October 3rd, 2024 (Rev. 1)

Syndao Inc.
32 Harry Douglas Street
Stittsville, Ontario, K2S 1Z2

Subject: 269-281 Bell Street South – Building Reviews | Condition Report

Dear Marc Larisey,

As requested, BPA Inc. has completed a structural condition review of the seven buildings with the civic addresses of 269, 271, 273, 275, 277, 279, and 281 Bell Street South, Ottawa, Ontario.

We understand that the seven buildings have been vacant since the spring of 2021 and that all services to the buildings (water, gas, electricity) have been disconnected since 2022. We also understand that the condition of the buildings have been deteriorating over time and the owners have raised concerns about their current conditions. On September 19th and September 27th, 2024, BPA Inc. visited the seven building and completed reviews of each of the buildings from the interior and exterior. Below is a summary of our observations.

1. 269 & 271 Bell Street South

In September of 2022, 269 Bell Street South was significantly damaged by a fire. During our review, we observed that the majority of the roof and sections of the upper walls were missing. The fire spread to the neighbouring building located 271 Bell Street S causing damage to the roof and wall framing. In addition to the fire damage, both of the buildings have experienced significant damage due to water from the fire fighting techniques and from being exposed to the elements for over 2 years.

Based on our observations of the condition of the buildings at 269 and 271 Bell Street South, it is our opinion that both of these buildings are not structurally salvageable.

2. 273, 275, 277, 279 & 281 Bell Street South

The five buildings located at 273, 275, 277, 279, and 281 Bell Street South are all in a similar condition and contained similar forms of structural issues, interior damage, and deterioration. These issues included:

- Cracking in foundation walls on the interior and exterior.
    - Significant cracking resulting in v-shaped gaps were observed within the concrete foundation walls.
    - Step cracking was observed within the mortar joints of the rubble stone and block foundation walls
- Deterioration of the mortar joints within the rubble stone and block foundation walls.

- Significant deterioration of the concrete foundation walls.
    - The deterioration of the concrete foundation walls was observed above grade on the exterior of the walls and below grade on the interior of the walls.
    - The concrete was observed to be deteriorating to a sandy material that was able to be easily removed from the walls by hand. Piles of the sandy material and the stone aggregate from the wall was observed on floors around the interior of the foundation walls indicating that the wall deterioration is occurring without physical disturbance.
- Holes through the foundation walls at the ingress location of services were observed, and at some locations, exterior soil was being washed in and accumulating below the openings.
- Exposed concrete footings that could be reviewed from the basement level were observed to be deteriorating and crumbling to a sandy material, similar to the concrete walls.
- Water ingress and efflorescence staining was observed throughout the foundation walls. The basement floors and walls were observed to be damp and wet.
- The foundation walls were locally hammer sounded and were observed to contain large areas that were identified as hollow sounding and soft.
- Damage to the structural wood floor framing.
    - Ground floor framing was observed to contain localized dry rot at the ends of joists and beams at the locations where they are pocketed into the foundation walls or bearing on the walls.
    - Localized damage observed along the wood beams (missing cross sectional area, checking, etc.)
- Unsupported wood floor framing.
    - A primary wood beam was observed to have shifted away from the foundation wall and floating above the wall.
    - The deterioration of the foundation walls has resulted in the loss of bearing at localized beam and joist locations.
    - Wood floor framing was observed to be inadequately supported and missing posts.
- Noticeable deflections and sagging in the wood floors.
    - The floors contained noticeable areas with elevation changes across a room and floor level. This included raised areas over beams below and localized areas of observed settlement in the corners of rooms or along a wall.

- Cracking in finished walls.
    - Several locations of cracking were observed throughout the finished ceilings and walls. These were located across mid spans of ceiling and at windows, door frames and vertically within walls at locations where floor deflections were noted.
- Exterior brick cladding damage.
    - The houses containing brick cladding contained areas of significant step cracking within the mortar joints at several locations.
- Exterior covered porch roofs were observed to be leaning away from the building and damage was observed on the support posts.
- The roofing on each of the buildings is beyond its serviceable life and contains missing, damaged and curling shingles.
- Windows and doors were observed to be damaged, cracked and broken.
- Significant damage to the interior finishes were observed throughout each of the buildings. These included but are not limited to:
    - Peeling paint
    - Failed drywall and lath and plaster ceilings.
    - Large holes in the walls and ceilings.
    - Damage toilets, bathtubs, and sinks.
    - Damaged countertop and cabinetry in the kitchens and bathrooms.
    - Missing trim, moulding, and flooring.

While beyond the scope of our report, we also observed that the mechanical and electrical systems throughout the buildings have been severely damaged. This includes the electrical wiring, piping, boiler system and hot water tanks, duct work and furnaces.

Refer to the photos in Appendix A at the end of the report illustrating the issues, damage and deterioration described above.

3. <u>Order of Magnitude Cost Estimate:</u>

Following our review of the condition of the buildings at 273, 275, 277, 279, and 281 Bell Street South, we have provided our opinion on the order of magnitude costs that will be required to repair and/or replace the structural deficiencies and interior damage.

- Foundation Replacement: $175,000.00 per building
    - Total Foundation Replacement Estimate for five (5) buildings: $875,000.00

- Wood repairs and reinforcement due to dry rot and inadequate support: $25,000.00 per building
    - Total wood repairs estimate for five (5) buildings: $125,000.00
- Brick damage and step cracking repair estimate (281 Bell St S): $20,000.00
- Roofing Replacement estimate: $10,000 per building
    - Total roofing replacement estimate for five (5) buildings: $50,000.00
- Interior Repairs (Finishes, Fixtures, Cabinetry, Flooring, etc.): $100,000 per building
    - Total interior repairs estimate for five (5) buildings: $500,000.00

4. Conclusion:

Following our review of the buildings located at 269, 271, 273, 275, 277, 279, and 281 Bell Street South, we observed several deficiencies, areas of damage, and deterioration throughout each of the structures.

Between the fire and water damage and the conditions of the foundations of buildings 269 and 271 Bell Street South, it is our opinion that both of these buildings are not structurally salvageable and should be demolished.

As noted above, the anticipated cost to complete the structural remediation of the buildings located at 273, 275, 277, 279, and 281 Bell Street South is $1,020.000.00, and it is our opinion that structural remediation of these buildings is technically impractical and is not cost beneficial. It is therefore our recommendation that these building structures be demolished.

In addition to the structural costs listed above, there appears to be a high degree of environmental remediation that will be required to each of these buildings as well as roofing, window, and interior repairs in order to make the buildings inhabitable.

Please do not hesitate to contact us should you require any further information.

Best regards,

Brent Weatherdon, M.Eng., P.Eng., ing.
Director, Structural – Special Projects

Appendix A: Photos

Photo 1: 269, 271, 273 and 275 Bell St S.

Photo 2: 277, 279 and 281 Bell St S

Photo 3: 281 Bell St - Failed Interior Ceiling

Photo 4: 281 Bell St - Interior paint peeling and ceiling damage

Phot 5: 281 Bell St - Interior Failed Ceiling

Photo 6: 281 Bell St - Interior wall damage

Photo 7: 277 Bell St - Interior finishes deterioration

Photo 8: 275 Bell St - Interior cracking in finishes at window

Photo 9: 281 Bell St - Primary ground floor beam shifted and unsupported

Photo 10: 281 Bell St - Deteriorated and Missing mortar in rubble stone wall

Photo 11: 281 Bell St - Exterior Brick damage – Step cracking

Photo 12: 273 Bell St - Concrete foundation deterioration at grade (exterior)

Photo 13: 275 Bell St - Concrete foundation deterioration (exterior)

Photo 14: 273 Bell St - Concrete foundation large crack (exterior)

Photo 15: 273 Bell St - Unsuported wood floor beam

Photo 16: 275 Bell St - Concrete foundation deterioration (interior)

Photo 17: 275 Bell St - Concrete foundation deterioration (interior)

Photo 18: 275 Bell St - Wood beam Dry rot

Photo 19: 275 Bell St - Foundation wall Water ingress and deterioration (interior)

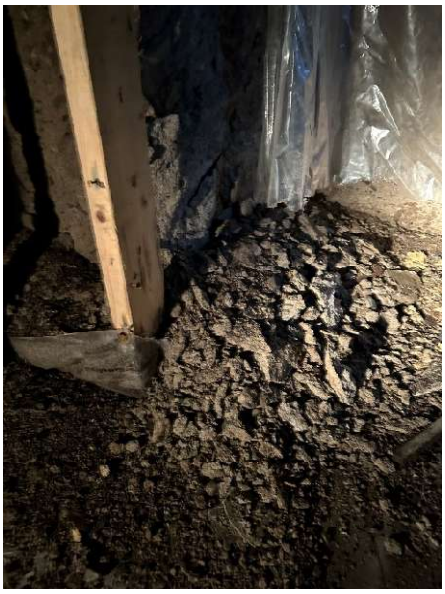

Photo 20: 275 Bell St - Foundation wall debris at base of wall (interior)

Photo 21: 277 Bell St - Step cracking in inteior foundation wall