

Construction Narrative – 305 N. Queen St

From Jan 2015 until Aug 2017, the front 3 story portion of 305 N. Queen underwent a thorough rehabilitation from the first floor to the roof which included structural items, plumbing and electric.

Design work was handled by Hammel and Associates with structural engineering needs and guidance supplied by Robert Desmarais of rrd pe corp. Masonry work was done by Steve Groff Masonry and Doug Sykes of Coatsville, PA. All other work completed by Soost Home Services, LLC

Some renovation work had been undertaken by previous owners including:

- 1) A new roof above the 3rd floor
- 2) New windows on the Queen street facade and on the 2nd floor rear.
- 3) A 600 amp service was brought into the building composed of two 200 Amp meter bases and two 100 amp meter bases. 3 separate breaker panels were also in place, one in the basement (100 amp), one on first floor (200 amp) and a 3rd on the second floor (200 amp).
- 4) A new main residence door was fabricated and installed. The Russwin lock on this door dates to early 1900's (1906?). The mortise lock was replaced in 2026 with an appropriate rebuilt vintage set.
- 5) Wiring in 2nd floor rear office, bedroom, and bathroom was already in place. All outlets, baseboard heaters, 240 A/C window outlet, and overhead lights were in place as of Nov. 2014.
- 6) 2nd Floor rear bathroom already existed prior to 2014 and electric water heater in basement as well.
- 7) The handicapped bathroom was also in place prior to Nov 2014.
- 8) Many interior walls had also been removed

It is assumed that this work was done with permits, up to code, and done with proper inspections. During subsequent work completed post Nov 2014, nothing was noted about any of this previous work to indicate otherwise.

Work completed Jan 2015 onwards:

Structural changes included the following, Permits, drawings, and inspection results are available.

- 1) Original switchback resident stairs were replaced with 4' wide straight staircases. Original stairs required a 5' width and stair widths of only 30".
- 2) With a narrower stair tower, it was possible to build the alcoves in the front commercial space. The columns separating these alcoves are actually load bearing transferring the weight from the basement arches below up to the second floor joist ledger.
- 3) Two layers of Type C drywall were added to 1st floor ceiling using resilient channel to provide a 2 hour fire separation. All walls separating the commercial space from other areas of the building as well as the alcove support columns are double layers of 5/8" Type X drywall providing a 2 hour fire rating. Basement and inside stairwell doors are also fire rated.
- 4) All commercial space electric was updated.
- 5) Second floor joists were sistered with new lumber as needed to strengthen floor and provide a level plane for new OSB T&G subflooring. Insulation was also added to help soundproof between floors.
- 6) LVL beams were added to extend 3rd floor joists into new narrower stair tower and to support new bathroom floor. Other joists were also sistered with new lumber as needed and OSB subflooring added above.
- 7) A ledger was added to North and South brick walls to which TJI joists were added to create a new attic floor (OSB T&G) for storage and to allow knee walls above to further support original roof rafters as needed.
- 8) Rear brick exterior wall above 2nd floor was repointed and a gap between buildings sealed off. (previously merely stuffed with newspapers and plastered over). Window and door lintels were levelled up for new windows in bathroom and kitchen. A window at the 3rd floor landing was removed and opened to allow a tall glass exterior door. This work was undertaken by Doug Sykes of Coatesville.
- 9) South brick wall above neighboring roofline was repointed and had bricks replaced as needed, by Steve Groff Masonry.
- 10) HVAC ductwork was run above ceilings and down south all behind refrigerator into rear second floor area. Lineset is run above 2nd floor ceiling and hidden by ceiling coffers.
- 11) Water heater was moved from basement to 3rd floor utility closet.
- 12) Second and third floor front areas have all new stairs, walls, plumbing, electric. Kitchen and bath are totally new.

Other points of interest:

Sloped floor – The first floor front floor is intentionally sloped towards the street. This was by design as there are no signs of structural settling. Alan Rock purchased a one story frame structure at this location in 1872. It is possible that the floor in this structure was sloped in the original structure.

Gravity ducts – It was common in the early part of the 20th century to install ductwork to heat buildings from the basement by allowing heat to naturally rise through the ducts. This was usually done by removing an inner wythe of brick to make room for the duct. In this building they were terracotta. One actually ran up the second floor rear wall. Parts of this are still embedded in the 3rd floor landing. One such duct also went thru the brick at the south end of the big wood internal lintel. This left nothing to support that lintel at that end. It was necessary to replace brick supports there. Otherwise, that lintel was supported by the remnants of an old door jamb which transferred the weight to the steel I-beam below.

Another such duct is in the north wall at the base of the 3rd floor stairs. This was used to run water and gas from the basement to the utility closet on the 3rd floor.

The fireplace mantel was nothing more than dressing for a gravity fed heat duct. There was never a firebox built for a traditional fire. This same mantel can be seen in other houses about town.

Rear brick wall – The rear brick wall leans inwards towards the top. The wall was intentionally built this way for some reason. There are no signs of failure or stress.

Skylight – The third floor ceiling was originally lath and plaster supported off the underside of the roof beams. Tons of additional weight on an already flat roof. This roof also had a roughly 5' x 5' skylight at some point that was framed with mortise and tenon joinery. Old leaks overtime many years prior had caused it be compromised with rot. Without the interior 3^d floor walls to transfer some of the ceiling weight onto the floor below, this was potentially a heavy snow load away from catastrophic failure.

5 Apartments – At one point there was supposedly up to five apartments in this building. Hence the numerous additional gas meters in the basement. A number of joists were completely cut thru to make way for plumbing. With the 12' ceilings on the second floor, evidence was found that a kitchen was built with a ceiling at 6' with a loft above. Up to 6' had subway tile type wall paper. Above 6' was sign of a ledger board and then floral wallpaper above with pen handwriting towards the 11' foot mark.

Window shutters – It is believed that the original Queen street windows had half height wooden shutters on the interior which would fold into recesses on either side. Screw holes for hinges were left uncovered on the window frames. Shutters are in the basement.

Coal boiler – There remains what I believe to be a coal fired boiler in the basement. It appears to have been relocated from its original position in front of the chimney to its current location on a newly poured concrete pad into which it settled a bit. This was done to make room for a new oil fired boiler since removed. Evidence of radiator pipes can be found, but no radiators.

Cavern under sidewalk – rather unique the neighboring buildings also had these. Hence why this block has no trees on the sidewalk. When the streetlight was added out front in 2014, the city actually broke through the brickwork and had to remedy to prevent leakage.

Rear Deck – Original building plans included a deck over the second floor rear to be serviced by the large 3rd floor exterior door. Budget constraints kept us from completing this. Note – the hallway wall adjacent to the bathroom is plumbed for a wet bar.

Bannister – It was not possible to re-use the original handrail and banister from the original switchback stairs because there was not enough for the new configuration. They were also too wide to meet current code for grasp ability. Pieces of the original handrail and balusters were incorporated into the new guard rails along the stairs.