



SAN FRANCISCO PLANNING DEPARTMENT

DATE: November 22, 2010
TO: Historic Preservation Commission
FROM: Timothy Frye, Acting Preservation Coordinator, (415) 575-6822
RE: Informational Presentation on Emergency Work at 130 Sutter Street

The Project Sponsor (Sponsor) has submitted the following materials for your review in anticipation of the December 1, 2010 informational hearing regarding emergency work at 130 Sutter Street, the Hallidie Building. Please note that the associated rehabilitation work will require a Certificate of Appropriateness from the Historic Preservation Commission and will be submitted for your review in early 2011.

1650 Mission St.
Suite 400
San Francisco,
CA 94103-2479

Reception:
415.558.6378

Fax:
415.558.6409

Planning
Information.
415.558.6377

October 13, 2010

Project Number M210-023

Bruce Albert
The Albert Group
Albert Group, Inc
114 Sansome Street
Suite 710
San Francisco, CA 94104

email: B.Albert@TheAlbertGroup.com

Dear Mr. Albert:

**Subject: Structural Observation Report - Fire Escapes and Balconies
130 Surter Street, San Francisco**

At your request we visited the site on October 6th, 7th, and 8th to accompany the crew of Applied Materials and Engineering (AME) as they performed steel testing of the existing exterior balconies and fire escapes at the above-reference property's south façade. The purpose of our visit was to further assess the general condition of these elements to complement our previous report dated March 23, 2010 and to photograph these conditions. Additionally, we reviewed architectural drawings by McGinnis Chen Associates to verify the accuracy of the structural elements shown.

Access to the façade was by means of scaffolding between Lines J and O to the 3rd floor (see attached elevation) and through windows at the 7th floor balcony. Other fire escapes were accessed by the fire escapes themselves where possible. Areas not accessible due to field conditions are noted on the attached elevation.

As described in our previous report, the condition of the steel outriggers supporting the fire escapes and balconies is of considerable concern. Pieces of the outriggers have deteriorated to the point where they are no longer functional. In some cases, testing of the steel was not practical due to the delaminated condition. A sampling of typical conditions are shown below and additional photos and a reference elevation are on following pages

Photo A - Second floor at Line M:

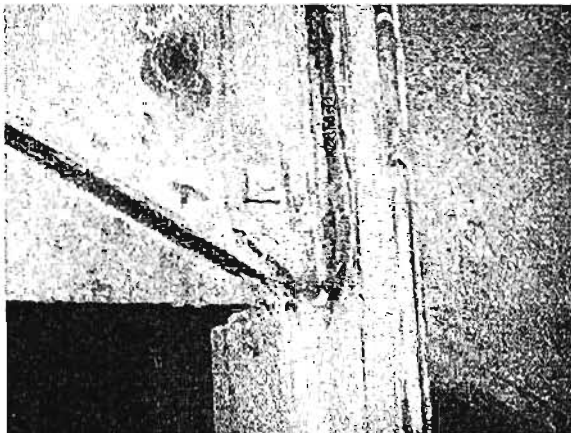


Photo B - Fifth floor at Line N:

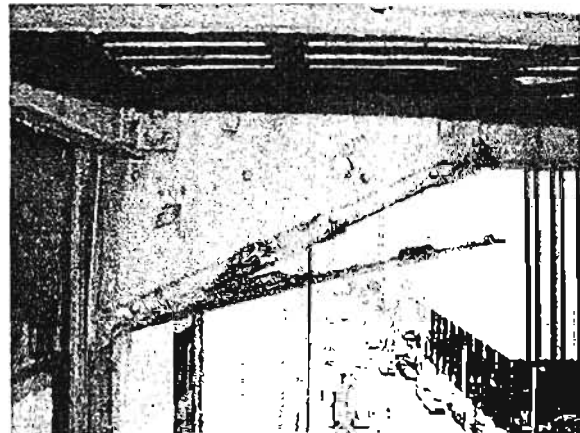


Photo C - Fourth floor at Line 3:

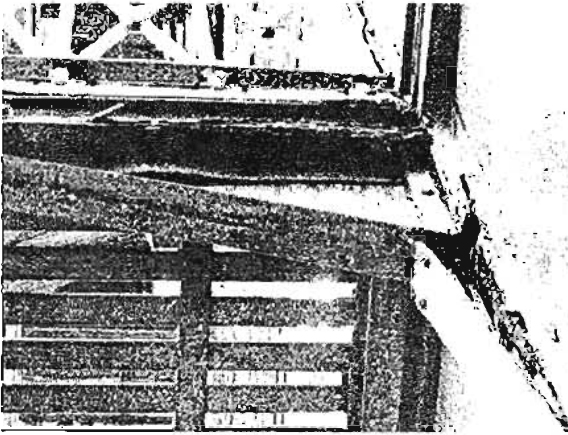
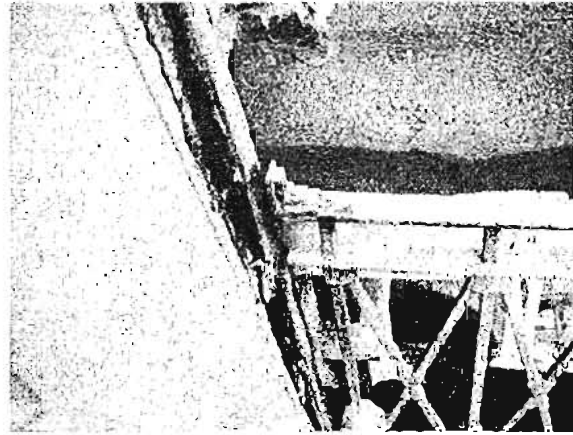


Photo D - Third floor at Line O:



As shown on the Photo D, the connection of the railings to the steel window mullion system has also suffered extensive deterioration.

Enclosed please find a copy of the test results from Applied Materials Engineering. As can be noted from the test results the deterioration of the structural support system has resulted in a loss of 70% of the original structural capacity. Not only does this result in a structure that is incapable of providing adequate support for the intended use but also presents a serious concern of imminent falling hazards. It was determined during the field work that certain sections of the fire escapes and walkways are unsafe and were not tested. Access to these areas will require full exterior scaffolding.

We recommend that corrective action be taken immediately. Falling protection, some of which we noted has been installed, should be reviewed and complemented if found necessary. Removal of all badly deteriorated elements should begin as soon as possible.

Please contact the undersigned with any questions or clarifications to the above.

Sincerely,
MURPHY BURR CURRY, INC.

Thad Povey, CE39850
Project Engineer

David G. Murphy, SE2379
President

Attachments:

- 1) Additional photos
- 2) Reference Elevation
- 3) AME testing report



Photo E - Second floor at Line L.5:

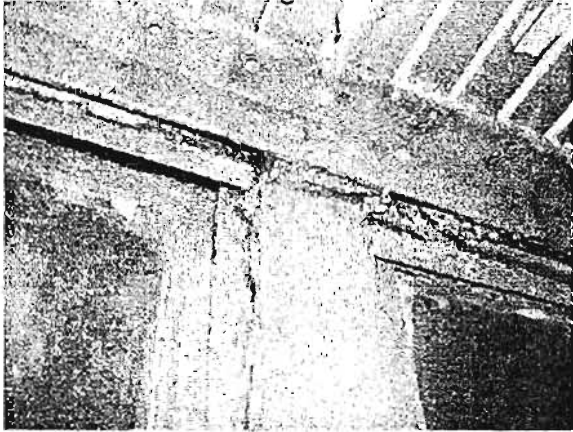


Photo F - Second floor at Line M.5:

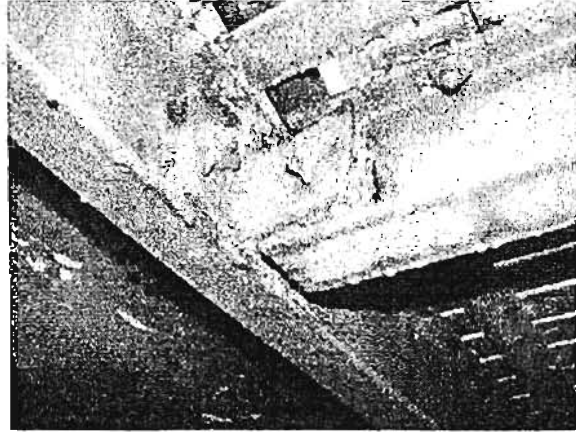


Photo G - Second floor at Line M:

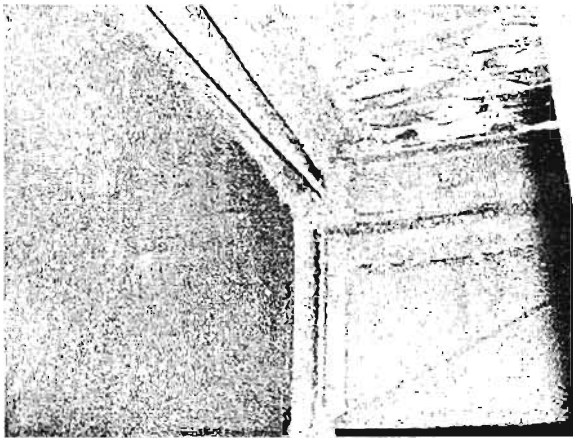


Photo H - Fourth floor at Line N:

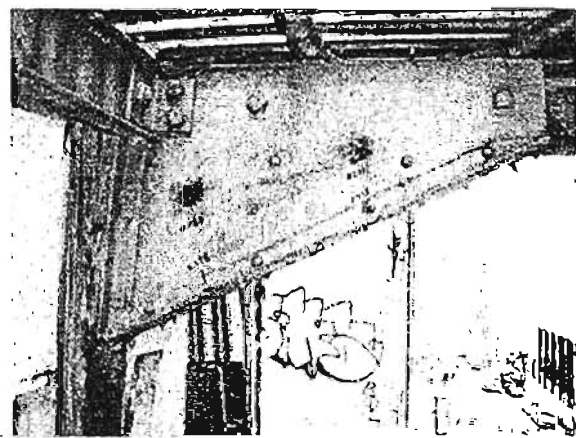


Photo I - Fourth floor at Line N:

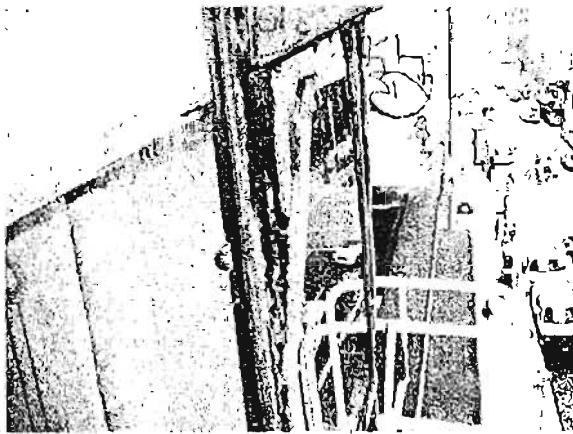
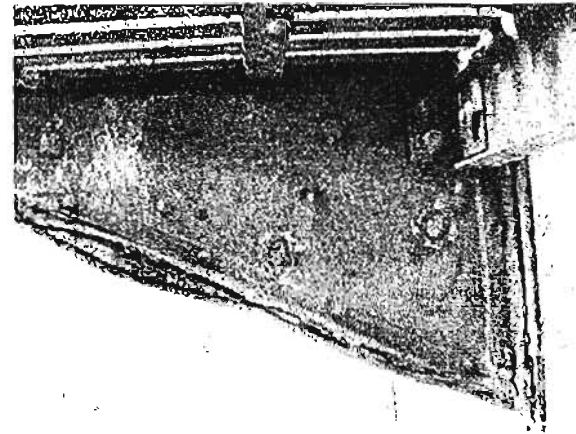
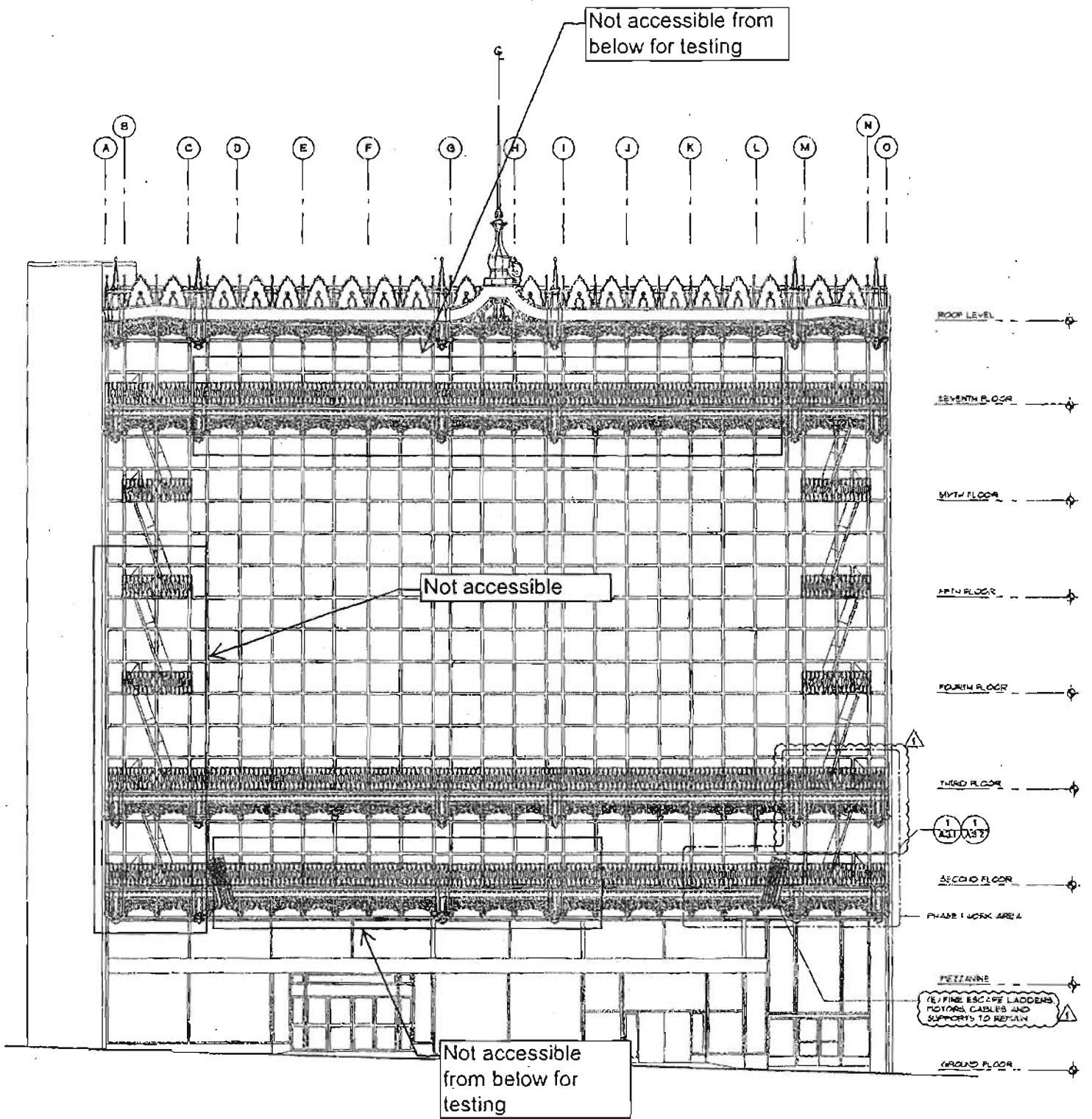


Photo J - Sixth floor at Line B:





1 SOUTH ELEVATION

1/8" = 1'-0"



APPLIED MATERIALS & ENGINEERING, INC.

980 41st Street
Oakland, CA 94608

Tel: (510) 420-8190
FAX: (510) 420-8186
e-mail: info@appmateng.com

October 12, 2010

Project No. 110567C

Mr. Bruce Albert
The Albert Group, Inc.
114 Sansome Street, Suite 710
San Francisco, CA 94104

Email: Balbert@thealbertgroup.com

Subject: Fire Escape and Balcony Testing for Corrosion
130 Sutter Street, San Francisco, CA¹

Dear Mr. Albert:

As requested, Applied Materials & Engineering, Inc. (AME) has conducted testing of the steel members of the fire escapes and balconies (for the effects of corrosion) on the south elevation of the building located at 130 Sutter Street in San Francisco, California.

This testing included accessible areas of the walkways at the 2nd, 3rd and 7th floors, and balconies at the 2nd through 7th floors at the east and west end of the building.

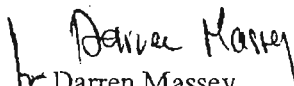
PROCEDURES & RESULTS

An electric grinder was used to remove paint and corrosion products at test locations. Thickness measurements of the steel members were recorded using a Dakota Ultrasonic MX-3 thickness gauge. The south elevation, showing locations of documented steel members, is given in Figure 1.

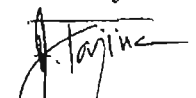
Locations of measurements on steel elements are shown in details provided in Figure 2. Documented results of the investigation are presented in Table I.

Please call if you have any questions regarding the above.

Sincerely,
APPLIED MATERIALS & ENGINEERING, INC.


Darren Massey
Project Manager

Reviewed by:


Armen Tajirian, Ph.D., P.E.
Principal

C.c.: David Murphy, S.E., MBC (email)

TABLE I
STEEL MEMBER THICKNESS MEASUREMENT RESULTS

130 Sutter Street, San Francisco, CA

AME Project No. 110567

Element	Floor	Gridline	Thickness Measurement (in.)			
			Vertical Outrigger Plate* (T1/T2)	Outrigger Angle* (T1/T2)	Walkway Angle*	I Beam*
Balcony	2 nd	N	0.217/0.214	0.149/0.169		
Balcony	2 nd	M.5				0.220 Bottom Flange
Balcony	2 nd	M	0.291/0.312	0.170/0.160		
Walkway	2 nd	L.5			0.234 Vertical Leg 0.273 Horizontal Leg	
Walkway	2 nd	L	0.281/0.225	0.155/0.149		
Walkway	2 nd	K.5			0.225 Vertical Leg 0.205 Horizontal Leg	
Walkway	2 nd	K	0.238/0.170	0.131/0.170		
Walkway	2 nd	J.5			0.217 Vertical Leg 0.205 Horizontal Leg	
Balcony	3 rd	N	0.189/0.191	0.155/0.189		
Balcony	3 rd	M.5				0.166 Web 0.223 Bottom Flange
Walkway	3 rd	M	0.194/0.195	0.141/0.143		
Walkway	3 rd	L.5			0.213 Vertical Leg 0.205 Horizontal Leg	
Walkway	3 rd	L	0.192/0.236	0.165/0.162		
Walkway	3 rd	K.5			0.201 Vertical Leg 0.250 Horizontal Leg	
Walkway	3 rd	K	0.181/0.168	0.131/0.136		
Walkway	3 rd	J.5			0.224 Vertical Leg 0.246 Horizontal Leg	
Walkway	3 rd	J	0.235/0.250	0.147/0.174		
Walkway	3 rd	I.5			0.243 Vertical Leg 0.222 Horizontal Leg	
Walkway	3 rd	I	0.247/0.250	0.126/0.140		
Walkway	3 rd	H.5			0.200 Vertical Leg 0.219 Horizontal Leg	
Walkway	3 rd	H	0.190/0.258	0.136/0.122		
Walkway	3 rd	G.5			0.206 Vertical Leg 0.191 Horizontal Leg	
Walkway	3 rd	G	0.230/0.188	0.138/0.131		
Walkway	3 rd	F.5			0.237 Vertical Leg 0.248 Horizontal Leg	
Walkway	3 rd	F	0.260/0.259	0.134/0.144		
Walkway	3 rd	E.5			0.212 Vertical Leg 0.193 Horizontal Leg	

TABLE I.1 (Cont.)

STEEL MEMBER THICKNESS MEASUREMENT RESULTS

130 Sutter Street, San Francisco, CA

AME Project No. 110567

Element	Floor	Gridline	Thickness Measurement (in.)			
			Vertical Outrigger Plate* (T1/T2)	Outrigger Angle* (T1/T2)	Walkway Angle*	Balcony I Beam*
Walkway	3 rd	E	0.289/0.287	0.124/0.125		
Walkway	3 rd	D.5			0.194 Vertical Leg 0.210 Horizontal Leg	
Walkway	3 rd	D	0.225/0.276	0.130/0.126		
Balcony	4 th	N	0.191/0.186	0.155/0.189		
Balcony	4 th	M.5				0.166 Web 0.223 Bottom Flange
Balcony	5 th	N	0.178/0.144	Total Loss		
Balcony	5 th	M.5				0.182 Web 0.223 Bottom Flange
Balcony	6 th	B	0.213/0.181	Total Loss		
Balcony	6 th	B.5				0.171 Web 0.214 Bottom Flange
Balcony	6 th	N	0.257/0.254	0.314/0.312		
Balcony	6 th	M.5				0.173 Web 0.210 Bottom Flange
Balcony	7 th	N (Repaired Area?)	0.254/0.257	0.333/0.315		
Balcony	7 th	M.5				0.168 Web 0.232 Bottom Flange
Balcony	7 th	B (Repaired Area?)	0.254/0.255	No Angle		
Balcony	7 th	B.5				0.172 Web 0.208 Bottom Flange

Note: 2nd – 5th floor balconies at west end (Lines B-C), partial 2nd level walkway and 7th level walkway were not accessible due to field conditions.

*See Figure 2 for locations of members tested.

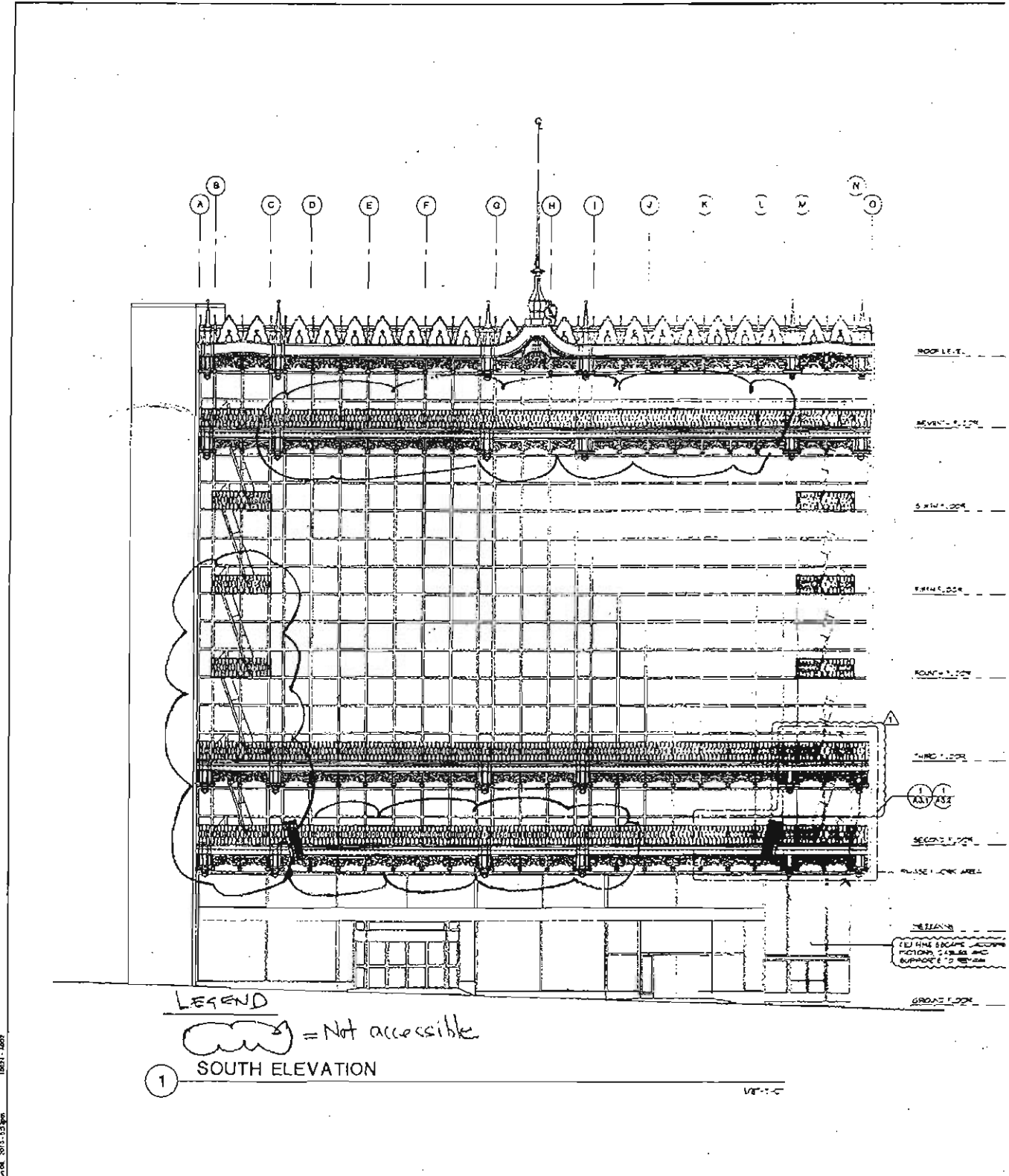
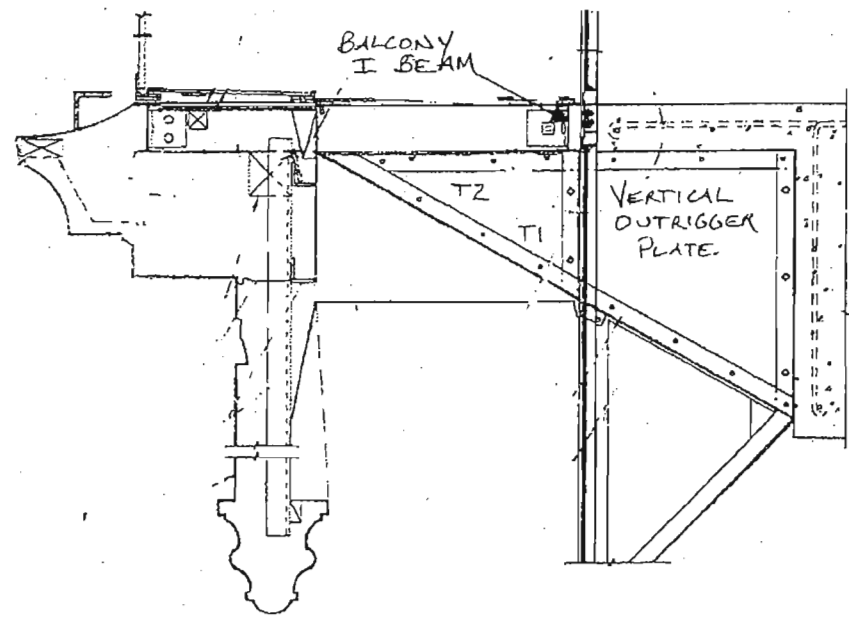


Figure 1. South elevation showing fire escape balconies & walkways.

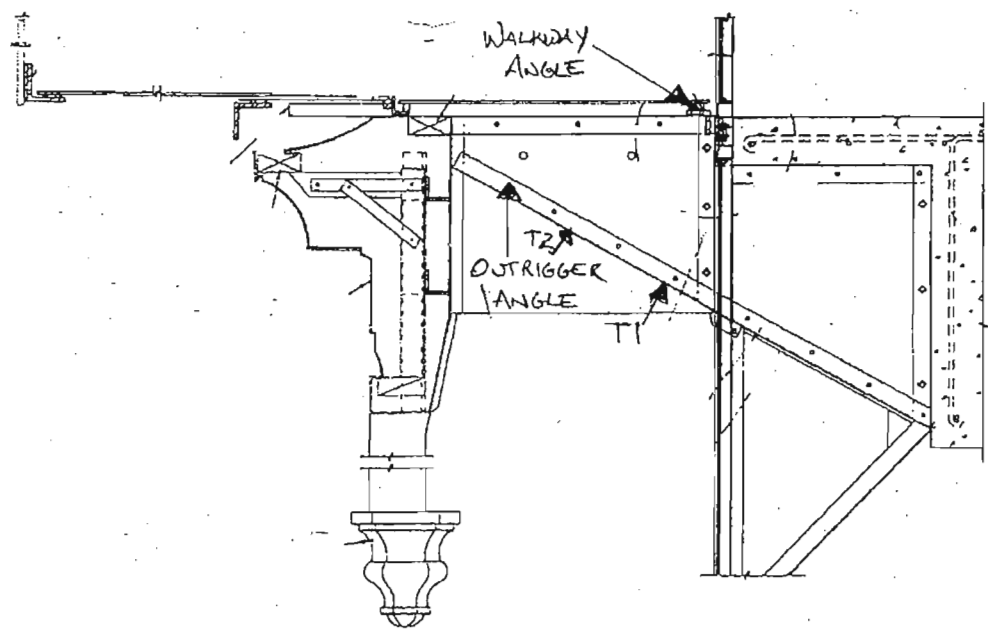
1 DETAIL AT BALCONY
CENTER OF ROUND BALCONY REF 2/A2.1

1 1/2" = 1'-0"



2 DETAIL AT BALCONY
SIDE OF ROUND BALCONY REF 2/A2.1

1 1/2" = 1'-0"



3 DETAIL AT BALCONY
AT FIRE ESCAPE REF 1/A2.1

HALF SIZE

1 1/2" = 1'-0"

Figure 2. Balcony details showing locations of thickness measurements.



NOTICE OF VIOLATION

of the San Francisco Municipal Codes Regarding Unsafe,
Substandard or Noncomplying Structure or Land or Occupancy

DEPARTMENT OF BUILDING INSPECTION NOTICE: 1
City and County of San Francisco
1660 Mission St. San Francisco, CA 94103

NUMBER: 201063153
DATE: 30-AUG-10

ADDRESS: 130 SUTTER ST
OCCUPANCY/USE: B (BUSINESS-OFFICE; FOOD AND DRINKING ESTABLISHMENT) **BLOCK:** 0288 **LOT:** 027

If checked, this information is based upon a site-observation only. Further research may indicate that legal use is different. If so, a revised Notice of Violation will be issued.

OWNER/AGENT: CONNER EDWARD
MAILING: CONNER EDWARD
ADDRESS: 27 MAIDEN LANE
SAN FRANCISCO CA

PHONE #: --

94108

PERSON CONTACTED @ SITE:

PHONE #: --

VIOLATION DESCRIPTION:

VIOLATION DESCRIPTION:	CODE/SECTION#
<input type="checkbox"/> WORK WITHOUT PERMIT	106.1.1
<input type="checkbox"/> ADDITIONAL WORK-PERMIT REQUIRED	106.4.7
<input type="checkbox"/> EXPIRED OR <input type="checkbox"/> CANCELLED PERMIT PA#:	106.4.4
<input checked="" type="checkbox"/> UNSAFE BUILDING <input type="checkbox"/> SEE ATTACHMENTS	102.1

Fire escape is extremely corroded and unsafe for egress.

CORRECTIVE ACTION:

- STOP ALL WORK SFBC 104.2.4
- FILE BUILDING PERMIT WITHIN 30 DAYS
- OBTAIN PERMIT WITHIN 60 DAYS AND COMPLETE ALL WORK WITHIN 90 DAYS, INCLUDING FINAL INSPECTION SIGNOFF.
- CORRECT VIOLATIONS WITHIN DAYS.
- YOU FAILED TO COMPLY WITH THE NOTICE(S) DATED , THEREFORE THIS DEPT. HAS INITIATED ABATEMENT PROCEEDINGS.
- NO PERMIT REQUIRED

(WITH PLANS) A copy of This Notice Must Accompany the Permit Application
415-558-6123

● FAILURE TO COMPLY WITH THIS NOTICE WILL CAUSE ABATEMENT PROCEEDINGS TO BEGIN.
SEE ATTACHMENT FOR ADDITIONAL WARNINGS.

Need letter from a license design professional on condition of fire escape and possible upgrades.

INVESTIGATION FEE OR OTHER FEE WILL APPLY

- 9x FEE (WORK W/O PERMIT AFTER 9/1/60)
- 2x FEE (WORK EXCEEDING SCOPE OF PERMIT)
- OTHER:
- REINSPECTION FEE \$
- NO PENALTY (WORK W/O PERMIT PRIOR TO 9/1/60)

APPROX. DATE OF WORK W/O PERMIT

VALUE OF WORK PERFORMED W/O PERMITS \$

BY ORDER OF THE DIRECTOR, DEPARTMENT OF BUILDING INSPECTION

CONTACT INSPECTOR: Edward C Greene

PHONE # 415-558-6123

DIVISION: BID

DISTRICT: 2

By: (Inspector's Signature) _____

MURPHY BURR CURRY, INC.
STRUCTURAL ENGINEERS

March 23, 2010

Project Number M210-023

Bruce Albert
The Albert Group
Albert Group, Inc
114 Sansome Street
Suite 710
San Francisco, CA 94104

email: B.Albert@TheAlbertGroup.com

Dear Mr. Albert:

**Subject: Structural Observation Report
130 Sutter Street, San Francisco**

At your request we have performed a visual inspection of certain exterior façade elements. The purpose of this inspection was to assess the general condition of ornamental metal and their anchorage to the building. We were limited to inspections of the first level of these metal pieces, which are located near the elevation of the second floor. We were assisted in this inspection with the use of a man lift.

Removal of a portion of the metal cladding allowed us to inspect the interior of the metal pieces and thereby we were able to observe the attachment of these pieces to the building structure. The pieces are attached to various steel brackets which are in turn attached to steel out riggers that are an extension of the steel framework of the building. We noted that the steel brackets were not painted with in the concealed space of the metal pieces but were painted where they are exposed to the exterior. We also noted that the roof enclosure over the metal pieces appears to have been leaking for a considerable amount of time.

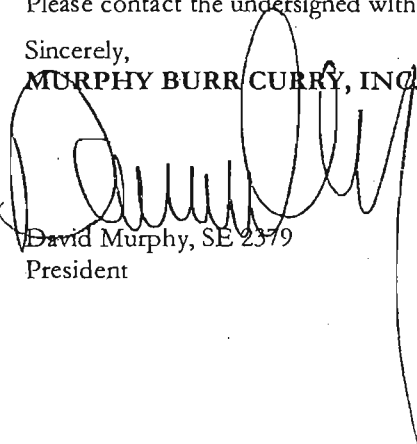
Of considerable concern is the condition of the steel brackets observed. Pieces of the brackets have deteriorated to the point where they are no longer functional. The steel has completely delaminated and portions of the steel members have disintegrated. It is our opinion that it is just a matter of time before portions of the façade supported by these brackets will fall off of the building.

We strongly recommend that corrective action be taken immediately. Falling protection, some of which we noted has been installed, should be reviewed and complemented if found necessary. Removal of all badly deteriorated elements should begin as soon as possible.

Please contact the undersigned with any questions or clarifications to the above.

Sincerely,

MURPHY BURR CURRY, INC.


David Murphy, SE 2379
President



EMERGENCY REHABILITATION OF THE
2ND FLOOR BALCONY OF
THE HALLIDIE BUILDING

130 Sutter Street
San Francisco, CA

INFORMATIONAL PRESENTATION FOR
HISTORIC PRESERVATION COMMISSION

Prepared for
The Albert Group

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CONTEXT

HISTORIC PHOTOS

EXISTING CONDITIONS PHOTOS

PROJECT TEAM & INITIAL SCOPE

IA. SITE CONTEXT

Completed in 1918, the Hallidie Building is located at 130 Sutter Street in the Financial District of San Francisco. The building is located between Kearny and Montgomery streets in an area that consists of both mid-rise and high-rise commercial buildings.

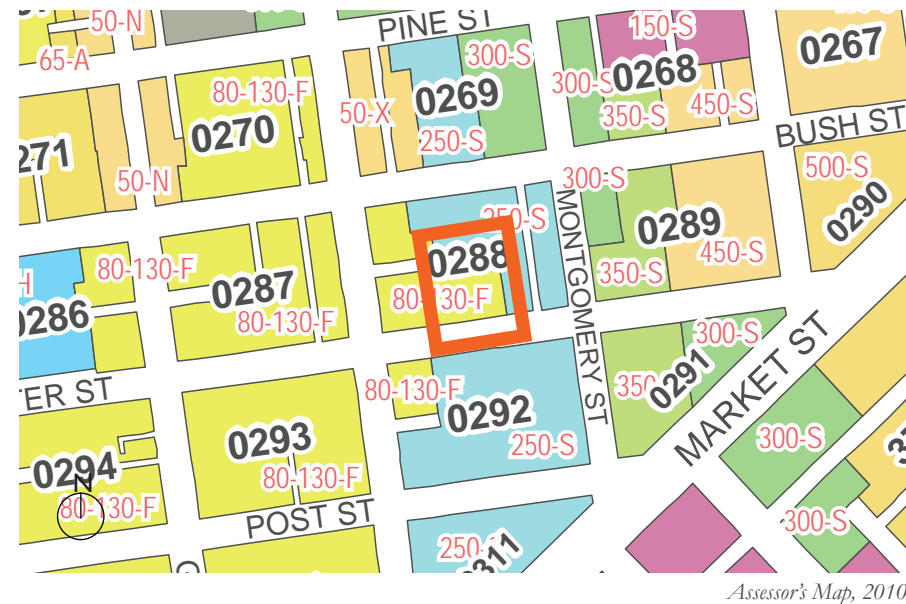
The area remained low to mid-rise after the devastation the 1906 Earthquake and Fire until the 1950s when taller buildings were built in the area. The Hallidie Building is on the north side of Sutter Street along side other mid-rise buildings. The buildings immediately west of Kearny and across Sutter Street are also mostly mid-rise buildings. However, building heights dramatically increase as one crosses Montgomery. The Hallidie Building is in an area zoned C-3-O (Downtown Office).



View of north side of Sutter Street from Kearny Street looking east



View of south side of Sutter Street from Kearny Street looking west



Assessor's Map, 2010

ASSESSOR'S INFORMATION:

Block: 0288
 Lot: 027
 Address: 130 Sutter Street
 San Francisco, CA 94104
 Zoning Code: C-3-O
 Year Built: 1918



Aerial, 2010; source: Google Earth

IB. BUILDING CONTEXT

HISTORIC CONTEXT

The Hallidie Building is recognized as one of the first glass curtain-walled structures. Designed by Willis Polk, it was completed in 1918. The building is a steel-frame and masonry structure notable for its glass and decorative metal façade. The building is listed on the National Register of Historic Places as well as on the California Register. The property is City Landmark Number 37, designated in 1971.

The glass curtain wall of the building is generally recognized as the forerunner of contemporary curtain wall buildings. The building was built as an investment for the University of California at Berkeley and its decorative metal was originally painted blue and gold. The building is named after Andrew Hallidie, the inventor of the cable car.

Though innovative in its use of a glass curtain wall, the building has a traditional composition. Its decorative ironwork is Victorian in style and its location expresses the base and capital of the building. The fire escapes are integrated into the ironwork of the building and serve to frame the building on either side. The front (south) façade of the Hallidie Building remains mostly unaltered and is much the same as when it was first constructed.



Hallidie Building, Date Unknown; source: San Francisco Public Library

EXISTING CONDITIONS

The south façade curtain wall of the Hallidie Building exhibits distorted and rusting structural steel components including deteriorated fire escape ladders, landings and balconies as well as corroded ornamental sheet metal.

The building is suffering from two significant original design oversights. The curtain wall as designed does not allow for any thermal expansion or contraction. Any movement of the structural frame affects the alignment of the window frames and the support for the balconies. Some of the most serious damage observed at the curtain wall is associated in and around the balconies and fire escapes. These components are severely deteriorated and their structural integrity has become a life safety hazard that requires immediate attention.

The absence of an adequate weep system for water to drain off of the curtain wall is also a factor that has contributed to the deterioration of the facade. Since none of the curtain wall connections are flashed, the façade suffers from continuous water damage exhibited by the metal rust and corrosion. Water accumulates between the steel frame and balcony members and at the base of the windows, thus causing further deterioration to the overall curtain wall.



Existing building; source: <http://www.docomomo-us.org>

PREVIOUS STUDIES

Several studies have been conducted as part of a scoping effort in preparation for the rehabilitation of the front facade of the Hallidie Building. Studies conducted so far include:

1. A conditions assessment conducted by McGinnis Chen in 1998.
2. A assessment of the second floor balcony by McGinnis Chen in 2002.
3. A color analysis was conducted by Page & Turnbull in March 2008 in order to determine the original colors of the metal at the front facade. This information will be used to select appropriate paint colors when the repairs are complete.
4. A metal analysis was conducted in 2010. The effort was coordinated by McGinnis Chen with an outside consultant.



Decorative sheet metal below balconies

2. HISTORIC PHOTOS



Hallidie Building, 1981, *Historic American Buildings Survey photograph*; source: *Library of Congress*



Hallidie Building, Date unknown; source: *San Francisco Public Library*



Hallidie Building, Date Unknown; source: *San Francisco Public Library*

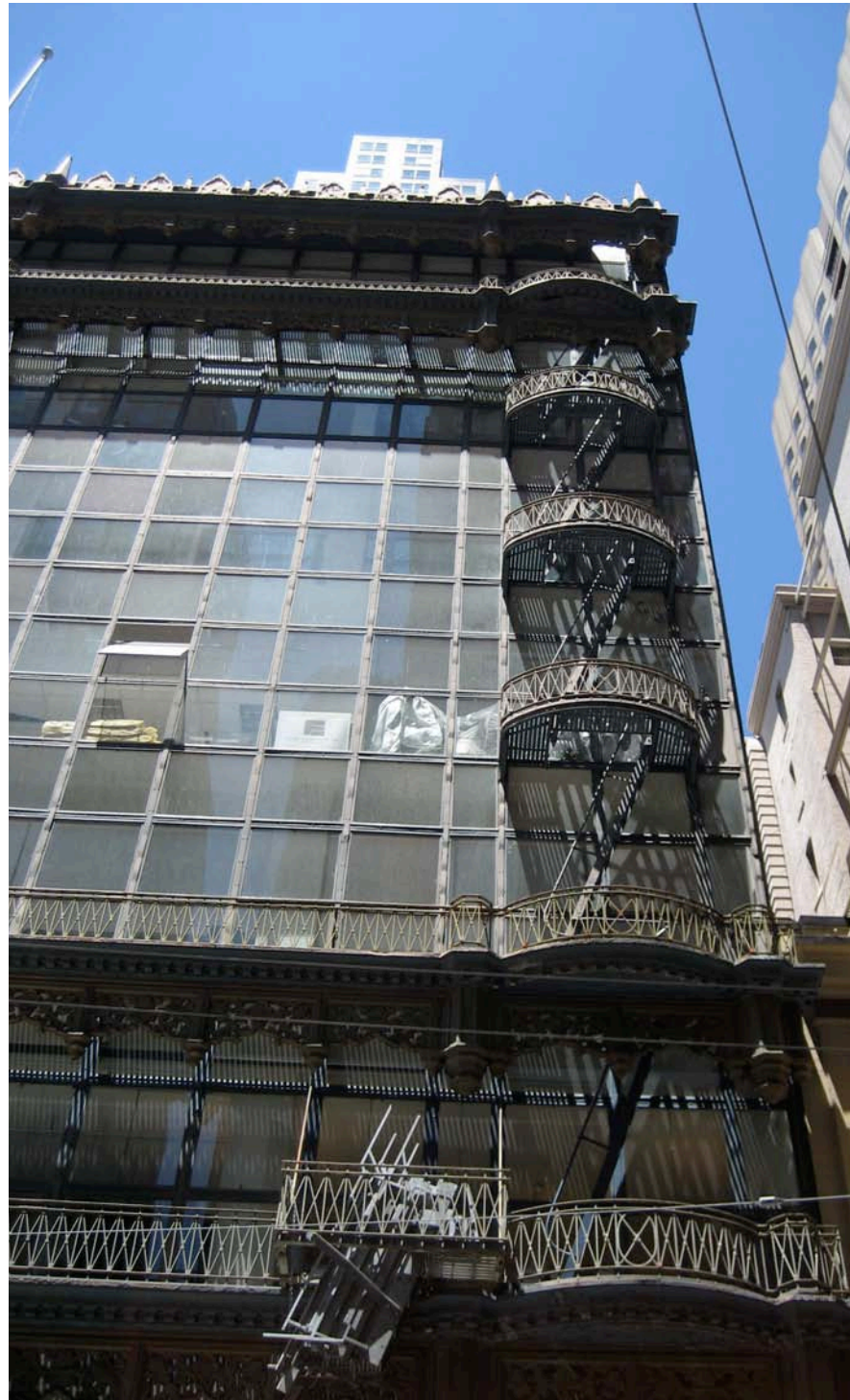


Hallidie Building Plaque, June 6, 1951; source: *San Francisco Public Library*

3. SOUTH FAÇADE: EXISTING CONDITION PHOTOGRAPHS



South facade; source: <http://www.panoramio.com>



Area of work will include the second and third floor balconies on the easternmost side of the building



Deterioration at decorative sheet metal



Deterioration at decorative sheet metal

3. SOUTH FAÇADE: EXISTING CONDITION PHOTOGRAPHS continued



Deterioration at structural framework



Deterioration at balcony



Deterioration at windows



Deterioration at balcony



Deterioration at balcony



Deterioration of framing

4A. PROJECT TEAM

THE HALLIDIE BUILDING OWNERS

Ed Conner and Herbert McLaughlin are long-time San Francisco residents and two of the five founding members of San Francisco Architectural Heritage. They share an interest in historic buildings and have owned and rehabilitated buildings in San Francisco, Chicago, Omaha, Dallas and Cleveland. Mr. McLaughlin is the senior partner at KMD Architects. As a University of California at Berkeley alumnus, Mr. Conner has a special interest in the

THE ALBERT GROUP

Founded in 1987, The Albert Group is the project manager and owner's representative. The Albert Group has managed the restoration and renovation of numerous San Francisco buildings. They are coordinating the project team's efforts, managing communication, and overseeing project execution.

MCGINNIS CHEN ASSOCIATES

McGinnis Chen Associates, Inc. is the Architect of Record for the remediation work at the Hallidie Building. They are designing rehabilitation methodologies to improve the existing conditions and are watching over the ornamental sheet metal components.

For the last 47 years, McGinnis Chen Associates, Inc. has been providing specialized exterior building envelope consulting services to private, institutional and public sector clients. Their architectural and engineering expertise includes existing building remediation, waterproofing consultation, design peer review, construction monitoring and contract administration, complemented by a working understanding of the legal procedures involved in litigating defective buildings.

MURPHY BURR CURRY

As the project's structural engineer, Murphy Burr Curry's role is to assess the structural integrity of the balconies and fire escapes through evaluating and testing of the existing structural elements. Murphy Burr Curry will develop recommendations for structural improvements that can be implemented without sacrificing the historic character of the building.

PAGE & TURNBULL

As preservation architect for the project, Page & Turnbull works closely with the team to ensure that best preservation practices are in place. Page & Turnbull's role is to advise on historical issues so that the integrity and character-defining features of the building are retained.

Page & Turnbull's team of architects, historians, planners, and conservators use design, research, and technology to accomplish a broad array of work. Architectural services emphasize the re-use of existing buildings and the thoughtful application of new design. They are skilled in the assessment and treatment of the most significant architectural and historical spaces and elements. Page & Turnbull ensures that projects comply with the Secretary of the Interior's Standards for Rehabilitation for local, state and federal agency review and approvals.



Decorative sheet metal is being removed where there are existing seams



Cataloging and removing of decorative sheet metal



Storing of decorative metal

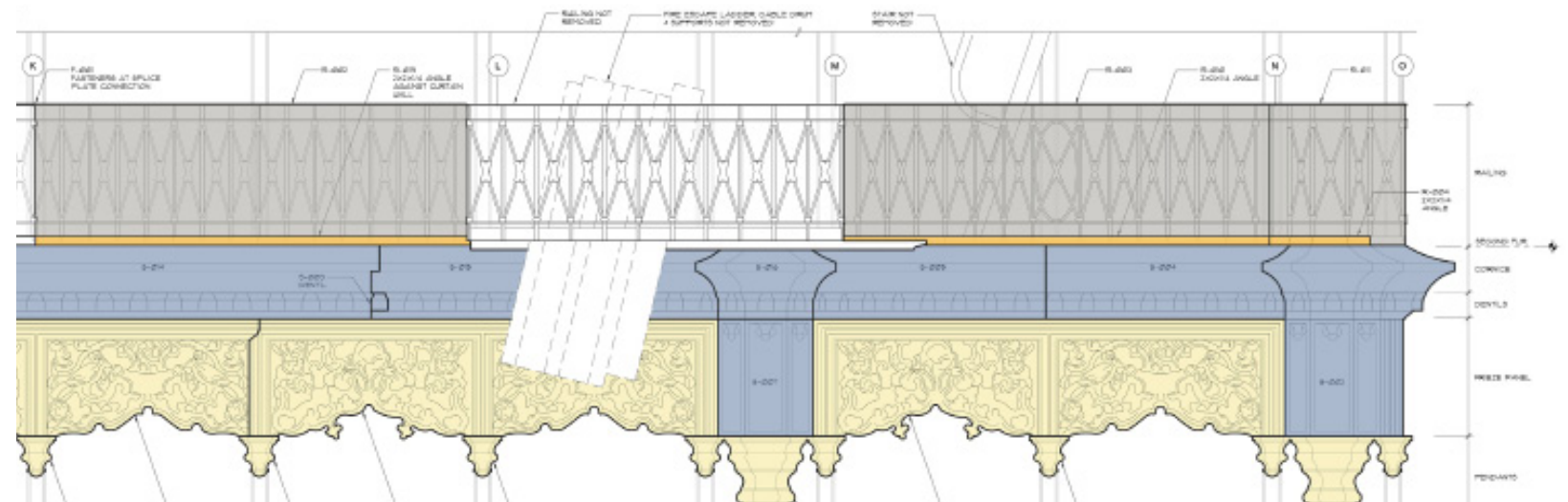
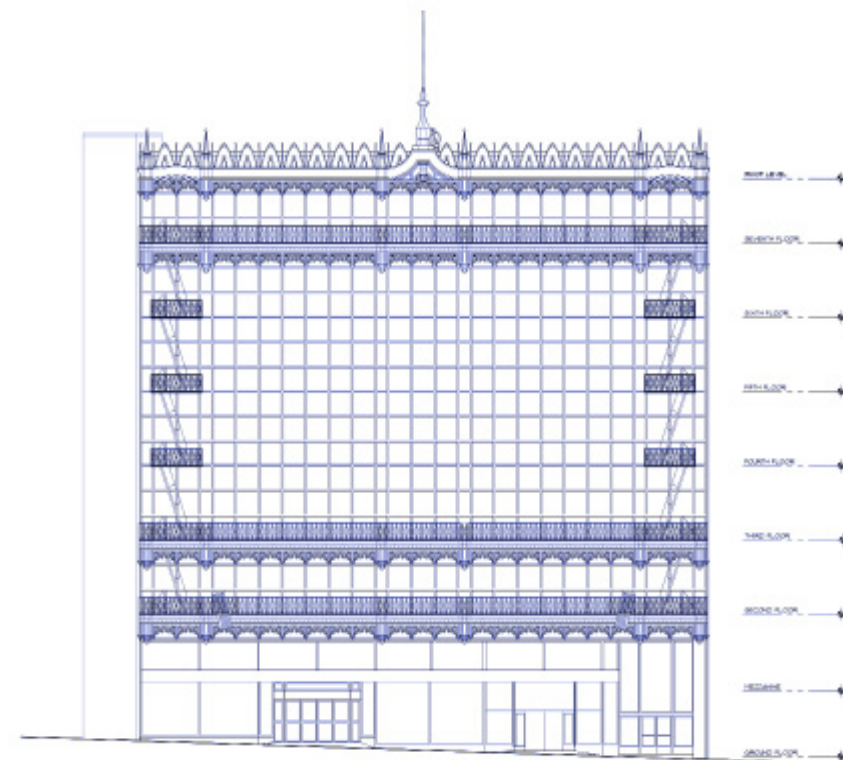
4B. INITIAL SCOPE

REMEDIATION OF THE SECOND FLOOR BALCONY

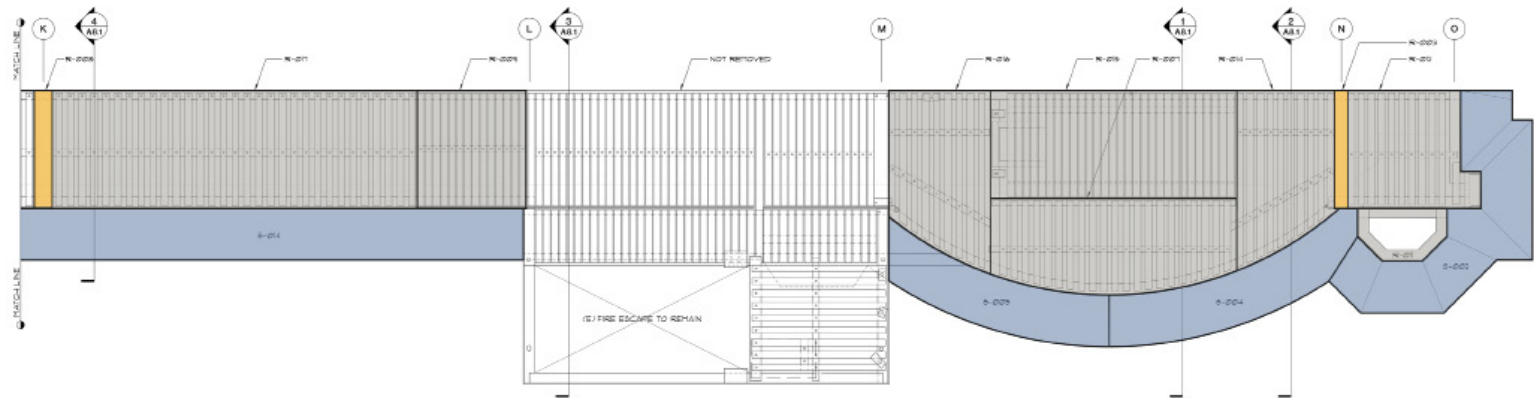
The project structural engineer has determined the existing framework that supports both the historic decorative sheet metal and the balconies is deteriorated and currently presents a falling hazard. To date, the work has been limited to the eastern thirty feet of the second floor balcony. It has been exploratory in nature in order to assess the extent of damage to this structural framework and to identify appropriate repairs. Given the historic significance of the building, the scope of work for the second floor balcony triggers numerous levels of consideration including historic preservation, forensic investigation, conservation, remediation, waterproofing, and disassembly and salvage of the ornamental sheet metal.

In order to properly assess the damage to the structural framework, the decorative sheet metal has been removed. The decorative sheet metal has been disassembled and removed at the east end of the second level only. All of the sheet metal components were removed in sections and disassembled at existing seams. The balcony railing was taken apart in sections connected at splice plate locations. Each item was given an Item Identification Number and photographed for documentation. Information collected during the salvage and disassembly process was entered into a digital database. As each sheet metal component undergoes a process of repair, the balcony structure will be remediated under the supervision of the structural engineer. All sheet metal pieces and railing components will be reinstalled in their original locations after the balcony remediation is complete.

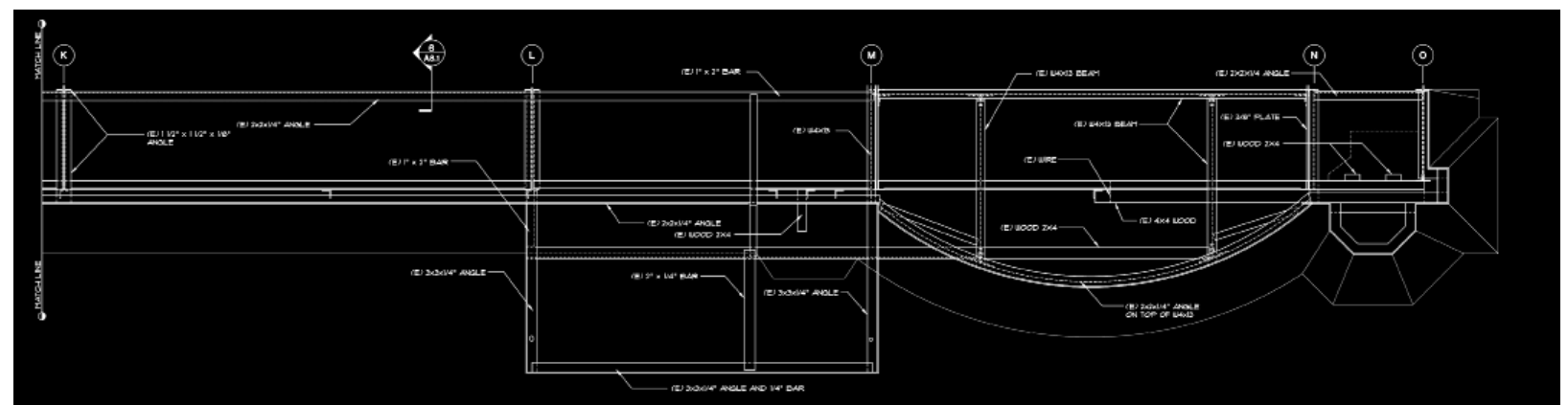
In addition to the structural repairs, the exploratory work will result in an assessment that will inform a plan for the full rehabilitation of the visible elements of the balconies (decorative sheet metal and railings). After a repair approach has been developed, the rehabilitation scope will be presented to the Planning Department and Historic Preservation Commission through the submission of a Certificate of Appropriateness application.



Disassembly Diagram: Partial Elevation of Second Floor Sheet Metal



Disassembly Diagram: Partial Second Floor Balcony Plan



Partial Second Floor Balcony Framing Plan

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