

EXISTING CONDITIONS AND OBJECTIVES

The school St. Margaret Mary Catholic Elementary School (25 Brentwood Dr, Hamilton, ON L8T 3V9) is a multi-level building used as educational facilities.

The replacement of the gymnasium roof at St. Margaret Mary CES is included in this project. Refer to Drawings for existing and new roof assemblies. The Contractor is responsible for confirming all existing roof assemblies and building dimensions as required.

STIPULATED PRICE ITEMS

Items outlined below coincide with the Stipulated Price items listed on the Bid Form and are to include all costs associated with the following:

1.0 General

.1 Mobilization, Access, and Protection:

- .1 This item shall include, but not be limited to, all related equipment, mobilization, safety supervision, site protection, coordination with Consultant and Owner, demobilization, security, site cleanup and repair of damage caused by the work.
- .2 Building Occupants will occupy premises during the construction period for execution of normal operations. Cooperate with Building Management in scheduling operations to minimize conflict and to facilitate building usage. Depending on the start date, if the construction starts between May to June, the school will be occupied.
- .3 Contractor is to coordinate the work with Building Management on a daily basis so that notices can be delivered as may be required.
- .4 Temporary barriers, enclosures and signage will be highly enforced. No public access to the work area is to be allowed and no work is to occur outside enclosed work area.
- .5 It is expected that the Contractor will ensure the safety and proper routing of the public. Maintain fire routes and exits and if they are affected as part of the work, include for hoarding / overhead protection within the work area. No areas of access to or around the building are to be restricted without the approval of Building Management.
- .6 Where a worker may be exposed to a fall hazard, the employer of the worker is responsible for providing and ensuring that all such workers be adequately trained and protected by a fall protection system that meets the requirements of the Occupational Health and Safety Act - Ontario Regulation 213/91 - Section 26.
- .7 Provide access to the work area as required to facilitate review of the work by the Consultant.

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- .8 Provide temporary support to existing structural and cladding components during performance of work (if required).
 - .9 Install temporary protection for all interior and exterior building components, vehicles, pedestrians, and occupants, as required to ensure safe, clean, and orderly removal and disposal work.
 - .10 Install temporary protection for all building components, i.e., parging, masonry, siding and/or concrete to ensure safe, clean, and orderly removal and replacement work. All spatter or staining on existing elements as the result of the roofing work shall be removed at the Contractor's cost. Contractor shall assume responsibility of existing elements and new roofing assembly where solvents are required to remove spatter and staining which will adversely affect the elements to be cleaned.
 - .11 Weather protection and enclosures (if required) are to be included in this item and will not be considered as an additional cost after award of the project. Provide weather protection for building components exposed during demolition / removals and/or winter protection and heat as required to perform the work if required and as specified
 - .12 Protect moisture sensitive materials being stored outside from inclement weather using 8oz vinyl tarpaulins adequately secured to prevent blow off. All temperature sensitive materials shall be stored in a heated location with a minimum temperature of 5°C (40°F) and removed only as needed. Under no circumstances shall temperature sensitive materials be allowed to freeze.
 - .13 Conventional Roof Protection (insulation under waterproofing membrane): Provide ¾" plywood sheathing, 2" rigid insulation and polyethylene sheeting where equipment or materials are stored on or moved across the roof.
 - .14 Provide temporary protection (such as drop cloths and carpet runners) at locations of interior work and/or worker movement through the building to ensure safe, clean and orderly removal and disposal, and to provide protection of interior building components and finishes. Elevator cab, if used, to be fully protected.
 - .15 Coordination of trades will be the responsibility of the Contractor to ensure the work is completed as soon as possible.
 - .16 Prior to commencement of the Work, record condition and take photographs of existing building and landscaping components. Provide daily and final cleanup to restore building and site landscaping (grassed areas, shrubs, and hard surfaces) to pre-construction conditions. During the completion of the Work, every attempt to minimize damage to landscaping shall be exercised, including the control of debris.
 - .17 For work completed by a subcontractor, a representative of the general contractor must be present on site at all times.

- .2 **Bonding:** Bonding is required and will be in the front-end documents. 100% bid bond and 50% labour and materials.

2.0 Roof Replacement

- .1 Upon award of the contract, Contractor to submit completed Manufacturer's project warranty application to the warranty provider advising them of the project and all relevant project related details. A two (2) year Contractor Warranty and twenty (20) year Manufacturer's Labour, Material and Workmanship System Warranty, per building, are required.
- .2 Removal of all components of the existing roof assemblies including membrane, insulation, vapour retarder, perimeter flashings, and projection flashing where shown on drawings, and existing roof deck, etc. and disposal of same to an approved landfill site. Provide protection of building components during removal.
- .3 Provide all mechanical and electrical disconnects as required to accommodate the removal of existing components and installation of the new roof assembly. **Coordinate the disconnection of all rooftop equipment with the Owner.**
- .4 **St. Margaret Mary CES – Gymnasium Roof Replacement of the existing conventional BUR assembly on Seporex Deck with new 2-ply modified bitumen assembly.** Supply all materials, labour and equipment required to complete full roof assembly replacement in accordance with Sections 06 10 53, 07 52 16, 07 62 00 and 07 92 00, and Drawings, including, but not limited to the following:
- .1 Remove existing roof assembly and existing steel deck, including existing perimeter cants and underlying wood blocking. Make good all damage. Remove and discard or salvage existing rooftop equipment, curbs, drains, and supports as per Drawings.
- .2 Deck Overlay Board: Install 13 mm (1/2") gypsum core deck overlay board mechanically fastened in place to meet or exceed wind uplift requirements set out in Section 07 52 16.
- .3 Vertical Surface Overlay Board: Over vertical surfaces to receive self-adhered membrane and as shown on drawings, install 6 mm (1/4") overlay board mechanically fastened in place with screws and plates.
- .4 Inspect and seal all substrates to eliminate fire hazard. Use firestop tape and underlay membrane as required or recommended by Manufacturer.
- .5 Vapour Retarder: Install 1-ply self-adhered modified bitumen vapour retarder membrane (field and flashings) applied to the top of the deck overlay board and vertical substrates. Extend vapour retarder flashings minimum 76 mm (3") above finished insulation/overlay board as shown on Drawings.
- .6 Wood Blocking: Install new wood blocking at perimeters and curbs as shown on Drawings.

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- .7 Insulation: Install two layers of 38 mm (1.5") of inorganic glass faced Polyisocyanurate insulation set in cold adhesive. The maximum board size shall be factory cut, 1200 mm x 1200 mm (4' x 4'). Reduce thickness of second layer of base insulation installed below tapered backslope by 13 mm (1/2") as shown on Drawings.
 - .8 Perimeter Backslope: Install inorganic glass faced tapered polyisocyanurate insulation backslope at the exterior roof perimeter as shown on Drawings, set in cold adhesive.
 - .9 Tapered Drain Sumps: Install inorganic glass faced Polyisocyanurate insulation drain sumps as shown on Drawings, set in cold-adhesive.
 - .10 Cover Board: Install 13 mm (1/2") gypsum core cover board set in cold adhesive. The maximum board size shall be factory cut, 1200 mm x 1200 mm (4' x 4').
 - .11 Flame Stop Membrane: Prior to torch-application of field base sheet, at all upturns and as shown on Drawings, install continuous self-adhered flame stop membrane strip.
 - .12 2-ply Modified Bitumen Roof Membrane: Construct the roof membrane from 1-ply 180 gm/m² base sheet and 1-ply 250 gm/m² cap sheet torch-applied.
 - .13 2-ply Modified Bitumen Roof Membrane Flashings: Construct membrane flashings from 1-ply 180 gm/m² self-adhered base sheet and 1-ply 250 gm/m² cap sheet torch-applied.
 - .14 Mechanical, Electrical and Miscellaneous Roof Penetrations: Install mechanical, electrical and miscellaneous roof penetrations as specified and as shown on the Drawings.
 - .15 Existing Drains: Replace existing drains with new copper drains size to match existing as shown on the Drawings.

3.0 Related Roofing Components

- .1 Metal Counterflashing's: Install new 24-gauge pre-finished galvanized metal to Section 07 62 00 and shown on the Drawings.
- .2 Sealants: Provide and install sealants as required by Section 07 92 00 and shown on the Drawings.

4.0 Unit Price Items

Items outlined below coincide with the Unit Price items listed on the Bid Form and are to include all costs associated with the following:

- .1 2x6 Lumber: Supply and installation of additional 2x6 lumber, not otherwise detailed, required as a result of modifications or hidden conditions.
- .2 Labour Costs: Hourly costs related to the completion of work not originally specified in the scope of work. Contractor to submit a detailed breakdown of hours for any work completed under this item.

- .3 Mark-up on Materials: Allowable mark-up on materials associated with the completion of work not originally specified in the scope of work. Contractor to submit a detailed breakdown of material costs for any work completed under this item.

5.0 Qualifications

- .1 The above is to be considered a general description of the work to be completed and must not be construed as limiting the scope of work.
- .2 All quantities / measurements to be confirmed by Contractor from on-site take-offs.

END OF SECTION – 01 11 50