

Department of Community Planning and Economic Development
Planning Division

Certificate of Appropriateness
BZH-26600

Date: October 5, 2010

Proposal: Request for Certificate of Appropriateness to replace dentils

Applicant: Robert Mack, MacDonald & Mack Architects

Address of Property: 25 North 4th Street

Project Name: 25 North 4th Street Dentil Replacement

Contact Person and Phone: Robert Mack, 612.341.4051

Planning Staff and Phone: John Smoley, Ph.D., 612-673-2830

Date Application Deemed Complete: September 17, 2010

Publication Date: October 5, 2010

Public Hearing: October 12, 2010

Appeal Period Expiration: October 22, 2010

Ward: 7

Neighborhood Organization: **Downtown Minneapolis Neighborhood Association**

Concurrent Review: n/a

Attachments:

- A. Staff Report – A1-A13
- B. Materials Submitted by CPED – B1-B19
 - a. 350' map – B1
 - b. 350' map with comprehensive plan land use categories indicated – B2
 - c. Preservation Brief #7: *The Preservation of Historic Glazed Architectural Terra-Cotta* – B3-B19
- C. Materials Submitted by Applicant – C1-C50
 - a. Application – C1-C9
 - b. Letter to Neighborhood & Councilmember – C10-C11
 - c. Plans – C12-C14
 - d. Project Specifications – C15 - C39
 - e. Photos – C40-C50
- D. Materials Submitted by Other Parties – n/a

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25 North 4th Street, 2010, photo submitted by Applicant

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25 North 4th Street (second building from right) , 1930, Minnesota Historical Society photograph

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CLASSIFICATION:	
Local Historic District	Warehouse Historic District (contributing resource)
Period of Significance	1865 to 1930
Criteria of significance	The Warehouse Historic District is significant for its depiction of social history, architecture, and the work of master craftsmen during the period 1865 to 1930.
Date of local designation	1978
Applicable Design Guidelines	<i>The Secretary of the Interior's Standards for Treatment of Historic Properties</i> <i>Warehouse Historic District Design Guidelines</i>

PROPERTY INFORMATION	
Current name	Robitshek Building
Historic Name	Robitshek Building
Current Address	25 North 4th Street
Historic Address	21-25 North 4th Street
Original Construction Date	1919
Original Contractor	C.F. Hoglin
Original Architect	Long, Lamoreaux, and Long
Historic Use	Factory
Current Use	Advertising school and billiard hall
Proposed Use	Advertising school and billiard hall

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BACKGROUND:

The Robitshek Building is a five-story Beaux Arts composition constructed with brick and stylized terra cotta. An egg-and-dart molding frames the first floor storefront while five defined columns with ornate capitals divide the upper stories into four bays. Paired windows in each bay are organized as a vertical element within a rounded arch. The bays are further defined by recessed spandrels. The elaborate cornice consists of projecting modillions and terra cotta medallions. The ground floor storefront and entry have been modified, but the building retains its integrity.

The Minneapolis Warehouse Historic District is historically significant as an early example of commercial growth as the city's warehouse and wholesaling district. The district expanded during the late nineteenth and early twentieth centuries and helped transform Minneapolis into a major distribution and jobbing center for the northwest. The district is also significant for its concentration of commercial buildings representative of every major architectural style from the late nineteenth to early twentieth century. Finally, the district is significant for exemplifying the work of master craftsmen in its construction.

The exterior portions of the subject property contribute to the district's significance. Designed by Long, Lamoreaux, and Long in 1900, the building is representative of Beaux Arts architecture and the work of master architects characteristic of the district.

SUMMARY OF APPLICANT'S PROPOSAL:

The Applicant proposes to replace all of the terra cotta dentils on the cornice of the building at 25 North 4th Street with fiberglass dentils of the same size, shape, color, and detail. Supplementary work consists of repointing deteriorated mortar joints, repairing terra cotta cracks with epoxy, and installing a sheet metal cap with drip edge atop the terra cotta capitals.

In May 2010 one of the dentils on the cornice of the building at 25 North 4th Street suddenly and unexpectedly fell, shattering on the sidewalk five stories below. The Applicant's architect has determined that signs of structural trauma are clearly evident in other dentils. Water damage to the internal metal anchors threatens to release additional dentils with no notice. The Applicant installed a scaffolding system designed to protect passersby. Missing mortar and terra cotta cracks continue to permit water infiltration thus exacerbating the situation. The repairs are intended to provide a long-term solution to the issues.

PUBLIC COMMENT:

As of the publication of this staff report, staff has received no comment letters on the project.

CERTIFICATE OF APPROPRIATENESS:

Findings as required by the Minneapolis Preservation Code:

The Planning Division of the Minneapolis Community Planning and Economic Development Department has analyzed the application based on the findings required by the Minneapolis Preservation Ordinance. Before approving a certificate of appropriateness, and based upon the evidence presented in each application submitted, the commission shall make findings based upon, but not limited to, the following:

(1) *The alteration is compatible with and continues to support the criteria of significance and period of significance for which the landmark or historic district was designated.*

The exterior portions of the building at 25 North 4th Street contribute to the district's significance due to the property's embodiment of Beaux Arts architecture and the work of master architects characteristic of the district. Regardless of what changes are made to the subject property, it will maintain its historical significance, but proposed changes may affect its integrity (i.e. the property's ability to communicate its historical significance).

(2) *The alteration is compatible with and supports the interior and/or exterior designation in which the property was designated.*

The proposed alterations are compatible with and support the property's exterior designation. The exterior portions of the building at 25 North 4th Street contribute to the district's significance. The Applicant is proposing to conduct a replacement of failing dentils attached to a substandard anchoring system to prevent further catastrophic failures (see pages C43-C45). The weight of the dentils and failed anchoring system necessitate the change of materials. Supplementary repairs (repointing, epoxy crack repair, and sheet metal capital caps) will prevent water infiltration. The repairs will be conducted five stories above the street, making the changes virtually imperceptible. Similar changes to the Grain Exchange were done just two stories off of the ground and are imperceptible (see pages C49-C50).

(3) *The alteration is compatible with and will ensure continued integrity of the landmark or historic district for which the district was designated.*

Based upon the evidence provided below, the proposed work will impair, but not destroy, the integrity of the contributing resource.

Location: The Applicant proposes no changes to the contributing resource's location, thus the project will not impair the contributing resource's integrity of location.

Design: As proposed, the project will minimally alter the design of the building. The Applicant proposes to place sheet metal caps atop the cracked capitals whose terra cotta glaze has worn away (see page C46). Placing sheet metal atop the caps will enable the current caps to be repaired, rather than replaced, and will help prevent water infiltration on a horizontal

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surface. The sheet metal caps, painted to match the color of the terra cotta, will be highly reversible and very difficult to see from the street.

Setting: As the Applicant is proposing no changes to properties around the contributing resource, the project will not affect the property's integrity of setting.

Materials: The Applicant proposes to replace the buildings historic terra cotta dentils with new, fiberglass dentils of the same size, shape, color, and detail, in accordance with Preservation Brief #7: *The Preservation of Historic Glazed Architectural Terra-Cotta*. The replacement is intended to prevent further catastrophic failures. The weight of the dentils and failed anchoring system necessitate the change of materials. Supplementary repairs (repointing, epoxy crack repair, and sheet metal capital caps) will introduce new materials to prevent water infiltration. The repairs will be conducted five stories above the street, making the changes virtually imperceptible. Similar changes to the Grain Exchange done just two stories off of the ground are imperceptible.

Workmanship: The Applicant proposes to replace the buildings historic terra cotta dentils with new, fiberglass dentils of the same size, shape, color, and detail, in accordance with Preservation Brief #7: *The Preservation of Historic Glazed Architectural Terra-Cotta*. The replacement is limited to the dentils, not the entire cornice. While this will remove tangible evidence of the workmanship inherent in the building, the dentils are relatively less ornate than other terra cotta workmanship on the building, to include other portions of the cornice. The project will minimally impair the contributing resource's integrity of workmanship.

Feeling: The Applicant is proposing to repair decorative terra cotta on a building significant for its architecture and association with architects. The repairs will be extremely difficult to see from the public right of way. There will be no impact upon the building's integrity of feeling.

Association: The building is significant for its Beaux Arts architecture and association with historically significant architects. The proposed changes will not impair the property's association with these elements.

(4) The alteration will not materially impair the significance and integrity of the landmark, historic district or nominated property under interim protection as evidenced by the consistency of alterations with the applicable design guidelines adopted by the commission.

The application follows all guidelines laid out in the Minneapolis Warehouse Historic District Design Guidelines (adopted in 2010).

Three guidelines related to mortar replacement apply, specifically:

2.16. Mortar joints shall only be repointed where there is evidence of a moisture problem or when a substantial amount of the mortar is missing.

2.17. Mortar joints shall be cleared with hand tools. The use of electric saws and hammers to remove mortar can seriously damage the adjacent brick and are inappropriate.

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2.18. Replacement mortar shall duplicate the original mortar's composition, color, texture, joint width, and joint profile.

Moisture damage is quite apparent from photographs submitted by the Applicant (see pages C42-C47). The project specifications prepared by the Applicant (see pages C15 - C39) ensure that replacement materials, to include mortar, prevent water infiltration while being highly difficult to see from the street.

Two guidelines related to cornices apply, specifically:

2.62. The original building roofline including the cornice, parapet, and other elements shall be retained and not altered.

2.66. When a parapet or cornice is missing, replacements will be considered based on historic photos or other evidence.

The original roofline will not be altered. The cornice shall be preserved with minimal changes (dentil replacements and crack repairs). New dentils shall replicate the existing, historic dentils in terms of size, shape, color, and detail, in accordance with Preservation Brief #7: *The Preservation of Historic Glazed Architectural Terra-Cotta*.

(5) *The alteration will not materially impair the significance and integrity of the landmark, historic district or nominated property under interim protection as evidenced by the consistency of alterations with the recommendations contained in The Secretary of the Interior's Standards for the Treatment of Historic Properties.*

The Applicant is conducting a rehabilitation of the subject property.

The rehabilitation guidelines of *The Secretary of the Interior's Standards for the Treatment of Historic Properties* recommend identifying, retaining, and preserving masonry features that are important in defining the overall historic character of the building such as walls, brackets, railings, cornices, window architraves, door pediments, steps, and columns; and details such as tooling and bonding patterns, coatings, and color.

The Applicant seeks to end water infiltration into the subject property's decorative cornice and to prevent further catastrophic failure of the feature. Professional analysis has determined that the current dentil anchoring system is failing, as depicted in Applicant photos. Sealing, repointing, and installing sheet metal should end water infiltration into the cornice. Replacing the existing terra cotta dentils with light fiberglass dentils will alleviate the need to remove and rebuild the cornice, a likely outcome given the design of the anchoring system.

Of course, this will result in the replacement of one historic feature: terra cotta dentils. The rehabilitation guidelines of *The Secretary of the Interior's Standards for the Treatment of Historic Properties* do not recommend removing or radically changing masonry features which are important in defining the overall historic character of the building so that, as a result, the character is diminished. They also do not recommend replacing or rebuilding a

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major portion of exterior masonry walls that could be repaired so that, as a result, the building is no longer historic and is essentially new construction.

While the dentils are an important component of the building's cornice, their replacement with fiberglass replicas will not constitute a radical change that diminishes the historic character of the building. The dentils could technically be repaired, but this would require major work, specifically cornice removal and restoration. Preservation Brief #7: *The Preservation of Historic Glazed Architectural Terra-Cotta*, specifically notes the extreme difficulty in such an endeavor:

Removing and re-anchoring damaged glazed architectural terra-cotta is an extremely difficult if not impossible task. The complexity of the interlocking system of masonry units, backfill, and metal anchoring system precludes the removal of the glazed architectural terra-cotta unit without destroying it."

Re-anchoring deteriorated units is likewise impossible. Therefore, if the terra-cotta in question is loose, severely deteriorated, or its structural integrity in serious question, it is best removed and replaced.

The dentil replacement will also help prevent further deterioration, hinted at by the sudden failure of a dentil's anchoring system.

The rehabilitation guidelines of *The Secretary of the Interior's Standards for the Treatment of Historic Properties* recommend protecting and maintaining masonry by providing proper drainage so that water does not stand on flat, horizontal surfaces or accumulate in curved decorative features. Water has been pooling atop terra cotta capital caps not protected by the building's cornice (see sheet C46). The proposed installation of sheet metal capital caps will help preserve the existing decorative terra cotta caps, whose protective finish has worn away, in a manner that is easily reversed.

The proposal is also in line with Preservation Brief #7: *The Preservation of Historic Glazed Architectural Terra-Cotta*, which notes,

In-kind replacement [of terra cotta] is possible today, but only on a limited basis. Most new glazed architectural terra-cotta is machine made, not hand made as the original. Thus, the porous tile body of the new material tends to be more uniform but less dense and often not as durable. The glaze on the new glazed architectural terra-cotta tends to be thinner than that on the older material and subsequently more brittle. Machine processing has also produced a glaze that is uniform in color as opposed to historic glazes which were slightly mottled and, therefore, richer. Visual compatibility is an important consideration when replacing in-kind.

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Only a fairly limited inventory of in-kind pieces is presently available for replacement such as plain ashlar blocks and the simpler details such as cappings and sills...

Fiberglass replacement is a viable alternative, particularly when rich and elaborate ornamentation has to be duplicated. Casting from original intact pieces can produce numerous sharp copies of entablatures, moldings, balusters, voussoirs, etc. Anchoring is easily included in casting.

The brief goes on to note fiberglass replacement drawbacks: color compatibility, fire code violations (in seismically active areas), and poor weathering and aging processes. The application notes that the replacement color shall match the original, and that the materials shall age similar to those used on the Grain Exchange. Photographic and in-person visual evidence of those replacement features indicate no discernible difference in terms of color or aging.

(6) The certificate of appropriateness conforms to all applicable regulations of this preservation ordinance and is consistent with the applicable policies of the comprehensive plan and applicable preservation policies in small area plans adopted by the city council.

Action 8.1.1 of the Minneapolis Plan for Sustainable Growth indicates that the City shall protect historic resources from modifications that are not sensitive to their historic significance. The project will not modify the building in a way that is insensitive to its historical character, as discussed in items 4 and 5 above.

Comprehensive plan policy 8.1 states that the City will, "Preserve, maintain, and designate districts, landmarks, and historic resources which serve as reminders of the city's architecture, history, and culture." The proposed work will help preserve the subject property by helping to end water infiltration into the cornice and preventing the removal and rebuilding of the cornice, required to install new terra cotta dentils.

(7) Destruction of any property. Before approving a certificate of appropriateness that involves the destruction, in whole or in part, of any landmark, property in an historic district or nominated property under interim protection, the commission shall make findings that the destruction is necessary to correct an unsafe or dangerous condition on the property, or that there are no reasonable alternatives to the destruction. In determining whether reasonable alternatives exist, the commission shall consider, but not be limited to, the significance of the property, the integrity of the property and the economic value or usefulness of the existing structure, including its current use, costs of renovation and feasible alternative uses. The commission may delay a final decision for a reasonable period of time to allow parties interested in preserving the property a reasonable opportunity to act to protect it.

The project does not include the destruction of the subject property.

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Before approving a certificate of appropriateness, and based upon the evidence presented in each application submitted, the commission shall make findings that alterations are proposed in a manner that demonstrates that the Applicant has made adequate consideration of the following documents and regulations:

(8) Adequate consideration of the description and statement of significance in the original nomination upon which designation of the landmark or historic district was based.

The Applicant has made adequate consideration of the description and statement of significance in the original nomination upon which designation of the landmark or historic district was based (see pages C4-C9 for their narrative). The exterior portions of the building at 25 North 4th Street contribute to the district's significance. The Applicant is proposing to replace dentils and conduct minor repairs to prevent water infiltration into the most decorative feature on the building.

(9) Where applicable, Adequate consideration of Title 20 of the Minneapolis Code of Ordinances, Zoning Code, Chapter 530, Site Plan Review.

Title 20 of the Minneapolis Code of Ordinances, Zoning Code, Chapter 530, Site Plan Review does not require site plan review for this proposal, which includes no additions.

(10) The typology of treatments delineated in the Secretary of the Interior's Standards for the Treatment of Historic Properties and the associated guidelines for preserving, rehabilitating, reconstructing, and restoring historic buildings.

As discussed in finding #5, the application is in compliance with the rehabilitation guidelines of the Secretary of the Interior's Standards for the Treatment of Historic Properties.

Before approving a certificate of appropriateness that involves alterations to a property within an historic district, the commission shall make findings based upon, but not limited to, the following:

(11) The alteration is compatible with and will ensure continued significance and integrity of all contributing properties in the historic district based on the period of significance for which the district was designated.

The proposed alterations are compatible with and will ensure continued significance and integrity of all contributing properties in the historic district. The proposed alterations will occur at the top of the building, five stories above the street. These changes will be extremely difficult to notice from the public right of way (see plans on pages C12-C14 and detailed specifications on pages C15-C39), like previously completed terra cotta replacement and repair on the second story of the Grain Exchange (see pages C49–C50).

(12) Granting the certificate of appropriateness will be in keeping with the spirit and intent of the ordinance and will not negatively alter the essential character of the

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historic district.

The spirit and intent of the City of Minneapolis' Heritage Preservation Regulations is to preserve historically significant buildings, structures, sites, objects, districts, and cultural landscapes of the community while permitting appropriate changes to be made to these properties. The Owner seeks to replace terra cotta dentils that have failed without warning and to end water infiltration into the most decorative feature on the building: its cornice. These changes will be very difficult to see from the street.

(13) The certificate of appropriateness will not be injurious to the significance and integrity of other resources in the historic district and will not impede the normal and orderly preservation of surrounding resources as allowed by regulations in the preservation ordinance.

Approval of this Certificate of Appropriateness will not impede the normal and orderly preservation of surrounding resources within the district and City at large. Preservation Brief #7: *The Preservation of Historic Glazed Architectural Terra-Cotta*, notes,

The root of deterioration in glazed architectural terra-cotta systems often lies in a misapplication of the material. Historically, glazed architectural terra-cotta was viewed as a highly waterproof system needing neither flashing, weep holes nor drips. This supposition, however, has proved to be untrue, as serious water-related failure was evident early in the life of many glazed architectural terra-cotta clad or detailed buildings.

The catastrophic failure of the subject property's dentils and the proposed replacement may set a good example for district property owners to assess the condition of their historic masonry and appropriately address failing systems before further catastrophic failures ensue.

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STAFF RECOMMENDATION

CPED-Planning recommends that the Heritage Preservation Commission **adopt** staff findings and **approve** the Certificate of Appropriateness subject to the following conditions:

1. All workmanship must be conducted in accordance with *The Secretary of the Interior's Standards for the Treatment of Historic Properties*.
2. Final plans, elevations, details, material selections, and finish samples must be submitted to CPED-Planning Staff for final review and approval prior to any permits being issued.
3. By ordinance, approvals are valid for a period of one year from the date of the HPC decision. Upon written request and for good cause, the planning director may grant up to a one year extension if the request is made in writing no later than October 12, 2011.
4. By ordinance, all approvals granted in this Certificate of Appropriateness shall remain in effect as long as all of the conditions and guarantees of such approvals are observed. Failure to comply with such conditions and guarantees shall constitute a violation of this Certificate of Appropriateness and may result in termination of the approval.