

Memorandum

То:	Jeff Murphy, Building and Inspections Services Division Manager
From:	Walter Hallen, Project Management Supervisor
Subject:	1817 Church – General Work Condition Review
Date:	February 2011

During our visit to the building today I observed the following:

# **Exterior Walls:**

-Masonry joints are well pointed at this time.

-Wood windows and doors need replacement of sills and some frame sections and prep plus prime and finish paint/ varnish.

-Mansard roofs require replacement of failing slate and repair of sheet metal projecting window enclosures.

-Lower rear roof shows recent patching/ repair and joint between roof and upper building wall is not watertight. Flashing repair and possible roof replacement required. -Upper roof not viewed,

### **Interior Finishes:**

-All wall, floor, and ceiling finished must be repaired/ replaced to remove damaged portions and to remove mold growth.

# Vertical Exits:

-Every floor must be served by two code-compliant exit stairways.

-Stairs must be 44" width, except they may be 36" wide if they serve 50 people or less.

-Stair winder treads must conform to code dimension. Existing winders do not comply.

-Stairs must have handrails on both sides.

-Stairs must be enclosed in one hour fire rated enclosures with fire rated, self-closing door assemblies.

-Current building code does not accept the existing rear fire escape as an exit.

# Exitway marking/ lighting:

-All exits must be marked with illuminated exit signs.

-All spaces must have battery operated means of egress illumination.

# Accessibility:

-Step at front door must be replaced with a ramp to provide an accessible path. -At least two fully accessible toilet rooms must be provided. Existing toilet rooms are not accessible. Number of plumbing fixtures required depends on building use/ population and must agree with the State of Illinois Plumbing Code criteria. -Depending on the extent of public use, an elevator may be required that accommodates a 24" X 76" ambulance stretcher. The Capital Development Board of the State of Illinois staff must be consulted on this issue.

# Site Features:

-The depressed site area at the rear of the building does not appear to have proper storm water drainage. This area must have area drain(s) connected to the city sewer system.



Chris Booker Plumbing and Mechanical Inspector Community Development 2100 Ridge Avenue Evanston, Illinois 60201 847 448-8017 cbooker@cityofevanston.org

To: Jeff Murphy

Re: 1817 Church St.

Date: 2-21-11

This letter will sum up code violations and recommendations in plumbing and HVAC at the said property. The below listed items do not meet code at time of inspection and must be corrected to comply with code at time of reinspection.

1<sup>st</sup> floor Plumbing and HVAC

- 1) Water is not operational to any of the plumbing fixtures
- 2) Water distribution to the building is under sized and must be increased to 1-1/4" to properly serve the building
- 3) There is no floor drain present in the mechanical room, floor drain must be install to comply with ILPC 04' to comply with code
- 4) The kitchen waste piping is not code compliant with ILPC 04', kitchen waste must be changed from an full s-trap.
- 5) 1<sup>st</sup> floor bath room has a broken p-trap a left hand lav.
- 6) Mechanical system is under sized for each room and will not deliver the proper amount fo cfm required by ASHRAE standards for the square footage served
- 7) There are not adequate return provisions for many of the rooms
- 8) Thermal envelope in building is not meet by 09'IECC and as a result all ducting must be insulated
- 9) The exhaust ducting from the bath fan is not properly pitched and should be discharged to an earlier opportunity to properly function
- 10) No drain on lower reassessed landing at back of building and standing water is accumulating

2nd floor Plumbing and HVAC

- 11) Water is not operational to any of the plumbing fixtures
- 12) Water distribution to this floor is under sized and must be increased to 1" to properly serve the building
- 13) Mechanical system is under sized for each room and will not deliver the proper amount of cfm required by ASHRAE standards for the square footage served
- 14) There are not adequate return provisions for many of the rooms
- 15) Thermal envelope in building is not meet by 09'IECC and as a result all ducting must be insulated
- 16) Bathroom has no exhaust fan and window is also not operable
- 17) Thermostat is not reaching roof top unit for 2<sup>nd</sup> and 3<sup>rd</sup> floors
- 18) Looking down onto 1<sup>st</sup> floor roof level the plumbing vent stack must be extended up to 12" to avoid being buried by the snow

3rd floor Plumbing and HVAC

- 19) Water is not operational to any of the plumbing fixtures
- 20) Water distribution to this floor is under sized and must be increased to 1" to properly serve the building
- 21) Mechanical system is under sized for each room and will not deliver the proper amount of cfm required by ASHRAE standards for the square footage served
- 22) There are not adequate return provisions for many of the rooms
- 23) Thermal envelope in building is not meet by 09'IECC and as a result all ducting must be insulated

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- 24) Bathroom has no exhaust fan and window is also not operable 25) Thermostat is not reaching roof top unit for  $2^{nd}$  and  $3^{rd}$  floors

#### Roof Plumbing and HVAC

26) From the view from ground level the roof top unit does not comply with the recognized safety Regulations for guard rail or parapet wall height or distance from under sized parapet wall for safety of serviceability.



Claude Garesche Electrical Inspector Community Development 2100 Ridge Avenue Evanston, Illinois 60201 847 448-8018 TTY 847.328.4080 cgaresche@cityofevanston.org

To: Jeff Murphy

Re: 1817 Church Electrical Inspection

Date: 2/21/2011

The following electrical violations were identified at time of inspection.

- Existing 100 amp Single Phase 120/240 volt Electrical Service is deteriorated and undersized. Remove existing Service and nstall a new Three Phase 200 amp 120/208 volt system complete with new Three Phase and Single Phase Branch Circuit Panels.
- Existing branch circuit wiring and conduit system is deteriorated and in not capable of providing the required low impedance ground path that is critical for the proper operation of the branch circuit over current protection. Remove all existing branch circuit wiring and conduits; install a completely new system according to approved plans.

In general, there are no salvageable components in this system. Please contact me with any questions or concerns you may have.

Thank you, Claude Garesche Electrical Inspector



# Memorandum

Evanston

 To: Wally Bobkiewicz City Manager Marty Lyons Assistant City Manager
From: Douglas J. Gaynor Director Parks, Recreation and Community Services Department David Cook, Superintendent of Facilities Management Division

Subject: 1817 Church St. Façade Stabilization

Date: March 12, 2010

# BACKGROUND

The Facilities Management Division of the Parks, Recreation and Community Services Department (FM) received a Violation List # 09-0431 dated 4/27/09 for the unoccupied, City-owned building at 1817 Church Street, Copy Attached. On May 4, 2009, representatives of FM conducted a limited investigation of the front façade of the building. The purpose of the investigation was to gather information required to prepare a written report as required in item 1 on the attached Violation List. Present during the Inspection were; David Cook, Superintendent of Facilities Management, Richard Woods FM worker III.

The purpose of this report is to provide our opinion of the present integrity of the building envelope including the low sloped built-up roofing, slate mansard roof cladding, masonry façade and chimney at 1817 Church Street.

# INVESTIGATION

The south elevation of the building was examined from the sidewalk and a person lift. All of the slate shingles were checked for attachment through physically pulling and shaking each slate. Slate shingles that were found to be loose were re-attached using 1 ½ long aluminum roofing nails. The stone cornice, dentals, window and building quoins as well as the brick veneer was sounded with a sounding hammer. Loose areas of stone or masonry that were judged to be in immanent danger of falling were removed. The wood sash and metal railings were shaken manually to judge their attachment to the structure. This structure was revisited on February 24, 2010 to check the condition of the building visually.

# FINDINGS

There were five major components to the elevation; slate shingles, metal dormer siding, wood windows, metal railings, masonry façade and chimney. Each listed element will be addressed below.

### Slate

In 2009, several slate shingles were found to be loose. These shingles were re-attached as described above.

In 2010, two additional shingles had fallen off of the dormer. One shingle was observed in the mansard gutter. The other shingle was not found. No lift was present at the site, and the shingles were not repaired.

### **Metal Dormer Siding**

In 2009, the metal dormer siding on each side of the dormer windows in the mansard roof was poorly attached to the masonry backup. The original masonry cut nails had worked themselves loose over the intervening years due to differential movement and the deterioration of the underlying masonry structure. The poor attachment allowed the sheet metal siding to flap away from the dormer structure. In 2009 this sheet metal was re-attached to the masonry back-up with #10 cut nails. Attachment to the masonry

substrate was marginal due to the deteriorated condition of the masonry substrate that comprises the structure of the dormer side walls. To overcome this deteriorated condition of the substrate, additional nails were used in additional locations to create better attachment.

In 2010, the dormer siding was working itself loose again. To reduce the possibility of having the dormer cladding become unattached from the building, the dormer side walls should be re-built and re-clad with new metal siding.

#### Wood Windows

In 2009 the wood window sash and frames were in fair to poor condition. They were unfinished. Unfinished wood or wood with a failed coating will deteriorate more rapidly in this environment than properly coated wood.

In 2010 due to the lack of coating, the wood sills on the third floor require replacement. They are severely deteriorated and split. The rest of the windows require re-sealing, scraping, priming painting and re-caulking to preserve them.

#### **Stone Ornamentation**

In 2009 the stone ornamentation around the dormer windows was sounded. It felt reasonably tight and securely attached to the building structure. One area of deteriorated masonry was observed in the bottom of an arch above a dormer window. This loose masonry was removed.

The stone cornice and dentals beneath the mansard roof were sounded. They all appeared solid. Three areas of broken cornice were observed. In each location the broken pieces of stone were removed. The cause of the fracture was apparent since corroded metal nails that were used to attach the gutter were observed at the crack of each stone. Clearly, the stones were broken when the nails were driven into the stone to attach the gutter. Over time, the stone crack widened as the nails expanded due to corrosion and freeze thaw cycles.

The stone masonry above the second floor lintels on the eastern three windows sounded hollow and felt loose when sounded. This indicated that the stones were poorly attached to the building structure. This area of masonry must be removed and re-anchored back to the structure. This condition was also observed at the central door jamb.

In 2010, the masonry above the windows on the second floor was not sounded due to limited access. The condition at the central door jamb was still observed.

#### **Brick Masonry**

In 2009, the brick masonry was also sounded. It generally sounded solid with little movement when struck with the sounding hammer. Similar to the Stone Ornamentation, the masonry above the lintel above the 2<sup>nd</sup> floor windows is poorly attached. This area needs to be re-built. While it is not in immanent danger of falling, it must be repaired this season since frost jacking and cyclical freeze thaw action could dislodge some of the bricks after another winter. This was not re-checked in 2010 due to limited access.

#### Chimney

In 2009, the brick masonry chimney was in poor condition. The vertical and horizontal mortar joints on the west side of the chimney were open and many of them lacked any mortar. It was recommended that the chimney be lowered to the height of the metal bracket and capped thus reducing chimney repair costs. This work has not been accomplished and the chimney remains in poor condition.

### Low Slope Roofing

In 2009 evidence of ongoing water leakage was observed in the wood decking and beams of the first floor ceiling behind the three story front of the building. The roof was observed. Trash, construction debris and wood moldings with the nails embedded in the wood were observed on the roof. A low window opening in the north side of the upper building contained a window unit air conditioner. The sill of this window was close to the height of the roof surface preventing proper roof termination at this location. This roof appeared to be over 15 years old.

In 2010 lacking any repairs to the roof or window, signs of ongoing water leakage were observed. Due to the snow cover, the roof surface was not closely observed.

#### ANALYSIS AND RECOMMENDATIONS

The majority of the façade is in fair condition at this time. It requires some immediate maintenance and repair as described below.

#### Slate Shingles Windows and Dormers

The slate shingles and dormer siding should be examined and re-attached by a reputable roofing contractor experienced in slate repairs. All repairs should conform to the printed recommendations in the current edition of *The Slate Book by* Brian Stearns, Alan Stearns, and John Meyer.

The wood window sills on the upper windows should be replaced. Once all of the carpentry work has been completed, the windows should be properly prepared, primed, painted with a high quality exterior painting system and re-caulked. Left unfinished the windows will continue to deteriorate at an accelerated rate. Costs for their repair will also increase at an accelerating rate due to the increased deterioration. The underlying masonry dormer structure requires repair. It is deteriorated and will not properly hold fasteners with any significant withdrawal strength for an extended length of time. These areas of the building should be re-built this year to provide a proper substrate for the application of the metal dormer siding.

#### Masonry quoins, lintels, and brick veneer

The stone ornamentation must be re-attached above the second floor window and along the east door jamb. Helical anchors can be used to stitch the stone back to the existing substrate if a suitable substrate is present. If a suitable substrate is not present, the masonry back-up will need to be re-built as well. The existing chimney must be taken down to a more stable height with the remaining masonry to be tuckpointed. This work must be done to avoid increased deterioration and increased chances of portions of the façade failing.

#### Roof

The roof continues to leak causing increased deterioration to the roof structure. Based upon our limited observations, some small areas of wood decking may need to be replaced as part of the roof repairs. Although we saw evidence of water leakage over the wooden structural beams, it does not appear that the beam's structural capacity has been affected at this time. With prolonged water leakage and associated damage, the structural capacity of the wood beams will be reduced requiring their replacement as well.

#### Conclusions

The majority of the façade is relatively stable. However some elements of the facade must be repaired as described above or there will be an increased chance of broken building elements falling onto the sidewalk. Due to the temporary repairs that were conducted on May 4, 2009, there was no need for overhead protection to be installed over the sidewalk in front of the building in 2009.

If funding can not be found to address each of the elements as described above in 2010, then overhead protection should be provided to reduce the risk of potentially injuring sidewalk users.

# \$\$18,500

# \$17,000

\$19.047

# 1817 Church Anticipated Costs

3	/11/2010	Amount		Comment
Exterior				
	Repair 3 ex			FM
South Elevation	windows	\$6,000		Est
		v window and		FM
	board-up	\$1,700	<b>.</b>	Est
Total Carpentry		\$7,700	\$7,700	
South Elevation				
	Dormer Rep			National Roofing
	Masonry Re	epairs \$17,477		Bulley and Andrews
	Chimney re	pairs \$1,570		Bulley and Andrews
Total Masonry		\$27,547	\$27,547	
Roof	D			
	Remove an			Notice of Designs
First Floor	Roof	\$17,000		National Roofing
	Slate	\$4,000		National Roofing
Total Roofs		\$21,000	\$21,000	
Total Construction	n		\$56,247	
	Overhead a	nd Profit	<b>чоо,</b>	
	10%	\$5,625		
Contingency 10%		\$5,625	\$11,249	
Total			\$67,496	

Nothing added for re-building back-up masonry

# *STREET, 1817*

# Violation List CHURCH 09-0431

# Uncorrected Items Only

Uncorrected nems Only						
Violation Code Other	Location	Unit Number	Violation	Corrected		
1 . PM-104.10	Exterior	Provide a written report from a licensed structural engineer, evaluating the integrity of the slate roof and the façade.	4 /27/09			
2 . PM-109.2	Exterior	Erect a temporary shed canopy covering the sidewalk and pedestrian traffic that travels the length of the building and the width of the sidewalk WITHIN 24 HOURS OF RECEIVING THIS NOTICE. The canopy will protect pedestrians from falling debris including roof slate and damaged concrete corbel that was observed on April 27, 2009. *PERMIT REQUIRED	4 /27/09			
3 . PM-304.8	Exterior	Repair the street side exterior corbel that has been observed in disrepair. *PERMIT REQUIRED	4 /27/09			
4 . PM-304.7	Exterior	Repair the roof structure including the street side slate roof that was observed to be in major disrepair. *PERMIT REQUIRED	4 /27/09			
5 . PM-704.1	Interior	Check all the emergency exit lighting batteries within the structure and repair or replace all defective units. It was observed that while in the building some of the emergency lighting was inoperable when depressing the test buttons.	4 /27/09			

# **Correction Order Reference**

Code Number	Code Description
РМ-704.1	General. All systems, devices and equipment to detect a fire, actuate an alarm, or suppress or control a fire or any combination thereof shall be maintained in an operable condition at all times in accordance with the International Fire Code.
PM-304.7	Roof, sump pump or other discharge. The roof and flashing shall be sound, tight, and not have defects that admit rain. Roof drainage shall be adequate to prevent dampness or deterioration in the walls or interior portion of the structure. Roof drains, gutters and downspouts shall be maintained in good repair, free from obstructions, vegetation, rust, cracks and holes. Painted gutters and downspouts with exposed surfaces or peeling paint shall be painted. Where gutters are provided, downspouts shall be required and shall terminate water discharge a minimum of three (3) feet away from any portion of the structure. Gutter/downspouts, sump pumps and discharge from other sources, shall not discharge upon a public way nor be directed towards adjacent properties, and shall be drained upon the premises without causing retention of stagnant water thereon. Gutters and downspouts shall not retain stagnant water.
PM-304.8	Decorative features. All cornices, belt courses, corbels, terra cotta trim, wall facings and similar decorative features shall be maintained in good repair with proper anchorage and in a safe condition. *******PERMIT REQUIRED FOR STRUCTURAL REPAIRS******
PM-109.2	Temporary safeguards. Notwithstanding other provisions of this code, whenever, in the opinion of the code official, there is imminent danger due to an unsafe condition, the code official shall order the necessary work to be done, including the boarding up of openings, to render such structure temporarily safe whether or not the legal procedure herein described has been instituted; and shall cause such other action to be taken as the code official deems necessary to meet such emergency.
PM-104.10	Engineering reports. The code official may require submittal of written reports by a licensed design professional regarding violations for which a notice of violation has been issued.