



Brad Murphy
City of Madison
Planning & Development
215 Martin Luther King Jr. Blvd.
Madison, WI
53703

July 18^h 2005

RE: CAPITOL WEST: BROOM STREET LOFTS

Dear Brad,

As you requested, we have taken a closer look at maintaining the footprint and height of the Broom Street Lofts as proposed in our current Amendment to the GDP (including 4' projections into the proposed front yard setback), and moving the building closer to the existing parking structure at 345 West Washington – this would have the effect of reducing the rear-yard setback and subsequently allowing for an increase in the front yard setback.

We have reviewed the issue of moving the proposed building with Doug Kozel of KEE Architects, Paul Karow of Arnold and O'Sheridan, and Sam Lawrence of Findorff Construction. Based on this review we believe the impact of moving this 4-story, Type-VA building with windows on all four sides is as follows:

- The openings along the face of the parking structure would require structural infill. This results from soil abutting the parking structure wall at the location of existing wall openings for grading and drainage requirements that we believe we can avoid if we remain ten feet or more from the existing structure. Moving the structure closer results in structural masonry infill, water proofing, and additional mechanical ventilation at the parking structure.
- The footings of the Broom Street Lofts would have to be constructed 1' deeper for every foot closer to the existing parking structure that we move the building. This change results from the lateral pressure the proposed Broom Street structure foundation exerts on the existing parking structure – the closer the proposed building, the deeper the footings have to be to avoid exerting pressure on the wall of the adjacent building. The work entailed would require additional excavation and deeper foundation work.
- A reduction in the amount of openings along the rear elevation would be required. Based on our analysis, the maximum amount of openings allowed if the building is sprinkled is 25%. This change would be particularly significant along the first floor of the building where we envisioned significant amounts of glass (80%-90%) for the first floor units at the rear-yard open space.

- Based on our current assumptions of direct entry from the exterior of the building to the 1st floor units, the useable open space for the first floor units becomes reduced by the dimension that the building is moved closer to the parking structure resulting in less desirable condominium units.
- And finally, based on our most recent meeting with yourself and Building Inspection and Planning staff members – we have determined that enclosing the garage structure as identified above, in conjunction with the existing Business use atop the garage, creates the requirement for fire protection at both levels of the garage (IBC 903.2.11) To limit the impact of fire protection from the Main Street Ramp, separation walls would be provided between the 345 Parking Structure and the Main Street Ramp under this scenario.

Our most current estimates for the costs associated with the additional work resulting from moving the building closer to the parking structure (not including any reduction in sales prices resulting from modified design) ranges from approximately \$385,500 to \$402,050 based on the distance of the shift:

- 1' Shift (providing a 13' front yard setback): \$385,500
- 2' Shift (providing a 14' front yard setback): \$393,800
- 3' Shift (providing a 15' front yard setback): \$402,050

Please note, that in addition to being more costly, we believe that the reduction of the rear-yard setback reduces the quality of the Broom Street Lofts. We have concerns, and our consultants have confirmed that a rear yard of less than 10 feet has a significant likelihood of becoming dark, undesirable and difficult to use as a patio or semi private open space. Please refer to the attached cross section for a closer look at this issue.

If you have any questions regarding this letter please do not hesitate to call,

Thank You,



THE ALEXANDER COMPANY, Inc.

Thomas Miller
Development Project Manager

Attachments:

- Letter from Sam Lawrence Findorff
- Memo from Doug Kozell, KEE Architects

Cc

Natalie Bock
Bill White, Michael Best & Friedrich

July 18, 2005

Mr. Tom Miller
The Alexander Company
145 East Badger Road
Madison, WI 53713

**Re: Capitol West
Broom Street Townhomes**

Dear Tom

Currently the setback for the Broom Street Townhomes is set between twelve and fifteen feet. To maintain the building area a three foot increase in the setback means a decrease in the separation between the new building and the existing parking structures. This letter will identify the costs associated with these changes.

As the new building moves closer to the existing structure footings for the new building need to be lowered so that the added soil pressure isn't bearing on the existing structure. For each foot the separation between the buildings is decreased the footings need to be lowered one foot. It will cost an additional \$30/sf including the cost of excavation, backfill, and the concrete itself to lower these footings. No waterproofing or added insulation should be required. There is roughly 250 lineal feet of wall, which equates to \$7,500 for each foot the two buildings get closer, or \$22,500 to lower the footings three feet (or, in other words, to move from a 10' separation to 7').

As we discussed, as the separation between buildings decreases the ability to maintain existing grades between the two buildings dwindles. Raising the grades will necessitate infilling the parking ramp wall. This 260' long, 5' high wall will cost \$20/sf including removal of the chain link fencing, and adding a reinforced block wall, doweled into the existing concrete wall, with an angle bolted to the existing structure at the top of the wall. Assuming a third of the new masonry would be waterproofed at a cost of \$2/sf and two thirds will be covered with synthetic stucco at \$7/sf the total cost for this wall will be roughly \$33,000.

Four exhaust fans will need to be added to ventilate this now enclosed area. There are existing vertical shafts in the ramp that can be utilized so all that is needed are fans, the necessary electrical feeds, and the addition of some simple controls. These fans, fully operational, are worth \$5,000 each for a total added cost of \$20,000.

Modifications of this nature may require that the existing parking ramp be brought to current building code standards. An initial review of the code suggests that this will require the addition of a fire sprinkler system throughout the parking ramp. To mitigate the cost of this work it appears feasible to separate the ramp below 345 West Washington




Avenue from the adjacent ramp to the south by constructing fire walls between the two ramps on both levels. In all likelihood these walls will be constructed from reinforced masonry and would contain fire-rated shutters that will close in the event of a fire while permitting the flow of cars during normal operation. The cost to build these walls will be \$80,000. The cost to add the fire protection system on the two levels of parking below the 345 West Washington Avenue building will add another \$210,000

Of course there are still unknowns in all of this so I would include another ten percent for contingency and our fee. In all the change adds \$402,000 to the construction cost for the project. I have not included any additional costs for architectural or engineering fees associated with the design for these changes.

Hopefully this is the information you are after. If it is not, please let me know.

Sincerely,
J.H. FINDORFF & SON INC.



Sam Lawrence
Preconstruction Project Manager

Thomas Miller

From: Doug Kozel [doug@keearch.com]
Sent: Monday, July 18, 2005 12:20 PM
To: Thomas Miller
Cc: Sohail Khan; Sam Lawrence
Subject: Broom Street Setback - Codes

Tom,

We have additional analysis related to a separation of less than 10 feet between the Broom Street townhomes and the existing parking garage along Broom Street.

If the wall of the upper tier of the existing parking garage is enclosed, this will affect the building code situation. Under the current code, two sides must be partially open for a garage to be considered an open parking structure (IBC 406.3.3.1). With the enclosure of the Broom Street side, the parking under 345 West Washington will become an enclosed structure and will require mechanical ventilation. Also, according to IBC 903.2.11, the enclosed parking garage under the office occupancy would require sprinklers.

In order to limit the amount of sprinklering, a separation wall and driveway fire shutters could be considered between the parking under 345 West Washington and the connected garage at 180 Washington Row along Main Street.

Douglas Kozel AIA
KEE Architecture Inc.
621 Williamson Street
Madison, WI 53703
608-255-9202
608-255-9011 (fax)