

January 24, 2013

BENICIA HISTORIC PRESERVATION REVIEW COMMISSION

REGULAR MEETING AGENDA

City Hall Commission Room

Thursday, January 24, 2013

6:30 P.M.

I. OPENING OF MEETING:

A. Pledge of Allegiance

B. Roll Call of Commissioners

C. Reference to Fundamental Rights of Public -

A plaque stating the Fundamental Rights of each member of the public is posted at the entrance to this meeting room per Section 4.04.030 of the City of Benicia's Open Government Ordinance.

II. ADOPTION OF AGENDA:

III. OPPORTUNITY FOR PUBLIC COMMENT

This portion of the meeting is reserved for persons wishing to address the Commission on any matter not on the agenda that is within the subject matter jurisdiction of the Historic Preservation Review Commission. State law prohibits the Commission from responding to or acting upon matters not listed on the agenda. Each speaker has a maximum of five minutes for public comment. If others have already expressed your position, you may simply indicate that you agree with a previous speaker. If appropriate, a spokesperson may present the views of your entire group. Speakers may not make personal attacks on commissioners, staff or members of the public, or make comments which are slanderous or which may invade an individual's personal privacy.

A. WRITTEN COMMENT

B. PUBLIC COMMENT

IV. CONSENT CALENDAR

Consent Calendar items are considered routine and will be enacted, approved or adopted by one motion unless a request for removal for discussion or explanation is received from the Historic Preservation Review Commission or a member of the public by submitting a speaker slip for that item.

*Any Item identified as a Public Hearing has been placed on the Consent Calendar because it has not generated any public interest or dissent. However, if any member of the public wishes to comment on a Public Hearing item, or would like the item placed on the regular agenda, please notify the Community Development Staff either prior to, or at the Historic Preservation Review Commission meeting, prior to the reading of the Consent Calendar.

[A. Approval of Minutes of November 15, 2012](#)

[B. DESIGN REVIEW TO RAISE THE FOUNDATION AND REMOVE EXISTING BRICK VENEER AT 821 EAST SECOND STREET](#)

13PLN-00001 Design Review

821 East Second Street, APN: 0089-052-110

PROPOSAL:

The applicant requests design review approval to remove a portion the existing brick veneer from one of the buildings at the Powerhouse office complex and replace with stucco and corner brick detail to match the existing west and north facades of the building. The proposed work is necessary to maintaining the structural integrity of the building. The subject building is located within the Downtown Historic Overlay District; however is not listed as a historic structure in the Downtown Historic Conservation Plan.

Recommendation:

Approve the design review request to remove the existing brick veneer from the southwest corner of the building at 821 East Second Street, based on the findings, and subject to the conditions listed in the draft resolution.

V. REGULAR AGENDA ITEMS

[A. DESIGN REVIEW TO INCREASE THE HEIGHT OF THE ROOFLINE AT 1209 POLK STREET](#)

12PLN-00054 Design Review

1209 Polk Street, APN: 0080-140-160

PROPOSAL:

The applicant requests design review approval to raise the roof height of the existing building from 36'-4" to 46'-4" to accommodate interior crane operations at 1209 Polk Street. The subject building is located within the Arsenal Historic Overlay District; however it is not listed as historic structure in the Arsenal Historic Conservation Plan.

Recommendation:

Approve the design review request to raise the roof height of the existing building by 10-feet at 1209 Polk Street based on the findings and subject to the conditions of approval listed in the draft resolution.

[B. DESIGN REVIEW TO REPLACE ELEVEN WINDOWS AT 283 WEST H STREET](#)

12PLN-00053 Design Review

283 West H Street, APN: 0089-042-160

PROPOSAL:

The applicant requests design review approval to replace 11 wood casement windows of varying style with new paintable wood composite windows on the existing single-family residence located at 283 West H Street, a contributing structure within the Downtown Historic Overlay District.

Recommendation:

Approve the design review request to replace 11 windows of the existing residence located at 283 West H Street, based on the findings, and subject to the conditions listed in the draft resolution.

C. WINDOW STANDARDS RESOLUTION AND DESIGN REVIEW EXEMPTIONS DISCUSSION

The Commission has recorded its preferences for window standards for designated buildings in the Downtown Historic Conservation District through a series of resolutions. The purpose of these resolutions was to incorporate the Secretary of the Interior Standards and provide a threshold for staff-level approval for window repair and replacement. The purpose of this discussion is to determine how best to recommend current Commission preferences to the City Council.

Recommendation:

Review the window standards resolution and potential DHCP changes, take public comment, and direct staff to bring back a draft for future action.

VII. COMMUNICATIONS FROM STAFF

A. City Council designation of Commissioners Haughey and Trumbly as "Owners of Historic Property"

VIII. COMMUNICATIONS FROM COMMISSIONERS

IX. ADJOURNMENT

Public Participation

The Benicia Historic Preservation Review Commission welcomes public participation.

Pursuant to the Brown Act, each public agency must provide the public with an opportunity to speak on any matter within the subject matter jurisdiction of the agency and which is not on the agency's agenda for that meeting. The Historic Preservation Review Commission allows speakers to speak on agenda and non-agenda matters under public comment. Comments are limited to no more than 5 minutes per speaker. By law, no action may be taken on any item raised during the public comment period although informational answers to questions may be given and matters may be referred to staff for placement on a future agenda of the Historic Preservation Review Commission.

Should you have material you wish to enter into the record, please submit it to the Commission Secretary.

Disabled Access

In compliance with the Americans with Disabilities Act (ADA), if you need special assistance to participate in this meeting, please contact the ADA Coordinator at (707) 746-4211. Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting.

Meeting Procedures

All items listed on this agenda are for Commission discussion and/or action. In accordance with the Brown Act, each item is listed and includes, where appropriate, further description of the item and/or a recommended action. The posting of a recommended action does not limit, or necessarily indicate, what action the Commission may take.

The Historic Preservation Review Commission may not begin new public hearing items after 11 p.m. Public hearing items, which remain on the agenda, may be continued to the next regular meeting of the Commission, or to a special meeting.

Pursuant to Government Code Section 65009; if you challenge a decision of the Historic Preservation Review Commission in court, you may be limited to raising only those issues you or someone else raised at the Public Hearing described in this notice, or in written correspondence delivered to the Historic Preservation Review Commission at, or prior to, the Public Hearing. You may also be limited by the ninety (90) day statute of limitations in which to file and serve a petition for administrative writ of mandate challenging any final City decisions regarding planning or zoning.

Appeals of Historic Preservation Review Commission decisions that are final actions, not recommendations, are considered by the Planning Commission. Appeals must be filed in the Community Development Department in writing, stating the basis of appeal with the appeal fee within 10 business days of the date of action.

Public Records

The agenda packet for this meeting is available at the City Clerk's Office, the Benicia Public Library and the Community Development Department during regular working hours. The Community Development Department is open Monday through Friday (except legal holidays), 8:30 a.m. to 5 p.m. (closed from noon to 1 p.m.). Technical staff is available from 8:30 - 9:30 a.m. and 1:00 - 2:00 p.m. only. If you have questions/comments outside of those hours, please call 746-4280 to make an appointment. To the extent feasible, the packet is also available on the City's web page at www.ci.benicia.ca.us under the heading "Agendas and Minutes." Public records related to an open session agenda item that are distributed after the agenda packet is prepared are available before the meeting at the Community Development Department's office located at 250 East L Street, Benicia, or at the meeting held in the City Hall Commission Room. If you wish to submit written information on an agenda item, please submit to Amy Million, Commission Secretary, as soon as possible so that it may be distributed to the Historic Preservation Review Commission.

 [November 15, 2012 Draft Minutes \(pdf\)](#)

 [821 East Second Street \(pdf\)](#)

 [1209 Polk Street \(pdf\)](#)

 [283 West H Street \(pdf\)](#)

 [Window Standards \(pdf\)](#)

 [Historic Property Owners \(pdf\)](#)

DRAFT



**BENICIA HISTORIC PRESERVATION REVIEW COMMISSION
REGULAR MEETING MINUTES**

**City Hall Commission Room
Thursday, November 15, 2012
6:30 P.M.**

I. OPENING OF MEETING:

A. Pledge of Allegiance

B. Roll Call of Commissioners

Present: Commissioners Berry, Delgado (arrived 6:35 p.m.),
McKee, Trumbly, Van Landschoot, vonStudnitz and
Chair Haughey

Absent: None

Staff Present: Amy Million, Principal Planner/Recording Secretary

C. Reference to Fundamental Rights of Public

II. ADOPTION OF AGENDA:

On a motion of Commissioner Van Landschoot, seconded by Commissioner Trumbly, the Agenda was approved by the following vote:

Ayes: Commissioners Berry, McKee, Trumbly, Van Landschoot, vonStudnitz
and Chair Haughey

Noes: None

Absent: Commissioner Delgado

Abstain: None

III. OPPORTUNITY FOR PUBLIC COMMENT

A. WRITTEN COMMENT

None.

B. PUBLIC COMMENT

None.

IV. CONSENT CALENDAR

On a motion of Commissioner vonStudnitz, seconded by Commissioner Berry, the consent calendar, noting the following abstentions, was approved by the following vote:

- Ayes: Commissioners Berry, McKee, Trumbly, Van Landschoot, and vonStudnitz and Chair Haughey.
- Noes: None
- Absent: Commissioner Delgado
- Abstain: None

A. Approval of Minutes of Joint Workshop with Planning Commission of September 13, 2012

B. Approval of Minutes of October 25, 2012

V. REGULAR AGENDA ITEMS

A. VON PFISTER ADOBE NOMINATION

Staff provided a brief overview of the proposal and recommended a few changes to the draft resolution to accurately reflect the subject application including referring to the subject building as "The von Pfister General Store" to be consistent with the nomination form and correction of a typo.

Commissioner vonStudnitz provided some information on the genealogy of General von Pfister and recommended changes to the nomination form.

Commissioner Trumbly commented on the appropriateness of the building qualifying under Criteria C.

Public comment was opened.

Bonnie Silvera with the Benicia Historical Society clarified the history of the Historical Society's previous application efforts. She noted that a Jerry Hayes has been pivotal in this process and he is owed a debt of gratitude for his effort in obtaining a nomination for Criteria A, B, and C.

Jerry Hayes with the Benicia Historical Society provided additional detail on the past efforts of the Benicia Historical Society on obtaining a national register nomination and the form previously prepared by Carey & Company, a consultant firm. He stated that the Historical Society is not interested in moving forward with a recommendation of Criteria D.

A member of the Benicia Historical Society addressed Commissioner Trumbly's earlier comment on Criteria C and stated that the adobe construction method was considered to be unique.

Public comment was closed.

The Commission requested clarification on the next steps. Vic Randall, Management Analyst Parks & Community Services stated that the plan is to submit the nomination form before the next review cycle in May. The commission and the applicants discussed the process, cost of rehabilitation and the timing once the application is submitted. Mr. Hayes added that the ultimate goal is to provide a site where the public can see the adobe structure and reconstruct what the general store would have looked like.

The restoration was discussed in greater detail including the introduction of new materials. Members of the Benicia Historical Society and the Commission discussed the restoration process, the building's history and the individual Criteria.

Commissioners discussed adding Criteria D to the application. This was strongly encouraged by Commissioners Berry and Trumbly since it would allow more opportunity for grant funding.

RESOLUTION 12-13 OF THE HISTORIC PRESERVATION REVIEW COMMISSION OF THE CITY OF BENICIA RECOMMENDING TO THE CITY COUNCIL TO SUPPORT THE NOMINATION OF THE VON PFISTER GENERAL STORE TO THE NATIONAL REGISTER OF HISTORIC PLACES

On a motion of Commissioner Van Landschoot, seconded by Commissioner von Studnitz, the above resolution was approved by the following vote:

- Ayes: Commissioners Berry, Delgado, McKee, Trumbly, Van Landschoot, vonStudnitz and Chair Haughey
- Noes: None
- Absent: None
- Abstain: None

B. DESIGNATE A REPRESENTATIVE FOR THE BENICIA URBAN WATERFRONT ENHANCEMENT AND MASTER PLAN COMMUNITY ADVISORY COMMITTEE

Staff provided a brief overview of the master plan and the purpose of the Community Advisory Committee.

Commissioner Van Landschoot stated that he would like to be the representative.

Commissioner McKee noted that having a design person on the committee would be beneficial.

Chair Haughey provided some history on the original efforts. Haughey asked for clarification on the process if more than one commissioner is interested in participating. Staff clarified that there will be one representative from the commission on the committee and others may participate as members of the community.

On a motion of Commissioner Delgado, seconded by Chair Haughey, the Commission designated Commissioner McKee to represent the Historic Preservation Review Commission on the Community Advisory Committee for the Benicia Urban Waterfront Enhancement and Master Plan Community Plan by the following vote:

Ayes: Commissioner Delgado
Noes: Commissioners McKee, Trumbly, vonStudnitz and Chair Haughey
Absent: None
Abstain: Commissioners Berry and Van Landschoot

Motion did not pass.

On a motion of Commissioner Mc Kee, seconded by Commissioner Berry, the Commission designated Commissioner Van Landschoot to represent the Historic Preservation Review Commission on the Community Advisory Committee for the Benicia Urban Waterfront Enhancement and Master Plan Community Plan by the following vote:

Ayes: Commissioners Berry, McKee, Trumbly, Van Landschoot, vonStudnitz and Chair Haughey
Noes: Commissioner Delgado
Absent: None
Abstain: None

C. CERTIFIED LOCAL GOVERNMENT (CLG) ANNUAL REPORT

Staff provided an overview of the 2011-2012 CLG Annual Report.

The Commissioners and staff briefly discussed the report; specifically the information provided on pages 11 and 12.

VII. COMMUNICATIONS FROM STAFF

Staff informed the Commission that the Historic Preservation Review Commission received a letter, photographs and negatives as a donation from a citizen. The historic photographs and negatives are of the Benicia Arsenal. Staff suggested that the Benicia Historical Museum would be an appropriate location for the items. The Commission agreed.

Staff provided an update on the City Council's review of the boards and commissions. The next study session will be a "30,000 foot view" of the City's boards and commissions and is scheduled for Tuesday, November 27 at 6:00 p.m.

Staff informed the Commission that recently several requests have been made to install alternative materials such as fiberglass windows. Staff provided a sample of a Milgard brand fiberglass window. The Commission requested that this is to be agendaized at a future meeting so that they may discuss in more detail.

VIII. COMMUNICATIONS FROM COMMISSIONERS

None.

IX. ADJOURNMENT

Chair Haughey adjourned the meeting at 7:40 p.m.

AGENDA ITEM
HISTORIC PRESERVATION REVIEW COMMISSION MEETING:
JANUARY 24, 2013
CONSENT CALENDAR

DATE : January 14, 2013

TO : Historic Preservation Review Commission

FROM : Amy Million, Principal Planner

SUBJECT : **DESIGN REVIEW TO REMOVE A PORTION OF ONE OF THE BUILDING'S BRICK VENEER AT 821 EAST SECOND STREET**

PROJECT : **13PLN-00001 Design Review**
821 East Second Street
APN: 0089-052-110

RECOMMENDATION:

Approve the design review request to remove the existing brick veneer from the southwest corner of one of the buildings at the Powerhouse office complex 821 East Second Street, based on the findings, and subject to the conditions listed in the draft resolution.

EXECUTIVE SUMMARY:

The applicant requests design review approval to replace the existing brick with stucco and corner brick detail to match the existing west and north facades of the building. The proposed work is necessary to maintain the structural integrity of the building. The subject building is located within the Downtown Historic Overlay District; however is not listed as a historic structure in the Downtown Historic Conservation Plan.

BUDGET INFORMATION:

There are no budget impacts associated with this project.

ENVIRONMENTAL ANALYSIS:

This project is exempt from the California Environmental Quality Act (CEQA) pursuant to Section 15301, Existing Facilities. This exemption includes minor alterations to the exterior of existing structures, involving no expansion of use. The proposed modification to the building's façade is minor in nature and will not expand the existing use of the subject building.

BACKGROUND:

Applicant/Property Owner: Phil Joy / Bill and LeeAnn Cawley
 General Plan designation: Downtown Commercial
 Zoning designation: Neighborhood General – Open, NG-O
 Existing/Proposed use: Offices
 Adjacent zoning:
 North: Neighborhood General, NG
 East: Open Space, OS
 South: Neighborhood General, NG
 West: Neighborhood General, NG

821 East Second Street is a non-historic building located on the northwest corner of East H and East Second Street within the Downtown Historic Overlay District. The subject building is located on the same parcel as 191 East H Street, commonly referred to as the Powerhouse Building. The Powerhouse Building listed as a contributing structure in the Downtown Historic Conservation Plan; however, the newer subject building is not. A copy of the 2008 historic survey for the Powerhouse building is attached to this staff report for reference.

SUMMARY:

The applicant is requesting design review approval to remove the existing brick veneer in locations at and around the southwest corner of the building. See Figures A and B.

Figure A:

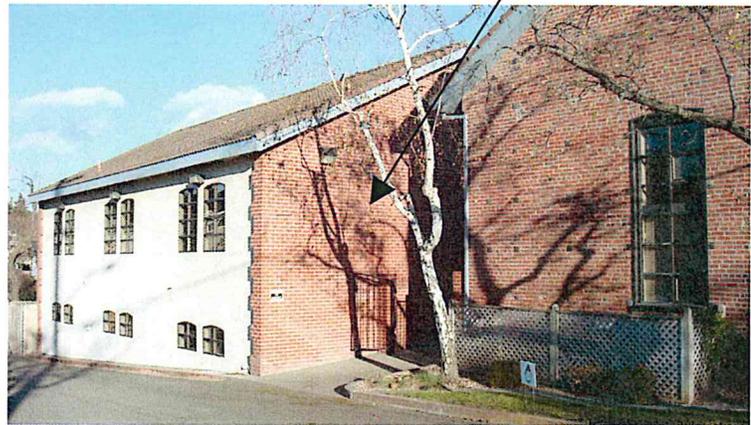


Figure B: View of the southwest corner of 821 East Second Street from East H Street

The subject building is clad with brick veneer on the south and east facades and stucco on the west and north facades. The brick veneer at the southwest corner will be replaced with stucco and a corner brick detail to match the existing treatment on other portions of the building. The brick veneer facing the interior courtyard on the east and south facades will remain. These facades are minimally visible from East Second Street.

The purpose of the project is to improve the structural integrity of the building. According to the application materials provided, the exterior walls of the subject building are too heavy and have resulted in a significant amount of shifting in the southwest corner of the building. This shifting has created cracks in the building wall and foundation that impact the building's structural integrity and emergency egress due to the location near the exterior stairs leading from the upper floor to the ground level. See figure C below. Improvements to the building will also include foundation repair.



Figure C: View of interior of building from courtyard looking toward southwest corner of building

Downtown Historic Conservation Plan Consistency

The subject property is located in the Downtown Historic Overlay District and therefore is subject to the policies and guidelines set forth in the Downtown Historic Conservation Plan (DHCP). The building itself is not listed as a historic structure, but is located on a site with a contributing structure to the DHCP.

The Purpose of the DHCP is as follows (pg. 2):

1. Implement the City's general plan,
2. Deter demolition, destruction, misuse, or neglect of historic or architecturally significant buildings that form an important link to Benicia's past,
3. Promote the conservation, preservation, protection, and enhancement of each historic district,

4. Stimulate the economic health and residential quality of the community and stabilize and enhance the value of property, and
5. Encourage development tailored to the character and significance of each historic district.

The general review criteria under the DHCP for this property are "Commercial Building Types." There are no policies and guidelines that provide direction explicitly for material changes to existing, non-historic commercial buildings located within the Transitional Area of the DHCP. However, the overarching theme of the DHCP is ensure compatibility of changes made to structures within the historic district. The proposal to remove the brick and replace it will stucco and brick detailing to match the west and north facades of the building are consistent with this theme

Downtown Mixed Use Master Plan Consistency

The project is consistent with Downtown Mixed Use Master Plan requirements in that the office use remains unchanged and no additions are proposed that require review of any site development standards.

CONCLUSION:

Staff finds that the project is consistent with the Downtown Mixed Use Master Plan and the Downtown Historic Conservation District and recommends the Historic Preservation Review Commission approve the design review request based on the findings and conditions of approval in the draft resolution.

FURTHER ACTION:

The Historic Preservation Review Commission's action will be final unless appealed to the Planning Commission within ten business days.

Attachments:

- Draft Resolution
- 2008 Survey (Department of Parks and Recreation Forms A & B)
- Project Plans & Photographs

DRAFT RESOLUTION

RESOLUTION NO. 13- (HPRC)

**A RESOLUTION OF THE HISTORIC PRESERVATION REVIEW COMMISSION
OF THE CITY OF BENICIA APPROVING EXTERIOR MODIFICATIONS TO THE
FAÇADE OF 821 EAST SECOND STREET**

WHEREAS, the applicant, Phil Joy and Bill & LeeAnn Cawley, property owners, requested Design Review approval to remove the brick veneer on the southwest corner of the existing building at 821 East Second Street; and

WHEREAS, the Historic Preservation Review Commission at a regular meeting on January 24, 2013 conducted a public hearing and reviewed the proposed project;

NOW, THEREFORE, BE IT RESOLVED THAT the Historic Preservation Review Commission of the City of Benicia hereby approves the exterior modifications at 821 East Second Street; and

BE IT FURTHER RESOLVED THAT the Historic Preservation Review Commission makes the following findings:

- a) This project is exempt from the California Environmental Quality Act (CEQA) pursuant to Section 15301, Existing Facilities. This exemption includes minor alterations to the exterior of existing structures, involving no expansion of use. The proposed modification to the building's façade is minor in nature and will not expand the existing use of the subject building.
- b) The project will be consistent with the Downtown Historic Conservation Plan policies and design guidelines.
- c) The design of the project is consistent with the purposes of Title 17 of the Benicia Municipal Code.

BE IT FURTHER RESOLVED THAT the Benicia Historic Preservation Review Commission hereby approves the proposed project subject to the following conditions:

1. This approval shall expire two years from the date of approval, unless made permanent by the issuance of a demolition permit and the commencement of work that is diligently pursued to completion. Alternatively, the time period may be extended, by the Community Development Director, if the application for time extension is received prior to the end of the initial two year deadline and there has been no change in the City's development policies which affect the site, and there is no change in the physical circumstances nor new information about the project site which would warrant reconsideration of the approval.
2. The plans submitted for the building permit and development and construction shall be in substantial compliance with the project plans with details and

photographs date stamped received January 7, 2013, consisting of 9 sheets marked Exhibit "A" on file with the Community Development Department. Any alteration of the approved plans shall be requested in writing and reviewed and approved by the Community Development Director prior to changes being made in the field.

3. The project shall adhere to all applicable ordinances, standard plans, and specifications of the City of Benicia.
4. The applicant or permittee shall defend, indemnify, and hold harmless the City of Benicia or its agents, officers, and employees from any claim, action, or proceeding against the City of Benicia or its agents, officers, or employees to attack, set aside, void, or annul an approval of the Historic Preservation Review Commission, Planning Commission, City Council, Community Development Director, or any other department, committee, or agency of the City concerning a development, variance, permit or land use approval which action is brought within the time period provided for in any applicable statute; provided, however, that the applicant's or permittee's duty to so defend, indemnify, and hold harmless shall be subject to the City's promptly notifying the applicant or permittee of any said claim, action, or proceeding and the City's full cooperation in the applicant's or permittee's defense of said claims, actions, or proceedings.

* * * * *

On motion of Commissioner , seconded by Commissioner , the above Resolution was adopted by the Historic Preservation Review Commission of the City of Benicia at a regular meeting of said Commission held on January 24, 2013 by the following vote:

Ayes:
Noes:
Absent:
Abstain:

Toni Haughey
Historic Preservation Review Commission Chair

**2008 SURVEY (DEPARTMENT OF PARKS AND
RECREATION FORMS 523 A & B)**

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #:
HRI #
Trinomial
NRHP Status Code:
Other Listings

Review Code _____ Reviewer _____ Date _____

- *Resource Name or #: 191 East H Street
P1. Other Identifier: none
*P2. Location: *a. County Solano
b. Address: 191 East H Street
*c. City: Benicia Zip 94510
d. UTM: N/A
e. USGS Quad: Benicia T2N R3W MDM
*f. Other Locational Data (APN #): 89-052-11

***P3a. Description**

This is an industrial building constructed in the 1870s or 1880s to house the Benicia Gas Works. In 1886 it was sited at the end of the block several lots removed from adjacent residences. It is a two-story rectangular plan building of masonry construction. The roof is side gabled, moderately pitched, and has modest overhangs. The roof is presently clad with a modern Spanish tile. The building has large vertically emphasized window openings which have had modern metal frame windows inserted. The entry is located at the west side of the front façade. It is probable that the original building entry was at the east end where the Gas Works office was located. The current entry opens into an area that was the coal house and which was unlikely to have had a direct front entry. The brick walls are laid in English bond. A large, single story modern building has been constructed to the east of the old gas building.

*P3b. Resource Attributes: HP2

*P4. Resources Present: Building Structure Object Site District Element of District

P5b. Description of Photo:

Front façade, view northwest

*P6. Date Constructed/Age: 1870

Prehistoric Historic Both

P5. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



*P7. Owner and Address:

Charles Britt
191 East H Street
Benicia, CA 94510

*P8. Recorded by:
Survey Committee
City of Benicia

*P9. Date Recorded: 9-08

*P10. Type of Survey: Intensive

Reconnaissance Other

Describe Eligibility Evaluation

*P11. Report Citation: none

*Attachments: NONE Map Sheet
 Continuation Sheet Building, Structure,
and Object Record Linear Resource Record
 Archaeological Record District Record
 Milling Station Record Rock Art Record
 Artifact Record Photograph Record
Other (List):

BUILDING, STRUCTURE, AND OBJECT RECORD

*Resource Identifier: 191 East H Street

*NRHP Status Code: 6Z

B1. **Historic Name:** Benicia Gas Works

B2. **Common Name:** none

B3. **Original Use:** Gas Works Building - Industrial

B4. **Present Use:** Offices

*B5. **Architectural Style:** Industrial

*B6. **Construction History:** The building has been modified to convert it from industrial to office use.

*B7. **Moved?** No Yes Unknown

Date: N/A

Original Location: same

*B8. **Related Features:** none.

B9a. **Architect:** unknown

B9b. **Builder:** unknown

*B10. **Significance: Theme:** Benicia Downtown District **Period of Significance:** 1847-1940 **Property Type:** Single Family **Applicable Criteria:** A / C

This building is an example of a small industrial building constructed to service the needs of the local community. Its location at the edge of the early residential district is a reminder of the intermixture of industrial, commercial, and residential uses that was common in 19th-century towns before land use was regulated. The original massing, form and building openings are preserved sufficiently that the industrial origins of the building are still discernable. The building is currently a contributor to the Downtown Historic District and should continue to retain this status. The extensive changes that have been made to the building were necessary in order to adaptively reuse the industrial building for commercial office use.

B11. **Additional Resource Attributes:** N/A

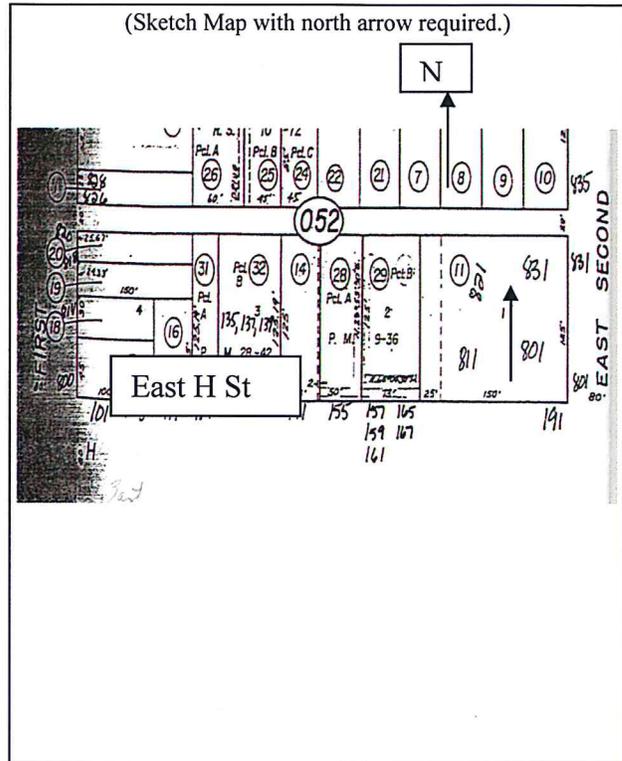
B12. **References:** McAlester, Virginia and Lee. *A Field Guide to American Houses*. New York: Alfred Knopf (1986); Brueggemann, Robert. *Benicia Portrait of an Early California Town: An Architectural History* (San Francisco: 101 Productions (1980); Woodbridge, Sally and Cannon Design Group. *Benicia, California: Downtown Historic Conservation Plan*. City of Benicia, 1990; Sanborn Map Benicia, CA. 1886; 1986 Benicia Historic Inventory form.

BUILDING, STRUCTURE, AND OBJECT RECORD

Remarks: N/A

B14. Evaluator: Survey Committee
Survey Committee
City of Benicia

B 15. Date of Evaluation: 9-08



(This space reserved for official comments.)

PROJECT PLANS AND PHOTOGRAPHS

Attached are photographs and sketches showing details of this repair work.

The details of the jacking and lifting and the overall maintenance of a safe job site will be the responsibility of Phil Joy Construction. He is very experienced in doing this type of work and does not need my input.

I would like to make an inspection after things are jacked up and leveled but before placing the concrete for the foundation curb extension. At that time I will check the reinforcing steel and anchors and I will also check the welded steel column extensions at the exterior stairs.

Sincerely,

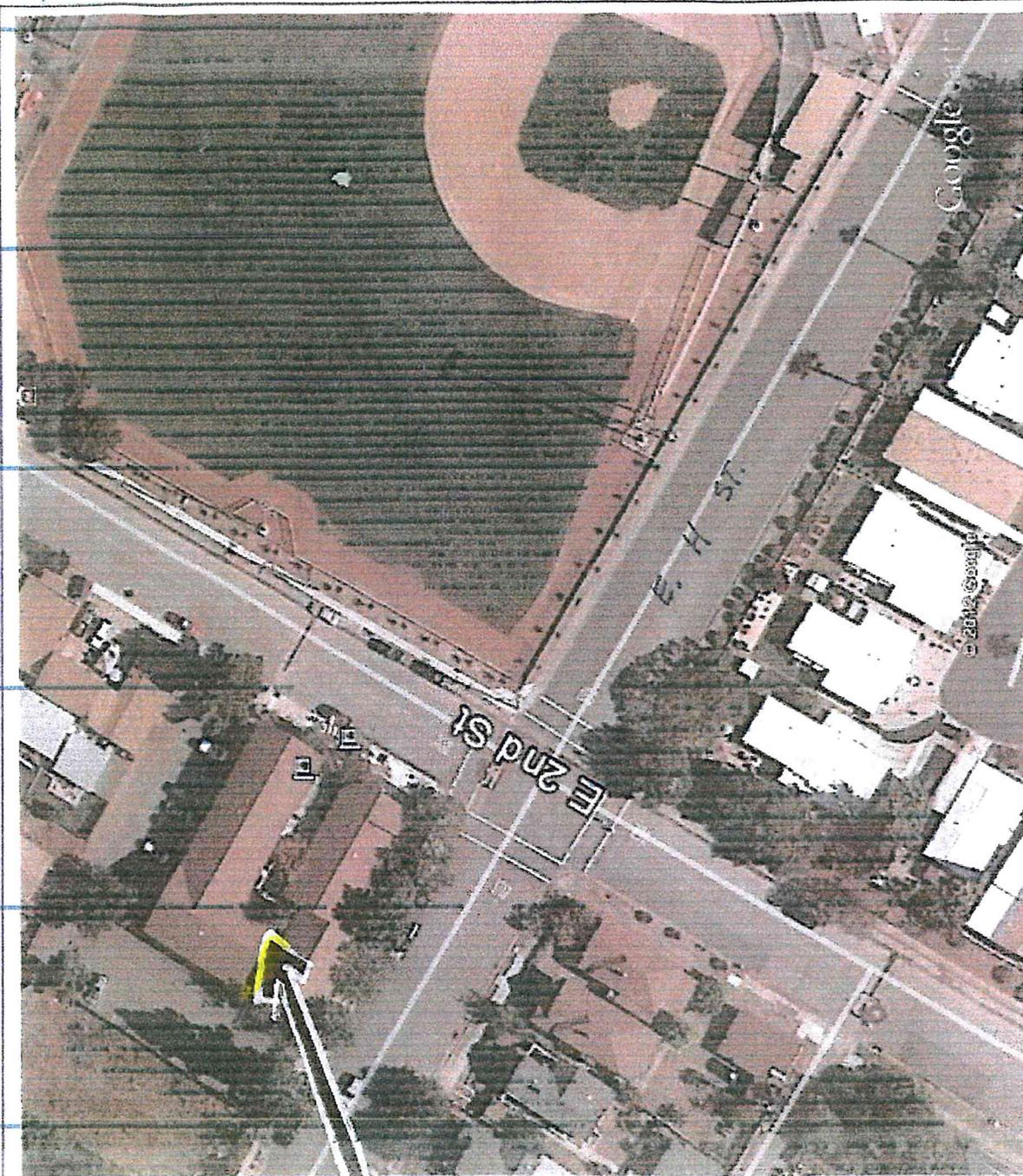


Kenneth R. Hughes
Structural Engineer

attachments

c. Phil Joy

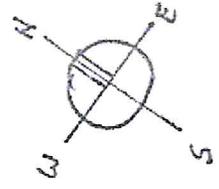




feet 200

Google earth

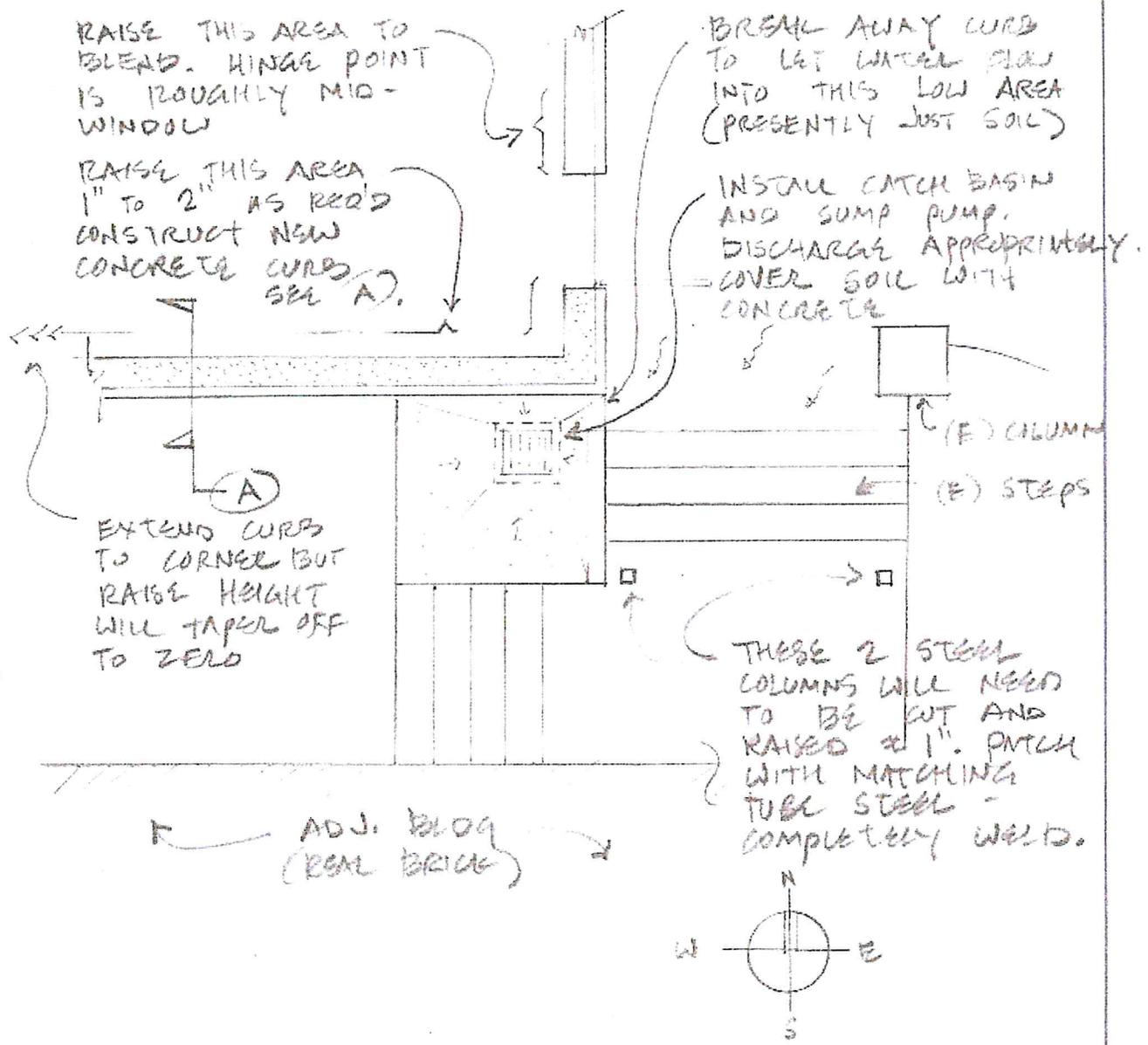
LOCATION



Kenneth R. Hughes
Structural Engineer
3620 Mt. Diablo Blvd., #203
Lafayette, California 94549
Tel: (925) 284-2808
Fax: (925) 284-7492

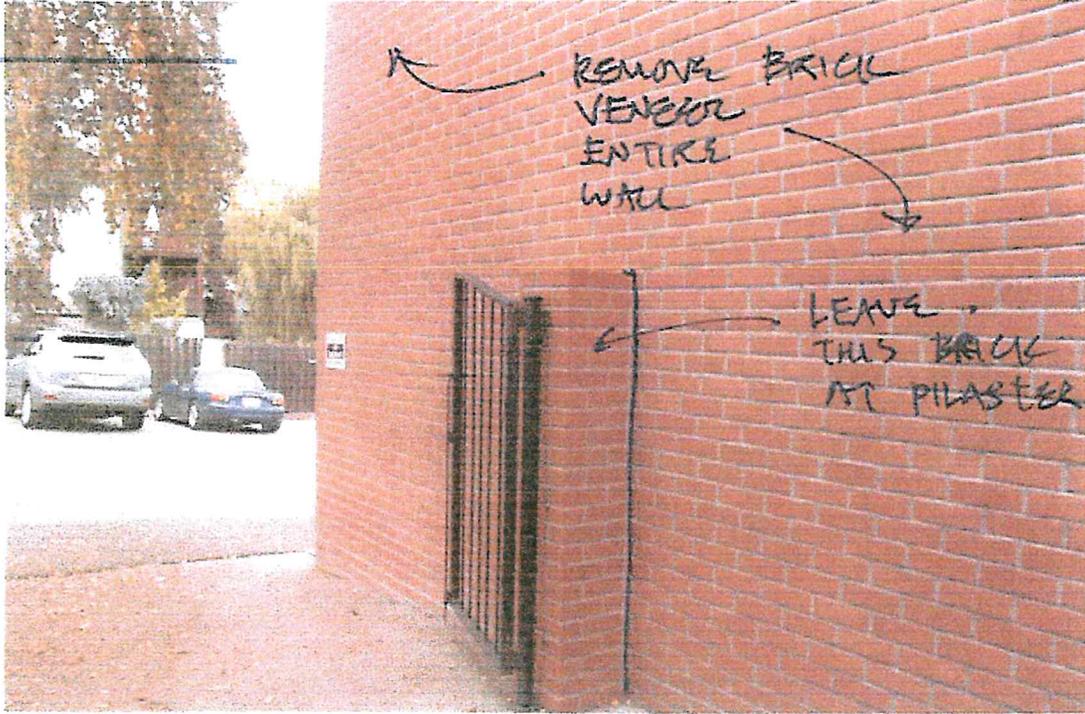
PROJECT: 2012.50
DATE: 11.29.12 SHEET: 3

PARTIAL PLAN, SOUTH EAST CORNER



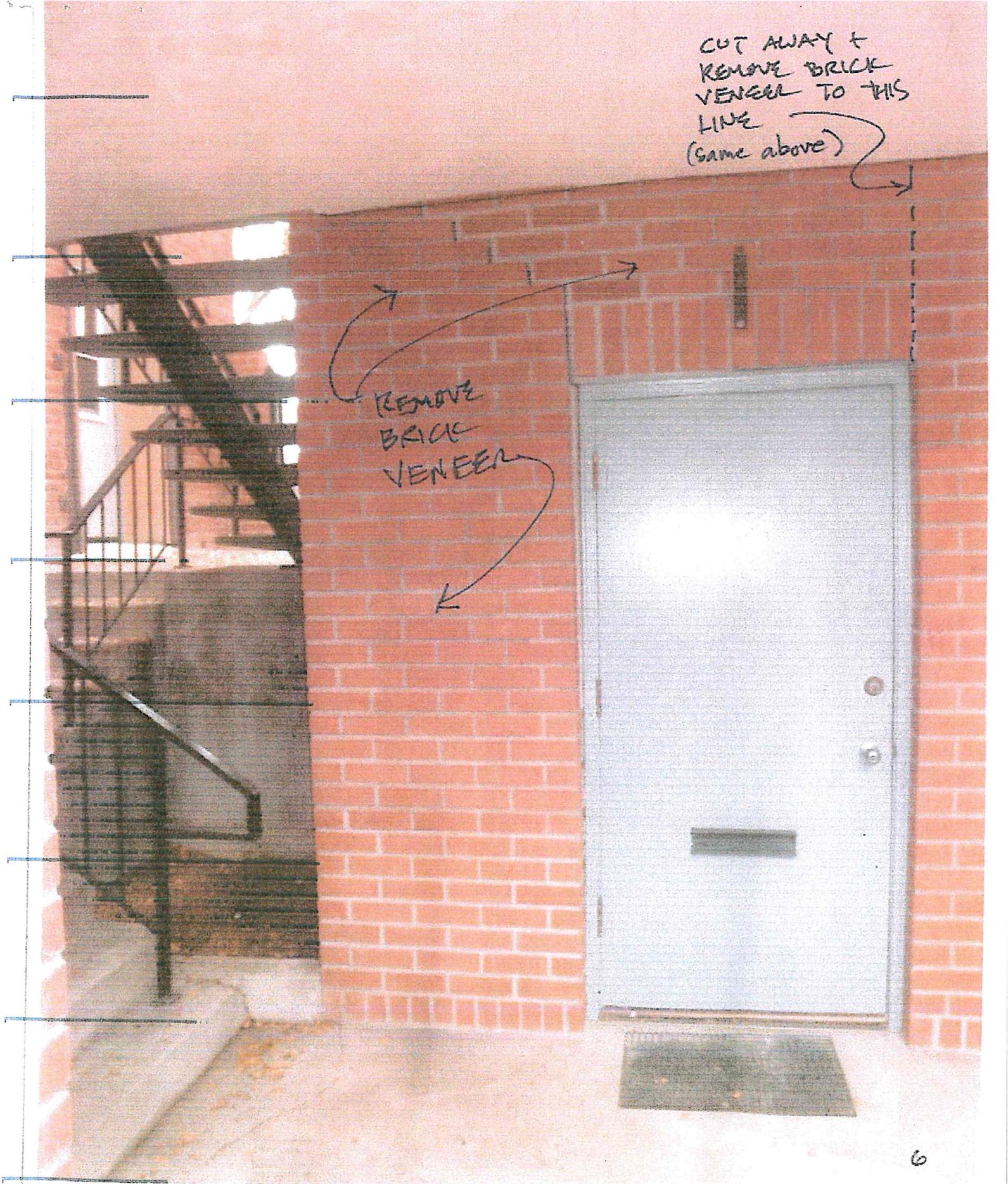
Kenneth R. Hughes
 Structural Engineer
 3620 Mt. Diablo Blvd., #203
 Lafayette, California 94549
 Tel: (925) 284-2808
 Fax: (925) 284-7492

PROJECT: 2012.50
 DATE: 11-29-12 SHEET: 4



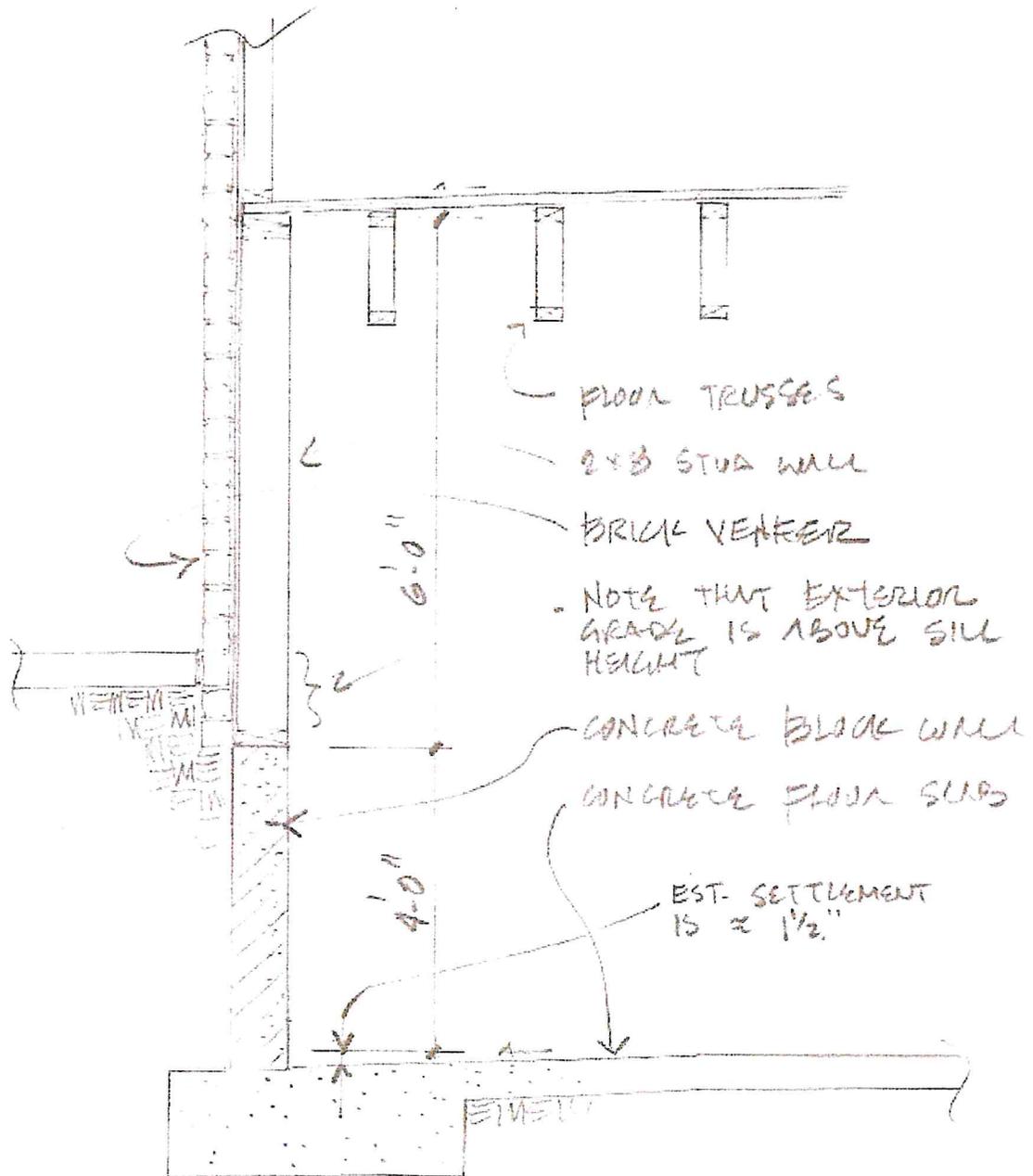
CUT AWAY &
REMOVE BRICK
VENEER TO THIS
LINE
(same above)

REMOVE
BRICK
VENEER



CUT STEEL COLUMNS,
RAISE 1/2" PATCH
WITH MATCHING TUBE
STEEL, COMPL. PEN.
WELD, SEAL + GRIND
SMOOTH

SECTION A - EXISTING CONDITION



Kenneth R. Hughes
Structural Engineer
3620 Mt. Diablo Blvd., #203
Lafayette, California 94549
Tel: (925) 284-2808
Fax: (925) 284-7492

PROJECT: 2012.50
DATE: 11-29-12 SHEET: 8

SECTION (A) - FIRST STEP

1. REMOVE BRICK VENEER FROM WALL.

INSTALL 10^d ONLY AT 3' o.c. INTO NEW PLATE

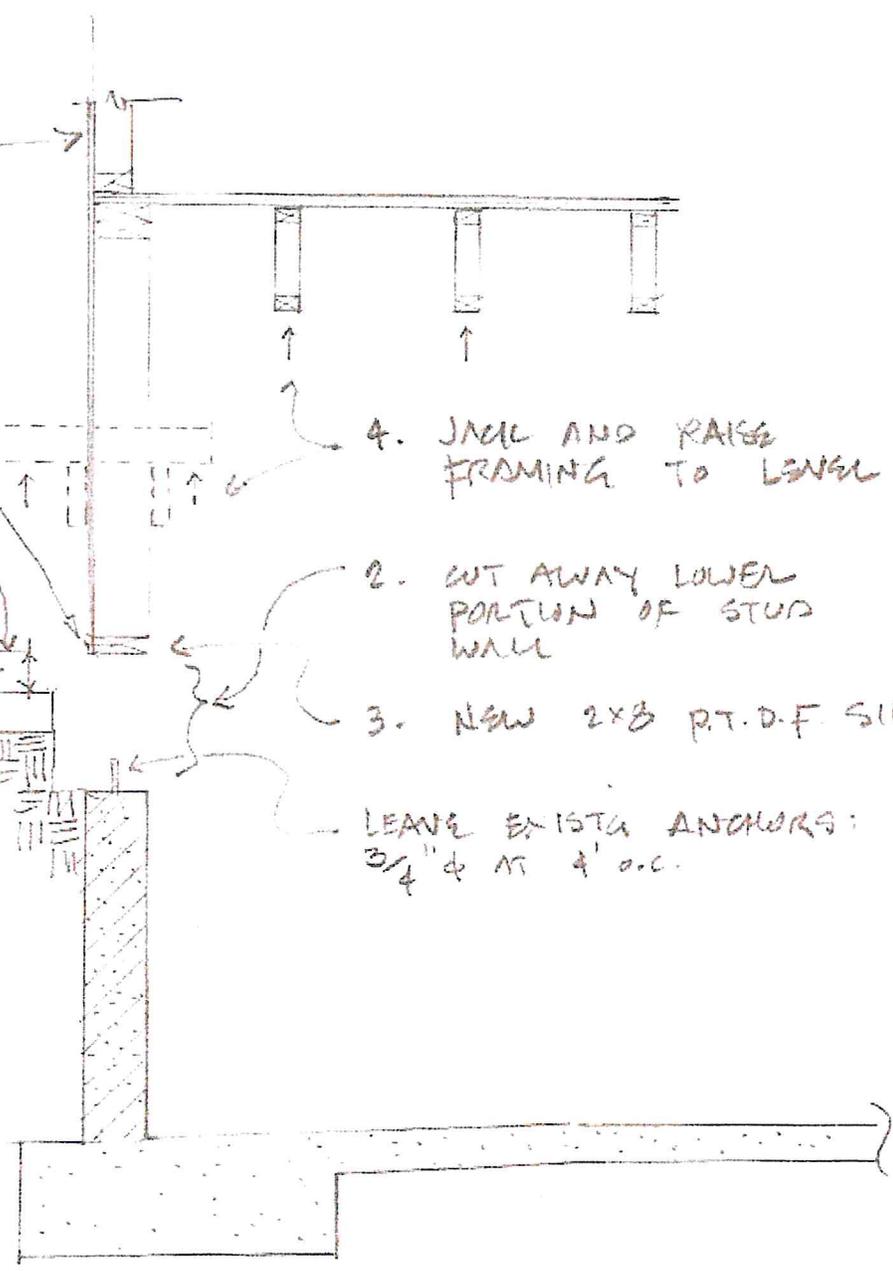
LEVEL
6" MIN

4. JACK AND RAISE FRAMING TO LEVEL

2. CUT AWAY LOWER PORTION OF STUD WALL

3. NEW 2x8 P.T.D.F. SILL

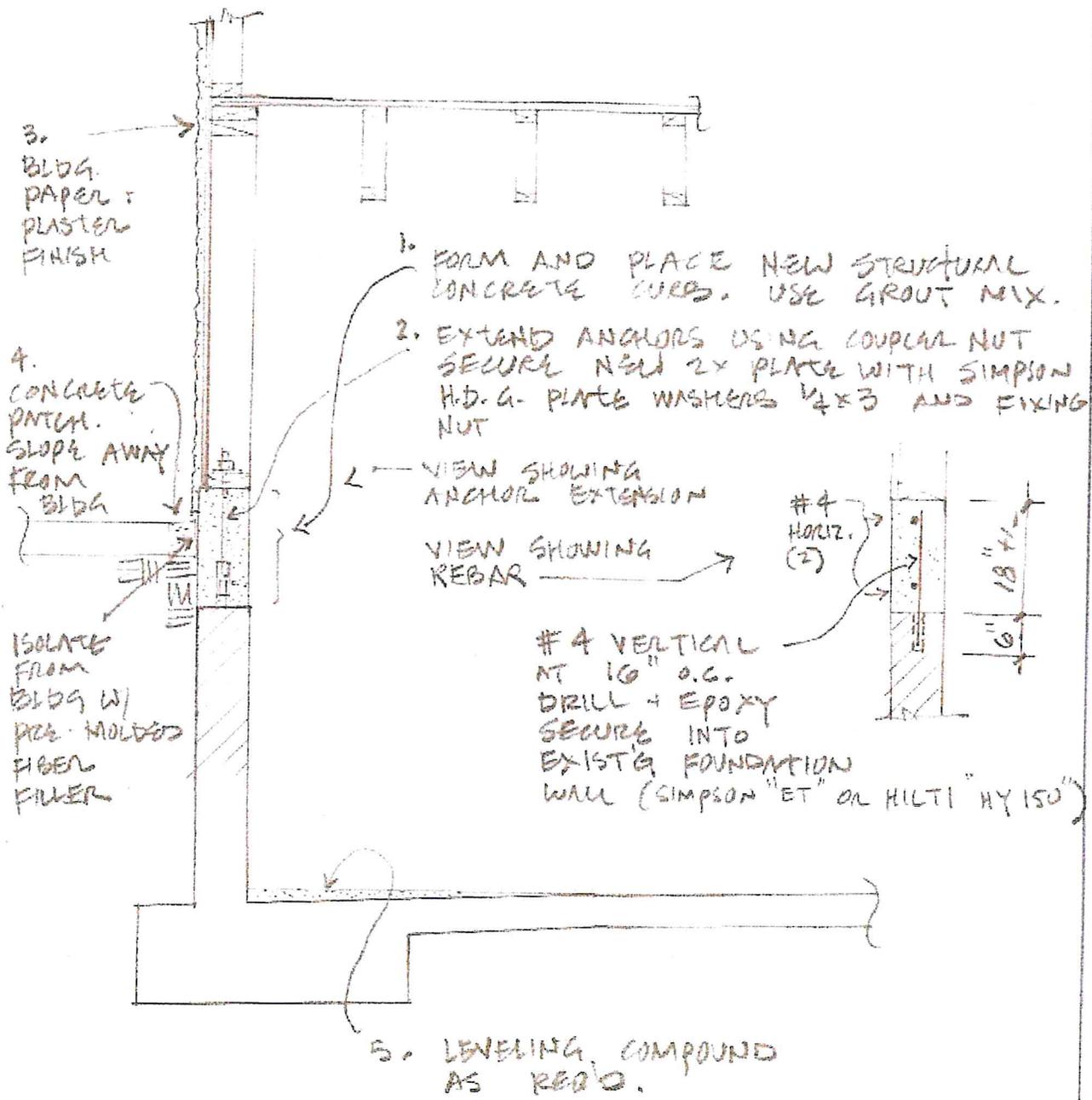
LEAVE EXISTG ANCHORS:
3/4" ϕ AT 4' o.c.



Kenneth R. Hughes
Structural Engineer
3620 Mt. Diablo Blvd., #203
Lafayette, California 94549
Tel: (925) 284-2808
Fax: (925) 284-7492

PROJECT: 2012.50
DATE: 11.29.12 SHEET: 9

SECTION (A) - SECOND STEP



Kenneth R. Hughes
 Structural Engineer
 3620 Mt. Diablo Blvd., #203
 Lafayette, California 94549
 Tel: (925) 284-2808
 Fax: (925) 284-7492

PROJECT: 2012.50
 DATE: 11-29-12 SHEET: 10

**AGENDA ITEM
HISTORIC PRESERVATION REVIEW COMMISSION MEETING
JANUARY 24, 2013
REGULAR AGENDA ITEM**

DATE : January 15, 2013

TO : Historic Preservation Review Commission

FROM : Amy Million, Principal Planner

SUBJECT : **DESIGN REVIEW FOR MODIFICATION TO THE EXISTING BUILDING
AT 1209 POLK STREET**

PROJECT : 12PLN-00054 Design Review
1209 Polk Street
APN: 0080-140-160

RECOMMENDATION:

Approve the design review request to raise the roof height of the existing building by 10 feet at 1209 Polk Street based on the findings and subject to the conditions of approval listed in the draft resolution.

EXECUTIVE SUMMARY:

The applicant requests design review approval to raise the roof height of the existing building from 36'-4" to 46'-4" to accommodate interior crane operations at 1209 Polk Street. The subject building is located within the Arsenal Historic Overlay District; however it is not listed as historic structure in the Arsenal Historic Conservation Plan.

ENVIRONMENTAL ANALYSIS:

This project is exempt from the California Environmental Quality Act (CEQA) pursuant to Section 15301, Existing Facilities. This exemption includes minor alterations to the exterior of existing structures, involving no expansion of use. The increase in the building height to accommodate existing operations is minor in nature and will not expand the existing use of the subject building.

BACKGROUND:

Applicant/Property Owner: Timothy Boe / Randy & Mike Potter
General Plan designation: Lower Arsenal Mixed Use
Zoning designation: PD, Planned Development
Existing/Proposed use: Industrial
Adjacent zoning:

North: CG, General Commercial
East: PD, Planned Development
South: PD, Planned Development
West: IG, General Industrial

The subject property is located on the northwest corner of Polk and Jackson Streets in the Historic Arsenal Park Planned Development zoning district. The subject property is located within the Arsenal Historic Overlay District, but is not individually designated as a historic structure nor within one of the four National Register Districts.

PROJECT DESCRIPTION AND ANALYSIS:

The subject building is a one-story industrial building with a raised roofline on the north side extending from the front of the building towards the rear for the majority of the length of the building. The raised roofline creates a clerestory on the north elevation. The height at the peak of the roof is 36'-4" as measured from Jackson Street. The building has a simple utilitarian design comprised of concrete walls with wood panel accents, wood molding, and industrial style casement and clerestory windows.

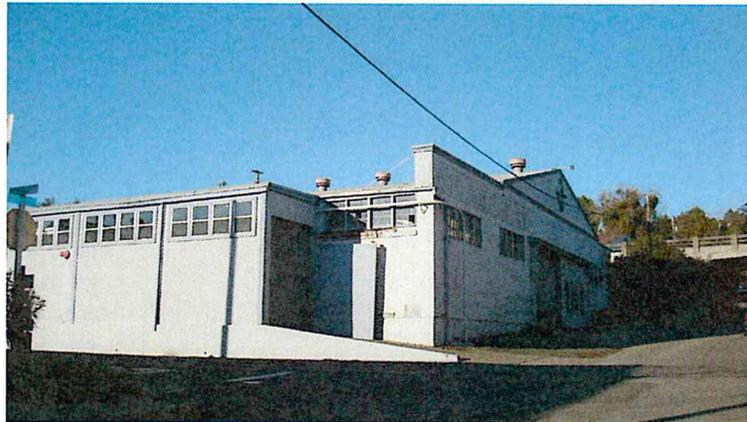


Figure A: View of existing building façade

The subject building is currently occupied by an industrial machine shop. According to the applicant, the daily operations of the business have been



hampered by the interior height of the building; as the overhead cranes do not have sufficient clearance in which to operate when certain pieces of equipment are in their fully extended position. The applicant is proposing to raise the roof in areas where the crane operations conflict with other operational machinery.

Figure B below is a rendering of the proposed building as seen from the Grant Street overpass to the north. The building's new design includes the addition of decorative quoins on the corners of the building, edges of the front entry, and along the base of the new roofline. There are multiple buildings within the Arsenal Historic Overlay District with quoins including many of the military residential buildings along Officer's Row, but none located within the immediate vicinity of the subject building. The proposed modifications will also include replacing the roll-up door on the front entry and relocate the decorative vent. The increased height will provide for the installation of new clerestory windows on both the north and south side of the addition so that the interior work area may be lit by natural light.

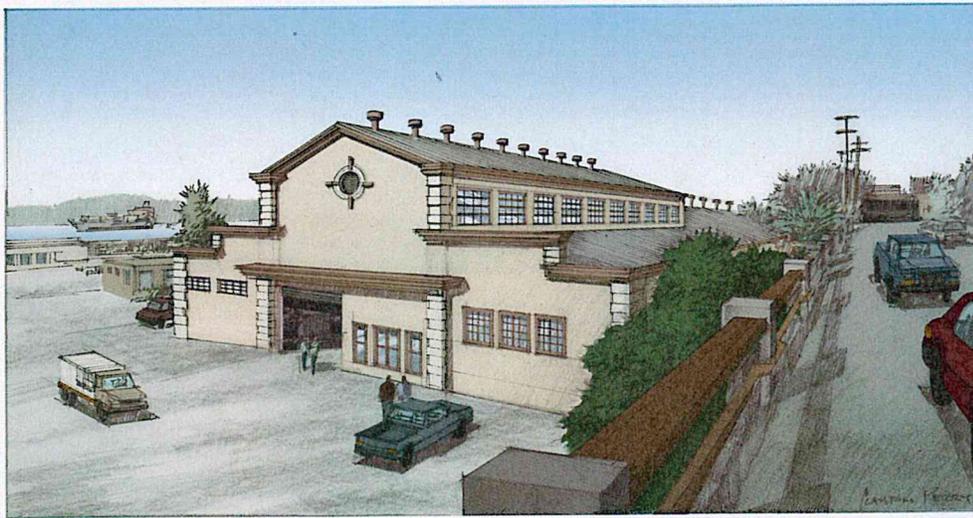


Figure B: Rendering of proposed facade

Arsenal Historic Conservation Plan Consistency

The subject property is located in the Arsenal Historic Overlay District and therefore is subject to the policies and guidelines set forth in the Arsenal Historic Conservation Plan (AHCP).

The Purpose of the AHCP is as follows (pg. 2):

1. Implement the City's general plan,
2. Deter demolition, destruction, misuse, or neglect of historic or architecturally significant buildings that form an important link to Benicia's past,
3. Promote the conservation, preservation, protection, and enhancement of each historic district,
4. Stimulate the economic health and residential quality of the community and stabilize and enhance the value of property, and

5. Encourage development tailored to the character and significance of each historic district.

The subject building is not listed as contributing to the district and therefore the general review criteria under the AHCP for this property are "All Properties" in addition to guidelines specific to its location in Subdistrict 4. There are a number of policies and guidelines that provide direction for the consideration of this project.

View Corridors and Sight Lines

The subject property is located within a designated view corridor identified on pages 37 and 38 of the AHCP. The view is defined from Jefferson Street at Park Road to the Shop Buildings and Martinez Hills beyond.

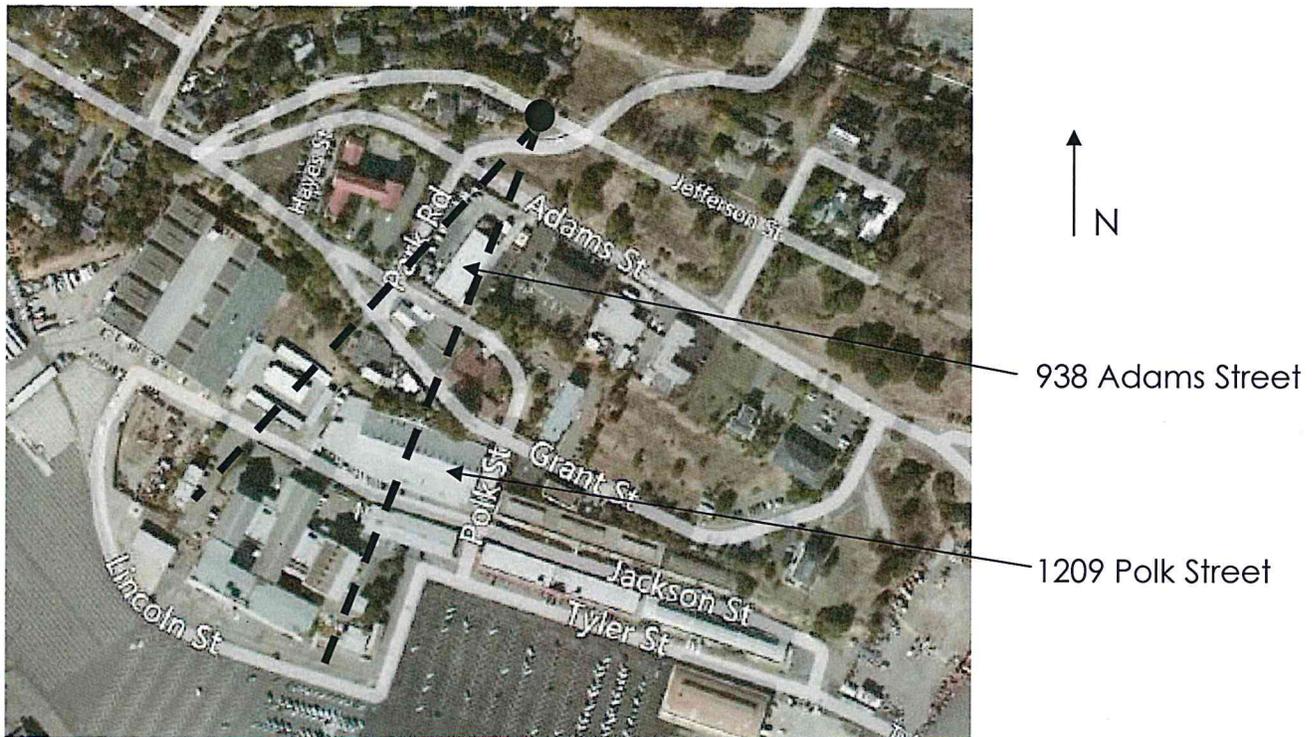


Figure C: Designated View Corridor" Aerial photograph

The building on the southeast corner of Adams and Park Street addressed as 938 Adams Street (see Figure C above) creates a visual obstruction on the Shop Buildings. The same building is seen in the forefront of the photograph below in Figure D.



Figure D: Designated View Corridor "View from Jefferson Street at Park Road"

As shown in Figure D, there is an existing significant change in elevation from the intersection of Jefferson Street and Park Road which allows for the view to the Martinez hills. A break in the development pattern provides a line-of-sight to the middle of the three Shop buildings (no. 56). This is the only one of the three Shop Buildings visible and only the second story can be seen. From the designated view corridor, the subject building is located behind the building at 938 Adams Street, to the left of the Shop Buildings. No portion of the subject building is visible. The increased roofline of 1209 Polk Street will not be visible from the designated view corridor and therefore have no impact.

Special Review Areas

The subject property is located outside of the Special Review Areas identified on page 41 of the AHCP as Critical Development Sites and National Register Historic Districts.

Design Polices for Arsenal Subdistrict 4

This property is located within Subdistrict 4: The Flats/Waterfront. The proposed design and materials are consistent with the Building Design guidelines, which state that the form and massing should be similar to existing, roof forms should be industrial: flat or simple gables and buildings should convey a sense of mass and performance with minimal ornamentation. The proposed alterations are simple, consistent with the design of existing building and in keeping with the industrial character of the area.

Zoning Ordinance Consistency

The subject property is located within the Planned Development (PD) zoning district commonly referred to as the Historic Arsenal Park Planned Development. The PD was created in 1991 to establish new uses within the previously zoned Industrial district. The PD allowed for the development regulations of the IG, General Industrial zoning district to remain in effect. There is no height limit in the IG district, except a maximum height of 75 feet is established for all buildings

within all Industrial districts based on their individual setbacks from the property line. The proposed height of 46'-4" complies with the height requirements of the district. No other modifications are proposed that require review of any site development standards.

Conclusion

The proposed increase in height is consistent with the policies and guidelines set forth in the Zoning Ordinance, General Plan and Arsenal Historic Conservation Plan. Staff recommends approval of the proposed modifications, based on the findings and conditions of approval set forth in the attached draft resolution.

FURTHER ACTION:

The Historic Preservation Review Commission's action will be final unless appealed to the Planning Commission within ten days.

Attachments:

- Draft Resolution
- Project Plans
- Applicant's Project Description & Photographs

DRAFT RESOLUTION

RESOLUTION NO. 13- (HPRC)

A RESOLUTION OF THE HISTORIC PRESERVATION REVIEW COMMISSION OF THE CITY OF BENICIA APPROVING DESIGN REVIEW FOR MODIFICATIONS TO THE EXISTING BUILDING AT 1209 POLK STREET (12PLN-00054)

WHEREAS, the applicant, Timothy Boe and Randy & Mike Potter, property owners, have requested design review approval to increase the height of the building by 10-feet at 1209 Polk Street; and

WHEREAS, the Historic Preservation Review Commission at their regular meeting on January 24, 2013, conducted a public hearing and reviewed the proposed project; and

NOW, THEREFORE, BE IT RESOLVED that the Historic Preservation Review Commission of the City of Benicia hereby approved the modification to 1209 Polk Street.

BE IT FURTHER RESOLVED that the Historic Preservation Review Commission makes the following findings:

- a) This project is exempt from the California Environmental Quality Act (CEQA) pursuant to Section 15301, Existing Facilities. This exemption includes minor alterations to the exterior of existing structures, involving no expansion of use. The increase in the building's height to accommodate interior crane operations is minor in nature and will not expand the existing use of the subject building.
- b) The proposed modifications are consistent with the purposes of Title 17 of the Benicia Municipal Code which includes the design guidelines identified in the Arsenal Historic Conservation Plan.

BE IT FURTHER RESOLVED that the Historic Preservation Review Commission of the City of Benicia hereby approves the proposed project subject to the following conditions:

1. This approval shall expire two years from the date of approval, unless made permanent by the issuance of a demolition permit and the commencement of work that is diligently pursued to completion. Alternatively, the time period may be extended, by the Community Development Director, if the application for time extension is received prior to the end of the initial two year deadline and there has been no change in the City's development policies which affect the site, and there is no change in the physical circumstances nor new information about the project site which would warrant reconsideration of the approval.

2. The plans submitted for the building permit and development and construction shall be in substantial compliance with the project plans date stamped received December 31, 2012, consisting of 6 sheets marked Exhibit "A" on file with the Community Development Department. Any alteration of the approved plans shall be requested in writing and reviewed and approved by the Community Development Director prior to changes being made in the field.
3. The project shall adhere to all applicable ordinances, plans, and specifications of the City of Benicia.
4. The applicant or permittee shall defend, indemnify, and hold harmless the City of Benicia or its agents, officers, and employees from any claim, action, or proceeding against the City of Benicia or its agents, officers, or employees to attack, set aside, void, or annul an approval of the Historic Preservation Review Commission, Planning Commission, City Council, Community Development Director, or any other department, committee, or agency of the City concerning a development, variance, permit or land use approval which action is brought within the time period provided for in any applicable statute; provided, however, that the applicant's or permittee's duty to so defend, indemnify, and hold harmless shall be subject to the City's promptly notifying the applicant or permittee of any said claim, action, or proceeding and the City's full cooperation in the applicant's or permittee's defense of said claims, actions, or proceedings.

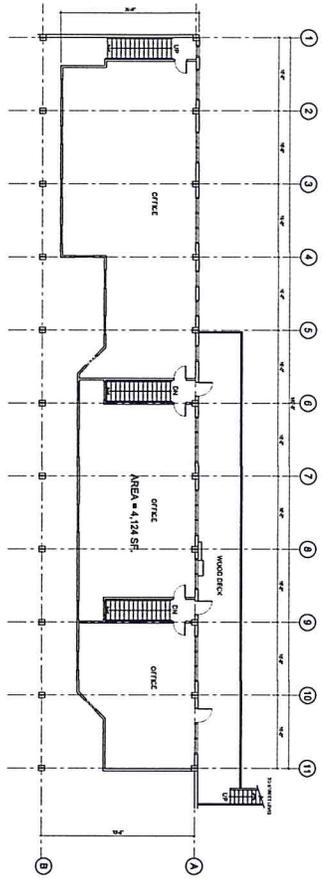
* * * * *

On motion of Commissioner _____, seconded by Commissioner _____, the above Resolution was adopted by the Historic Preservation Review Commission of the City of Benicia at a regular meeting of said Commission held on January 24, 2013 by the following vote:

Ayes:
Noes:
Absent:
Abstain:

Toni Haughey
Historic Preservation Review Commission Chair

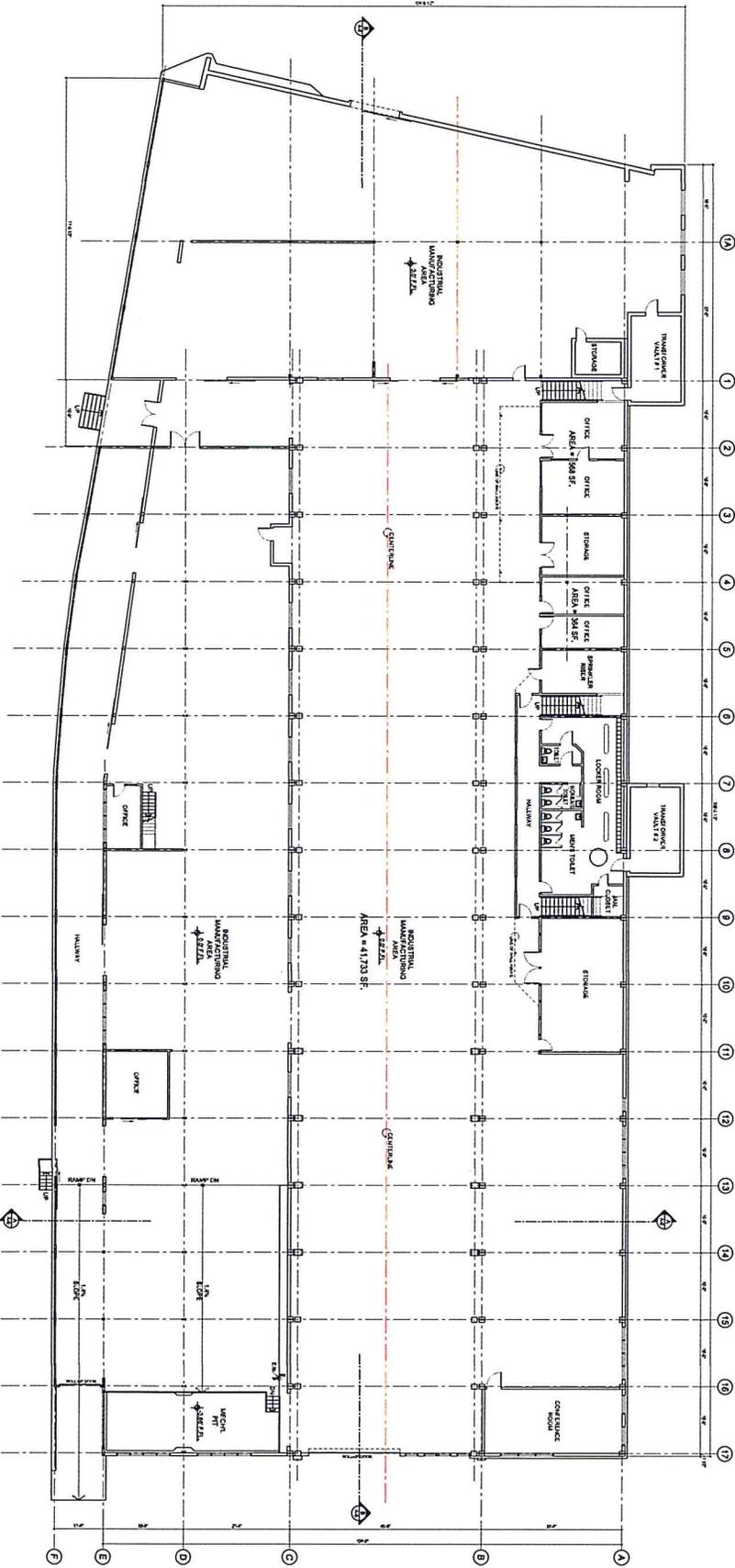
PROJECT PLANS



EXISTING MEZZANINE FLOOR PLAN

AREA BREAKDOWN	
EXISTING MEZZANINE	4,124 SF.
OFFICE	331 SF.
MEZZANINE	1,131 SF.
OFFICE	4,478 SF.
TOTAL	10,064 SF.

SCALE: 1/4" = 1'-0"



EXISTING FIRST FLOOR PLAN

SCALE: 1/4" = 1'-0"

NOTE:
EXISTING REMAINING TO REMAIN, UNDO



SCALE: 1/4" = 1'-0"

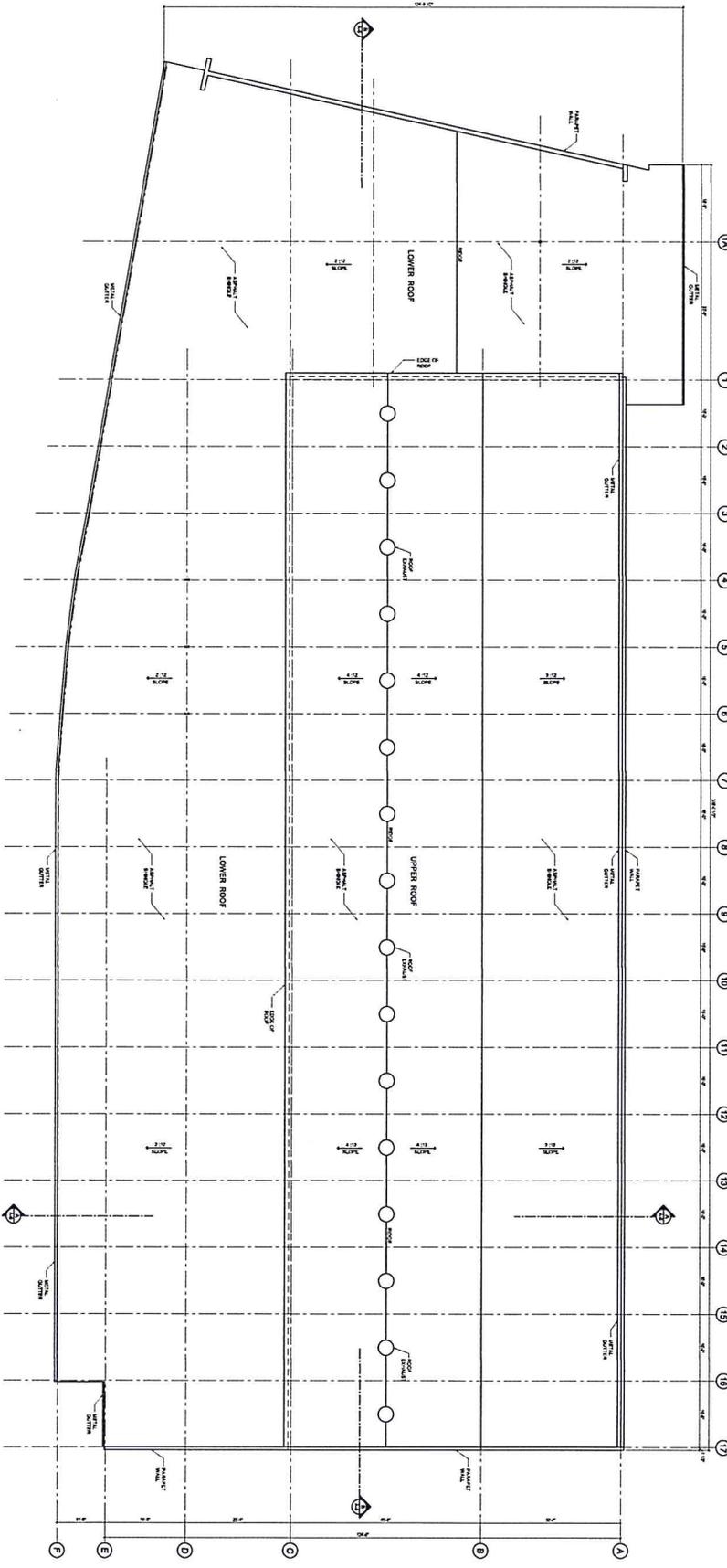
SCALE: 1/4" = 1'-0"

PROJECT:
EXISTING ROOF TO BE RAISED
1209 POLK STREET
BEND, CA 94510

APPLICANT:
UNICO MECHANICAL
1209 POLK STREET
BEND, CA 94510

MARK	DATE	DESCRIPTION

SCALE: 1/4" = 1'-0"



NOTE:
EXISTING BUILDING TO REMAIN UNTO

EXISTING ROOF PLAN

SCALE: 1/8" = 1'-0"

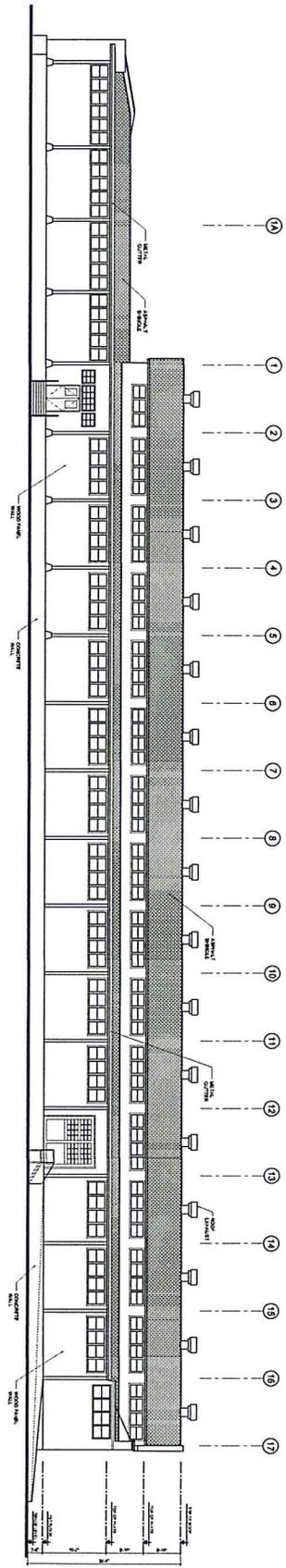
1 A-2

PROJECT:
EXISTING ROOF TO BE RAISED
1209 POLK STREET
BENICIA, CA 94510

APPLICANT:
UNICO MECHANICAL
1209 POLK STREET
BENICIA, CA 94510

MARK	DATE	DESCRIPTION

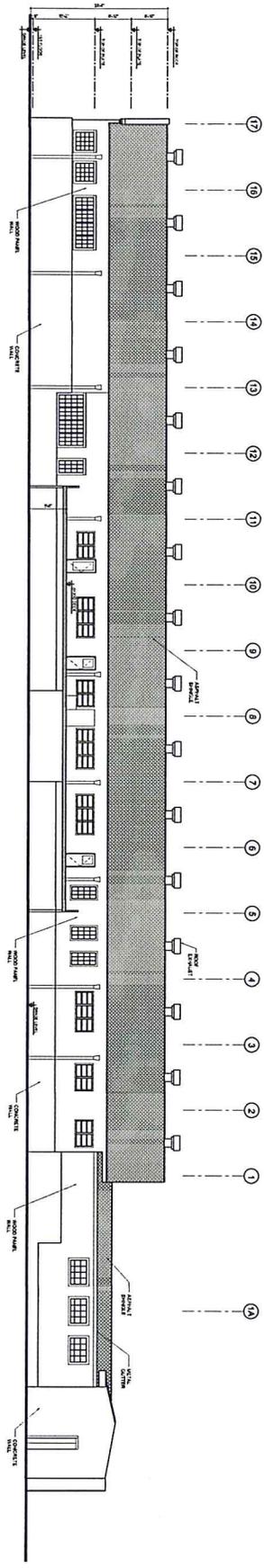




EXISTING SOUTH ELEVATION

SCALE 3/32" = 1'-0"

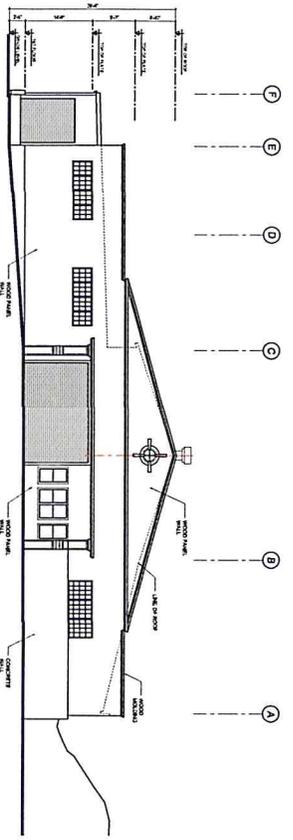
1



EXISTING NORTH ELEVATION

SCALE 3/32" = 1'-0"

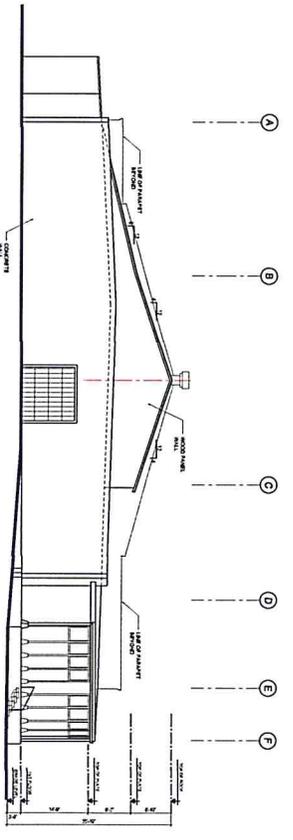
2



EXISTING EAST ELEVATION

SCALE 3/32" = 1'-0"

3



EXISTING WEST ELEVATION

SCALE 3/32" = 1'-0"

4

NOTE
EXISTING BUILDING TO REMAIN UNALD

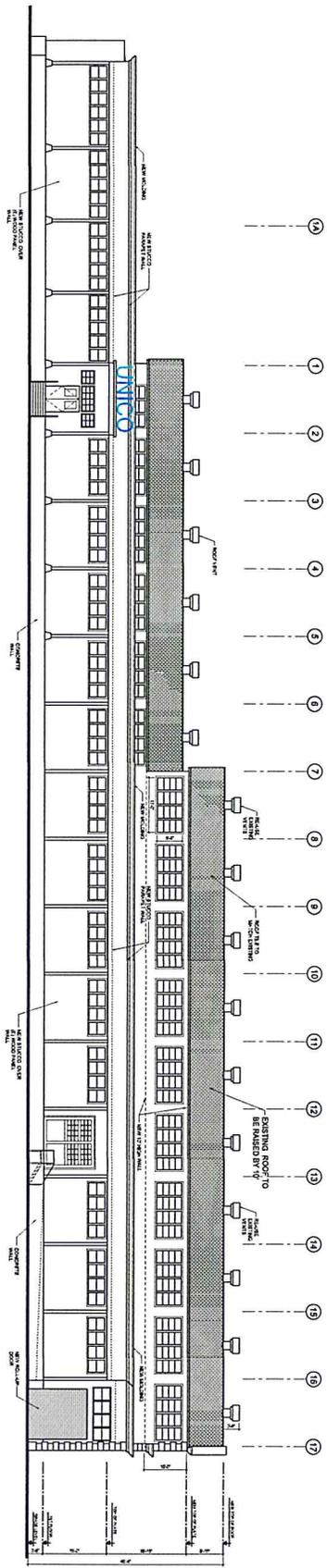
MARK	DATE	DESCRIPTION

PROJECT:
EXISTING ROOF TO BE RAISED
1209 POLK STREET
BENICIA, CA 94510

APPLICANT:
UNICO MECHANICAL
1209 POLK STREET
BENICIA, CA 94510

SCALE 3/32" = 1'-0"

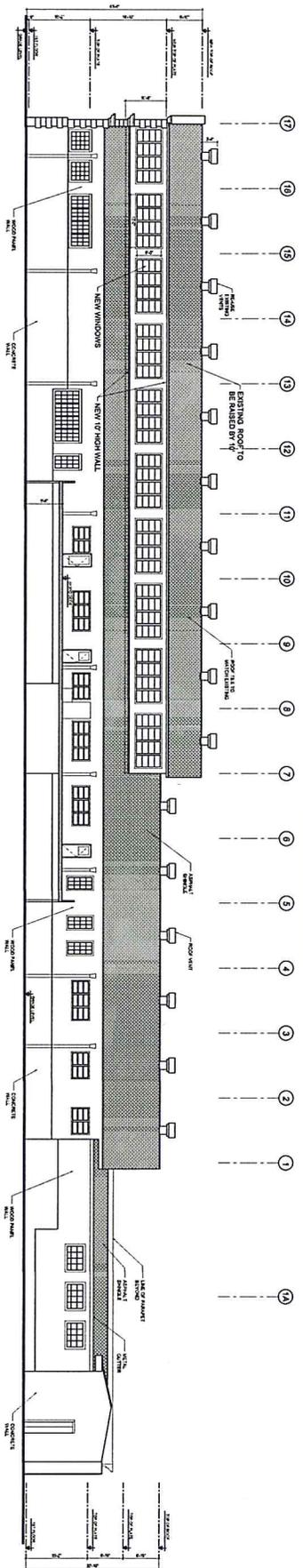
A-4



PROPOSED SOUTH ELEVATION

SCALE
3/8" = 1'-0"

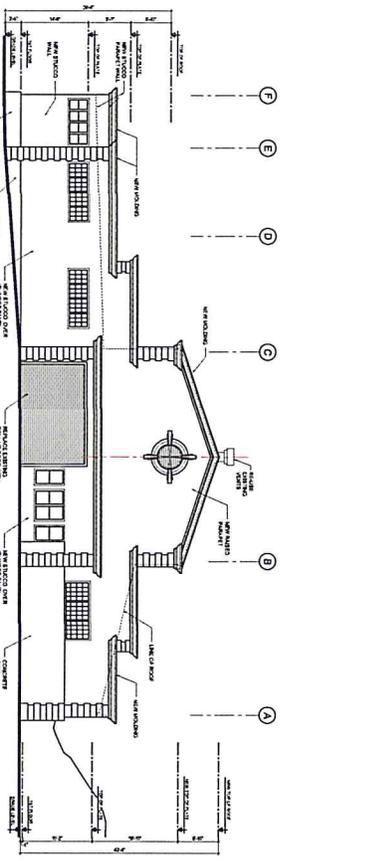
1



PROPOSED NORTH ELEVATION

SCALE
3/8" = 1'-0"

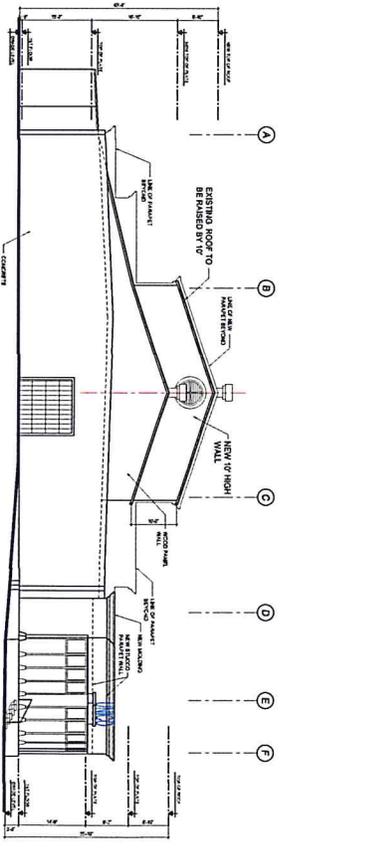
2



PROPOSED EAST ELEVATION

SCALE
3/8" = 1'-0"

3



PROPOSED WEST ELEVATION

SCALE
3/8" = 1'-0"

4

MARK	DATE	DESCRIPTION

PROJECT:
EXISTING ROOF TO BE RAISED
1209 POLK STREET
BERNICA, CA 94510

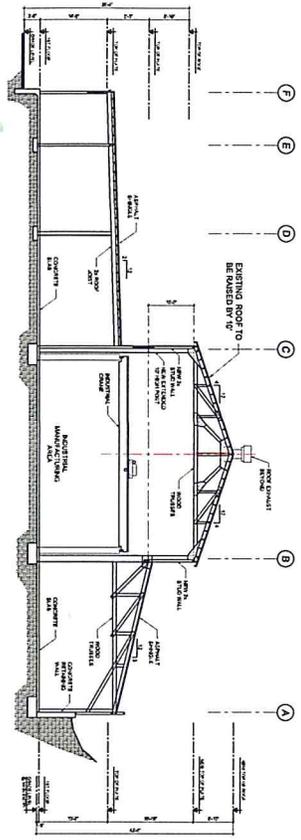
APPLICANT:
UNICO MECHANICAL
1209 POLK STREET
BERNICA, CA 94510

SCALE
3/8" = 1'-0"

4

5

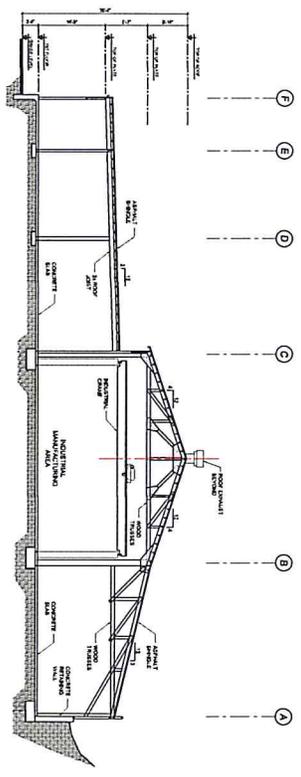
NOTE:
EXISTING BUILDING TO REMAIN UNO



PROPOSED SECTION A-A

SCALE 3/32" = 1'-0"

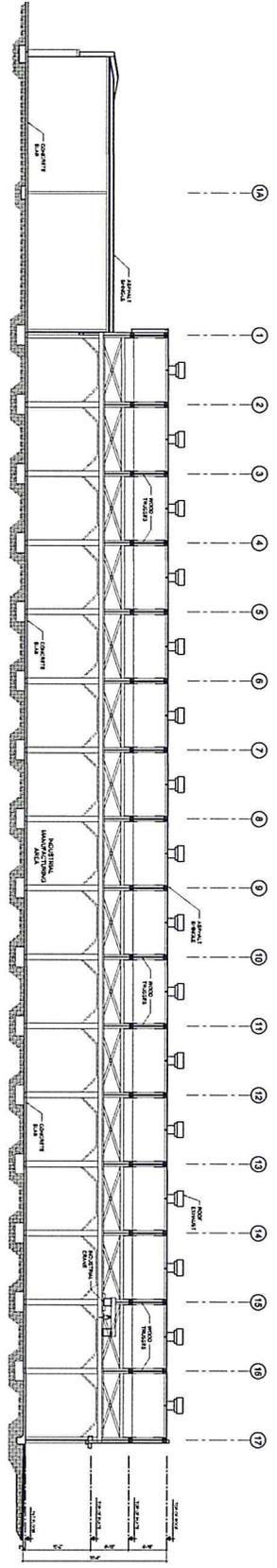
2



EXISTING SECTION A-A

SCALE 3/32" = 1'-0"

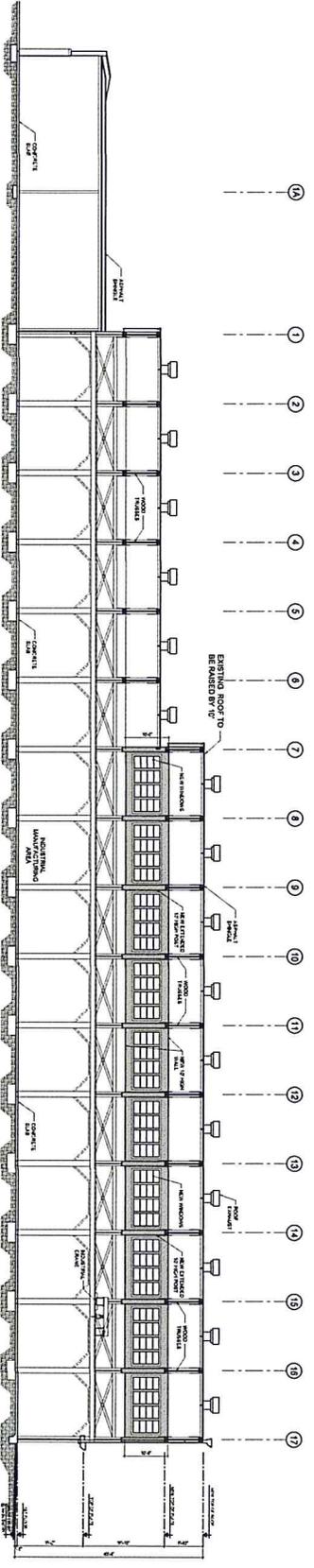
1



EXISTING SECTION B-B

SCALE 3/32" = 1'-0"

3



PROPOSED SECTION B-B

SCALE 3/32" = 1'-0"

4

NOTE
EXISTING BUILDING TO REMAIN UNAD

MARK	DATE	DESCRIPTION

APPLICANT:
UNICO MECHANICAL
1209 POK STREET
BEND, CA 94510

PROJECT:
EXISTING ROOF TO BE RAISED
1209 POK STREET
BEND, CA 94510

DATE: 11-13-13
SCALE: 3/32" = 1'-0"
SHEET: 4 OF 4
SECTION: A-6

4
A-6

**APPLICANT'S PROJECT DESCRIPTION &
PHOTOGRAPHS**



Existing Building Facade

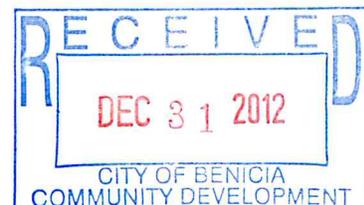


By raising the existing roof in the areas where potential crane conflicts exist (the first ten bays) not only can sufficient clearance be obtained to allow crane operations even when the machinery below is fully operational in its extended height condition - but the possibility of adding clearstory windows along that section of roof also becomes achievable. This will allow an area that is currently illuminated by artificial lighting to be lit up during the daytime hours by natural means. The raised section of roof also provides some variation to the large exterior unbroken expanses of roof surfaces that currently exist - thus providing some architectural relief. The primary building elevation facing onto Polk Street will also benefit from a new facade treatment made possible by the increased height of the roofline.



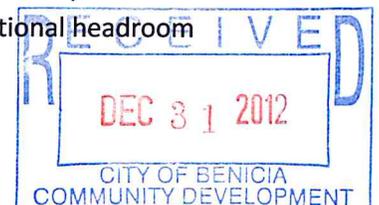
New Building Facade

The new proposed façade treatment is reflective in architectural character and massing as are the existing facades of surrounding buildings - such as the former bachelors quarters located across Grant Street from the subject property. Currently surfaced with exterior sheeting panels and plywood detailing - the new stucco facade and faux sandstone trim will be more reflective of the character of the surrounding federalist style of architecture depicted in many of the historical structures in the Arsenal area. The new proposed elevation on Polk Street will represent a substantial improvement over what currently exists. This project presents an opportunity to bring a fresh new look to a highly visible part of the lower Arsenal.





The subject property located at 1209 Polk Street in Benicia has housed operations providing large rotating equipment processing and industrial repair services for more than 30 years - providing large scale heavy milling and repair services to the industry. During this time daily operations have been hampered by a condition where the overhead cranes do not have sufficient clearance in which to operate when certain pieces of equipment are in their fully extended position. Due largely to the high levels of experience of the machinists working for this company a potentially hazardous safety issue has been successfully mitigated for years by restricting the operations of overhead cranes when machinery interferes with the path of crane travel. Nonetheless the existing condition is less than optimal - and with health and safety being a factor the applicant proposes to increase the operational headroom height of their building by raising the existing trusses and roof by ten feet.



**AGENDA ITEM
HISTORIC PRESERVATION REVIEW COMMISSION MEETING:
JANUARY 24, 2013
REGULAR AGENDA ITEM**

DATE : January 15, 2013

TO : Historic Preservation Review Commission

FROM : Amy Million, Principal Planner

SUBJECT : **DESIGN REVIEW TO REPLACE 11 WINDOWS OF THE SINGLE-FAMILY RESIDENCE AT 283 WEST H STREET**

PROJECT : **12PLN-00053 Design Review**
283 West H Street
APN: 0089-042-160

RECOMMENDATION:

Approve the design review request to replace 11 windows of the existing residence located at 283 West H Street, based on the findings, and subject to the conditions listed in the draft resolution.

EXECUTIVE SUMMARY:

The applicant requests design review approval to replace 11 wood casement windows of varying grid patterns and style with new paintable wood composite window on the existing single-family residence located at 283 West H Street, a contributing structure within the Downtown Historic Overlay District.

BUDGET INFORMATION:

There are no budget impacts associated with this project.

ENVIRONMENTAL ANALYSIS:

This project is exempt from the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15331, which applies to projects limited to the maintenance, repair, stabilization, rehabilitation, restoration, preservation, conservation or reconstruction of historical resources in a manner consistent with the federal Secretary of the Interior's Standards for the Treatment of Historic Properties.

BACKGROUND:

Applicant/Property Owner: Brent Anderson/Dale Baptist
General Plan designation: Low Density Residential

Zoning designation: RS, Single Family Residential
 Existing/Proposed use: Single Family Residential
 Adjacent zoning:
 North: RS, Single Family Residential
 East: RS, Single Family Residential
 South: RS, Single Family Residential
 West: RS, Single Family Residential

283 West H Street is located on the north side of West H Street between Second and Third Streets. The subject building is listed as a contributing structure in the Downtown Historic Conservation Plan.

SUMMARY:

On October 18, 2012, the applicant began replacing wood windows with new wood composite windows prior to obtaining a building permit or design review approval. At that time, the City's building inspector contacted the window contractor and issued a stop work order.



On November 16, 2012, the property owner and window contractor submitted for design review approval to replace the wood windows with Fibrex brand windows. See attached Floor Plan for location of replacement windows numbered 101-111.

The applicant is requesting design review approval to replace 11 single pane wood casement windows on all facades with Fibrex brand windows. Fibrex is a paintable wood composite material. Staff will have a sample of the Fibrex window available for the Commission's review at the meeting. The prior windows include five decorative casement windows on the east side of the front façade and east façade; two four-pane casement windows and one single-pane casement window on the rear façade; and three casement windows on the west façade. All replacement windows are proposed to be dual pane, double hung windows. The 11 new double hung windows have no grids. The applicant is not proposing to change the size of the openings.



View of front windows of the enclosed porch, #107-109 on floor plan



View of rear windows, #101, 102 & 106 on floor plan

The structure at 283 West H Street was built in 1880. The original survey completed in 2004 by Carol Roland, suggested that due to historically inappropriate alterations including enclosing the front porch and installing a horizontally emphasized front window, that the building's contributory status should be reconsidered. The Historic Survey Committee and the City ultimately determined that the building retained enough integrity to retain its status as a contributing structure and updated the survey form in 2008. Attached is a copy of the adopted 2008 survey form.

According to the city-adopted survey completed by the Survey Committee in 2008, the building still conveys its cottage-like feeling and character in spite of its historically inauthentic alterations. As stated in the survey, "the house has been remodeled to enclose the front porch and replace the front windows which could date from the 1930s (based on their style) or could be more recent reproductions." The most prominent five casement windows proposed to be replaced on the front and east facades are located on the enclosed porch and are not an original feature of the house. The survey form indicates the period of significance to be 1847-1940; however, the building's historic integrity is defined by its Queen Anne architecture. "This house retains the form and massing, as well as some of the typical details of a Queen Anne Cottage" as stated on the survey form. Queen Anne era architecture is from late 19th century into the first two decades of the 20th century. The porch enclosure and subject windows were likely constructed after the Queen Anne era and therefore do not relate to the period of significance.

Downtown Historic Conservation Plan Consistency

The subject property is located in the Downtown Historic Overlay District and therefore is subject to the policies and guidelines set forth in the Downtown Historic Conservation Plan (DHCP). The property is listed as a contributing structure to the DHCP.

The Purpose of the DHCP is as follows (pg. 2):

1. Implement the City's general plan,
2. Deter demolition, destruction, misuse, or neglect of historic or architecturally significant buildings that form an important link to Benicia's past,
3. Promote the conservation, preservation, protection, and enhancement of each historic district,
4. Stimulate the economic health and residential quality of the community and stabilize and enhance the value of property, and
5. Encourage development tailored to the character and significance of each historic district.

The general review criteria under the DHCP for this property are “Historic Buildings.” There are a number of policies and guidelines that provide direction for the consideration of this project. These include:

- Policy 2 – Façade Elements and Details
- Policy 4 – Appropriate Materials, Colors, Finishes

The guidelines that apply to this project and staff’s response to each follow.

Policy 1 does not apply because it provides guidelines for new additions. Policy 3 does not apply because it provides guidelines for siding, later and colored materials, roofing, and chimneys.

Policy 2 – Façade Elements and Details

Policy 2, Guideline 2.2: Maintain the proportions of existing door and window openings and the pattern of existing sash in replacement work or additions.

Policy 2, Guideline 2.3: New or replacement window sash should match the original sash. Where the original sash has been completely removed, new windows should match the existing unless a complete replacement program for the façade is undertaken.

Response: The new windows are the same in overall dimension as the original wood frames and will fit into the existing openings of the subject windows; however, the new windows are a different style. As stated above, the existing windows are a mix of casement styles including various grid patterns. The proposed windows are traditional one-over-one double hung.

Although the prominent windows along the enclosed front porch may be original, they are not considered to be a character-defining feature. The porch enclosure is considered to be an inauthentic alteration; therefore, replacing the windows will not impair the building’s historic integrity or negatively impact its contributory status.

Policy 4 – Appropriate Materials, Colors, and Finishes

Policy 4, Guideline 4.1: Use original materials whenever possible in restoration, renovation or repair work and use the same materials for building additions.

Response: The property owner determined that the original wood, single-pane windows were better replaced with a paintable, wood composite, energy efficient window that fit in the existing openings. Six of the replacement windows

are not highly visible from the street; while five of the replacement windows which are visible from East H Street were part of a later addition.

Policy 4, Guideline 4.2: For substitute materials, the outward appearance, durability, texture and finish should be as close as possible to that of the original. If the original was painted, the substitute should accept and retain a painted finish.

Response: The prior wood windows are smooth painted, casement windows with various patterns. The proposed windows are smooth in texture, paintable, and double hung.

Policy 4, Guideline 4.3: Wood window sash is preferred for historic buildings. Vinyl clad wood or factory finished (i.e., baked enamel) aluminum frames are acceptable if the original design can be duplicated.

Response: The features of the contributing structure that are listed as character defining include the cross hip and gable roof, cornice treatments, brackets, eave returns and porch roof line. The applicant is not proposing to alter any of these. See response to *Policy 2, Guideline 2.3*, above.

Consistency with Secretary of the Interior's Standards

The proposed project is consistent with the Secretary of the Interior's Standards (see Attachment 2).

Zoning Ordinance Consistency

The project is consistent with existing Zoning Ordinance requirements in that the residential use remains unchanged and no additions are proposed that require review of any site development standards.

CONCLUSION:

Historically the Commission has provided some flexibility with replacement materials on those portions of the building that are not highly visible from the street. The replacement windows on the west and rear façade are not highly visible from West H Street (refer to windows 101-106 on the attached Floor Plan). In addition window 107-111 were a later addition when the porch was enclosed and do not contribute to the building's historic integrity.

The Commission should note that the proposed request is consistent with Purpose No. 4 of the DHCP in that the proposed project will, "Stimulate the economic health and residential quality of the community and stabilize and enhance the value of property." In addition, the project is consistent with the General Plan and Climate Action Plan goals and strategies to increase energy efficiency.

Staff recommends the Historic Preservation Review Commission approve the design review application based on the findings and conditions of approval in the draft resolution.

FURTHER ACTION:

The Historic Preservation Review Commission's action will be final unless appealed to the Planning Commission within ten business days.

Attachments:

- Draft Resolution
- Secretary of the Interior Standards
- 2008 Survey (Department of Parks and Recreation Forms A & B)
- Floor Plan
- Photographs (Prior to window replacement)

DRAFT RESOLUTION

RESOLUTION NO. 13- (HPRC)

**A RESOLUTION OF THE HISTORIC PRESERVATION REVIEW COMMISSION
OF THE CITY OF BENICIA APPROVING WINDOW REPLACEMENT AT 283 WEST H
STREET**

WHEREAS, Brent Anderson of Renewal by Anderson on behalf of Dale Baptist, has requested Design Review approval to replace 11 windows on the side and front façades of the existing single-family residence at 283 West H Street; and

WHEREAS, the Historic Preservation Review Commission at a regular meeting on January 24, 2013 conducted a public hearing and reviewed the proposed project;

NOW, THEREFORE, BE IT RESOLVED THAT the Historic Preservation Review Commission of the City of Benicia hereby approves the window replacement at 283 West H Street; and

BE IT FURTHER RESOLVED THAT the Historic Preservation Review Commission makes the following findings:

- a) This project is Categorically Exempt under Section 15331 of the California Environmental Quality Act (CEQA), which applies to projects limited to the maintenance, repair, stabilization, rehabilitation, restoration, preservation, conservation or reconstruction of historical resources in a manner consistent with the federal Secretary of the Interior's Standards for the Treatment of Historic Properties.
- b) The project will be consistent with the Downtown Historic Conservation Plan policies and design guidelines and the Secretary of the Interior's Standards if the conditions of approval are adhered to.
- c) The design of the project is consistent with the purposes of Title 17 of the Benicia Municipal Code.

BE IT FURTHER RESOLVED THAT the Benicia Historic Preservation Review Commission hereby approves the proposed project subject to the following conditions:

1. This approval shall expire two years from the date of approval unless made permanent by the issuance of a building permit.
2. Any other alteration of the approved floor plan and material (Fibrex brand paintable wood composite window) shall be requested in writing for consideration of approval by the Historic Preservation Review Commission prior to changes being made in the field.
3. The project shall adhere to all applicable ordinances, standard plans, and

specifications of the City of Benicia.

4. The applicant or permittee shall defend, indemnify, and hold harmless the City of Benicia or its agents, officers, and employees from any claim, action, or proceeding against the City of Benicia or its agents, officers, or employees to attack, set aside, void, or annul an approval of the Historic Preservation Review Commission, Planning Commission, City Council, Community Development Director, or any other department, committee, or agency of the City concerning a development, variance, permit or land use approval which action is brought within the time period provided for in any applicable statute; provided, however, that the applicant's or permittee's duty to so defend, indemnify, and hold harmless shall be subject to the City's promptly notifying the applicant or permittee of any said claim, action, or proceeding and the City's full cooperation in the applicant's or permittee's defense of said claims, actions, or proceedings.

* * * * *

On motion of Commissioner , seconded by Commissioner , the above Resolution was adopted by the Historic Preservation Review Commission of the City of Benicia at a regular meeting of said Commission held on January 24, 2013 by the following vote:

Ayes:

Noes:

Absent:

Abstain:

Toni Haughey
Historic Preservation Review Commission Chair

**CONSISTENCY ANALYSIS:
SECRETARY OF THE INTERIOR'S
STANDARDS FOR REHABILITATION**

**Project Consistency Analysis:
Secretary of Interior's Standards for Rehabilitation
Mills Act Contract (12PLN-00053)
283 West H Street**

Rehabilitation is defined as the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features that convey its historical, cultural, or architectural values.

When repair and replacement of deteriorated features are necessary; when alterations or additions to the property are planned for a new or continued use; and when its depiction at a particular period of time is not appropriate, rehabilitation may be considered as a treatment.

The bold text are the Secretary of Interior's Standard for Rehabilitation guidelines. The regular text is staff's response about how the particular guideline or policy relates to the proposed project.

- 1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.**

The existing residential use will not change.

- 2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.**

The structure at 283 West H Street is a Queen Anne Cottage. The principal character-defining features of this style of building as exhibited on the subject property are a cross hip and gable roof, cornice treatments, brackets, eave returns and porch roof line.

None of the noted character defining architectural features will be modified. The proposal will replace 11 windows; five of which are located on the non-original front porch enclosure and six are located at the rear of the structure not highly visible from the public right away. The existing window openings will be utilized as they exist.

- 3. Each property will 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 elements from other historic properties, will not be undertaken.**

The property was surveyed in 1986. The analysis states that the building is a

common example of the Mediterranean Revival style, which is a common infill style the DHCD. No features will be added or changed that will convey a false sense of historicism.

4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.

The structure has not been changed in a manner that said changes might have acquired historic significance in their own right. The two major alterations as noted in the 2008 survey were the porch enclosure and the window along the front façade. These changes were noted by the surveyor to potentially jeopardize the building's status a contributory structure.

The survey form indicates the period of significance to be 1847-1940; however, the building's historic integrity is defined by its Queen Anne architecture. "This house retains the form and massing, as well as some of the typical details of a Queen Anne Cottage" as stated on the survey form. Queen Anne era architecture is from late 19th century into the first two decades of the 20th century. The porch enclosure and subject windows were likely constructed after the Queen Anne era; therefore do not relate to the period of significance nor have they acquired significance in their own right.

5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.

No distinctive materials, features, finishes and construction techniques will be removed.

6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.

The property owner determined that the original wood, single-pane windows were better replaced with a paintable, wood composite, energy efficient window that fit in the existing openings. The most prominent replacement windows along the front façade are not considered to be character defining features as they were part of a later addition. Six of the replacement windows are not highly visible from the street; All of the proposed new windows will fit within the original openings built for the structure.

7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.

No chemical or physical treatments will be undertaken.

**2008 SURVEY (DEPARTMENT OF PARKS AND
RECREATION FORMS 523 A & B)**

PRIMARY RECORD

Primary #:
HRI #
Trinomial
NRHP Status Code:
Other Listings

Review Code _____ Reviewer _____ Date _____

- *Resource Name or #: 283 West H Street
- P1. Other Identifier: none
- *P2. Location: *a. County Solano
- b. Address: 283 West H Street
- *c. City: Benicia Zip 94510
- d. UTM: N/A
- e. USGS Quad: Benicia T2N R3W MDM
- *f. Other Locational Data (APN #): 89-042-16

***P3a. Description**

This house was originally a Queen Anne Cottage and still retains a number of identifying features from the period of construction, including the cross hip and gable roof, cornice treatments, brackets, eave returns and porch roof line. However, the house has been substantially altered through the enclosure of the porch and the alteration of fenestration on the front and west facades. The house is L-shape in plan with a projecting front gable that exhibits a narrow fascia and a barge board. The gable has exaggerated eave returns. A wide cornice is found on the side facades and across the enclosed porch. Side and rear fenestration is predominantly one-over-one double hung. However, the front window is a horizontally emphasized central window with narrow, double hung side lights. A similar window has been installed on the west façade. The canted porch enclosure has casement windows with patterned muntins. The door is recessed with an arched entry to the stoop. There is a one-story attached garage on the west.

***P3b. Resource Attributes:** HP2

***P4. Resources Present:** Building Structure Object Site District Element of District

P5b. Description of Photo:

Front façade, view north

***P6. Date Constructed/Age:** 1880

Prehistoric Historic Both

P5. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



***P7. Owner and Address:**

Doreen Fazzio
283 West H Street
Benicia, CA 94510

***P8. Recorded by:**

Carol Roland
Roland-Nawi Associates
4829 Crestwood Way
Sacramento, CA 95822

***P9. Date Recorded:** 11-20-04

***P10. Type of Survey:** Intensive
Reconnaissance Other

Describe Eligibility Evaluation

***P11. Report Citation:** none

***Attachments:** NONE Map Sheet
 Continuation Sheet Building, Structure,
and Object Record Linear Resource Record
 Archaeological Record District Record
 Milling Station Record Rock Art Record
 Artifact Record Photograph Record
Other (List):

BUILDING, STRUCTURE, AND OBJECT RECORD

*Resource Identifier: 283 West H Street

*NRHP Status Code: 6Z

B1. Historic Name: N/A

B2. Common Name: none

B3. Original Use: Residential

B4. Present Use: Residential

*B5. Architectural Style: Queen Anne

*B6. Construction History: The house has been remodeled to enclose the front porch and replace the front windows which could date from the 1930s (based on their style) or could be more recent reproductions.

*B7. Moved? No Yes Unknown

Date: N/A

Original Location: same

*B8. Related Features: A flat roofed, single story garage is loosely attached to the west side of the house.

B9a. Architect: unknown

B9b. Builder: unknown

*B10. Significance: Theme: Benicia Downtown District Period of Significance: 1847-1940 Property Type: Single Family Applicable Criteria: A / C

This house retains the form and massing, as well as some of the typical details of a Queen Anne Cottage. However, it has been remodeled with elements drawn from other architectural styles and periods (i.e. the horizontally emphasized tri-partite front window). The front porch has been enclosed. It still conveys a cottage-like feeling and character. The building is currently listed as a contributor to the historic district and should retain that status.

B11. Additional Resource Attributes: N/A

B12. References: McAlester, Virginia and Lee. *A Field Guide to American Houses*. New York: Alfred Knopf (1986); Bruegmann, Robert. *Benicia Portrait of an Early California Town: An Architectural History* (San Francisco: 101 Productions (1980); Woodbridge, Sally and Cannon Design Group. *Benicia, California: Downtown Historic Conservation Plan*. City of Benicia, 1990; Sanborn Map Benicia, CA. 1886; 1986 Benicia Historic Inventory form.

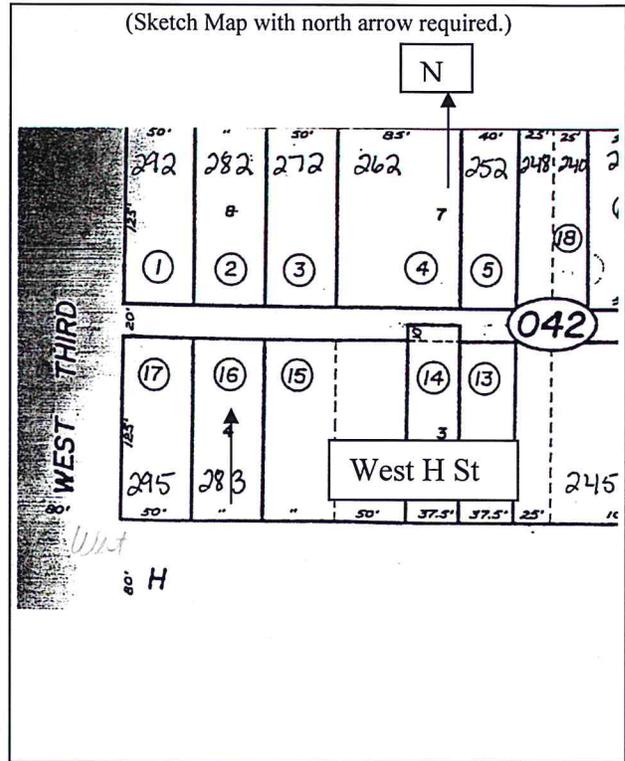
BUILDING, STRUCTURE, AND OBJECT RECORD

Remarks: N/A

B14. Evaluator: Carol Roland, Ph.D.

Roland-Nawi Associates: Preservation Consultants
4829 Crestwood Way
Sacramento, CA 95822

B 15. Date of Evaluation: 11-22-04

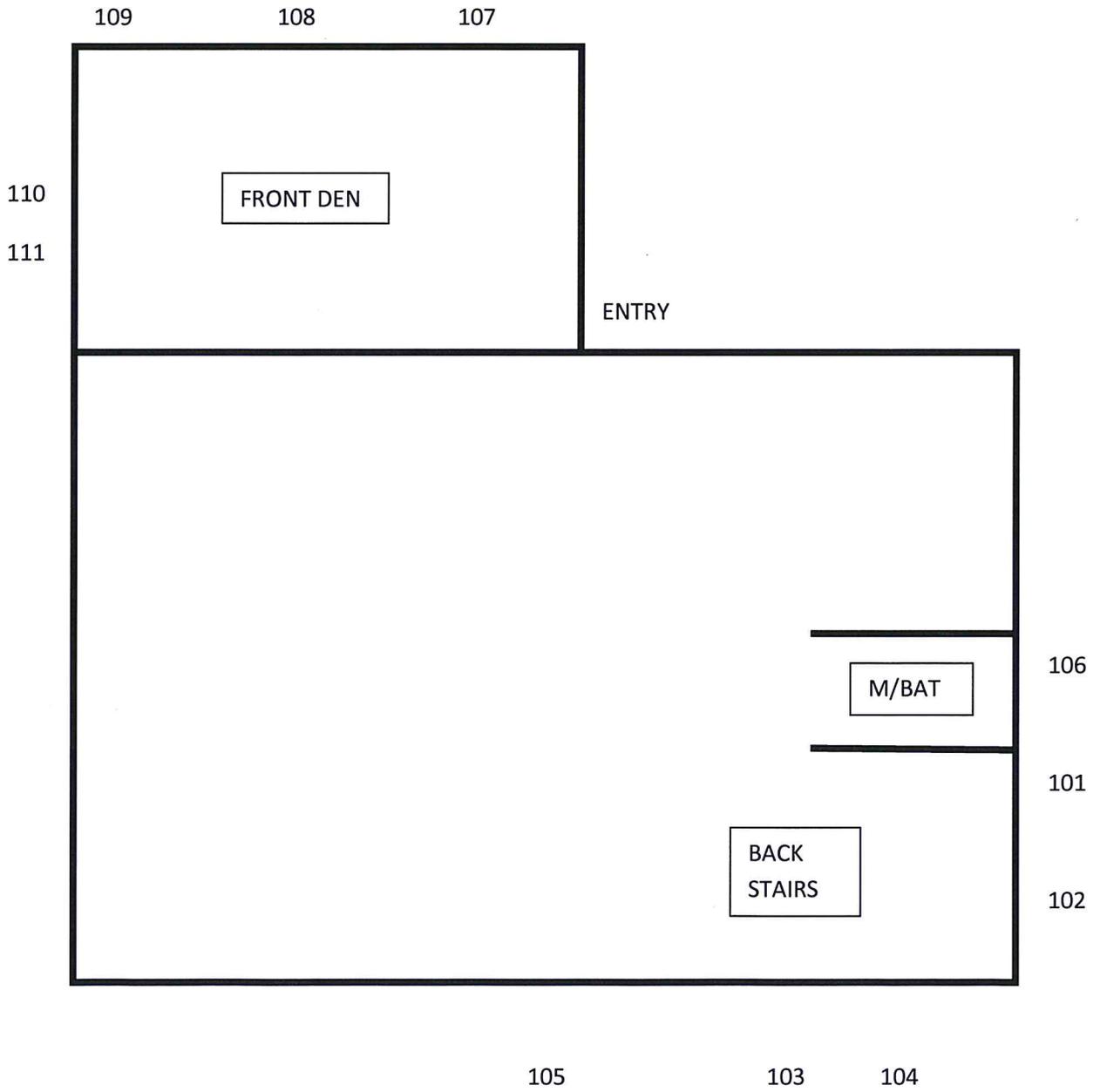


(This space reserved for official comments.)

FLOOR PLAN

DALE BAPTIST FLOOR PLAN

FRONT (WEST H STREET)



**PHOTOGRAPHS
(PRIOR TO WINDOW REPLACEMENT)**



107 108 109

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Community Development Department
MEMORANDUM

Date: January 24, 2013
To: Historic Preservation Review Commission
From: Amy Million, Principal Planner
Re: Window Standards Resolutions & Design Review Exemptions

In 2011, the Commission adopted Resolution No. 11-3 describing a preference for window standards for designated buildings in the Downtown Historic Conservation District. This resolution clarified previous window standard Resolution Nos. 5-14 and No. 10-4. The purpose of all three resolutions was to emphasize the Secretary of the Interior Standards guidelines for repair and provide a threshold for staff-level approval for window repair and replacement.

Resolution No. 11-3 states:

The Benicia Historic Preservation Review Commission hereby determines that proposals to modify windows in a designated building in the [Downtown] historic district shall be repaired, if possible, or if replaced, replaced with wood or historically appropriate material. Upon verification of feasibility of repair per National Park Service Preservation Brief 9 (Exhibit A), staff is authorized to approve window repairs or replacements meeting the above criteria. Replacement windows shall be those typical of the period and appropriate to the architectural style. Staff can approve dual-paned windows that convey the visual appearance of the original windows. All other repairs and replacements, other than those approved as above, are to be reviewed by the Historic Preservation Review Commission.

The Commission has the authority to *make policy recommendations to the city council on matters that relate to historic preservation and the restoration of designated buildings and districts* (BMC 2.84.080). In order to implement the Commission's policy, the City Council would need to adopt the proposed direction to staff in Resolution No. 11-3.

The purpose of this discussion is to determine how best to recommend current Commission preferences to the City Council. This discussion will also include further analysis of the proposed changes and their relationship to the design review exemptions in the Downtown Historic Conservation Plan (DHCP).

Downtown Historic Conversation Plan

Since Resolution No. 11-3 suggests modifications to the design review processes, staff recommends changing the DHCP to reflect those modifications. Formalizing these changes in the DHCP would provide a clear tool for

implementation. A redline version of the recommended changes to Applicability and Exemptions section in the DHCP (pg. 25) is attached for your review.

The DHCP (pg. 25) provides a list of routine maintenance and repairs that are exempt from design review.

Replacement of existing building features or elements with identical ones and routine maintenance are exempt from design review as are repairs of emergency nature to rehabilitate an unsafe building. Specific examples of routine maintenance and repairs which are exempt from design review apply only to designated historic structures and include the following:

- *Painting*
- *Reroofing with the same material*
- *Replacement of existing siding or trim or siding or trim of the same material and appearance.*
- *Replacement of existing windows or doors with windows or doors of the same dimension, finish and overall appearance*
- *Other repairs or replacements as determined by planning staff.*

Resolution No. 11-3 attempts to clarify the design review exemption pertaining to windows as stated above in bullet point no. 4. The issues to consider in trying to implement the exemption include:

1. replacement windows for non-historic structures
2. replacement of existing non-original windows with original materials
3. use of alternative materials that could resemble wood or historically appropriate material
4. repair before replacement

The recommended changes to the DHCP intend to clarify the list of exemptions so that staff, decision-makers and the community are presented with certainty and clear direction for implementation. Over the years, the Commission has expressed concern with a lack of process for requiring the replacement of non-original materials with original materials, such as, replacing vinyl windows with wood windows. This has been incorporated into the revised language as an exemption (see new bullet point).

Incorporating the Secretary of the Interior Standards

The Secretary of the Interior Standards for Rehabilitation & Illustrated Guidelines for Rehabilitating Historic Buildings (Standards) encourage the repair of original windows before replacing them. In addition to those guidelines, the National Park Services has updated its guidelines to replace the "Energy Conservation" chapter and produced the Illustrated Guidelines on Sustainability For

Rehabilitation of Historic Buildings (Sustainability Standards). *[The Sustainability Standards] guidelines offer specific guidance on how to make historic buildings more sustainable in a manner that will preserve their historic character and that will meet The [Standards]*¹. The Sustainability Standards also encourage the repair and maintenance of existing windows; however, the focus towards an energy efficient replacement window is demonstrated in its following recommendations:

- Install compatible and energy-efficient replacement windows that match the appearance, size, design, proportion and profile of the existing historic windows and that are also durable, repairable and recyclable, when existing windows are too deteriorated to repair.
- Replace missing windows with new, energy efficient windows that are appropriate to the style of historic building and that are also durable, repairable and recyclable.
- Retrofit historic windows with high-performance glazing or clear film, when possible, and only if the historic character can be maintained.

Staff is aware that one of the key parts of Resolution No. 11-3 was to require repair per National Park Service Preservation Brief No. 9 before replacement. In helping to determine possible ways to incorporate this requirement, staff reviewed the policies of other jurisdictions in the Bay Area. The following was noted:

City of Vallejo:

The city's ordinance requires a Certificate of Appropriateness (COA) for alterations to any listed building, or any building in any of the Historic Districts. They also have a "Design Assistance Committee" made up of two members from the Architectural Heritage and Landmarks Commission. Vallejo's ordinance does not allow the City to require replacement of non-original/inauthentic materials that were legally installed. However, through the COA process the City is able to evaluate the situation when a COA is applied for and recommend repair if appropriate.

City of Berkeley:

Among other responsibilities, approval by the City's Landmark Commission is required for alteration of any designated structure, EXCEPT "when the application is for a permit to do ordinary maintenance and repairs, unless, in the opinion of the commission [or staff], approval of the said application would seriously conflict with the purposes and standards of [the preservation ordinance] or the provisions of the designation. For the purpose of [the

¹ The Secretary of the Interior Standards for Rehabilitation & Illustrated Guidelines on Sustainability For Rehabilitating Historic Buildings by National Park Service, 2011

preservation ordinance], "ordinary maintenance and repairs" means any work, the sole purpose and effect of which is to correct deterioration, decay or damage".²

The ordinance language for the City of Berkeley is broad and allows for some discretion with maintenance and repair work to undergo a design review process that would otherwise be exempt should the City determine that the work is not consistent with the goals of the district.

Staff recommends that the Commission discuss the changes proposed by Resolution No. 11-3 and the draft changes to the DHCP, take public comment and direct staff to bring back a draft for future action.

Attachments:

- Resolution No. 11-3 & attachment: National Park Service Preservation Brief 9
- Resolution No. 10-4 & attachment: National Park Service Preservation Brief 9
- Resolution No. 05-14
- Proposed modification to DHCP, pg. 25

² City of Berkeley Municipal Code, Chapter 3.24

RESOLUTION NO. 11-3 (HPRC)

A RESOLUTION OF THE HISTORIC PRESERVATION REVIEW COMMISSION OF THE CITY OF BENICIA AMENDING ESTABLISHED WINDOW STANDARDS FOR DESIGNATED BUILDINGS IN THE DOWNTOWN HISTORIC OVERLAY DISTRICT

WHEREAS, the City of Benicia has an established Downtown Historic Overlay District; and

WHEREAS, property owners of designated buildings in the Downtown Historic Overlay District are required to obtain Historic Preservation Review Commission approval to make modifications to their structures; and

WHEREAS, on August 18, 2005, October 27, 2005, November 17, 2005, and December 22, 2005, the Historic Preservation Review Commission held public hearings on the establishment of window standards for designated buildings in the Downtown Historic Conservation District, considered the staff report, presentations, and public testimony, and directed staff to draft a Resolution formalizing the Commission's findings; and

WHEREAS, on December 22, 2005, the Historic Preservation Review Commission adopted resolution No. 05-14, establishing window standards; and

WHEREAS, on May 27, 2010, the Historic Preservation Review Commission reviewed and amended Resolution No. 05-14 to incorporate Preservation Brief 9 as Exhibit A to clarify the process for verifying feasibility of repair of windows, and adopted Resolution No. 10-4; and

WHEREAS, on February 24, 2011, the Historic Preservation Review Commission held a workshop on windows, and reviewed and amended Resolution No. 10-4.

NOW, THEREFORE, the Historic Preservation Review Commission of the City of Benicia hereby resolves as follows:

SECTION 1. The Benicia Historic Preservation Review Commission hereby determines that proposals to modify windows in a designated building in the historic district shall be repaired, if possible, or if replaced, replaced with wood or historically appropriate material. Upon verification of feasibility of repair per National Park Service Preservation Brief 9 (Exhibit A), staff is authorized to approve window repairs or replacements meeting the above criteria. Replacement windows shall be those typical of the period and appropriate to the architectural style. Staff can approve dual-paned windows that convey the visual appearance of the original windows. All other repairs and replacements, other than those approved as above, are to be reviewed by the Historic Preservation Review Commission.

The foregoing motion was made by Commissioner Crompton, seconded by Commissioner McKee, and carried by the following vote at a regular meeting of the Commission on February 24, 2011:

Ayes: Commissioners Crompton, Mang, McKee, Taagepera, Van Landschoot, and Chair Haughey

Noes: None

Absent: Commissioner White



Toni Haughey
Historic Preservation Review Commission Chair

9 Preservation Briefs

Technical Preservation Services

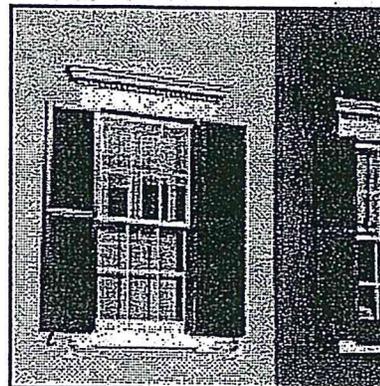
National Park Service
U.S. Department of the Interior



The Repair of Historic Wooden Windows

John H. Myers

- » Architectural or Historical Significance
- » Physical Evaluation
- » Repair Class I: Routine Maintenance
- » Repair Class II: Stabilization
- » Repair Class III: Splices and Parts Replacement
- » Weatherization
- » Window Replacement
- » Conclusion
- » Additional Reading



A NOTE TO OUR USERS: The web versions of the **Preservation Briefs** differ somewhat from the printed versions. Many illustrations are new, captions are simplified, illustrations are typically in color rather than black and white, and some complex charts have been omitted.

The windows on many historic buildings are an important aspect of the architectural character of those buildings. Their design, craftsmanship, or other qualities may make them worthy of preservation. This is self-evident for ornamental windows, but it can be equally true for warehouses or factories where the windows may be the most dominant visual element of an otherwise plain building. Evaluating the significance of these windows and planning for their repair or replacement can be a complex process involving both objective and subjective considerations. *The Secretary of the Interior's Standards for Rehabilitation* and the accompanying guidelines, call for respecting the significance of original materials and features, repairing and retaining them wherever possible, and when necessary, replacing them in kind. This Brief is based on the issues of significance and repair which are implicit in the standards, but the primary emphasis is on the technical issues of planning for the repair of windows including evaluation of their physical condition, techniques of repair, and design considerations when replacement is necessary.

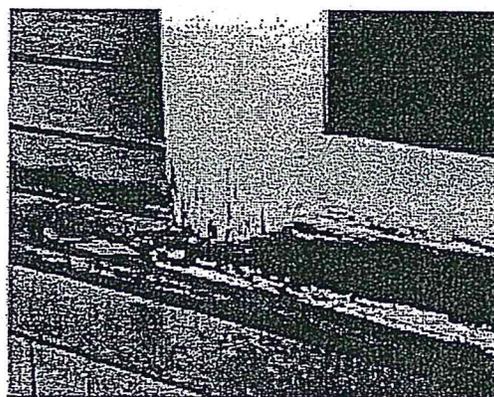
Much of the technical section presents repair techniques as an instructional guide for the do-it-yourselfer. The information will be useful, however, for the architect, contractor, or developer on large-scale projects. It presents a methodology for approaching the evaluation and repair of existing windows, and considerations for replacement, from which the professional can develop alternatives and specify appropriate materials and procedures.

Architectural or Historical Significance

- 3) condition of the frame and sill
- 4) condition of the sash (rails, stiles and muntins)
- 5) glazing problems
- 6) hardware, and
- 7) the overall condition of the window (excellent, fair, poor, and so forth)

Many factors such as poor design, moisture, vandalism, insect attack, and lack of maintenance can contribute to window deterioration, but moisture is the primary contributing factor in wooden window decay. All window units should be inspected to see if water is entering around the edges of the frame and, if so, the joints or seams should be caulked to eliminate this danger. The glazing putty should be checked for cracked, loose, or missing sections which allow water to saturate the wood, especially at the joints. The back putty on the interior side of the pane should also be inspected, because it creates a seal which prevents condensation from running down into the joinery. The sill should be examined to insure that it slopes downward away from the building and allows water to drain off. In addition, it may be advisable to cut a dripline along the underside of the sill. This almost invisible treatment will insure proper water runoff, particularly if the bottom of the sill is flat. Any conditions, including poor original design, which permit water to come in contact with the wood or to puddle on the sill must be corrected as they contribute to deterioration of the window.

One clue to the location of areas of excessive moisture is the condition of the paint; therefore, each window should be examined for areas of paint failure. Since excessive moisture is detrimental to the paint bond, areas of paint blistering, cracking, flaking, and peeling usually identify points of water penetration, moisture saturation, and potential deterioration. Failure of the paint should not, however, be mistakenly interpreted as a sign that the wood is in poor condition and hence, irreparable. Wood is frequently in sound physical condition beneath unsightly paint. After noting areas of paint failure, the next step is to inspect the condition of the wood, particularly at the points identified during the paint examination.



Deterioration of poorly maintained windows usually begins on horizontal surfaces and at joints, where water can collect and saturate the wood. Photo: NPS files.

Each window should be examined for operational soundness beginning with the lower portions of the frame and sash. Exterior rainwater and interior condensation can flow downward along the window, entering and collecting at points where the flow is blocked. The sill, joints between the sill and jamb, corners of the bottom rails and muntin joints are typical points where water collects and deterioration begins. The operation of the window (continuous opening and closing over the years and seasonal temperature changes) weakens the joints, causing movement and slight separation. This process makes the joints more vulnerable to water which is readily absorbed into the endgrain of the wood. If severe deterioration exists in these areas, it will usually be apparent on visual inspection, but other less severely deteriorated areas of the wood may be tested by two traditional methods using a small ice pick.

An ice pick or an awl may be used to test wood for soundness. The technique is simply to jab the pick into a wetted wood surface at an angle and pry up a small section of the wood. Sound wood will separate in long fibrous splinters, but decayed wood will lift up in short irregular pieces due to the breakdown of fiber strength.



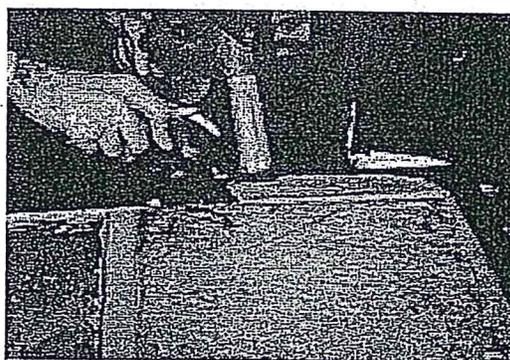
After removing paint from the seam between the interior stop and the jamb, the stop can be pried out and gradually worked loose using a pair of putty knives as shown. Photo: NPS files.

double-hung wooden window, but they may be adapted to other window types and styles as applicable.

Historic windows have usually acquired many layers of paint over time. Removal of excess layers or peeling and flaking paint will facilitate operation of the window and restore the clarity of the original detailing. Some degree of paint removal is also necessary as a first step in the proper surface preparation for subsequent refinishing (if paint color analysis is desired, it should be conducted prior to the onset of the paint removal). There are several safe and effective techniques for removing paint from wood, depending on the amount of paint to be removed.

Paint removal should begin on the interior frames, being careful to remove the paint from the interior stop and the parting bead, particularly along the

seam where these stops meet the jamb. This can be accomplished by running a utility knife along the length of the seam, breaking the paint bond. It will then be much easier to remove the stop, the parting bead and the sash. The interior stop may be initially loosened from the sash side to avoid visible scarring of the wood and then gradually pried loose using a pair of putty knives, working up and down the stop in small increments. With the stop removed, the lower or interior sash may be withdrawn. The sash cords should be detached from the sides of the sash and their ends may be pinned with a nail or tied in a knot to prevent them from falling into the weight pocket.



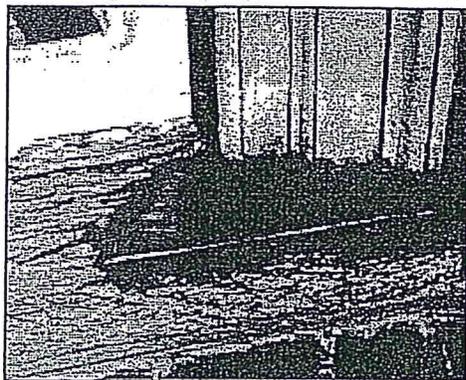
Sash can be removed and repaired in a convenient work area. Paint is being removed from this sash with a hot air gun. Photo: NPS files.

Removal of the upper sash on double-hung units is similar but the parting bead which holds it in place is set into a groove in the center of the stile and is thinner and more delicate than the interior stop. After removing any paint along the seam, the parting bead should be carefully pried out and worked free in the same manner as the interior stop. The upper sash can be removed in the same manner as the lower one and both sash taken to a convenient work area (in order to remove the sash the interior stop and parting bead need only be removed from one side of the window). Window openings can be covered with polyethylene sheets or plywood sheathing while the sash are out for repair.

The sash can be stripped of paint using appropriate techniques, but if any heat treatment is used, the glass should be removed or protected from the sudden temperature change which can cause breakage. An overlay of aluminum foil on gypsum board or asbestos can protect the glass from such rapid temperature change. It is important to protect the glass because it may be historic and often adds character to the window. Deteriorated putty should be removed manually, taking care not to damage the wood along the rabbet. If the glass is to be removed, the glazing points which hold the glass in place can be extracted and the panes numbered and removed for cleaning and reuse in the same openings. With the glass panes out, the remaining putty can be removed and the sash can be sanded, patched, and primed with a preservative primer. Hardened putty in the rabbets may be softened by heating with a soldering iron at the

damaged windows can be repaired using simple processes. Partially decayed wood can be waterproofed, patched, built-up, or consolidated and then painted to achieve a sound condition, good appearance, and greatly extended life. Three techniques for repairing partially decayed or weathered wood are discussed in this section, and all three can be accomplished using products available at most hardware stores.

One established technique for repairing wood which is split, checked or shows signs of rot, is to: **1)** dry the wood, **2)** treat decayed areas with a fungicide, **3)** waterproof with two or three applications of boiled linseed oil (applications every 24 hours), **4)** fill cracks and holes with putty, and **5)** after a "skin" forms on the putty, paint the surface. Care should be taken with the use of fungicide which is toxic. Follow the manufacturers' directions and use only on areas which will be painted. When using any technique of building up or patching a flat surface, the finished surface should be sloped slightly to carry water away from the window and not allow it to puddle. Caulking of the joints between the sill and the jamb will help reduce further water penetration.



This illustrates a two-part epoxy patching compound used to fill the surface of a weathered sill and rebuild the missing edge. When the epoxy cures, it can be sanded smooth and painted to achieve a durable and waterproof repair. Photo: NPS files.

When sills or other members exhibit surface weathering they may also be built-up using wood putties or homemade mixtures such as sawdust and resorcinol glue, or whiting and varnish. These mixtures can be built up in successive layers, then sanded, primed, and painted. The same caution about proper slope for flat surfaces applies to this technique.

Wood may also be strengthened and stabilized by consolidation, using semirigid epoxies which saturate the porous decayed wood and then harden. The surface of the consolidated wood can then be filled with a semirigid epoxy patching compound, sanded and painted. Epoxy patching compounds can be used to build up missing sections or decayed ends of members. Profiles can

be duplicated using hand molds, which are created by pressing a ball of patching compound over a sound section of the profile which has been rubbed with butcher's wax. This can be a very efficient technique where there are many typical repairs to be done. The process has been widely used and proven in marine applications; and proprietary products are available at hardware and marine supply stores. Although epoxy materials may be comparatively expensive, they hold the promise of being among the most durable and long lasting materials available for wood repair. More information on epoxies can be found in the publication "Epoxies for Wood Repairs in Historic Buildings," cited in the bibliography.

Any of the three techniques discussed can stabilize and restore the appearance of the window unit. There are times, however, when the degree of deterioration is so advanced that stabilization is impractical, and the only way to retain some of the original fabric is to replace damaged parts.

Repair Class III: Splices and Parts Replacement

When parts of the frame or sash are so badly deteriorated that they cannot be stabilized there are methods which permit the retention of some of the existing or original fabric.

Most windows should not require the extensive repairs discussed in this section. The ones which do are usually in buildings which have been abandoned for long periods or have totally lacked maintenance for years. It is necessary to thoroughly investigate the alternatives for windows which do require extensive repairs to arrive at a solution which retains historic significance and is also economically feasible. Even for projects requiring repairs identified in this section, if the percentage of parts replacement per window is low, or the number of windows requiring repair is small, repair can still be a cost effective solution.

Weatherization

A window which is repaired should be made as energy efficient as possible by the use of appropriate weatherstripping to reduce air infiltration. A wide variety of products are available to assist in this task. Felt may be fastened to the top, bottom, and meeting rails, but may have the disadvantage of absorbing and holding moisture, particularly at the bottom rail. Rolled vinyl strips may also be tacked into place in appropriate locations to reduce infiltration. Metal strips or new plastic spring strips may be used on the rails and, if space permits, in the channels between the sash and jamb. Weatherstripping is a historic treatment, but old weatherstripping (felt) is not likely to perform very satisfactorily. Appropriate contemporary weatherstripping should be considered an integral part of the repair process for windows. The use of sash locks installed on the meeting rail will insure that the sash are kept tightly closed so that the weatherstripping will function more effectively to reduce infiltration. Although such locks will not always be historically accurate, they will usually be viewed as an acceptable contemporary modification in the interest of improved thermal performance.

Many styles of storm windows are available to improve the thermal performance of existing windows. The use of exterior storm windows should be investigated whenever feasible because they are thermally efficient, cost-effective, reversible, and allow the retention of original windows (see "Preservation Briefs: 3"). Storm window frames may be made of wood, aluminum, vinyl, or plastic; however, the use of unfinished aluminum storms should be avoided. The visual impact of storms may be minimized by selecting colors which match existing trim color. Arched top storms are available for windows with special shapes. Although interior storm windows appear to offer an attractive option for achieving double glazing with minimal visual impact, the potential for damaging condensation problems must be addressed. Moisture which becomes trapped between the layers of glazing can condense on the colder, outer prime window, potentially leading to deterioration. The correct approach to using interior storms is to create a seal on the interior storm while allowing some ventilation around the prime window. In actual practice, the creation of such a durable, airtight seal is difficult.

Window Replacement

Although the retention of original or existing windows is always desirable and this Brief is intended to encourage that goal, there is a point when the condition of a window may clearly indicate replacement. The decision process for selecting replacement windows should not begin with a survey of contemporary window products which are available as replacements, but should begin with a look at the windows which are being replaced. Attempt to understand the contribution of the window(s) to the appearance of the facade including: **1)** the pattern of the openings and their size; **2)** proportions of the

"Fixing Double-hung Windows." *Old House Journal* (no. 12, 1979): 135.

Morrison, Hugh. *Early American Architecture*. New York: Oxford University Press, 1952.

Phillips, Morgan, and Selwyn, Judith. *Epoxies for Wood Repairs in Historic Buildings*. Washington, DC: Technical Preservation Services, U.S. Department of the Interior (Government Printing Office, Stock No. 024016000951), 1978.

Rehab Right. Oakland, California: City of Oakland Planning Department, 1978 (pp. 7883).

"Sealing Leaky Windows." *Old House Journal* (no. 1, 1973): 5.

Smith, Baird M. "Preservation Briefs: 3 Conserving Energy in Historic Buildings." Washington, DC: Technical Preservation Services, U.S. Department of the Interior, 1978.

Weeks, Kay D. and David W. Look, "Preservation Briefs: 10 Exterior Paint Problems on Historic Woodwork." Washington, DC: Technical Preservation Services, U.S. Department of the Interior, 1982.

Washington, D.C. 1981

Home page logo: Historic six-over-six windows--preserved. Photo: NPS files.

This publication has been prepared pursuant to the National Historic Preservation Act of 1966, as amended, which directs the Secretary of the Interior to develop and make available information concerning historic properties. Technical Preservation Services (TPS), Heritage Preservation Services Division, National Park Service prepares standards, guidelines, and other educational materials on responsible historic preservation treatments for a broad public.

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KDW

RESOLUTION NO. 10-4 (HPRC)

A RESOLUTION OF THE HISTORIC PRESERVATION REVIEW COMMISSION OF THE CITY OF BENICIA AMENDING ESTABLISHED WINDOW STANDARDS FOR DESIGNATED BUILDINGS IN THE DOWNTOWN HISTORIC OVERLAY DISTRICT

WHEREAS, the City of Benicia has an established Downtown Historic Overlay District; and

WHEREAS, property owners of designated buildings in the Downtown Historic Overlay District are required to obtain Historic Preservation Review Commission approval to make modifications to their structures; and

WHEREAS, on August 18, 2005, October 27, 2005, November 17, 2005, and December 22, 2005, the Historic Preservation Review Commission held public hearings on the establishment of window standards for designated buildings in the Downtown Historic Conservation District, considered the staff report, presentations, and public testimony, and directed staff to draft a Resolution formalizing the Commission's findings; and

WHEREAS, on December 22, 2005, the Historic Preservation Review Commission adopted resolution No. 05-14, establishing window standards; and

WHEREAS, on May 27, 2010, the Historic Preservation Review Commission reviewed and amended Resolution No. 05-14 to incorporate Preservation Brief 9 as Exhibit A, and clarified the process for verifying feasibility of repair of windows.

NOW, THEREFORE, the Historic Preservation Review Commission of the City of Benicia hereby resolves as follows:

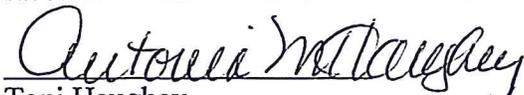
SECTION 1. The Benicia Historic Preservation Review Commission hereby determines that proposals to modify windows in a designated building in the historic district shall be repaired, if possible, or if replaced, replaced in-kind. Upon verification of feasibility of repair per National Park Service Preservation Brief 9 (Exhibit A), staff is authorized to approve window repairs or replacements meeting the above criteria. Replacement windows shall be those typical of the period and appropriate to the architectural style. Windows may contain low-E and be insulated glass when there are no muntins or true-divided lites. All other repairs and replacements, other than those approved as above, are to be reviewed by the Historic Preservation Review Commission.

The foregoing motion was made by Commissioner Crompton, seconded by Commissioner Mang, and carried by the following vote at a regular meeting of the Commission on May 27, 2010:

Ayes: Commissioners Crompton, Mang, McKee, Taagepera, White and Chair Haughey

Noes: None

Absent: Commissioner Van Landschoot



Toni Haughey

Historic Preservation Review Commission Chair

EXHIBIT 'A'

9 Preservation Briefs

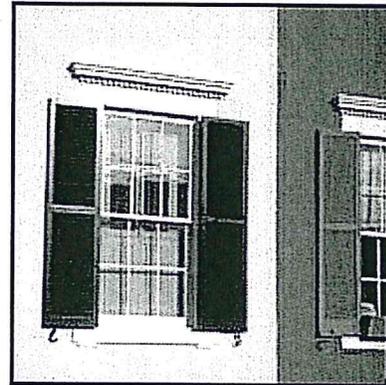
Technical Preservation Services
National Park Service
U.S. Department of the Interior



The Repair of Historic Wooden Windows

John H. Myers

- » Architectural or Historical Significance
- » Physical Evaluation
- » Repair Class I: Routine Maintenance
- » Repair Class II: Stabilization
- » Repair Class III: Splices and Parts Replacement
- » Weatherization
- » Window Replacement
- » Conclusion
- » Additional Reading



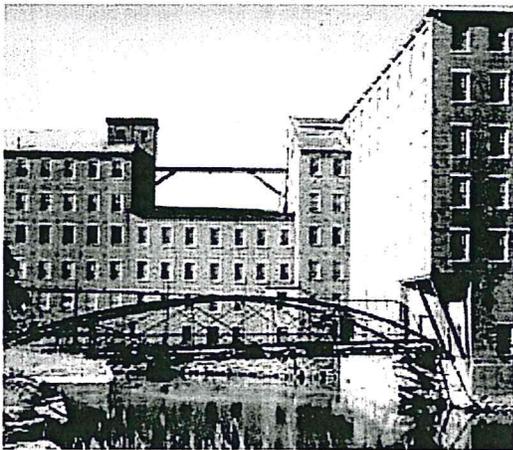
A NOTE TO OUR USERS: The web versions of the **Preservation Briefs** differ somewhat from the printed versions. Many illustrations are new, captions are simplified, illustrations are typically in color rather than black and white, and some complex charts have been omitted.

The windows on many historic buildings are an important aspect of the architectural character of those buildings. Their design, craftsmanship, or other qualities may make them worthy of preservation. This is self-evident for ornamental windows, but it can be equally true for warehouses or factories where the windows may be the most dominant visual element of an otherwise plain building. Evaluating the significance of these windows and planning for their repair or replacement can be a complex process involving both objective and subjective considerations. *The Secretary of the Interior's Standards for Rehabilitation* and the accompanying guidelines, call for respecting the significance of original materials and features, repairing and retaining them wherever possible, and when necessary, replacing them in kind. This Brief is based on the issues of significance and repair which are implicit in the standards, but the primary emphasis is on the technical issues of planning for the repair of windows including evaluation of their physical condition, techniques of repair, and design considerations when replacement is necessary.

Much of the technical section presents repair techniques as an instructional guide for the do-it-yourselfer. The information will be useful, however, for the architect, contractor, or developer on large-scale projects. It presents a methodology for approaching the evaluation and repair of existing windows, and considerations for replacement, from which the professional can develop alternatives and specify appropriate materials and procedures.

Architectural or Historical Significance

Evaluating the architectural or historical significance of windows is the first step in planning for window treatments, and a general understanding of the function and history of windows is vital to making a proper evaluation. As a part of this evaluation, one must consider four basic window functions: admitting light to the interior spaces, providing fresh air and ventilation to the interior, providing a visual link to the outside world, and enhancing the appearance of a building. No single factor can be disregarded when planning window treatments; for example, attempting to conserve energy by closing up or reducing the size of window openings may result in the use of *more* energy by increasing electric lighting loads and decreasing passive solar heat gains.



Windows are frequently important visual focal points, especially on simple facades such as this mill building. Replacement of the multi-pane windows with larger panes could dramatically alter the appearance of the building. Photo: NPS files.

Historically, the first windows in early American houses were casement windows; that is, they were hinged at the side and opened outward. In the beginning of the eighteenth century single- and double-hung windows were introduced. Subsequently many styles of these vertical sliding sash windows have come to be associated with specific building periods or architectural styles, and this is an important consideration in determining the significance of windows, especially on a local or regional basis. Site-specific, regionally oriented architectural comparisons should be made to determine the significance of windows in question. Although such comparisons may focus on specific window types and their details, the ultimate determination of significance should be made within the context of the whole building, wherein the windows are one architectural element.

After all of the factors have been evaluated, **windows should be considered significant to a building if they:** **1)** are original, **2)** reflect the original design intent for the building, **3)** reflect period or regional styles or building practices, **4)** reflect changes to the building resulting from major periods or events, or **5)** are examples of exceptional craftsmanship or design. Once this evaluation of significance has been completed, it is possible to proceed with planning appropriate treatments, beginning with an investigation of the physical condition of the windows.

Physical Evaluation

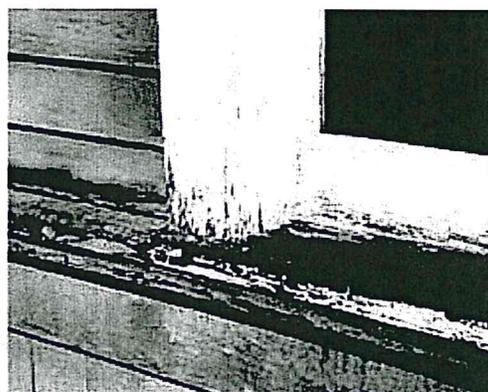
The key to successful planning for window treatments is a careful evaluation of existing physical conditions on a unit-by-unit basis. A graphic or photographic system may be devised to record existing conditions and illustrate the scope of any necessary repairs. Another effective tool is a window schedule which lists all of the parts of each window unit. Spaces by each part allow notes on existing conditions and repair instructions. When such a schedule is completed, it indicates the precise tasks to be performed in the repair of each unit and becomes a part of the specifications. In any evaluation, one should note at a minimum:

- **1)** window location
- **2)** condition of the paint

- **3)** condition of the frame and sill
- **4)** condition of the sash (rails, stiles and muntins)
- **5)** glazing problems
- **6)** hardware, and
- **7)** the overall condition of the window (excellent, fair, poor, and so forth)

Many factors such as poor design, moisture, vandalism, insect attack, and lack of maintenance can contribute to window deterioration, but moisture is the primary contributing factor in wooden window decay. All window units should be inspected to see if water is entering around the edges of the frame and, if so, the joints or seams should be caulked to eliminate this danger. The glazing putty should be checked for cracked, loose, or missing sections which allow water to saturate the wood, especially at the joints. The back putty on the interior side of the pane should also be inspected, because it creates a seal which prevents condensation from running down into the joinery. The sill should be examined to insure that it slopes downward away from the building and allows water to drain off. In addition, it may be advisable to cut a dripline along the underside of the sill. This almost invisible treatment will insure proper water runoff, particularly if the bottom of the sill is flat. Any conditions, including poor original design, which permit water to come in contact with the wood or to puddle on the sill must be corrected as they contribute to deterioration of the window.

One clue to the location of areas of excessive moisture is the condition of the paint; therefore, each window should be examined for areas of paint failure. Since excessive moisture is detrimental to the paint bond, areas of paint blistering, cracking, flaking, and peeling usually identify points of water penetration, moisture saturation, and potential deterioration. Failure of the paint should not, however, be mistakenly interpreted as a sign that the wood is in poor condition and hence, irreparable. Wood is frequently in sound physical condition beneath unsightly paint. After noting areas of paint failure, the next step is to inspect the condition of the wood, particularly at the points identified during the paint examination.



Deterioration of poorly maintained windows usually begins on horizontal surfaces and at joints, where water can collect and saturate the wood. Photo: NPS files.

Each window should be examined for operational soundness beginning with the lower portions of the frame and sash. Exterior rainwater and interior condensation can flow downward along the window, entering and collecting at points where the flow is blocked. The sill, joints between the sill and jamb, corners of the bottom rails and muntin joints are typical points where water collects and deterioration begins. The operation of the window (continuous opening and closing over the years and seasonal temperature changes) weakens the joints, causing movement and slight separation. This process makes the joints more vulnerable to water which is readily absorbed into the endgrain of the wood. If severe deterioration exists in these areas, it will usually be apparent on visual inspection, but other less severely deteriorated areas of the wood may be tested by two traditional methods using a small ice pick.

An ice pick or an awl may be used to test wood for soundness. The technique is simply to jab the pick into a wetted wood surface at an angle and pry up a small section of the wood. Sound wood will separate in long fibrous splinters, but decayed wood will lift up in short irregular pieces due to the breakdown of fiber strength.

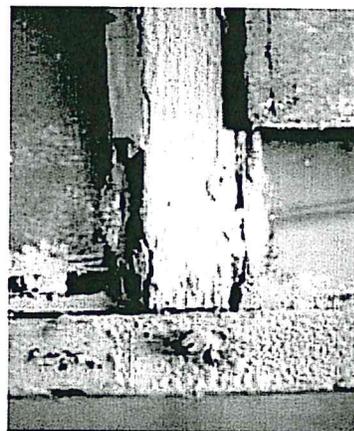
Another method of testing for soundness consists of pushing a sharp object into the wood, perpendicular to the surface. If deterioration has begun from the hidden side of a member and the core is badly decayed, the visible surface may appear to be sound wood. Pressure on the probe can force it through an apparently sound skin to penetrate deeply into decayed wood. This technique is especially useful for checking sills where visual access to the underside is restricted.

Following the inspection and analysis of the results, the scope of the necessary repairs will be evident and a plan for the rehabilitation can be formulated. Generally the actions necessary to return a window to "like new" condition will fall into three broad categories: **1) routine maintenance procedures, 2) structural stabilization, and 3) parts replacement.** These categories will be discussed in the following sections and will be referred to respectively as **Repair Class I, Repair Class II, and Repair Class III.** Each successive repair class represents an increasing level of difficulty, expense, and work time. Note that most of the points mentioned in Repair Class I are routine maintenance items and should be provided in a regular maintenance program for any building. The neglect of these routine items can contribute to many common window problems.

Before undertaking any of the repairs mentioned in the following sections all sources of moisture penetration should be identified and eliminated, and all existing decay fungi destroyed in order to arrest the deterioration process. Many commercially available fungicides and wood preservatives are toxic, so it is extremely important to follow the manufacturer's recommendations for application, and store all chemical materials away from children and animals. After fungicidal and preservative treatment the windows may be stabilized, retained, and restored with every expectation for a long service life.

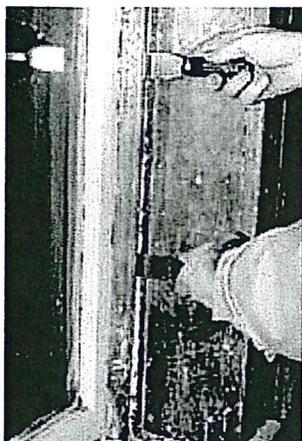
Repair Class I: Routine Maintenance

Repairs to wooden windows are usually labor intensive and relatively uncomplicated. On small scale projects this allows the do-it-yourselfer to save money by repairing all or part of the windows. On larger projects it presents the opportunity for time and money which might otherwise be spent on the removal and replacement of existing windows, to be spent on repairs, subsequently saving all or part of the material cost of new window units. Regardless of the actual costs, or who performs the work, the evaluation process described earlier will provide the knowledge from which to specify an appropriate work program, establish the work element priorities, and identify the level of skill needed by the labor force.



This historic double-hung window has many layers of paint, some cracked and missing putty, slight separation at the joints, broken sash cords, and one cracked pane. Photo: NPS files.

The routine maintenance required to upgrade a window to "like new" condition normally includes the following steps: 1) some degree of interior and exterior paint removal, 2) removal and repair of sash (including reglazing where necessary), 3) repairs to the frame, 4) weatherstripping and reinstallation of the sash, and 5) repainting. These operations are illustrated for a typical



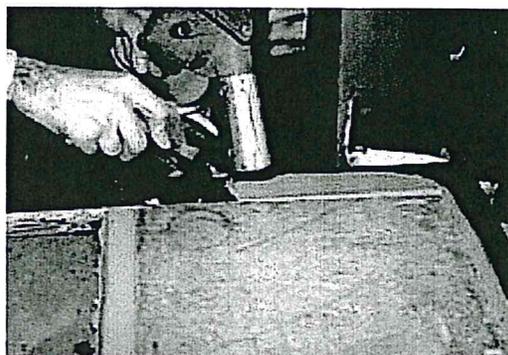
After removing paint from the seam between the interior stop and the jamb, the stop can be pried out and gradually worked loose using a pair of putty knives as shown. Photo: NPS files.

double-hung wooden window, but they may be adapted to other window types and styles as applicable.

Historic windows have usually acquired many layers of paint over time. Removal of excess layers or peeling and flaking paint will facilitate operation of the window and restore the clarity of the original detailing. Some degree of paint removal is also necessary as a first step in the proper surface preparation for subsequent refinishing (if paint color analysis is desired, it should be conducted prior to the onset of the paint removal). There are several safe and effective techniques for removing paint from wood, depending on the amount of paint to be removed.

Paint removal should begin on the interior frames, being careful to remove the paint from the interior stop and the parting bead, particularly along the

seam where these stops meet the jamb. This can be accomplished by running a utility knife along the length of the seam, breaking the paint bond. It will then be much easier to remove the stop, the parting bead and the sash. The interior stop may be initially loosened from the sash side to avoid visible scarring of the wood and then gradually pried loose using a pair of putty knives, working up and down the stop in small increments. With the stop removed, the lower or interior sash may be withdrawn. The sash cords should be detached from the sides of the sash and their ends may be pinned with a nail or tied in a knot to prevent them from falling into the weight pocket.



Sash can be removed and repaired in a convenient work area. Paint is being removed from this sash with a hot air gun. Photo: NPS files.

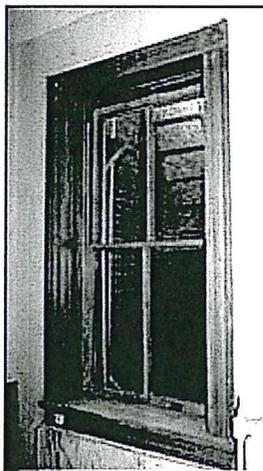
Removal of the upper sash on double-hung units is similar but the parting bead which holds it in place is set into a groove in the center of the stile and is thinner and more delicate than the interior stop. After removing any paint along the seam, the parting bead should be carefully pried out and worked free in the same manner as the interior stop. The upper sash can be removed in the same manner as the lower one and both sash taken to a convenient work area (in order to remove the sash the interior stop and parting bead need only be removed from one side of the window). Window openings can be covered with polyethylene sheets or plywood sheathing while the sash are out for repair.

The sash can be stripped of paint using appropriate techniques, but if any heat treatment is used, the glass should be removed or protected from the sudden temperature change which can cause breakage. An overlay of aluminum foil on gypsum board or asbestos can protect the glass from such rapid temperature change. It is important to protect the glass because it may be historic and often adds character to the window. Deteriorated putty should be removed manually, taking care not to damage the wood along the rabbet. If the glass is to be removed, the glazing points which hold the glass in place can be extracted and the panes numbered and removed for cleaning and reuse in the same openings. With the glass panes out, the remaining putty can be removed and the sash can be sanded, patched, and primed with a preservative primer. Hardened putty in the rabbets may be softened by heating with a soldering iron at the

point of removal. Putty remaining on the glass may be softened by soaking the panes in linseed oil, and then removed with less risk of breaking the glass. Before reinstalling the glass, a bead of glazing compound or linseed oil putty should be laid around the rabbet to cushion and seal the glass. Glazing compound should only be used on wood which has been brushed with linseed oil and primed with an oil based primer or paint. The pane is then pressed into place and the glazing points are pushed into the wood around the perimeter of the pane.

The final glazing compound or putty is applied and beveled to complete the seal. The sash can be refinished as desired on the inside and painted on the outside as soon as a "skin" has formed on the putty, usually in 2 or 3 days. Exterior paint should cover the beveled glazing compound or putty and lap over onto the glass slightly to complete a weather-tight seal. After the proper curing times have elapsed for paint and putty, the sash will be ready for reinstallation.

While the sash are out of the frame, the condition of the wood in the jamb and sill can be evaluated. Repair and refinishing of the frame may proceed concurrently with repairs to the sash, taking advantage of the curing times for the paints and putty used on the sash. One of the most common work items is the replacement of the sash cords with new rope cords or with chains. The weight pocket is frequently accessible through a door on the face of the frame near the sill, but if no door exists, the trim on the interior face may be removed for access. Sash weights may be increased for easier window operation by elderly or handicapped persons. Additional repairs to the frame and sash may include consolidation or replacement of deteriorated wood. Techniques for these repairs are discussed in the following sections.



Following the relatively simple repairs, the window is weathertight, like new in appearance, and serviceable for many years to come. Photo: NPS files.

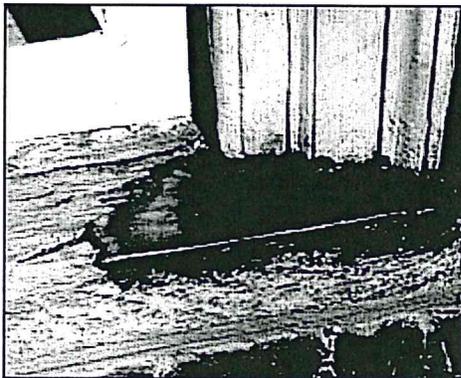
The operations just discussed summarize the efforts necessary to restore a window with minor deterioration to "like new" condition. The techniques can be applied by an unskilled person with minimal training and experience. To demonstrate the practicality of this approach, and photograph it, a Technical Preservation Services staff member repaired a wooden double-hung, two over two window which had been in service over ninety years. The wood was structurally sound but the window had one broken pane, many layers of paint, broken sash cords and inadequate, worn-out weatherstripping. The staff member found that the frame could be stripped of paint and the sash removed quite easily. Paint, putty and glass removal required about one hour for each sash, and the reglazing of both sash was accomplished in about one hour. Weatherstripping of the sash and frame, replacement of the sash cords and reinstallation of the sash, parting bead, and stop required an hour and a half. These times refer only to individual operations; the entire process took several days due to the drying and curing times for putty, primer, and paint, however, work on other window units could have been in progress during these lag times.

Repair Class II: Stabilization

The preceding description of a window repair job focused on a unit which was operationally sound. Many windows will show some additional degree of physical deterioration, especially in the vulnerable areas mentioned earlier, but even badly

damaged windows can be repaired using simple processes. Partially decayed wood can be waterproofed, patched, built-up, or consolidated and then painted to achieve a sound condition, good appearance, and greatly extended life. Three techniques for repairing partially decayed or weathered wood are discussed in this section, and all three can be accomplished using products available at most hardware stores.

One established technique for repairing wood which is split, checked or shows signs of rot, is to: **1)** dry the wood, **2)** treat decayed areas with a fungicide, **3)** waterproof with two or three applications of boiled linseed oil (applications every 24 hours), **4)** fill cracks and holes with putty, and **5)** after a "skin" forms on the putty, paint the surface. Care should be taken with the use of fungicide which is toxic. Follow the manufacturers' directions and use only on areas which will be painted. When using any technique of building up or patching a flat surface, the finished surface should be sloped slightly to carry water away from the window and not allow it to puddle. Caulking of the joints between the sill and the jamb will help reduce further water penetration.



This illustrates a two-part epoxy patching compound used to fill the surface of a weathered sill and rebuild the missing edge. When the epoxy cures, it can be sanded smooth and painted to achieve a durable and waterproof repair. Photo: NPS files.

When sills or other members exhibit surface weathering they may also be built-up using wood putties or homemade mixtures such as sawdust and resorcinol glue, or whiting and varnish. These mixtures can be built up in successive layers, then sanded, primed, and painted. The same caution about proper slope for flat surfaces applies to this technique.

Wood may also be strengthened and stabilized by consolidation, using semirigid epoxies which saturate the porous decayed wood and then harden. The surface of the consolidated wood can then be filled with a semirigid epoxy patching compound, sanded and painted. Epoxy patching compounds can be used to build up missing sections or decayed ends of members. Profiles can

be duplicated using hand molds, which are created by pressing a ball of patching compound over a sound section of the profile which has been rubbed with butcher's wax. This can be a very efficient technique where there are many typical repairs to be done. The process has been widely used and proven in marine applications; and proprietary products are available at hardware and marine supply stores. Although epoxy materials may be comparatively expensive, they hold the promise of being among the most durable and long lasting materials available for wood repair. More information on epoxies can be found in the publication "Epoxies for Wood Repairs in Historic Buildings," cited in the bibliography.

Any of the three techniques discussed can stabilize and restore the appearance of the window unit. There are times, however, when the degree of deterioration is so advanced that stabilization is impractical, and the only way to retain some of the original fabric is to replace damaged parts.

Repair Class III: Splices and Parts Replacement

When parts of the frame or sash are so badly deteriorated that they cannot be stabilized there are methods which permit the retention of some of the existing or original fabric.

These methods involve replacing the deteriorated parts with new matching pieces, or splicing new wood into existing members. The techniques require more skill and are more expensive than any of the previously discussed alternatives. It is necessary to remove the sash and/or the affected parts of the frame and have a carpenter or woodworking mill reproduce the damaged or missing parts. Most millwork firms can duplicate parts, such as muntins, bottom rails, or sills, which can then be incorporated into the existing window, but it may be necessary to shop around because there are several factors controlling the practicality of this approach. Some woodworking mills do not like to repair old sash because nails or other foreign objects in the sash can damage expensive knives (which cost far more than their profits on small repair jobs); others do not have cutting knives to duplicate muntin profiles. Some firms prefer to concentrate on larger jobs with more profit potential, and some may not have a craftsman who can duplicate the parts. A little searching should locate a firm which will do the job, and at a reasonable price. If such a firm does not exist locally, there are firms which undertake this kind of repair and ship nationwide. It is possible, however, for the advanced do-it-yourselfer or craftsman with a table saw to duplicate moulding profiles using techniques discussed by Gordie Whittington in "Simplified Methods for Reproducing Wood Mouldings," *Bulletin of the Association for Preservation Technology*, Vol. III, No. 4, 1971, or illustrated more recently in *The Old House*, Time-Life Books, Alexandria, Virginia, 1979.

The repairs discussed in this section involve window frames which may be in very deteriorated condition, possibly requiring removal; therefore, caution is in order. The actual construction of wooden window frames and sash is not complicated. Pegged mortise and tenon units can be disassembled easily, if the units are out of the building. The installation or connection of some frames to the surrounding structure, especially masonry walls, can complicate the work immeasurably, and may even require dismantling of the wall. It may be useful, therefore, to take the following approach to frame repair: **1)** conduct regular maintenance of sound frames to achieve the longest life possible, **2)** make necessary repairs in place, wherever possible, using stabilization and splicing techniques, and **3)** if removal is necessary, thoroughly investigate the structural detailing and seek appropriate professional consultation.

Another alternative may be considered if parts replacement is required, and that is sash replacement. If extensive replacement of parts is necessary and the job becomes prohibitively expensive it may be more practical to purchase new sash which can be installed into the existing frames. Such sash are available as exact custom reproductions, reasonable facsimiles (custom windows with similar profiles), and contemporary wooden sash which are similar in appearance. There are companies which still manufacture high quality wooden sash which would duplicate most historic sash. A few calls to local building suppliers may provide a source of appropriate replacement sash, but if not, check with local historical associations, the state historic preservation office, or preservation related magazines and supply catalogs for information.

If a rehabilitation project has a large number of windows such as a commercial building or an industrial complex, there may be less of a problem arriving at a solution. Once the evaluation of the windows is completed and the scope of the work is known, there may be a potential economy of scale. Woodworking mills may be interested in the work from a large project; new sash in volume may be considerably less expensive per unit; crews can be assembled and trained on site to perform all of the window repairs; and a few extensive repairs can be absorbed (without undue burden) into the total budget for a large number of sound windows. While it may be expensive for the average historic home owner to pay seventy dollars or more for a mill to grind a custom knife to duplicate four or five bad muntins, that cost becomes negligible on large commercial projects which may have several hundred windows.

Most windows should not require the extensive repairs discussed in this section. The ones which do are usually in buildings which have been abandoned for long periods or have totally lacked maintenance for years. It is necessary to thoroughly investigate the alternatives for windows which do require extensive repairs to arrive at a solution which retains historic significance and is also economically feasible. Even for projects requiring repairs identified in this section, if the percentage of parts replacement per window is low, or the number of windows requiring repair is small, repair can still be a cost effective solution.

Weatherization

A window which is repaired should be made as energy efficient as possible by the use of appropriate weatherstripping to reduce air infiltration. A wide variety of products are available to assist in this task. Felt may be fastened to the top, bottom, and meeting rails, but may have the disadvantage of absorbing and holding moisture, particularly at the bottom rail. Rolled vinyl strips may also be tacked into place in appropriate locations to reduce infiltration. Metal strips or new plastic spring strips may be used on the rails and, if space permits, in the channels between the sash and jamb. Weatherstripping is a historic treatment, but old weatherstripping (felt) is not likely to perform very satisfactorily. Appropriate contemporary weatherstripping should be considered an integral part of the repair process for windows. The use of sash locks installed on the meeting rail will insure that the sash are kept tightly closed so that the weatherstripping will function more effectively to reduce infiltration. Although such locks will not always be historically accurate, they will usually be viewed as an acceptable contemporary modification in the interest of improved thermal performance.

Many styles of storm windows are available to improve the thermal performance of existing windows. The use of exterior storm windows should be investigated whenever feasible because they are thermally efficient, cost-effective, reversible, and allow the retention of original windows (see "Preservation Briefs: 3"). Storm window frames may be made of wood, aluminum, vinyl, or plastic; however, the use of unfinished aluminum storms should be avoided. The visual impact of storms may be minimized by selecting colors which match existing trim color. Arched top storms are available for windows with special shapes. Although interior storm windows appear to offer an attractive option for achieving double glazing with minimal visual impact, the potential for damaging condensation problems must be addressed. Moisture which becomes trapped between the layers of glazing can condense on the colder, outer prime window, potentially leading to deterioration. The correct approach to using interior storms is to create a seal on the interior storm while allowing some ventilation around the prime window. In actual practice, the creation of such a durable, airtight seal is difficult.

Window Replacement

Although the retention of original or existing windows is always desirable and this Brief is intended to encourage that goal, there is a point when the condition of a window may clearly indicate replacement. The decision process for selecting replacement windows should not begin with a survey of contemporary window products which are available as replacements, but should begin with a look at the windows which are being replaced. Attempt to understand the contribution of the window(s) to the appearance of the facade including: **1)** the pattern of the openings and their size; **2)** proportions of the

frame and sash; **3)** configuration of window panes; **4)** muntin profiles; **5)** type of wood; **6)** paint color; **7)** characteristics of the glass; and **8)** associated details such as arched tops, hoods, or other decorative elements. Develop an understanding of how the window reflects the period, style, or regional characteristics of the building, or represents technological development.

Armed with an awareness of the significance of the existing window, begin to search for a replacement which retains as much of the character of the historic window as possible. There are many sources of suitable new windows. Continue looking until an acceptable replacement can be found. Check building supply firms, local woodworking mills, carpenters, preservation oriented magazines, or catalogs or suppliers of old building materials, for product information. Local historical associations and state historic preservation offices may be good sources of information on products which have been used successfully in preservation projects.

Consider energy efficiency as one of the factors for replacements, but do not let it dominate the issue. Energy conservation is no excuse for the wholesale destruction of historic windows which can be made thermally efficient by historically and aesthetically acceptable means. In fact, a historic wooden window with a high quality storm window added should thermally outperform a new double-glazed metal window which does not have thermal breaks (insulation between the inner and outer frames intended to break the path of heat flow). This occurs because the wood has far better insulating value than the metal, and in addition many historic windows have high ratios of wood to glass, thus reducing the area of highest heat transfer. One measure of heat transfer is the U-value, the number of Btu's per hour transferred through a square foot of material. When comparing thermal performance, the lower the U-value the better the performance. According to ASHRAE 1977 Fundamentals, the U-values for single glazed wooden windows range from 0.88 to 0.99. The addition of a storm window should reduce these figures to a range of 0.44 to 0.49. A non-thermal break, double-glazed metal window has a U-value of about 0.6.

Conclusion

Technical Preservation Services recommends the retention and repair of original windows whenever possible. We believe that the repair and weatherization of existing wooden windows is more practical than most people realize, and that many windows are unfortunately replaced because of a lack of awareness of techniques for evaluation, repair, and weatherization. Wooden windows which are repaired and properly maintained will have greatly extended service lives while contributing to the historic character of the building. Thus, an important element of a building's significance will have been preserved for the future.

Additional Reading

ASHRAE Handbook 1977 Fundamentals. New York: American Society of Heating, Refrigerating and Air-conditioning Engineers, 1978 (chapter 26).

Ferro, Maximillian. *Preservation: Present Pathway to Fall River's Future*. Fall River, Massachusetts: City of Fall River, 1979 (chapter 7).

"Fixing Double-hung Windows." *Old House Journal* (no. 12, 1979): 135.

Morrison, Hugh. *Early American Architecture*. New York: Oxford University Press, 1952.

Phillips, Morgan, and Selwyn, Judith. *Epoxies for Wood Repairs in Historic Buildings*. Washington, DC: Technical Preservation Services, U.S. Department of the Interior (Government Printing Office, Stock No. 024016000951), 1978.

Rehab Right. Oakland, California: City of Oakland Planning Department, 1978 (pp. 7883).

"Sealing Leaky Windows." *Old House Journal* (no. 1, 1973): 5.

Smith, Baird M. "Preservation Briefs: 3 Conserving Energy in Historic Buildings." Washington, DC: Technical Preservation Services, U.S. Department of the Interior, 1978.

Weeks, Kay D. and David W. Look, "Preservation Briefs: 10 Exterior Paint Problems on Historic Woodwork." Washington, DC: Technical Preservation Services, U.S. Department of the Interior, 1982.

Washington, D.C. 1981

Home page logo: Historic six-over-six windows--preserved. Photo: NPS files.

This publication has been prepared pursuant to the National Historic Preservation Act of 1966, as amended, which directs the Secretary of the Interior to develop and make available information concerning historic properties. Technical Preservation Services (TPS), Heritage Preservation Services Division, National Park Service prepares standards, guidelines, and other educational materials on responsible historic preservation treatments for a broad public.

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KDW

RESOLUTION NO. 05-14 (HPRC)

**A RESOLUTION OF THE HISTORIC PRESERVATION REVIEW
COMMISSION OF THE CITY OF BENICIA ESTABLISHING WINDOW
STANDARDS FOR DESIGNATED BUILDINGS IN THE DOWNTOWN
HISTORIC CONSERVATION DISTRICT**

WHEREAS, the City of Benicia has an established Downtown Historic Conservation District; and

WHEREAS, property owners of designated buildings in the Downtown Historic Conservation District are required to obtain Historic Preservation Review Commission approval to make modifications to their structures;

WHEREAS, on August 18, 2005, October 27, 2005 and November 17, 2005, the Historic Preservation Review Commission held public hearings on the establishment of window standards for designated buildings in the Downtown Historic Conservation District, considered the staff report, presentations, and public testimony, and directed staff to draft a Resolution formalizing the Commission's findings;

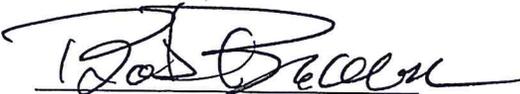
WHEREAS, on December 22, 2005, the Historic Preservation Review Commission accepted staff's draft resolution.

NOW, THEREFORE, the Historic Preservation Review Commission of the City of Benicia hereby resolves as follows:

SECTION 1. The Benicia Historic Preservation Review Commission hereby determines that proposals to modify windows in a designated building in the historic district shall be repaired, if possible, or if replaced, replaced in-kind. Staff is authorized to approve window repairs or replacements meeting the above criteria. Replacement windows shall be those typical of the period and appropriate to the architectural style. Windows may contain low-E and be insulated glass when there are no muntins or true-divided lites. All other repairs and replacements, other than those approved as above, are to be reviewed by the Historic Preservation Review Commission.

The foregoing motion was made by Commissioner Delgado, seconded by Commissioner Conlow, and carried by the following vote at a regular meeting of the Commission on December 22, 2005:

Ayes: Commissioners Conlow, Delgado and Chair Donaghue
Noes: Commissioner Haughey
Absent: Commissioners Dean, Grantham and Wilson


Bob Brown

Historic Preservation Review Commission Secretary

Applicability and Exemptions

The policies outlined above with respect to the design review process apply equally to individual designated landmark properties as well as all structures and sites in designated historic districts. Replacement of existing building features or elements with identical ones and routine maintenance are exempt from design review as are repairs of emergency nature to rehabilitate an unsafe building. ~~Painting is administrative review for non-historic single-family residences and duplexes in the Central Area only.~~ The following are specific examples of routine maintenance and repairs which are exempt from design review. These examples ~~do not apply only to properties with designated historic structures~~ Mills Act Contract agreements.

- Painting
- Reroofing with the same material
- Replacement of existing siding or trim with siding or trim of the same material and appearance
- Replacement of existing windows or doors with windows or doors of the same dimension, finish, material and overall appearance
- Replacement of existing materials with original materials evidenced by historic photographs, surveys or other documentation
- Other repairs or replacements as determined by planning staff

Criteria and Application Procedure

The criteria for review are those which are presented in the following sections of this conservation plan. Upon adoption of the Downtown Conservation Plan, the design review policies and the procedures outlined above will supersede the interim review procedures formerly in effect for First Street. The application process and materials to be submitted are described in Chapter

17.108 Design Review and 17.112 Development Plan Review of the Benicia Zoning Ordinance.

However, under this conservation plan, where review is administrative, the Planning Director will be given discretion in prescribing the materials and documents to be submitted by the applicant in accordance with the scope of the proposed project. Furthermore, administrative design review of non-historic single-family residential projects should be completed by the Community Development Director within 10 working days rather than 30 days. Where review is not administrative, application shall be made as specified in Chapter 17.108 and 17.112 of the Benicia Zoning Ordinance, unless modified by City Council Resolution 09-26.

As the design guidelines and regulations contained within this conservation plan will be used by the city staff and commissions in reviewing applications for development and alterations in the historic district, the first step a property owner should taken is to determine what level of review will be required for a give project. The following tables (1 and 2) are provided to simplify this process. All number of alterations are listed in the first column

RESOLUTION NO. 12-142

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BENICIA DESIGNATING TONI HAUGHEY AND MARGARET TRUMBLY TO THE HISTORIC PRESERVATION REVIEW COMMISSION AS OWNERS OF HISTORIC PROPERTY

WHEREAS, the goals of the Historic Preservation Review Commission ("HPRC") are to:

1. Protect and preserve structures, districts and neighborhoods which contribute to the cultural and aesthetic heritage of Benicia.
2. To foster civic pride in the beauty and accomplishments of the past.
3. To stabilize and improve the economic value of certain historic structures, districts and neighborhoods.
4. To promote and encourage continued private ownership and utilization of such buildings and other structures now so owned and used.
5. To conduct design review in historic overlay (H) districts as provided for in Chapter 17.108 BMC.
6. To advise and assist the city council in implementing the goals, policies and programs set forth in the city's general plan relating to preservation and enhancement of the city's historic character and protection of the city's archeological sites and resources; and

WHEREAS, Benicia Municipal Code section 2.56.030 provides the appointments to HPRC shall include seven Benicia residents, at least two of which shall be owners of historic property within the historic district. One of these members shall be the owner of a residence in the historic district. The other member shall be the owner of either a residence or business property in the historic district.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Benicia that the appointments of Toni Haughey and Margaret Trumbly to the Historic Preservation Review Commission ("HPRC") as the historic property owner representatives by Mayor Patterson are hereby confirmed.

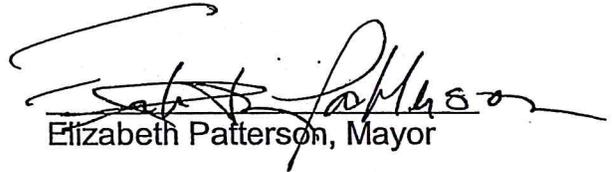
BE IT FURTHER RESOLVED that the designation of Toni Haughey and Margaret Trumbly as the historic property owners shall continue until the expiration of their respective terms.

On motion of Council Member **Schwartzman**, seconded by Council Member **Hughes**, the above Resolution was approved by roll call by the City Council of the City of Benicia at a regular meeting of said Council held on the 20th day of November, 2012 and adopted by the following vote:

Ayes: Council Members Campbell, Hughes, Schwartzman, Strawbridge and Mayor Patterson

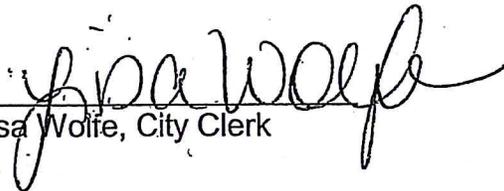
Noes: None

Absent: None



Elizabeth Patterson, Mayor

Attest:



Lisa Wolfe, City Clerk