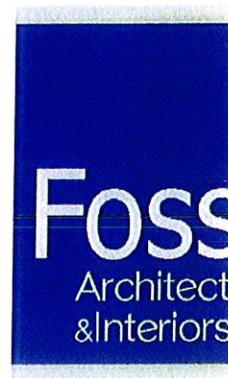


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June 21, 2011

Mr. Randy Nelson, City Engineer
City of Wahpeton
1900 North 4th Street
P.O. Box 490
Wahpeton, ND 58074

Re: Old City Hall Building Assessment

Dear Mr. Nelson;

This writer toured and observed the Old City Hall building in Wahpeton, ND, on June 7th, 2011, for the purpose of determining suitability of the building for renovation for use as city offices or other uses. The building has been vacant since the mid 1990's. The building underwent a major interior demolition project in preparation for a new tenant which removed nearly all interior partitions, finishes, mechanical and electrical systems. Some new framing was erected along with portions of a fire sprinkler system and plumbing for new toilets which remain incomplete. Windows on the first floor were removed and the openings boarded up after the project was abandoned.

The garage addition on the east side of the building has remained opened to the elements for some time and is home to many pigeons.

The following observations were made regarding major building components:

Concrete

Concrete conditions observed on site include a new floor slab at the grad-level (south) portion of the building which is in excellent condition. The sub-grade level (north) consists of original concrete floors and foundation wall at the lower portion of foundation walls, below grade level. The floor condition was difficult to observe due to poor lighting and piles of salvaged material, but appeared to be uneven and patched in many locations. No significant wall cracks or movement was observed, but many areas have been patched and old openings in filled with masonry. Musty and damp odors were observed at this level, though no water or seepage was evident.

Masonry

Building exterior walls consist of brick and stone veneer over brick and clay tile backup with no insulation or cavity between wythes. The brick and stone veneer is in need of tuckpointing with many joints observed void of mortar and some areas of settlement cracking. Much of the plaster and wall finishes have been removed at the interior of the building revealing the brick and clay tile backup. Many areas have been patched where new openings have been cut, or old openings in filled. The brick and clay tile backup has deteriorated or been damaged by the

demolition process bringing into question the integrity of this back up material. Many masonry joints in the backup wythe are deteriorated. Concern for re-use of this building would be the ability to structurally repair and adequately seal the envelope from moisture and thermal infiltration given the lack of insulation and cavity in the wall construction and the porous nature of the backup material in its present condition.

The exterior of the garage addition exhibits severe brick deterioration that warrants demolition.

Steel

Steel observed was limited to structural columns at the grade level (south) portion of the building supporting steel beams carrying the load of wood joists. The columns are presently encased in new wood surrounds, and only a portion of the steel beams are visible as they are up-set into the wood framing. From what was observed, the steel appears to be in good condition.

Wood

Wood floor joists, where visible, appeared to be in good condition. In the exposed area of the grade-level portion of the building (south side), the joists had been sprayed with an acoustic or fire retardant material which concealed a portion of the joists and floor deck. In other areas, joists are concealed by plaster, gypsum board or metal ceiling. Roof rafters were not observed due to lack of access. A 1991 structural analysis performed by Heyer Engineering determined that the framing would be adequate to support 50 lbs/square foot live loads, suitable for office-type occupancy.

New wood framing of a mezzanine structure, furring out of exterior walls, and interior wall partitions have been erected as part of the abandoned remodeling project and are in good condition.

Thermal and Moisture Protection

The condition of the roof could not be observed due to lack of access, but is assumed to be a low-sloped roof sloping to the north and south from a center ridge running east and west down to gutters located behind the parapet, draining to downspouts on the east façade of the building. There was no evidence of water entering the building through the roof at this time. However pigeons have been entering the building by some means and have been nesting in the second floor.

It is assumed there is some type of attic or cavity between the second floor ceiling and the roof rafters which may contain some sort of insulation, though probably minimal. The exterior walls are un-insulated.

Doors and Windows

Doors and windows consist of a wide variety including hollow metal doors and frames, wood windows, doors and frames, glass block, and new aluminum window framing on the south wall at grade level. Some openings have been stripped of window framing or glass block and remain loosely boarded up. Other than the new aluminum windows, all doors and windows are in poor condition and would need to be replaced.

Interior Finishes

Much of the building has been stripped of any interior finishes. The lower level exterior walls have been stripped to the masonry backup. Most interior partitions have been removed. Some new framing was erected as part of the abandoned remodeling project. Floors are bare concrete or wood subfloor.

The upper level walls exhibit various stages of plaster removal. Wood flooring remains in the large gathering room (south side) along with original tin ceiling (painted) which could possibly be salvaged.

Specialties and Equipment

The building has been stripped of any significant specialties or equipment as part of the abandoned remodeling project.

Elevator

No elevator exists in the building. Building levels below and above grade-level are not accessible.

Mechanical Equipment

Minimal mechanical equipment consisting of a furnace unit and some ductwork remains on the ground-level floor situated above the vault structure but is disconnected from power and fuel and is not operational.

Some new waste piping for a toilet grouping and fire sprinkler piping has been installed as part of the abandoned remodeling project but is incomplete and not operational.

Electrical Equipment

An electrical disconnect panel and distribution panels remain on the ground level floor in a utility closet, but the building is disconnected from power. Light fixtures remain on second floor but are not operational due to lack of power.

Conclusion

The building exhibits historic architectural character on the exterior that would make for an attractive city or office building. However, significant brick repair and tuckpointing is required to stabilize the envelope. New entry doors and re-windowing of glass block openings and those openings boarded up will be required to complete the building envelope, replace deteriorated conditions and improve energy performance. More investigation is required to determine the condition of the existing roof, but is assumed to be in need of replacement given the vacancy of the building for 15+ years. The garage addition on the east side is severely deteriorated and should be demolished.

Additionally, observation of the interior side of the back-up masonry suggest that significant repair and masonry work is required to stabilize the exterior walls structurally and provide appropriate thermal and moisture protection for subsequent renovation. The cost of such repair to exterior and interior masonry to preserve the architectural significance of this community landmark must be weighed against the cost of building new. Should the decision be made to demolish the building, certain architectural elements including stone work, metal cornice and interior metal ceilings could be salvaged for reuse.

Any renovation project should include furring-out and insulating exterior walls with thermal insulation and adding insulation at the roof to improve energy efficiency. Some framing corrections will need to be made where existing stairs were removed and openings in-filled with sub-standard construction. Complete fit-up of interior space will be required including partitions, doors and frames, hardware, and finishes along with complete mechanical and electrical systems. The grade-level portion of the building will work nicely for accessibility, but an elevator will need to be installed to provide access to all building levels.

I would expect the cost of renovation to be equal to that of new construction for a building of comparable construction and configuration.

Reported by:

Robert A. Ames, AIA, LEED AP

Foss Architecture & Interiors

Photos



1. West Elevation. Canopy structure over ground level entry has been remove. Lower left window is boarded up.



2. South Elevation. New aluminum windows have been installed in three lower windows.



3. East Elevation. Roof drains via downspouts on either side of this elevation. Garage structure is an addition.



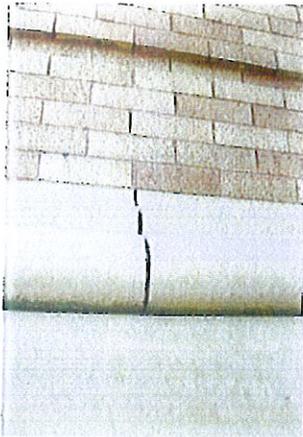
4. North Elevation. Lower windows have been removed and openings boarded up. Garage door has been removed and structure is open to the elements.



5. East wall of garage addition exhibits severely spalled brick.



6. Interior of garage is exposed to the elements and is deteriorating. Heavily invested by pigeons.



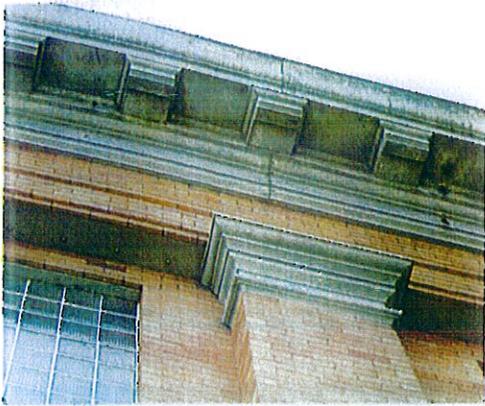
7. Joint in stone banding requiring tuckpointing.



8. Basement wood window.



9. Deteriorating stone condition at front steps.



10. View from below of metal cornice and column capital.



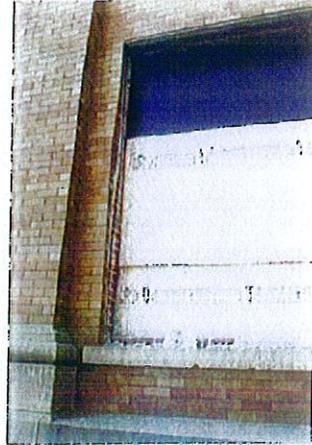
11. Typical condition at foundation showing settlement and deterioration of masonry joints



12. Deterioration of masonry joints at front steps.



13. Existing window opening where window has been removed.



14. Existing window opening where window has been removed.



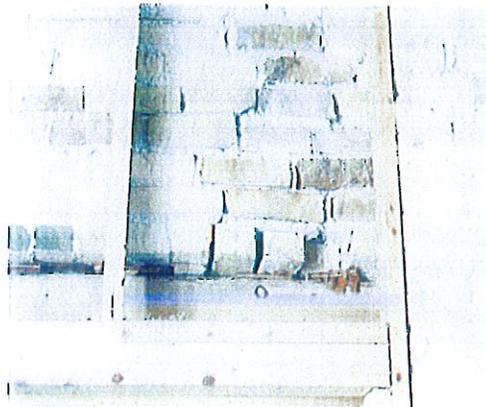
15. View from inside of existing window opening with new aluminum window. Wood framing is new from abandoned remodeling project.



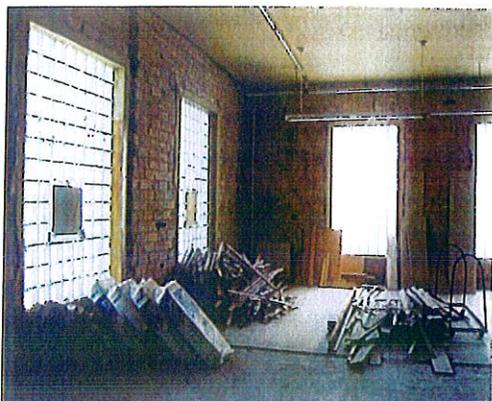
16. Inside view of back-up masonry near opening showing deterioration of masonry.



17. Steel beam supporting wood joists. Joists rest on wood ledger bolted to each side of beam web. Only bottom flange of beam is visible.



18. Deteriorating masonry back-up at opening.



19. Interior view of second floor showing glass block windows.



20. Clay tile back up of exterior wall at second floor.



21. Tin ceiling and deteriorating plaster at second floor.



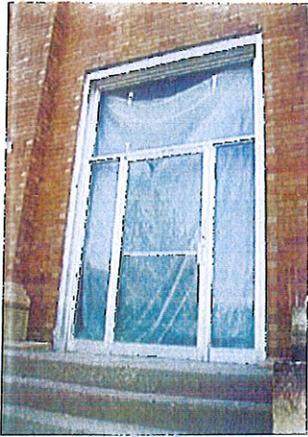
22. Interior wall at second floor showing condition of plaster



23. Interior of walls at basement showing masonry and blocked window openings.



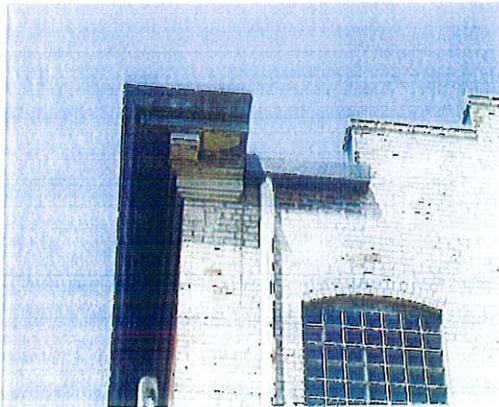
24. Basement wall at north elevation with exit door (on right).



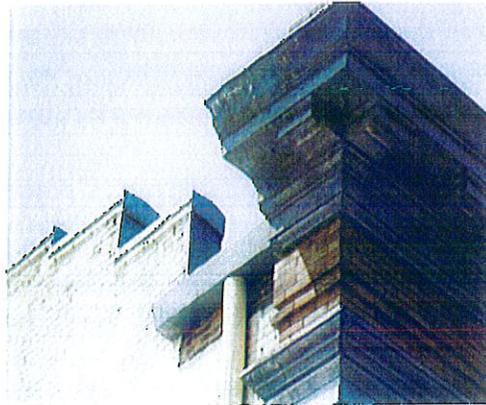
25. Aluminum entry on west elevation.



26. Hollow metal entry framing on west elevation.



27. Cornice, gutter and downspout on southeast elevation.



28. Cornice, gutter and downspout on northeast elevation.



29. Electric service panel disconnected from power.



30. Existing electrical distribution panels.



31. Mechanical furnace and equipment remaining on top of vault structure.