real brick, or real stone. They understood that historic materials would not always be available or economically feasible, and that "traditional" materials available on today's market may not exhibit the quality and workmanship that was characteristic of earlier versions of those same materials.⁴ They affirmed that alternatives to wood, brick, and stone were available and would allow *new construction* that maintained the look and feel of the traditional materials while offering enhanced durability at prices that allow continued development in the neighborhood.

These sentiments were shared by those who established other historic districts in Milwaukee; the language quoted above from the *Historic Designation Study Report* for Brewers Hill is repeated almost verbatim in the preservation guidelines of the study reports for virtually all historic preservation districts in Milwaukee, including Brady Street (1990),⁵ Cass and Wells Street (1992),⁶ Concordia (1988, amended 2009),⁷ Grant Boulevard (1985),⁸ Kilbourn/Reservoir Park (1999),⁹ West Mitchell Street (1986, revised 2012),¹⁰ North Lake Drive (1984),¹¹ North Lake Drive Estates (1984, revised 1988),¹² North Point North and South (1983),¹³ Old World Third Street (1991),¹⁴ Pabst Brewery (1985),¹⁵ and Sherman Boulevard (1995).¹⁶ In documents from the 1980s through 2012, the inclusion of language recognizing the need and appropriateness of alternative building materials in *new construction* was intentionally included, indicating the widespread acceptance of such materials over time and in a wide variety of historic neighborhoods and historic preservation districts throughout Milwaukee.

³ <http://www.city.milwaukee.gov/ImageLibrary/Groups/cityHPC/DesignatedReports/vticnf/HDBrewersHill.pdf>. Page 9.

⁴ In *Living With History: A guide to the preservation standards for historically designated houses in Milwaukee*, Paul Jakubovich states, "Old wood is inherently superior in quality to most of today's construction lumber." (Page 3)

⁵ <http://www.city.milwaukee.gov/ImageLibrary/Groups/cityHPC/DesignatedReports/vticnf/HDBradySt.pdf>

⁶ <http://www.city.milwaukee.gov/ImageLibrary/Groups/cityHPC/DesignatedReports/vticnf/HDCassWellsSt.pdf>

⁷ <http://www.city.milwaukee.gov/ImageLibrary/Groups/cityHPC/DesignatedReports/vticnf/HDCConcordia.pdf> and <http://www.city.milwaukee.gov/ImageLibrary/Groups/cityHPC/DesignatedReports/vticnf/ConcordiaStudyReport.pdf>

⁸ <http://www.city.milwaukee.gov/ImageLibrary/Groups/cityHPC/DesignatedReports/vticnf/HDGrantBlvd.pdf>

⁹ <http://www.city.milwaukee.gov/ImageLibrary/Groups/cityHPC/DesignatedReports/vticnf/HDKilbournReservoir.pdf>

¹⁰ <http://city.milwaukee.gov/ImageLibrary/Groups/cityHPC/DesignatedReports/vticnf/MitchellStreetHistoricDistrict.pdf>

¹¹ <http://www.city.milwaukee.gov/ImageLibrary/Groups/cityHPC/DesignatedReports/vticnf/HDNoLakeDr.pdf>

¹² <http://www.city.milwaukee.gov/ImageLibrary/Groups/cityHPC/DesignatedReports/vticnf/HDNoLakeDrEstates.pdf>

¹³ <http://www.city.milwaukee.gov/ImageLibrary/Groups/cityHPC/DesignatedReports/vticnf/HDNoPointNorth.pdf> and

<http://www.city.milwaukee.gov/ImageLibrary/Groups/cityHPC/DesignatedReports/vticnf/HDNoPointSouth.pdf>

¹⁴ <http://www.city.milwaukee.gov/ImageLibrary/Groups/cityHPC/DesignatedReports/vticnf/HDOldWorldThird.pdf>

¹⁵ <http://www.city.milwaukee.gov/ImageLibrary/Groups/cityHPC/DesignatedReports/vticnf/hdpabst.pdf>

¹⁶ <http://www.city.milwaukee.gov/ImageLibrary/Groups/cityHPC/DesignatedReports/vticnf/HDShermBlvd.pdf>

3 Nationally recognized standards for new construction in historic districts support the careful use of alternative materials, encouraging a balance between *compatibility* with existing structures and *differentiation*, that identifies new structures as such.

In the U.S., the widely accepted guide for new construction (additions or infill) in historic districts is Standard Nine of The Secretary of the Interior's Standards for Rehabilitation, which states:

"9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment."¹⁷

Standard Nine does the following when applied to historical districts:

- lists components of a new construction projects in a historic district which must be considered, including materials, features, size, massing, scale and proportion;
- highlights the need to protect the integrity of the district; and
- recognizes the tension between **compatibility** and **differentiation**

Like the language used in the Milwaukee ordinances and in the study reports establishing historic preservation districts throughout Milwaukee, the words chosen by the Secretary of the Interior carefully avoid suggesting that new construction in historic districts should blindly copy or mimic actual historic structures. Indeed, scholars and practitioners recognize that Standard Nine leaves open the possibility that modern buildings can be constructed in some historic districts if architects and planners are careful to consider ways of integrating the new structures into the rhythm, flow, and character of the neighborhood. A 2007 publication by the Preservation Alliance, for example, states, "What makes buildings from different eras and styles compatible is that they share the same underlying principles of space, structure, elements, composition, proportion, ornament, and character."¹⁸ The document does not include materials in this list.

Our new construction project, however, does *not* intend to introduce a radical new style to the Brewers Hill Historical District. Instead it honors the underlying principles highlighted by the Preservation Alliance: space, structure, elements, composition, proportion, ornament, and character. In doing so, our project sustains a sense of continuity in architectural language and achieves a balance between differentiation and compatibility—weighted in favor of compatibility with the existing structures in the neighborhood.

The National Park Service, the leading federal authority responsible for the oversight of our national historic monuments, has strict guidelines for the preservation of existing historic properties and neighborhoods. According to the NPS, the inclusion of new construction within a historic district differs from the preservation of an existing building in that there are no existing materials or features to be replaced or replicated. Only the **compatibility** and **differentiation** of the new structure to its historic surroundings can be the guidelines for what will ultimately be the composition of the

¹⁷ <https://www.nps.gov/tps/standards/rehabilitation/rehab/stand.htm>

¹⁸ "Sense of Place: Design Guidelines for New Construction in Historic Districts." 2007, www.preservationalliance.com/publications/SenseofPlace_final.pdf. Page 9.

proposed home. The Technical Preservation Services arm of the NPS notes the following with regard to new construction, "Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken." The National Park Service elaborates on the point by adding that, "**New construction should also be distinct from the old and must not attempt to replicate historic buildings elsewhere on site and to avoid creating a false sense of historic development.**"¹⁹

In keeping with national guidelines from federal agencies and the practices of respected historic planning commissions throughout the U.S., the proposed home at 100 West Brown Street will not be a strict attempt to replicate historic buildings in the Brewers Hill neighborhood. Those well versed in the elements of historic architecture and preservation will be able to see the **differentiation** inherent in this project and understand that it is to be undertaken in the name of increased energy efficiency, enhanced environmental awareness, integration of modern technology and convenience, and recognition of financial exigencies. At the same time, this home, as proposed, will put heavy emphasis on **compatibility**. It will honor and celebrate the architecture of the 19th century in Milwaukee. It will protect the integrity of the Brewers Hill historic district by blending in with the homes around it. And it will enhance the community by filling in a gaping hole in the fabric of the neighborhood.

4 Historic preservation commissions in cities similar to Milwaukee have approved the use of the same materials we are proposing.

Writing in the February 2009 edition of *Traditional Building*, Steven Semes discusses developments related to national standards in historic districts, especially the difficulty of finding the correct balance between compatibility and differentiation, "The way to make buildings from different eras and styles compatible is for them to share the same generative principles, sustaining a decorous conversation about space, structure, elements, composition (including arrangement and scale), proportion, ornament and character."²⁰ For some local historic planning commissions however, compatibility in all of these areas is sometimes not enough, if compatibility of materials is not considered.

The use of alternative rather than traditional materials on *new construction* in historic preservation districts has been discussed by historic planning commissions around the country. A helpful summary of the results of these conversations can be found in a 2013 review study entitled "Alternate Materials and Their Use in Historic Districts" prepared by Thomason and Associates for the Historic Preservation Office of Columbus, Ohio.²¹ The results from this study were updated for a presentation by Phil Thomason to the American Institute of Architects (AIA) of the Potomac Valley in Maryland. Thomason notes that his studies have shown "a trend towards acceptance of alternative materials under certain circumstances."²²

¹⁹ <https://www.nps.gov/tps/standards/applying-rehabilitation/successful-rehab/new-construction.htm>

²⁰ <http://www.oldhouseauthority.com/archive/DifferentiatedandCompatibleDesign>

²¹ Thomason and Associates. "Alternate Materials and Their Use in Historic Districts." City of Columbus Development, Historic Preservation Office City of Columbus, Ohio Planning Division, 2013, www.columbus.gov/Templates/Detail.aspx?id=60775.

²² Thomason, Phil. "Milwaukee Project." Received by Robert Ater, 14 November 2017.

Thomason's studies are based on surveys of historic preservation commissions in the following major cities:

Boston, Massachusetts
El Paso, Texas
Nashville, Tennessee
Charlotte, North Carolina
Memphis, Tennessee
Jacksonville, Florida
Indianapolis, Indiana
Austin, Texas

He has also done work with the following cities and incorporated information from projects in these cities into his results:

Fernandina Beach, Florida; Lexington, Kentucky; Covington, Louisiana; Monroe, Louisiana; Oklahoma City, Oklahoma; Waynesville, North Carolina; Franklin, Tennessee; Lynchburg, Virginia; Roanoke, Virginia; and Olympia, Washington.

Many of the historic preservation commissions in these cities allow alternative materials in historic districts under defined circumstances. Thomason notes the following reasons often given to consider alternative materials:

Availability of Historic Materials – Difficulty of obtaining quality tight-grain or old-growth lumber for repairs or replacement.

Expense – Cost of high quality materials often prohibitive for many homeowners.

Loss of Traditional Trades – There may not be local crafts or trades people with the skills to provide repairs using historic materials.

Sustainability – Some alternative materials are of recycled products reducing the need for wood and other finite resources.

Durability – Alternative materials are often advertised as long-lasting products – still assessing these claims.

Appearance – Many of the new alternative materials have some compatibility with imitating wood, slate and other historic materials.

Consumer Demand – If it looks historic why can't I use it?²³

Drawing on Thomason's work we will outline the acceptance by other HPCs of materials we plan to use on our project in Milwaukee.

²³ Thomason and Associates. Trends & Best Practices for Incorporating Alternate Materials into Design Review. AIA Potomac Valley, 2017.

Windows

When discussing replacement windows in *historic structures*, most historic preservation commissions surveyed by Thomason and Associates in 2013 "recommend the replacement of non-repairable wood windows with new wood windows to match the original."²⁴ But Parrett Windows in Milwaukee have confirmed that traditional wood windows with single glazed sashes will not meet energy standards set by WI UDC for new construction. Thus double-glazed windows seem in order. This argument for double-glazed windows is furthered by the National Park Service's standards for replacement materials which states that alternate materials can be implemented if hardships prevail "or if current code requirements do not permit the use of the historic material."²⁵

In addition, concerns over the longevity of new wood windows has caused some commissions to reconsider the use of alternative materials," particularly in new construction.²⁶ One of the most common types of window materials in new construction is aluminum clad. "Aluminum clad windows typically come with anodized or baked enamel finishes. Aluminum is used as the facing material over the wood frame for the trim, sash units and muntins."²⁷ According to Thomason and Associates' 2013 study, aluminum clad windows are allowed in historic districts as follows:

- Boston allows aluminum clad on commercial and industrial buildings on a case by case basis.
- In Nashville, Indianapolis, Austin and Charlotte HPC guidelines allow the installation of aluminum clad windows with both anodized and baked enamel finishes on primary facades and other elevations.
- In Jacksonville and El Paso, design guidelines allow for the use of aluminum clad windows as long as they match in dimensions, profile and overall appearance.²⁸

The double-hung windows chosen for our project in the Brewers Hill historic district, Marvin Ultimate double hung windows, clad in aluminum at the exterior with simulated muntins, incorporate historic elements such as panes divided by muntins while conforming to city and state codes and providing the benefits of modern energy efficiency.

This particular model has been chosen for our project because it has been selected by historical preservation commissions for use with new construction projects, such as those listed above. In addition, in Savannah these Marvin windows have been approved for use in new construction, additions, and non-historic buildings in historic districts.²⁹

²⁴https://www.columbus.gov/uploadedFiles/Columbus/Departments/Development/Planning_Division/Document_Library/Librar_y_Documents/PDFs/Alternate%20Materials%20and%20Their%20Use%20in%20Historic%20Districts.pdf

²⁵ <https://www.nps.gov/tps/standards/applying-rehabilitation/successful-rehab/substitute-materials.htm>

²⁶https://www.columbus.gov/uploadedFiles/Columbus/Departments/Development/Planning_Division/Document_Library/Librar_y_Documents/PDFs/Alternate%20Materials%20and%20Their%20Use%20in%20Historic%20Districts.pdf

²⁷ Thomason and Associates. Trends & Best Practices for Incorporating Alternate Materials into Design Review. AIA Potomac Valley, 2017.

²⁸https://www.columbus.gov/uploadedFiles/Columbus/Departments/Development/Planning_Division/Document_Library/Librar_y_Documents/PDFs/Alternate%20Materials%20and%20Their%20Use%20in%20Historic%20Districts.pdf

²⁹ <http://www.thempc.org/docs/lit/hist/faq/windows.pdf>

Cementitious Siding (Fiber-Cement Siding)

"Cementitious siding is made from cement mixed with ground sand, cellulose fiber and other additives. Its content is approximately 45 percent Portland cement, 45 percent silica sand, and 10 percent wood fiber. Surface patterns include wood-grained and smooth. Any of the siding can be ordered pre-finished or ready-to-paint."³⁰ Cementitious siding provides enhanced durability; increased resistance to rot, termites, and other pests; and lower maintenance costs over the life of the home³¹ when compared to traditional wood siding. One brand of cementitious siding is HardiePlank, produced by the James Hardie Company. Though fiber cement siding was first patented in the early 1900s, the current iterations of this material come from work done in the mid 1980s, when James Hardie "began designing and manufacturing a wide range of fiber-cement building products that made use of the benefits that came from the product's durability, versatility and strength."³²

Thomason notes the following positive aspects of cementitious siding relevant to its use in historic districts: Smooth finish provides visual compatibility with traditional wood; potential longevity with some warranties guaranteed for 50 years; good moisture permeability; considered environmentally friendly and a "green" material. A 2013 *Washington Post* article adds that "unlike wood, fiber-cement boards are very straight and dimensionally consistent. [...] Another advantage is cost. Fiber-cement siding runs about \$3 to \$3.50 per square foot, about twice the price of vinyl siding, but less than the \$4 to \$6 per square foot for cedar siding."³³

Thomason's study shows wide-spread acceptance of cementitious siding by the cities surveyed:

- **All cities approve cementitious siding for new primary buildings**, outbuildings and rear and lateral additions.
- Indianapolis and Nashville do not allow cementitious siding as a substitute material on historic buildings.
- El Paso allows cementitious siding on rear and non-readily visible side elevations [of historic buildings].
- Jacksonville and Memphis allow cementitious siding only on rear elevations - the bottom 24" of siding [of historic buildings].
- Charlotte and Austin allow cementitious siding on all elevations if it matches in dimensions and profile.³⁴

Since our project involves entirely *new construction* rather than preservation of an existing structure, it is worth repeating that the "smooth lap siding product is considered to be a compatible material for new construction in historic neighborhoods" by all of the cities surveyed in Thomason's study.³⁵ In

³⁰ Thomason and Associates. Trends & Best Practices for Incorporating Alternate Materials into Design Review. AIA Potomac Valley, 2017.

³¹ <https://www.jameshardie.com/why-hardie/performance-and-durability>

³² <https://www.jameshardie.com/about-us/our-company>

³³ https://www.washingtonpost.com/realestate/fiber-cement-has-cost-and-durability-on-its-side/2013/05/02/b744f7e6-adf2-11e2-98ef-d1072ed3cc27_story.html?utm_term=.d1c5349fe65d

³⁴ Thomason and Associates. Trends & Best Practices for Incorporating Alternate Materials into Design Review. AIA Potomac Valley, 2017.

³⁵ Thomason and Associates. "Alternate Materials and Their Use in Historic Districts." City of Columbus Development, Historic Preservation Office City of Columbus, Ohio Planning Division, 2013. www.columbus.gov/Templates/Detail.aspx?id=60775.

addition, the National Park Service acknowledges its potential use as a substitute for wood on additions to historical structures as well as new construction within historical boundaries.³⁶

HPC staff has indicated some uncertainty about the durability of HardiePlank and similar products, despite claims and guarantees from the manufacturers. However, HardiePlank has been used on multiple structures in the Brewers Hill neighborhood, both on secondary structures (i.e. garages) in the historic preservation district and on primary structures outside of the historic preservation district with excellent results. An example in the neighborhood is the group of seventeen houses fronting on East Brown, N Buffam, and N Hubbard Streets. Built in 2004 by Titan Building these single family homes have HardiePlank siding that has maintained its color and its material integrity quite well for 13 years. Multiple other structures in the neighborhood would provide additional examples of the durability and stability of HardiePlank and similar fiber-cement siding products.

Front Porch Floor

Trex composite flooring is proposed for the front porch floor of this project. This material is considered to be green in that most products are made from 50% recycled plastic (including plastic grocery bags) and 50% recycled wood products from woodworking operations such as sawdust and discarded pallets.

According to Thomason and Associates, "use of composite porch floors appears to be gaining favor as an appropriate alternative material. Of the cities surveyed, half allow the use of composite porch floors on the primary elevations while half do not. In Jacksonville, a committee is now proposing that this material be staff approved on primary elevations as long as it is painted. In Memphis, this material has also been approved on primary elevations depending on the visibility from the street. All of the cities surveyed allowed this material to be used on porches on side and rear elevations not visible from the public right-of-way."³⁷

In their report, the Milwaukee HPC staff indicated that they were "tempted to grant the synthetic porch decking, if the porch is trimmed such that the edge of the synthetic boards is not visible. The proposed gray color will read as painted wood for at least a few years."

The porch flooring will have limited visibility to pedestrians or auto traffic on either street bordering the lot due to the elevation of the house and the porch.

Roof

On the suggestion of the HPC staff, we will use CertainTeed Landmark weathered wood shingles, an alternative material that replicates the look of historic wood shingles.

³⁶ Thomason and Associates. "Alternate Materials and Their Use in Historic Districts." City of Columbus Development, Historic Preservation Office City of Columbus, Ohio Planning Division, 2013. www.columbus.gov/Templates/Detail.aspx?id=60775.

³⁷ Thomason and Associates. "Alternate Materials and Their Use in Historic Districts." City of Columbus Development, Historic Preservation Office City of Columbus, Ohio Planning Division, 2013. www.columbus.gov/Templates/Detail.aspx?id=60775.

Trim

Trim will be an Azek product, which maintains the same appearance as historic materials. Milwaukee HPC staff seem to agree in their report calling the Azek trim "the least concerning application of a synthetic material on this project."

5 Our new construction project at 100 West Brown Street is compatible with the historic character of the neighborhood and protects its integrity.

The founding document for the Brewers Hill Historic District cites four key elements that need to be considered when approving new construction: siting, scale, form, and materials.³⁸ The proposed new construction at 100 W. Brown Street has given careful attention to **each** of these elements. None of them has been neglected or overlooked. The **siting** of the home takes into account the setback of neighboring houses. It also mirrors the siting of the historic structure on the site, Krueger Brothers Grocery. The **scale** of the components of the proposed home, including the porch, windows, roof, and doors are all compatible with the adjacent historical structures and the styles of homes in the neighborhood. Indeed, as the project has evolved, we have worked carefully to incorporate input from the HPC staff on scale, resulting in a design that has become quite compatible with homes nearby. The **mass** of the proposed project is also compatible with the surrounding buildings. The building and roof elements of our project express continuity with neighboring historic structures. In terms of siting, scale, and mass, this project is very compatible with the historic homes in the Brewers Hill Historic District.

Building materials deserve some closer consideration, since they seem to be the most contentious component of the proposed project. It seems worthwhile here to re-quote the relevant passage from the Brewers Hill *Historic Designation Study Report*, which states the following about the materials to be used in *new construction*:

"The physical composition of the materials may be different from that of the historic materials, but the same appearance should be maintained."³⁹

In many instances, our home at 100 West Brown will have materials identical to those originally used in nearby historic homes, creating a sense of continuity with the architecture around it. The exposed sections of the basement/foundation will be faced with full (real) bricks; and the wrap-around front porch railings, columns, posts, balusters, and skirting (perhaps the most prominent decorative elements of this corner house) will be constructed of painted wood. However, for reasons of durability, sustainability, and cost, we request that the HPC allow us to use alternative materials as described above.

Trained eyes may note that some of the external materials on our home are not historic – as they should – but these alternative materials will not harm the character of the neighborhood. Indeed, these materials will provide an element of differentiation that is a core component of ordinances, standards, and practices in historic districts around the country.

³⁸ <http://www.city.milwaukee.gov/ImageLibrary/Groups/cityHPC/DesignatedReports/vticnf/HDBrewersHill.pdf>. Page 9.

³⁹ <http://www.city.milwaukee.gov/ImageLibrary/Groups/cityHPC/DesignatedReports/vticnf/HDBrewersHill.pdf>. Page 9.

6 Precedent in practice should not trump policy.

The arguments presented here, especially those based on the Thomason and Associates study make it clear that historic preservation commissions around the country have grown comfortable using alternative materials in new infill construction in historic preservation districts (even while they may remain more conservative in their stance on the use of such materials on historical structures).

Arguments presented by HPC staff against the use of alternative materials rely heavily on the fear of going against precedent in practice. When questioned about City of Milwaukee ordinances and historic district study reports that allow the use of alternative materials, HPC staff suggested that precedent in practice trumps policy. They recommend using all wood for siding, windows, porches, and other exterior elements because they worry that allowing other materials into the Historic Preservation District would open the floodgates of inauthentic structures. Despite written policies that encourage and allow the use of alternative materials, the HPC staff points in the appendix of their staff report to the history of new infill houses and major additions in the Brewers Hill Historic District being required to have wood siding, wood trim, and wood windows. The number of projects listed, especially if one only considers new construction as distinct from major additions, provides a very weak precedent. It is also interesting to note that only one new structure has been built in the last thirteen years. And two of the three most recent projects approved with wood exteriors were not built at all. While national economic conditions might certainly account for some reluctance to build, it is also worthwhile to consider whether the practice of insisting on all wood exteriors for new construction has resulted in Brewers Hill pricing itself out of the market. Instead of worrying about violating a precedent, perhaps the HPC should consider whether it is time for a new precedent that reflects written policies to be set, in order to allow those who wish to contribute to the stability of our neighborhoods access to those neighborhoods.

Our project at 100 West Brown Street is new construction on an empty lot. Allowing modern, affordable, sustainable, and durable materials on our project will not imply that these materials will have to be allowed on other types of projects. This will not be a violation of precedent, unless one house in thirteen years can be considered a precedent. The HPC in Milwaukee may wish to follow the lead of historic preservation commissions around the country by differentiating between new construction and the preservations of historic structures—as written policies suggest it should—and developing a practice that takes this important distinction into account.

Our call for written policies to be followed is supported by the Historic Brewers Hill Neighborhood Association, a neighborhood group that includes residents and owners in the Brewers Hill Historic District. In their letter to the HPC dated December 15, 2017, this group of homeowners and residents requests "that the HPC apply its own written standards for new construction materials when evaluating" our project and allow us to use alternative materials as requested. The support of the HBHA dampens the argument made in the staff report that allowing alternative materials would be "unfair," since the representatives of the neighborhood's residents, including some of those impacted by the earlier insistence on wood exteriors on new construction, are now advocating for the use of alternative materials. To this group of neighbors, the distinction between preserving historic structures and developing new additions to a historic district is clear.

Beyond issues of fairness and accountability, we urge the HPC to consider environmental sustainability as well. Is it sustainable for Wisconsin builders to transport wood over long distances

from Maine or Massachusetts or Louisiana, as HPC staff have recommended? It is widely acknowledged that currently available new-growth wood does not have the durability of the old-growth wood that was used on many historic homes.⁴⁰ Should lower-grade, new-growth wood be preferred over renewable products that incorporate recycled wood products and are more durable?

Other historic planning commissions have had these conversations and asked these questions—including HPCs in some communities (like Savannah) that have much greater economic investments (due to tourism) in the integrity of their historic neighborhoods than Milwaukee. We urge the Milwaukee HPC to give serious consideration to the thoughtful proposal we have submitted and to the value that our home at 100 West Brown Street would bring to Brewers Hill.

7 Requiring that this home be clad in wood may mean that it will not be financially possible and will not be built, leaving a gap in the fabric of the neighborhood.

As part of the financing of this home project, we have been working with Johnson Bank. The bank worked to hire an appraiser to determine the value of the finished home. Appraisers were reluctant to take the case, because they feared that the appraised value of the home would not equal the cost of building the home or were concerned about the difficulty of finding comparable properties to use in the appraisal. When an appraiser was identified (after several had refused to take the work), he did indeed have difficulties finding other properties to use as comps. When he returned a valuation of the property to the bank to use for the purposes of financing, the valuation came in \$5,400 below the cost of construction (per the detailed construction contract with Redbud Homes), even when some lower cost finishes (such as vinyl siding, which is no longer under consideration) were included in the contract. A new appraisal will have to be carried out if significant changes are made to the construction contract in order to determine whether higher cost materials such as wood cladding will increase the valuation of the finished home, and there is a real possibility that significant changes to the cost of building the home could make it financially impossible to proceed.

The table below shows the costs (based on contractors estimates) of several variations on the exterior finishes of the home. (Vinyl siding is no longer under consideration, but is included here for the sake of cost comparison.) These figures show that cedar siding, as recommended by the HPC staff is significantly more expensive, both initially and over the life of the house than HardiePlank. In addition, the installation cost alone of windows from a local company recommended by HPC staff (Parrett) also come in at twice the cost of the Marvin windows.

⁴⁰ In *Living With History: A guide to the preservation standards for historically designated houses in Milwaukee*, Paul Jakubovich states, "Old wood is inherently superior in quality to most of today's construction lumber." (Page 3)

Exterior Element	A: Current Contract	B. Proposed to HPC	C: Add'l Option 1	D: Add'l Option 2
Siding	vinyl siding and trim boards \$26,025.36 (*A: \$0) (*B: \$0)	HardiePlank siding and trim boards \$37,674.00 (*A: \$1,250) (*B: \$1,250)	painted cedar with painted cedar trim boards \$48,084.91 (*A: \$2,500) (*B: \$6,500)	painted cedar with Azek trim boards \$47,572.29 (*A: \$2,500) (*B: \$5,000)
Windows	Marvin Windows ("Ultimate" double hung units, clad in aluminum at the exterior with simulated muntins) \$30,280.19	Marvin Windows ("Ultimate" double hung units, clad in aluminum at the exterior with simulated muntins) \$30,280.19	Parrett wood, aluminum clad window package \$64,831.80	Parrett wood window package TBD (*B: TBD)

Information based on actual quotes from contractors.

*A = Cost of painting and touch-up upon installation

*B = Cost of regular repainting (≈ every five years)

As we consider whether we can afford to build this house, we will need to consider both whether construction costs are affordable, and whether we can afford the upkeep of this home. Using alternative materials will clearly make it more economically feasible in both the short and long terms.

Not building this home will also involve a cost to the neighborhood. The lot on the corner of West Brown and First Streets is one of the anchors of this historic district. Leaving it empty and open – as it has been since the former structure was demolished about ten years ago – could be interpreted as a lack of concern for and investment in the health of the community. A newly constructed home built in a way that sustains the architectural language of the historic district without imitating it in inappropriate ways, a home which HPC staff have called "refined, appropriate, and carefully thought through"⁴¹ will, on the other hand, honor the architectural history of Milwaukee, "blend well with the surrounding Brewers Hill neighborhood,"⁴² and add integrity and strength to the historic character of the district.

We urge the HPC to approve this project as we have proposed it and to issue a Certificate of Appropriateness so that construction can begin early this spring.

⁴¹ Historic Preservation Commission of Milwaukee. Staff Report PTS #114399. Milwaukee, November 6, 2017.

⁴² Historic Preservation Commission of Milwaukee. Staff Report PTS #114399. Milwaukee, November 6, 2017.