BECKER
STRUCTURAL ENGINEERS

Field Report #1 No. 3604

Project:	Casco Bay PG – Stair/Elevator Tower Restoration
Project #:	WO 3604
Date/Time:	January 28, 2016,1:30 p.m.
Observers	Josh Martin-McNaughton, Author (BSE), Tim Rich (KISC),

I visited the site to review the progress of the work and to check for general conformance with the design intent of the drawings and specifications for this project. The weather at the time of this visit was partly cloudy and 40 degrees F.

The following observations were made:

1. KISC has mobilized to the site and installed staging along three sides of the stair tower. Barrier fencing has been installed along the work site perimeter.

2. KISC has begun to remove the split face block façade, see photos below. The split face block was easily removed due to the poor condition of the mortar joints. The removal the façade will continue into next week.

3. After removal of the split face block, the CMU backup wall was inspected for deficiencies. Generally the CMU is in fair condition; the wall was still damp after removal of the façade and appears to have been retaining moisture, no moisture barrier was observed within the wall cavity. Full depth cracks extend through a several sections of the CMU wall and will have to be rebuilt, typically at the upper levels of the tower, see photo above. Throughout the wall surface, joints where the mortar is missing or soft will have to be repointed to create a smooth uniform surface for the air/vapor barrier to be applied to. Abandoned wall ties will have to be ground off and cut flush with the wall surface along with any mortar projections. Where CMU cells were exposed or open, no vertical reinforcement was observed, though horizontal joint ladder reinforcement was observed where the joints were open.

4. Anchor bolts securing the wood roof framing were installed in the cavity between the CMU back up wall and split face block and not anchored into grouted cells as is typical construction practice, see photo below with unsecured anchor bolts circled in red. BSE will

provide KISC with a detail on anchoring the roof framing to the wall. The roof framing appears to be in good condition with no rotted or deteriorated wood sections observed.

5. The majority of the window metal frames have deteriorated with rust pack causing cracking of the surrounding CMU block, see photo above. The windows, frames and flashing are scheduled to be replaced and the surrounding CMU repaired.

6. BSE requested that KISC remove sections of CMU wall at the 5th level to verify/inspect the condition between the lobby concrete slab and CMU wall, see adjacent photo. It appears that during original construction the CMU wall was notched so slab reinforcement could extend into the wall and the concrete slab placed, with the CMU cell interior used as a pour stop. Looped (bottom) and straight (top) reinforcing bars were observed as shown in the adjacent photo. A bond beam was not observed in the CMU wall as detailed and noted in the original drawings.

CC: File, John Peverada (City of Portland), Steve Kalisz (MHR), Tim Rich (KISC), Todd Neal (BSE)