



Addendum #3

Bid Opportunity: 24-7540-RFT - Pioneer Park Public School Interior Renovations

Revised Closing Date: Tuesday, April 16, 2024 2:00 PM

The following issued by the Board shall form part of the Bid / Proposal Solicitation document. The revisions and additions noted herein along with any attachments shall be read in conjunction with all other related documents. This Addendum shall, take precedence over the previously issued documents where differences occur. Receipt of this addendum must be acknowledged in the Bidding System, bids&tenders.

If you have already submitted a Bid / Proposal, it will be automatically withdrawn as a result of this addendum. You must resubmit the Bid / Proposal acknowledging all addenda and revising your Bid / Proposal to comply with all addenda.

Question 1:

Please confirm if the base cabinets in room 114 and 112 will have to be removed and reinstalled to facilitate the floor replacement. Notes 14 and 28 do not specifically instruct us to remove and reinstall the base cabinetry in these rooms.

Answer 1:

All fixed millwork in rooms 114 and 112 is to remain in place. Existing flooring and rubber wall base is to be removed and replaced with new resilient flooring

and new rubber wall base at full extent of each room from existing millwork base to existing walls.

The following clarification items are hereby issued and form an integral part of this addendum:

Revisions to Project Manual Specifications:

- .1 **REFERENCE Section 00 21 13 – INSTRUCTIONS TO BIDDERS:**
 - .1 On page 9 of 209, under item 6. Anticipated Project Schedule, revise the tender closing date to **April 16, 2024**.

- .2 **REFERENCE Section 07 51 00 – BUILT-UP ROOFING:**
 - .1 Delete Section 07 51 00 and replace with the attached updated Specification Section 07 51 00 - BUILT-UP BITUMINOUS ROOFING.

END OF ADDENDUM

- 1 General
- 1.1 INSTRUCTIONS
 - .1 Comply with the Instructions to Bidders, the General Conditions of the Contract, the Supplementary Conditions and the General Requirements of Division 01.
 - .2 Report in writing to the General Contractor any defects of surfaces or work prepared by other Sections which affect the quality or dimensions of the Work. Commencement of work implies acceptance of existing conditions and work by others.
- 1.2 SECTION INCLUDES
 - .1 Cold Applied Built-up bituminous roofing system.
- 1.3 RELATED SECTIONS
 - .1 Section 04 20 00 – Unit Masonry: Connection of wall vapour barrier system to roofing system.
 - .2 Section 05 31 23 – Steel Roof Decking.
 - .3 Section 06 10 00 - Rough Carpentry: cants, blocking and curbs.
 - .4 Section 07 62 00 - Sheet Metal Flashing and Trim.
 - .5 Section 07 72 00 - Roof Accessories: Manufactured hatches
 - .6 Division 22 – Plumbing
- 1.4 REFERENCES
 - .1 ASTM C931/931M-01: Standard Specification for Exterior Gypsum Soffit Board.
 - .2 ASTM D4601-98: Standard Specification for Asphalt-Coated Glass Fibre Base Sheet Used In Roofing.
 - .3 CSA A123.4 M1979: Bitumen for Use in Construction of Built Up Roof Coverings and Dampproofing and Waterproofing Systems.
 - .4 CGSB 37 GP 9Ma: Primer, Asphalt, Unfilled, for Asphalt Roofing, Dampproofing and Waterproofing.
 - .5 CGSB 37-GP-52M: Roofing and Waterproofing Membrane, Sheet Applied, Elastomeric.
 - .6 CAN/CGSB 51.33 M89: Vapour Barrier Sheet, Excluding Polyethylene, for Use in Building Construction.
 - .7 CAN/ULC-S704-2001: Standard for Thermal Insulation, Polyurethane and Polyisocyanurate Boards, Faced.
 - .8 CAN/ULC-S706-02: Standard for Wood Fibre Thermal Insulation for Buildings.
- 1.5 PERFORMANCE REQUIREMENTS
 - .1 Install at specified Roof Area; - Cold Process Built Up Roof System Gravelled
 - .1 Prime any new metal or wood components using Tremprime WB that are to receive asphaltic materials.
 - .2 Install self-adhering AVC membrane and associated primer over existing deck.
 - .3 Install 1 or 2 layers of Polyisocyanurate into Low Rise Foam Insulation Adhesive. Contractor is to verify existing insulation thickness and are to match.

- .4 Install Cover Board 0.5" Asphalt Coated Fiberboard into Low Rise Foam Insulation Adhesive.
 - .5 A built up roof membrane – 3 Ply Cold Process
 - .6 Install Roofing Membrane as follows:
 - (1) Plies: Three
 - (2) Ply Type: Composite Felt, Three plies.
 - (3) Interply Adhesive: Burmastic Cold Process Adhesive
 - .7 Surfacing: 3/8" Clean round pea gravel, free of all fines, splinters etc. into Cold Process Flood Coat.
- 1.2 Specified Flashings and accessories: Install flashings at all roof perimeters, projections, and drains incorporating:
- .1 Reinforced EPDM/SBR Rubber sheet adhered with Elastomeric Bedding Adhesive as per detail drawings.
 - .2 Provide Products that are compatible with one another under field conditions, as demonstrated by roofing manufacturer.
 - .3 Provide watertight roofing system capable of resisting specified uplift pressures, thermally induced movement and exposure to weather without failing during the specified warranty period.
- 1.6 CERTIFICATES
- .1 Manufacturer Certificates: Signed by roofing manufacturer verifying that installer is approved, authorized or licensed by manufacturer to install specified Products.
 - .2 Installer Certificates: Signed by installer verifying that they have the specified qualifications described below.
- 1.7 TEST REPORTS
- .1 Manufacturer Field Inspection Reports: manufacturer's written acceptance of roofing installation based on daily inspections.
- 1.8 QUALITY ASSURANCE
- .1 Manufacturer: qualified manufacturer having roofing systems listed by UL and approved for use by Factory Mutual.
 - .2 Installer: a company and persons specializing in the application of protected elastomeric roofing, with documented experience and approved to apply roofing system by manufacturer.
 - .3 Conform to CRCA Roofing Specifications and roofing membrane manufacturer's instructions.
- 1.9 PRE-INSTALLATION MEETINGS
- .1 Conduct pre-installation meeting.
 - .2 Meeting: prior to commencement of deck installation, review and document methods and procedures related to roof deck and roofing system construction, including the following:
 - .1 Participants: authorized representatives of the General Contractor, Consultant, Owner, Roofing Subcontractor, Roofing Manufacturer, and installers of roof accessories and roof-mounted equipment.
 - .2 Review methods and procedures related to roofing installation, including manufacturer's written installation instructions.

- .3 Review construction schedule and confirm availability of Products, Subcontractor personnel, equipment and facilities.
- .4 Review deck installation criteria and finishes for conformance with roofing system criteria, including issues of flatness and fastening.
- .5 Review structural loading conditions and limitations of roof deck both during and after roofing application.
- .6 Review flashing details, special roofing details, roof drainage, roof penetrations, equipment curbs, and other conditions affecting roofing installation.
- .7 Review governing regulatory requirements, and requirements for insurance and certificates as applicable.
- .8 Review safety requirements, including temporary fall-arrest measures.
- .9 Review field quality control procedures.

1.10 DELIVERY, STORAGE AND HANDLING

- .1 Deliver and store Products undamaged in original containers with manufacturer's labels and seals intact.
- .2 Store Products in designated areas elevated off the ground and protected from ultra-violet radiation, inclement weather and construction activities.
- .3 Store solvent-based liquids away from excessive heat and open flame.
- .4 Store adhesives and sealants at temperature above -5 degrees Celsius.
- .5 Store membrane rolls on end, dry, and protected from moisture and damage. Cover rolls, insulation and other moisture-sensitive Products with tarpaulins.
- .6 Store Products on roof deck in a manner to prevent overloading the structure and properly secured to prevent movement due to wind or other forces

1.11 SITE CONDITIONS

- .1 Protect adjacent properties from damage as a result of contract operations.
- .2 Protect the Work and the Owner's property from damage as a result of contract operations.
- .3 Confine equipment, material storage, and operations of workers to limits indicated by laws, ordinances, permits, and prior arrangements with the Owner.
- .4 Do not interrupt or hamper occupant operations without prior written approval.
- .5 Remove progressively all debris created by the execution of the Work and dispose of same at appropriate disposal sites.
- .6 Alert the General Contractor to the expected presence of odours, fumes, or dust and co-ordinate the shielding of ventilation equipment or scheduling of process to achieve acceptable abatement.
- .7 Upon completion of the work, leave premises in original order and condition.

1.12 ENVIRONMENTAL REQUIREMENTS

- .1 Do not install roofing during weather that might adversely affect the performance of the system.

- .2 Do not install roofing over surfaces that are wet, icy, dirty or otherwise unacceptable to the system being installed.
- .3 Secure the Work in a safe and watertight fashion before the onset of inclement weather and at the end of each day's work.

1.13 WARRANTY

- .1 Submit warranties in accordance with the General Conditions of the Contract.
- .2 Installer's Warranty: standard 2 year warranty, commencing from the date of Substantial Performance of the Work.

2 Products

2.1 PRODUCTS

- .1 All primers, adhesives, sealants (including hardener), joint filler, grout, epoxy, sealers, and finishes applied on site and within weather barrier shall meet environmental requirements for low emitting materials.

2.2 MANUFACTURERS

- .1 Manufacturers of cold-applied built-up asphalt roofing systems.
 - .1 Basis of Design: Tremco Canada.

2.3 MATERIALS

- .1 Primer:
 - .1 Tremprime WB by Tremco.
 - .2 Insulation: To match existing and confirmed by contractor.
 - (1) Insulation 1 or 2 layers of Polyisocyanurate Insulation
 - (2) Overlay Insulation – 0.5" Asphalt Coated Fiberboard
- .2 Insulation Adhesive:
 - .1 Low Rise Foam Insulation Adhesive by Tremco.
- .3 Vapour Retarder
 - .1 AVC Membrane and Primer.
- .4 Flashing Membrane and Adhesive
 - .1 TRA membrane
 - .2 Tremlar V
- .5 Cold Applied BUR. Burmastic by Tremco
 - .1 Three Ply Composite Ply HT Felt
- .6 Reinforcing Membrane:
 - .1 Burmesh by Tremco.
- .7 Ballast:

- .1 3/8" Pea Gravel free of fines and long splinters.

2.4 ACCESSORIES

- .1 Stack Flashings: Prefabricated aluminum sleeves as manufactured by Thaler Metal Industries or equivalent.
- .2 Drains: Prefabricated drains as manufactured by Altra Metal Specialties – Mode ABD-CR-X-SS: Aluminum Body Roof Drain complete with clamping ring.
- .3 Metal Flashings and Coping
 - .1 Metal counter flashings and caps shall be 26 gauge, G90 galvanized Grade A steel conforming to ASTM A525. Finish to be Stelco 8000 series and colour to be as selected by the Board. Obtain written confirmation of colour prior to ordering.
 - .2 Two-piece gooseneck flashings are to be installed around all electrical projections.
- .4 Sealant
 - .1 One-part polyurethane – approved product and manufacturer – Dymonic by Tremco.

2.5 SHOP FINISHING

- .1 Galvanizing: to ASTM A653/A653M, zinc coating, hot dip process, minimum G90 coating.
- .2 Shop Painted Finish: baked ceramic pigmentation coating, applied to a minimum 1 mil dry film thickness and having a specular gloss of 30 (plus or minus 5) gloss units when measured with a Gardner 60 degree gloss meter; eg. Colorite HMP by Valspar, colour as selected by Consultant from standard range of colours.

3 Execution

3.1 PREPARATION – ROOF AREAS AS PER DRAWINGS

- .1 Examine all drains and report any plugged drains to the Inspector. Any drains not reported and found plugged at the end of the contract will be deemed the responsibility of the contractor. Use temporary plugs during roof removal operations and remove before the end of each working day or when rain is imminent.
- .2 Remove existing roofing, insulation and vapour retarder to allow for installation of new roof curbs.
- .3 Verify acceptability of deck, projections, curbs, parapets, walls and other constructions as these pertain to the roofing work and its expected performance.
- .4 Correct any deficiencies in these constructions or advise General Contractor of conditions believed to be beyond the Scope of Work.
- .5 Fill and pack all joints, cracks, seams, and openings in the deck and its appurtenances to prevent air leakage from the building interior.

3.2 ROOF DECK

- .1 Deck reattachment:
 - .1 Mechanically reattach loose sections of deck to steel or wood support members according to existing fastening pattern.
- .2 Deck replacement:

- .1 Remove defective decking. Examine supports. If unsound, contact General Contractor immediately for future action.
- .2 Install new decking in accordance with appropriate building regulations and CSSBI, (Canadian Sheet Steel Building Institute).
- .3 Deck protection (Metal):
 - .1 Remove loose flaking rust, down to clean, dust free, sound metal surface.
 - .2 Apply one coat of rust inhibitive paint over prepared surface at the rate of 6 m²/litre (250 ft²/gal).

3.3 AIR BARRIER

- .1 Apply primer and install on to substrate, overlapping side and end laps in conformance with manufacturer's written recommendations. Begin work at bottom of slopes, unroll and align on substrate. Ensure all edges are supported.
- .2 Remove release sheet and adhere membrane, working in sections to avoid wrinkles in membrane.
- .3 Seal membrane at insulation perimeters and around penetrations to ensure sealed connections with base sheet at upstands.
- .4 Sprayed in Place Foam:
 - .1 Fill all cavities and joints with foam according to manufacturer's directions.

3.4 VAPOUR RETARDER

- .1 Self-Adhering Membrane
 - .1 Apply primer and install on to substrate, overlapping side and end laps in conformance with manufacturer's written recommendations. Begin work at bottom of slopes, unroll and align on substrate. Ensure all edges are supported.
 - .2 Remove release sheet and adhere membrane, working in sections to avoid wrinkles in membrane.
 - .3 Seal membrane at insulation perimeters and around penetrations to ensure sealed connections with base sheet at upstands.

3.5 INSULATION

- .1 NB: Adhered with Low Rise Foam Insulation Adhesive
 - .1 Firmly butt each insulation board to surrounding boards. Do not jam or deform owners.
 - .2 Minimize elevation variation between boards at joints to provide level surface to accommodate subsequent roofing.
 - .3 Stagger joints at least 150mm (6 inches).
 - .4 Leave no voids at blocking, penetrations, walls, or parapets.
 - .5 At all drains and scuppers slope insulation for a radius of 1200 mm (48 inches) to ensure positive drainage.
 - .6 Adhere insulation into ribbons of low rise foam insulation adhesive in 1/2" to 3/4" beads approximately 12" o.c.
 - .7 Immediately after placement, walk insulation boards into adhesive to achieve solid contact.

3.6 COLD APPLIED BUR

.1 Three Ply – Cold

- .1 Starting at the low point of the Roof, install three (3) plies of ply sheet, shingle fashion. Overlap starter strips 660 mm (26 inches) with first ply, then overlap each succeeding ply 625 mm (24 2/3 inches). Place ply sheets to ensure water will flow over or parallel to; but never against exposed edges.
- .2 Embed into Cold Process Adhesive, 300, 600 and 900 mm (12, 24 and 36 inch) wide plies to start and finish roof membrane along roof edges and terminations.
- .3 Solidly coat each ply of felt for the full width with Cold Process Adhesive. Immediately after installation, broom and/or roll ply sheet. Ensure complete and continuous seal and contact between adhesive and felts, including ends, edges and laps without wrinkles, fish mouths, or blisters.
- .4 Extend all plies to the top edge of all cant strips and cut off evenly.
- .5 Apply uniform and continuous pressure to exposed edge and end laps to ensure complete adhesion.
- .6 Avoid walking on plies until adhesive has set.
- .7 Overlap previous days' work 600 mm (24 inches) as required.
- .8 Cut out fishmouths/side laps which are not completely sealed and patch. Replace all sheets which are not fully and continuously bonded.
- .9 Lap ply membrane ends 150 (6 inches). Stagger end laps 1 metre (3 feet) minimum.
- .10 Adhesive application rate: Minimum 1.0 Litres/Sq. Metre (2.5 Gals per 100 Sq. ft).

3.7 TEMPORARY WATERSTOP/TIE-INS

- .1 Remove embedded gravel, dirt and debris from top ply of felt along termination for a distance of 450 mm (18 inches).
- .2 Extend roofing system at least 300 mm (12 inches) onto prepared area installing insulation fillers as required.
- .3 Seal edge with 150 mm (6 inch) wide reinforcing membrane embedded between alternate courses of temporary waterstop adhesive.
- .4 At beginning of next day's work, remove temporary connection by cutting felts evenly along edge of existing roof system and remove insulation fillers.
- .5 Temporary waterstop adhesive application rate:
 - .1 Cold 3.3 l/m² (12 ft²/gallon)

3.8 PERMANENT WATERSTOP/TIE-INS

- .1 Remove embedded gravel, dirt and debris from top ply of felt along termination for a distance of 450 mm (18 inches).
- .2 Install 450 mm (18 inch) wide ply sheet(s) from exposed deck to the existing roofing with a continuous application of permanent waterstop adhesive.
- .3 Extend roofing system beyond permanent waterstop ply sheet and at least 300 mm (12 inches) onto prepared area of adjacent roofing.

- .4 Seal leading edge of new membrane with 300 mm (12 inch) wide reinforcing membrane embedded between alternate courses of flashing adhesive.
- .5 Permanent waterstop adhesive application rate:
 - .1 Cold Adhesive 3.3 l/m² (12 ft²/gallon)

3.9 FLASHINGS

- .1 Curb Details - Elastomeric Sheeting:
 - .1 Adhere sheeting completely to horizontal and vertical blocking surfaces with flashing adhesive. Press sheeting into adhesive. Ensure complete bond and continuity without wrinkles or voids.
 - .2 Sheeting width: Sufficient to extend from 50 mm (2 inches) down inside face of curb down onto adjacent roofing 150 mm (6 inches), minimum. Mechanically fasten sheeting on inside face of curb.
 - .3 Lap sheeting ends 100 mm (4 inches); and adhere with flashing adhesive.
 - .4 Overcoat lap edges with end lap stripping adhesive and membrane.
 - .5 Tie in leading edge of sheeting with stripping ply membrane embedded between alternate continuous courses of stripping ply adhesive.
- .2 Pitch pans:
 - .1 Apply 1.5 mm (1/16 inch) uniform layer of flashing adhesive to surface receiving metal flange.
 - .2 Install pre-manufactured pitch pan into adhesive. Prime flange prior to installation.
 - .3 Pitch pans shall be a 24-gauge galvanised steel, a minimum 100 mm (4 inches) high. There shall be at least 50 mm (2 inches) clearance between the projection and side wall.
 - .4 Adhere elastomeric sheeting completely to flashing surface with flashing adhesive. Cover flange completely. Extend flashing at least 100mm (4 inches) onto adjacent roofing. Ensure complete bond and continuity without wrinkles and voids. Lap sheeting ends 100mm (inches).
 - .5 Overcoat lap edges with end lap stripping adhesive and membrane.
 - .6 Tie in leading edge of sheeting with stripping ply membrane embedded between alternate courses of stripping ply adhesive.
 - .7 Fill pitch pan 25 mm (1 inch) from top with pitch pan base filler.
 - .8 Fill remainder with pitch pan topping mastic. The mastic shall be crowned in order to ensure water run-off.
 - .9 Install metal cap and caulk opening.
- .3 At piping through roof boxes
 - .1 Install wood blocking.
 - .2 Fabricate and install two-piece pipe box. The bottom portion shall be fabricated with 100 mm (4 inch) flange. The top section shall be notched to fit over piping. Openings shall be a minimum 200 mm (8 inches) above the roof surface.
 - .3 Set flange in mastic, nail flange to wood blocking 75 mm (3 inches) o.c. Prime flange.
 - .4 Fill box interior with batt insulation.

- .5 Fasten top and closure detail to bottom.
- .6 Wipe clean metal surfaces of box and piping with metal cleaner. Prime metal with metal primer. Caulk joint between box and piping. Tool neatly.
- .7 Install elastomeric sheeting with flashing adhesive and membrane.
- .8 Flashing detail shall conform to drawing entitled, Piping Through Roof Deck.
- .9 Overcoat lap edges with end lap stripping adhesive and membrane.
- .10 Tie in leading edge of sheeting with stripping ply membrane embedded between alternate courses of stripping ply adhesive.

3.10 METAL FLASHINGS

- .1 Installation of metal flashing shall be in accordance with the metal flashing section of the Canadian Roofing Contractors' Association (CRCA) manual.

3.11 SURFACING APPLICATION

- .1 Gravel Finish
 - .1 Prior to application of surface treatment system, contractor shall inspect roof with manufacturer's representative.
 - .2 Ensure surface is clean and dry. Flood coat the entire roof with specified flood coat bitumen at the rate of 6 gallons per square (cold adhesive) or 60 lbs. per square
 - .3 Immediately broadcast minimum 25 kg per sq. metre (500 lbs. per 100 sq. ft.) of new, clean, dry roofing gravel. Cover flood coat material completely.
 - .4 Rake out gravel to provide a neat even surface.

3.12 CLEANING

- .1 Refer to Section 01 74 00.
- .2 Clean drains of debris, ensuring free drainage.
- .3 Clean adjacent roof surfaces, levels and ground level areas of debris and excess Products.

3.13 PROTECTION

- .1 Adequately protect Products and work from damage by weather, traffic and other causes.
- .2 At the end of each Working Day, seal exposed edges of roofing membrane to be watertight.
- .3 Protect adjacent Work from damage. Repair damage.

END OF SECTION