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INTRODUCTION

Stantec Consulting Ltd. (Stantec) was retained to undertake a condition assessment of the First Metropolitan United Church (First Met) buildings and building systems located at 932 Balmoral Road in Victoria, B.C. The buildings at First Met include the Sanctuary, Fellowship Hall, Social Suite, and Christian Education wing. The objectives of the condition assessment were to determine the overall condition of the buildings, recommend on the viability of continued use of the buildings, recommend and prioritize improvements, and identify improvements that may trigger additional improvements.

The condition assessment was based on a visual review of the buildings and building systems, but no destructive testing or observation of concealed areas was undertaken as the buildings are currently occupied. Some existing building drawings and documents were provided to aid in the evaluation. The recommended improvements have been prioritized as currently critical because of life safety (CC); potentially critical (PC): not critical now in regards to life safety, protection of property or extending the functional life of the building, but may become critical if not addressed soon; prudent (P) but not critical in regards to protection of property, extending/improving the functional life of the building or improving quality of experience in the building. The recommended seismic upgrades have been noted as a prudent (P) priority with an ‘*’ instead of a potentially critical priority as the seismic upgrading of existing buildings is not required by the current code and many existing buildings in the Victoria area are not seismically upgraded due to construction costs. However, although these buildings may not be under a constant threat of collapse, the recommended seismic upgrading becomes a critical item during a seismic event as collapsing of the buildings is a possibility.

CONCLUSIONS AND RECOMMENDATIONS

In general, the buildings and building systems at First Met are seen to be well maintained and functional. However, some of the building and building system elements are reaching the end of their serviceable life. The following tables summarize our conclusions and recommendations, provide construction cost estimates for each item, and are prioritized as indicated above. Please refer to the main body of the report and appendices for further information. The cost estimate indicated in the tables below represents construction costs only, with details of additional costing items located in the Cost Estimate section of this report.



CURRENTLY CRITICAL (CC)

| | ARCHITECTURAL | CURRENTLY CRITICAL |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| No. | Item Description | Construction Cost Estimate |
| | No items | |
| | MECHANICAL | |
| 1 | Install backflow prevention devices on incoming water mains (in mechanical rooms) and separate fire protection system from domestic water piping. This is a CRD requirement for all buildings and will protect against cross-contamination of the two water systems. | \$10,000.00 |
| | ELECTRICAL | |
| 1 | Provide fire stopping of electrical penetrations through rated separations (walls and ceilings). Fire stopping particularly noted as being deficient in boiler and electrical rooms | \$2,000.00 |
| 2 | Provide lighting on exterior exit stair outside Doreene McLeod room (normal and emergency lighting) | \$2,300.00 |
| 3 | Provide receptacles and branch circuit wiring to replace extension cords used as permanent wiring. | \$5,000.00 |
| | BUILDING ENVELOPE | |
| | No items | |
| | STRUCTURAL | |
| | No items | |



POTENTIALLY CRITICAL (PC)

| | ARCHITECTURAL | POTENTIALLY CRITICAL |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| No. | Item Description | Construction Cost Estimate |
| 1 | Upgrades to finishes, lighting and washrooms in Fellowship Hall (deficiency items 1, 3) | \$75,000.00 |
| 2 | Alternative Solution: Replacement of Fellowship Hall | \$4.55M |
| 3 | Replace door to main floor accessible washroom in Social Suite (deficiency item 7) | \$1,100.00 |
| | MECHANICAL | |
| 1 | Replace heating water boilers in basement mechanical room. These boilers provide heating for the Fellowship Hall, the Social Suite, and the Christian Education Wing. They are beyond their expected lifespan and could reasonably be expected to fail during a heating season. Planned replacement is more cost effective and will allow the church time to have proper equipment designed and installed on a schedule that is suitable to occupants. Emergency replacement is more expensive and will result in loss of heating capacity to tenanted and church-occupied spaces. | \$91,000.00 |
| 2 | Remove unused fuel oil tank in basement mechanical room. | \$6,000.00 |
| 3 | Replace hot water tank serving flower room sink (or provide domestic hot water to flower room sink from Narthex basement water heater and remove flower room water heater). The water heater is beyond its expected lifespan. Failure of the tank could result in unwanted water damage in adjacent areas. In addition, due to its age, the equipment is likely highly inefficient. | \$2,000.00 |

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| No. | Item Description | Construction Cost Estimate |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| 4 | Replace air handling unit serving lower level east spaces (tenanted). This equipment is beyond its expected service life. Because it provides both heating and ventilation air for a tenanted space, budgeting should be allocated to replace the unit. Planned replacement is more cost effective and will allow the church time to have proper equipment designed and installed on a schedule that is suitable to occupants. Emergency replacement is more expensive and will result in loss of heating and ventilation capacity to tenanted spaces. | \$30,000.00 |
| 5 | Replace trim and provide insulation for exposed trap arms under sinks in barrier-free (handicapped) washrooms. Because these fixtures do not meet current codes, it is possible that they present a barrier to some users with disabilities. In addition, it is important to insulate the drains below the sinks to ensure users in wheelchairs do not burn themselves. | \$24,000.00 |
| 6 | The steam boiler is currently not functioning properly. It is believed that this boiler is undersized and needs to be replaced or the capacity to be increased in order to provide adequate heating to the Sanctuary area. | \$40,000.00 |
| ELECTRICAL | | |
| 1 | Upgrade Fellowship Hall electrical service equipment and panels as required by breakdown or renovations | \$18,000.00 |
| 2 | The Fellowship Hall Service is beyond its lifespan and shall be replaced when required by breakdown or renovation. | \$5,000.00 |
| BUILDING ENVELOPE | | |
| 1 | The Sanctuary asphalt shingles have reached the end of their intended service life. Active water ingress is occurring at isolated locations (typically at interface locations). | \$70,000.00 |
| 2 | Replace all roof to wall interface flashing during roof renewal of the Sanctuary. | \$6,000.00 |

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| No. | Item Description | Construction Cost Estimate |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| 3 | No flashing is present on the 'topped' chimneys and end wall of the Sanctuary. MH recommends the installation of cap flashings at both the end wall and 'topped' chimneys during roof renewal. | \$2,200.00 |
| 4 | The metal covering of the roof level access hatch of the Sanctuary is significantly deteriorated. Replace metal covering | \$500.00 |
| 5 | Poor drainage on the Sanctuary roof levels bell towers have led to water ingress during times of heavy rains. Further review roof level drainage during roofing renewal is required. | Info Only |
| 6 | MH observed the Sanctuary brick masonry to be in general good condition; however, some remedial work (re-pointing) is required. MH recommends re-pointing of the masonry joints as required. | \$48,000.00 |
| 7 | MH observed the Sanctuary sandstone masonry to be in general good condition; however, some remedial work is required. MH recommends replacement of the sand stone wall caps on gable end and repairs of all cracking. | \$7,000.00 |
| 8 | The pitched asphalt shingled roof of the Fellowship Hall appears to have surpassed its useful service life. We recommend budgeting for roof replacement within 2 years. All interfaces between the various roofs and roof to walls should be addressed at this time. | \$49,000.00 |
| 9 | Staining was observed on the masonry wall of the Christian Education Wing beneath the steel stair attachment on the west elevation. We recommend that the surface corrosion be removed from the metal stairs and the stairs be re-coated with an ethyl silicate zinc rich coating and the staining on the masonry walls should be removed. | \$2,800.00 |
| STRUCTURAL | | |
| 1 | The wood ledger connection for the main floor framing at the exterior entrances to the Christian Education Wing does not meet code requirements. Install additional 5/8" diameter sleeve anchors at 30" o.c. each side. | \$6,000.00 |



PRUDENT (P)

| | ARCHITECTURAL | PRUDENT |
|------------|------------------------------------------------------------------------------------------------------------|--------------------------------------|
| No. | Item Description | Construction Cost Estimate |
| 1 | Addition of sprinkler system to Sanctuary and Assembly School Building (deficiency item 1) | \$116,000.00 |
| 2 | Upgrade to finishes and lighting throughout chapel, D McLeod Rm etc (deficiency items 3, 4, 5, 6) | \$115,000.00 |
| 3 | Addition of lower glazed units along west elevation of Fellowship Hall (deficiency item 2) | \$48,000.00 |
| 4 | Upgrade to finishes and lighting of Social Suite (deficiency items 1, 4, 5) | \$59,000.00 |
| 5 | Improved security measures/card access system for Social Suite (deficiency item 2, 3) | \$9,500.00 |
| 6 | Upgrades to all washrooms of CE Wing (deficiency item 1) | \$55,000.00 |
| 7 | Upgrade to finishes and lighting throughout CE Wing (deficiency items 2,3,4,5,6,7) | \$116,000.00 |
| 8 | Meditative Garden (concept) Outdoor Area/memorial garden (Site considerations #2) | \$56,000.00 |
| 9 | Painting of access “tunnel” by ICA daycare children (deficiency item 3) | Cost Unknown |
| 10 | Additional curb cut to facilitate circulation around parking lot (deficiency item 5) | \$12,000.00 |
| 11 | Improvements to exterior porch/lighting by Chapel/ D McLeod Rm (deficiency items 6,7) | \$45,000.00 (#6) & Cost Unknown (#7) |
| 12 | Improvements to exterior signage, lighting and security, including promotional banners (deficiency item 8) | \$13,000.00 |
| 13 | Painting of wood windows, doors and paneling (deficiency item 9) | See Building Envelope |
| 14 | Screening of waste/recycling bins (deficiency item 10) | \$2,000.00 |
| 15 | Improve building access, through ramps, additional lift (deficiency item 11) | \$15,000.00 |
| 16 | Consider relocating kitchen to a larger but less prominent location. | Unknown |

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| No. | Item Description | Construction Cost Estimate |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| 17 | Addition of sprinkler system throughout all buildings triggered by major alterations/additions (Sanctuary item 1 included, refer to page 134). | \$256,000.00 |
| MECHANICAL | | |
| 1 | Fellowship Hall air handling equipment is beyond its expected lifespan. Replacing the equipment and improving the current design to reduce energy consumption could benefit the facility. | \$53,000.00 |
| 2 | There is currently no mechanical ventilation air serving the Sanctuary and the Christian Education Wing (levels 2 and 3). If improvements to indoor air quality are desirable, make-up air units (or air handling equipment with recirculating capacity) could be installed to service these spaces. | \$98,000.00 |
| ELECTRICAL | | |
| 1 | Replace Fellowship Hall lighting controls as required by breakdown or renovations | \$5,000.00 |
| 2 | Replace boiler room motor starters as required by breakdown. | \$7,500.00 |
| 3 | Perform preventative maintenance infrared scan on electrical power service equipment | \$3,500.00 |
| 4 | As a precaution we recommend stocking spare fuses for service equipment to facilitate breakdown repairs. | \$500.00 |
| 5 | The Fellowship Hall lighting is dated and provides insufficient light for functions. Lighting upgrades are recommended, but may result in requiring upgrades to panels and controls. | \$8,500.00 |
| BUILDING ENVELOPE | | |
| 1 | Sanctuary skylights are nearing the end of their intended service life. Budget for replacement in the next 2-5 years. | \$2,500.00 |

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| No. | Item Description | Construction Cost Estimate |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| 2 | The Sanctuary stucco cladding is installed proud of the brick wall. The stucco stops are rusting and the caulking b/w the stucco stops and brick is failing. A gum-lip flashing is recommended over this joint. | \$1,600.00 |
| 3 | The Sanctuary flashings at brick projections (east elevation above chapel roof) are back-sloped towards the wall and in some locations not present. A gum-lip flashing is recommended over this joint. | \$1,250.00 |
| 4 | Active water ingress is occurring at the below grade wall located at the northwest corner of the Sanctuary. Further investigation is recommended. | Info Only |
| 5 | We recommend budgeting for roof replacement of the Fellowship Hall existing 2-ply SBS roofing membrane within 5 years. At the time of the roof replacements work all drainage should be reviewed. | \$32,000.00 |
| 6 | We recommend that the Fellowship Hall parapet cap flashing (located on the north elevation) and sealant joints at flashing to cladding joints be reviewed and replaced if deteriorated. | \$2,800.00 |
| 7 | Deteriorated board and batten cladding at base of Fellowship Hall wall (north elevation roof level). During roofing replacement cut back board and batten cladding a minimum of 4" off the roof surface and extend roofing membrane up wall. | \$1,700.00 |
| 8 | MH observed deteriorated caulking throughout the penetrations of Fellowship Hall. Periodic maintenance to include caulking replacement at penetrations would be prudent. | \$3,300.00 |
| 9 | Isolated areas of cracking of the Fellowship Hall foundation and masonry block at both the east and west elevation was observed. We recommend that the cracking through the block units be routed out and sealed with caulking, and that cracked mortar joints be routed out and re-pointed. | \$500.00 |
| 10 | Fellowship Hall crawl space vent locations are below grade on the west elevation. Debris and vegetation present. These areas should be kept clean and free of debris. | \$200.00 |
| 11 | MH observed evidence of water ingress in the form of staining on the Fellowship Hall floor joists (in the crawl space area). This appeared to be a result of a leaking roof drain pipe. Roof drainage pipes should be reviewed and repaired as required. | \$1,800.00 |
| 12 | We recommend budgeting for roof replacement of the Social Suite existing 2-ply SBS roofing membrane be within 5 years. At the time of the roof replacements work all drainage should be reviewed. | \$21,000.00 |
| 13 | We recommend that the organic growth throughout the Social Suite built up roof on the north elevation be removed. Budget for roofing replacement during low-slope renewal (5-10 years) | \$2,250.00 |
| 14 | Re-slope the Social Suite flashings throughout the second level (brick to metal cladding) (south elevation). | \$400.00 |

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| No. | Item Description | Construction Cost Estimate |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| 15 | The crawl space beneath the entrance way between the Fellowship Hall and Christian Education Wing is not vented. We recommend that this crawl space be vented to the exterior and insulation be installed between the floor joists. | \$4,800.00 |
| 16 | We recommend that budgeting for roof replacement of the Christian Education Wing existing 2-ply SBS roofing membrane within 5 years. | \$77,000.00 |
| 17 | Christian Education Wing skylights are nearing the end of their intended service life. We recommend budgeting for replacement in the next 2-5 years. | \$2,500.00 |
| 18 | Peeling paint was observed on the wood window frame and trim of the Christian Education Wing. Failed caulking was observed at the window to block wall interface. MH recommends the wood window frames and trims be re-finish and the windows re-caulked to the cladding interfaces. | \$600.00 |
| 19 | At several locations, staining and organic growth was observed on the Christian Education Wing masonry block wall at the ends of the window sills. We recommend that all organic growth be removed from the sill flashings. Maintain caulking between sill flashing and block wall | \$2,200.00 |
| 20 | The panel cladding on the north elevation of the Christian Education Wing was observed detached on this elevation. MH recommends that this cladding be re-attached and the re-caulked at all interfaces. | \$400.00 |
| 21 | Monitor minor cracking of Sanctuary arched stone stairwell on the east side of the south elevation. | \$800.00 |
| 22 | Install drain screen at roof drain of Social Suite lower roof on south elevation. | \$200.00 |
| 23 | Replace windows of Christian Education Wing as needed. | \$5,000.00 |
| STRUCTURAL | | |
| 1 | Seismic upgrade of the Sanctuary as indicated in the drawings located in the appendix. | \$1,883,000.00* |
| 2 | Seismic upgrade of the Fellowship Hall as indicated in the drawings located in the appendix. | \$929,000.00* |
| 3 | Seismic upgrade of the Christian Education Wing as indicated in the drawings located in the appendix. | \$1,102,000.00* |
| 4 | The Sanctuary chimney appears to exceed a height to width ratio of 2:1 and shall be laterally braced with steel members or the height of the chimney reduced and capped. | \$11,000.00 |
| 5 | The quality of the Sanctuary mortar appears to vary throughout building. The overall condition and shear strength of the existing mortar may need to be determined for seismic upgrading. | See Building Envelope Cost |



LIMITATIONS

This report was prepared by Stantec for the First Met. The material in it reflects our best judgment in light of the information available to us at the time of review and preparation. Any use which a third party makes of this report, or any release on or decisions made based on it, are the responsibility of such third parties. Stantec accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report. The scope of work does not include an implementation plan for any recommended actions, energy modeling, nor geotechnical, environmental or hazardous building materials assessments. We recommend that First Met proceeds with a detailed program analysis, and a feasibility study for possible modifications/replacement of the Fellowship Hall prior to proceeding with related recommendations indicated within this condition assessment.